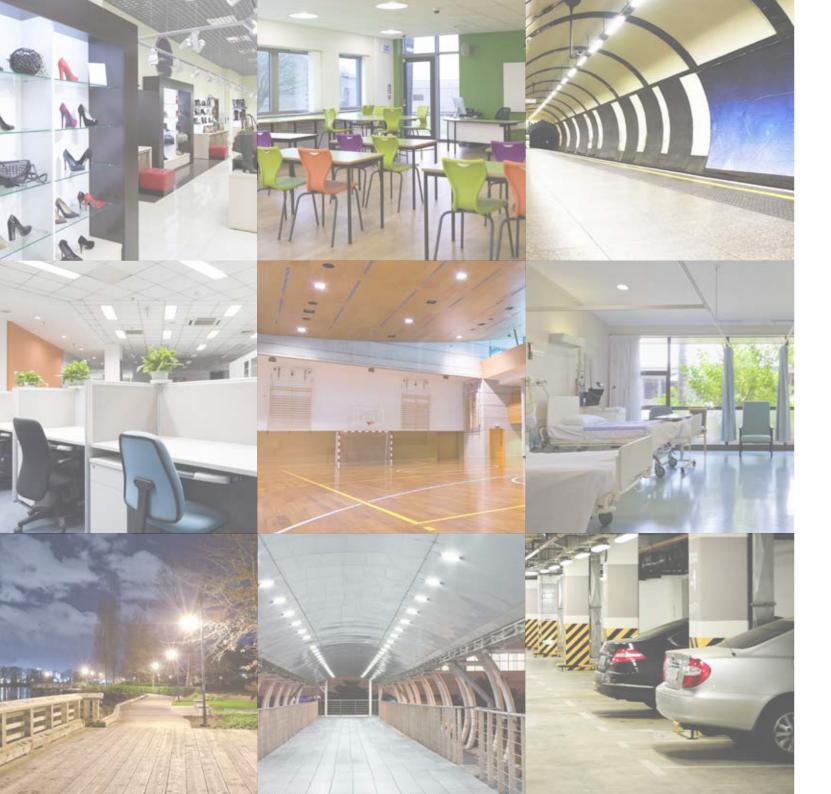


light engines - simple and reliable









LED light engines - range overview

LED light engines offer a simple and reliable solution for:

- linear fluorescent applications (pages 4-8)
- bulkhead luminaires (pages 9-17)
- square and rectangular fittings (pages 14-17)

Accommodating an array of needs, light engines are available in three levels, catering to all budgets and light requirements.

select	exclusive	choice		
robust, cost-effective, simple	unrivalled, superior, simple	your choice, your way, simple		

All light engines are built to the highest quality, using high performance and high efficacy mid-power LEDs. With the **select** and **exclusive** ranges you can expect:

- Long life up to 60,000 hours
- High colour rendering option CRI > 90 available in the **exclusive** range
- Poke-in connectors for quick connection
- Optimal PCB materials

If you need something completely custom then let's talk about **choice** - built with our knowledge and expertise, made your way!

LED linear light engines

Our linear range offers a great solution for office and industrial applications. The ideal fit for a variety of luminaires and can be used in light fixtures where fluorescent technology is currently employed.





- 280mm x 55mm
- 3000K or 4000K CCT options
- 33 LED
- Up to 1749 lumens
- Up to 155 lm/W
- CRI > 90 available in exclusive

Part Number	CCT	CRI	No. of LEDs	Typ. Flux	Typ. Forward Voltage	Test Current	Test T _{SP}	Typ. Power	Typ. Efficacy
FE-LS33N83028055	3000	>80	33	1416	30.77	350	65	10.77	131
FE-LS33N84028055	4000	>80	33	1491	30.77	330	00	10.77	138
FE-LS33BP83028055	3000	>80	33	1669	32.32	350	65	11.31	148
FE-LS33BP84028055	4000	>80	33	1749	32.32	330	03	11.31	155
Units	К	-	-	lm	\vee	mA	°C	\bigvee	lm/W

LED linear light engines

Our linear range offers a great solution for office and industrial applications.

The ideal fit for a variety of luminaires, and can be used in light fixtures where fluorescent technology is currently employed.





- 280mm x 24mm
- 3000K or 4000K CCT options
- 18 or 36 LED options
- Up to 1908 lumens
- Up to 155 lm/W
- CRI > 90 available in exclusive

Part Number	ССТ	CRI	No. of LEDs	Typ. Flux	Typ. Forward Voltage	Test Current	Test T _{SP}	Typ. Power	Typ. Efficacy
FE-LS18N83028024	7000	>80	18	772	16.79			5.87	131
FE-LS36N83028024	3000		36	1544	33.57	350	65	11.75	131
FE-LS18N84028024	4000	>80	18	813	16.79			5.87	138
FE-LS36N84028024	4000	>00	36	1627	33.57			11.75	138
FE-LS18BP83028024	3000	>80	18	911	17.63		65	6.17	148
FE-LS36BP83028024	3000	>00	36	1821	35.26	350		12.34	148
FE-LS18BP84028024	4000	>80	18	954	17.63	330		6.17	155
FE-LS36BP84028024	4000	>00	36	1908	35.26			12.34	155
Units	К	-	-	lm	V	mA	°C	W	lm/W

280 x 24mm



- 560mm x 24mm
- 3000K or 4000K CCT options
- 24 or 48 LED options
- Up to 1961 lumens
- Up to 163 lm/W
- CRI > 90 available in exclusive

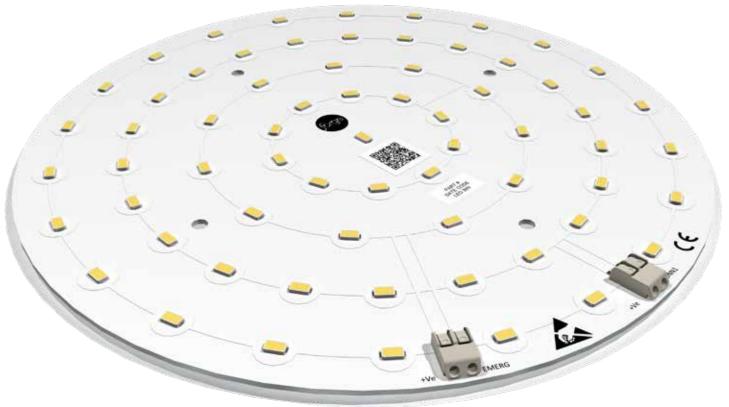
Part Number	CCT	CRI	No. of LEDs	Typ. Flux	Typ. Forward Voltage	Test Current	Test T _{SP}	Typ. Power	Typ. Efficacy
FE-LS24N83056024	7000	× 90	24	1030	22.38			7.83	131
FE-LS48N83056024	3000	>80	48	1623	32.47	350	65	11.36	143
FE-LS24N84056024	4000	00 >80 24 1084 48 1710	22.38	330	0.5	7.83	138		
FE-LS48N84056024	4000		48	1710	32.47			11.36	150
FE-LS24BP83056024	3000	>80	24	1214	23.51			8.23	148
FE-LS48BP83056024	3000	>00	48	1872	34.41	350	65	12.04	156
FE-LS24BP84056024	4000	>80	24	1272	23.51	330	05	8.23	155
FE-LS48BP84056024	4000	>60	48	1961	34.41			12.04	163
Units	К	-	-	lm	\vee	mA	°C	W	lm/W



LED round light engines

Our round range offers a great solution for office and industrial applications.

The ideal fit for a variety of luminaires and can be used in wall and ceiling bulkhead fixtures.



Available sizes:-





- 200mm Diameter
- 3000K or 4000K CCT options
- 33, 66 or 99 LED options
- Up to 5247 lumens
- Up to 166 lm/W
- CRI > 90 available in exclusive



- 315mm Diameter
- 3000K or 4000K CCT options
- 72 LED
- Up to 4235 lumens
- Up to 163 lm/W
- CRI > 90 available in exclusive

Part Number	ССТ	CRI	No. of LEDs	Typ. Flux	Typ. Forward Voltage	Test Current	Test T _{SP}	Typ. Power	Typ. Efficacy		
FE-LC33E00N830200			33	1416	30.77	350		10.77	131		
FE-LC66E00N830200	3000	. 00	66	2141	29.61	500		14.81	145		
FE-LC99E00N830200		>80	99	3027	29.40	700		20.58	147		
FE-LC99EUUN83U2UU			99	4247	30.77	1050	G E	32.31	131		
FE-LC33E00N840200			33	1491	30.77	350	65	10.77	138		
FE-LC66E00N840200	4000	>80	66	2255	29.61	500		14.81	152		
FE-LC99E00N840200			99	3188	29.40	700		20.58	146		
FE-LC99EUUN84U2UU			99	4473	30.77	1050		32.31	138		
FE-LC33E00BP830200			33	1669	32.32	350		11.31	148		
FE-LC66E00BP830200	3000	. 00	66	2462	31.42	500		15.71	157		
FE-LC99E00BP830200	3000	>80	>80	>80	99	3465	31.26	700		21.88	158
FE-LC99EUUBP63U2UU			99	5008	32.32	1050	65	33.94	148		
FE-LC33E00BP840200			33	1749	32.32	350	65	11.31	155		
FE-LC66E00BP840200	4000	200	66	2579	31.42	500		15.71	164		
	4000	>80	99	3630	31.26	700		21.88	166		
FE-LC99E00BP840200			99	5247	32.32	1050		33.94	155		
Units	К	-	-	lm	V	mA	°C	W	lm/W		

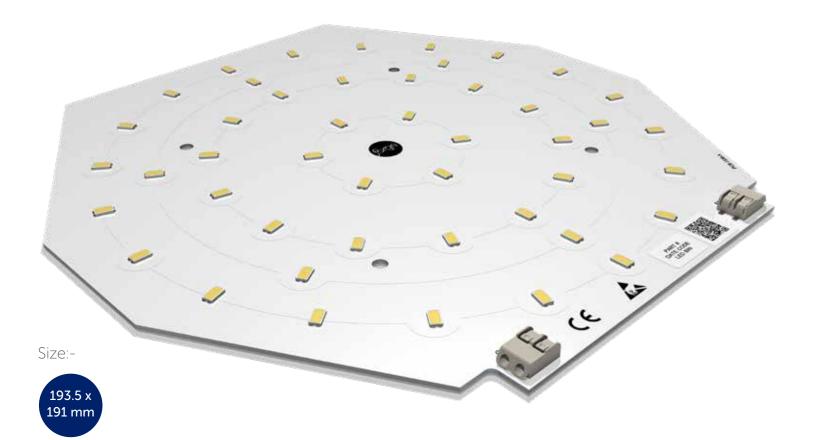
Part Number	CCT	CRI	No. of LEDs	Typ. Flux	Typ. Forward Voltage	Test Current	Test T _{SP}	Typ. Power	Typ. Efficacy
FE-LC72E0N830315	3000	>80	72	2435	24.35	700		17.05	143
FE-LC/ZEUN83U3I5	3000	>80	/2	3393	25.56	1050	65	26.84	126
FF 1 C72F0N10 4074F	4000	>80	72	2564	24.35	700	05	17.05	150
FE-LC72E0N840315				3574	25.56	1050		26.84	133
FE-LC72E0BP830315	3000	>80	72	2808	25.81	700		18.06	156
FE-LC/ZEUDP03U3I3	3000	>00	/2	4043	26.75	1050	65	28.08	144
FE-LC72E0BP840315	4000	>80	72	2942	25.81	700	05	18.06	163
FE-LC/ZEUBP84U3I3	4000	>80	72	4235	26.75	1050		28.08	151
Units	К	-	_	lm	V	mA	°C	W	lm/W

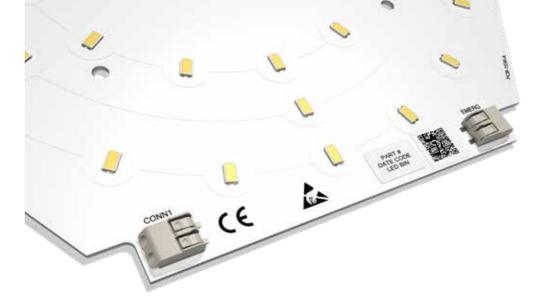




LED octagonal light engines

Our octagonal range offers a great solution for office, corridor and stairwell lighting. The ideal fit for a variety of fixtures including wall and ceiling bulkhead fittings.





- 193.5mm x 191.0mm A/F
- 3000K or 4000K CCT options
- 40-LEDs Primary, 6 LEDs Emergency
- Up to 1846 lumens
- Up to 169 lm/W
- CRI > 90 available in exclusive

Part Number	CCT	CRI	No. of LEDs	Typ. Flux	Typ. Forward Voltage	Test Current	Test T _{SP}	Typ. Power	Typ. Efficacy
FE-LC40E0N830190	3000	>80		1116	21.17	350		7.41	151
FE-LC40E0IN630190	3000	700	40	1513	21.97	500	65	10.99	138
FE-LC40E0N840190	4000	>80		1176	21.17	350	05	7.41	159
FE-LC40E0IN640190		>00		1593	21.97	500		10.99	145
FE-LC40E0BP830190	3000	>80	40	1270	22.56	350		7.89	161
FE-LC40E0BP630190	3000	>00		1762	23.19	500	65	11.60	152
FE-LC40E0BP840190	4000	>80	40	1330	22.56	350	03	7.89	169
FE-LC4UEUBP84U19U	4000	>80		1846	23.19	500		11.60	159
Units	К	-	-	lm	V	mA	°C	W	lm/W

LED wide area light engines

Our range of LED wide area illumination engines put light where you need it most. The ideal fit for a variety of fixtures including ceiling troffers and low-bay lighting fixtures.





- 380mm x 380mm
- 3000K or 4000K CCT options
- 121 LED
- Up to 6927 lumens
- Up to 166 lm/W
- CRI > 90 available in exclusive

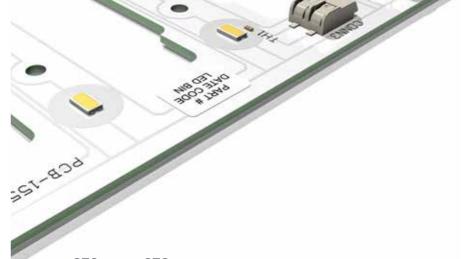
Part Number	ССТ	CRI	No. of LEDs	Typ. Flux	Typ. Forward Voltage	Test Current	Test T _{SP}	Typ. Power	Typ. Efficacy
				3679	29.38	850		24.98	147
FE-LT121N830380380	3000	>80	121	4402	30.05	1050	65	31.55	140
				5245	30.82	1300		40.07	131
	4000		121	3875	29.38	850		24.98	155
FE-LT121N840380380		>80		4637	30.05	1050	65	31.55	147
				5524	30.82	1300		40.07	138
				4209	31.24	850		26.55	159
FE-LT121BP830380380	3000	>80	121	5110	31.76	1050	65	33.35	153
				6612	32.59	1400		45.63	145
				4410	31.24	850		26.55	166
FE-LT121BP840380380	4000	>80	121	5353	31.76	1050	65	33.35	161
				6927	32.59	1400		45.63	152
Units	К		-	lm	V	mA	°C	W	lm/W

LED wide area light engines

Our finger style wide area light engine is a cost effective solution - putting light where you need it most.

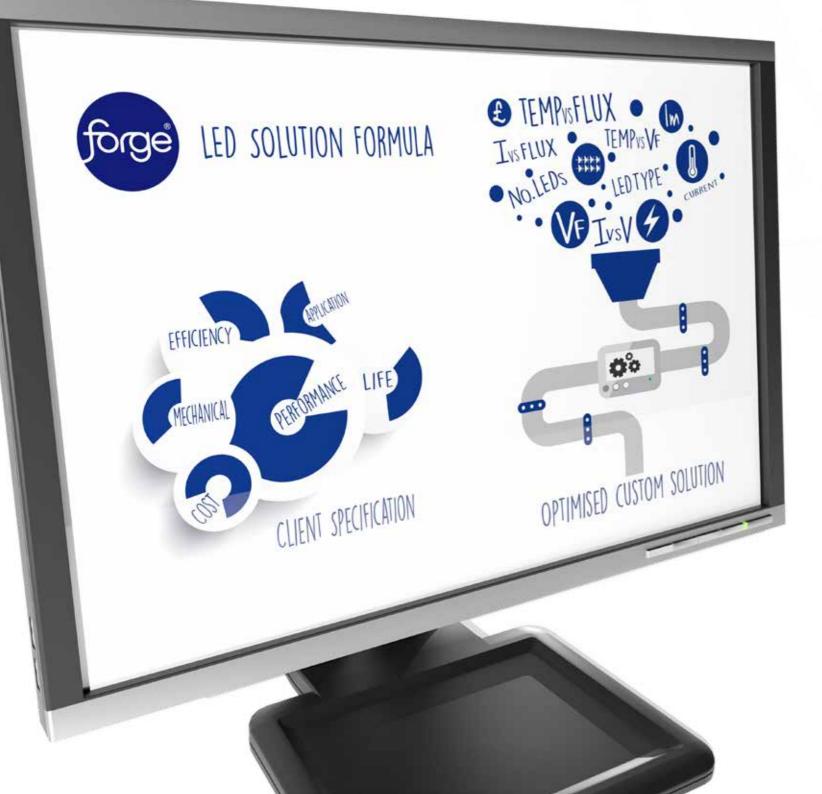
The ideal fit for a variety of fixtures including ceiling troffers and low-bay lighting fixtures.





- 270mm x 270mm
- 3000K or 4000K CCT options
- 32 or 64 LED options
- Optional thermistor
- Up to 1365 lumens
- Up to 188 lm/W
- CRI > 90 available in exclusive

Part Number	CCT	CRI	No. of LEDs	Typ. Flux	Typ. Forward Voltage	Test Current	Test T _{SP}	Typ. Power	Typ. Efficacy
FE-LT32N830270270			32	585	10.19	350		3.57	164
FE-LT64N830270270	3000	>80	64	610	9.83	350	65	3.44	177
FE-LI 04110302/02/0			04	1171	10.19	700		7.13	164
FE-LT32N840270270	4000		32	617	10.19	350		3.57	173
FE-LT64N840270270		>80	64	642	9.83	350	65	3.44	187
FE-LI 041N8402/02/0				1233	10.19	700		7.13	173
FE-LT32BP830270270			32	651	10.95	350		3.83	170
FE-LT64BP830270270	3000	>80	64	666	10.63	350	65	3.72	179
FE-LI 04DP03U2/U2/U			04	1303	10.95	700		7.66	170
FE-LT32BP840270270			32	682	10.95	350		3.83	178
FE-LT64BP840270270	4000	>80	64	697	10.63	350	65	3.72	188
FE-L104DP04UZ/UZ/U			04	1365	10.95	700		7.66	178
Units	К		-	lm	V	mA	°C	W	lm/W



The choice concept



thermals are crucial to a long life, high perfomance solution. We'll create a light engine that keeps its cool!



your design will consider the best LED stringing composition. Enabling output and efficacy targets without adding additional, unneccessary LEDs.



power is a key consideration to ensure optimal performance and long life.



know what you are prepared to pay for your ideal solution. Cost engineering to meet requirements within budget is all part of the service.

Wondering if there's an alternative solution to off-the-shelf standard LED light engines?

We combine our knowledge, expertise and LED technology with your requirements to create a completely custom solution.

We don't believe in making do, and you shouldn't either. When you consider the choice range you will get a solution completely optimised for you - this isn't about just adding more LEDs.

We consider power, temperature, flux, current, LED type, voltage and, that all-important, cost target. With application information from you we're ready to go. Take a look at just a few ways you can start to consider a custom solution.

Choice - your way

Customise, don't compromise!

A rigid, snappable PCB enables you to use a single PCB design for different extrusion lengths - making stocking simple and allowing for cost savings.

Whilst we use the highest quality, high performance mid-power LEDs we have access to all major manufacturers. If you want to use a specific brand, or need to change the package size to meet your perfomance, that's completely possible.

Colour temperature, tight binning control and CRI requirements are not something to compromise on - 2200K with 2 step binning in CRI > 90 is entirely possible for your light engine.

One of the easiest ways to customise and strengthen your brand in the process, is to stamp your logo on your very own light engine.

more options this way >



snappable

- enjoy greater product flexibilty from a single PCBA design.



colour temperature

- from extremely warm to super cool, colour temperature is everything when creating exceptional lighting.





PCB material

- create a light engine within your budget that meets with your performance requirements.

shapes and cutouts

- if you need a microwave sensor or a completely unique shape for your application then it's no problem.



connectors

- choose the connector that works

best for you and your application.

flexible

- with the option for a flexible PCB your light engine becomes truly versatile, and allows for the creation of some really stunning lighting effects.



tunable

- create mood lighting, simulate daylight, enhance your lighting scheme and support human centric lighting.



Customise, don't compromise!

With over 24 years in the business we know what we're talking about, and are ideally placed to help you create your very own customised light engine.

Talk to our friendly sales team and tell them exactly what you want. We'll then involve our clever engineers to get down to designing. Once you're happy you have something unique and completely fit for your purpose, we'll push the button on volume production.

Product enhancement really is this easy.



clever light solutions



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