

Intercomparisons. Practical exercise. - Special cases -

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Individual Monitoring Service

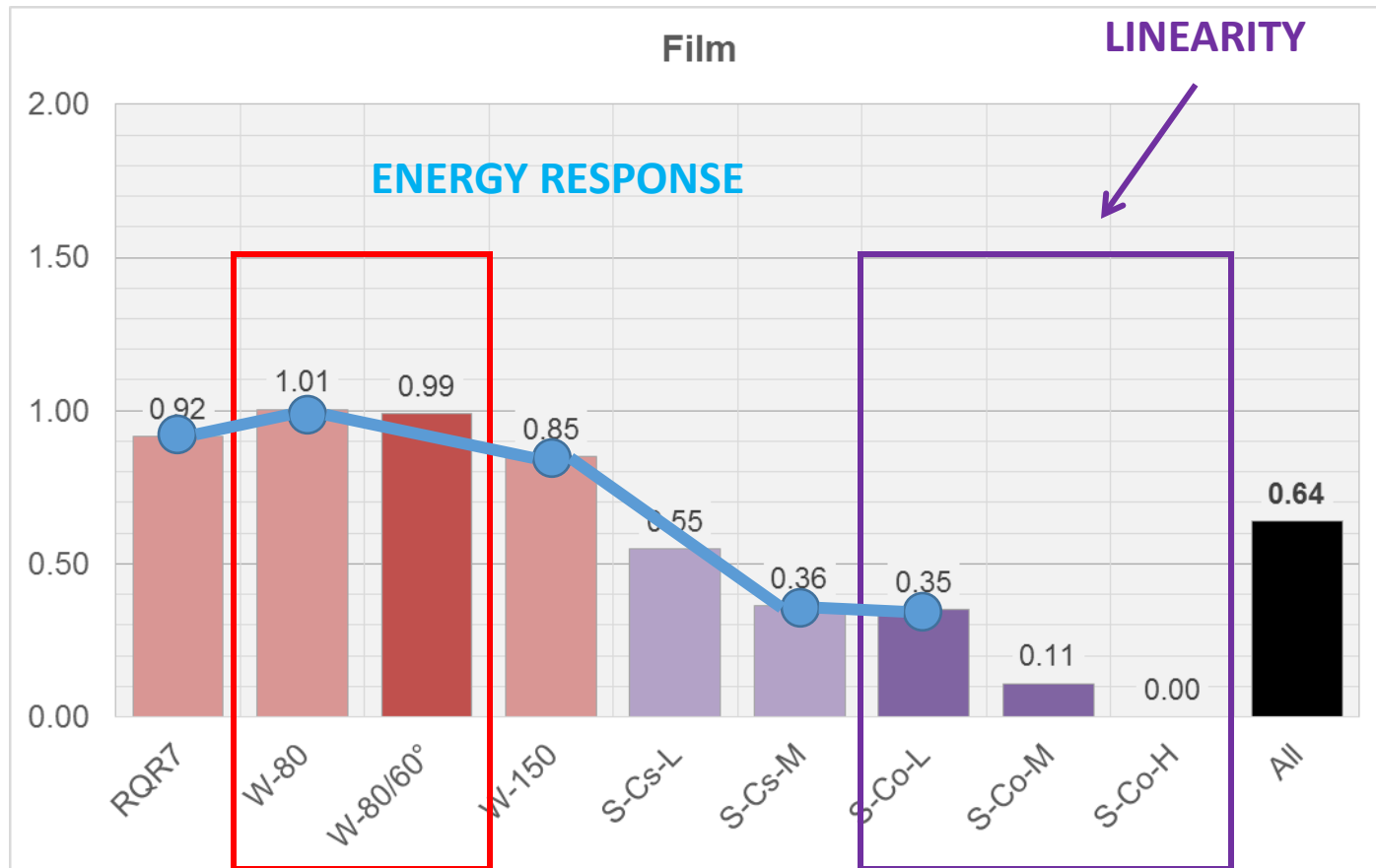
Ciemat

SPAIN

Irradiation plan

	Hp(10)	Dose (mSv)
Radiation	Quality	
X-Ray	RQR7	8
	W-80	8
	W-80/60°	8
	W-150	8
Gamma	S-Cs-L	1
	S-Cs-M	8
	S-Co-L	8
	S-Co-M	80
	S-Co-H	500

Irradiation plan allows to check:



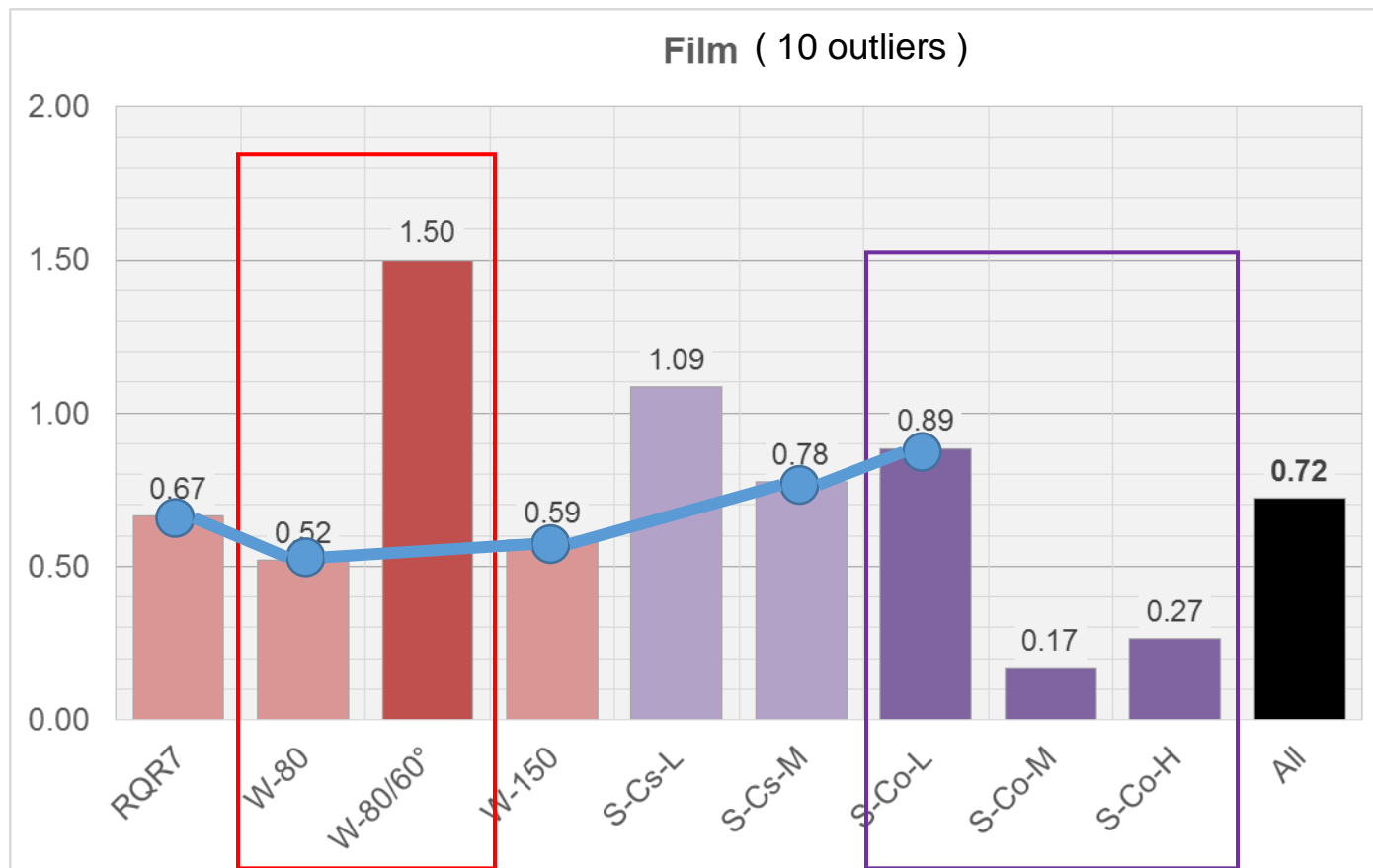
ANGULAR RESPONSE

Exercise:

- Check the dosimetric characteristic of the system:
 - Linearity
 - Angular response
 - Energy response
- Indicate some possible reasons in case of low performance
- Indicate some actions to improve performance

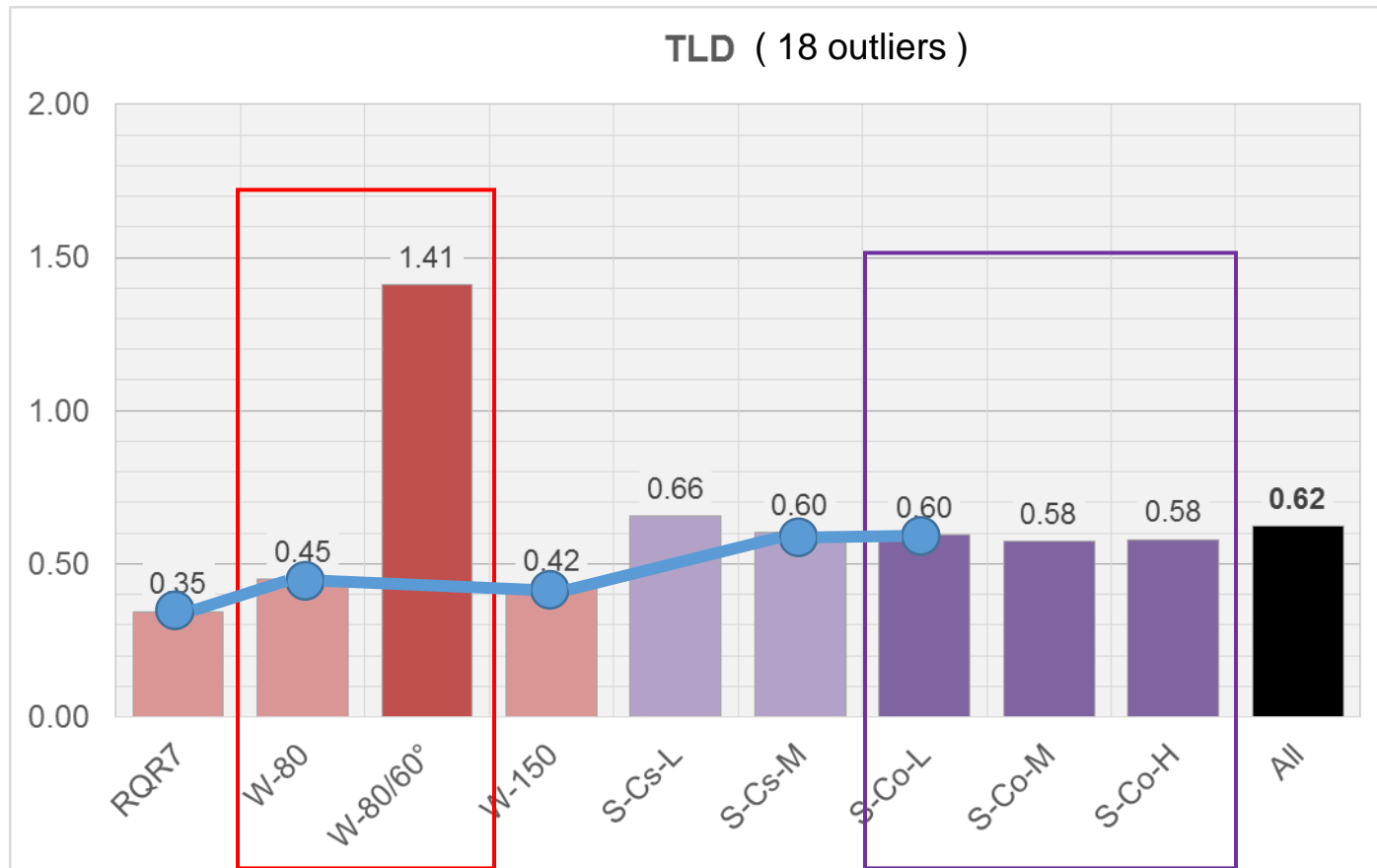
15 min

G1:



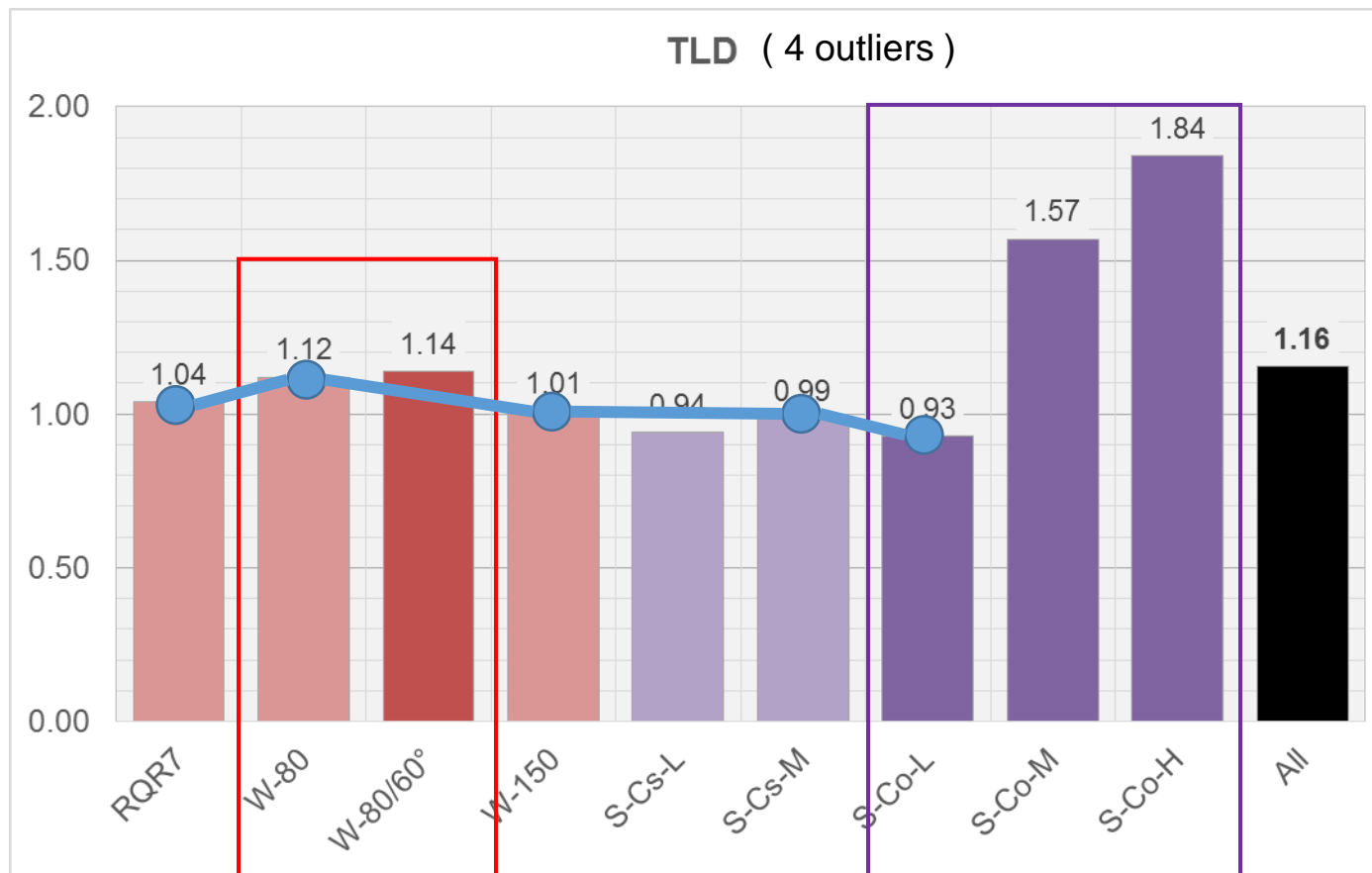
- Saturation problem (film/densitometer)?
- Change of film in two film systems (fast/low emulsion)?
- Badge design?

G2:



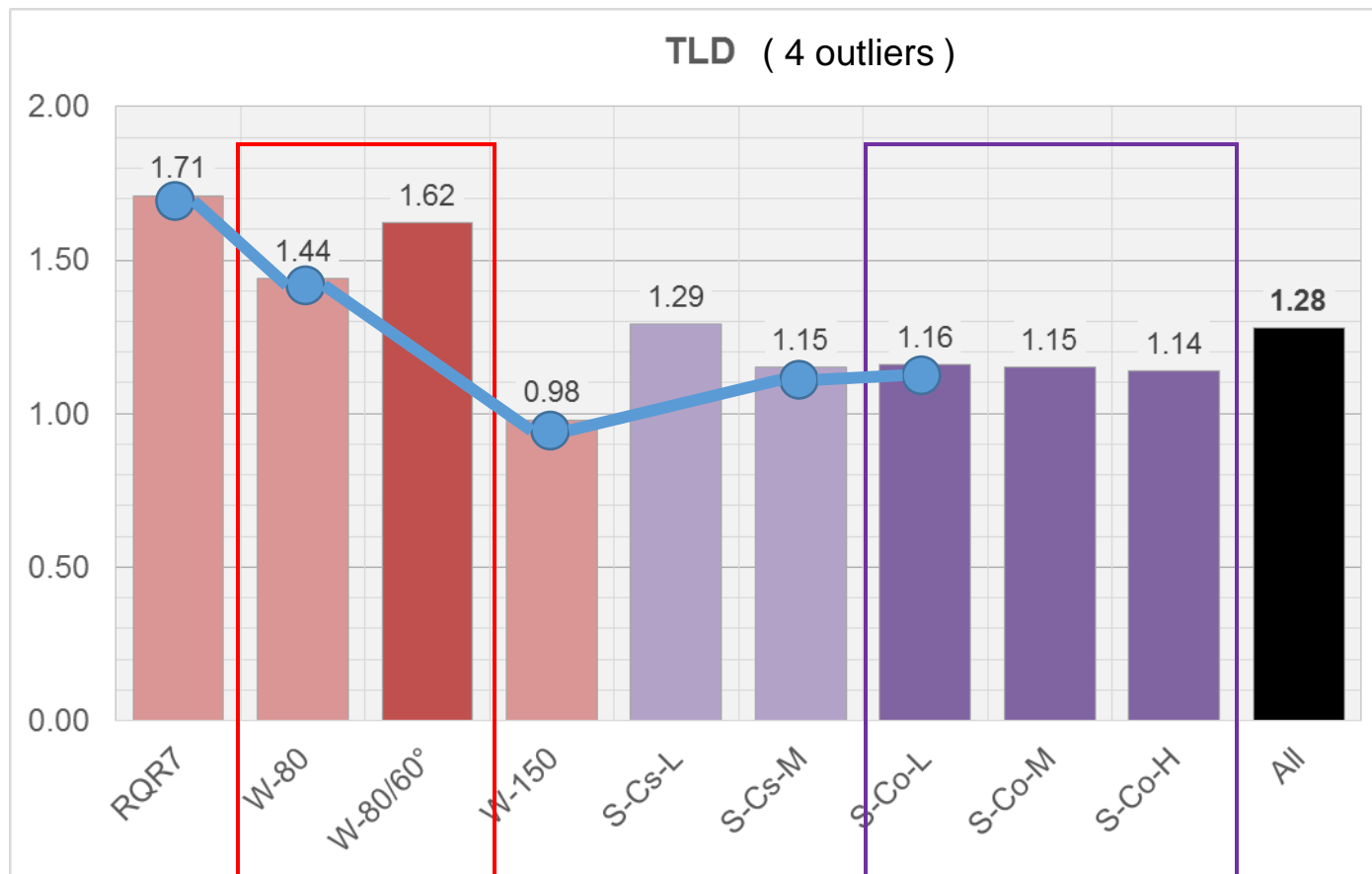
- Badge design
- Wrong calibration

G3:



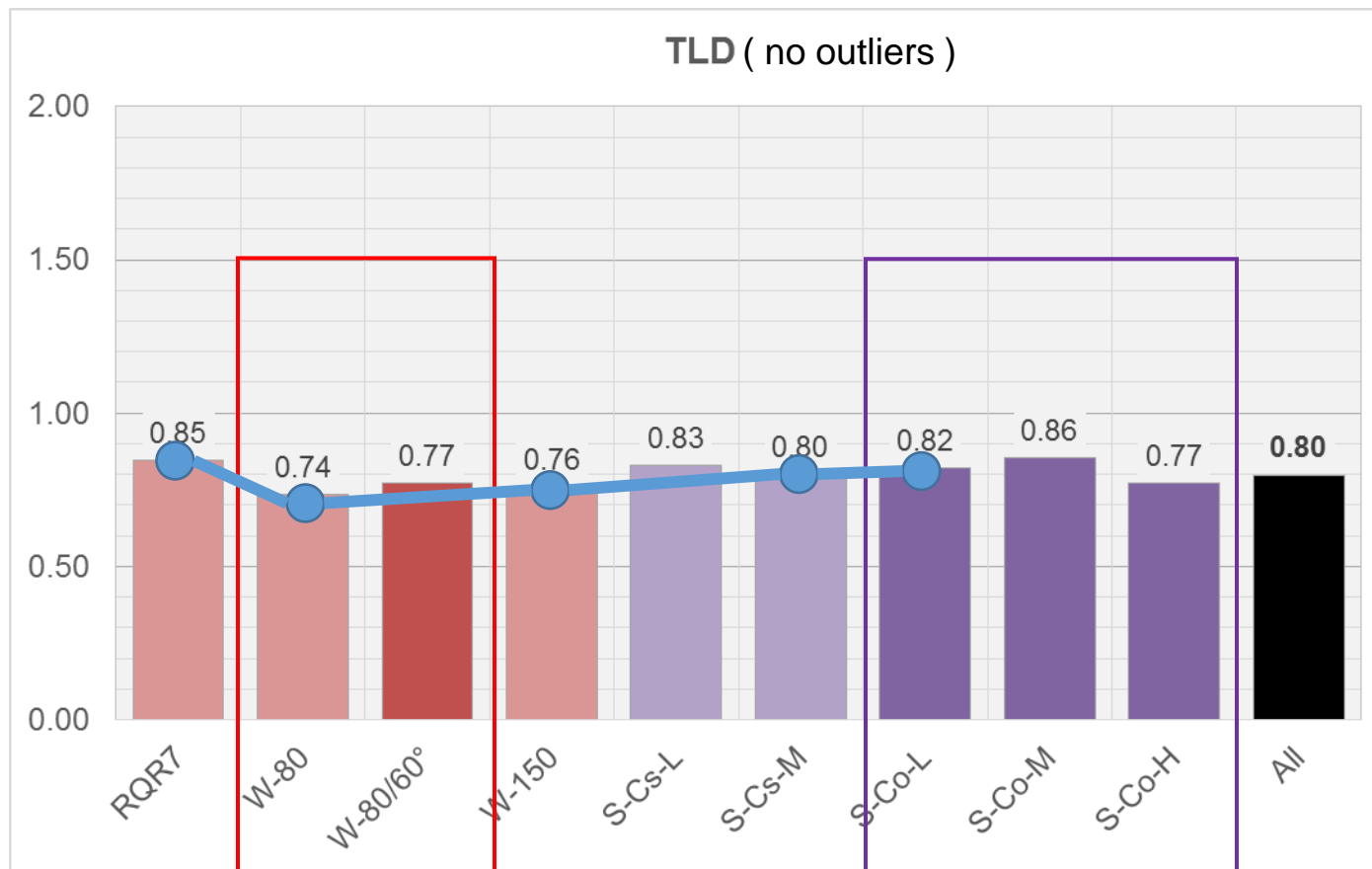
- Detector material?
- High doses out of range of performance?
- TLD reader: counting mode / current mode?

G4:



- Detector material?
- Filter thicknesses?
- Algorithm?

G5:



- Very good performance but... there is still space for improvement by checking calibration (-20%)

Thank you for your attention

