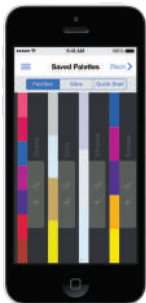




Think *LEE*

New **LEE** Filters Swatch App



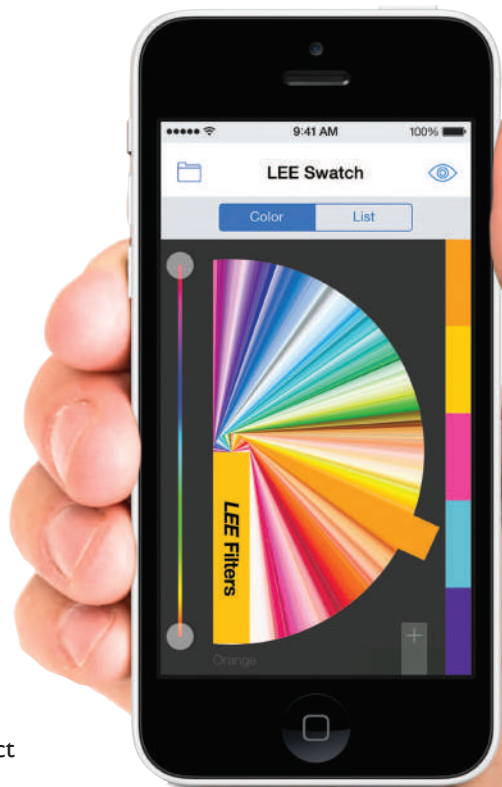
Our new LEE Swatch app puts the complete range of LEE lighting filters on one screen, with an innovative colour picker so you can easily build palettes anytime inspiration strikes.

You can review detailed information about each colour including spectral charts. It's easy to rapidly cycle through similar filters and compare data so you can find the perfect fit for your project. There's a full search and list capability but also many innovative tools for those who prefer to select colours intuitively.

If you're stuck for inspiration the App includes a growing library of professionally selected palettes designed to embody specific moods. These are easy to edit and make your own.

Your palettes are automatically saved and with one tap you can email full details, complete with colour swatches.

The App also contains many popular tools from our website, all completely redesigned for ease of use on a smartphone. These include a Gel Comparator to find the LEE match to competitor's filters, a Colour Temperature Calculator for the Mired Shift aficionados, and a Diffusion Finder that gives you relative diffusion across the LEE range.



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www.leefilters.com

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.

CONTENTS

CORPORATE STATEMENT	04-05
ROLL AND SHEET SIZES	06-09
QUICK ROLLS AND LIGHTING PACKS	10-12
LED FILTERS	13-16
THE DESIGNER SERIES	17-22
THE SCIENCE BEHIND THE ART	23-24
COLOUR RANGE	25-47
NUMERICAL LISTING	48-51
TECHNICAL FILTERS	52-62
ARCHITECTURAL SERIES	63-75
PROMOTIONAL ITEMS	76-77
INDEX	78



AN INVESTMENT IN THE FUTURE

**DIRECTORS OF PHOTOGRAPHY
WORLDWIDE RELY ON THE
CONSISTENT AND REPEATABLE
PERFORMANCE OF LEE FILTERS.**

Lighting designers are a demanding bunch – and understandably so. Whether they work in film, television, theatre, entertainment or architecture, it is essential that their equipment is capable of producing precise, reliable and repeatable results.

It is the ability to meet these demands that has kept LEE Filters at the forefront of lighting filter manufacture for more than 40 years – ever since cinematographer David Holmes used his expertise and the results of his extensive research to pioneer the use of modern polymeric materials in the making of lighting filters.

We are particularly proud of the fact that all our filters are produced at our manufacturing facility in Andover. This allows us to retain complete control over the coating process and ensures we maintain the high standards to which our clients have become accustomed.



**FROM BROADWAY TO THE WEST
END AND FROM THE STAGE TO
THE BOX OFFICE, LEE FILTERS
PROVIDES THE TOOLS TO GET
THE JOB DONE.**










And the reason why LEE Filters is able to hold its position as the world's leading manufacturer of lighting filter products? It's because we understand and appreciate the fact that our customers depend on us to produce filters of exceptional quality.

Our continual investment in research and development means that our dedicated team is in a position not only to consistently embrace new technologies, but also to listen to customers' requests and act upon them. Marrying our technical expertise with our ability to respond quickly to consumer demand is what sets us apart from our competitors.

In recent years, we have taken this communication one step further, with the introduction of the Designer Series. All the colours in this range are created in conjunction with some of the world's leading lighting designers. After all, who knows better than the users themselves exactly which colour will realise their creative vision?

At LEE Filters, we are proud to lead the way in meeting the requirements of lighting professionals the world over.

Our products come in many different sizes, please use the diagrams below as a guide.

								
<p>Size 7.62m x 1.52m (25' x 60")</p>	<p>Size 6.10m x 1.52m (20' x 60")</p>	<p>Size 7.62m x 1.37m (25' x 54")</p>	<p>Size 7.62m x 1.22m (25' x 48") 2" Core (5.08cm)</p>	<p>Size 7.62m x 1.22m (25' x 48") 1" Core (2.54cm)</p>	<p>Size 4m x 1.17m (13' x 46")</p>	<p>Size 7.62m x 0.61m (25' x 24")</p>	<p>Size 15.24m x 0.3m (50' x 12")</p>	<p>Size Any width between 2.5cm (1") and 1.17m (46"). All rolls are 7.62m (25') long.</p>
<p>Products 216 250 251 252 416 450 452</p>	<p>Products 201 204 - 211 223 270 - 275 298 299 400 402 404 414 414P 429 439 439P</p>	<p>Products 430 - 434 460 - 464</p>	<p>Products Colour Effect Filters LED Filters Tungsten Conversion Daylight Conversion LED Conversion Neutral Density Fluorescent Correction Arc Correction Ultra Violet Absorption Diffusion Media Heat Shield</p>	<p>Products Colour Effect Filters LED Filters Tungsten Conversion Daylight Conversion LED Conversion Neutral Density Fluorescent Correction Arc Correction Ultra Violet Absorption Diffusion Media Heat Shield</p>	<p>Products Colour Effect HT</p>	<p>Products Black Foil</p>	<p>Products Black Foil</p>	<p>Products Quick Rolls</p> <p>* HT Rolls available as a special order</p>



287

It's complicated, this business. Having decided that there's a pinkiness missing from the tests, the next attempt goes too much the other way. It's clear there could be almost infinite subtle variations – all of which could, in some way, be labelled as gold, but Declan's 'reflected' gold is proving elusive. "We'll know when it's right," he says. "And equally, we'll know when it isn't."

During a break for lunch, Alison is spotted studying her wedding ring, turning her hand this way and that to understand the way in which light reflects from it. This must have done the trick, because shortly after our return to the lab, there is the long-awaited eureka moment. Having run the gamut of golds that were too acidic, not warm enough and too heavy on the green, the tone that Declan had in mind was achieved. "I knew something was missing – I just didn't know what," he says. "We were almost there with one of the tests, which was just right at the lower range of the lamp's intensity. I wanted it to do the same thing, but at higher intensities."



So how did they do it? Simple. By adding a warm up filter to a previous test formula. This reduced the overly yellow appearance of the previous test, and introduced what was definitely a 'proper' gold, that remained such even when tested under a variety of sources and in a range of intensities.

"It maintains its richness as it dims," explains Declan, "becoming more molten as the percentage is reduced. You could see it being used for anything from early morning sunlight to a kind of surreal candlelight."

In its simplest form, the end result is a layer of carefully selected dyes in lacquer form, poured onto a sheet of polyester and spread evenly. But it's so much more than that: it's sunrise and sunset; it's a wash of colour over a desert; it's a subtle backdrop. The result is 550 ALD Gold. It's alchemy.

501

283

505



Acrylic Panel

Size
Panel 2.44m x 1.52m (8' x 5')
Thickness 3mm (1/8")

Products
A209
A210
A211

Acrylic Panel

Size
Panel 2.44m x 1.22m (8' x 4')
Thickness 3mm (1/8")

Products
A205
A207
A208
A209
A210
A211



<p>Full Sheet</p> <p>Size Full Sheet 0.53m x 1.22m (21" x 48")</p> <p>Products Colour Effect Filters LED Filters Tungsten Conversion Daylight Conversion LED Conversion Neutral Density Fluorescent Correction Arc Correction Ultra Violet Absorption Diffusion Media Heat Shield</p>	<p>Half Sheet</p> <p>Size Half Sheet 0.53m x 0.61m (21" x 24")</p> <p>Products Colour Effect Filters LED Filters Tungsten Conversion Daylight Conversion LED Conversion Neutral Density Fluorescent Correction Arc Correction Ultra Violet Absorption Diffusion Media Heat Shield</p>	<p>Half Sheet HT</p> <p>Size Half Sheet HT 0.53m x 0.56m (21" x 22")</p> <p>Products Colour Effect HT</p>	<p>Polariser</p> <p>Size Available in 0.3m (1') lengths. Sheets come in 0.43m (17") and 1.45m (57") widths.</p> <p>Products Polariser</p>
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QUICK ROLLS

HT QUICK ROLLS ARE AVAILABLE AS A SPECIAL ORDER.

Your high volume solution

Quick Rolls enable you to have a roll of any colour 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 waste on the cutting room floor.

Quick Rolls are sold by the width in inches (2.54cm) up to a maximum width of 46" (1.17m) and all 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.



LIGHTING PACKS

Essential Toolkits for Lighting Control

Everything you need to control common lighting conditions. Each pack contains a select assortment of 250mm x 300mm (10"x12") pre-cut sheets of LEE lighting filter. A rugged vinyl pouch is ideal for portable storage.



Colour Effects Pack
Colour the backdrop or draw focus with colour.

No.	Name	Qty
106	Primary Red	2
139	Primary Green	2
119	Dark Blue	2
010	Medium Yellow	2
790	Moroccan Pink	2
181	Congo Blue	2

Diffusion Pack
Soften shadows, adjust contrast, shape light.

No.	Name	Qty
216	Full White Diffusion	2
250	½ White Diffusion	2
251	¼ White Diffusion	2
400	LEELux	2
410	Opal Frost	2
253	Hampshire Frost	2

Tungsten To Daylight Pack
Convert tungsten light sources to daylight.

No.	Name	Qty
200	Double CTB	2
201	Full CTB	2
202	½ CTB	2
203	¼ CTB	2
218	⅛ CTB	2
720	Durham Daylight Frost	2

Cosmetic Pack
Enhance skin tone by combining pale tints with subtle diffusion.

No.	Name	Qty
184	Cosmetic Peach	2
187	Cosmetic Rouge	2
188	Cosmetic Highlight	2
186	Cosmetic Silver Rose	2
775	Soft Amber Key 2	2
791	Moroccan Frost	2

Daylight To Tungsten Pack
Convert daylight sources to tungsten.

No.	Name	Qty
204	Full CTO	2
285	¾ CTO	2
205	½ CTO	2
206	¼ CTO	2
223	⅛ CTO	2
208	Full CTO + .6ND Combo	2

LED To Tungsten Pack
Convert cool white LED to tungsten. Soften shadows and adjust contrast.

No.	Name	Qty
216	Full White Diffusion	2
250	½ White Diffusion	2
622	1 ⅛ Digital LED CTO	2
624	Full Digital LED CTO	2
626	⅞ Digital LED CTO	2
628	¾ Digital LED CTO	2

Quick Location Pack

A variety of colour-correction, effect, and light-shaping tools to control common lighting conditions.

No.	Name	Qty
201	Full CTB	2
202	½ CTB	2
204	Full CTO	2
205	½ CTO	2
216	Full White Diffusion	2
250	½ White Diffusion	2
210	.6 ND	2
106	Primary Red	1
181	Congo Blue	1
738	JAS Green	1
187	Cosmetic Rouge	1
188	Cosmetic Highlight	1
791	Moroccan Frost	1
775	Soft Amber Key 2	1
720	Durham Daylight Frost	1
270	LEE Scrim	1
280	Black Foil	1

Master Location Pack

Our largest variety of colour-correction, effect, and light-shaping tools to provide the control you need to master any lighting condition.

No.	Name	Qty
200	Double CTB	2
201	Full CTB	2
202	½ CTB	2
203	¼ CTB	2
204	Full CTO	2
205	½ CTO	2
206	¼ CTO	2
216	Full White Diffusion	2
250	½ White Diffusion	2
251	¼ White Diffusion	2
210	.6 ND	2
106	Primary Red	1
126	Mauve	1
181	Congo Blue	1
738	JAS Green	1
187	Cosmetic Rouge	1
188	Cosmetic Highlight	1

791	Moroccan Frost	1
775	Soft Amber Key 2	1
720	Durham Daylight Frost	1
244	Plus Green	1
245	½ Plus Green	1
219	Fluorescent Green	1
270	LEE Scrim	1
280	Black Foil	1

MUSIC PACKS

These convenient, pre-cut 250mm x 250mm (10"x10") sheets of LEE polyester filters come complete with instructions on how to use colour to enhance the mood of your music. They are perfect for use in small night clubs and are packaged in six different sets.

DJ Pack 1

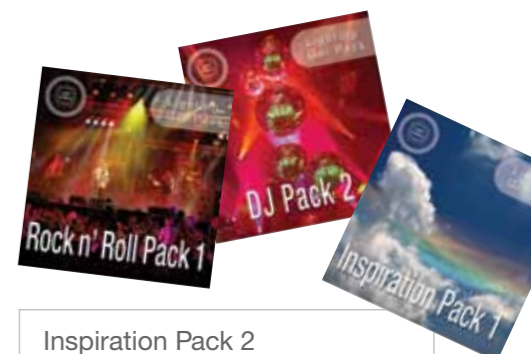
No.	Name	Qty
015	Deep Straw	1
020	Medium Amber	1
024	Scarlet	1
026	Bright Red	1
048	Rose Purple	1
068	Sky Blue	1
116	Medium Blue-Green	1
181	Congo Blue	1
323	Jade	1
325	Mallard Green	1
328	Follies Pink	1
343	Special Medium Lavender	1

DJ Pack 2

No.	Name	Qty
027	Medium Red	1
089	Moss Green	1
105	Orange	1
113	Magenta	1
141	Bright Blue	1
180	Dark Lavender	1
197	Alice Blue	1
328	Follies Pink	1
735	Velvet Green	1
744	Dirty White	1
781	Terry Red	1
797	Deep Purple	1

Inspiration Pack 1

No.	Name	Qty
009	Pale Amber Gold	3
058	Lavender	3
143	Pale Navy Blue	3
195	Zenith Blue	3



Inspiration Pack 2

No.	Name	Qty
063	Pale Blue	3
106	Primary Red	3
735	Velvet Green	3
764	Sun Colour Straw	3

Rock n' Roll Pack 1

No.	Name	Qty
116	Medium Blue-Green	3
128	Bright Pink	3
158	Deep Orange	3
181	Congo Blue	3

Rock n' Roll Pack 2

No.	Name	Qty
048	Rose Purple	3
132	Medium Blue	3
327	Forest Green	3
341	Plum	3

COLOUR MAGIC PACKS

The LEE Filters Colour Magic series is a set of eight individual packs, each containing a selection of 12 filters 250mm x 300mm (10" x 12") that relate to a particular aspect of lighting and studio work.

Colour Magic 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.	Name	Qty
101	Yellow	1
116	Medium Blue Green	1
118	Light Blue	1
122	Fern Green	1
126	Mauve	1
128	Bright Pink	1
129	Heavy Frost	1
144	No Colour Blue	1
179	Chrome Orange	1
180	Dark Lavender	1
192	Flesh Pink	1
228	Brushed Silk	1

Saturates Pack

A selection of strong and vibrant colours for more intense colour combinations.

No.	Name	Qty
027	Medium Red	1
101	Yellow	1
105	Orange	1
116	Medium Blue Green	1
120	Deep Blue	1
126	Mauve	1
129	Heavy Frost	1
135	Deep Golden Amber	1
139	Primary Green	1
181	Congo Blue	1
182	Light Red	1
332	Special Rose Pink	1

Studio Pack

A range of technical filters for basic light source control.

No.	Name	Qty
201	Full CTB	2
281	¾ CTB	2
204	Full CTO	2
285	¾ CTO	2
298	0.15 Neutral Density	1
209	0.3 Neutral Density	1
210	0.6 Neutral Density	1
211	0.9 Neutral Density	1

Complementary Pack

A starter pack for exploring the basics of colour addition and subtraction.

No.	Name	Qty
164	Flame Red	1
124	Dark Green	1
119	Dark Blue	1
176	Loving Amber	1
174	Dark Steel Blue	1
138	Pale Green	1
101	Yellow	1
115	Peacock Blue	1
128	Bright Pink	1
007	Pale Yellow	1
117	Steel Blue	1
035	Light Pink	1

Light Tint Pack

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

No.	Name	Qty
003	Lavender Tint	1
007	Pale Yellow	1
009	Pale Amber Gold	1
035	Light Pink	1
061	Mist Blue	1
063	Pale Blue	1
103	Straw	1
154	Pale Rose	1
162	Bastard Amber	1
169	Lilac Tint	1
213	White Flame Green	1
255	Hollywood Frost	1

Studio Plus Pack

A range of technical filters for fine control of light sources.

No.	Name	Qty
202	½ CTB	2
203	¼ CTB	2
218	⅙ CTB	2
205	½ CTO	2
206	¼ CTO	2
223	⅙ CTO	2

Tint Pack

Lighting filters which complement the original Colour Magic pack to create alternative shades.

No.	Name	Qty
002	Rose Pink	1
048	Rose Purple	1
088	Lime Green	1
100	Spring Yellow	1
108	English Rose	1
131	Marine Blue	1
157	Pink	1
164	Flame Red	1
174	Dark Steel Blue	1
228	Brushed Silk	1
250	½ White Diffusion	1
344	Violet	1

Arc Correction Pack

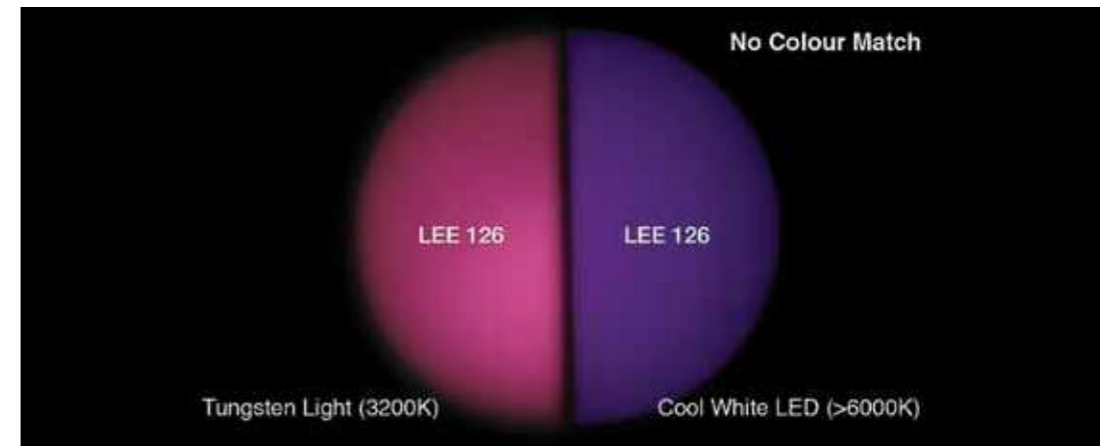
A selection of technical filters for colour correction.

No.	Name	Qty
205	½ CTO	2
206	¼ CTO	2
219	LEE Fluorescent Green	1
241	LEE Fluorescent 5700K	1
242	LEE Fluorescent 4300K	1
243	LEE Fluorescent 3600K	1
244	Full Plus Green	2
245	½ Plus Green	2



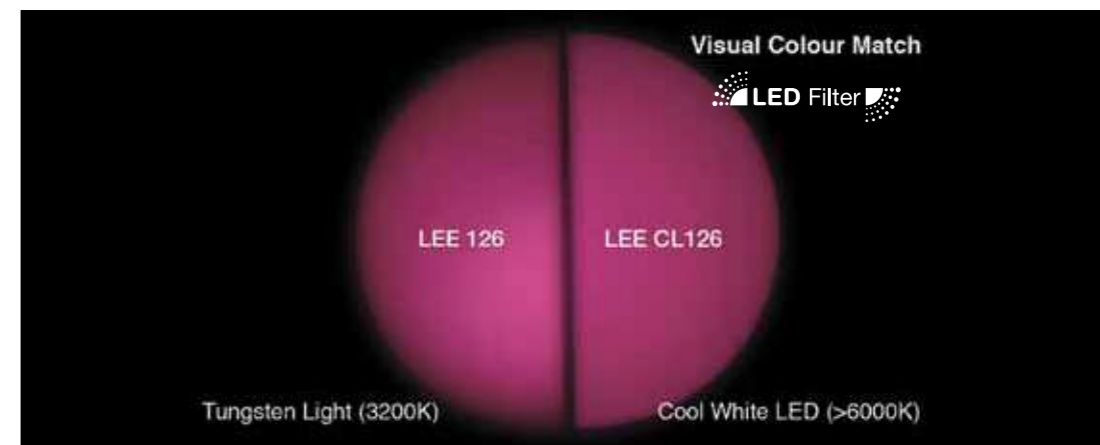
LED FILTERS

If there's one problem that lighting designers can relate to, it's the dramatic change in hue that occurs when a coloured filter is placed in front of a cool white LED fitting. And the issue is only exacerbated when combining cool white LED and tungsten light sources, making it almost impossible to match the colours.



Existing LEE 126 on tungsten (left hand side) and cool white LED (right hand side). The colour is totally different.

With cool white LED systems increasing in use, it became obvious that something had to be done, so the technicians at LEE Filters came up with a solution: the LED Filter range. These filters are designed to produce the same colour on a cool white LED (>6000K) as their tungsten-lighting equivalent. Try to think of them as a range of colour-corrected filters, as opposed to those that are colour temperature corrected.



Existing LEE 126 on tungsten (left hand side) and new LED CL126 on cool white LED (right hand side). There is now a good visual colour match.

LED COLOUR RANGE



Source: LED >6000K

Filter Colour

CL104
Cool LED Deep Amber

Projected Colour

104

For use on cool white LED with C.T. >6000K to produce a pleasing golden yellow. Similar to **LEE 104** on a tungsten lamp.

Filter Colour

CL105
Cool LED Orange

Projected Colour

105

For use on cool white LED with C.T. >6000K to produce a warm medium amber. Similar to **LEE 105** on a tungsten lamp.

Filter Colour

CL106
Cool LED Primary Red

Projected Colour

106

For use on cool white LED with C.T. >6000K to produce a warm primary red. Similar to **LEE 106** on a tungsten lamp. Good for cycloramas.

Filter Colour

CL113
Cool LED Magenta

Projected Colour

113

For use on cool white LED with C.T. >6000K to produce a soft pink red, with strong contrasting shadows. Similar to **LEE 113** on a tungsten lamp.

Filter Colour

CL115
Cool LED Peacock Blue

Projected Colour

115

For use on cool white LED with C.T. >6000K to produce a fresh, crisp, spearmint colour. Similar to **LEE 115** on a tungsten lamp. Good for cycloramas.

Filter Colour

CL116
Cool LED Medium Blue Green

Projected Colour

116

For use on cool white LED with C.T. >6000K to produce a vibrant turquoise with a green bias. Similar to **LEE 116** on a tungsten lamp.

Filter Colour

CL117
Cool LED Steel Blue

Projected Colour

117

For use on cool white LED with C.T. >6000K to produce a silvery moonlight wash. Similar to **LEE 117** on a tungsten lamp. Good for cycloramas.

Filter Colour

CL118
Cool LED Light Blue

Projected Colour

118

For use on cool white LED with C.T. >6000K to produce a cold, spine-chilling blue. Similar to **LEE 118** on a tungsten lamp.

Filter Colour

CL119
Cool LED Dark Blue

Projected Colour

119

For use on cool white LED with C.T. >6000K to produce a soft moody blue, good for blacklighting. Similar to **LEE 119** on a tungsten lamp.

Filter Colour

CL126
Cool LED Mauve

Projected Colour

126

For use on cool white LED with C.T. >6000K to produce a bold intense pink. Similar to **LEE 126** on a tungsten lamp.

Filter Colour

CL128
Cool LED Bright Pink

Projected Colour

128

For use on cool white LED with C.T. >6000K to produce a neon pink good for musicals / pantos. Similar to **LEE 128** on a tungsten lamp.

Filter Colour

CL132
Cool LED Medium Blue

Projected Colour

132

For use on cool white LED with C.T. >6000K to produce a mid tone blue good for night scenes. Similar to **LEE 132** on a tungsten lamp.

Filter Colour

CL139
Cool LED Primary Green

Projected Colour

139

For use on cool white LED with C.T. >6000K to produce a vivid primary green. Similar to **LEE 139** on a tungsten lamp. Good for cycloramas.

Filter Colour

CL147
Cool LED Apricot

Projected Colour

147

For use on cool white LED with C.T. >6000K to produce a warm key light amber. Similar to **LEE 147** on a tungsten lamp.

Filter Colour

CL158
Cool LED Deep Orange

Projected Colour

158

For use on cool white LED with C.T. >6000K to produce a sunset-like glow. Similar to **LEE 158** on a tungsten lamp.

Filter Colour

CL164
Cool LED Flame Red

Projected Colour

164

For use on cool white LED with C.T. >6000K to produce a dawn burst, orange-red glow. Similar to **LEE 164** on a tungsten lamp.

Filter Colour

CL180
Cool LED Dark Lavender

Projected Colour

180

For use on cool white LED with C.T. >6000K to produce a dance floor pink, good for cycloramas. Similar to **LEE 180** on a tungsten lamp.

Filter Colour

CL181
Cool LED Light Red

Projected Colour

181

For use on cool white LED with C.T. >6000K to produce soft, romantic, mood lighting. Similar to **LEE 181** on a tungsten lamp.

Filter Colour

CL182
Cool LED Light Red

Projected Colour

182

For use on cool white LED with C.T. >6000K to produce a saturated vibrant red, good for cycloramas. Similar to **LEE 182** on a tungsten lamp.

LED CONVERSION FILTERS

Because the white light emitted from an LED fixture has a strong blue cast, it appears cold when compared with a tungsten white light. In order to overcome this problem, LEE Filters has introduced the LED CTO Filter range (CTO stands for Colour Temperature Orange), which is designed to give the white light from an LED source a more tungsten-like warmth. In effect, the filters take the 5000K to 7000K colour temperature of an LED source and convert them to the appearance of a 3200K tungsten source. This allows lighting designers to mix the two sources without the viewer or camera picking up on any difference.



622 One and One Eighth Digital LED CTO

Converts white LED of 7000K to Tungsten of 3200K
Mired shift + 170

626 Seven Eighths Digital LED CTO

Converts white LED of 5550K to Tungsten of 3200K
Mired shift + 132

624 Full Digital LED CTO

Converts white LED of 6200K to Tungsten of 3200K
Mired shift + 151

628 Three Quarter Digital LED CTO

Converts white LED of 5000K to Tungsten of 3200K
Mired shift + 113



THE DESIGNER SERIES


A VERY SPECIAL RANGE OF LIGHTING FILTERS UNIQUE TO LEE. THE DESIGNER SERIES COLOURS HAVE BEEN CREATED BY SOME OF THE TOP LIGHTING DESIGNERS WORKING IN STAGE, SCREEN, TELEVISION, CINEMA AND ARCHITECTURAL LIGHTING.


Nobody knows better than the lighting designers themselves what they need in order to realise their vision. Whether they're recreating the pale, watery hues of a winter sunrise, or the dark, gritty tones of an urban environment, it's essential that the filters are capable of reproducing the vision that is in their mind's eye.


With this in mind, LEE Filters has set about helping the lighting designers to achieve their aims, by involving them at the earliest possible opportunity – the concept stage. Designers are invited to the LEE Filters manufacturing plant in Andover, where they work closely with the team of research and development technicians, blending sometimes myriad dyes in order to create their perfect colour.


Only after the new filter has been tested stringently in the field, is it then launched as part of the Designer Series.

PETER BARNES


 ***707 Ultimate Violet**
Used in musical performances for general colour washes and set lighting.


 ***721 Berry Blue**
Used in musical performances for rear colour wash or set lighting.


 ***729 Scuba Blue**
Used in musical performances for a rear colour wash or set lighting.


 ***797 Deep Purple**
Used in musical performances for general colour washes and set lighting.


TANYA BURNS

 **505 Sally Green**
A fresh, light & airy summer green. 'Under tree canopy' light quality without 'pantomime countryside'. Subtle enough to light faces without having to add too much general cover on top.

 **506 Marlene**
Flattering skin tone filter without the comedy 'pink'. Also useful as Indian summer at dusk/sepia type effect.


 **507 Madge**
Denser, saturated orange version of 135 avoiding 'pinky red'. Good for backlight, instruments, part of a sunset palette, and generating a party atmosphere.


 **508 Midnight Maya**
A rich, sultry blue. Like Congo Blue, but allowing greater light transmission so more maintenance friendly - fewer gel changes.


 **525 Argent Blue**
LSI's Silver Anniversary colour sits between 165 and 068 in the range. Great for a foreboding cold winter's night, but allows enough light transmission to be useful for general illuminance too.




LUCY CARTER


 **511 Bacon Brown**
An intense and warm deep brown. Designed to recreate the pigment browns used by Francis Bacon in some of his paintings.


 **512 Amber Delight**
A dark, dirty orange.


 **513 Ice And A Slice**
A pale acidic spring yellow. For a sharp white wash.


 **514 Double G & T**
Double 513, when only a double will do. Has a more acidic bite.

PAULE CONSTABLE

 **731 Dirty Ice**
Dirtier than 730 Liberty Green, more orange, sympathetic with skin tones.

 **733 Damp Squib**
A dirty green, reduces warmth. Good for cross lighting.

 **742 Bram Brown**
Dirtier than 156 Chocolate, good for skin tones. Dims well and doesn't go pink at low light levels.


 **768 Egg Yolk Yellow**
A bold strong chemical yellow, less orange/red than 179 Chrome Orange.


"I WAS FASCINATED TO LEARN THE PROCESS OF MAKING COLOUR. THE CHANCE TO DEVELOP NEW COLOURS WAS THRILLING; A REAL MEETING OF ART AND SCIENCE. BEING ABLE TO DISCUSS COLOUR IN THAT DETAIL AND FOR LEE TO RESPOND IN SUCH A POSITIVE WAY WAS A UNIQUE EXPERIENCE."


Paule Constable

* Also available in High Temperature (HT) version

CHRIS DAVEY

 **712 Bedford Blue**
A smoky warm blue. Good for skin tones.


 **722 Bray Blue**
A purer blue with very little red in it.


 **748 Seedy Pink**
A smoky pink. Good for tungsten on skin tones.


"A BIG THANK YOU FOR A VERY INTERESTING DAY. ALL THE TEAM AT LEE CLEARLY TAKE GREAT PRIDE IN THEIR PRODUCTS, SHOWN BY THE RIGOROUS QUALITY CONTROL CHECKS."

Chris Davey


DAVE DAVEY

 **701 Provence**
The colour of the lavender fields of the south of France. A redder version of 180 Dark Lavender for use on cameras balanced to tungsten sources.

 **736 Twickenham Green**
A powerful green with depth, for music or light entertainment.

 **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.


 **749 Hampshire Rose**
Combines flesh tone warmer 154 Pale Rose with some Hampshire frost.

 **770 Burnt Yellow**
A colour that feels warm and dense on camera, a balance between 179 Chrome Orange and 105 Orange.

CHRIS ELLIS


 **714 Elysian Blue**
A new deeper version of 197 Alice Blue.


 **717 Shanklin Frost**
201 Full CT Blue with frost to soften the beam of profile units.

 **718 Half Shanklin Frost**
202 Half CT Blue with frost to soften the beam of profile units.

 **798 Chrysalis Pink**
A new deeper lavender with a dash of rose blusher.


RICK FISHER

 **708 Cool Lavender**
For use as a warmer tint without turning yellow and to recreate the colour of fluorescent lighting.

 **728 Steel Green**
Approaching storms. Overcast days. Cold steely light. Malevolent moonlight.


"I HAD A VERY PRODUCTIVE DAY AT LEE, RESULTING IN TWO COLOURS WHICH, ALTHOUGH SIMILAR, SPOKE DIFFERENT LANGUAGES."


Rick Fisher


 **735 Velvet Green**
A beautiful background colour. Victorian melodrama. A night time green.

PETER FISKER

 **700 Perfect Lavender**
In-between 170 Deep Lavender and 345 Fuchsia Pink, and is good for backlighting and romantic atmospheres.

 **703 Cold Lavender**
A colour that would be great for front / key lighting and that works well with 152 Pale Gold.

 **727 QFD Blue**
A special version of 729 Scuba Blue which is good for backlighting and swimming pool effects.

 **780 AS Golden Amber**
Between 778 Millennium Gold and 135 Deep Golden Amber, but less red, strong and good for backlighting.

HENRIK HAMBRO**706 King Fals Lavender**

A cold lavender.

710 Spir Special Blue

A cool industrial blue.

740 Aurora Borealis Green

Primary jungle colour. Removes some red and blue. Works best with daylight bulbs. Sodium lamp effect.

741 Mustard Yellow

Spooky when used in haze. Removes some red and blue. Works best with daylight bulbs. Sodium lamp effect.

773 Cardbox Amber

Warm tint for skin tones.

787 Marius Red

Nice deep full red. Rose leaf colour.

799 Special KH Lavender

A deep lavender that brings out the UV.

"I WOULD LIKE TO THANK LEE FILTERS FOR THE TWO DAYS I SPENT WITH THEIR VERY PROFESSIONAL R&D TEAM. IT WAS GREAT FUN TO PLAY WITH COLOURS AND VERY DIFFICULT TO STOP GETTING NEW IDEAS."

Henrik Hambro

MARK HENDERSON**711 Cold Blue**

To give a cold/grey HMI effect from a tungsten source. Will also help blend the light when using both tungsten and HMI sources.

719 Colour Wash Blue

To allow low intensity tungsten to hold a cold/blue feel.

746 Brown

To give a murky, dirty feel to tungsten. A darker, less pink chocolate.

777 Rust

A vivid rust colour effect.

789 Blood Red

For a deep saturated red effect. Used when a strong vivid red effect is required.

DAVID HERSEY**724 Ocean Blue**

Useful at low levels of light. Good for dull skies and moonlight.

725 Old Steel Blue

Cool wash, useful for highlights.

763 Wheat

Adds warmth, sunlight.

764 Sun Colour Straw

Adds warmth, bright sunlight.

776 Nectarine

Romantic sunset. Period pieces.

779 Bastard Pink

Deep sunset. Useful on dark skin tones.

JAKOB HOLST***716 Mikkel Blue**

A romantic blue to produce a night effect.

774 Soft Amber Key 1

Used for producing a warm key light colour.

775 Soft Amber Key 2

Used for producing a warm key light colour.

* Also available in High Temperature (HT) version

JESPER KONGSHAUG**730 Liberty Green**

A good green for creating mystery and suspense.

765 LEE Yellow

Useful for producing a strong sunlight effect.

ANDY LIDDLE***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.

781 Terry Red

A strong amber red that works well when used against deep reds and dark ambers, in wash combinations and on cycloramas.

***738 JAS Green**

A rich yellowish green. Useful as a concert stage wash where darker skin tone, costume and set are a consideration.

"AFTER 20 YEARS IN LIGHTING, I PROMISE TO NEVER THROW A PIECE OF COLOUR ON THE STAGE AGAIN, NOW I KNOW WHAT IT TAKES TO DEVELOP AND MAKE!"

Andy Liddle

DURHAM MARENGHI**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.

720 Durham Daylight Frost

Smooths PAR or flood washes of large areas. Useful for houselight and good for entrances from natural light.

704 Lily

A cool lavender with little red content. Good for romantic evening exteriors.

750 Durham Frost

A frost that almost completely softens shutter edges and removes hot spots.

705 Lily Frost

Smooths PAR or flood washes of large areas. Useful for houselights and a good colour wash for evening events.

790 Moroccan Pink

A rich natural pink, good for producing late afternoon sun effects.

"...I APPRECIATE YOU FINDING THE TIME TO TALK TO DESIGNERS SUCH AS MYSELF ABOUT YOUR PRODUCTS."

Durham Marenghi

791 Moroccan Frost

Smooths PAR or flood washes of large areas. Useful for houselights and good for interior colour washes.

DECLAN RANDALL**550 ALD Gold**

A 'proper' gold to celebrate the 50th anniversary of the ALD. It maintains its richness as it dims, becoming more molten as the percentage is reduced.

602 Platinum

At full power produces dazzling grey light with slight red bias, when dimmed warms up quickly to a useful brown. Good for effect lighting as well as a cold, white sidelight that has some warmth in it.

600 Arctic White

A bright, brilliant blue-grey light at 100%. It does not warm up as it dims and is not affected by amber drift. Useful as a backlight or for special effects where a whiter light is called for.

603 Moonlight White

A pleasant white light at full power, dims down to a warm colour and at low intensities has more yellow than red content. Good for sunlight effect as if through stormy clouds reflecting off of the ocean.

601 Silver

A silver-grey light at full power, dims through lavender-grey then warm brown-grey. Works well with 550 ALD Gold. Good for creating a sense of intense darkness on stage whilst still being useful.



MIKE ROBERTSON

- 500 Double New Colour Blue**
The strongest of the New Colour Blue (NCB) series for dramatic 'white' face and key light where warmer tones than CTB are required.
- 503 Quarter New Colour Blue**
The lightest correction in the NCB series.
- 501 New Colour Blue (Robertson Blue)**
An alternative to the CTB series with warmer tones and a lesser green cast for face and key light.
- 504 Waterfront Green**
Designed for period key light and modern urban horizons.
- 502 Half New Colour Blue**
A lighter correction in the NCB series.

DAVID WHITEHEAD

- 709 Electric Lilac**
Provides good colour rendering which creates a sharp edge, adding a touch of drama.
- 794 Pretty 'n Pink**
Creates warm and soft effects.
- 767 Oklahoma Yellow**
A rich blend of bright sunshine and warm ochre overtones.
- 795 Magical Magenta**
Rich mixture of red and pinks.

KATE WILKINS

- 723 Virgin Blue**
This is a pure blue, not too green and not too lavender, yet still feels warm for a blue with an early morning feel.
- 747 Easy White**
Primarily developed for fluorescents to ensure warm, comfortable light and flattering skin tones.

PATRICK WOODROFFE

- *715 Cabana Blue**
A deep blue that still has enough transmission to work encouragingly well on television.
- 793 Vanity Fair**
A rich glamorous pink, good for use on special occasions.
- *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.



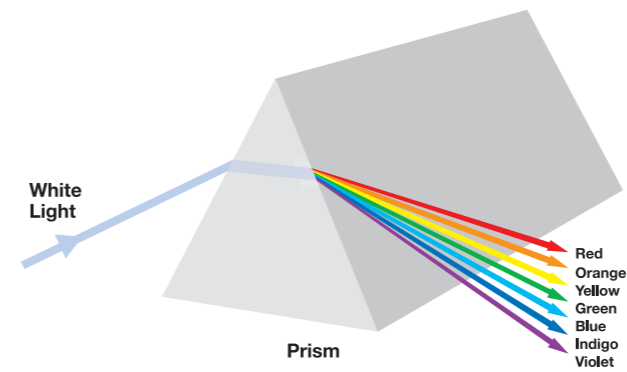
* Also available in High Temperature (HT) version

THE SCIENCE BEHIND THE ART

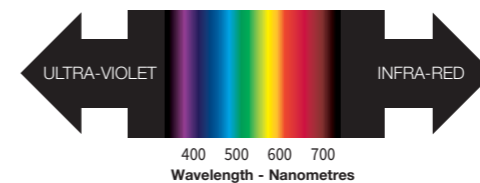
Light

Light is energy that travels in wave form. The human eye responds to certain wavelengths and these make up the visible spectrum. Wavelengths outside this spectrum are invisible to us, such as infra red, ultra violet and X-ray.

Sir Isaac Newton showed that by shining white light through a glass prism it could be separated back into its different wavelengths.



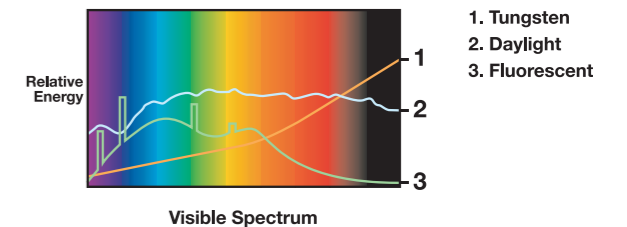
Each wavelength within the visible spectrum is recognised by our eyes as providing a particular colour sensation, the diagram below clearly indicates the visible colours and their corresponding wavelengths. White light consists of all of the visible wavelengths, present in equal amounts.



By using filters to selectively reduce the level of light at certain wavelengths we can create coloured light to meet our individual requirements, whether technical or aesthetic.



Most artificial light sources do not actually produce white light. For example, incandescent sources such as tungsten generate light which has more energy at the red end of the spectrum, whereas a fluorescent source often has spikes of energy mainly in the blue and green region. Filters can be used to correct these differences and make one light source appear like another.

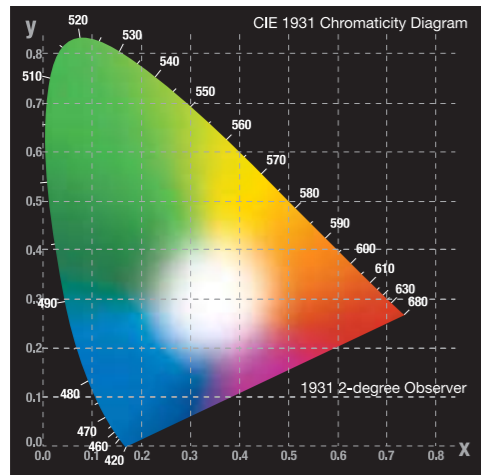


In order to record and communicate colour accurately, you either need to create a physical example of that colour that will never fade or become damaged, or use a mathematical model. A model uses numbers to describe different attributes of a certain colour, these being HUE, SATURATION and LIGHTNESS. The HUE describes the physical colour - red, yellow, green etc. SATURATION is a perception of how strong the hue of the colour is represented in the sample. The LIGHTNESS (or darkness) of a colour is perceived, when a comparison made to a similar area that is not coloured, but lit with the same strength of illumination.

As there are three attributes to a colour, the numbers associated with them in a mathematical model can be thought of as a position in a three dimensional shape, this shape is called a colour space.

The particular colour space used by LEE Filters technicians was devised in 1931 by the Commission International Eclairage (CIE) and is one of the many internationally recognised standard colour spaces.

The HUE and SATURATION of any colour can be represented by its position on a chromaticity diagram, as seen below. The diagram contains all visible colours, and all possible densities of these colours, in a two-dimensional configuration, with pale colours in the centre and saturated versions of those same colours at the edges. A colour's position on this diagram will be represented by its Chromaticity Co-ordinates.



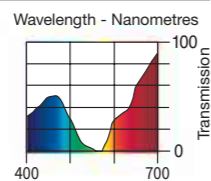
How to use this brochure.

The technical information contained in this brochure is designed to help you choose the correct colour for your requirements in a number of different ways.

The spectral power distribution (SPD) curves illustrated in this brochure, show the percentage of light at each wavelength across the visible spectrum that is passed when light is shone through the filter. From this data, you can tell which constituent parts of the source will be transmitted, and which will be reduced.

(Measured to source C, Correlated Color Temperature of 6774K)			
Transmission Y%	Absorption abs	Chromaticity Co-ordinates	
		x	y
13.9	0.86	0.288	0.167

048
Rose Purple
Good for emulating evening.
Great backlight.



The Y% figure is representative of overall average transmission of that filter, as perceived by the human eye. The Y value is actually one of the TRISTIMULUS VALUES, a set of values unique to each colour, that are calculated mathematically from the data contained in the SPD graph.

The absorption (abs) of a filter is calculated from the Y% value, and is another way of expressing the light-stopping properties of that filter. Abs is a linear scale, so values can be added or subtracted more easily than using Y%.

Y%	abs
50	0.3 (1 Stop)
25	0.6 (2 Stop)
12.5	0.9 (3 Stop)

The Chromaticity co-ordinates published for each colour are measured and calculated using a theoretical standard light source, and can be plotted on the chromaticity diagram to establish that particular colour's characteristics in relation to all other colours.

Choosing filter materials

Since subtractive filters achieve their purpose by absorbing energy, knowing the expected spectral performance of a particular filter and in particular, its overall Transmission Efficiency Y, can help the user to select the materials used, whether being polyester, high temperature polymer or glass.

Each material has recommended temperature limits, and our staff are always happy to advise on the best material for a particular job, and on its durability. The lifetime that may be expected from a particular filter in a particular application can often be difficult to predict, because it depends upon many different factors.

We have many years of experience in a range of different areas, and our staff will readily share the practical knowledge that they have gathered as to how to prolong the lifetime of any particular filter.

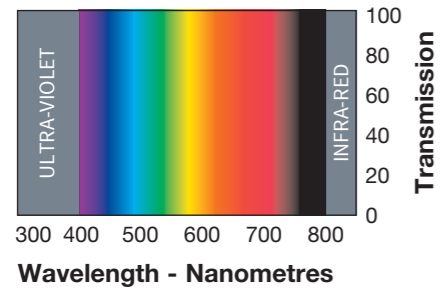
Colour Range

SPECTRAL CHARTS

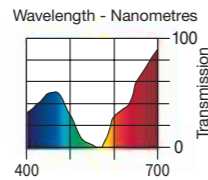
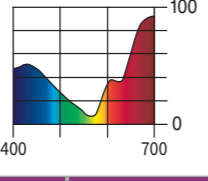
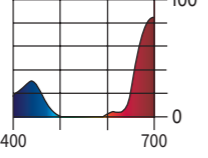
The following pages show a spectral chart and colour sample for each filter within the colour range.

The spectral chart illustrates the percentage of light transmitted by each filter at wavelengths across the visible portion of the electromagnetic spectrum.

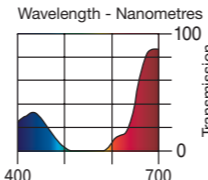
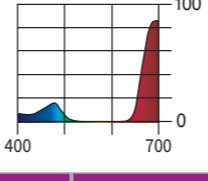
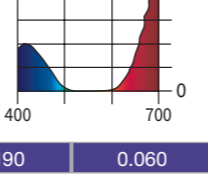
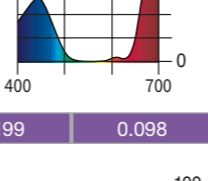
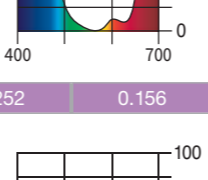
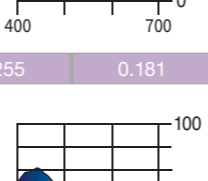
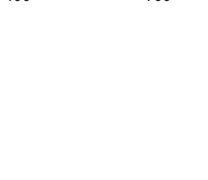
The illustration below clearly shows the visible colours represented at these wavelengths.

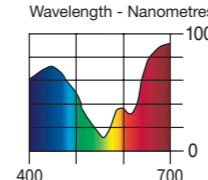
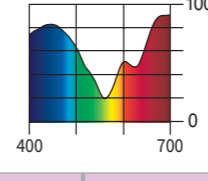
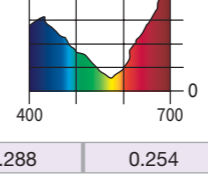
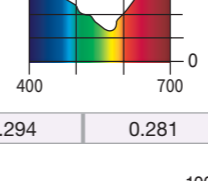
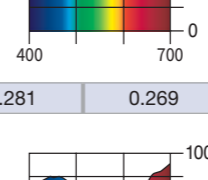
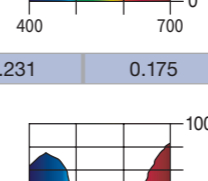
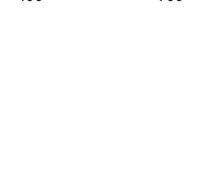


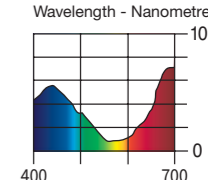
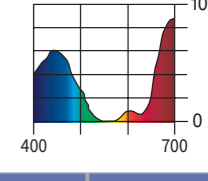
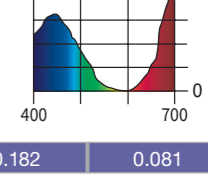
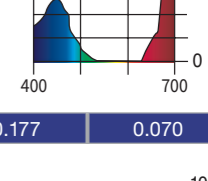
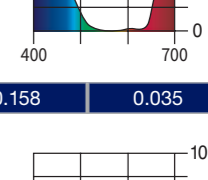
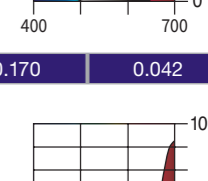
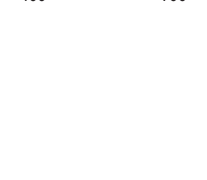
The colour sample of each filter shows an approximate representation of the colour when tungsten light of 3200K is shone through the filter onto a white surface.

(Measured to source C, Correlated Color Temperature of 6774K)			
Transmission Y%	Absorption abs	Chromaticity Co-ordinates x y	
13.9	0.86	0.288	0.167
048 Rose Purple Good for emulating evening. Great backlight.			
			
21.5	0.67	0.301	0.204
CL180 Cool LED Dark Lavender For use on cool white LED with C.T.>6000K to produce a dance floor pink, good for cycloramas. Similar to LEE 180 on a tungsten lamp.			
			
2.3	1.65	0.235	0.065
797* Deep Purple Used in musical performances for general colour washes and set lighting.			
			

* Also available in High Temperature (HT) version

(Measured to source C, Correlated Color Temperature of 6774K)			
Transmission Y%	Absorption abs	Chromaticity Co-ordinates x y	
4.5	1.35	0.287	0.102
049 Medium Purple A strong cheerful glow, for cycloramas and pantomimes.			
			
1.8	1.74	0.218	0.109
CL181 Cool LED Congo Blue For use on cool white LED with C.T.>6000K to produce soft, romantic, mood lighting. Similar to LEE 181 on a tungsten lamp.			
			
4.1	1.38	0.287	0.082
126 Mauve Good for back lighting. Dark magenta / purple adds drama, mood.			
			
3.8	1.43	0.190	0.060
798 Chrysalis Pink A new deep lavender with a dash of rose blusher.			
			
9.4	1.03	0.199	0.098
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.			
			
15.5	0.81	0.252	0.156
345 Fuchsia Pink Musical revue, pantomime, sultry scenes.			
			
20.4	0.69	0.255	0.181
703 Cold Lavender Made for front/key lighting, perfect together with LEE 152.			
			

(Measured to source C, Correlated Color Temperature of 6774K)			
Transmission Y%	Absorption abs	Chromaticity Co-ordinates x y	
33.0	0.48	0.259	0.218
052* Light Lavender General area side lights. Great for basic followspot colour. Excellent back light.			
			
40.0	0.40	0.267	0.221
704 Lily A cool lavender with little red content. Good for romantic evening exteriors.			
			
25.7	0.59	0.278	0.211
170 Deep Lavender Set lighting - discos - theatres.			
			
43.2	0.36	0.288	0.254
136 Pale Lavender Pantomime, ballroom sets, enhances dark skin tones in follow spots.			
			
59.5	0.23	0.294	0.281
169 Lilac Tint Pale lavender. Good for almost white light with a cool tint.			
			
54.1	0.27	0.281	0.269
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.			
			
26.4	0.58	0.231	0.175
137 Special Lavender Moonlight, musical / romantic scenes, enhances skin tones.			
			

(Measured to source C, Correlated Color Temperature of 6774K)			
Transmission Y%	Absorption abs	Chromaticity Co-ordinates x y	
22.3	0.65	0.240	0.183
194 Surprise Pink Good for musicals.			
			
8.9	1.05	0.212	0.099
058* Lavender Excellent backlight. Creates a new dimension.			
			
6.6	1.18	0.191	0.072
180 Dark Lavender Pleasing effects for theatrical lighting, backlighting.			
			
6.0	1.22	0.182	0.081
343 Special Medium Lavender Theatre and T.V. effect lighting, backlighting.			
			
4.8	1.32	0.177	0.070
700 Perfect Lavender Good for backlighting and romantic atmospheres.			
			
0.8	2.10	0.158	0.035
181* Congo Blue Looks like black light when used with a fluorescent source. Great effect colour. Very saturated.			
			
2.0	1.69	0.170	0.042
707* Ultimate Violet Used in musical performances for general colour washes and set lighting.			
			

(Measured to source C, Correlated Color Temperature of 6774K)

Transmission Y%	Absorption abs	Chromaticity Co-ordinates	
		x	y
5.5	1.26	0.186	0.091
706			
King Fals Lavender			
A cold lavender.			
3.0	1.53	0.164	0.061
508			
Midnight Maya			
A rich, sultry blue. Like Congo Blue, but allowing greater light transmission so more maintenance friendly - fewer gel changes.			
1.4	1.86	0.158	0.035
799			
Special K.H. Lavender			
A deep lavender that brings out the UV.			
1.0	2.00	0.151	0.030
071*			
Tokyo Blue			
Deep blue, use for midnight scenes, cycloramas.			
1.1	1.97	0.148	0.037
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.			
34.0	0.47	0.238	0.227
709			
Electric Lilac			
Provides good colour rendering which creates sharp edges, adding a touch of drama.			
20.1	0.70	0.209	0.148
142			
Pale Violet			
Moonlight, cycloramas, highlighting pot plants.			

(Measured to source C, Correlated Color Temperature of 6774K)

Transmission Y%	Absorption abs	Chromaticity Co-ordinates	
		x	y
5.4	1.26	0.161	0.070
199			
Regal Blue			
A deep lavender blue, that strongly enhances skin tones.			
12.2	0.91	0.180	0.133
710			
Spir Special Blue			
A cool industrial blue.			
1.7	1.78	0.159	0.066
198			
Palace Blue			
Dark moonlight - romantic evening.			
3.9	1.4	0.146	0.054
716*			
Mikkel Blue			
A romantic blue to produce a night effect.			
2.7	1.56	0.142	0.046
195*			
Zenith Blue			
Moonlight for dark sets, cycloramas.			
6.8	1.17	0.152	0.075
715*			
Cabana Blue			
A deep blue that still has enough transmission to work encouragingly well on television.			
7.0	1.16	0.158	0.100
723			
Virgin Blue			
This is a pure blue, not too green and not too lavender, yet still feels warm for a blue with an early morning feel.			

(Measured to source C, Correlated Color Temperature of 6774K)

Transmission Y%	Absorption abs	Chromaticity Co-ordinates	
		x	y
6.5	1.19	0.147	0.084
721*			
Berry Blue			
Used in musical performances for rear colour wash, or set lighting.			
2.1	1.68	0.149	0.051
120*			
Deep Blue			
Pleasing effect for theatrical lighting.			
4.2	1.37	0.141	0.070
363*			
Special Medium Blue			
Cool moonlight, mood effects.			
2.5	1.60	0.143	0.065
085*			
Deeper Blue			
Deep warm blue. Good for back and side lighting.			
3.1	1.51	0.142	0.054
119*			
Dark Blue			
Good for mood effects created by backlight and sidelight. Creates great contrast.			
6.8	1.17	0.151	0.097
714			
Elysian Blue			
A new deeper version of Alice Blue.			
5.6	1.25	0.145	0.072
079*			
Just Blue			
Good colour mixing blue. Great for cyclorama lighting.			

(Measured to source C, Correlated Color Temperature of 6774K)

Transmission Y%	Absorption abs	Chromaticity Co-ordinates	
		x	y
5.2	1.28	0.139	0.086
722			
Bray Blue			
A purer blue with very little red in it.			
12.5	0.90	0.158	0.117
075			
Evening Blue			
Good for night scenes, romantic moonlight.			
17.1	0.77	0.171	0.143
525			
Argent Blue			
Great for a foreboding cold winter's night, but allows enough light transmission to be useful for general illuminance too.			
10.4	0.98	0.164	0.118
197*			
Alice Blue			
Great for cyclorama lighting. Deep blue skies.			
17.9	0.75	0.183	0.158
712			
Bedford Blue			
A smoky warm blue. Good for skin tones.			
16.2	0.79	0.179	0.155
200			
Double CTB			
Converts tungsten to daylight.			
19.3	0.71	0.188	0.171
719			
Colour Wash Blue			
To allow low intensity tungsten to hold a cold/blue feel.			

* Also available in High Temperature (HT) version

(Measured to source C, Correlated Color Temperature of 6774K)			
Transmission Y%	Absorption abs	Chromaticity Co-ordinates	
		x	y
17.7	0.75	0.193	0.190
366 Cornflower			
Seasonal mood lighting, pale moonlight.			
14.4	0.84	0.223	0.198
711 Cold Blue			
To give a cold/grey HMI effect from a tungsten source. Will also help blend when using both tungsten and HMI sources.			
23.3	0.63	0.200	0.187
500 Double New Colour Blue			
The strongest of the New Colour Blue (NCB) series for dramatic 'white' face and key light where warmer tones than CTB are required.			
43.4	0.36	0.246	0.249
501 New Colour Blue (Robertson Blue)			
An alternative to the CTB series with warmer tones and a lesser green cast for face and key light.			
43.4	0.36	0.257	0.260
708 Cool Lavender			
For use as a warmer tint without turning yellow and to recreate the colour of fluorescent lighting.			
9.5	1.02	0.230	0.223
600 Arctic White			
A bright, brilliant blue-grey light at 100%. It does not warm up as it dims and is not affected by amber drift. Useful as a backlight or for special effects.			
9.0	1.04	0.244	0.248
601 Silver			
A silver-grey light at full power, dims through lavender-grey then warm brown-grey. Good for creating a sense of intense darkness on stage whilst still being useful.			

(Measured to source C, Correlated Color Temperature of 6774K)			
Transmission Y%	Absorption abs	Chromaticity Co-ordinates	
		x	y
15.3	0.82	0.261	0.267
602 Platinum			
At full power produces dazzling grey light with slight red bias, when dimmed warms up quickly to a useful brown. Good for effect lighting as well as a cold, white sidelight.			
28.3	0.55	0.268	0.271
603 Moonlight White			
A pleasant white light at full power, dims down to a warm colour and at low intensities has more yellow than red content. Good for sunlight effect as if through stormy clouds reflecting off of the ocean.			
62.2	0.21	0.284	0.284
053* Paler Lavender			
Subtle cool wash.			
61.6	0.21	0.276	0.281
502 Half New Colour Blue			
A lighter correction in the NCB series.			
74.5	0.13	0.293	0.299
503 Quarter New Colour Blue			
The lightest correction in the NCB series.			
69.2	0.16	0.285	0.294
203 Quarter CTB			
Converts tungsten to daylight.			
62.4	0.21	0.268	0.284
061* Mist Blue			
Night scenes, cool wash.			

* Also available in High Temperature (HT) version

(Measured to source C, Correlated Color Temperature of 6774K)			
Transmission Y%	Absorption abs	Chromaticity Co-ordinates	
		x	y
54.4	0.26	0.252	0.270
063* Pale Blue			
Cool front light wash, good for creating an overcast look for cold weather.			
54.9	0.26	0.261	0.273
202 Half CTB			
Converts tungsten to daylight.			
45.5	0.35	0.239	0.258
281 Three Quarter CTB			
Converts tungsten to daylight.			
34.0	0.47	0.228	0.233
201 Full CTB			
Converts tungsten to photographic daylight.			
24.4	0.61	0.201	0.188
283 One and a Half CTB			
Converts tungsten to daylight.			
30.0	0.52	0.204	0.205
174 Dark Steel Blue			
Set lighting - creates good moonlight shadows.			
24.8	0.61	0.176	0.176
161 Slate Blue			
Pure medium blue. Good for skies, moonlight, dusk.			

(Measured to source C, Correlated Color Temperature of 6774K)			
Transmission Y%	Absorption abs	Chromaticity Co-ordinates	
		x	y
13.4	0.87	0.151	0.128
068 Sky Blue			
Morning skin tones, night sky. Cyclorama lights.			
8.3	1.08	0.137	0.110
132* Medium Blue			
Deep moonlight. Great for colour mixing.			
20.0	0.70	0.159	0.158
165 Daylight Blue			
Moonlight.			
23.4	0.63	0.171	0.190
352 Glacier Blue			
Cold blue, good for cool atmospheric mood setting.			
16.2	0.79	0.170	0.205
143 Pale Navy Blue			
Moonlight, cyclorama night effect.			
26.6	0.57	0.175	0.197
196 True Blue			
Moonlight.			
4.5	1.35	0.120	0.167
CL119 Cool LED Dark Blue			
For use on cool white LED with C.T.>6000K to produce a soft moody blue, good for backlighting. Similar to LEE 119 on a tungsten lamp.			

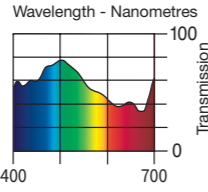
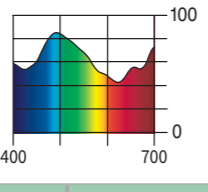
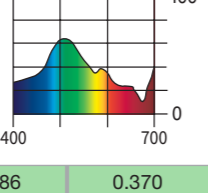
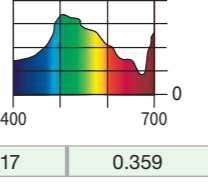
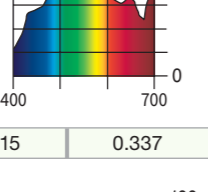
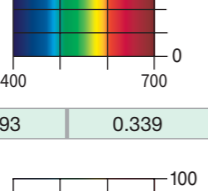
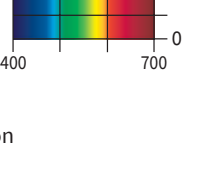
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Transmission Y%	Absorption abs	Chromaticity Co-ordinates	
		x	y
6.6	1.18	0.109	0.210
727 QFD Blue	Wavelength - Nanometres		
Good for backlighting and swimming pool effect.			
18.6	0.75	0.129	0.159
141* Bright Blue	Wavelength - Nanometres		
Very dramatic when used as moonlight.			
18.7	0.73	0.128	0.168
183 Moonlight Blue	Wavelength - Nanometres		
Moonlight, cycloramas.			
22.2	0.65	0.149	0.113
118* Light Blue	Wavelength - Nanometres		
Strong night effect.			
36.2	0.44	0.189	0.222
724 Ocean Blue	Wavelength - Nanometres		
Useful at low levels of light, dull skies, moonlight.			
32.4	0.49	0.183	0.228
144 No Colour Blue	Wavelength - Nanometres		
Clean blue with hints of green. Good for moonlight and side light.			
11.4	0.94	0.126	0.228
CL132 Cool LED Medium Blue	Wavelength - Nanometres		
For use on cool white LED with C.T. >6000K to produce a mid tone blue good for night scenes. Similar to LEE 132 on a tungsten lamp.			

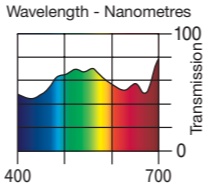
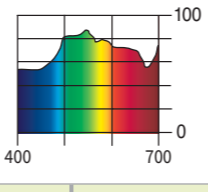
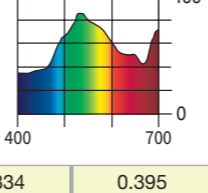
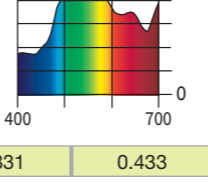
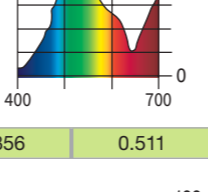
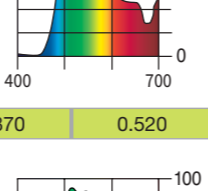
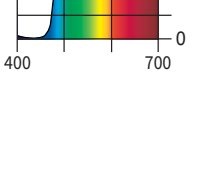
(Measured to source C, Correlated Color Temperature of 6774K)			
Transmission Y%	Absorption abs	Chromaticity Co-ordinates	
		x	y
56.2	0.24	0.239	0.270
725 Old Steel Blue	Wavelength - Nanometres		
Cool wash, useful for highlights.			
54.7	0.26	0.223	0.278
117 Steel Blue	Wavelength - Nanometres		
Good for cool washes. Adds a pale green tint. Great for emulating icy weather on stage.			
41.4	0.38	0.201	0.245
140 Summer Blue	Wavelength - Nanometres		
Good for light midday sky. Light blue tinted wash.			
41.0	0.39	0.193	0.246
353 Lighter Blue	Wavelength - Nanometres		
Daylight effects.			
25.4	0.60	0.141	0.220
172* Lagoon Blue	Wavelength - Nanometres		
Floodlit warm wash - underwater scenes - ballet.			
39.2	0.41	0.173	0.265
354 Special Steel Blue	Wavelength - Nanometres		
Cooling blue-green wash for stage and set lighting.			
8.7	1.06	0.110	0.241
729* Scuba Blue	Wavelength - Nanometres		
Used in musical performances for a rear colour wash, or set lighting.			

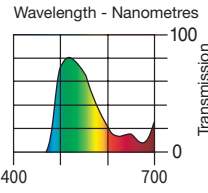
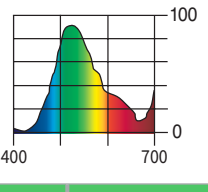
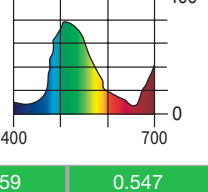
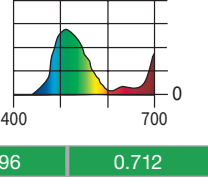
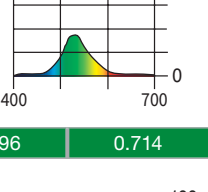
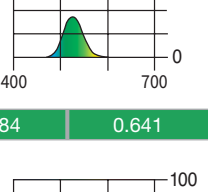
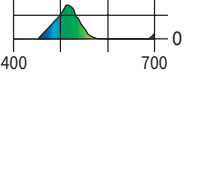
(Measured to source C, Correlated Color Temperature of 6774K)			
Transmission Y%	Absorption abs	Chromaticity Co-ordinates	
		x	y
16.5	0.78	0.113	0.280
116* Medium Blue-Green	Wavelength - Nanometres		
Pleasing effect for theatrical lighting.			
35.2	0.46	0.134	0.296
115* Peacock Blue	Wavelength - Nanometres		
Pleasing effect on sets, cyclorama cloths, back lighting (e.g. ice rinks, galas, etc).			
41.3	0.38	0.199	0.305
131 Marine Blue	Wavelength - Nanometres		
Romantic moonlight - ballet - underwater scenes.			
38.3	0.42	0.201	0.364
322 Soft Green	Wavelength - Nanometres		
Cool green, use for gobo cover, pantomime, cycloramas.			
25.8	0.59	0.150	0.316
CL118 Cool LED Light Blue	Wavelength - Nanometres		
For use on cool white LED with C.T. >6000K to produce a cold, spine-chilling blue. Similar to LEE 118 on a tungsten lamp.			
32.0	0.50	0.165	0.367
323 Jade	Wavelength - Nanometres		
Use for underwater scenes, cycloramas, backlighting.			
34.1	0.47	0.177	0.416
CL115 Cool LED Peacock Blue	Wavelength - Nanometres		
For use on cool white LED with C.T. >6000K to produce a fresh, crisp, spearmint colour. Similar to LEE 115 on a tungsten lamp.			

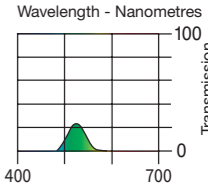
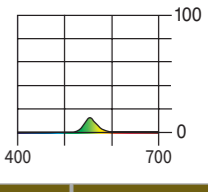
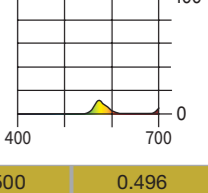
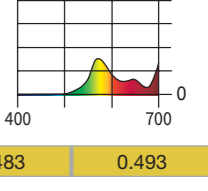
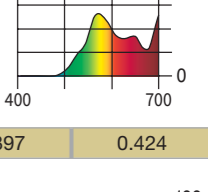
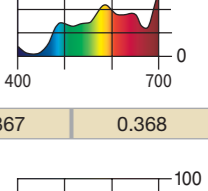
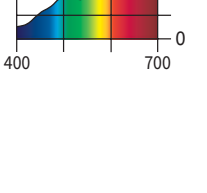
(Measured to source C, Correlated Color Temperature of 6774K)			
Transmission Y%	Absorption abs	Chromaticity Co-ordinates	
		x	y
17.9	0.75	0.126	0.400
CL116 Cool LED Medium Blue-Green	Wavelength - Nanometres		
For use on cool white LED with C.T. >6000K to produce a vibrant turquoise with a green bias. Similar to LEE 116 on a tungsten lamp.			
11.5	0.93	0.103	0.536
735 Velvet Green	Wavelength - Nanometres		
A beautiful background colour. Victorian melodrama. A night-time green.			
29.7	0.53	0.123	0.586
124* Dark Green	Wavelength - Nanometres		
Cycloramas - good for back lighting.			
4.2	1.38	0.162	0.496
327 Forest Green	Wavelength - Nanometres		
Deep green, sinister forest scenes, cycloramas, backlighting.			
31.0	0.51	0.219	0.334
219 LEE Fluorescent Green	Wavelength - Nanometres		
General tungsten to fluorescent correction for use when fluorescent colour temp is unknown, to provide medium correction.			
27.4	0.56	0.231	0.290
241 LEE Fluorescent 5700 Kelvin	Wavelength - Nanometres		
Converts tungsten to fluorescent light of 5700K (cool white/daylight).			
45.9	0.33	0.256	0.302
728 Steel Green	Wavelength - Nanometres		
Approaching storms. Overcast days. Cold steely light. Malevolent moonlight.			

* Also available in High Temperature (HT) version

(Measured to source C, Correlated Color Temperature of 6774K)			
Transmission Y%	Absorption abs	Chromaticity Co-ordinates	
		x	y
58.2	0.24	0.271	0.317
504 Waterfront Green			
Designed for period key light and modern urban horizons.			
67.5	0.17	0.277	0.330
730 Liberty Green			
A good green for creating mystery and suspense.			
37.3	0.43	0.262	0.346
242 LEE Fluorescent 4300 Kelvin			
Converts tungsten to fluorescent light of 4300K (white).			
45.7	0.34	0.286	0.370
243 LEE Fluorescent 3600 Kelvin			
Converts tungsten to fluorescent light of 3600K (warm white).			
80.0	0.10	0.317	0.359
213 White Flame Green			
Corrects white flame carbon arcs by absorbing ultra violet.			
84.6	0.07	0.315	0.337
246 Quarter Plus Green			
Approximately equivalent to CC075 green.			
63.8	0.20	0.293	0.339
731 Dirty Ice			
A flat green with a fluorescent feel. Sympathetic to skin tones.			

(Measured to source C, Correlated Color Temperature of 6774K)			
Transmission Y%	Absorption abs	Chromaticity Co-ordinates	
		x	y
63.6	0.20	0.312	0.351
733 Damp Squib			
A dirty green. Reduces warmth but not towards blue. Good for cross lighting.			
81.7	0.08	0.319	0.355
245 Half Plus Green			
Approximately equivalent to CC15 green.			
74.2	0.12	0.324	0.388
244 LEE Plus Green			
Approximately equivalent to CC30 green.			
80.5	0.09	0.334	0.395
CL117 Cool LED Steel Blue			
For use on cool white LED with C.T. >6000K to produce a silvery moonlight wash. Similar to LEE 117 on a tungsten lamp.			
79.9	0.10	0.331	0.433
138 Pale Green			
Good with gobos for wooded scenes.			
70.9	0.15	0.356	0.511
088 Lime Green			
Use with gobos for leafy glades - pantomimes - slightly sinister atmosphere.			
72.4	0.14	0.370	0.520
505 Sally Green			
A fresh, light and airy summer green. 'Under tree canopy' light quality without 'pantomime countryside'. Subtle enough to light faces without having to add too much general cover on top.			

(Measured to source C, Correlated Color Temperature of 6774K)			
Transmission Y%	Absorption abs	Chromaticity Co-ordinates	
		x	y
52.3	0.28	0.315	0.587
738* JAS Green			
A rich yellowish green: useful as a concert stage wash where darker skin tones, costume and set are a consideration.			
64.0	0.20	0.302	0.534
121* LEE Green			
Dense foliage, tropical or woodlands effect.			
51.5	0.28	0.234	0.543
122* Fern Green			
Cycloramas - good for mood effect.			
29.8	0.53	0.259	0.547
089* Moss Green			
Mood creator. Used with gobos, creates a great foliage effect.			
11.9	0.92	0.196	0.712
139* Primary Green			
Set lighting, cycloramas.			
13.0	0.89	0.196	0.714
CL139 Cool LED Primary Green			
For use on cool white LED with C.T. >6000K to produce a vivid primary green. Similar to LEE 139 on a tungsten lamp.			
10.9	0.96	0.184	0.641
090* Dark Yellow Green			
Highlighting for forest effects.			

(Measured to source C, Correlated Color Temperature of 6774K)			
Transmission Y%	Absorption abs	Chromaticity Co-ordinates	
		x	y
7.2	1.14	0.175	0.740
736 Twickenham Green			
A powerful green with depth, for music or light entertainment.			
3.7	1.43	0.337	0.617
740 Aurora Borealis Green			
Primary jungle colour. Removes some red and blue. Works best with Daylight bulbs. Sodium lamp effect.			
3.3	1.48	0.506	0.491
741 Mustard Yellow			
Spooky when used in haze. Removes some red and blue. Works best with daylight bulbs. Sodium lamp effect.			
13.7	0.86	0.500	0.496
642 Half Mustard Yellow			
Half strength Sodium light effect, designed for use with daylight sources.			
31.3	0.50	0.483	0.493
643 Quarter Mustard Yellow			
Quarter strength Sodium light effect, designed for use with daylight sources.			
34.1	0.47	0.397	0.424
650 Industry Sodium			
Used on tungsten to blend with Sodium light.			
41.9	0.38	0.367	0.368
230 Super Correction LCT Yellow			
Converts yellow carbon arc (of low colour temperature) to tungsten.			

* Also available in High Temperature (HT) version

(Measured to source C, Correlated Color Temperature of 6774K)			
Transmission Y%	Absorption abs	Chromaticity Co-ordinates	
		x	y
1.5	1.82	0.498	0.437
746			
Brown To give a murky, dirty feel to tungsten. A darker, less pink chocolate.			
2.4	1.62	0.540	0.443
653			
Lo Sodium Used on tungsten to create a Low Pressure Sodium look.			
1.6	1.79	0.563	0.406
511			
Bacon Brown An intense and warm deep brown. Designed to recreate the pigment browns used by Francis Bacon in some of his paintings.			
11.5	0.94	0.430	0.423
742			
Bram Brown A dirty brown with green /cool quality. Good for skin tones, dims well without going too pink.			
15.6	0.81	0.442	0.394
208			
Full CTO +.6ND Converts daylight 6500K to tungsten 3200K and reduces light 2 stops.			
32.5	0.49	0.435	0.386
207			
Full CTO +.3ND Converts daylight 6500K to tungsten 3200K and reduces light 1 stop.			
37.4	0.43	0.423	0.385
232			
Super Correction W.F. Green to Tungsten Converts white flame arc to 3200K, for use with tungsten film.			

(Measured to source C, Correlated Color Temperature of 6774K)			
Transmission Y%	Absorption abs	Chromaticity Co-ordinates	
		x	y
55.4	0.26	0.387	0.369
628			
Three Quarter Digital LED CTO Converts white LED of 5000K to Tungsten of 3200K. Allows sources to be blended both visually and for digital imaging.			
26.4	0.58	0.380	0.363
156			
Chocolate Warms light and reduces the intensity.			
49.1	0.31	0.402	0.368
626			
Seven Eighths Digital LED CTO Converts white LED of 5550K to Tungsten of 3200K. Allows sources to be blended both visually and for digital imaging.			
44.2	0.35	0.415	0.366
624			
Full Digital LED CTO Converts white LED of 6200K to Tungsten of 3200K. Allows sources to be blended both visually and for digital imaging.			
41.5	0.38	0.428	0.371
622			
One and One Eighth Digital LED CTO Converts white LED of 7000K to Tungsten of 3200K. Allows sources to be blended both visually and for digital imaging.			
38.5	0.41	0.430	0.365
237			
CID (to Tungsten) Converts CID to 3200K, for use with tungsten film.			
31.1	0.51	0.389	0.344
747			
Easy White Primarily developed for fluorescents to ensure warm, comfortable light and flattering skin tones.			

(Measured to source C, Correlated Color Temperature of 6774K)			
Transmission Y%	Absorption abs	Chromaticity Co-ordinates	
		x	y
29.8	0.53	0.372	0.331
238			
CSI (to Tungsten) Converts CSI to 3200K, for use with tungsten film.			
70.7	0.15	0.370	0.332
152			
Pale Gold Interior lighting to enhance skin tones.			
77.7	0.11	0.348	0.328
162			
Bastard Amber Warm white, warm wash, lamplight.			
67.3	0.17	0.358	0.344
506			
Marlene Flattering skin tone filter without the comedy 'pink'. Also useful as Indian summer at dusk / sepia type effect.			
71.1	0.15	0.376	0.371
009*			
Pale Amber Gold Perfect warm front light for any skin tone.			
70.8	0.15	0.374	0.364
205			
Half CTO Converts daylight to tungsten light.			
71.2	0.15	0.370	0.378
442			
Half CT Straw Converts 6500K to 4300K - daylight to tungsten light with yellow bias.			

(Measured to source C, Correlated Color Temperature of 6774K)			
Transmission Y%	Absorption abs	Chromaticity Co-ordinates	
		x	y
72.1	0.14	0.392	0.392
013*			
Straw Tint Warmer than other straw colours. Good sunlight effect when used in contrast with ambers and blues.			
80.5	0.09	0.365	0.380
764			
Sun Colour Straw Adds warmth, bright sunlight.			
81.6	0.09	0.336	0.359
103			
Straw Pale sunlight through window effect - warm winter effect.			
79.1	0.10	0.346	0.340
206			
Quarter CTO Converts daylight to tungsten light.			
79.8	0.10	0.338	0.349
443			
Quarter CT Straw Converts 6500K to 5100K - daylight to tungsten light with yellow bias.			
84.3	0.07	0.343	0.357
763			
Wheat Adds warmth, sunlight.			
88.7	0.05	0.340	0.363
212			
LCT Yellow (Y1) Reduces colour temperature of low carbon arcs to 3200K.			

* Also available in High Temperature (HT) version

(Measured to source C, Correlated Color Temperature of 6774K)			
Transmission Y%	Absorption abs	Chromaticity Co-ordinates x y	
85.4	0.07	0.339	0.363
007* Pale Yellow Sunlight.			
80.2	0.10	0.389	0.412
765 LEE Yellow Useful for producing a strong sunlight effect.			
75.1	0.12	0.434	0.440
102 Light Amber Warm yellow colour. Great for candlelight or warm bright sunlight effects.			
46.8	0.33	0.471	0.461
550 ALD Gold Created for the ALD's 50th Anniversary.			
87.1	0.06	0.380	0.447
513 Ice And A Slice A pale acidic spring yellow. For a sharp white wash.			
87.3	0.06	0.403	0.486
514 Double G & T Double 513, when only a double will do. Has a more acidic bite.			
84.2	0.08	0.410	0.502
100 Spring Yellow Sunlight wash - use with gobos, disco, dark skin tones.			

* Also available in High Temperature (HT) version

(Measured to source C, Correlated Color Temperature of 6774K)			
Transmission Y%	Absorption abs	Chromaticity Co-ordinates x y	
86.5	0.06	0.426	0.509
010* Medium Yellow Pure bright yellow. Not good for acting areas but great for special effects and accents.			
80.0	0.10	0.451	0.507
101 Yellow Sunlight and window effect - pleasant in acting areas.			
68.9	0.16	0.481	0.501
767 Oklahoma Yellow A rich blend of bright sunshine and warm ochre overtones.			
63.9	0.20	0.496	0.462
104 Deep Amber Good for sunlight effect, accents, side light. Be careful of skin tones under the reddish tint of this colour.			
60.8	0.22	0.517	0.460
015* Deep Straw Warm amber light. Good for effects such as candlelight and fire.			
55.6	0.26	0.522	0.469
768 Egg Yolk Yellow A bold strong chemical yellow. Based on 179 but not as red.			
54.0	0.27	0.520	0.460
179 Chrome Orange Combination of 1/2 CTO and double strength 104, sunlight.			

(Measured to source C, Correlated Color Temperature of 6774K)			
Transmission Y%	Absorption abs	Chromaticity Co-ordinates x y	
50.7	0.30	0.523	0.419
020* Medium Amber Afternoon sunlight, candlelight, great side light.			
47.7	0.32	0.545	0.447
770 Burnt Yellow A colour that feels warm and dense on camera, a balance between 179 and 105.			
41.3	0.38	0.563	0.428
105 Orange Mainly light entertainment, functions. Fire effect if used with 106, 166, 104.			
38.1	0.42	0.558	0.425
CL104 Cool LED Deep Amber For use on cool white LED with C.T. >6000K to produce a pleasing golden yellow. Similar to LEE 104 on a tungsten lamp.			
24.3	0.61	0.576	0.416
777 Rust A vivid rust colour effect.			
11.5	0.94	0.595	0.390
512 Amber Delight A dark dirty orange.			
21.9	0.66	0.535	0.399
652 Urban Sodium Used on tungsten to create the orange glow associated with Sodium light.			

(Measured to source C, Correlated Color Temperature of 6774K)			
Transmission Y%	Absorption abs	Chromaticity Co-ordinates x y	
40.9	0.39	0.514	0.424
287 Double CTO Converts daylight to tungsten.			
48.2	0.32	0.478	0.422
286 One and Half CTO Converts daylight to tungsten.			
55.4	0.26	0.437	0.392
204 Full CTO Converts daylight to tungsten light.			
57.3	0.24	0.426	0.407
441 Full CT Straw Converts 6500K to 3200K - daylight to tungsten light with yellow bias.			
57.9	0.24	0.421	0.412
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.			
61.3	0.21	0.400	0.387
285 Three Quarter CTO Converts daylight to tungsten light.			
58.2	0.24	0.426	0.376
236 HMI (to Tungsten) Converts HMI to 3200K, for use with Tungsten film.			

(Measured to source C, Correlated Color Temperature of 6774K)			
Transmission Y%	Absorption abs	Chromaticity Co-ordinates	
		x	y
55.9	0.25	0.422	0.389
604	Wavelength - Nanometres		
Full CT Eight Five	Transmission		
Converts daylight to tungsten with a red bias.			
48.8	0.31	0.444	0.396
651	Wavelength - Nanometres		
Hi Sodium	Transmission		
Used on tungsten to create a High Pressure Sodium look.			
19.6	0.71	0.439	0.372
017	Wavelength - Nanometres		
Surprise Peach	Transmission		
Skin tones - mood light.			
37.8	0.42	0.501	0.371
134	Wavelength - Nanometres		
Golden Amber	Transmission		
Great for emulating a late in the day sunset. Side lighting, cyclorama lighting.			
53.0	0.28	0.446	0.381
147	Wavelength - Nanometres		
Apricot	Transmission		
Sunrise, sunset, lamplight.			
52.9	0.27	0.424	0.368
776	Wavelength - Nanometres		
Nectarine	Transmission		
Romantic sunset. Period pieces.			
60.2	0.22	0.400	0.351
773	Wavelength - Nanometres		
Cardbox Amber	Transmission		
Warm tint for skin tones.			

(Measured to source C, Correlated Color Temperature of 6774K)			
Transmission Y%	Absorption abs	Chromaticity Co-ordinates	
		x	y
57.1	0.24	0.412	0.352
108	Wavelength - Nanometres		
English Rose	Transmission		
Warm tint wash - dark flesh tones - softer skin tones.			
35.4	0.45	0.498	0.347
008*	Wavelength - Nanometres		
Dark Salmon	Transmission		
Enhances dark skin tones, sunsets, ballroom sets.			
26.4	0.58	0.566	0.359
025	Wavelength - Nanometres		
Sunset Red	Transmission		
Warm stage wash, TV studio wash, sunset effect.			
38.8	0.41	0.501	0.336
779	Wavelength - Nanometres		
Bastard Pink	Transmission		
Deep sunset. Useful on dark skin tones.			
27.3	0.56	0.551	0.382
CL147	Wavelength - Nanometres		
Cool LED Apricot	Transmission		
For use on cool white LED with C.T. >6000K to produce a warm key light amber. Similar to LEE 147 on a tungsten lamp.			
29.9	0.52	0.588	0.403
158	Wavelength - Nanometres		
Deep Orange	Transmission		
Fire effect.			
31.3	0.51	0.586	0.396
021*	Wavelength - Nanometres		
Gold Amber	Transmission		
Great for sunsets, cyclorama lighting and fire effects.			

(Measured to source C, Correlated Color Temperature of 6774K)			
Transmission Y%	Absorption abs	Chromaticity Co-ordinates	
		x	y
27.3	0.56	0.606	0.382
778*	Wavelength - Nanometres		
Millennium Gold	Transmission		
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.			
26.4	0.58	0.614	0.385
CL105	Wavelength - Nanometres		
Cool LED Orange	Transmission		
For use on cool white LED with C.T. >6000K to produce a warm medium amber. Similar to LEE 105 on a tungsten lamp.			
25.8	0.59	0.623	0.376
780	Wavelength - Nanometres		
AS Golden Amber	Transmission		
A strong colour good for backlighting.			
23.9	0.62	0.647	0.339
022*	Wavelength - Nanometres		
Dark Amber	Transmission		
Backlight.			
23.3	0.63	0.631	0.367
CL158	Wavelength - Nanometres		
Cool LED Deep Orange	Transmission		
For use on cool white LED with C.T. >6000K to produce a sunset like glow. Similar to LEE 158 on a tungsten lamp.			
19.5	0.71	0.667	0.326
135	Wavelength - Nanometres		
Deep Golden Amber	Transmission		
Fire effect.			
19.1	0.72	0.643	0.348
781	Wavelength - Nanometres		
Terry Red	Transmission		
A strong amber red that works well when used against reds, and dark ambers, in wash combinations, and on cycloramas.			

(Measured to source C, Correlated Color Temperature of 6774K)			
Transmission Y%	Absorption abs	Chromaticity Co-ordinates	
		x	y
13.6	0.87	0.662	0.337
507	Wavelength - Nanometres		
Madge	Transmission		
Denser, saturated Orange version of 135 avoiding 'pinkish red'. Good for backlight, instruments, part of a sunset palette, and generating a party atmosphere.			
18.9	0.72	0.664	0.310
019*	Wavelength - Nanometres		
Fire	Transmission		
Strong red/amber. Good for fire effects.			
18.0	0.75	0.659	0.302
164	Wavelength - Nanometres		
Flame Red	Transmission		
Special effects and great for fire effects.			
13.6	0.87	0.669	0.317
CL164	Wavelength - Nanometres		
Cool LED Flame Red	Transmission		
For use on cool white LED with C.T. >6000K to produce a dawn burst orange red glow. Similar to LEE 164 on a tungsten lamp.			
11.0	0.96	0.670	0.313
182	Wavelength - Nanometres		
Light Red	Transmission		
Theatre and television effect lighting, cycloramas.			
9.3	1.03	0.699	0.285
106	Wavelength - Nanometres		
Primary Red	Transmission		
Strong red effect, cycloramas.			
8.0	1.10	0.697	0.303
CL106	Wavelength - Nanometres		
Cool LED Primary Red	Transmission		
For use on cool white LED with C.T. >6000K to produce a warm primary red. Similar to LEE 106 on a tungsten lamp.			

* Also available in High Temperature (HT) version

(Measured to source C, Correlated Color Temperature of 6774K)			
Transmission Y%	Absorption abs	Chromaticity Co-ordinates	
		x	y
8.4	1.08	0.696	0.303
CL182 Cool LED Light Red	Wavelength - Nanometres 		
For use on cool white LED with C.T.>6000K to produce a saturated vibrant red, good for cycloramas. Similar to LEE 182 on a tungsten lamp.			
1.2	1.91	0.677	0.314
789 Blood Red			
For a deep saturated red effect. Used when a strong vivid red effect is required.			
1.0	2.00	0.714	0.283
787 Marius Red			
Nice deep full red. Rose leaf colour.			
3.6	1.44	0.712	0.261
027* Medium Red			
Cyclorama lighting, side lighting, footlights. Good for colour mixing.			
5.8	1.24	0.693	0.303
029 PLASA Red			
Fire effect, musicals, cycloramas.			
8.6	1.06	0.712	0.281
026* Bright Red			
Vibrant red, good for cyclorama lighting.			
8.9	1.05	0.672	0.291
CL113 Cool LED Magenta			
For use on cool white LED with C.T.>6000K to produce a soft pink red, with strong contrasting shadows. Similar to LEE 113 on a tungsten lamp.			

(Measured to source C, Correlated Color Temperature of 6774K)			
Transmission Y%	Absorption abs	Chromaticity Co-ordinates	
		x	y
18.7	0.73	0.561	0.296
024* Scarlet			
Pantomimes, ballroom sets, fire effects.			
36.4	0.44	0.457	0.272
157 Pink			
Dance sequences (useful for softening white costumes without affecting skin tones).			
48.0	0.32	0.407	0.284
107 Light Rose			
Good for general washes. Good for followspots.			
54.9	0.26	0.391	0.295
109 Light Salmon			
Interesting backlight.			
50.2	0.30	0.407	0.321
176 Loving Amber			
Backlight and general area, great for sunrise, warms skin tones.			
58.1	0.24	0.378	0.324
790 Moroccan Pink			
A rich natural pink, good for producing late afternoon sun effects.			
64.1	0.19	0.370	0.335
004* Medium Bastard Amber			
Naturally enhances skin tones.			

(Measured to source C, Correlated Color Temperature of 6774K)			
Transmission Y%	Absorption abs	Chromaticity Co-ordinates	
		x	y
69.4	0.16	0.361	0.321
151 Gold Tint			
Pleasing effect for theatrical lighting.			
73.4	0.14	0.350	0.318
154 Pale Rose			
Pleasing effect for theatrical lighting, lamplight.			
64.9	0.19	0.362	0.303
153 Pale Salmon			
Backlighting in conjunction with white light.			
61.3	0.21	0.335	0.289
035* Light Pink			
Musical revues. Warm wash.			
57.8	0.22	0.325	0.279
247 LEE Minus Green			
Approximately equivalent to CC30 magenta.			
46.8	0.33	0.335	0.251
794 Pretty 'n Pink			
Creates warm and soft effects.			
47.5	0.32	0.351	0.249
110 Middle Rose			
Pleasing effects for theatrical lighting.			

(Measured to source C, Correlated Color Temperature of 6774K)			
Transmission Y%	Absorption abs	Chromaticity Co-ordinates	
		x	y
45.4	0.34	0.360	0.268
036* Medium Pink			
Good for general washes. Side lighting.			
34.9	0.46	0.410	0.237
192 Flesh Pink			
Musical and pantomime key lighting.			
31.9	0.50	0.389	0.215
111 Dark Pink			
Good for cycloramas.			
32.7	0.50	0.328	0.202
002 Rose Pink			
Strong pink wash cycloramas.			
21.6	0.67	0.335	0.180
328 Follies Pink			
Dramatic stage lighting.			
13.1	0.88	0.327	0.138
795 Magical Magenta			
Rich mixture of red and pinks.			
13.7	0.86	0.401	0.151
128 Bright Pink			
Created for use as back lighting, side lighting. Good for "specials". Great for musicals.			

* Also available in High Temperature (HT) version

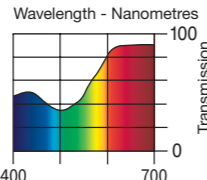
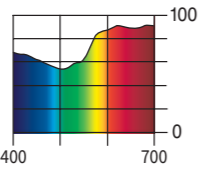
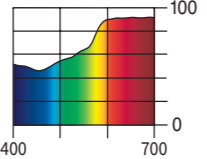
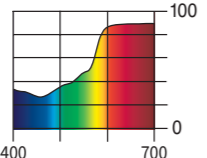
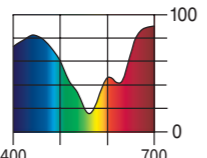
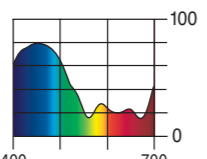
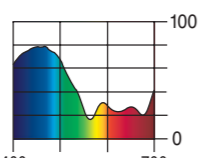
(Measured to source C, Correlated Color Temperature of 6774K)			
Transmission Y%	Absorption abs	Chromaticity Co-ordinates x y	
12.0	0.92	0.419	0.170
793 Vanity Fair A rich glamorous pink, good for use on special occasions.			
10.5	0.98	0.465	0.193
332 Special Rose Pink Pantomimes, light entertainment etc. Strong stage wash.			
5.2	1.28	0.504	0.215
CL126 Cool LED Mauve For use on cool white LED with C.T. >6000K to produce a bold intense pink. Similar to LEE 126 on a tungsten lamp.			
14.4	0.84	0.482	0.238
148 Bright Rose Fire effects, musicals.			
6.0	1.22	0.572	0.223
046* Dark Magenta Very strong pink, good for back lighting.			
10.9	0.96	0.563	0.217
113 Magenta Very strong - used carefully for small areas on set.			
12.2	0.91	0.570	0.263
CL128 Cool LED Bright Pink For use on cool white LED with C.T.>6000K to produce a neon pink good for musicals / pantos. Similar to LEE 128 on a tungsten lamp.			

(Measured to source C, Correlated Color Temperature of 6774K)			
Transmission Y%	Absorption abs	Chromaticity Co-ordinates x y	
12.0	0.92	0.397	0.265
127 Smokey Pink Cycloramas - set lighting, discos.			
14.4	0.84	0.373	0.263
748 Seedy Pink A smoky pink. Good for tungsten on skin tones.			
72.0	0.14	0.317	0.297
248 Half Minus Green Approximately equivalent to CC15 magenta.			
82.4	0.08	0.312	0.307
249 Quarter Minus Green Approximately equivalent to CC075 magenta.			
86.5	0.06	0.312	0.311
279 Eighth Minus Green Provides very slight magenta correction.			
75.7	0.12	0.303	0.300
003 Lavender Tint Subtle cool wash for stage and studio lighting.			
81.3	0.09	0.299	0.307
218 Eighth CTB Converts tungsten to daylight.			

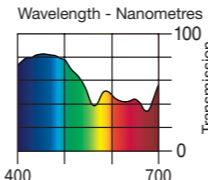




(Measured to source C, Correlated Color Temperature of 6774K)			
Transmission Y%	Absorption abs	Chromaticity Co-ordinates x y	
87.7	0.06	0.313	0.327
278 Eighth Plus Green Provides very slight green cast.			
89.4	0.05	0.325	0.337
159 No Colour Straw Warm effect, sunlight.			
85.2	0.07	0.328	0.332
223 Eighth CTO Converts daylight to tungsten light.			
83.1	0.08	0.323	0.332
444 Eighth CT Straw Converts 6500K to 5700K - daylight to tungsten light with yellow bias.			
91.5	0.04	0.314	0.321
226 LEE UV Transmission of less than 50% at 410nms.			
95.0	0.02	0.311	0.317
130 Clear Used in animation and projection work.			

* Also available in High Temperature (HT) version

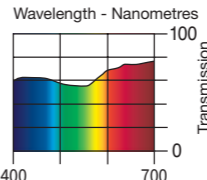
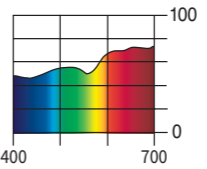
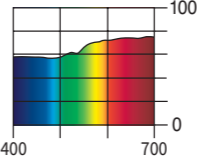
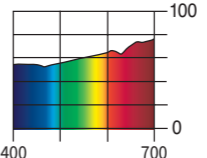
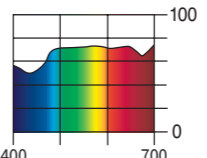
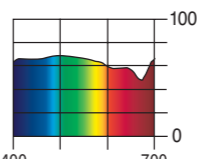
(Measured to source C, Correlated Color Temperature of 6774K)

Transmission Y%	Absorption abs	Chromaticity Co-ordinates	
		x	y
57.2	0.24	0.376	0.322
791# Moroccan Frost Smooths PAR or flood washes of large areas. Useful for houselights; good for interior colour washes.			
			
74.0	0.13	0.339	0.318
749# Hampshire Rose Combines flesh tone warmer 154 with some Hampshire Frost.			
			
70.6	0.15	0.366	0.348
774 Soft Amber Key 1 Used for producing a warm key light colour.			
			
58.4	0.23	0.409	0.363
775 Soft Amber Key 2 Used for producing a warm key light colour.			
			
38.5	0.42	0.264	0.217
705# Lily Frost Smooths PAR or flood washes of large areas. Useful for houselights; a good colour wash for evening events.			
			
32.3	0.49	0.216	0.209
720# Durham Daylight Frost Smooths PAR or flood washes of large areas. Useful for houselights; good for entrances from natural light.			
			
37.6	0.43	0.227	0.225
717# Shanklin Frost 201 with frost to soften the beam of profile units.			
			

(Measured to source C, Correlated Color Temperature of 6774K)

Transmission Y%	Absorption abs	Chromaticity Co-ordinates	
		x	y
56.3	0.25	0.263	0.270
718# Half Shanklin Frost 202 with frost to soften the beam of profile units.			
			
42.0	0.38	0.312	0.316
221 Blue Frost Used for soft light effects with the addition of 218.			
			
36.0	0.44	0.312	0.317
217# Blue Diffusion As White Diffusion but with the addition of 218.			
			
22.6	0.65	0.235	0.219
224# Daylight Blue Frost Used for soft light effects with the addition of tungsten correction 201.			
			
25.0	0.60	0.318	0.326
225# Neutral Density Frost Used for soft light effects with the addition of 0.6 Neutral Density.			
			

(Measured to source C, Correlated Color Temperature of 6774K)

Transmission Y%	Absorption abs	Chromaticity Co-ordinates	
		x	y
59.7	0.22	0.323	0.308
186 Cosmetic Silver Rose Pale tints complementary to key lighting.			
			
58.8	0.23	0.336	0.328
187 Cosmetic Rouge Pale tints complementary to key lighting.			
			
66.3	0.18	0.330	0.327
188 Cosmetic Highlight Pale tints complementary to key lighting.			
			
58.6	0.23	0.328	0.328
184 Cosmetic Peach Pale tints complementary to key lighting.			
			
71.7	0.15	0.327	0.347
189 Cosmetic Silver Moss Pale tints complementary to key lighting.			
			
65.8	0.18	0.300	0.318
191 Cosmetic Aqua Blue Pale tints complementary to key lighting.			
			

Non-Flame Retardant product

002	Rose Pink	075	Evening Blue	129	Heavy Frost
003	Lavender Tint	*079	Just Blue	130	Clear
*004	Medium Bastard Amber	*085	Deeper Blue	131	Marine Blue
*007	Pale Yellow	088	Lime Green	*132	Medium Blue
*008	Dark Salmon	*089	Moss Green	134	Golden Amber
*009	Pale Amber Gold	*090	Dark Yellow Green	135	Deep Golden Amber
*010	Medium Yellow	100	Spring Yellow	136	Pale Lavender
*013	Straw Tint	101	Yellow	137	Special Lavender
*015	Deep Straw	102	Light Amber	138	Pale Green
017	Surprise Peach	103	Straw	*139	Primary Green
*019	Fire	104	Deep Amber	140	Summer Blue
*020	Medium Amber	105	Orange	*141	Bright Blue
*021	Gold Amber	106	Primary Red	142	Pale Violet
*022	Dark Amber	107	Light Rose	143	Pale Navy Blue
*024	Scarlet	108	English Rose	144	No Colour Blue
025	Sunset Red	109	Light Salmon	147	Apricot
*026	Bright Red	110	Middle Rose	148	Bright Rose
*027	Medium Red	111	Dark Pink	151	Gold Tint
029	Plasa Red	113	Magenta	152	Pale Gold
*035	Light Pink	*115	Peacock Blue	153	Pale Salmon
*036	Medium Pink	*116	Medium Blue-Green	154	Pale Rose
*046	Dark Magenta	117	Steel Blue	156	Chocolate
048	Rose Purple	*118	Light Blue	157	Pink
049	Medium Purple	*119	Dark Blue	158	Deep Orange
*052	Light Lavender	*120	Deep Blue	159	No Colour Straw
*053	Paler Lavender	*121	LEE Green	161	Slate Blue
*058	Lavender	*122	Fern Green	162	Bastard Amber
*061	Mist Blue	*124	Dark Green	164	Flame Red
*063	Pale Blue	126	Mauve	165	Daylight Blue
068	Sky Blue	127	Smokey Pink	169	Lilac Tint
*071	Tokyo Blue	128	Bright Pink	170	Deep Lavender

*172	Lagoon Blue	209	.3 Neutral Density	247	LEE Minus Green
174	Dark Steel Blue	210	.6 Neutral Density	248	1/2 Minus Green
176	Loving Amber	211	.9 Neutral Density	249	1/4 Minus Green
179	Chrome Orange	212	LCT Yellow	250	1/2 White Diffusion
180	Dark Lavender	213	White Flame Green	251	1/4 White Diffusion
*181	Congo Blue	214	Full Tough Spun	252	1/8 White Diffusion
182	Light Red	215	1/2 Tough Spun	253	Hampshire Frost
183	Moonlight Blue	216	White Diffusion	**254	New Hampshire Frost
184	Cosmetic Peach	217	Blue Diffusion	255	Hollywood Frost
186	Cosmetic Silver Rose	218	1/8 CT Blue	256	1/2 Hampshire Frost
187	Cosmetic Rouge	219	LEE Fluorescent Green	257	1/4 Hampshire Frost
188	Cosmetic Highlight	220	White Frost	258	1/8 Hampshire Frost
189	Cosmetic Silver Moss	221	Blue Frost	261	Tough Spun FR - Full
191	Cosmetic Aqua Blue	223	1/8 CT Orange	262	Tough Spun FR - 3/4
192	Flesh Pink	224	Daylight Blue Frost	263	Tough Spun FR - 1/2
194	Surprise Pink	225	LEE N.D. Frost	264	Tough Spun FR - 3/8
*195	Zenith Blue	226	LEE U.V.	265	Tough Spun FR - 1/4
196	True Blue	228	Brushed Silk	269	LEE Heat Shield
*197	Alice Blue	229	1/4 Tough Spun	270	LEE Scrim
198	Palace Blue	230	Super Correction LCT Yellow	271	Mirror Silver
199	Regal Blue	232	Super White Flame Green	272	Soft Gold Reflector
200	Double CT Blue	236	H.M.I (To Tungsten)	273	Soft Silver Reflector
201	Full CT Blue	237	C.I.D. (To Tungsten)	274	Mirror Gold
202	1/2 CT Blue	238	C.S.I. (To Tungsten)	275	Black Scrim
203	1/4 CT Blue	239	Polariser	278	1/8 Plus Green
204	Full CT Orange	241	LEE Fluorescent 5700 K	279	1/8 Minus Green
205	1/2 CT Orange	242	LEE Fluorescent 4300 K	280	Black Foil
206	1/4 CT Orange	243	LEE Fluorescent 3600 K	281	3/4 CT Blue
207	Full CT Orange + .3 Neutral Density	244	LEE Plus Green	283	1 1/2 CT Blue
208	Full CT Orange + .6 Neutral Density	245	1/2 Plus Green	285	3/4 CT Orange
		246	1/4 Plus Green	286	1 1/2 CT Orange

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

287	Double CT Orange
298	.15 Neutral Density
299	1.2 Neutral Density
322	Soft Green
323	Jade
327	Forest Green
328	Follies Pink
332	Special Rose Pink
343	Special Medium Lavender
345	Fuchsia Pink
352	Glacier Blue
353	Lighter Blue
354	Special Steel Blue
*363	Special Medium Blue
366	Cornflower
400	LEELux
402	Soft Frost
404	Half Soft Frost
410	Opal Frost
414	Highlight
414P	Perforated Highlight
416	3/4 White Diffusion
420	Light Opal Frost
429	Quiet Frost
430	Grid Cloth
432	Light Grid Cloth
434	1/4 Grid Cloth
439	Heavy Quiet Frost
439P	Perforated Heavy Quiet Frost
441	Full CT Straw

442	1/2 CT Straw
443	1/4 CT Straw
444	1/8 CT Straw
450	3/8 White Diffusion
452	1/16 White Diffusion
460	Quiet Grid Cloth
462	Quiet Light Grid Cloth
464	Quiet 1/4 Grid Cloth
500	Double New Colour Blue
501	New Colour Blue (Robertson Blue)
502	Half New Colour Blue
503	Quarter New Colour Blue
504	Waterfront Green
505	Sally Green
506	Marlene
507	Madge
508	Midnight Maya
511	Bacon Brown
512	Amber Delight
513	Ice And A Slice
514	Double G & T
525	Argent Blue
550	ALD Gold
600	Arctic White
601	Silver
602	Platinum
603	Moonlight White
604	Full CT Eight Five
622	One And Eighth Digital LED CTO
624	Full Digital LED CTO

626	Seven Eighths Digital LED CTO
628	Three Quarter Digital LED CTO
642	Half Mustard Yellow
643	Quarter Mustard Yellow
650	Industry Sodium
651	Hi Sodium
652	Urban Sodium
653	Lo Sodium
700	Perfect Lavender
701	Provence
702	Special Pale Lavender
703	Cold Lavender
704	Lily
705	Lily Frost
706	King Fals Lavender
*707	Ultimate Violet
708	Cool Lavender
709	Electric Lilac
710	Spir Special Blue
711	Cold Blue
712	Bedford Blue
*713	J.Winter Blue
714	Elysian Blue
*715	Cabana Blue
*716	Mikkel Blue
717	Shanklin Frost
718	Half Shanklin Frost
719	Colour Wash Blue
720	Durham Daylight Frost
*721	Berry Blue

722	Bray Blue
723	Virgin Blue
724	Ocean Blue
725	Old Steel Blue
727	QFD Blue
728	Steel Green
*729	Scuba Blue
730	Liberty Green
731	Dirty Ice
733	Damp Squib
735	Velvet Green
736	Twickenham Green
*738	Jas Green
740	Aurora Borealis Green
741	Mustard Yellow
742	Bram Brown
744	Dirty White
746	Brown
747	Easy White
748	Seedy Pink
749	Hampshire Rose
750	Durham Frost
763	Wheat
764	Sun Colour Straw
765	LEE Yellow
767	Oklahoma Yellow
768	Egg Yolk Yellow
770	Burnt Yellow
773	Cardbox Amber
774	Soft Amber Key 1
775	Soft Amber Key 2

776	Nectarine
777	Rust
*778	Millennium Gold
779	Bastard Pink
780	AS Golden Amber
781	Terry Red
787	Marius Red
789	Blood Red
790	Moroccan Pink
791	Moroccan Frost
793	Vanity Fair
794	Pretty 'N Pink
795	Magical Magenta
*797	Deep Purple
798	Chrysalis Pink
799	Special KH Lavender

CL158	Cool LED Deep Orange
CL164	Cool LED Flame Red
CL180	Cool LED Dark Lavender
CL181	Cool LED Congo Blue
CL182	Cool LED Light Red

A205	Half CTO
A207	Full CTO + .3ND
A208	Full CTO + .6ND
A209	.3ND
A210	.6ND
A211	.9ND

CL104	Cool LED Deep Amber
CL105	Cool LED Orange
CL106	Cool LED Primary Red
CL113	Cool LED Magenta
CL115	Cool LED Peacock Blue
CL116	Cool LED Medium Blue-Green
CL117	Cool LED Steel Blue
CL118	Cool LED Light Blue
CL119	Cool LED Dark Blue
CL126	Cool LED Mauve
CL128	Cool LED Bright Pink
CL132	Cool LED Medium Blue
CL139	Cool LED Primary Green
CL147	Cool LED Apricot

* Also available in High Temperature (HT) version



TECHNICAL FILTERS

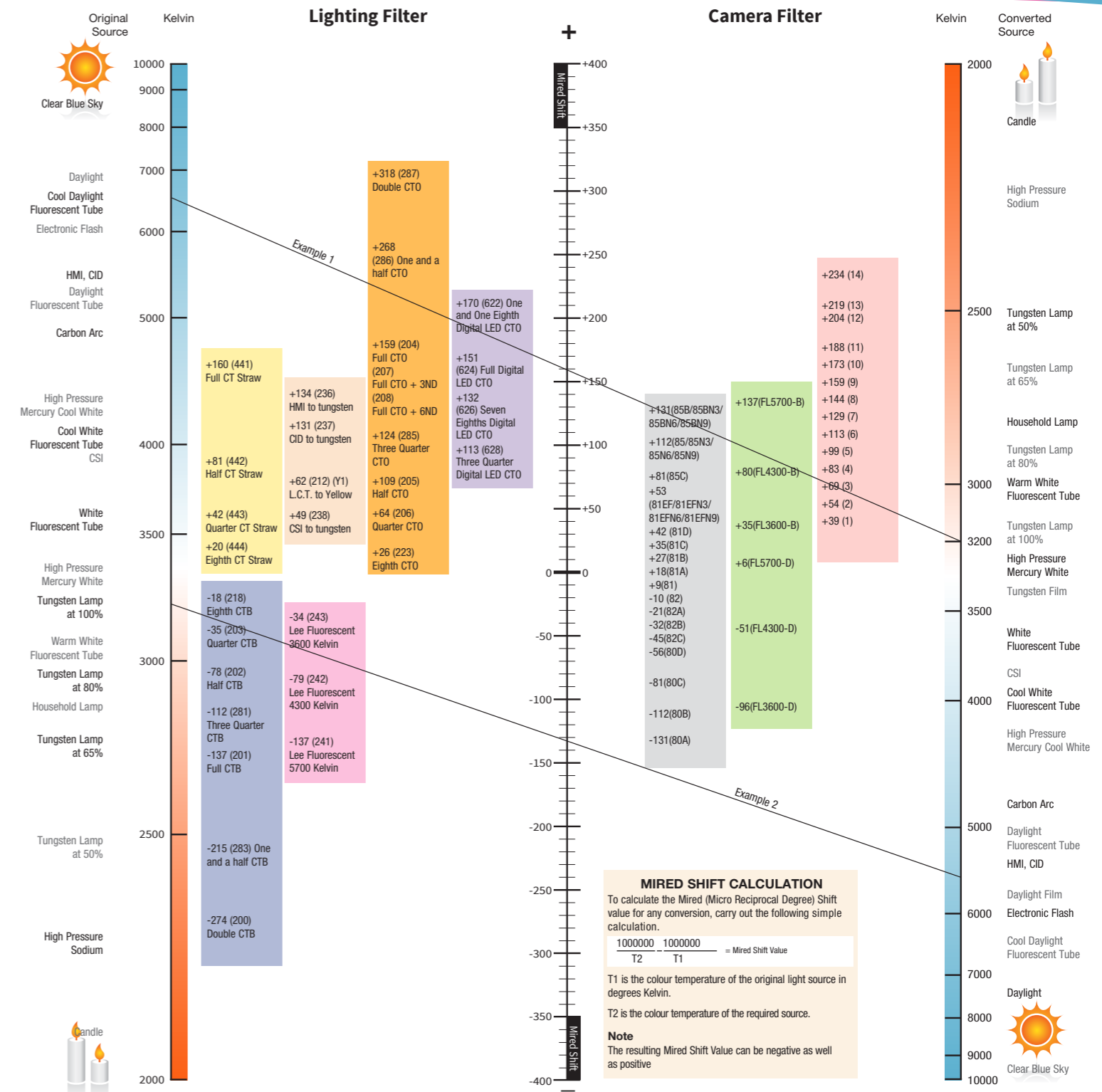
IN ADDITION TO OUR BROAD RANGE OF LIGHTING FILTER, WE ALSO PRODUCE THE HIGHEST QUALITY CAMERA FILTERS IN BOTH RESIN AND POLYESTER.

Lighting specialists are faced with innumerable problems to solve in the course of a shoot or project. The LEE range of technical filters is designed to make life a little easier, and features daylight, tungsten and fluorescent conversions, along with neutral densities, diffusers, reflectors and scrims.

Conversion Chart	53
Conversion Filters	54-55
Correction Filters	56-57
Acrylic Panels	58
Reflection Media	58
Protection Media	59
Diffusion Media	60-62



A TOUCH OF ART, A LOT OF SCIENCE.



How to use

Simply draw a line from the Colour Temperature value of your Original Light Source, to that of the required Source. Where the line crosses the central band, read off the Mired Shift value. For your convenience we have added both our Lighting and Camera Filters at their appropriate positions in relation to the Mired Shift Scale. The Lighting Filters are positioned on the left of the Mired Shift Scale, whilst the Camera Filters are on the right.

Example 1 (Lighting Filter) - To convert an original source of 6500K to 3200K. The line has been drawn as an example. You will note that it crosses the central band at just over +150 Mired Shift. This indicates that the Filter required is 204 Full CTO (also available with two degrees of Neutral Density).

Example 2 (Camera Filter) - To convert an original source of 3250K (tungsten light) to 5600K (daylight film) you can see that the line crosses the central band at -130 mired shift. This indicates that the camera filter required is an 80A (-131 Mired Shift).

Try our easy-to-use Colour Temperature (Mired Shift) Calculator at leefilters.com/lighting/mired-shift-calculator.html

(Measured to source C, Correlated Color Temperature of 6774K)

		Kelvin	Mired Shift	Transmission Y%	Absorption abs	Chromaticity x	Co-ordinates y
200 Double CTB	Converts Tungsten to Daylight.	3200K to 26000K approx	-274	16.2	0.79	0.179	0.155
283 One and a Half CTB	Converts Tungsten to Daylight.	3200K to 8888K	-200	24.4	0.61	0.201	0.188
201 Full CTB	Converts Tungsten to Photographic Daylight. Also available as Wide Roll.	3200K to 5700K	-137	34.0	0.47	0.228	0.233
281 Three Quarter CTB	Converts Tungsten to Daylight.	3200K to 5000K	-112	45.5	0.35	0.239	0.258
202 Half CTB	Converts Tungsten to Daylight.	3200K to 4300K	-78	54.9	0.26	0.261	0.273
203 Quarter CTB	Converts Tungsten to Daylight.	3200K to 3600K	-35	69.2	0.16	0.285	0.294
218 Eighth CTB	Converts Tungsten to Daylight.	3200K to 3400K	-18	81.3	0.09	0.299	0.307

Tungsten to Fluorescent

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

Daylight to Tungsten

287 Double CTO	Converts Daylight to Tungsten Light.	6500K to 2147K	+312	40.9	0.39	0.514	0.424
286 One and a Half CTO	Converts Daylight to Tungsten Light.	6500K to 2507K	+245	48.2	0.32	0.478	0.422
204 Full CTO	Converts Daylight to Tungsten Light.	6500K to 3200K	+159	55.4	0.26	0.437	0.392
207 Full CTO +.3ND	Converts Daylight to Tungsten and reduces light 1 Stop.	6500K to 3200K	+159	32.5	0.49	0.435	0.386
208 Full CTO +.6ND	Converts Daylight to Tungsten and reduces light 2 Stops.	6500K to 3200K	+159	15.6	0.81	0.442	0.394
285 Three Quarter CTO	Converts Daylight to Tungsten Light.	6500K to 3600K	+124	61.3	0.21	0.400	0.387
205 Half CTO	Converts Daylight to Tungsten Light.	6500K to 3800K	+109	70.8	0.15	0.374	0.364
206 Quarter CTO	Converts Daylight to Tungsten Light.	6500K to 4600K	+64	79.1	0.10	0.346	0.346

(Measured to source C, Correlated Color Temperature of 6774K)

		Kelvin	Mired Shift	Transmission Y%	Absorption abs	Chromaticity x	Co-ordinates y
223 Eighth CTO	Converts Daylight to Tungsten Light.	6500K to 5550K	+26	85.2	0.07	0.328	0.332
604 Full CT Eight Five	Converts Daylight to Tungsten with a red bias.	6500K to 3200K	+159	55.9	0.25	0.422	0.389
441 Full CT Straw	Converts Daylight to Tungsten Light with yellow bias.	6500K to 3200K	+160	57.3	0.24	0.426	0.407
442 Half CT Straw	Converts Daylight to Tungsten Light with yellow bias.	6500K to 4300K	+81	71.2	0.15	0.370	0.378
443 Quarter CT Straw	Converts Daylight to Tungsten Light with yellow bias.	6500K to 5100K	+42	79.8	0.10	0.338	0.349
444 Eighth CT Straw	Converts Daylight to Tungsten Light with yellow bias.	6500K to 5700K	+20	83.1	0.08	0.323	0.332

LED to Tungsten

622 One and One Eighth Digital LED CTO	Converts cool white LED to Tungsten. Allows sources to be blended both visually and for digital imaging.	7000K to 3200K	+170	41.5	0.38	0.428	0.371
624 Full Digital LED CTO	Converts cool white LED to Tungsten. Allows sources to be blended both visually and for digital imaging.	6200K to 3200K	+151	44.2	0.35	0.415	0.366
626 Seven Eighths Digital LED CTO	Converts cool white LED to Tungsten. Allows sources to be blended both visually and for digital imaging.	5550K to 3200K	+132	49.1	0.31	0.402	0.368
628 Three Quarter Digital LED CTO	Converts cool white LED to Tungsten. Allows sources to be blended both visually and for digital imaging.	5000K to 3200K	+113	55.4	0.26	0.387	0.369

Discharge and Arc to Tungsten

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
212 LCT Yellow (Y1)	Reduces Colour Temperature of low carbon arcs to 3200K.			88.7	0.05	0.340	0.363
230 Super Correction LCT Yellow	Converts Yellow carbon arc (of low colour temperature) to Tungsten.			41.9	0.38	0.367	0.368
232 Super Correction White Flame Green to Tungsten	Converts White Flame arc to 3200K, for use with Tungsten film.			37.4	0.43	0.423	0.385

(Measured to source C, Correlated Color Temperature of 6774K)

Neutral Density

		Transmission Y%	Absorption abs	Chromaticity x	Co-ordinates y
298 .15ND	Reduces light 1/2 stop, without changing colour.	70.2	0.15	0.311	0.319
209 .3ND	Reduces light 1 stop, without changing colour.	50.0	0.30	0.310	0.319
210 .6ND	Reduces light 2 stops, without changing colour.	25.0	0.60	0.308	0.317
211 .9ND	Reduces light 3 stops, without changing colour.	12.3	0.90	0.310	0.322
299 1.2ND	Reduces light 4 stops, without changing colour.	6.3	1.18	0.308	0.315

Ultra Violet Absorption

226 LEE UV	Transmission of less than 50% at 410nms.	91.5	0.04	0.314	0.321
213 White Flame Green	Corrects White Flame Carbon arcs by absorbing ultra violet	80.0	0.10	0.317	0.359

Minus Green - 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

Plus Green - 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.

(Measured to source C, Correlated Color Temperature of 6774K)

Polariser

		Mired Shift	Transmission Y%	Absorption abs	Stop Value	Note
239 Polariser	Made from 0.006" (150 micron) Triacetate. Reduces glare and reflection. Use with LEE Polarising Camera Filter.	+19	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)

Urban Effects

(Measured to source C, Correlated Color Temperature of 6774K)

		Transmission Y%	Absorption abs	Chromaticity x	Co-ordinates y
600 Arctic White	A bright, brilliant blue-grey light at 100%. It does not warm up as it dims and is not affected by amber drift. Useful as a backlight or for special effects where a whiter light is called for.	9.5	1.02	0.230	0.223
601 Silver	A silver-grey light at full power, dims through lavender-grey then warm brown-grey. Works well with 550 ALD Gold. Good for creating a sense of intense darkness on stage whilst still being useful.	9.0	1.04	0.244	0.248
602 Platinum	At full power produces dazzling grey light with slight red bias, when dimmed warms up quickly to a useful brown. Good for effect lighting as well as a cold, white sidelight that has some warmth in it.	15.3	0.82	0.261	0.267
603 Moonlight White	A pleasant white light at full power, dims down to a warm colour and at low intensities has more yellow than red content. Good for sunlight effect as if through stormy clouds reflecting off of the ocean.	28.3	0.55	0.268	0.271
741 Mustard Yellow	Spooky when used in haze. Removes some red and blue. Works best with daylight bulbs. Sodium lamp effect.	3.3	1.48	0.506	0.491
642 Half Mustard Yellow	Half strength Sodium light effect, designed for use with daylight sources.	13.7	0.86	0.500	0.496
643 Quarter Mustard Yellow	Quarter strength Sodium light effect, designed for use with daylight sources.	31.3	0.50	0.483	0.493
650 Industry Sodium	Used on tungsten to blend with Sodium light.	34.1	0.47	0.397	0.424
651 Hi Sodium	Used on tungsten to create a High Pressure Sodium look.	48.8	0.31	0.444	0.396
652 Urban Sodium	Used on tungsten to create the orange glow associated with Sodium light.	21.9	0.66	0.535	0.399
653 Lo Sodium	Used on tungsten to create a Low Pressure Sodium look.	2.4	1.62	0.540	0.443

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.

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

The panels are available in two sizes:

Size	Thickness	Weight	Note
2.44m x 1.22m (8' x 4')	3mm (1/8")	9.6kg (21lbs)	All panels available in this size
2.44m x 1.52m (8' x 5')	3mm (1/8")	12kg (26.5lbs)	Only A209, A210 & A211 available in this size

(Measured to source C, Correlated Color Temperature of 6774K)

Daylight to Tungsten

		Mired Shift	Transmission Y%
A205 Half CTO	Converts Daylight to Tungsten Light.	+90	72.6
A207 Full CTO + .3ND	Converts Daylight to Tungsten and reduces light 1 Stop.	+175	30.2
A208 Full CTO + .6ND	Converts Daylight to Tungsten and reduces light 2 Stops.	+175	13.8

Neutral Density

		Mired Shift	Transmission Y%
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

Reflection Media

Reflector

Special note

271 Mirror Silver	Produces hard reflection. White backed.	Available in 6.10m x 1.52m (20'x60") rolls
273 Soft Silver Reflector	Produces soft reflection. White backed.	Available in 6.10m x 1.52m (20'x60") rolls
274 Mirror Gold	Produces hard reflection. White backed. Mired Shift +45.	Available in 6.10m x 1.52m (20'x60") rolls
272 Soft Gold Reflector	Produces soft reflection. White backed. Mired Shift +45.	Available in 6.10m x 1.52m (20'x60") rolls

Scrim

270 LEE Scrim	Perforated reflector producing a very soft reflection. Silver on one side and black on reverse.	Stop value 1 1/2 when used as a filter, Transmission 36%.
275 Black Scrim	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 1 1/2 when used as a filter, Transmission 36%.

(Measured to source C, Correlated Color Temperature of 6774K)

Transmission Y% Absorption abs Chromaticity Co-ordinates x y

Heat Shield

269 LEE Heat Shield	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
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Foil

Special note

280 Black Foil	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")			
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Non-Flame Retardant Polymer Film

			Transmission Y%	Stop Value	Special Notes
	216 White Diffusion	Used for soft light effects. Manufactured on a tough Polyester base in a range of seven strengths.	36	1 1/2	Rolls also available in 1.52m (60") width
	416 Three Quarter White Diffusion		50	1	
	250 Half White Diffusion		60	3/4	Rolls also available in 1.52m (60") width
	450 Three Eighth White Diffusion		63	2/3	
	251 Quarter White Diffusion		80	1/3	Rolls also available in 1.52m (60") width
	252 Eighth White Diffusion		>85	<1/4	
	452 Sixteenth White Diffusion		>85	<1/4	
	400 LEELux	A dense white diffuser used for soft light effects (125 micron polyester base).	36	1 1/2	Wide Rolls also available
	255 Hollywood Frost	Light frost effect - softens edges.	83	<1/3	
	228 Brushed Silk	Directional soft light effect used for scattering light in one direction only.	60	3/4	
	410 Opal Frost	Used for softening spotlight beam edges without altering shape (23 micron polyester base).	71	1/2	
	420 Light Opal Frost	Similar characteristics to Opal Frost, but less diffuse (36 micron polyester base).	>85	<1/4	
	258 Eighth Hampshire Frost	Extra Light frost effect.	>85	<1/4	
	257 Quarter Hampshire Frost	Extra Light frost effect.	>85	<1/4	
	256 Half Hampshire Frost	Extra Light frost effect.	>85	<1/4	
	253 Hampshire Frost	Light frost effect.	>85	<1/4	
	750 Durham Frost	A frost that almost completely softens shutter edges and removes hot spots.	>85	<1/4	
	720 Durham Daylight Frost	Smooths PAR or flood washes of large areas. Useful for houselights; good for entrances from natural light.	32.3	1 2/3	Full CT Blue
	717 Shanklin Frost	201 with frost to soften the beam of profile units.	37	1 1/2	Full CT Blue
	718 Half Shanklin Frost	202 with frost to soften the beam of profile units.	56	3/4	Half CT Blue
	705 Lily Frost	Smooths PAR or flood washes of large areas. Useful for houselights; a good colour wash for evening events.	38	1 1/3	Colour = 704
	791 Moroccan Frost	Smooths PAR or flood washes of large areas. Useful for houselights; good for interior colour washes.	57	3/4	Colour = 790

			Transmission Y%	Stop Value	Special Notes
	749 Hampshire Rose	Combines flesh tone warmer 154 with some Hampshire Frost.	74	1/2	Colour = 154
	217 Blue Diffusion	As White Diffusion but with the addition of Eighth CTB.	36	1 1/2	1/8 CT Blue
	224 Daylight Blue Frost	Used for soft light effects with the addition of tungsten correction 201.	22	2 1/4	Full CT Blue
	225 Neutral Density Frost	Used for soft light effects with the addition of 0.6 Neutral Density.	25	2	.6 Neutral Density

Grid Cloth

	430 Grid Cloth		18	2 1/2	
	432 Light Grid Cloth	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	1 3/4	Rolls only 1.37m x 7.62m (54" x 25")
	434 Quarter Grid Cloth		60	3/4	
	460 Quiet Grid Cloth		15	2 3/4	
	462 Quiet Light Grid Cloth	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	2 1/4	Rolls only 1.37m x 7.62m (54" x 25")
	464 Quiet Quarter Grid Cloth		47.5	1	

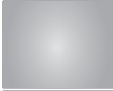




Tough Spun

	214 Full Tough Spun	Softens light, reduces intensity. Manufactured from non-woven Polyester.	18	2 1/2	Rolls only 7.62 x 1.22m (25" x 48")
	215 Half Tough Spun		36	1 1/2	
	229 Quarter Tough Spun		60	3/4	

Flame Retardant Polymer Film



	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 CT Blue
	254 New Hampshire Frost	Used to soften the edges of spotlight beams, and to reduce the blue fringe.	>85	<1/4	HT only (For sizes see p6-9)
	774 Soft Amber Key 1	Used for producing a warm key light colour.	71	1/2	
	775 Soft Amber Key 2	Used for producing a warm key light colour.	58	3/4	

Flexi Frost



			Transmission Y%	Stop Value	Special Notes
	439 Heavy Quiet Frost	A very strong diffuser, but pliable to handle, which virtually eliminates shadows at close distances.	7.8	3 ² / ₃	Thickness 270 microns (11 thou)
	402 Soft Frost	A strong diffuser that creates a wide field of soft illumination but is very pliable to handle. Diffusion characteristics similar to 216, falls between 216 and 129.	12.0	3	Thickness 100 microns (4 thou)
	429 Quiet Frost	A strong diffuser that creates a wide field of soft illumination but is thicker than the 402 product. Diffusion characteristics similar to 416.	18.4	2 ¹ / ₂	Thickness 325 microns (13 thou)
	404 Half Soft Frost	A useful diffuser without too much light loss but very pliable to handle. Diffusion characteristics fall between 251 and 252.	36.2	1 ¹ / ₂	Thickness 100 microns (4 thou)
	414 Highlight	A useful diffuser without too much light loss in a thick format. Diffusion characteristics similar to 252.	39.6	1 ¹ / ₃	Thickness 300 microns (12 thou)

Advantages of this material are the large roll width; lack of noise when handled or used in windy conditions; waterproof for use outdoors, can be sewn or grommetted together for use on large frames; flame retardant.
1.52m width, 6.10m length, (60" x 20')

Perforated Diffusion

	439P Perforated Heavy Quiet Frost	A combination of both direct and strongly diffused light.	1.52m width, 6.10m length, (60" x 20') Flame retardant.	2 ¹ / ₃	Thickness 270 microns (11 thou)
	414P Perforated Highlight	A combination of both direct and soft diffused light.		1 ¹ / ₃	Thickness 300 microns (12 thou)

Tough Spun

	261 Tough Spun FR - Full	Non yellowing flame retardant spun polyester material in five densities to give better light control.	25	2	Rolls only 7.62 x 1.22m (25' x 4')
	262 Tough Spun FR - 3/4		32	1 ² / ₃	
	263 Tough Spun FR - 1/2		41	1 ¹ / ₃	
	264 Tough Spun FR - 5/8		50	1	
	265 Tough Spun FR - 1/4		60	3/4	

The Architectural Series



FLUORESCENT SLEEVES

COLOURED SLEEVES USED WITH DIFFUSION CREATE A SMOOTH WALLWASH.

EXTEND THE LIFE OF COLOURED INSERTS BY ADDING LEE UV INTO A T8 OR T12 TUBE.

When it comes to fluorescent lighting, LEE has every base covered, thanks to the Fluorescent Coloured Sleeves range.

All of the LEE colours (pages 26-47) are available as fluorescent sleeves. You can also phone and request a swatch book containing the full colour range.



Pre-assembled Sleeves

Our pre-assembled sleeves are delivered ready to use. Made from a thermally stable, electrically insulating polycarbonate, the sleeves are capped at the ends, allowing them to be fixed easily to the fluorescent tube. The sleeves are available in standard lengths for T5, T8 and T12 diameter tubes.

Please contact us if you intend to use sleeves on high-output T5 tubes, as not all of them are suitable: the extreme heat at either end of these tubes can cause the filter to discolour.



T5 Sleeves



T8 Sleeves



T12 Sleeves

Easily Transform the Mood of a Room



Recessed fluorescent tube, no filter.

Amber filter.

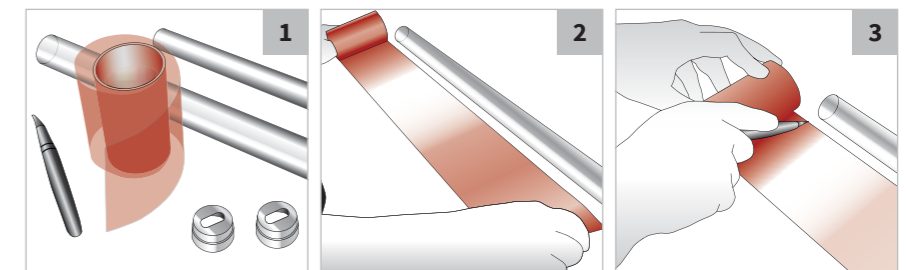
Blue filter.

Magenta filter.

Self-assembly Sleeves

Should you wish to assemble the sleeves yourself, LEE Filters can provide pre-cut Quick Rolls, as well as clear polycarbonate sleeves.

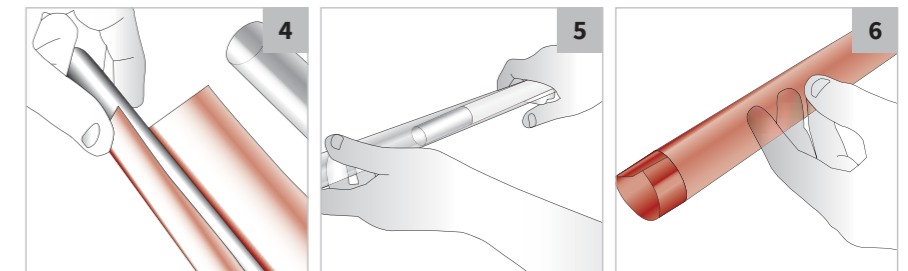
Quick Rolls are 7.62m (25ft) in length and are available for T5, T8 and T12 diameter sleeves.



You'll require a clear sleeve, a Quick Roll of colour, two end caps, a knife and a rod or pole to stuff the sleeve.

Unwind the roll of gel to the length of the sleeve.

Cut the gel slightly longer than the length of the sleeve.

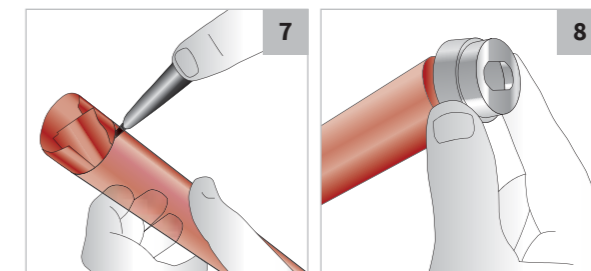


Wrap the gel tightly around the rod.

Holding the gel tightly around the rod feed it into one end of the sleeve. Then push it through the sleeve until it comes out the other end.

Remove the rod from the sleeve, leaving the gel inside.

NEUTRAL DENSITY FILTERS USED IN FLUORESCENT TUBES WILL REDUCE LIGHT WHERE INTENSITY IS AN ISSUE.



Trim off any excess gel from the ends.

Place end caps on both ends of the sleeve.

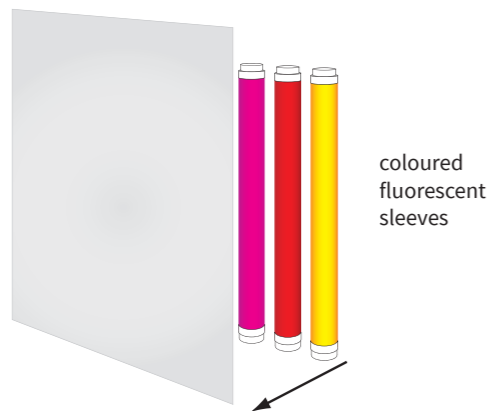
GET CREATIVE



Two-tone sleeves

There's an easy way to increase the versatility of your fluorescent sleeves – simply place one colour at the front and another at the back. And with more than 250 colours to choose from, the possible combinations are almost endless.

216 White Diffusion



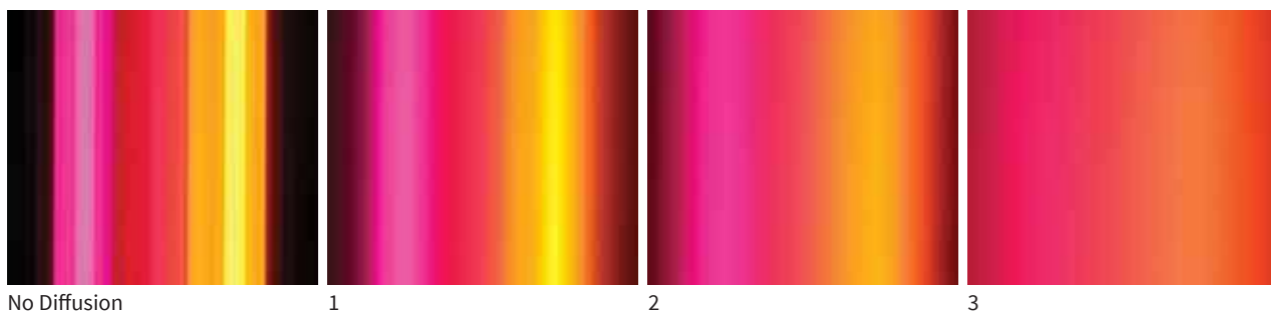
coloured fluorescent sleeves

Diffusion Effects

Another effect that works well with coloured fluorescent sleeves is the addition of some diffusion in front of the sleeves. The diffusion softens the light giving a soft, subtle blend of colours.

In the example below, a roll of LEE 216 White Diffusion was placed in front of three coloured fluorescent sleeves. The distance between the diffusion and the sleeves was then slightly increased for each image: the further the distance, the more diffused the colours become.

The distance between the diffusion and tubes determines the strength of the diffusion effect. The further apart, the stronger the effect; the closer together, the weaker the effect.



No Diffusion

1

2

3



THE GLASS SERIES

LEE FILTERS OFFERS A COMPLETE RANGE OF LIGHTING FILTER PRODUCTS SPECIFICALLY DESIGNED FOR APPLICATIONS SUCH AS RETAIL AND ENTERTAINMENT, AS WELL AS BOTH INTERIOR AND EXTERIOR LIGHTING PROJECTS.

Dichroic Glass Colours

Durable, fade-resistant and capable of withstanding temperatures of up to 371°C, LEE dichroic glass filters are in a class of their own. The manufacturing process – whereby layers of thin metal films are laid down by vacuum deposition onto a Borofloat glass substrate – results in the kind of clear, pure colour so in demand by the lighting industry.

The glass is available in 3.3mm and 1.7mm thicknesses.

Professional Colours

Chosen after extensive research among design professionals, the Glass Series colour palette provides a range of 51 consistent, repeatable colours. This includes subtle, less saturated tones suitable for architectural use. Building on our expertise in film and theatre lighting, LEE has closely matched the glass series on polyester lighting filter material to provide a convenient swatch reference book. Available on request, lighting professionals can use this book to test colour schemes or demonstrate the effects of different filters.





LEE FILTERS DICHROIC GLASS IS NOT TEMPERED.

Framed Glass

Offering protection from both mechanical and thermal shock, these lightweight aluminium frames – which are available in both plain and colour – are compatible with all the most popular lighting fixtures in the entertainment, architectural and theatre industries. Made using an innovative silicone gasket, which surrounds the glass, the frames can also be manufactured with a safety mesh for added strength.

The frames measure from 7.5cm (3") to 60cm (23.5") across, and can be designed to any shape.

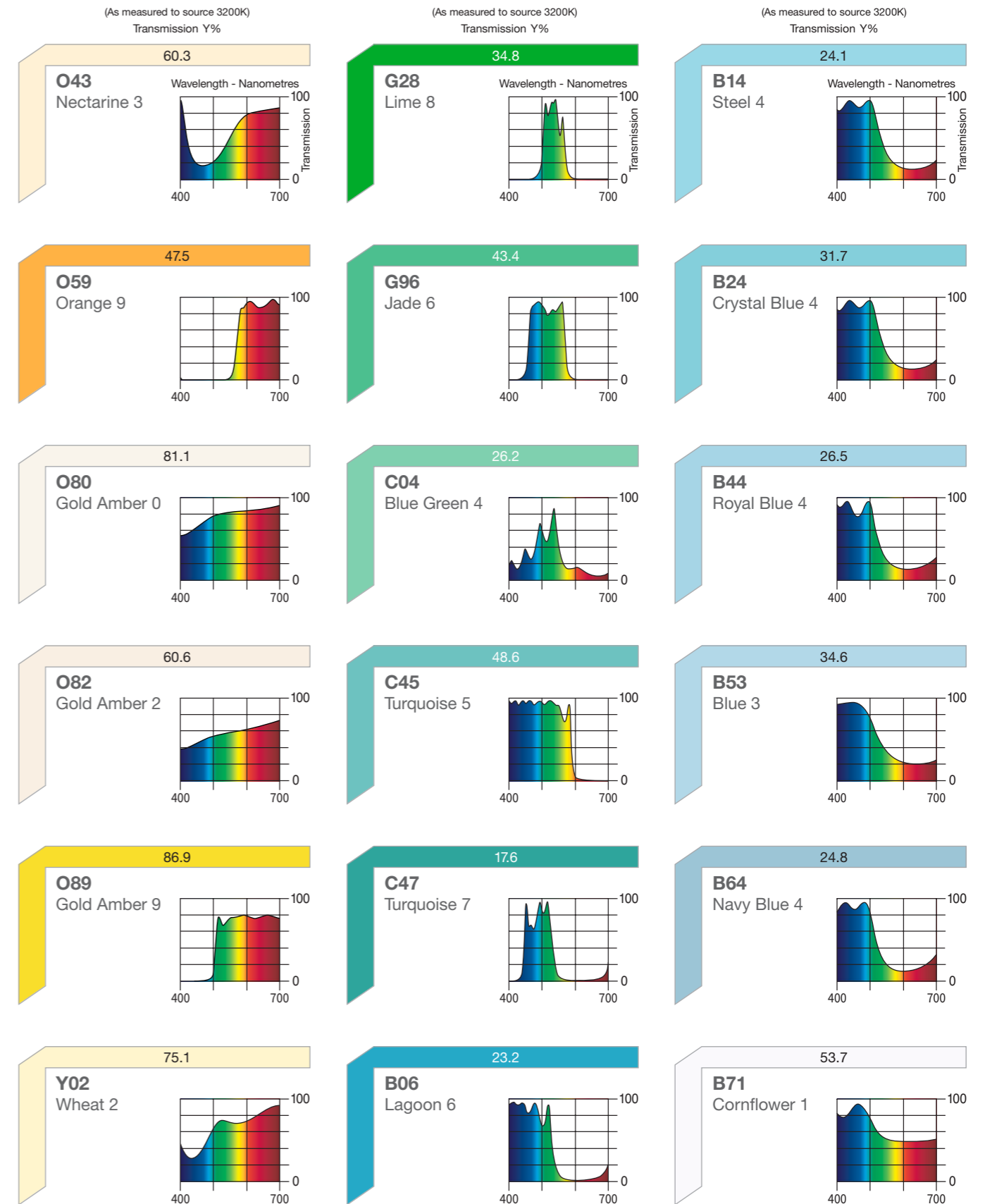
Framed Glass

- 15.8cm (6.25") Source Four
- 19cm (7.5") Source Four PAR
- 25.4cm (10") PAR 64

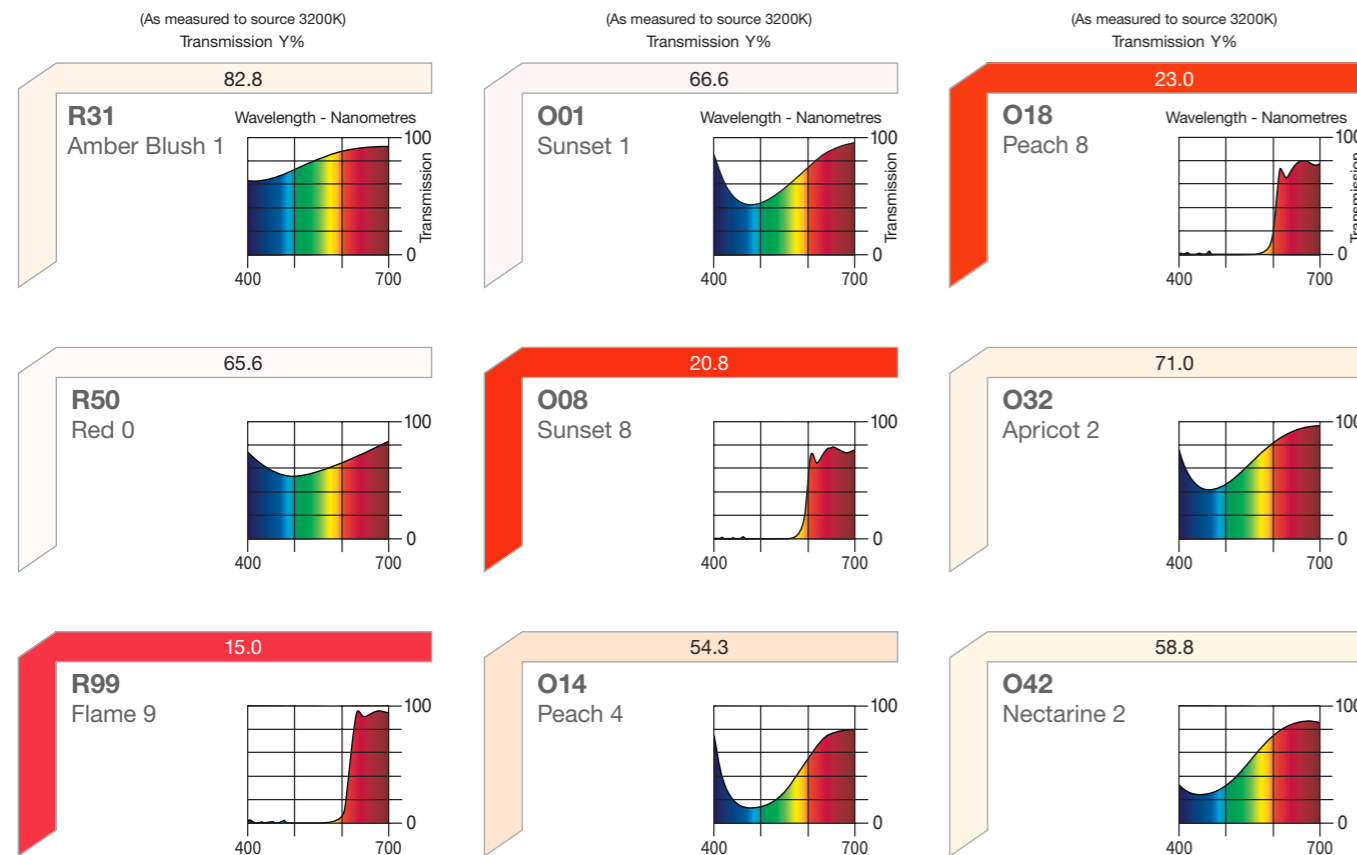
Unframed Glass

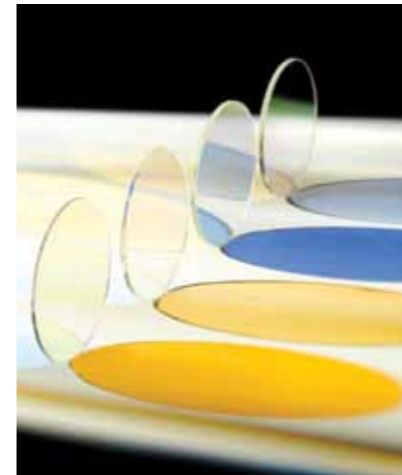
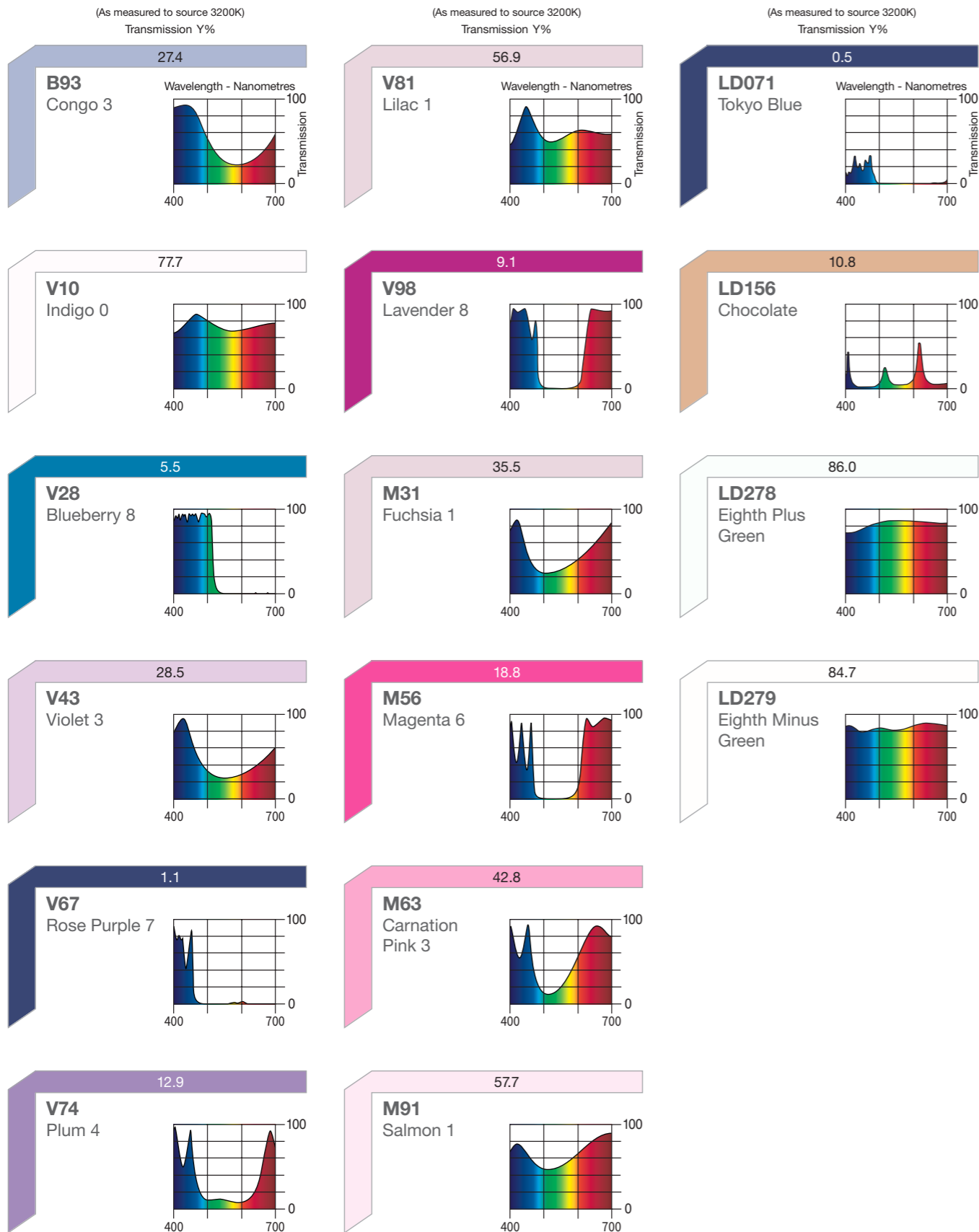
Unframed filters can be supplied for use in smaller light fittings with integral holders.

- 4.99cm (1.96") MR16 and Par 16 (circular)
- 5cm (2") square
- For further information on custom sizes, please call LEE Filters for a quotation.



The Glass Colour Range





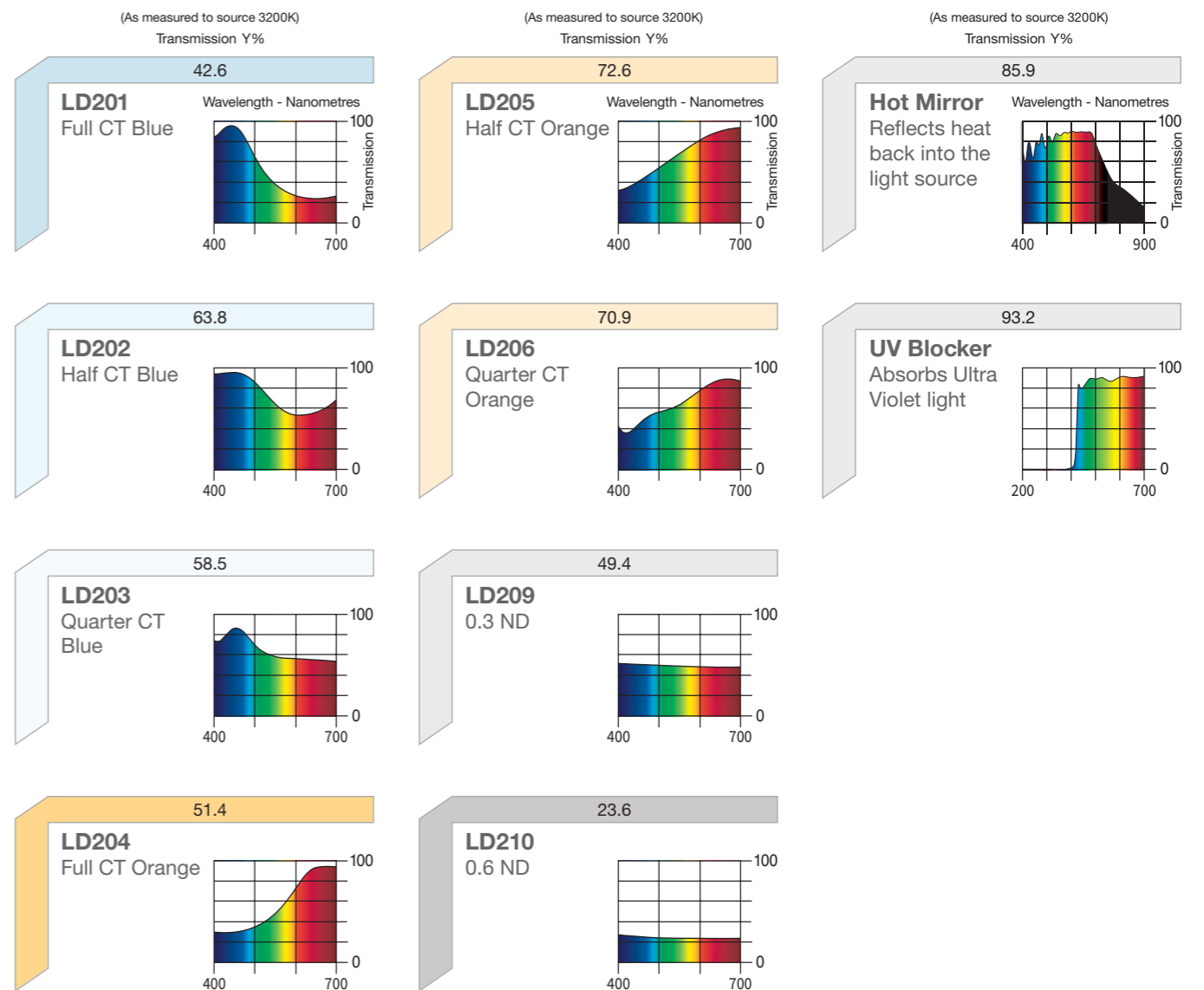
SPECIALISED GLASS FILTERS

LEE Specialised Filters are highly versatile and increase the lighting designer's scope for creativity and technical excellence. The range includes warming, cooling and UV filters.

Warming filters (CT Orange) are ideal for warming up a cool light source, such as an LED light. In addition, they can also be used as a warm amber colour in their own right, or to reduce the overall colour temperature of a light source.

Cooling filters (CT Blue) are designed to cool a light source. They can also be used as a stand-alone cool blue colour, or to convert tungsten light to daylight.

The UV Blocker absorbs ultra-violet light, while the Hot Mirror reflects heat back into the light source.

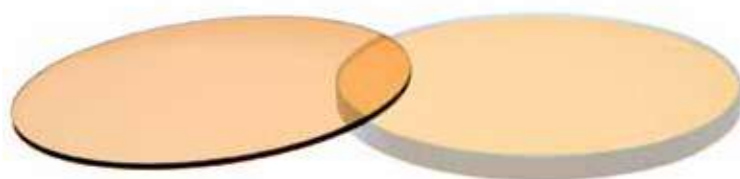


DICHROIC POLYCARBONATE FILTERS

Durable and versatile, the filters in this five-colour range have a dichroic coating on one side, and provide an optimal colour correction solution for permanent installations (such as restaurants). A mere 0.76mm thick, the LEE dichroic polycarbonate filters fit easily into a small-fixture accessory slot.

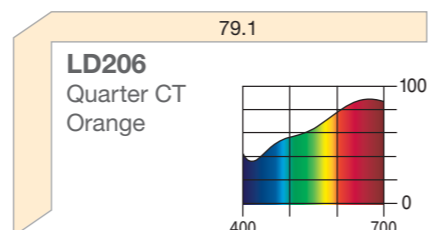
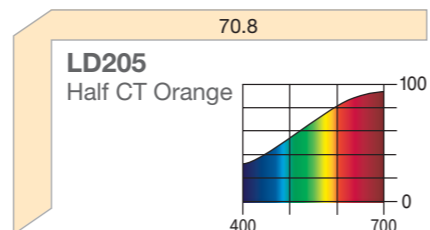
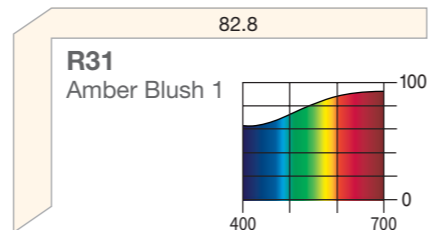
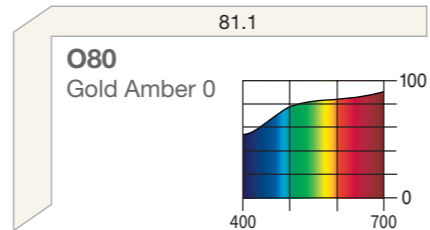
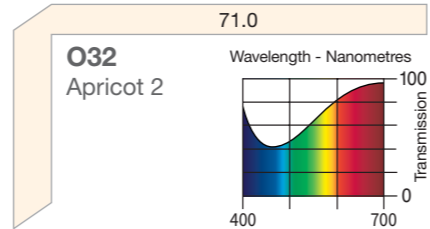


- Stocked in 49.9mm diameter (custom sizes are available upon request).
- Five stock Dichroic Series colours (custom colours are available upon request).
- Polycarbonate substrate includes a highly heat-resistant hard coating on both sides.
- Dichroic coating is a process of vacuum deposition of thin metal films onto a polycarbonate substrate.
- Maximum operating temperature is 100°C.
- Polycarbonate material is 0.76mm thick.



Polycarbonate 0.76mm thick vs glass 3.3mm thick.

(As measured to source 3200K)
Transmission Y%



LEE FILTERS DICHROIC GLASS IS COATED ON ONE SIDE. TO DETERMINE WHICH SIDE IS COATED, TOUCH YOUR FINGER TO THE FLAT SURFACE OF THE FILTER. ON THE COATED SIDE, THE REFLECTION WILL MEET YOUR FINGER. ON THE UNCOATED SIDE, THERE WILL BE A SPACE BETWEEN YOUR FINGER AND THE REFLECTION.



Unfrosted Glass



Frosted Glass

FROSTED DICHROIC GLASS COLOURS


Sometimes, colour alone isn't the sole consideration – the quality of the light is just as important. For a diffused light, the LEE Frosted Colour Dichroic filters provide colour and softness in one filter. Colour coated on one side and diffused on the other, the filters – which are available in every colour in the glass series – are capable of withstanding temperatures up to 371°C, making them particularly resistant to fading.


Frosted Colour Dichroic Glass filters are available for MR16 and PAR 16 circular light fittings, as well as in custom shapes and sizes.


GLASS DIFFUSION FILTERS


The LEE Glass Diffusion filters come in a variety of strengths, making them a versatile addition to the lighting designer's armoury.


They are available for MR16 and PAR 16 fittings, as well as in custom shapes and sizes.

- 

Linear Diffusion
- 

Softening Diffusion
- 

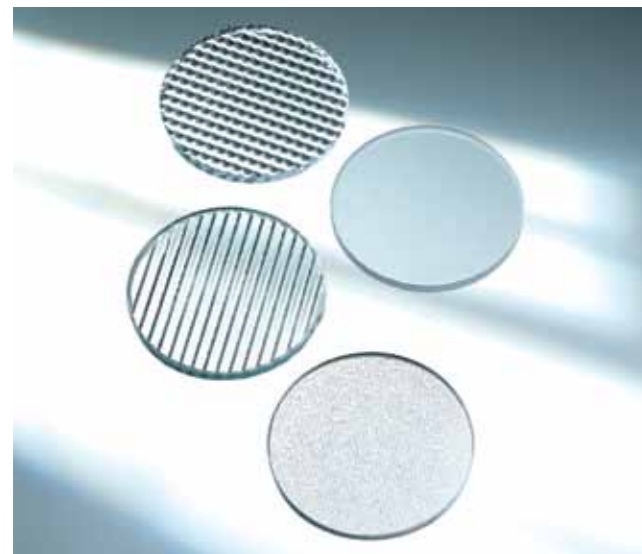
O80 Linear Diffusion
Combined Linear Diffusion and warming filter
- 

Frosted Diffusion
- 

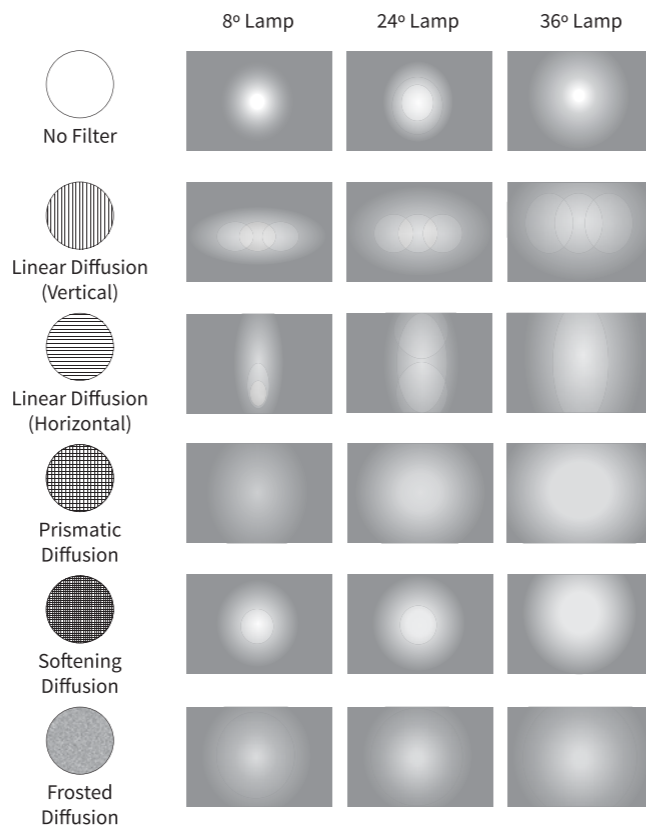
Prismatic Diffusion



All diffusion filters are available in custom shapes and sizes.



The diagram below shows the diffusion effect created when using an 8°, 24° or 36° 50w MR16 bulb, at a distance of 92cm (3ft).



MR16 / PAR 16 ACCESSORIES

ALL LEE CLIP-ON ACCESSORIES ARE COMPATIBLE WITH MR16 OR PAR 16 BULBS AND ARE AVAILABLE IN PACKS OF FIVE, IN SILVER OR BLACK.



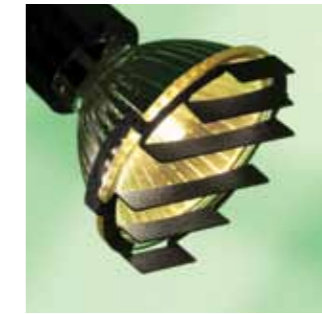
Screw-on Accessory Holder

The Screw-on Accessory Holder allows the lighting designer to attach up to two filters directly to an MR16 or PAR 16 bulb, allowing for a combination of effects within the one fitting.



Clip-on Filter Holder

This holds a single filter and is suitable for a standard open bulb.



Clip-on Baffle

The Clip-on Baffle (also known as a blade louvre) limits glare by trapping the peripheral light sideways. The baffle also gives the fixture a more professional look.



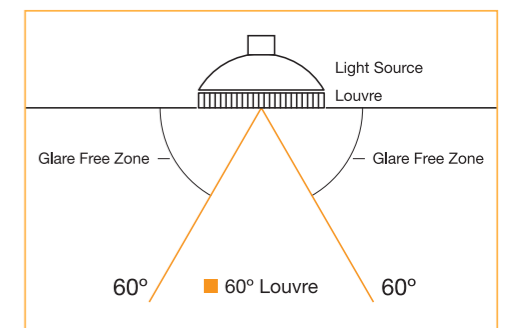
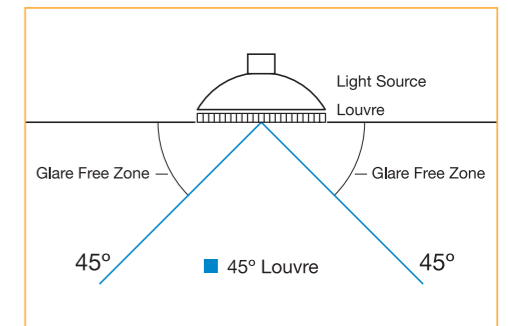
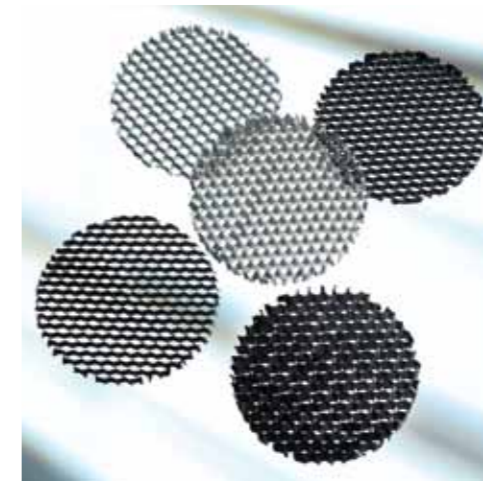
Clip-on Barndoors

The LEE Clip-on Barndoors have a dual function – they both limit the glare from a bulb and permit the user to direct the light in a particular direction. To use, simply rotate the flaps or bend the hinges – the high quality of which means they can be adjusted several times.



LOUVRES

A Honeycomb Louvre is designed to reduce the glare from a light fitting. They are available in 45° and 60° angles, and are also available in custom shapes and sizes, enabling them to be used on a number of different light fittings.



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.

The LEE Filters swatch books each serve a different purpose:

1. The Designers Edition

Features the entire filter range in chromatic groupings.

2. The Numeric Edition

Features the entire filter range in numerical order.

3. The LED Swatch

Features the entire range of LED Filters.

4. The Cinematographers' Edition

A large-format, dual-swath book, the Cinematographers' Edition features the grades of colour correction and diffusion filters that are most frequently used in film.

5. The Master Edition

A very large-format swatch of lighting products. (There is a charge for this swatch book.)

6. The Pocket Edition

Want to compare which LEE Filters products are the equivalent of other manufacturers' products? This is the swatch book you need. It includes a listing of all lighting filter products.

7. The Glass Edition

A large-format swatch book, this contains polyester lighting filter material that closely matches the colours from the glass series.

8. The Fluorescent Edition

A sample of each of the polyester colours that are available for the clear fluorescent sleeves.



SWATCH APP

The LEE Swatch iPhone app puts the complete range of LEE lighting filters on one screen, with an innovative colour picker so you can easily build palettes anytime inspiration strikes.



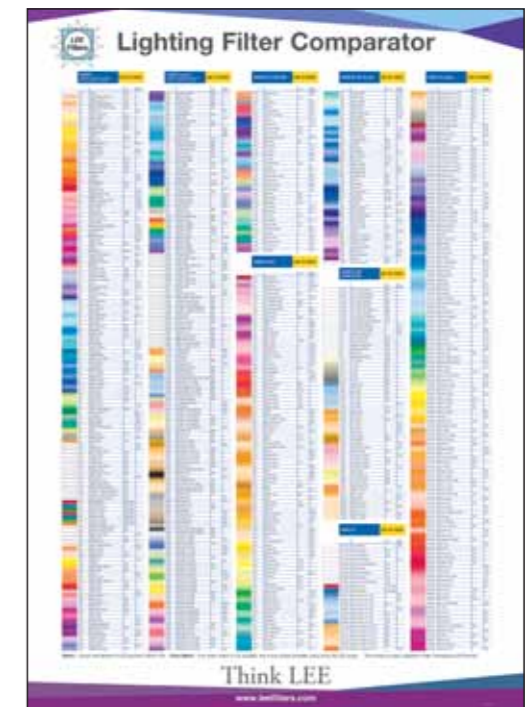
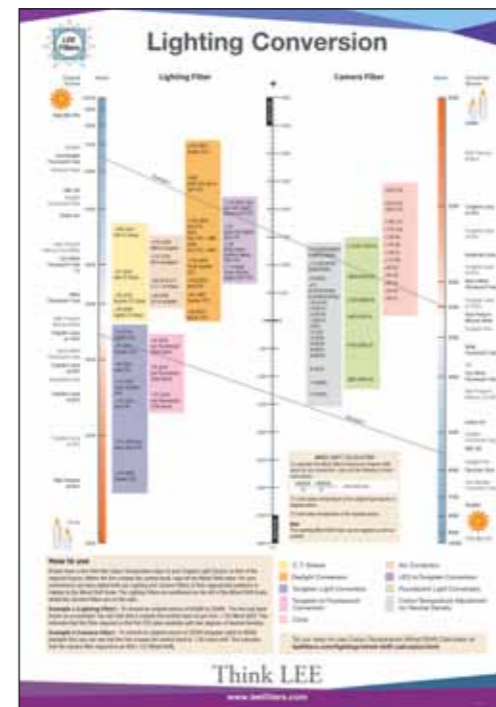
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<http://appstore.com/leefilters>



POSTERS

For a useful, at-a-glance reference for LEE products and essential lighting and filter topics, simply order one of our A1 posters.



CUTTERS

Safer than open blades and easy to use, these filter cutters are suitable for cutting LEE polyester material.



WEBSITE

For further information on all LEE Filters products, visit www.leefilters.com.

LED Conversion Filters



Convert Cool White
LED to Tungsten

A common complaint from people using LED lighting is that the white light is very blue, making it look cold in comparison to a tungsten light. LEE Filters have solved this problem with the introduction of a new range of specially designed LED CTO Filters.

These filters will convert white LED sources (colour temperatures ranging from 5000-7000K) to the equivalent of a 3200K tungsten source. This means that different types of luminaires can now be blended together without the viewer or digital camera seeing a difference.

622 One and One Eighth Digital LED CTO

Converts white LED of 7000K to Tungsten of 3200K
Mired shift + 170

624 Full Digital LED CTO

Converts white LED of 6200K to Tungsten of 3200K
Mired shift + 151

626 Seven Eighths Digital LED CTO

Converts white LED of 5550K to Tungsten of 3200K
Mired shift + 132

628 Three Quarter Digital LED CTO

Converts white LED of 5000K to Tungsten of 3200K
Mired shift + 113

Think LEE

••• for LED •••

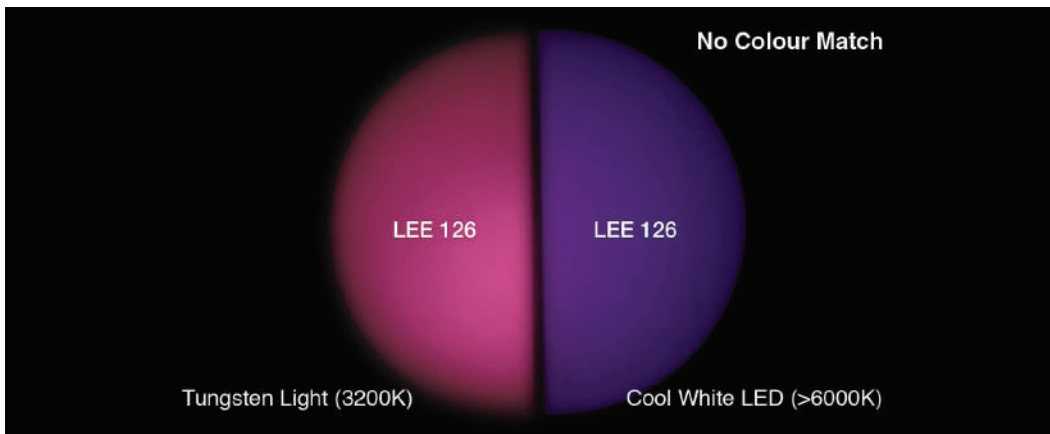
www.leefilters.com



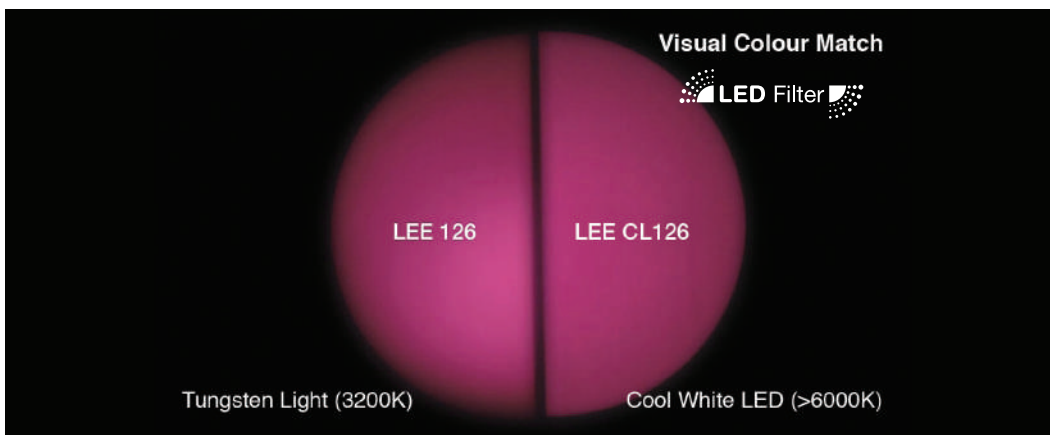


New LED Filter Range

Have you ever tried using coloured lighting filter in front of a Cool White LED fitting? It ends up looking so completely different that if you did not know better you would think it was a totally different colour. The problem is made even worse when mixing Cool White LED and Tungsten fixtures together, trying to get a colour match from the two different sources is virtually impossible.



To help fix this problem LEE Filters have launched a new range of LED Filters. These new filters when used on Cool White LED (>6000K) have been specifically designed to give a visual colour match to the existing colours on Tungsten (3200K). Try to think of them as a range of colour-corrected colours as opposed to colours that are colour temperature corrected.



LED Colours



Source
Cool White LED >6000K



Source
Cool White LED >6000K



Source
Cool White LED >6000K



Source
Cool White LED >6000K

CL104 Cool LED Deep Amber

104



For use on cool white LED with C.T. >6000K to produce a pleasing golden yellow. Similar to **LEE 104** on a tungsten lamp

CL116 Cool LED Medium Blue Green

116



For use on cool white LED with C.T. >6000K to produce a vibrant turquoise with a green bias. Similar to **LEE 116** on a tungsten lamp.

CL128 Cool LED Bright Pink

128



For use on cool white LED with C.T.>6000K to produce a neon pink good for musicals / pantos. Similar to **LEE 128** on a tungsten lamp.

CL164 Cool LED Flame Red

164



For use on cool white LED with C.T.>6000K to produce a dawn burst orange red glow. Similar to **LEE 164** on a tungsten lamp.

CL105 Cool LED Orange

105



For use on cool white LED with C.T. >6000K to produce a warm medium amber. Similar to **LEE 105** on a tungsten lamp.

CL117 Cool LED Steel Blue

117



For use on cool white LED with C.T. >6000K to produce a silvery moonlight wash. Similar to **LEE 117** on a tungsten lamp. Good for cycloramas.

CL132 Cool LED Medium Blue

132



For use on cool white LED with C.T.>6000K to produce a mid tone blue good for night scenes. Similar to **LEE 132** on a tungsten lamp.

CL180 Cool LED Dark Lavender

180



For use on cool white LED with C.T.>6000K to produce a dance floor pink good for cycloramas. Similar to **LEE 180** on a tungsten lamp.

CL106 Cool LED Primary Red

106



For use on cool white LED with C.T. >6000K to produce a warm primary red, with strong contrasting shadows. Similar to **LEE 106** on a tungsten lamp. Good for cycloramas.

CL118 Cool LED Light Blue

118



For use on cool white LED with C.T.>6000K to produce a cold spine chilling blue. Similar to **LEE 118** on a tungsten lamp.

CL139 Cool LED Primary Green

139



For use on cool white LED with C.T. >6000K to produce a vivid primary green. Similar to **LEE 139** on a tungsten lamp. Good for cycloramas.

CL181 Cool LED Congo Blue

181



For use on cool white LED with C.T.>6000K to produce soft romantic mood lighting. Similar to **LEE 181** on a tungsten lamp.

CL113 Cool LED Magenta

113



For use on cool white LED with C.T.>6000K to produce a soft pink red, with strong contrasting shadows. Similar to **LEE 113** on a tungsten lamp.

CL119 Cool LED Dark Blue

119



For use on cool white LED with C.T.>6000K to produce a soft moody blue, good for blacklighting. Similar to **LEE 119** on a tungsten lamp.

CL147 Cool LED Apricot

147



For use on cool white LED with C.T. >6000K to produce a warm key light amber. Similar to **LEE 147** on a tungsten lamp.

CL182 Cool LED Light Red

182



For use on cool white LED with C.T.>6000K to produce a saturated vibrant red good for cycloramas. Similar to **LEE 182** on a tungsten lamp.

CL115 Cool LED Peacock Blue

115



For use on cool white LED with C.T. >6000K to produce a fresh crisp spearmint colour. Similar to **LEE 115** on a tungsten lamp. Good for cycloramas.

CL126 Cool LED Mauve

126



For use on cool white LED with C.T. >6000K to produce a bold intense pink. Similar to **LEE 126** on a tungsten lamp.

CL158 Cool LED Deep Orange

158



For use on cool white LED with C.T. >6000K to produce a sunset like glow. Similar to **LEE 158** on a tungsten lamp.

For best results use with LED fittings that have a homogenous beam (i.e. diffusion filter or focusing optic)



New LED Conversion Filters

A common complaint from people using LED lighting is that the white light is very blue, making it look cold in comparison to a Tungsten white light. LEE Filters have solved this problem with the introduction of a new range of especially designed LED CTO Filters. These filters will convert from white LED sources (colour temperatures ranging from 5000-7000K) to the equivalent of a 3200K Tungsten source. This means that different types of luminaires can now be blended together without the viewer or digital camera seeing a difference.



622 One and One Eighth Digital LED CTO



Converts white LED of 7000K to Tungsten of 3200K
Mired shift + 170

624 Full Digital LED CTO



Converts white LED of 6200K to Tungsten of 3200K
Mired shift + 151

626 Seven Eighths Digital LED CTO



Converts white LED of 5550K to Tungsten of 3200K
Mired shift + 132

628 Three Quarter Digital LED CTO



Converts white LED of 5000K to Tungsten of 3200K
Mired shift + 113

For best results use with LED fittings that have a homogenous beam (i.e. diffusion filter or focusing optic)

LEE LED – Clever Stuff



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new from LEE filters



New Colours

We are pleased to announce that ten new colours have been added to the popular LEE Designer Series; a range of lighting filters created by some of the top designers in stage, screen and architectural lighting.

Tanya Burns and Mike Robertson are the two latest lighting designers to be invited to the LEE Filters factory to work alongside the Research and Development team to create their own unique range of colours. Both Tanya and Mike spent a day in the LEE Filters laboratory and they have each produced five new colours which have now been added to the LEE Designer Series.



Tanya has worked in the lighting industry for a number of years, across theatre, dance & opera with many shows in the West End and major repertory theatres.

After being awarded the Arts Foundation of Great Britain Fellowship for Lighting Design, Tanya chose to develop her interest in architecture and the lit environment in addition to the theatrical element. To this end, she studied at The Bartlett School of Architecture, UCL, gaining an MSc in Light & Lighting.

Tanya has been a full time member of the Imagination Lighting Department since 2005, utilising creative lighting for clients as wide ranging as Samsung, Land Rover, Ford and BT.

New colours from Tanya Burns



525 Argent Blue

LSI's Silver Anniversary colour sits between 165 and 068 in the range. Great for a foreboding cold winter's night, but allows enough light transmission to be useful for general illuminance too. Named by popular vote at LEE, Chris' 'Argent' suggestion (meaning silver) winning by a mile – proving that it pays to know your Latin...



508 Midnight Maya

A rich, sultry blue. Like Congo Blue, but allowing greater light transmission so more maintenance friendly - fewer gel changes. The visual equivalent of listening to Maya Angelou reading prose and a nod to working together on 'Moon on a Rainbow Shawl'.



505 Sally Green

A fresh, light & airy summer green. 'Under tree canopy' light quality without 'pantomime countryside'. Subtle enough to light faces without having to add too much general cover on top.



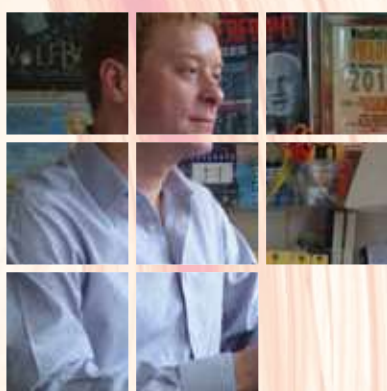
506 Marlene

Flattering skin tone filter without the comedy 'pink'. Named for Marlene Dietrich who understood the importance of beautiful lighting, especially at a certain age! Also useful as Indian summer at dusk / sepia type effect.



507 Madge

Denser, saturated orange version of 135 avoiding 'pinky red'. Good for backlight, instruments, part of a sunset palette, and generating a party atmosphere. 'Madge', short for Imagination, is a thank-you to Gary Withers for championing creative lighting in the corporate world.



Mike is a lighting designer working mainly in the theatre and has also lit hundreds of events, buildings and even aeroplanes.

Winner of the 2007 Olivier Award Mike has lit shows and events in Hong Kong, Zimbabwe, Scotland, Norway, Switzerland, France, Sweden, Ireland, Germany, Poland and extensively in regional England and London. He is also a regular columnist.

New colours from Mike Robertson



500 Double New Colour Blue

The strongest of the New Colour Blue (NCB) series for dramatic 'white' face and key light where warmer tones than CTB are required.



501 New Colour Blue (Robertson Blue)

An alternative to the CTB series with warmer tones and a lesser green cast for face and key light.



502 Half New Colour Blue

A lighter correction in the NCB series.



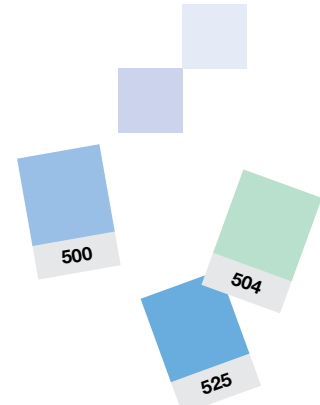
503 Quarter New Colour Blue

The lightest correction in the NCB series.



504 Waterfront Green

Designed for period key light and modern urban horizons.



24 carat gold



550 ALD Gold

Lighting designer Declan Randall has a wide grin on his face. Clad in a fetching red lab coat, he walks briskly and with intent from the lightbox, over to a custom-built, enclosed room that's fondly referred to as the 'igloo'. Inside, the smile fades a little, replaced by a frown of concentration.

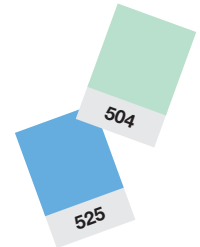
A moment later, he's back at the lightbox and what's fast becoming a ritual is repeated. Eventually, he pauses, but only to chuckle, "I'm like a kid in a sweet shop."

South Africa born Declan is spending the day in the R&D section of LEE Filters. The aim? To create a new colour for the catalogue – one that celebrates 50 years of the Association of Lighting Designers. For Declan, the choice of colour is obvious: it's got to be gold.

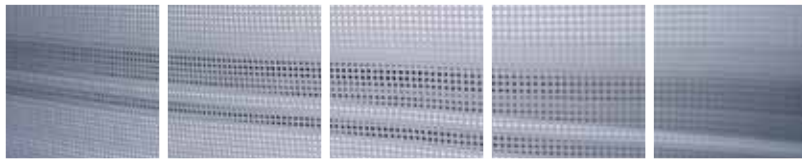
With lighting designs that span genres and nations (from High School Musical to Porgy and Bess, from Hong Kong to New York City), Declan's experience is nothing if not varied. A self-confessed lighting obsessive, he is fascinated by what he refers to as the 'texture' of light – the form it takes and how our eyes translate it in our everyday surroundings. Fortunately, he is also open to experimentation, because it turns out that creating the gold that – at the beginning of the day's activities – exists only in his mind's eye, is trickier than it would first appear.

It would be easy to assume the gold that Declan is visualising is a rich, deep hue with the qualities of molten metal but, in fact, what he's after is altogether more subtle. "Imagine the reflection off a bar of gold," he says, holding the palm of his hand above a sheet of gel that's laid on the lightbox. "That reflected colour is what I'm trying to achieve. And, of course, gold has a kind of shimmer to it, so we have to try to create something that captures that quality. It not only has to look gold, it has to react to light in the way that gold would."

While his projects include architectural and exhibition work, Declan visualises the gold he is hoping to create as existing more in the context of the theatre. But before it reaches that point, it is the job of Alison Chetwynd, head of R&D at LEE Filters, and with twenty four years of experience under her belt, to translate Declan's vision and description into reality. She has prepared a number of test sheets as a starting point, based on previous discussions with Declan. In the past, in order to achieve the sort of gold he sees in his mind's eye, he has combined filters to create what he describes as a "greeny-black yellow". This is the first combination that's created. It's close, but not quite what he hopes for.



new from LEE filters



New Perforated Diffusion

Having a company philosophy of continuous research and development is the catalyst that brings new and exciting products to the market. This is most definitely the case with our new perforated diffusion filters, the latest advancement in filter technology from LEE Filters.

Diffusion media was originally developed to soften hard or point sources and LEE have many different diffusion products that do this job. However with the amount of soft sources now in daily use on sets around the world we have now developed specific diffusions that work with soft lights.

The new LEE Perforated Diffusions have been specifically designed to work in conjunction with Kino Flo fixtures offering an alternative set of light modifying diffusion. The perforated diffusion produces both a soft but directional source by allowing a combination of direct and diffused light to combine. This creates a unique and different quality. The quality of light from this diffused perforation system will differ depending on the particular source it is applied to. The diffusion was developed using standard 4' fixtures as well as some of the newer parabolic lights like the Vistabeam, Parabeam and Parazips. Each grade of diffusion and perforation produces its own unique variation of soft diffused light, we recommend testing to find a particular combination that works for you.



414P Perforated Highlight

A combination of both direct and soft diffused light.

439P Perforated Heavy Quiet Frost

A combination of both direct and strongly diffused light.

New Technical Filters

A demand from lighting professionals requiring a smoother more even colour change when using Scrollers has resulted in three new strengths of colour conversion being added to the LEE Technical Filter range.

283 One and a Half CTB

Converts Tungsten Light to Daylight

286 One and a Half CTO

Converts Daylight to Tungsten Light

287 Double CTO

Converts Daylight to Tungsten Light

New Wide Rolls

For easy fitting on windows and larger light sources three of our most popular technical filter products are now available in wider roll sizes.

- 201 Full CTB and 400 LEE Lux are now available in 6.10m (20') x 1.52m (60'') rolls.
- 239 Polariser is now available in 0.3m (1') lengths x 1.45m (57'') width.



Think LEE

... for LED ...

A range of your favourite colours
now available colour matched for Cool White LED



Source

Cool White LED

Filter

NEW LED Filter
CL104 Deep Amber

Result

Colour matched to existing
104 Deep Amber

The new LED Filter range

We've done the hard work, so you don't have to



INDEX

	Page		Page
Acrylic Panels	58	Magentas	43
Acrylic Panels Sizes	8, 58	Minus Green	56
An Investment in the Future	4	MR16 Accessories	75
Architectural Series	63	Music Packs	11
Black Foil	59	Neutral Density	56
Blues	28	Numerical Listing	48-51
Clip-on Accessories	75	Oranges	38
Colour Magic Packs	12		
Colour Range	25-47	Perforated Diffusion	62
Colour Temperature Adjustment	54, 55	Pinks	42
Coloured Frosts	46	Plus Green	56
Contents	3	Polariser	57
Conversion Chart	53	Posters	77
Conversion Filters	54, 55	Protection Media	59
Correction Filters	56, 57		
Cosmetic Range	47	Quick Rolls	10, 65
Cutters	77		
		Reds	41
Daylight Conversion	54, 55	Reflection Media	58
Dichroic Colour Correction Filters	71	Reflector	58
Dichroic Glass Filters	67-71	Roll sizes	6, 7
Dichroic Polycarbonate Filters	72		
Discharge + Arc Conversion	55	Scrim	58
Diffusion Media	60	Sheet sizes	9
Diffusion	60	Spectral Charts	26
		Specialised Glass Filters	71
Filter Sizes	6, 7, 9	Straws	37, 55
Flexi-Frost	62	Swatch App	77
Fluorescent Correction	56	Swatches	76
Fluorescent Sleeves	64, 65, 66		
Frost	60, 61	Technical Filters	52
Frosted Dichroic Glass Filters	73	The Designer Series	17-22
		The Science Behind the Art	23, 24
Glass Diffusion Filters	74	Tough Spun	61, 62
Glass Series	67	Tungsten Light Conversion	54
Greens	33		
Grid Cloth	61	Ultra Violet Absorption	56
		Urban Effects	57
Heat Shield	59		
Holders	75	Website	77
Lavenders	26	Yellows	37
LED Filters	13-15		
LED Conversion Filters	16		
Lighting Packs	10, 11		
Louvres	75		

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