



Tel: +1.805.964.3615 info@fwt.com
 Fax: +1.805.964.3162 www.fwt.com
 330 Kellogg Avenue, Suite D, Goleta, CA 93117 U.S.A.

FWT-60-00 Batch Characterization

Batch 1097

Typical Calibration Curve

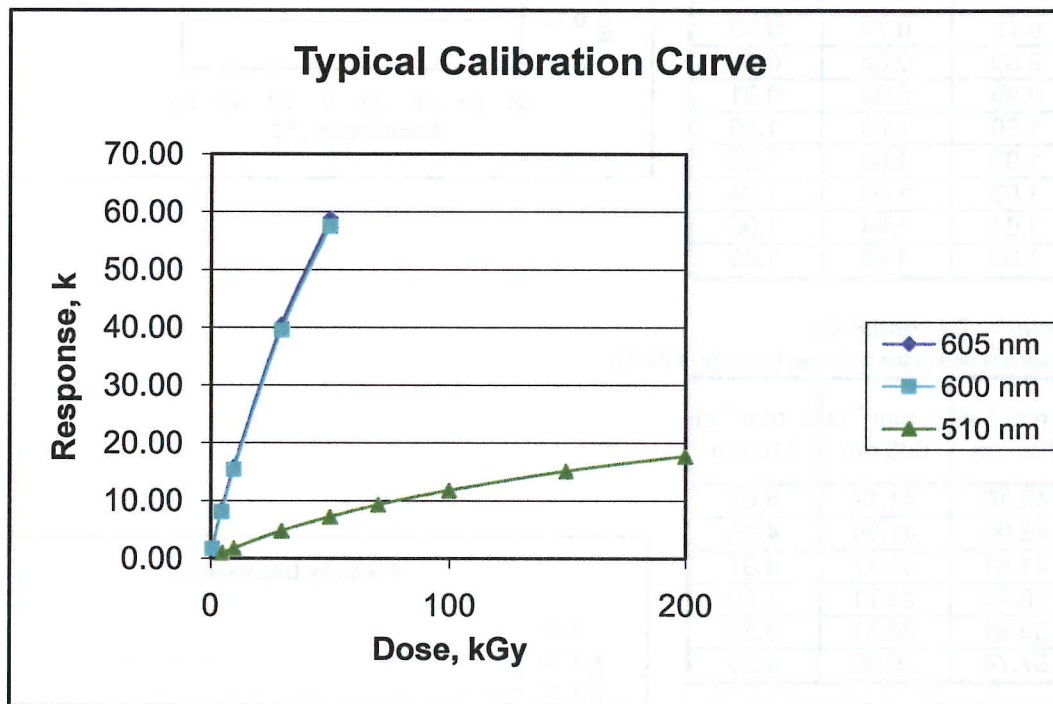
(Dosimeters pre-conditioned to 20 °C and 50%RH)

Dose, kGy	k, mm ⁻¹ at 605 nm	k, mm ⁻¹ at 600 nm	k, mm ⁻¹ at 510 nm
1	1.78	1.73	
5	8.38	8.12	0.97
10	15.88	15.43	1.80
30	40.54	39.51	4.82
50	58.88	57.51	7.21
70			9.32
100			11.80
150			15.15
200			17.73

Coefficient of Variation of k

605 nm	600 nm	510 nm
1.4%	1.3%	1.4%

Note: k is the specific absorbance and is determined from the thickness, t, and final and initial absorbances Af and Ai:
 $k = (A_f - A_i) / t$.



This typical calibration curve is provided as a guide to the response of FWT-60-00 Radiachromic Detectors to ionizing radiation. Actual response also depends on the instrumentation used to measure absorbancies and thicknesses.

John O. Riches
 Authorization for Release

3-5-2009
 Date



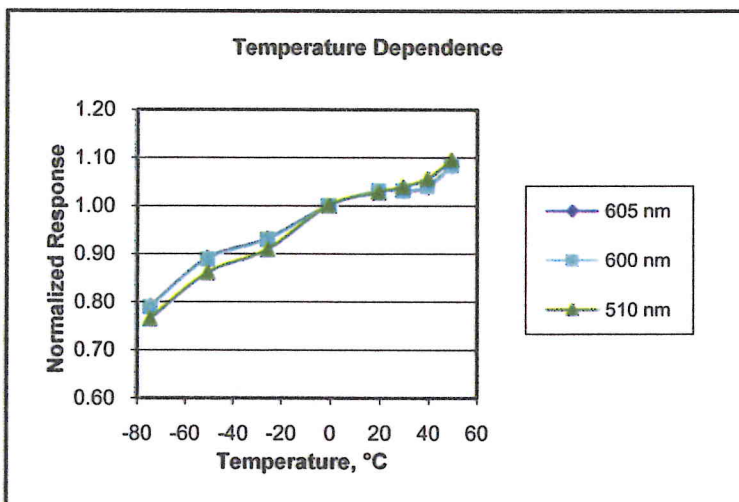
FWT-60-00 Batch Characterization

Batch 1097

Temperature Dependence

(Dosimeters pre-conditioned to 20 °C and 50%RH)

T, °C	k, mm ⁻¹ at 605 nm	k, mm ⁻¹ at 600 nm	k, mm ⁻¹ at 510 nm
-74	31.78	30.87	3.60
-50	35.79	34.75	4.05
-25	37.43	36.36	4.28
0	40.14	39.09	4.71
20	41.37	40.31	4.84
30	41.34	40.31	4.89
40	41.68	40.66	4.97
50	43.42	42.34	5.16

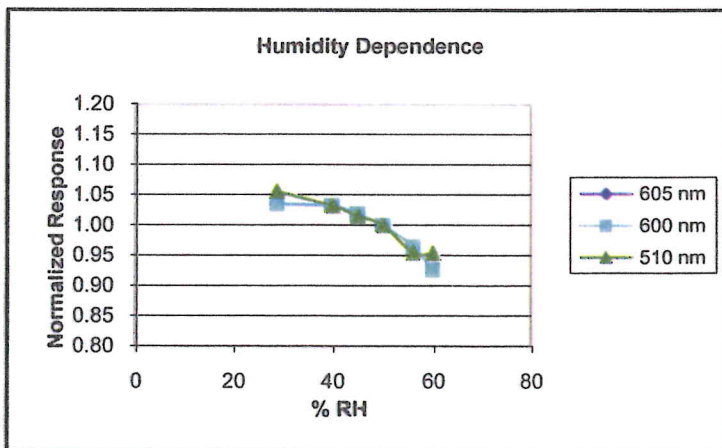


T, °C	Norm. k at 605 nm	Norm k at 600 nm	Norm k at 510 nm
-74	0.79	0.79	0.76
-50	0.89	0.89	0.86
-25	0.93	0.93	0.91
0	1.00	1.00	1.00
20	1.03	1.03	1.03
30	1.03	1.03	1.04
40	1.04	1.04	1.06
50	1.08	1.08	1.09

Humidity Dependence

(Dosimeters pre-conditioned to the indicated humidity at 20 °C)

%RH	k, mm ⁻¹ at 605 nm	k, mm ⁻¹ at 600 nm	k, mm ⁻¹ at 510 nm
29	42.16	41.12	5.07
40	42.03	41.00	4.95
45	41.51	40.47	4.87
50	40.74	39.71	4.80
56	39.31	38.31	4.58
60	37.74	36.80	4.58



%RH	Norm. k at 605 nm	Norm k at 600 nm	Norm k at 510 nm
29	1.03	1.04	1.06
40	1.03	1.03	1.03
45	1.02	1.02	1.01
50	1.00	1.00	1.00
56	0.96	0.96	0.95
60	0.93	0.93	0.95