

the  
ART  
*of*  
light

**LEE Filters**

## FUTURE

## P E R S P E C T I V E

In successful companies, continuous achievement is driven by innovation and understanding. Creating a product or process is only a first step - maintaining the momentum of progress and success over many years requires a demanding set of disciplines.

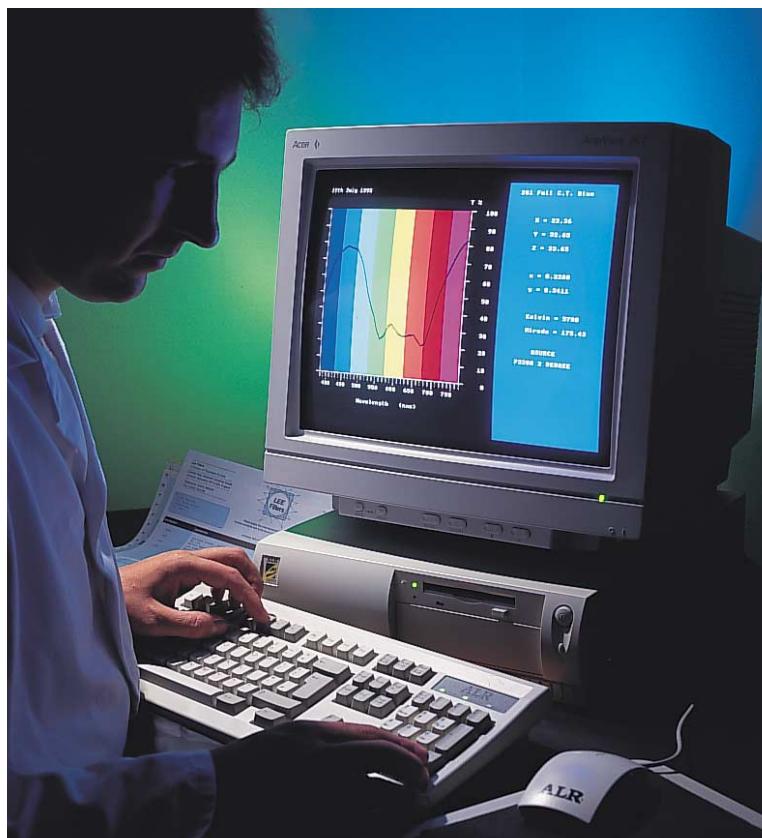
At Lee Filters, we are proud to say that we have earned - and kept - our reputation as the world's leading manufacturer of lighting filter products by constantly looking ahead. Our company culture is one of continuous research and development - there can never be enough colours: or diffusers: or polarisers: and even we have not yet found the perfect production process.

We understand the science of what we do, and the art of what we do. We are always looking forward.

This brochure will introduce you to our world. A world of vibrant colour which continues to make a very significant contribution to what we believe is the art of light.

Both now, and for the future.





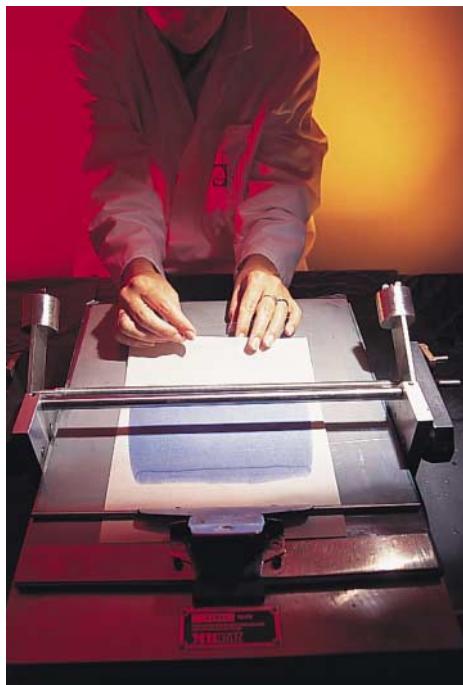
## TECHNICAL E X C E L L E N C E

The Lee Filters' plant is the world's leading location for the production of filters for the film, television, theatre and stills photographic markets. It is the only facility totally dedicated to the development and manufacture of these products, with production lines whose equipment is continuously updated to maintain accuracy, consistency, and unsurpassed quality.

At the heart of the manufacturing process is an appreciation of the scientific and technical principles which impact on filter performance. The often complex relationships between light sources, equipment, image recording media and the base materials available to the filter manufacturer are vital considerations in product development and production. They need to be analysed, understood, and applied to evolutionary thinking.

Each Lee filter is designed to fulfil a specific function, taking into account the parameters set by its required performance, and then the physical laws of light. This is a demanding technical process which Lee Filters continues to develop. As it stands today, it ensures excellence.

**LEE Filters**



## QUALITY

### C O N T R O L

The ability to create a wide range of products is only an advantage if the high quality of every filter produced can be guaranteed.

Lee Filters has developed sophisticated quality control systems based on purpose programmed spectrophotometers. But consideration is always given to that most incredible of all optical instruments - the human eye, which will eventually receive the created colour stimulus.

Every filter leaving the factory is accurately checked against a scientifically generated set of parameters. At Lee Filters, there is only one pass mark - 100%.

## RESEARCH AND D E V E L O P M E N T

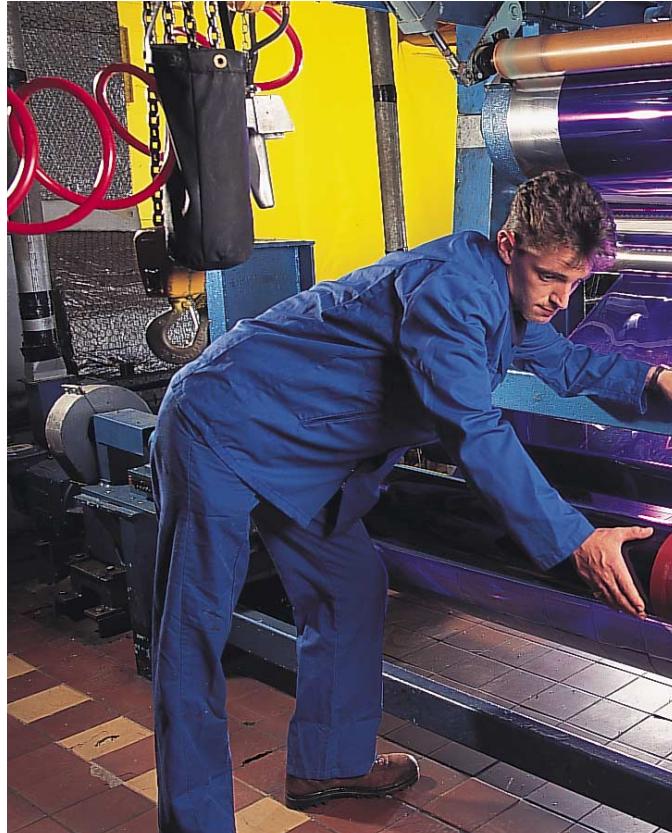
To maintain the pace of new product innovations, the company makes a major investment in research and development, with the R&D function at the forefront of company activity.

Research and Development personnel constantly monitor key areas relating to filters and the situations in which they are used, always seeking to relate new developments to future manufacturing techniques.

Among the most important areas of detailed interest are:

- developments in the polymeric materials which are the basis of Lee lighting filters;
- lamp and recording media technologies, because modern designs make increasing physical and technical demands on filters;
- the availability and performance of chemicals used in colourants is monitored in the quest for an even wider range of accurate and consistent colours. Lee mixes its own dyes to ensure reliability;

Additionally, Lee executives pay very close attention to feedback from end-users. Often, comments or individual requests from end-users will prompt research into new areas of filter performance, and this can eventually result in "customer-driven" products which fulfil a defined market need.





## TOTAL P R O D U C T I O N

The Lee Filters production philosophy is simply stated - ensure control from beginning to end.

From the selection of raw materials, through manufacture and all quality procedures to packing and despatch, Lee's stringent rules apply.

Each production procedure and much of the machinery used within it has been developed by - or for - Lee Filters, giving the company unparalleled control throughout the production cycle.

This precise monitoring regime, together with rigorous quality testing routines, ensures a consistency and repeatability of colour which is second to none.

Such in-depth care is only given to Lee Filters products for Lee Filters customers. Every lighting filter produced in the factory will carry the distinctive Lee Filters label - and no-one else's. That's the guarantee of quality.

On the pages which follow you will see what this continued dedication and commitment has come to mean in practice - a phenomenal selection of lighting filter products.



Welcome to the Lee Filters world of colour....

**LEE Filters**

# COLOUR RANGE

PRODUCT	EFFECT/COLOUR	Transmission Y%	Absorption	Chromaticity Co-ordinates	
				x	y
003 Lavender Tint	Subtle cool wash for stage and studio lighting	75.7	0.12	0.303	0.300
169 Lilac Tint	Ballroom - dance - backlight - front of house	59.5	0.23	0.294	0.281
136 Pale Lavender	Pantomime, ballroom sets, enhances dark skin tones in follow spots	43.2	0.36	0.288	0.254
704 Lily	A cool lavender with little red content. Good for romantic evening exteriors	40.0	0.40	0.267	0.221
052* Light Lavender	Set dressing, pantomimes and musicals	33.0	0.48	0.259	0.218
170 Deep Lavender	Set lighting - discos - theatres	25.7	0.59	0.278	0.211
345 Fuchsia Pink	Musical revue, pantomime, sultry scenes	15.5	0.81	0.252	0.156
048 Rose Purple	Musical revues, discos, etc. cycloramas	13.9	0.86	0.288	0.167
049 Medium Purple	A strong cheerful glow, for cycloramas and pantomimes	4.5	1.35	0.287	0.102
126 Mauve	Cycloramas - good for back lighting	4.1	1.38	0.287	0.082
797* Deep Purple	Used in musical performances for general colour washes and set lighting	2.3	1.65	0.235	0.065
798 Chrysalis Pink	A new deep lavender with a dash of rose blusher	3.8	1.43	0.190	0.060
707* Ultimate Violet	Used in musical performances for general colour washes and set lighting	2.0	1.69	0.170	0.042
343 Special Medium Lavender	Theatre and T.V. effect lighting, backlighting	6.0	1.22	0.182	0.081
180 Dark Lavender	Pleasing effects for theatrical lighting, backlighting	6.6	1.18	0.191	0.072
701 Provence	The colour of the Lavender fields of the South of France. A redder version of 180 for use on cameras balanced to tungsten sources	9.4	1.03	0.199	0.098
058* Lavender	Backlight	8.9	1.05	0.212	0.099
194 Surprise Pink	With 193 for musicals	22.3	0.65	0.240	0.183
344 Violet	Dusk effect, good skin tones, romantic effect	20.0	0.70	0.213	0.175
142 Pale Violet	Moonlight, cycloramas, highlighting pot plants	20.1	0.70	0.209	0.148
137 Special Lavender	Moonlight, musical / romantic scenes, enhances skin tones	26.4	0.58	0.231	0.175
702 Special Pale Lavender	A cold lavender when used with a full tungsten source, but warms as the source is dimmed. Good as a fill for slow sunset fades	54.1	0.27	0.281	0.269
709 Electric Lilac	Provides good colour rendering which creates sharp edges, adding a touch of drama	34.0	0.47	0.238	0.227
053* Paler Lavender	Subtle cool wash	62.2	0.21	0.284	0.284
708 Cool Lavender	For use as a warmer tint without turning yellow and to recreate the colour of fluorescent lighting	43.4	0.36	0.257	0.26
218 Eighth C.T.B.	Converts tungsten to daylight	81.3	0.09	0.299	0.307
203 Quarter C.T.B.	Converts tungsten to daylight	69.2	0.16	0.285	0.294

violet blue cyan green yellow red magenta



PRODUCT	EFFECT/COLOUR	Transmission Y%	Absorption		Chromaticity Co-ordinates	
			x	y	x	y
061* Mist Blue	Night scenes, cool wash	62.4	0.21	0.268	0.284	
202 Half C.T.B.	Converts tungsten to daylight	54.9	0.26	0.261	0.273	
063* Pale Blue	Cycloramas, cool wash	54.4	0.26	0.252	0.270	
117 Steel Blue	Gaslight effect when used in conjunction with 213	54.7	0.26	0.223	0.278	
725 Old Steel Blue	Cool wash, useful for highlights	56.2	0.24	0.239	0.270	
353 Lighter Blue	Daylight effects	41.0	0.39	0.193	0.246	
140 Summer Blue	Warm blue - cycloramas - tint wash	41.4	0.38	0.201	0.245	
172* Lagoon Blue	Floodlit warm wash - underwater scenes - ballet	25.4	0.60	0.141	0.220	
724 Ocean Blue	Useful at low levels of light, dull skies, - moonlight	36.2	0.44	0.189	0.222	
144 No Colour Blue	Moonlight for green seas, cycloramas with 147 to produce sunsets	32.4	0.49	0.183	0.228	
118* Light Blue	Strong night effect	22.2	0.65	0.149	0.113	
183 Moonlight Blue	Moonlight, cycloramas	18.7	0.73	0.128	0.168	
352 Glacier Blue	Cold blue, good for cool atmospheric mood setting	23.4	0.63	0.171	0.190	
174 Dark Steel Blue	Set lighting - creates good moonlight shadows	30.0	0.52	0.204	0.205	
196 True Blue	Moonlight	26.6	0.57	0.175	0.197	
281 Threequarters C.T.B.	Converts tungsten to daylight	45.5	0.35	0.239	0.258	
201 Full C.T.B.	Converts tungsten to photographic daylight	34.0	0.47	0.228	0.233	
161 Slate Blue	Moonlight and dusk	24.8	0.61	0.176	0.176	
165 Daylight Blue	Moonlight	20.0	0.70	0.159	0.158	
141* Bright Blue	Pretty or romantic moonlight, cycloramas, night	18.6	0.75	0.129	0.159	
143 Pale Navy Blue	Moonlight, cyclorama night effect	16.2	0.79	0.170	0.205	
366 Cornflower	Seasonal mood lighting, pale moonlight	17.7	0.75	0.193	0.190	
719 Colour Wash Blue	To allow low intensity tungsten to hold a cold/blue feel	19.3	0.71	0.188	0.171	
712 Bedford Blue	A smoky warm blue. Good for skin tones	17.9	0.75	0.183	0.158	
200 Double C.T.B.	Converts tungsten to daylight	16.2	0.79	0.179	0.155	
132* Medium Blue	Set lighting - travelling matt blue, cycloramas, night	8.3	1.08	0.137	0.110	
068 Sky Blue	Night effect, cycloramas	13.4	0.87	0.151	0.128	
075 Evening Blue	Good for night scenes, romantic moonlight	12.5	0.90	0.158	0.117	
197* Alice Blue	Moonlight, cycloramas	10.4	0.98	0.164	0.118	

\* Also available in High Temperature (HT) version

**LEE Filters**

PRODUCT	EFFECT/COLOUR	Transmission Y%	Absorption		Chromaticity Co-ordinates	
			x	y		
723 Virgin Blue	This is a pure blue, not to green and not to lavender, yet still feels warm for a blue with an early morning feel	7.0	1.16	0.158	0.1	
079* Just Blue	Cycloramas	5.6	1.25	0.145	0.072	
722 Bray Blue	A purer blue with very little red in it	5.2	1.28	0.139	0.086	
714 Elysian Blue	A new deeper version of Alice blue	6.8	1.17	0.151	0.097	
721* Berry Blue	Used in musical performances for rear colour wash, or set lighting	6.5	1.19	0.147	0.084	
715* Cabana Blue	A deep blue that still has enough transmission to work encouragingly well on television	6.8	1.17	0.152	0.075	
716* Mikkel Blue	A romantic blue to produce a night effect	3.9	1.4	0.146	0.054	
199 Regal Blue	A deep lavender blue, that strongly enhances skin tones.	5.4	1.26	0.161	0.070	
711 Cold Blue	To give a cold/grey H.M.I. effect from a tungsten source. Will also help blend when using both tungsten and HMI sources	14.4	0.84	0.223	0.198	
119* Dark Blue	Mood effects, jazz clubs, etc - back projection - travelling matt blue, moonlight	3.1	1.51	0.142	0.054	
363* Special Medium Blue	Cool moonlight, mood effects	4.2	1.37	0.141	0.070	
195* Zenith Blue	Moonlight for dark sets, cycloramas	2.7	1.56	0.142	0.046	
120* Deep Blue	Pleasing effect for theatrical lighting	1.1	1.96	0.149	0.021	
085* Deeper Blue	Moonlight, strong back lighting	2.5	1.60	0.143	0.065	
198 Palace Blue	Dark moonlight - romantic evening	1.7	1.78	0.159	0.066	
713* J.Winter Blue	A very dark blue with a high UV content. Good when used in high concentrations for a moody and powerful stage colour wash	1.1	1.97	0.148	0.037	
071* Tokyo Blue	Deep blue, use for midnight scenes, cycloramas	1.0	2.00	0.151	0.030	
181* Congo Blue	Theatre and television effect lighting, back lighting	0.8	2.10	0.158	0.035	
729* Scuba Blue	Used in musical performances for a rear colour wash, or set lighting	8.7	1.06	0.110	0.241	
116* Medium Blue-Green	Pleasing effect for theatrical lighting	16.5	0.78	0.113	0.280	
354 Special Steel Blue	Cooling blue-green wash for stage and set lighting	39.2	0.41	0.173	0.265	
115* Peacock Blue	Pleasing effect on sets, cyclorama cloths, back lighting (e.g. ice rinks, galas, etc)	35.2	0.46	0.134	0.296	
131 Marine Blue	Romantic moonlight - ballet - underwater scenes	41.3	0.38	0.199	0.305	
241 Lee Fluorescent 5700 Kelvin	Converts tungsten to fluorescent light of 5700K (cool white/daylight)	27.4	0.56	0.231	0.290	
728 Steel Green	Approaching storms. Overcast days. Cold steely light. Malevolent moonlight	45.9	0.33	0.256	0.302	
730 Liberty Green	A good green for creating mystery and suspense	67.5	0.17	0.277	0.330	
242 Lee Fluorescent 4300 Kelvin	Converts tungsten to fluorescent light of 4300K (white)	37.3	0.43	0.262	0.346	
219 Lee Fluorescent Green	General tungsten to fluorescent correction for use when fluorescent colour temp is unknown, to provide medium correction.	31.0	0.51	0.219	0.334	
323 Jade	Use for underwater scenes, cycloramas, backlighting	32.0	0.50	0.165	0.367	

violet    blue    cyan    green    yellow    red    magenta

PRODUCT	EFFECT/COLOUR	Transmission Y%	Absorption		Chromaticity Co-ordinates	
			x	y		
322 Soft Green	Cool green, use for gobo cover, pantomime, cycloramas	38.3	0.42	0.201	0.364	
325 Mallard Green	Good for mood setting, undergrowth	7.7	1.11	0.112	0.412	
327 Forest Green	Deep green, sinister forest scenes, cycloramas, backlighting	4.2	1.38	0.162	0.496	
735 Velvet Green	A beautiful background colour. Victorian melodrama. A night time green	11.5	0.93	0.103	0.536	
090* Dark Yellow Green	Highlighting for forest effects	10.9	0.96	0.184	0.641	
736 Twickenham Green	A powerful green with depth, for music or light entertainment	7.2	1.14	0.175	0.74	
139* Primary Green	Set lighting, cycloramas	11.9	0.92	0.196	0.712	
089* Moss Green	With gobos for forest scenes	29.8	0.53	0.259	0.547	
124* Dark Green	Cycloramas - good for back lighting	29.7	0.53	0.123	0.586	
243 Lee Fluorescent 3600 Kelvin	Converts tungsten to fluorescent light of 3600K (warm white).	45.7	0.34	0.286	0.370	
122* Fern Green	Cycloramas - good for mood effect	51.5	0.28	0.234	0.543	
738* JAS Green	A rich yellowish green: useful as a concert stage wash where darker skin tones, costume, and set are a consideration	52.3	0.28	0.315	0.587	
121* Lee Green	Cycloramas	64.0	0.20	0.302	0.534	
088 Lime Green	Use with gobos for leafy glades - pantos - slightly sinister atmosphere	70.9	0.15	0.356	0.511	
138 Pale Green	Good with gobos for wooded scenes	79.9	0.10	0.331	0.433	
244 Lee Plus Green	Approximately equivalent to CC30 green	74.2	0.12	0.324	0.388	
213 White Flame Green	Corrects white flame carbon arcs by absorbing ultra violet	80.0	0.10	0.317	0.359	
245 Half Plus Green	Approximately equivalent to CC15 green	81.7	0.08	0.319	0.355	
246 Quarter Plus Green	Approximately equivalent to CC075 green	84.6	0.07	0.315	0.337	
278 Eighth Plus Green	Provides very slight green cast	87.7	0.06	0.313	0.327	
230 Super Correction L.C.T. Yellow	Converts yellow carbon arc (of low colour temperature) to tungsten	41.9	0.38	0.367	0.368	
156 Chocolate	With 103 Straw in same lantern to produce candlelight	26.4	0.58	0.380	0.363	
747 Easy White	Primarily developed for fluorescents to ensure warm, comfortable light and flattering skin tones.	31.1	0.51	0.389	0.344	
017 Surprise Peach	Skin tones - mood light	19.6	0.71	0.439	0.372	
746 Brown	To give a murky, dirty feel to tungsten. A darker, less pink chocolate	1.5	1.82	0.498	0.437	
208 Full C.T.O. +.6ND	Converts daylight to tungsten 6500K to 3200K and reduces light 2 stops	15.6	0.81	0.442	0.394	
207 Full C.T.O. +.3ND	Converts daylight to tungsten 6500K to 3200K and reduces light 1 stop	32.5	0.49	0.435	0.386	
232 Super Correction W.F. Green to Tungsten	Converts white flame arc to 3200K, for use with tungsten film	37.4	0.43	0.423	0.385	
285 Threequarters C.T.O.	Converts daylight to tungsten light	61.3	0.21	0.400	0.387	

\* Also available in High Temperature (HT) version

**LEE Filters**

PRODUCT	EFFECT/COLOUR	Transmission Y%	Absorption	Chromaticity Co-ordinates	
				x	y
009* Pale Amber Gold	Late sunlight	71.1	0.15	0.376	0.371
205 Half C.T.O.	Converts daylight to tungsten light	70.8	0.15	0.374	0.364
442 Half C.T. Straw	Converts 6500K to 4300K - daylight to tungsten light with yellow bias	71.2	0.15	0.370	0.378
013* Straw Tint	Sunlight wash with gobos, interior lighting	72.1	0.14	0.392	0.392
103 Straw	Pale sunlight through window effect - warm winter effect	81.6	0.09	0.336	0.359
443 Quarter C.T. Straw	Converts 6500K to 5100K - daylight to tungsten light with yellow bias	79.8	0.10	0.338	0.349
206 Quarter C.T.O.	Converts daylight to tungsten light	79.1	0.10	0.346	0.34
223 Eighth C.T.O.	Converts daylight to tungsten light	85.2	0.07	0.328	0.332
444 Eighth C.T Straw	Converts 6500K to 5700K - daylight to tungsten light with yellow bias	83.1	0.08	0.323	0.332
159 No Colour Straw	Warm effect, sunlight	89.4	0.05	0.325	0.337
130 Clear	Used in animation and projection work	95.0	0.02	0.311	0.317
226 Lee UV	Transmission of less than 50% at 410nm	91.5	0.04	0.314	0.321
763 Wheat	Adds warmth, sunlight	84.3	0.07	0.343	0.357
212 L.C.T. Yellow (Y1)	Reduces colour temperature of low carbon arcs to 3200K	88.7	0.05	0.340	0.363
007* Pale Yellow	Sunlight	85.4	0.07	0.339	0.363
100 Spring Yellow	Sunlight wash - use with gobos - disco - dark skin tones	84.2	0.08	0.410	0.502
010* Medium Yellow	Sunlight effect	86.5	0.06	0.426	0.509
101 Yellow	Sunlight and window effect - pleasant in acting areas	80.0	0.10	0.451	0.507
765 LEE Yellow	Useful for producing a strong sunlight effect	80.2	0.10	0.389	0.412
764 Sun Colour Straw	Adds warmth, bright sunlight	80.5	0.09	0.365	0.380
102 Light Amber	Lamplight effects - dawn sun effects - pleasant in acting areas	75.1	0.12	0.434	0.440
767 Oklahoma Yellow	A rich blend of bright sunshine and warm ochre overtones	68.9	0.16	0.481	0.501
104 Deep Amber	Mood effect on backings. Backlighting of floor and colour effect	63.9	0.20	0.496	0.462
015* Deep Straw	Strong mood effect on backings with yellow bias	60.8	0.22	0.517	0.460
744 Dirty White	Correct a daylight source to an off white tungsten source. Used with a tungsten source provides a "dingy" effect like a smoky bar	57.9	0.24	0.421	0.412
441 Full C.T. Straw	Converts 6500K to 3200K - daylight to tungsten light with yellow bias	57.3	0.24	0.426	0.407
204 Full C.T.O.	Converts daylight to tungsten light	55.4	0.26	0.437	0.392
236 HMI (to Tungsten)	Converts HMI to 3200K, for use with Tungsten film	58.2	0.24	0.426	0.376
179 Chrome Orange	Combination of 1/2 CTO and double strength 104, sunlight	54.0	0.27	0.520	0.460

violet blue cyan green yellow red magenta

PRODUCT	EFFECT/COLOUR	Transmission Y%	Absorption	Chromaticity Co-ordinates	
				x	y
020* Medium Amber	Late sunlight	50.7	0.30	0.523	0.419
770 Burnt Yellow	A colour that feels warm and dense on camera, a balance between 179 and 105	47.7	0.32	0.545	0.447
776 Nectarine	Romantic sunset. Period pieces	52.9	0.27	0.424	0.368
147 Apricot	Sunrise, sunset, lamplight	53.0	0.28	0.446	0.381
105 Orange	Mainly light entertainment, functions. Fire effect if used with 106, 166, 104	41.3	0.38	0.563	0.428
779 Bastard Pink	Deep sunset. Useful on dark skin tones	38.8	0.41	0.501	0.336
237 CID (to Tungsten)	Converts CID to 3200K, for use with tungsten film	38.5	0.41	0.430	0.365
134 Golden Amber	Fire effect (doubled up)	37.8	0.42	0.501	0.371
158 Deep Orange	Fire effect	29.9	0.52	0.588	0.403
021* Gold Amber	Fire effect, sunset	31.3	0.51	0.586	0.396
777 Rust	A vivid rust colour effect	24.3	0.61	0.576	0.416
778* Millennium Gold	Useful for lighting architecture: it produces a rich amber when used on a tungsten source, or a much cooler effect when used on a HMI lamp	27.3	0.56	0.606	0.382
135 Deep Golden Amber	Fire effect	19.5	0.71	0.667	0.326
022* Dark Amber	Backlight	23.9	0.62	0.647	0.339
025 Sunset Red	Warm stage wash - TV studio wash - sunset effect	26.4	0.58	0.566	0.359
166 Pale Red	Cycloramas	25.0	0.60	0.532	0.263
781 Terry Red	A strong amber red that works well when used against reds, and dark ambers, in wash combinations, and on cycloramas	19.1	0.72	0.643	0.348
019* Fire	Disco effect - fire effect	18.9	0.72	0.664	0.310
164 Flame Red	Fire effect	18.0	0.75	0.659	0.302
024* Scarlet	Pantomimes, ballroom sets, fire effects	18.7	0.73	0.561	0.296
182 Light Red	Theatre and television effect lighting, cycloramas	11.0	0.96	0.670	0.313
106 Primary Red	Strong red effect, cycloramas	9.3	1.03	0.699	0.285
026* Bright Red	Cycloramas	8.6	1.06	0.712	0.281
029 PLASA Red	Fire effect, musicals, cycloramas	5.8	1.24	0.693	0.303
027* Medium Red	Cycloramas	3.6	1.44	0.712	0.261
789 Blood Red	For a deep saturated red effect. Used when a strong vivid red effect is required	1.2	1.91	0.677	0.314
341 Plum	Romantic, atmospheric set lighting	19.4	0.71	0.309	0.256
748 Seedy Pink	A smoky pink. Good for tungsten on skin tones	14.4	0.84	0.373	0.263
127 Smokey Pink	Cycloramas - set lighting, discos	12.0	0.92	0.397	0.265

\* Also available in High Temperature (HT) version

**LEE Filters**

PRODUCT	EFFECT/COLOUR	Transmission Y%	Absorption		Chromaticity Co-ordinates	
			x	y		
046* Dark Magenta	Very strong pink, good for back lighting	6.0	1.22	0.572	0.223	
113 Magenta	Very strong - used carefully for small areas on set	10.9	0.96	0.563	0.217	
148 Bright Rose	Fire effects, musicals	14.4	0.84	0.482	0.238	
332 Special Rose Pink	Pantomimes, light entertainment etc. strong stage wash	10.5	0.98	0.465	0.193	
793 Vanity Fair	A rich glamourous pink, good for use on special occasions	12.0	0.92	0.419	0.170	
128 Bright Pink	Cycloramas - good for back lighting - strong effect	13.7	0.86	0.401	0.151	
795 Magical Magenta	Rich mixture of red and pinks	13.1	0.88	0.327	0.138	
328 Follies Pink	Dramatic stage lighting	21.6	0.67	0.335	0.180	
002 Rose Pink	Strong pink wash cycloramas	32.7	0.50	0.328	0.202	
111 Dark Pink	Good for cycloramas	31.9	0.50	0.389	0.215	
192 Flesh Pink	Musical and pantomime key lighting	34.9	0.46	0.410	0.237	
036* Medium Pink	Front of house lanterns	45.4	0.34	0.360	0.268	
110 Middle Rose	Pleasing effects for theatrical lighting	47.5	0.32	0.351	0.249	
794 Pretty 'n Pink	Creates warm and soft effects	46.8	0.33	0.335	0.251	
039 Pink Carnation	Soft, cool pastel pink, good for backlighting and general colourwash	60.2	0.22	0.320	0.268	
247 Lee Minus Green	Approximately equivalent to CC30 magenta	57.8	0.22	0.325	0.279	
035* Light Pink	Musical reviews. Warm wash	61.3	0.21	0.335	0.289	
153 Pale Salmon	Backlighting in conjunction with white light	64.9	0.19	0.362	0.303	
248 Half Minus Green	Approximately equivalent to CC15 magenta	72.0	0.14	0.317	0.297	
249 Quarter Minus Green	Approximately equivalent to CC075 magenta	82.4	0.08	0.312	0.307	
279 Eighth Minus Green	Provides very slight correction	86.5	0.06	0.312	0.311	
162 Bastard Amber	Warm white, warm wash, lamp light	77.7	0.11	0.348	0.328	
152 Pale Gold	Interior lighting to enhance skin tones	70.7	0.15	0.370	0.332	
154 Pale Rose	Pleasing effect for theatrical lighting, lamplight	73.4	0.14	0.350	0.318	
151 Gold Tint	Pleasing effect for theatrical lighting	69.4	0.16	0.361	0.321	
004* Medium Bastard Amber	Naturally enhances skin tones	64.1	0.19	0.370	0.335	
108 English Rose	Warm tint wash - dark flesh tones - softer skin tones	57.1	0.24	0.412	0.352	
790 Moroccan Pink	A rich natural pink, good for producing late afternoon sun effects	58.1	0.24	0.378	0.324	
176 Loving Amber	Sunrise backlight	50.2	0.30	0.407	0.321	

violet blue cyan green yellow red magenta

PRODUCT	EFFECT/COLOUR	Transmission Y%	Absorption		Chromaticity Co-ordinates	
			x	y	x	y
109 Light Salmon	Interesting backlight	54.9	0.26	0.391	0.295	
107 Light Rose	Mood effect on backings. Backlighting of floor and colour effect	48.0	0.32	0.407	0.284	
157 Pink	Dance sequences (useful for softening white costumes without affecting skin tones)	36.4	0.44	0.457	0.272	
193 Rosy Amber	Warm, emotional, romantic	36.0	0.44	0.473	0.279	
008* Dark Salmon	Enhances dark skin tones, sunsets, ballroom sets	35.4	0.45	0.498	0.347	
238 CSI (to Tungsten)	Converts CSI to 3200K, for use with tungsten film	29.8	0.53	0.372	0.331	

## COSMETIC RANGE

PRODUCT	EFFECT/COLOUR	Transmission Y%	Absorption		Chromaticity Co-ordinates	
			x	y	x	y
191 Cosmetic Aqua Blue	Pale tints complementary to key lighting	65.8	0.18	0.300	0.318	
190 Cosmetic Emerald	Pale tints complementary to key lighting	67.1	0.17	0.307	0.327	
189 Cosmetic Silver Moss	Pale tints complementary to key lighting	71.7	0.15	0.327	0.347	
184 Cosmetic Peach	Pale tints complementary to key lighting	58.6	0.23	0.328	0.328	
185 Cosmetic Burgundy	Pale tints complementary to key lighting	57.7	0.24	0.324	0.319	
188 Cosmetic Highlight	Pale tints complementary to key lighting	66.3	0.18	0.330	0.327	
187 Cosmetic Rouge	Pale tints complementary to key lighting	58.8	0.23	0.336	0.328	
186 Cosmetic Silver Rose	Pale tints complementary to key lighting	59.7	0.22	0.323	0.308	

## COLOURED FROSTS

PRODUCT	EFFECT/COLOUR	Transmission Y%	Absorption		Chromaticity Co-ordinates	
			x	y	x	y
705 Lily Frost	Smoothes PAR or flood washes of large areas. Useful for houselights; a good colour wash for evening events	38.5	0.42	0.264	0.217	
775 Soft Amber Key 2	Used for producing a warm key light colour	58.4	0.23	0.409	0.363	
774 Soft Amber Key 1	Used for producing a warm key light colour	70.6	0.15	0.366	0.348	
749 Hampshire Rose	Combines flesh tone warmer 154 with some Hampshire frost	74	0.13	0.339	0.318	
791 Moroccan Frost	Smoothes PAR or flood washes of large areas. Useful for houselights; good for interior colour washes	57.2	0.24	0.376	0.322	

# NUMERICAL LISTING

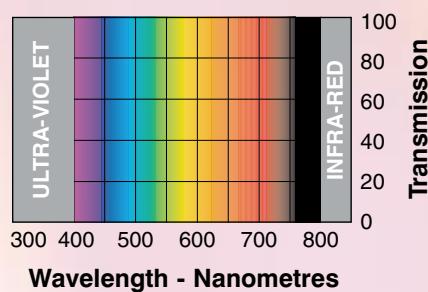
002 ROSE PINK	137 SPECIAL LAVENDER	219 LEE FLUORESCENT GREEN	400 LEELUX
003 LAVENDER TINT	138 PALE GREEN	220 WHITE FROST	410 OPAL FROST
004* MEDIUM BASTARD AMBER	139* PRIMARY GREEN	221 BLUE FROST	416 $\frac{3}{4}$ WHITE DIFFUSION
007* PALE YELLOW	140 SUMMER BLUE	223 $\frac{1}{8}$ C.T.ORANGE	420 LIGHT OPAL FROST
008* DARK SALMON	141* BRIGHT BLUE	224 DAYLIGHT BLUE FROST	430 GRID CLOTH
009* PALE AMBER GOLD	142 PALE VIOLET	225 LEE N.D. FROST	432 LIGHT GRID CLOTH
010* MEDIUM YELLOW	143 PALE NAVY BLUE	226 LEE U.V.	434 $\frac{1}{4}$ GRID CLOTH
013* STRAW TINT	144 NO COLOUR BLUE	228 BRUSHED SILK	441 FULL C.T. STRAW
015* DEEP STRAW	147 APRICOT	229 $\frac{1}{4}$ TOUGH SPUN	442 $\frac{1}{2}$ C.T. STRAW
017 SURPRISE PEACH	148 BRIGHT ROSE	230 SUPER CORRECTION L.C.T. YELLOW	443 $\frac{1}{4}$ C.T. STRAW
019* FIRE	151 GOLD TINT	232 SUPER WHITE FLAME GREEN	444 $\frac{1}{8}$ C.T. STRAW
020* MEDIUM AMBER	152 PALE GOLD	236 H.M.I (TO TUNGSTEN)	450 $\frac{3}{8}$ WHITE DIFFUSION
021* GOLD AMBER	153 PALE SALMON	237 C.I.D. (TO TUNGSTEN)	452 $\frac{1}{16}$ WHITE DIFFUSION
022* DARK AMBER	154 PALE ROSE	238 C.S.I. (TO TUNGSTEN)	460 QUIET GRID CLOTH
024* SCARLET	156 CHOCOLATE	239 POLARISER	462 QUIET LIGHT GRID CLOTH
025 SUNSET RED	157 PINK	241 LEE FLUORESCENT 5700 K	464 QUIET $\frac{1}{4}$ GRID CLOTH
026* BRIGHT RED	158 DEEP ORANGE	242 LEE FLUORESCENT 4300 K	701 PROVENCE
027* MEDIUM RED	159 NO COLOUR STRAW	243 LEE FLUORESCENT 3600 K	702 SPECIAL PALE LAVENDER
029 PLASA RED	161 SLATE BLUE	244 LEE PLUS GREEN	704 LILY
035* LIGHT PINK	162 BASTARD AMBER	245 $\frac{1}{2}$ PLUS GREEN	705 LILY FROST
036* MEDIUM PINK	164 FLAME RED	246 $\frac{1}{4}$ PLUS GREEN	707* ULTIMATE VIOLET
039 PINK CARNATION	165 DAYLIGHT BLUE	247 LEE MINUS GREEN	708 COOL LAVENDER
046* DARK MAGENTA	166 PALE RED	248 $\frac{1}{2}$ MINUS GREEN	709 ELECTRIC LILAC
048 ROSE PURPLE	169 LILAC TINT	249 $\frac{1}{4}$ MINUS GREEN	711 COLD BLUE
049 MEDIUM PURPLE	170 DEEP LAVENDER	250 $\frac{1}{2}$ WHITE DIFFUSION	712 BEDFORD BLUE
052* LIGHT LAVENDER	172* LAGOON BLUE	251 $\frac{1}{4}$ WHITE DIFFUSION	713* J.WINTER BLUE
053* PALER LAVENDER	174 DARK STEEL BLUE	252 $\frac{1}{8}$ WHITE DIFFUSION	714 ELYSIAN BLUE
058* LAVENDER	176 LOVING AMBER	253 HAMPSHIRE FROST	715* CABANA BLUE
061* MIST BLUE	179 CHROME ORANGE	254 NEW HAMPSHIRE FROST	716* MIKKEL BLUE
063* PALE BLUE	180 DARK LAVENDER	255 HOLLYWOOD FROST	717 SHANKLIN FROST
068 SKY BLUE	181* CONGO BLUE	256 $\frac{1}{2}$ HAMPSHIRE FROST	718 HALF SHANKLIN FROST
071* TOKYO BLUE	182 LIGHT RED	257 $\frac{1}{4}$ HAMPSHIRE FROST	719 COLOUR WASH BLUE
075 EVENING BLUE	183 MOONLIGHT BLUE	258 $\frac{1}{8}$ HAMPSHIRE FROST	720 DURHAM DAYLIGHT FROST
079* JUST BLUE	184 COSMETIC PEACH	261 TOUGH SPUN FR - FULL	721* BERRY BLUE
085* DEEPER BLUE	185 COSMETIC BURGUNDY	262 TOUGH SPUN FR - $\frac{3}{4}$	722 BRAY BLUE
088 LIME GREEN	186 COSMETIC SILVER ROSE	263 TOUGH SPUN FR - $\frac{1}{2}$	723 VIRGIN BLUE
089* MOSS GREEN	187 COSMETIC ROUGE	264 TOUGH SPUN FR - $\frac{3}{8}$	724 OCEAN BLUE
090* DARK YELLOW GREEN	188 COSMETIC HIGHLIGHT	265 TOUGH SPUN FR - $\frac{1}{4}$	725 OLD STEEL BLUE
100 SPRING YELLOW	189 COSMETIC SILVER MOSS	269 LEE HEAT SHIELD	728 STEEL GREEN
101 YELLOW	190 COSMETIC EMERALD	270 LEE SCRIM	729* SCUBA BLUE
102 LIGHT AMBER	191 COSMETIC AQUA BLUE	271 MIRROR SILVER	730 LIBERTY GREEN
103 STRAW	192 FLESH PINK	272 SOFT GOLD REFLECTOR	735 VELVET GREEN
104 DEEP AMBER	193 ROSY AMBER	273 SOFT SILVER REFLECTOR	736 TWICKENHAM GREEN
105 ORANGE	194 SURPRISE PINK	274 MIRROR GOLD	738* JAS GREEN
106 PRIMARY RED	195* ZENITH BLUE	275 BLACK SCRIM	744 DIRTY WHITE
107 LIGHT ROSE	196 TRUE BLUE	278 $\frac{1}{8}$ PLUS GREEN	746 BROWN
108 ENGLISH ROSE	197* ALICE BLUE	279 $\frac{1}{8}$ MINUS GREEN	747 EASY WHITE
109 LIGHT SALMON	198 PALACE BLUE	280 BLACK FOIL	748 SEEDY PINK
110 MIDDLE ROSE	199 REGAL BLUE	281 $\frac{3}{4}$ C.T. BLUE	749 HAMPSHIRE ROSE
111 DARK PINK	200 DOUBLE C.T. BLUE	285 $\frac{3}{4}$ C.T. ORANGE	750 DURHAM FROST
113 MAGENTA	201 FULL C.T. BLUE	298 .15 NEUTRAL DENSITY	763 WHEAT
115* PEACOCK BLUE	202 $\frac{1}{2}$ C.T. BLUE	299 1.2 NEUTRAL DENSITY	764 SUN COLOUR STRAW
116* MEDIUM BLUE-GREEN	203 $\frac{1}{4}$ C.T. BLUE	322 SOFT GREEN	765 LEE YELLOW
117 STEEL BLUE	204 FULL C.T. ORANGE	323 JADE	767 OKLAHOMA YELLOW
118* LIGHT BLUE	205 $\frac{1}{2}$ C.T. ORANGE	325 MALLARD GREEN	770 BURNT YELLOW
119* DARK BLUE	206 $\frac{1}{4}$ C.T. ORANGE	327 FOREST GREEN	774 SOFT AMBER KEY 1
120* DEEP BLUE	207 FULL C.T. ORANGE + .3 NEUTRAL DENSITY	328 FOLLIES PINK	775 SOFT AMBER KEY 2
121* LEE GREEN	208 FULL C.T. ORANGE + .6 NEUTRAL DENSITY	332 SPECIAL ROSE PINK	776 NECTARINE
122* FERN GREEN	209 .3 NEUTRAL DENSITY	341 PLUM	777 RUST
124* DARK GREEN	210 .6 NEUTRAL DENSITY	343 SPECIAL MEDIUM LAVENDER	778* MILLENNIUM GOLD
126 MAUVE	211 .9 NEUTRAL DENSITY	344 VIOLET	779 BASTARD PINK
127 SMOKEY PINK	212 L.C.T. YELLOW	345 FUCHSIA PINK	781 TERRY RED
128 BRIGHT PINK	213 WHITE FLAME GREEN	352 GLACIER BLUE	789 BLOOD RED
129 HEAVY FROST	214 FULL TOUGH SPUN	353 LIGHTER BLUE	790 MOROCCAN PINK
130 CLEAR	215 $\frac{1}{2}$ TOUGH SPUN	354 SPECIAL STEEL BLUE	791 MOROCCAN FROST
131 MARINE BLUE	216 WHITE DIFFUSION	363* SPECIAL MEDIUM BLUE	793 VANITY FAIR
132* MEDIUM BLUE	217 BLUE DIFFUSION	366 CORNFLOWER	794 PRETTY 'N PINK
134 GOLDEN AMBER	218 $\frac{1}{8}$ C.T. BLUE		795 MAGICAL MAGENTA
135 DEEP GOLDEN AMBER			797* DEEP PURPLE
136 PALE LAVENDER			798 CHRYSALIS PINK

\* Also available in High Temperature (HT) version  
254 Available in High Temperature (HT) version only

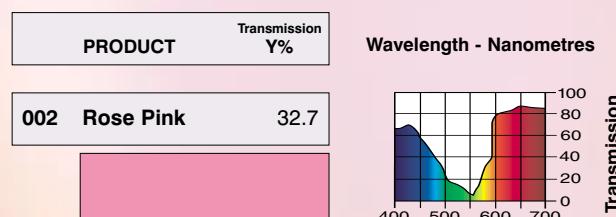
# SPECTRAL CHARTS

The following pages show a spectral chart and colour sample for each filter within the colour range.

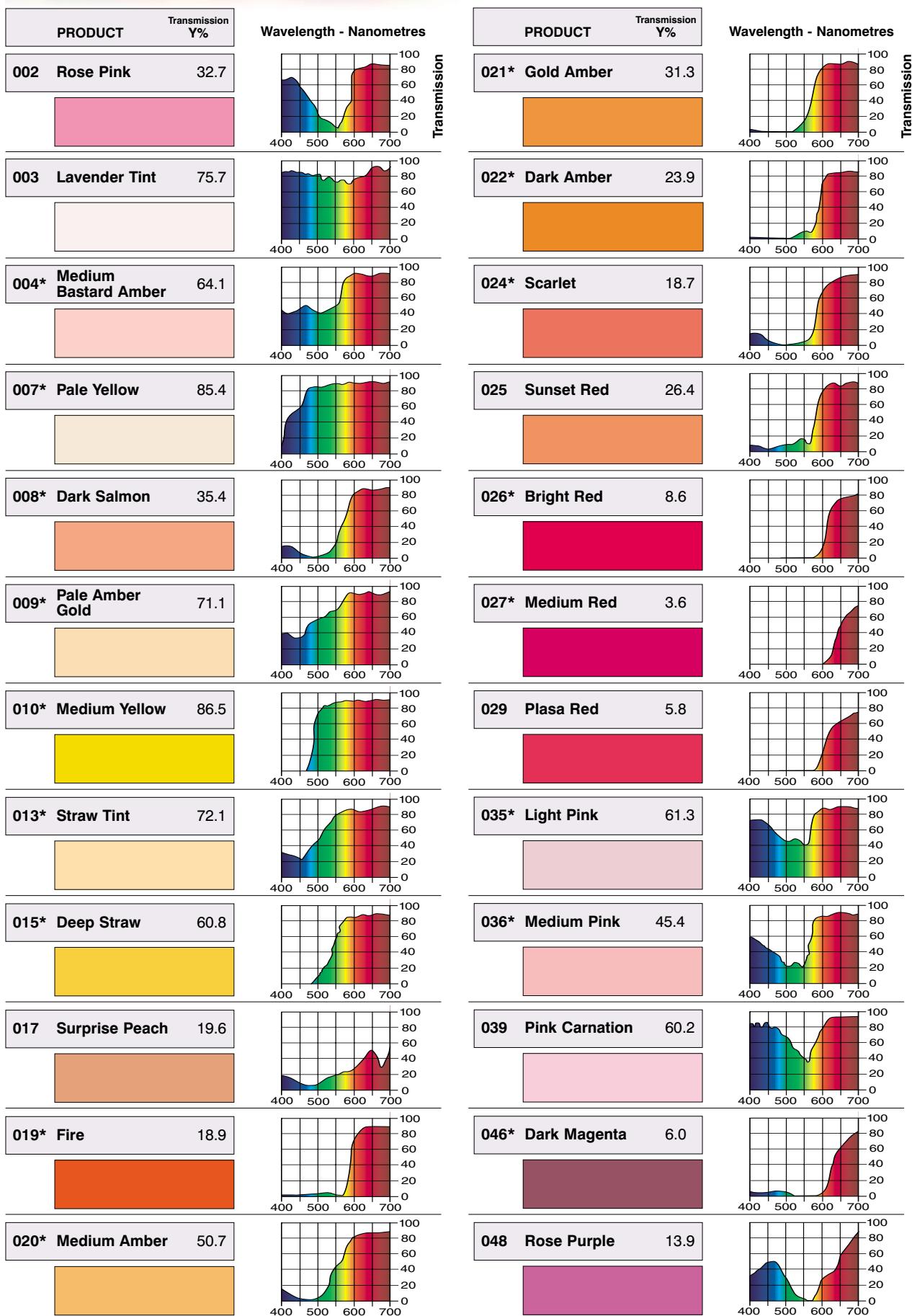
The Spectral chart illustrates the percentage of light transmitted by each filter at wavelengths across the visible portion of the electromagnetic spectrum. The illustration below clearly shows the visible colours represented at these wavelengths.



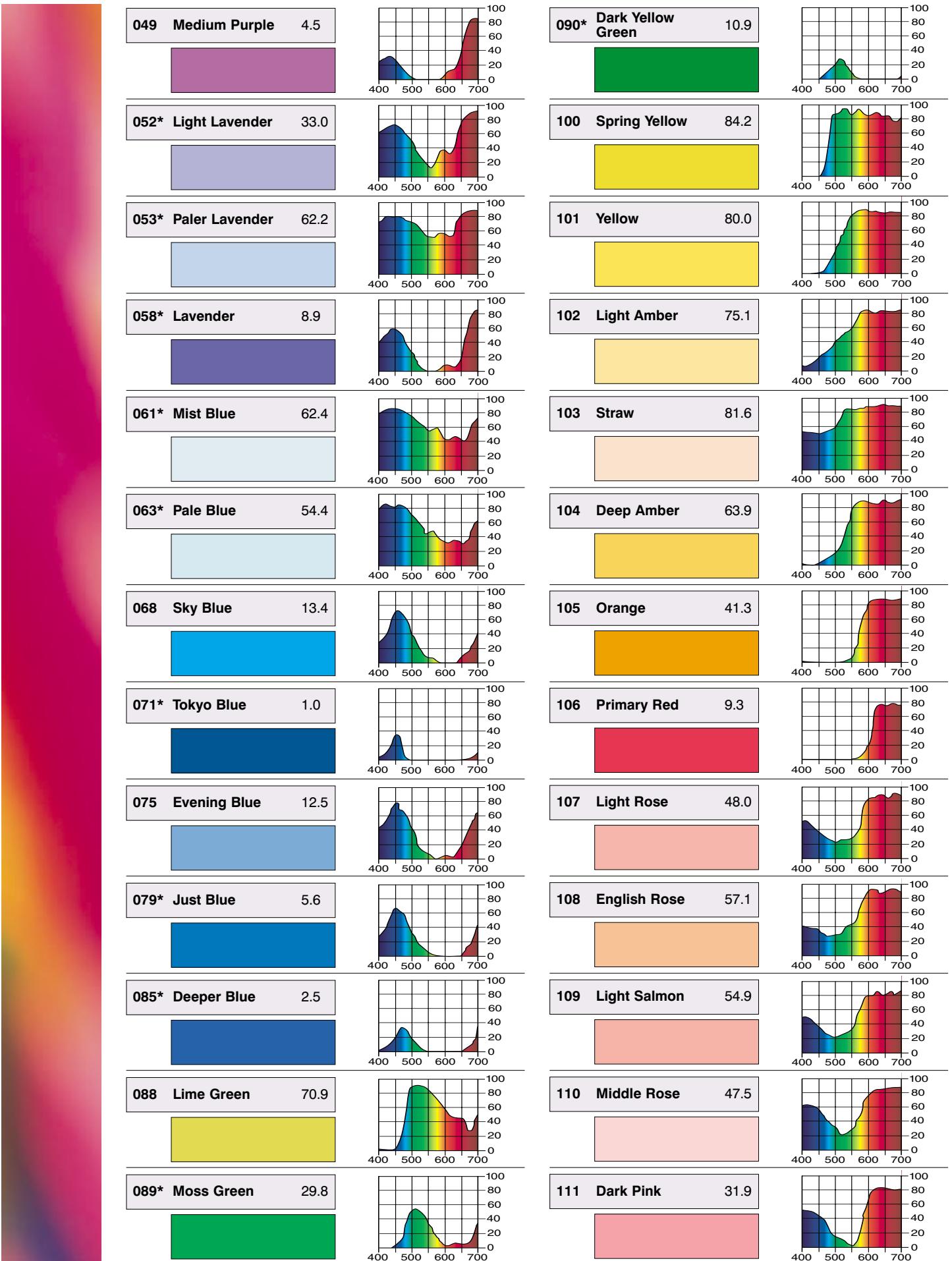
The colour sample of each filter shows an approximate representation of the colour when tungsten light of 3200K is shone through the filter onto a white surface.

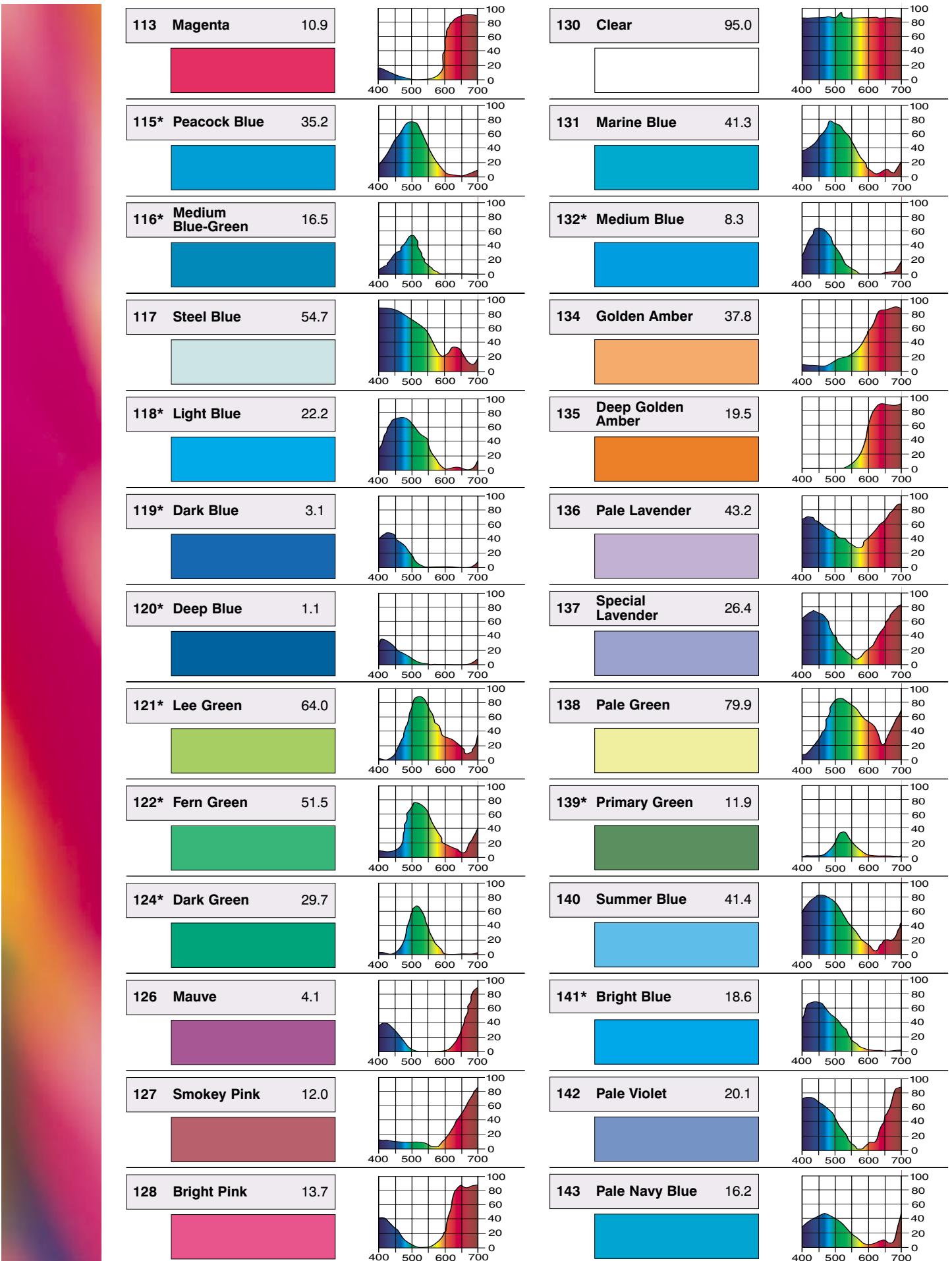


# SPECTRAL CHARTS

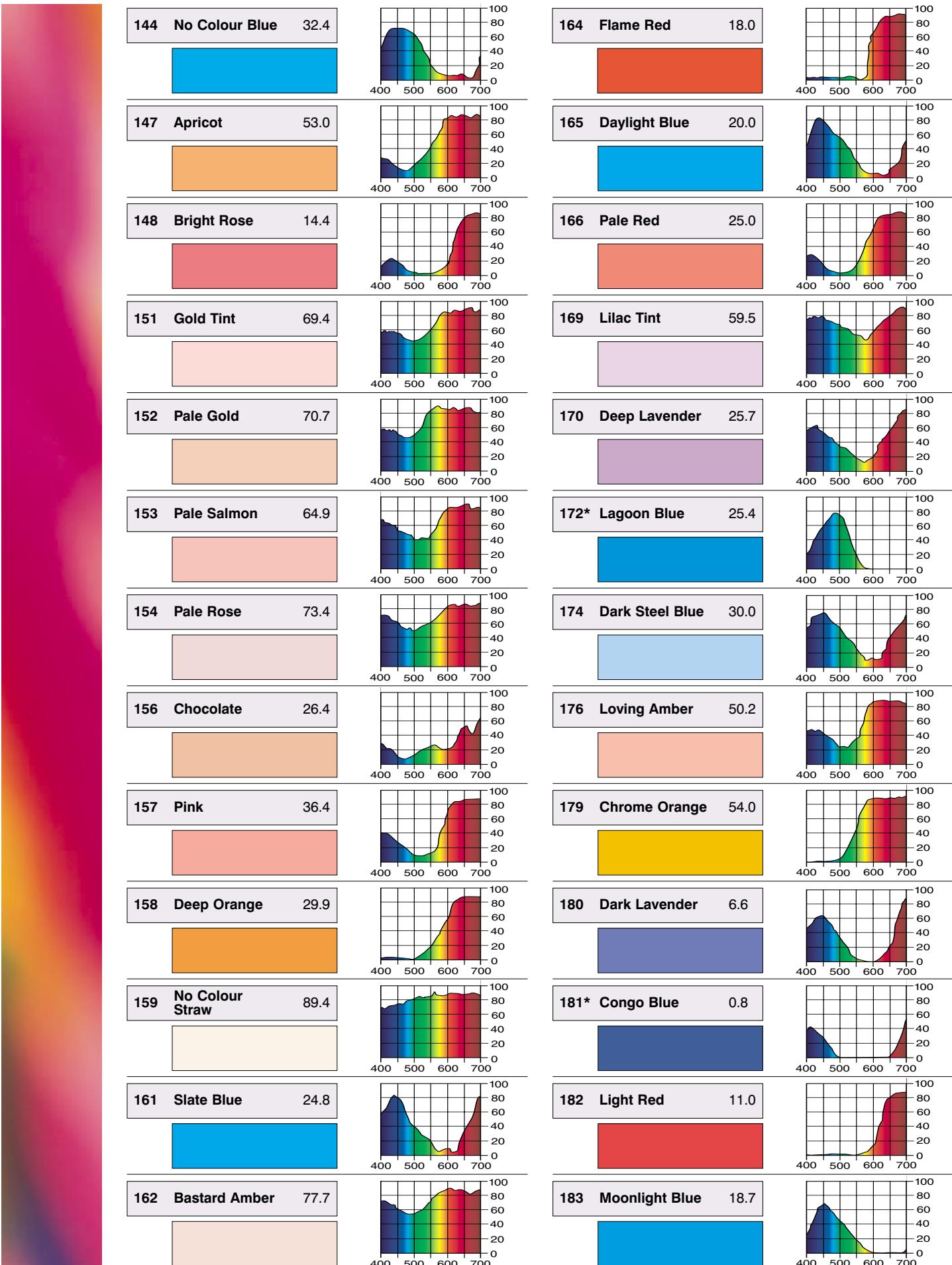


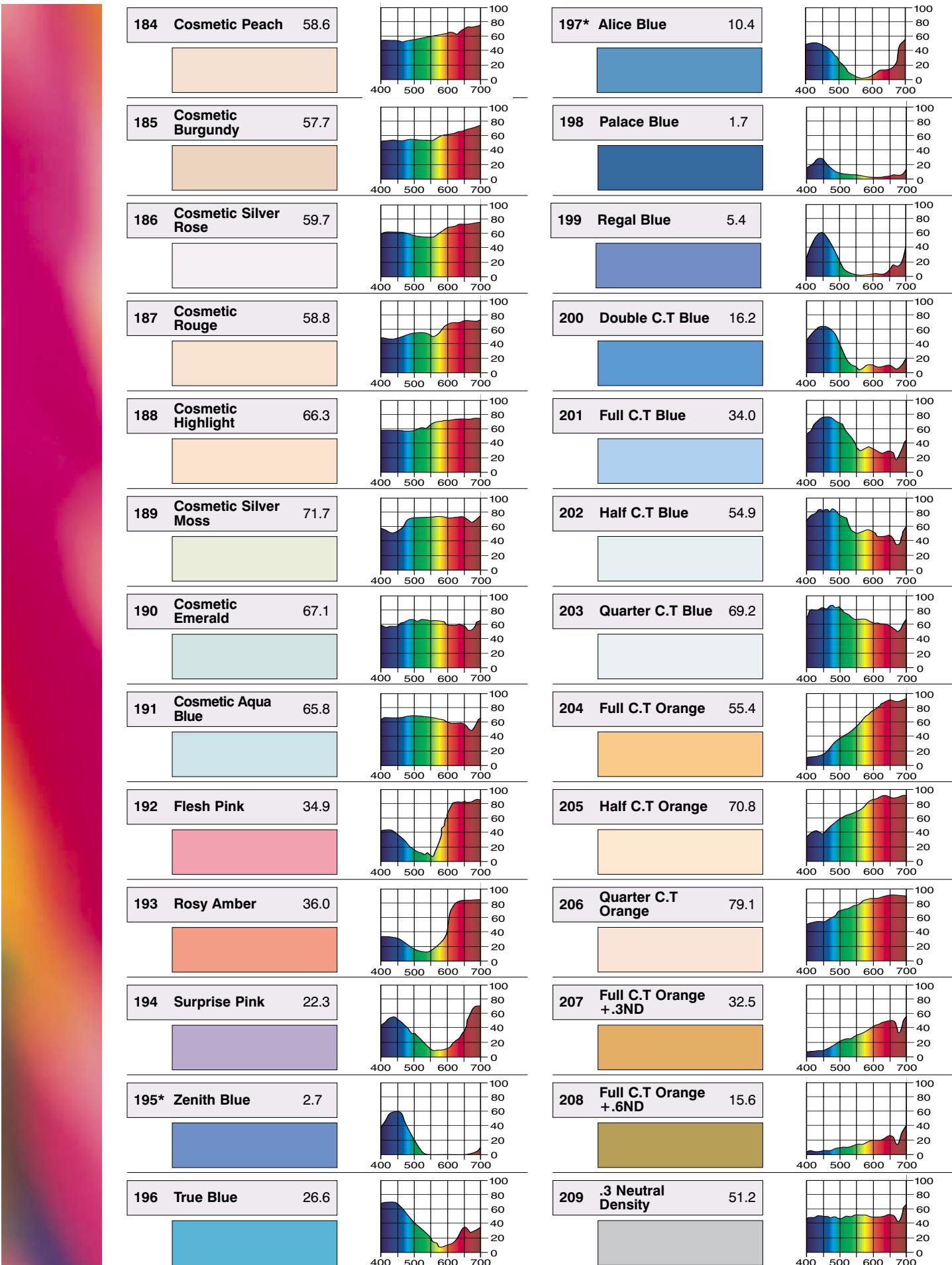
\* Also available in High Temperature (HT) version



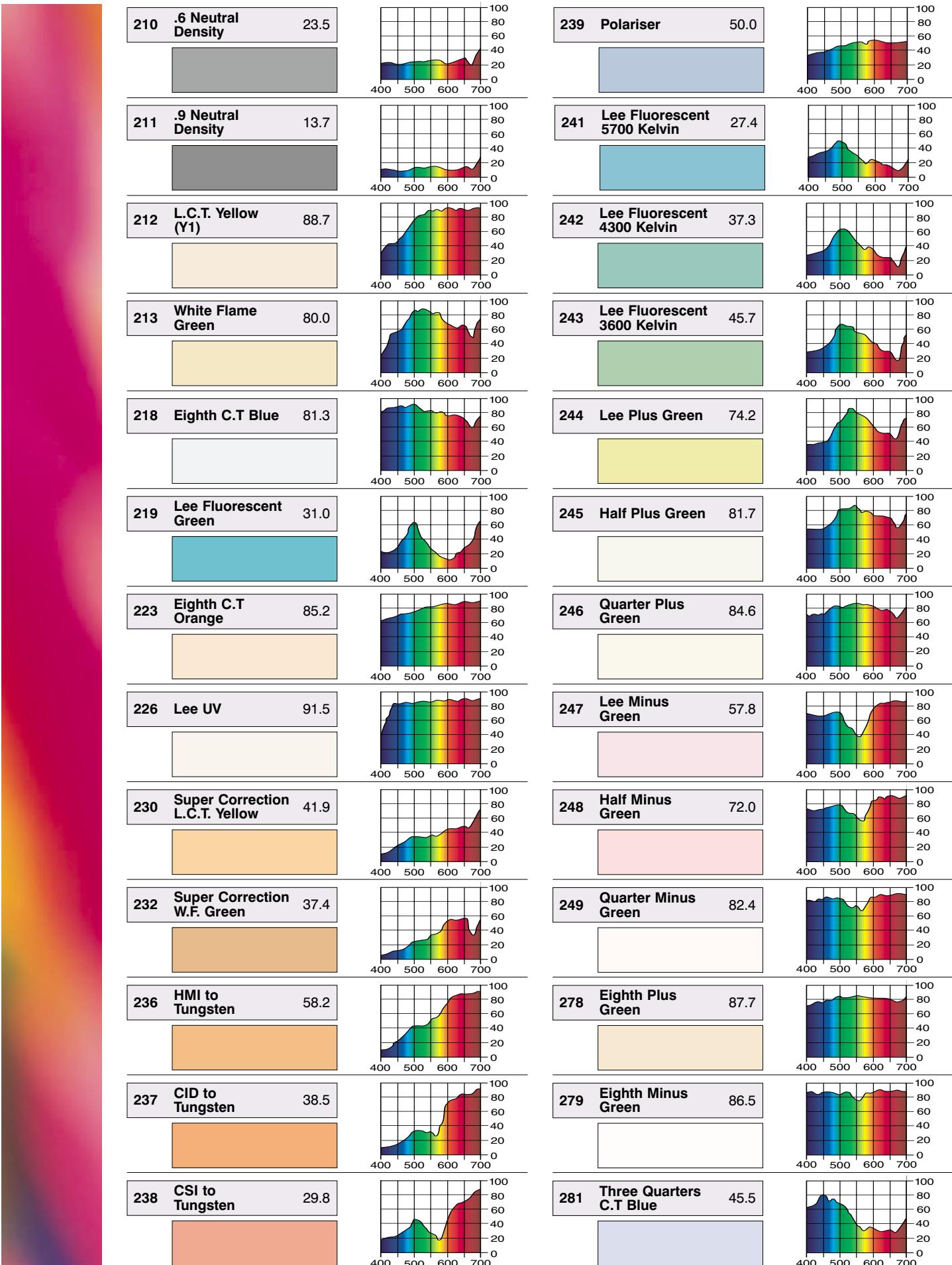


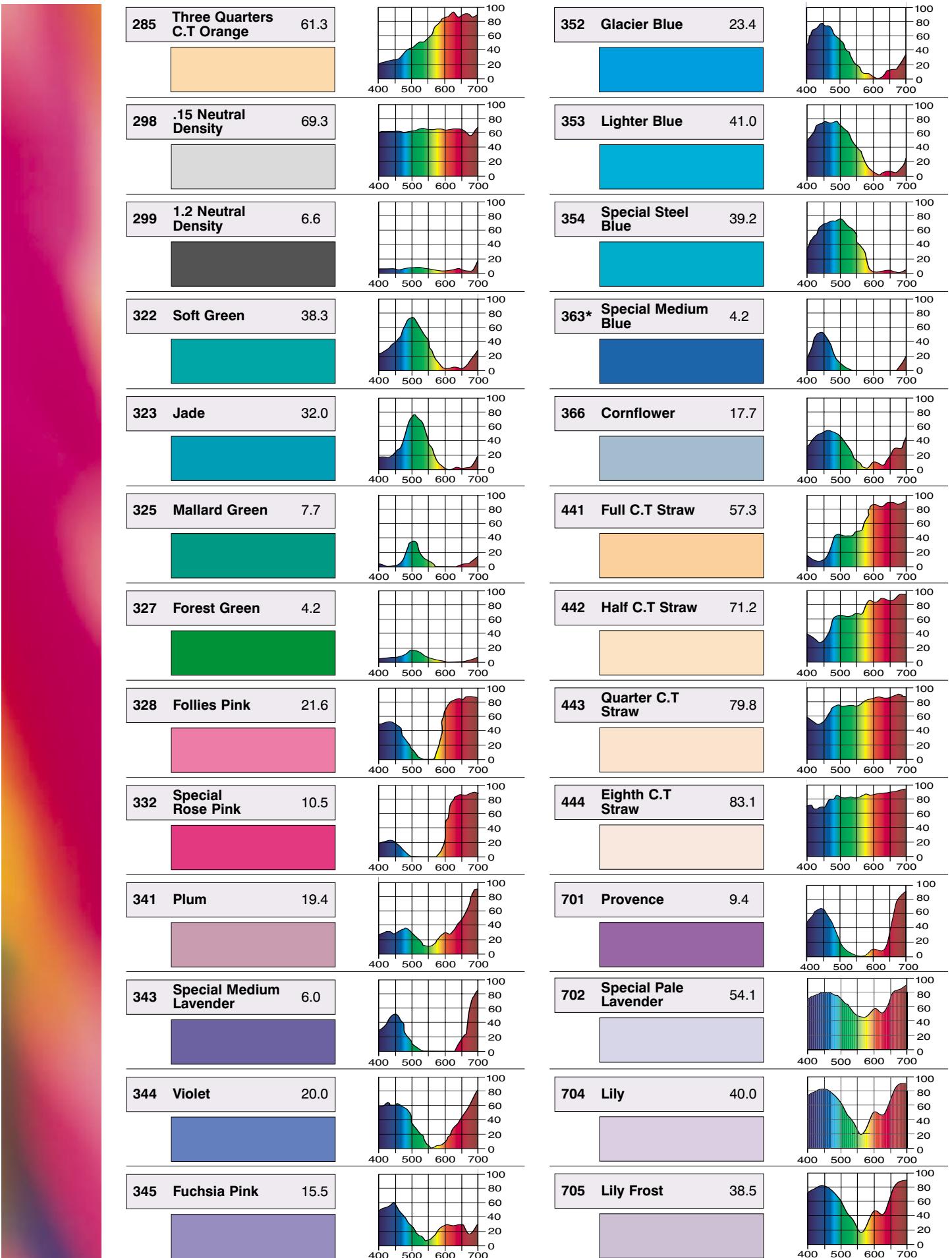
\* Also available in High Temperature (HT) version



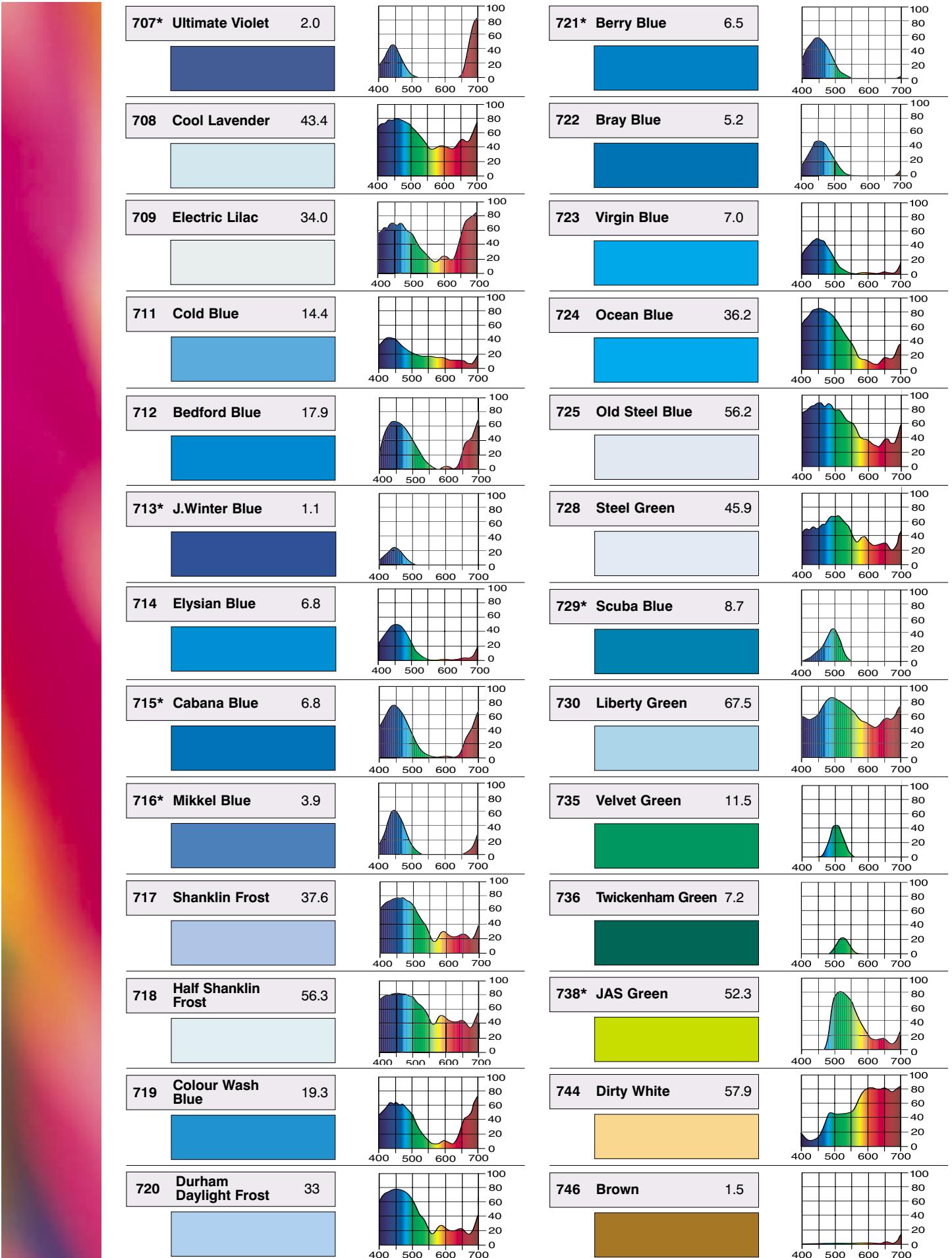


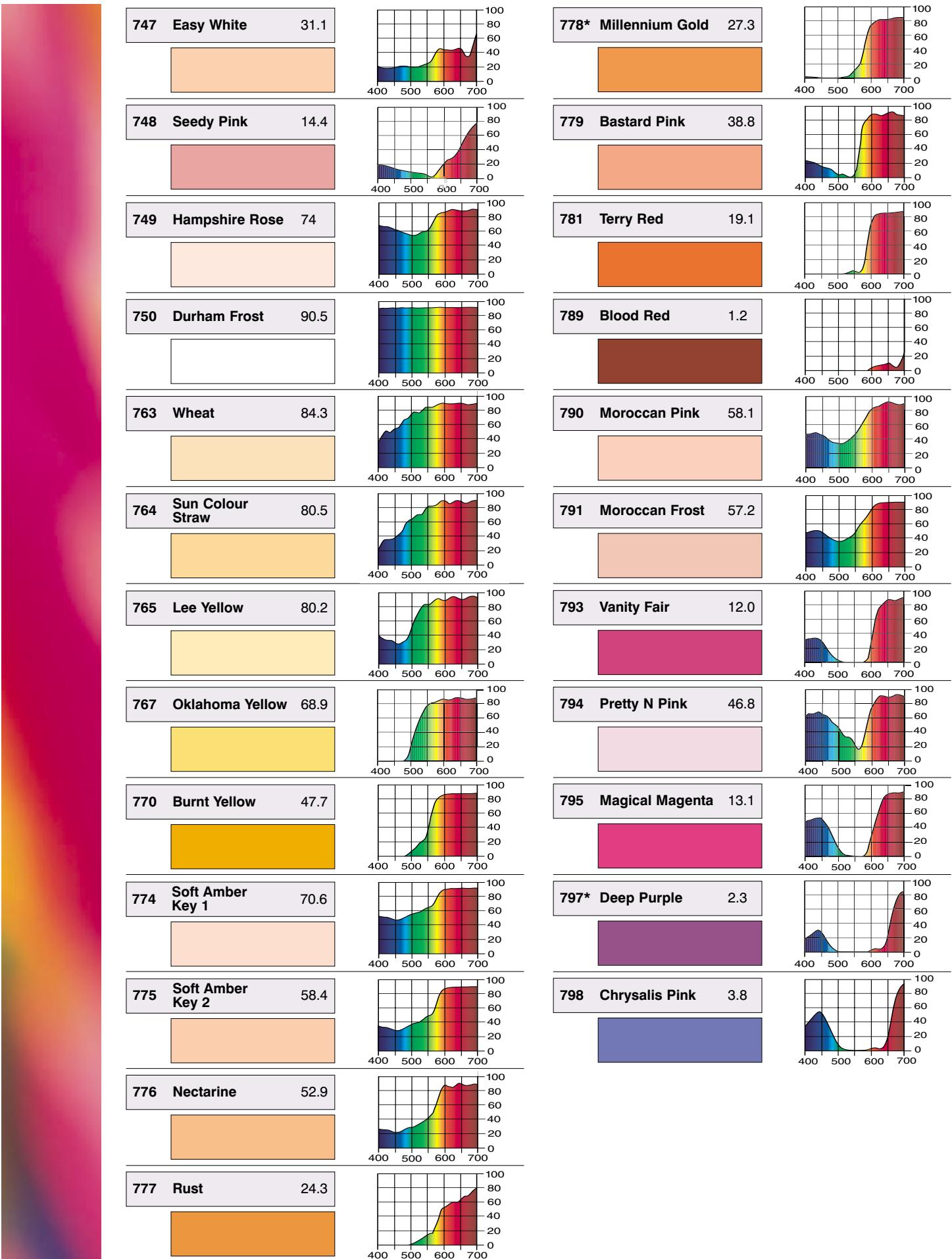
\* Also available in High Temperature (HT) version





\* Also available in High Temperature (HT) version





\* Also available in High Temperature (HT) version

# ARCHITECTURAL R A N G E

Building on their experience in film and theatre lighting, LEE Filters have introduced a range of lighting filter products specifically designed for use in the entertainment, leisure and architectural industries.

**FLUORESCENT SLEEVES** 26

**DICHROIC GLASS FILTERS** 27

**FROSTED DICHROIC GLASS FILTERS** 30



Lighting by John Decker / Richard Rutherford,  
Rutherford Design

# Fluorescent Sleeves

## GET CREATIVE WITH FLUORESCENT LIGHTING!



T12, T5 and T8 sleeves

Any of the dynamic colours from the popular colour range are now available as pre-cut polyester inserts for use in fluorescent lighting. UV filters are also available.

### PRE-ASSEMBLED SLEEVES

You choose the colour and leave the rest to us. Your chosen colour is cut to size, inserted into a clear sleeve and delivered to you ready to install.

The sleeves are made from a thermally stable, electrically insulating, polycarbonate. The ends of each sleeve are capped with an end cap; these end caps fix the sleeve to the fluorescent bulb making installation easy.

The sleeves are available in 0.61m (2'), 1.22m (4'), 1.53m (5') and 2.44m (8') lengths for T5, T8 and T12 diameter tubes.

### SELF-ASSEMBLY

Alternatively Lee Filters can supply you with pre-cut rolls of your chosen colour along with the clear polycarbonate sleeves enabling you to assemble the inserts and sleeves yourself.

The pre-cut rolls are 7.62m (25') long and are available for T5, T8 and T12 diameter sleeves.



# Glass Series

LEE Filters have designed a range of dichroic glass filters with permanent and semi-permanent lighting installations in mind. A palette of over 30 colours will meet the need of designers in a wide range of applications within the entertainment, leisure, and architectural industries.

## DICHROIC GLASS COLOURS



Specifically designed to meet the demands of the lighting industry, the dichroic glass filters are produced by the vacuum deposition of layers of thin metal films onto a substrate of borofloat glass. This glass is 3.3mm thick and therefore extremely durable, and the production process creates spectacularly clear and pure colours. The glass filters will not fade and will withstand temperatures up to 371°C.

## PROFESSIONAL COLOURS

Chosen after extensive research among design professionals, the Glass Series colour palette provides a range of 36 consistent, repeatable colours. This includes subtle, less saturated tones suitable for architectural use. Building on their expertise in film and theatre lighting, LEE has closely matched the glass series on polyester lighting filter material to provide a convenient swatch book. Available on request, lighting professionals can use this book to test colour schemes or demonstrate the effects of different filters.



## GLASS FRAMES

These lightweight aluminium frames, available both plain and in colour, suit all the popular lighting fixtures in the entertainment, architectural and theatrical industries. An innovative silicone gasket completely surrounds the glass, providing protection from both mechanical and thermal shock. A safety mesh can be added where required. Frames from 7.5cm to 60cm across can be designed in any shape.



## FRAMED GLASS

- 15.8cm Source Four
- 19cm Source Four PAR
- 25.4cm PAR 64

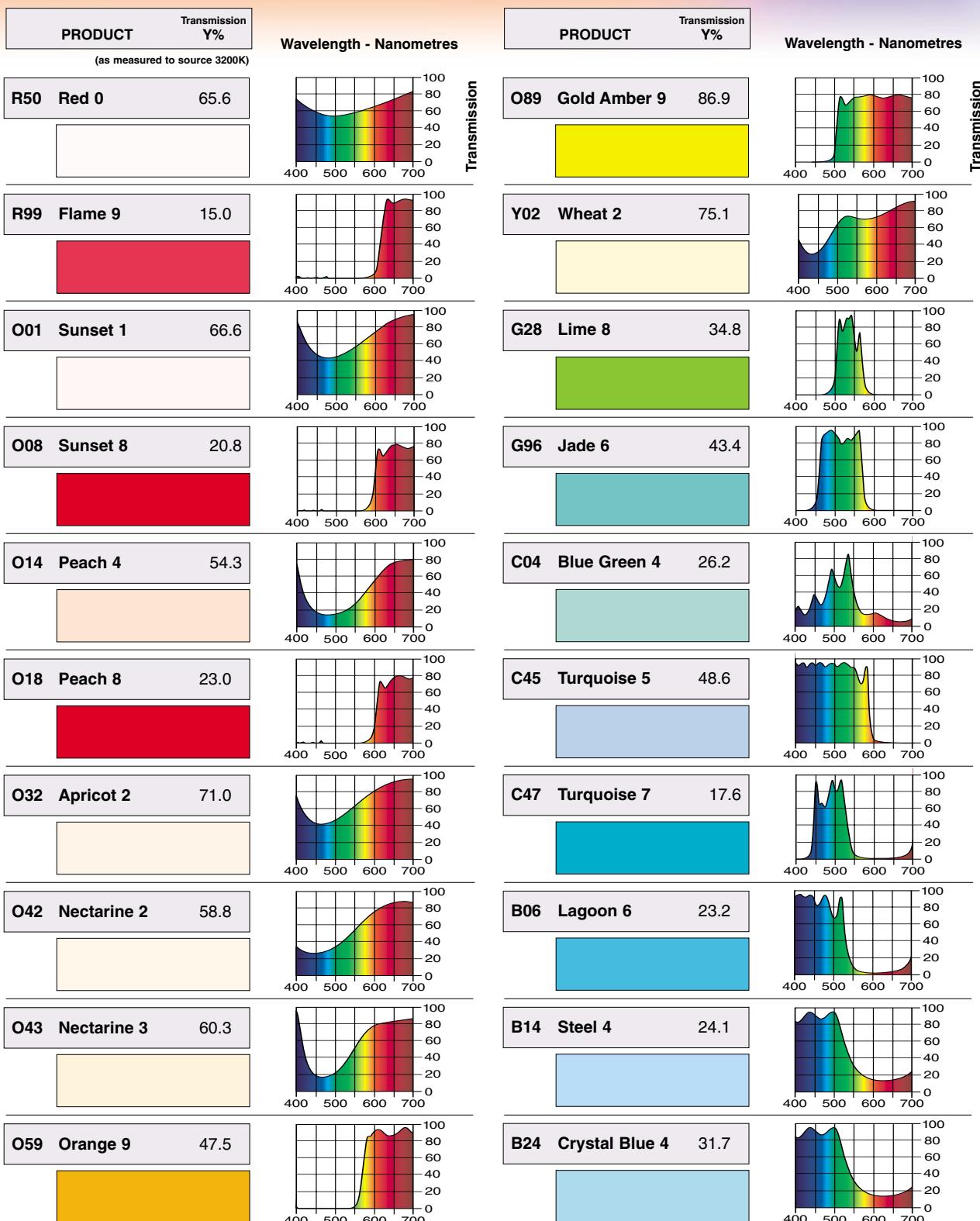
## UNFRAMED GLASS

Unframed filters can be supplied for use in smaller units with integral holders

- 4.99cm MR16 (circular)
- 5cm square
- Custom sizes can be supplied - please ask for a quotation

# Glass Series

These colour patches are approximate representations of the colour obtained when tungsten light of 3200K is shone through the filter onto a white surface



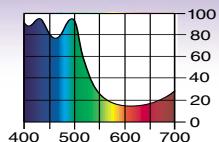
## THE COLOUR CODE

The letter refers to a colour, and can be: (M), R, O, Y, G, C, B, V, or M, (R)

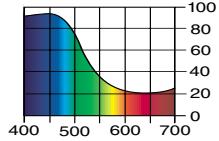
The first number is an indication of the hue within this colour, and can be 0 to 9. A low number indicates the hue of the colour is biased towards the preceding colour, and a high number indicates that the hue of the colour is biased towards the following colour. There is additionally a descriptive name associated with each hue of colour. The second number indicates the strength factor of the colour, with 0 being weak through to 9 being strong.



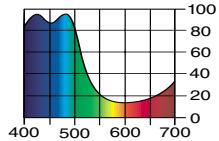
**B44 Royal Blue 4** 26.5



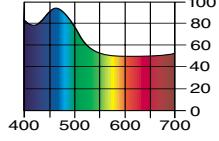
**B53 Blue 3** 34.6



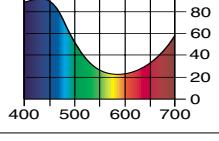
**B64 Navy Blue 4** 24.8



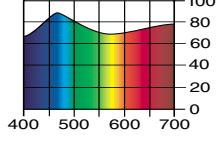
**B71 Cornflower 1** 53.7



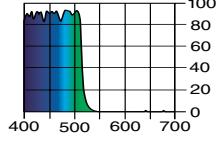
**B93 Congo 3** 27.4



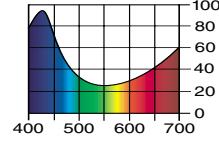
**V10 Indigo 0** 77.7



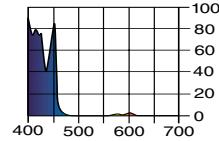
**V28 Blueberry 8** 5.5



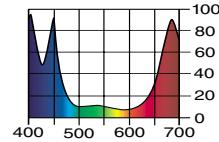
**V43 Violet 3** 28.5



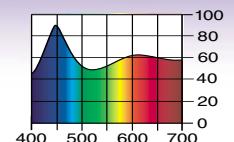
**V67 Rose Purple 7** 1.1



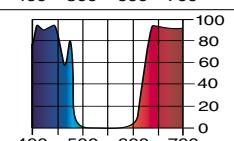
**V74 Plum 4** 12.9



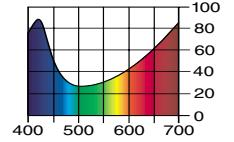
**V81 Lilac 1** 56.9



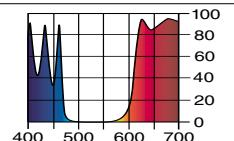
**V98 Lavender 8** 9.1



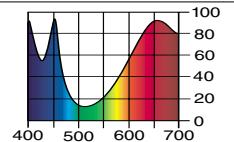
**M31 Fuchsia 1** 35.5



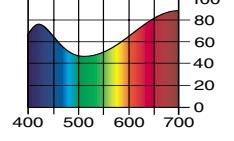
**M56 Magenta 6** 18.8



**M63 Carnation Pink 3** 42.8

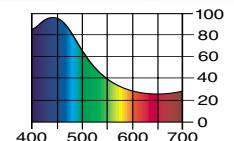


**M91 Salmon 1** 57.7

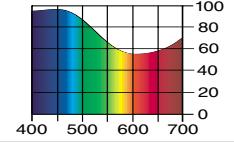


## GLASS CORRECTION FILTERS

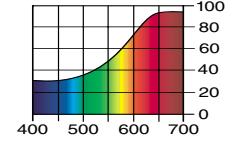
**Full CT Blue** 42.6



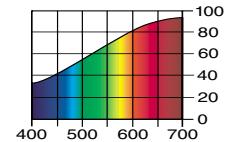
**Half CT Blue** 63.8



**Full CT Orange** 51.4



**Half CT Orange** 72.6



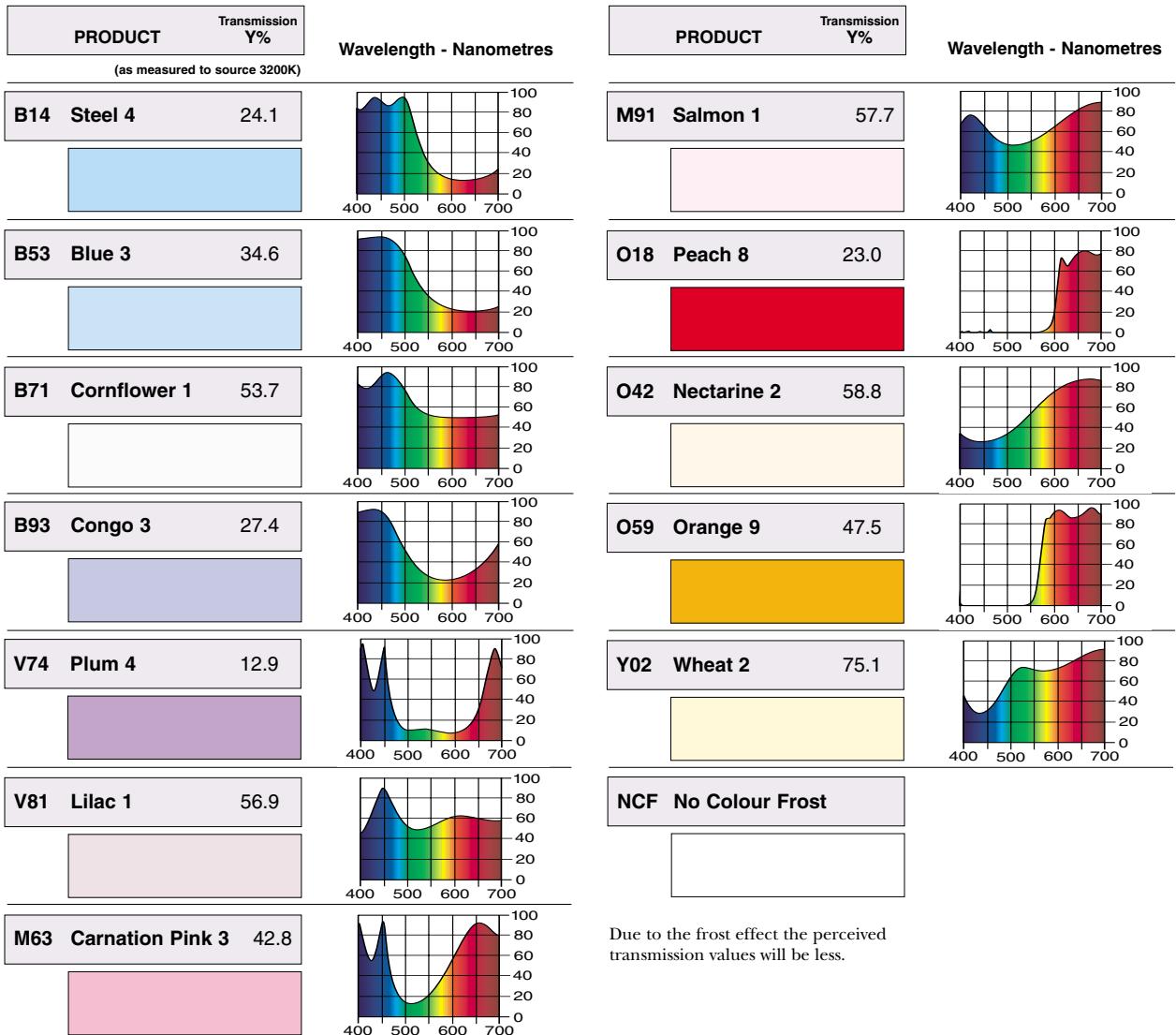
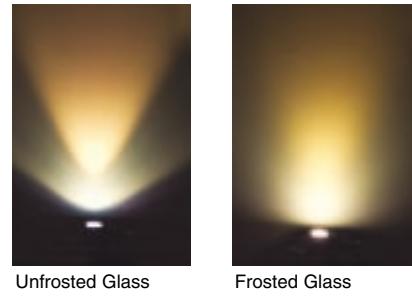
# Glass Series

## FROSTED DICHROIC GLASS COLOURS

The twelve most popular colours within the glass series are now available as a new range of Frosted Dichroic Glass filters, enabling the lighting designer to add colour and diffusion in the one filter. The diffusion within the filter softens the light beam giving a more even and graduated lighting effect.

Frosted Colour Dichroic Filters are colour-coated on one side by a vacuum deposition of metal film, and diffused on the other side (the no-colour version is simply diffuse texture on one side). The diffusion creates a frost very similar to LEE 251 Quarter White Diffusion, when the frosted side is placed on the fixture outwards, away from the lamp. The dichroic coating is able to withstand temperatures up to 371°C, allowing the colour to last for years without fading.

Frosted Dichroic Glass filters are available for MR16 (4.99cm) circular light fittings with an integral holder.



Due to the frost effect the perceived transmission values will be less.

# TECHNICAL FILTERS

CONVERSION FILTERS	32
ACRYLIC PANELS	33
CORRECTION FILTERS	34
REFLECTION MEDIA	35
PROTECTION MEDIA	35
DIFFUSION MEDIA	36
DIFFUSION CHART	38
CONVERSION CHART	39
COLOUR MAGIC	40

# CONVERSION

PRODUCT	DESCRIPTION	Kelvin	Mired Shift	Transmission Y%	Absorption	Chromaticity Co-ordinates	x	y
<b>Tungsten Light Conversion</b>								
200 Double C.T.B.	Converts Tungsten to Daylight	3200K to 26000K approx	-274	16.2	0.79	0.179	0.155	
201 Full C.T.B.	Converts Tungsten to Photographic Daylight	3200K to 5700K	-137	34.0	0.47	0.228	0.233	
281 Threequarters C.T.B.	Converts Tungsten to Daylight	3200K to 5000K	-112	45.5	0.35	0.239	0.258	
202 Half C.T.B	Converts Tungsten to Daylight	3200K to 4300K	-78	54.9	0.26	0.261	0.273	
203 Quarter C.T.B.	Converts Tungsten to Daylight	3200K to 3600K	-35	69.2	0.16	0.285	0.294	
218 Eighth C.T.B.	Converts Tungsten to Daylight	3200K to 3400K	-18	81.3	0.09	0.299	0.307	
<b>Daylight Conversion</b>								
204 Full C.T.O	Converts Daylight to Tungsten Light	6500K to 3200K	+159	55.4	0.26	0.437	0.392	
285 Threequarters C.T.O.	Converts Daylight to Tungsten Light	6500K to 3600K	+124	61.3	0.21	0.400	0.387	
205 Half C.T.O.	Converts Daylight to Tungsten Light	6500K to 3800K	+109	70.8	0.15	0.374	0.364	
206 Quarter C.T.O.	Converts Daylight to Tungsten Light	6500K to 4600K	+64	79.1	0.10	0.346	0.346	
223 Eighth C.T.O.	Converts Daylight to Tungsten Light	6500K to 5550K	+26	85.2	0.07	0.328	0.332	
207 Full C.T.O. +.3ND	Converts Daylight to Tungsten and reduces light 1 Stop	6500K to 3200K	+159	32.5	0.49	0.435	0.386	
208 Full C.T.O. +.6ND	Converts Daylight to Tungsten and reduces light 2 Stops	6500K to 3200K	+159	15.6	0.81	0.442	0.394	
441 Full C.T. Straw	Converts Daylight to Tungsten Light with yellow bias	6500K to 3200K	+160	57.3	0.24	0.426	0.407	
442 Half C.T. Straw	Converts Daylight to Tungsten Light with yellow bias	6500K to 4300K	+81	71.2	0.15	0.370	0.378	
443 Quarter C.T. Straw	Converts Daylight to Tungsten Light with yellow bias	6500K to 5100K	+42	79.8	0.10	0.338	0.349	
444 Eighth C.T. Straw	Converts Daylight to Tungsten Light with yellow bias	6500K to 5700K	+20	83.1	0.08	0.323	0.332	
<b>Neutral Density</b>								
298 .15ND	Reduces light 1/2 Stop, without changing colour			69.3	0.16	0.311	0.319	
209 .3ND	Reduces light 1 Stop, without changing colour			51.2	0.29	0.310	0.319	
210 .6ND	Reduces light 2 Stops, without changing colour			23.5	0.63	0.308	0.317	
211 .9ND	Reduces light 3 Stops, without changing colour			13.7	0.86	0.310	0.322	
299 1.2ND	Reduces light 4 Stops, without changing colour			6.6	1.18	0.308	0.315	
<b>Polariser</b>								
239 Polariser	Made from 0.006" (150 micron) Triacetate. Reduces glare and reflection. Use with Lee Polarising Camera Filter.		+12.9	50.0	0.3	1	single sheet	
				38.0	0.42	1 1/3	Axis Uncrossed (double sheet)	
				<.05	>3	>10	Axis crossed (double sheet)	

# ACRYLIC PANELS

LEE Filters have supplemented their range of high quality products for the film and television industry by adding an all-new range of acrylic panels. These panels are manufactured specifically for LEE and exhibit the same degrees of colour accuracy and consistency as our range of lighting filters.

Specifically for use over windows for correcting daylight, these hardwearing panels can be cut to size and installed permanently, or used on location again and again.

Each panel is 2.44m by 1.22m (8' x 4') by 4mm thick, and weighs 9.6Kg.

The panels are available in a range of Colour Temperature Oranges and Neutral Densities, including combinations that are unique to LEE Filters.

PRODUCT	DESCRIPTION	Mired Shift	Transmission Y%
<b>Daylight Conversion</b>			
A204 Full C.T.O	Converts Daylight to Tungsten Light	+175	57.2
A205 Half C.T.O	Converts Daylight to Tungsten Light	+90	72.6
A207 Full C.T.O + .3ND	Converts Daylight to Tungsten and reduces light 1 Stop	+175	30.2
A208 Full C.T.O + .6ND	Converts Daylight to Tungsten and reduces light 2 Stops	+175	13.8
<b>Neutral Density</b>			
A209 .3ND	Reduces light 1 Stop, without changing colour	0	48.0
A210 .6ND	Reduces light 2 Stops, without changing colour	0	22.2
A211 .9ND	Reduces light 3 Stops, without changing colour	0	13.1

# CORRECTION

PRODUCT	DESCRIPTION	Transmission Y%	Absorption	Chromaticity Co-ordinates	
				x	y
<b>Arc Correction (Carbon-Regular)</b>					
212 L.C.T. Yellow (Y1)	Reduces Colour Temperature of low carbon arcs to 3200K	88.7	0.05	0.340	0.363
213 White Flame Green	Corrects White Flame Carbon arcs by absorbing ultra violet	80.0	0.10	0.317	0.359
<b>Arc Correction (Carbon-Colour Balanced)</b>					
230 Super Correction L.C.T. Yellow	Converts Yellow carbon arc (of low colour temperature) to Tungsten	41.9	0.38	0.367	0.368
232 Super Correction W.F. Green to Tungsten	Converts White Flame arc to 3200K, for use with Tungsten film	37.4	0.43	0.423	0.385
<b>Arc Correction (Compact Source)</b>					
236 HMI (to Tungsten)	Converts HMI to 3200K, for use with Tungsten film	58.2	0.24	0.426	0.376
237 CID (to Tungsten)	Converts CID to 3200K, for use with Tungsten film	38.5	0.41	0.430	0.365
238 CSI (to Tungsten)	Converts CSI to 3200K, for use with Tungsten film	29.8	0.53	0.372	0.331
<b>Fluorescent Correction System</b>					
241 Lee Fluorescent 5700 Kelvin	Converts Tungsten to Fluorescent light of 5700K (cool white/daylight)	27.4	0.56	0.231	0.290
242 Lee Fluorescent 4300 Kelvin	Converts Tungsten to Fluorescent light of 4300K (white)	37.3	0.43	0.262	0.346
243 Lee Fluorescent 3600 Kelvin	Converts Tungsten to Fluorescent light of 3600K (warm white)	45.7	0.34	0.286	0.370
219 Lee Fluorescent Green	General Tungsten to Fluorescent correction for use when colour temperature is unknown	31.0	0.51	0.219	0.334
The above correction filters are to be used in conjunction with an appropriate Lee FL-B Fluorescent to Tungsten or Lee FL-D Fluorescent to Daylight camera filter.					
<b>Plus Green</b> - Used on Daylight and Tungsten light sources to provide green cast when used in conjunction with discharge lighting.					
244 Lee Plus Green	Approximately equivalent to CC30 Green camera filter	74.2	0.12	0.324	0.388
245 Half Plus Green	Approximately equivalent to CC15 Green camera filter	81.7	0.08	0.319	0.355
246 Quarter Plus Green	Approximately equivalent to CC075 Green camera filter	84.6	0.07	0.315	0.337
278 Eighth Plus Green	Provides very slight green cast	87.7	0.06	0.313	0.327
The above correction filters are to be used in conjunction with an appropriate Lee FL-B Fluorescent to Tungsten or Lee FL-D Fluorescent to Daylight camera filter.					
<b>Minus Green</b> - Used on lighting to eliminate unwanted green cast created by discharge light sources on film.					
247 Lee Minus Green	Approximately equivalent to CC30 Magenta camera filter	57.8	0.22	0.325	0.279
248 Half Minus Green	Approximately equivalent to CC15 Magenta camera filter	72.0	0.14	0.317	0.297
249 Quarter Minus Green	Approximately equivalent to CC075 Magenta camera filter	82.4	0.08	0.312	0.307
279 Eighth Minus Green	Provides very slight correction	86.5	0.06	0.312	0.311
<b>Ultra Violet Absorption</b>					
226 Lee UV	Transmission of less than 50% at 410nm	91.5	0.04	0.314	0.321

## REFLECTION MEDIA

PRODUCT	DESCRIPTION	SPECIAL NOTE
<b>Reflector</b>		
<b>271 Mirror Silver</b>		Produces hard reflection. White backed
<b>272 Soft Gold Reflector</b>	Used to bounce light with either hard or soft reflection	Produces soft reflection. White backed. Mired Shift + 45
<b>273 Soft Silver Reflector</b>		Produces soft reflection. White backed.
<b>274 Mirror Gold</b>		Produces hard reflection. White backed. Mired Shift +45
<b>Scrim</b>		
<b>270 Lee Scrim</b>	Perforated reflector producing a very soft reflection. Silver on one side and black on reverse	Stop value 1½ when used as a filter, Transmission 36%.
<b>275 Black Scrim</b>	A flexible perforated material that is black on both sides. Can be used on windows to reduce light intensity, without causing any unwanted reflections	Stop value 1½ when used as a filter, Transmission 36%.

## PROTECTION MEDIA

PRODUCT	DESCRIPTION	Transmission Y%	Absorption	Chromaticity Co-ordinates x	Chromaticity Co-ordinates y
<b>Heat Shield</b>					
<b>269 Lee Heat Shield</b>	A transparent flexible film used to extend the life of a filter. The shield should be placed between the light source and the filter allowing distance between the shield and the filter. Air should be allowed to circulate freely around the LEE HEAT SHIELD	91.0	0.04	0.311	0.317
<b>Foil</b>					
<b>280 Black Foil</b>	Used to reduce unwanted light spill or to control unwanted light reflection	Available in two roll sizes 7.62m x 0.61m (25' x 24") 15.24m x 0.30m (50' x 12")			

# DIFFUSION MEDIA

## Non-Flame Retardant

PRODUCT	DESCRIPTION	Transmission %	Stop value	Special note
<b>Tough Spun</b>				
<b>214 Full Tough Spun</b>		18	2½	
<b>215 Half Tough Spun</b>	Softens light, reduces intensity. Manufactured from non-woven Polyester	36	1½	
<b>229 Quarter Tough Spun</b>		60	¾	
<b>Diffusion</b>				
<b>216 White Diffusion</b>		36	1½	Rolls also available in 1.52m (60") width
<b>416 Three Quarter White Diffusion</b>		50	1	
<b>250 Half White Diffusion</b>		60	¾	
<b>450 Three Eighth White Diffusion</b>	Used for soft light effects. Manufactured on a tough Polyester base in a range of seven strengths	63	⅔	
<b>251 Quarter White Diffusion</b>		80	⅓	
<b>252 Eighth White Diffusion</b>		>85	<¼	
<b>452 Sixteenth White Diffusion</b>		>85	<¼	
<b>400 LeeLux</b>	A dense white diffuser used for soft light effects (125 micron polyester base)	36	1½	
<b>217 Blue Diffusion</b>	As White Diffusion but with the addition of eighth CTB	36	1½	1/8 C.T. Blue
<b>228 Brushed Silk</b>	Directional soft light effect used for scattering light in one direction only	60	¾	
<b>Grid Cloth</b>				
<b>430 Grid Cloth</b>		18	2½	
<b>432 Light Grid Cloth</b>	A waterproof textile/fabric diffusion that is reinforced to allow it to be sewn or grommetted - ideal for attaching to large frames. Comes in three weights	30	1¾	Rolls only 1.37m x 7.62m (54" x 25')
<b>434 Quarter Grid Cloth</b>		60	¾	
<b>460 Quiet Grid Cloth</b>		15	2¾	
<b>462 Quiet Light Grid Cloth</b>	A textile/fabric diffusion that is reinforced to allow it to be sewn or grommetted - ideal for attaching to large frames, but that is quiet when used in windy conditions outdoors. Comes in three weights	22.5	2¼	Rolls only 1.37m x 7.62m (54" x 25')
<b>464 Quiet Quarter Grid Cloth</b>		47.5	1	
<b>Frost</b>				
<b>224 Daylight Blue Frost</b>	Frosts are used for soft light effects and can include tungsten correction or neutral density	22	2¼	Full C.T. Blue
<b>225 Neutral Density Frost</b>		25	2	.6 Neutral Density

PRODUCT	DESCRIPTION	Transmission %	Stop value	Special note
<b>Frost</b>				
255 Hollywood Frost	Light frost effect - softens edges	83	<1/3	
253 Hampshire Frost	Light frost effect	>85	<1/4	
256 Half Hampshire Frost	Extra Light frost effect	>85	<1/4	
257 Quarter Hampshire Frost	Extra Light frost effect	>85	<1/4	
258 Eighth Hampshire Frost	Extra Light frost effect	>85	<1/4	
410 Opal Frost	Used for softening spotlight beam edges without altering shape	71	1/2	
420 Light Opal Frost	Similar characteristics to Opal Frost, but less diffuse	>85	<1/4	

### Flame Retardant

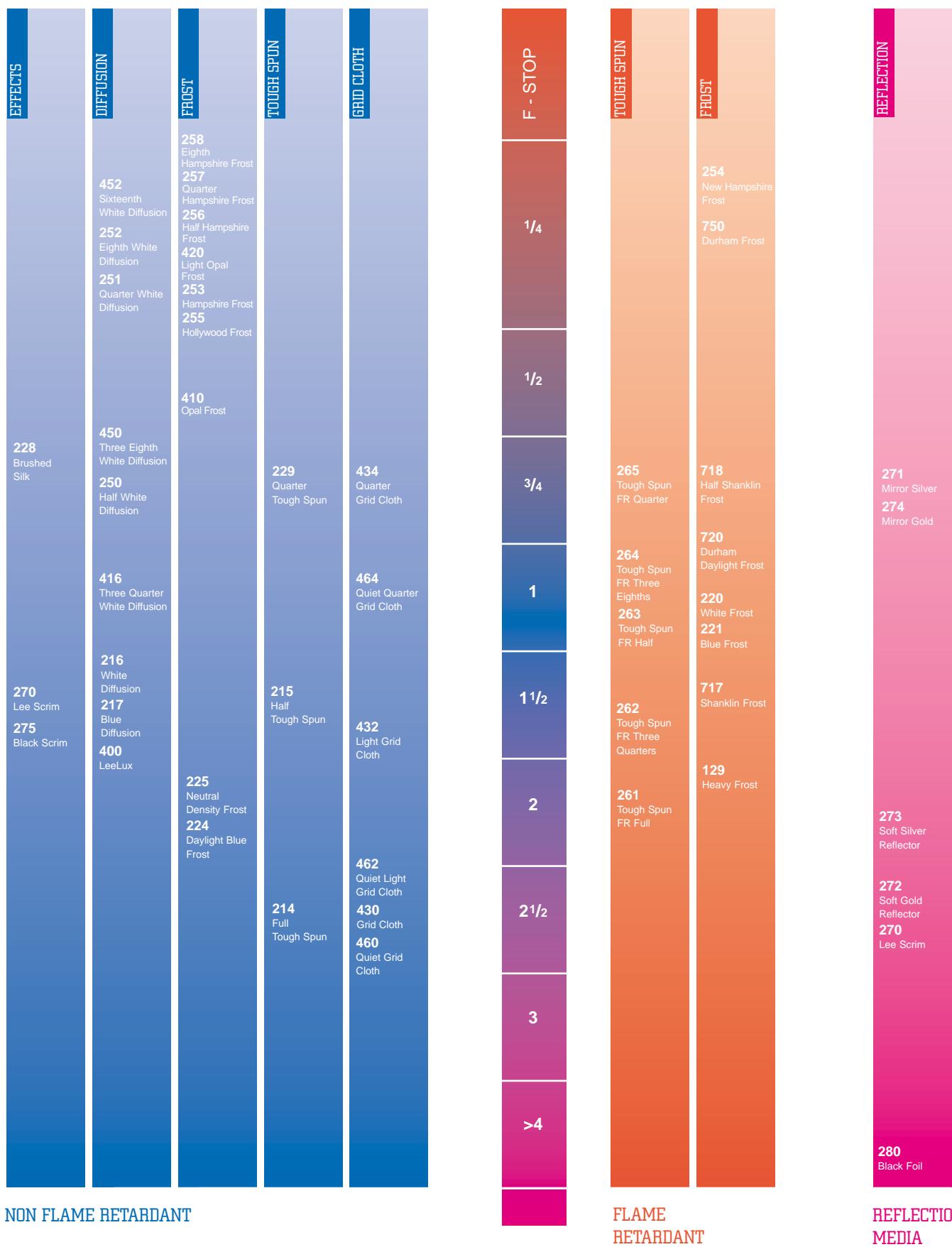
PRODUCT	DESCRIPTION	Transmission %	Stop Value	Special note
<b>Frost</b>				
129 Heavy Frost	Strong diffuser, eliminates nearly all shadows	25	2	
220 White Frost	Used for soft light effects	39	1 1/3	
221 Blue Frost	Used for soft light effects with the addition of 218	42	1 1/3	1/8 C.T. Blue
254 New Hampshire Frost	Used to soften the edges of spotlight beams, and to reduce the blue fringe	>85	<1/4	HT ( For sizes, see chart ) only
750 Durham Frost	A frost that almost completely softens shutter edges and removes hot spots	>85	<1/4	
720 Durham Daylight Frost	Smoothes PAR or flood washes of large areas. Useful for houselights; good for entrances from natural light	32.3	12/3	Full C.T. Blue
717 Shanklin Frost	201 with frost to soften the beam of profile units	37	11/2	Full C.T. Blue
718 Half Shanklin Frost	202 with frost to soften the beam of profile units	56	3/4	Half C.T. Blue

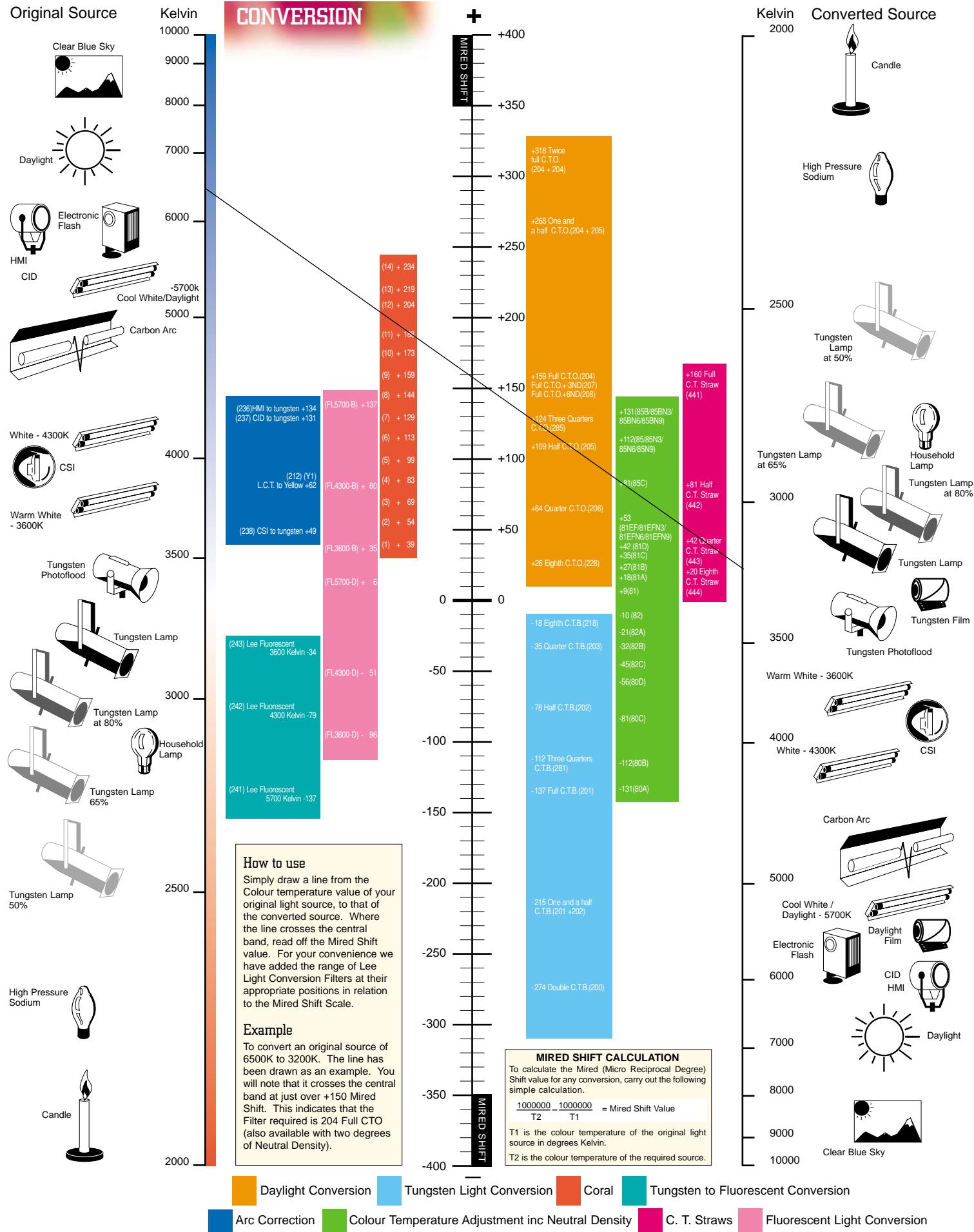
### Tough Spun

261 Tough Spun FR - Full		25	2	
262 Tough Spun FR - 3/4		32	1 2/3	
263 Tough Spun FR - 1/2	Non yellowing flame retardant spun polyester material in five densities to give better light control	41	1 1/3	Rolls only 7.62 x 1.22m (25' x 4')
264 Tough Spun FR - 3/8		50	1	
265 Tough Spun FR - 1/4		60	3/4	

# DIFFUSION

This chart has been designed to enable you to quickly establish the degree of diffusion you will require for any particular cinematographic, photographic or stage lighting situation. Each type of diffusion and reflection media is listed relative to its approximate f-stop increase (on the central band) as a guide only.





# COLOUR MAGIC

The Lee Filters colourMAGIC series is a set of eight individual packs each containing a selection of 12 filters (250mm x 300mm) that relate to a particular aspect of lighting and studio work. colourMAGIC offers an opportunity to get to know the performance of the various filters on offer in a cost effective way.

## original pack

create 50 colours from 12

No.	Filter
101	Yellow
116	Medium Blue Green
118	Light Blue
122	Fern Green
126	Mauve
128	Bright Pink
129	Heavy Frost
144	No Colour Blue
179	Chrome Orange
180	Dark Lavender
192	Flesh Pink
228	Brushed Silk

## arc correction pack

a selection of technical filters for colour correction

No.	Filter
205	Half C. T. O.
206	Quarter C. T. O.
219	Lee Fluorescent Green
241	Lee Fluorescent 5700K
242	Lee Fluorescent 4300K
243	Lee Fluorescent 3600K
244	Full Plus Green
245	Half Plus Green

## saturates pack

a selection of strong and vibrant colours for more intense colour combinations

No.	Filter
027	Medium Red
101	Yellow
105	Orange
116	Medium Blue Green
120	Deep Blue
126	Mauve
129	Heavy Frost
135	Deep Golden Amber
139	Primary Green
181	Congo Blue
182	Light Red
332	Special Rose Pink

## studio pack

a range of technical filters for basic light source control

No.	Filter
201	Full C. T. B.
281	Three Quarters C. T. B.
204	Full C. T. O.
285	Three Quarters C. T. O.
298	0.15 Neutral Density
209	0.3 Neutral Density
210	0.6 Neutral Density
211	0.9 Neutral Density

## tint pack

lighting filters which complement the original colour magic pack to create alternative shades

No.	Filter
002	Rose Pink
048	Rose Purple
088	Lime Green
100	Spring Yellow
108	English Rose
131	Marine Blue
157	Pink
164	Flame Red
174	Dark Steel Blue
228	Brushed Silk
250	Half White Diffusion
344	Violet

## studio plus pack

a range of technical filters for fine control of light sources

No.	Filter
202	Half C. T. B.
203	Quarter C. T. B.
218	Eighth C. T. B.
205	Half C. T. O.
206	Quarter C. T. O.
223	Eighth C. T. O.

## complementary pack

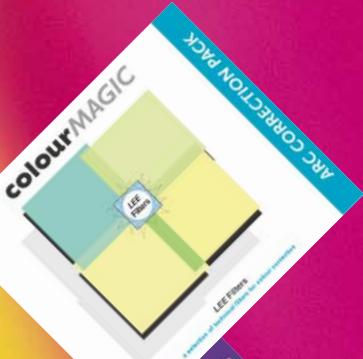
a starter pack for exploring the basics of colour addition and subtraction

No.	Filter
164	Flame Red
124	Dark Green
119	Dark Blue
176	Loving Amber
174	Dark Steel Blue
138	Pale Green
101	Yellow
115	Peacock Blue
128	Bright Pink
007	Pale Yellow
117	Steel Blue
035	Light Pink

## light tint pack

paler shades to give more subtle effects and to filter white light from the lamp

No.	Filter
003	Lavender Tint
007	Pale Yellow
009	Pale Amber Gold
035	Light Pink
061	Mist Blue
063	Pale Blue
103	Straw
154	Pale Rose
162	Bastard Amber
169	Lilac Tint
213	White Flame Green
255	Hollywood Frost



# QUICK ROLLS

## Any Colour & Width

Quick Rolls enable you to have a roll of any colour from the popular colour range\* in any width, saving you both time and money. The Quick Roll is pre-cut to your chosen width, so the gel is ready to frame in just one cut, putting an end to wasted gel on the cutting room floor.

Quick Rolls are sold by the 1" (2.54cm) up to a maximum width of 46" (1.16m). Our standard roll size width is 48" (1.22m). All Quick Rolls are 25' (7.62m) long.

An average cost saving of between 20-30% can be obtained using Quick Rolls compared to buying individual sheets.

\*Please note that HT is not available as Quick Rolls



## TRIPLE AWARD WINNING PRODUCT!

- 2000 LDI Awards
- 2001 ESTA Dealers' Choice Award
- 2001 EDDY Awards

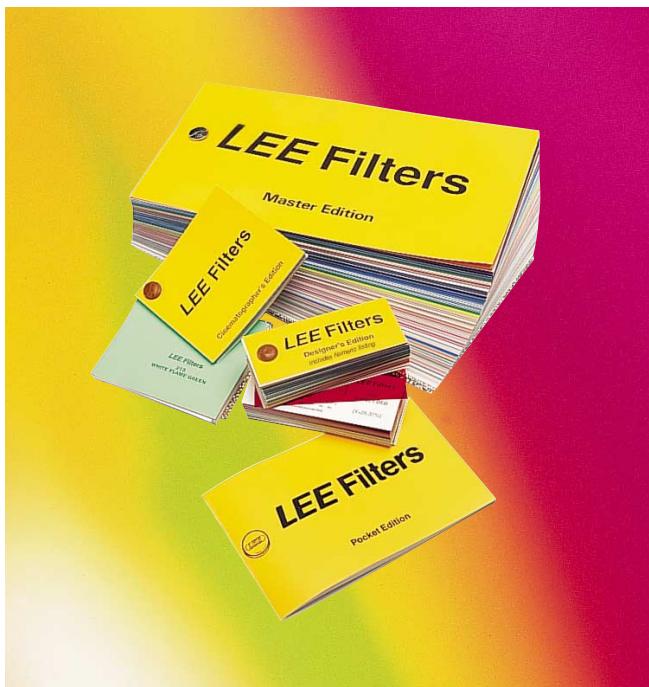
## POSTERS AND CUTTERS

To help end-users achieve the optimum benefits from Lee Filters, the company offers a series of A1 size posters covering essential filtration topics, together with comprehensive product listings.

Additionally, freely available are filter cutters which enable rolls and sheets to be cut down to the required size without fuss or the use of open blades.



## SWATCHES



In order to give our end-users the highest possible levels of information and support, Lee Filters makes available a package of technical information which is second to none.

Uniquely, the company produces a range of swatch books, each individually developed to serve a specific purpose.

**They are:**

**The Designers' Edition** - a unique swatch book that contains all of the filters in chromatic groupings, along with an additional numeric index.

**The Cinematographers' Edition** - which is a larger format swatch with grades of technical filters most frequently used in film;

**The Master Edition\*** - very large format swatch of lighting products;

**The Venetian Edition\*** - a collapsible poster that is made up of a series of slats which will fold together like a concertina. Each slat has small windows cut out of it, into which samples of LEE filters have been placed, allowing the whole range to be viewed simultaneously;

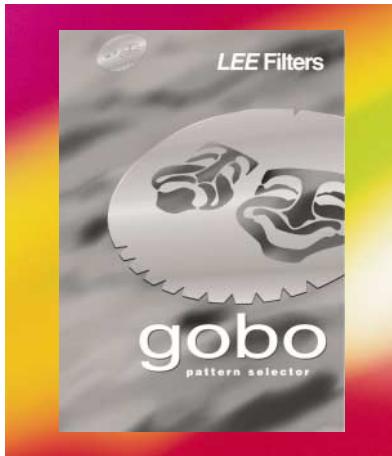
**The Pocket Edition** - a handy sized listing of all lighting filter products, together with a comparator section which identifies Lee Filters' equivalents to other manufacturers' products.

\* These swatches are not available free of charge.

## WEBSITE

Information on all LEE Filters products can be found on our website:  
[www.leefilters.com](http://www.leefilters.com)

## GOBOS



The Lee Filters gobo catalogue contains more than 200 patterns, many of them new designs developed to complement existing ranges and to broaden the range available for today's (and tomorrow's) productions.

Lee offers a poster featuring all current gobo patterns, and this is ideal for the office or studio.

## INDEX

page	page		
Acrylic Panels	33	Magentas	11, 12
Arc Correction	34	Minus Green	34
Architectural Range	25	Neutral Density	32, 33
Blues	6, 7, 8	Non-Flame Retardant	36
Colour Magic	40	Numerical Listing	14
Colour Range	6	Oranges	9, 10, 11
Colour Temperature Adjustment	32, 34, 39	Plus Green	34
Coloured Frosts	13	Polariser	32
Contents	1	Posters	42
Conversion Chart	39	Price List	43
Conversion Filters	32	Protection Media	35
Coral	39	Quality Control	4
Correction Filters	34	Quick Rolls	41
Cosmetic Range	13	Reds	11, 12
Cutters	42	Reflection Media	35, 38
Daylight Conversion	32, 33	Research and Development	4
Dichroic Glass Filters	27, 28, 29	Scrim	35, 38
Diffusion	36	Spectral Curves	15
Diffusion Chart	38	Straws	32, 39
Diffusion Media	26, 37, 38	Swatches	42
Flame Retardant	37	Technical Excellence	3
Filter Sizes – Diffusion	36, 37	Technical Filters	31
Filter Sizes	43	Tungsten Light Conversion	32
Fluorescent Conversion	39	Total Production	5
Fluorescent Correction	34, 39	Tough Spun	36, 37
Fluorescent Sleeves	26	Ultra Violet Absorption	34
Foil	35	Violets	6
Frost	36, 37	Website	42
Frosted Dichroic Glass Filters	30	Yellows	10
Future Perspective	2		
Glass Series	27		
Gobos	43		
Greens	8, 9		
Grid Cloth	36		
Heat Shield	35		

### LEE Filters

Central Way, Walworth Industrial Estate, Andover, Hants SP10 5AN, UK  
Tel: +44 (0)1264 366245 Fax: +44 (0)1264 355058 [www.leefilters.com](http://www.leefilters.com)

**LEE Filters**

forty three



[www.leefilters.com](http://www.leefilters.com)