



an investment in the future



Answering the need for a better product

It was the demand from the movie production industry for something better that originally led to the birth of LEE Filters, and in the subsequent forty years, our company has always prided itself on designing and producing products that are truly better than anything else available.



Back in the late 1960s, leading Cinematographer David Holmes gathered research and manufacturing expertise from around the globe, and pioneered the use of modern polymeric materials to make filters for film and TV production, theatres and entertainment venues. Our expertise and experience in film and theatre lighting subsequently led us to expand into other areas, including a complete range of filters for architectural use, both indoors and out.



Quality is everything

Filters select particular colours of light by absorbing and attenuating parts of the spectrum, and consistent and repeatable performance is vital to the user. The whole filter making process is carried out at our factory in Andover, the company's UK headquarters, so that we have full control of the quality of all the raw materials, and can ensure that the coating process is carried out to meticulous quality standards.



Directors of Photography worldwide rely on the consistent and repeatable performance of LEE Filters.

From the haunted house to the roller coaster, theme parks worldwide have always depended on the endless effects created with LEE Filters.









Guarding a reputation

We rapidly gained our reputation as the world's leading manufacturer of lighting filter products, but we have only maintained that jealously guarded position over the decades by investing heavily in research. The production of lighting filters is both an art and a science, and we work closely with the film-making artists and bring the latest scientific developments to bear on making the wishes of these artists come true.

■ The Film-makers' Choice

Our never ending passion for providing the best possible product has led us to become the supplier of choice, to leading film and TV programme makers around the world. Countless movies have been lit using LEE Filters, and many companies wouldn't dream of using anything else, recognising that the results of investing in a movie can be significantly enhanced by choosing the world's best filters.



Making a rewarding investment

The company culture is one of continuous research and development, always searching for newer and better materials and more effective manufacturing techniques and processes. This culture, backed by significant investments in machinery, ensures that we provide the ultimate in performance, availability, reliability and longevity.







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technical excellence







Keeping control - Everything under one roof

Our manufacturing facility is known worldwide as the source of the world's highest quality lighting filters. The site is home to our Research and Development Laboratory, where expert scientists and technicians have been responsible for much of the improvement in filter technology over recent decades. Our exacting quality control ensures that lighting directors can rely on filters that exhibit consistent colour performance.

The need for continuous R&D

Long-term improvements in filter design and technology have come about because we have developed a deep understanding of the scientific and technical principles which impact on filter performance. The relationships between light sources and filters are often complex, and need an expert knowledge of both the physics of illumination and of materials science, together with long experience of what actually works practically on a 'shoot'.

Nothing stands still in lighting and filter technology, and our researchers have to ensure that they stay at the cutting-edge of new developments in the materials which are the basis of the filters, and that they understand the key implications of new lighting technologies and techniques that are coming along.









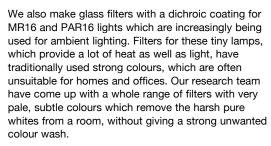


From Broadway to the West End and from the stage to the box office LEE Filters provide the tools to get the job done.

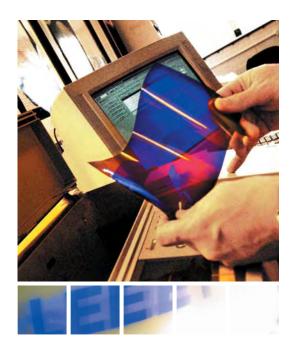


Branching out

Our experience and expertise in film and theatre lighting has enabled us to branch out into designing and making filters for various 'architectural' lighting applications. These include the popular coloured fluorescent sleeves, a clear polycarbonate sleeve with a coloured polyester insert. Available in a wide range of colours, these are used by architects in shopping malls, restaurants, clubs, bars and hotel buildings around the world.



Every LEE Filter is carefully designed to fulfil a specific function, and its parameters are precisely adjusted to suit the need of the user. Sophisticated technical measurement and monitoring equipment, including computer-controlled spectrophotometers, are used not only during the manufacturing process, but also to check that every filter leaving the factory meets the precise parameters to which it was designed.





A policy of continuous improvement

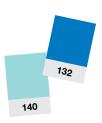
Filter manufacturing entails the use of high precision machinery to coat a fast-moving roll of polyester film with a precise accurate thickness of dyestuff. The company has invested in new plant as required, to ensure that it produces nothing less than the best. The complex machinery, much of which has actually been designed by or for LEE Filters, is carefully maintained and operated by skilled technicians, many of whom are proud to have been part of the LEE Filters success story for many years.

Because everything is effectively under one roof, we can ensure that all aspects of design and production are constantly under control, and complete records exist of every filter that we have ever made since the factory opened.





Theatre productions rely on LEE Filters, who can advise on the best filtering solutions for different stage plays and musicals.



quality control

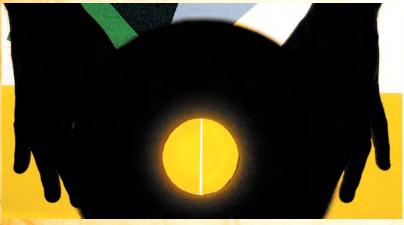




At LEE Filters, quality control is built in to our whole design and production process - it comes as an integral part of every filter that you buy.

The most appropriate materials are chosen for each application, and precise monitoring throughout the coating and production process ensures that the filter material is the same from the start to the finish of a roll, so that the user can be sure that the colour and the performance of the filter will be consistent throughout.

Every filter is accurately checked against a scientifically generated set of parameters, and we are proud to say that nothing that doesn't meet the highest standards ever leaves the factory.



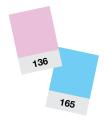
Television production, feature films and video all require specific technical filters to achieve uniformity from lens to screen; let LEE Filters' experts be your guide.







customer service





Solution Providers

We are not merely designers and suppliers of filters - a key area of our business is that the expertise of our staff allows us to be true 'solution providers' who can advise and help on all sorts of lighting and filtration tasks and problems. Only by having complete control of the design and manufacturing process can we offer such brilliant service - sometimes taking difficult management decisions to interrupt an existing 'run' and coat a special roll for that very urgent job.





Service-it's what we're about

Our goal is to provide you, our customer, with the highest level of service that you know and deserve. As the leading manufacturer of lighting filter we are able to provide a colour consistency from batch to batch that is unmatched in this or any other industry and whether it's a container load that you need or maybe just a few sheets we endeavour to maintain ample stock of the highest quality filters on the market. Please rest assured that whether you are dealing directly with us or with one of our valued distributors your best interests are at hand.

Education

At LEE Filters we understand the value of education and in continuing the learning process throughout the length of a career. Whether it be through seminars, factory visits, trade shows or conferences we endeavour to educate both current and future filter users on advancements and trends going forward.

■ No effect too special!

At LEE Filters we take great pride in assisting with the production of custom filters to meet the requests and requirements of specific applications. We have recently produced water proof filters for an under water film production, specific lenses for 3D glasses, custom colours for fluorescent tube inserts and custom dichroic colours for retail applications. Let us know what we can do for you!

Supplying the world

While our primary manufacturing is in the UK and our main distribution centres are in the UK and USA, we maintain distributors throughout the world for a truly global supply chain. Rest assured that the filters you require for the commercial in Sydney will match the ones that you just used on a feature in Buenos Aires.

LEE Filters - A growing range of applications

Whether it's special Neutral Density filters for Formula 1 cars or special filters for 3D applications our experts are on hand to help with any aspect of your latest project.





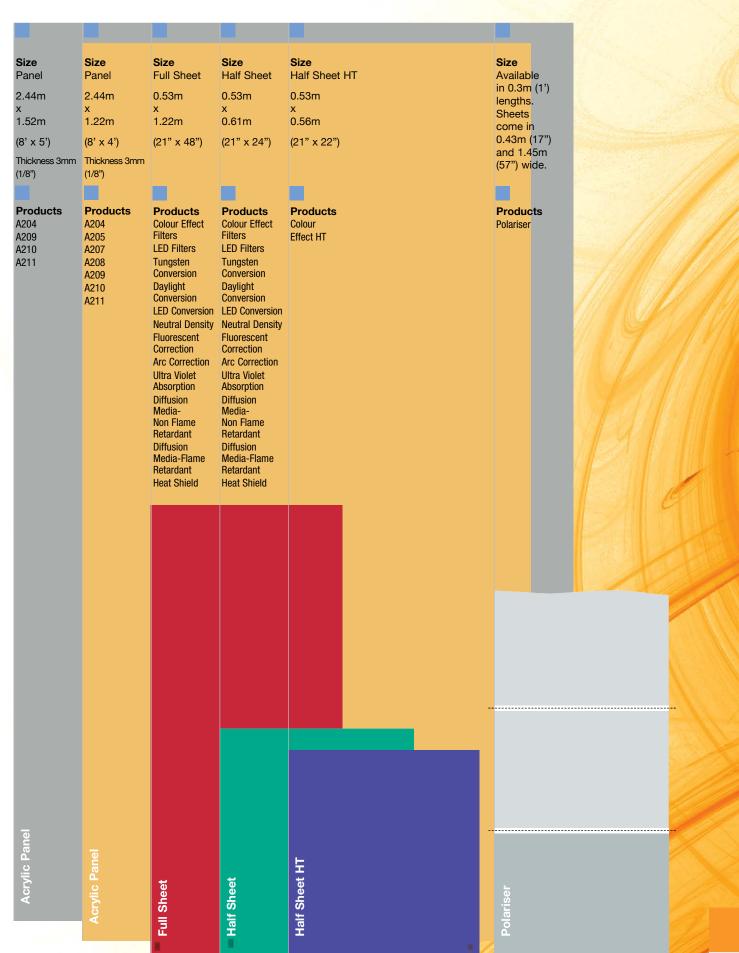




roll and sheet sizes

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

Size 7.62m	Size 6.10m x	Size 7.62m x	Size 7.62m x	Size 7.62m x	Size 4m x	Size 7.62m x	Size 15.24m x	Size Any width betwee 2.5cm (1") and
.52m	1.52m	1.37m	1.22m	1.22m	1.17m	0.61m	0.3m	1.17m (46").
25' x 60")	(20' x 60")	(25' x 54")	(25' x 48") 2" Core (5.08cm)	(25' x 48") 1" Core (2.54cm)	(13' x 46")	(25' x 24")	(50' x 12")	All rolls are 7.62m (25') long.
Products 16 50 51 16 52 16 50 52	Products 201 204 - 211 223 270 - 275 298 299 400 402 404 414 414P 429 439 439P	Products 430 - 434 460 - 464	Products Colour Effect Filters LED Filters Tungsten Conversion Daylight Conversion LED Conversion Neutral Density Fluorescent Correction Arc Correction Ultra Violet Absorption Diffusion Media- Non Flame Retardant Diffusion Media- Flame Retardant Heat Shield	Products Colour Effect Filters LED Filters Tungsten Conversion Daylight Conversion LED Conversion Neutral Density Fluorescent Correction Arc Correction Ultra Violet Absorption Diffusion Media- Non Flame Retardant Diffusion Media- Flame Retardant Heat Shield	Products Colour Effect HT	Products Black Foil	Products Black Foil	Products Quick Rolls * HT Rolls available as special order



New LED Filters

Have you ever tried using coloured lighting filter in front of a Cool White LED fitting? It looks so completely different, if you knew no better you would think it was another colour entirely. 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.



New LED colours



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.
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.
CL106 Cool LED Primary Red	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.
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.
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.
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.
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.
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.
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.
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.

LED Filter range

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.		
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.		
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.		
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.		
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.		
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.		
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.		
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.		
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.		

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 specially 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

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.







Lighting designers always have a colour in mind. Be it to create a romantic moonlit setting or a feisty, angry backdrop, they know exactly what colours they need to create the desired effect. LEE offer over 250 colours, but designers sometimes feel that a particular colour they are looking for is missing. LEE decided to rectify this by offering lighting designers a unique opportunity - to turn their ideas into realities.

Since 1998 a number of leading lighting designers have been invited to the LEE Filters factory to create their own unique colours. The Designer Series of lighting filters is a direct result of the work undertaken by these designers.

Within the course of a day, each designer is able to solve a problem or create a colour for a specific mood or effect. Working closely with LEE's Research & Development team, designers take their ideas forward by mixing and blending dyes, enabling them to create new colours. Test samples are then manufactured for field trials and once the colour has passed the stringent LEE quality control process it is named by the designer and added to the Designer Series.

Peter Barnes



* 707 Ultimate Violet

Used in musical performances for general colour washes and set lighting.



* 729 Scuba Blue

Used in musical performances for a rear colour wash or set lighting.



* 721 Berry Blue

Used in musical performances for rear colour wash or set lighting.



* 797 Deep Purple

Used in musical performances for general colour washes and set lighting.

Tanya Burns



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.



508 Midnight Maya

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



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



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.



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.

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.



513 Ice And A Slice

A pale acidic spring yellow. For a sharp white wash



512 Amber Delight

A dark dirty orange.



514 Double G & T

Double 513, when only a double will do. Has a more acidic bite.

Paule Constable



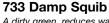
Dirtier than 730 Liberty Green, more orange, sympathetic with skin tones.



742 Bram Brown

Dirtier than 156 Chocolate, good for skin tones.

Dims well and doesn't go pink at low light levels.



A dirty green, reduces warmth. Good for cross lighting.



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

Chris Davey



712 Bedford Blue

A smoky warm blue. Good for skin tones.



748 Seedy Pink

A smoky pink. Good for tungsten on skin tones.



722 Bray Blue

A purer blue with very little red in it.

"A big thank you for a very interesting day. All the team at LEE clearly take great pride in your 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.



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.



736 Twickenham Green

A powerful green with depth, for music or light entertainment.



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.

the designer series

Chris Ellis



714 Elysian Blue

A new deeper version of 197 Alice Blue.



718 Half Shanklin Frost

202 Half CT Blue with frost to soften the beam of profile units.



717 Shanklin Frost

201 Full 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



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



735 Velvet Green

A beautiful background colour. Victorian melodrama. A night time green.



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

Peter Fisker



700 Perfect Lavender

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



727 QFD Blue

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



703 Cold Lavender

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



780 AS Golden Amber

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

Henrik Hambro



706 King Fals Lavender

A cold lavender.

very difficult to stop getting new ideas."



741 Mustard Yellow

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



710 Spir Special Blue

A cool industrial blue.



773 Cardbox Amber

Warm tint for skin tones.



740 Aurora Borealis Green

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



787 Marius Red

Nice deep full red. Rose leaf colour.

"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



799 Special KH Lavender

A deep lavender that brings out the UV.

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.



764 Sun Colour Straw Adds warmth, bright sunlight.

Adds warmin, bright sunlight



725 Old Steel Blue

763 Wheat

Adds warmth, sunlight.

Cool wash, useful for highlights.



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.



775 Soft Amber Key 2

Used for producing a warm key light colour. Flame retardant.



Used for producing a warm key light colour. Flame retardant.





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.

"After 20 years in lighting, I promise to never

throw a piece of colour on the stage again, now



* 738 JAS Green

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

I know what it takes to develop and make!

Andy Liddle

the designer series

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.

704 Lily

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

705 Lily Frost

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

"...l appreciate you finding the time to talk to designers such as myself about your products."

Durham Marenghi

720 Durham Daylight Frost

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

750 Durham Frost

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

790 Moroccan Pink

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

791 Moroccan Frost

Smoothes 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.

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.

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.

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

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

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.

David Whitehead

709 Electric Lilac

Provides good colour rendering which creates a sharp edge, adding a touch of drama.



767 Oklahoma Yellow

A rich blend of bright sunshine and warm ochre overtones.





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.



* 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.



793 Vanity Fair

A rich glamorous pink, good for use on special occasions.













quick rolls and lighting packs

quick rolls

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.



HT Quick Rolls are available as a special order.

lighting packs

Essential Toolkits for Lighting Control

Everything you need to control common lighting conditions.
Each pack contains a select assortment of 300mm x 300mm (12"x12") precut 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. (12 sheets)

No.	Name	-
106	Primary Red	
139	Primary Green	
119	Dark Blue	x2 each
010	Medium Yellow	eacn
790	Moroccan Pink	
181	Congo Blue	

Cosmetic Pack – Enhance skin tone by combining pale tints with subtle diffusion. (12 sheets)

No.	Name	\neg	
184	Cosmetic Peach		
187	Cosmetic Rouge		
188	Cosmetic Highlight		x2 each
186	Cosmetic Silver Rose		eacn
775	Soft Amber Key 2		
791	Moroccan Frost		

Diffusion Pack – Soften shadows, adjust contrast, shape light. (12 sheets)

No.	Name _	7
216	Full White Diffusion	
250	1/2 White Diffusion	
251	1/4 White Diffusion	x2
400	LEELux	each
410	Opal Frost	
253	Hampshire Frost _	

Daylight to Tungsten Pack – Convert daylight sources to tungsten. (12 sheets)

No.	Name —	1
204	Full CTO	
285	3/4 CTO	
205	1/2 CTO	x2 each
206	1/4 CTO	each
223	1/8 CTO	
208	Full CTO + .6ND Combo	

Tungsten to Daylight Pack – Convert tungsten light sources to daylight. (12 sheets)

No.	Name	\neg	
200	Double CTB		
201	Full CTB		
202	1/2 CTB		x2 each
203	1/4 CTB		each
218	1/8 CTB		
720	Durham Daylight Frost.		

Quick Location Pack – A variety of colour corrections, effect, and light shaping tools to control common lighting conditions. (24 sheets)

NO.	Name	_	
201	Full CTB		
202	1/2 CTB		
204	Full CTO		x2
205	1/2 CTO		each
216	Full White Diffusion		
250	1/2 White Diffusion		
210	.6 ND	=	
106	Primary Red		
181	Congo Blue		
738	JAS Green		
187	Cosmetic Rouge		
188	Cosmetic Highlight		x1
791	Moroccan Frost		each
775	Soft Amber Key 2		
720	Durham Daylight Frost		
270	LEE Scrim		
280	Black Foil		



Master Location Pack – Our largest variety of colour corrections, effect, and light shaping tools to provide the control you need to master any lighting condition. (36 sheets)

No.	Name	_
200	Double CTB	
201	Full CTB	
202	1/2 CTB	
203	1/4 CTB	
204	Full CTO	x2
205	1/2 CTO	each
206	1/4 CTO	
216	Full White Diffusion	
250	1/2 White Diffusion	
251	1/4 White Diffusion	
210	.6 ND	\exists
106	Primary Red	
126	Mauve	
181	Congo Blue	
738	JAS Green	
187	Cosmetic Rouge	
188	Cosmetic Highlight	
791	Moroccan Frost	x1
775	Soft Amber Key 2	each
720	Blue Durham Frost	
244	Plus Green	
245	1/2 Plus Green	
219	Fluorescent Green	
270		
280	Black Foil	
		4

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	,
015	Deep Straw	
020	Medium Amber	
024	Scarlet	
026	Bright Red	
048	Rose Purple	x1
068	Sky Blue	each
116	Medium Blue-Green	
181	Congo Blue	
323	Jade	
325	Mallard Green	
328	Follies Pink	
343	Special Medium Lavender	

Name Medium Red 027 Moss Green 089 105 Orange Magenta Bright Blue 141 180 Dark Lavender Alice Blue

328	Follies Pink
735	Velvet Green
744	Dirty White
781	Terry Red
797	Deep Purple

DJ Pack 2

Inspiration Pack 1			
No.	Name	_	
009	Pale Amber Gold		
058	Lavender		х3
143	Pale Navy Blue		x3 each
195	Zenith Blue		

Inspiration Pack 2

No.	Name	_	
063	Pale Blue		
106	Primary Red		x3 each
735	Velvet Green		each
764	Sun Colour Straw		

Rock n' Roll Pack 1

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

Rock n' Roll Pack 2

No.	Name
048	Rose Purple
132	Medium Blue
227	Forest Green

341 Plum



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 _	_
101	Yellow	
116	Medium Blue Green	
118	Light Blue	
122	Fern Green	
126	Mauve	x1
128	Bright Pink	each
129	Heavy Frost	eacii
144	No Colour Blue	
179	Chrome Orange	
180	Dark Lavender	
192	Flesh Pink	
228	Brushed Silk	

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

No.	Name	
027	Medium Red	
101	Yellow	
105	Orange	
116	Medium Blue Green	
120	Deep Blue	
126	Mauve	x1
129	Heavy Frost	each
135	Deep Golden Amber	
139	Primary Green	
181	Congo Blue	
182	Light Red	
332	Special Rose Pink	

Studio Pack - a range of technical filters for basic light source control

No.	Name	\neg
201	Full CTB	
281	Three Quarters CTB	x2
204	Full CTO	each
285	Three Quarters CTO	
298	0.15 Neutral Density	
209	0.3 Neutral Density	x1
210	0.6 Neutral Density	each
211	0.9 Neutral Density	

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

No.	Name	
164	Flame Red	
124	Dark Green	
119	Dark Blue	
176	Loving Amber	
174	Dark Steel Blue	
138	Pale Green	x1
101	Yellow	eacl
115	Peacock Blue	
128	Bright Pink	
007	Pale Yellow	
117	Steel Blue	
035	Light Pink	

Light Tint Pack - paler shades to give more subtle effects and to filter white light from the lamp

No.	Name		
003	Lavender Tint		
007	Pale Yellow		
009	Pale Amber Gold		
035	Light Pink		
061	Mist Blue		
063	Pale Blue		x1
103	Straw		each
154	Pale Rose		
162	Bastard Amber		
169	Lilac Tint		
213	White Flame Green		
255	Hollywood Frost	_	

Studio Plus Pack - a range of technical filters for fine control of light sources

		Ü	
No.	Name	_	
202	Half CTB		
203	Quarter CTB		
218	Eighth CTB	x2 each	
205	Half CTO	eacn	
206	Quarter CTO		
223	Eighth CTO		

Tint Pack - lighting filters which complement the original Colour Magic pack to create alternative shades

No.	Name	
002	Rose Pink	
048	Rose Purple	
880	Lime Green	
100	Spring Yellow	
108	English Rose	
131	Marine Blue	x1
157	Pink	eacl
164	Flame Red	
174	Dark Steel Blue	
228	Brushed Silk	
250	Half White Diffusion	
344	Violet	

Arc Correction Pack - a selection of technical filters for colour correction

No.	Name	
205	Half CTO	x2 each
206	Quarter CTO	each
219	LEE Fluorescent Green	
241	LEE Fluorescent 5700K	x1
242	LEE Fluorescent 4300K	each
243	LEE Fluorescent 3600K	
244	Full Plus Green	x2
245	Half Plus Green	each

the science behind the art

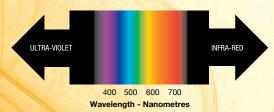
Light

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.

White Light Red Orange Vellow Green Blue Indigo Violet

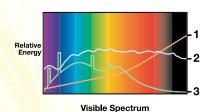
Each wavelength within the visible spectrum is recognised by our eyes as providing a particular colour sensation, the diagram below clearly indicates the visible colours and their corresponding wavelengths. White light consists of all of the visible wavelengths, present in equal amounts.



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.



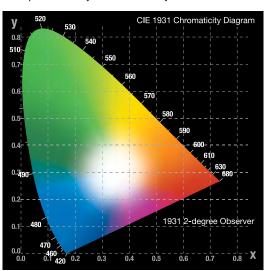
- 1 Tungsten
- 2. Daylight
- 3. Fluorescent

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.

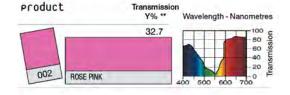
The HUE and SATURATION of any colour can be represented by its position on a chromaticity diagram, as seen below. The diagram contains all visible colours, and all possible densities of these colours, in a two dimensional configuration. Pale colours in the centre and saturated versions of those same 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 the booklet at the back of 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.



54.1	0.27	0.281	0.269
75.7	0.12	0.303	0.300
59.5	0.23	0.294	0.281

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%.

Υ%	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 lots of different areas, and our staff will readily offer the practical knowledge that they have gained as to how to prolong the lifetime of any particular filter.

728



product effect/colour

 $\begin{array}{ccc} \text{Transmission Absorption Chromaticity Co-ordinates} & \text{Y\%} & \text{x} & \text{y} \\ \text{(Measured to source C, Correlated Colour Temperature of 6774K)} \end{array}$

			(weasured	to source C,	Correlated C	olour rempera	ature or 67741
	048	Rose Purple	Good for emulating evening. Great backlight.	13.9	0.86	0.288	0.167
	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.	21.5	0.67	0.301	0.204
	797*	Deep Purple	Used in musical performances for general colour washes and set lighting.	2.3	1.65	0.235	0.065
	049	Medium Purple	A strong cheerful glow, for cycloramas and pantomimes.	4.5	1.35	0.287	0.102
	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.	1.8	1.74	0.218	0.109
	126	Mauve	Good for back lighting. Dark magenta / purple adds drama, mood.	4.1	1.38	0.287	0.082
	798	Chrysalis Pink	A new deep lavender with a dash of rose blusher.	3.8	1.43	0.190	0.060
	701	Provence	The colour of the Lavender fields of the South of France. A redder version of 180 for use on cameras balanced to tungsten sources.	9.4	1.03	0.199	0.098
	345	Fuchsia Pink	Musical revue, pantomime, sultry scenes.	15.5	0.81	0.252	0.156
	703	Cold Lavender	Made for front/key lighting perfect together with Lee 152.	20.4	0.69	0.255	0.181
	052*	Light Lavender	General area side lights. Great for basic followspot colour. Excellent back light.	33.0	0.48	0.259	0.218
	704	Lily	A cool lavender with little red content. Good for romantic evening exteriors.	40.0	0.40	0.267	0.221
	170	Deep Lavender	Set lighting - discos - theatres.	25.7	0.59	0.278	0.211
	136	Pale Lavender	Pantomime, ballroom sets, enhances dark skin tones in follow spots.	43.2	0.36	0.288	0.254
	169	Lilac Tint	Pale lavender. Good for almost white light with a cool tint.	59.5	0.23	0.294	0.281
	702	Special Pale Lavender	A cold lavender when used with a full tungsten source, but warms as the source is dimmed. Good as a fill for slow sunset fades.	54.1	0.27	0.281	0.269
	137	Special Lavender	Moonlight, musical / romantic scenes, enhances skin tones.	26.4	0.58	0.231	0.175
	344	Violet	Dusk effect, good skin tones, romantic effect.	20.0	0.70	0.213	0.175
	194	Surprise Pink	With 193 for musicals.	22.3	0.65	0.240	0.183
	058*	Lavender	Excellent backlight. Creates a new dimension.	8.9	1.05	0.212	0.099
	180	Dark Lavender	Pleasing effects for theatrical lighting, backlighting.	6.6	1.18	0.191	0.072
	343	Special Medium Lavender	Theatre and T.V. effect lighting, backlighting.	6.0	1.22	0.182	0.081
	700	Perfect Lavender	Good for backlighting and romantic atmospheres.	4.8	1.32	0.177	0.070
	181*	Congo Blue	Looks like black light when used with a fluorescent source. Great effect colour. Very saturated.	0.8	2.10	0.158	0.035
	707*	Ultimate Violet	Used in musical performances for general colour washes and set lighting.	2.0	1.69	0.170	0.042
	706	King Fals Lavender	A cold lavender.	5.5	1.26	0.186	0.091
	508	Midnight Maya	A rich, sultry blue. Like Congo Blue, but allowing greater light transmission so more maintenance friendly - fewer gel changes.	3.0	1.53	0.164	0.061
	799	Special K.H. Lavender	A deep lavender that brings out the UV.	1.4	1.86	0.158	0.035
* Also	available ir	High Temperature (F	IT) vorcion				

^{*} Also available in High Temperature (HT) version

colour range

product

effect/colour

		(Measured	to source C,	Correlated Co	lour Tempera	ture of 6774K)
071*	Tokyo Blue	Deep blue, use for midnight scenes, cycloramas.	1.0	2.00	0.151	0.030
713*	J.Winter Blue	A very dark blue with a high UV content. Good when used in high concentrations for a moody and powerful stage colour wash.	1.1	1.97	0.148	0.037
709	Electric Lilac	Provides good colour rendering which creates sharp edges, adding a touch of drama.	34.0	0.47	0.238	0.227
142	Pale Violet	Moonlight, cycloramas, highlighting pot plants.	20.1	0.70	0.209	0.148
199	Regal Blue	A deep lavender blue, that strongly enhances skin tones.	5.4	1.26	0.161	0.070
710	Spir Special Blue	A cool industrial blue.	12.2	0.91	0.180	0.133
198	Palace Blue	Dark moonlight - romantic evening.	1.7	1.78	0.159	0.066
716*	Mikkel Blue	A romantic blue to produce a night effect.	3.9	1.4	0.146	0.054
195*	Zenith Blue	Moonlight for dark sets, cycloramas.	2.7	1.56	0.142	0.046
715*	Cabana Blue	A deep blue that still has enough transmission to work encouragingly well on television.	6.8	1.17	0.152	0.075
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.	7.0	1.16	0.158	0.100
721*	Berry Blue	Used in musical performances for rear colour wash, or set lighting.	6.5	1.19	0.147	0.084
120*	Deep Blue	Pleasing effect for theatrical lighting.	2.1	1.68	0.149	0.051
363*	Special Medium Blue	Cool moonlight, mood effects.	4.2	1.37	0.141	0.070
085*	Deeper Blue	Deep warm blue. Good for back and side lighting.	2.5	1.60	0.143	0.065
119*	Dark Blue	Good for mood effects created by backlight and sidelight. Creates great contrast.	3.1	1.51	0.142	0.054
714	Elysian Blue	A new deeper version of Alice blue.	6.8	1.17	0.151	0.097
079*	Just Blue	Good colour mixing blue. Great for cyclorama lighting.	5.6	1.25	0.145	0.072
722	Bray Blue	A purer blue with very little red in it.	5.2	1.28	0.139	0.086
075	Evening Blue	Good for night scenes, romantic moonlight.	12.5	0.90	0.158	0.117
525	Argent Blue	Great for a foreboding cold winter's night, but allows enough light transmission to be useful for general illuminance too.	17.1	0.77	0.171	0.143
197*	Alice Blue	Great for cyclorama lighting. Deep blue skies.	10.4	0.98	0.164	0.118
712	Bedford Blue	A smoky warm blue. Good for skin tones.	17.9	0.75	0.183	0.158
200	Double CTB	Converts tungsten to daylight.	16.2	0.79	0.179	0.155
719	Colour Wash Blue	To allow low intensity tungsten to hold a cold/blue feel.	19.3	0.71	0.188	0.171
366	Cornflower	Seasonal mood lighting, pale moonlight.	17.7	0.75	0.193	0.190
711	Cold Blue	To give a cold/grey H.M.I. effect from a tungsten source. Will also help blend when using both tungsten and HMI sources.	14.4	0.84	0.223	0.198
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.	23.3	0.63	0.200	0.187

product

effect/colour

		(Measured	to source C,	Correlated C	olour Temper	ature of 6774k
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	0.246	0.249
708	Cool Lavender	For use as a warmer tint without turning yellow and to recreate the colour of fluorescent lighting.	43.4	0.36	0.257	0.260
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.	9.5	1.02	0.230	0.223
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.	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.	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
053*	Paler Lavender	Subtle cool wash.	62.2	0.21	0.284	0.284
502	Half New Colour Blue	A lighter correction in the NCB series.	61.6	0.21	0.276	0.281
503	Quarter New Colour Blue	The lightest correction in the NCB series.	74.5	0.13	0.293	0.299
203	Quarter CTB	Converts tungsten to daylight.	69.2	0.16	0.285	0.294
061*	Mist Blue	Night scenes, cool wash.	62.4	0.21	0.268	0.284
063*	Pale Blue	Cool front light wash, good for creating an overcast look for cold weather.	54.4	0.26	0.252	0.270
202	Half CTB	Converts tungsten to daylight.	54.9	0.26	0.261	0.273
281	Threequarters CTB	Converts tungsten to daylight.	45.5	0.35	0.239	0.258
201	Full CTB	Converts tungsten to photographic daylight.	34.0	0.47	0.228	0.233
283	One and a Half CTB	Converts tungsten to daylight.	24.4	0.61	0.201	0.188
174	Dark Steel Blue	Set lighting - creates good moonlight shadows.	30.0	0.52	0.204	0.205
161	Slate Blue	Pure medium blue. Good for skies, moonlight, dusk.	24.8	0.61	0.176	0.176
068	Sky Blue	Morning skin tones, night sky. Cyclorama lights.	13.4	0.87	0.151	0.128
132*	Medium Blue	Deep moonlight. Great for colour mixing.	8.3	1.08	0.137	0.110
165	Daylight Blue	Moonlight.	20.0	0.70	0.159	0.158
352	Glacier Blue	Cold blue, good for cool atmospheric mood setting.	23.4	0.63	0.171	0.190
143	Pale Navy Blue	Moonlight, cyclorama night effect.	16.2	0.79	0.170	0.205
196	True Blue	Moonlight.	26.6	0.57	0.175	0.197
CL119	Cool LED Dark Blue	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.	4.5	1.35	0.120	0.167
727	QFD Blue	Good for backlighting and swimming pool effect.	6.6	1.18	0.109	0.210
141*	Bright Blue	Very dramatic when used as moonlight.	18.6	0.75	0.129	0.159
183	Moonlight Blue	Moonlight, cycloramas.	18.7	0.73	0.128	0.168
						_

colour range

roduct εffect/colour

 $\begin{array}{ccc} \text{Transmission Absorption Chromaticity Co-ordinates} & \text{$Y\%$} & \text{x} & \text{y} \\ \text{$(\textit{Measured to source C, Correlated Colour Temperature of 6774K)}} \end{array}$

(Measured to source C, Correlated Colour Temperature of 67						
118*	Light Blue	Strong night effect.	22.2	0.65	0.149	0.113
724	Ocean Blue	Useful at low levels of light, dull skies, - moonlight.	36.2	0.44	0.189	0.222
144	No Colour Blue	Clean blue with hints of green. Good for moonlight and side light.	32.4	0.49	0.183	0.228
CL132	Cool LED Medium Blue	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.	11.4	0.94	0.126	0.228
725	Old Steel Blue	Cool wash, useful for highlights.	56.2	0.24	0.239	0.270
117	Steel Blue	Good for cool washes. Adds a pale green tint. Great for emulating icy weather on stage.	54.7	0.26	0.223	0.278
140	Summer Blue	Good for light midday sky. Light blue tinted wash.	41.4	0.38	0.201	0.245
353	Lighter Blue	Daylight effects.	41.0	0.39	0.193	0.246
172*	Lagoon Blue	Floodlit warm wash - underwater scenes - ballet.	25.4	0.60	0.141	0.220
354	Special Steel Blue	Cooling blue-green wash for stage and set lighting.	39.2	0.41	0.173	0.265
729*	Scuba Blue	Used in musical performances for a rear colour wash, or set lighting.	8.7	1.06	0.110	0.241
116*	Medium Blue- Green	Pleasing effect for theatrical lighting.	16.5	0.78	0.113	0.280
115*	Peacock Blue	Pleasing effect on sets, cyclorama cloths, back lighting (e.g. ice rinks, galas, etc).	35.2	0.46	0.134	0.296
131	Marine Blue	Romantic moonlight - ballet - underwater scenes.	41.3	0.38	0.199	0.305
322	Soft Green	Cool green, use for gobo cover, pantomime, cycloramas.	38.3	0.42	0.201	0.364
CL118	Cool LED Light Blue	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.	25.8	0.59	0.150	0.316
323	Jade	Use for underwater scenes, cycloramas, backlighting.	32.0	0.50	0.165	0.367
CL115	Cool LED Peacock Blue	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.	34.1	0.47	0.177	0.416
CL116	Cool LED Medium Blue-Green	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.	17.9	0.75	0.126	0.400
325	Mallard Green	Good for mood setting, undergrowth.	7.7	1.11	0.112	0.412
735	Velvet Green	A beautiful background colour. Victorian melodrama. A night-time green.	11.5	0.93	0.103	0.536
124*	Dark Green	Cycloramas - good for back lighting.	29.7	0.53	0.123	0.586
327	Forest Green	Deep green, sinister forest scenes, cycloramas, backlighting.	4.2	1.38	0.162	0.496
219	LEE Fluorescent Green	General tungsten to fluorescent correction for use when fluorescent colour temp is unknown, to provide medium correction.	31.0	0.51	0.219	0.334
241	LEE Fluorescent 5700 Kelvin	Converts tungsten to fluorescent light of 5700K (cool white/daylight).	27.4	0.56	0.231	0.290
728	Steel Green	Approaching storms. Overcast days. Cold steely light. Malevolent moonlight.	45.9	0.33	0.256	0.302
504	Waterfront Green	Designed for period key light and modern urban horizons.	58.2	0.24	0.271	0.317
730	Liberty Green	A good green for creating mystery and suspense.	67.5	0.17	0.277	0.330

product

effect/colour

		(ivieasured	to source C,	Correlated C	olour Lemper	ature of 6774r
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
213	White Flame Green	Corrects white flame carbon arcs by absorbing ultra violet.	80.0	0.10	0.317	0.359
246	Quarter Plus Green	Approximately equivalent to CC075 green.	84.6	0.07	0.315	0.337
731	Dirty Ice	A flat green with a fluorescent feel. Sympathetic to skin tones.	63.8	0.20	0.293	0.339
733	Damp Squib	A dirty green. Reduces warmth but not towards blue. Good for cross lighting.	63.6	0.20	0.312	0.351
245	Half Plus Green	Approximately equivalent to CC15 green.	81.7	0.08	0.319	0.355
244	LEE Plus Green	Approximately equivalent to CC30 green.	74.2	0.12	0.324	0.388
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.	80.5	0.09	0.334	0.395
138	Pale Green	Good with gobos for wooded scenes.	79.9	0.10	0.331	0.433
088	Lime Green	Use with gobos for leafy glades - pantomimes - slightly sinister atmosphere.	70.9	0.15	0.356	0.511
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.	72.4	0.14	0.370	0.520
738*	JAS Green	A rich yellowish green: useful as a concert stage wash where darker skin tones, costume and set are a consideration.	52.3	0.28	0.315	0.587
121*	LEE Green	Dense foliage, tropical or woodlands effect.	64.0	0.20	0.302	0.534
122*	Fern Green	Cycloramas - good for mood effect.	51.5	0.28	0.234	0.543
089*	Moss Green	Mood creator. Used with gobos, creates a great foliage effect.	29.8	0.53	0.259	0.547
139*	Primary Green	Set lighting, cycloramas.	11.9	0.92	0.196	0.712
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	13.0	0.89	0.196	0.714
090*	Dark Yellow Green	Highlighting for forest effects.	10.9	0.96	0.184	0.641
736	Twickenham Green	A powerful green with depth, for music or light entertainment.	7.2	1.14	0.175	0.740
740	Aurora Borealis Green	Primary jungle colour. Removes some red and blue. Works best with Daylight bulbs. Sodium lamp effect.	3.7	1.43	0.337	0.617
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
230	Super Correction LCT Yellow	Converts yellow carbon arc (of low colour temperature) to tungsten.	41.9	0.38	0.367	0.368
746	Brown	To give a murky, dirty feel to tungsten. A darker, less pink chocolate.	1.5	1.82	0.498	0.437
653	Lo Sodium	Used on tungsten to create a Low Pressure Sodium look.	2.4	1.62	0.540	0.443

colour range

product

effect/colour

 $\begin{array}{ccc} \text{Transmission Absorption Chromaticity Co-ordinates} & \text{Y}\% & \text{x} & \text{y} \\ \text{(Measured to source C, Correlated Colour Temperature of 6774K)} \end{array}$

			(Measured	to source C, (Correlated Co	lour Tempera	ture of 6774K)
	511	Bacon Brown	An intense and warm deep brown. Designed to recreate the pigment browns used by Francis Bacon in some of his paintings.	1.6	1.79	0.563	0.406
	742	Bram Brown	A dirty brown with green /cool quality. Good for skin tones, dims well without going too pink.	11.5	0.94	0.430	0.423
	208	Full CTO +.6ND	Converts daylight to tungsten 6500K to 3200K and reduces light 2 stops.	15.6	0.81	0.442	0.394
	207	Full CTO +.3ND	Converts daylight to tungsten 6500K to 3200K and reduces light 1 stop.	32.5	0.49	0.435	0.386
	232	Super Correction W.F. Green to Tungsten	Converts white flame arc to 3200K, for use with tungsten film.	37.4	0.43	0.423	0.385
	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.	55.4	0.26	0.387	0.369
	156	Chocolate	Warms light and reduces the intensity.	26.4	0.58	0.380	0.363
	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.	49.1	0.31	0.402	0.368
	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.	44.2	0.35	0.415	0.366
	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.	41.5	0.38	0.428	0.371
	237	CID (to Tungsten)	Converts CID to 3200K, for use with tungsten film.	38.5	0.41	0.430	0.365
	747	Easy White	Primarily developed for fluorescents to ensure warm, comfortable light and flattering skin tones.	31.1	0.51	0.389	0.344
	238	CSI (to Tungsten)	Converts CSI to 3200K, for use with tungsten film.	29.8	0.53	0.372	0.331
	152	Pale Gold	Interior lighting to enhance skin tones.	70.7	0.15	0.370	0.332
	162	Bastard Amber	Warm white, warm wash, lamplight.	77.7	0.11	0.348	0.328
	506	Marlene	Flattering skin tone filter without the comedy 'pink'. Also useful as Indian summer at dusk / sepia type effect.	67.3	0.17	0.358	0.344
	009*	Pale Amber Gold	Perfect warm front light for any skin tone.	71.1	0.15	0.376	0.371
	205	Half CTO	Converts daylight to tungsten light.	70.8	0.15	0.374	0.364
	442	Half CT Straw	Converts 6500K to 4300K - daylight to tungsten light with yellow bias.	71.2	0.15	0.370	0.378
	013*	Straw Tint	Warmer than other straw colours. Good sunlight effect when used in contrast with ambers and blues.	72.1	0.14	0.392	0.392
	764	Sun Colour Straw	Adds warmth, bright sunlight.	80.5	0.09	0.365	0.380
	103	Straw	Pale sunlight through window effect - warm winter effect.	81.6	0.09	0.336	0.359
	206	Quarter CTO	Converts daylight to tungsten light.	79.1	0.10	0.346	0.340
	443	Quarter CT Straw	Converts 6500K to 5100K - daylight to tungsten light with yellow bias.	79.8	0.10	0.338	0.349
	763	Wheat	Adds warmth, sunlight.	84.3	0.07	0.343	0.357
	212	LCT Yellow (Y1)	Reduces colour temperature of low carbon arcs to 3200K.	88.7	0.05	0.340	0.363
	007*	Pale Yellow	Sunlight.	85.4	0.07	0.339	0.363
	765	LEE Yellow	Useful for producing a strong sunlight effect.	80.2	0.10	0.389	0.412
* AI	ovoilable i	n High Tomporatura (H	T)i				

product

effect/colour

		(ivieasured	to source C,	Correlated C	olour remper	ature of 6774r
102	Light Amber	Warm yellow colour. Great for candlelight or warm bright sunlight effects.	75.1	0.12	0.434	0.440
550	ALD Gold	To be used for ALD's 50th Anniversary	46.8	0.33	0.471	0.461
513	Ice And A Slice	A pale acidic spring yellow. For a sharp white wash.	87.1	0.06	0.380	0.447
514	Double G & T	Double 513, when only a double will do. Has a more acidic bite.	87.3	0.06	0.403	0.486
100	Spring Yellow	Sunlight wash - use with gobos, disco, dark skin tones.	84.2	0.08	0.410	0.502
010*	Medium Yellow	Pure bright yellow. Not good for acting areas but great for special effects and accents.	86.5	0.06	0.426	0.509
101	Yellow	Sunlight and window effect - pleasant in acting areas.	80.0	0.10	0.451	0.507
767	Oklahoma Yellow	Arich blend of bright sunshine and warm ochre overtones.	68.9	0.16	0.481	0.501
104	Deep Amber	Good for sunlight effect, accents, side light. Be careful of skin tones under the reddish tint of this colour.	63.9	0.20	0.496	0.462
015*	Deep Straw	Warm amber light. Good for effects such as candlelight and fire.	60.8	0.22	0.517	0.460
768	Egg Yolk Yellow	A bold strong chemical yellow. Based on 179 but not as red.	55.6	0.26	0.522	0.469
179	Chrome Orange	Combination of 1/2 CTO and double strength 104, sunlight	54.0	0.27	0.520	0.460
020*	Medium Amber	Afternoon sunlight, candlelight, great side light.	50.7	0.30	0.523	0.419
770	Burnt Yellow	A colour that feels warm and dense on camera, a balance between 179 and 105.	47.7	0.32	0.545	0.447
105	Orange	Mainly light entertainment, functions. Fire effect if used with 106, 166, 104.	41.3	0.38	0.563	0.428
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.	38.1	0.42	0.558	0.425
777	Rust	A vivid rust colour effect.	24.3	0.61	0.576	0.416
512	Amber Delight	A dark dirty orange.	11.5	0.94	0.595	0.390
652	Urban Sodium	Used on tungsten to create the orange glow associated with Sodium light	21.9	0.66	0.535	0.399
287	Double CTO	Converts daylight to tungsten.	40.9	0.39	0.514	0.424
286	One and Half CTO	Converts daylight to tungsten.	48.2	0.32	0.478	0.422
204	Full CTO	Converts daylight to tungsten light.	55.4	0.26	0.437	0.392
441	Full CT Straw	Converts 6500K to 3200K - daylight to tungsten light with yellow bias.	57.3	0.24	0.426	0.407
744	Dirty White	Correct a daylight source to an off white tungsten source. Used with a tungsten source provides a "dingy" effect like a smoky bar.	57.9	0.24	0.421	0.412
285	Threequarters CTO	Converts daylight to tungsten light.	61.3	0.21	0.400	0.387
236	HMI (to Tungsten)	Converts HMI to 3200K, for use with Tungsten film.	58.2	0.24	0.426	0.376
604	Full CT Eight Five	Converts daylight to tungsten with a red bias.	55.9	0.25	0.422	0.389
651	Hi Sodium	Used on tungsten to create a High Pressure Sodium look.	48.8	0.31	0.444	0.396

colour range

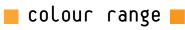
roduct εffect/colour

		(Measured	to source C, (Correlated Co	olour Tempera	ture of 6774K
017	Surprise Peach	Skin tones - mood light.	19.6	0.71	0.439	0.372
134	Golden Amber	Great for emulating a late in the day sunset. Side lighting, cyclorama lighting.	37.8	0.42	0.501	0.371
147	Apricot	Sunrise, sunset, lamplight.	53.0	0.28	0.446	0.381
776	Nectarine	Romantic sunset. Period pieces.	52.9	0.27	0.424	0.368
773	Cardbox Amber	Warm tint for skin tones.	60.2	0.22	0.400	0.351
108	English Rose	Warm tint wash - dark flesh tones - softer skin tones.	57.1	0.24	0.412	0.352
008*	Dark Salmon	Enhances dark skin tones, sunsets, ballroom sets.	35.4	0.45	0.498	0.347
025	Sunset Red	Warm stage wash, TV studio wash, sunset effect.	26.4	0.58	0.566	0.359
779	Bastard Pink	Deep sunset. Useful on dark skin tones.	38.8	0.41	0.501	0.336
CL147	Cool LED Apricot	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.	27.3	0.56	0.551	0.382
158	Deep Orange	Fire effect.	29.9	0.52	0.588	0.403
021*	Gold Amber	Great for sunsets, cyclorama lighting and fire effects.	31.3	0.51	0.586	0.396
778*	Millennium Gold	Useful for lighting architecture: it produces a rich amber when used on a tungsten source, or a much cooler effect when used on a HMI lamp.	27.3	0.56	0.606	0.382
CL105	Cool LED Orange	For use on cool white LED with C.T. >6000K to produce a warm medium amber. Similar to (LEE 105 on a tungsten lamp).	26.4	0.58	0.614	0.385
780	AS Golden Amber	A strong colour good for backlighting.	25.8	0.59	0.623	0.376
022*	Dark Amber	Backlight.	23.9	0.62	0.647	0.339
CL158	Cool LED Deep Orange	For use on cool white LED with C.T. >6000K to produce a sunset like glow. Similar to LEE 158 on a tungsten lamp.	23.3	0.63	0.631	0.367
135	Deep Golden Amber	Fire effect.	19.5	0.71	0.667	0.326
781	Terry Red	A strong amber red that works well when used against reds, and dark ambers, in wash combinations, and on cycloramas.	19.1	0.72	0.643	0.348
507	Madge	Denser, saturated Orange version of L135 avoiding 'pinky red'. Good for backlight, instruments, part of a sunset palette, and generating a party atmosphere.	13.6	0.87	0.662	0.337
019*	Fire	Strong red/amber. Good for fire effects.	18.9	0.72	0.664	0.310
164	Flame Red	Special effects and great for fire effects.	18.0	0.75	0.659	0.302
CL164	Cool LED Flame Red	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.	13.6	0.87	0.669	0.317
182	Light Red	Theatre and television effect lighting, cycloramas.	11.0	0.96	0.670	0.313
106	Primary Red	Strong red effect, cycloramas.	9.3	1.03	0.699	0.285
CL106	Cool LED Primary Red	For use on cool white LED with C.T. >6000K to produce a warm primary red. Similar to LEE 106 on a tungsten lamp.	8.0	1.10	0.697	0.303
CL182	Cool LED Light Red	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.	8.4	1.08	0.696	0.303
789	Blood Red	For a deep saturated red effect. Used when a strong vivid red effect is required.	1.2	1.91	0.677	0.314

product

effect/colour

		(Measured	to source C,	Correlated C	olour Lemper	ature of 6774k
787	Marius Red	Nice deep full red. Rose leaf colour.	1.0	2.00	0.714	0.283
027*	Medium Red	Cyclorama lighting, side lighting, footlights. Good for colour mixing.	3.6	1.44	0.712	0.261
029	PLASA Red	Fire effect, musicals, cycloramas.	5.8	1.24	0.693	0.303
026*	Bright Red	Vibrant red, good for cyclorama lighting.	8.6	1.06	0.712	0.281
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.	8.9	1.05	0.672	0.291
024*	Scarlet	Pantomimes, ballroom sets, fire effects.	18.7	0.73	0.561	0.296
166	Pale Red	Cycloramas.	25.0	0.60	0.532	0.263
157	Pink	Dance sequences (useful for softening white costumes without affecting skin tones).	36.4	0.44	0.457	0.272
193	Rosy Amber	Warm, emotional, romantic.	36.0	0.44	0.473	0.279
107	Light Rose	Good for general washes. Good for followspots.	48.0	0.32	0.407	0.284
109	Light Salmon	Interesting backlight.	54.9	0.26	0.391	0.295
176	Loving Amber	Backlight and general area, great for sunrise, warms skin tones.	50.2	0.30	0.407	0.321
790	Moroccan Pink	A rich natural pink, good for producing late afternoon sun effects.	58.1	0.24	0.378	0.324
004*	Medium Bastard Amber	Naturally enhances skin tones.	64.1	0.19	0.370	0.335
151	Gold Tint	Pleasing effect for theatrical lighting.	69.4	0.16	0.361	0.321
154	Pale Rose	Pleasing effect for theatrical lighting, lamplight.	73.4	0.14	0.350	0.318
153	Pale Salmon	Backlighting in conjunction with white light.	64.9	0.19	0.362	0.303
035*	Light Pink	Musical reviews. Warm wash.	61.3	0.21	0.335	0.289
247	LEE Minus Green	Approximately equivalent to CC30 magenta.	57.8	0.22	0.325	0.279
039	Pink Carnation	Soft, cool pastel pink, good for backlighting and general colourwash.	60.2	0.22	0.320	0.268
794	Pretty 'n Pink	Creates warm and soft effects.	46.8	0.33	0.335	0.251
110	Middle Rose	Pleasing effects for theatrical lighting.	47.5	0.32	0.351	0.249
036*	Medium Pink	Good for general washes. Side lighting.	45.4	0.34	0.360	0.268
192	Flesh Pink	Musical and pantomime key lighting.	34.9	0.46	0.410	0.237
111	Dark Pink	Good for cycloramas.	31.9	0.50	0.389	0.215
002	Rose Pink	Strong pink wash cycloramas	32.7	0.50	0.328	0.202
328	Follies Pink	Dramatic stage lighting.	21.6	0.67	0.335	0.180
795	Magical Magenta	Rich mixture of red and pinks.	13.1	0.88	0.327	0.138



product

effect/colour

 $\label{eq:Transmission Absorption Chromaticity Co-ordinates} Y\% & x & y \\ \textit{(Measured to source C, Correlated Colour Temperature of 6774K)} \\$

_		(ivieasured	to source c, t	Jorrelated Co	nour rempera	ture of 6774K,
128	Bright Pink	Created for use as back lighting, side lighting. Good for "specials". Great for musicals.	13.7	0.86	0.401	0.151
793	Vanity Fair	A rich glamorous pink, good for use on special occasions.	12.0	0.92	0.419	0.170
332	Special Rose Pink	Pantomimes, light entertainment etc. Strong stage wash.	10.5	0.98	0.465	0.193
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.	5.2	1.28	0.504	0.215
148	Bright Rose	Fire effects, musicals.	14.4	0.84	0.482	0.238
046*	Dark Magenta	Very strong pink, good for back lighting.	6.0	1.22	0.572	0.223
113	Magenta	Very strong - used carefully for small areas on set.	10.9	0.96	0.563	0.217
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.	12.2	0.91	0.570	0.263
127	Smokey Pink	Cycloramas - set lighting, discos.	12.0	0.92	0.397	0.265
748	Seedy Pink	A smoky pink. Good for tungsten on skin tones.	14.4	0.84	0.373	0.263
341	Plum	Romantic, atmospheric set lighting.	19.4	0.71	0.309	0.256
248	Half Minus Green	Approximately equivalent to CC15 magenta.	72.0	0.14	0.317	0.297
249	Quarter Minus Green	Approximately equivalent to CC075 magenta.	82.4	0.08	0.312	0.307
279	Eighth Minus Green	Provides very slight magenta correction.	86.5	0.06	0.312	0.311
003	Lavender Tint	Subtle cool wash for stage and studio lighting.	75.7	0.12	0.303	0.300
218	Eighth CTB	Converts tungsten to daylight.	81.3	0.09	0.299	0.307
278	Eighth Plus Green	Provides very slight green cast.	87.7	0.06	0.313	0.327
159	No Colour Straw	Warm effect, sunlight.	89.4	0.05	0.325	0.337
223	Eighth CTO	Converts daylight to tungsten light.	85.2	0.07	0.328	0.332
444	Eighth CT Straw	Converts 6500K to 5700K - daylight to tungsten light with yellow bias.	83.1	0.08	0.323	0.332
226	LEE UV	Transmission of less than 50% at 410nms.	91.5	0.04	0.314	0.321
130	Clear	Used in animation and projection work.	95.0	0.02	0.311	0.317

coloured frosts

product	effect/colour	Transmission Y% easured to source	n Absorption C, Correlated (x	у
791 [#] Moroccan Frost	Smoothes PAR or flood washes of large areas. Useful for houselights; good for interior colour washes.	57.2	0.24	0.376	0.322
749 [#] Hampshire Rose	Combines flesh tone warmer 154 with some Hampshire Frost.	74.0	0.13	0.339	0.318
774 Soft Amber Key 1	Used for producing a warm key light colour.	70.6	0.15	0.366	0.348
775 Soft Amber Key 2	Used for producing a warm key light colour.	58.4	0.23	0.409	0.363
705 [#] Lily Frost	Smoothes PAR or flood washes of large areas. Useful for houselights; a good colour wash for evening events.	38.5	0.42	0.264	0.217
720 ^a Durham Daylight Frost	Smoothes PAR or flood washes of large areas. Useful for houselights; good for entrances from natural light.	32.3	0.49	0.216	0.209
717 [#] Shanklin Frost	201 with frost to soften the beam of profile units.	37.6	0.43	0.227	0.225
718 [#] Half Shanklin Frost	202 with frost to soften the beam of profile units.	56.3	0.25	0.263	0.270
221 Blue Frost	Used for soft light effects with the addition of 218.	42.0	0.38	0.312	0.316
217 ^a Blue Diffusion	As White Diffusion but with the addition of 218.	36.0	0.44	0.312	0.317
224 [*] Daylight Blue Frost	Used for soft light effects with the addition of tungsten correction 201.	22.6	0.65	0.235	0.219
225 [#] Neutral Density Frost	Used for soft light effects with the addition of 0.6 Neutral Density.	25.0	0.60	0.318	0.326

[#] Non-Flame Retardant product

cosmetic range

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

numerical listing

002	ROSE PINK	127	SMOKEY PINK	203	1/4 CT BLUE
003	LAVENDER TINT	128	BRIGHT PINK	204	FULL CT ORANGE
004*	MEDIUM BASTARD AMBER	129	HEAVY FROST	205	1/2 CT ORANGE
007*	PALE YELLOW	130	CLEAR	206	1/4 CT ORANGE
*800	DARK SALMON	131	MARINE BLUE	207	FULL CT ORANGE + .3 NEUTRAL DENSITY
009*	PALE AMBER GOLD	132*	MEDIUM BLUE	208	FULLCT ORANGE +
010*	MEDIUM YELLOW	134	GOLDEN AMBER	208	.6 NEUTRAL DENSITY
013*	STRAW TINT	135	DEEP GOLDEN AMBER	209	.3 NEUTRAL DENSITY
015*	DEEP STRAW	136	PALE LAVENDER	210	.6 NEUTRAL DENSITY
017	SURPRISE PEACH	137	SPECIAL LAVENDER	211	.9 NEUTRAL DENSITY
019*	FIRE	138	PALE GREEN	212	LCT YELLOW
020*	MEDIUM AMBER	139*	PRIMARY GREEN	213	WHITE FLAME GREEN
021*	GOLD AMBER	140	SUMMER BLUE	214	FULL TOUGH SPUN 793
022* 024*	DARK AMBER	141*	BRIGHT BLUE	215	1/2 TOUGH SPUN
024	SCARLET SUNSET DED	142	PALE VIOLET	216	WHITE DIFFUSION
025 026*	SUNSET RED	143 144	PALE NAVY BLUE NO COLOUR BLUE	217	BLUE DIFFUSION
026 027*	BRIGHT RED MEDIUM RED	144	APRICOT	218	1/8 CT BLUE
027	PLASA RED	148	BRIGHT ROSE	219	LEE FLUORESCENT GREEN
029	LIGHT PINK	151	GOLD TINT	220	WHITE FROST
036*	MEDIUM PINK	152	PALE GOLD	221	BLUE FROST
039	PINK CARNATION	153	PALE SALMON	223	1/8 CT ORANGE
046*	DARK MAGENTA	154	PALE ROSE	224	DAYLIGHT BLUE FROST
048	ROSE PURPLE	156	CHOCOLATE	225	LEE N.D. FROST
049	MEDIUM PURPLE	157	PINK	226	LEE U.V.
052*	LIGHT LAVENDER	158	DEEP ORANGE	228	BRUSHED SILK
053*	PALER LAVENDER	159	NO COLOUR STRAW	229	1/4 TOUGH SPUN
058*	LAVENDER	161	SLATE BLUE	230	SUPER CORRECTION
061*	MIST BLUE	162	BASTARD AMBER		LCT YELLOW
063*	PALE BLUE	164	FLAME RED	232	SUPER WHITE FLAME GREEN
068	SKY BLUE	165	DAYLIGHT BLUE	236	H.M.I (TO TUNGSTEN)
071*	TOKYO BLUE	166	PALE RED	237	C.I.D. (TO TUNGSTEN)
075	EVENING BLUE	169	LILAC TINT	238	C.S.I. (TO TUNGSTEN)
079*	JUST BLUE	170	DEEP LAVENDER	239	POLARISER
085*	DEEPER BLUE	172*	LAGOON BLUE	241	LEE FLUORESCENT 5700 K
088	LIME GREEN	174	DARK STEEL BLUE	242	LEE FLUORESCENT 4300 K
089*	MOSS GREEN	176	LOVING AMBER	243	LEE FLUORESCENT 3600 K
090*	DARK YELLOW GREEN	179	CHROME ORANGE	244	LEE PLUS GREEN
100	SPRING YELLOW	180	DARK LAVENDER	245	1/2 PLUS GREEN
101	YELLOW	181*	CONGO BLUE	246	1/4 PLUS GREEN
102	LIGHT AMBER	182	LIGHT RED	247	LEE MINUS GREEN
103	STRAW	183	MOONLIGHT BLUE	248	1/2 MINUS GREEN
104	DEEP AMBER	184	COSMETIC PEACH	249	1/4 MINUS GREEN
105	ORANGE	185	COSMETIC BURGUNDY	250	1/2 WHITE DIFFUSION
106	PRIMARY RED	186	COSMETIC SILVER ROSE	251	1/4 WHITE DIFFUSION
107	LIGHT ROSE	187	COSMETIC ROUGE	252	1/8 WHITE DIFFUSION 106
108	ENGLISH ROSE	188	COSMETIC HIGHLIGHT	253	HAMPSHIRE FROST
109	LIGHT SALMON	189	COSMETIC SILVER MOSS	254**	NEW HAMPSHIRE FROST
110	MIDDLE ROSE	190	COSMETIC EMERALD	255	HOLLYWOOD FROST
111	DARK PINK	191	COSMETIC AQUA BLUE	256	1/2 HAMPSHIRE FROST
113	MAGENTA	192	FLESH PINK	257	1/4 HAMPSHIRE FROST
115*	PEACOCK BLUE	193	ROSY AMBER	258	1/8 HAMPSHIRE FROST
116*	MEDIUM BLUE-GREEN	194	SURPRISE PINK	261	TOUGH SPUN FR - FULL
117	STEEL BLUE	195*	ZENITH BLUE	262	TOUGH SPUN FR - 3/4
118*	LIGHT BLUE	196	TRUE BLUE	263	TOUGH SPUN FR - 1/2
119*	DARK BLUE	197*	ALICE BLUE	264	TOUGH SPUN FR - 3/8
120*	DEEP BLUE	198	PALACE BLUE	265	TOUGH SPUN FR - 1/4
121* 122*	LEE GREEN FERN GREEN	199 200	REGALBLUE DOUBLE CT BLUE	269 270	LEE HEAT SHIELD LEE SCRIM
124*	DARK GREEN	200	FULL CT BLUE	270	MIRROR SILVER
124	MAUVE	201	1/2 CT BLUE	272	SOFT GOLD REFLECTOR
120	IVII YO V L	202	1/2 OT DECE	212	OUT TOOLD HEI LEGION

653

508

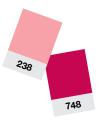
MIDNIGHT MAYA

744

DIRTY WHITE

273	SOFT SILVER REFLECTOR	511	BACON BROWN	746	BROWN	
274	MIRROR GOLD	512	AMBER DELIGHT	747	EASY WHITE	
275	BLACKSCRIM	513	ICE AND A SLICE	748	SEEDY PINK	
278	1/8 PLUS GREEN	514	DOUBLE G & T	749	HAMPSHIRE ROSE	
279	1/8 MINUS GREEN	525	ARGENT BLUE	750	DURHAM FROST	
280	BLACK FOIL	550	ALD Gold	763	WHEAT	
281	3/4 CT BLUE	600	ARCTIC WHITE	764	SUN COLOUR STRAW	
283	1 1/2 CT BLUE	601	SILVER	765	LEE YELLOW	
285	3/4 CT ORANGE	602	PLATINUM	767	OKLAHOMA YELLOW	
286	1 1/2 CT ORANGE	603	MOONLIGHT WHITE	768	EGG YOLK YELLOW	
287	DOUBLE CT ORANGE	604	FULL CT EIGHT FIVE	770	BURNT YELLOW	
298	.15 NEUTRAL DENSITY	622	ONE AND EIGHTH DIGITAL	773	CARDBOX AMBER	
299	1.2 NEUTRAL DENSITY		LED CTO	774	SOFT AMBER KEY 1	
322	SOFT GREEN	624	FULL DIGITAL LED CTO	775	SOFT AMBER KEY 2	
323	JADE	626	SEVEN EIGHTHS DIGITAL LED CTO	776	NECTARINE	
325	MALLARD GREEN	628	THREE QUARTER DIGITAL LED CTO	777	RUST	
327	FOREST GREEN	642	HALF MUSTARD YELLOW	778*	MILLENNIUM GOLD	
328	FOLLIES PINK	643	QUARTER MUSTARD YELLOW	779	BASTARD PINK	
332	SPECIAL ROSE PINK	650	INDUSTRY SODIUM	780	AS GOLDEN AMBER	
341	PLUM	651	HI SODIUM	781	TERRY RED	
343	SPECIAL MEDIUM	652	URBAN SODIUM	787	MARIUS RED	
344	LAVENDER VIOLET	653	LO SODIUM	789	BLOOD RED	
345	FUCHSIA PINK	700	PERFECT LAVENDER	790	MOROCCAN PINK	
352	GLACIER BLUE	701	PROVENCE	791	MOROCCAN FROST	
353	LIGHTER BLUE	702	SPECIAL PALE LAVENDER	793	VANITY FAIR	
354	SPECIAL STEEL BLUE	703	COLD LAVENDER	794	PRETTY 'N PINK	
363*	SPECIAL MEDIUM BLUE	704	LILY	795	MAGICAL MAGENTA	
366	CORNFLOWER	705	LILY FROST	797*	DEEP PURPLE	
400	LEELUX	706	KING FALS LAVENDER	798	CHRYSALIS PINK	
402	SOFT FROST	707*	ULTIMATE VIOLET	799	SPECIAL KH LAVENDER	
404	HALF SOFT FROST	708	COOL LAVENDER	01404	COOL LED DEED AMBED	
410	OPAL FROST	709	ELECTRIC LILAC		COOL LED DEEP AMBER	642
414	HIGHLIGHT	710	SPIR SPECIAL BLUE		COOL LED ORANGE	642
414P	PERFORATED HIGHLIGHT	711	COLD BLUE		COOL LED PRIMARY RED COOL LED MAGENTA	
416	3/4 WHITE DIFFUSION	712	BEDFORD BLUE		COOL LED PEACOCK BLUE	
420	LIGHT OPAL FROST	713*	J.WINTER BLUE		COOL LED MEDIUM BLUE-GRE	ENI
429	QUIET FROST	714	ELYSIAN BLUE		COOL LED STEEL BLUE	LIN
430	GRID CLOTH	715*	CABANA BLUE		COOL LED LIGHT BLUE	
432	LIGHT GRID CLOTH	716*	MIKKEL BLUE		COOL LED DARK BLUE	
434	1/4 GRID CLOTH	717	SHANKLINFROST		COOL LED MAUVE	
439	HEAVY QUIET FROST	718	HALFSHANKLINFROST		COOL LED BRIGHT PINK	728
439P	PERFORATED HEAVY QUIET FROST	719 720	COLOUR WASH BLUE DURHAM DAYLIGHT FROST		COOL LED MEDIUM BLUE	Ma
441	FULL CT STRAW	721*			COOL LED PRIMARY GREEN	
442	1/2 CT STRAW	721	BRAY BLUE		COOL LED APRICOT	
443	1/4 CT STRAW	723	VIRGIN BLUE		COOL LED DEEP ORANGE	
444	1/8 CT STRAW	724			COOL LED FLAME RED	
450 452	3/8 WHITE DIFFUSION 1/16 WHITE DIFFUSION	725	OLD STEEL BLUE		COOL LED DARK LAVENDER	
	QUIETGRID CLOTH	727	QFD BLUE		COOL LED CONGO BLUE	
460 462	QUIET LIGHT GRID CLOTH	728			COOL LED LIGHT RED	
464	QUIET 1/4 GRID CLOTH	729*	SCUBA BLUE			
500	DOUBLE NEW COLOUR BLUE	730		A204	FULL CTO	
501	NEW COLOUR BLUE	731			HALF CTO	
	(ROBERTSON BLUE)	733	DAMP SQUIB		FULL CTO + .3ND	
502	HALF NEW COLOUR BLUE	735		A208	FULL CTO + .6ND	111
503	QUARTER NEW COLOUR BLUE	736		A209	.3ND	11/11/2
504	WATERFRONT GREEN	738*	JAS GREEN	A210	.6ND 132	141
505	SALLY GREEN	740	AURORA BOREALIS GREEN	A211		
506	MARLENE	741	MUSTARD YELLOW			1 116
507	MADGE	742	BRAM BROWN			
508	MIDNIGHT MAYA	744	DIRTY WHITE			18 1

technical filters













The LEE range of technical filters has been developed to accurately convert and manipulate light sources with a high degree of accuracy for technical situations. A full range of daylight, tungsten and fluorescent conversions, neutral densities, diffusers, reflectors and scrims, are all available in a variety of sizes and materials to suit the required job.

A touch of art, a lot of science.

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■ Reflection Media	46
■ Protection Media	47
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In addition to our broad range of lighting filter, we also produce the highest quality camera filters in both resin and polyester.

conversion chart ■

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)

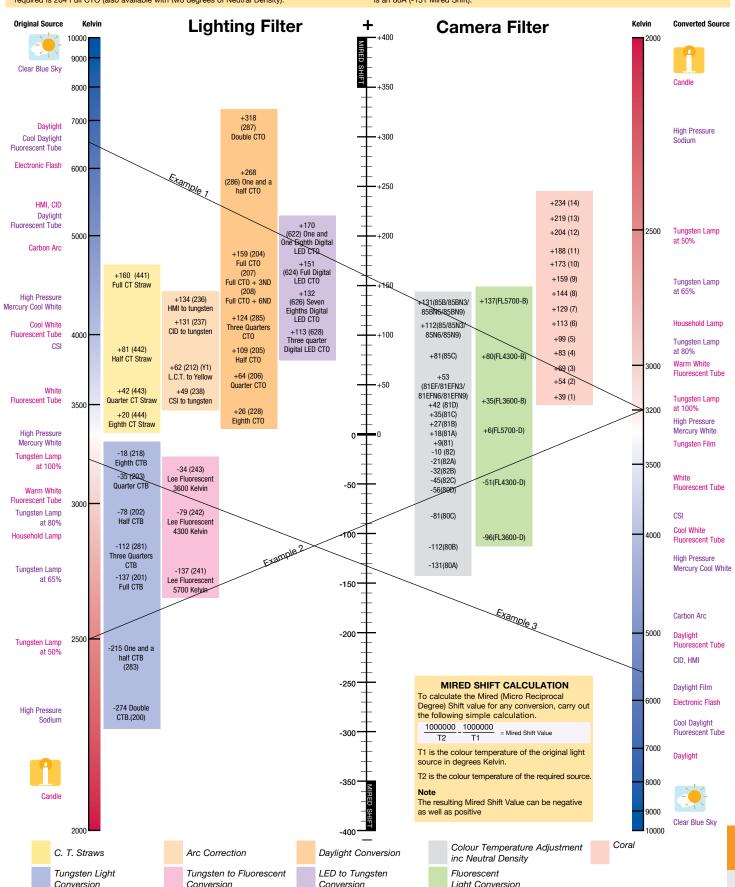
To convert an original source of 6500K to 3200K. The line has been drawn as an example. You will note that it crosses the central band at just over +150 Mired Shift. This indicates that the Filter required is 204 Full CTO (also available with two degrees of Neutral Density).

xample 2 (Lighting Filter)

To convert an original source of 2500K to 3200K. You will note that the line crosses the central band at -90 Mired Shift. In this example the nearest filter is a 202 Half CTB with a Mired Shift of -78. To a combination of two filters can be used. 202 Half CTB (-78 Mired Shift) and 218 Eighth CTB (-18 Mired Shift) and 218 Eighth CTB (-18 Mired Shift) with GTB (-18 Mired Shift) and 218 Eighth CTB (-18 Mired Shift) and 218 Eighth CTB (-18 Mired Shift).

Example 3 (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).





product

description

Kelvin

Mired Transmission Absorption Chromaticity Co-ordinates Shift Y% x y (Measured to source C, Correlated Colour Temperature of 6774K)

Tungsten to Daylight

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 quarters 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

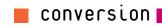
Tungsten to Fluorescent

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

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.

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 quarters 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



Prod	uct	description	Kelvin	Mired Shift (Measured	Transmission Y% d to source C, (•	х	Co-ordinates y sture of 6774K)
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 white LED of 7000K to Tungsten of 3200K. Allows sources to be blended both visually and for digital imaging.	41.5	0.38	0.428	0.371
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.	44.2	0.35	0.415	0.366
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.	49.1	0.31	0.402	0.368
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	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





effect/colour

Transmission Absorption Chromaticity Co-ordinates
Y% x y

Measured to source C. Correlated Colour Temperature of 6774KI

Neutral Density

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.



description product Transmission Absorption Stop Value Mired Shift Note

Polariser

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	Axiz uncrossed (double sheet)
				<.05	>3	>10	Axiz crossed (double sheet)

Urban Effects

Transmission Y%	n Absorptio	n Chromatici	ty Co-ordinate y	s
0.5	1.00	0.000	0.000	

			Y%		x	У
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

acrylic panels

These panels are manufactured specifically for LEE and exhibit the same degrees of colour accuracy and consistency as our range of lighting filters.

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

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 A204, A209, A210 & A211 available in this size						

Daylight to Tungsten

A204 Full CTO	Converts Daylight to Tungsten Light.	+175	57.2
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

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

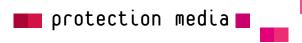
eroduct description special note

Reflector

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 11/2 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 11/2 when used as a filter, Transmission 36%.



product

effect/colour

Transmission Absorption Chromaticity Co-ordinates
Y9% x y
(Measured to source C, Correlated Colour Temperature of 6774K)

Heat Shield

269 I	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

280 Black Foil Seed to reduce driwanted light spill of to control driwanted light x 0.61m (25' x 24") 15.24m : reflection.	280 Blac	ck Foil	Used to reduce unwanted light spill or to control unwanted light reflection.	Available in two roll sizes 7.62n x 0.61m (25' x 24") 15.24m x 0.30m (50' x 12")
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product

description

Transmission Stop value Y%

Special Note

Non-Flame Retardant Polymer Film

Polymer F	ilm					
	216	White Diffusion		36	11/2	Rolls also available in 1.52m (60") width
	416	Three Quarter White Diffusion		50	1	
О	250	Half White Diffusion		60	3/4	Rolls also available in 1.52m (60") width
Ю	450	Three Eighth White Diffusion	Used for soft light effects. Manufactured on a tough Polyester base in a range of seven strengths.	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	11/2	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	Smoothes 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	11/2	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	Smoothes 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	Smoothes PAR or flood washes of large areas. Useful for houselights; good for interior colour washes.	57	3/4	Colour = 790
0	749	Hampshire Rose	Combines flesh tone warmer 154 with some Hampshire Frost.	74	1/2	Colour = 154

eroduct c							
			. d	descr cpccon		Mired Transmission Absorption Chromaticity Co-ordinates: Shift Y% y y easured to source C, Correlated Colour Temperature of 6774k	
		217	Blue Diffusion	As White Diffusion but with the addition of Eighth CTB.	36	11/2	√8 CT Blue
C		224	Daylight Blue Frost	Used for soft light effects with the addition of tungsten correction 201.	22	21/4	Full CT Blue
K		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	21/2	
		432	Light Grid Cloth	A waterproof textile/fabric diffusion that is reinforced	30	13/4	Rolls only 1.37m x 7.62m (54" x 25')
		434	Quarter Grid Cloth	to allow it to be sewn or grommetted - ideal for attaching to large frames. Comes in three weights.	60	3/4	

15

22.5

47.5

 $2^{3}/_{4}$

21/4

1

Rolls only 1.37m x 7.62m (54" x 25')

Tough Spun

460

462

464

Quiet Grid Cloth

Quiet Light Grid

Quiet Quarter Grid Cloth

Cloth

	214	Full Tough Spun		18	21/2	
ю	215	Half Tough Spun	Softens light, reduces intensity. Manufactured from non-woven Polyester.	36	11/2	Rolls only 7.62 x 1.22m (25' x 48")
•	229	Quarter Tough Spun		60	3/4	

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.

Flame Polymer		dant				
	129	Heavy Frost	Strong diffuser, eliminates nearly all shadows.	25	2	
•	220	White Frost	Used for soft light effects.	39	11/3	
	221	Blue Frost	Used for soft light effects with the addition of 218.	42	11/3	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 p10-11)
	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	





description

Transmission Stop value Y%

Special Notes

Flexi Frost

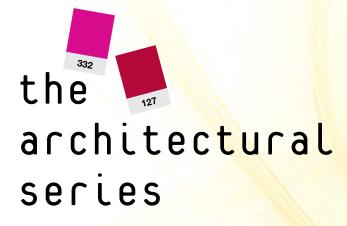
439 Heavy Quiet Fro	A very strong diffuser but pliable to handle, that virtually eliminates shadows at close distances.	Advantages of	7.8	32/3	Thickness 270 microns (11 thou)
402 Soft Frost	A strong diffuser that creates a wide field of soft illumination but is very pliable to handle. Diffusion characteristics similar to 216, falls between 216 and 129.	this material are the large roll width; lack of noise when handled or used in windy	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.	conditions; waterproof for use outdoors, can be sewn or grommetted together for use	18.4	21/2	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.	on large frames; flame retardant.	36.2	11/2	Thickness 100 microns (4 thou)
414 Highlight	A useful diffuser without too much light loss in a thick format. Diffusion characteristics similar to 252.	6.10m length, (60" x 20')	39.6	11/3	Thickness 300 microns (12 thou)

Perforated Diffusion

439P	Perforated Heavy Quiet Frost	Quiet Frost strongly diffused light.		21/3	Thickness 270 microns (11 thou)
414P	Perforated Highlight	A combination of both direct and soft diffused light.	length, (60" x 20') Flame retardant.	11/3	Thickness 300 microns (12 thou)

Tough Spun

	261	Tough Spun FR - Full		25	2	
1 .	262	Tough Spun FR - ³ / ₄	Non yellowing flame retardant spun polyester material in five densities to give better light control. 50	32	1 ² /3	
Ю	263	Tough Spun FR - ½		11/3	Rolls only 7.62 x 1.22m (25' x 4')	
0	264	Tough Spun FR - ³ / ₈		50	1	
•	265	Tough Spun FR - 1/4		60	3/4	

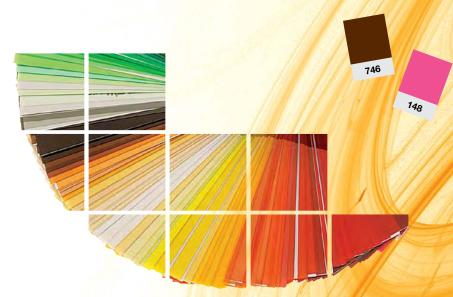








Building on our experience in film and theatrical lighting, LEE Filters have introduced a range of lighting filter products specifically designed for use in the entertainment, leisure and architectural industries.



architectural series —

fluorescent sleeves



116

Get creative with fluorescent lighting! With over 250 colours to choose from, LEE Filters Fluorescent Coloured Sleeves offer the designer more choice than ever for both interior and exterior lighting projects.

Visit www.leefilters.com to view all the latest colours or alternatively phone and request a swatch book containing the full colour range.



T5 Sleeves

T8 Sleeves

T12 Sleeves

Pre-assembled Sleeves

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

The sleeves are made from a thermally stable, electrically insulating, polycarbonate. The ends of each sleeve are capped with an end cap; these end caps fix the sleeve to the fluorescent tube making installation easy. The sleeves are available in standard lengths for T5, T8 and T12 diameter tubes.

It is recommended that you contact us if intending to use sleeves on T5 tubes, as your colour choice and tube wattage will determine if a sleeve is suitable. The sleeves are not recommended for use on high output T5 tubes, as the extreme heat at either end of the tube can cause the filter to discolour.

Extend the life of coloured inserts by adding LEE UV into a T8 or T12 tube.

Coloured Sleeves used with diffusion create a smooth wallwash.



Self-assembly

Alternatively LEE Filters can supply pre-cut "Quick Rolls" of your chosen colour along with clear polycarbonate sleeves enabling self assembly of the inserts and sleeves.

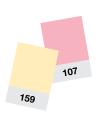
The pre-cut "Quick Rolls" are 7.62m (25') long and are available for T5, T8 and T12 diameter sleeves.



Two-tone Sleeves

Two-tone sleeves

There are a number of different ways you can use coloured fluorescent sleeves creatively. An effect that works particularly well is a two-tone sleeve. This is where you have one colour at the front of the sleeve and a contrasting colour at the back. With over 250 colours to choose from, the number of different colour combinations are endless!



Neutral Density filters used in fluorescent tubes will reduce light where intensity is an issue.



the glass series





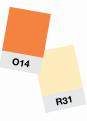


Dichroic Glass Colours

Specifically designed to meet the demands of the lighting industry, LEE Filters dichroic glass filters are produced by the vacuum deposition of layers of thin metal films onto a substrate of borofloat glass. The glass is available in a thickness of 3.3mm and 1.7mm, and the production process creates spectacularly clear and pure colours. The glass filters will not fade and should withstand temperatures up to 371°C.

Professional Colours

Chosen after extensive research among design professionals, the Glass Series colour palette provides a range of 39 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 offer 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.



*Lighting design by LIGHTF0RM LLC

architectural series

the glass series



Framed Glass

These lightweight aluminium frames, available both plain and in colour, suit all the popular lighting fixtures in the entertainment, architectural and theatrical industries. An innovative silicone gasket completely surrounds the glass, providing protection from both mechanical and thermal shock. A safety mesh can be added where required. Frames from 7.5cm (3") to 60cm (23.5") across can be designed in any shape.



Framed Glass

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





V2g

V10

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
- Custom sizes can be supplied please ask for a quotation



	No.	Name	No.	Name	No.	Name
0	R31	Amber Blush 1	G28	Lime 8	V43	Violet 3
0	R50	Red 0	G96	Jade 6	V67	Rose Purple 7
	R99	Flame 9	C04	Blue Green 4	V74	Plum 4
	O01	Sunset 1	C45	Turquoise 5	V81	Lilac 1
	O08	Sunset 8	C47	Turquoise 7	V98	Lavender 8
	014	Peach 4	B06	Lagoon 6	M31	Fuchsia 1
	O18	Peach 8	B14	Steel 4	M56	Magenta 6
	O32	Apricot 2	B24	Crystal Blue 4	M63	Carnation Pink 3
	O42	Nectarine 2	B44	Royal Blue 4	M91	Salmon 1
0	O43	Nectarine 3	B53	Blue 3	LD071	Tokyo Blue
	O59	Orange 9	B64	Navy Blue 4	LD156	Chocolate
0	O80	Gold Amber 0	B71	Cornflower 1	LD278	Eighth Plus Green
0	O82	Gold Amber 2	B93	Congo 3	LD279	Eighth Minus Green
0	O89	Gold Amber 9	V10	Indigo 0		
0	Y02	Wheat 2	V28	Blueberry 8		
10	11 11 11					



LED no filter



LED warming filter

Specialised Glass Filters

LEE Specialised Filters include warming, cooling and UV Filters.

Warming filters (CT Orange) will warm up a cool light source such as an LED light; they can also be used as a warm amber colour or to reduce the colour temperature of a light source.

Cooling filters (CT Blue) will cool a light source. They can also be used as a cool blue colour or to convert tungsten light to daylight.

- No. Name

 LD201 Full CT Blue

 LD202 Half CT Blue

 LD203 Quarter CT Blue

 LD204 Full CT Orange
- LD205 Half CT OrangeLD206 Quarter CT Orange
- LD209 0.3 ND LD210 0.6 ND
- UV Blocker Absorbs Ultra Violet light
- Hot Mirror
 Reflects heat back into
 the light source

Dichroic Polycarbonate Filters

Colour correct your LED light source using the new dichroic coated polycarbonate filter. With a thickness of 0.76mm, the polycarbonate will easily fit within a small fixture accessory slot. This filter has a dichroic coating on one side providing an optimal colour correction solution for permanent applications.

- Stocked in 49.9mm diameter (custom sizes available upon request).
- 5 stock Dichroic Series colours (custom colours available upon request).
- Polycarbonate substrate includes a high heat resistance 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

architectural series ____

frosted dichroic glass colours



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

Frosted Colour Dichroic Filters are colour-coated on one side by a vacuum deposition of metal film, and diffused on the other side.

The diffusion creates an even soft frost, removing the halo effect when the frosted side is placed on the fixture outwards, away from the lamp. The dichroic coating should withstand temperatures up to 371°C, allowing the colour to last for years without fading.

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



Unfrosted Glass



Frosted Glass



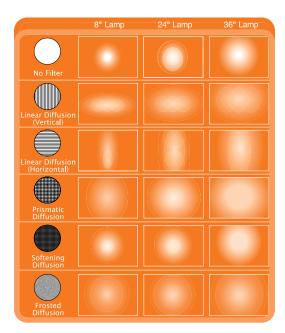


LEE Filters Dichroic glass is coated on one side. To determine which side is coated touch your finger to the flat surface of the filter. On the coated side the reflection will meet your finger. On the uncoated side there will be a space between your finger and the reflection.

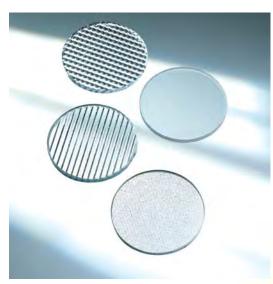
glass diffusion filters

The LEE range of Glass Diffusion Filters offer different densities of diffusion for a wide range of lighting effects. They are available for MR16 and PAR fittings as well as 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 (3').



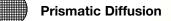
M91







Combined Linear Diffusion and warming filter



Softening Diffusion

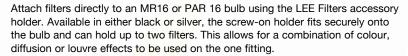
Frosted Diffusion



architectural series



MR16 / PAR 16 accessories



LEE Clip-on accessories are a quick and easy way of adding a filter to or limiting the glare from MR16 or PAR 16 bulbs.

The Clip-on Filter Holder holds a single filter to a standard open bulb. The holder is available in either black or silver (packs of five).

The Clip-on Baffle (also known as blade louvres) traps the peripheral light sideways, limiting glare. The baffle also gives the fixture a more professional look. Available in black or silver (packs of five).

Clip-on Barndoors trap the light sideways; this limits the glare from a bulb but also allows you to direct the illumination from the bulb to a specific area. The flaps are adjustable by rotation and by bending the hinges. The high quality material of the hinges allows you to adjust them a number of times. Available in black or silver (packs of five).



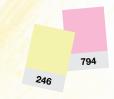
Clip-on Filter Holder



Clip-on Baffle



Clip-on Barndoors

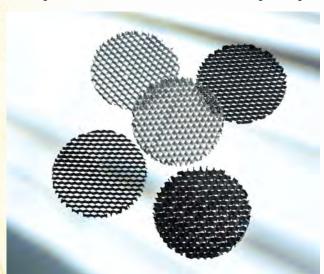


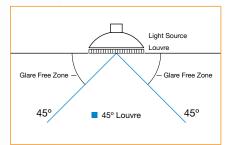
louvres

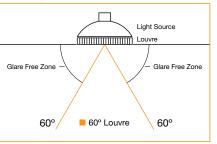


Honeycomb Louvres reduce the glare from a light fitting. They are available in either a 45° or 60° angle and come in silver and black to match the LEE filter holders.

Louvres are also available in custom shapes and sizes enabling them to be used on a number of different light fittings.









Gobos







Steel Collection Gobos

Project images and patterns onto walls, floors and ceilings with LEE Filters gobos. Great for creating both dramatic and subtle effects the LEE range of steel gobos has over 1,000 different designs for you to choose from. Used by architects and lighting designers around the world in shopping malls, offices, restaurants, clubs, bars and hotel buildings, gobos allow you to add creativity to any internal or external lighting scheme.

To view the full range of LEE gobo designs visit www.leefilters.com/index.php/gobos/ or to download posters of the full range visit www.leefilters.com/lighting/lighting-resources.html



Custom Gobos

Project your own design, company logo, artwork or picture with LEE Filters Custom Gobos.



Steel Gobos

Steel gobos give high definition results for simple images and breakups. They are perfect for projecting logos and artwork in architectural projects.



These glass gobos reproduce high resolution photo quality black and white images, with absolute accuracy. They are suitable for any long term installation.

One or Two Layer Glass Gobos

These glass gobos use one or two solid colours that give a crisp clean image. The gobos are created using the highest quality etching available, to create brilliant colours for use in any permanent installation.

Full Colour Glass Gobos

Made from glass, these high quality full colour gobos are perfect for projecting any colour image or high resolution photograph used in a permanent installation.





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.

We produce a range of swatch books, each individually developed to serve a specific purpose.

They are:

- **The Designers' Edition** a swatch book containing the entire filter range in chromatic groupings.
- **The Numeric Edition** a swatch book containing the entire filter range in numerical order.
- The Cinematographers' Edition a large format dual swatch book with grades of both colour correction and diffusion filters most frequently used in film.
- **The Master Edition*** a very large format swatch of lighting products.
- The Pocket Edition a handy sized listing of all lighting filter products, together with a comparator section which identifies LEE Filters' equivalents to other manufacturers' products.
- **The Glass Edition** a large format swatch book containing polyester lighting filter material that closely matches the colours from the glass series.
- **The Fluorescent Edition** contains a sample of all the colours available as polyester inserts for the clear fluorescent sleeves.

^{*} These swatches are not available free of charge.







cutters

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



website

Information on all LEE Filters products can be found on our website: www.leefilters.com

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