

**EURADOS Intercomparison 2010
for Whole Body Dosemeters
in Photon Fields**

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Abstract

EURADOS Working Group 2 has developed a system for a self-sustained programme of regular intercomparisons (Figel, M. Report to Council, WG02-SG2, 2007). The first intercomparison, for whole body dosemeters in photon fields (IC2008), was carried out in 2008. The following year an intercomparison was organized for extremity dosemeters in photon and beta fields. These two intercomparisons were assessed by EURADOS Council as successful and it was agreed to hold a further intercomparison, IC2010, for whole body dosemeters in photon fields. IC2010 built on the success of the two previous intercomparisons with 85 participating dosimetry systems from 70 institutes and participants from 30 countries around the world. The number of participating systems increased significantly comparing to IC2008 – from 62 to 85.

IC2010 was organized by an organization group (OG) composed of Andrew McWhan and Wioletta Dobrzynska from Cavendish Nuclear Limited (co-ordinator and co-ordinating laboratory), Tom Grimbergen (NRG), Ana Maria Romero (CIEMAT), Hannes Stadtman (Seibersdorf Laboratories) and Markus Figel (Helmholtz Zentrum München).

The systems tested during this exercise included 59 TLD, 13 Film, 8 OSL and 5 dosimeter systems based on other techniques (Other), i.e. radiophotoluminescence (RPL), direct ion storage (DIS) or active personal dosimeters (APD). In IC2008, OSL systems were included in the Other category but the increase in the number of these systems in IC2010 was considered to be sufficient to include them as a separate category for this analysis. A total of 2210 dosimeters were handled by the coordinator of which 1700 dosimeters were irradiated. All irradiations were carried out by a selected metrology laboratory, accredited to EN ISO/IEC 17025 in accordance with the irradiation plan developed by the OG. The metrology laboratory selected for IC2010 was the Austrian Federal Office of Metrology (BEV).

Out of the total of 85 systems, 67 reported $H_p(10)$ and $H_p(0.07)$, 18 reported $H_p(10)$ results only. In general, the participants showed a very satisfactory performance with only 5% outliers from the total reported values. 74% systems had no outliers from the trumpet curve criteria. 86% of the systems fulfilled the ISO 14146 performance criteria (max. 2 outliers are allowed). Film systems showed a big improvement compared to IC2008 (down from 25% outliers in IC2008 to 7% in IC2010). The median of all response values was very close to unity (0.99).

The influence of dosimeter design on the response values was examined at the participants meeting held at AM2011 in Prague with discussion on both general aspects of this intercomparison and specific system problems.

The intercomparison results can assist the participants to show compliance with their quality management system, compare their results with those from other participants and develop action plans for improvement of their systems. The high number of participants confirms that there is strong demand for international intercomparisons exercises, particularly in Europe, and that these are of significant operational value for Individual Monitoring Services (IMS). In 2012 two further intercomparisons were started: one for whole body dosemeters for photon fields and one for whole body dosemeters for neutron fields.

1 Introduction

EURADOS working groups on Harmonisation of Individual Monitoring in Europe (1997-2000 [1,2], 2001-2004 [3]) have shown that intercomparison exercises (ICs) are a fundamental prerequisite for harmonisation of individual monitoring services (IMS). Consequently, these EURADOS working groups recommended periodic performance tests or IC exercises within the European Union (EU) to assist the objective of harmonisation. It was believed that ICs would stimulate IMS to improve the quality of their results, provide information on IMS quality throughout EU and assist harmonisation of IMS quality control standards. Further support was provided by the response to questionnaires sent to IMS in the EU and non EU countries which showed very strong interest in participating in the proposed programme of periodic ICs.

Consequently, in 2005-2006 EURADOS started to investigate the possibility of organizing a programme of self-sustained ICs. Based on the collected evidence, it was decided to organize the first IC, IC2008, within the framework of EURADOS.

Participation in regular ICs is now specifically recommended in the new European Commission's *Technical Recommendations for Monitoring Individuals Occupationally Exposed to External Radiation* [4]. Participation is also being considered as an essential criterion for IMS approval by some authorities. At the same time, a growing number of IMS are also working towards formal accreditation for EN ISO/IEC 17025 [5] which in itself requires the participation in regular inter laboratory comparisons.

EURADOS WG2 has now successfully carried out two intercomparisons for whole body dosimeters (IC2008 & IC2010) and one for extremity dosimeters in photon and beta fields (IC2009) [6, 7]. These exercises were performed without any external funding with all costs being covered by the participants' fees.

This report describes the set-up of the IC2010 and gives an extended overview of the results.

2 Outline of the EURADOS Intercomparison 2010 project

2.1 Organization Group

The organizational structure for the EURADOS programme for self-sustained ICs for IMS, was laid down in the report of Working Group 2 (WG2) Subgroup 2 which was presented to the EURADOS Council at the Annual Meeting 2007 (AM2007) [8]. This WG2 report provided extensive plans for a self-sustained IC programme including detailed proposals for organization and financial arrangements. This plan was put in practice starting from IC2008 and has been essentially kept unaltered with all subsequent ICs.

For each IC an Organization Group (OG) is appointed by EURADOS Council. This group prepares, manages and controls all planning and operational details of the ICs. This includes all materials and data transfer between the participating IMS and the irradiation laboratories that will perform the irradiations. For efficiency reasons, the OG is limited to a relatively small number of persons which also assists control of confidentiality as the information is handled by the minimum number of persons required for the task.

For IC2010 the OG was formed by the authors of this report, with Babcock International Group, United Kingdom, acting as the coordinating institute.

2.2 Scope

IC2010 was for whole body dosimeters in photon fields.

As with IC2008 the option was included for IMS to report both $H_p(10)$ and $H_p(0.07)$ or just $H_p(10)$. The IC was aimed specifically for dosimeters already in routine use for individual monitoring of exposed workers but IMS could also apply to participate with novel systems.

2.3 Project set-up and phases

As for IC 2008 and IC2009, four main phases can be defined for IC2010, i.e.:

1. *preparation*
2. *announcement and registration*
3. *execution*
4. *reporting*

In the *preparation* phase for IC2010, the OG developed a proposal by defining the scope, establishing the irradiation plan (radiation qualities and dose range) and setting the budget and provisional timetable. The OG then contacted suitably accredited (ISO 17025 accreditation) irradiation laboratories for quotes, based on an outline of the proposed irradiation and the number of expected participants. As EURADOS is a non-profit making organisation, the intercomparison fee is based on a careful prediction of total costs. This includes a prediction of the minimum number of participants required to balance income and expenditure. When the quotes from the irradiation laboratories have been received and the budget has been finalised, the OG presents the proposal to the EURADOS Council for formal approval.

The Federal Office of Metrology (BEV), Austria was selected as the irradiation laboratory for IC2010.

Terms and conditions for the participants were then established with limits set for maximum and minimum number of participants. The EURADOS Council approved the budget and gave formal approval to the OG to proceed with IC2010.

During the second phase, *announcement and registration*, the IC exercise was formally announced on the EURADOS website and by direct emailing of the announcement to all IMS on the OG mailing list which includes all previous EURADOS intercomparison participants. The announcement included information about the type of intercomparison, the dose ranges, energies and angles of irradiation and the schedule for IC2010.

To clarify the scope of the IC to the candidate participants, the following information was given in the *announcement and application* phase:

Irradiations, restricted to photons, will be carried out in an accredited or primary standard European irradiation facility in terms of $H_p(10)$ and $H_p(0.07)$ in the following ranges:

1. Energy: 30 keV to 1.3 MeV
2. Dose: 0.2 mSv to 1 Sv
3. Angle of incidence: $\pm 60^\circ$

This information was provided in advance to enable potential participants to decide if this IC would be suitable for their dosimetry systems.

Those interested in participating were invited to complete an application form (which included terms and conditions). The application form could be downloaded from the EURADOS website. The Organization Group then met and evaluated the status of all the applications. Once the minimum number of participants, as set by the budget, had been reached the selected irradiation laboratory was formally notified and decision was made to continue to the next phase.

The *execution* phase started with the coordinator sending all participants a confirmation of participation and a set of instructions as well as the corresponding invoice. All participants were requested to prepare their doseometers according to their standard procedures, and to supply the identification codes of the doseometers to the coordinator using the electronic form sent by the coordinator. Each participant was required to prepare 26 doseometers in total (20 doseometers for irradiation, 6 background/spares).

The participants were required to dispatch the doseometers to the coordinating laboratory, in accordance with the guidelines, before the set deadline. The coordinating laboratory received and registered all doseometers, and added organization labels to all of the doseometers. For each dosemeter, the label added by the coordinator showed the identification number as provided by the participant and a code to be used by the irradiation laboratory. The code consisted of a "system number" identifying the dosemeter system and a number corresponding to a radiation quality, angle and dose range combination from the irradiation plan. Figure 1 shows an example of a dosemeter with the label added by the coordinator.



Figure 1: Example of a dosimeter with the label added by the coordinator. "S40" is the code to identify the dosimetry system (note: for presentation of the results, a different code was used). "26" is the code to identify a specific radiation quality, angle and dose range combination from the irradiation plan.

The dosimeters were forwarded to the irradiation laboratory in two crates (Figure 2). Each crate was accompanied by an electronic dosimeter to monitor the doses received in transit.



Figure 2: Two crates ready for dispatch

When the irradiated dosimeters were returned to the co-ordinator, the organization labels were removed and the dosimeters were returned to the intercomparison participants for evaluation

along with instructions on reporting their results. An Excel-sheet was provided for digital transfer of the results.

After receiving the results, the co-ordinator calculated the value of the response, R, for each dosimeter by dividing the participant's result ($H_{p, \text{participant}}$) by the reference dose given by the irradiation laboratory ($H_{p, \text{reference}}$) according with equation (1).

$$R = \frac{H_{p, \text{participant}}}{H_{p, \text{reference}}} \quad (1)$$

The calculated response values were sent to each participant for the initial check and confirmation (with the opportunity to comment). Thus, each participant was informed of the radiation qualities and the doses given to their dosimeters. All comments were discussed by the OG to decide if any applications for result modification could be permitted. Note that as a general rule, the OG only accepts changes to the results when it is proven that there has been an error by the OG or by the irradiation laboratory.

In the final phase, *reporting*, the coordinator prepared the "Certificates of Participation" which were signed by the coordinator and the chairperson of EURADOS. These certificates were issued to participants at the "Participants' Meeting" during EURADOS Annual Meeting (AM2011) in Prague. The participants present at this meeting received their Certificate of Participation including information on the irradiation qualities, radiation doses, response values and overall uncertainties. The participants who did not attend the meeting received their Certificates of Participation by postal mail. The last task of the *reporting* phase was the preparation and publication of this EURADOS report.

The main milestones in the time schedule are summarized in Appendix A: Time schedule.

2.4 Irradiation plan

Photon irradiation qualities were chosen from ISO 4037 [9], including S-Co, S-Cs, W-110, W-250 and N-40. Irradiation categories were specified by the OG in an irradiation plan. Details about this plan were confidential and only known by the OG and the irradiation laboratory. In addition, the exact dose value (which was varied $\pm 20\%$ from the nominal value) was selected by the irradiation laboratory for each irradiation. Table 1 summarizes the plan for each dosimetry system. The plan was designed to give an overview of performance while varying irradiation parameters (dose, energy, angle) and applying mixed radiation qualities.

Table 1: Irradiation plan for the EURADOS 2010 intercomparison for whole body dosemeters.

Irradiation category	Nominal $H_p(10)$ (mSv)	Number of dosemeters
W-250 + S-Cs	3	2
N-40 + S-Cs	3	2
N-40 30°	1	2
W-110/ $\pm 45^\circ/y$	5	2
W-110/ $\pm 45^\circ/x$	5	2
S-Cs-L	0.5	2
S-Cs-M	2.5	4
S-Cs-H	12	2
S-Co	250	2
	Total:	20 dosemeters (24 irradiations)
Background and transit control		6

2.5 Participants

70 IMS from 30 countries (Appendix B: List of participants) participated with a total of 85 dosimetry systems: 59 TLD, 13 Films, 8 OSL and 5 dosimeter systems based on other techniques (Other), i.e. radiophotoluminescence (RPL), direct ion storage (DIS) or active personal dosemeters (APD).

Table 2: Number of participant systems per country

Country	Services per country	Total number of services	Systems	Total number of systems
Italy	7		11	
Belgium	8		10	
UK	6	30	8	40
Spain	5		5	
Germany	4		6	
Czech Republic				
Portugal	3	9	3	9
Denmark				
Austria, Slovenia, Netherlands Finland, Croatia, Serbia, Ukraine, Poland	2	16	18	18
Turkey, Switzerland, Romania	1	3	2	6
France, Ireland, Macedonia, Luxembourg, Greece, Bosnia & Herzegovina, Estonia, Lithuania, Argentina, Norway, Moldova	1	12	1	12

Table 3 shows the number of systems per dosimeter type including information on the type of detector. TLD is the most widely employed dosimetry technique. 44% of the TLD participants used LiF:Mg,Ti detectors. 67 of the 85 systems submitted results for both quantities and the remaining 18 only in the quantity $H_p(10)$.

Table 3: Number of systems per dosimeter type and type of detector and dose quantity

type/detector	systems	% all	% type	type	$H_p(10) / H_p(0.07)$	$H_p(10)$ -only	all
TLD	59	69%		TLD	49	10	59
LiF:Mg,Ti	37	44%	63%	Film	6	7	13
LiF:Mg,Cu,P	10	12%	17%	OSL	8	0	8
Li2B4O7:Cu/CaSO4:TM	8	9%	14%	other	4	1	5
LiF:Mg,Cu,P/CaF:Mn	1	1%	2%	All	67	18	85
LiF:Mg,Ti/CaF2:Dy	1	1%	2%				
LiF:Mg,Ti/Li2B4O7:Mn.Si	1	1%	2%				
LiF:Mg,Ti/LiF:Mg,Cu,P	1	1%	2%				
Film	13	15%					
Agfa	8	9%	62%				
Kodak	4	5%	31%				
FOMA	1	1%	8%				
OSL	8	9%					
Al2O3:C	7	8%	88%				
BeO	1	1%	13%				
Other	5	6%					
Glass	2	2%	40%				
DIS	2	2%	40%				
APD	1	1%	20%				
All	85	100%					

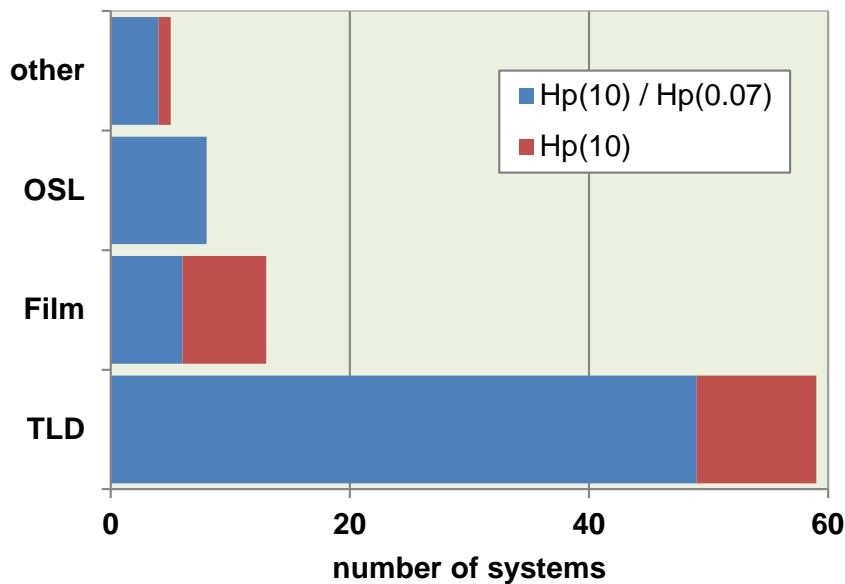


Figure 3: Summary of all systems concerning type of detector and dose quantity

Table 4 summarizes the reference radiation qualities. Cs-137 was the most popular source used for calibration.

Table 4: Referenced radiation qualities given by the participants

reference quality	TLD	Film	OSL	other	All
Cs-137	31	6	8	2	47
Cs-137/N300	1				1
Cs-137/N80	1				1
Cs-137/48keV		1			1
Co-60/30keV	1				1
Co-60	8	2			10
35keV		1			1
6MV	1				1
N80	1				1
Ra-226	1				1
Sr/Y-90	1				1
W300	1				1
not reported	12	3		3	18
All	59	13	8	5	85

2.6 Intercomparison procedure compared to ISO 14146

IC2010 was set up to meet the standard ISO 14146 "Criteria and performance limits for the periodic evaluation of processors of personal dosemeters" [10] and compliance was reached for the following items:

- Quantities measured
- Standard test conditions
- Maximum accumulated photon radiation background
- Radiation qualities and angles
- Dose range
- Evaluation sample size
- Number of background and spare dosimeters
- Evaluation procedure
- Evaluation sequence

However on some items it was impossible to fulfil the ISO 14146 requirements. The main deviations from the standard were:

- The "evaluating organization" **did not** send a representative to select the dosimeters and to observe that no special effort is made in processing them, to ensure that the processing of the evaluation dosimeters is carried out in exactly the same way as for the processor's normal customers.
- No "qualification body" involved (for approving dosimetry services)
 - The qualification body shall deem competent each processor which is able to show compliance with the performance limits.
 - The qualification body shall provide the processor with a certificate which specifies at least the dosimetry system and the period of validity.

Obviously it is impossible to comply fully with ISO 14146 because an IC deviates from a performance test in a few fundamental and practical aspects.

- In an IC, there are many participants, and the organizer is not able to visit all these participants.
- The performance test should be tailored to the specifications of the dosimetry system tested, which may or may not be controlled by national requirements. In an international IC the participating systems may cover a wide range of systems with different specifications for dose and energy ranges covered.
- For the participants it is very difficult to avoid deviating from routine procedures, e.g. because:
 - the dosimeters have to be sent to a foreign address,
 - the time period the dosimeters leave the service deviates from what is normal,
 - the results have to be prevented from being transferred to registries of radiation workers,
 - the method for the background correction may differ from normal practice.

Since EURADOS cannot play the role as “qualification body”, the participant has the responsibility for making their participation in the IC a useful exercise for their IMS, for example for supporting their accreditation process. The participant should record (for their own use) all deviations from routine procedures, and should be able to justify these deviations to their accreditation organization and explain any impact on the results. Therefore it is in the interest of the participant, to restrict these deviations from normal practice to the minimum.

For these reasons EURADOS does not provide the participants with any assessment of the individual results but only the ratio between the measured dose and the conventional true value. However, for the analysis of the global results, the performance limits according to ISO 14146, commonly known as “trumpet curves”, were adopted:

$$\frac{1}{F} \left(1 - \frac{2H_0}{H_0 + H_c} \right) \leq R \leq F \left(1 + \frac{H_0}{2H_0 + H_c} \right) \quad (2)$$

where, $F = 1.5$, H_c is the conventional true value and H_0 is the “lower limit of the dose range for which the system has been approved”. For this IC H_0 was not tailored to each individual participant. Instead, a value of 0.085 mSv was chosen for H_0 for all participants, assuming a “lower limit of the dose range” of 1 mSv in a year (i.e. the annual limit for effective dose for the public), and an issuing frequency of 12 per year.

The standard ISO 14146 allows a maximum of one-tenth of the dosimeters irradiated to exceed the above performance limits but, for the analysis of the global results in this report, any result exceeding these limits was considered as an outlier.

2.7 Execution of the irradiations

A total of 1700 dosimeters were irradiated according to the irradiation plan at the irradiation laboratory contracted for the IC (BEV, Austria, accredited according to ISO 17025). All irradiations were performed according to the international standard ISO 4037 [9].

Personal dose equivalent was obtained using the primary standard of the BEV for X-ray and gamma radiation qualities. The BEV standard for monitoring air kerma for the X-ray radiation qualities of ISO standard 4037 was the free in air plate ionisation chamber. For gamma radiation from Cs-137 and Co-60 radionuclides a graphite – cylindrical cavity ionisation chamber was used. For dose equivalent quantities, calibration conditions were created according to ISO 4037. Suitable conversion coefficients were taken from ISO 4037 as well or they were calculated from measured real X-ray spectra. All irradiations were performed on the appropriate ISO slab-phantom recommended by the standard (Figure 4). As described in section 2.4, the irradiation laboratory varied the actual doses around the nominal values given in the irradiation plan.



Figure 4: Irradiation set up

Table 5 and Table 6 show a summary of the actual doses imparted for the different radiation qualities, for $H_p(10)$ and $H_p(0.07)$, respectively.

Table 5: Summary of the actual radiation qualities and doses imparted, $H_p(10)$

Radiation	Quality	$H_p(10)$ (mSv)	min (mSv)	max (mSv)
X-ray	N-40 30°	1	0.8	1.2
	W-110 45° X	5	4	6
	W-110 45° Y	5	4	6
Gamma	S-Cs	0.5	0.4	0.6
	S-Cs	2.5	2	3
	S-Cs	12	9.6	14.4
	S-Co	250	200	300
Mixed	N-40 + S-Cs	3	2.4	3.6
	W-250 + S-Cs	3	2.4	3.6

Table 6: Summary of the actual radiation qualities and doses imparted, $H_p(0.07)$

Radiation	Quality	$H_p(0.07)$ (mSv)	min (mSv)	max (mSv)
X-ray	N-40 30°	1	0.79	1.32
	W-110 45° X	5	3.82	5.75
	W-110 45° Y	5	3.82	5.75
Gamma	S-Cs	0.5	0.4	0.6
	S-Cs	2.5	2	3
	S-Cs	12	9.6	14.4
	S-Co	250	200	300
Mixed	N-40 + S-Cs	3	2.47	3.7
	W-250 + S-Cs	3	2.36	3.54

The laboratory reported the irradiation data to the coordinating laboratory by means of irradiation certificates (Appendix C: Example Irradiation Certificate).

2.8 Background and transit dose control

For each dosimetry system six dosimeters were reserved as “background and transit dose control” dosimeters to allow for background and transfer dose corrections. These dosimeters were also available for use by the irradiation laboratory in case of damage or errors with the irradiations. Only a few background and transit dose control dosimeters had to be used for this purpose.

The dosimeters were sent in two crates to the irradiation facility. Each crate contained an active personal dosimeter added by the coordinator to detect possible additional irradiations during shipment between the coordinator and irradiation laboratory.

The organizer provided the participants with the identification codes of the unused “background and transit dose control” dosimeters. The mean values per system for all of these non-irradiated dosimeters are shown in Figure 5.

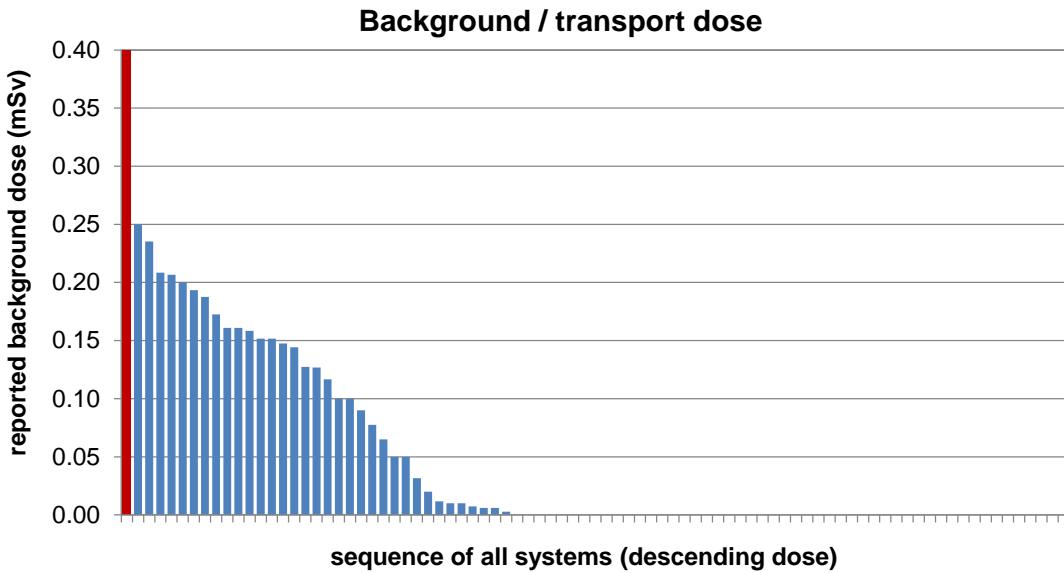


Figure 5: Reported background doses (the first red bar is truncated - the reported background dose was 1.8 mSv) for all systems

2.9 Confidentiality and integrity of the data and the results

The data processed by the OG had to be treated confidentially for two specific reasons.

Firstly, the IC was designed to be a blind test for all the participants. This meant that all participants were to report their results without knowing the details of the irradiation plan, in particular the dose values. The dose values were reported to the participants only after the coordinator had received the dose values evaluated by the participant. At the time of application for the IC, only the ranges of dose, energies and angles were known to the participants. Direct communication between participants and the irradiation laboratory was not allowed and the coordinator transferred all necessary information. It was known that some IMS would participate with more than one dosimetry system and it was also considered that some IMS might have access to results of other participants. In order to prevent these participants guessing dose values by combining results, the irradiation plan was executed in a random order for each participant. In addition, the irradiation laboratory varied the dose values in the irradiation plan within specified ranges from participant to participant, rather than using fixed dose values for each radiation quality.

Secondly, the individual results are the property of the participants only and thus have to be kept confidential. To assure this confidentiality the coordinator separated all information which could possibly lead to the identity of the participants from the published results. In the overviews of the results, the participating dosimetry systems are only referenced by a randomized code. All participants' certificates contained "Reporting number used in publications" known only to the participant and the coordinator. However, once participants have received their certificates, OG has no influence on the use that participants make of their own results.

During the IC exercises significant quantities of data had to be exchanged. In order to assure data integrity it was decided to use parallel data streams. All official results were reported on signed papers. In parallel data was exchanged in electronic formats for efficient processing and to prevent typographic errors. In case of any ambiguity the data on the signed papers was taken as "true".

2.10 EURADOS Certificates of Participation and Participants Meeting

EURADOS is not accredited for the evaluation of IMS and consequently the results issued by EURADOS itself cannot be regarded as an official test report. As an alternative, the established protocol is to report back the results to the individual participants in the form of a "Certificate of Participation", with the irradiation reports of the accredited irradiation laboratories as an annex.

These certificates consist of two pages. The front page shows the certificate number, the reporting number, the details of the participant, the description of the system as given by the participant and a summary of the IC procedure. The front page was signed by both the EURADOS Chairperson and the IC coordinator. The second page shows the actual results for each dosimeter, irradiation quality, value of $H_p(10)$ as reported by participant, value of $H_p(10)$ as reported by the irradiation laboratory, and the ratio of these two values. In addition, the same three quantities for $H_p(0.07)$ were reported for the participants who chose to report $H_p(0.07)$ values. In the Certificates, no performance limits were indicated because these might differ from one participant to the other (see Appendix D: Example "Certificate of Participation").

The next step was to prepare a participants meeting, coinciding with the EURADOS 2011 Annual Meeting, held in Prague, to show and discuss the results among the OG and the participants. At this meeting the participants received their Certificate of Participation including information on the irradiation qualities, doses imparted, response values and overall uncertainties. The participants who were not able to attend the meeting received their certificates by post.

3 Results and Discussion

3.1 Review of the comments received from participants

After sending the draft results to the participants, comments were only received from one participant who requested revision of their $H_p(0.07)$ results because of errors made by the participant during evaluation.

In accordance with OG protocol, it was decided to leave these results unchanged.

3.2 Basic statistical results

The response (R) was calculated for each dosimeter by dividing the participant's result, $H_{p, \text{participant}}$ by the reference dose values (given by irradiation laboratory) $H_{p, \text{reference}}$ according with equation (1), (page 5).

Table 7 shows the total number of values reported, together with estimates for the central value of the distribution of response values (arithmetic mean, median value) and measures for the spread in the response values (standard deviation, 5th and 95th percentiles).

Table 7: Total number of values reported, and some statistical quantities indicating the central values and spread of the results

statistics of response values	response	
	$H_p(10)$	$H_p(0.07)$
number of reported values	1700	1304
arithmetic mean value	1.00	0.99
standard deviation	0.23	0.23
minimum	0.15	0.06
5 th percentile	0.63	0.59
25 th percentile	0.88	0.85
median value	0.98	0.97
75 th percentile	1.08	1.09
95 th percentile	1.54	1.55
maximum	3.80	2.53

For all irradiated dosimeters, values for $H_p(10)$ were reported, while for $H_p(0.07)$ participants reported no values in about 22% of the cases. Both for $H_p(10)$ and for $H_p(0.07)$ the estimates of the

central values (medians) were all close to unity. The spread in the values for $H_p(10)$ and that for $H_p(0.07)$ were very similar.

From the percentiles, the 90% coverage intervals of all responses for all participants together can be derived: this was approximately 0.6 – 1.6.

3.3 Distribution of response values

Figure 6 shows the frequency distributions and the cumulative distributions of all response values. For $H_p(10)$ values ranged from 0.15 to 3.5 (outside the range of the figure), while for $H_p(0.07)$ the values ranged from 0.06 to 3.53 (outside the range of the figure).

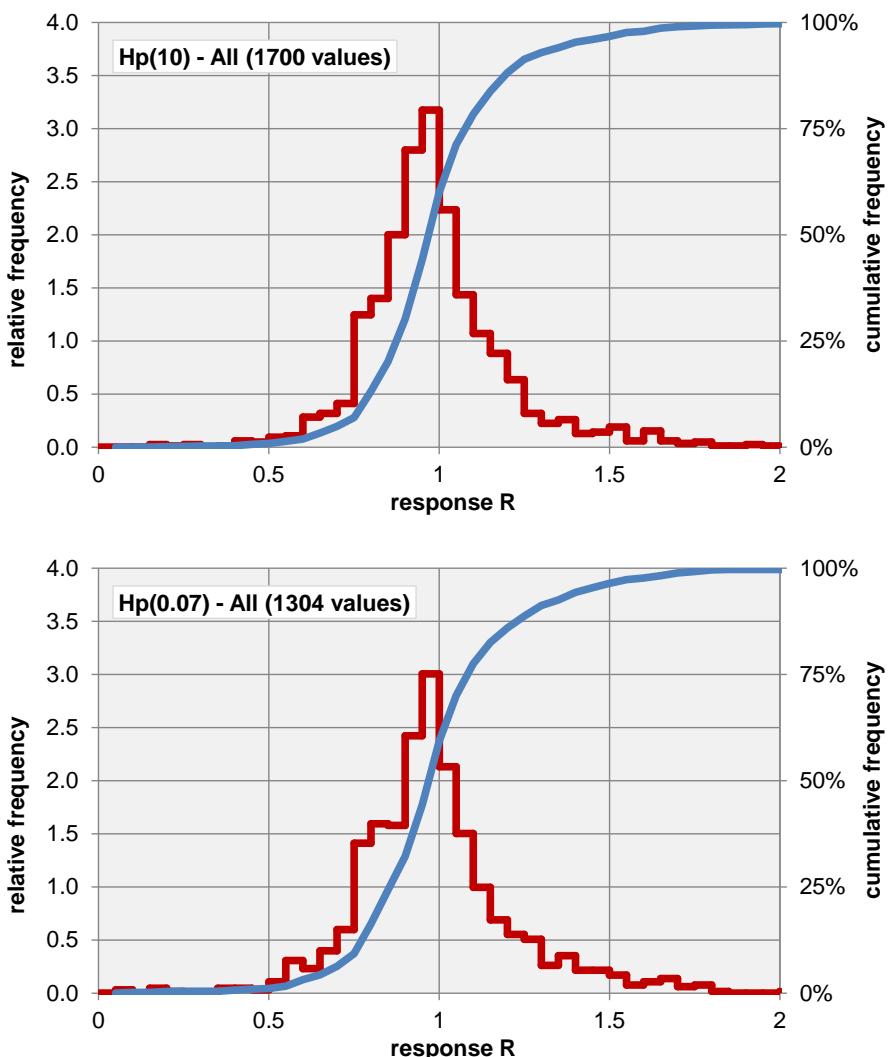


Figure 6: Frequency distributions and the cumulative distributions of all response values. Top: $H_p(10)$; bottom: $H_p(0.07)$. Some values were out of the range of the x-axis.

Figure 7 shows the same results, but subdivided per type of system.

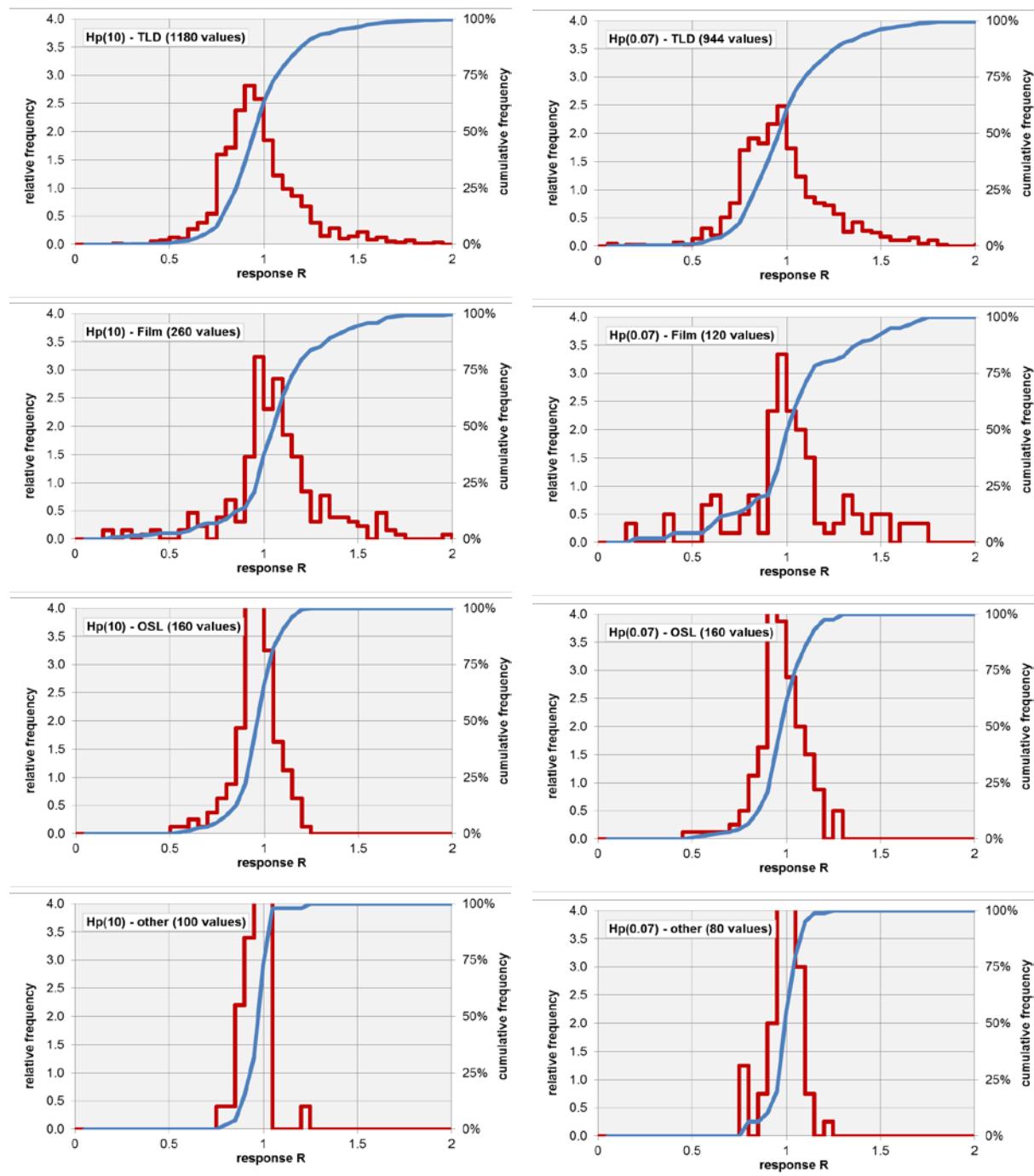


Figure 7: Frequency distributions and the cumulative distributions of all response value. From top to bottom: different types of dosimetry systems. Left: $H_p(10)$; right: $H_p(0.07)$. Some values were out of the range of the x and y-axis. The area below the frequency distribution is equal to unity for all graphs.

3.4 Response values per radiation quality

Subdividing the results per radiation quality results in Figure 8 and Figure 9 where the distribution of $H_p(10)$ and $H_p(0.07)$ results is expressed in the diagrams by the median value (diamond), the 50% range (box), the 90% range (bar) and the maximum and minimum values (dots).

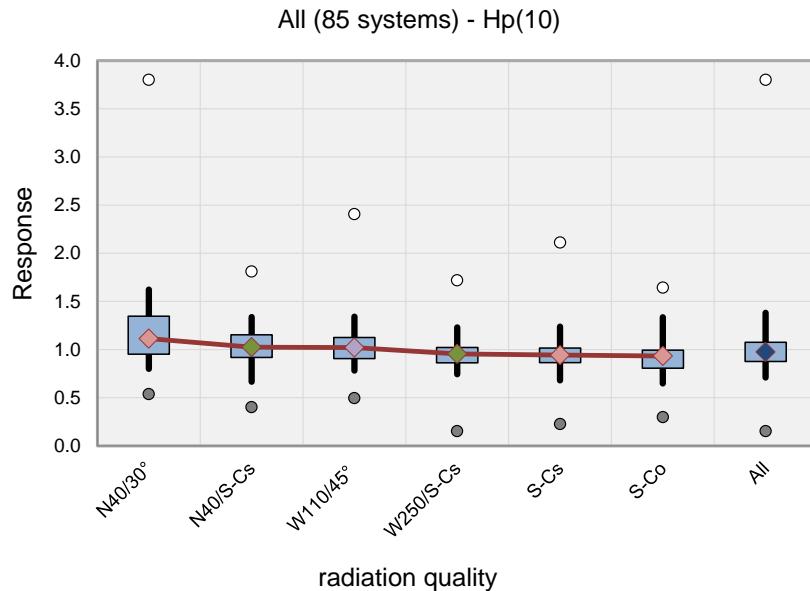


Figure 8: Distributions of all $H_p(10)$ response values for different radiation qualities. Diamond (Median), box (50% range), bar (90% range), dots (minimum, maximum).

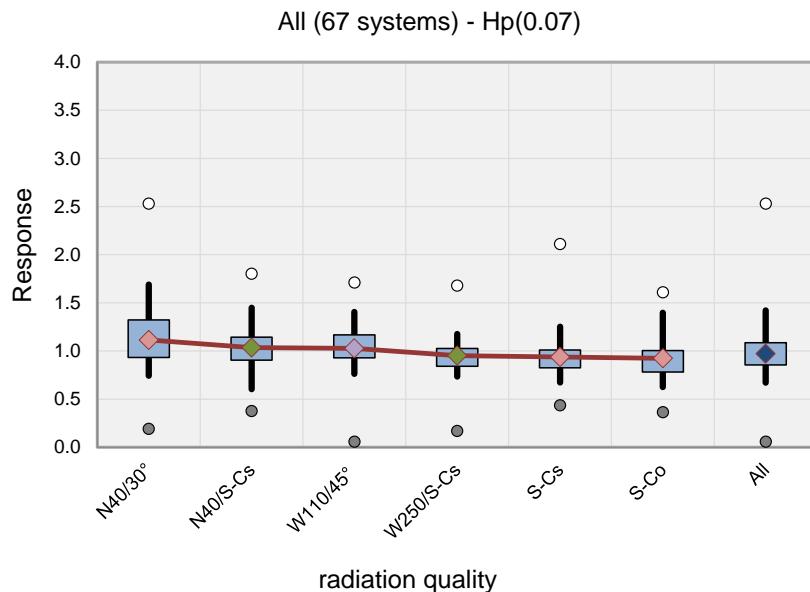


Figure 9: Distributions of all $H_p(0.07)$ response values for different radiation qualities. Diamond (Median), box (50% range), bar (90% range), dots (minimum, maximum).

Figure 8 summarises all system results for the dose quantity $H_p(10)$ for the different irradiation categories. The median of all response values of all systems for all radiations (furthest right bar in the diagram) is close to 1. In most cases (90% bar) the response values for $H_p(10)$ are within an acceptable range (0.7 to 1.5). A pronounced over response for many systems is obvious only for N40/30° irradiations with the low energy photons (filtered 40 kV x-ray radiation). The extreme values for all qualities cover the range from 0.15 to 3.8.

Figure 9 shows the same type of results, but for the dose quantity $H_p(0.07)$.

Figure 10 shows the same results, but subdivided per type of system. This subdivision makes clear that the deviations for N40/30° are mainly caused by TLD and film systems. Apart for the larger spread of response values for film systems, the results suggest an overall bias larger than 1 for these systems for low photon energies, and smaller than one for high photon energies. In contrast, the systems in the category Other show a small spread and almost no bias for the energy range tested.

The comparison between TLD and film systems shows a pronounced difference between the spread of response values for these two dosimeter types. Both TLDs and films show wider range of extremes than OSL and Other. However comparing the 50% boxes of both types (TLD and film) for all qualities together gives quite similar results. For lower energy photons (N40/30° was tested) the TLD and film results are comparable with the exception of the single TLD outlier (see Figure 10). For all of the qualities including mixed fields, the TLDs and films show good results although a few outliers can be seen in these graphs.

These results show that the performance of good film dosimeters is comparable with the performance of good TLDs.

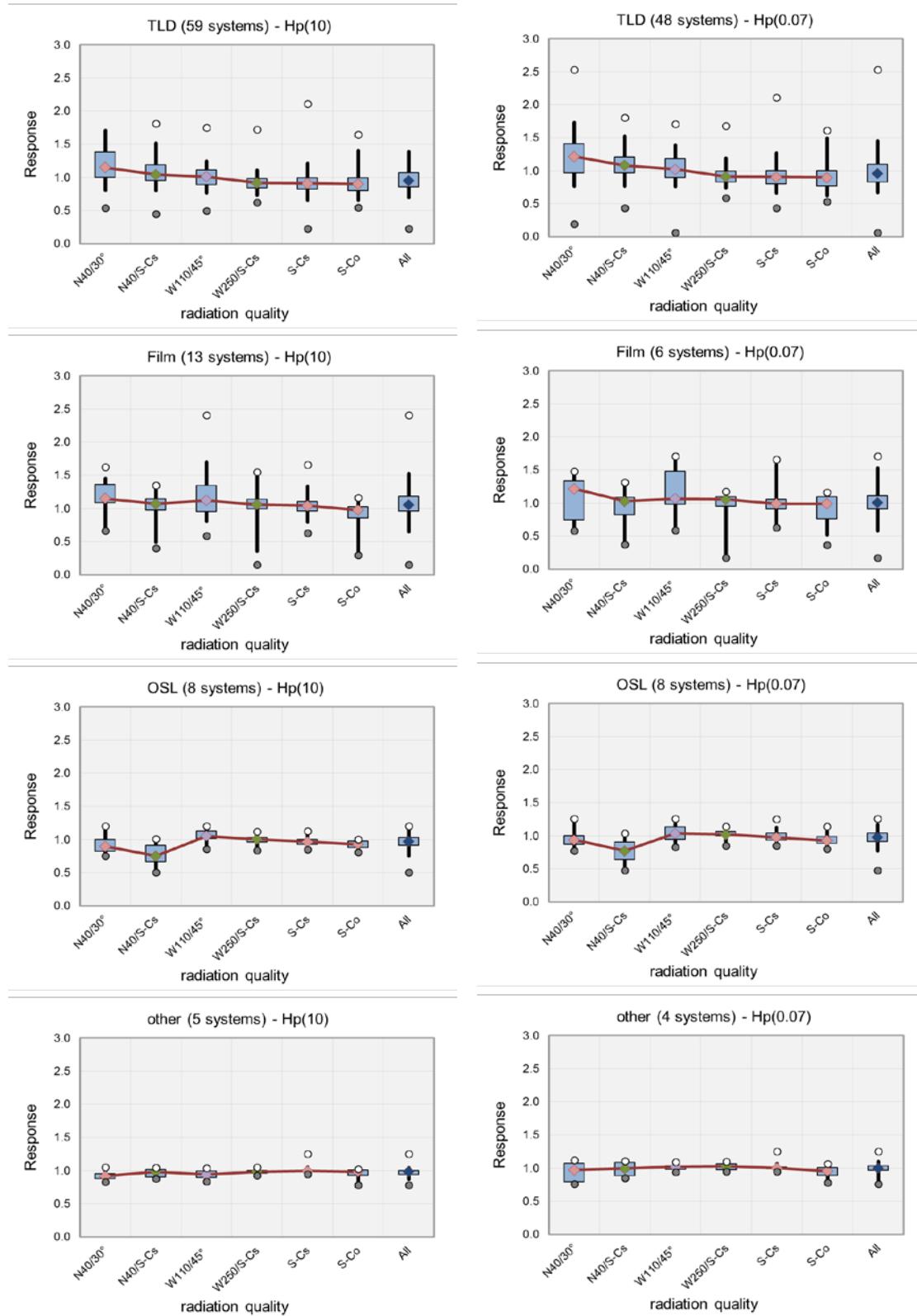


Figure 10: Distributions of all response values for different systems. From top to bottom: different types of dosimetry systems. Left: $H_p(10)$; right: $H_p(0.07)$. The overresponse for a single system for N40/30° seen in Figure 8 is off scale in this Figure (see TLD $H_p(10)$).

3.5 Response values for different TLD detector materials

Three different detectors material combinations were grouped in Figure 11.

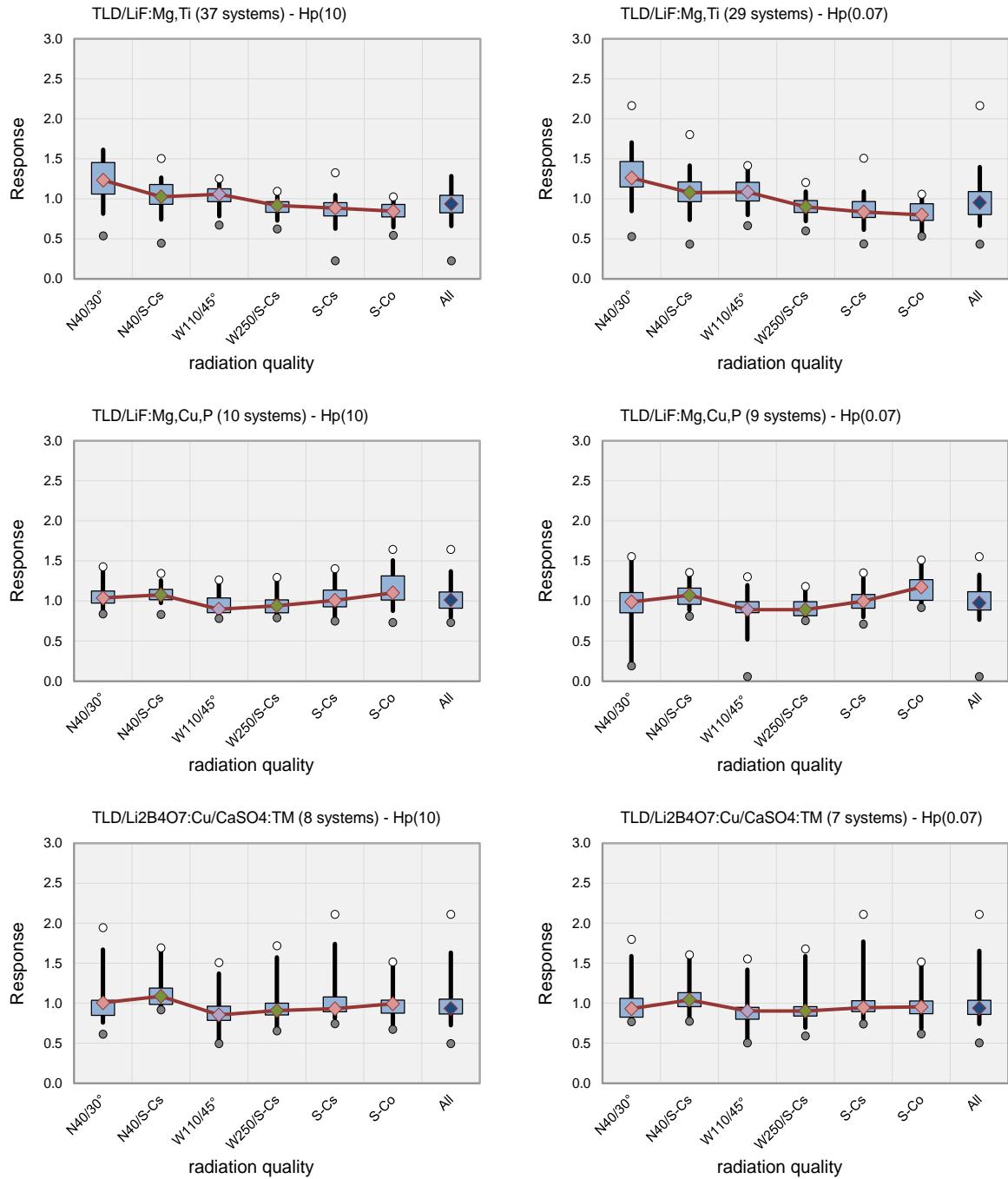


Figure 11: Comparison of the response distributions for different TLD materials.

37 out of a total of 55 TLD systems used LiF:Mg,Ti as detector material. The typical over response for lower energy photons and some mixed radiation fields are observed, eg N40/30°. For the

higher sensitivity material LiF:Mg,Cu,P the performance, for both the energy response as well as for the spread of the individual response values, is better compared to LiF:Mg,Ti. For these LiF:Mg,Cu,P systems the response is very close to unity for all the radiation qualities. For the 50% box there is a slight reduction in the response to W110/45° and a slight increase in the response to Co-60. The response for Li₂B₄O₇/CaSO₄:Tm dosimeters is also good for all qualities although it can be seen that the bias within the 90% bar is predominantly an over response. The spread of the individual response values for these systems is slightly higher than that for the LiF:Mg,Ti and LiF:Mg,Cu,P systems.

3.6 Reproducibility

To investigate the reproducibility of the IC results, the coefficient of variation (CV) was calculated for all irradiation categories as the ratio of the standard deviation to the mean value of the two or four values. The relative frequency (histogram) and the cumulative frequency of the calculated values for all reported results is shown in Figure 12. For $H_p(10)$, it can be seen that around 70% of the reported values fall below 5% of CV. For only 3% of the reported results the CV was larger than 20% (outside the x-axis in Figure 11) although some participants reported values with more than 40% of CV within one irradiation category. For $H_p(0.07)$ similar conclusions can be made.

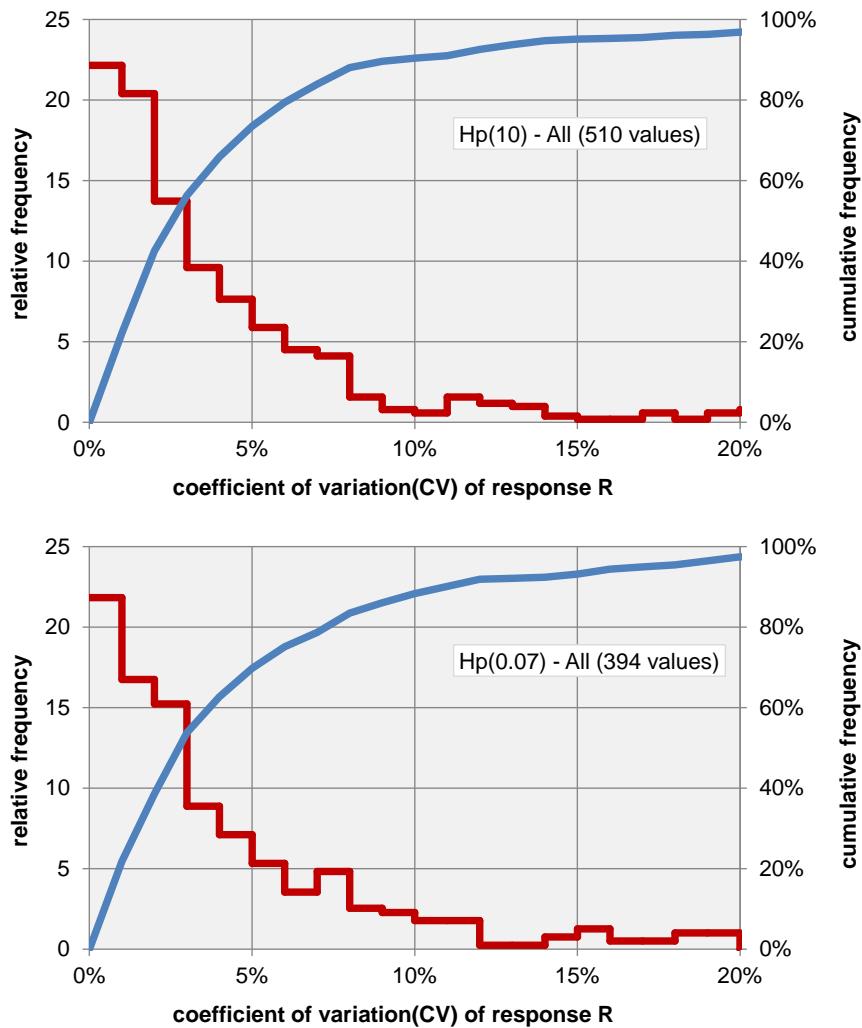


Figure 12: Distributions of coefficient of variation (CV) values for results within the same irradiation categories. Relative frequency (red histogram, left axis) and the cumulative frequency (blue, right axis). Values for $H_p(10)$ (top) and for $H_p(0.07)$ (bottom).

3.7 Linearity

One of the aims of the irradiation plan was to test the linearity of the systems by varying the dose through a range, from 0.5 mSv to 250 mSv, without varying any other parameter, such as beam quality or irradiation angle. The quality chosen for this test was S-Cs. Unfortunately, because of dose rate limitations, doses in the 250 mSv range were not available for S-Cs. As an alternative, S-Co was chosen for the highest dose value, to allow for testing the performance of the participating systems in this dose range (see section 22.4).

The response values on the low dose end of the dose range for S-Cs (0.5 mSv) may vary because of non-perfect correction for background and transit dose (see Paragraph 2.8). This means that only results for S-Cs irradiations for the dose values around 3 mSv (4 dosimeters per system) and 10 mSv (2 dosimeters per system) could be used for a pure linearity test. The distribution of the mean response values and the ratio for different responses are given in Figure 13. The mean linearity for all these TLD systems is good within the tested range. Most of the systems appear to be able to cope with both S-Cs and S-Co irradiations although it can be seen that the 90% bar for S-Co is significantly higher than for S-Cs irradiations, i.e. some of the systems are over responding to S-Co.

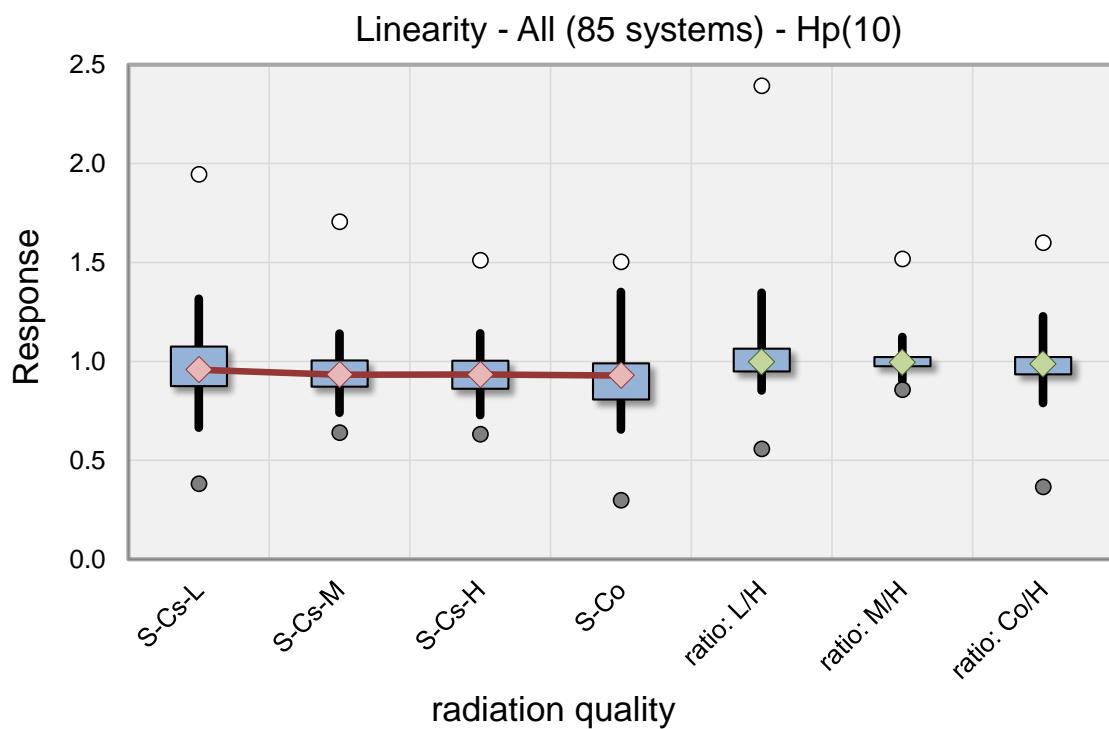


Figure 13: Distribution of the mean response values for Cs and Co irradiations for different doses (L: low dose; M: medium dose; H: high dose) and the distribution for different mean response ratios.

3.8 Response values as a function of reference doses

Figure 14 displays all response values for $H_p(10)$ as a function of reference dose. The distribution of response values were subdivided by type of dosimetry system (film, TLD, OSL, Other). The dashed lines represent the trumpet curves according to equation (2), with $F=1.5$ and $H_0=0.085$ mSv. The outliers represent 5% of the total numbers of reported values for $H_p(10)$ and 9% for $H_p(0.07)$.

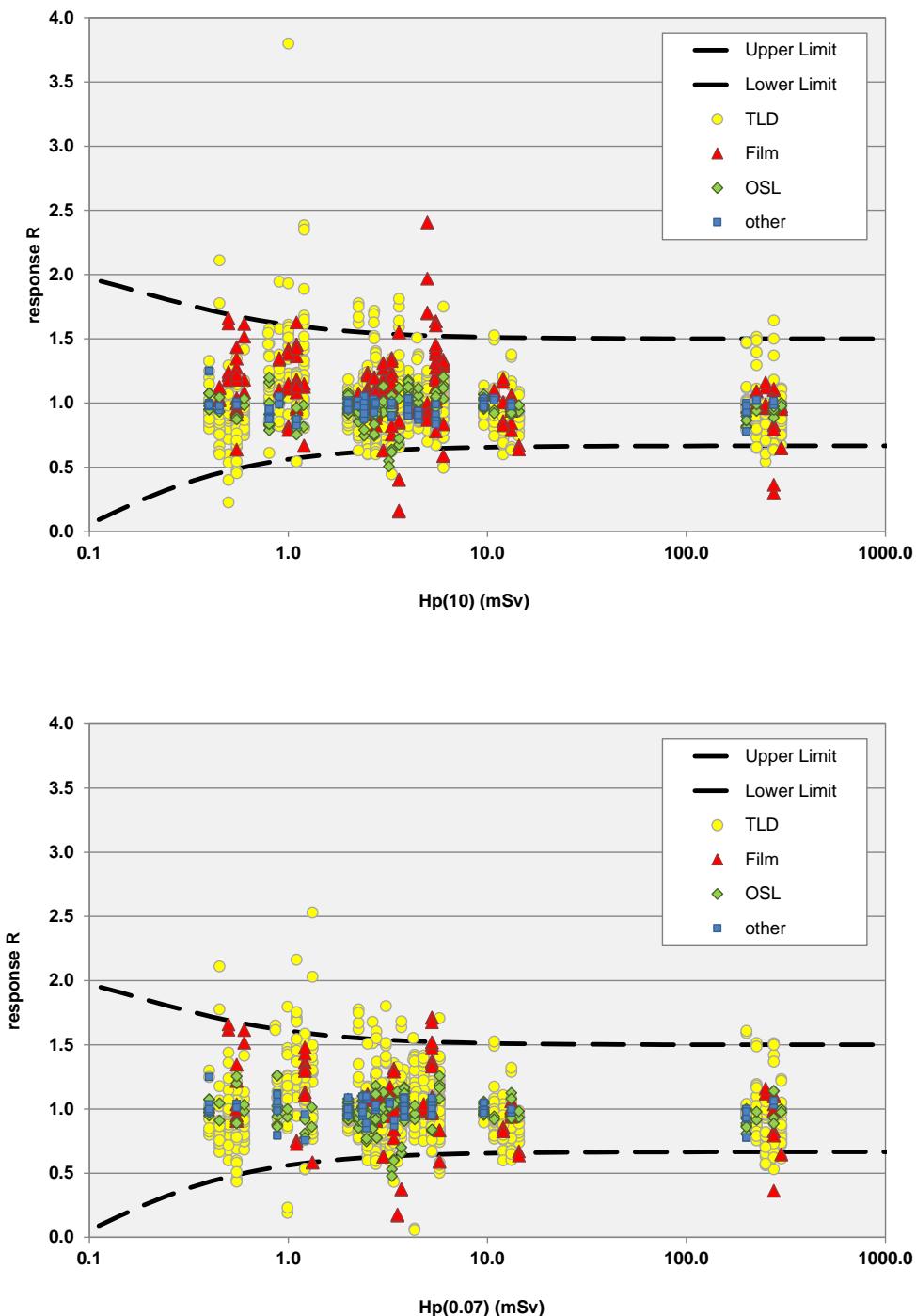


Figure 14: Response values for $H_p(10)$ (top) and $H_p(0.07)$ (bottom) as a function of reference dose. The dashed lines represent the trumpet curves.

3.9 Outliers

Defining all the response values out of the trumpet curves as outliers, Table 8 and Table 9 represent the relative number of outliers per radiation quality and type of dosimetry system.

Table 8: Relative number of outliers per irradiation category and type of dosimetry system, for $H_p(10)$ results. For S-Cs and W110 all categories were combined.

Outliers						
Quantity	Irradiation category	TLD	Film	OSL	other	All
$H_p(10)$	N40/30°	10%	4%	0%	0%	8%
	N40/S-Cs	7%	8%	19%	0%	8%
	W110/45°	2%	17%	0%	0%	4%
	W250/S-Cs	2%	15%	0%	0%	4%
	S-Cs	4%	1%	0%	0%	3%
	S-Co	8%	19%	0%	0%	8%
$H_p(10)$ All		5%	8%	2%	0%	5%

Table 9: Relative number of outliers per irradiation category and type of dosimetry system, for $H_p(0.07)$ results. For S-Cs and W110 all categories were combined.

Outliers						
Quantity	Irradiation category	TLD	Film	OSL	other	All
$H_p(0.07)$	N40/30°	16%	17%	0%	0%	13%
	N40/S-Cs	9%	17%	25%	0%	11%
	W110/45°	5%	21%	0%	0%	6%
	W250/S-Cs	7%	17%	0%	0%	7%
	S-Cs	10%	2%	0%	0%	8%
	S-Co	16%	25%	0%	0%	14%
$H_p(0.07)$ All		10%	13%	3%	0%	9%

3.10 Results for individual systems

This paragraph presents results for individual systems separately (but anonymously). Individual systems are represented with a “reporting number”. This number was randomly assigned and has no relation to the participant number as used by the organizer for keeping track of correspondence etc.

Response values for each individual system separately are shown anonymously in Figure 15. It shows that most outliers are grouped at certain systems. Some systems show a significant bias, others have a more than normal spread of results.

It should be noted that there are examples of excellent performances within each type of dosimetry system.

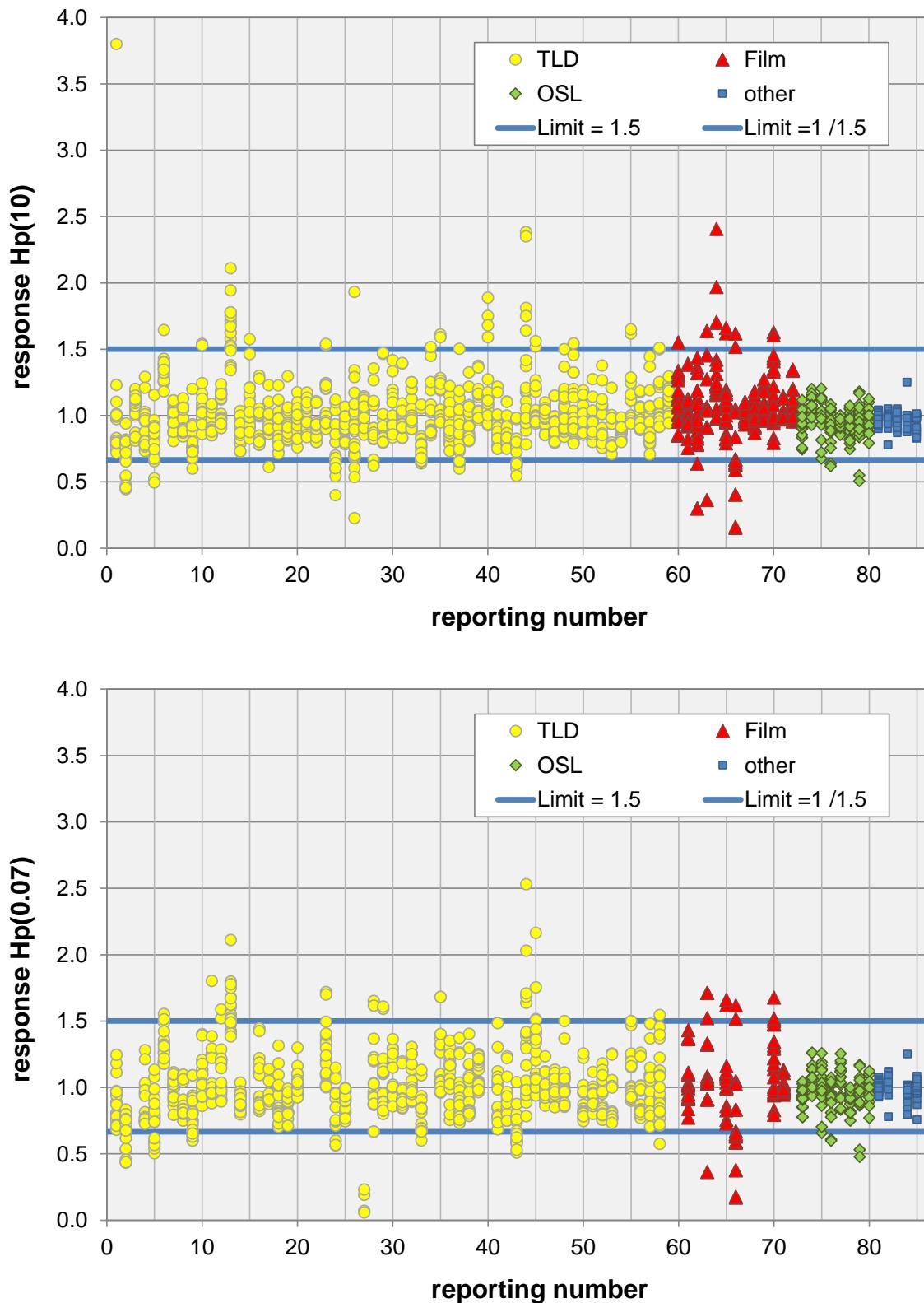


Figure 15: Response values for $H_p(10)$ (top) and $H_p(0.07)$ (bottom) for each individual participant system. Film, TLD, OSL and other systems are represented by triangles, circles, diamonds and squares, respectively.

For each participating system a separate datasheet was prepared summarizing all the results and the underlying data. Data for $H_p(10)$ and $H_p(0.07)$ (if any) is presented in separate sheets. Each sheet shows the data reported by the irradiation laboratory and by the participant, and the response value calculated from these values (for each irradiation separately). Data has been combined for the radiation qualities and some statistical quantities are also provided. Two figures have been included to show the response values in the trumpet curve and the response values for the different radiation qualities.

These sheets have been prepared primarily to enable the participants to analyze their own results and to compare these with the results of the other participants. The individual results will not be analyzed in further detail in this report. The datasheets for all participants can be inspected in Appendix E: Datasheets with results for individual participants.

4 Conclusions

EURADOS working group 2 has developed a system for self sustained ICs for IMS for external radiation. IC2010 for whole body dosimeters was carried out in 2010 with 85 participating dosimetry systems from participants around the world. The IC results can assist all participants to demonstrate compliance within their own quality management system, compare their results with other participants and develop action plans for improving their own systems. In general, the IMS participants showed a very satisfactory performance with only 5% outliers from the total reported values. Some TLD systems have shown greater deviations than in IC2008 while film performance has improved. The dosimetry systems in category Other have no outliers. However IC2010 results do show that there are examples of excellent performances within each type of dosimetry system.

The median of all response values was very close to unity. This finding confirms that, in general, the calibration procedures, especially the traceability to standard dosimetry laboratories, meets the required standards without any general bias. However, the results, in particular the outliers, also indicate that a number of services could improve the quality of their systems by reviewing their calibration procedures.

Specific additional information was supplied by the participants. This allowed a more detailed analysis of the results with respect to detector type. The observed characteristics are generally in agreement with results established in scientific literature.

The high number of participating systems (85) confirms that there is a significant demand for internationally organized ICs and that these are of operational value for individual monitoring services. Therefore it is planned to continue this series of EURADOS ICs.

5 References

- 1 Editors: D.T. Bartlett, P. Ambrosi, J.M. Bordy, J.W.E. van Dijk, *Harmonisation and Dosimetric Quality Assurance in Individual Monitoring for External Radiation.* Special issue - Radiat. Prot. Dosim. 89(1-2) (2000).
- 2 Editors: D.T. Bartlett, J. Boehm, H. Hyvonen, *Individual Monitoring of External Radiation.* Special Issue - Radiat. Prot. Dosim. 96(1-3) (2001).
- 3 Editors: J.W.E. van Dijk, T. Bolognese-Milsztajn, E. Fantuzzi, M.A. Lopez Ponte, H. Stadtmann, *Harmonisation of Individual Monitoring in Europe.* Special Issue - Radiat Prot Dosim., Vol. 112(1) (2004).
- 4 European Commission, *Technical Recommendations for Monitoring Individuals Occupationally Exposed to External Radiation,* Directorate-General for Energy and Transport. RP 160, Luxembourg (2009).
- 5 International Organisation for Standardisation and International Electrotechnical Commission, *General requirements for the competence of testing and calibration laboratories.* ISO/IEC Standard 17025:2005.
- 6 T.W.M. Grimbergen, M. Figel, A. M. Romero, H. Stadtmann and A.F. McWhan, *EURADOS Intercomparison 2008 for Whole Body Dosemeters in Photon Fields,* Eurados Report 2012-01 (2012).
- 7 T.W.M. Grimbergen, M. Figel, A. M. Romero, H. Stadtmann and A.F. McWhan, *EURADOS Intercomparison 2009 for Extremity Dosemeters in Photon and Beta Fields,* Eurados Report 2013-01 (2013).
- 8 EURADOS WG2 , Harmonisation of Individual Monitoring in Europe. Final Report, (January 2007).
- 9 International Organisation for Standardisation. *X and gamma reference radiations for calibrating dosemeters and doserate meters and for determining their response as a function of photon energy. Part 3: Calibration of area and personal dosemeters and the measurement of their response as a function of energy and angle of incidence.* ISO 4037:1999.
- 10 International Organisation for Standardisation. *Radiation protection—criteria and performance limits for the periodic evaluation of processors of personal dosemeters for X and gamma radiation.* ISO 14146:2000.

6 Figures and tables

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Appendix A: Time schedule

Realized time Schedule:

May 2010	Announcement - Call for participants
30 July 2010	Deadline for IMS sending Application Forms
06 August 2010	Deadline for receiving guidelines
03 September 2010	Deadline for IMS sending dosemeters to OG
October 2010	Irradiation
November 2010	IMS Receiving dosemeters for readout
December 2010	Deadline for IMS sending dosemeters results to OG
January 2011	Deadline for OG sending and confirming results from IMS
February 2011	IMS receiving Certificates of Participation at Participants Meeting (coinciding with AM2011 in Prague)

Appendix B: List of participants

(Participants sorted alphabetically by country and institute)

Institute	Place	Country
AUTORIDAD REGULATORIA NUCLEAR	Buenos Aires	Argentina
Seibersdorf Labor GmbH - Dosimetry Service	Seibersdorf	Austria
IAEA	Wien	Austria
AV-Controlatom	Vilvoorde	Belgium
Belgoprocess NV	Dessel	Belgium
Department of Health Physics	Gent	Belgium
SCK-CEN Belgian Nuclear Research Centre	Mol	Belgium
U.Z.Gasthuisberg Leuven	Leuven	Belgium
Department of Defence Laboratories Belgium	Vilvoorde	Belgium
University of Liege, SUCPR	Liege	Belgium
Service de dosimetrie, Universite Catholique de Louvain	Brussels	Belgium
Institute for Public Health of Federation of Bosnia and Herzegovina	Sarajevo	Bosnia and Herzegovina
Ruder Boskovic Institute	Zagreb	Croatia
EKOTEH	Zagreb	Croatia
VF, a.s.	Cerna Hora	Czech Republic
CSOD - Celostatni sluzba osobni dozimetrie, s.r.o.	Praha	Czech Republic
National Radiation Protection Institute	Praha	Czech Republic
Personal Dosimetry Laboratory	Herlev	Denmark
Riso Personnel Dosimetry Laboratory	Roskilde	Denmark
Personodosimetri – Laboratorium	Aarhus	Denmark
Environmental Board Radiation Safety Department	Tallinn	Estonia
Doseco Ltd	Jyväskylä	Finland
Fortum, Loviisa Nuclear Power Plant	Loviisa	Finland
Institute de Radioprotection et de Surete Nucleaire	Le Vesinet Cedex	France
Helmholtzzentrum Muenchen	Munchen	Germany
Materialprüfungsamt Nordrhein-Westfalen MPA-NRW	Dortmund	Germany

LPS - Landesanstalt fur Personendosimetrie und Strahlenschutzausbildung	Berlin	Germany
Strahlenmesstelle Berlin	Berlin	Germany
Greek Atomic Energy Commission (GAEC)	Agia Paraskevi, Attiki	Greece
Radiological Protection Institute of Ireland (RPII)	Dublin	Ireland
Servizio di Dosimetria - Dipartimento di Energia - CESNEF Politecnico do Milano	Milano	Italy
ENEA Radiation Protection Institute Individual Monitoring Service	Bologna	Italy
L.B. Servizi per le Aziende s.r.l.	Terlizzi	Italy
Tecnorad s.r.l.	Verona	Italy
X-Gammaguard	Saronno	Italy
Servizio di Dosimetria AOU Careggi	Firenze	Italy
Servizio Dosimetrico ASL Cesena	Cesena	Italy
EUROPEAN COMMISSION - JOINT RESEARCH CENTRE - Nuclear decommissioning Unit - Radiation Protection Sector - Dosimetry Service	Ispra	Italy
Radiation Protection Centre Personal Dosimetry Division	Vilnius	Lithuania
Division de la Radioprotection		Luxembourg
Individual Dosimetry Laboratory of the Centre of Radiation Protection of the National Centre of Public Health	Chisinau	Moldova
Norwegian Radiation Protection Authority	Hamar	Norway
Laboratory of Individual and Environmental Dosimetry (LADIS)	Krakow	Poland
Central Laboratory for Radiological Protection	Warsaw	Poland
ITN-UPSR	Sacavem	Portugal
MedicalConsult, S.A.	Lisboa	Portugal
PLURIRAD Lda.	Lisboa	Portugal
Institute of Public Health - Ionizing Radiation Department - TLD	Skopje	Republic of Macedonia
DOZIMED S.R.L.	Magurele	Romania
Serbian Institute of Occupational Health "dr Dragomir Krajovic"	Belgrade	Serbia

Vinca Institute of Nuclear Sciences, Radiation Protection Dpt, Individual Monitoring Service	Belgrade	Serbia
Jozef Stefan Institute	Ljubljana	Slovenia
Nuclear Power Plant Krsko	Krsko	Slovenia
Ciemat External Dosimetry Service	Madrid	Spain
INFOCITEC S.A.	Madrid	Spain
Laboratorio de Dosimetria del Centro Nacional de Sanidad Ambiental	Majadahonda	Spain
Servicio de Dosimetria Externa de la Fabrica de Juzbado	Juzbado (Salamanca)	Spain
Gestisa	Madrid	Spain
Paul Scherrer Institute	Villigen	Switzerland
NRG - Radiation & Environment	Arnhem	The Netherlands
Philips Electronics Nederland B.V., Department: Philips Stralingsbeschemingsdienst	Eindhoven	The Netherlands
Turkish Atomic Energy Authority (TAEK)	Ankara	Turkey
Central Laboratory of Personal Dosimetry, Grigorev Institute for Medical Radiology	Kharkov	Ukraine
Radiation Protection Institute ATS Ukraine	Kiev	Ukraine
Amersham Dosimetry Service	Amersham	United Kingdom
AWE	Reading, Berks	United Kingdom
Berkeley Approved Dosimetry Service	Berkeley, Gloucestershire	United Kingdom
Landauer Europe	Kidlington, Oxfordshire	United Kingdom
UK Health Protection Agency	Chilton, Didcot	United Kingdom
Sellafield Dosimetry Service	Seascale	United Kingdom

Appendix C: Example Irradiation Certificate

Physikalisch-technischer Prüfdienst Prüfungsschein <i>Measurement Certificate</i>		 BEV Bundesamt für Eich- und Vermessungswesen A-1160 Wien, Arlgasse 35 • Tel. +43(0)1-21110-6327 • Fax +43-(0)1-21110-6000 • E-Mail: ptp@bev.gv.at DVR: 0037028	
Prüfungsschein <i>Measurement Certificate</i>		Prüfungsschein Nr. T10-1118/40 <i>Measurement Certificate No. T10-1118/40</i>	
Gegenstand Object	EURADOS Intercomparison 2010 (IC2010/01)	Dieses Zertifikat ist in Übereinstimmung mit den Kalibrier- und Messmöglichkeiten (CMCs), wie sie im Anhang C des gegenseitigen Abkommens (MRA) des Internationalen Komitees für Maß und Gewicht (CIPM) enthalten sind. Im Rahmen des MRA wird die Gültigkeit der Kalibrier- und Prüfscheine von allen teilnehmenden Instituten für die im Anhang C spezifizierten Messgrößen, Messbereiche und Messunsicherheiten gegenseitig anerkannt (nähre Informationen unter http://www.bipm.org).	
Type, Bauart Fabrikations Nr. Type, Serial number	Personal dosimeter S40-01 to S40-26 (as labeled by the customer)	<i>This certificate is consistent with the capabilities that are included in Appendix C of the MRA drawn up by the CIPM. Under the MRA, all participating institutes recognize the validity of each other's calibration and measurement certificates for the quantities, ranges and measurement uncertainties specified in Appendix C (for details see http://www.bipm.org).</i>	
Hersteller Manufacturer	-		
Auftraggeber Customer	EURADOS Intercomparison 2010 Organisation Group	Die Prüfung erfolgt auf der gesetzlichen Grundlage der §§ 60 und 61 des Maß- und Eichgesetzes BGBl. Nr. 152/1950, in der geltenden Fassung.	
Auftragsnummer des Auftraggebers Order number of Customer	IC2010/01 from 2010-09-15	Dieser Prüfungsschein dokumentiert die Rückverfolgbarkeit auf nationale Normale zur Darstellung der physikalischen Einheiten in Übereinstimmung mit dem Internationalen Einheitensystem (SI). Das BEV ist als das nationale Metrologie-institut für die nationalen Normale verantwortlich.	
Auftragsnummer Order number	T10-1118 from 2010-09-01	Für die Einhaltung einer angemessenen Frist zur Wiederholung der Kalibrierung ist der Benutzer verantwortlich.	
Anzahl der Seiten Number of pages	4		
Eingangsdatum Date of receipt	2010-09-30		
Datum der Prüfung Date of test	2010-10-06 to 2010-10-27	<i>The test is performed in accordance with the Metrology Act (MEG) federal gazette No. 152/1950, as amended. This measurement certificate documents the traceability to national standards, which realize the physical units of measurements according to the International System of Units (SI). The BEV is the national metrology institute and maintains the national standards. The user is obliged to have the object recalibrated at appropriate intervals.</i>	
Stempel Seal	Datum Date	Der Leiter des Prüfdienstes Head of testing service	Sachbearbeiter Person responsible
	20. DEZ. 2010	 Mag. Robert Edelmaier	 Dipl.-Ing. Andreas Steurer
		DVR: 0037028 FL54010701 – 07.2007	
		Seite 1 von 4 Seiten page 1 of 4 pages	



Prüfungsschein Nr. T10-1118/40
Measurement certificate No. T10-1118/40

Kenndaten:

Characteristic values:

Personal dosimeters delivered by the participant with dosimeter identification S40-01 to S40-26.
Assignment of the dosimeter identification numbers by the EURADOS Intercomparison organisation group
(Coordinator Andrew McWhan).

Reference point and reference direction of dosimeter: As defined by the participant. If no specifications are received, the reference point will be considered as the centre of the back face of the dosimeter and the reference direction will be considered perpendicular to the frontplane of the dosimeter.

Prüfverfahren:

Test procedure:

The dosimeters were irradiated in the dosimetry laboratory of the BEV. The personal dose equivalent values have been obtained using the primary standards of the BEV for X-ray and gamma radiation qualities. The standard of air kerma of the BEV for the X-ray radiation qualities of ISO standard 4037 is the free air parallel plate ionisation chamber and for gamma radiation from 137-Cs and 60-Co radionuclides is the Graphite – cylindrical cavity ionisation chamber. For dose equivalent quantities calibration conditions are created according to ISO 4037 standards set. Suitable conversion coefficients are taken from ISO 4037 as well, or they are calculated from measured real X-ray spectra.

Quantity to be measured: personal dose equivalent $H_p(10)$ and $H_p(0,07)$

Phantom: slab water phantom according to ISO 4037

Irradiation conditions:

137-Cs irradiation facility: Reference beam facility
Focus to phantom distance is 2000 mm respectively 3000 mm, Field diameter at phantom surface is 52 cm respectively 78 cm.

60-Co irradiation facility: Picker Type C8MI 80,
Focus to phantom distance is 2000 mm, Field size at the phantom surface is 44 cm x 44 cm

X-ray facility: Philips type MG 320, inherent filtration of X-ray tube: 2,5 mm Be,
Focus to phantom distance is 2500 mm, Field diameter at phantom surface is 47 cm.

Environmental conditions during irradiations:

Air temperature: 19,5°C – 20,5°C
Atmospheric pressure: 97,0 kPa – 101,0 kPa
Relative air humidity: 40% – 50%



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Prüfungsschein Nr. T10-1118/40
Measurement certificate No. T10-1118/40

Ergebnisse der Prüfung:
Results:

Resulting dose equivalent values and related uncertainties for the dosimeters of the participant's dosimeter system are given in the following table.

whole body dose-meter	irradiation date	radiation quality	angle of radiation incidence	air kerma rate	personal dose equivalent per irradiation	expanded uncertainty	total personal dose equivalent	personal dose equivalent per irradiation	total personal dose equivalent	re-mark
		ISO 4037	$\alpha, {}^\circ$	K_a mGy/s	$H_p(10)$ mSv	$U(k=2)$ %	$H_p(10)$ mSv	$H_p(0,07)$ mSv	$H_p(0,07)$ mSv	
S40-01	07.10.2010	W250	0	0,0065	1,20	5,0	2,40	1,16	2,36	1)
	25.10.2010	S-Cs	0	0,012	1,20	4,0		1,20		
S40-02	07.10.2010	W250	0	0,007	1,20	5,0	2,40	1,16	2,36	1)
	25.10.2010	S-Cs	0	0,012	1,20	4,0		1,20		
S40-03	07.10.2010	N40	0	0,0021	1,20	5,0	2,40	1,27	2,47	1)
	25.10.2010	S-Cs	0	0,012	1,20	4,0		1,20		
S40-04	07.10.2010	N40	0	0,0021	1,20	5,0	2,40	1,27	2,47	1)
	25.10.2010	S-Cs	0	0,012	1,20	4,0		1,20		
S40-05	12.10.2010	N40	30	0,0021	0,80	5,0	0,80	0,88	0,88	-
S40-06	12.10.2010	N40	30	0,0021	0,80	5,0		0,88		
S40-07	12.10.2010	W110	45 y-axis	0,023	4,00	5,0	4,00	3,83	3,83	-
S40-08	12.10.2010	W110	-45 y-axis	0,023	4,00	5,0		3,83		
S40-09	14.10.2010	W110	45 x-axis	0,023	4,00	5,0	4,00	3,82	3,82	-
S40-10	14.10.2010	W110	-45 x-axis	0,023	4,00	5,0		3,82		
S40-11	22.10.2010	S-Cs	0	0,012	9,6	4,0	9,6	9,6	9,6	-
S40-12	22.10.2010	S-Cs	0	0,012	9,6	4,0		9,6		
S40-13	22.10.2010	S-Cs	0	0,012	2,00	4,0	2,00	2,00	2,00	-
S40-14	22.10.2010	S-Cs	0	0,012	2,00	4,0		2,00		
S40-15	22.10.2010	S-Cs	0	0,012	2,00	4,0	2,00	2,00	2,00	-
S40-16	22.10.2010	S-Cs	0	0,012	2,00	4,0		2,00		
S40-17	25.10.2010	S-Cs	0	0,0052	0,400	4,0	0,400	0,400	0,400	-
S40-18	25.10.2010	S-Cs	0	0,0052	0,400	4,0		0,400		
S40-19	28.10.2010	S-Co	0	0,72	200	4,0	200	200	200	-
S40-20	28.10.2010	S-Co	0	0,72	200	4,0		200		
S40-21	-	-	-	-	-	-	-	-	-	3)
S40-22	-	-	-	-	-	-	-	-	-	2)
S40-23	-	-	-	-	-	-	-	-	-	2)
S40-24	-	-	-	-	-	-	-	-	-	2)
S40-25	-	-	-	-	-	-	-	-	-	2)
S40-26	-	-	-	-	-	-	-	-	-	2)

¹⁾ Expanded uncertainty for the total personal dose equivalent: $U = 3,2\% (k = 2)$

²⁾ unirradiated

³⁾ failure



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Prüfungsschein Nr. T10-1118/40
Measurement certificate No. T10-1118/40

Messunsicherheit:
Measurement uncertainty:

The reported expanded uncertainty U of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor $k = 2$, which for a normal distribution corresponds to a coverage probability of approximately 95 %. The standard uncertainty of measurement has been determined in accordance with "Guide to the Expression of Uncertainty in Measurement (BIPM, IEC, IFCC, ISO, IUPAC, IUPAP and OIML)" and following EA Publication EA-04/2.

Anmerkungen:
Remarks:

The results of the test are exclusively related to the submitted dosimeters at the time of irradiation. This calibration certificate may not be reproduced other than in full. Calibration certificates without signature and seal are not valid.

Appendix D: Example "Certificate of Participation"

European Radiation Dosimetry Group 

European Radiation Dosimetry Group e.V. • Bundesallee 100 • D-38116 Braunschweig | Certificate of Participation EURADOS- 2010-Sxx

Certificate of Participation

for the EURADOS Intercomparison 2010 (IC2010) for whole body dosemeters

Certificate number:	EURADOS- 2010-Sxx
Number of pages:	2
Date of Issue:	10 February 2011
Participating institute:	Example certificate
Dosimetry system:	Example certificate
Reporting ID number used in publications:	XX
Intercomparison procedure:	The EURADOS Intercomparison 2010 for whole body dosemeters was managed and coordinated on behalf of EURADOS by the WG2 Intercomparison Organization Group (OG). The OG established the irradiation plan and announced the intercomparison, including the range limits of the doses and radiation qualities, in May 2010. Participants were asked to indicate details of the dosimeter reference point on the application form. After completing application procedures the participant sent its doseometers, according to the instructions of the OG, to the OG Coordinator (August /September 2010). The Coordinator relabeled the doseometers according to the table given on page 2, and sent all doseometers, along with the instructions to the irradiation laboratory. The laboratory irradiated the doseometers according to the irradiation plan and then sent all the doseometers back to the coordinator (October 2010). The Coordinator then returned the doseometers to the participant for assessment and indicated which doseometers were not irradiated. The participant was instructed to follow normal routine procedures as far as possible. The participant then sent the results of the dosimeter readings to the coordinator (December 2010). <u>After receipt of the participant results</u> , the coordinator sent the irradiation data to the participant.
Number of participants	70 institutes participated in IC2010 with a total of 85 systems
Irradiation data:	See the certificate of the irradiation laboratory No: T10 - 1118/xx(attached to this certificate)
Participant results:	See the attached report of the participant
Intercomparison results:	See the table on page 2 of this certificate

On behalf of the intercomparison Organization Group: On behalf of EURADOS

Andrew McWhan
Coordinator Helmut Schuhmacher
Chairperson

Page 1 of 2

European Radiation Dosimetry Group



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| Certificate of Participation EURADOS- 2010-Sxx

Result of the intercomparison:

Dosemeter id coordinator	Dosemeter id participant	Quality	Hp(10)			Hp(0.07)		
			Participant's value (mSv)	Reference value (mSv)	Ratio	Participant's value (mSv)	Reference value (mSv)	Ratio
1	2018720	W250/ S-Cs 0°	3.10	3.30	0.94	2.70	3.24	0.83
8	2018723	W110 - 45° y-axis	4.30	5.50	0.78	4.10	5.26	0.78
25	2018729	NIR						
16	2018730	S-Cs 0°	1.80	2.75	0.65	1.70	2.75	0.62
21	2018735	NIR						
6	2018775	N40 30°	0.60	1.10	0.55	0.65	1.21	0.54
26	2018776	NIR						
14	2018801	S-Cs 0°	2.20	2.75	0.80	2.10	2.75	0.76
19	2018816	S-Co 0°	221.00	275	0.80	208.00	275	0.76
15	2018836	S-Cs 0°	2.10	2.75	0.76	2.00	2.75	0.73
5	2018854	N40 30°	0.59	1.10	0.54	0.64	1.21	0.53
24	2018859	NIR						
2	2018884	W250/ S-Cs 0°	2.70	3.30	0.82	2.50	3.24	0.77
23	2018892	NIR						
13	2019604	S-Cs 0°	2.00	2.75	0.73	1.90	2.75	0.69
7	2019606	W110 45° y-axis	4.40	5.50	0.80	4.20	5.26	0.80
20	2019612	S-Co 0°	198.00	275	0.72	186.00	275	0.68
11	2019623	S-Cs 0°	10.40	13.2	0.79	9.80	13.2	0.74
9	2019628	W110 45° x-axis	4.40	5.50	0.80	4.20	5.26	0.80
22	2019635	NIR						
17	2019642	S-Cs 0°	0.26	0.550	0.47	0.25	0.550	0.45
4	2019651	N40/ S-Cs 0°	1.47	3.30	0.45	1.47	3.39	0.43
3	2019656	N40/ S-Cs 0°	1.48	3.30	0.45	1.49	3.39	0.44
12	2019671	S-Cs 0°	10.40	13.2	0.79	9.70	13.2	0.73
10	2019677	W110 -45° x-axis	3.70	5.50	0.67	3.50	5.26	0.67
18	2019688	S-Cs 0°	0.25	0.550	0.45	0.24	0.550	0.44

Notes:

NIR: Not IRadiated

WIR: Wrong IRadiated

Appendix E: Datasheets with results for individual participants

In this annex all individual results are given for all participating systems, identified by their reporting number (see section 2.9), for the dose quantity $H_p(10)$ and $H_p(0.07)$. Since some systems were not designed to measure $H_p(0.07)$ these systems are missing in this part of the annex.

For the non-irradiated and wrongly irradiated dosemeters the following terms were used:

- NIR not irradiated dosimeter (available for background and transport dose correction by the monitoring service)
- WIR wrongly irradiated dosimeter (wrongly irradiated by the irradiation laboratory).

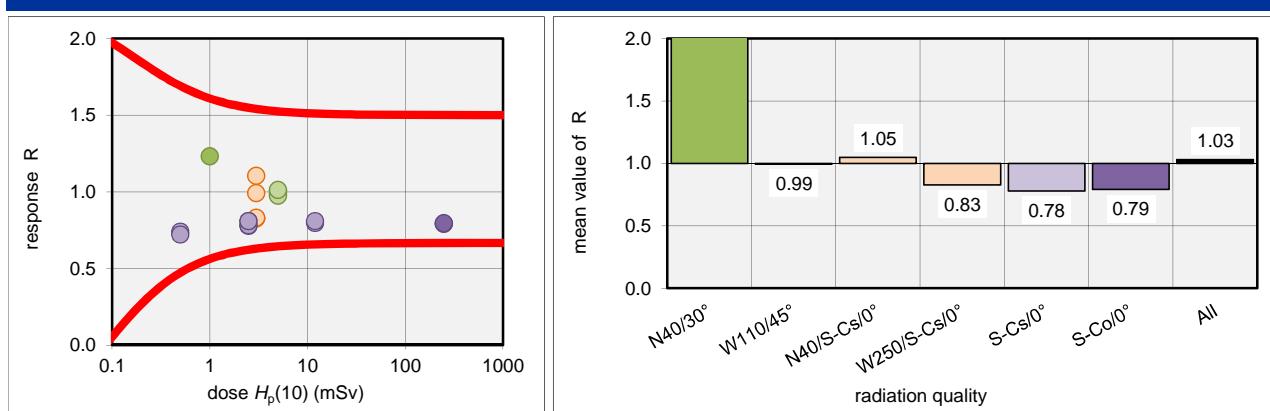
These results were not included in the data sheets.

Reporting number 1: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.00	1.23	1.23	
		6	1.00	3.80	3.80	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.00	4.95	0.99	
		10	5.00	5.02	1.00	
		7	4.99	4.86	0.97	
		8	4.99	5.05	1.01	
x-ray and gamma	N40/S-Cs/0°	3	3.00	3.31	1.10	
		4	3.00	2.97	0.99	
	W250/S-Cs/0°	1	3.00	2.48	0.83	
		2	3.00	2.49	0.83	
gamma	S-Cs/0°	17	0.50	0.37	0.74	
		18	0.50	0.36	0.72	
		13	2.50	1.94	0.78	
		14	2.50	1.95	0.78	
		15	2.50	2.02	0.81	
		16	2.50	2.02	0.81	
		11	12.00	9.55	0.80	
		12	12.00	9.69	0.81	
	S-Co/0°	19	250.00	197.56	0.79	
		20	250.00	198.77	0.80	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	2.52	2.52	3.80	1.23	72%
W110/45°	4	1.00	0.99	1.01	0.97	2%
N40/S-Cs/0°	2	1.05	1.05	1.10	0.99	8%
W250/S-Cs/0°	2	0.83	0.83	0.83	0.83	0%
S-Cs/0°	8	0.79	0.78	0.81	0.72	4%
S-Co/0°	2	0.79	0.79	0.80	0.79	0%
All	20	0.82	1.03	3.80	0.72	65%

outliers: 1 of 20

Fraction of outliers: 5%



Results: IC2010

1 point outside diagramme (> 2)

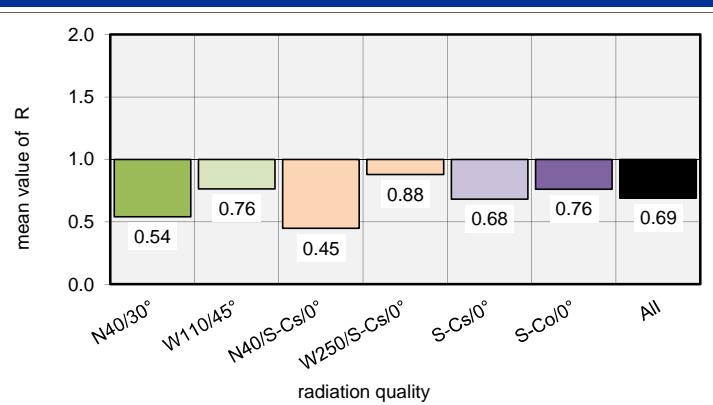
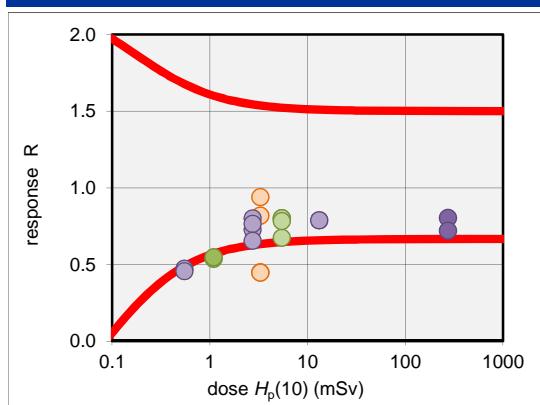
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 2: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.10	0.59	0.54	
		6	1.10	0.60	0.55	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.50	4.40	0.80	
		10	5.50	3.70	0.67	
		7	5.50	4.40	0.80	
		8	5.50	4.30	0.78	
x-ray and gamma	N40/S-Cs/0°	3	3.30	1.48	0.45	
		4	3.30	1.47	0.45	
	W250/S-Cs/0°	1	3.30	3.10	0.94	
		2	3.30	2.70	0.82	
gamma	S-Cs/0°	17	0.55	0.26	0.47	
		18	0.55	0.25	0.45	
		13	2.75	2.00	0.73	
		14	2.75	2.20	0.80	
		15	2.75	2.10	0.76	
		16	2.75	1.80	0.65	
		11	13.20	10.40	0.79	
		12	13.20	10.40	0.79	
	S-Co/0°	19	275.00	221.00	0.80	
		20	275.00	198.00	0.72	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.54	0.54	0.55	0.54	1%
W110/45°	4	0.79	0.76	0.80	0.67	8%
N40/S-Cs/0°	2	0.45	0.45	0.45	0.45	0%
W250/S-Cs/0°	2	0.88	0.88	0.94	0.82	10%
S-Cs/0°	8	0.75	0.68	0.80	0.45	21%
S-Co/0°	2	0.76	0.76	0.80	0.72	8%
All	20	0.75	0.69	0.94	0.45	22%

outliers: 6 of 20

Fraction of outliers: 30%



Results: IC2010

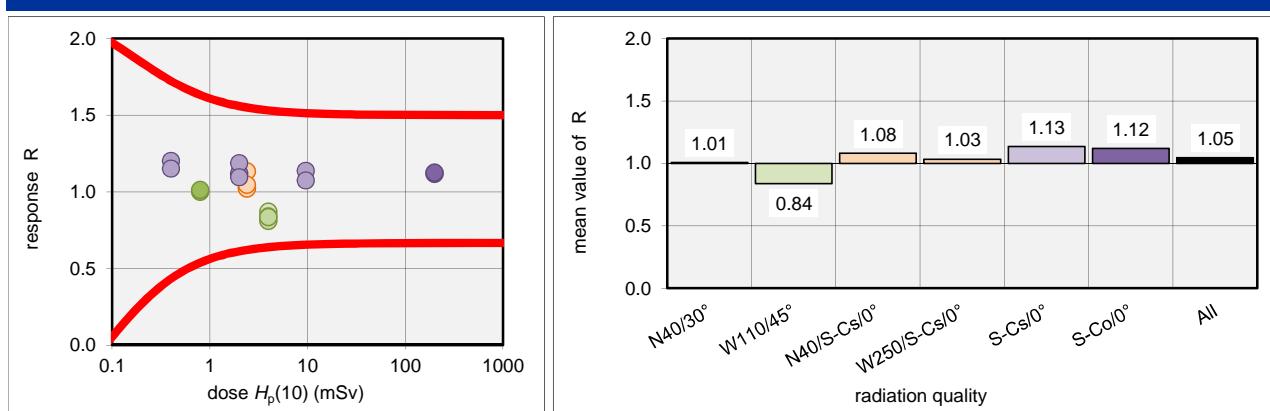
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 3: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	0.80	0.80	1.00	
		6	0.80	0.81	1.01	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.00	3.48	0.87	
		10	4.00	3.35	0.84	
		7	4.00	3.24	0.81	
		8	4.00	3.34	0.84	
x-ray and gamma	N40/S-Cs/0°	3	2.40	2.47	1.03	
		4	2.40	2.72	1.13	
	W250/S-Cs/0°	1	2.40	2.45	1.02	
		2	2.40	2.51	1.05	
gamma	S-Cs/0°	17	0.40	0.48	1.20	
		18	0.40	0.46	1.15	
		13	2.00	2.23	1.12	
		14	2.00	2.24	1.12	
		15	2.00	2.37	1.19	
		16	2.00	2.19	1.10	
		11	9.60	10.90	1.14	
		12	9.60	10.30	1.07	
	S-Co/0°	19	200.00	223.00	1.12	
		20	200.00	225.00	1.13	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.01	1.01	1.01	1.00	1%
W110/45°	4	0.84	0.84	0.87	0.81	3%
N40/S-Cs/0°	2	1.08	1.08	1.13	1.03	7%
W250/S-Cs/0°	2	1.03	1.03	1.05	1.02	2%
S-Cs/0°	8	1.13	1.13	1.20	1.07	4%
S-Co/0°	2	1.12	1.12	1.13	1.12	1%
All	20	1.08	1.05	1.20	0.81	11%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

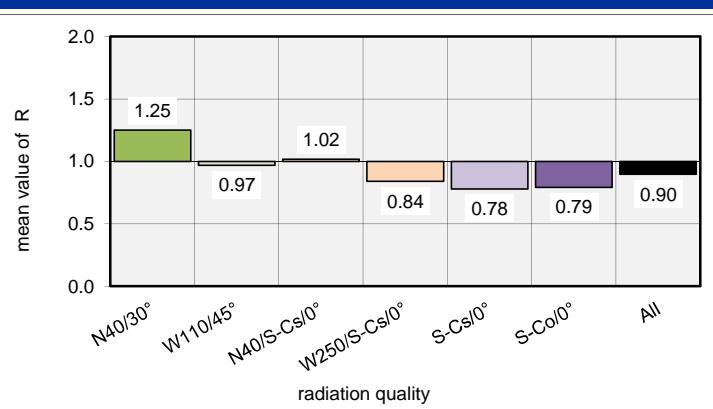
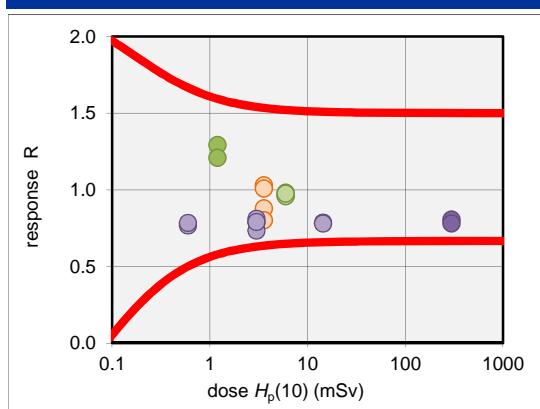
Reporting number 4: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)
x-ray	N40/30°	5	1.20	1.55	1.29
		6	1.20	1.45	1.21
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	6.00	5.88	0.98
		10	6.00	5.78	0.96
		7	6.00	5.74	0.96
		8	6.00	5.84	0.97
x-ray and gamma	N40/S-Cs/0°	3	3.60	3.70	1.03
		4	3.60	3.63	1.01
	W250/S-Cs/0°	1	3.60	3.16	0.88
		2	3.60	2.88	0.80
gamma	S-Cs/0°	17	0.60	0.46	0.77
		18	0.60	0.47	0.78
		13	3.00	2.36	0.79
		14	3.00	2.20	0.73
		15	3.00	2.43	0.81
		16	3.00	2.37	0.79
		11	14.40	11.32	0.79
		12	14.40	11.23	0.78
	S-Co/0°	19	300.00	241.42	0.80
		20	300.00	233.72	0.78
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.25	1.25	1.29	1.21	5%
W110/45°	4	0.97	0.97	0.98	0.96	1%
N40/S-Cs/0°	2	1.02	1.02	1.03	1.01	1%
W250/S-Cs/0°	2	0.84	0.84	0.88	0.80	7%
S-Cs/0°	8	0.78	0.78	0.81	0.73	3%
S-Co/0°	2	0.79	0.79	0.80	0.78	2%
All	20	0.81	0.90	1.29	0.73	17%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

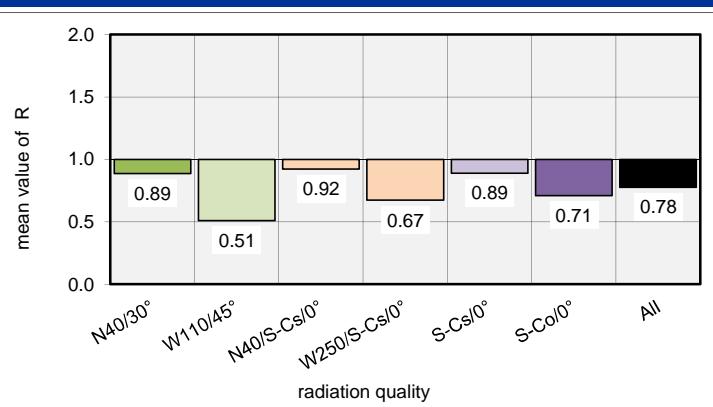
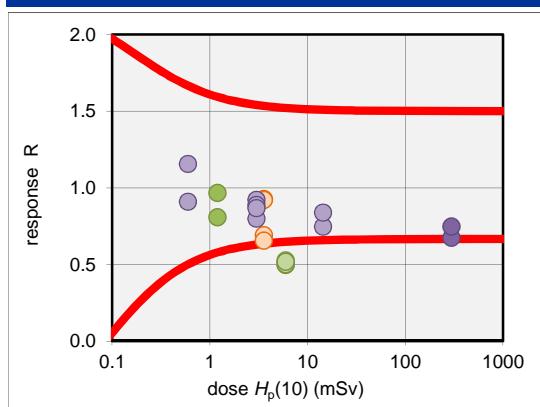
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 5: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.20	1.158	0.97	
		6	1.20	0.969	0.81	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	6.00	3.158	0.53	
		10	6.00	2.974	0.50	
		7	6.00	2.998	0.50	
		8	6.00	3.108	0.52	
x-ray and gamma	N40/S-Cs/0°	3	3.60	3.331	0.93	
		4	3.60	3.312	0.92	
	W250/S-Cs/0°	1	3.60	2.484	0.69	
		2	3.60	2.357	0.65	
gamma	S-Cs/0°	17	0.60	0.693	1.16	
		18	0.60	0.545	0.91	
		13	3.00	2.762	0.92	
		14	3.00	2.661	0.89	
		15	3.00	2.392	0.80	
		16	3.00	2.597	0.87	
		11	14.40	10.733	0.75	
		12	14.40	12.073	0.84	
	S-Co/0°	19	300.00	202.264	0.67	
		20	300.00	223.743	0.75	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.89	0.89	0.97	0.81	13%
W110/45°	4	0.51	0.51	0.53	0.50	3%
N40/S-Cs/0°	2	0.92	0.92	0.93	0.92	0%
W250/S-Cs/0°	2	0.67	0.67	0.69	0.65	4%
S-Cs/0°	8	0.88	0.89	1.16	0.75	14%
S-Co/0°	2	0.71	0.71	0.75	0.67	7%
All	20	0.80	0.78	1.16	0.50	23%

outliers: 4 of 20

Fraction of outliers: 20%



Results: IC2010

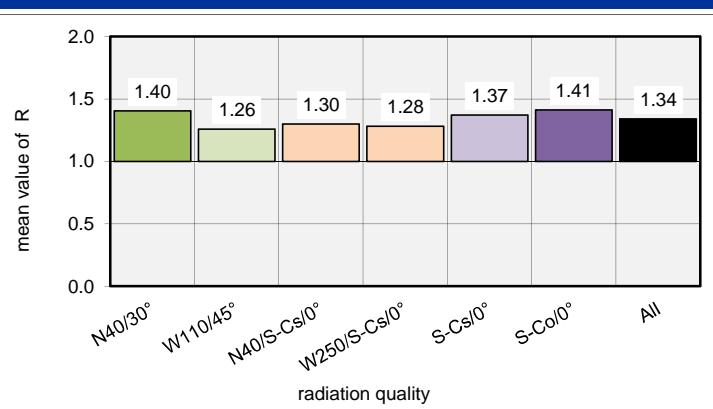
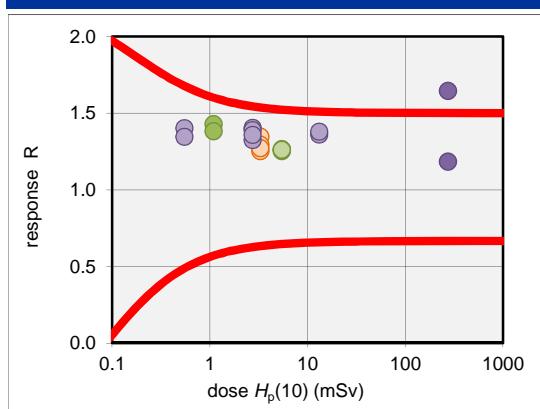
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 6: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.10	1.57	1.43	
		6	1.10	1.52	1.38	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.50	6.88	1.25	
		10	5.50	6.95	1.26	
		7	5.50	6.93	1.26	
		8	5.50	6.93	1.26	
x-ray and gamma	N40/S-Cs/0°	3	3.30	4.13	1.25	
		4	3.30	4.44	1.35	
	W250/S-Cs/0°	1	3.30	4.27	1.29	
		2	3.30	4.19	1.27	
gamma	S-Cs/0°	17	0.55	0.77	1.40	
		18	0.55	0.74	1.35	
		13	2.75	3.64	1.32	
		14	2.75	3.86	1.40	
		15	2.75	3.82	1.39	
		16	2.75	3.73	1.36	
		11	13.20	17.94	1.36	
		12	13.20	18.19	1.38	
	S-Co/0°	19	275.00	325.00	1.18	
		20	275.00	452.00	1.64	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.40	1.40	1.43	1.38	2%
W110/45°	4	1.26	1.26	1.26	1.25	0%
N40/S-Cs/0°	2	1.30	1.30	1.35	1.25	5%
W250/S-Cs/0°	2	1.28	1.28	1.29	1.27	1%
S-Cs/0°	8	1.37	1.37	1.40	1.32	2%
S-Co/0°	2	1.41	1.41	1.64	1.18	23%
All	20	1.35	1.34	1.64	1.18	7%

outliers: 1 of 20

Fraction of outliers: 5%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

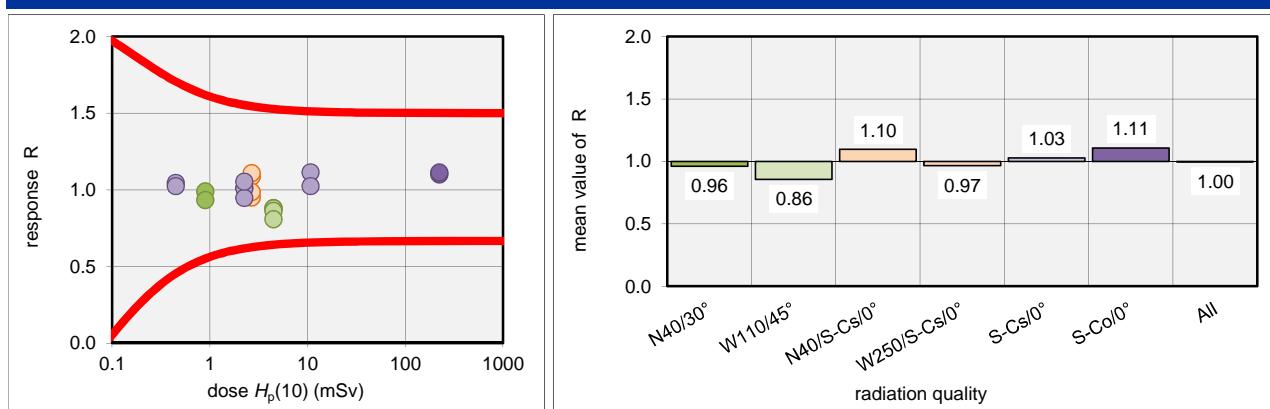
Reporting number 7: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)
x-ray	N40/30°	5	0.90	0.89	0.99
		6	0.90	0.84	0.93
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.50	3.96	0.88
		10	4.50	3.95	0.88
		7	4.50	3.88	0.86
		8	4.50	3.63	0.81
x-ray and gamma	N40/S-Cs/0°	3	2.70	2.93	1.09
		4	2.70	2.99	1.11
	W250/S-Cs/0°	1	2.70	2.56	0.95
		2	2.70	2.66	0.99
gamma	S-Cs/0°	17	0.45	0.47	1.04
		18	0.45	0.46	1.02
		13	2.25	2.28	1.01
		14	2.25	2.27	1.01
		15	2.25	2.13	0.95
		16	2.25	2.37	1.05
		11	10.80	12.03	1.11
		12	10.80	11.05	1.02
	S-Co/0°	19	225.00	247.45	1.10
		20	225.00	250.30	1.11
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.96	0.96	0.99	0.93	4%
W110/45°	4	0.87	0.86	0.88	0.81	4%
N40/S-Cs/0°	2	1.10	1.10	1.11	1.09	1%
W250/S-Cs/0°	2	0.97	0.97	0.99	0.95	3%
S-Cs/0°	8	1.02	1.03	1.11	0.95	5%
S-Co/0°	2	1.11	1.11	1.11	1.10	1%
All	20	1.01	1.00	1.11	0.81	9%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

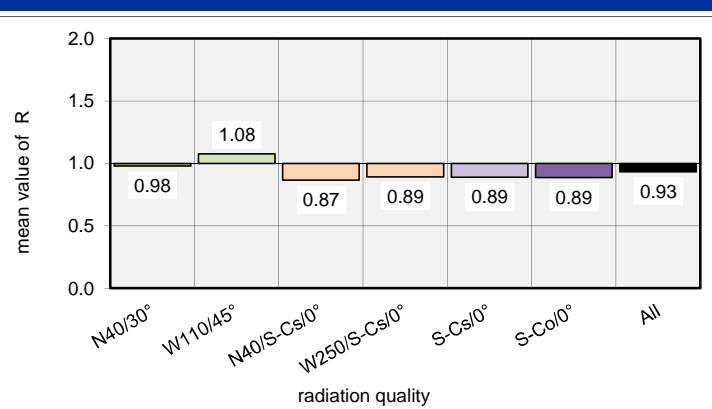
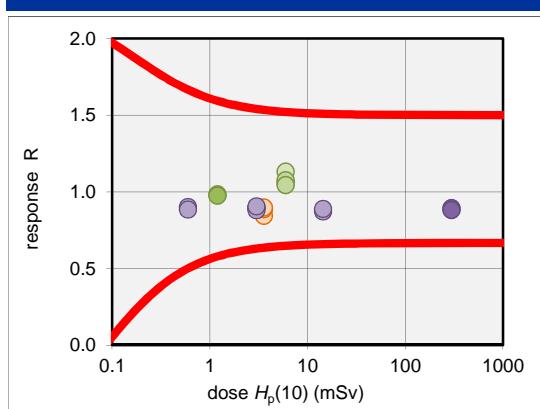
Reporting number 8: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.20	1.180	0.98	
		6	1.20	1.170	0.98	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	6.00	6.780	1.13	
		10	6.00	6.350	1.06	
		7	6.00	6.450	1.08	
		8	6.00	6.260	1.04	
x-ray and gamma	N40/S-Cs/0°	3	3.60	3.030	0.84	
		4	3.60	3.200	0.89	
	W250/S-Cs/0°	1	3.60	3.190	0.89	
		2	3.60	3.230	0.90	
gamma	S-Cs/0°	17	0.60	0.540	0.90	
		18	0.60	0.530	0.88	
		13	3.00	2.690	0.90	
		14	3.00	2.680	0.89	
		15	3.00	2.640	0.88	
		16	3.00	2.710	0.90	
		11	14.40	12.550	0.87	
		12	14.40	12.790	0.89	
	S-Co/0°	19	300.00	267.900	0.89	
		20	300.00	264.200	0.88	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.98	0.98	0.98	0.98	1%
W110/45°	4	1.07	1.08	1.13	1.04	4%
N40/S-Cs/0°	2	0.87	0.87	0.89	0.84	4%
W250/S-Cs/0°	2	0.89	0.89	0.90	0.89	1%
S-Cs/0°	8	0.89	0.89	0.90	0.87	1%
S-Co/0°	2	0.89	0.89	0.89	0.88	1%
All	20	0.90	0.93	1.13	0.84	9%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

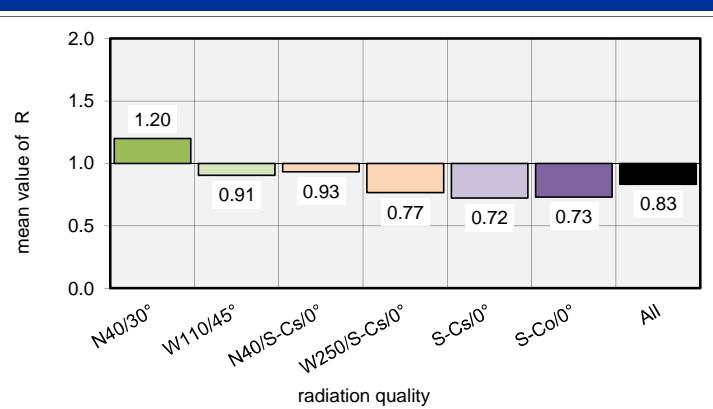
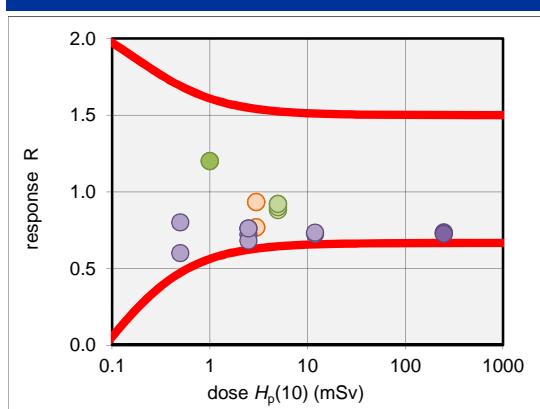
Reporting number 9: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.00	1.2	1.20	
		6	1.00	1.2	1.20	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.00	4.4	0.88	
		10	5.00	4.6	0.92	
		7	5.00	4.5	0.90	
		8	5.00	4.6	0.92	
x-ray and gamma	N40/S-Cs/0°	3	3.00	2.8	0.93	
		4	3.00	2.8	0.93	
	W250/S-Cs/0°	1	3.00	2.3	0.77	
		2	3.00	2.3	0.77	
gamma	S-Cs/0°	17	0.50	0.3	0.60	
		18	0.50	0.4	0.80	
		13	2.50	1.9	0.76	
		14	2.50	1.8	0.72	
		15	2.50	1.7	0.68	
		16	2.50	1.9	0.76	
		11	12.00	8.7	0.73	
		12	12.00	8.8	0.73	
	S-Co/0°	19	250.00	183.7	0.73	
		20	250.00	181.6	0.73	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.20	1.20	1.20	1.20	0%
W110/45°	4	0.91	0.91	0.92	0.88	2%
N40/S-Cs/0°	2	0.93	0.93	0.93	0.93	0%
W250/S-Cs/0°	2	0.77	0.77	0.77	0.77	0%
S-Cs/0°	8	0.73	0.72	0.80	0.60	8%
S-Co/0°	2	0.73	0.73	0.73	0.73	1%
All	20	0.77	0.83	1.20	0.60	19%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

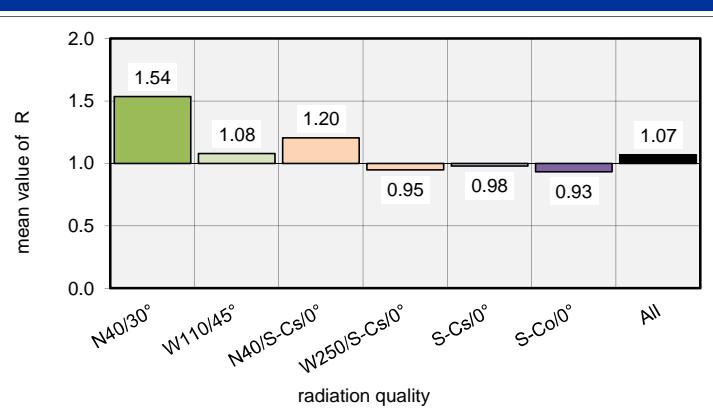
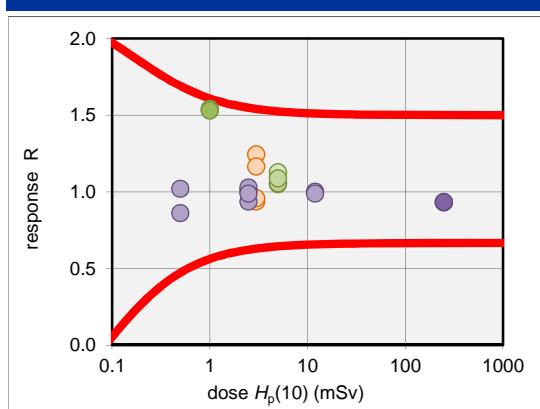
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 10: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.00	1.54	1.54	
		6	1.00	1.53	1.53	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.00	5.63	1.13	
		10	5.00	5.25	1.05	
		7	5.00	5.28	1.06	
		8	5.00	5.43	1.09	
x-ray and gamma	N40/S-Cs/0°	3	3.00	3.73	1.24	
		4	3.00	3.49	1.16	
	W250/S-Cs/0°	1	3.00	2.81	0.94	
		2	3.00	2.87	0.96	
gamma	S-Cs/0°	17	0.50	0.43	0.86	
		18	0.50	0.51	1.02	
		13	2.50	2.51	1.00	
		14	2.50	2.34	0.94	
		15	2.50	2.57	1.03	
		16	2.50	2.47	0.99	
		11	12.00	11.99	1.00	
		12	12.00	11.86	0.99	
	S-Co/0°	19	250.00	232.51	0.93	
		20	250.00	233.31	0.93	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.54	1.54	1.54	1.53	0%
W110/45°	4	1.07	1.08	1.13	1.05	3%
N40/S-Cs/0°	2	1.20	1.20	1.24	1.16	5%
W250/S-Cs/0°	2	0.95	0.95	0.96	0.94	1%
S-Cs/0°	8	0.99	0.98	1.03	0.86	6%
S-Co/0°	2	0.93	0.93	0.93	0.93	0%
All	20	1.01	1.07	1.54	0.86	17%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

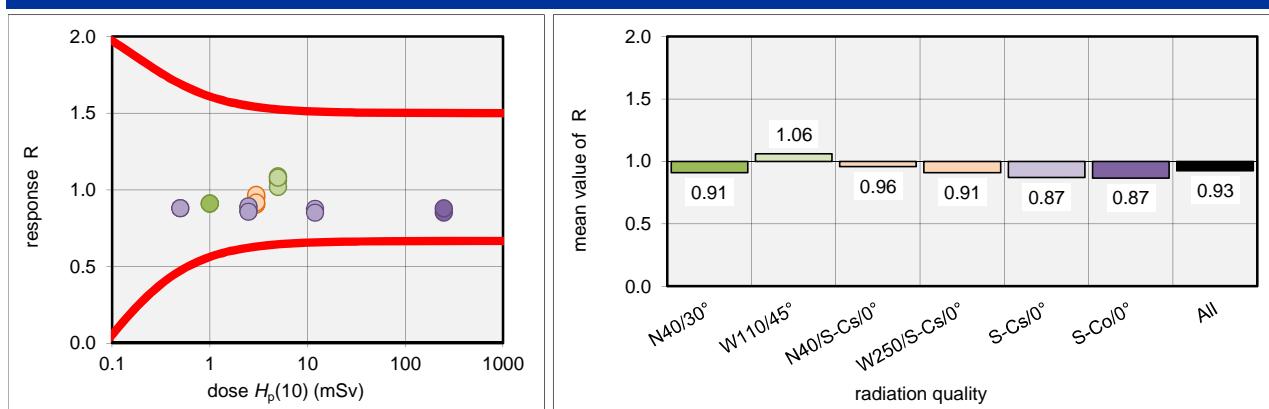
Reporting number 11: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)
x-ray	N40/30°	5	1.00	0.91	0.91
		6	1.00	0.91	0.91
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.00	5.30	1.06
		10	5.00	5.43	1.09
		7	5.00	5.09	1.02
		8	5.00	5.39	1.08
x-ray and gamma	N40/S-Cs/0°	3	3.00	2.85	0.95
		4	3.00	2.90	0.97
	W250/S-Cs/0°	1	3.00	2.71	0.90
		2	3.00	2.75	0.92
gamma	S-Cs/0°	17	0.50	0.44	0.88
		18	0.50	0.44	0.88
		13	2.50	2.15	0.86
		14	2.50	2.21	0.88
		15	2.50	2.23	0.89
		16	2.50	2.14	0.86
		11	12.00	10.49	0.87
		12	12.00	10.20	0.85
	S-Co/0°	19	250.00	212.86	0.85
		20	250.00	219.67	0.88
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.91	0.91	0.91	0.91	0%
W110/45°	4	1.07	1.06	1.09	1.02	3%
N40/S-Cs/0°	2	0.96	0.96	0.97	0.95	1%
W250/S-Cs/0°	2	0.91	0.91	0.92	0.90	1%
S-Cs/0°	8	0.88	0.87	0.89	0.85	2%
S-Co/0°	2	0.87	0.87	0.88	0.85	2%
All	20	0.90	0.93	1.09	0.85	8%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

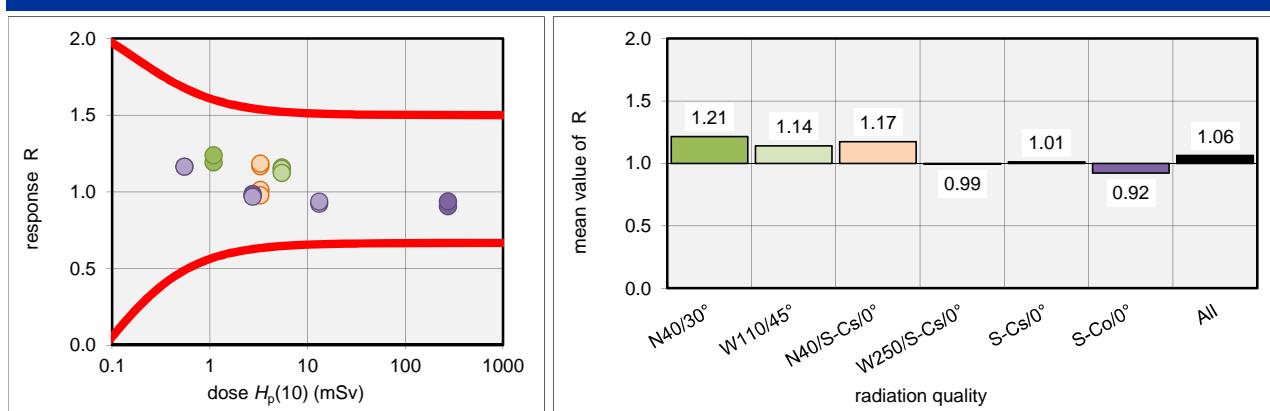
Reporting number 12: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)
x-ray	N40/30°	5	1.10	1.31	1.19
		6	1.10	1.36	1.24
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.50	6.22	1.13
		10	5.50	6.37	1.16
		7	5.50	6.32	1.15
		8	5.50	6.17	1.12
x-ray and gamma	N40/S-Cs/0°	3	3.30	3.85	1.17
		4	3.30	3.90	1.18
	W250/S-Cs/0°	1	3.30	3.34	1.01
		2	3.30	3.22	0.98
gamma	S-Cs/0°	17	0.55	0.64	1.16
		18	0.55	0.64	1.16
		13	2.75	2.71	0.99
		14	2.75	2.68	0.97
		15	2.75	2.68	0.97
		16	2.75	2.66	0.97
		11	13.20	12.15	0.92
		12	13.20	12.35	0.94
	S-Co/0°	19	275.00	248.91	0.91
		20	275.00	257.73	0.94
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.21	1.21	1.24	1.19	3%
W110/45°	4	1.14	1.14	1.16	1.12	1%
N40/S-Cs/0°	2	1.17	1.17	1.18	1.17	1%
W250/S-Cs/0°	2	0.99	0.99	1.01	0.98	3%
S-Cs/0°	8	0.97	1.01	1.16	0.92	10%
S-Co/0°	2	0.92	0.92	0.94	0.91	2%
All	20	1.07	1.06	1.24	0.91	10%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

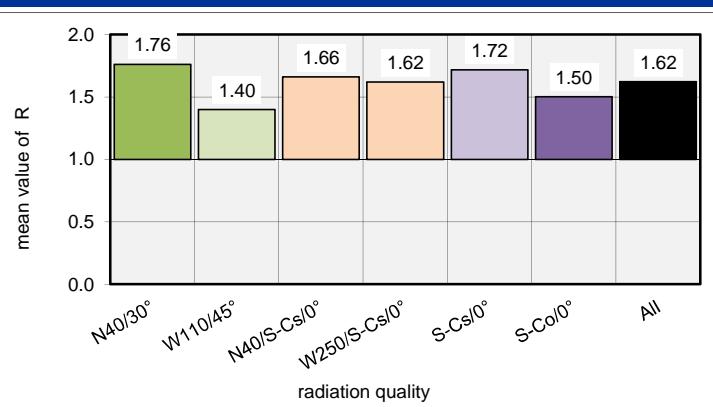
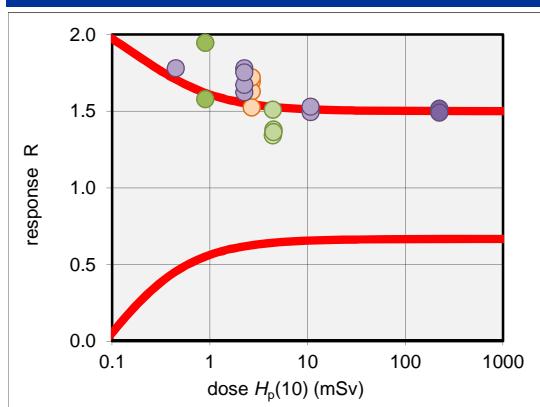
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 13: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	0.90	1.42	1.58	
		6	0.90	1.75	1.94 outlier	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.43	5.94	1.34	
		10	4.43	6.68	1.51	
		7	4.50	6.21	1.38	
		8	4.50	6.13	1.36	
x-ray and gamma	N40/S-Cs/0°	3	2.69	4.55	1.69 outlier	
		4	2.69	4.38	1.63 outlier	
	W250/S-Cs/0°	1	2.70	4.11	1.52	
		2	2.70	4.64	1.72 outlier	
gamma	S-Cs/0°	17	0.45	0.95	2.11 outlier	
		18	0.45	0.80	1.78 outlier	
		13	2.25	3.65	1.62 outlier	
		14	2.25	4.00	1.78 outlier	
		15	2.25	3.76	1.67 outlier	
		16	2.25	3.94	1.75 outlier	
		11	10.80	16.13	1.49 OK	
		12	10.80	16.50	1.53 outlier	
	S-Co/0°	19	225.00	341.00	1.52 outlier	
		20	225.00	335.00	1.49 OK	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.76	1.76	1.94	1.58	15%
W110/45°	4	1.37	1.40	1.51	1.34	5%
N40/S-Cs/0°	2	1.66	1.66	1.69	1.63	3%
W250/S-Cs/0°	2	1.62	1.62	1.72	1.52	9%
S-Cs/0°	8	1.71	1.72	2.11	1.49	11%
S-Co/0°	2	1.50	1.50	1.52	1.49	1%
All	20	1.60	1.62	2.11	1.34	12%

outliers: 12 of 20

Fraction of outliers: 60%



Results: IC2010

[1 point outside diagramme \(> 2\)](#)

trumpet parameter: 1.5 / 0.085 mSv

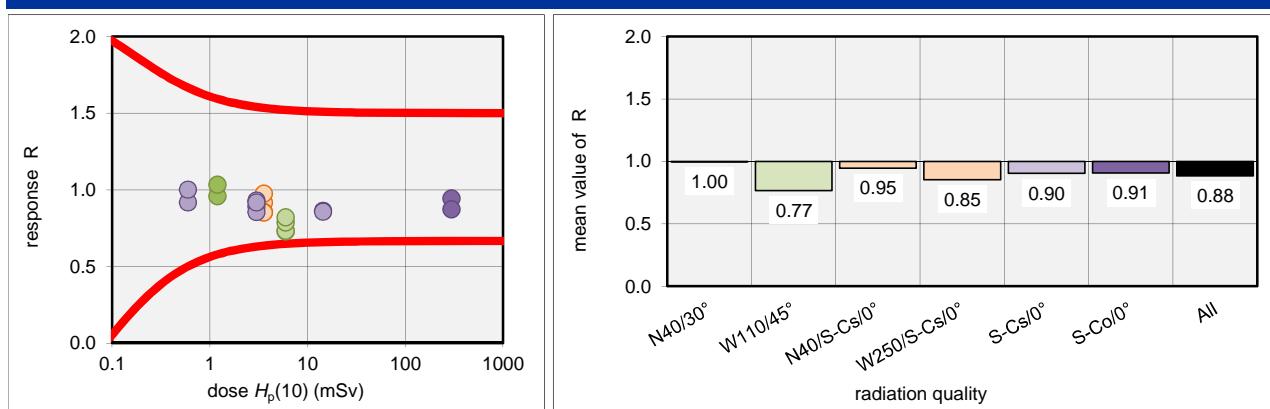
Reporting number 14: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)
x-ray	N40/30°	5	1.20	1.15	0.96
		6	1.20	1.24	1.03
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	6.00	4.37	0.73
		10	6.00	4.39	0.73
		7	6.01	4.73	0.79
		8	6.01	4.92	0.82
	N40/S-Cs/0°	3	3.60	3.30	0.92
		4	3.60	3.51	0.98
x-ray and gamma	W250/S-Cs/0°	1	3.60	3.08	0.86
		2	3.60	3.06	0.85
	S-Cs/0°	17	0.60	0.55	0.92
		18	0.60	0.60	1.00
		13	3.00	2.67	0.89
		14	3.00	2.56	0.85
		15	3.00	2.79	0.93
		16	3.00	2.75	0.92
	S-Co/0°	11	14.40	12.41	0.86
		12	14.40	12.33	0.86
	S-Co/0°	19	300.00	282.57	0.94
		20	300.00	261.29	0.87
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.00	1.00	1.03	0.96	5%
W110/45°	4	0.76	0.77	0.82	0.73	6%
N40/S-Cs/0°	2	0.95	0.95	0.98	0.92	4%
W250/S-Cs/0°	2	0.85	0.85	0.86	0.85	0%
S-Cs/0°	8	0.90	0.90	1.00	0.85	5%
S-Co/0°	2	0.91	0.91	0.94	0.87	6%
All	20	0.88	0.88	1.03	0.73	9%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

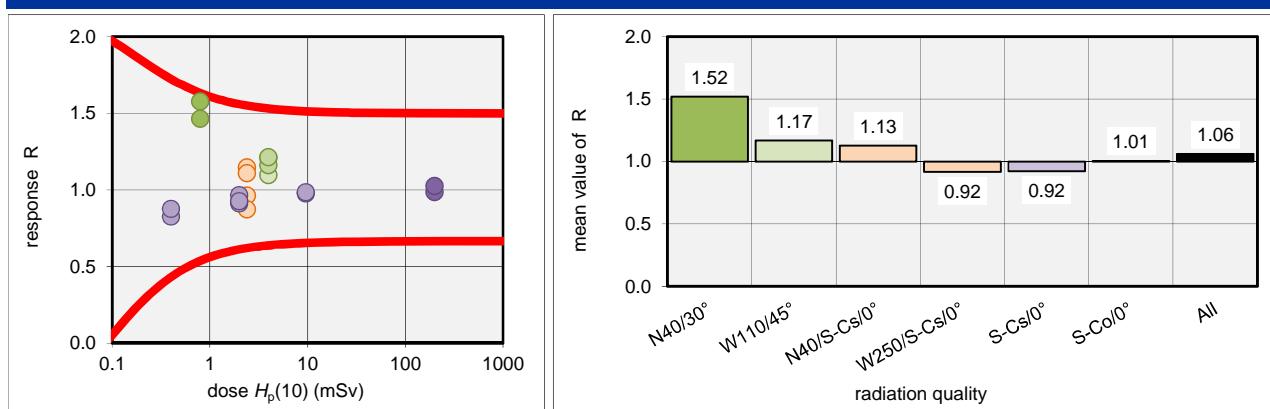
Reporting number 15: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	0.80	1.17	1.46	
		6	0.80	1.26	1.58	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.00	4.38	1.10	
		10	4.00	4.83	1.21	
		7	4.00	4.64	1.16	
		8	4.00	4.85	1.21	
x-ray and gamma	N40/S-Cs/0°	3	2.40	2.75	1.15	
		4	2.40	2.66	1.11	
	W250/S-Cs/0°	1	2.40	2.31	0.96	
		2	2.40	2.09	0.87	
gamma	S-Cs/0°	17	0.40	0.33	0.83	
		18	0.40	0.35	0.88	
		13	2.00	1.82	0.91	
		14	2.00	1.85	0.93	
		15	2.00	1.93	0.97	
		16	2.00	1.85	0.93	
		11	9.60	9.37	0.98	
		12	9.60	9.44	0.98	
	S-Co/0°	19	200.00	197.00	0.99	
		20	200.00	205.00	1.03	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.52	1.52	1.58	1.46	5%
W110/45°	4	1.18	1.17	1.21	1.10	5%
N40/S-Cs/0°	2	1.13	1.13	1.15	1.11	2%
W250/S-Cs/0°	2	0.92	0.92	0.96	0.87	7%
S-Cs/0°	8	0.93	0.92	0.98	0.83	6%
S-Co/0°	2	1.01	1.01	1.03	0.99	3%
All	20	0.98	1.06	1.58	0.83	18%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

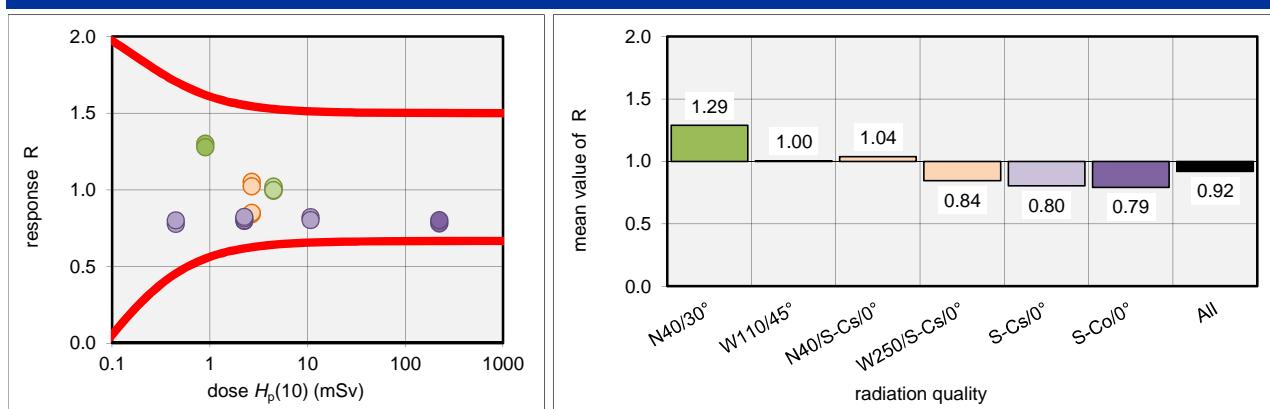
Reporting number 16: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)
x-ray	N40/30°	5	0.90	1.17	1.30
		6	0.90	1.15	1.28
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.50	4.53	1.01
		10	4.50	4.59	1.02
		7	4.50	4.47	0.99
		8	4.50	4.49	1.00
x-ray and gamma	N40/S-Cs/0°	3	2.69	2.83	1.05
		4	2.69	2.75	1.02
	W250/S-Cs/0°	1	2.70	2.27	0.84
		2	2.70	2.29	0.85
gamma	S-Cs/0°	17	0.45	0.35	0.78
		18	0.45	0.36	0.80
		13	2.25	1.79	0.80
		14	2.25	1.80	0.80
		15	2.25	1.83	0.81
		16	2.25	1.85	0.82
		11	10.80	8.86	0.82
		12	10.80	8.67	0.80
	S-Co/0°	19	225.00	175.71	0.78
		20	225.00	180.25	0.80
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	0			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.29	1.29	1.30	1.28	1%
W110/45°	4	1.00	1.00	1.02	0.99	1%
N40/S-Cs/0°	2	1.04	1.04	1.05	1.02	2%
W250/S-Cs/0°	2	0.84	0.84	0.85	0.84	1%
S-Cs/0°	8	0.80	0.80	0.82	0.78	2%
S-Co/0°	2	0.79	0.79	0.80	0.78	2%
All	20	0.83	0.92	1.30	0.78	17%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

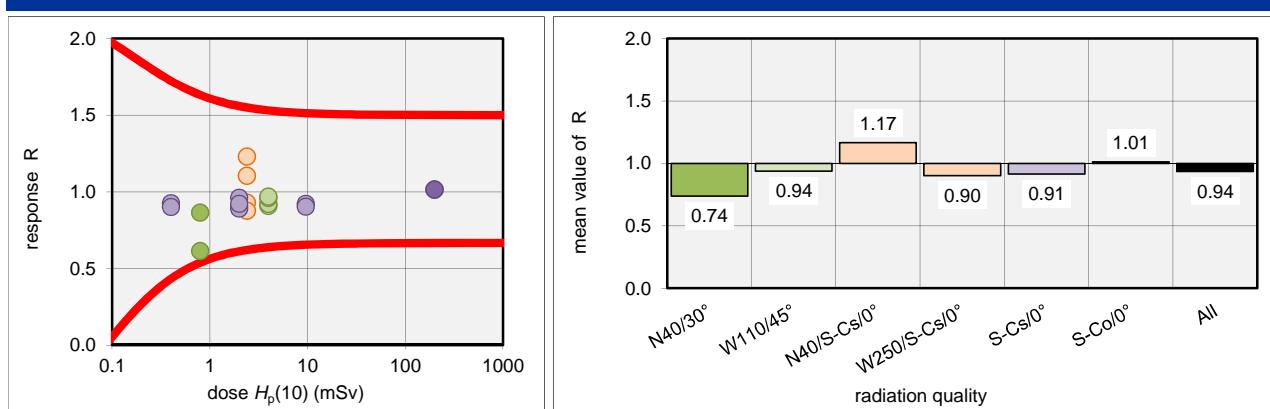
Reporting number 17: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)
x-ray	N40/30°	5	0.80	0.49	0.61
		6	0.80	0.69	0.86
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.00	3.63	0.91
		10	4.00	3.68	0.92
		7	4.00	3.84	0.96
		8	4.00	3.87	0.97
x-ray and gamma	N40/S-Cs/0°	3	2.40	2.65	1.10
		4	2.40	2.95	1.23
	W250/S-Cs/0°	1	2.40	2.23	0.93
		2	2.40	2.10	0.88
gamma	S-Cs/0°	17	0.40	0.37	0.93
		18	0.40	0.36	0.90
		13	2.00	1.79	0.90
		14	2.00	1.92	0.96
		15	2.00	1.78	0.89
		16	2.00	1.84	0.92
		11	9.60	8.84	0.92
		12	9.60	8.67	0.90
	S-Co/0°	19	200.00	202.61	1.01
		20	200.00	202.57	1.01
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.74	0.74	0.86	0.61	24%
W110/45°	4	0.94	0.94	0.97	0.91	3%
N40/S-Cs/0°	2	1.17	1.17	1.23	1.10	8%
W250/S-Cs/0°	2	0.90	0.90	0.93	0.88	4%
S-Cs/0°	8	0.91	0.91	0.96	0.89	2%
S-Co/0°	2	1.01	1.01	1.01	1.01	0%
All	20	0.92	0.94	1.23	0.61	12%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

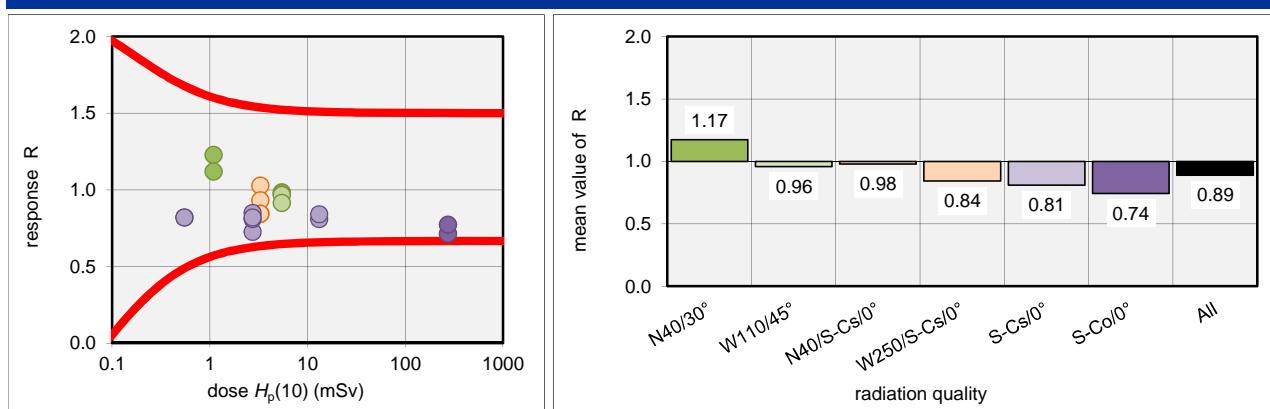
Reporting number 18: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)
x-ray	N40/30°	5	1.10	1.35	1.23
		6	1.10	1.23	1.12
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.50	5.40	0.98
		10	5.50	5.37	0.98
		7	5.50	5.31	0.97
		8	5.50	5.02	0.91
x-ray and gamma	N40/S-Cs/0°	3	3.30	3.39	1.03
		4	3.30	3.07	0.93
	W250/S-Cs/0°	1	3.30	2.78	0.84
		2	3.30	2.78	0.84
gamma	S-Cs/0°	17	0.55	0.45	0.82
		18	0.55	0.45	0.82
		13	2.75	1.99	0.72
		14	2.75	2.22	0.81
		15	2.75	2.33	0.85
		16	2.75	2.25	0.82
		11	13.20	10.67	0.81
		12	13.20	11.09	0.84
	S-Co/0°	19	275.00	196.33	0.71
		20	275.00	212.47	0.77
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.17	1.17	1.23	1.12	7%
W110/45°	4	0.97	0.96	0.98	0.91	3%
N40/S-Cs/0°	2	0.98	0.98	1.03	0.93	7%
W250/S-Cs/0°	2	0.84	0.84	0.84	0.84	0%
S-Cs/0°	8	0.82	0.81	0.85	0.72	5%
S-Co/0°	2	0.74	0.74	0.77	0.71	6%
All	20	0.84	0.89	1.23	0.71	15%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

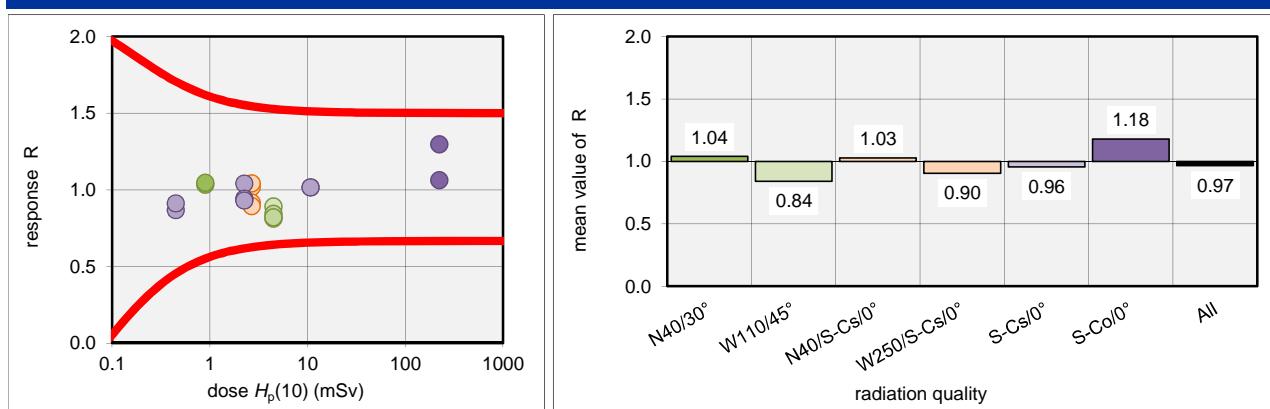
Reporting number 19: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)
x-ray	N40/30°	5	0.90	0.93	1.03
		6	0.90	0.94	1.04
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.50	4.01	0.89
		10	4.50	3.79	0.84
		7	4.50	3.65	0.81
		8	4.50	3.69	0.82
x-ray and gamma	N40/S-Cs/0°	3	2.70	2.74	1.01
		4	2.70	2.81	1.04
	W250/S-Cs/0°	1	2.70	2.47	0.91
		2	2.70	2.41	0.89
gamma	S-Cs/0°	17	0.45	0.39	0.87
		18	0.45	0.41	0.91
		13	2.25	2.10	0.93
		14	2.25	2.34	1.04
		15	2.25	2.12	0.94
		16	2.25	2.09	0.93
		11	10.80	10.96	1.01
		12	10.80	10.96	1.01
	S-Co/0°	19	225.00	238.75	1.06
		20	225.00	291.61	1.30
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.04	1.04	1.04	1.03	1%
W110/45°	4	0.83	0.84	0.89	0.81	4%
N40/S-Cs/0°	2	1.03	1.03	1.04	1.01	2%
W250/S-Cs/0°	2	0.90	0.90	0.91	0.89	2%
S-Cs/0°	8	0.94	0.96	1.04	0.87	6%
S-Co/0°	2	1.18	1.18	1.30	1.06	14%
All	20	0.94	0.97	1.30	0.81	12%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

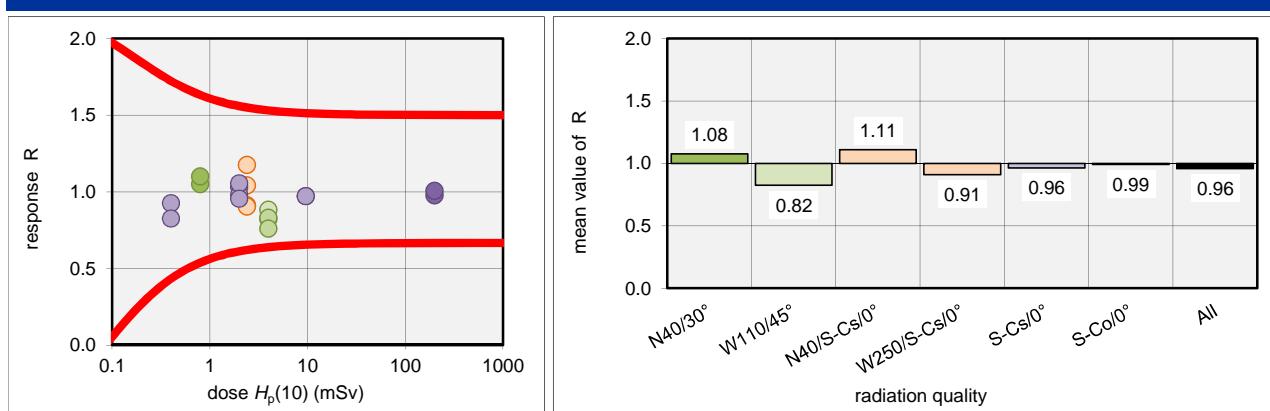
Reporting number 20: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	0.80	0.84	1.05	
		6	0.80	0.88	1.10	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.00	3.53	0.88	
		10	4.00	3.29	0.82	
		7	4.00	3.32	0.83	
		8	4.00	3.04	0.76	
x-ray and gamma	N40/S-Cs/0°	3	2.40	2.82	1.18	
		4	2.40	2.50	1.04	
	W250/S-Cs/0°	1	2.40	2.19	0.91	
		2	2.40	2.17	0.90	
gamma	S-Cs/0°	17	0.40	0.37	0.93	
		18	0.40	0.33	0.83	
		13	2.00	2.06	1.03	
		14	2.00	1.96	0.98	
		15	2.00	2.11	1.06	
		16	2.00	1.91	0.96	
		11	9.60	9.32	0.97	
		12	9.60	9.32	0.97	
	S-Co/0°	19	200.00	195.16	0.98	
		20	200.00	200.94	1.00	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.08	1.08	1.10	1.05	3%
W110/45°	4	0.83	0.82	0.88	0.76	6%
N40/S-Cs/0°	2	1.11	1.11	1.18	1.04	9%
W250/S-Cs/0°	2	0.91	0.91	0.91	0.90	1%
S-Cs/0°	8	0.97	0.96	1.06	0.83	7%
S-Co/0°	2	0.99	0.99	1.00	0.98	2%
All	20	0.97	0.96	1.18	0.76	11%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

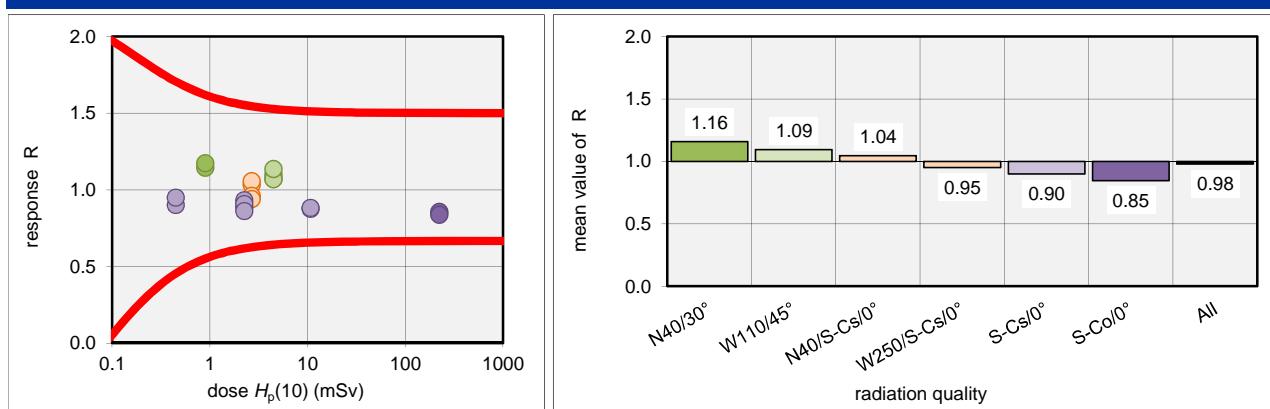
Reporting number 21: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	0.90	1.028	1.14	
		6	0.90	1.056	1.17	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.50	4.811	1.07	
		10	4.50	4.945	1.10	
		7	4.50	4.810	1.07	
		8	4.50	5.105	1.13	
x-ray and gamma	N40/S-Cs/0°	3	2.70	2.789	1.03	
		4	2.70	2.848	1.05	
	W250/S-Cs/0°	1	2.70	2.592	0.96	
		2	2.70	2.533	0.94	
gamma	S-Cs/0°	17	0.45	0.405	0.90	
		18	0.45	0.427	0.95	
		13	2.25	2.097	0.93	
		14	2.25	1.994	0.89	
		15	2.25	2.041	0.91	
		16	2.25	1.937	0.86	
		11	10.80	9.443	0.87	
		12	10.80	9.527	0.88	
	S-Co/0°	19	225.00	192.564	0.86	
		20	225.00	188.280	0.84	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.16	1.16	1.17	1.14	2%
W110/45°	4	1.08	1.09	1.13	1.07	3%
N40/S-Cs/0°	2	1.04	1.04	1.05	1.03	1%
W250/S-Cs/0°	2	0.95	0.95	0.96	0.94	2%
S-Cs/0°	8	0.89	0.90	0.95	0.86	3%
S-Co/0°	2	0.85	0.85	0.86	0.84	2%
All	20	0.94	0.98	1.17	0.84	11%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

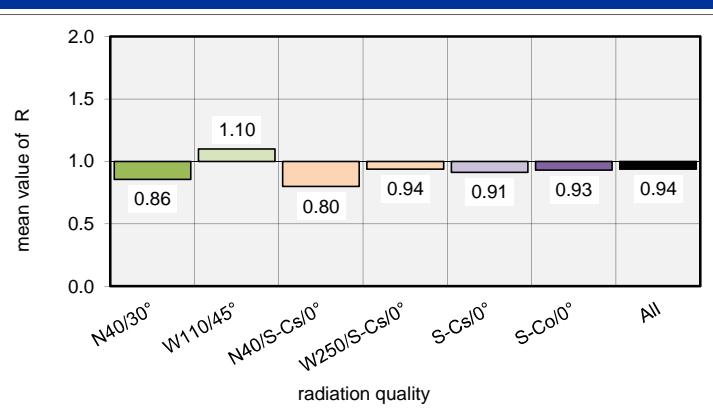
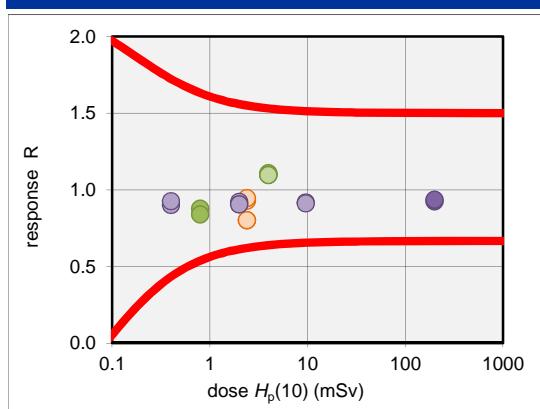
Reporting number 22: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	0.80	0.70	0.88	
		6	0.80	0.67	0.84	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.00	4.43	1.11	
		10	4.00	4.39	1.10	
		7	4.00	4.39	1.10	
		8	4.00	4.38	1.10	
x-ray and gamma	N40/S-Cs/0°	3	2.40	1.92	0.80	
		4	2.40	1.92	0.80	
	W250/S-Cs/0°	1	2.40	2.23	0.93	
		2	2.40	2.27	0.95	
gamma	S-Cs/0°	17	0.40	0.36	0.90	
		18	0.40	0.37	0.93	
		13	2.00	1.82	0.91	
		14	2.00	1.84	0.92	
		15	2.00	1.81	0.91	
		16	2.00	1.81	0.91	
		11	9.60	8.81	0.92	
		12	9.60	8.75	0.91	
	S-Co/0°	19	200.00	184.90	0.92	
		20	200.00	186.70	0.93	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.86	0.86	0.88	0.84	3%
W110/45°	4	1.10	1.10	1.11	1.10	1%
N40/S-Cs/0°	2	0.80	0.80	0.80	0.80	0%
W250/S-Cs/0°	2	0.94	0.94	0.95	0.93	1%
S-Cs/0°	8	0.91	0.91	0.93	0.90	1%
S-Co/0°	2	0.93	0.93	0.93	0.92	1%
All	20	0.92	0.94	1.11	0.80	10%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

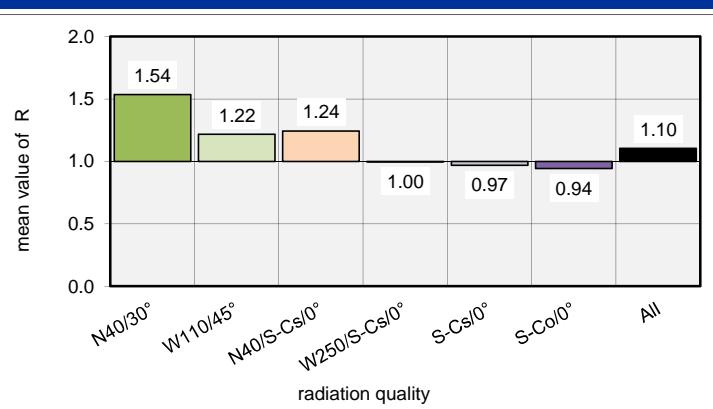
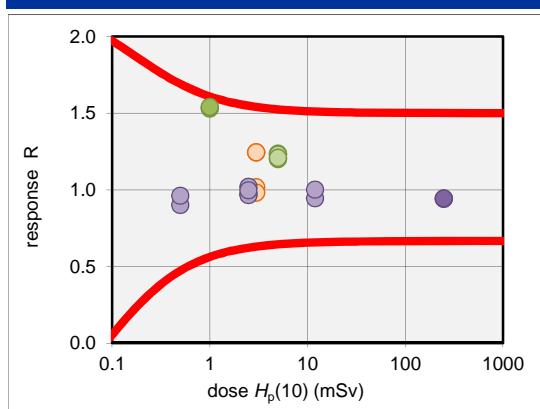
Reporting number 23: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.00	1.53	1.53	
		6	1.00	1.54	1.54	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.00	6.17	1.23	
		10	5.00	6.14	1.23	
		7	5.00	6.00	1.20	
		8	5.00	6.04	1.21	
x-ray and gamma	N40/S-Cs/0°	3	3.00	3.73	1.24	
		4	3.00	3.73	1.24	
	W250/S-Cs/0°	1	3.00	3.05	1.02	
		2	3.00	2.94	0.98	
gamma	S-Cs/0°	17	0.50	0.45	0.90	
		18	0.50	0.48	0.96	
		13	2.50	2.43	0.97	
		14	2.50	2.41	0.96	
		15	2.50	2.55	1.02	
		16	2.50	2.49	1.00	
		11	12.00	11.33	0.94	
		12	12.00	11.99	1.00	
	S-Co/0°	19	250.00	235.38	0.94	
		20	250.00	235.73	0.94	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.54	1.54	1.54	1.53	0%
W110/45°	4	1.22	1.22	1.23	1.20	1%
N40/S-Cs/0°	2	1.24	1.24	1.24	1.24	0%
W250/S-Cs/0°	2	1.00	1.00	1.02	0.98	3%
S-Cs/0°	8	0.97	0.97	1.02	0.90	4%
S-Co/0°	2	0.94	0.94	0.94	0.94	0%
All	20	1.01	1.10	1.54	0.90	17%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

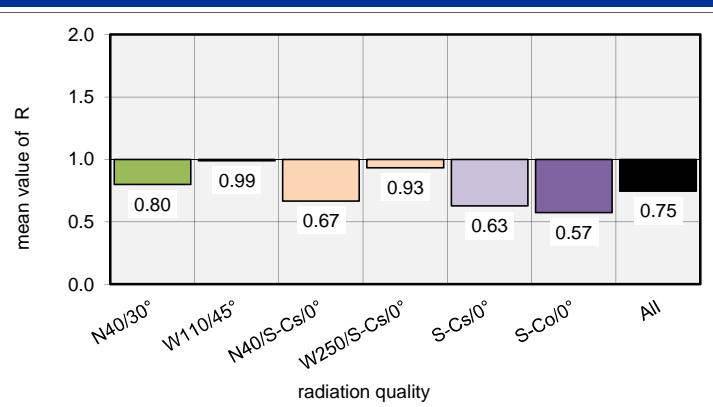
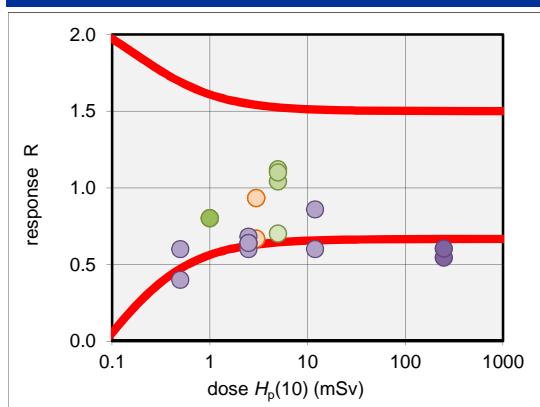
Reporting number 24: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)
x-ray	N40/30°	5	1.00	0.8	0.80
		6	1.00	0.8	0.80
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.00	3.5	0.70
		10	5.00	5.6	1.12
		7	5.00	5.2	1.04
		8	5.00	5.5	1.10
x-ray and gamma	N40/S-Cs/0°	3	3.00	2.0	0.67
		4	3.00	2.0	0.67
	W250/S-Cs/0°	1	3.00	2.8	0.93
		2	3.00	2.8	0.93
gamma	S-Cs/0°	17	0.50	0.3	0.60
		18	0.50	0.2	0.40
		13	2.50	1.7	0.68
		14	2.50	1.6	0.64
		15	2.50	1.5	0.60
		16	2.50	1.6	0.64
		11	12.00	7.2	0.60
		12	12.00	10.3	0.86
	S-Co/0°	19	250.00	135.8	0.54
		20	250.00	150.7	0.60
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.80	0.80	0.80	0.80	0%
W110/45°	4	1.07	0.99	1.12	0.70	20%
N40/S-Cs/0°	2	0.67	0.67	0.67	0.67	0%
W250/S-Cs/0°	2	0.93	0.93	0.93	0.93	0%
S-Cs/0°	8	0.62	0.63	0.86	0.40	20%
S-Co/0°	2	0.57	0.57	0.60	0.54	7%
All	20	0.67	0.75	1.12	0.40	26%

outliers: 5 of 20

Fraction of outliers: 25%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

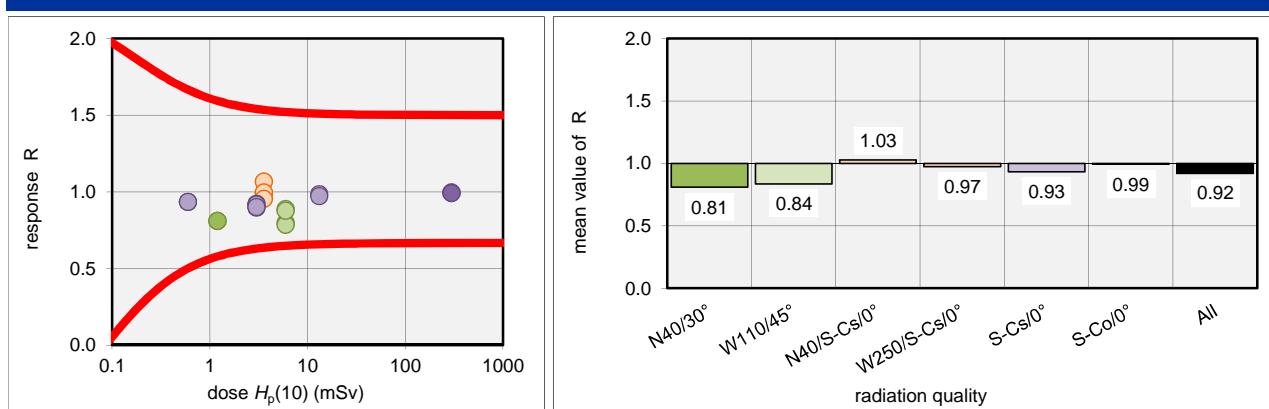
Reporting number 25: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)
x-ray	N40/30°	5	1.20	0.97	0.81
		6	1.20	0.97	0.81
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	6.00	5.32	0.89
		10	6.00	4.78	0.80
		7	6.00	4.70	0.78
		8	6.00	5.26	0.88
x-ray and gamma	N40/S-Cs/0°	3	3.60	3.56	0.99
		4	3.60	3.84	1.07
	W250/S-Cs/0°	1	3.60	3.58	0.99
		2	3.60	3.43	0.95
gamma	S-Cs/0°	17	0.60	0.56	0.93
		18	0.60	0.56	0.93
		13	3.00	2.76	0.92
		14	3.00	2.69	0.90
		15	3.00	2.75	0.92
		16	3.00	2.70	0.90
		11	13.20	12.97	0.98
		12	13.20	12.83	0.97
	S-Co/0°	19	300.00	298.44	0.99
		20	300.00	297.30	0.99
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.81	0.81	0.81	0.81	0%
W110/45°	4	0.84	0.84	0.89	0.78	6%
N40/S-Cs/0°	2	1.03	1.03	1.07	0.99	5%
W250/S-Cs/0°	2	0.97	0.97	0.99	0.95	3%
S-Cs/0°	8	0.93	0.93	0.98	0.90	3%
S-Co/0°	2	0.99	0.99	0.99	0.99	0%
All	20	0.93	0.92	1.07	0.78	8%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

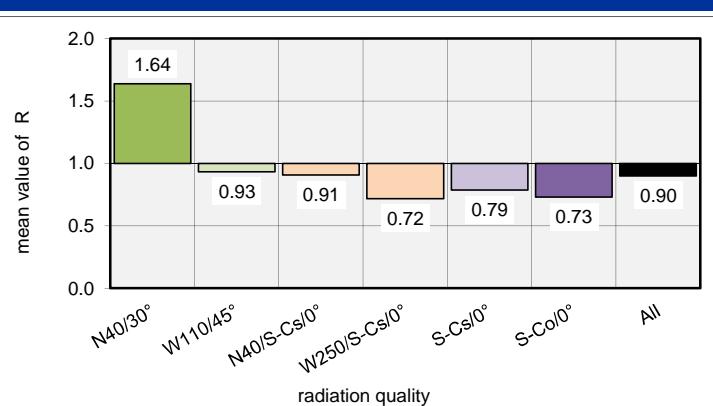
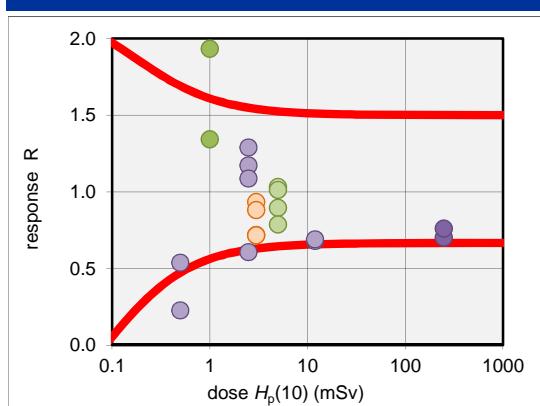
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 26: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.00	1.932	1.93	
		6	1.00	1.342	1.34	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.00	5.152	1.03	
		10	5.00	4.478	0.90	
		7	5.00	3.934	0.79	
		8	5.00	5.060	1.01	
x-ray and gamma	N40/S-Cs/0°	3	3.00	2.794	0.93	
		4	3.00	2.643	0.88	
	W250/S-Cs/0°	1	3.00	2.155	0.72	
		2	3.00	2.143	0.71	
gamma	S-Cs/0°	17	0.50	0.113	0.23	
		18	0.50	0.268	0.54	
		13	2.50	3.223	1.29	
		14	2.50	2.928	1.17	
		15	2.50	2.715	1.09	
		16	2.50	1.513	0.61	
		11	12.00	8.141	0.68	
		12	12.00	8.272	0.69	
	S-Co/0°	19	250.00	175.140	0.70	
		20	250.00	189.890	0.76	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.64	1.64	1.93	1.34	25%
W110/45°	4	0.95	0.93	1.03	0.79	12%
N40/S-Cs/0°	2	0.91	0.91	0.93	0.88	4%
W250/S-Cs/0°	2	0.72	0.72	0.72	0.71	0%
S-Cs/0°	8	0.68	0.79	1.29	0.23	46%
S-Co/0°	2	0.73	0.73	0.76	0.70	6%
All	20	0.83	0.90	1.93	0.23	40%

outliers: 3 of 20

Fraction of outliers: 15%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

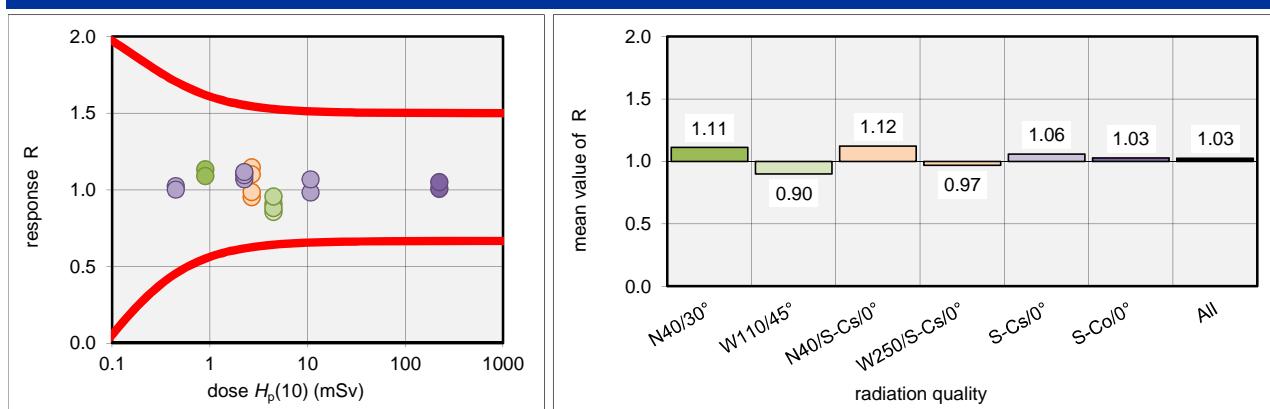
Reporting number 27: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)
x-ray	N40/30°	5	0.90	1.02	1.13
		6	0.90	0.98	1.09
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.50	3.85	0.86
		10	4.50	4.08	0.91
		7	4.50	3.96	0.88
		8	4.50	4.30	0.96
x-ray and gamma	N40/S-Cs/0°	3	2.70	3.09	1.14
		4	2.70	2.97	1.10
	W250/S-Cs/0°	1	2.70	2.57	0.95
		2	2.70	2.66	0.99
gamma	S-Cs/0°	17	0.45	0.46	1.02
		18	0.45	0.45	1.00
		13	2.25	2.50	1.11
		14	2.25	2.40	1.07
		15	2.25	2.46	1.09
		16	2.25	2.51	1.12
		21	10.80	10.60	0.98
		22	10.80	11.53	1.07
	S-Co/0°	19	225.00	226.00	1.00
		20	225.00	236.00	1.05
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			
	WIR	11			
	WIR	12			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.11	1.11	1.13	1.09	3%
W110/45°	4	0.89	0.90	0.96	0.86	5%
N40/S-Cs/0°	2	1.12	1.12	1.14	1.10	3%
W250/S-Cs/0°	2	0.97	0.97	0.99	0.95	2%
S-Cs/0°	8	1.07	1.06	1.12	0.98	5%
S-Co/0°	2	1.03	1.03	1.05	1.00	3%
All	20	1.04	1.03	1.14	0.86	8%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

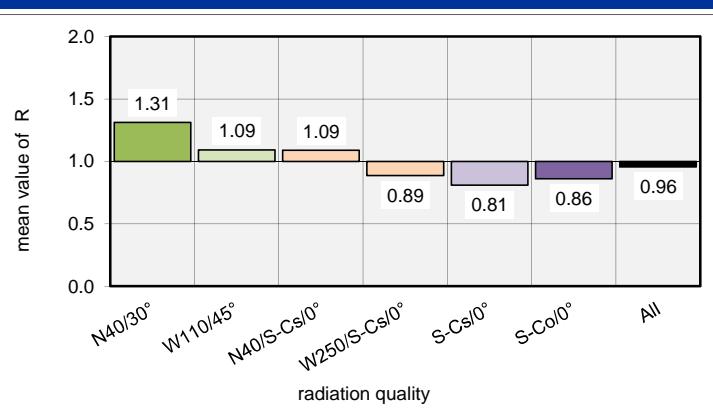
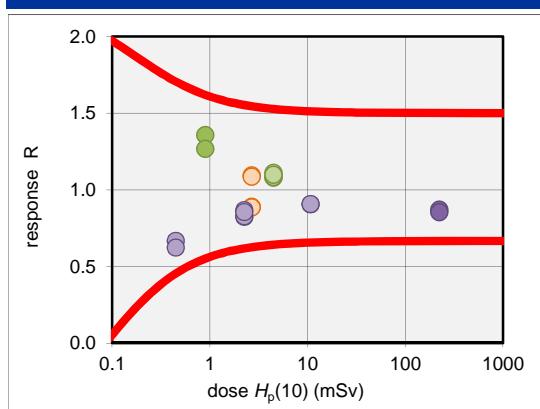
Reporting number 28: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)
x-ray	N40/30°	7	0.90	1.22	1.36
		8	0.90	1.14	1.27
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.50	4.85	1.08
		10	4.50	4.99	1.11
		5	4.50	4.87	1.08
		6	4.50	4.94	1.10
x-ray and gamma	N40/S-Cs/0°	3	2.70	2.95	1.09
		4	2.70	2.93	1.09
	W250/S-Cs/0°	1	2.70	2.40	0.89
		2	2.70	2.39	0.89
gamma	S-Cs/0°	17	0.45	0.30	0.67
		18	0.45	0.28	0.62
		13	2.25	1.85	0.82
		14	2.25	1.95	0.87
		15	2.25	1.86	0.83
		16	2.25	1.92	0.85
		11	10.80	9.77	0.90
		12	10.80	9.78	0.91
	S-Co/0°	19	225.00	195.86	0.87
		20	225.00	191.91	0.85
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.31	1.31	1.36	1.27	5%
W110/45°	4	1.09	1.09	1.11	1.08	1%
N40/S-Cs/0°	2	1.09	1.09	1.09	1.09	0%
W250/S-Cs/0°	2	0.89	0.89	0.89	0.89	0%
S-Cs/0°	8	0.84	0.81	0.91	0.62	13%
S-Co/0°	2	0.86	0.86	0.87	0.85	1%
All	20	0.90	0.96	1.36	0.62	19%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

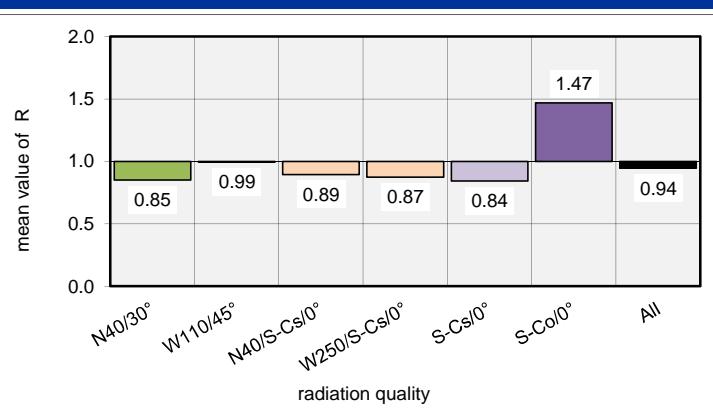
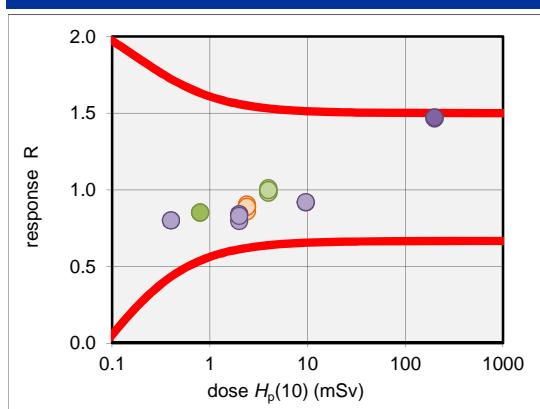
Reporting number 29: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)
x-ray	N40/30°	5	0.80	0.68	0.85
		6	0.80	0.68	0.85
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.00	3.94	0.99
		10	4.00	4.04	1.01
		7	4.00	3.92	0.98
		8	4.00	3.99	1.00
x-ray and gamma	N40/S-Cs/0°	3	2.40	2.12	0.88
		4	2.40	2.17	0.90
	W250/S-Cs/0°	1	2.40	2.06	0.86
		2	2.40	2.13	0.89
gamma	S-Cs/0°	21	0.40	0.32	0.80
		22	0.40	0.32	0.80
		13	2.00	1.68	0.84
		14	2.00	1.68	0.84
		15	2.00	1.59	0.80
		16	2.00	1.66	0.83
		11	9.60	8.80	0.92
		12	9.60	8.83	0.92
	S-Co/0°	19	200.00	292.96	1.46
		20	200.00	294.27	1.47
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			
	WIR	17			
	WIR	18			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.85	0.85	0.85	0.85	0%
W110/45°	4	0.99	0.99	1.01	0.98	1%
N40/S-Cs/0°	2	0.89	0.89	0.90	0.88	2%
W250/S-Cs/0°	2	0.87	0.87	0.89	0.86	2%
S-Cs/0°	8	0.84	0.84	0.92	0.80	6%
S-Co/0°	2	1.47	1.47	1.47	1.46	0%
All	20	0.89	0.94	1.47	0.80	20%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

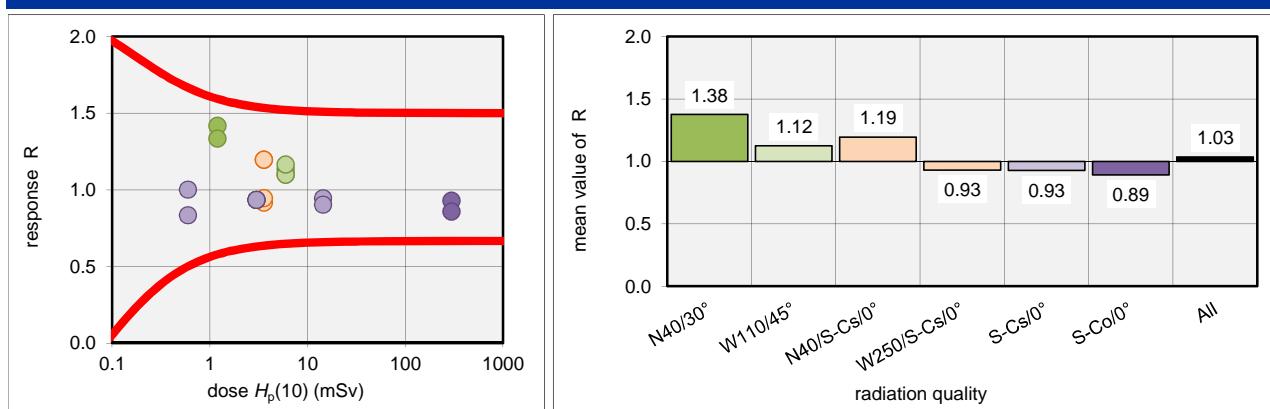
Reporting number 30: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.20	1.7	1.42	
		6	1.20	1.6	1.33	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	6.00	6.8	1.13	
		10	6.00	6.6	1.10	
		7	6.01	6.6	1.10	
		8	6.01	7.0	1.16	
x-ray and gamma	N40/S-Cs/0°	3	3.60	4.3	1.19	
		4	3.60	4.3	1.19	
	W250/S-Cs/0°	1	3.60	3.3	0.92	
		2	3.60	3.4	0.94	
gamma	S-Cs/0°	17	0.60	0.5	0.83	
		18	0.60	0.6	1.00	
		13	3.00	2.8	0.93	
		14	3.00	2.8	0.93	
		15	3.00	2.8	0.93	
		16	3.00	2.8	0.93	
		11	14.40	13.6	0.94	
		12	14.40	13.0	0.90	
	S-Co/0°	19	300.00	278.2	0.93	
		20	300.00	257.4	0.86	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.38	1.38	1.42	1.33	4%
W110/45°	4	1.12	1.12	1.16	1.10	3%
N40/S-Cs/0°	2	1.19	1.19	1.19	1.19	0%
W250/S-Cs/0°	2	0.93	0.93	0.94	0.92	2%
S-Cs/0°	8	0.93	0.93	1.00	0.83	5%
S-Co/0°	2	0.89	0.89	0.93	0.86	5%
All	20	0.94	1.03	1.42	0.83	16%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

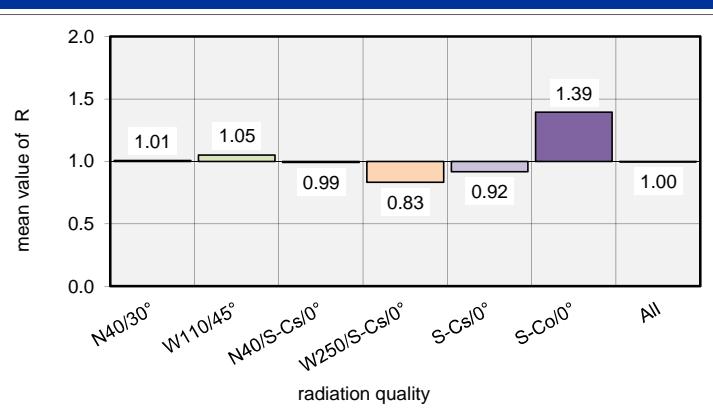
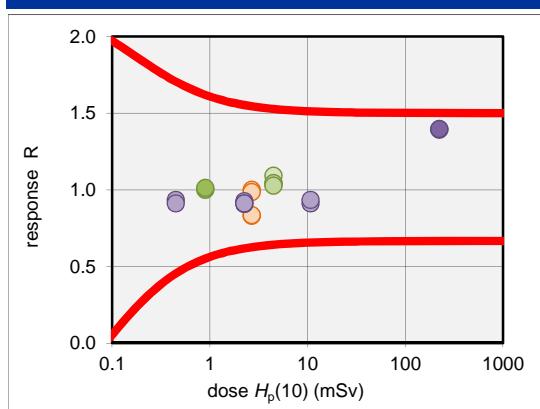
Reporting number 31: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)
x-ray	N40/30°	5	0.90	0.90	1.00
		6	0.90	0.91	1.01
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.50	4.91	1.09
		10	4.50	4.67	1.04
		7	4.50	4.69	1.04
		8	4.50	4.62	1.03
x-ray and gamma	N40/S-Cs/0°	3	2.70	2.70	1.00
		4	2.70	2.66	0.99
	W250/S-Cs/0°	1	2.70	2.24	0.83
		2	2.70	2.25	0.83
gamma	S-Cs/0°	17	0.45	0.42	0.93
		18	0.45	0.41	0.91
		13	2.25	2.04	0.91
		14	2.25	2.08	0.92
		15	2.25	2.05	0.91
		16	2.25	2.05	0.91
		11	10.80	9.84	0.91
		12	10.80	10.07	0.93
	S-Co/0°	19	225.00	313.31	1.39
		20	225.00	313.97	1.40
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.01	1.01	1.01	1.00	1%
W110/45°	4	1.04	1.05	1.09	1.03	3%
N40/S-Cs/0°	2	0.99	0.99	1.00	0.99	1%
W250/S-Cs/0°	2	0.83	0.83	0.83	0.83	0%
S-Cs/0°	8	0.91	0.92	0.93	0.91	1%
S-Co/0°	2	1.39	1.39	1.40	1.39	0%
All	20	0.96	1.00	1.40	0.83	15%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

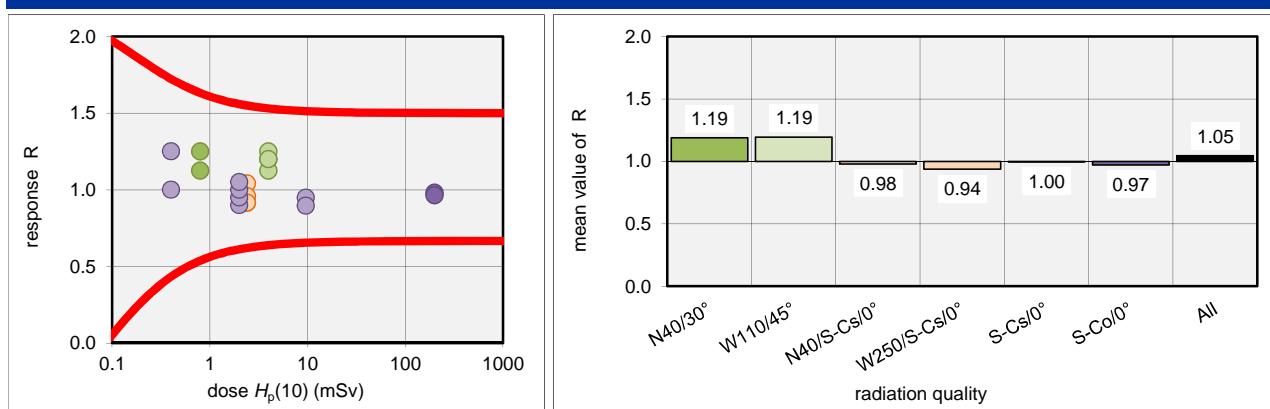
Reporting number 32: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	0.80	0.9	1.13	
		6	0.80	1.0	1.25	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.00	4.8	1.20	
		10	4.00	5.0	1.25	
		7	4.00	4.5	1.13	
		8	4.00	4.8	1.20	
x-ray and gamma	N40/S-Cs/0°	3	2.40	2.2	0.92	
		4	2.40	2.5	1.04	
	W250/S-Cs/0°	1	2.40	2.3	0.96	
		2	2.40	2.2	0.92	
gamma	S-Cs/0°	17	0.40	0.4	1.00	
		18	0.40	0.5	1.25	
		13	2.00	1.8	0.90	
		14	2.00	1.9	0.95	
		15	2.00	2.0	1.00	
		16	2.00	2.1	1.05	
		11	9.60	9.1	0.95	
		12	9.60	8.6	0.90	
	S-Co/0°	19	200.00	195.9	0.98	
		20	200.00	192.9	0.96	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.19	1.19	1.25	1.13	7%
W110/45°	4	1.20	1.19	1.25	1.13	4%
N40/S-Cs/0°	2	0.98	0.98	1.04	0.92	9%
W250/S-Cs/0°	2	0.94	0.94	0.96	0.92	3%
S-Cs/0°	8	0.98	1.00	1.25	0.90	11%
S-Co/0°	2	0.97	0.97	0.98	0.96	1%
All	20	1.00	1.05	1.25	0.90	12%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

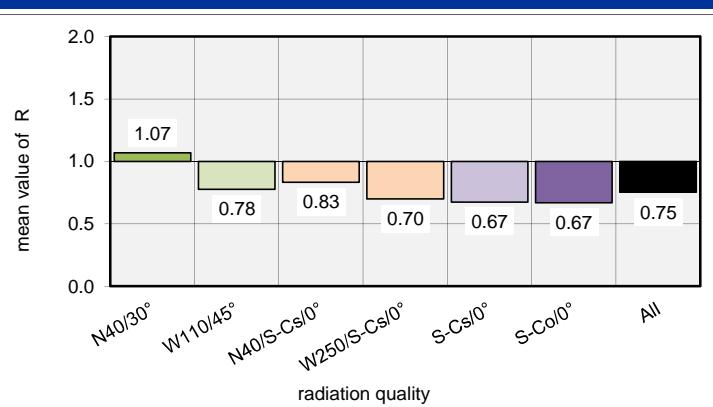
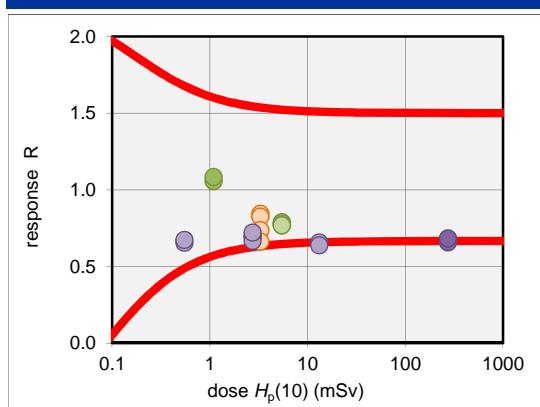
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 33: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.10	1.16	1.05	
		6	1.10	1.19	1.08	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.50	4.34	0.79	
		10	5.50	4.29	0.78	
		7	5.50	4.22	0.77	
		8	5.50	4.22	0.77	
x-ray and gamma	N40/S-Cs/0°	3	3.30	2.78	0.84	
		4	3.30	2.72	0.82	
	W250/S-Cs/0°	1	3.30	2.43	0.74	
		2	3.30	2.18	0.66	
gamma	S-Cs/0°	17	0.55	0.36	0.65	
		18	0.55	0.37	0.67	
		13	2.75	1.91	0.69	
		14	2.75	1.90	0.69	
		15	2.75	1.83	0.67	
		16	2.75	1.98	0.72	
		11	13.20	8.67	0.66	
		12	13.20	8.42	0.64	
	S-Co/0°	19	275.00	180.91	0.66	
		20	275.00	187.38	0.68	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.07	1.07	1.08	1.05	2%
W110/45°	4	0.77	0.78	0.79	0.77	1%
N40/S-Cs/0°	2	0.83	0.83	0.84	0.82	2%
W250/S-Cs/0°	2	0.70	0.70	0.74	0.66	8%
S-Cs/0°	8	0.67	0.67	0.72	0.64	4%
S-Co/0°	2	0.67	0.67	0.68	0.66	2%
All	20	0.71	0.75	1.08	0.64	16%

outliers: 3 of 20

Fraction of outliers: 15%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

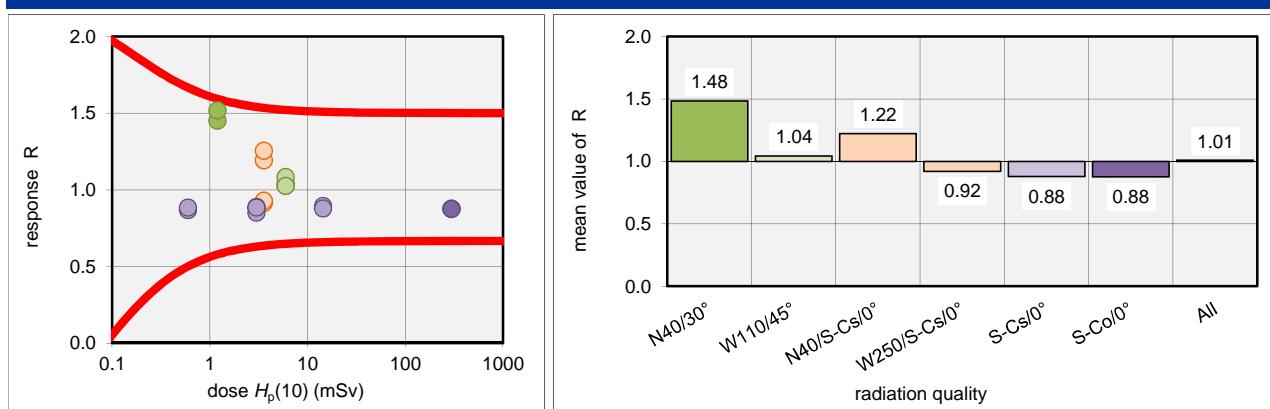
Reporting number 34: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.20	1.74	1.45	
		6	1.20	1.82	1.52	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	6.00	6.16	1.03	
		10	6.00	6.24	1.04	
		7	6.01	6.51	1.08	
		8	6.01	6.16	1.02	
x-ray and gamma	N40/S-Cs/0°	3	3.60	4.29	1.19	
		4	3.60	4.51	1.25	
	W250/S-Cs/0°	1	3.60	3.29	0.91	
		2	3.60	3.34	0.93	
gamma	S-Cs/0°	17	0.60	0.52	0.87	
		18	0.60	0.53	0.88	
		13	3.00	2.66	0.89	
		14	3.00	2.64	0.88	
		15	3.00	2.55	0.85	
		16	3.00	2.65	0.88	
		11	14.40	12.86	0.89	
		12	14.40	12.62	0.88	
	S-Co/0°	19	300.00	263.00	0.88	
		20	300.00	262.00	0.87	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.48	1.48	1.52	1.45	3%
W110/45°	4	1.03	1.04	1.08	1.02	3%
N40/S-Cs/0°	2	1.22	1.22	1.25	1.19	4%
W250/S-Cs/0°	2	0.92	0.92	0.93	0.91	1%
S-Cs/0°	8	0.88	0.88	0.89	0.85	2%
S-Co/0°	2	0.88	0.88	0.88	0.87	0%
All	20	0.90	1.01	1.52	0.85	20%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

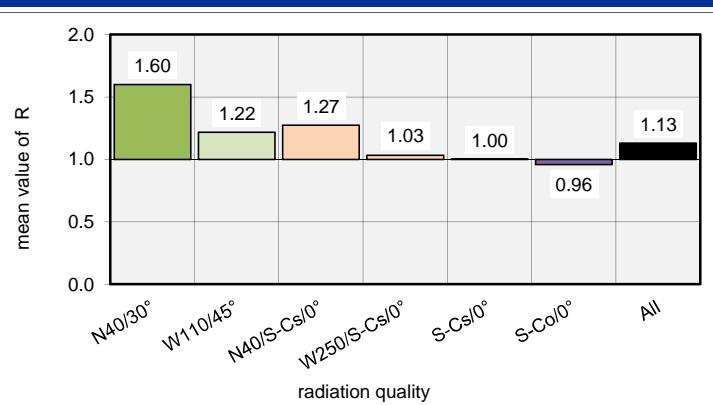
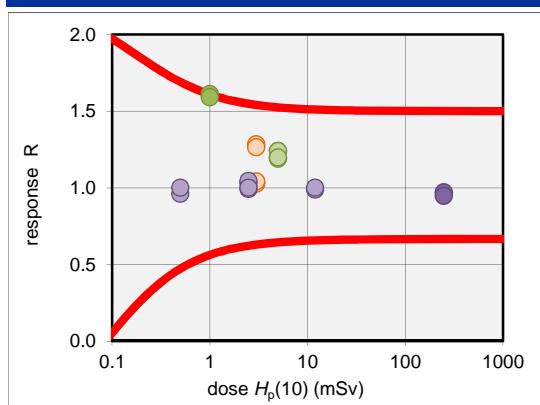
Reporting number 35: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.00	1.61	1.61	
		6	1.00	1.59	1.59	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.00	6.20	1.24	
		10	5.00	6.20	1.24	
		7	5.00	5.95	1.19	
		8	5.00	5.99	1.20	
x-ray and gamma	N40/S-Cs/0°	3	3.00	3.85	1.28	
		4	3.00	3.79	1.26	
	W250/S-Cs/0°	1	3.00	3.08	1.03	
		2	3.00	3.12	1.04	
gamma	S-Cs/0°	17	0.50	0.48	0.96	
		18	0.50	0.50	1.00	
		13	2.50	2.57	1.03	
		14	2.50	2.61	1.04	
		15	2.50	2.48	0.99	
		16	2.50	2.50	1.00	
		11	12.00	11.85	0.99	
		12	12.00	11.99	1.00	
	S-Co/0°	19	250.00	242.48	0.97	
		20	250.00	236.82	0.95	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.60	1.60	1.61	1.59	1%
W110/45°	4	1.22	1.22	1.24	1.19	2%
N40/S-Cs/0°	2	1.27	1.27	1.28	1.26	1%
W250/S-Cs/0°	2	1.03	1.03	1.04	1.03	1%
S-Cs/0°	8	1.00	1.00	1.04	0.96	3%
S-Co/0°	2	0.96	0.96	0.97	0.95	2%
All	20	1.03	1.13	1.61	0.95	17%

outliers: 1 of 20

Fraction of outliers: 5%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

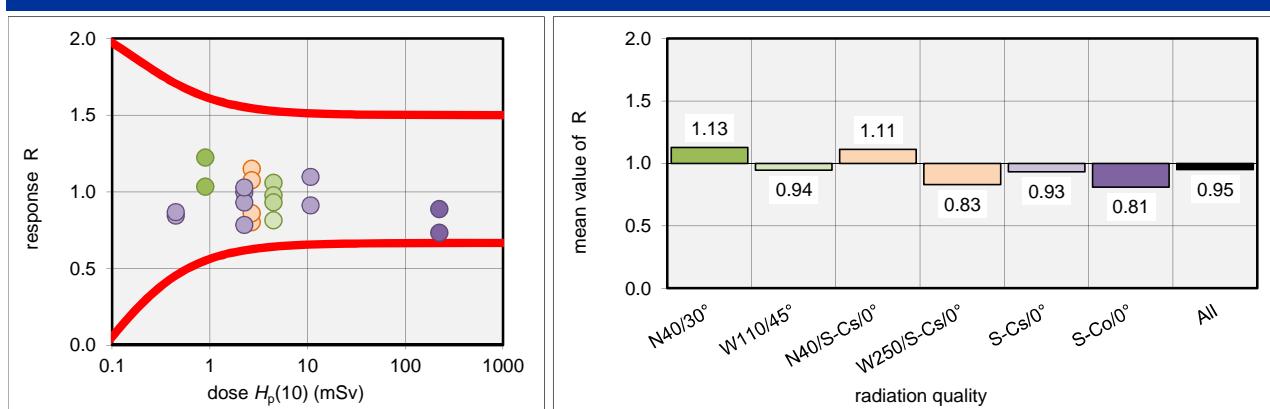
Reporting number 36: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	0.90	1.100	1.22	
		6	0.90	0.930	1.03	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.50	3.660	0.81	
		10	4.50	4.760	1.06	
		7	4.49	4.380	0.98	
		8	4.49	4.180	0.93	
x-ray and gamma	N40/S-Cs/0°	3	2.69	3.090	1.15	
		4	2.69	2.890	1.07	
	W250/S-Cs/0°	1	2.70	2.160	0.80	
		2	2.70	2.320	0.86	
gamma	S-Cs/0°	17	0.45	0.380	0.84	
		18	0.45	0.390	0.87	
		13	2.25	2.240	1.00	
		14	2.25	2.090	0.93	
		15	2.25	1.760	0.78	
		16	2.25	2.310	1.03	
		11	10.80	9.830	0.91	
		12	10.80	11.840	1.10	
	S-Co/0°	19	225.00	164.920	0.73	
		20	225.00	199.510	0.89	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.13	1.13	1.22	1.03	12%
W110/45°	4	0.95	0.94	1.06	0.81	11%
N40/S-Cs/0°	2	1.11	1.11	1.15	1.07	5%
W250/S-Cs/0°	2	0.83	0.83	0.86	0.80	5%
S-Cs/0°	8	0.92	0.93	1.10	0.78	11%
S-Co/0°	2	0.81	0.81	0.89	0.73	13%
All	20	0.93	0.95	1.22	0.73	14%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

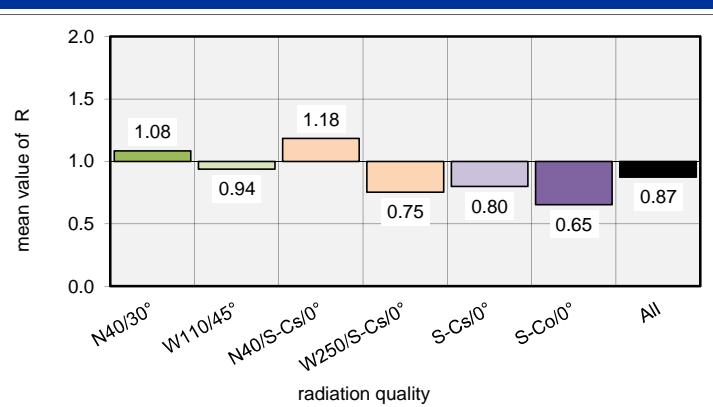
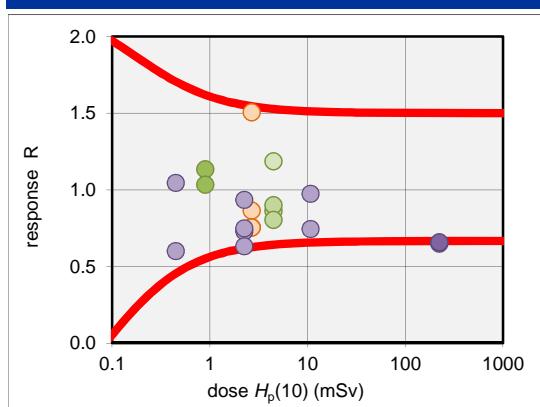
Reporting number 37: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	0.90	1.02	1.13	
		6	0.90	0.93	1.03	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.50	5.33	1.18	
		10	4.50	3.88	0.86	
		7	4.50	4.05	0.90	
		8	4.50	3.61	0.80	
x-ray and gamma	N40/S-Cs/0°	3	2.70	4.06	1.50	
		4	2.70	2.33	0.86	
	W250/S-Cs/0°	1	2.70	2.04	0.76	
		2	2.70	2.03	0.75	
gamma	S-Cs/0°	17	0.45	0.27	0.60	
		18	0.45	0.47	1.04	
		13	2.25	1.64	0.73	
		14	2.25	1.42	0.63	
		15	2.25	1.68	0.75	
		16	2.25	2.10	0.93	
		11	10.80	8.02	0.74	
		12	10.80	10.51	0.97	
	S-Co/0°	19	225.00	145.90	0.65	
		20	225.00	147.65	0.66	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.08	1.08	1.13	1.03	7%
W110/45°	4	0.88	0.94	1.18	0.80	18%
N40/S-Cs/0°	2	1.18	1.18	1.50	0.86	38%
W250/S-Cs/0°	2	0.75	0.75	0.76	0.75	0%
S-Cs/0°	8	0.74	0.80	1.04	0.60	20%
S-Co/0°	2	0.65	0.65	0.66	0.65	1%
All	20	0.83	0.87	1.50	0.60	26%

outliers: 2 of 20

Fraction of outliers: 10%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

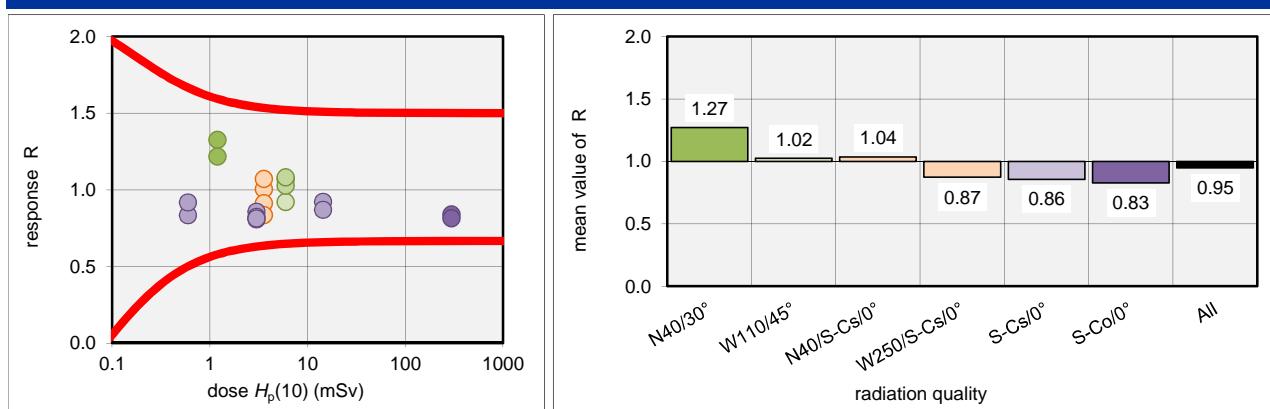
Reporting number 38: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)
x-ray	N40/30°	5	1.20	1.59	1.33
		6	1.20	1.46	1.22
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	6.00	5.52	0.92
		10	6.00	6.41	1.07
		7	6.00	6.16	1.03
		8	6.00	6.48	1.08
x-ray and gamma	N40/S-Cs/0°	3	3.60	3.61	1.00
		4	3.60	3.85	1.07
	W250/S-Cs/0°	1	3.60	3.28	0.91
		2	3.60	3.00	0.83
gamma	S-Cs/0°	17	0.60	0.50	0.83
		18	0.60	0.55	0.92
		13	3.00	2.57	0.86
		14	3.00	2.42	0.81
		15	3.00	2.47	0.82
		16	3.00	2.44	0.81
		11	14.40	13.27	0.92
		12	14.40	12.52	0.87
	S-Co/0°	19	300.00	251.65	0.84
		20	300.00	244.03	0.81
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.27	1.27	1.33	1.22	6%
W110/45°	4	1.05	1.02	1.08	0.92	7%
N40/S-Cs/0°	2	1.04	1.04	1.07	1.00	5%
W250/S-Cs/0°	2	0.87	0.87	0.91	0.83	6%
S-Cs/0°	8	0.85	0.86	0.92	0.81	5%
S-Co/0°	2	0.83	0.83	0.84	0.81	2%
All	20	0.91	0.95	1.33	0.81	15%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

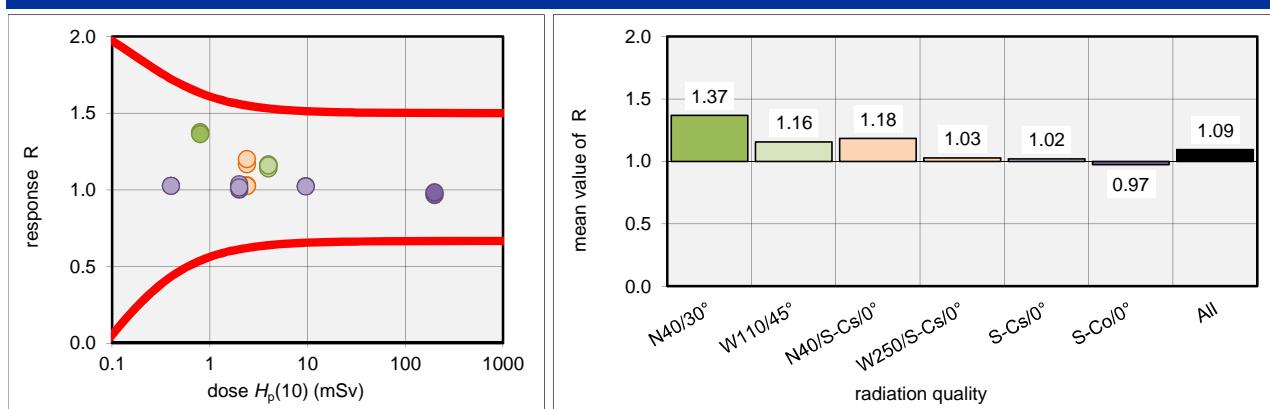
Reporting number 39: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	0.80	1.10	1.38	
		6	0.80	1.09	1.36	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.00	4.65	1.16	
		10	4.00	4.66	1.17	
		7	4.00	4.56	1.14	
		8	4.00	4.63	1.16	
x-ray and gamma	N40/S-Cs/0°	3	2.40	2.80	1.17	
		4	2.40	2.88	1.20	
	W250/S-Cs/0°	1	2.40	2.47	1.03	
		2	2.40	2.46	1.03	
gamma	S-Cs/0°	17	0.40	0.41	1.03	
		18	0.40	0.41	1.03	
		13	2.00	2.07	1.04	
		14	2.00	2.00	1.00	
		15	2.00	2.01	1.01	
		16	2.00	2.03	1.02	
		11	9.60	9.83	1.02	
		12	9.60	9.81	1.02	
	S-Co/0°	19	200.00	193.10	0.97	
		20	200.00	196.40	0.98	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.37	1.37	1.38	1.36	1%
W110/45°	4	1.16	1.16	1.17	1.14	1%
N40/S-Cs/0°	2	1.18	1.18	1.20	1.17	2%
W250/S-Cs/0°	2	1.03	1.03	1.03	1.03	0%
S-Cs/0°	8	1.02	1.02	1.04	1.00	1%
S-Co/0°	2	0.97	0.97	0.98	0.97	1%
All	20	1.03	1.09	1.38	0.97	11%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

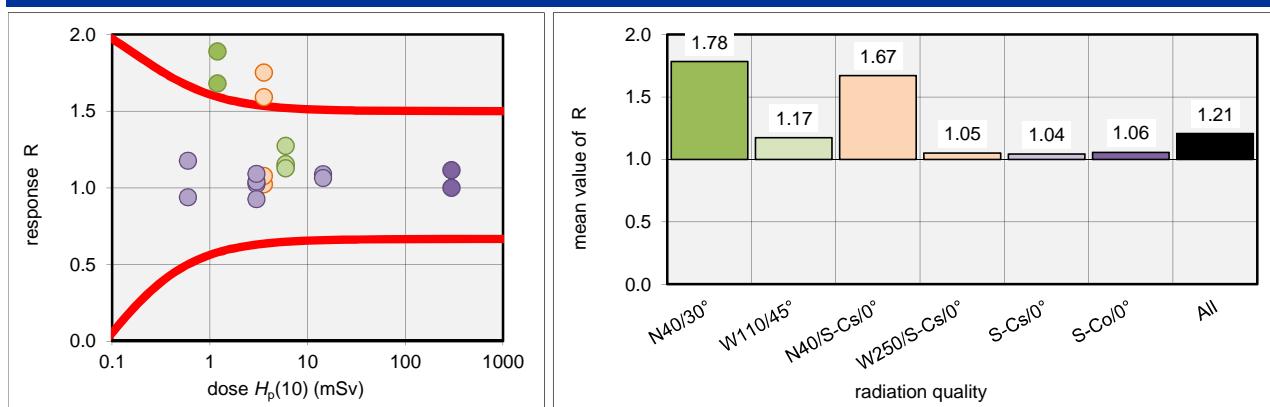
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 40: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality	dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)		
x-ray	N40/30°	5 6	1.20 1.20	2.266 2.015	1.89 1.68	
	W110/45°/x W110/-45°/x	9 10	6.00 6.00	6.841 7.633	1.14 1.27	
	W110/45°/y W110/-45°/y	7 8	6.00 6.00	6.918 6.756	1.15 1.13	
	N40/S-Cs/0°	3 4	3.60 3.60	5.725 6.303	1.59 1.75	
	W250/S-Cs/0°	1 2	3.60 3.60	3.681 3.875	1.02 1.08	
gamma	S-Cs/0°	17 18	0.60 0.60	0.705 0.562	1.18 0.94	
		13 14	3.00 3.00	3.072 2.778	1.02 0.93	
		15 16	3.00 3.00	3.119 3.269	1.04 1.09	
		11 12	14.40 14.40	15.652 15.299	1.09 1.06	
		19 20	300.00 300.00	334.018 299.994	1.11 1.00	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	
N40/30°	2	1.78	1.78	1.89	1.68	8%
W110/45°	4	1.15	1.17	1.27	1.13	6%
N40/S-Cs/0°	2	1.67	1.67	1.75	1.59	7%
W250/S-Cs/0°	2	1.05	1.05	1.08	1.02	4%
S-Cs/0°	8	1.05	1.04	1.18	0.93	8%
S-Co/0°	2	1.06	1.06	1.11	1.00	8%
All	20	1.10	1.21	1.89	0.93	23%

outliers: 4 of 20

Fraction of outliers: 20%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

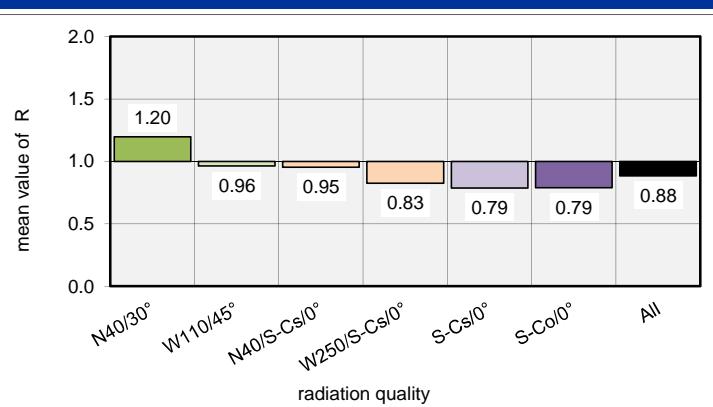
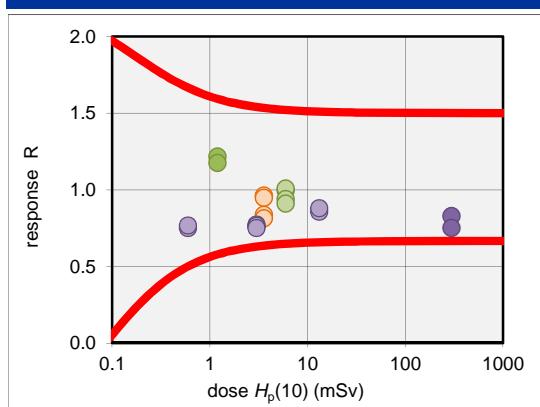
Reporting number 41: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)
x-ray	N40/30°	5	1.20	1.46	1.22
		6	1.20	1.41	1.18
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	6.00	5.97	1.00
		10	6.00	6.04	1.01
		7	6.00	5.63	0.94
		8	6.00	5.46	0.91
x-ray and gamma	N40/S-Cs/0°	3	3.60	3.46	0.96
		4	3.60	3.41	0.95
	W250/S-Cs/0°	1	3.60	3.01	0.84
		2	3.60	2.93	0.81
gamma	S-Cs/0°	17	0.60	0.45	0.75
		18	0.60	0.46	0.77
		13	3.00	2.28	0.76
		14	3.00	2.32	0.77
		15	3.00	2.29	0.76
		16	3.00	2.25	0.75
		11	13.20	11.31	0.86
		12	13.20	11.60	0.88
	S-Co/0°	19	300.00	248.28	0.83
		20	300.00	225.42	0.75
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.20	1.20	1.22	1.18	2%
W110/45°	4	0.97	0.96	1.01	0.91	5%
N40/S-Cs/0°	2	0.95	0.95	0.96	0.95	1%
W250/S-Cs/0°	2	0.83	0.83	0.84	0.81	2%
S-Cs/0°	8	0.77	0.79	0.88	0.75	6%
S-Co/0°	2	0.79	0.79	0.83	0.75	7%
All	20	0.85	0.88	1.22	0.75	16%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

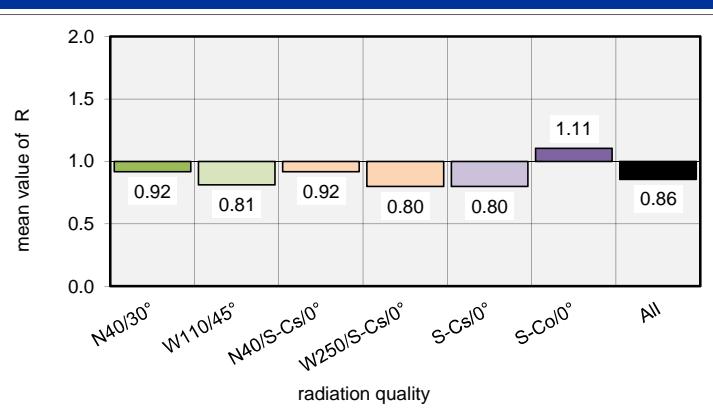
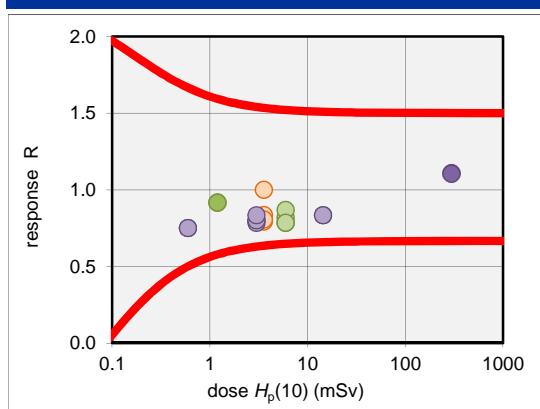
Reporting number 42: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.20	1.10	0.92	
		6	1.20	1.10	0.92	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	6.00	4.90	0.82	
		10	6.00	4.70	0.78	
		7	6.00	5.20	0.87	
		8	6.00	4.70	0.78	
x-ray and gamma	N40/S-Cs/0°	3	3.60	3.00	0.83	
		4	3.60	3.60	1.00	
	W250/S-Cs/0°	1	3.60	2.85	0.79	
		2	3.60	2.90	0.81	
gamma	S-Cs/0°	17	0.60	0.45	0.75	
		18	0.60	0.45	0.75	
		13	3.00	2.40	0.80	
		14	3.00	2.35	0.78	
		15	3.00	2.40	0.80	
		16	3.00	2.50	0.83	
		11	14.40	12.00	0.83	
		12	14.40	12.00	0.83	
	S-Co/0°	19	300.00	332.10	1.11	
		20	300.00	331.10	1.10	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.92	0.92	0.92	0.92	0%
W110/45°	4	0.80	0.81	0.87	0.78	5%
N40/S-Cs/0°	2	0.92	0.92	1.00	0.83	13%
W250/S-Cs/0°	2	0.80	0.80	0.81	0.79	1%
S-Cs/0°	8	0.80	0.80	0.83	0.75	4%
S-Co/0°	2	1.11	1.11	1.11	1.10	0%
All	20	0.83	0.86	1.11	0.75	12%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

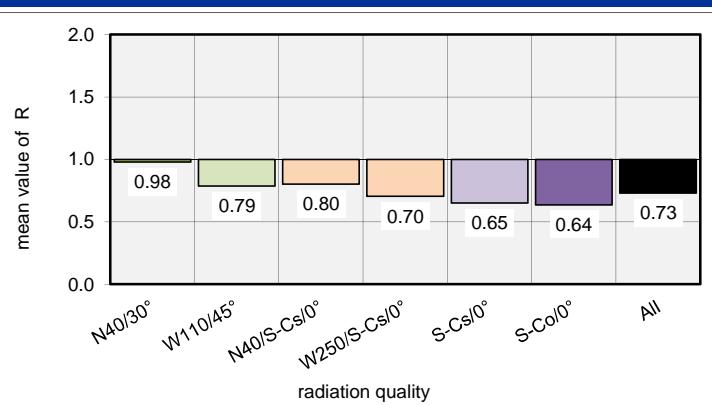
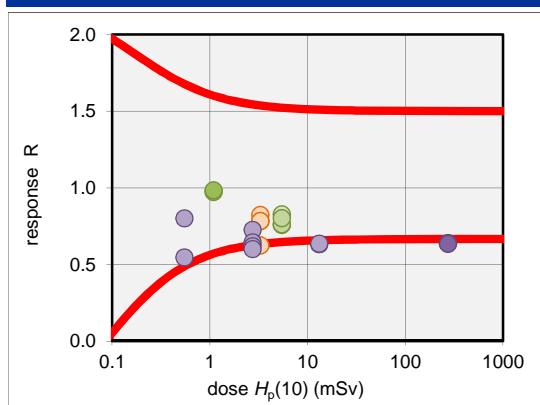
Reporting number 43: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)
x-ray	N40/30°	5	1.10	1.07	0.97
		6	1.10	1.08	0.98
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.50	4.54	0.83
		10	5.50	4.16	0.76
		7	5.49	4.18	0.76
		8	5.50	4.40	0.80
x-ray and gamma	N40/S-Cs/0°	3	3.30	2.71	0.82
		4	3.30	2.58	0.78
	W250/S-Cs/0°	1	3.30	2.06	0.62
		2	3.30	2.58	0.78
gamma	S-Cs/0°	17	0.55	0.30	0.55
		18	0.55	0.44	0.80
		13	2.75	1.99	0.72
		14	2.75	1.77	0.64
		15	2.75	1.70	0.62
		16	2.75	1.65	0.60
		11	13.20	8.32	0.63
		12	13.20	8.37	0.63
	S-Co/0°	19	275.00	175.66	0.64
		20	275.00	174.22	0.63
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.98	0.98	0.98	0.97	1%
W110/45°	4	0.78	0.79	0.83	0.76	4%
N40/S-Cs/0°	2	0.80	0.80	0.82	0.78	3%
W250/S-Cs/0°	2	0.70	0.70	0.78	0.62	16%
S-Cs/0°	8	0.63	0.65	0.80	0.55	12%
S-Co/0°	2	0.64	0.64	0.64	0.63	1%
All	20	0.74	0.73	0.98	0.55	17%

outliers: 7 of 20

Fraction of outliers: 35%



Results: IC2010

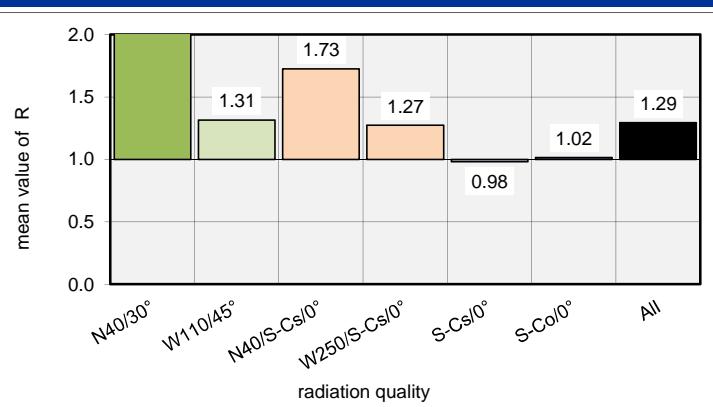
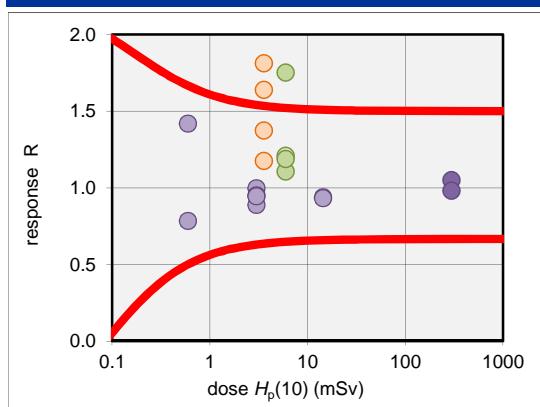
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 44: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.20	2.86	2.38	
		6	1.20	2.82	2.35	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	6.00	7.25	1.21	
		10	6.00	10.50	1.75	
		7	6.01	6.65	1.11	
		8	6.01	7.14	1.19	
x-ray and gamma	N40/S-Cs/0°	3	3.60	6.52	1.81	
		4	3.60	5.90	1.64	
	W250/S-Cs/0°	1	3.60	4.94	1.37	
		2	3.60	4.23	1.18	
gamma	S-Cs/0°	17	0.60	0.47	0.78	
		18	0.60	0.85	1.42	
		13	3.00	2.99	1.00	
		14	3.00	2.85	0.95	
		15	3.00	2.66	0.89	
		16	3.00	2.83	0.94	
		11	14.40	13.50	0.94	
		12	14.40	13.40	0.93	
	S-Co/0°	19	300.00	315.00	1.05	
		20	300.00	294.00	0.98	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	2.37	2.37	2.38	2.35	1%
W110/45°	4	1.20	1.31	1.75	1.11	22%
N40/S-Cs/0°	2	1.73	1.73	1.81	1.64	7%
W250/S-Cs/0°	2	1.27	1.27	1.37	1.18	11%
S-Cs/0°	8	0.94	0.98	1.42	0.78	19%
S-Co/0°	2	1.02	1.02	1.05	0.98	5%
All	20	1.14	1.29	2.38	0.78	36%

outliers: 5 of 20

Fraction of outliers: 25%



Results: IC2010

2 points outside diagramme (> 2)

trumpet parameter: 1.5 / 0.085 mSv

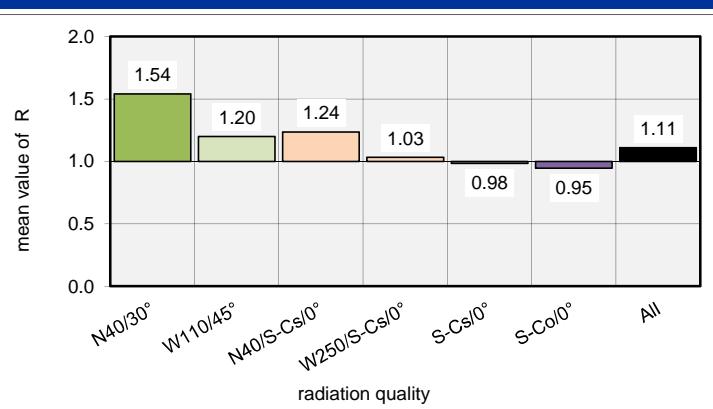
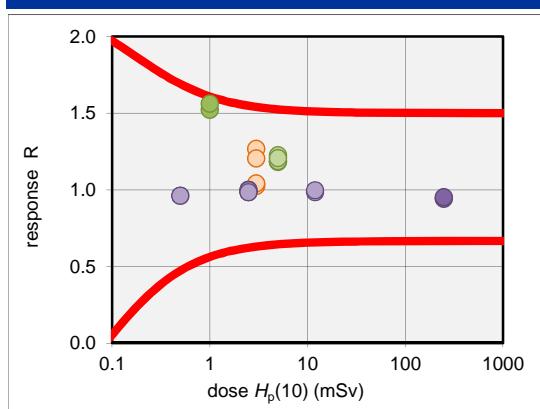
Reporting number 45: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)
x-ray	N40/30°	5	1.00	1.52	1.52
		6	1.00	1.56	1.56
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.00	5.90	1.18
		10	5.00	6.12	1.22
		7	5.00	5.93	1.19
		8	5.00	6.03	1.21
x-ray and gamma	N40/S-Cs/0°	3	3.00	3.80	1.27
		4	3.00	3.61	1.20
	W250/S-Cs/0°	1	3.00	3.07	1.02
		2	3.00	3.12	1.04
gamma	S-Cs/0°	17	0.50	0.48	0.96
		18	0.50	0.48	0.96
		13	2.50	2.50	1.00
		14	2.50	2.46	0.98
		15	2.50	2.49	1.00
		16	2.50	2.46	0.98
		11	12.00	11.80	0.98
		12	12.00	11.95	1.00
	S-Co/0°	19	250.00	235.00	0.94
		20	250.00	237.70	0.95
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.54	1.54	1.56	1.52	2%
W110/45°	4	1.20	1.20	1.22	1.18	2%
N40/S-Cs/0°	2	1.24	1.24	1.27	1.20	4%
W250/S-Cs/0°	2	1.03	1.03	1.04	1.02	1%
S-Cs/0°	8	0.98	0.98	1.00	0.96	2%
S-Co/0°	2	0.95	0.95	0.95	0.94	1%
All	20	1.01	1.11	1.56	0.94	16%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

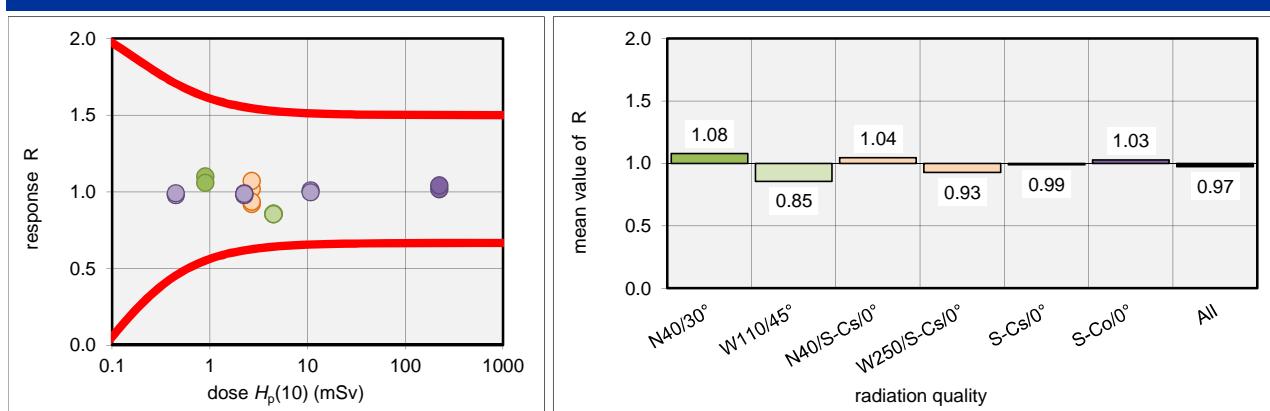
Reporting number 46: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	0.90	0.990	1.10	
		6	0.90	0.951	1.06	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.50	3.859	0.86	
		10	4.50	3.851	0.86	
		7	4.52	3.852	0.85	
		8	4.52	3.858	0.85	
x-ray and gamma	N40/S-Cs/0°	3	2.70	2.746	1.02	
		4	2.70	2.891	1.07	
	W250/S-Cs/0°	1	2.70	2.482	0.92	
		2	2.70	2.523	0.93	
gamma	S-Cs/0°	17	0.45	0.440	0.98	
		18	0.45	0.445	0.99	
		13	2.25	2.228	0.99	
		14	2.25	2.204	0.98	
		15	2.25	2.200	0.98	
		16	2.25	2.217	0.99	
		11	10.80	10.896	1.01	
		12	10.80	10.752	1.00	
	S-Co/0°	19	225.00	228.407	1.02	
		20	225.00	234.393	1.04	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.08	1.08	1.10	1.06	3%
W110/45°	4	0.85	0.85	0.86	0.85	0%
N40/S-Cs/0°	2	1.04	1.04	1.07	1.02	4%
W250/S-Cs/0°	2	0.93	0.93	0.93	0.92	1%
S-Cs/0°	8	0.99	0.99	1.01	0.98	1%
S-Co/0°	2	1.03	1.03	1.04	1.02	2%
All	20	0.99	0.97	1.10	0.85	8%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

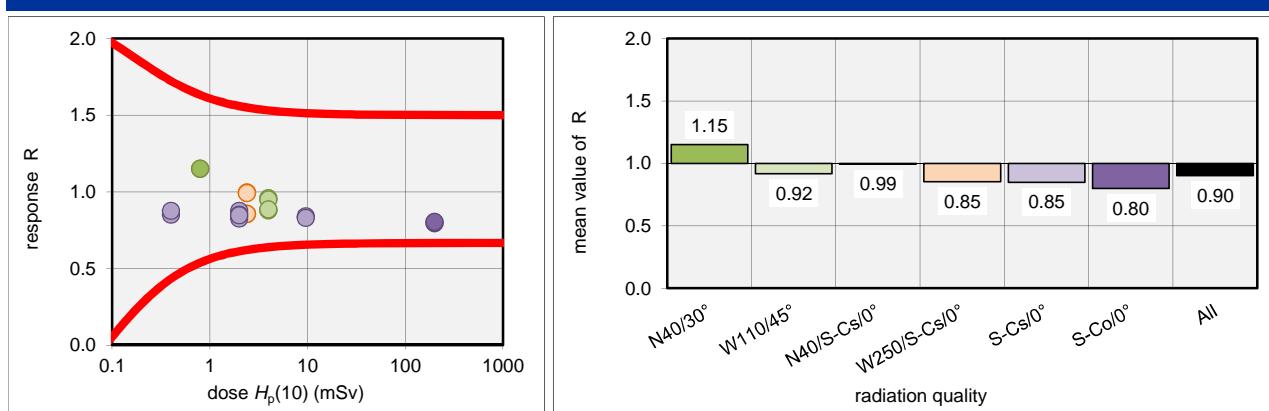
Reporting number 47: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	0.80	0.92	1.15	
		6	0.80	0.92	1.15	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.00	3.83	0.96	
		10	4.00	3.80	0.95	
		7	4.00	3.51	0.88	
		8	4.00	3.54	0.89	
x-ray and gamma	N40/S-Cs/0°	3	2.40	2.39	1.00	
		4	2.40	2.38	0.99	
	W250/S-Cs/0°	1	2.40	2.05	0.85	
		2	2.40	2.05	0.85	
gamma	S-Cs/0°	17	0.40	0.34	0.85	
		18	0.40	0.35	0.88	
		13	2.00	1.65	0.83	
		14	2.00	1.75	0.88	
		15	2.00	1.70	0.85	
		16	2.00	1.69	0.85	
		11	9.60	8.06	0.84	
		12	9.60	7.95	0.83	
	S-Co/0°	19	200.00	158.72	0.79	
		20	200.00	160.48	0.80	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.15	1.15	1.15	1.15	0%
W110/45°	4	0.92	0.92	0.96	0.88	5%
N40/S-Cs/0°	2	0.99	0.99	1.00	0.99	0%
W250/S-Cs/0°	2	0.85	0.85	0.85	0.85	0%
S-Cs/0°	8	0.85	0.85	0.88	0.83	2%
S-Co/0°	2	0.80	0.80	0.80	0.79	1%
All	20	0.86	0.90	1.15	0.79	11%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

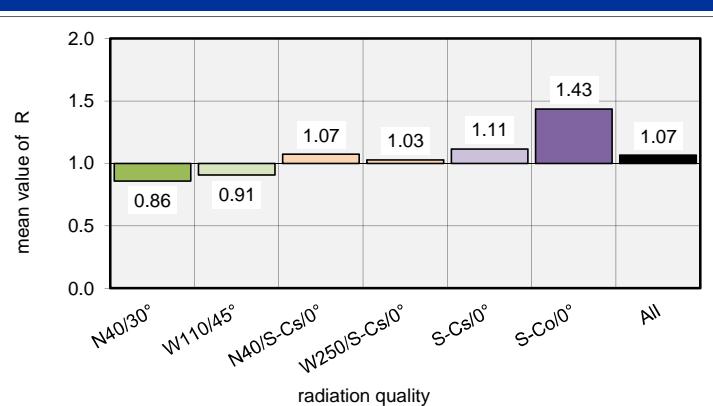
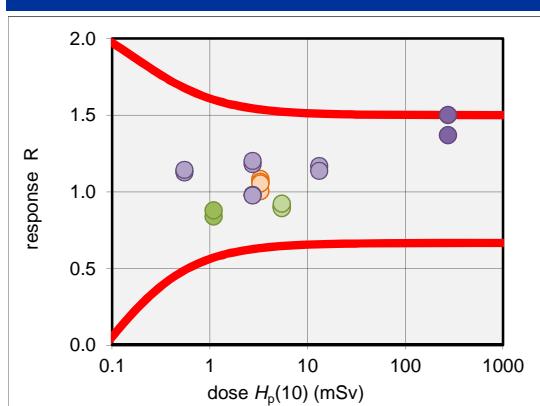
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 48: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality	dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)		
x-ray	N40/30°	5 6	1.10 1.10	0.923 0.966	0.84 0.88	OK OK
	W110/45°/x W110/-45°/x	9 10	5.50 5.50	4.967 4.971	0.90 0.90	OK OK
	W110/45°/y W110/-45°/y	7 8	5.50 5.50	4.914 5.072	0.89 0.92	OK OK
x-ray and gamma	N40/S-Cs/0°	3 4	3.30 3.30	3.571 3.510	1.08 1.06	OK OK
	W250/S-Cs/0°	1 2	3.30 3.30	3.309 3.473	1.00 1.05	OK OK
gamma	S-Cs/0°	17 18 13 14 15 16 11 12	0.55 0.55 2.75 2.75 2.75 2.75 13.20 13.20	0.619 0.628 3.247 3.302 2.694 2.679 15.410 15.000	1.13 1.14 1.18 1.20 0.98 0.97 1.17 1.14	OK OK OK OK OK OK OK OK
		19 20	275.00 275.00	376.500 412.400	1.37 1.50	OK OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.86	0.86	0.88	0.84	3%
W110/45°	4	0.90	0.91	0.92	0.89	1%
N40/S-Cs/0°	2	1.07	1.07	1.08	1.06	1%
W250/S-Cs/0°	2	1.03	1.03	1.05	1.00	3%
S-Cs/0°	8	1.14	1.11	1.20	0.97	8%
S-Co/0°	2	1.43	1.43	1.50	1.37	6%
All	20	1.06	1.07	1.50	0.84	16%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

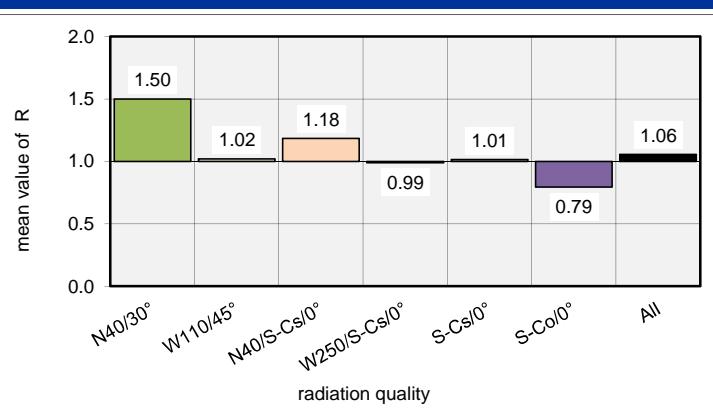
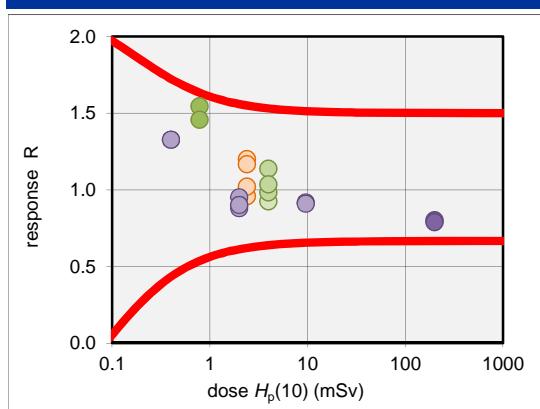
Reporting number 49: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)
x-ray	N40/30°	5	0.79	1.22	1.54
		6	0.79	1.15	1.46
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.00	3.70	0.93
		10	4.00	3.93	0.98
		7	4.00	4.55	1.14
		8	4.00	4.14	1.04
x-ray and gamma	N40/S-Cs/0°	3	2.40	2.88	1.20
		4	2.40	2.80	1.17
	W250/S-Cs/0°	1	2.40	2.30	0.96
		2	2.40	2.45	1.02
gamma	S-Cs/0°	17	0.40	0.53	1.33
		18	0.40	0.53	1.33
		13	2.00	1.90	0.95
		14	2.00	1.80	0.90
		15	2.00	1.76	0.88
		16	2.00	1.80	0.90
		11	9.60	8.80	0.92
		12	9.60	8.72	0.91
	S-Co/0°	19	200.00	160.00	0.80
		20	200.00	157.50	0.79
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.50	1.50	1.54	1.46	4%
W110/45°	4	1.01	1.02	1.14	0.93	9%
N40/S-Cs/0°	2	1.18	1.18	1.20	1.17	2%
W250/S-Cs/0°	2	0.99	0.99	1.02	0.96	4%
S-Cs/0°	8	0.91	1.01	1.33	0.88	19%
S-Co/0°	2	0.79	0.79	0.80	0.79	1%
All	20	0.97	1.06	1.54	0.79	20%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

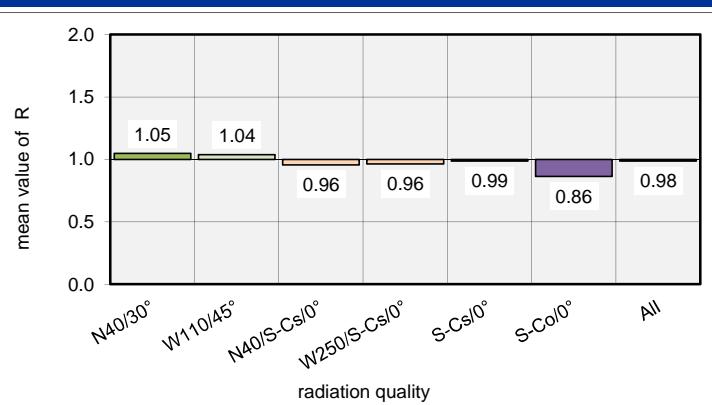
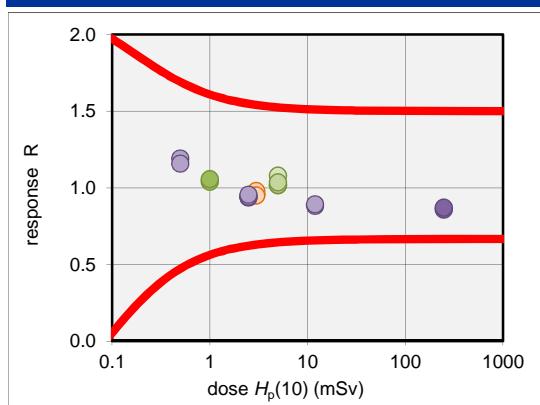
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 50: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality	dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)		
x-ray	N40/30°	5 6	1.00 1.00	1.0384 1.0560	1.04 1.06	OK OK
	W110/45°/x W110/-45°/x	9 10	5.00 5.00	5.3896 5.0806	1.08 1.02	OK OK
	W110/45°/y W110/-45°/y	7 8	5.00 5.00	5.0879 5.1774	1.02 1.04	OK OK
	N40/S-Cs/0°	3 4	3.00 3.00	2.8624 2.8750	0.95 0.96	OK OK
	W250/S-Cs/0°	1 2	3.00 3.00	2.9329 2.8450	0.98 0.95	OK OK
gamma	S-Cs/0°	17 18 13 14 15 16	0.50 0.50 2.50 2.50 2.50 2.50	0.5955 0.5785 2.3387 2.3486 2.3537 2.3878	1.19 1.16 0.94 0.94 0.94 0.96	OK OK OK OK OK OK
		11 12	12.00 12.00	10.5817 10.7091	0.88 0.89	OK OK
		19 20	250.00 250.00	214.0684 217.4244	0.86 0.87	OK OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.05	1.05	1.06	1.04	1%
W110/45°	4	1.03	1.04	1.08	1.02	3%
N40/S-Cs/0°	2	0.96	0.96	0.96	0.95	0%
W250/S-Cs/0°	2	0.96	0.96	0.98	0.95	2%
S-Cs/0°	8	0.94	0.99	1.19	0.88	12%
S-Co/0°	2	0.86	0.86	0.87	0.86	1%
All	20	0.96	0.98	1.19	0.86	9%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

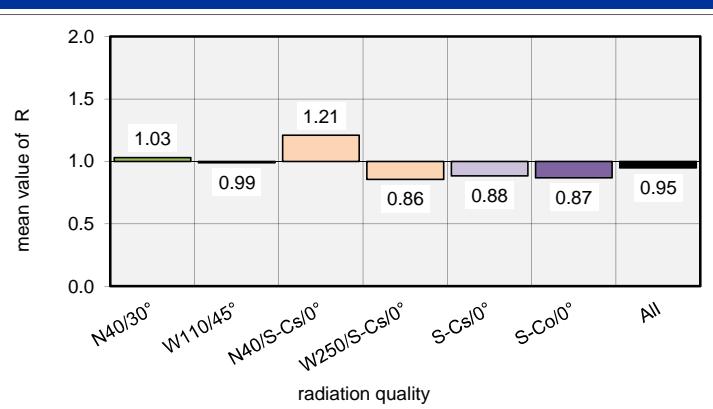
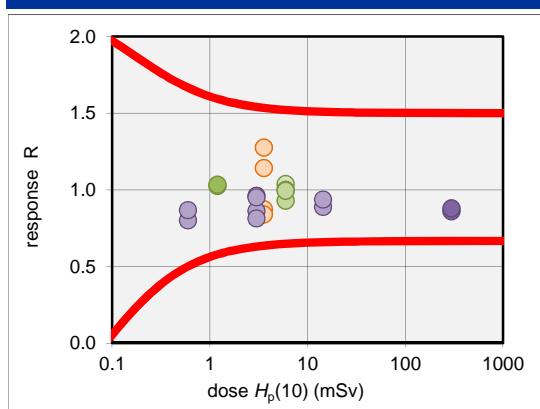
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 51: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.20	1.23	1.03	
		6	1.20	1.24	1.03	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	6.00	6.22	1.04	
		10	6.00	5.57	0.93	
		7	6.01	6.01	1.00	
		8	6.01	5.97	0.99	
x-ray and gamma	N40/S-Cs/0°	3	3.60	4.11	1.14	
		4	3.60	4.59	1.28	
	W250/S-Cs/0°	1	3.60	3.14	0.87	
		2	3.60	3.02	0.84	
gamma	S-Cs/0°	17	0.60	0.48	0.80	
		18	0.60	0.52	0.87	
		13	3.00	2.88	0.96	
		14	3.00	2.58	0.86	
		15	3.00	2.44	0.81	
		16	3.00	2.85	0.95	
		11	14.40	12.79	0.89	
		12	14.40	13.47	0.94	
	S-Co/0°	19	300.00	257.75	0.86	
		20	300.00	263.22	0.88	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.03	1.03	1.03	1.03	1%
W110/45°	4	1.00	0.99	1.04	0.93	5%
N40/S-Cs/0°	2	1.21	1.21	1.28	1.14	8%
W250/S-Cs/0°	2	0.86	0.86	0.87	0.84	3%
S-Cs/0°	8	0.88	0.88	0.96	0.80	7%
S-Co/0°	2	0.87	0.87	0.88	0.86	1%
All	20	0.93	0.95	1.28	0.80	12%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

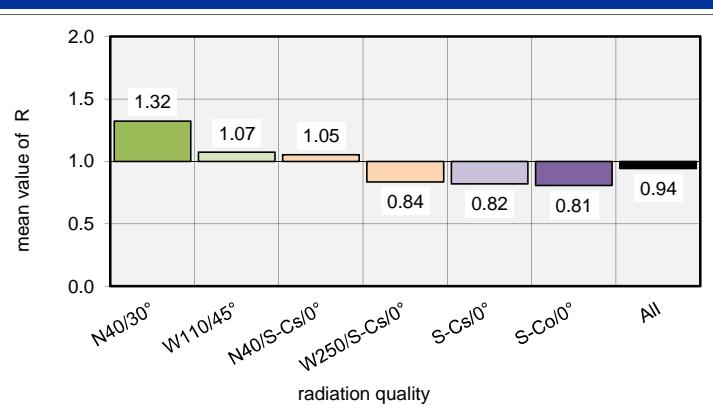
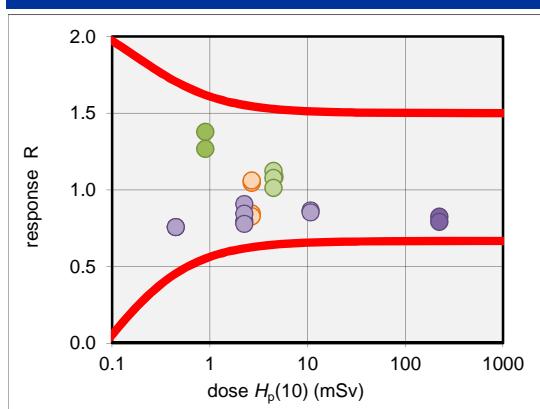
Reporting number 52: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)
x-ray	N40/30°	5	0.90	1.24	1.38
		6	0.90	1.14	1.27
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.60	4.98	1.08
		10	4.50	5.05	1.12
		7	4.50	4.84	1.08
		8	4.50	4.55	1.01
x-ray and gamma	N40/S-Cs/0°	3	2.70	2.82	1.04
		4	2.70	2.86	1.06
	W250/S-Cs/0°	1	2.70	2.28	0.84
		2	2.70	2.23	0.83
gamma	S-Cs/0°	17	0.45	0.34	0.76
		18	0.45	0.34	0.76
		13	2.25	2.04	0.91
		14	2.25	1.79	0.80
		15	2.25	1.90	0.84
		16	2.25	1.75	0.78
		21	10.80	9.33	0.86
		22	10.80	9.20	0.85
	S-Co/0°	19	225.00	185.54	0.82
		20	225.00	177.92	0.79
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			
	WIR	11			
	WIR	12			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.32	1.32	1.38	1.27	6%
W110/45°	4	1.08	1.07	1.12	1.01	4%
N40/S-Cs/0°	2	1.05	1.05	1.06	1.04	1%
W250/S-Cs/0°	2	0.84	0.84	0.84	0.83	2%
S-Cs/0°	8	0.82	0.82	0.91	0.76	7%
S-Co/0°	2	0.81	0.81	0.82	0.79	3%
All	20	0.86	0.94	1.38	0.76	19%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

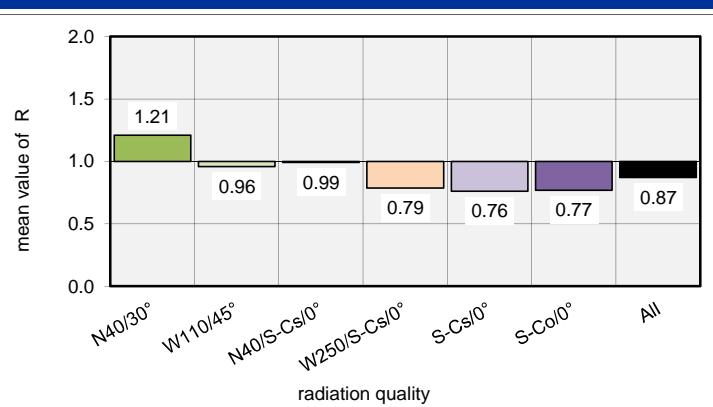
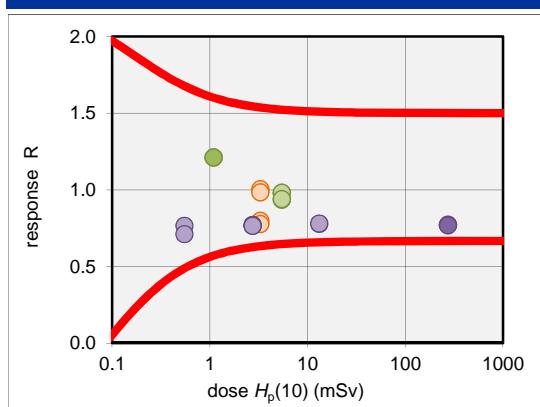
Reporting number 53: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.10	1.33	1.21	
		6	1.10	1.33	1.21	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.50	5.38	0.98	
		10	5.50	5.39	0.98	
		7	5.50	5.14	0.93	
		8	5.50	5.16	0.94	
x-ray and gamma	N40/S-Cs/0°	3	3.30	3.31	1.00	
		4	3.30	3.24	0.98	
	W250/S-Cs/0°	1	3.30	2.63	0.80	
		2	3.30	2.56	0.78	
gamma	S-Cs/0°	17	0.55	0.42	0.76	
		18	0.55	0.39	0.71	
		13	2.75	2.11	0.77	
		14	2.75	2.12	0.77	
		15	2.75	2.10	0.76	
		16	2.75	2.10	0.76	
		11	13.20	10.26	0.78	
		12	13.20	10.29	0.78	
	S-Co/0°	19	275.00	212.04	0.77	
		20	275.00	211.15	0.77	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.21	1.21	1.21	1.21	0%
W110/45°	4	0.96	0.96	0.98	0.93	3%
N40/S-Cs/0°	2	0.99	0.99	1.00	0.98	2%
W250/S-Cs/0°	2	0.79	0.79	0.80	0.78	2%
S-Cs/0°	8	0.77	0.76	0.78	0.71	3%
S-Co/0°	2	0.77	0.77	0.77	0.77	0%
All	20	0.78	0.87	1.21	0.71	17%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

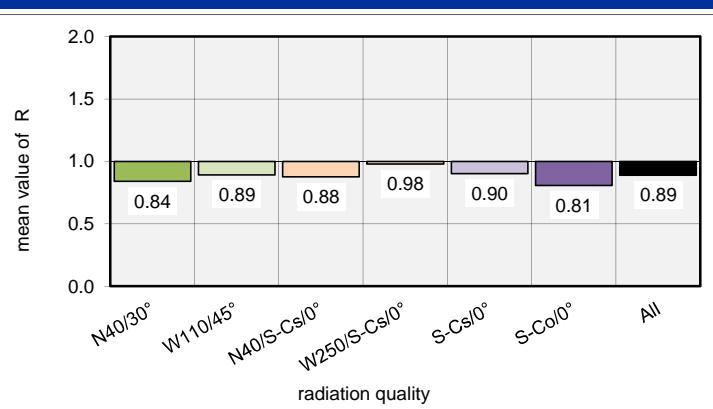
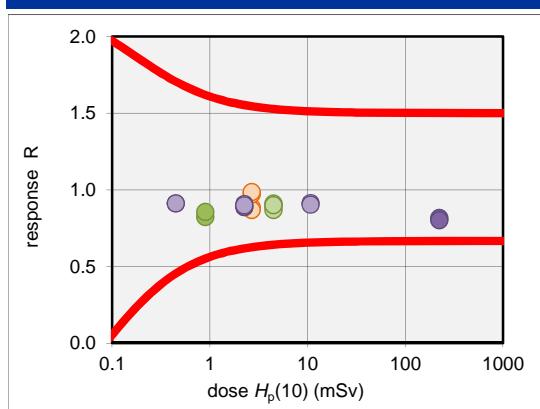
Reporting number 54: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)
x-ray	N40/30°	5	0.90	0.74	0.82
		6	0.90	0.77	0.86
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.50	4.02	0.89
		10	4.50	4.09	0.91
		7	4.50	3.90	0.87
		8	4.50	4.05	0.90
x-ray and gamma	N40/S-Cs/0°	3	2.70	2.39	0.89
		4	2.70	2.34	0.87
	W250/S-Cs/0°	1	2.70	2.62	0.97
		2	2.70	2.66	0.99
gamma	S-Cs/0°	17	0.45	0.41	0.91
		18	0.45	0.41	0.91
		13	2.25	1.99	0.88
		14	2.25	2.04	0.91
		15	2.25	2.00	0.89
		16	2.25	2.02	0.90
		11	10.80	9.86	0.91
		12	10.80	9.74	0.90
	S-Co/0°	19	225.00	183.31	0.81
		20	225.00	180.06	0.80
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.84	0.84	0.86	0.82	3%
W110/45°	4	0.90	0.89	0.91	0.87	2%
N40/S-Cs/0°	2	0.88	0.88	0.89	0.87	1%
W250/S-Cs/0°	2	0.98	0.98	0.99	0.97	1%
S-Cs/0°	8	0.90	0.90	0.91	0.88	1%
S-Co/0°	2	0.81	0.81	0.81	0.80	1%
All	20	0.90	0.89	0.99	0.80	5%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

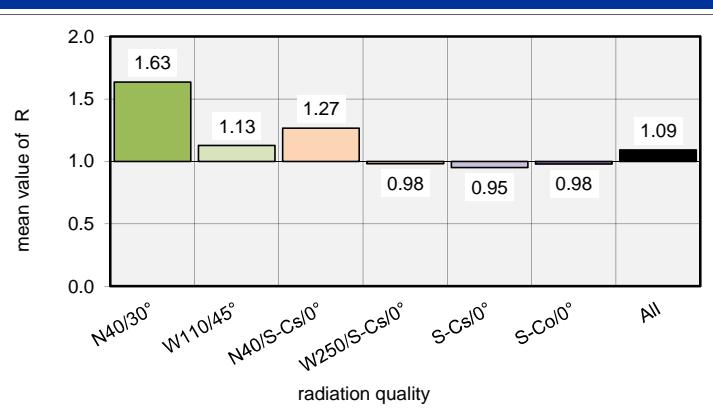
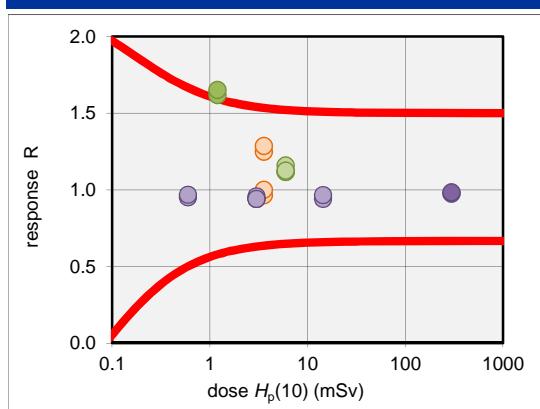
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 55: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality	dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)		
x-ray	N40/30°	5 6	1.20 1.20	1.94 1.98	1.62 1.65	
	W110/45°/x W110/-45°/x	9 10	6.00 6.00	6.69 6.95	1.12 1.16	
	W110/45°/y W110/-45°/y	7 8	6.00 6.00	6.69 6.75	1.12 1.13	
	N40/S-Cs/0°	3 4	3.60 3.60	4.49 4.63	1.25 1.29	
	W250/S-Cs/0°	1	3.60	3.47	0.96	
		2	3.60	3.60	1.00	
gamma	S-Cs/0°	17 18	0.60 0.60	0.57 0.58	0.95 0.97	
		21 22 23 24	3.00 3.00 3.00 3.00	2.82 2.82 2.87 2.82	0.94 0.94 0.96 0.94	
		11 12	14.40 14.40	13.54 13.89	0.94 0.96	
		19 20	300.00 300.00	292.50 294.50	0.98 0.98	
	NIR NIR WIR WIR WIR WIR	25 26 13 14 15 16				
	S-Co/0°					
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.63	1.63	1.65	1.62	1%
W110/45°	4	1.12	1.13	1.16	1.12	2%
N40/S-Cs/0°	2	1.27	1.27	1.29	1.25	2%
W250/S-Cs/0°	2	0.98	0.98	1.00	0.96	3%
S-Cs/0°	8	0.95	0.95	0.97	0.94	1%
S-Co/0°	2	0.98	0.98	0.98	0.98	0%
All	20	0.98	1.09	1.65	0.94	20%

outliers: 2 of 20

Fraction of outliers: 10%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

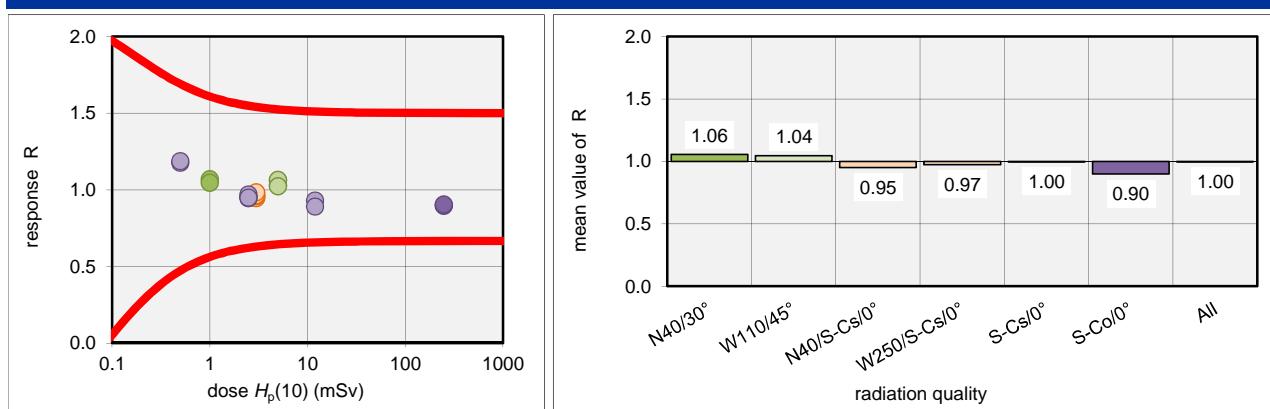
Reporting number 56: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)
x-ray	N40/30°	5	1.00	1.0678	1.07
		6	1.00	1.0441	1.04
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.00	5.1488	1.03
		10	5.00	5.2976	1.06
		7	4.99	5.3130	1.06
		8	4.99	5.1049	1.02
x-ray and gamma	N40/S-Cs/0°	3	3.00	2.8356	0.95
		4	3.00	2.8703	0.96
	W250/S-Cs/0°	1	3.00	2.8899	0.96
		2	3.00	2.9500	0.98
gamma	S-Cs/0°	17	0.50	0.5881	1.18
		18	0.50	0.5926	1.19
		13	2.50	2.3805	0.95
		14	2.50	2.4225	0.97
		15	2.50	2.3612	0.94
		16	2.50	2.3724	0.95
		11	12.00	11.1621	0.93
		12	12.00	10.6810	0.89
	S-Co/0°	19	250.00	223.4673	0.89
		20	250.00	225.8712	0.90
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.06	1.06	1.07	1.04	2%
W110/45°	4	1.04	1.04	1.06	1.02	2%
N40/S-Cs/0°	2	0.95	0.95	0.96	0.95	1%
W250/S-Cs/0°	2	0.97	0.97	0.98	0.96	1%
S-Cs/0°	8	0.95	1.00	1.19	0.89	11%
S-Co/0°	2	0.90	0.90	0.90	0.89	1%
All	20	0.97	1.00	1.19	0.89	8%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

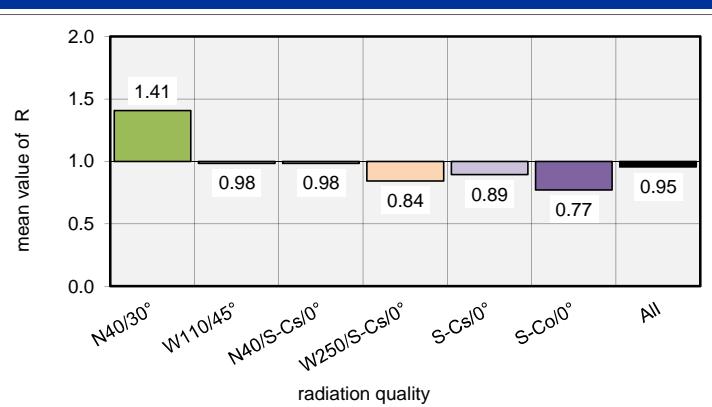
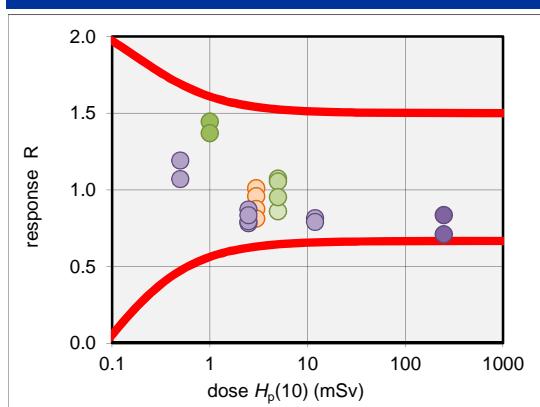
Reporting number 57: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.00	1.444	1.44	
		6	1.00	1.368	1.37	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.00	4.294	0.86	
		10	5.00	5.361	1.07	
		7	5.00	5.263	1.05	
		8	5.00	4.760	0.95	
x-ray and gamma	N40/S-Cs/0°	3	3.00	3.027	1.01	
		4	3.00	2.870	0.96	
	W250/S-Cs/0°	1	3.00	2.623	0.87	
		2	3.00	2.437	0.81	
gamma	S-Cs/0°	17	0.50	0.595	1.19	
		18	0.50	0.535	1.07	
		13	2.50	1.955	0.78	
		14	2.50	2.175	0.87	
		15	2.50	1.986	0.79	
		16	2.50	2.082	0.83	
		11	12.00	9.785	0.82	
		12	12.00	9.466	0.79	
	S-Co/0°	19	250.00	208.754	0.84	
		20	250.00	177.047	0.71	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.41	1.41	1.44	1.37	4%
W110/45°	4	1.00	0.98	1.07	0.86	10%
N40/S-Cs/0°	2	0.98	0.98	1.01	0.96	4%
W250/S-Cs/0°	2	0.84	0.84	0.87	0.81	5%
S-Cs/0°	8	0.82	0.89	1.19	0.78	17%
S-Co/0°	2	0.77	0.77	0.84	0.71	12%
All	20	0.87	0.95	1.44	0.71	21%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

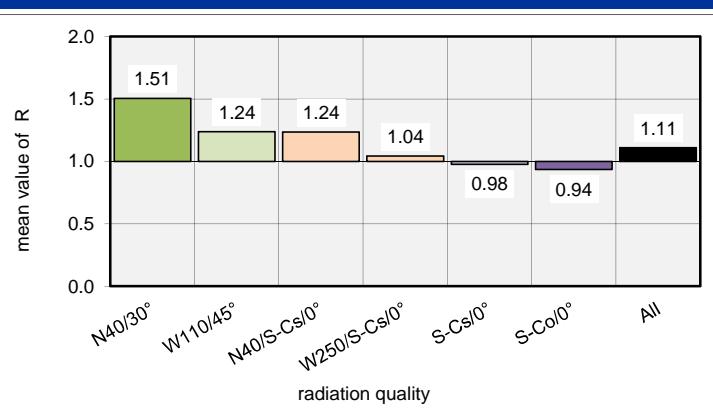
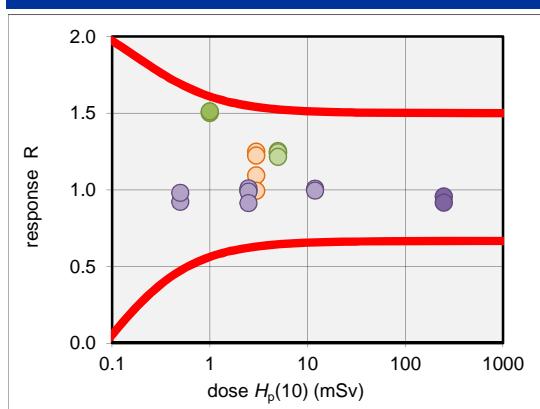
Reporting number 58: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)
x-ray	N40/30°	5	1.00	1.50	1.50
		6	1.00	1.51	1.51
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.00	6.19	1.24
		10	5.00	6.26	1.25
		7	5.00	6.22	1.24
		8	5.00	6.07	1.21
x-ray and gamma	N40/S-Cs/0°	3	3.00	3.74	1.25
		4	3.00	3.67	1.22
	W250/S-Cs/0°	1	3.00	3.28	1.09
		2	3.00	2.98	0.99
gamma	S-Cs/0°	17	0.50	0.46	0.92
		18	0.50	0.49	0.98
		13	2.50	2.49	1.00
		14	2.50	2.52	1.01
		15	2.50	2.47	0.99
		16	2.50	2.28	0.91
		11	12.00	12.09	1.01
		12	12.00	11.93	0.99
	S-Co/0°	19	250.00	238.91	0.96
		20	250.00	229.03	0.92
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.51	1.51	1.51	1.50	0%
W110/45°	4	1.24	1.24	1.25	1.21	1%
N40/S-Cs/0°	2	1.24	1.24	1.25	1.22	1%
W250/S-Cs/0°	2	1.04	1.04	1.09	0.99	7%
S-Cs/0°	8	0.99	0.98	1.01	0.91	4%
S-Co/0°	2	0.94	0.94	0.96	0.92	3%
All	20	1.01	1.11	1.51	0.91	17%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

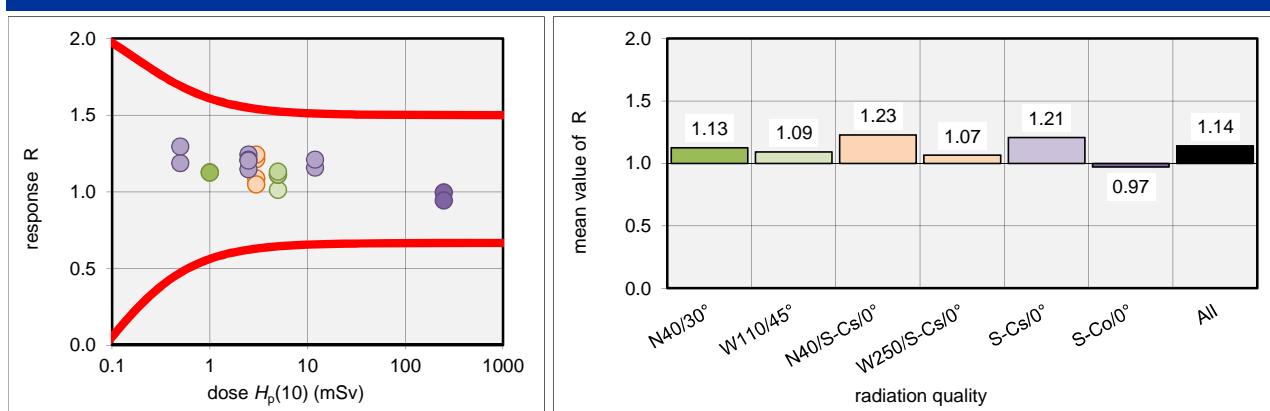
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 59: (TLD) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.00	1.126	1.13	
		6	1.00	1.125	1.13	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.00	5.057	1.01	
		10	5.00	5.554	1.11	
		7	5.00	5.556	1.11	
		8	5.00	5.650	1.13	
	N40/S-Cs/0°	3	3.00	3.634	1.21	
		4	3.00	3.726	1.24	
x-ray and gamma	W250/S-Cs/0°	1	3.00	3.259	1.09	
		2	3.00	3.140	1.05	
	S-Cs/0°	17	0.50	0.593	1.19	
		18	0.50	0.647	1.29	
		13	2.50	3.105	1.24	
		14	2.50	2.867	1.15	
		15	2.50	3.022	1.21	
		16	2.50	3.005	1.20	
	S-Co/0°	11	12.00	13.884	1.16	
		12	12.00	14.505	1.21	
	S-Co/0°	19	250.00	248.980	1.00	
		20	250.00	235.916	0.94	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.13	1.13	1.13	1.13	0%
W110/45°	4	1.11	1.09	1.13	1.01	5%
N40/S-Cs/0°	2	1.23	1.23	1.24	1.21	2%
W250/S-Cs/0°	2	1.07	1.07	1.09	1.05	3%
S-Cs/0°	8	1.21	1.21	1.29	1.15	4%
S-Co/0°	2	0.97	0.97	1.00	0.94	4%
All	20	1.14	1.14	1.29	0.94	8%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

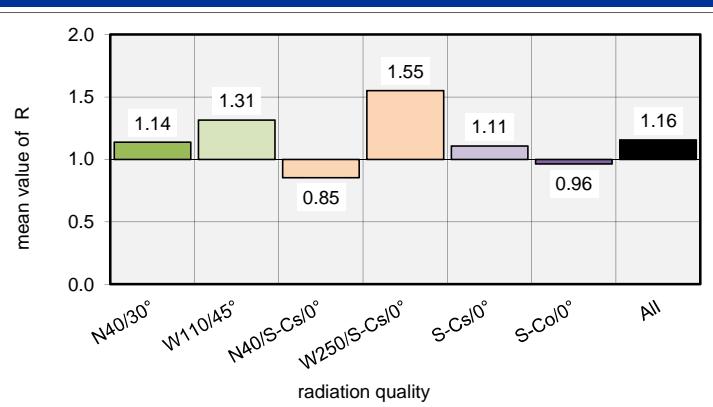
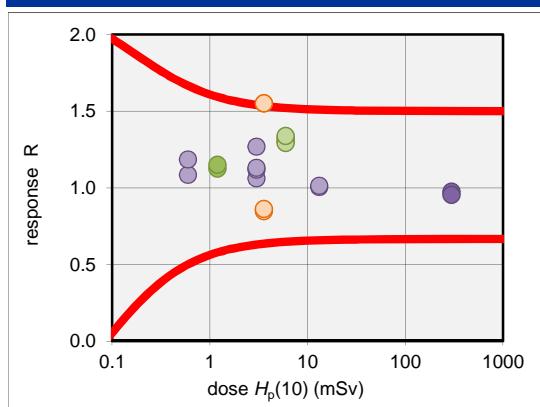
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 60: (Film) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.20	1.35	1.13	
		6	1.20	1.38	1.15	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	6.00	7.82	1.30	
		10	6.00	7.94	1.32	
		7	6.00	7.75	1.29	
		8	6.00	8.02	1.34	
x-ray and gamma	N40/S-Cs/0°	3	3.60	3.05	0.85	
		4	3.60	3.10	0.86	
	W250/S-Cs/0°	1	3.60	5.58	1.55	
		2	3.60	5.58	1.55	
gamma	S-Cs/0°	17	0.60	0.65	1.08	
		18	0.60	0.71	1.18	
		13	3.00	3.18	1.06	
		14	3.00	3.80	1.27	
		15	3.00	3.35	1.12	
		16	3.00	3.39	1.13	
		11	13.20	13.25	1.00	
		12	13.20	13.38	1.01	
	S-Co/0°	19	300.00	292.00	0.97	
		20	300.00	285.75	0.95	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.14	1.14	1.15	1.13	2%
W110/45°	4	1.31	1.31	1.34	1.29	2%
N40/S-Cs/0°	2	0.85	0.85	0.86	0.85	1%
W250/S-Cs/0°	2	1.55	1.55	1.55	1.55	0%
S-Cs/0°	8	1.10	1.11	1.27	1.00	8%
S-Co/0°	2	0.96	0.96	0.97	0.95	2%
All	20	1.13	1.16	1.55	0.85	17%

outliers: 2 of 20

Fraction of outliers: 10%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

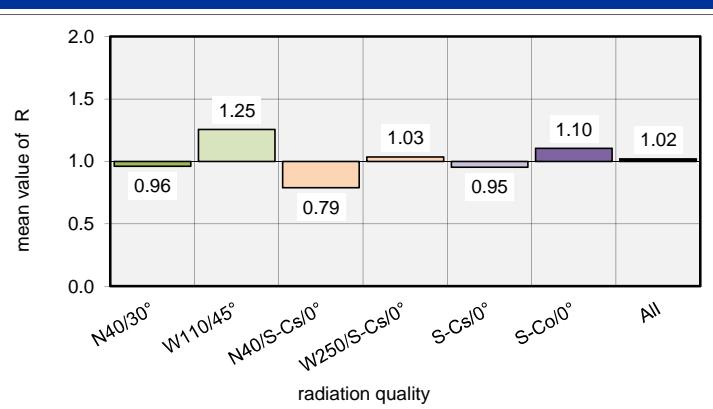
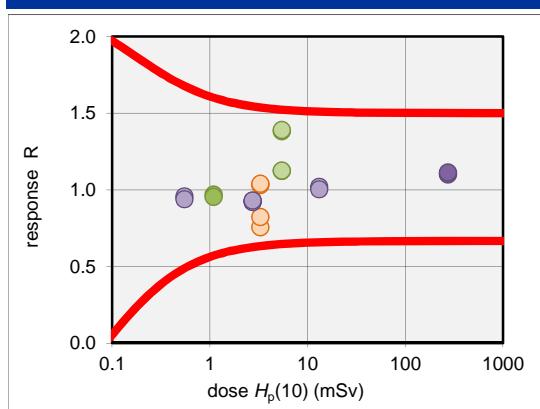
Reporting number 61: (Film) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.10	1.065	0.97	
		6	1.10	1.048	0.95	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.50	7.599	1.38	
		10	5.50	6.169	1.12	
		7	5.50	7.646	1.39	
		8	5.50	6.181	1.12	
x-ray and gamma	N40/S-Cs/0°	3	3.30	2.492	0.76	
		4	3.30	2.712	0.82	
	W250/S-Cs/0°	1	3.30	3.402	1.03	
		2	3.30	3.425	1.04	
gamma	S-Cs/0°	17	0.55	0.526	0.96	
		18	0.55	0.516	0.94	
		13	2.75	2.555	0.93	
		14	2.75	2.539	0.92	
		15	2.75	2.525	0.92	
		16	2.75	2.557	0.93	
		11	13.20	13.460	1.02	
		12	13.20	13.220	1.00	
	S-Co/0°	19	275.00	302.100	1.10	
		20	275.00	305.600	1.11	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.96	0.96	0.97	0.95	1%
W110/45°	4	1.25	1.25	1.39	1.12	12%
N40/S-Cs/0°	2	0.79	0.79	0.82	0.76	6%
W250/S-Cs/0°	2	1.03	1.03	1.04	1.03	0%
S-Cs/0°	8	0.93	0.95	1.02	0.92	4%
S-Co/0°	2	1.10	1.10	1.11	1.10	1%
All	20	0.98	1.02	1.39	0.76	15%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

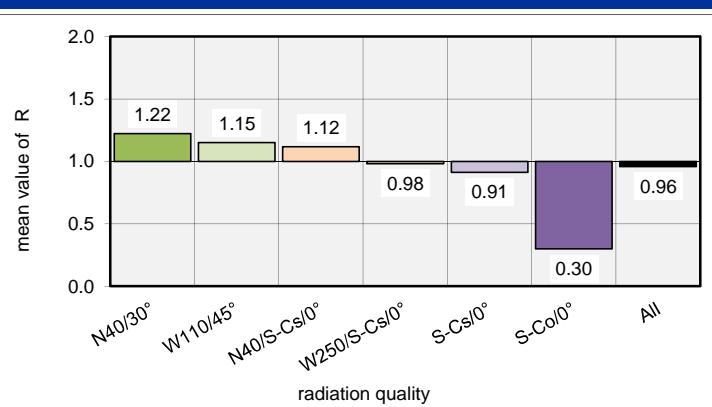
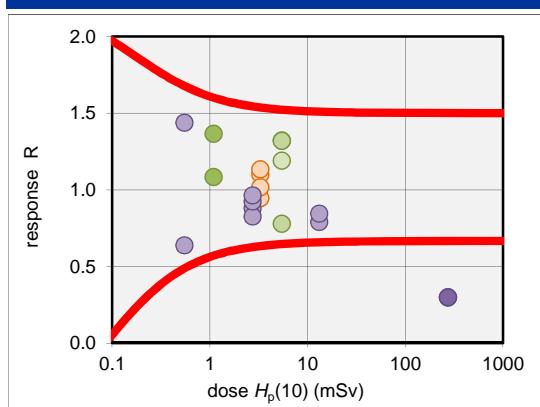
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 62: (Film) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.10	1.50	1.36	
		6	1.10	1.19	1.08	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	21	5.50	6.54	1.19	
		22	5.50	7.26	1.32	
		7	5.50	4.28	0.78	
		8	5.50	7.25	1.32	
x-ray and gamma	N40/S-Cs/0°	3	3.30	3.63	1.10	
		4	3.30	3.74	1.13	
	W250/S-Cs/0°	1	3.30	3.12	0.95	
		2	3.30	3.35	1.02	
gamma	S-Cs/0°	17	0.55	0.35	0.64	
		18	0.55	0.79	1.44	
		13	2.75	2.42	0.88	
		14	2.75	2.27	0.83	
		15	2.75	2.54	0.92	
		16	2.75	2.65	0.96	
		11	13.20	10.41	0.79	
		12	13.20	11.13	0.84	
	S-Co/0°	19	275.00	82.04	0.30	
		20	275.00	82.04	0.30	
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			
		WIR	9			
		WIR	10			
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.22	1.22	1.36	1.08	16%
W110/45°	4	1.25	1.15	1.32	0.78	22%
N40/S-Cs/0°	2	1.12	1.12	1.13	1.10	2%
W250/S-Cs/0°	2	0.98	0.98	1.02	0.95	5%
S-Cs/0°	8	0.86	0.91	1.44	0.64	26%
S-Co/0°	2	0.30	0.30	0.30	0.30	0%
All	20	0.95	0.96	1.44	0.30	33%

outliers: 2 of 20

Fraction of outliers: 10%



Results: IC2010

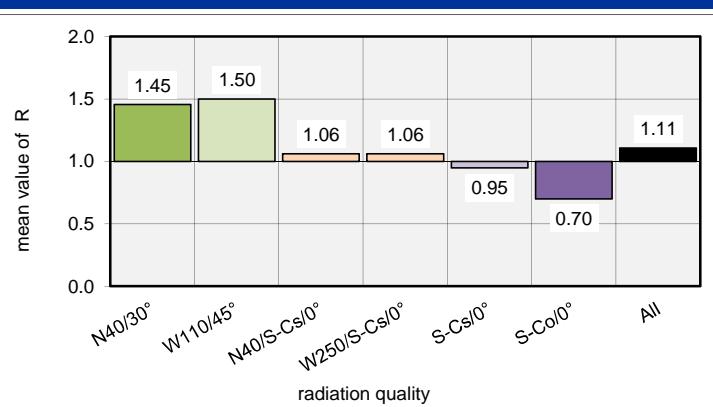
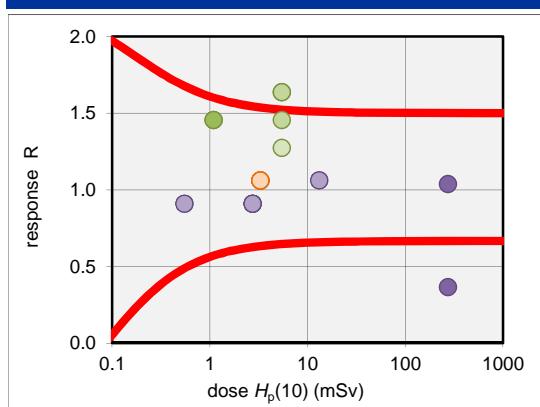
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 63: (Film) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.10	1.6	1.45	
		6	1.10	1.6	1.45	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.50	7.0	1.27	
		10	5.50	9.0	1.64	
		7	5.50	9.0	1.64	
		8	5.50	8.0	1.45	
x-ray and gamma	N40/S-Cs/0°	3	3.30	3.5	1.06	
		4	3.30	3.5	1.06	
	W250/S-Cs/0°	1	3.30	3.5	1.06	
		2	3.30	3.5	1.06	
gamma	S-Cs/0°	17	0.55	0.5	0.91	
		18	0.55	0.5	0.91	
		13	2.75	2.5	0.91	
		14	2.75	2.5	0.91	
		15	2.75	2.5	0.91	
		16	2.75	2.5	0.91	
		11	13.20	14.0	1.06	
		12	13.20	14.0	1.06	
	S-Co/0°	19	275.00	100.0	0.36	
		20	275.00	285.0	1.04	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	
N40/30°	2	1.45	1.45	1.45	1.45	0%
W110/45°	4	1.55	1.50	1.64	1.27	12%
N40/S-Cs/0°	2	1.06	1.06	1.06	1.06	0%
W250/S-Cs/0°	2	1.06	1.06	1.06	1.06	0%
S-Cs/0°	8	0.91	0.95	1.06	0.91	7%
S-Co/0°	2	0.70	0.70	1.04	0.36	68%
All	20	1.06	1.11	1.64	0.36	27%

outliers: 3 of 20

Fraction of outliers: 15%



Results: IC2010

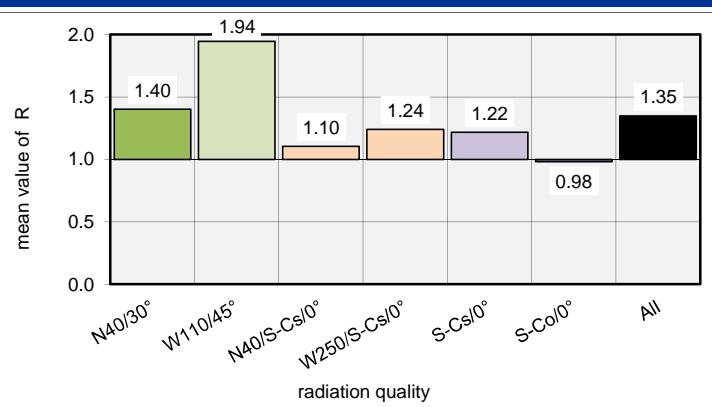
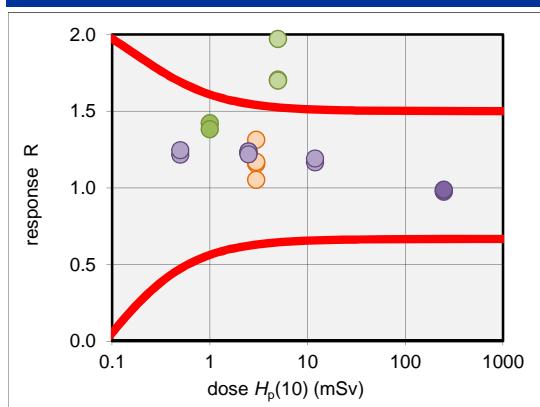
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 64: (Film) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.00	1.420	1.42	
		6	1.00	1.382	1.38	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.00	12.034	2.41	
		10	5.00	8.526	1.71	
		7	5.00	9.845	1.97	
		8	5.00	8.488	1.70	
x-ray and gamma	N40/S-Cs/0°	3	3.00	3.465	1.16	
		4	3.00	3.152	1.05	
	W250/S-Cs/0°	1	3.00	3.937	1.31	
		2	3.00	3.503	1.17	
gamma	S-Cs/0°	17	0.50	0.608	1.22	
		18	0.50	0.622	1.24	
		13	2.50	3.065	1.23	
		14	2.50	3.089	1.24	
		15	2.50	3.092	1.24	
		16	2.50	3.043	1.22	
		11	12.00	13.972	1.16	
		12	12.00	14.293	1.19	
	S-Co/0°	19	250.00	243.659	0.97	
		20	250.00	246.819	0.99	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.40	1.40	1.42	1.38	2%
W110/45°	4	1.84	1.94	2.41	1.70	17%
N40/S-Cs/0°	2	1.10	1.10	1.16	1.05	7%
W250/S-Cs/0°	2	1.24	1.24	1.31	1.17	8%
S-Cs/0°	8	1.22	1.22	1.24	1.16	2%
S-Co/0°	2	0.98	0.98	0.99	0.97	1%
All	20	1.23	1.35	2.41	0.97	26%

outliers: 4 of 20

Fraction of outliers: 20%



Results: IC2010

1 point outside diagramme (> 2)

trumpet parameter: 1.5 / 0.085 mSv

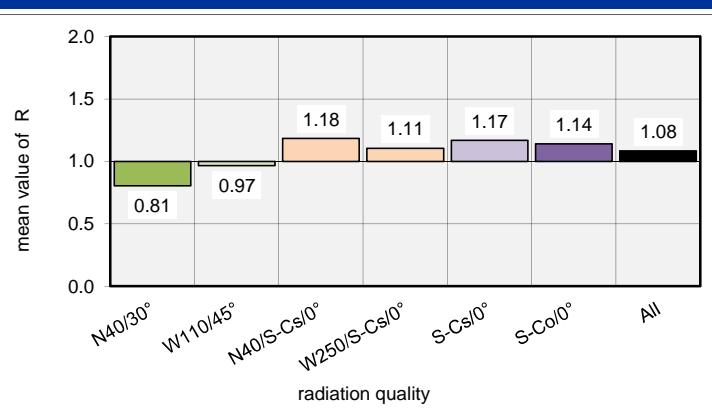
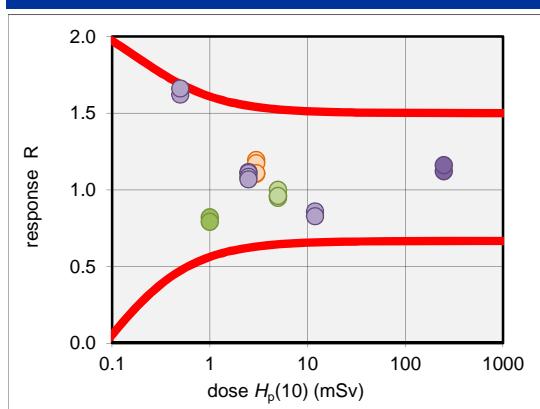
Reporting number 65: (Film) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.00	0.82	0.82	
		6	1.00	0.79	0.79	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.00	4.80	0.96	
		10	5.00	5.00	1.00	
		7	5.00	4.73	0.95	
		8	5.00	4.80	0.96	
x-ray and gamma	N40/S-Cs/0°	3	3.00	3.58	1.19	
		4	3.00	3.52	1.17	
	W250/S-Cs/0°	1	3.00	3.31	1.10	
		2	3.00	3.32	1.11	
gamma	S-Cs/0°	17	0.50	0.81	1.62	
		18	0.50	0.83	1.66	
		13	2.50	2.79	1.12	
		14	2.50	2.77	1.11	
		15	2.50	2.71	1.08	
		16	2.50	2.67	1.07	
		11	12.00	10.31	0.86	
		12	12.00	9.92	0.83	
	S-Co/0°	19	250.00	280.00	1.12	
		20	250.00	290.00	1.16	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.81	0.81	0.82	0.79	3%
W110/45°	4	0.96	0.97	1.00	0.95	2%
N40/S-Cs/0°	2	1.18	1.18	1.19	1.17	1%
W250/S-Cs/0°	2	1.11	1.11	1.11	1.10	0%
S-Cs/0°	8	1.10	1.17	1.66	0.83	27%
S-Co/0°	2	1.14	1.14	1.16	1.12	2%
All	20	1.09	1.08	1.66	0.79	21%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

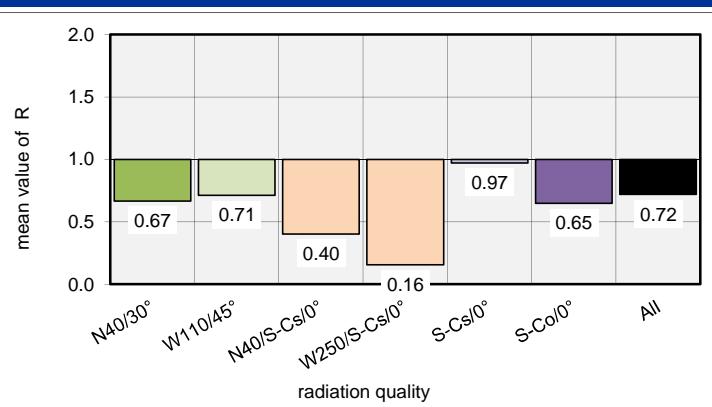
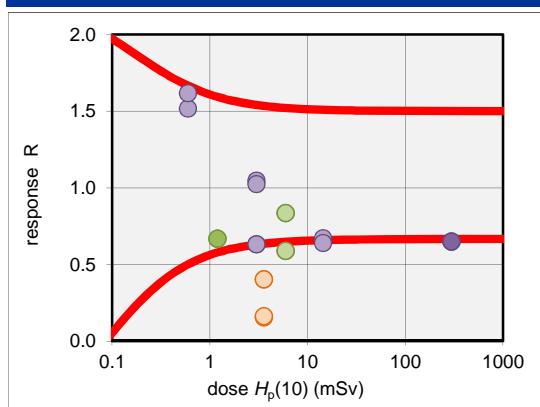
Reporting number 66: (Film) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.20	0.800	0.67	
		6	1.20	0.800	0.67	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	6.00	5.010	0.84	
		10	6.00	5.010	0.84	
		7	6.00	3.530	0.59	
		8	6.00	3.530	0.59	
x-ray and gamma	N40/S-Cs/0°	3	3.60	1.450	0.40	
		4	3.60	1.450	0.40	
	W250/S-Cs/0°	1	3.60	0.550	0.15	
		2	3.60	0.580	0.16	
gamma	S-Cs/0°	17	0.60	0.910	1.52	
		18	0.60	0.970	1.62	
		13	3.00	1.890	0.63	
		14	3.00	3.140	1.05	
		15	3.00	3.070	1.02	
		16	3.00	1.890	0.63	
		11	14.40	9.650	0.67	
		12	14.40	9.210	0.64	
	S-Co/0°	19	300.00	194.400	0.65	
		20	300.00	194.400	0.65	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.67	0.67	0.67	0.67	0%
W110/45°	4	0.71	0.71	0.84	0.59	20%
N40/S-Cs/0°	2	0.40	0.40	0.40	0.40	0%
W250/S-Cs/0°	2	0.16	0.16	0.16	0.15	4%
S-Cs/0°	8	0.85	0.97	1.62	0.63	42%
S-Co/0°	2	0.65	0.65	0.65	0.65	0%
All	20	0.65	0.72	1.62	0.15	51%

outliers: 9 of 20

Fraction of outliers: 45%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

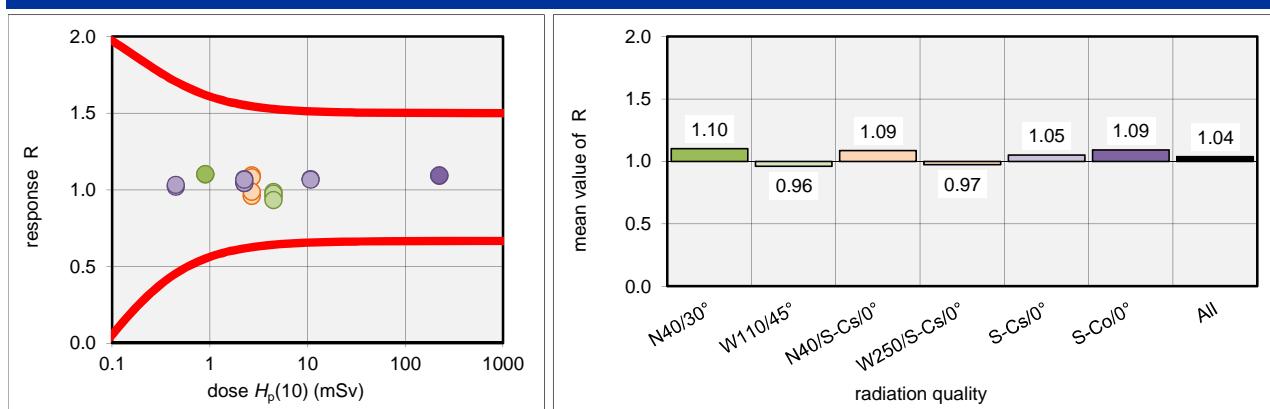
Reporting number 67: (Film) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	0.90	0.990	1.10	
		6	0.90	0.992	1.10	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.50	4.431	0.98	
		10	4.50	4.298	0.96	
		7	4.50	4.381	0.97	
		8	4.50	4.191	0.93	
x-ray and gamma	N40/S-Cs/0°	3	2.70	2.952	1.09	
		4	2.70	2.918	1.08	
	W250/S-Cs/0°	1	2.70	2.588	0.96	
		2	2.70	2.663	0.99	
gamma	S-Cs/0°	17	0.45	0.459	1.02	
		18	0.45	0.464	1.03	
		13	2.25	2.407	1.07	
		14	2.25	2.346	1.04	
		15	2.25	2.350	1.04	
		16	2.25	2.397	1.07	
		11	10.80	11.554	1.07	
		12	10.80	11.500	1.06	
	S-Co/0°	19	225.00	245.390	1.09	
		20	225.00	245.760	1.09	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.10	1.10	1.10	1.10	0%
W110/45°	4	0.96	0.96	0.98	0.93	2%
N40/S-Cs/0°	2	1.09	1.09	1.09	1.08	1%
W250/S-Cs/0°	2	0.97	0.97	0.99	0.96	2%
S-Cs/0°	8	1.05	1.05	1.07	1.02	2%
S-Co/0°	2	1.09	1.09	1.09	1.09	0%
All	20	1.05	1.04	1.10	0.93	5%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

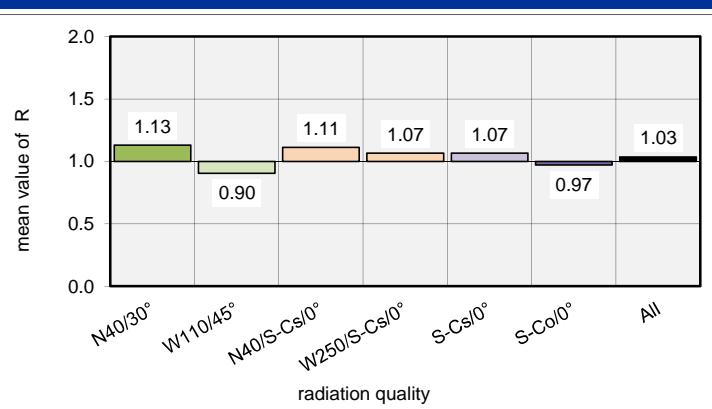
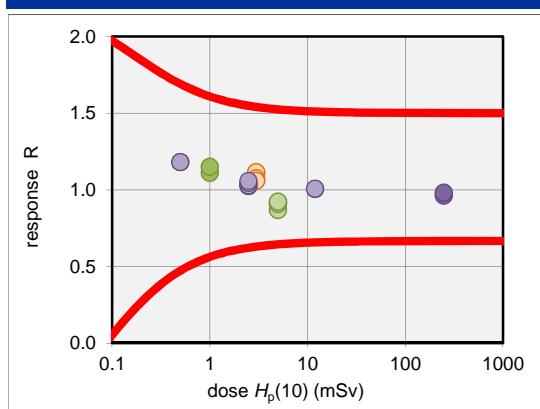
Reporting number 68: (Film) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)
x-ray	N40/30°	5	1.00	1.11	1.11
		6	1.00	1.15	1.15
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.00	4.59	0.92
		10	5.00	4.34	0.87
		7	5.00	4.54	0.91
		8	5.00	4.61	0.92
x-ray and gamma	N40/S-Cs/0°	3	3.00	3.33	1.11
		4	3.00	3.34	1.11
	W250/S-Cs/0°	1	3.00	3.22	1.07
		2	3.00	3.17	1.06
gamma	S-Cs/0°	17	0.50	0.59	1.18
		18	0.50	0.59	1.18
		13	2.50	2.56	1.02
		14	2.50	2.57	1.03
		15	2.50	2.61	1.04
		16	2.50	2.64	1.06
		11	12.00	12.05	1.00
		12	12.00	12.08	1.01
	S-Co/0°	19	250.00	240.48	0.96
		20	250.00	245.10	0.98
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.13	1.13	1.15	1.11	3%
W110/45°	4	0.91	0.90	0.92	0.87	3%
N40/S-Cs/0°	2	1.11	1.11	1.11	1.11	0%
W250/S-Cs/0°	2	1.07	1.07	1.07	1.06	1%
S-Cs/0°	8	1.04	1.07	1.18	1.00	7%
S-Co/0°	2	0.97	0.97	0.98	0.96	1%
All	20	1.04	1.03	1.18	0.87	9%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

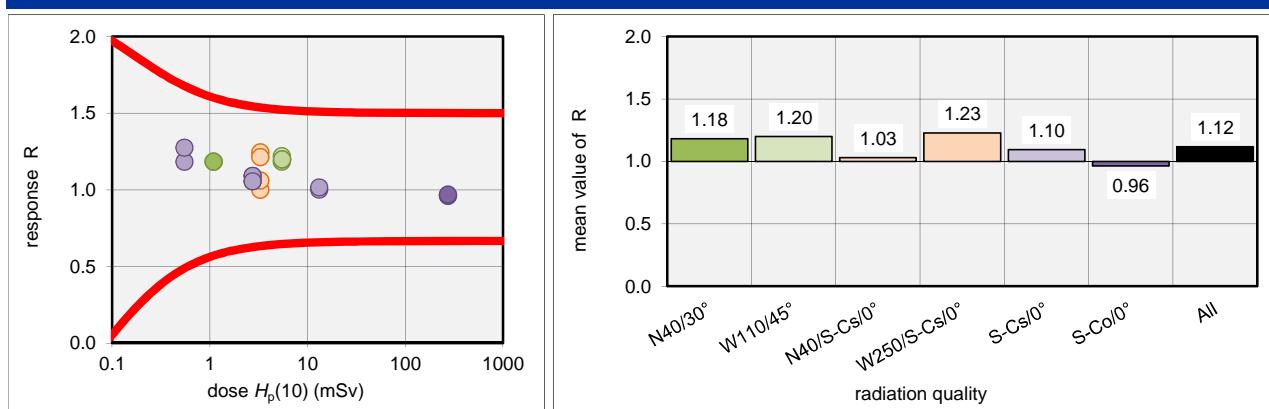
Reporting number 69: (Film) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)
x-ray	N40/30°	5	1.10	1.30	1.18
		6	1.10	1.30	1.18
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.50	6.70	1.22
		10	5.50	6.50	1.18
		7	5.51	6.60	1.20
		8	5.51	6.60	1.20
x-ray and gamma	N40/S-Cs/0°	3	3.30	3.30	1.00
		4	3.30	3.50	1.06
	W250/S-Cs/0°	1	3.30	4.10	1.24
		2	3.30	4.00	1.21
gamma	S-Cs/0°	17	0.55	0.65	1.18
		18	0.55	0.70	1.27
		13	2.75	2.90	1.05
		14	2.75	3.00	1.09
		15	2.75	3.00	1.09
		16	2.75	2.90	1.05
		11	13.20	13.20	1.00
		12	13.20	13.40	1.02
	S-Co/0°	19	275.00	264.10	0.96
		20	275.00	266.20	0.97
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.18	1.18	1.18	1.18	0%
W110/45°	4	1.20	1.20	1.22	1.18	1%
N40/S-Cs/0°	2	1.03	1.03	1.06	1.00	4%
W250/S-Cs/0°	2	1.23	1.23	1.24	1.21	2%
S-Cs/0°	8	1.07	1.10	1.27	1.00	8%
S-Co/0°	2	0.96	0.96	0.97	0.96	1%
All	20	1.14	1.12	1.27	0.96	9%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

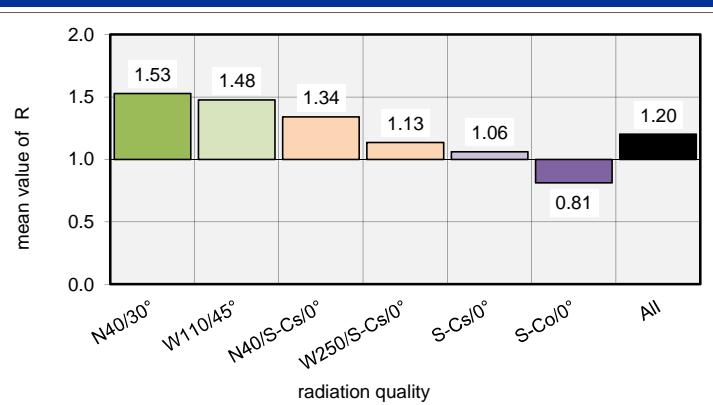
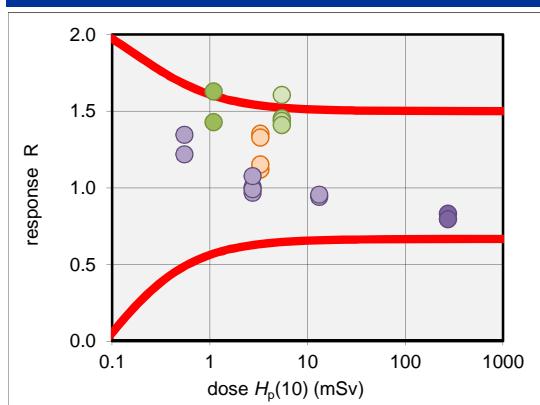
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 70: (Film) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.10	1.79	1.63	
		6	1.10	1.57	1.43	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.50	8.82	1.60	
		10	5.50	7.99	1.45	
		7	5.50	7.89	1.43	
		8	5.50	7.75	1.41	
x-ray and gamma	N40/S-Cs/0°	3	3.30	4.46	1.35	
		4	3.30	4.38	1.33	
	W250/S-Cs/0°	1	3.30	3.69	1.12	
		2	3.30	3.80	1.15	
gamma	S-Cs/0°	17	0.55	0.67	1.22	
		18	0.55	0.74	1.35	
		13	2.75	2.76	1.00	
		14	2.75	2.66	0.97	
		15	2.75	2.72	0.99	
		16	2.75	2.96	1.08	
		11	13.20	12.40	0.94	
		12	13.20	12.60	0.95	
	S-Co/0°	19	275.00	228.06	0.83	
		20	275.00	218.35	0.79	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.53	1.53	1.63	1.43	9%
W110/45°	4	1.44	1.48	1.60	1.41	6%
N40/S-Cs/0°	2	1.34	1.34	1.35	1.33	1%
W250/S-Cs/0°	2	1.13	1.13	1.15	1.12	2%
S-Cs/0°	8	1.00	1.06	1.35	0.94	14%
S-Co/0°	2	0.81	0.81	0.83	0.79	3%
All	20	1.18	1.20	1.63	0.79	21%

outliers: 2 of 20

Fraction of outliers: 10%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

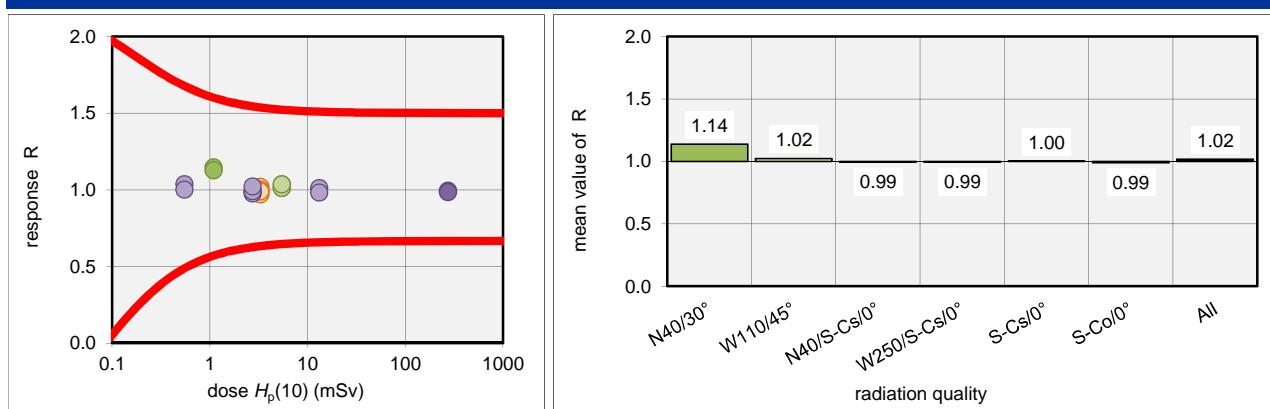
Reporting number 71: (Film) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)
x-ray	N40/30°	5	1.10	1.26	1.15
		6	1.10	1.24	1.13
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.50	5.56	1.01
		10	5.50	5.69	1.03
		7	5.50	5.56	1.01
		8	5.50	5.69	1.03
x-ray and gamma	N40/S-Cs/0°	3	3.30	3.36	1.02
		4	3.30	3.20	0.97
	W250/S-Cs/0°	1	3.30	3.30	1.00
		2	3.30	3.26	0.99
gamma	S-Cs/0°	17	0.55	0.57	1.04
		18	0.55	0.55	1.00
		13	2.75	2.68	0.97
		14	2.75	2.73	0.99
		15	2.75	2.72	0.99
		16	2.75	2.81	1.02
		11	13.20	13.35	1.01
		12	13.20	12.95	0.98
	S-Co/0°	19	275.00	273.00	0.99
		20	275.00	271.00	0.99
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.14	1.14	1.15	1.13	1%
W110/45°	4	1.02	1.02	1.03	1.01	1%
N40/S-Cs/0°	2	0.99	0.99	1.02	0.97	3%
W250/S-Cs/0°	2	0.99	0.99	1.00	0.99	1%
S-Cs/0°	8	1.00	1.00	1.04	0.97	2%
S-Co/0°	2	0.99	0.99	0.99	0.99	1%
All	20	1.01	1.02	1.15	0.97	4%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

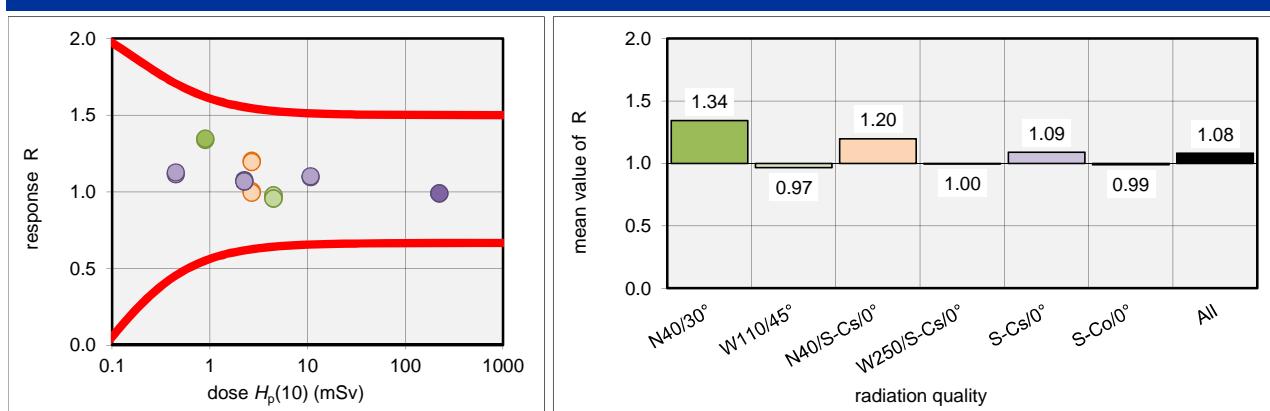
Reporting number 72: (Film) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)
x-ray	N40/30°	5	0.90	1.203	1.34
		6	0.90	1.212	1.35
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.50	4.388	0.98
		10	4.50	4.393	0.98
		7	4.50	4.297	0.95
		8	4.50	4.303	0.96
x-ray and gamma	N40/S-Cs/0°	3	2.70	3.245	1.20
		4	2.70	3.220	1.19
	W250/S-Cs/0°	1	2.70	2.708	1.00
		2	2.70	2.683	0.99
gamma	S-Cs/0°	17	0.45	0.501	1.11
		18	0.45	0.506	1.12
		13	2.25	2.397	1.07
		14	2.25	2.420	1.08
		15	2.25	2.408	1.07
		16	2.25	2.403	1.07
		11	10.80	11.808	1.09
		12	10.80	11.884	1.10
	S-Co/0°	19	225.00	222.294	0.99
		20	225.00	222.545	0.99
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.34	1.34	1.35	1.34	1%
W110/45°	4	0.97	0.97	0.98	0.95	1%
N40/S-Cs/0°	2	1.20	1.20	1.20	1.19	1%
W250/S-Cs/0°	2	1.00	1.00	1.00	0.99	1%
S-Cs/0°	8	1.08	1.09	1.12	1.07	2%
S-Co/0°	2	0.99	0.99	0.99	0.99	0%
All	20	1.07	1.08	1.35	0.95	11%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

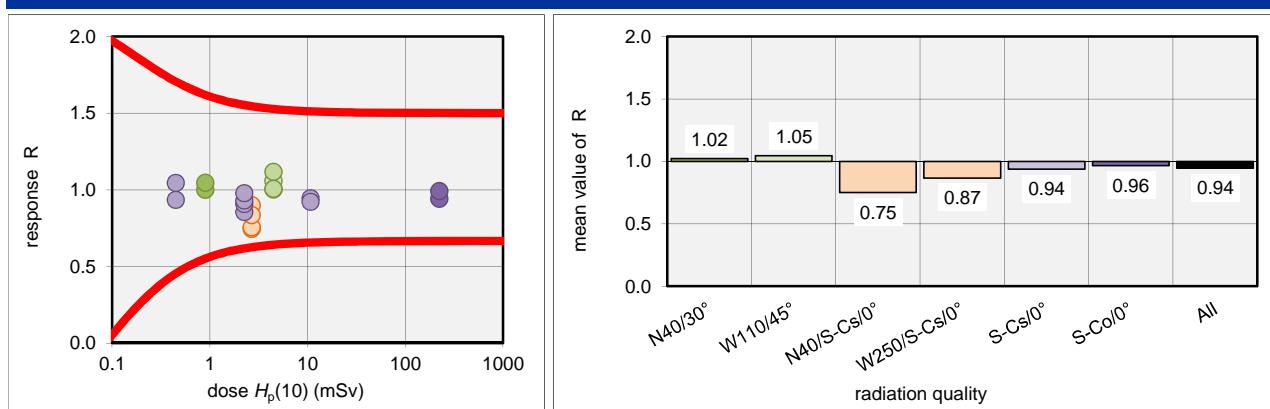
Reporting number 73: (OSL) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)
x-ray	N40/30°	5	0.90	0.90	1.00
		6	0.90	0.94	1.04
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.50	4.76	1.06
		10	4.50	5.02	1.12
		7	4.50	4.51	1.00
		8	4.50	4.52	1.00
x-ray and gamma	N40/S-Cs/0°	3	2.70	2.01	0.74
		4	2.70	2.04	0.76
	W250/S-Cs/0°	1	2.70	2.43	0.90
		2	2.70	2.25	0.83
gamma	S-Cs/0°	17	0.45	0.42	0.93
		18	0.45	0.47	1.04
		13	2.25	1.92	0.85
		14	2.25	2.04	0.91
		15	2.25	2.09	0.93
		16	2.25	2.20	0.98
		11	10.80	10.19	0.94
		12	10.80	9.94	0.92
	S-Co/0°	19	225.00	211.45	0.94
		20	225.00	222.73	0.99
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.02	1.02	1.04	1.00	3%
W110/45°	4	1.03	1.05	1.12	1.00	5%
N40/S-Cs/0°	2	0.75	0.75	0.76	0.74	1%
W250/S-Cs/0°	2	0.87	0.87	0.90	0.83	5%
S-Cs/0°	8	0.93	0.94	1.04	0.85	6%
S-Co/0°	2	0.96	0.96	0.99	0.94	4%
All	20	0.94	0.94	1.12	0.74	10%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

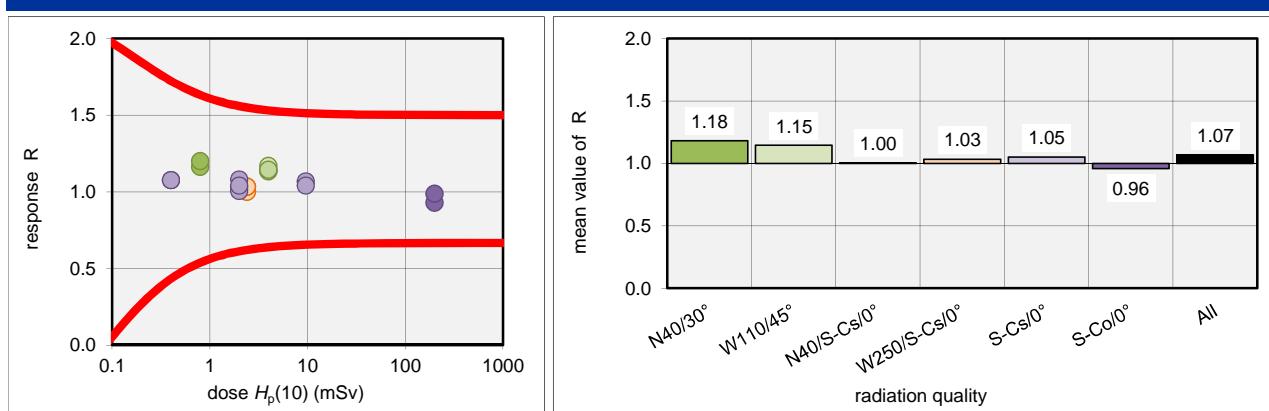
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 74: (OSL) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	0.80	0.93	1.16	
		6	0.80	0.96	1.20	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.00	4.67	1.17	
		10	4.00	4.55	1.14	
		7	4.00	4.53	1.13	
		8	4.00	4.57	1.14	
x-ray and gamma	N40/S-Cs/0°	3	2.40	2.42	1.01	
		4	2.40	2.40	1.00	
	W250/S-Cs/0°	1	2.40	2.48	1.03	
		2	2.40	2.48	1.03	
gamma	S-Cs/0°	17	0.40	0.43	1.08	
		18	0.40	0.43	1.08	
		13	2.00	2.06	1.03	
		14	2.00	2.16	1.08	
		15	2.00	2.01	1.01	
		16	2.00	2.08	1.04	
		11	9.60	10.24	1.07	
		12	9.60	9.99	1.04	
	S-Co/0°	19	200.00	185.59	0.93	
		20	200.00	197.15	0.99	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.18	1.18	1.20	1.16	2%
W110/45°	4	1.14	1.15	1.17	1.13	1%
N40/S-Cs/0°	2	1.00	1.00	1.01	1.00	1%
W250/S-Cs/0°	2	1.03	1.03	1.03	1.03	0%
S-Cs/0°	8	1.05	1.05	1.08	1.01	3%
S-Co/0°	2	0.96	0.96	0.99	0.93	4%
All	20	1.05	1.07	1.20	0.93	7%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

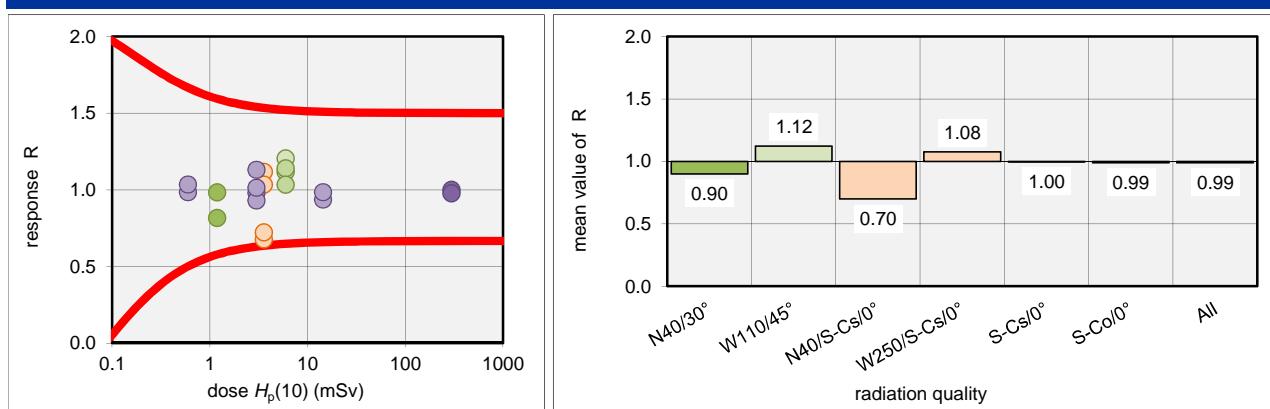
Reporting number 75: (OSL) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.19	0.97	0.82	
		6	1.19	1.17	0.98	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	6.00	7.22	1.20	
		10	6.00	6.69	1.12	
		7	6.00	6.83	1.14	
		8	6.00	6.20	1.03	
x-ray and gamma	N40/S-Cs/0°	3	3.60	2.43	0.68	
		4	3.60	2.60	0.72	
	W250/S-Cs/0°	1	3.60	4.02	1.12	
		2	3.60	3.72	1.03	
gamma	S-Cs/0°	17	0.60	0.59	0.98	
		18	0.60	0.62	1.03	
		13	3.00	2.94	0.98	
		14	3.00	2.79	0.93	
		15	3.00	3.04	1.01	
		16	3.00	3.39	1.13	
		11	14.40	13.47	0.94	
		12	14.40	14.15	0.98	
	S-Co/0°	19	300.00	300.02	1.00	
		20	300.00	292.68	0.98	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.90	0.90	0.98	0.82	13%
W110/45°	4	1.13	1.12	1.20	1.03	6%
N40/S-Cs/0°	2	0.70	0.70	0.72	0.68	5%
W250/S-Cs/0°	2	1.08	1.08	1.12	1.03	5%
S-Cs/0°	8	0.98	1.00	1.13	0.93	6%
S-Co/0°	2	0.99	0.99	1.00	0.98	2%
All	20	0.99	0.99	1.20	0.68	13%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

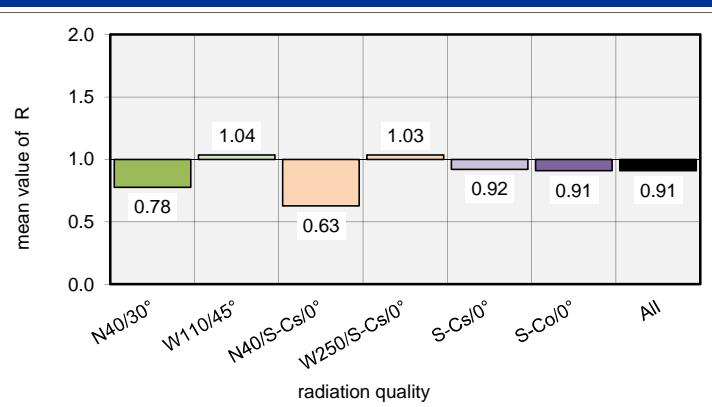
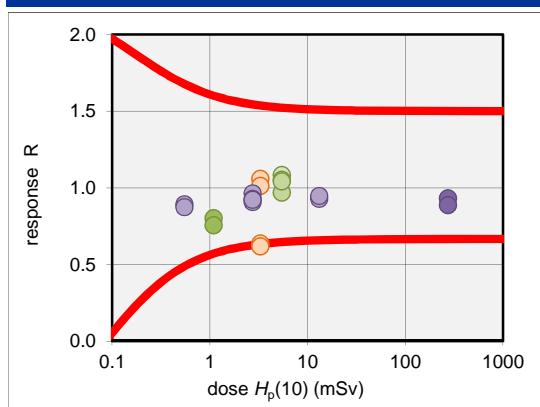
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 76: (OSL) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.10	0.88	0.80	
		6	1.10	0.83	0.75	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.50	5.96	1.08	
		10	5.50	5.78	1.05	
		7	5.50	5.32	0.97	
		8	5.50	5.72	1.04	
x-ray and gamma	N40/S-Cs/0°	3	3.30	2.10	0.64	
		4	3.30	2.04	0.62	
	W250/S-Cs/0°	1	3.30	3.49	1.06	
		2	3.30	3.34	1.01	
gamma	S-Cs/0°	17	0.55	0.49	0.89	
		18	0.55	0.48	0.87	
		13	2.75	2.65	0.96	
		14	2.75	2.49	0.91	
		15	2.75	2.55	0.93	
		16	2.75	2.53	0.92	
		11	13.20	12.25	0.93	
		12	13.20	12.48	0.95	
	S-Co/0°	19	275.00	255.91	0.93	
		20	275.00	243.78	0.89	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.78	0.78	0.80	0.75	4%
W110/45°	4	1.05	1.04	1.08	0.97	5%
N40/S-Cs/0°	2	0.63	0.63	0.64	0.62	2%
W250/S-Cs/0°	2	1.03	1.03	1.06	1.01	3%
S-Cs/0°	8	0.92	0.92	0.96	0.87	3%
S-Co/0°	2	0.91	0.91	0.93	0.89	3%
All	20	0.93	0.91	1.08	0.62	14%

outliers: 1 of 20

Fraction of outliers: 5%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

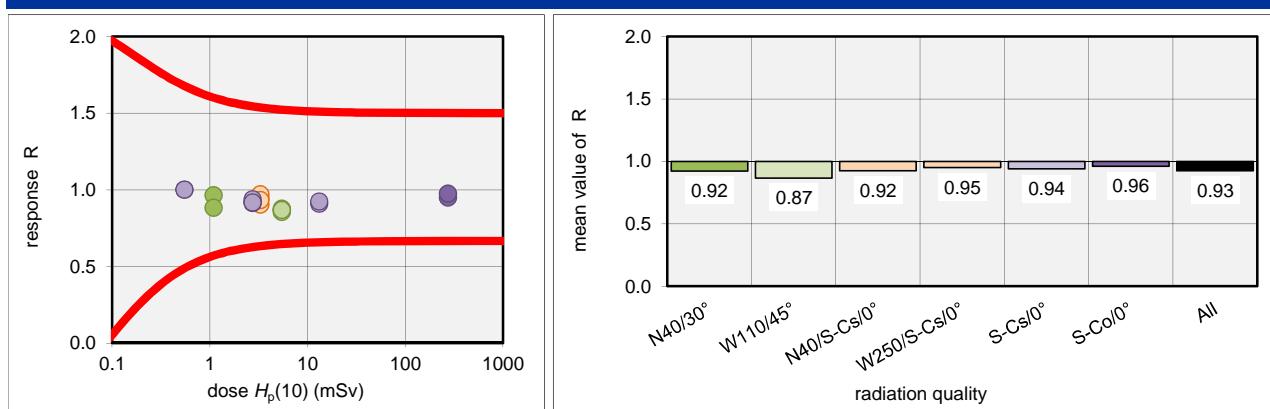
Reporting number 77: (OSL) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)
x-ray	N40/30°	5	1.10	1.06	0.96
		6	1.10	0.97	0.88
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.50	4.77	0.87
		10	5.50	4.70	0.85
		7	5.50	4.82	0.88
		8	5.50	4.77	0.87
	N40/S-Cs/0°	3	3.30	2.98	0.90
		4	3.30	3.12	0.95
x-ray and gamma	W250/S-Cs/0°	1	3.30	3.20	0.97
		2	3.30	3.08	0.93
	S-Cs/0°	17	0.55	0.55	1.00
		18	0.55	0.55	1.00
		13	2.75	2.53	0.92
		14	2.75	2.58	0.94
		15	2.75	2.51	0.91
		16	2.75	2.52	0.92
		11	13.20	11.99	0.91
		12	13.20	12.18	0.92
	S-Co/0°	19	275.00	260.73	0.95
		20	275.00	267.78	0.97
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.92	0.92	0.96	0.88	6%
W110/45°	4	0.87	0.87	0.88	0.85	1%
N40/S-Cs/0°	2	0.92	0.92	0.95	0.90	3%
W250/S-Cs/0°	2	0.95	0.95	0.97	0.93	3%
S-Cs/0°	8	0.92	0.94	1.00	0.91	4%
S-Co/0°	2	0.96	0.96	0.97	0.95	2%
All	20	0.92	0.93	1.00	0.85	5%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

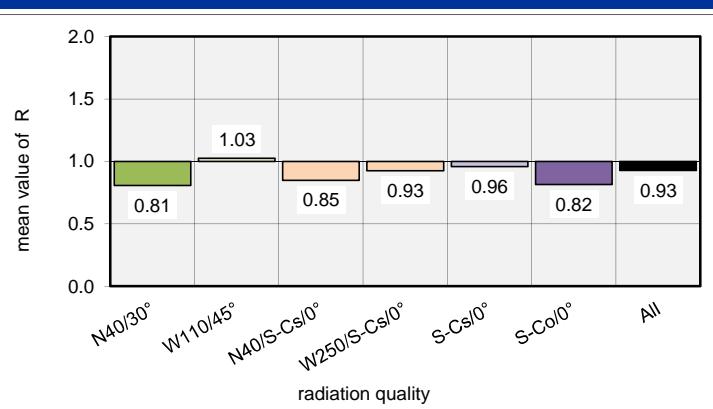
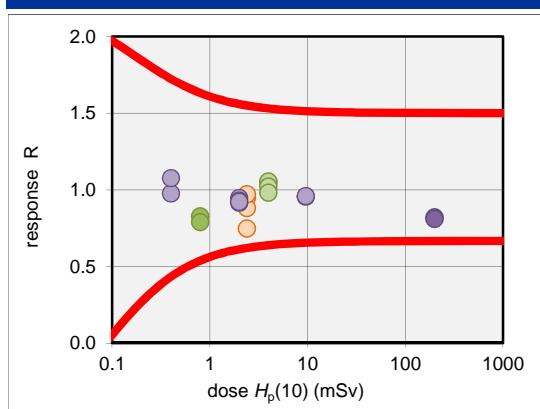
Reporting number 78: (OSL) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	0.80	0.66	0.83	
		6	0.80	0.63	0.79	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.00	4.19	1.05	
		10	4.00	4.21	1.05	
		7	4.00	4.08	1.02	
		8	4.00	3.92	0.98	
x-ray and gamma	N40/S-Cs/0°	3	2.40	2.28	0.95	
		4	2.40	1.79	0.75	
	W250/S-Cs/0°	1	2.40	2.11	0.88	
		2	2.40	2.33	0.97	
gamma	S-Cs/0°	17	0.40	0.39	0.98	
		18	0.40	0.43	1.08	
		13	2.00	1.89	0.95	
		14	2.00	1.86	0.93	
		15	2.00	1.83	0.92	
		16	2.00	1.84	0.92	
		11	9.60	9.16	0.95	
		12	9.60	9.20	0.96	
	S-Co/0°	19	200.00	164.03	0.82	
		20	200.00	161.99	0.81	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.81	0.81	0.83	0.79	3%
W110/45°	4	1.03	1.03	1.05	0.98	3%
N40/S-Cs/0°	2	0.85	0.85	0.95	0.75	17%
W250/S-Cs/0°	2	0.93	0.93	0.97	0.88	7%
S-Cs/0°	8	0.95	0.96	1.08	0.92	5%
S-Co/0°	2	0.82	0.82	0.82	0.81	1%
All	20	0.95	0.93	1.08	0.75	10%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

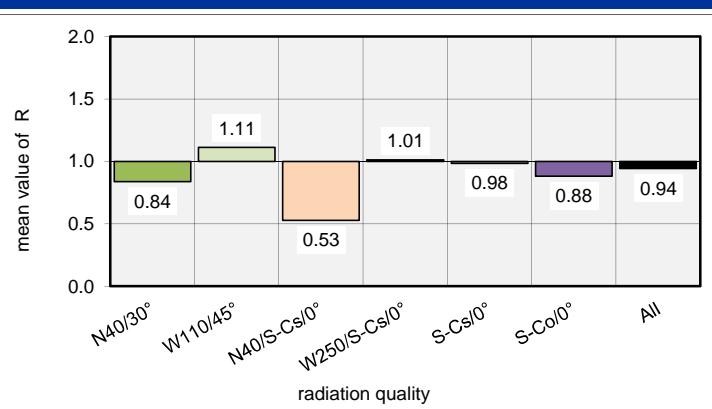
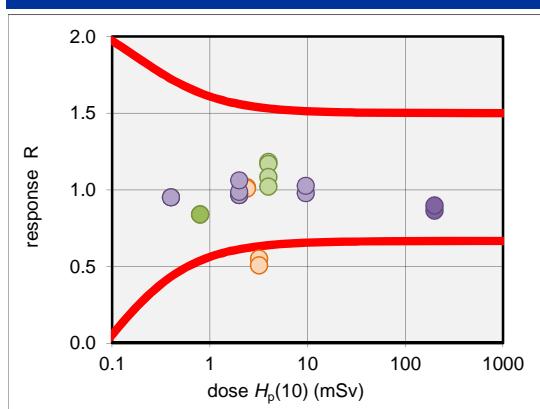
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 79: (OSL) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	0.80	0.67	0.84	
		6	0.80	0.67	0.84	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.00	4.72	1.18	
		10	4.00	4.67	1.17	
		7	4.00	4.33	1.08	
		8	4.00	4.08	1.02	
x-ray and gamma	N40/S-Cs/0°	3	3.20	1.76	0.55	
		4	3.20	1.62	0.51	
	W250/S-Cs/0°	1	2.40	2.44	1.02	
		2	2.40	2.42	1.01	
gamma	S-Cs/0°	17	0.40	0.38	0.95	
		18	0.40	0.38	0.95	
		13	2.00	1.93	0.97	
		14	2.00	1.93	0.97	
		15	2.00	1.97	0.99	
		16	2.00	2.12	1.06	
		11	9.60	9.39	0.98	
		12	9.60	9.84	1.03	
	S-Co/0°	19	200.00	172.86	0.86	
		20	200.00	179.49	0.90	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.84	0.84	0.84	0.84	0%
W110/45°	4	1.13	1.11	1.18	1.02	7%
N40/S-Cs/0°	2	0.53	0.53	0.55	0.51	6%
W250/S-Cs/0°	2	1.01	1.01	1.02	1.01	1%
S-Cs/0°	8	0.97	0.98	1.06	0.95	4%
S-Co/0°	2	0.88	0.88	0.90	0.86	3%
All	20	0.97	0.94	1.18	0.51	18%

outliers: 2 of 20

Fraction of outliers: 10%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

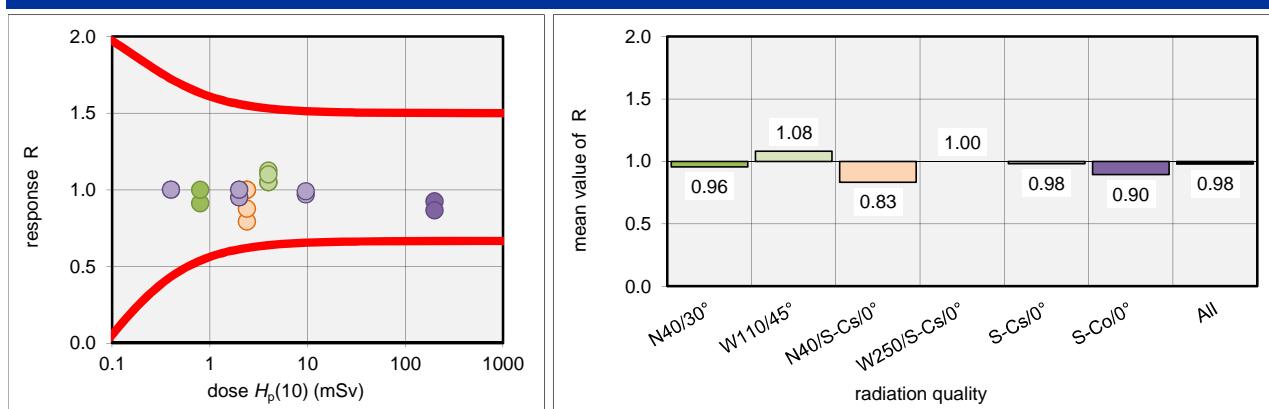
Reporting number 80: (OSL) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)
x-ray	N40/30°	5	0.80	0.73	0.91
		6	0.80	0.80	1.00
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.00	4.20	1.05
		10	4.00	4.50	1.13
		7	4.00	4.20	1.05
		8	4.00	4.40	1.10
x-ray and gamma	N40/S-Cs/0°	3	2.40	1.90	0.79
		4	2.40	2.10	0.88
	W250/S-Cs/0°	1	2.40	2.40	1.00
		2	2.40	2.40	1.00
gamma	S-Cs/0°	17	0.40	0.40	1.00
		18	0.40	0.40	1.00
		13	2.00	1.90	0.95
		14	2.00	1.90	0.95
		15	2.00	2.00	1.00
		16	2.00	2.00	1.00
		11	9.60	9.30	0.97
		12	9.60	9.50	0.99
	S-Co/0°	19	200.00	185.00	0.93
		20	200.00	173.00	0.87
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.96	0.96	1.00	0.91	6%
W110/45°	4	1.08	1.08	1.13	1.05	3%
N40/S-Cs/0°	2	0.83	0.83	0.88	0.79	7%
W250/S-Cs/0°	2	1.00	1.00	1.00	1.00	0%
S-Cs/0°	8	0.99	0.98	1.00	0.95	2%
S-Co/0°	2	0.90	0.90	0.93	0.87	5%
All	20	1.00	0.98	1.13	0.79	8%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

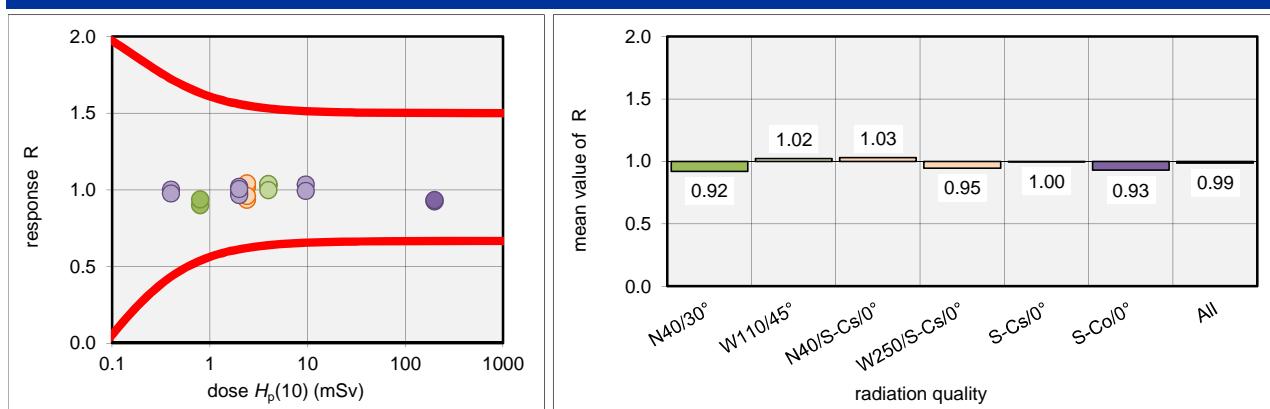
Reporting number 81: (other) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)
x-ray	N40/30°	5	0.80	0.72	0.90
		6	0.80	0.75	0.94
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.00	4.11	1.03
		10	4.00	4.12	1.03
		7	4.00	4.15	1.04
		8	4.00	3.99	1.00
x-ray and gamma	N40/S-Cs/0°	3	2.41	2.45	1.02
		4	2.41	2.51	1.04
	W250/S-Cs/0°	1	2.41	2.25	0.93
		2	2.41	2.31	0.96
gamma	S-Cs/0°	17	0.40	0.40	1.00
		18	0.40	0.39	0.98
		13	2.00	2.04	1.02
		14	2.00	1.96	0.98
		15	2.00	1.93	0.97
		16	2.00	2.01	1.01
		11	9.60	9.93	1.03
		12	9.60	9.52	0.99
	S-Co/0°	19	200.00	184.95	0.92
		20	200.00	186.50	0.93
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.92	0.92	0.94	0.90	3%
W110/45°	4	1.03	1.02	1.04	1.00	2%
N40/S-Cs/0°	2	1.03	1.03	1.04	1.02	2%
W250/S-Cs/0°	2	0.95	0.95	0.96	0.93	2%
S-Cs/0°	8	1.00	1.00	1.03	0.97	2%
S-Co/0°	2	0.93	0.93	0.93	0.92	1%
All	20	0.99	0.99	1.04	0.90	4%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

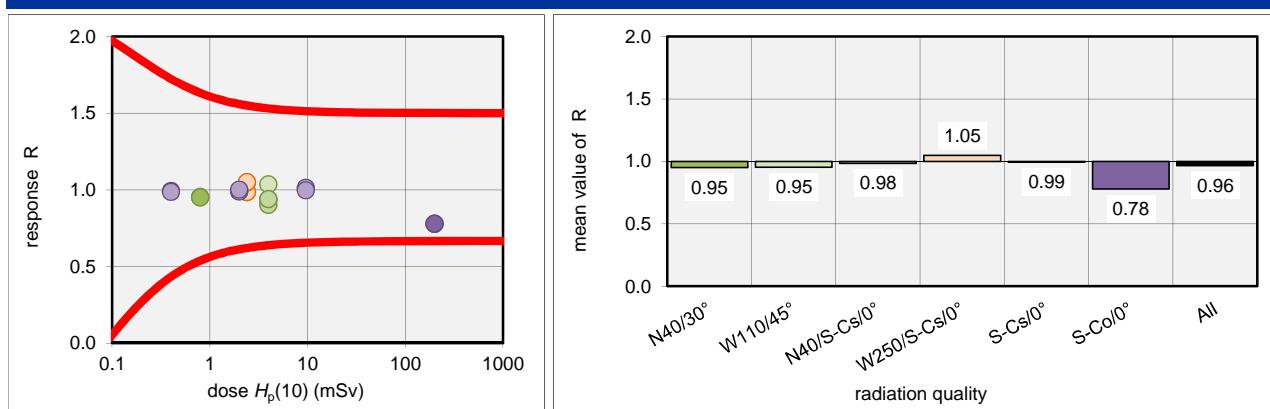
Reporting number 82: (other) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)
x-ray	N40/30°	5	0.80	0.762	0.95
		6	0.80	0.760	0.95
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.00	4.136	1.03
		10	4.00	3.747	0.94
		7	4.00	3.605	0.90
		8	4.00	3.757	0.94
x-ray and gamma	N40/S-Cs/0°	3	2.40	2.361	0.98
		4	2.40	2.364	0.99
	W250/S-Cs/0°	1	2.40	2.514	1.05
		2	2.40	2.520	1.05
gamma	S-Cs/0°	17	0.40	0.397	0.99
		18	0.40	0.394	0.99
		13	2.00	1.983	0.99
		14	2.00	1.983	0.99
		15	2.00	1.976	0.99
		16	2.00	1.999	1.00
		11	9.60	9.714	1.01
		12	9.60	9.552	1.00
	S-Co/0°	19	200.00	155.667	0.78
		20	200.00	155.586	0.78
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			
	WIR	21			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.95	0.95	0.95	0.95	0%
W110/45°	4	0.94	0.95	1.03	0.90	6%
N40/S-Cs/0°	2	0.98	0.98	0.99	0.98	0%
W250/S-Cs/0°	2	1.05	1.05	1.05	1.05	0%
S-Cs/0°	8	0.99	0.99	1.01	0.99	1%
S-Co/0°	2	0.78	0.78	0.78	0.78	0%
All	20	0.99	0.96	1.05	0.78	8%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

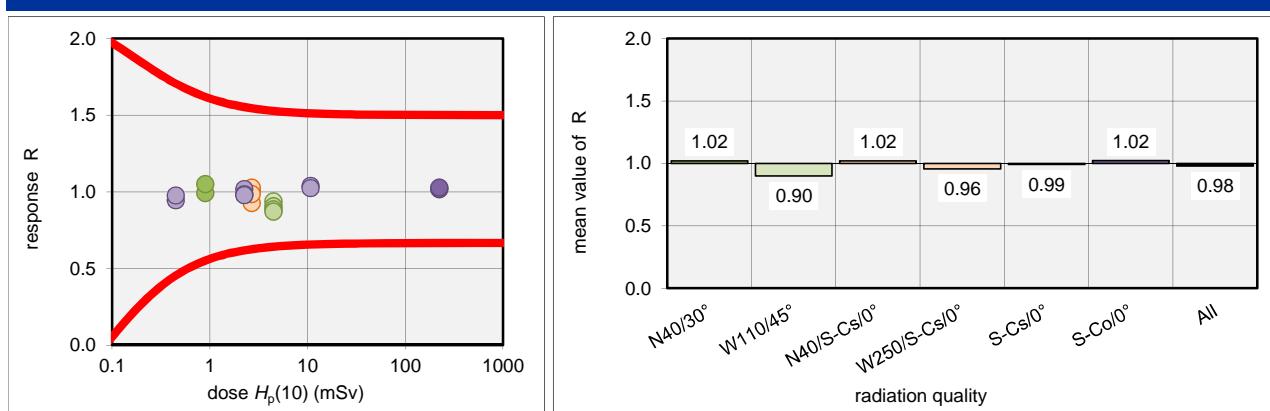
Reporting number 83: (other) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)
x-ray	N40/30°	5	0.90	0.891	0.99
		6	0.90	0.945	1.05
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.50	4.214	0.94
		10	4.50	4.075	0.91
		7	4.50	3.983	0.89
		8	4.50	3.911	0.87
x-ray and gamma	N40/S-Cs/0°	3	2.69	2.721	1.01
		4	2.69	2.762	1.03
	W250/S-Cs/0°	1	2.70	2.500	0.93
		2	2.70	2.660	0.99
gamma	S-Cs/0°	17	0.45	0.425	0.94
		18	0.45	0.439	0.98
		13	2.25	2.204	0.98
		14	2.25	2.287	1.02
		15	2.25	2.213	0.98
		16	2.25	2.201	0.98
		11	10.80	11.211	1.04
		12	10.80	11.041	1.02
	S-Co/0°	19	225.00	228.781	1.02
		20	225.00	230.681	1.03
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.02	1.02	1.05	0.99	4%
W110/45°	4	0.90	0.90	0.94	0.87	3%
N40/S-Cs/0°	2	1.02	1.02	1.03	1.01	1%
W250/S-Cs/0°	2	0.96	0.96	0.99	0.93	4%
S-Cs/0°	8	0.98	0.99	1.04	0.94	3%
S-Co/0°	2	1.02	1.02	1.03	1.02	1%
All	20	0.98	0.98	1.05	0.87	5%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

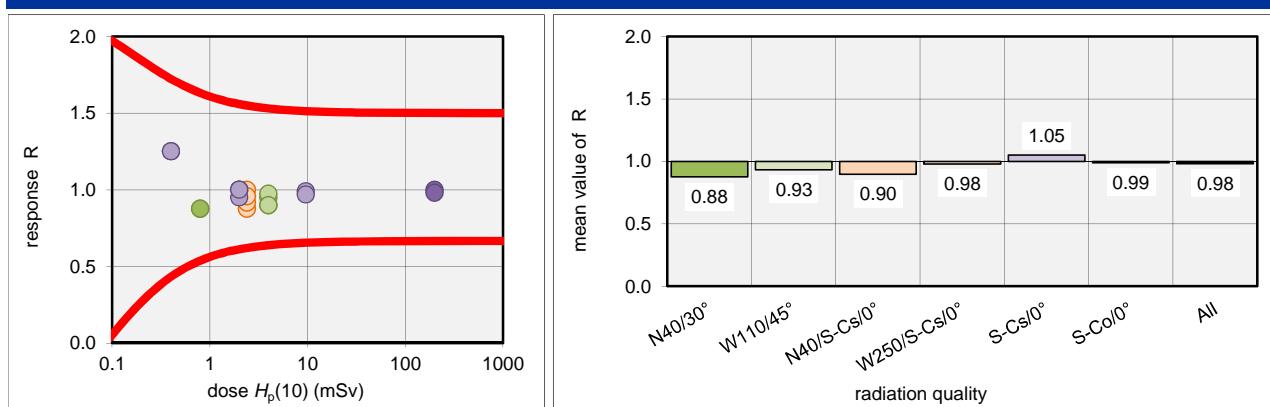
Reporting number 84: (other) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	0.80	0.7	0.88	
		6	0.80	0.7	0.88	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.00	3.6	0.90	
		10	4.00	3.8	0.95	
		7	4.00	3.9	0.98	
		8	4.00	3.6	0.90	
x-ray and gamma	N40/S-Cs/0°	3	2.40	2.1	0.88	
		4	2.40	2.2	0.92	
	W250/S-Cs/0°	1	2.40	2.4	1.00	
		2	2.40	2.3	0.96	
gamma	S-Cs/0°	17	0.40	0.5	1.25	
		18	0.40	0.5	1.25	
		13	2.00	2.0	1.00	
		14	2.00	2.0	1.00	
		15	2.00	1.9	0.95	
		16	2.00	2.0	1.00	
		11	9.60	9.5	0.99	
		12	9.60	9.3	0.97	
	S-Co/0°	19	200.00	199.9	1.00	
		20	200.00	196.0	0.98	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.88	0.88	0.88	0.88	0%
W110/45°	4	0.93	0.93	0.98	0.90	4%
N40/S-Cs/0°	2	0.90	0.90	0.92	0.88	3%
W250/S-Cs/0°	2	0.98	0.98	1.00	0.96	3%
S-Cs/0°	8	1.00	1.05	1.25	0.95	12%
S-Co/0°	2	0.99	0.99	1.00	0.98	1%
All	20	0.97	0.98	1.25	0.88	10%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

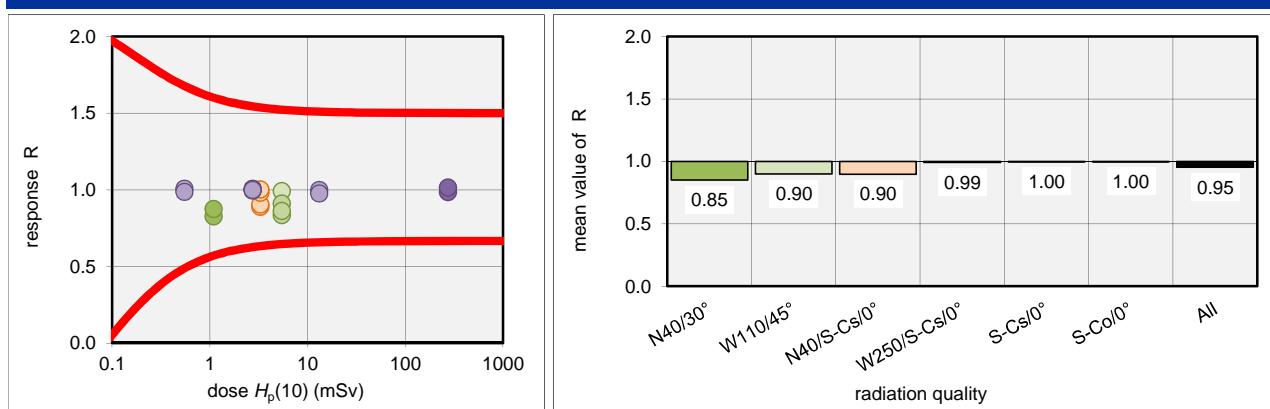
Reporting number 85: (other) for dose quantity $H_p(10)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.10	0.909	0.83	
		6	1.10	0.961	0.87	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.50	5.447	0.99	
		10	5.50	4.592	0.83	
		7	5.50	4.999	0.91	
		8	5.50	4.738	0.86	
x-ray and gamma	N40/S-Cs/0°	3	3.30	2.931	0.89	
		4	3.30	2.983	0.90	
	W250/S-Cs/0°	1	3.30	3.236	0.98	
		2	3.30	3.306	1.00	
gamma	S-Cs/0°	17	0.55	0.554	1.01	
		18	0.55	0.542	0.99	
		13	2.75	2.735	0.99	
		14	2.75	2.759	1.00	
		15	2.75	2.767	1.01	
		16	2.75	2.745	1.00	
		11	13.20	13.176	1.00	
		12	13.20	12.872	0.98	
	S-Co/0°	19	275.00	270.741	0.98	
		20	275.00	278.975	1.01	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.85	0.85	0.87	0.83	4%
W110/45°	4	0.89	0.90	0.99	0.83	8%
N40/S-Cs/0°	2	0.90	0.90	0.90	0.89	1%
W250/S-Cs/0°	2	0.99	0.99	1.00	0.98	2%
S-Cs/0°	8	1.00	1.00	1.01	0.98	1%
S-Co/0°	2	1.00	1.00	1.01	0.98	2%
All	20	0.98	0.95	1.01	0.83	7%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

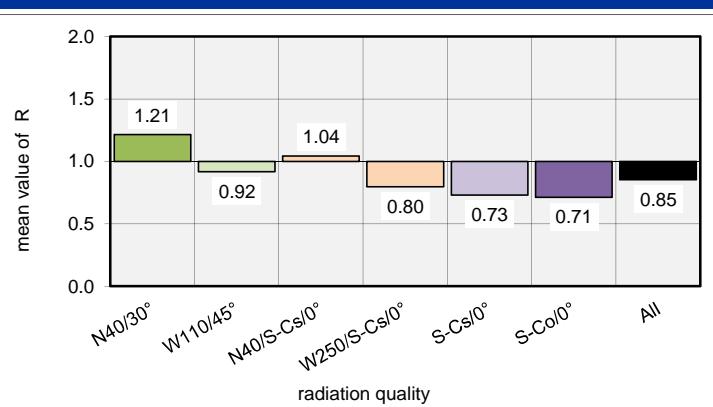
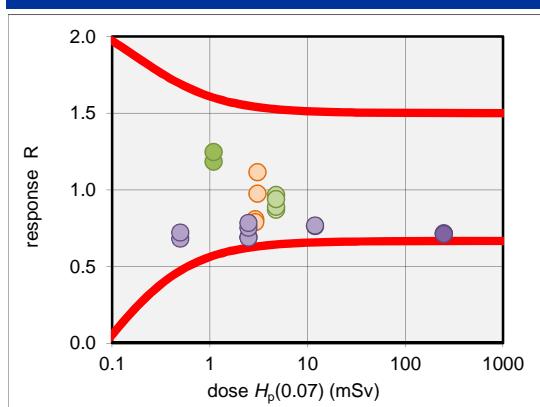
Reporting number 1: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)
x-ray	N40/30°	5	1.10	1.30	1.18
		6	1.10	1.37	1.25
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.79	4.17	0.87
		10	4.79	4.63	0.97
		7	4.77	4.24	0.89
		8	4.77	4.48	0.94
x-ray and gamma	N40/S-Cs/0°	3	3.09	3.44	1.11
		4	3.09	3.01	0.97
	W250/S-Cs/0°	1	2.94	2.37	0.81
		2	2.94	2.32	0.79
gamma	S-Cs/0°	17	0.50	0.34	0.68
		18	0.50	0.36	0.72
		13	2.50	1.73	0.69
		14	2.50	1.72	0.69
		15	2.50	1.88	0.75
		16	2.50	1.96	0.78
		11	12.00	9.15	0.76
		12	12.00	9.19	0.77
	S-Co/0°	19	250.00	178.59	0.71
		20	250.00	177.57	0.71
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.21	1.21	1.25	1.18	4%
W110/45°	4	0.91	0.92	0.97	0.87	5%
N40/S-Cs/0°	2	1.04	1.04	1.11	0.97	9%
W250/S-Cs/0°	2	0.80	0.80	0.81	0.79	2%
S-Cs/0°	8	0.74	0.73	0.78	0.68	6%
S-Co/0°	2	0.71	0.71	0.71	0.71	0%
All	20	0.79	0.85	1.25	0.68	20%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

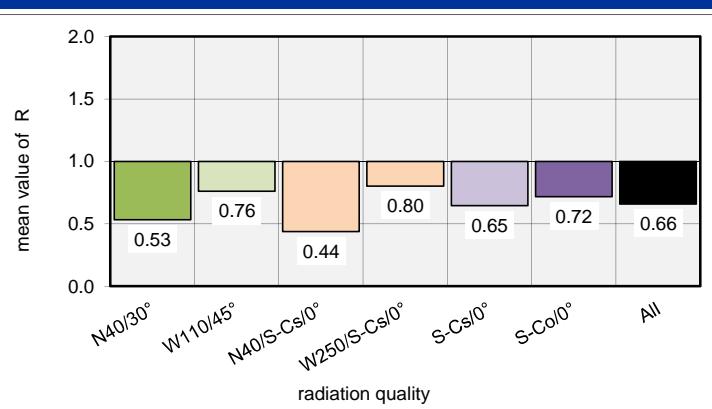
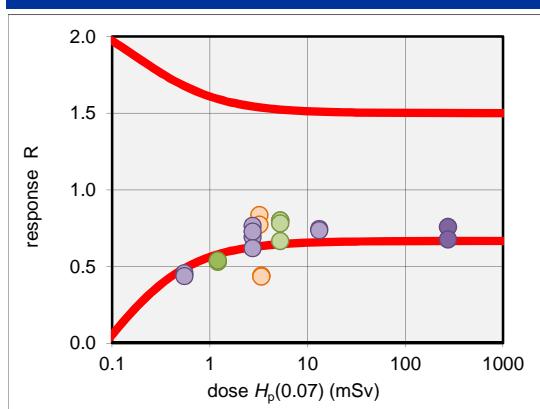
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 2: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results			
radiation quality	dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)			
x-ray	N40/30°	5 6	1.21 1.21	0.64 0.65	0.53 0.54 outlier outlier		
	W110/45°/x W110/-45°/x	9 10	5.26 5.26	4.20 3.50	0.80 0.67 OK OK		
	W110/45°/y W110/-45°/y	7 8	5.26 5.26	4.20 4.10	0.80 0.78 OK OK		
x-ray and gamma	N40/S-Cs/0°	3 4	3.39 3.39	1.49 1.47	0.44 0.43 outlier outlier		
	W250/S-Cs/0°	1 2	3.24 3.24	2.70 2.50	0.83 0.77 OK OK		
gamma	S-Cs/0°	17 18	0.55 0.55	0.25 0.24	0.45 0.44 outlier outlier		
		13 14	2.75 2.75	1.90 2.10	0.69 0.76 OK OK		
		15 16	2.75 2.75	2.00 1.70	0.73 0.62 OK outlier		
		11 12	13.20 13.20	9.80 9.70	0.74 0.73 OK OK		
		19 20	275.00 275.00	208.00 186.00	0.76 0.68 OK OK		
		NIR NIR NIR NIR NIR NIR	21 22 23 24 25 26				
	S-Co/0°	19 20	275.00 275.00	208.00 186.00	0.76 0.68 OK OK		
	All	20	0.71	0.66	0.83 0.43 21%		
radiation quality		number of values	median (R)	mean (R)	maximum (R)		
					minimum (R)		
					coefficient of variation (R)		
N40/30°		2	0.53	0.53	0.54	0.53	1%
W110/45°		4	0.79	0.76	0.80	0.67	8%
N40/S-Cs/0°		2	0.44	0.44	0.44	0.43	1%
W250/S-Cs/0°		2	0.80	0.80	0.83	0.77	5%
S-Cs/0°		8	0.71	0.65	0.76	0.44	20%
S-Co/0°		2	0.72	0.72	0.76	0.68	8%
All		20	0.71	0.66	0.83	0.43	21%

outliers: 7 of 20

Fraction of outliers: 35%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

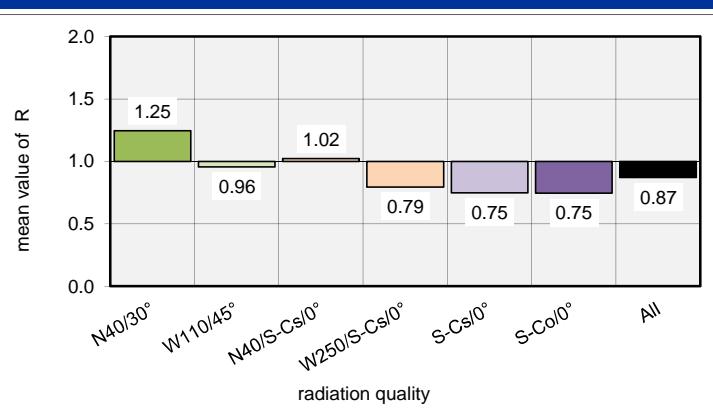
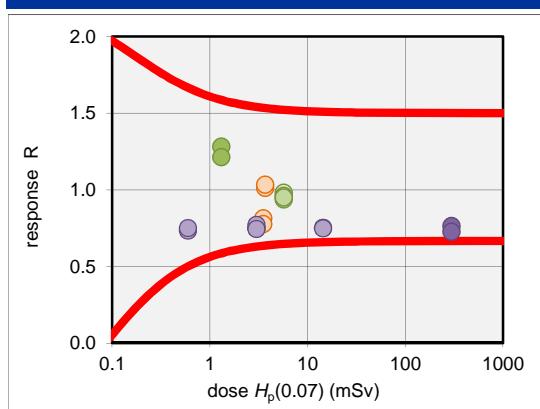
Reporting number 4: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)
x-ray	N40/30°	5	1.32	1.69	1.28
		6	1.32	1.60	1.21
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.74	5.63	0.98
		10	5.74	5.37	0.94
		7	5.74	5.51	0.96
		8	5.74	5.45	0.95
x-ray and gamma	N40/S-Cs/0°	3	3.70	3.74	1.01
		4	3.70	3.82	1.03
	W250/S-Cs/0°	1	3.53	2.87	0.81
		2	3.53	2.74	0.78
gamma	S-Cs/0°	17	0.60	0.44	0.73
		18	0.60	0.45	0.75
		13	3.00	2.25	0.75
		14	3.00	2.24	0.75
		15	3.00	2.31	0.77
		16	3.00	2.23	0.74
		11	14.40	10.83	0.75
		12	14.40	10.76	0.75
	S-Co/0°	19	300.00	229.13	0.76
		20	300.00	217.94	0.73
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.25	1.25	1.28	1.21	4%
W110/45°	4	0.95	0.96	0.98	0.94	2%
N40/S-Cs/0°	2	1.02	1.02	1.03	1.01	1%
W250/S-Cs/0°	2	0.79	0.79	0.81	0.78	3%
S-Cs/0°	8	0.75	0.75	0.77	0.73	1%
S-Co/0°	2	0.75	0.75	0.76	0.73	4%
All	20	0.77	0.87	1.28	0.73	19%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

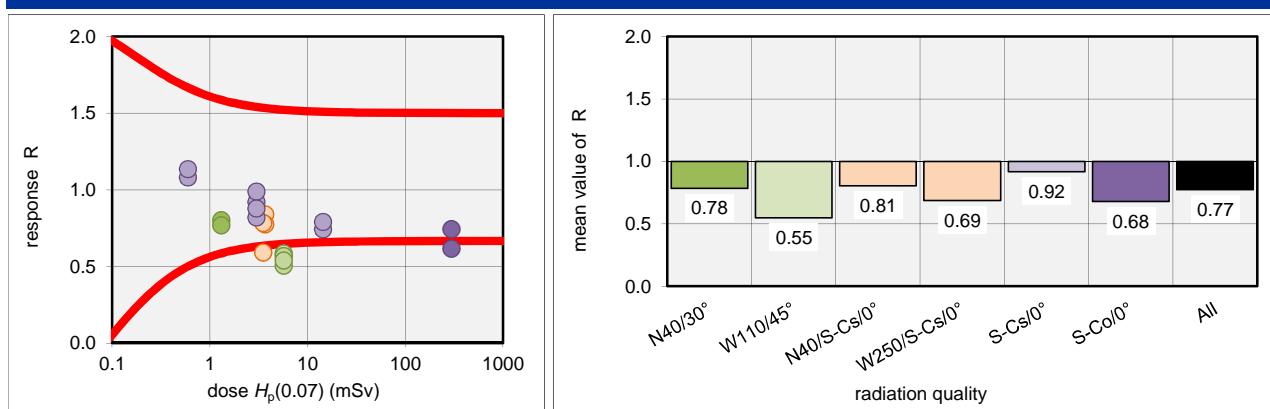
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 5: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality	dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)	
x-ray	N40/30°	5 6	1.32 1.32	1.058 1.014	0.80 0.77 OK OK
	W110/45°/x W110/-45°/x	9 10	5.74 5.74	3.353 3.250	0.58 0.57 outlier outlier
	W110/45°/y W110/-45°/y	7 8	5.74 5.74	2.891 3.093	0.50 0.54 outlier outlier
x-ray and gamma	N40/S-Cs/0°	3 4	3.70 3.70	3.099 2.861	0.84 0.77 OK OK
	W250/S-Cs/0°	1 2	3.53 3.53	2.762 2.084	0.78 0.59 outlier
gamma	S-Cs/0°	17 18 13 14 15 16	0.60 0.60 3.00 3.00 3.00 3.00	0.648 0.680 2.755 2.456 2.963 2.631	1.08 1.13 OK OK OK OK
		11 12	14.40 14.40	10.668 11.356	0.74 0.79 OK OK
		19 20	300.00 300.00	184.833 222.564	0.62 0.74 outlier OK
		NIR NIR NIR NIR NIR NIR	21 22 23 24 25 26		
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)
N40/30°	2	0.78	0.78	0.80	0.77
W110/45°	4	0.55	0.55	0.58	0.50
N40/S-Cs/0°	2	0.81	0.81	0.84	0.77
W250/S-Cs/0°	2	0.69	0.69	0.78	0.59
S-Cs/0°	8	0.90	0.92	1.13	0.74
S-Co/0°	2	0.68	0.68	0.74	0.62
All	20	0.78	0.77	1.13	0.50

outliers: 6 of 20

Fraction of outliers: 30%



Results: IC2010

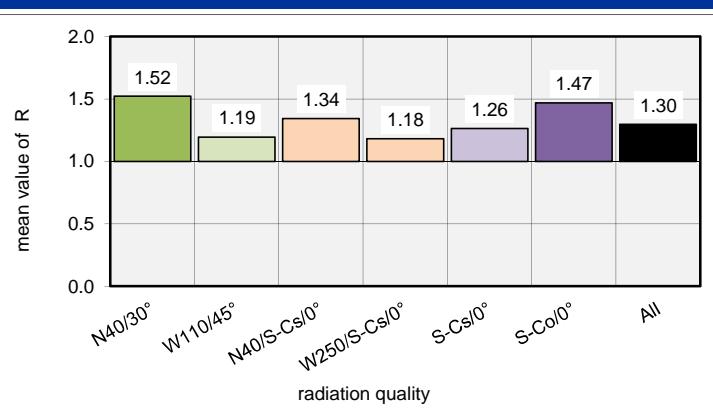
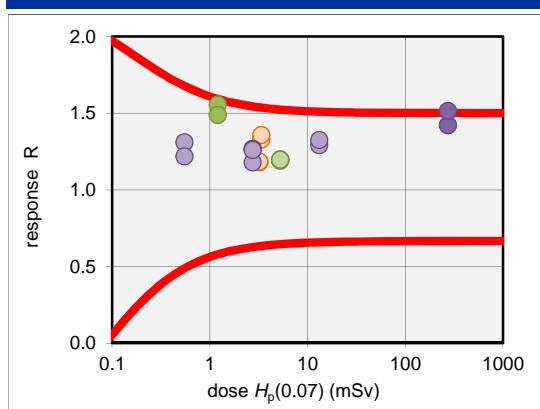
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 6: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.21	1.88	1.55	
		6	1.21	1.80	1.49	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.26	6.25	1.19	
		10	5.26	6.30	1.20	
		7	5.26	6.28	1.19	
		8	5.26	6.29	1.20	
x-ray and gamma	N40/S-Cs/0°	3	3.39	4.50	1.33	
		4	3.39	4.60	1.36	
	W250/S-Cs/0°	1	3.24	3.82	1.18	
		2	3.24	3.83	1.18	
gamma	S-Cs/0°	17	0.55	0.72	1.31	
		18	0.55	0.67	1.22	
		13	2.75	3.24	1.18	
		14	2.75	3.48	1.27	
		15	2.75	3.48	1.27	
		16	2.75	3.46	1.26	
		11	13.20	17.04	1.29	
		12	13.20	17.46	1.32	
	S-Co/0°	19	275.00	391.00	1.42	
		20	275.00	416.00	1.51	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.52	1.52	1.55	1.49	3%
W110/45°	4	1.19	1.19	1.20	1.19	0%
N40/S-Cs/0°	2	1.34	1.34	1.36	1.33	2%
W250/S-Cs/0°	2	1.18	1.18	1.18	1.18	0%
S-Cs/0°	8	1.27	1.26	1.32	1.18	4%
S-Co/0°	2	1.47	1.47	1.51	1.42	4%
All	20	1.27	1.30	1.55	1.18	9%

outliers: 1 of 20

Fraction of outliers: 5%



Results: IC2010

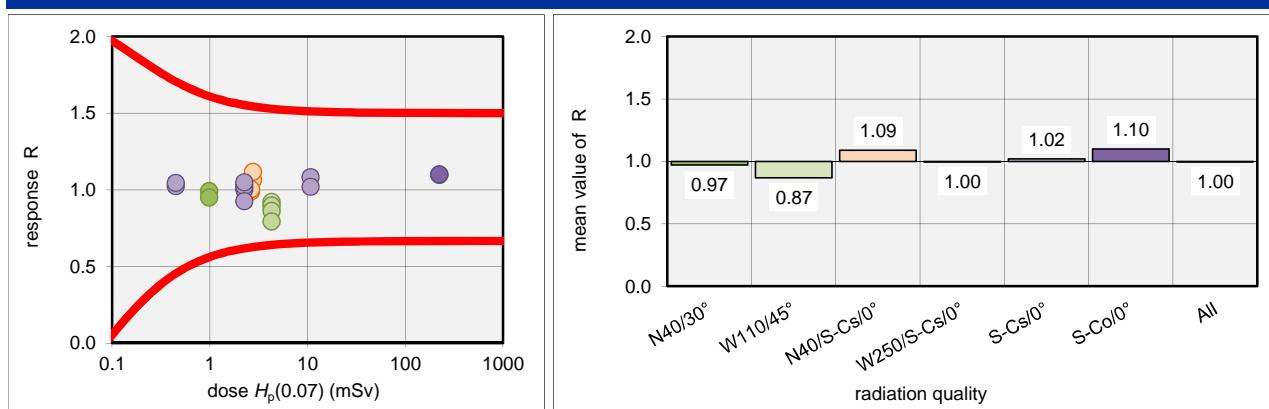
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 7: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality	dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)		
x-ray	N40/30°	5 6	0.99 0.99	0.98 0.94	0.99 0.95 OK	
	W110/45°/x W110/-45°/x	9 10	4.31 4.31	3.96 3.87	0.92 0.90 OK	
	W110/45°/y W110/-45°/y	7 8	4.31 4.31	3.71 3.42	0.86 0.79 OK	
	N40/S-Cs/0°	3 4	2.78 2.78	2.96 3.10	1.06 1.12 OK	
	W250/S-Cs/0°	1	2.65	2.62	0.99 OK	
		2	2.65	2.66	1.00 OK	
gamma	S-Cs/0°	17 18	0.45 0.45	0.46 0.47	1.02 1.04 OK	
		13 14 15 16	2.25 2.25 2.25 2.25	2.25 2.30 2.08 2.36	1.00 1.02 0.92 1.05 OK	
		11 12	10.80 10.80	11.69 11.00	1.08 1.02 OK	
		19 20	225.00 225.00	247.10 247.20	1.10 1.10 OK	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	
N40/30°	2	0.97	0.97	0.99	0.95	3%
W110/45°	4	0.88	0.87	0.92	0.79	6%
N40/S-Cs/0°	2	1.09	1.09	1.12	1.06	3%
W250/S-Cs/0°	2	1.00	1.00	1.00	0.99	1%
S-Cs/0°	8	1.02	1.02	1.08	0.92	5%
S-Co/0°	2	1.10	1.10	1.10	1.10	0%
All	20	1.01	1.00	1.12	0.79	9%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

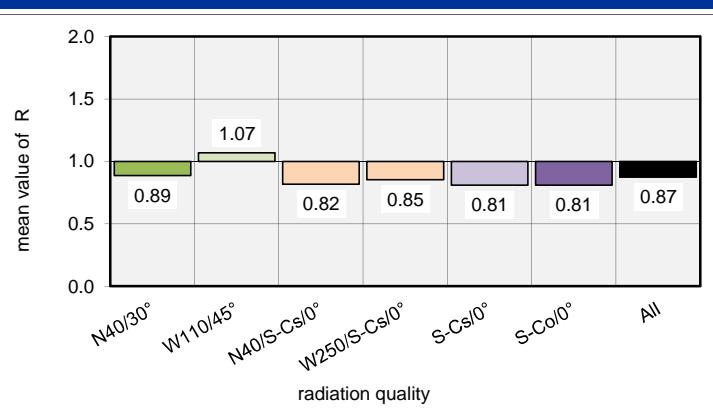
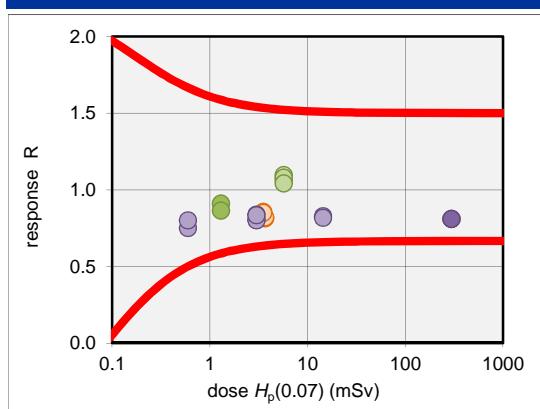
Reporting number 8: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)
x-ray	N40/30°	5	1.31	1.190	0.91
		6	1.31	1.130	0.86
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.74	6.290	1.10
		10	5.74	6.090	1.06
		7	5.74	6.190	1.08
		8	5.74	5.980	1.04
	N40/S-Cs/0°	3	3.70	3.010	0.81
		4	3.70	3.030	0.82
x-ray and gamma	W250/S-Cs/0°	1	3.53	3.020	0.86
		2	3.53	3.000	0.85
	S-Cs/0°	17	0.60	0.450	0.75
		18	0.60	0.480	0.80
		13	3.00	2.510	0.84
		14	3.00	2.420	0.81
		15	3.00	2.400	0.80
		16	3.00	2.500	0.83
		11	14.40	11.900	0.83
		12	14.40	11.750	0.82
	S-Co/0°	19	300.00	242.700	0.81
		20	300.00	242.600	0.81
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.89	0.89	0.91	0.86	4%
W110/45°	4	1.07	1.07	1.10	1.04	2%
N40/S-Cs/0°	2	0.82	0.82	0.82	0.81	0%
W250/S-Cs/0°	2	0.85	0.85	0.86	0.85	0%
S-Cs/0°	8	0.81	0.81	0.84	0.75	3%
S-Co/0°	2	0.81	0.81	0.81	0.81	0%
All	20	0.83	0.87	1.10	0.75	12%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

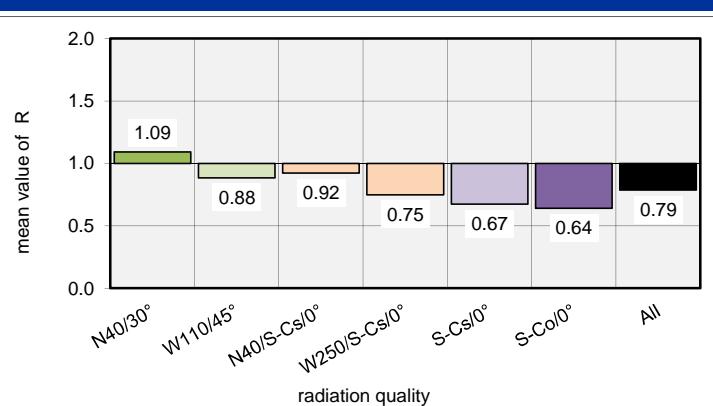
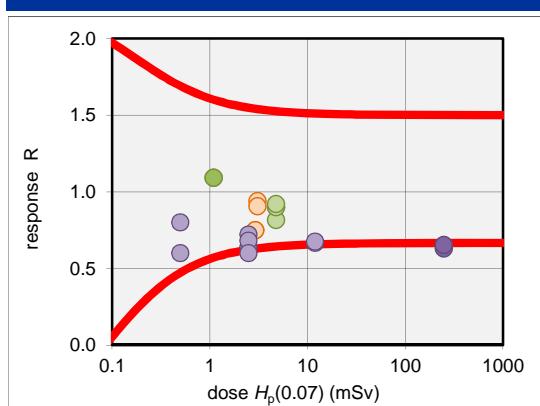
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 9: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.10	1.2	1.09	
		6	1.10	1.2	1.09	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.78	4.3	0.90	
		10	4.78	3.9	0.82	
		7	4.78	4.3	0.90	
		8	4.78	4.4	0.92	
x-ray and gamma	N40/S-Cs/0°	3	3.09	2.9	0.94	
		4	3.09	2.8	0.91	
	W250/S-Cs/0°	1	2.94	2.2	0.75	
		2	2.94	2.2	0.75	
gamma	S-Cs/0°	17	0.50	0.3	0.60	
		18	0.50	0.4	0.80	
		13	2.50	1.8	0.72	
		14	2.50	1.6	0.64	
		15	2.50	1.7	0.68	
		16	2.50	1.5	0.60	
		11	12.00	8.0	0.67	
		12	12.00	8.1	0.68	
	S-Co/0°	19	250.00	157.6	0.63	
		20	250.00	163.1	0.65	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.09	1.09	1.09	1.09	0%
W110/45°	4	0.90	0.88	0.92	0.82	5%
N40/S-Cs/0°	2	0.92	0.92	0.94	0.91	2%
W250/S-Cs/0°	2	0.75	0.75	0.75	0.75	0%
S-Cs/0°	8	0.67	0.67	0.80	0.60	10%
S-Co/0°	2	0.64	0.64	0.65	0.63	2%
All	20	0.75	0.79	1.09	0.60	19%

outliers: 3 of 20

Fraction of outliers: 15%



Results: IC2010

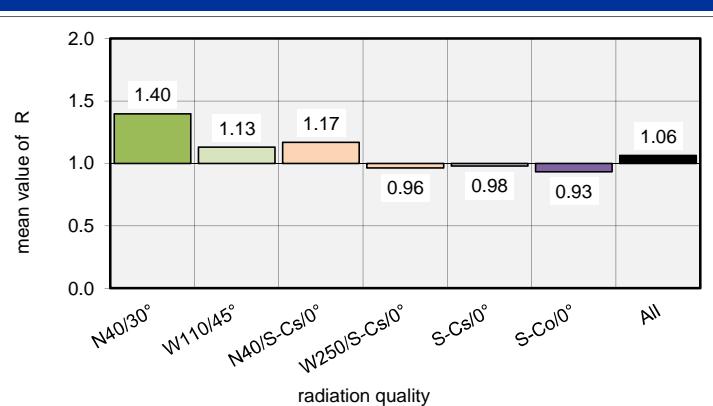
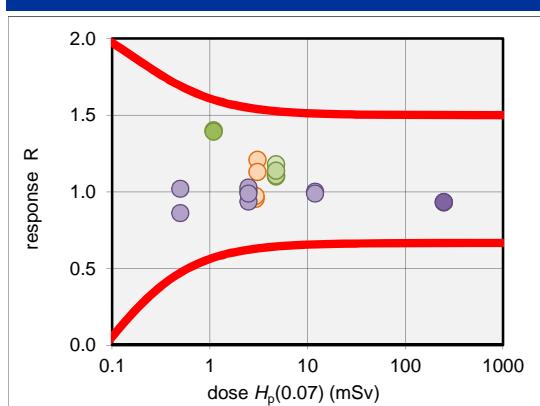
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 10: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.10	1.54	1.40	
		6	1.10	1.53	1.39	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.78	5.63	1.18	
		10	4.78	5.25	1.10	
		7	4.78	5.28	1.10	
		8	4.78	5.43	1.14	
x-ray and gamma	N40/S-Cs/0°	3	3.09	3.73	1.21	
		4	3.09	3.49	1.13	
	W250/S-Cs/0°	1	2.95	2.81	0.95	
		2	2.95	2.87	0.97	
gamma	S-Cs/0°	17	0.50	0.43	0.86	
		18	0.50	0.51	1.02	
		13	2.50	2.51	1.00	
		14	2.50	2.34	0.94	
		15	2.50	2.57	1.03	
		16	2.50	2.47	0.99	
		11	12.00	11.99	1.00	
		12	12.00	11.86	0.99	
	S-Co/0°	19	250.00	232.51	0.93	
		20	250.00	233.31	0.93	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.40	1.40	1.40	1.39	0%
W110/45°	4	1.12	1.13	1.18	1.10	3%
N40/S-Cs/0°	2	1.17	1.17	1.21	1.13	5%
W250/S-Cs/0°	2	0.96	0.96	0.97	0.95	1%
S-Cs/0°	8	0.99	0.98	1.03	0.86	6%
S-Co/0°	2	0.93	0.93	0.93	0.93	0%
All	20	1.01	1.06	1.40	0.86	14%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

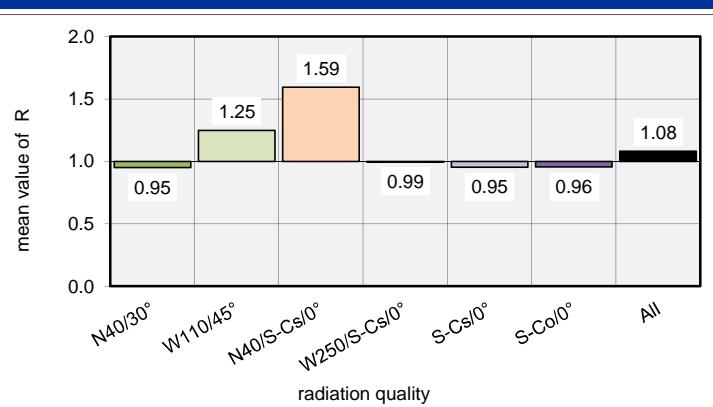
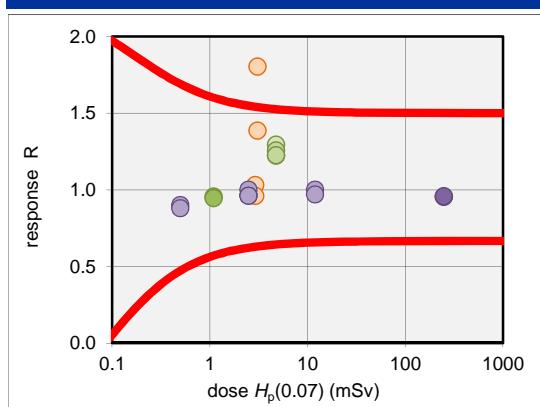
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 11: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.10	1.05	0.95	
		6	1.10	1.04	0.95	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.78	6.18	1.29	
		10	4.78	5.84	1.22	
		7	4.78	6.00	1.26	
		8	4.78	5.85	1.22	
x-ray and gamma	N40/S-Cs/0°	3	3.09	5.57	1.80	
		4	3.09	4.28	1.39	
	W250/S-Cs/0°	1	2.94	3.03	1.03	
		2	2.94	2.82	0.96	
gamma	S-Cs/0°	17	0.50	0.45	0.90	
		18	0.50	0.44	0.88	
		13	2.50	2.41	0.96	
		14	2.50	2.50	1.00	
		15	2.50	2.40	0.96	
		16	2.50	2.40	0.96	
		11	12.00	11.99	1.00	
		12	12.00	11.62	0.97	
	S-Co/0°	19	250.00	238.12	0.95	
		20	250.00	239.41	0.96	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.95	0.95	0.95	0.95	1%
W110/45°	4	1.24	1.25	1.29	1.22	3%
N40/S-Cs/0°	2	1.59	1.59	1.80	1.39	19%
W250/S-Cs/0°	2	0.99	0.99	1.03	0.96	5%
S-Cs/0°	8	0.96	0.95	1.00	0.88	5%
S-Co/0°	2	0.96	0.96	0.96	0.95	0%
All	20	0.97	1.08	1.80	0.88	21%

outliers: 1 of 20

Fraction of outliers: 5%



Results: IC2010

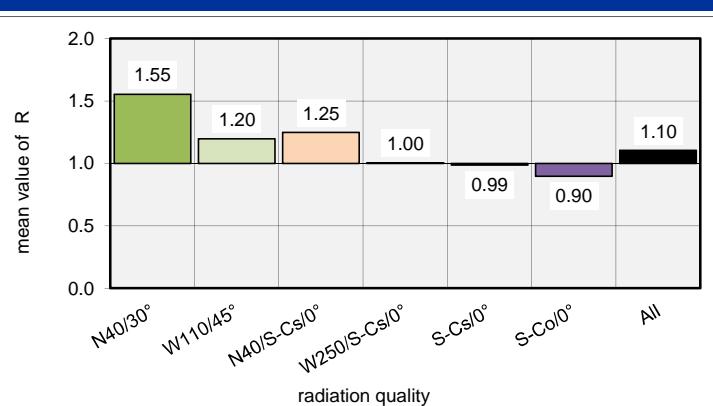
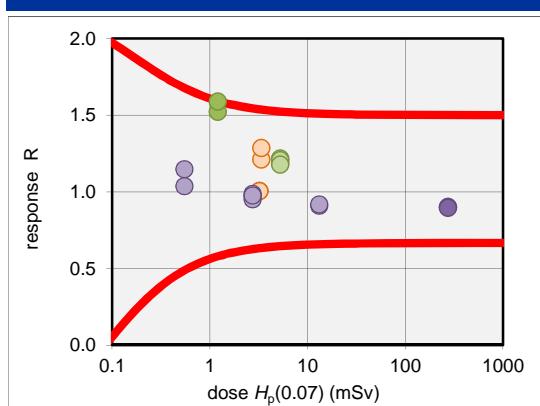
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 12: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.21	1.84	1.52	
		6	1.21	1.92	1.59	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.26	6.40	1.22	
		10	5.26	6.26	1.19	
		7	5.26	6.34	1.21	
		8	5.26	6.19	1.18	
x-ray and gamma	N40/S-Cs/0°	3	3.39	4.10	1.21	
		4	3.39	4.36	1.29	
	W250/S-Cs/0°	1	3.24	3.26	1.01	
		2	3.24	3.25	1.00	
gamma	S-Cs/0°	17	0.55	0.63	1.15	
		18	0.55	0.57	1.04	
		13	2.75	2.67	0.97	
		14	2.75	2.61	0.95	
		15	2.75	2.71	0.99	
		16	2.75	2.68	0.97	
		11	13.20	12.00	0.91	
		12	13.20	12.10	0.92	
	S-Co/0°	19	275.00	247.67	0.90	
		20	275.00	245.99	0.89	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.55	1.55	1.59	1.52	3%
W110/45°	4	1.20	1.20	1.22	1.18	1%
N40/S-Cs/0°	2	1.25	1.25	1.29	1.21	4%
W250/S-Cs/0°	2	1.00	1.00	1.01	1.00	0%
S-Cs/0°	8	0.97	0.99	1.15	0.91	8%
S-Co/0°	2	0.90	0.90	0.90	0.89	0%
All	20	1.02	1.10	1.59	0.89	18%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

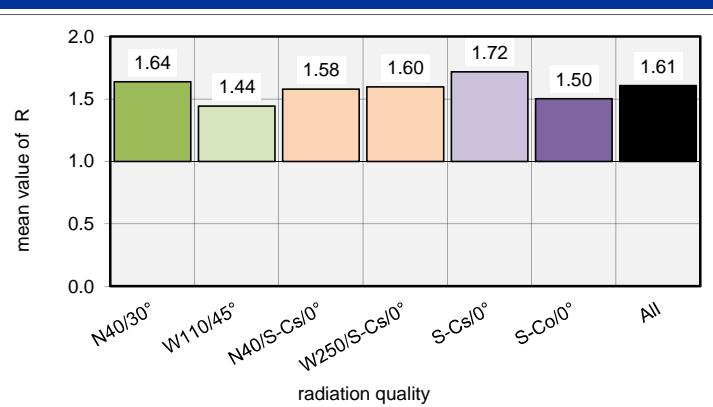
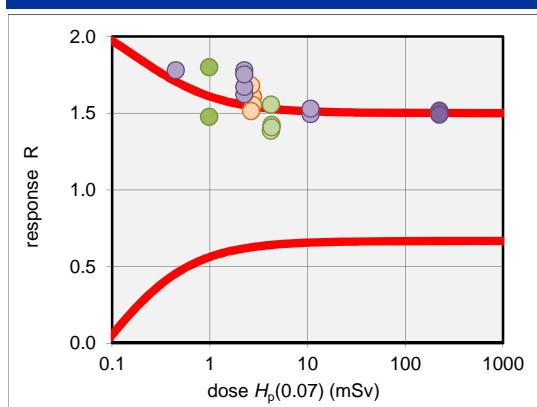
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 13: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	0.99	1.46	1.47	
		6	0.99	1.78	1.80	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.24	5.87	1.38	
		10	4.24	6.59	1.55	
		7	4.30	6.12	1.42	
		8	4.30	6.05	1.41	
x-ray and gamma	N40/S-Cs/0°	3	2.77	4.45	1.61	
		4	2.77	4.30	1.55	
	W250/S-Cs/0°	1	2.65	4.01	1.51	
		2	2.65	4.45	1.68	
gamma	S-Cs/0°	17	0.45	0.95	2.11	
		18	0.45	0.80	1.78	
		13	2.25	3.65	1.62	
		14	2.25	4.00	1.78	
		15	2.25	3.76	1.67	
		16	2.25	3.94	1.75	
		11	10.80	16.13	1.49	
		12	10.80	16.50	1.53	
	S-Co/0°	19	225.00	341.00	1.52	
		20	225.00	335.00	1.49	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.64	1.64	1.80	1.47	14%
W110/45°	4	1.42	1.44	1.55	1.38	5%
N40/S-Cs/0°	2	1.58	1.58	1.61	1.55	2%
W250/S-Cs/0°	2	1.60	1.60	1.68	1.51	7%
S-Cs/0°	8	1.71	1.72	2.11	1.49	11%
S-Co/0°	2	1.50	1.50	1.52	1.49	1%
All	20	1.55	1.61	2.11	1.38	11%

outliers: 13 of 20

Fraction of outliers: 65%



Results: IC2010

1 point outside diagramme (> 2)

trumpet parameter: 1.5 / 0.085 mSv

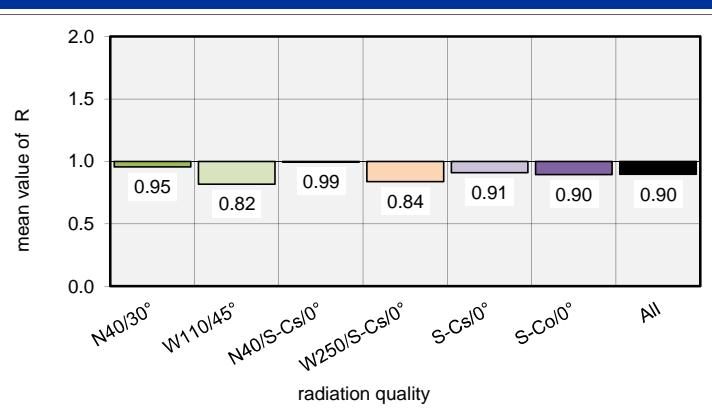
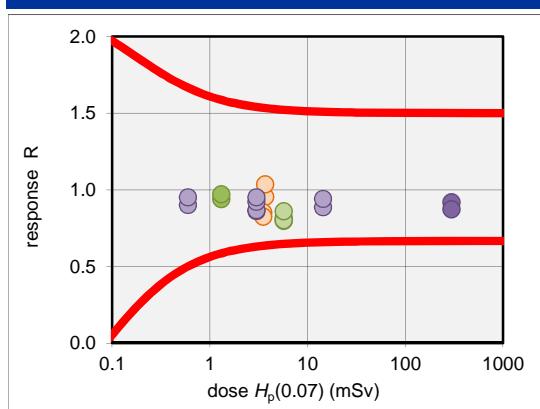
Reporting number 14: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.32	1.24	0.94	
		6	1.32	1.28	0.97	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.74	4.57	0.80	
		10	5.74	4.68	0.82	
		7	5.74	4.60	0.80	
		8	5.74	4.93	0.86	
x-ray and gamma	N40/S-Cs/0°	3	3.70	3.53	0.95	
		4	3.70	3.83	1.04	
	W250/S-Cs/0°	1	3.54	3.01	0.85	
		2	3.54	2.92	0.82	
gamma	S-Cs/0°	17	0.60	0.54	0.90	
		18	0.60	0.57	0.95	
		13	3.00	2.58	0.86	
		14	3.00	2.60	0.87	
		15	3.00	2.76	0.92	
		16	3.00	2.85	0.95	
		11	14.40	12.75	0.89	
		12	14.40	13.52	0.94	
	S-Co/0°	19	300.00	275.24	0.92	
		20	300.00	261.76	0.87	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.95	0.95	0.97	0.94	2%
W110/45°	4	0.81	0.82	0.86	0.80	3%
N40/S-Cs/0°	2	0.99	0.99	1.04	0.95	6%
W250/S-Cs/0°	2	0.84	0.84	0.85	0.82	2%
S-Cs/0°	8	0.91	0.91	0.95	0.86	4%
S-Co/0°	2	0.90	0.90	0.92	0.87	4%
All	20	0.89	0.90	1.04	0.80	7%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

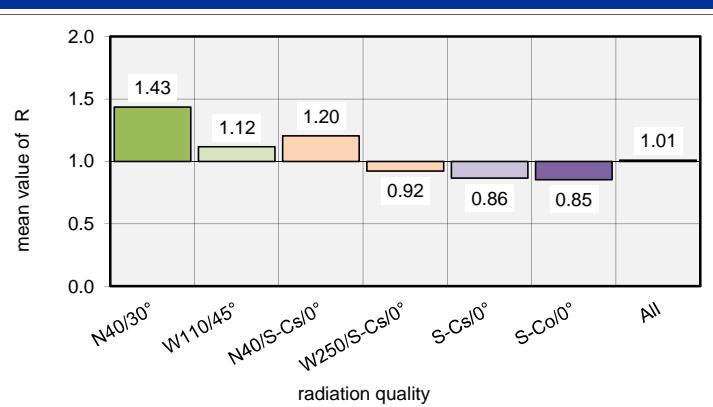
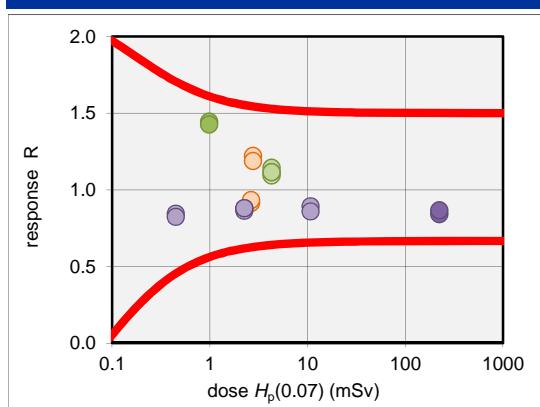
Reporting number 16: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)
x-ray	N40/30°	5	0.99	1.43	1.44
		6	0.99	1.41	1.42
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.31	4.71	1.09
		10	4.31	4.93	1.14
		7	4.30	4.79	1.11
		8	4.30	4.79	1.11
x-ray and gamma	N40/S-Cs/0°	3	2.77	3.38	1.22
		4	2.77	3.29	1.19
	W250/S-Cs/0°	1	2.65	2.42	0.91
		2	2.65	2.47	0.93
gamma	S-Cs/0°	17	0.45	0.38	0.84
		18	0.45	0.37	0.82
		13	2.25	1.97	0.88
		14	2.25	1.94	0.86
		15	2.25	1.98	0.88
		16	2.25	1.98	0.88
		11	10.80	9.64	0.89
		12	10.80	9.28	0.86
	S-Co/0°	19	225.00	189.07	0.84
		20	225.00	194.85	0.87
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	0			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.43	1.43	1.44	1.42	1%
W110/45°	4	1.11	1.12	1.14	1.09	2%
N40/S-Cs/0°	2	1.20	1.20	1.22	1.19	2%
W250/S-Cs/0°	2	0.92	0.92	0.93	0.91	1%
S-Cs/0°	8	0.87	0.86	0.89	0.82	3%
S-Co/0°	2	0.85	0.85	0.87	0.84	2%
All	20	0.90	1.01	1.44	0.82	19%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

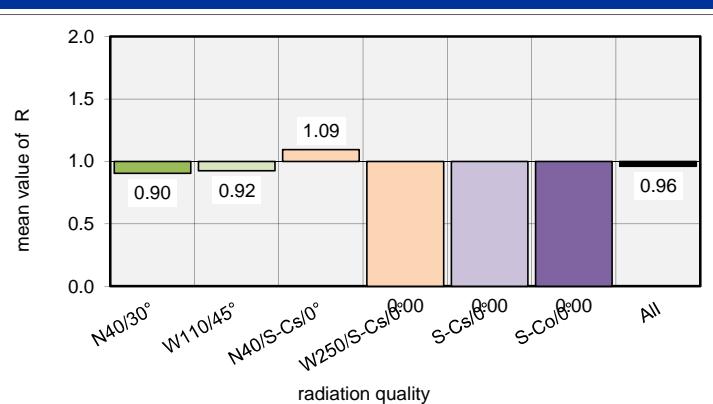
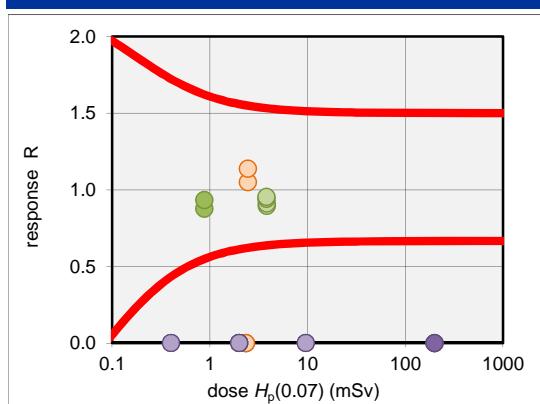
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 17: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality	dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)		
x-ray	N40/30°	5 6	0.88 0.88	0.77 0.82	0.88 0.93 OK	
	W110/45°/x	9	3.83	3.43	0.90 OK	
	W110/-45°/x	10	3.83	3.48	0.91 OK	
	W110/45°/y	7	3.82	3.59	0.94 OK	
	W110/-45°/y	8	3.82	3.64	0.95 OK	
x-ray and gamma	N40/S-Cs/0°	3 4	2.47 2.47	2.59 2.81	1.05 1.14 OK	
	W250/S-Cs/0°	1	2.36	0.0	outlier	
		2	2.36	0.0	outlier	
gamma	S-Cs/0°	17 18	0.40 0.40	0.0 0.0	outlier outlier	
		13 14 15 16	2.00 2.00 2.00 2.00	0.0 0.0 0.0 0.0	outlier outlier outlier outlier	
		11 12	9.60 9.60	0.0 0.0	outlier outlier	
		19 20	200.00 200.00	0.00 0.00	outlier outlier	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.90	0.90	0.93	0.88	4%
W110/45°	4	0.92	0.92	0.95	0.90	3%
N40/S-Cs/0°	2	1.09	1.09	1.14	1.05	6%
W250/S-Cs/0°	0	-	-	-	-	-
S-Cs/0°	0	-	-	-	-	-
S-Co/0°	0	-	-	-	-	-
All	8	0.94	0.96	1.14	0.88	9%

outliers: 12 of 20

Fraction of outliers: 60%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

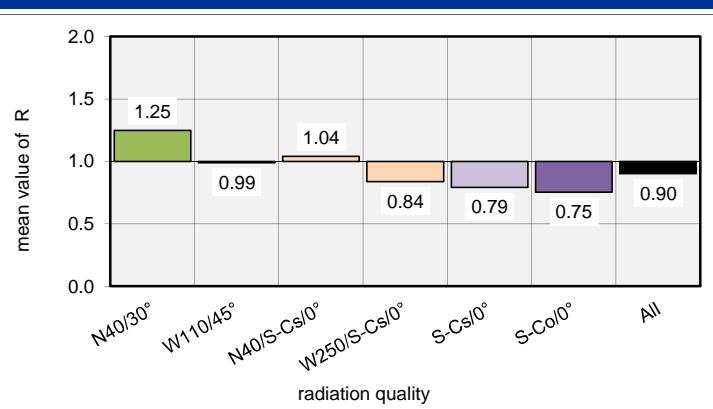
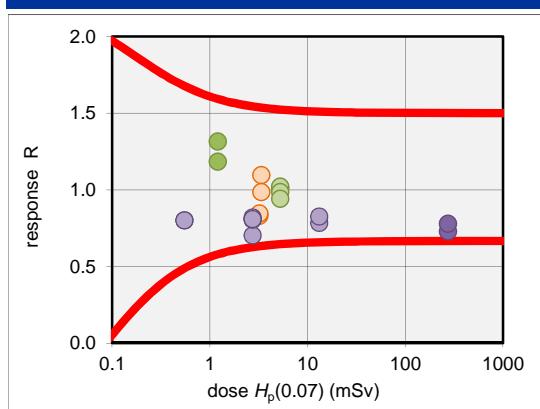
Reporting number 18: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)
x-ray	N40/30°	5	1.21	1.59	1.31
		6	1.21	1.43	1.18
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.26	5.31	1.01
		10	5.26	5.36	1.02
		7	5.26	5.18	0.98
		8	5.26	4.95	0.94
x-ray and gamma	N40/S-Cs/0°	3	3.39	3.71	1.09
		4	3.39	3.34	0.99
	W250/S-Cs/0°	1	3.24	2.69	0.83
		2	3.24	2.74	0.85
gamma	S-Cs/0°	17	0.55	0.44	0.80
		18	0.55	0.44	0.80
		13	2.75	1.93	0.70
		14	2.75	2.21	0.80
		15	2.75	2.25	0.82
		16	2.75	2.22	0.81
		11	13.20	10.34	0.78
		12	13.20	10.88	0.82
	S-Co/0°	19	275.00	200.30	0.73
		20	275.00	214.18	0.78
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.25	1.25	1.31	1.18	7%
W110/45°	4	1.00	0.99	1.02	0.94	4%
N40/S-Cs/0°	2	1.04	1.04	1.09	0.99	7%
W250/S-Cs/0°	2	0.84	0.84	0.85	0.83	1%
S-Cs/0°	8	0.80	0.79	0.82	0.70	5%
S-Co/0°	2	0.75	0.75	0.78	0.73	5%
All	20	0.83	0.90	1.31	0.70	18%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

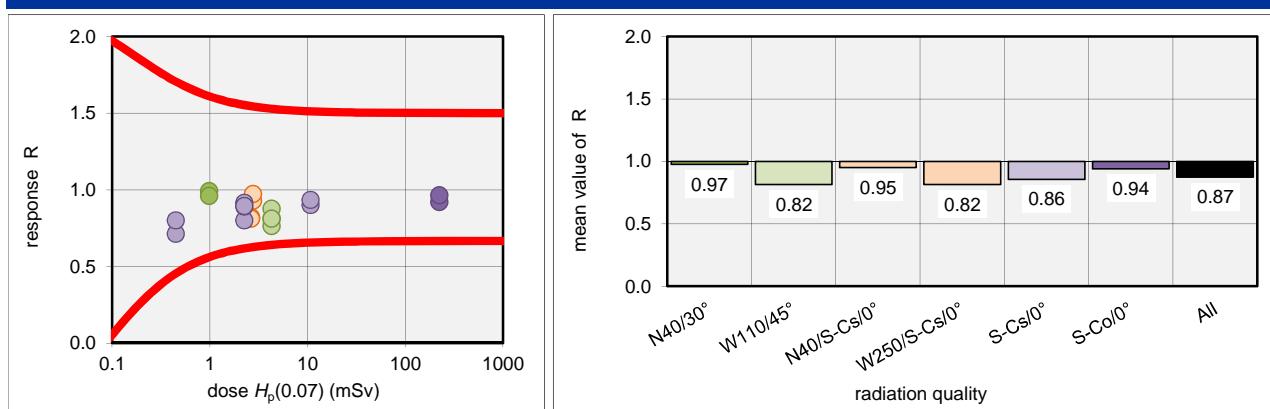
Reporting number 19: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)
x-ray	N40/30°	5	0.99	0.98	0.99
		6	0.99	0.95	0.96
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.30	3.49	0.81
		10	4.30	3.77	0.88
		7	4.30	3.28	0.76
		8	4.30	3.49	0.81
x-ray and gamma	N40/S-Cs/0°	3	2.78	2.58	0.93
		4	2.78	2.70	0.97
	W250/S-Cs/0°	1	2.65	2.17	0.82
		2	2.65	2.15	0.81
gamma	S-Cs/0°	17	0.45	0.32	0.71
		18	0.45	0.36	0.80
		13	2.25	2.06	0.92
		14	2.25	1.80	0.80
		15	2.25	2.00	0.89
		16	2.25	2.01	0.89
		11	10.80	9.72	0.90
		12	10.80	10.07	0.93
	S-Co/0°	19	225.00	206.74	0.92
		20	225.00	216.77	0.96
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.97	0.97	0.99	0.96	2%
W110/45°	4	0.81	0.82	0.88	0.76	6%
N40/S-Cs/0°	2	0.95	0.95	0.97	0.93	3%
W250/S-Cs/0°	2	0.82	0.82	0.82	0.81	1%
S-Cs/0°	8	0.89	0.86	0.93	0.71	9%
S-Co/0°	2	0.94	0.94	0.96	0.92	3%
All	20	0.89	0.87	0.99	0.71	9%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

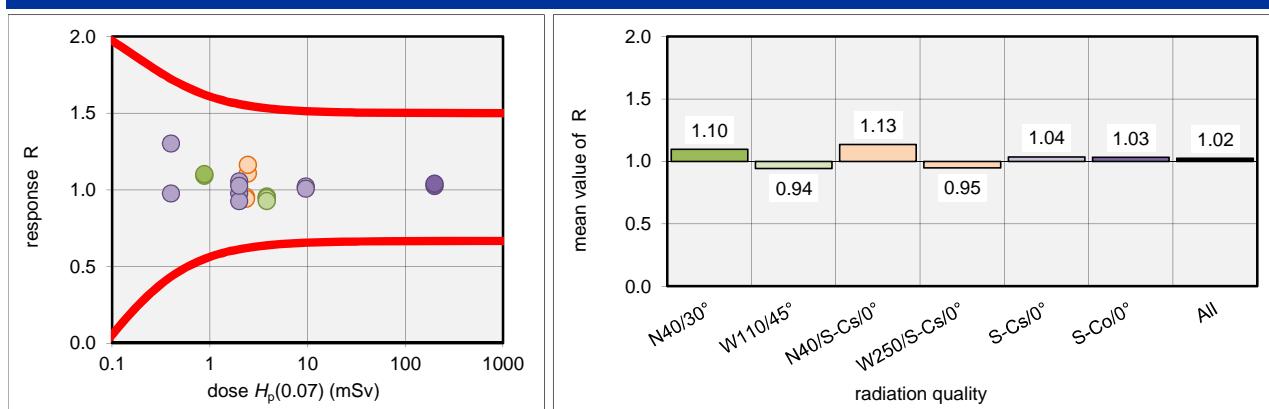
Reporting number 20: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality	dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)	
x-ray	N40/30°	5 6	0.88 0.88	0.96 0.97	1.09 1.10
	W110/45°/x W110/-45°/x	9 10	3.83 3.83	3.66 3.63	0.96 0.95
	W110/45°/y W110/-45°/y	7 8	3.83 3.83	3.62 3.55	0.95 0.93
	N40/S-Cs/0°	3 4	2.47 2.47	2.73 2.87	1.11 1.16
	W250/S-Cs/0°	1	2.36	2.25	0.95
		2	2.36	2.22	0.94
gamma	S-Cs/0°	17 18 13 14 15 16	0.40 0.40 2.00 2.00 2.00 2.00	0.39 0.52 1.95 1.85 2.11 2.05	0.98 1.30 0.98 0.93 1.06 1.03
		11 12	9.60 9.60	9.80 9.67	1.02 1.01
		19 20	200.00 200.00	204.97 207.90	1.02 1.04
		NIR NIR NIR NIR NIR NIR	21 22 23 24 25 26		
	S-Co/0°	19 20	200.00 200.00	204.97 207.90	1.02 1.04
		NIR NIR NIR NIR NIR NIR	21 22 23 24 25 26		

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.10	1.10	1.10	1.09	1%
W110/45°	4	0.95	0.94	0.96	0.93	1%
N40/S-Cs/0°	2	1.13	1.13	1.16	1.11	4%
W250/S-Cs/0°	2	0.95	0.95	0.95	0.94	1%
S-Cs/0°	8	1.01	1.04	1.30	0.93	11%
S-Co/0°	2	1.03	1.03	1.04	1.02	1%
All	20	1.01	1.02	1.30	0.93	9%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

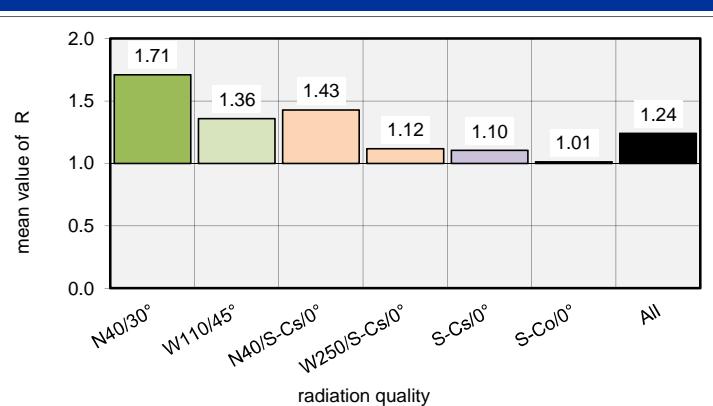
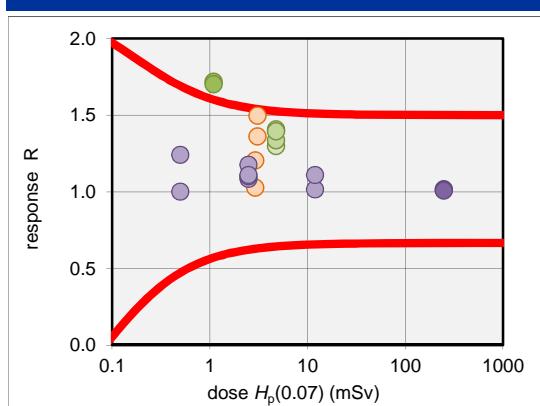
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 23: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality	dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)		
x-ray	N40/30°	5 6	1.10 1.10	1.89 1.87	1.72 1.70	
	W110/45°/x W110/-45°/x	9 10	4.78 4.78	6.20 6.72	1.30 1.41	
	W110/45°/y W110/-45°/y	7 8	4.78 4.78	6.38 6.66	1.33 1.39	
	N40/S-Cs/0°	3 4	3.09 3.09	4.62 4.20	1.50 1.36	
	W250/S-Cs/0°	1	2.94	3.54	1.20	
		2	2.94	3.02	1.03	
		17 18	0.50 0.50	0.62 0.50	1.24 1.00	
		13 14 15 16	2.50 2.50 2.50 2.50	2.71 2.94 2.75 2.77	1.08 1.18 1.10 1.11	
gamma	S-Cs/0°	11 12	12.00 12.00	12.19 13.30	1.02 1.11	
		19 20	250.00 250.00	254.00 252.08	1.02 1.01	
		NIR NIR NIR NIR NIR NIR	21 22 23 24 25 26			
	S-Co/0°					
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.71	1.71	1.72	1.70	1%
W110/45°	4	1.36	1.36	1.41	1.30	4%
N40/S-Cs/0°	2	1.43	1.43	1.50	1.36	7%
W250/S-Cs/0°	2	1.12	1.12	1.20	1.03	11%
S-Cs/0°	8	1.10	1.10	1.24	1.00	7%
S-Co/0°	2	1.01	1.01	1.02	1.01	1%
All	20	1.19	1.24	1.72	1.00	18%

outliers: 2 of 20

Fraction of outliers: 10%



Results: IC2010

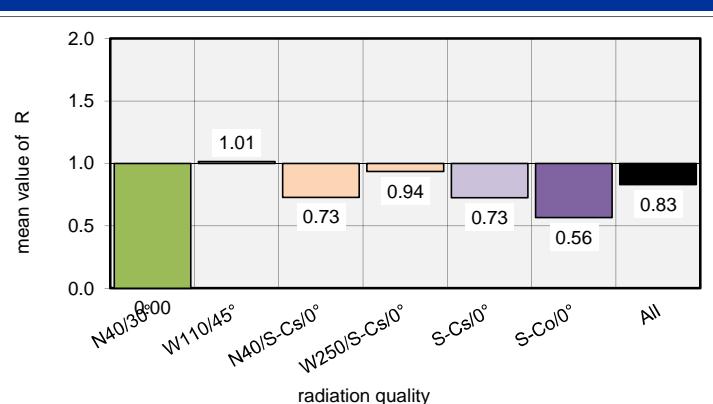
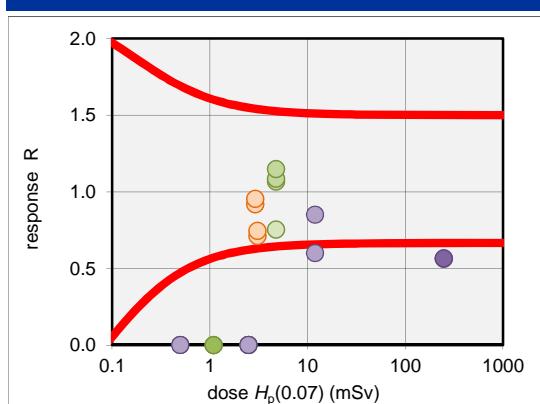
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 24: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.10	0.0		
		6	1.10	0.0	outlier outlier	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.78	3.6	0.75	
		10	4.78	5.1	1.07	
		7	4.79	5.2	1.09	
		8	4.79	5.5	1.15	
x-ray and gamma	N40/S-Cs/0°	3	3.09	2.2	0.71	
		4	3.09	2.3	0.74	
	W250/S-Cs/0°	1	2.94	2.7	0.92	
		2	2.94	2.8	0.95	
gamma	S-Cs/0°	17	0.50	0.0		
		18	0.50	0.0	outlier outlier	
		13	2.50	0.0	outlier	
		14	2.50	0.0	outlier	
		15	2.50	0.0	outlier	
		16	2.50	0.0	outlier	
		11	12.00	7.2	0.60	
		12	12.00	10.2	0.85	
	S-Co/0°	19	250.00	140.9	0.56	
		20	250.00	141.5	0.57	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	0	-	-	-	-	-
W110/45°	4	1.08	1.01	1.15	0.75	17%
N40/S-Cs/0°	2	0.73	0.73	0.74	0.71	3%
W250/S-Cs/0°	2	0.94	0.94	0.95	0.92	3%
S-Cs/0°	2	0.73	0.73	0.85	0.60	24%
S-Co/0°	2	0.56	0.56	0.57	0.56	0%
All	12	0.80	0.83	1.15	0.56	25%

outliers: 11 of 20

Fraction of outliers: 55%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

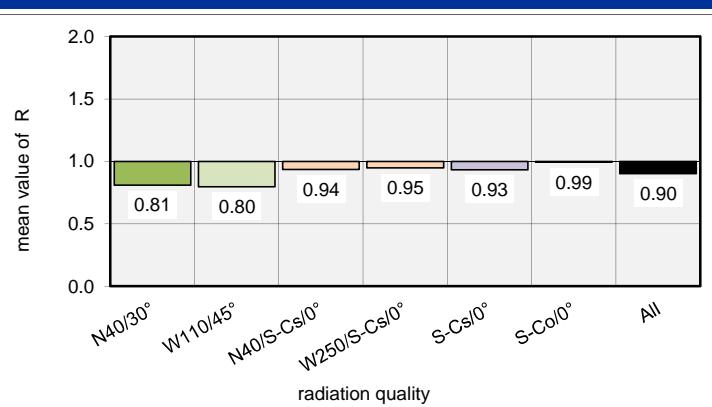
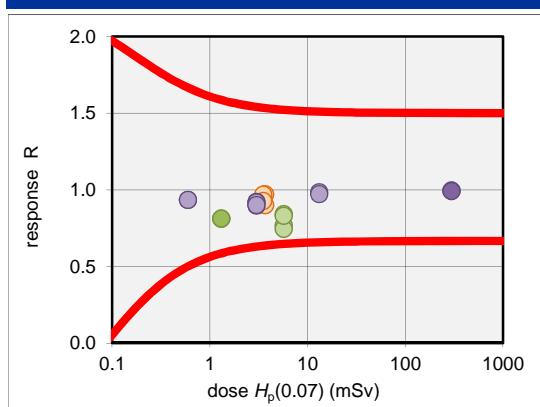
Reporting number 25: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)
x-ray	N40/30°	5	1.32	1.07	0.81
		6	1.32	1.07	0.81
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.74	4.83	0.84
		10	5.74	4.40	0.77
		7	5.74	4.27	0.74
		8	5.74	4.77	0.83
x-ray and gamma	N40/S-Cs/0°	3	3.70	3.33	0.90
		4	3.70	3.59	0.97
	W250/S-Cs/0°	1	3.53	3.42	0.97
		2	3.53	3.27	0.93
gamma	S-Cs/0°	17	0.60	0.56	0.93
		18	0.60	0.56	0.93
		13	3.00	2.76	0.92
		14	3.00	2.69	0.90
		15	3.00	2.75	0.92
		16	3.00	2.70	0.90
		11	13.20	12.97	0.98
		12	13.20	12.83	0.97
	S-Co/0°	19	300.00	298.44	0.99
		20	300.00	297.30	0.99
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.81	0.81	0.81	0.81	0%
W110/45°	4	0.80	0.80	0.84	0.74	6%
N40/S-Cs/0°	2	0.94	0.94	0.97	0.90	5%
W250/S-Cs/0°	2	0.95	0.95	0.97	0.93	3%
S-Cs/0°	8	0.93	0.93	0.98	0.90	3%
S-Co/0°	2	0.99	0.99	0.99	0.99	0%
All	20	0.92	0.90	0.99	0.74	8%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

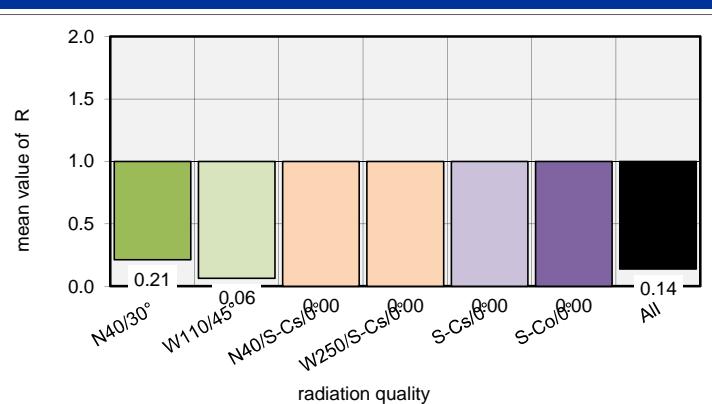
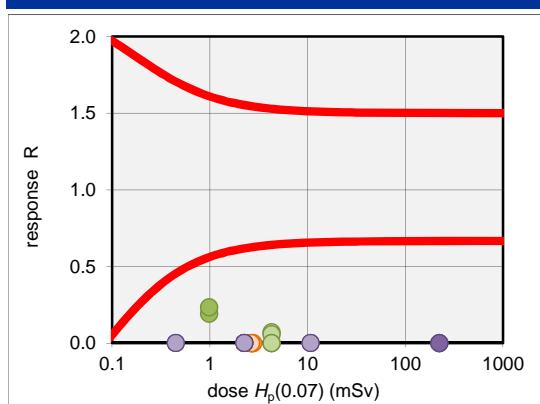
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 27: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	0.99	0.19	0.19	
		6	0.99	0.23	0.23	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.30	0.30	0.07	
		10	4.30	0.25	0.06	
		7	4.31	0.0	outlier	
		8	4.31	0.0	outlier	
x-ray and gamma	N40/S-Cs/0°	3	2.77	0.0	outlier	
		4	2.77	0.0	outlier	
	W250/S-Cs/0°	1	2.65	0.0	outlier	
		2	2.65	0.0	outlier	
gamma	S-Cs/0°	17	0.45	0.0	outlier	
		18	0.45	0.0	outlier	
		13	2.25	0.0	outlier	
		14	2.25	0.0	outlier	
		15	2.25	0.0	outlier	
		16	2.25	0.0	outlier	
		21	10.80	0.0	outlier	
		22	10.80	0.0	outlier	
	S-Co/0°	19	225.00	0.00	outlier	
		20	225.00	0.00	outlier	
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
	WIR	11				
	WIR	12				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.21	0.21	0.23	0.19	13%
W110/45°	2	0.06	0.06	0.07	0.06	13%
N40/S-Cs/0°	0	-	-	-	-	-
W250/S-Cs/0°	0	-	-	-	-	-
S-Cs/0°	0	-	-	-	-	-
S-Co/0°	0	-	-	-	-	-
All	4	0.13	0.14	0.23	0.06	63%

outliers: 20 of 20

Fraction of outliers: 100%



Results: IC2010

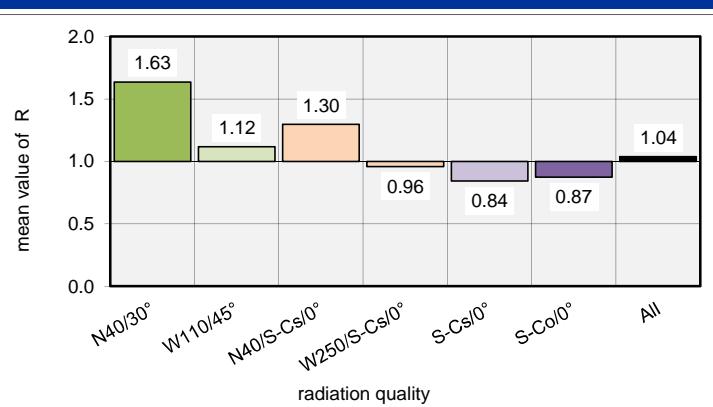
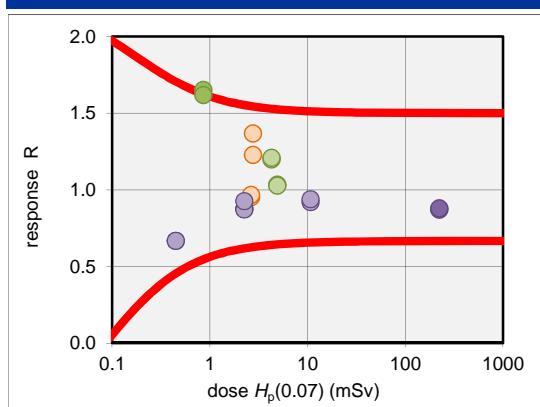
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 28: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality	dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)		
x-ray	N40/30°	7 8	0.86 0.86	1.42 1.39	1.65 1.62	
	W110/45°/x W110/-45°/x	9 10	4.30 4.30	5.15 5.19	1.20 1.21	
	W110/45°/y W110/-45°/y	5 6	4.94 4.94	5.10 5.07	1.03 1.03	
	N40/S-Cs/0°	3 4	2.78 2.78	3.80 3.41	1.37 1.23	
	W250/S-Cs/0°	1	2.65	2.52	0.95	
		2	2.65	2.56	0.97	
gamma	S-Cs/0°	17 18	0.45 0.45	0.30 0.30	0.67 0.67	
		13 14 15 16	2.25 2.25 2.25 2.25	1.97 1.97 1.96 2.08	0.88 0.88 0.87 0.92	
		11 12	10.80 10.80	9.93 10.13	0.92 0.94	
		19 20	225.00 225.00	195.66 197.61	0.87 0.88	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	
N40/30°	2	1.63	1.63	1.65	1.62	2%
W110/45°	4	1.12	1.12	1.21	1.03	9%
N40/S-Cs/0°	2	1.30	1.30	1.37	1.23	8%
W250/S-Cs/0°	2	0.96	0.96	0.97	0.95	1%
S-Cs/0°	8	0.88	0.84	0.94	0.67	13%
S-Co/0°	2	0.87	0.87	0.88	0.87	1%
All	20	0.94	1.04	1.65	0.67	26%

outliers: 1 of 20

Fraction of outliers: 5%



Results: IC2010

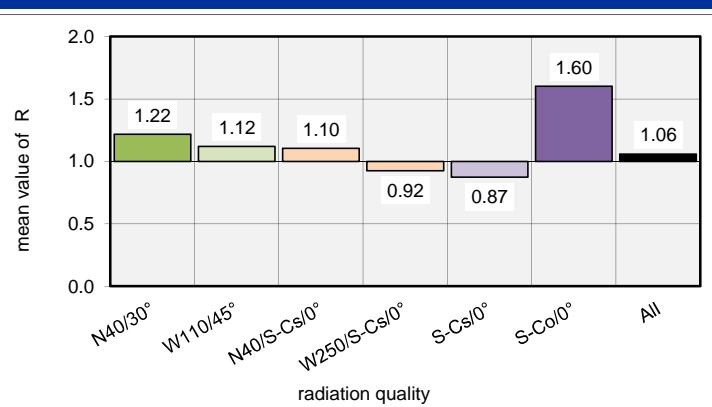
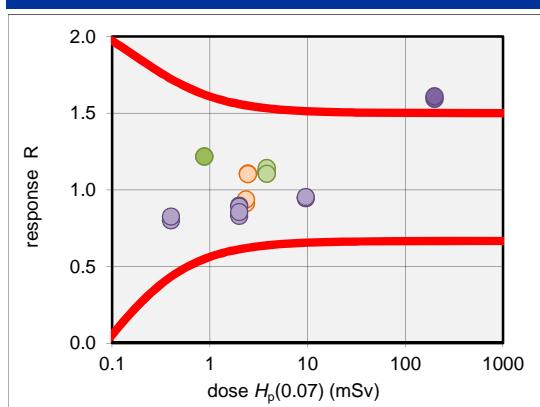
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 29: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	0.88	1.07	1.22	
		6	0.88	1.07	1.22	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	3.82	4.25	1.11	
		10	3.82	4.27	1.12	
		7	3.83	4.37	1.14	
		8	3.83	4.23	1.10	
x-ray and gamma	N40/S-Cs/0°	3	2.47	2.73	1.11	
		4	2.47	2.72	1.10	
	W250/S-Cs/0°	1	2.36	2.15	0.91	
		2	2.36	2.21	0.94	
gamma	S-Cs/0°	21	0.40	0.32	0.80	
		22	0.40	0.33	0.83	
		13	2.00	1.79	0.90	
		14	2.00	1.78	0.89	
		15	2.00	1.66	0.83	
		16	2.00	1.71	0.86	
		11	9.60	9.06	0.94	
		12	9.60	9.15	0.95	
	S-Co/0°	19	200.00	318.38	1.59	
		20	200.00	321.89	1.61	
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			
		WIR	17			
		WIR	18			
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.22	1.22	1.22	1.22	0%
W110/45°	4	1.12	1.12	1.14	1.10	1%
N40/S-Cs/0°	2	1.10	1.10	1.11	1.10	0%
W250/S-Cs/0°	2	0.92	0.92	0.94	0.91	2%
S-Cs/0°	8	0.87	0.87	0.95	0.80	6%
S-Co/0°	2	1.60	1.60	1.61	1.59	1%
All	20	1.03	1.06	1.61	0.80	22%

outliers: 2 of 20

Fraction of outliers: 10%



Results: IC2010

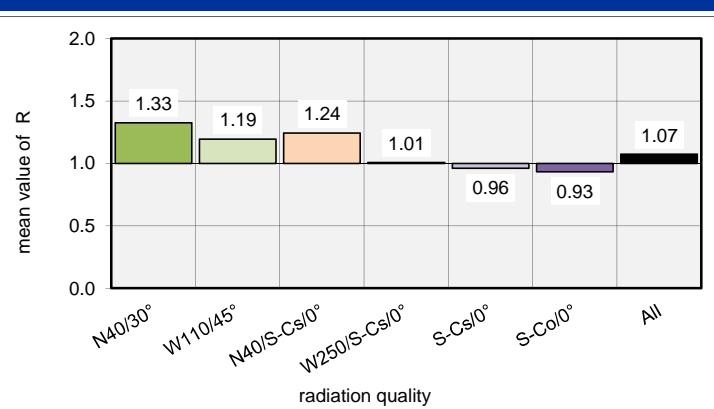
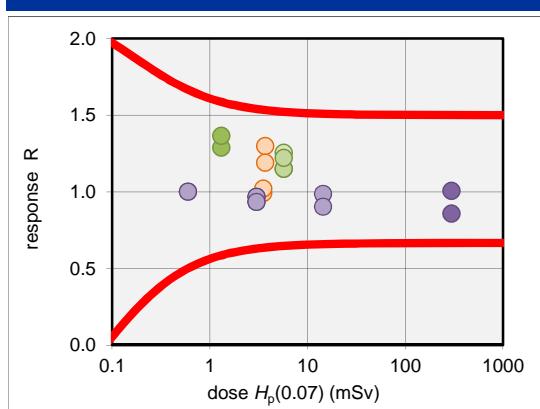
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 30: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.32	1.7	1.29	
		6	1.32	1.8	1.36	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.74	7.2	1.25	
		10	5.74	6.6	1.15	
		7	5.74	6.6	1.15	
		8	5.74	7.0	1.22	
x-ray and gamma	N40/S-Cs/0°	3	3.70	4.8	1.30	
		4	3.70	4.4	1.19	
	W250/S-Cs/0°	1	3.53	3.5	0.99	
		2	3.53	3.6	1.02	
gamma	S-Cs/0°	17	0.60	0.6	1.00	
		18	0.60	0.6	1.00	
		13	3.00	2.9	0.97	
		14	3.00	2.8	0.93	
		15	3.00	2.9	0.97	
		16	3.00	2.8	0.93	
		11	14.40	14.2	0.99	
		12	14.40	13.0	0.90	
	S-Co/0°	19	300.00	301.6	1.01	
		20	300.00	257.4	0.86	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.33	1.33	1.36	1.29	4%
W110/45°	4	1.18	1.19	1.25	1.15	4%
N40/S-Cs/0°	2	1.24	1.24	1.30	1.19	6%
W250/S-Cs/0°	2	1.01	1.01	1.02	0.99	2%
S-Cs/0°	8	0.97	0.96	1.00	0.90	4%
S-Co/0°	2	0.93	0.93	1.01	0.86	11%
All	20	1.00	1.07	1.36	0.86	14%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

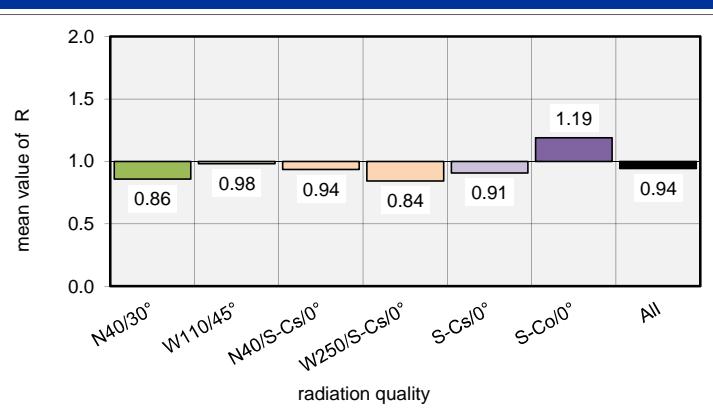
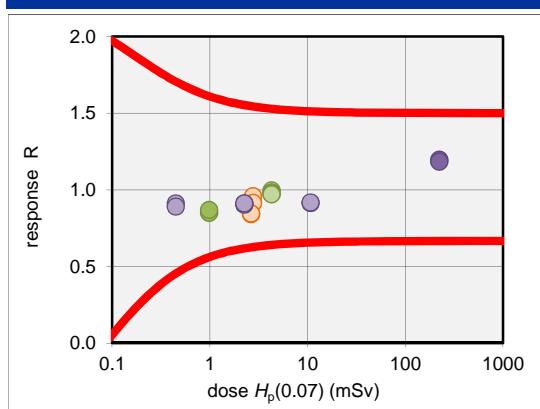
Reporting number 31: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)
x-ray	N40/30°	5	0.99	0.84	0.85
		6	0.99	0.86	0.87
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.31	4.29	1.00
		10	4.31	4.23	0.98
		7	4.31	4.21	0.98
		8	4.31	4.18	0.97
x-ray and gamma	N40/S-Cs/0°	3	2.78	2.66	0.96
		4	2.78	2.54	0.91
	W250/S-Cs/0°	1	2.65	2.23	0.84
		2	2.65	2.24	0.85
gamma	S-Cs/0°	17	0.45	0.41	0.91
		18	0.45	0.40	0.89
		13	2.25	2.04	0.91
		14	2.25	2.03	0.90
		15	2.25	2.05	0.91
		16	2.25	2.05	0.91
		11	10.80	9.85	0.91
		12	10.80	9.90	0.92
	S-Co/0°	19	225.00	268.81	1.19
		20	225.00	266.07	1.18
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.86	0.86	0.87	0.85	2%
W110/45°	4	0.98	0.98	1.00	0.97	1%
N40/S-Cs/0°	2	0.94	0.94	0.96	0.91	3%
W250/S-Cs/0°	2	0.84	0.84	0.85	0.84	0%
S-Cs/0°	8	0.91	0.91	0.92	0.89	1%
S-Co/0°	2	1.19	1.19	1.19	1.18	1%
All	20	0.91	0.94	1.19	0.84	10%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

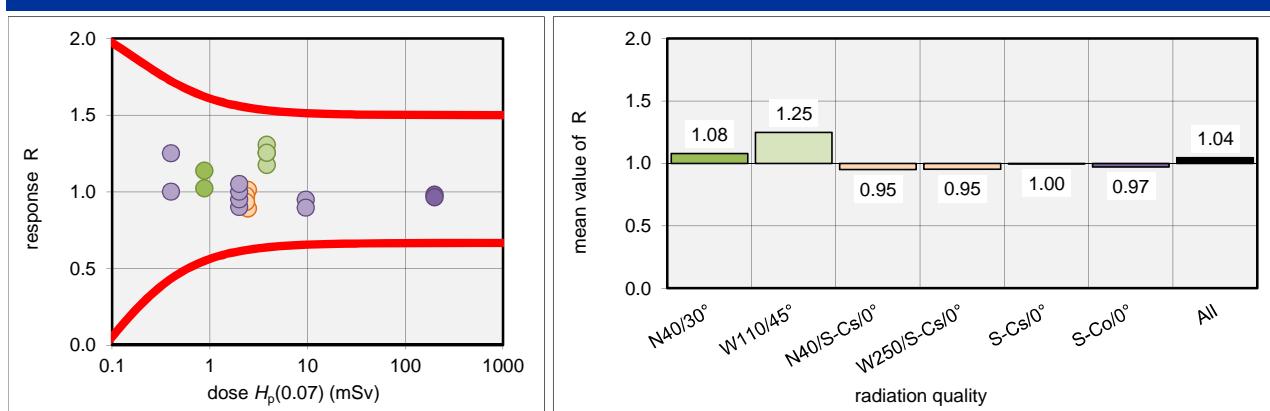
Reporting number 32: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)
x-ray	N40/30°	5	0.88	0.9	1.02
		6	0.88	1.0	1.14
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	3.83	4.8	1.25
		10	3.83	5.0	1.31
		7	3.83	4.5	1.17
		8	3.83	4.8	1.25
x-ray and gamma	N40/S-Cs/0°	3	2.47	2.2	0.89
		4	2.47	2.5	1.01
	W250/S-Cs/0°	1	2.36	2.3	0.97
		2	2.36	2.2	0.93
gamma	S-Cs/0°	17	0.40	0.4	1.00
		18	0.40	0.5	1.25
		13	2.00	1.8	0.90
		14	2.00	1.9	0.95
		15	2.00	2.0	1.00
		16	2.00	2.1	1.05
		11	9.60	9.1	0.95
		12	9.60	8.6	0.90
	S-Co/0°	19	200.00	195.9	0.98
		20	200.00	192.9	0.96
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.08	1.08	1.14	1.02	7%
W110/45°	4	1.25	1.25	1.31	1.17	4%
N40/S-Cs/0°	2	0.95	0.95	1.01	0.89	9%
W250/S-Cs/0°	2	0.95	0.95	0.97	0.93	3%
S-Cs/0°	8	0.98	1.00	1.25	0.90	11%
S-Co/0°	2	0.97	0.97	0.98	0.96	1%
All	20	1.00	1.04	1.31	0.89	13%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

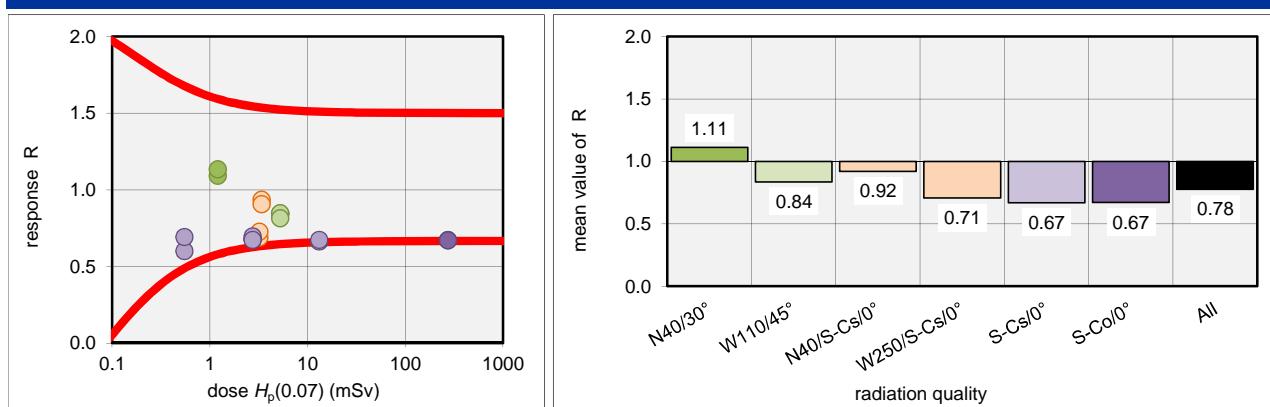
Reporting number 33: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)
x-ray	N40/30°	5	1.21	1.32	1.09
		6	1.21	1.37	1.13
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.26	4.43	0.84
		10	5.26	4.43	0.84
		7	5.26	4.45	0.85
		8	5.26	4.28	0.81
x-ray and gamma	N40/S-Cs/0°	3	3.40	3.18	0.94
		4	3.40	3.08	0.91
	W250/S-Cs/0°	1	3.24	2.23	0.69
		2	3.24	2.35	0.73
gamma	S-Cs/0°	17	0.55	0.33	0.60
		18	0.55	0.38	0.69
		13	2.75	1.87	0.68
		14	2.75	1.85	0.67
		15	2.75	1.91	0.69
		16	2.75	1.85	0.67
		11	13.20	8.73	0.66
		12	13.20	8.89	0.67
	S-Co/0°	19	275.00	184.61	0.67
		20	275.00	184.04	0.67
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.11	1.11	1.13	1.09	3%
W110/45°	4	0.84	0.84	0.85	0.81	2%
N40/S-Cs/0°	2	0.92	0.92	0.94	0.91	2%
W250/S-Cs/0°	2	0.71	0.71	0.73	0.69	4%
S-Cs/0°	8	0.67	0.67	0.69	0.60	4%
S-Co/0°	2	0.67	0.67	0.67	0.67	0%
All	20	0.69	0.78	1.13	0.60	19%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

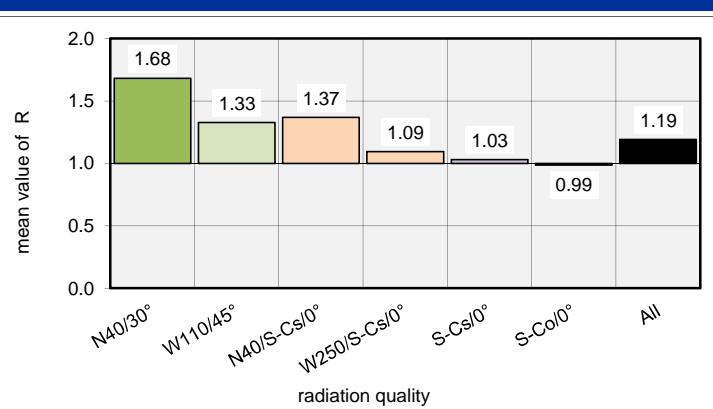
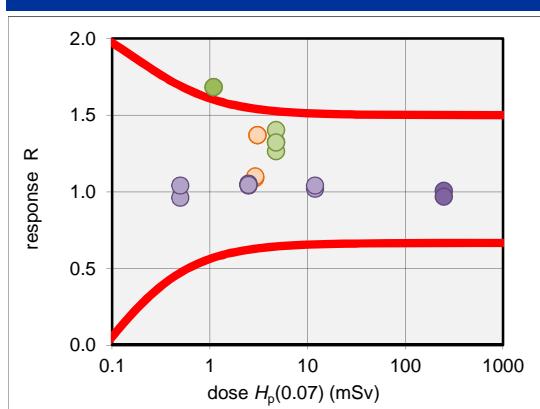
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 35: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality	dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)		
x-ray	N40/30°	5 6	1.10 1.10	1.85 1.85	1.68 1.68	
	W110/45°/x W110/-45°/x	9 10	4.78 4.78	6.33 6.70	1.32 1.40	
	W110/45°/y W110/-45°/y	7 8	4.78 4.78	6.04 6.31	1.26 1.32	
	N40/S-Cs/0°	3 4	3.09 3.09	4.23 4.23	1.37 1.37	
	W250/S-Cs/0°	1	2.94	3.20	1.09	
		2	2.94	3.23	1.10	
gamma	S-Cs/0°	17 18	0.50 0.50	0.48 0.52	0.96 1.04	
		13 14 15 16	2.50 2.50 2.50 2.50	2.60 2.62 2.63 2.61	1.04 1.05 1.05 1.04	
		11 12	12.00 12.00	12.23 12.47	1.02 1.04	
		19 20	250.00 250.00	251.25 241.94	1.01 0.97	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	
N40/30°	2	1.68	1.68	1.68	1.68	0%
W110/45°	4	1.32	1.33	1.40	1.26	4%
N40/S-Cs/0°	2	1.37	1.37	1.37	1.37	0%
W250/S-Cs/0°	2	1.09	1.09	1.10	1.09	1%
S-Cs/0°	8	1.04	1.03	1.05	0.96	3%
S-Co/0°	2	0.99	0.99	1.01	0.97	3%
All	20	1.07	1.19	1.68	0.96	19%

outliers: 2 of 20

Fraction of outliers: 10%

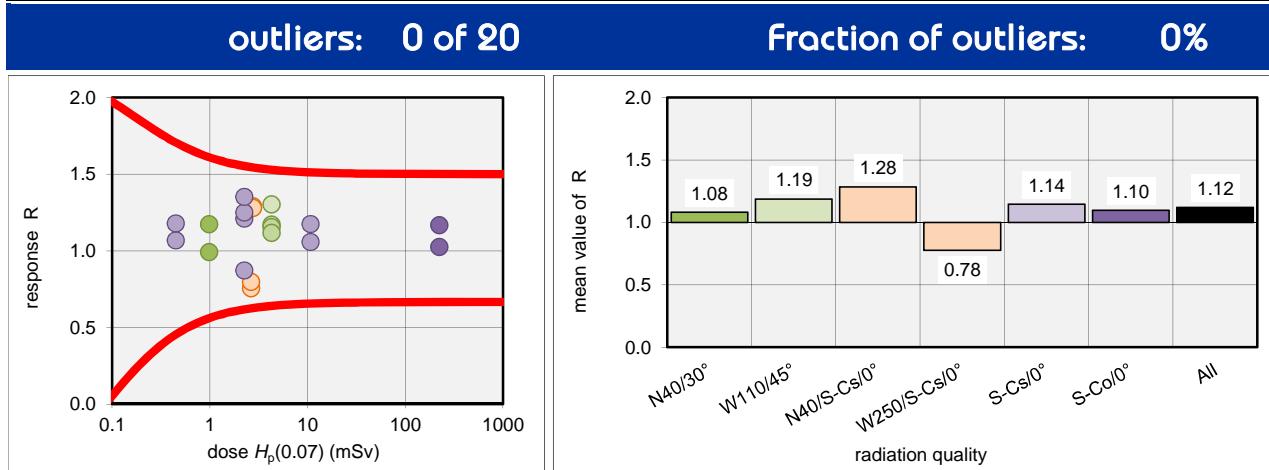


Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

Reporting number 36: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality	dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)	
x-ray	N40/30°	5 6	0.99 0.99	1.160 0.980	1.17 0.99
	W110/45°/x W110/-45°/x	9 10	4.30 4.30	5.600 5.030	1.30 1.17
	W110/45°/y W110/-45°/y	7 8	4.30 4.30	4.960 4.800	1.15 1.12
	N40/S-Cs/0°	3 4	2.77 2.77	3.570 3.540	1.29 1.28
	W250/S-Cs/0°	1 2	2.65 2.65	2.000 2.110	0.75 0.80
gamma	S-Cs/0°	17 18	0.45 0.45	0.480 0.530	1.07 1.18
		13 14 15 16	2.25 2.25 2.25 2.25	2.720 2.810 3.040 1.960	1.21 1.25 1.35 0.87
		11 12	10.80 10.80	11.420 12.680	1.06 1.17
		19 20	225.00 225.00	262.490 230.600	1.17 1.02
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)
N40/30°	2	1.08	1.08	1.17	0.99
W110/45°	4	1.16	1.19	1.30	1.12
N40/S-Cs/0°	2	1.28	1.28	1.29	1.28
W250/S-Cs/0°	2	0.78	0.78	0.80	0.75
S-Cs/0°	8	1.18	1.14	1.35	0.87
S-Co/0°	2	1.10	1.10	1.17	1.02
All	20	1.17	1.12	1.35	0.75
outliers: 0 of 20		Fraction of outliers: 0%			



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

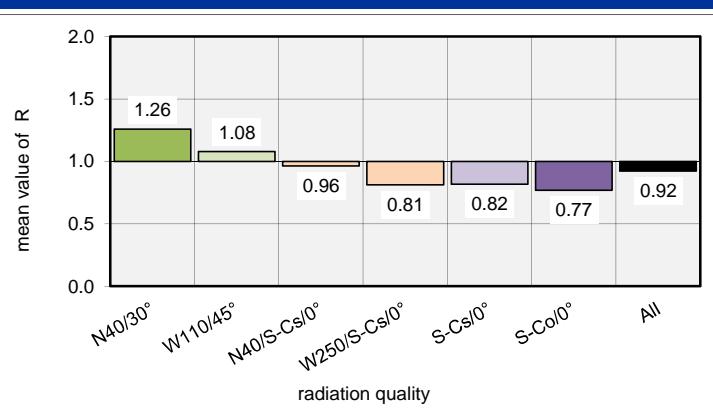
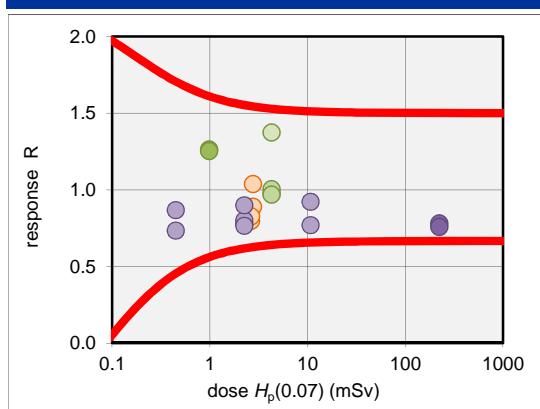
Reporting number 37: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)
x-ray	N40/30°	5	0.99	1.25	1.26
		6	0.99	1.24	1.25
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.30	5.90	1.37
		10	4.30	4.20	0.98
		7	4.30	4.31	1.00
		8	4.30	4.16	0.97
x-ray and gamma	N40/S-Cs/0°	3	2.77	2.46	0.89
		4	2.77	2.87	1.04
	W250/S-Cs/0°	1	2.65	2.11	0.80
		2	2.65	2.19	0.83
gamma	S-Cs/0°	17	0.45	0.33	0.73
		18	0.45	0.39	0.87
		13	2.25	1.75	0.78
		14	2.25	1.80	0.80
		15	2.25	1.72	0.76
		16	2.25	2.02	0.90
		11	10.80	8.31	0.77
		12	10.80	9.94	0.92
	S-Co/0°	19	225.00	175.30	0.78
		20	225.00	170.10	0.76
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.26	1.26	1.26	1.25	1%
W110/45°	4	0.99	1.08	1.37	0.97	18%
N40/S-Cs/0°	2	0.96	0.96	1.04	0.89	11%
W250/S-Cs/0°	2	0.81	0.81	0.83	0.80	3%
S-Cs/0°	8	0.79	0.82	0.92	0.73	8%
S-Co/0°	2	0.77	0.77	0.78	0.76	2%
All	20	0.88	0.92	1.37	0.73	20%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

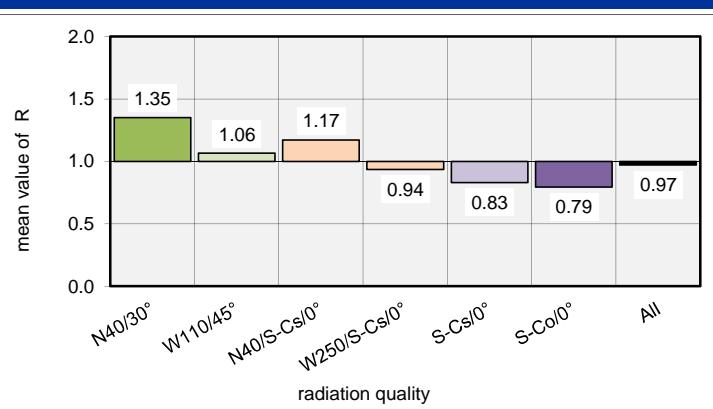
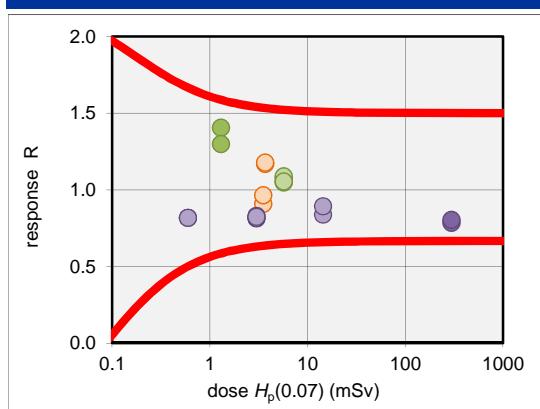
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 38: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.31	1.84	1.40	
		6	1.31	1.70	1.30	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.74	6.01	1.05	
		10	5.74	6.15	1.07	
		7	5.74	6.24	1.09	
		8	5.74	6.05	1.05	
x-ray and gamma	N40/S-Cs/0°	3	3.70	4.32	1.17	
		4	3.70	4.35	1.18	
	W250/S-Cs/0°	1	3.54	3.21	0.91	
		2	3.54	3.41	0.96	
gamma	S-Cs/0°	17	0.60	0.49	0.82	
		18	0.60	0.49	0.82	
		13	3.00	2.44	0.81	
		14	3.00	2.45	0.82	
		15	3.00	2.49	0.83	
		16	3.00	2.47	0.82	
		11	14.40	12.07	0.84	
		12	14.40	12.83	0.89	
	S-Co/0°	19	300.00	235.45	0.78	
		20	300.00	240.87	0.80	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.35	1.35	1.40	1.30	6%
W110/45°	4	1.06	1.06	1.09	1.05	2%
N40/S-Cs/0°	2	1.17	1.17	1.18	1.17	0%
W250/S-Cs/0°	2	0.94	0.94	0.96	0.91	4%
S-Cs/0°	8	0.82	0.83	0.89	0.81	3%
S-Co/0°	2	0.79	0.79	0.80	0.78	2%
All	20	0.90	0.97	1.40	0.78	19%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

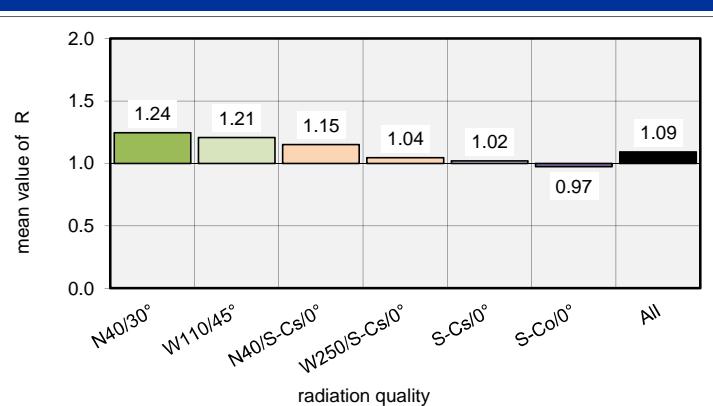
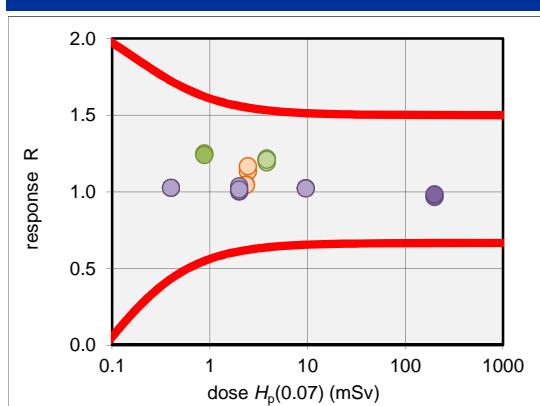
Reporting number 39: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	0.88	1.10	1.25	
		6	0.88	1.09	1.24	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	3.83	4.65	1.21	
		10	3.83	4.66	1.22	
		7	3.83	4.56	1.19	
		8	3.83	4.63	1.21	
x-ray and gamma	N40/S-Cs/0°	3	2.47	2.80	1.13	
		4	2.47	2.88	1.17	
	W250/S-Cs/0°	1	2.36	2.47	1.05	
		2	2.36	2.46	1.04	
gamma	S-Cs/0°	17	0.40	0.41	1.03	
		18	0.40	0.41	1.03	
		13	2.00	2.07	1.04	
		14	2.00	2.00	1.00	
		15	2.00	2.01	1.01	
		16	2.00	2.03	1.02	
		11	9.60	9.83	1.02	
		12	9.60	9.81	1.02	
	S-Co/0°	19	200.00	193.10	0.97	
		20	200.00	196.40	0.98	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.24	1.24	1.25	1.24	1%
W110/45°	4	1.21	1.21	1.22	1.19	1%
N40/S-Cs/0°	2	1.15	1.15	1.17	1.13	2%
W250/S-Cs/0°	2	1.04	1.04	1.05	1.04	0%
S-Cs/0°	8	1.02	1.02	1.04	1.00	1%
S-Co/0°	2	0.97	0.97	0.98	0.97	1%
All	20	1.04	1.09	1.25	0.97	9%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

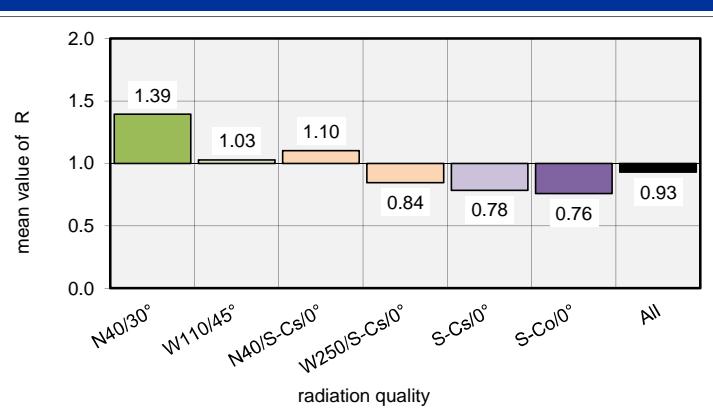
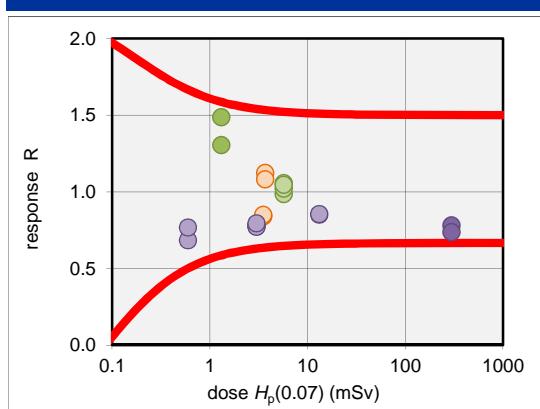
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 41: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.32	1.96	1.48	
		6	1.32	1.72	1.30	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.74	6.06	1.06	
		10	5.74	5.65	0.98	
		7	5.74	5.85	1.02	
		8	5.74	6.00	1.05	
x-ray and gamma	N40/S-Cs/0°	3	3.70	4.15	1.12	
		4	3.70	4.00	1.08	
	W250/S-Cs/0°	1	3.53	2.96	0.84	
		2	3.53	3.00	0.85	
gamma	S-Cs/0°	17	0.60	0.41	0.68	
		18	0.60	0.46	0.77	
		13	3.00	2.32	0.77	
		14	3.00	2.35	0.78	
		15	3.00	2.31	0.77	
		16	3.00	2.38	0.79	
		11	13.20	11.23	0.85	
		12	13.20	11.28	0.85	
	S-Co/0°	19	300.00	233.78	0.78	
		20	300.00	220.65	0.74	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.39	1.39	1.48	1.30	9%
W110/45°	4	1.03	1.03	1.06	0.98	3%
N40/S-Cs/0°	2	1.10	1.10	1.12	1.08	3%
W250/S-Cs/0°	2	0.84	0.84	0.85	0.84	1%
S-Cs/0°	8	0.78	0.78	0.85	0.68	7%
S-Co/0°	2	0.76	0.76	0.78	0.74	4%
All	20	0.85	0.93	1.48	0.68	22%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

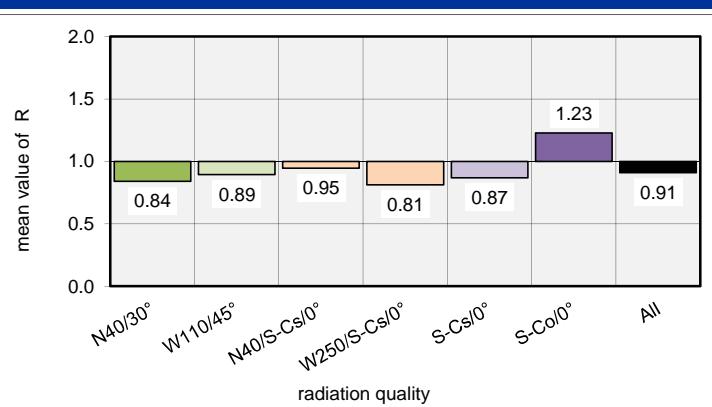
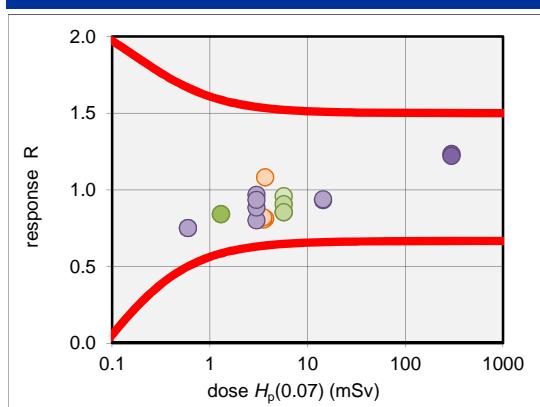
Reporting number 42: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)
x-ray	N40/30°	5	1.31	1.10	0.84
		6	1.31	1.10	0.84
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.74	5.50	0.96
		10	5.74	4.90	0.85
		7	5.74	5.20	0.91
		8	5.74	4.90	0.85
x-ray and gamma	N40/S-Cs/0°	3	3.70	3.00	0.81
		4	3.70	4.00	1.08
	W250/S-Cs/0°	1	3.54	2.85	0.81
		2	3.54	2.90	0.82
gamma	S-Cs/0°	17	0.60	0.45	0.75
		18	0.60	0.45	0.75
		13	3.00	2.40	0.80
		14	3.00	2.65	0.88
		15	3.00	2.90	0.97
		16	3.00	2.80	0.93
		11	14.40	13.40	0.93
		12	14.40	13.50	0.94
	S-Co/0°	19	300.00	370.00	1.23
		20	300.00	366.00	1.22
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.84	0.84	0.84	0.84	0%
W110/45°	4	0.88	0.89	0.96	0.85	6%
N40/S-Cs/0°	2	0.95	0.95	1.08	0.81	20%
W250/S-Cs/0°	2	0.81	0.81	0.82	0.81	1%
S-Cs/0°	8	0.91	0.87	0.97	0.75	10%
S-Co/0°	2	1.23	1.23	1.23	1.22	1%
All	20	0.87	0.91	1.23	0.75	15%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

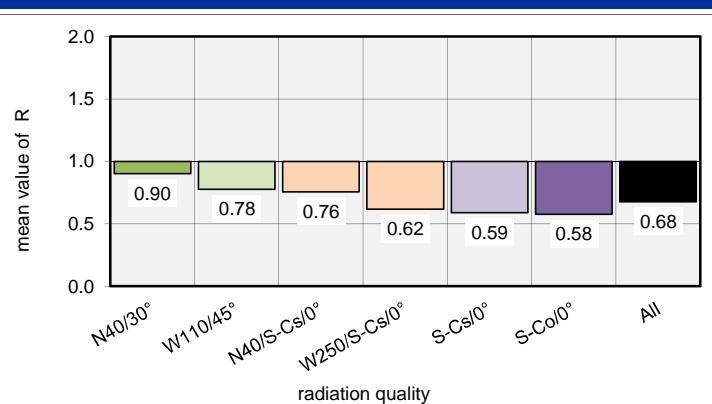
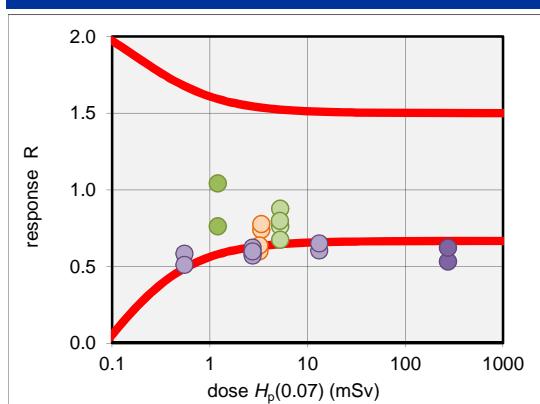
Reporting number 43: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)
x-ray	N40/30°	5	1.21	1.26	1.04
		6	1.21	0.92	0.76
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.26	4.00	0.76
		10	5.26	4.61	0.88
		7	5.25	4.18	0.80
		8	5.26	3.54	0.67
x-ray and gamma	N40/S-Cs/0°	3	3.39	2.50	0.74
		4	3.39	2.63	0.78
	W250/S-Cs/0°	1	3.24	1.94	0.60
		2	3.24	2.06	0.64
gamma	S-Cs/0°	17	0.55	0.32	0.58
		18	0.55	0.28	0.51
		13	2.75	1.61	0.59
		14	2.75	1.57	0.57
		15	2.75	1.71	0.62
		16	2.75	1.64	0.60
		11	13.20	7.97	0.60
		12	13.20	8.58	0.65
	S-Co/0°	19	275.00	146.12	0.53
		20	275.00	171.04	0.62
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.90	0.90	1.04	0.76	22%
W110/45°	4	0.78	0.78	0.88	0.67	11%
N40/S-Cs/0°	2	0.76	0.76	0.78	0.74	4%
W250/S-Cs/0°	2	0.62	0.62	0.64	0.60	4%
S-Cs/0°	8	0.59	0.59	0.65	0.51	7%
S-Co/0°	2	0.58	0.58	0.62	0.53	11%
All	20	0.63	0.68	1.04	0.51	19%

outliers: 9 of 20

Fraction of outliers: 45%



Results: IC2010

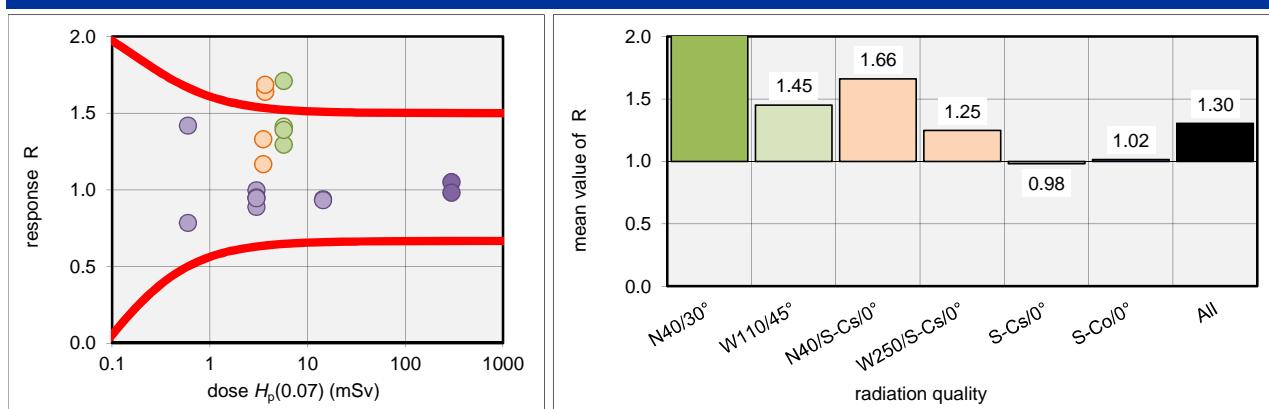
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 44: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality	dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)		
x-ray	N40/30°	5 6	1.32 1.32	2.68 3.34	2.03 2.53	
	W110/45°/x W110/-45°/x	9 10	5.74 5.74	8.10 9.81	1.41 1.71	
	W110/45°/y W110/-45°/y	7 8	5.75 5.75	7.44 7.99	1.29 1.39	
	N40/S-Cs/0°	3 4	3.70 3.70	6.06 6.23	1.64 1.68	
	W250/S-Cs/0°	1	3.53	4.12	1.17	
		2	3.53	4.69	1.33	
gamma	S-Cs/0°	17 18 13 14 15 16	0.60 0.60 3.00 3.00 3.00 3.00	0.47 0.85 2.99 2.85 2.66 2.83	0.78 1.42 1.00 0.95 0.89 0.94	
		11 12	14.40 14.40	13.50 13.40	0.94 0.93	
		19 20	300.00 300.00	315.00 294.00	1.05 0.98	
		NIR NIR NIR NIR NIR NIR	21 22 23 24 25 26			
	S-Co/0°	19 20	300.00 300.00	315.00 294.00	1.05 0.98	
		NIR NIR NIR NIR NIR NIR	21 22 23 24 25 26			
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	
N40/30°	2	2.28	2.28	2.53	2.03	16%
W110/45°	4	1.40	1.45	1.71	1.29	12%
N40/S-Cs/0°	2	1.66	1.66	1.68	1.64	2%
W250/S-Cs/0°	2	1.25	1.25	1.33	1.17	9%
S-Cs/0°	8	0.94	0.98	1.42	0.78	19%
S-Co/0°	2	1.02	1.02	1.05	0.98	5%
All	20	1.23	1.30	2.53	0.78	34%

outliers: 5 of 20

Fraction of outliers: 25%



Results: IC2010

2 points outside diagramme (> 2)

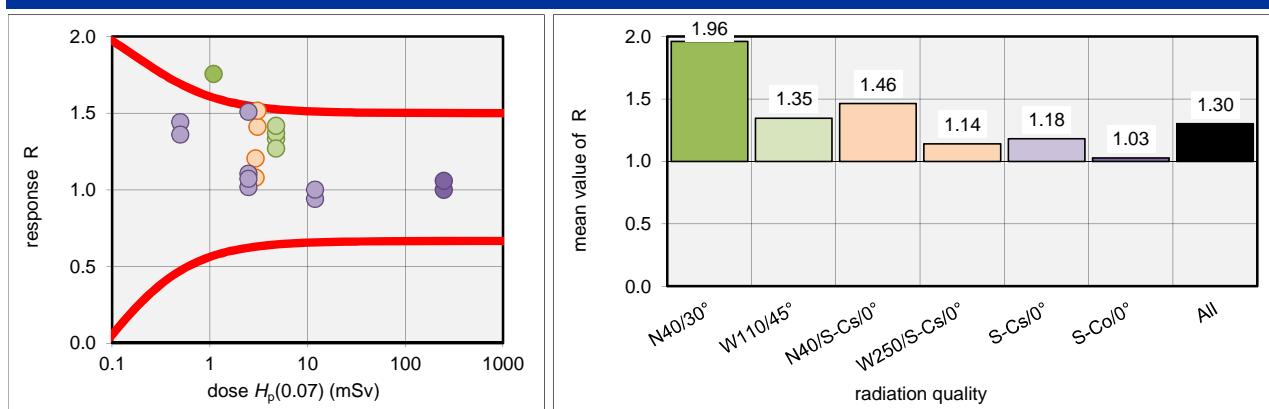
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 45: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality	dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)		
x-ray	N40/30°	5 6	1.10 1.10	2.38 1.93	2.16 1.75	
	W110/45°/x W110/-45°/x	9 10	4.78 4.78	6.37 6.54	1.33 1.37	
	W110/45°/y W110/-45°/y	7 8	4.78 4.78	6.06 6.77	1.27 1.42	
	N40/S-Cs/0°	3 4	3.09 3.09	4.36 4.68	1.41 1.51	
	W250/S-Cs/0°	1	2.95	3.18	1.08	
		2	2.95	3.55	1.20	
gamma	S-Cs/0°	17 18	0.50 0.50	0.72 0.68	1.44 1.36	
		13 14 15 16	2.50 2.50 2.50 2.50	2.76 3.77 2.54 2.68	1.10 1.51 1.02 1.07	
		11 12	12.00 12.00	11.27 12.01	0.94 1.00	
		19 20	250.00 250.00	249.60 264.60	1.00 1.06	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	
N40/30°	2	1.96	1.96	2.16	1.75	15%
W110/45°	4	1.35	1.35	1.42	1.27	5%
N40/S-Cs/0°	2	1.46	1.46	1.51	1.41	5%
W250/S-Cs/0°	2	1.14	1.14	1.20	1.08	8%
S-Cs/0°	8	1.09	1.18	1.51	0.94	19%
S-Co/0°	2	1.03	1.03	1.06	1.00	4%
All	20	1.30	1.30	2.16	0.94	23%

outliers: 2 of 20

Fraction of outliers: 10%



Results: IC2010

[1 point outside diagramme \(> 2\)](#)

trumpet parameter: 1.5 / 0.085 mSv

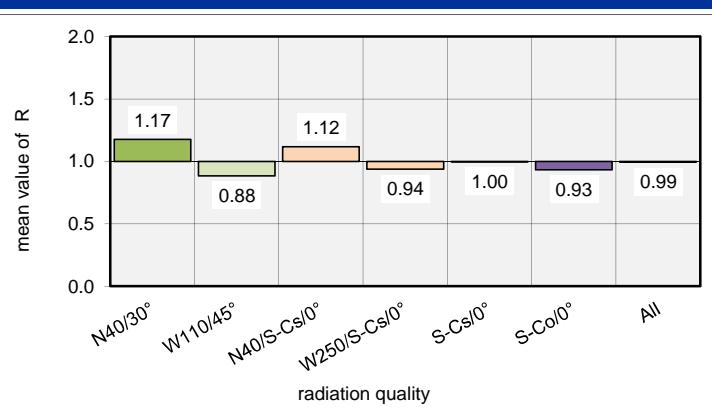
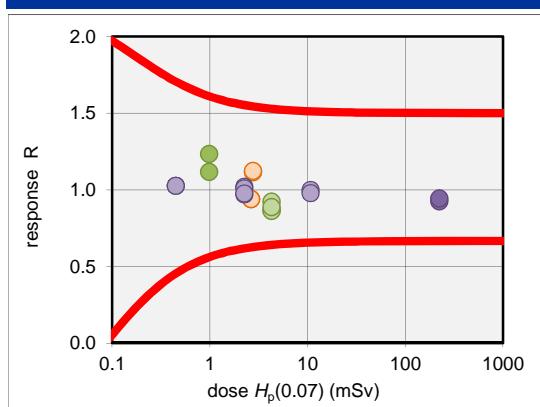
Reporting number 46: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality	dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)	
x-ray	N40/30°	5 6	0.99 0.99	1.105 1.221	1.12 1.23
	W110/45°/x W110/-45°/x	9 10	4.30 4.30	3.734 3.706	0.87 0.86
	W110/45°/y W110/-45°/y	7 8	4.32 4.32	3.985 3.825	0.92 0.89
	N40/S-Cs/0°	3 4	2.78 2.78	3.098 3.118	1.11 1.12
	W250/S-Cs/0°	1	2.65	2.488	0.94
		2	2.65	2.486	0.94
gamma	S-Cs/0°	17 18	0.45 0.45	0.461 0.461	1.02 1.02
		13 14 15 16	2.25 2.25 2.25 2.25	2.179 2.293 2.268 2.193	0.97 1.02 1.01 0.97
		11 12	10.80 10.80	10.772 10.558	1.00 0.98
		19 20	225.00 225.00	207.685 212.171	0.92 0.94
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.17	1.17	1.23	1.12	7%
W110/45°	4	0.88	0.88	0.92	0.86	3%
N40/S-Cs/0°	2	1.12	1.12	1.12	1.11	0%
W250/S-Cs/0°	2	0.94	0.94	0.94	0.94	0%
S-Cs/0°	8	1.00	1.00	1.02	0.97	2%
S-Co/0°	2	0.93	0.93	0.94	0.92	2%
All	20	0.98	0.99	1.23	0.86	10%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

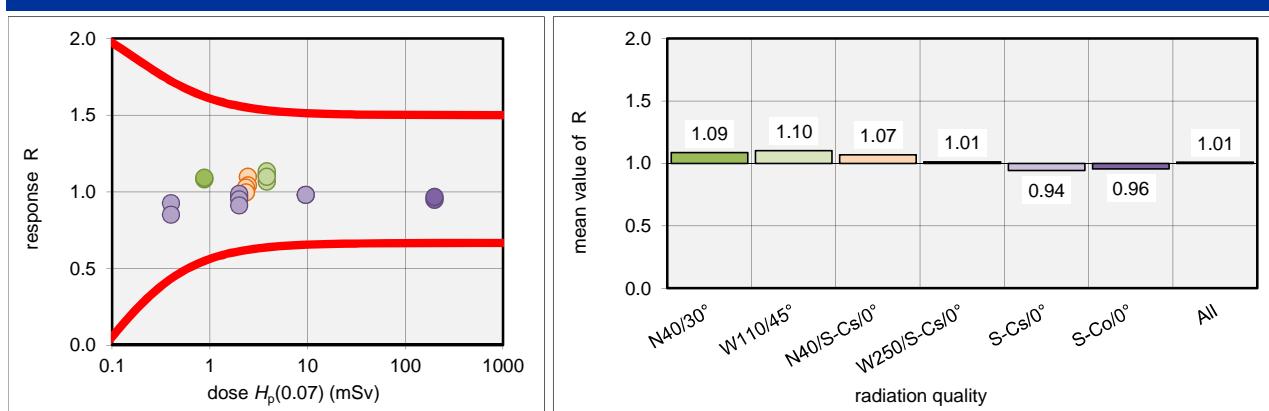
Reporting number 47: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	0.88	0.95	1.08	
		6	0.88	0.96	1.09	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	3.83	4.25	1.11	
		10	3.83	4.08	1.07	
		7	3.83	4.34	1.13	
		8	3.83	4.20	1.10	
x-ray and gamma	N40/S-Cs/0°	3	2.47	2.71	1.10	
		4	2.47	2.57	1.04	
	W250/S-Cs/0°	1	2.36	2.42	1.03	
		2	2.36	2.35	1.00	
gamma	S-Cs/0°	17	0.40	0.37	0.93	
		18	0.40	0.34	0.85	
		13	2.00	1.93	0.97	
		14	2.00	1.97	0.99	
		15	2.00	1.90	0.95	
		16	2.00	1.82	0.91	
		11	9.60	9.41	0.98	
		12	9.60	9.41	0.98	
	S-Co/0°	19	200.00	189.29	0.95	
		20	200.00	192.95	0.96	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.09	1.09	1.09	1.08	1%
W110/45°	4	1.10	1.10	1.13	1.07	3%
N40/S-Cs/0°	2	1.07	1.07	1.10	1.04	4%
W250/S-Cs/0°	2	1.01	1.01	1.03	1.00	2%
S-Cs/0°	8	0.96	0.94	0.99	0.85	5%
S-Co/0°	2	0.96	0.96	0.96	0.95	1%
All	20	0.99	1.01	1.13	0.85	8%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

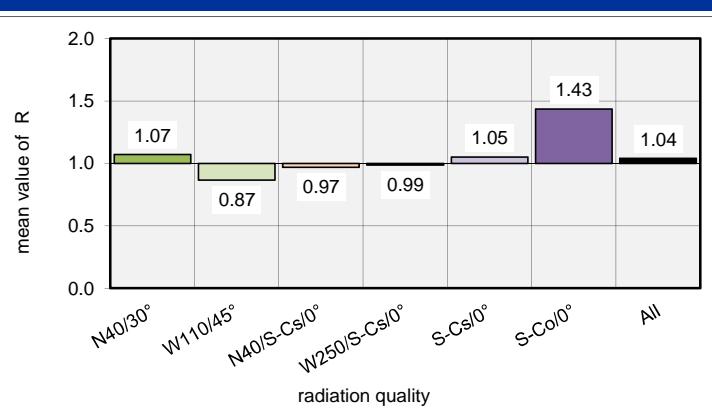
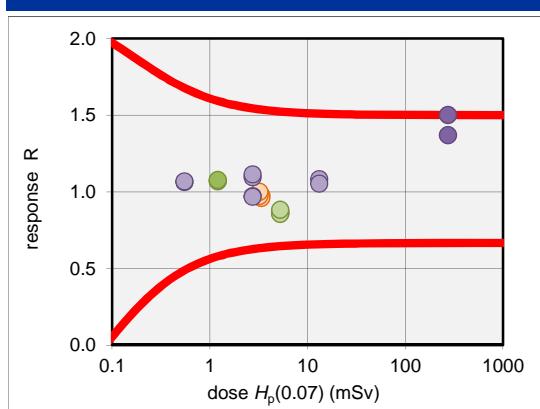
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 48: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality	dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)		
x-ray	N40/30°	5 6	1.21 1.21	1.292 1.302	1.07 1.08	OK OK
	W110/45°/x W110/-45°/x	9 10	5.26 5.26	4.542 4.546	0.86 0.86	OK OK
	W110/45°/y W110/-45°/y	7 8	5.26 5.26	4.494 4.638	0.85 0.88	OK OK
	N40/S-Cs/0°	3 4	3.39 3.39	3.309 3.252	0.98 0.96	OK OK
	W250/S-Cs/0°	1	3.24	3.148	0.97	OK
		2	3.24	3.239	1.00	OK
gamma	S-Cs/0°	17 18	0.55 0.55	0.585 0.587	1.06 1.07	OK OK
		13 14 15 16	2.75 2.75 2.75 2.75	3.009 3.060 2.672 2.657	1.09 1.11 0.97 0.97	OK OK OK OK
		11 12	13.20 13.20	14.280 13.900	1.08 1.05	OK OK
		19 20	275.00 275.00	376.500 412.400	1.37 1.50	OK OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.07	1.07	1.08	1.07	1%
W110/45°	4	0.86	0.87	0.88	0.85	1%
N40/S-Cs/0°	2	0.97	0.97	0.98	0.96	1%
W250/S-Cs/0°	2	0.99	0.99	1.00	0.97	2%
S-Cs/0°	8	1.07	1.05	1.11	0.97	5%
S-Co/0°	2	1.43	1.43	1.50	1.37	6%
All	20	1.03	1.04	1.50	0.85	15%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

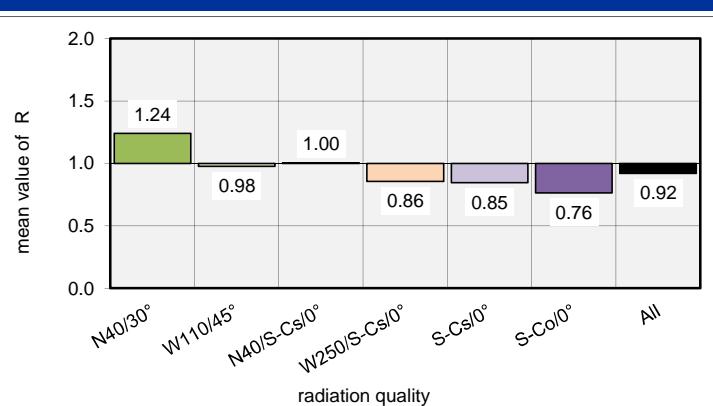
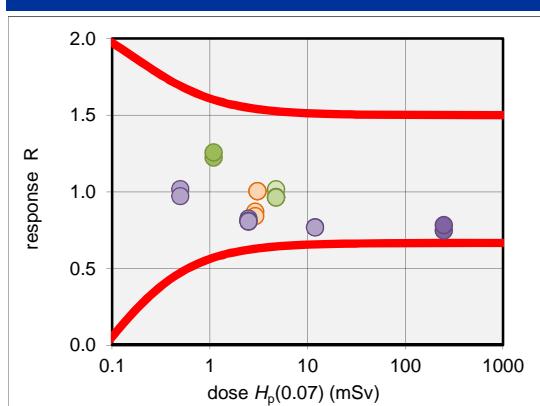
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 50: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.10	1.3443	1.22	
		6	1.10	1.3814	1.26	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.78	4.8517	1.02	
		10	4.78	4.6017	0.96	
		7	4.79	4.6225	0.97	
		8	4.79	4.6024	0.96	
	N40/S-Cs/0°	3	3.09	3.1003	1.00	
		4	3.09	3.1003	1.00	
x-ray and gamma	W250/S-Cs/0°	1	2.94	2.5576	0.87	
		2	2.94	2.4707	0.84	
	S-Cs/0°	17	0.50	0.5088	1.02	
		18	0.50	0.4859	0.97	
		13	2.50	2.0104	0.80	
		14	2.50	2.0610	0.82	
		15	2.50	2.0328	0.81	
		16	2.50	2.0137	0.81	
	S-Co/0°	11	12.00	9.2303	0.77	
		12	12.00	9.1927	0.77	
	S-Co/0°	19	250.00	186.5194	0.75	
		20	250.00	195.4227	0.78	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.24	1.24	1.26	1.22	2%
W110/45°	4	0.96	0.98	1.02	0.96	3%
N40/S-Cs/0°	2	1.00	1.00	1.00	1.00	0%
W250/S-Cs/0°	2	0.86	0.86	0.87	0.84	2%
S-Cs/0°	8	0.81	0.85	1.02	0.77	11%
S-Co/0°	2	0.76	0.76	0.78	0.75	3%
All	20	0.92	0.92	1.26	0.75	16%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

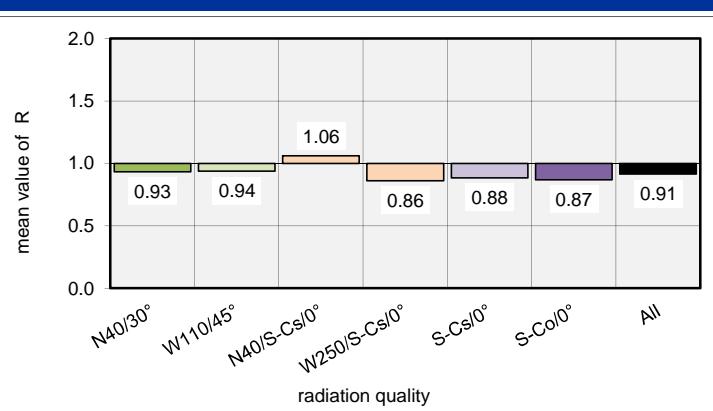
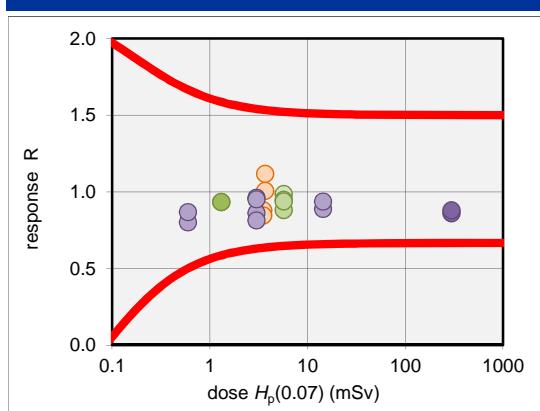
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 51: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.32	1.23	0.93	
		6	1.32	1.23	0.93	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.74	5.65	0.98	
		10	5.74	5.05	0.88	
		7	5.75	5.44	0.95	
		8	5.75	5.39	0.94	
x-ray and gamma	N40/S-Cs/0°	3	3.70	3.72	1.01	
		4	3.70	4.13	1.12	
	W250/S-Cs/0°	1	3.53	3.10	0.88	
		2	3.53	2.98	0.84	
gamma	S-Cs/0°	17	0.60	0.48	0.80	
		18	0.60	0.52	0.87	
		13	3.00	2.88	0.96	
		14	3.00	2.58	0.86	
		15	3.00	2.44	0.81	
		16	3.00	2.85	0.95	
		11	14.40	12.79	0.89	
		12	14.40	13.47	0.94	
	S-Co/0°	19	300.00	257.75	0.86	
		20	300.00	263.22	0.88	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.93	0.93	0.93	0.93	0%
W110/45°	4	0.94	0.94	0.98	0.88	5%
N40/S-Cs/0°	2	1.06	1.06	1.12	1.01	7%
W250/S-Cs/0°	2	0.86	0.86	0.88	0.84	3%
S-Cs/0°	8	0.88	0.88	0.96	0.80	7%
S-Co/0°	2	0.87	0.87	0.88	0.86	1%
All	20	0.91	0.91	1.12	0.80	8%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

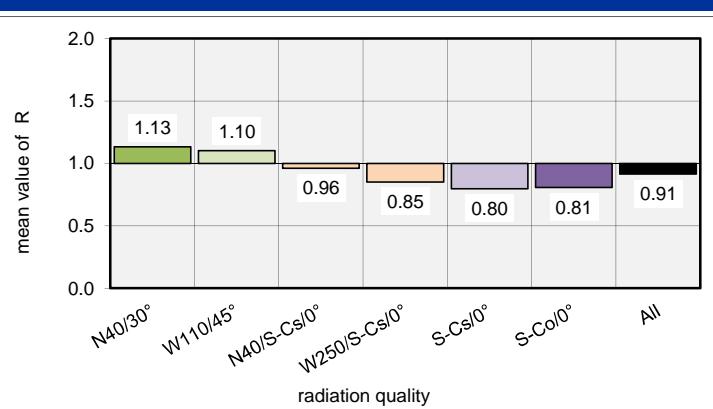
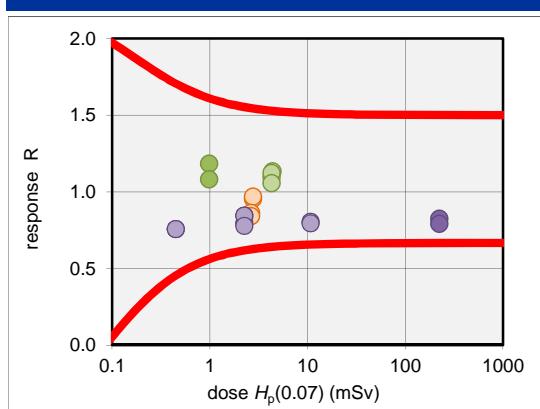
Reporting number 52: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)
x-ray	N40/30°	5	0.99	1.17	1.18
		6	0.99	1.07	1.08
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.40	4.98	1.13
		10	4.30	4.70	1.09
		7	4.31	4.84	1.12
		8	4.31	4.55	1.06
x-ray and gamma	N40/S-Cs/0°	3	2.78	2.65	0.95
		4	2.78	2.69	0.97
	W250/S-Cs/0°	1	2.65	2.28	0.86
		2	2.65	2.23	0.84
gamma	S-Cs/0°	17	0.45	0.34	0.76
		18	0.45	0.34	0.76
		13	2.25	1.90	0.84
		14	2.25	1.79	0.80
		15	2.25	1.90	0.84
		16	2.25	1.75	0.78
		21	10.80	8.68	0.80
		22	10.80	8.56	0.79
	S-Co/0°	19	225.00	185.54	0.82
		20	225.00	177.92	0.79
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			
	WIR	11			
	WIR	12			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.13	1.13	1.18	1.08	6%
W110/45°	4	1.11	1.10	1.13	1.06	3%
N40/S-Cs/0°	2	0.96	0.96	0.97	0.95	1%
W250/S-Cs/0°	2	0.85	0.85	0.86	0.84	2%
S-Cs/0°	8	0.79	0.80	0.84	0.76	4%
S-Co/0°	2	0.81	0.81	0.82	0.79	3%
All	20	0.84	0.91	1.18	0.76	16%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

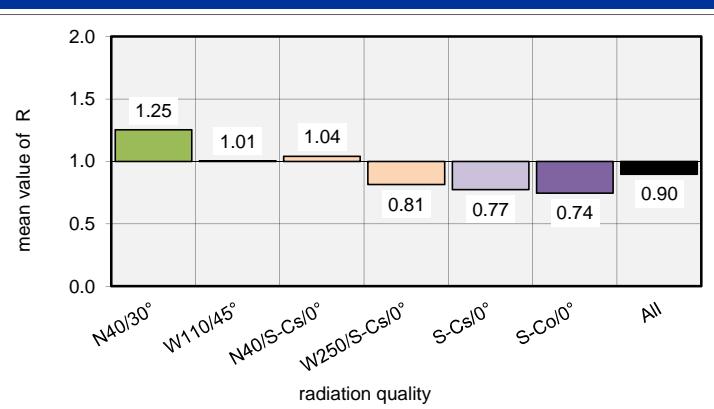
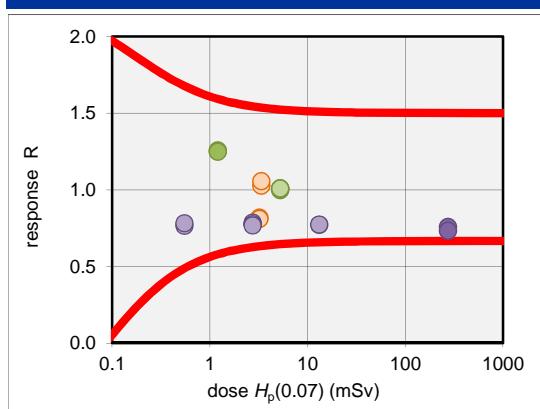
Reporting number 53: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)
x-ray	N40/30°	5	1.21	1.52	1.26
		6	1.21	1.51	1.25
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.26	5.31	1.01
		10	5.26	5.25	1.00
		7	5.26	5.29	1.01
		8	5.26	5.30	1.01
x-ray and gamma	N40/S-Cs/0°	3	3.39	3.48	1.03
		4	3.39	3.58	1.06
	W250/S-Cs/0°	1	3.24	2.65	0.82
		2	3.24	2.62	0.81
gamma	S-Cs/0°	17	0.55	0.42	0.76
		18	0.55	0.43	0.78
		13	2.75	2.13	0.77
		14	2.75	2.16	0.79
		15	2.75	2.13	0.77
		16	2.75	2.11	0.77
		11	13.20	10.18	0.77
		12	13.20	10.20	0.77
	S-Co/0°	19	275.00	208.25	0.76
		20	275.00	201.31	0.73
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.25	1.25	1.26	1.25	0%
W110/45°	4	1.01	1.01	1.01	1.00	0%
N40/S-Cs/0°	2	1.04	1.04	1.06	1.03	2%
W250/S-Cs/0°	2	0.81	0.81	0.82	0.81	1%
S-Cs/0°	8	0.77	0.77	0.79	0.76	1%
S-Co/0°	2	0.74	0.74	0.76	0.73	2%
All	20	0.80	0.90	1.26	0.73	19%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

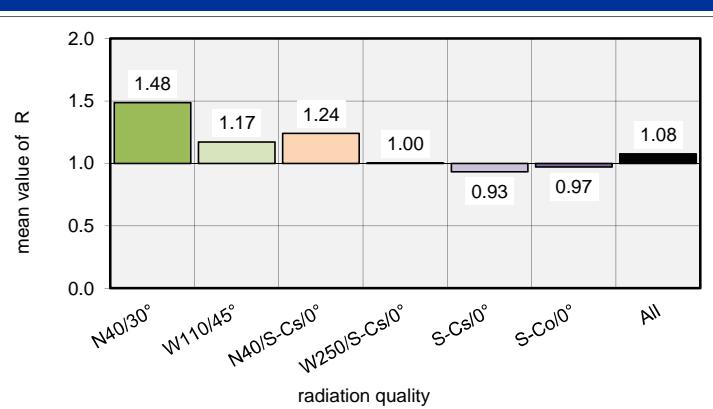
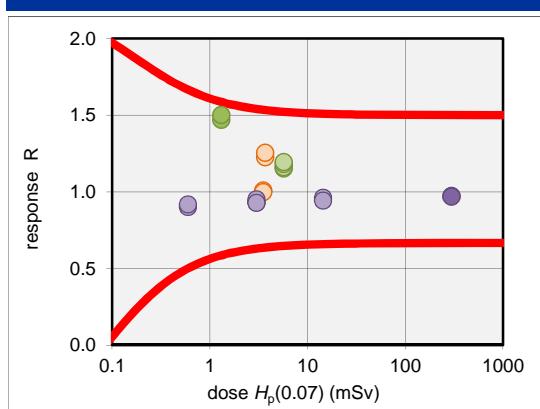
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 55: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.32	1.94	1.47	
		6	1.32	1.98	1.50	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.74	6.61	1.15	
		10	5.74	6.66	1.16	
		7	5.74	6.78	1.18	
		8	5.74	6.85	1.19	
x-ray and gamma	N40/S-Cs/0°	3	3.70	4.53	1.22	
		4	3.70	4.64	1.25	
	W250/S-Cs/0°	1	3.53	3.56	1.01	
		2	3.53	3.52	1.00	
gamma	S-Cs/0°	17	0.60	0.54	0.90	
		18	0.60	0.55	0.92	
		21	3.00	2.79	0.93	
		22	3.00	2.80	0.93	
		23	3.00	2.85	0.95	
		24	3.00	2.78	0.93	
		11	14.40	13.82	0.96	
		12	14.40	13.57	0.94	
	S-Co/0°	19	300.00	291.80	0.97	
		20	300.00	290.40	0.97	
	NIR	25				
	NIR	26				
	WIR	13				
	WIR	14				
	WIR	15				
	WIR	16				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.48	1.48	1.50	1.47	1%
W110/45°	4	1.17	1.17	1.19	1.15	2%
N40/S-Cs/0°	2	1.24	1.24	1.25	1.22	2%
W250/S-Cs/0°	2	1.00	1.00	1.01	1.00	1%
S-Cs/0°	8	0.93	0.93	0.96	0.90	2%
S-Co/0°	2	0.97	0.97	0.97	0.97	0%
All	20	0.98	1.08	1.50	0.90	17%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

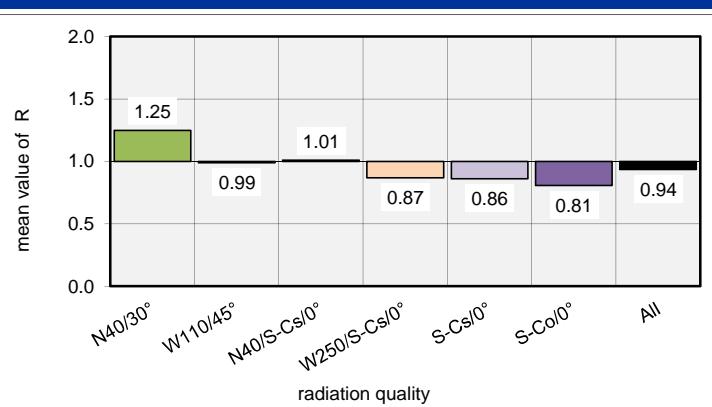
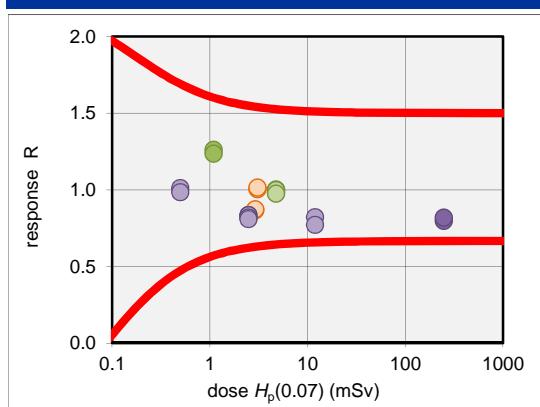
Reporting number 56: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)
x-ray	N40/30°	5	1.10	1.3865	1.26
		6	1.10	1.3578	1.23
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.78	4.7081	0.98
		10	4.78	4.7851	1.00
		7	4.78	4.7655	1.00
		8	4.78	4.6567	0.97
x-ray and gamma	N40/S-Cs/0°	3	3.09	3.0994	1.00
		4	3.09	3.1339	1.01
	W250/S-Cs/0°	1	2.94	2.5457	0.87
		2	2.94	2.5623	0.87
gamma	S-Cs/0°	17	0.50	0.5053	1.01
		18	0.50	0.4918	0.98
		13	2.50	2.0885	0.84
		14	2.50	2.0855	0.83
		15	2.50	2.0447	0.82
		16	2.50	2.0205	0.81
		11	12.00	9.8553	0.82
		12	12.00	9.2393	0.77
	S-Co/0°	19	250.00	199.1743	0.80
		20	250.00	204.1299	0.82
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.25	1.25	1.26	1.23	1%
W110/45°	4	0.99	0.99	1.00	0.97	1%
N40/S-Cs/0°	2	1.01	1.01	1.01	1.00	1%
W250/S-Cs/0°	2	0.87	0.87	0.87	0.87	0%
S-Cs/0°	8	0.83	0.86	1.01	0.77	10%
S-Co/0°	2	0.81	0.81	0.82	0.80	2%
All	20	0.92	0.94	1.26	0.77	15%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

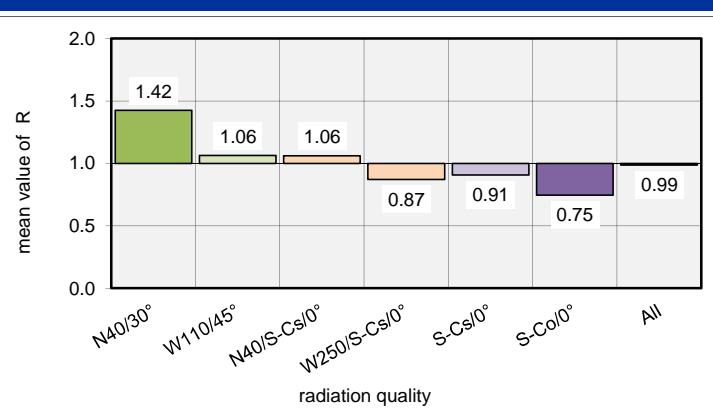
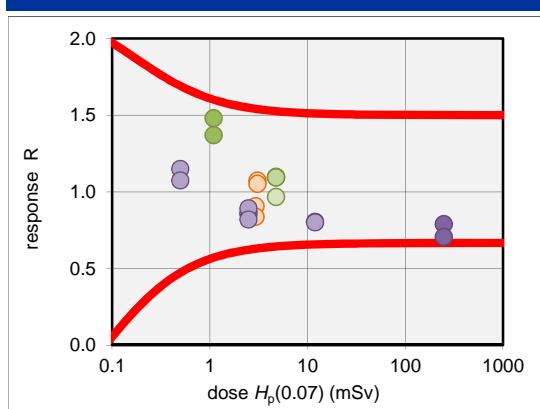
Reporting number 57: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)
x-ray	N40/30°	5	1.10	1.628	1.48
		6	1.10	1.506	1.37
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.78	4.618	0.97
		10	4.78	5.225	1.09
		7	4.78	5.240	1.10
		8	4.78	5.229	1.09
	N40/S-Cs/0°	3	3.09	3.315	1.07
		4	3.09	3.246	1.05
x-ray and gamma	W250/S-Cs/0°	1	2.95	2.670	0.91
		2	2.95	2.468	0.84
	S-Cs/0°	17	0.50	0.574	1.15
		18	0.50	0.537	1.07
		13	2.50	2.129	0.85
		14	2.50	2.158	0.86
		15	2.50	2.230	0.89
		16	2.50	2.046	0.82
	S-Co/0°	11	12.00	9.641	0.80
		12	12.00	9.593	0.80
	S-Co/0°	19	250.00	196.866	0.79
		20	250.00	176.263	0.71
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.42	1.42	1.48	1.37	6%
W110/45°	4	1.09	1.06	1.10	0.97	6%
N40/S-Cs/0°	2	1.06	1.06	1.07	1.05	1%
W250/S-Cs/0°	2	0.87	0.87	0.91	0.84	6%
S-Cs/0°	8	0.86	0.91	1.15	0.80	15%
S-Co/0°	2	0.75	0.75	0.79	0.71	8%
All	20	0.94	0.99	1.48	0.71	20%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

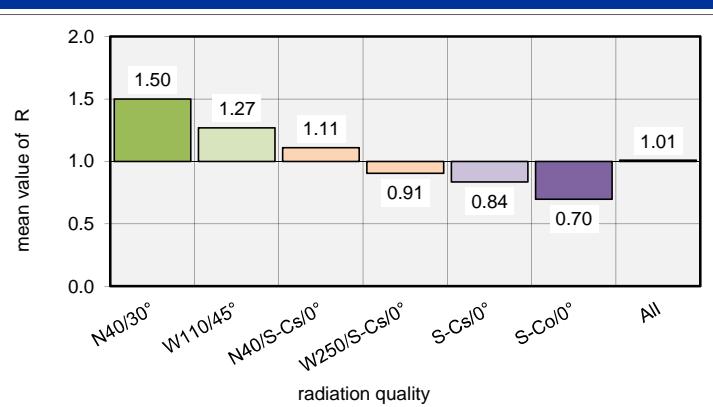
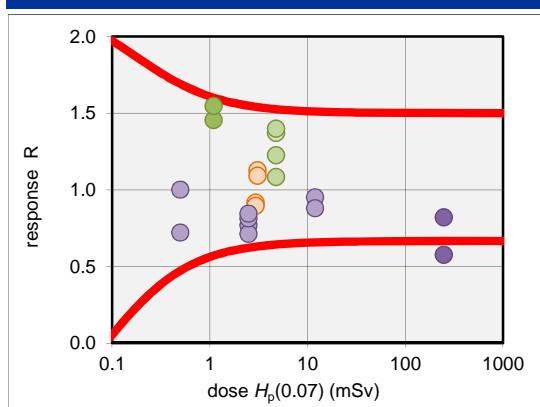
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 58: (TLD) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality	dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)		
x-ray	N40/30°	5 6	1.10 1.10	1.60 1.70	1.45 1.55	
	W110/45°/x W110/-45°/x	9 10	4.78 4.78	6.55 6.68	1.37 1.40	
	W110/45°/y W110/-45°/y	7 8	4.78 4.78	5.18 5.85	1.08 1.22	
	N40/S-Cs/0°	3 4	3.09 3.09	3.48 3.37	1.13 1.09	
	W250/S-Cs/0°	1	2.95	2.70	0.92	
		2	2.95	2.64	0.89	
		17 18	0.50 0.50	0.36 0.50	0.72 1.00	
		13 14 15 16	2.50 2.50 2.50 2.50	1.92 1.78 2.03 2.11	0.77 0.71 0.81 0.84	
gamma	S-Cs/0°	11 12	12.00 12.00	11.41 10.54	0.95 0.88	
		19 20	250.00 250.00	204.85 143.67	0.82 0.57	
		NIR NIR NIR NIR NIR NIR	21 22 23 24 25 26		outlier	
	S-Co/0°					
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.50	1.50	1.55	1.45	4%
W110/45°	4	1.30	1.27	1.40	1.08	11%
N40/S-Cs/0°	2	1.11	1.11	1.13	1.09	2%
W250/S-Cs/0°	2	0.91	0.91	0.92	0.89	2%
S-Cs/0°	8	0.83	0.84	1.00	0.71	12%
S-Co/0°	2	0.70	0.70	0.82	0.57	25%
All	20	0.93	1.01	1.55	0.57	27%

outliers: 1 of 20

Fraction of outliers: 5%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

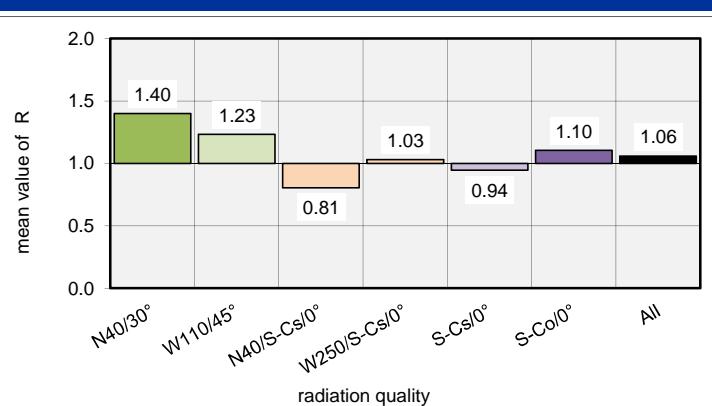
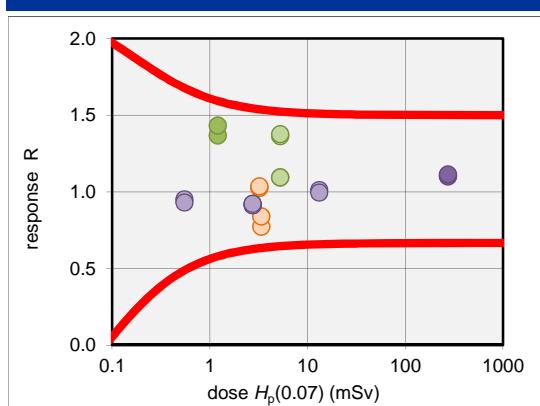
Reporting number 61: (Film) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.21	1.653	1.37	
		6	1.21	1.731	1.43	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.26	7.168	1.36	
		10	5.26	5.746	1.09	
		7	5.26	7.234	1.38	
		8	5.26	5.752	1.09	
x-ray and gamma	N40/S-Cs/0°	3	3.39	2.618	0.77	
		4	3.39	2.840	0.84	
	W250/S-Cs/0°	1	3.24	3.321	1.03	
		2	3.24	3.350	1.03	
gamma	S-Cs/0°	17	0.55	0.522	0.95	
		18	0.55	0.511	0.93	
		13	2.75	2.534	0.92	
		14	2.75	2.518	0.92	
		15	2.75	2.504	0.91	
		16	2.75	2.535	0.92	
		11	13.20	13.350	1.01	
		12	13.20	13.120	0.99	
	S-Co/0°	19	275.00	302.100	1.10	
		20	275.00	305.600	1.11	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.40	1.40	1.43	1.37	3%
W110/45°	4	1.23	1.23	1.38	1.09	13%
N40/S-Cs/0°	2	0.81	0.81	0.84	0.77	6%
W250/S-Cs/0°	2	1.03	1.03	1.03	1.03	1%
S-Cs/0°	8	0.93	0.94	1.01	0.91	4%
S-Co/0°	2	1.10	1.10	1.11	1.10	1%
All	20	1.02	1.06	1.43	0.77	18%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

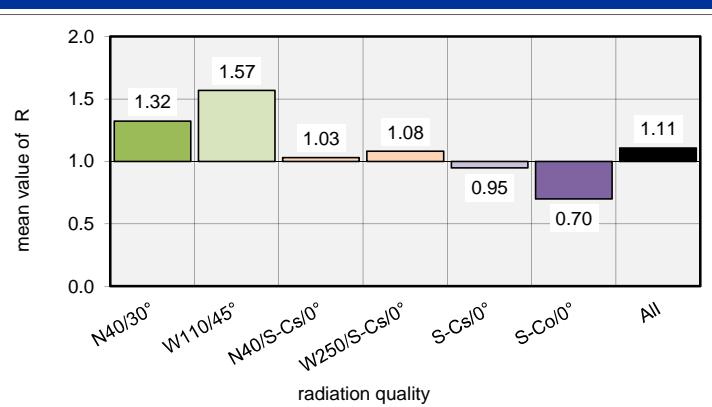
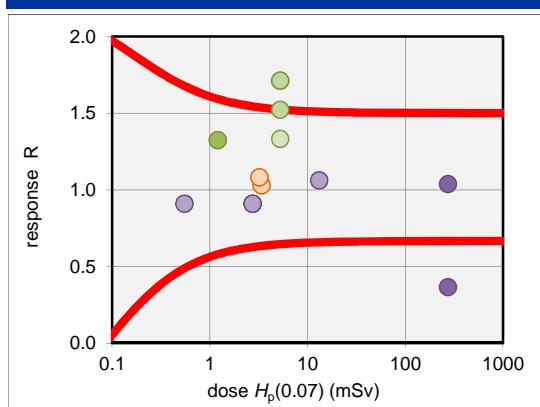
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 63: (Film) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.21	1.6	1.32	
		6	1.21	1.6	1.32	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.26	7.0	1.33	
		10	5.26	9.0	1.71	
		7	5.26	9.0	1.71	
		8	5.26	8.0	1.52	
x-ray and gamma	N40/S-Cs/0°	3	3.40	3.5	1.03	
		4	3.40	3.5	1.03	
	W250/S-Cs/0°	1	3.24	3.5	1.08	
		2	3.24	3.5	1.08	
gamma	S-Cs/0°	17	0.55	0.5	0.91	
		18	0.55	0.5	0.91	
		13	2.75	2.5	0.91	
		14	2.75	2.5	0.91	
		15	2.75	2.5	0.91	
		16	2.75	2.5	0.91	
		11	13.20	14.0	1.06	
		12	13.20	14.0	1.06	
	S-Co/0°	19	275.00	100.0	0.36	
		20	275.00	285.0	1.04	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	
N40/30°	2	1.32	1.32	1.32	1.32	0%
W110/45°	4	1.62	1.57	1.71	1.33	12%
N40/S-Cs/0°	2	1.03	1.03	1.03	1.03	0%
W250/S-Cs/0°	2	1.08	1.08	1.08	1.08	0%
S-Cs/0°	8	0.91	0.95	1.06	0.91	7%
S-Co/0°	2	0.70	0.70	1.04	0.36	68%
All	20	1.05	1.11	1.71	0.36	28%

outliers: 3 of 20

Fraction of outliers: 15%



Results: IC2010

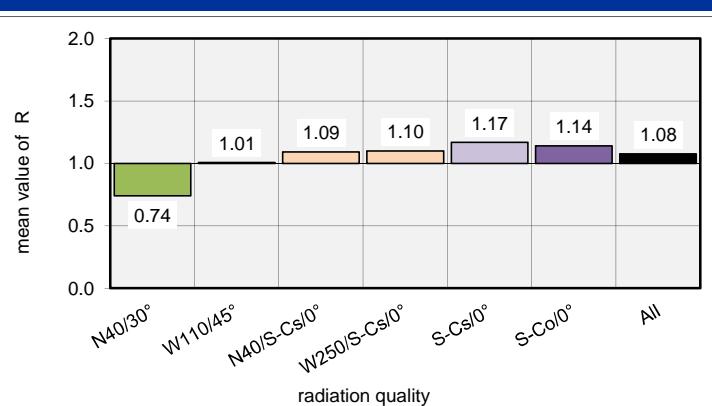
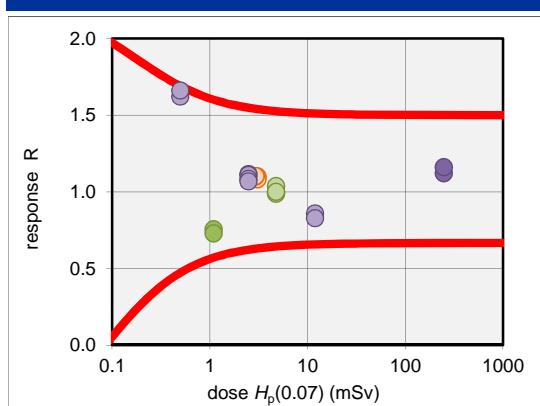
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 65: (Film) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.10	0.83	0.75	
		6	1.10	0.80	0.73	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.79	4.78	1.00	
		10	4.79	4.97	1.04	
		7	4.78	4.72	0.99	
		8	4.78	4.78	1.00	
x-ray and gamma	N40/S-Cs/0°	3	3.09	3.40	1.10	
		4	3.09	3.34	1.08	
	W250/S-Cs/0°	1	2.95	3.24	1.10	
		2	2.95	3.25	1.10	
gamma	S-Cs/0°	17	0.50	0.81	1.62	
		18	0.50	0.83	1.66	
		13	2.50	2.79	1.12	
		14	2.50	2.77	1.11	
		15	2.50	2.71	1.08	
		16	2.50	2.67	1.07	
		11	12.00	10.31	0.86	
		12	12.00	9.92	0.83	
	S-Co/0°	19	250.00	280.00	1.12	
		20	250.00	290.00	1.16	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.74	0.74	0.75	0.73	3%
W110/45°	4	1.00	1.01	1.04	0.99	2%
N40/S-Cs/0°	2	1.09	1.09	1.10	1.08	1%
W250/S-Cs/0°	2	1.10	1.10	1.10	1.10	0%
S-Cs/0°	8	1.10	1.17	1.66	0.83	27%
S-Co/0°	2	1.14	1.14	1.16	1.12	2%
All	20	1.08	1.08	1.66	0.73	21%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

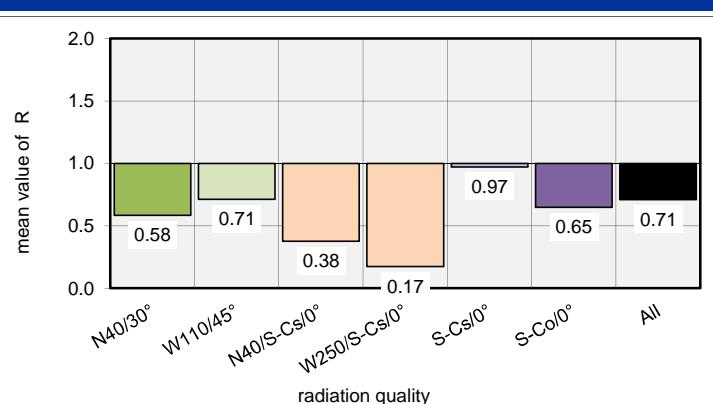
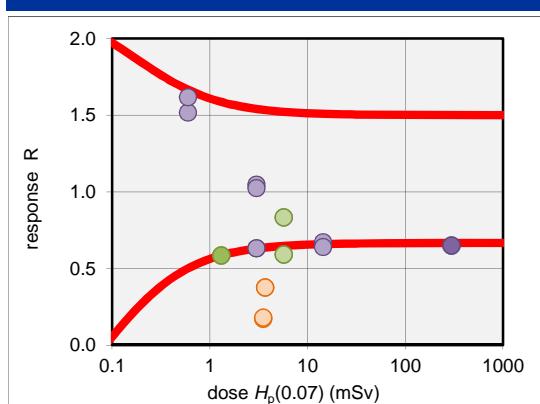
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 66: (Film) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality	dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)		
x-ray	N40/30°	5 6	1.32 1.32	0.770 0.770	0.58 0.58	
	W110/45°/x W110/-45°/x	9 10	5.74 5.74	4.780 4.780	0.83 0.83	
	W110/45°/y W110/-45°/y	7 8	5.74 5.74	3.390 3.390	0.59 0.59	
	N40/S-Cs/0°	3 4	3.70 3.70	1.390 1.390	0.38 0.38	
x-ray and gamma	W250/S-Cs/0°	1 2	3.53 3.53	0.600 0.630	0.17 0.18	
	S-Cs/0°	17 18	0.60 0.60	0.910 0.970	1.52 1.62	
gamma		13 14 15 16	3.00 3.00 3.00 3.00	1.890 3.140 3.070 1.890	0.63 1.05 1.02 0.63	
		11 12	14.40 14.40	9.650 9.210	0.67 0.64	
		19 20	300.00 300.00	194.400 194.400	0.65 0.65	
NIR	21					
NIR	22					
NIR	23					
NIR	24					
NIR	25					
NIR	26					
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	
N40/30°	2	0.58	0.58	0.58	0.58	0%
W110/45°	4	0.71	0.71	0.83	0.59	20%
N40/S-Cs/0°	2	0.38	0.38	0.38	0.38	0%
W250/S-Cs/0°	2	0.17	0.17	0.18	0.17	3%
S-Cs/0°	8	0.85	0.97	1.62	0.63	42%
S-Co/0°	2	0.65	0.65	0.65	0.65	0%
All	20	0.63	0.71	1.62	0.17	52%

outliers: 11 of 20

Fraction of outliers: 55%



Results: IC2010

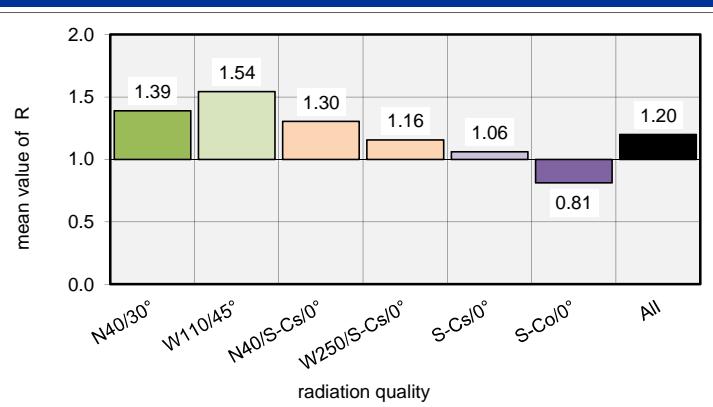
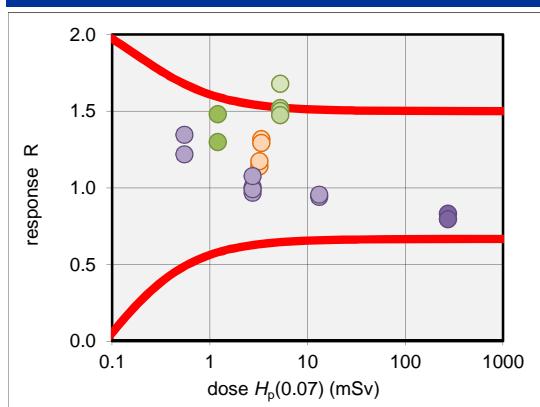
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 70: (Film) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.21	1.79	1.48	
		6	1.21	1.57	1.30	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.26	8.82	1.68	
		10	5.26	7.99	1.52	
		7	5.26	7.89	1.50	
		8	5.26	7.75	1.47	
x-ray and gamma	N40/S-Cs/0°	3	3.39	4.46	1.32	
		4	3.39	4.38	1.29	
	W250/S-Cs/0°	1	3.24	3.69	1.14	
		2	3.24	3.80	1.17	
gamma	S-Cs/0°	17	0.55	0.67	1.22	
		18	0.55	0.74	1.35	
		13	2.75	2.76	1.00	
		14	2.75	2.66	0.97	
		15	2.75	2.72	0.99	
		16	2.75	2.96	1.08	
		11	13.20	12.40	0.94	
		12	13.20	12.60	0.95	
	S-Co/0°	19	275.00	228.06	0.83	
		20	275.00	218.35	0.79	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.39	1.39	1.48	1.30	9%
W110/45°	4	1.51	1.54	1.68	1.47	6%
N40/S-Cs/0°	2	1.30	1.30	1.32	1.29	1%
W250/S-Cs/0°	2	1.16	1.16	1.17	1.14	2%
S-Cs/0°	8	1.00	1.06	1.35	0.94	14%
S-Co/0°	2	0.81	0.81	0.83	0.79	3%
All	20	1.20	1.20	1.68	0.79	21%

outliers: 1 of 20

Fraction of outliers: 5%



Results: IC2010

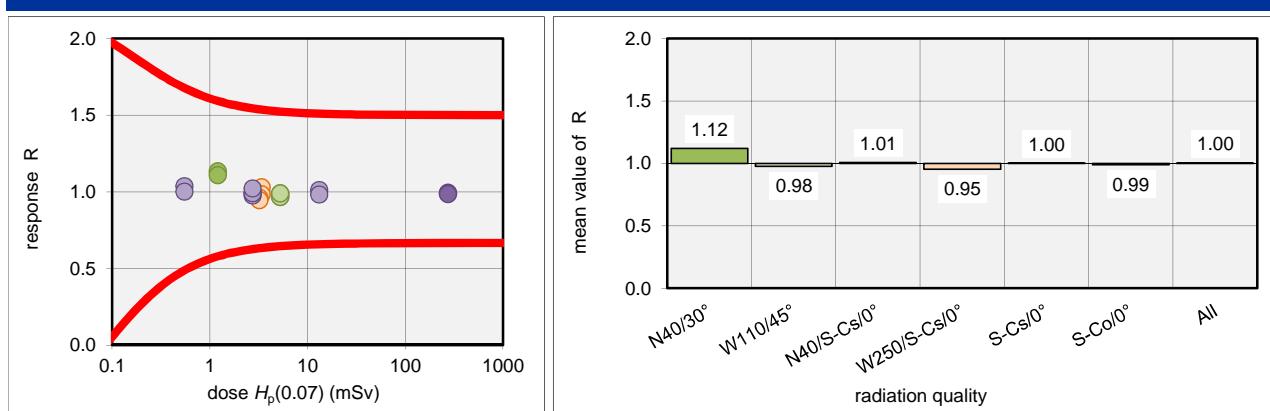
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 71: (Film) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.21	1.37	1.13	
		6	1.21	1.34	1.11	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.26	5.08	0.97	
		10	5.26	5.20	0.99	
		7	5.26	5.08	0.97	
		8	5.26	5.20	0.99	
x-ray and gamma	N40/S-Cs/0°	3	3.40	3.50	1.03	
		4	3.40	3.34	0.98	
	W250/S-Cs/0°	1	3.24	3.11	0.96	
		2	3.24	3.06	0.94	
gamma	S-Cs/0°	17	0.55	0.57	1.04	
		18	0.55	0.55	1.00	
		13	2.75	2.68	0.97	
		14	2.75	2.73	0.99	
		15	2.75	2.72	0.99	
		16	2.75	2.81	1.02	
		11	13.20	13.35	1.01	
		12	13.20	12.95	0.98	
	S-Co/0°	19	275.00	273.00	0.99	
		20	275.00	271.00	0.99	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.12	1.12	1.13	1.11	2%
W110/45°	4	0.98	0.98	0.99	0.97	1%
N40/S-Cs/0°	2	1.01	1.01	1.03	0.98	3%
W250/S-Cs/0°	2	0.95	0.95	0.96	0.94	1%
S-Cs/0°	8	1.00	1.00	1.04	0.97	2%
S-Co/0°	2	0.99	0.99	0.99	0.99	1%
All	20	0.99	1.00	1.13	0.94	5%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

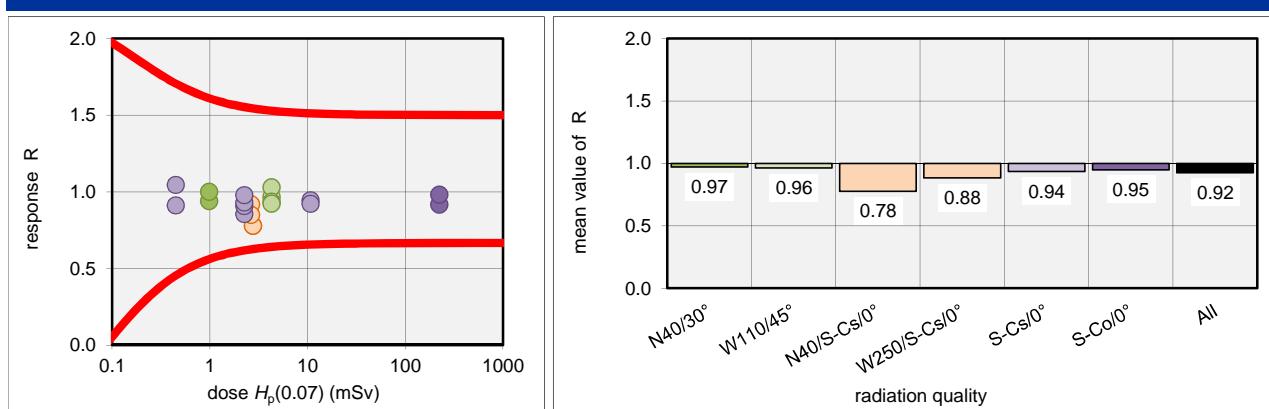
Reporting number 73: (OSL) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	0.99	0.93	0.94	
		6	0.99	0.99	1.00	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	4.31	4.16	0.97	
		10	4.31	4.43	1.03	
		7	4.31	4.03	0.94	
		8	4.31	3.97	0.92	
x-ray and gamma	N40/S-Cs/0°	3	2.78	2.16	0.78	
		4	2.78	2.16	0.78	
	W250/S-Cs/0°	1	2.65	2.43	0.92	
		2	2.65	2.25	0.85	
gamma	S-Cs/0°	17	0.45	0.41	0.91	
		18	0.45	0.47	1.04	
		13	2.25	1.92	0.85	
		14	2.25	2.04	0.91	
		15	2.25	2.09	0.93	
		16	2.25	2.20	0.98	
		11	10.80	10.19	0.94	
		12	10.80	9.94	0.92	
	S-Co/0°	19	225.00	206.05	0.92	
		20	225.00	220.54	0.98	
NIR			21			
NIR			22			
NIR			23			
NIR			24			
NIR			25			
NIR			26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.97	0.97	1.00	0.94	4%
W110/45°	4	0.95	0.96	1.03	0.92	5%
N40/S-Cs/0°	2	0.78	0.78	0.78	0.78	0%
W250/S-Cs/0°	2	0.88	0.88	0.92	0.85	5%
S-Cs/0°	8	0.92	0.94	1.04	0.85	6%
S-Co/0°	2	0.95	0.95	0.98	0.92	5%
All	20	0.93	0.92	1.04	0.78	8%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

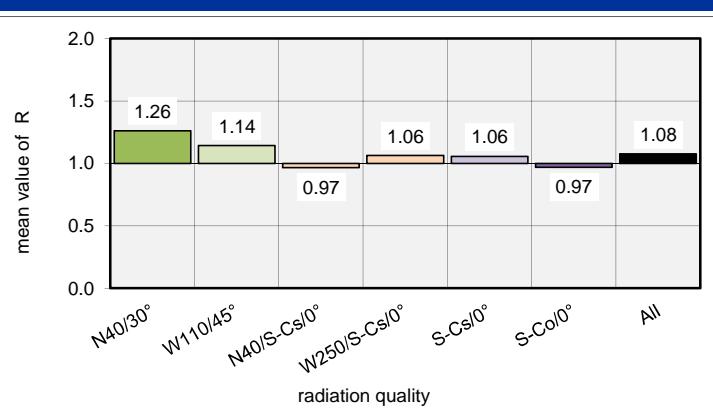
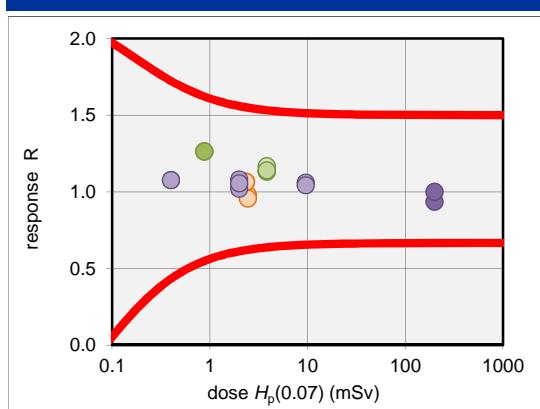
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 74: (OSL) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	0.88	1.11	1.26	
		6	0.88	1.11	1.26	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	3.83	4.47	1.17	
		10	3.83	4.35	1.14	
		7	3.83	4.33	1.13	
		8	3.83	4.36	1.14	
x-ray and gamma	N40/S-Cs/0°	3	2.47	2.41	0.98	
		4	2.47	2.36	0.96	
	W250/S-Cs/0°	1	2.36	2.51	1.06	
		2	2.36	2.51	1.06	
gamma	S-Cs/0°	17	0.40	0.43	1.08	
		18	0.40	0.43	1.08	
		13	2.00	2.09	1.05	
		14	2.00	2.16	1.08	
		15	2.00	2.04	1.02	
		16	2.00	2.11	1.06	
		11	9.60	10.16	1.06	
		12	9.60	10.01	1.04	
	S-Co/0°	19	200.00	187.02	0.94	
		20	200.00	199.92	1.00	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.26	1.26	1.26	1.26	0%
W110/45°	4	1.14	1.14	1.17	1.13	1%
N40/S-Cs/0°	2	0.97	0.97	0.98	0.96	1%
W250/S-Cs/0°	2	1.06	1.06	1.06	1.06	0%
S-Cs/0°	8	1.06	1.06	1.08	1.02	2%
S-Co/0°	2	0.97	0.97	1.00	0.94	5%
All	20	1.06	1.08	1.26	0.94	8%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

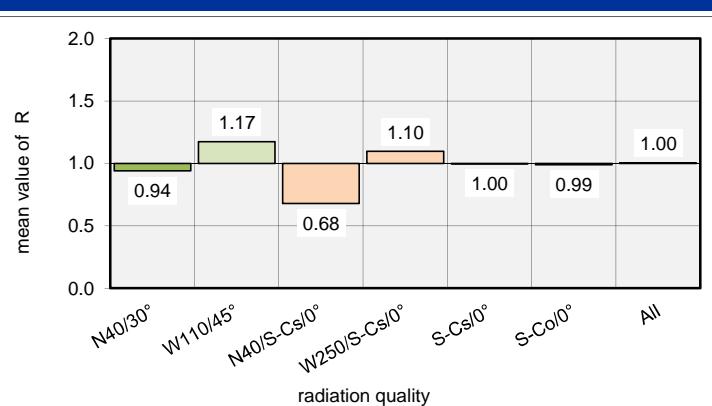
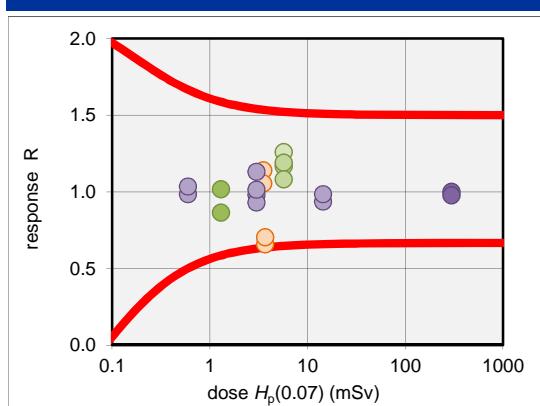
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 75: (OSL) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.31	1.13	0.86	
		6	1.31	1.33	1.02	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.74	7.22	1.26	
		10	5.74	6.69	1.17	
		7	5.74	6.83	1.19	
		8	5.74	6.20	1.08	
x-ray and gamma	N40/S-Cs/0°	3	3.70	2.43	0.66	
		4	3.70	2.60	0.70	
	W250/S-Cs/0°	1	3.53	4.02	1.14	
		2	3.53	3.72	1.05	
gamma	S-Cs/0°	17	0.60	0.59	0.98	
		18	0.60	0.62	1.03	
		13	3.00	2.94	0.98	
		14	3.00	2.79	0.93	
		15	3.00	3.04	1.01	
		16	3.00	3.39	1.13	
		11	14.40	13.47	0.94	
		12	14.40	14.15	0.98	
	S-Co/0°	19	300.00	300.02	1.00	
		20	300.00	292.68	0.98	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.94	0.94	1.02	0.86	11%
W110/45°	4	1.18	1.17	1.26	1.08	6%
N40/S-Cs/0°	2	0.68	0.68	0.70	0.66	5%
W250/S-Cs/0°	2	1.10	1.10	1.14	1.05	5%
S-Cs/0°	8	0.98	1.00	1.13	0.93	6%
S-Co/0°	2	0.99	0.99	1.00	0.98	2%
All	20	1.01	1.00	1.26	0.66	15%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

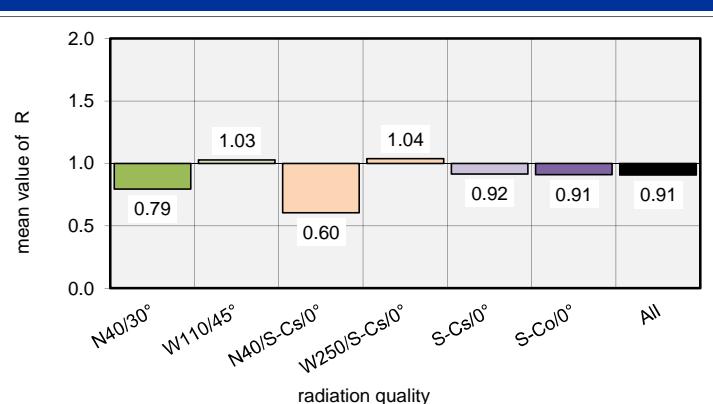
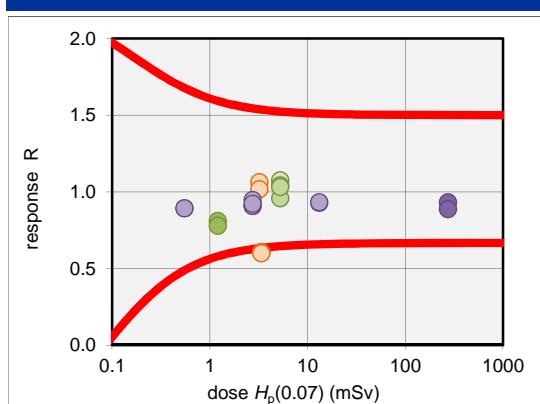
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 76: (OSL) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality	dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)		
x-ray	N40/30°	5 6	1.21 1.21	0.98 0.94	0.81 0.78 OK	
	W110/45°/x W110/-45°/x	9 10	5.26 5.26	5.65 5.48	1.07 1.04 OK	
	W110/45°/y W110/-45°/y	7 8	5.26 5.26	5.04 5.42	0.96 1.03 OK	
	N40/S-Cs/0°	3 4	3.39 3.39	2.06 2.03	0.61 0.60 outlier	
		1 2	3.24 3.24	3.44 3.29	1.06 1.02 OK	
gamma	S-Cs/0°	17 18	0.55 0.55	0.49 0.49	0.89 0.89 OK	
		13 14	2.75 2.75	2.60 2.49	0.95 0.91 OK	
		15 16	2.75 2.75	2.50 2.53	0.91 0.92 OK	
		11 12	13.20 13.20	12.25 12.29	0.93 0.93 OK	
	S-Co/0°	19	275.00	255.91	0.93 OK	
		20	275.00	243.78	0.89 OK	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	
N40/30°	2	0.79	0.79	0.81	0.78	3%
W110/45°	4	1.04	1.03	1.07	0.96	5%
N40/S-Cs/0°	2	0.60	0.60	0.61	0.60	1%
W250/S-Cs/0°	2	1.04	1.04	1.06	1.02	3%
S-Cs/0°	8	0.91	0.92	0.95	0.89	2%
S-Co/0°	2	0.91	0.91	0.93	0.89	3%
All	20	0.92	0.91	1.07	0.60	14%

outliers: 2 of 20

Fraction of outliers: 10%



Results: IC2010

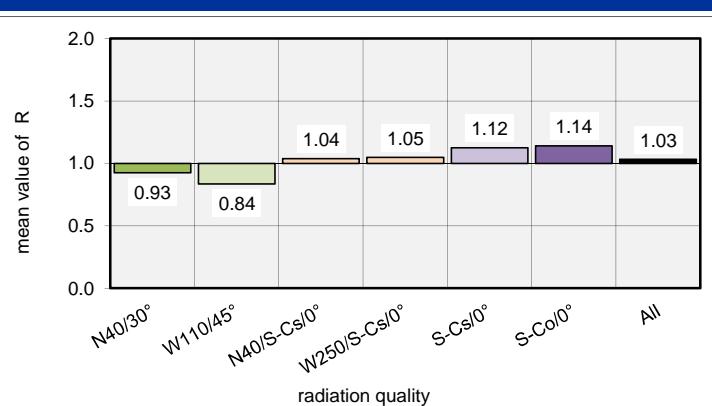
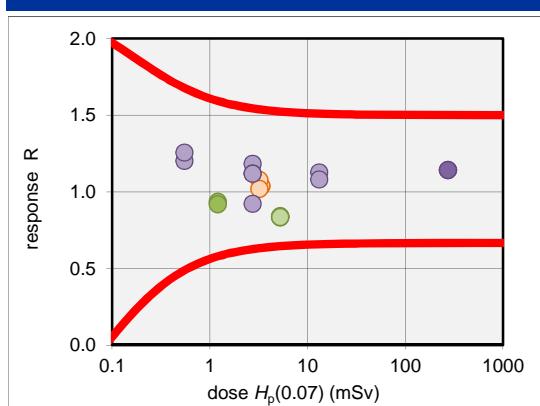
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 77: (OSL) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	1.21	1.13	0.93	
		6	1.21	1.11	0.92	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.26	4.40	0.84	
		10	5.26	4.42	0.84	
		7	5.26	4.38	0.83	
		8	5.26	4.39	0.83	
x-ray and gamma	N40/S-Cs/0°	3	3.39	3.51	1.04	
		4	3.39	3.52	1.04	
	W250/S-Cs/0°	1	3.24	3.49	1.08	
		2	3.24	3.30	1.02	
gamma	S-Cs/0°	17	0.55	0.66	1.20	
		18	0.55	0.69	1.25	
		13	2.75	2.53	0.92	
		14	2.75	3.25	1.18	
		15	2.75	3.08	1.12	
		16	2.75	3.07	1.12	
		11	13.20	14.85	1.13	
		12	13.20	14.25	1.08	
	S-Co/0°	19	275.00	313.75	1.14	
		20	275.00	313.75	1.14	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.93	0.93	0.93	0.92	1%
W110/45°	4	0.84	0.84	0.84	0.83	0%
N40/S-Cs/0°	2	1.04	1.04	1.04	1.04	0%
W250/S-Cs/0°	2	1.05	1.05	1.08	1.02	4%
S-Cs/0°	8	1.12	1.12	1.25	0.92	9%
S-Co/0°	2	1.14	1.14	1.14	1.14	0%
All	20	1.06	1.03	1.25	0.83	13%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

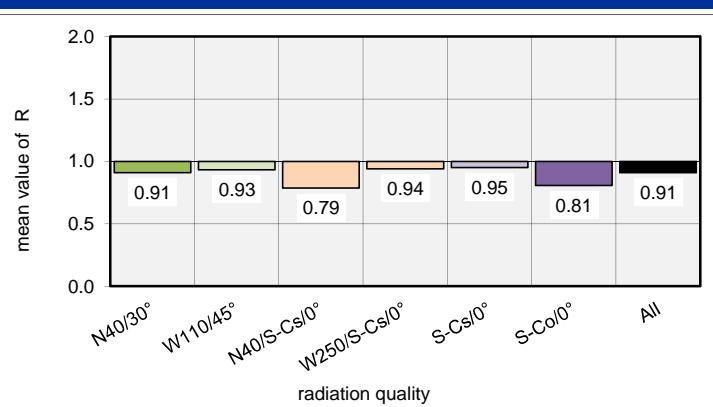
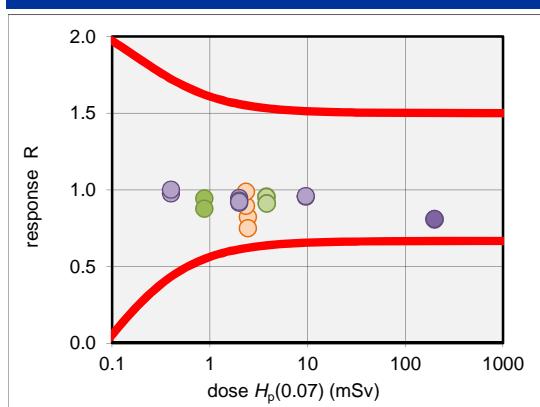
Reporting number 78: (OSL) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	0.88	0.83	0.94	
		6	0.88	0.77	0.88	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	3.82	3.65	0.96	
		10	3.82	3.63	0.95	
		7	3.83	3.49	0.91	
		8	3.83	3.48	0.91	
x-ray and gamma	N40/S-Cs/0°	3	2.47	2.03	0.82	
		4	2.47	1.85	0.75	
	W250/S-Cs/0°	1	2.36	2.11	0.89	
		2	2.36	2.33	0.99	
gamma	S-Cs/0°	17	0.40	0.39	0.98	
		18	0.40	0.40	1.00	
		13	2.00	1.89	0.95	
		14	2.00	1.86	0.93	
		15	2.00	1.83	0.92	
		16	2.00	1.84	0.92	
		11	9.60	9.16	0.95	
		12	9.60	9.20	0.96	
	S-Co/0°	19	200.00	160.92	0.80	
		20	200.00	161.99	0.81	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.91	0.91	0.94	0.88	5%
W110/45°	4	0.93	0.93	0.96	0.91	3%
N40/S-Cs/0°	2	0.79	0.79	0.82	0.75	7%
W250/S-Cs/0°	2	0.94	0.94	0.99	0.89	7%
S-Cs/0°	8	0.95	0.95	1.00	0.92	3%
S-Co/0°	2	0.81	0.81	0.81	0.80	0%
All	20	0.93	0.91	1.00	0.75	7%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

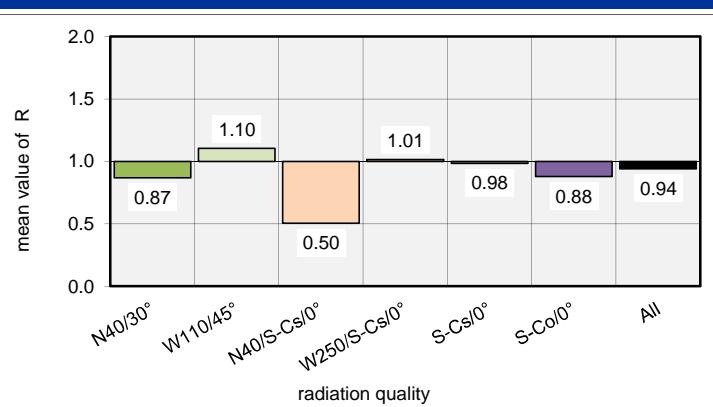
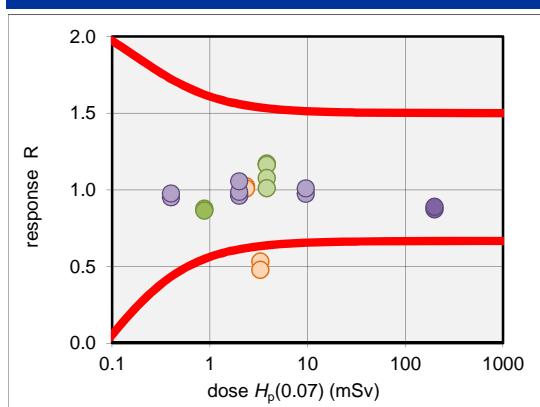
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 79: (OSL) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	0.88	0.77	0.88	
		6	0.88	0.76	0.86	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	3.83	4.48	1.17	
		10	3.83	4.45	1.16	
		7	3.83	4.12	1.08	
		8	3.83	3.87	1.01	
x-ray and gamma	N40/S-Cs/0°	3	3.31	1.76	0.53	
		4	3.31	1.58	0.48	
	W250/S-Cs/0°	1	2.36	2.41	1.02	
		2	2.36	2.38	1.01	
gamma	S-Cs/0°	17	0.40	0.38	0.95	
		18	0.40	0.39	0.98	
		13	2.00	1.93	0.97	
		14	2.00	1.92	0.96	
		15	2.00	1.97	0.99	
		16	2.00	2.11	1.06	
		11	9.60	9.34	0.97	
		12	9.60	9.69	1.01	
	S-Co/0°	19	200.00	174.17	0.87	
		20	200.00	177.65	0.89	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.87	0.87	0.88	0.86	1%
W110/45°	4	1.12	1.10	1.17	1.01	7%
N40/S-Cs/0°	2	0.50	0.50	0.53	0.48	8%
W250/S-Cs/0°	2	1.01	1.01	1.02	1.01	1%
S-Cs/0°	8	0.97	0.98	1.06	0.95	3%
S-Co/0°	2	0.88	0.88	0.89	0.87	1%
All	20	0.97	0.94	1.17	0.48	18%

outliers: 2 of 20

Fraction of outliers: 10%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

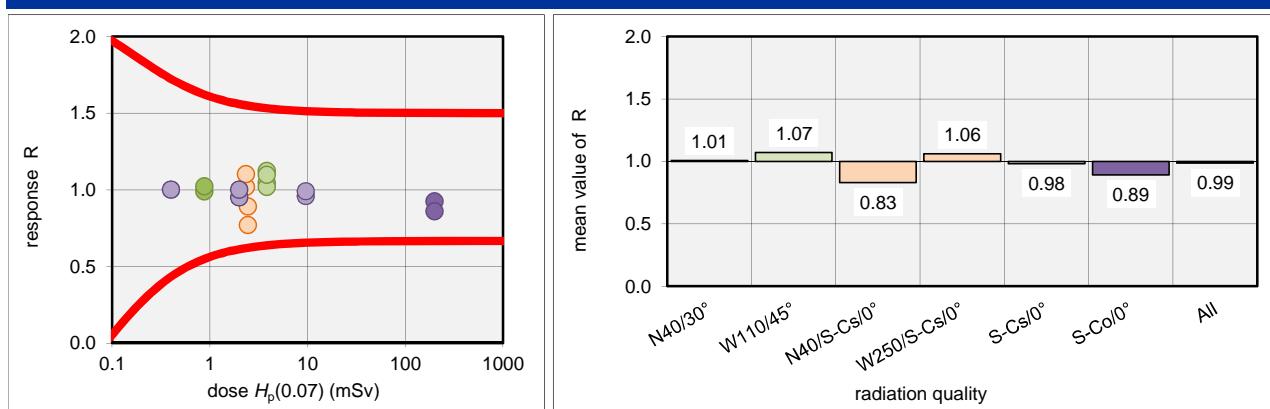
Reporting number 80: (OSL) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	0.88	0.87	0.99	
		6	0.88	0.90	1.02	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	3.83	4.00	1.04	
		10	3.83	4.30	1.12	
		7	3.83	3.90	1.02	
		8	3.83	4.20	1.10	
x-ray and gamma	N40/S-Cs/0°	3	2.47	1.90	0.77	
		4	2.47	2.20	0.89	
	W250/S-Cs/0°	1	2.36	2.40	1.02	
		2	2.36	2.60	1.10	
gamma	S-Cs/0°	17	0.40	0.40	1.00	
		18	0.40	0.40	1.00	
		13	2.00	1.90	0.95	
		14	2.00	1.90	0.95	
		15	2.00	2.00	1.00	
		16	2.00	2.00	1.00	
		11	9.60	9.20	0.96	
		12	9.60	9.50	0.99	
	S-Co/0°	19	200.00	185.00	0.93	
		20	200.00	172.00	0.86	
		NIR	21			
		NIR	22			
		NIR	23			
		NIR	24			
		NIR	25			
		NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.01	1.01	1.02	0.99	2%
W110/45°	4	1.07	1.07	1.12	1.02	4%
N40/S-Cs/0°	2	0.83	0.83	0.89	0.77	10%
W250/S-Cs/0°	2	1.06	1.06	1.10	1.02	6%
S-Cs/0°	8	0.99	0.98	1.00	0.95	2%
S-Co/0°	2	0.89	0.89	0.93	0.86	5%
All	20	1.00	0.99	1.12	0.77	8%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

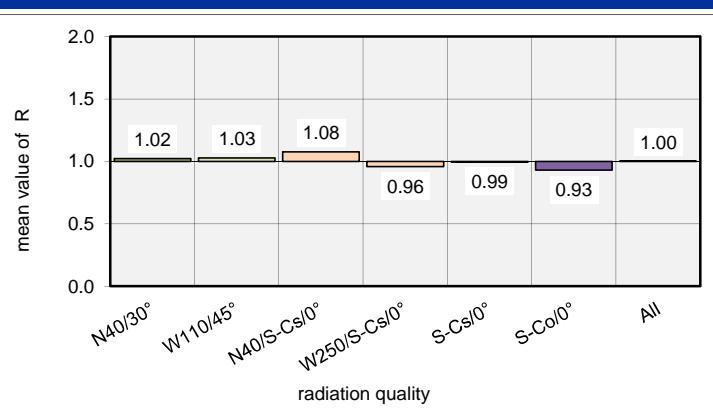
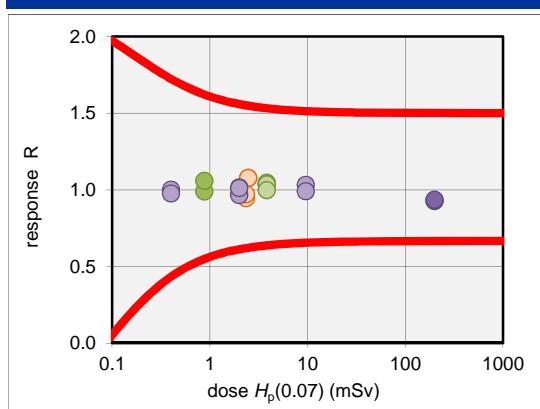
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 81: (other) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)	
x-ray	N40/30°	5	0.88	0.87	0.99	
		6	0.88	0.93	1.06	
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	3.83	4.00	1.04	
		10	3.83	3.96	1.03	
		7	3.83	3.96	1.03	
		8	3.83	3.82	1.00	
x-ray and gamma	N40/S-Cs/0°	3	2.48	2.67	1.08	
		4	2.48	2.67	1.08	
	W250/S-Cs/0°	1	2.36	2.23	0.94	
		2	2.36	2.29	0.97	
gamma	S-Cs/0°	17	0.40	0.40	1.00	
		18	0.40	0.39	0.98	
		13	2.00	2.03	1.02	
		14	2.00	1.94	0.97	
		15	2.00	1.93	0.97	
		16	2.00	2.02	1.01	
		11	9.60	9.91	1.03	
		12	9.60	9.50	0.99	
	S-Co/0°	19	200.00	185.26	0.93	
		20	200.00	186.81	0.93	
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.02	1.02	1.06	0.99	5%
W110/45°	4	1.03	1.03	1.04	1.00	2%
N40/S-Cs/0°	2	1.08	1.08	1.08	1.08	0%
W250/S-Cs/0°	2	0.96	0.96	0.97	0.94	2%
S-Cs/0°	8	0.99	0.99	1.03	0.97	2%
S-Co/0°	2	0.93	0.93	0.93	0.93	1%
All	20	1.00	1.00	1.08	0.93	4%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

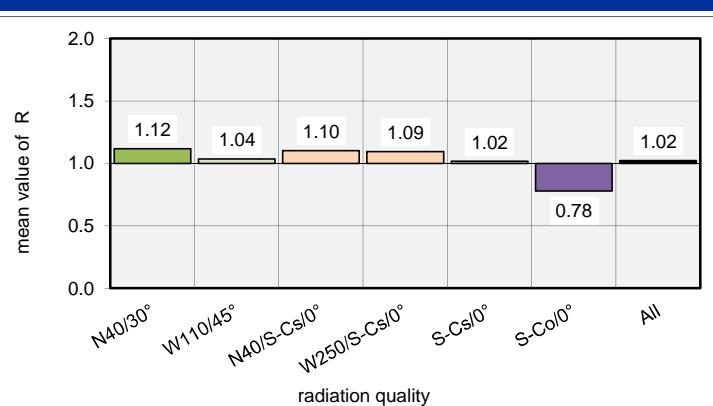
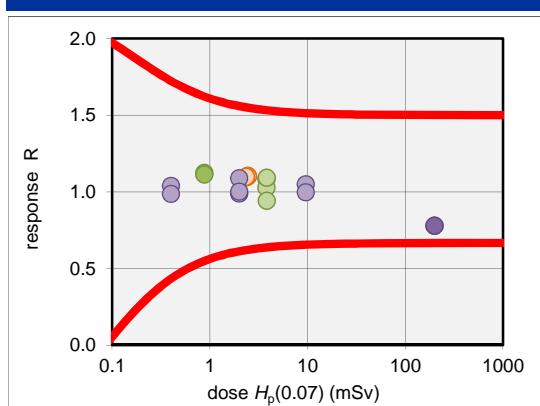
trumpet parameter: 1.5 / 0.085 mSv

Reporting number 82: (other) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results		
radiation quality	dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)		
x-ray	N40/30°	5 6	0.88 0.88	0.987 0.979	1.12 1.11	
	W110/45°/x W110/-45°/x	9 10	3.82 3.82	4.136 3.920	1.08 1.03	
	W110/45°/y W110/-45°/y	7 8	3.83 3.83	3.605 4.176	0.94 1.09	
	N40/S-Cs/0°	3 4	2.47 2.47	2.724 2.716	1.10 1.10	
	W250/S-Cs/0°	1 2	2.36 2.36	2.578 2.590	1.09 1.10	
gamma	S-Cs/0°	17 18	0.40 0.40	0.415 0.394	1.04 0.99	
		13 14 15 16	2.00 2.00 2.00 2.00	2.176 1.983 1.976 1.999	1.09 0.99 0.99 1.00	
		11 12	9.60 9.60	10.055 9.552	1.05 1.00	
		19 20	200.00 200.00	155.667 155.586	0.78 0.78	
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
	WIR	21				
radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	1.12	1.12	1.12	1.11	1%
W110/45°	4	1.05	1.04	1.09	0.94	7%
N40/S-Cs/0°	2	1.10	1.10	1.10	1.10	0%
W250/S-Cs/0°	2	1.09	1.09	1.10	1.09	0%
S-Cs/0°	8	1.00	1.02	1.09	0.99	4%
S-Co/0°	2	0.78	0.78	0.78	0.78	0%
All	20	1.04	1.02	1.12	0.78	10%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

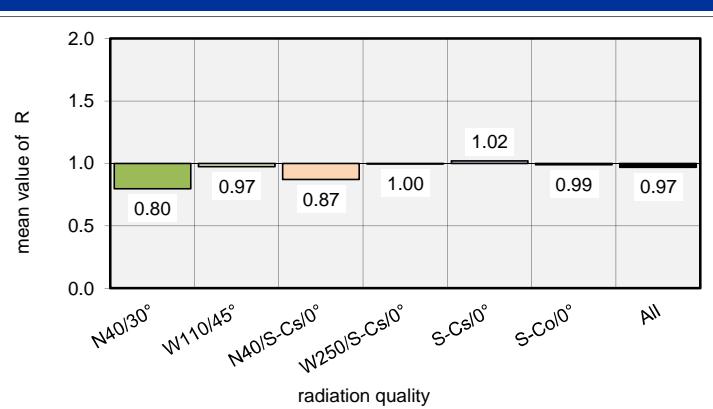
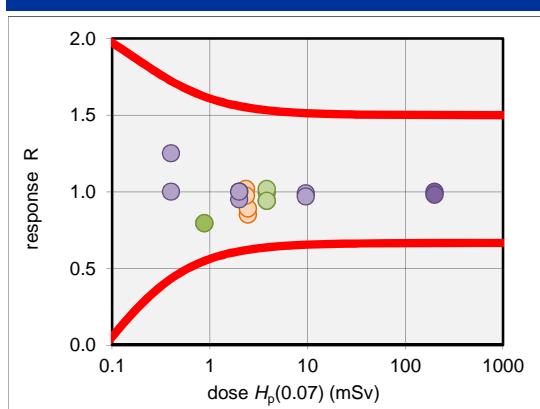
Reporting number 84: (other) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)
x-ray	N40/30°	5	0.88	0.7	0.80 OK
		6	0.88	0.7	0.80 OK
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	3.83	3.6	0.94 OK
		10	3.83	3.8	0.99 OK
		7	3.83	3.9	1.02 OK
		8	3.83	3.6	0.94 OK
x-ray and gamma	N40/S-Cs/0°	3	2.47	2.1	0.85 OK
		4	2.47	2.2	0.89 OK
	W250/S-Cs/0°	1	2.36	2.4	1.02 OK
		2	2.36	2.3	0.97 OK
gamma	S-Cs/0°	17	0.40	0.5	1.25 OK
		18	0.40	0.4	1.00 OK
		13	2.00	2.0	1.00 OK
		14	2.00	2.0	1.00 OK
		15	2.00	1.9	0.95 OK
		16	2.00	2.0	1.00 OK
		11	9.60	9.5	0.99 OK
		12	9.60	9.3	0.97 OK
	S-Co/0°	19	200.00	199.9	1.00 OK
		20	200.00	196.0	0.98 OK
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.80	0.80	0.80	0.80	0%
W110/45°	4	0.97	0.97	1.02	0.94	4%
N40/S-Cs/0°	2	0.87	0.87	0.89	0.85	3%
W250/S-Cs/0°	2	1.00	1.00	1.02	0.97	3%
S-Cs/0°	8	1.00	1.02	1.25	0.95	9%
S-Co/0°	2	0.99	0.99	1.00	0.98	1%
All	20	0.98	0.97	1.25	0.80	10%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv

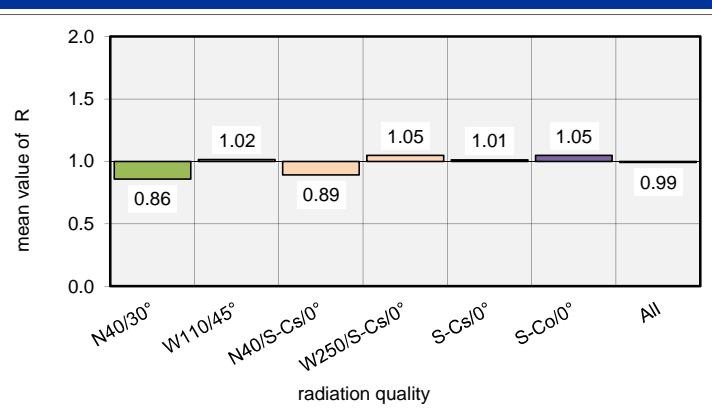
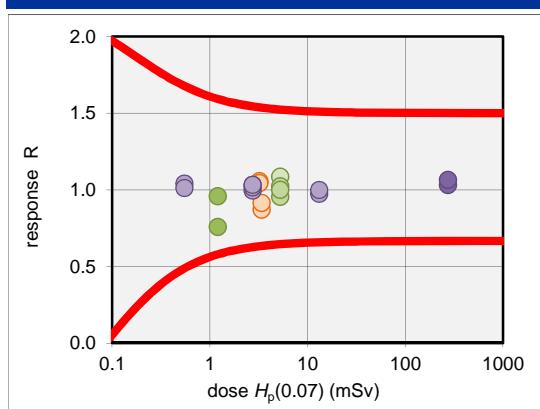
Reporting number 85: (other) for dose quantity $H_p(0.07)$

true values reported by the irradiating laboratory			values reported by participant	results	
radiation quality		dosemeter ID	dose $H_p(0.07)$ mSv	dose $H_p(0.07)$ mSv	response R (reported/true)
x-ray	N40/30°	5	1.21	0.916	0.76
		6	1.21	1.159	0.96
	W110/45°/x W110/-45°/x W110/45°/y W110/-45°/y	9	5.26	5.705	1.08
		10	5.26	5.011	0.95
		7	5.26	5.381	1.02
		8	5.26	5.261	1.00
x-ray and gamma	N40/S-Cs/0°	3	3.40	2.954	0.87
		4	3.40	3.105	0.91
	W250/S-Cs/0°	1	3.24	3.418	1.05
		2	3.24	3.376	1.04
gamma	S-Cs/0°	17	0.55	0.572	1.04
		18	0.55	0.556	1.01
		13	2.75	2.731	0.99
		14	2.75	2.834	1.03
		15	2.75	2.792	1.02
		16	2.75	2.834	1.03
		11	13.20	12.847	0.97
		12	13.20	13.173	1.00
	S-Co/0°	19	275.00	283.304	1.03
		20	275.00	292.296	1.06
	NIR	21			
	NIR	22			
	NIR	23			
	NIR	24			
	NIR	25			
	NIR	26			

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N40/30°	2	0.86	0.86	0.96	0.76	17%
W110/45°	4	1.01	1.02	1.08	0.95	5%
N40/S-Cs/0°	2	0.89	0.89	0.91	0.87	4%
W250/S-Cs/0°	2	1.05	1.05	1.05	1.04	1%
S-Cs/0°	8	1.01	1.01	1.04	0.97	2%
S-Co/0°	2	1.05	1.05	1.06	1.03	2%
All	20	1.01	0.99	1.08	0.76	8%

outliers: 0 of 20

Fraction of outliers: 0%



Results: IC2010

trumpet parameter: 1.5 / 0.085 mSv