Optical Filters

Bandpass Interference Filters

UV Bandpass Filters

COMMON SPECIFICATION

Construction:	MDM (metal-dielectric-metal)
Size:	25.4mm diameter
Thickness:	6mm max.
Size tolerance:	±0.5mm
Clear aperture:	90%
Blocking:	$1x10^{-3}$ from x-ray to 1.2µm

Supplied in a sealed foil envelope with spectral transmission curve.

Standard Bandpass Filters

COMMON SPECIFICATION

Construction:	Multi-cavity or ITF
Centre wavelength tolerance –	
40 & 80nm bandpass:	±6nm
All other filters:	±2nm
Bandwidth tolerance –	
≤254nm centre λ:	±2nm
260-1064nm centre λ:	±1.5nm
40 & 80nm bandpass:	±8nm
Size tolerance:	±0.5mm
Thickness –	
≤390nm:	7.6mm max.
400-1064nm:	6.4mm max.
Clear aperture –	
12.7mm diameter:	8.1mm
25.4mm diameter:	19.0mm
50.8 x 50.8mm:	48.5 x 48.5mm
Blocking –	
193-310nm:	$1x10^{-4}$ from low UV to far IR
320-370nm:	$1x10^{-4}$ from low UV to 750nm
380-1064nm:	$1x10^{-4}$ from low UV to far IR
40 & 80nm bandpass:	$1x10^{-3}$ from low UV to 1000nm

Supplied in a sealed foil envelope with spectral transmission curve.

Table L2 UV Bandpass Filters

Catalogue Number	Source	Centre λ (nm)	Centre λ Tolerance (nm)	Bandwidth FWHM (nm)	Peak Transmission (%)
37-2680	S, Ph[1]	180	±5.0	50.0	30
37-2698	Hg	185	±2.5	27.5	15
37-2706	Hg[2]	185	±2.5	27.5	10
37-2714	ArF Laser	193	±5.0	25.0	15
37-2722	Se[1]	200	±5.0	45.0	30
37-2730	Pb[1]	220	±5.0	45.0	30
37-2748	CO, Sn	240	±5.0	45.0	30
37-2755	KrF Laser	248	±2.5	25.0	15
37-2763	Hg	254	±2.5	25.0	15
37-2771	Fe[2]	260	±5.0	50.0	30
37-2789	Nd. Yag Laser	266	±5.0	50.0	30
37-2797	XeCl Laser	308	±2.5	25.0	10

[1] Stray light reduction
[2] High rejection of Hg 254nm line

Table L3 Standard Bandpass Filters

Catalogue Number Filter Size 12.7mm	25.4mm	50.8 x 50.8mm	Source	Centre λ (nm)	Bandwidth FWHM (nm)	Peak Transmission (%)	Effective Index n*	Number of Cavities
—	35-7889	—		250.0	11.0	10	1.45	2
—	35-2807	35-9026	Hg	254.0	7.0	10	1.45	2
—	35-7897	—		260.0	11.0	15	1.45	2
—	35-7905	—		270.0	11.0	15	1.45	2
—	35-9414	—	Hg	280.0	11.0	15	1.45	2
—	35-7913	—	Hg	290.0	11.0	15	1.45	2

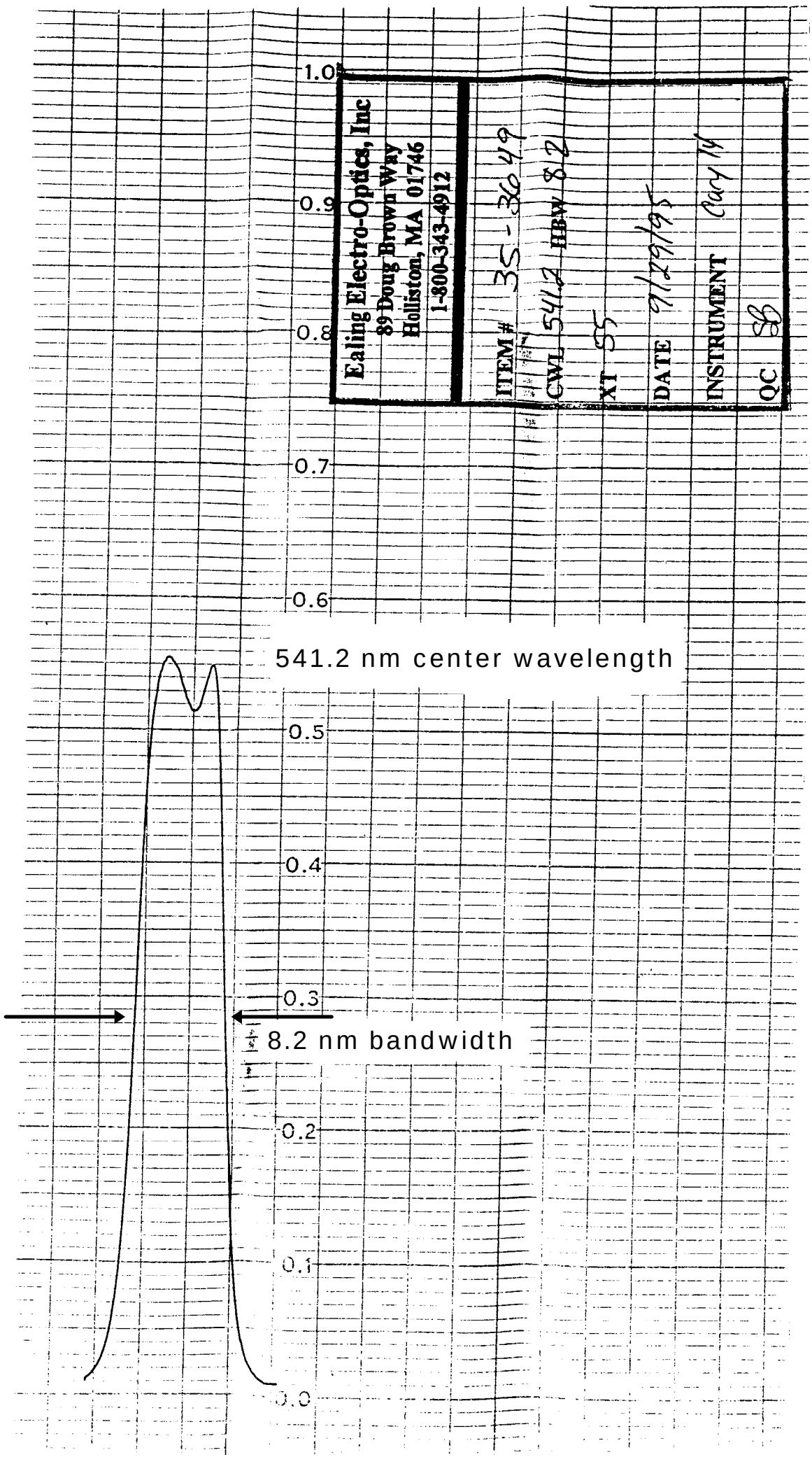
Optical Filters

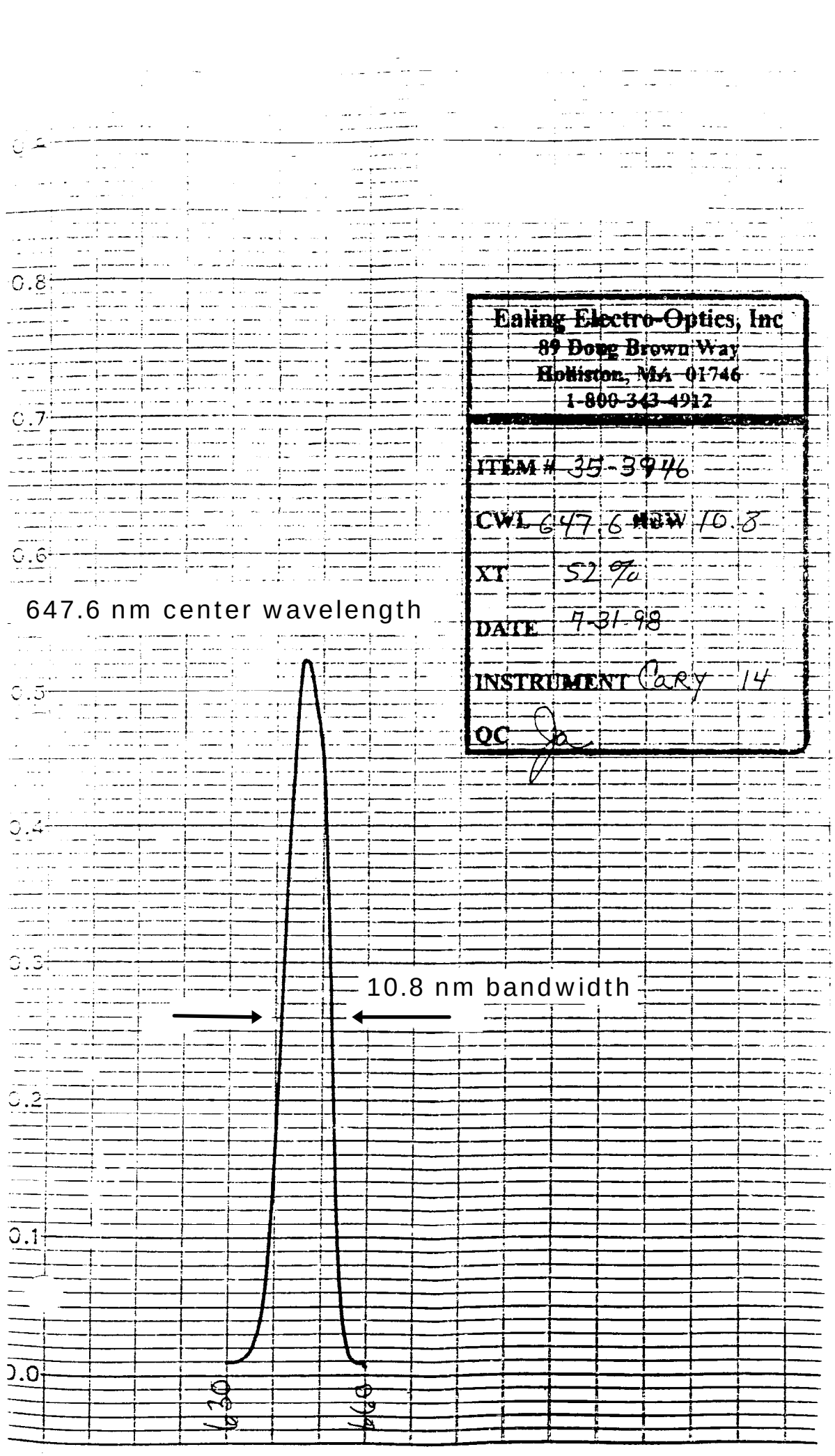
Bandpass Interference Filters

Table L3 Standard Bandpass Filters Cont'd.

Catalogue Number Filter Size 12.7mm	25.4mm	50.8 x 50.8mm	Source	Centre λ (nm)	Bandwidth FWHM (nm)	Peak Transmission (%)	Effective Index n*	Number of Cavities
—	35-7921	—		300.0	11.0	15	1.45	2
—	35-7939	—	Zn	307.1	10.0	15	1.45	2
—	35-8044	—		310.0	11.0	15	1.45	2
—	35-7947	—		320.0	11.0	20	1.45	2
—	35-7954	—	Cd	326.1	10.0	20	1.45	2
—	35-7962	—		330.0	10.0	20	1.45	2
35-7970	35-2989	35-2997		340.0	12.0	38	1.45	3
—	35-3003	35-3011		350.0	10.3	38	1.45	3
35-7996	35-3029	35-3037		360.0	10.6	38	1.45	3
—	35-3045	35-3052	Hg	365.0	10.7	38	1.45	3
—	35-3086	35-3094		380.0	11.2	30	1.45	3
—	35-3201	35-3219		400.0	9.0	30	1.45	3
—	35-9620	—		400.0	70.0	60	—	ITF
35-8069	35-3227	35-3235	Hg	405.0	9.2	40	1.45	3
35-8077	35-3243	35-3250	H	410.0	9.7	45	1.45	3
—	35-3268	35-3276	Argon	415.0	10.2	45	1.45	3
35-8093	35-3284	35-3292	Argon	420.0	7.0	45	1.45	3
—	35-3300	35-3318	Argon	430.0	7.3	45	2.10	3
35-8119	35-3326	35-3334	Hg	435.8	7.4	45	1.45	3
35-8127	35-3342	35-3359		440.0	7.5	45	1.45	3
35-8135	35-8143	—	HeCd Laser	441.6	1.0	45	—	3
35-8150	35-3367	35-3375	He	450.0	6.5	45	2.10	3
35-9646	35-5024	35-5032	He	450.0	40.0	50	1.45	4
—	35-9638	—	He	450.0	80.0	60	—	ITF
35-8168	35-8176	—	Argon Laser	457.9	1.0	45	—	3
—	35-3383	35-3391	Argon Laser	457.9	6.8	45	2.10	3
—	35-3409	35-3417		460.0	6.8	45	2.10	3
—	35-3425	35-3433	Cd	470.0	7.0	45	2.10	3
—	35-3441	35-3458	Cd	480.0	7.1	45	2.10	3
35-8358	35-8366	—	Argon Laser	488.0	1.0	45	—	3
35-9661	35-3466	35-3474	Argon Laser	488.0	7.2	45	2.10	3
35-8374	35-3482	35-3490		490.0	7.3	45	2.10	3
35-8382	35-3508	35-3516	He	500.0	7.4	50	2.10	3
—	35-5040	35-5057	He	500.0	40.0	50	2.10	4
—	35-3193	—	He	500.0	80.0	60	—	ITF
—	35-3524	35-3532	He	505.0	7.5	50	2.10	3
—	35-3540	35-3557	Cd	510.0	7.7	50	2.10	3
35-8416	35-8424	—	Argon Laser	514.5	1.0	50	—	3
35-9687	35-3565	35-3573	Argon Laser	514.5	8.0	50	2.10	3
35-8432	35-3581	35-3599		520.0	8.2	50	2.10	3
—	35-3607	35-3615		530.0	8.5	50	2.10	3
35-8457	35-8465	—	Nd.Yag, 2X	532.0	1.0	50	—	3
35-9695	35-3623	35-3631	Nd.Yag, 2X	532.0	8.6	50	2.10	3
35-8473	35-3649	35-3656	Ne	540.0	8.7	50	2.10	3
35-8481	35-3664	35-3672	Hg	546.1	8.8	50	2.10	3
35-8499	35-3680	35-3698		550.0	9.2	50	2.10	3
—	35-5065	35-5073		550.0	40.0	50	2.10	5
—	35-9588	—		550.0	80.0	60	—	ITF
35-8507	35-3706	35-3714		560.0	9.4	50	2.10	3
35-8515	35-8523	—	Dye Laser	568.2	1.0	55	—	3
35-8531	35-3722	35-3730		570.0	9.7	50	2.10	3
35-8549	35-3748	35-3755	Hg	577.0	9.8	50	2.10	3
—	35-3763	35-3771	Hg	580.0	9.8	50	2.10	3
35-8564	35-3789	35-3797	Na, He	589.6	10.0	50	2.10	3
35-8572	35-3805	35-3813		590.0	10.0	50	2.10	3
35-8580	35-3821	35-3839		600.0	10.1	50	2.10	3
—	35-5081	35-5099		600.0	40.0	50	2.10	5
—	35-9596	—		600.0	80.0	60	—	ITF

GREEN
FILTER

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Holliston, MA 01746
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ITEM # 35-3946
CWL 647.6 nm BW 10.8
XT 52%
DATE 7-31-98
INSTRUMENT Cary 14
QC
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10.8 nm bandwidth
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RED FILTER