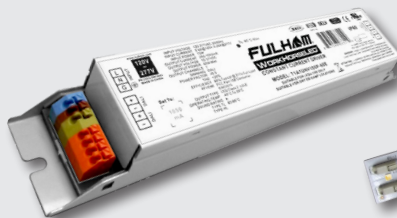


Complete LED System Solutions Modules + Drivers + Emergency Backup



Fulham offers superior illumination solutions for your luminaires, specially engineered to help you get exceptional products to market faster.

- High efficiency constant current LED modules in linear, round, half-round & rectangular shapes
- Wide range of drivers, including 0-10V, TRIAC & DALI dimming options, UNV & 120V input
- Programmable drivers enabling customized output currents, dimming curves & more
- HotSpot2 emergency system providing backup lighting during power outages

As the preferred partner of over 3000 lighting manufacturers and distributors worldwide, Fulham offers complete LED system solutions, including modules, drivers and emergency backup. Our highly efficient ThoroLED modules provide high lumen output in common form factors. A wide selection of drivers, including a range of programmable and dimmable models, offer the flexibility and dependability needed for any situation. And the HotSpot2 emergency system provides reliable backup lighting when your customers need it most.

Common Configurations For Fulham LED Drivers, Modules & Emergency Systems

How to use this guide:

- 1

Using the charts on the following pages, find your desired module shape, size, and quantity
- 2

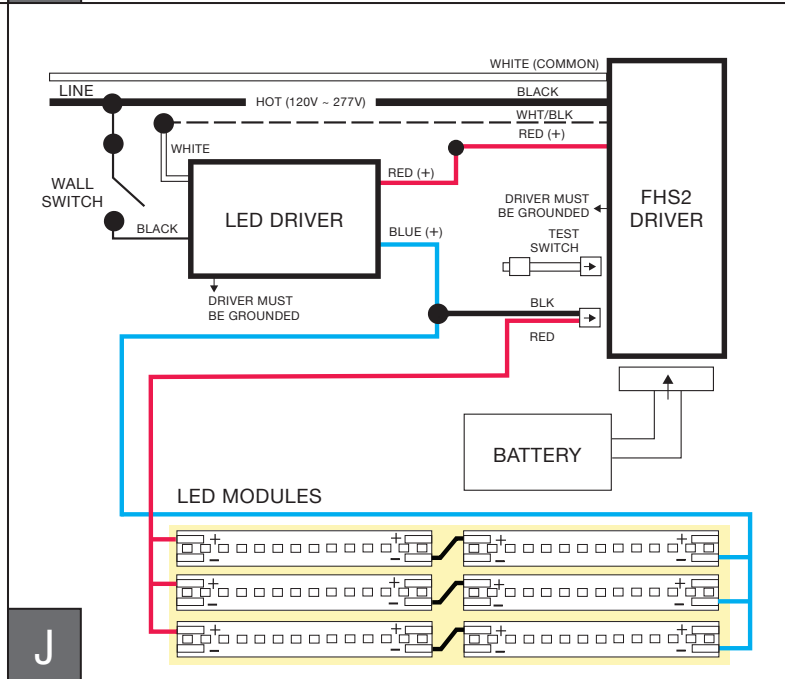
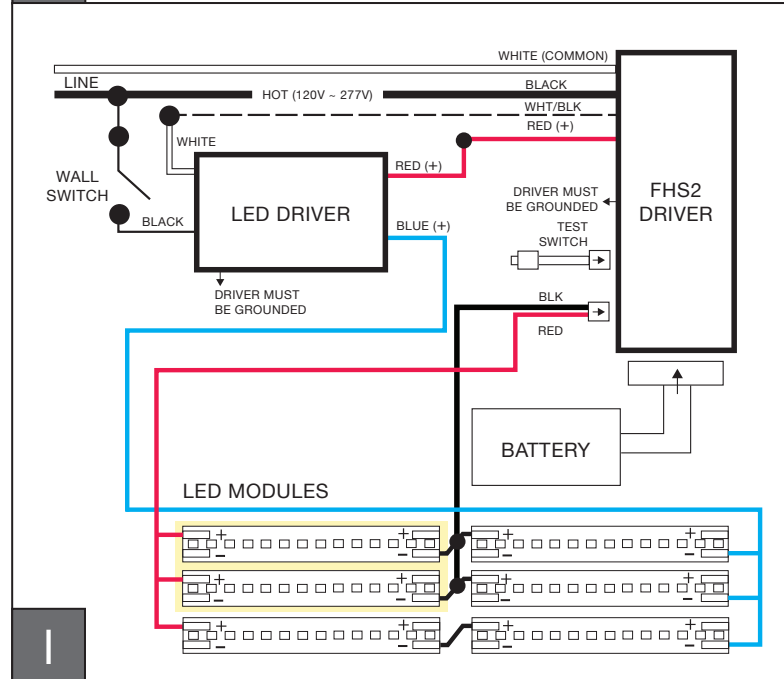
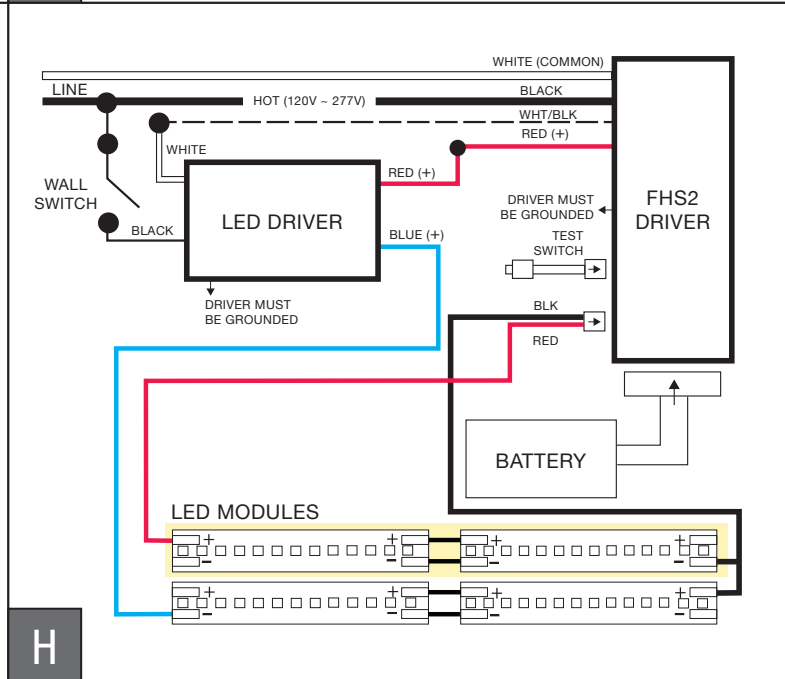
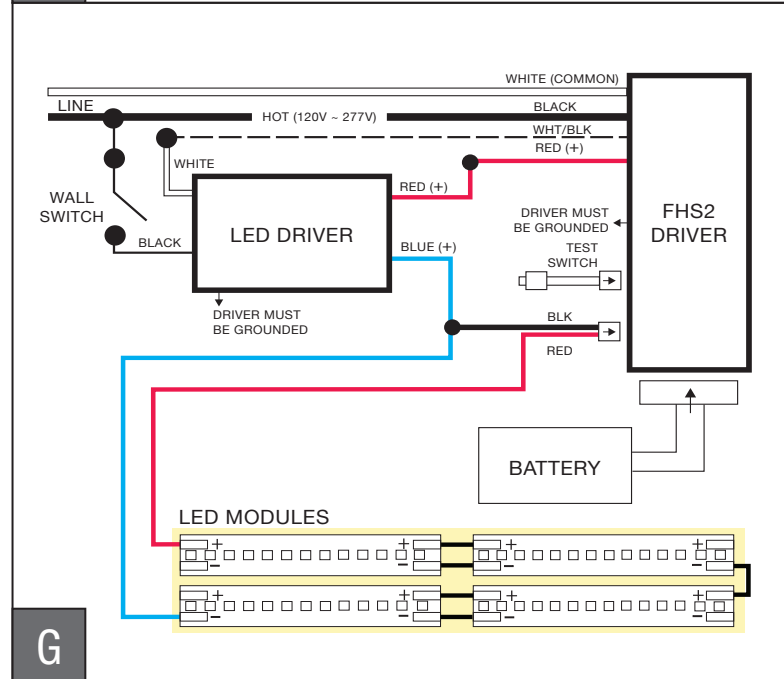
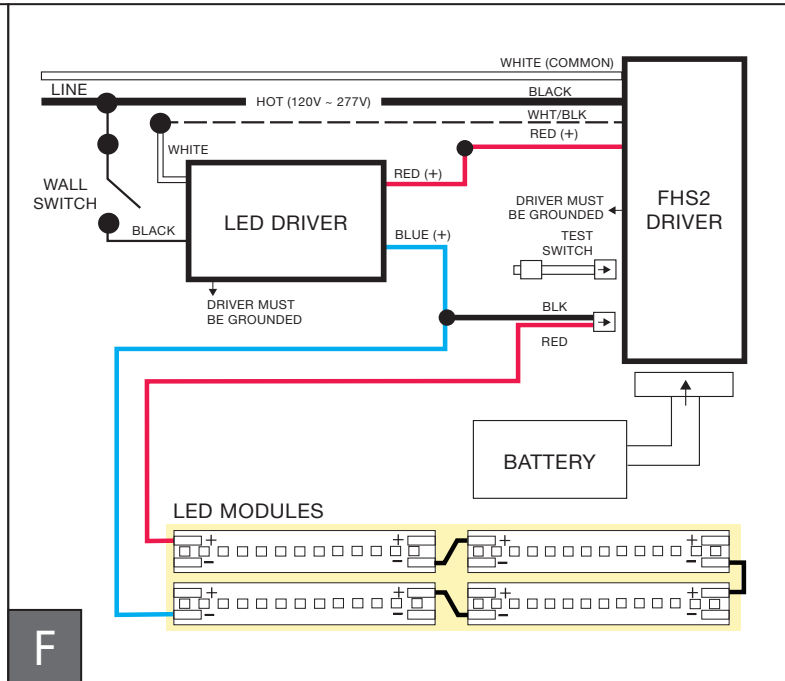
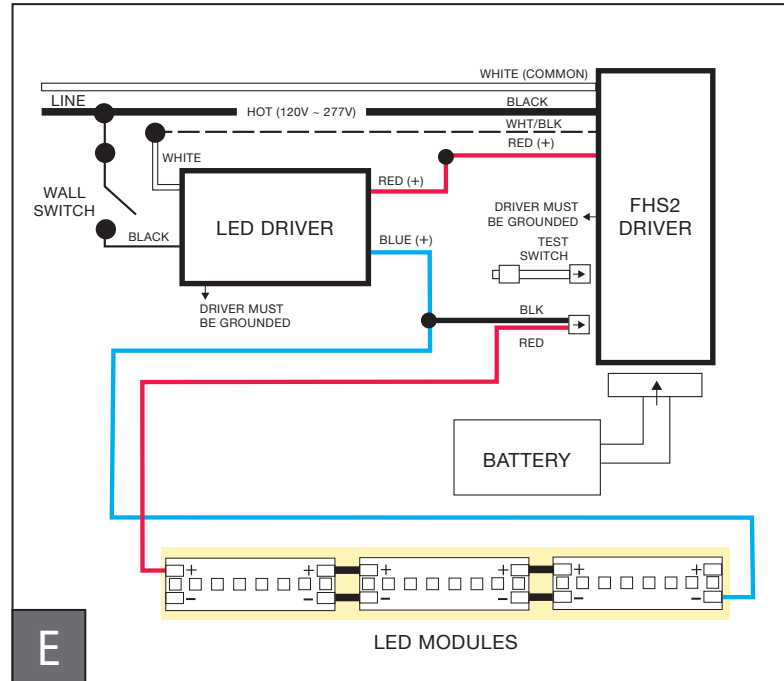
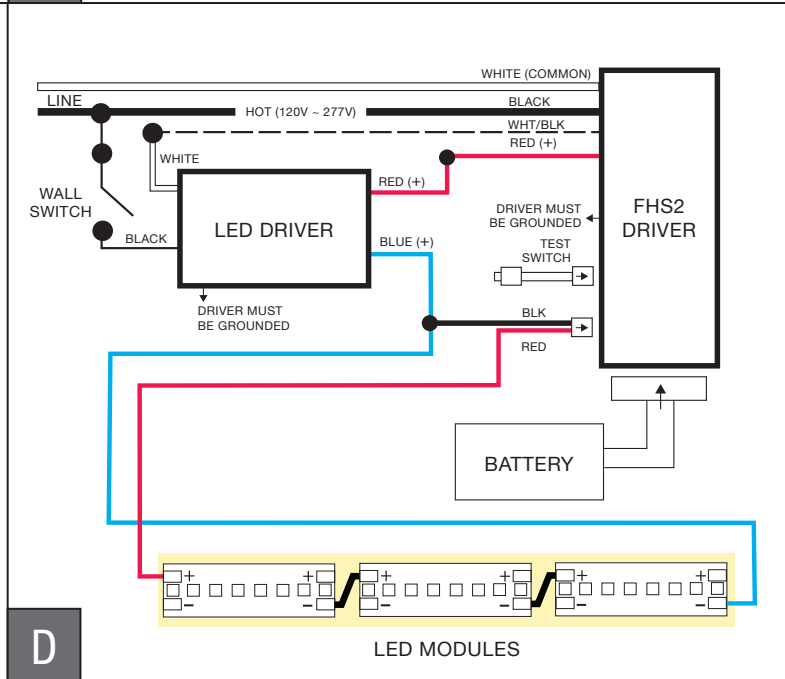
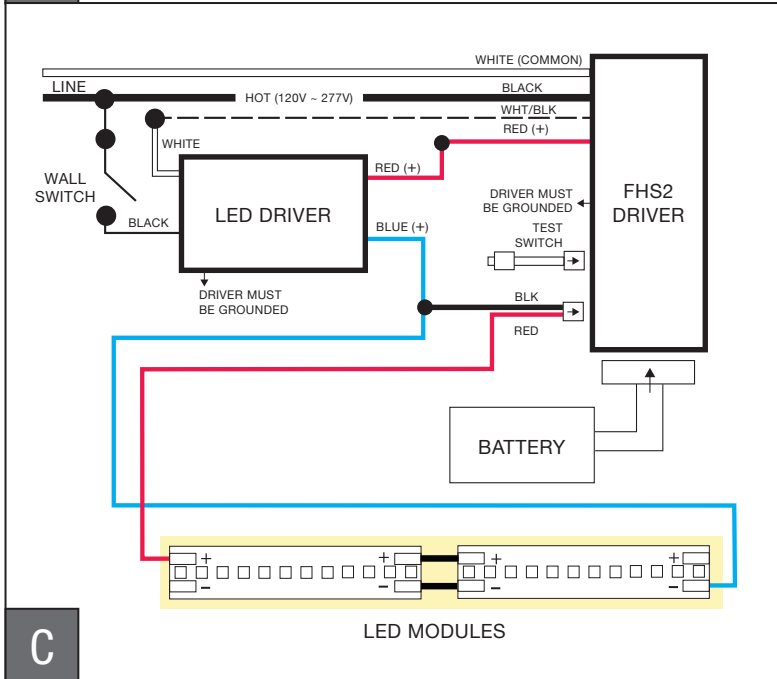
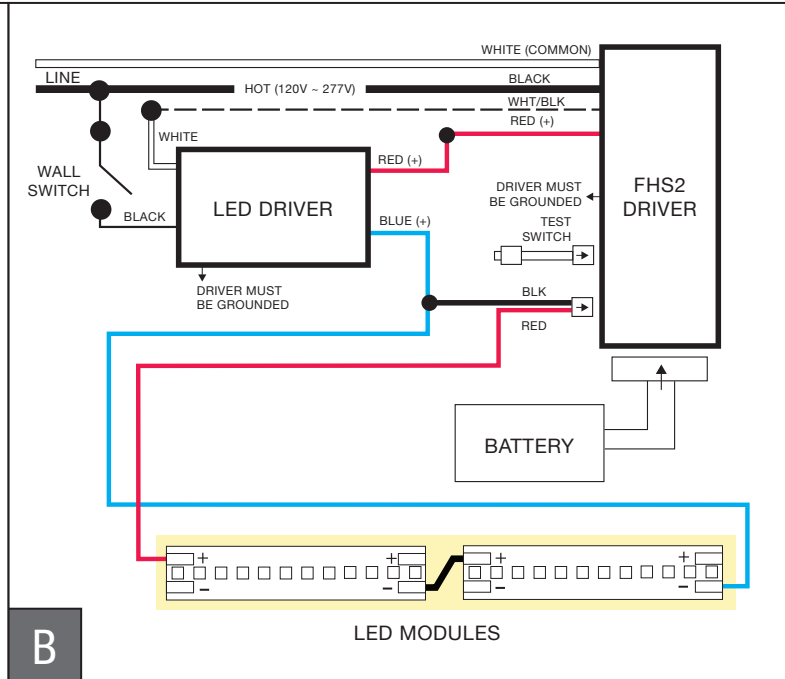
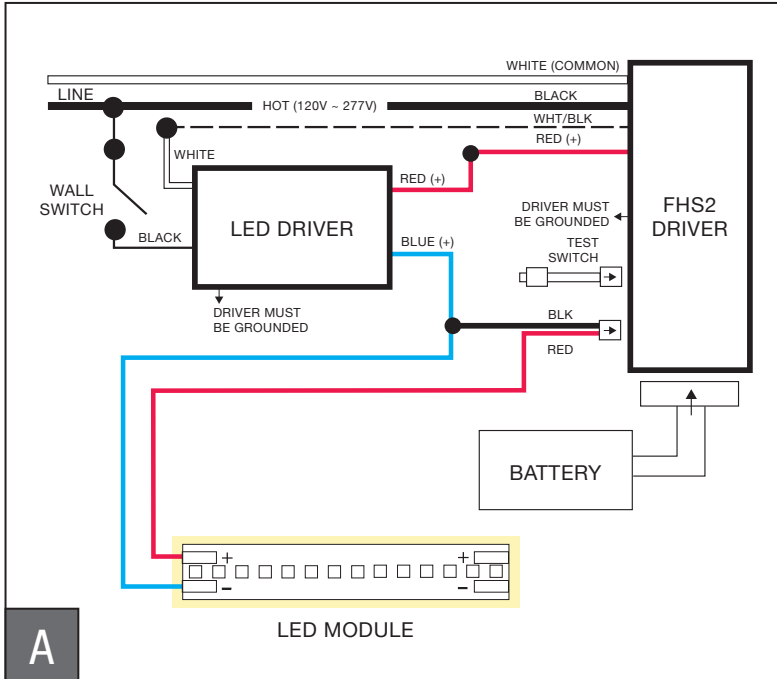
Find your desired lumen output in the left column
- 3

Look in the LED Driver, LED Module, and Diffuser Lens columns for recommended components
- 4

Look in the red emergency columns for recommended emergency components
- 5

Use the letter in the wiring diagram column to find the appropriate illustration below

- Modules shown are 4000K, 80 CRI. Other color temperatures and CRI are available.
- In wiring diagrams, modules that are powered during emergency mode are highlighted in yellow
- For illustration purposes, linear modules are shown in wiring diagrams.



Normal System Operation 4000K/80CRI			LED Driver			LED Module		Diffuser Lens (~13% lumen reduction)		Wiring Diagram		Emergency System Operation 4000K/80CRI, 90 Min Runtime			FHS2		Emergency Battery		Wiring Harness		# Modules ON in Emergency		
11” linear modules- 4 per driver																							
3380 lm	700 mA	25.6W	700 mA CC			T1M1UNV0700-30L 30W UNV Input 0-10V Dimming			TM21LN0540-201/202 201: MCPCB; 202: FR4		TLE-OPT-120-002		F	1025 lm	200 mA	6.8W	FHS2-UNV-56S		8W: FHSBATL3-1.5		FHS-HARNESS-200		4
3660 lm	700 mA	26.4W	700 mA CC			T1T11200700-30L 30W 120VAC Input TRIAC Dimming			TMU075007HL840A		TLE-OPT-120-003		F	1130 lm	200 mA	6.8W	FHS2-UNV-56S		8W: FHSBATL3-1.5		FHS-HARNESS-200		4
4260 lm	900 mA	33.6W	900 mA CC			T1M1UNV0900-40L 40W UNV Input 0-10V Dimming			TM21LN0540-201/202 201: MCPCB; 202: FR4		TLE-OPT-120-002		F	1860 lm	350 mA	12.2W	FHS2-UNV-56S		14W: FHSBATL6-1.5		FHS-HARNESS-350		4
4640 lm	1000 mA	37.6W	1000 mA CC			T1M1UNV1000-40L 40W UNV Input 0-10V Dimming			TM21LN0540-201/202 201: MCPCB; 202: FR4		TLE-OPT-120-002		F	1860 lm	350 mA	12.2W	FHS2-UNV-56S		14W: FHSBATL6-1.5		FHS-HARNESS-350		4
22” & 22.88” linear modules- 1 per driver																							
1720 lm	350 mA	11.5W	350 mA CC			T1M1UNV0350-15L 15W UNV Input 0-10V Dimming			TMU045015HL840A/B A: 22” B: 22.88”		A: TLE-OPT-120-004 B: TLE-OPT-120-005		A	530 lm	100 mA	3W	FHS2-UNV-36L		4W: FHSBATL3-1		FHS-HARNESS-100		1
2020 lm	350 mA	13.7W	350 mA CC			T1T11200350-15L 15W 120VAC Input TRIAC Dimming			TMU045018HL840A/B A: 22” B: 22.88”		A: TLE-OPT-120-004 B: TLE-OPT-120-005		A	1210 lm	200 mA	7.4W	FHS2-UNV-56S		8W: FHSBATL3-1.5		FHS-HARNESS-200		1
22” & 22.88” linear modules- 2 per driver																							
3380 lm	700 mA	25.6W	700 mA CC			T1M1UNV0700-30L 30W UNV Input 0-10V Dimming			TM42LN0540-201/202 201: MCPCB; 202: FR4		TLE-OPT-120-001		B	1025 lm	200 mA	6.8W	FHS2-UNV-56S		8W: FHSBATL3-1.5		FHS-HARNESS-200		2
3440 lm	350 mA	23.0W							A: TLE-OPT-120-004 B: TLE-OPT-120-005		C	1580 lm	300 mA	9.2W	FHS2-UNV-36L		10W: FHSBATL9-.6		FHS-HARNESS-300		2		
3660 lm	700 mA	26.4W	700 mA CC			T1T11200700-30L 30W 120VAC Input TRIAC Dimming			TMU075014HL840A		TLE-OPT-120-004		B	1130 lm	200 mA	6.8W	FHS2-UNV-56S		8W: FHSBATL3-1.5		FHS-HARNESS-200		2
4040 lm	350 mA	27.4W							A: TLE-OPT-120-004 B: TLE-OPT-120-005		C	2140 lm	350 mA	12.9W	FHS2-UNV-56S		14W: FHSBATL6-1.5		FHS-HARNESS-350		2		
4260 lm	900 mA	33.4W	900 mA CC			T1M1UNV0900-40L 40W UNV Input 0-10V Dimming			TM42LN0540-201/202 201: MCPCB; 202: FR4		TLE-OPT-120-001		B	1860 lm	350 mA	12.2W	FHS2-UNV-56S		14W: FHSBATL6-1.5		FHS-HARNESS-350		2
4640 lm	1000 mA	37.4W	1000 mA CC			T1M1UNV1000-40L 40W UNV Input 0-10V Dimming			TM42LN0540-201/202 201: MCPCB; 202: FR4		TLE-OPT-120-001		B	1860 lm	350 mA	12.2W	FHS2-UNV-56S		14W: FHSBATL6-1.5		FHS-HARNESS-350		2
4900 lm	1050 mA	39.6W				T1x1UNV105P-40E Programmable Output 250-1050 mACC 40W UNV Input x: M (0-10V) or A (DALI)			TM42LN0540-201/202 201: MCPCB; 202: FR4		TLE-OPT-120-001		B	1860 lm	350 mA	12.2W	FHS2-UNV-56S		14W: FHSBATL6-1.5		FHS-HARNESS-350		2
22” and 22.88” linear modules- 3 per driver																							
7350 lm	1050 mA	59.4W				T1x1UNV105P-60E Programmable Output 250-1050 mA CC 60W, UNV Input x: M (0-10V) or A (DALI)			TM42LN0540-201/202 201: MCPCB; 202: FR4		TLE-OPT-120-001		D	1910 lm	250 mA	12.8W	FHS2-UNV-56S		14W: FHSBATL6-1.5		FHS-HARNESS-250		3
22” and 22.88” linear modules- 4 per driver (2 series, 2 parallel)																							
6760 lm	700 mA	50.8W	1400 mA CC			T1M1UNV1400-60L 60W UNV Input 0-10V Dimming			TM42LN0540-201/202 201: MCPCB; 202: FR4		TLE-OPT-120-001		H	1860 lm	350 mA	12.2W	FHS2-UNV-56S		14W: FHSBATL6-1.5		FHS-HARNESS-350		2
7320 lm	700 mA	52.8W	1400 mA CC			T1UNV1400-60L 60W UNV Input			TMU075014HL840A		TLE-OPT-120-004		G	2850 lm	500 mA	17.2W	FHS2-UNV-56S		20W: FHSBATL6-3		FHS-HARNESS-500		4
8100 lm	840 mA	61.6W							1680 mA CC			T1M1UNV1680-88L 88W UNV Input 0-10V Dimming			TM42LN0540-201/202 201: MCPCB; 202: FR4		TLE-OPT-120-001		H	1860 lm	350 mA	12.2W	FHS2-UNV-56S
8520 lm	900 mA	66.8W	1800 mA CC			T1M1UNV1800-88L 88W UNV Input 0-10V Dimming			TM42LN0540-201/202 201: MCPCB; 202: FR4		TLE-OPT-120-001		H	1860 lm	350 mA	12.2W	FHS2-UNV-56S		14W: FHSBATL6-1.5		FHS-HARNESS-350		2
22” and 22.88” linear modules- 6 per driver (2 in series, 3 per parallel driver)																							
10140 lm	700 mA	76.2W	2100 mA CC			T1M1UNV2100-88L 88W UNV Input 0-10V Dimming			TM42LN0540-201/202 201: MCPCB; 202: FR4		TLE-OPT-120-001		I	1860 lm	700 mA	12.2W	FHS2-UNV-56S		14W: FHSBATL6-1.5		FHS-HARNESS-350		2
10980 lm	700 mA	79.2W							TLE-OPT-120-004		I	1975 lm	700 mA	12.4W	FHS2-UNV-56S		14W: FHSBATL6-1.5		FHS-HARNESS-350		2		

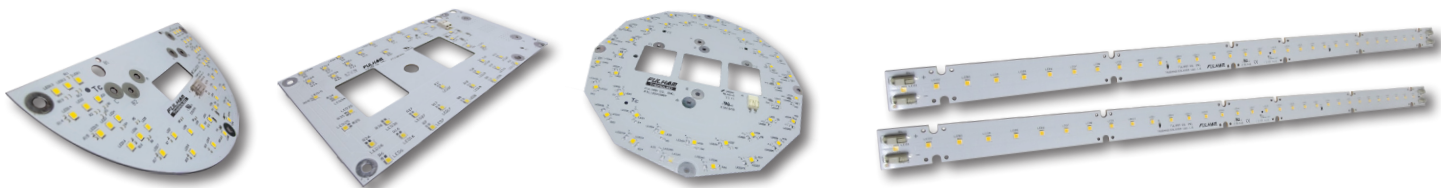
Normal System Operation 4000K/80CRI			LED Driver				LED Module			Wiring Diagram	Emergency System Operation 4000K/80CRI, 90 Min Runtime			FHS2	Emergency Battery	Wiring Harness	# Modules ON in Emergency
Round modules- 1 per driver																	
1450 lm	350 mA	10.6W	T1T11200350-15L 350 mA CC 15W 120VAC Input TRIAC Dimming				TM40RD0540-201 7” Diameter		A	430 lm	100 mA	2.8W	FHS2-UNV-36L	4W: FHSBATL3-1	FHS-HARNESS-100	1	
2300 lm	700 mA	17W	T1M1UNV0700-30L 700 mA CC 30W UNV Input 0-10V Dimming				TM64RD0540-201 9” Diameter		A	830 lm	250 mA	5.6W	FHS2-UNV-36L	6W: FHSBATL6-.6	FHS-HARNESS-250	1	
2750 lm	900 mA	22.3W	T1M1UNV0900-40L 900 mA CC 40W Univ Input 0-10V Dimming				TM64RD0540-201 9” Diameter		A	830 lm	250 mA	5.6W	FHS2-UNV-36L	6W: FHSBATL6-.6	FHS-HARNESS-250	1	
3030 lm	1000 mA	25.1W	T1M1UNV1000-40L 1000 mA CC 40W UNV Input 0-10V Dimming				TM64RD0540-201 9” Diameter		A	830 lm	250 mA	5.6W	FHS2-UNV-36L	6W: FHSBATL6-.6	FHS-HARNESS-250	1	
2880 lm	700 mA	21.1W	T1T11200700-30L 700 mA CC 30W 120VAC Input TRIAC Dimming				TM80RD0540-201 9” Diameter		A	1040 lm	250 mA	6.9W	FHS2-UNV-36L	8W: FHSBATL3-1.5	FHS-HARNESS-250	1	
3410 lm	900 mA	27.6W	T1M1UNV0900-40L 900 mA CC 40W UNV Input 0-10V Dimming				TM80RD0540-201 9” Diameter		A	1040 lm	250 mA	6.9W	FHS2-UNV-36L	8W: FHSBATL3-1.5	FHS-HARNESS-250	1	
3810 lm	1000 mA	31W	T1M1UNV1000-40L 1000 mA CC 40W UNV Input 0-10V Dimming				TM80RD0540-201 9” Diameter		A	1040 lm	250 mA	6.9W	FHS2-UNV-36L	8W: FHSBATL3-1.5	FHS-HARNESS-250	1	
4000 lm	1050 mA	33W	T1x1UNV105P-40E Programmable output 250-1050 mACC 40W UNV Input x: M (0-10V) or A (DALI)				TM80RD0540-201 9” Diameter		A	1040 lm	250 mA	6.9W	FHS2-UNV-36L	8W: FHSBATL3-1.5	FHS-HARNESS-250	1	
Round modules- 2 per driver																	
5500 lm	900 mA	44.6W	T1M1UNV1800-88L 1880 mA CC 88W UNV Input 0-10V Dimming				TM64RD0540-201 9” Diameter		C	1020 lm	300 mA	13.4W	FHS2-UNV-56S	14W: FHSBATL6-1.5	FHS-HARNESS-300	2	
6820 lm	900 mA	55.2W					TM80RD0540-201 9” Diameter		C	2120 lm	500 mA	13.8W	FHS2-UNV-36L	16W: FHSBATL6-1.5	FHS-HARNESS-500	2	
6310 lm	840 mA	51.2W	T1M1UNV1680-88L 1680 mA CC 88W UNV Input 0-10V Dimming				TM80RD0540-201 9” Diameter		C	2120 lm	500 mA	13.8W	FHS2-UNV-36L	16W: FHSBATL6-1.5	FHS-HARNESS-500	2	
6400 lm	1050 mA	53W	T1x1UNV105P-60E Programmable output 250-1050 mA CC 60W UNV Input x: M (0-10V) or A (DALI)				TM64RD0540-201 9” Diameter		B	2020 lm	300 mA	13.4W	FHS2-UNV-56S	14W: FHSBATL6-1.5	FHS-HARNESS-300	2	
Round Modules- 3 per driver																	
6900 lm	700 mA	51W	T1M1UNV2100-88L 2100 mA CC 88W UNV Input 0-10V Dimming				TM64RD0540-201 9” Diameter		E	1010 lm	300 mA	6.7W	FHS2-UNV-36L	8W: FHSBATL3-1.5	FHS-HARNESS-300	1	
8640 lm	700 mA	63.3W					TM80RD0540-201 9” Diameter		E	1060 lm	250 mA	6.9W	FHS2-UNV-36L	8W: FHSBATL3-1.5	FHS-HARNESS-250	1	
Round - 4 per driver (2 series, 2 parallel)																	
10,500 lm	840 mA	82.8W	T1M1UNV1680-88L 1680 mA CC 88W UNV Input 0-10V Dimming				TM64RD0540-201 9” Diameter		H	1020 lm	300 mA	13.4W	FHS2-UNV-56S	14W: FHSBATL6-1.5	FHS-HARNESS-300	2	
Half Round modules- 1 per driver																	
1450 lm	350 mA	10.6W	T1T11200350-15L 350 mA CC 15W 120VAC Input TRIAC Dimming				TM40HR0540-201 7” Diameter		A	430 lm	100 mA	2.8W	FHS2-UNV-36L	4W: FHSBATL3-1	FHS-HARNESS-100	1	
Rectangular modules- 1 per driver																	
1450 lm	350 mA	10.6W	T1T11200350-15L 350 mA CC 15W 120VAC Input TRIAC Dimming				TM40RT0540-206 4” x 7”		A	430 lm	100 mA	2.8W	FHS2-UNV-36L	4W: FHSBATL3-1	FHS-HARNESS-100	1	

LED Modules, Drivers, & Emergency Systems



LED Modules

Fulham's constant current LED modules are designed for efficiency, flexibility and reliability. With popular models providing over 140 lumens per watt, Fulham LED modules also offer significant energy savings. Multiple form factors, color temperatures, and CRI levels are available.



LED Drivers

Fulham's wide range of LED drivers provide the right solution for almost any luminaire. Programmable drivers allow customized output currents, dimming curves, and more. DALI, 0-10V, and TRIAC dimming drivers are available in multiple power levels and sizes.



LED Emergency

The award-winning HotSpot2 emergency system uses a luminaire's existing LED modules to provide reliable backup lighting during power outages. A complete system is composed of an emergency driver (also called a charger), a battery, and a wiring harness. A wide range of lumen output and run times are available.



FULHAM www.fulham.com | PN: FLYER-LEDSYSTEM

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