

SciLog DN 3140: SciTemp Post-Gamma Temperature Accuracy Test :

Test Summary: Ten, precalibrated at 25.00°C, SciTemp sensors (five Luer and five 3/4" TC sensors) were gamma irradiated at 35.7(max.) kGy. Post-gamma sensor survival and sensor accuracy were tested against a NIST-traceable temperature probe (re-calibration date 1/7/11). All post-gamma sensor measurements were carried out with temperature-equilibrated (25.00 +/- 0.1°) water. Equilibrated water was recirculated (150 ml/min) through sensors utilizing a peristaltic pump . All measurements were carried out within a temperature-equilibrated (25.0 +/- 0.3 glove box
All SciTemp sensors survived gamma-irradiation and tested accurately well within established limits of +/- 0.5 °C

<i>SciTemp</i> Luer Sensor ID	Cal: 7/2009 Pre-Gamma CF (Cal Factor)		Test: 7/2010 Post-Gamma NIST (Ref.)		Test: 7/2010 Post-Gamma SciTemp
A1-210053-0709	0.00		Temp., °C 25.07		Temp., °C 25.06
A1-210054-0709	-0.13		25.07		25.05
A1-210055-0709	-0.14		25.07		25.02
A1-210056-0709	-0.12		25.07		25.08
A1-210057-0709	0.02		25.07		25.09
Group Average			25.07		25.06
Group SD					+/- 0.03
<i>SciTemp</i> 3/4 TC Sensor ID	Cal: 10/2009 Pre-Gamma CF (Cal Factor)		Test: 7/2010 Post-Gamma NIST (Ref.)		Test: 7/2010 Post-Gamma SciTemp
A4-210062-1009	-0.15		Temp., °C 25.08		Temp., °C 25.05
A4-210063-1009	-0.16		25.08		25.06
A4-210064-1009	-0.10		25.08		25.06
A4-210065-1009	-0.16		25.08		25.05
A4-210066-1009	-0.14		25.08		25.07
Group Average			25.08		25.06
Group SD					+/- 0.01