

Type IV Amber Optics

for use with FL05 Area Lights

Instantly achieve warmer colour temperatures with CSC LED's easy-to-install Amber Optics!
Provides a close CCT match for HPS and LPS retrofits!



WHY CHOOSE AMBER OPTICS?



Enhance Visibility in Rain and Fog

Enhance visibility in foggy and rainy conditions. Amber lenses improve vision by reducing blue light, which reflects off water vapour and reduces clarity.



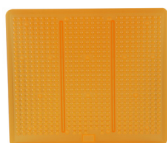
Dark Sky Preservation

Amber Optics enhance the appeal of the FL05 FLEX series for Dark Sky reserves and observatories with specialized environmental needs. Warm-toned lighting minimizes light pollution, helping to protect the surrounding ecosystem.



Limit Harm to Wildlife

Warm-toned lighting reduces disruption to wildlife behaviour compared to blue-rich lighting. Many species, including bats, amphibians, and insects, depend on darkness for hunting and reproduction, which can be significantly affected by blue-rich light.



FL-TYPE-IV-SM-AM



FL-TYPE-IV-LG-AM

Fixture CCT Setting	3000K	4000K	5000K
CCT With Amber Optics	2200K	2700K	3000K

PRODUCT CODES *Where xx denotes finish colour	WATTS	FIXTURE CCT	CCT WITH AMBER OPTICS	LUMENS	EFFICACY	CRI
FL-TYPE-IV-SM-AM with FL05-100W-3P-3CCT-UD-XX	60W	3000K	2200K	8005 lm	133 lm/W	70+
		4000K	2700K	8480 lm	141 lm/W	
		5000K	3000K	8067 lm	134 lm/W	
	80W	3000K	2200K	10433 lm	130 lm/W	
		4000K	2700K	11067 lm	138 lm/W	
		5000K	3000K	10516 lm	131 lm/W	
	100W	3000K	2200K	12741 lm	127 lm/W	
		4000K	2700K	13534 lm	135 lm/W	
		5000K	3000K	12845 lm	128 lm/W	
FL-TYPE-IV-SM-AM with FL05-150W-3P-3CCT-UD-XX	100W	3000K	2200K	12026 lm	120 lm/W	70+
		4000K	2700K	12988 lm	130 lm/W	
		5000K	3000K	12000 lm	120 lm/W	
	125W	3000K	2200K	14658 lm	117 lm/W	
		4000K	2700K	15860 lm	127 lm/W	
		5000K	3000K	14625 lm	117 lm/W	
	150W	3000K	2200K	17139 lm	114 lm/W	
		4000K	2700K	18582 lm	124 lm/W	
		5000K	3000K	17105 lm	114 lm/W	
FL-TYPE-IV-LG-AM with FL05-240W-3P-3CCT-UD-XX	180W	3000K	2200K	23242 lm	129 lm/W	70+
		4000K	2700K	25375 lm	141 lm/W	
		5000K	3000K	24197 lm	134 lm/W	
	210W	3000K	2200K	26485 lm	126 lm/W	
		4000K	2700K	28974 lm	138 lm/W	
		5000K	3000K	27600 lm	131 lm/W	
	240W	3000K	2200K	29549 lm	123 lm/W	
		4000K	2700K	32395 lm	135 lm/W	
		5000K	3000K	30824 lm	128 lm/W	
FL-TYPE-IV-LG-AM with FL05-300W-3P-3CCT-UD-XX	260W	3000K	2200K	30784 lm	118 lm/W	70+
		4000K	2700K	34310 lm	132 lm/W	
		5000K	3000K	32224 lm	124 lm/W	
	280W	3000K	2200K	32312 lm	115 lm/W	
		4000K	2700K	36109 lm	129 lm/W	
		5000K	3000K	33863 lm	121 lm/W	
	300W	3000K	2200K	33721 lm	112 lm/W	
		4000K	2700K	37789 lm	126 lm/W	
		5000K	3000K	35385 lm	118 lm/W	

CLOSE REPLACEMENT FOR HPS/LPS

A high CRI of 70+ will provide more natural colour rendering when compared to traditional HPS/LPS lamps (20-25 CRI), while still providing a closely matching CCT!

CONSTRUCTION

Amber Optics are crafted from UV Resistant Polycarbonate.

SPECTRAL INFORMATION

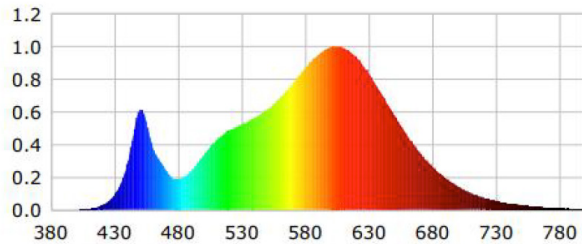


Fig. 1:
3000K Fixture Setting With Standard, Clear Optics

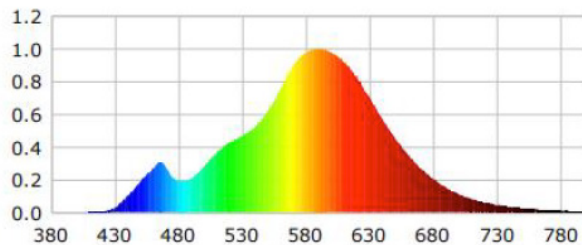


Fig. 2:
5000K Fixture Setting + Amber Optics = 3000K CCT

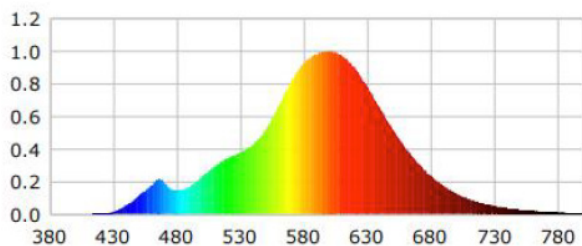


Fig. 3:
4000K Fixture Setting + Amber Optics = 2700K CCT

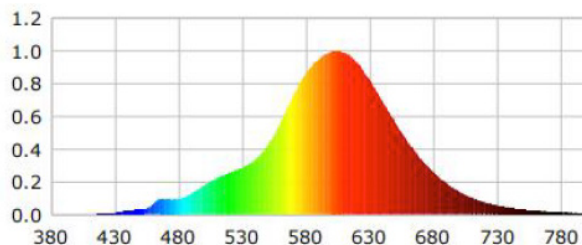


Fig. 4:
3000K Fixture Setting + Amber Optics = 2200K CCT

SPECTRAL GRAPHS EXPLAINED:

Using the FL05-150W-3P-3CCT-UD-XX* as an example, we can compare the spectral differences between having an Amber Lens installed versus the standard, clear polycarbonate optics of the FL05 series. Normal 3000K operation of the fixture contains blue wavelengths despite the warm colour temperature (Fig. 1).

When the Amber Lens is installed and the fixture is set to 5000K operation, a 3000K CCT is achieved which has reduced blue wavelengths (Fig. 2) when compared to the standard clear optics.

Setting the fixture to 4000K operation results in a 2700K CCT with further blue wavelength reduction (Fig. 3).

Using the 3000K setting on the fixture along with the Amber Lens results in a 2200K CCT, closer to HPS and LPS lamps (Fig. 4).

*Where XX denotes finish colour

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