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## 20.0mm Medium Spot Frosted TIR (10195)



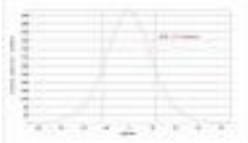






Part no.	10195
Drawing no.	60431
Family	20mm
Type	TIR
Diameter	20.0
Beam	Medium Spot
Finish	Frosted



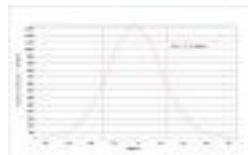
## LEDs & Performances

Select LED to view available holders

Manu.	Performance Data	Images	IES/STP
 <a href="#">Cree XLamp CSP XD16 Cool White</a>	Eff: 86.5 FWHM: 23 Cd/lm: 3.4	 	<a href="#">View</a>
 <a href="#">Cree XLamp MC-E White</a>	Eff: 78 FWHM: 28 Cd/lm: 2.6		<a href="#">View</a>
	Eff: 86.5 FWHM: 27		<a href="#">View</a>

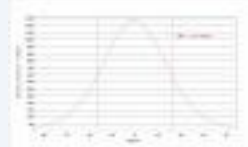
[Cree XLamp MH-B White](#)

Cd/lm: 2.44



[Cree XLamp XHP-50 Gen 2 White](#)

Eff: 86  
FWHM: 33  
Cd/lm: 2

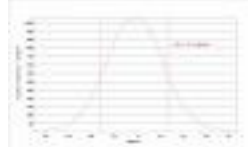


[View](#)



[Cree XLamp XHP-50 White](#)

Eff: 85.8  
FWHM: 30  
Cd/lm: 2.3

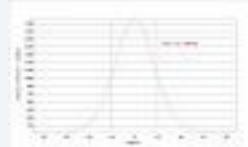


[View](#)



[Cree XLamp XHP35 HI White](#)

Eff: 86  
FWHM: 20  
Cd/lm: 4.8



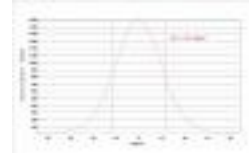
[View](#)

Eff: 85.9



[Cree XLamp XHP35 White](#)

FWHM: 24  
Cd/lm: 3.4



[View](#)



[Cree XLamp XM-L White](#)

FWHM: 26  
Cd/lm: 3.9



[View](#)



[Cree XLamp XP-E White](#)

Eff: 82.9  
FWHM: 18  
Cd/lm: 6

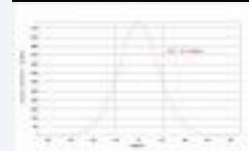


[View](#)



[Cree XLamp XP-G3 White](#)

Eff: 87  
FWHM: 20  
Cd/lm: 4.45

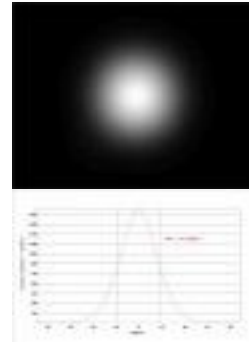


[View](#)



[Cree XLamp XP-L HI White](#)

Eff: 86.3  
FWHM: 19  
Cd/lm: 5.2

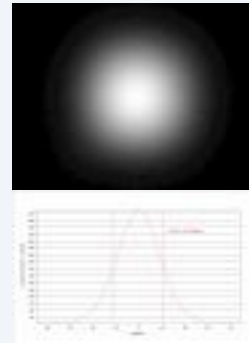


[View](#)



[Cree XLamp XP-L White](#)

Eff: 86  
FWHM: 22  
Cd/lm: 4



[View](#)



[Cree XLamp XP-L2 White](#)

Eff: 86.5  
FWHM: 28  
Cd/lm: 2.7



[View](#)

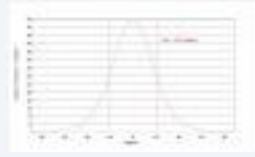


[Cree XLamp XQ-A Blue](#)

Eff: 87  
FWHM: 21  
Cd/lm: 4.5

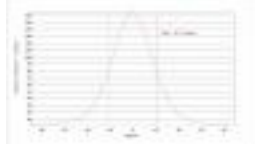
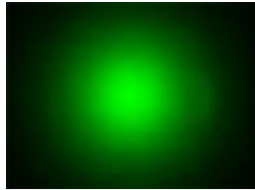


[View](#)



[Cree XLamp XQ-A Green](#)

Eff: 87  
FWHM: 21  
Cd/lm: 4.5

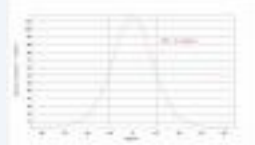


[View](#)



[Cree XLamp XQ-A Red](#)

Eff: 87.5  
FWHM: 21  
Cd/lm: 4.6

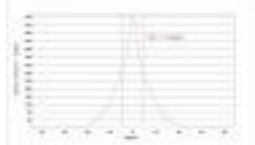


[View](#)



[Cree XLamp XQ-A White](#)

Eff: 86  
FWHM: 9  
Cd/lm: 11.4

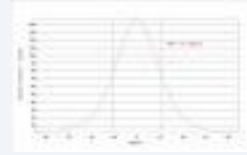


[View](#)



[Cree XLamp XQ-E HI Blue](#)

Eff: 86  
FWHM: 22  
Cd/lm: 3.9

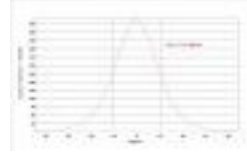
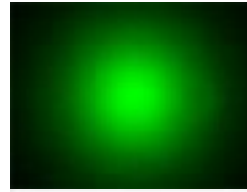


[View](#)



[Cree XLamp XQ-E HI Green](#)

Eff: 86  
FWHM: 22  
Cd/lm: 3.8

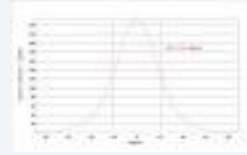
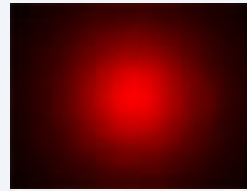


[View](#)



[Cree XLamp XQ-E HI Red](#)

Eff: 86  
FWHM: 22  
Cd/lm: 3.9



[View](#)

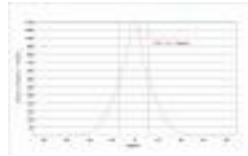


[Cree XLamp XQ-E HI White](#)

Eff: 86  
FWHM: 13  
Cd/lm: 7.63



[View](#)

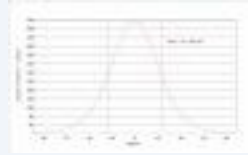


[Cree Xlamp XTE HE White](#)

Eff: 87.5  
FWHM: 25  
Cd/lm: 3.3



[View](#)



[LG 3535LG White](#)

FWHM: 23  
Cd/lm: 4.6



[View](#)

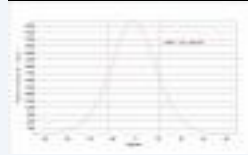


[Lite-On R38386AS - S R38 IR](#)

Eff: 90.5  
FWHM: 23  
Cd/lm: 4.1



[View](#)



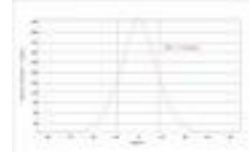
Eff: 84





[LUMILEDS LUXEON 3030 White](#)

FWHM: 18  
Cd/lm: 5.64

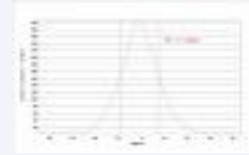


[View](#)



[LUMILEDS LUXEON 3535 HV White](#)

Eff: 85.9  
FWHM: 17  
Cd/lm: 5.93

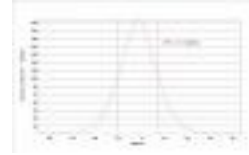
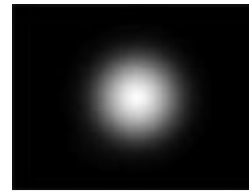


[View](#)



[LUMILEDS LUXEON 3535 L White](#)

Eff: 84  
FWHM: 18  
Cd/lm: 5.65



[View](#)

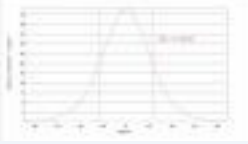


[LUMILEDS LUXEON 3535L Blue](#)

Eff: 87.5  
FWHM: 24  
Cd/lm: 3.6



[View](#)

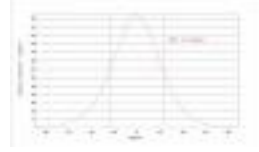


[LUMILEDS LUXEON 3535L Green](#)

Eff: 88  
FWHM: 24  
Cd/lm: 3.7



[View](#)

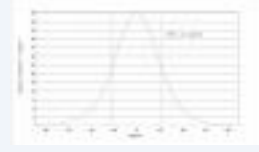


[LUMILEDS LUXEON 3535L Red](#)

Eff: 88  
FWHM: 22  
Cd/lm: 4.1



[View](#)

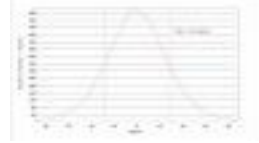


[LUMILEDS LUXEON 5050 White](#)

Eff: 87  
FWHM: 30  
Cd/lm: 2.5



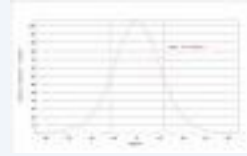
[View](#)





[LUMILEDS LUXEON C Blue](#)

Eff: 83  
FWHM: 24  
Cd/lm: 3.4

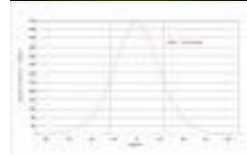


[View](#)



[LUMILEDS LUXEON C Lime](#)

Eff: 85  
FWHM: 23  
Cd/lm: 3.7

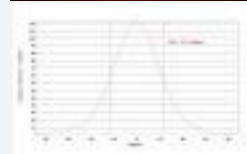


[View](#)



[LUMILEDS LUXEON C Red](#)

Eff: 82.5  
FWHM: 24  
Cd/lm: 3.4

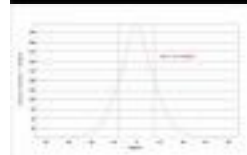


[View](#)



[LUMILEDS LUXEON CSP 05 White](#)

Eff: 84  
FWHM: 16  
Cd/lm: 5.33

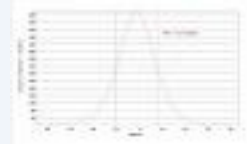


[View](#)



[LUMILEDS LUXEON CSP 10 White](#)

Eff: 83  
FWHM: 18  
Cd/lm: 4.63

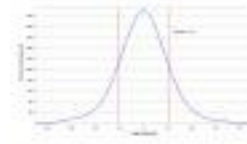


[View](#)



[LUMILEDS LUXEON CZ](#)

Eff: 87  
FWHM: 22  
Cd/lm: 4.4

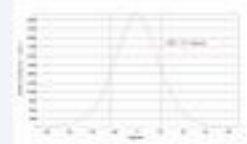


[View](#)



[LUMILEDS LUXEON IR Compact 850nm](#)

Eff: 91  
FWHM: 23  
Cd/lm: 4.3



[View](#)



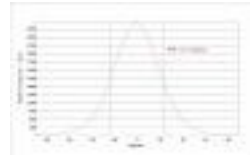
[LUMILEDS LUXEON IR Domed 150](#)

Eff: 91.5  
FWHM: 23  
Cd/lm: 4.1



[View](#)

[Degree](#)

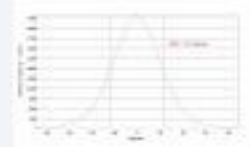


[LUMILEDS LUXEON IR Domed 60 Degree](#)

Eff: 89.5  
FWHM: 24  
Cd/lm: 3.8



[View](#)

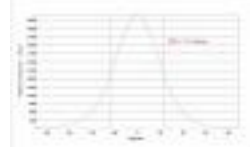


[LUMILEDS LUXEON IR Domed 90 Degree](#)

Eff: 90  
FWHM: 23  
Cd/lm: 4.1



[View](#)

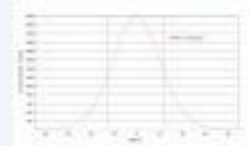


[LUMILEDS LUXEON MZ White](#)

Eff: 85.7  
FWHM: 25  
Cd/lm: 3.3



[View](#)

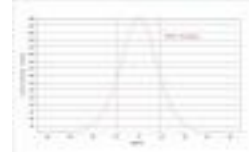


Eff: 84.1



[LUMILEDS LUXEON Q White](#)

FWHM: 19  
Cd/lm: 4.8



[View](#)



[LUMILEDS LUXEON R White](#)

Eff: 79.7  
FWHM: 21  
Cd/lm: 5.1



[View](#)



[LUMILEDS LUXEON Rebel ES White](#)

Eff: 79.7  
FWHM: 21  
Cd/lm: 5.1



[View](#)



[LUMILEDS LUXEON Rebel White](#)

Eff: 82.5  
FWHM: 18  
Cd/lm: 5.8



[View](#)

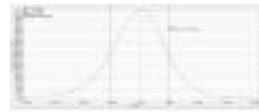


[LUMILEDS LUXEON T White](#)

Eff: 79.7  
FWHM: 21  
Cd/lm: 5.1

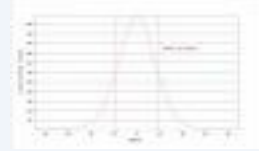


[View](#)



[LUMILEDS LUXEON TX White](#)

Eff: 85.9  
FWHM: 19  
Cd/lm: 5.2

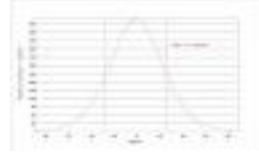


[View](#)



[LUMILEDS LUXEON V White](#)

Eff: 85  
FWHM: 27  
Cd/lm: 2.7

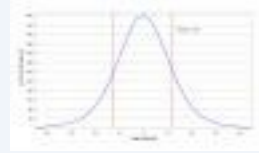


[View](#)



[LUMILEDS LUXEON V2 White](#)

Eff: 87.5  
FWHM: 25  
Cd/lm: 3.4

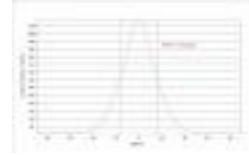


[View](#)



[LUMILEDS LUXEON Z ES White](#)

Eff: 86  
FWHM: 16  
Cd/lm: 6.73

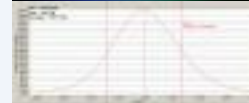
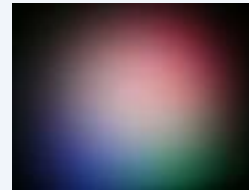


[View](#)



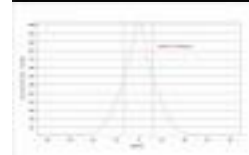
[LUMILEDS LUXEON Z RGBW](#)

Eff: 80  
FWHM: 29  
Cd/lm: 3.5



[LUMILEDS LUXEON Z White](#)

Eff: 86  
FWHM: 13  
Cd/lm: 7.88



[View](#)



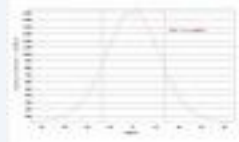
[Nichia 229A White](#)

Eff: 85  
FWHM: 28  
Cd/lm: 2.7



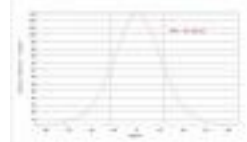
[View](#)





[Nichia 757G White](#)

Eff: 87.5  
FWHM: 24  
Cd/lm: 3.6

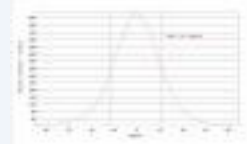


[View](#)



[Nichia NCSW E17A White](#)

Eff: 87  
FWHM: 22  
Cd/lm: 4.1

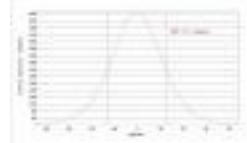


[View](#)



[Nichia NF2W 385AR-V2 White](#)

Eff: 87.5  
FWHM: 25  
Cd/lm: 3.4



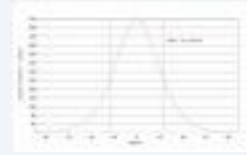
[View](#)

Eff: 85.5



[Nichia NVSL 219B White](#)

FWHM: 23  
Cd/lm: 3.7

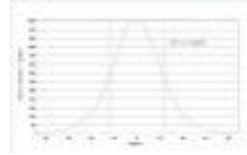


[View](#)



[Nichia NVSW 219C White](#)

Eff: 85.5  
FWHM: 25  
Cd/lm: 3.3

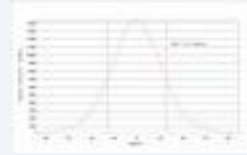


[View](#)



[Nichia NVSW 319A White](#)

Eff: 85.5  
FWHM: 26  
Cd/lm: 3.1



[View](#)



[Nichia NVSW E21A White](#)

Eff: 84  
FWHM: 18  
Cd/lm: 5.77

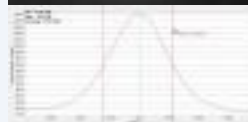
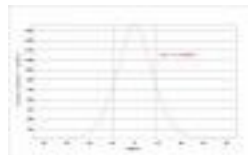


[View](#)



[Nichia Top Emitting 083 White](#)

Eff: 80.9  
FWHM: 23  
Cd/lm: 3.8

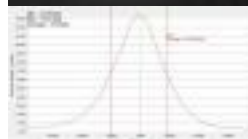


[View](#)



[Nichia Top Emitting NFSW 036 White](#)

Eff: 84.4  
FWHM: 19  
Cd/lm: 4.9

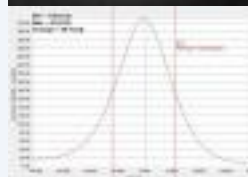


[View](#)



[Nichia Top Emitting NS3W 183T White](#)

Eff: 85.2  
FWHM: 22  
Cd/lm: 4.1

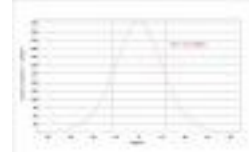


[View](#)

**OSRAM**  
Opto Semiconductors

[Osram OS DURIS E 2835 White](#)

Eff: 87  
FWHM: 24  
Cd/lm: 3.6

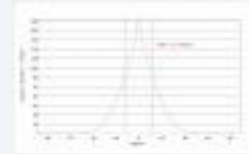


[View](#)

**OSRAM**  
Opto Semiconductors

[Osram OS DURIS E2 White](#)

Eff: 86  
FWHM: 13  
Cd/lm: 7.61

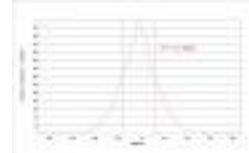
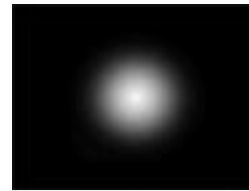


[View](#)

**OSRAM**  
Opto Semiconductors

[Osram OS DURIS E3 White](#)

Eff: 89.4  
FWHM: 15  
Cd/lm: 7.3

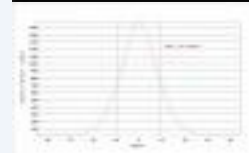


[View](#)

**OSRAM**  
Opto Semiconductors

[Osram OS DURIS P8 White](#)

Eff: 85.9  
FWHM: 19  
Cd/lm: 5.3

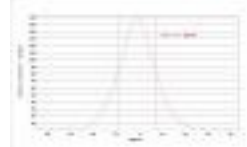


[View](#)

**OSRAM**  
Opto Semiconductors

[Osram OS DURIS S2 White](#)

Eff: 90.9  
FWHM: 17  
Cd/lm: 5.7

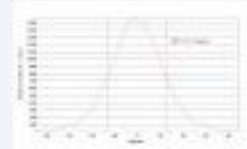


[View](#)

**OSRAM**  
Opto Semiconductors

[Osram OS DURIS S5 Deep Blue](#)

Eff: 87  
FWHM: 25  
Cd/lm: 3.5

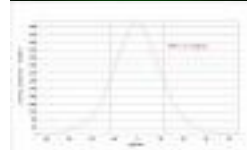
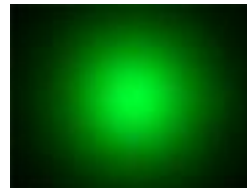


[View](#)

**OSRAM**  
Opto Semiconductors

[Osram OS DURIS S5 Green](#)

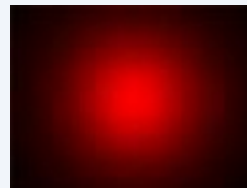
Eff: 87.5  
FWHM: 23  
Cd/lm: 3.8



[View](#)

**OSRAM**  
Opto Semiconductors

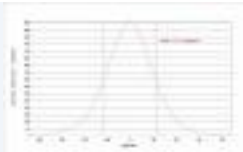
Eff: 88.5  
FWHM: 23



[View](#)

[Osram OS DURIS S5 Red](#)

Cd/lm: 4



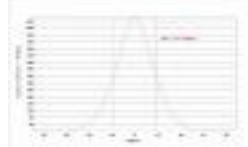
**OSRAM**  
Opto Semiconductors

[Osram OS DURIS S5 White](#)

Eff: 86  
FWHM: 18  
Cd/lm: 5.48



[View](#)



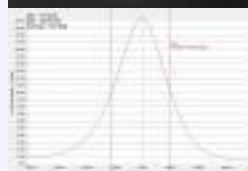
**OSRAM**  
Opto Semiconductors

[Osram OS GOLDEN DRAGON W5SM  
White](#)

Eff: 86  
FWHM: 19  
Cd/lm: 4.2



[View](#)



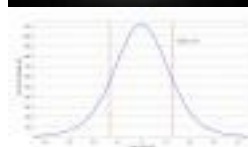
**OSRAM**  
Opto Semiconductors

[Osram OS Osconiq P3737 White](#)

Eff: 85.5  
FWHM: 27  
Cd/lm: 3



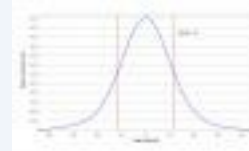
[View](#)



**OSRAM**  
Opto Semiconductors

[Osram OS OSLON Black SFH 4725S IR](#)

Eff: 92.5  
FWHM: 24  
Cd/lm: 4

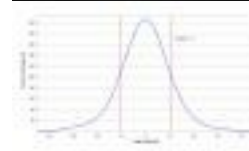


[View](#)

**OSRAM**  
Opto Semiconductors

[Osram OS OSLON Pure CSP GW VJLPE 1 White](#)

Eff: 87.5  
FWHM: 21 x 21  
Cd/lm: 4.5

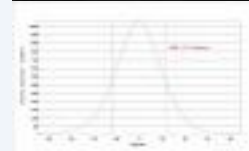


[View](#)

**OSRAM**  
Opto Semiconductors

[Osram OS OSLON Square Flat White](#)

Eff: 87.5  
FWHM: 23  
Cd/lm: 4.1

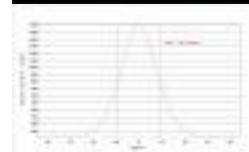


[View](#)

**OSRAM**  
Opto Semiconductors

[Osram OS OSLON Square Gen 3 White](#)

Eff: 86  
FWHM: 18  
Cd/lm: 5.4

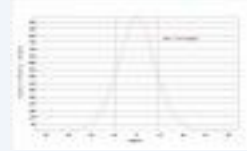


[View](#)



[Osram OS OSLON Square White](#)

Eff: 85  
FWHM: 19  
Cd/lm: 5.41

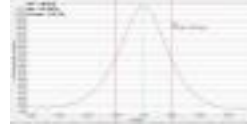


[View](#)



[Osram OS PLATINUM DRAGON W5SN White](#)

Eff: 85  
FWHM: 20  
Cd/lm: 4.7

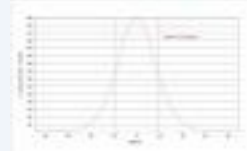
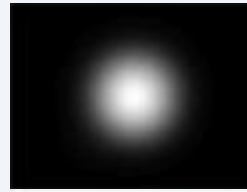


[View](#)



[Samsung 3535 LH351B White](#)

Eff: 86  
FWHM: 20  
Cd/lm: 5



[View](#)



[Samsung 3535 LH351D White](#)

Eff: 87.5  
FWHM: 27  
Cd/lm: 3.1



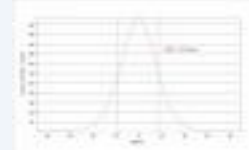
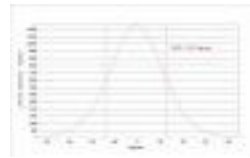
[View](#)





[Samsung 3535 LH351Z White](#)

Eff: 85.5  
FWHM: 18  
Cd/lm: 5.82

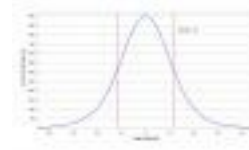


[View](#)



[Samsung CSP LH181B White](#)

Eff: 88.5  
FWHM: 24  
Cd/lm: 3.7

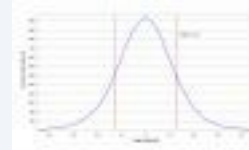


[View](#)



[Samsung CSP LH231B White](#)

Eff: 87  
FWHM: 25  
Cd/lm: 3.3

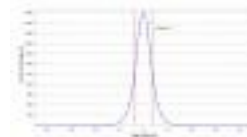
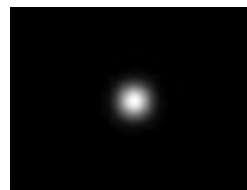


[View](#)



[Samsung CSP LM101B White](#)

Eff: 87.5  
FWHM: 7  
Cd/lm: 38.8

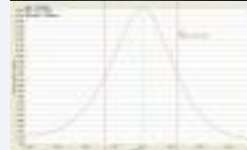


[View](#)



[Samsung WH5 White](#)

Eff: 83.8  
FWHM: 25  
Cd/lm: 3.4

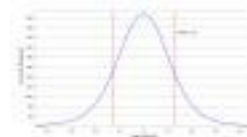


[View](#)



[Seoul CSP SZ8Y22 White](#)

Eff: 87  
FWHM: 25  
Cd/lm: 3.3



[View](#)

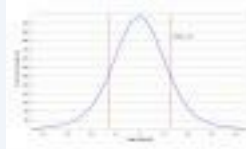


[Seoul CSP SZ8Y22P White](#)

Eff: 85.5  
FWHM: 25  
Cd/lm: 3.1

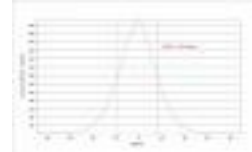


[View](#)



[Seoul MidPower MJT3030 White](#)

Eff: 86  
FWHM: 18  
Cd/lm: 5.45

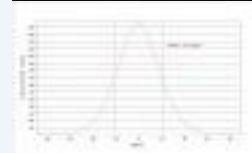


[View](#)



[Seoul MidPower MJT4040 White](#)

Eff: 87  
FWHM: 21  
Cd/lm: 3.84

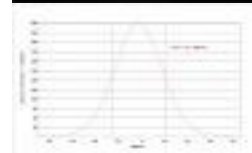


[View](#)



[Seoul P4 White](#)

Eff: 85  
FWHM: 24  
Cd/lm: 3.6



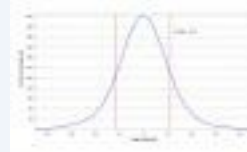
[View](#)

Eff: 84.5



[Seoul SZ8Y11 White](#)

FWHM: 22 x 22  
Cd/lm: 3.4

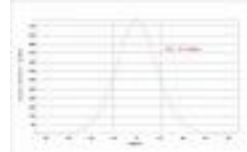


[View](#)



[Seoul SZ8Y15 White](#)

Eff: 85  
FWHM: 22  
Cd/lm: 3.7

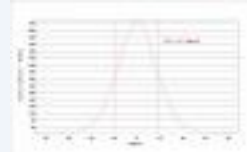


[View](#)



[Seoul SZ8Y19 White](#)

Eff: 87  
FWHM: 20  
Cd/lm: 4.4



[View](#)



[Seoul Z - Power Z5 M1 White](#)

Eff: 86  
FWHM: 19  
Cd/lm: 5.23



[View](#)



[SSC Acrich A2000 White](#)

Eff: 80.3  
FWHM: 28  
Cd/lm: 3.1

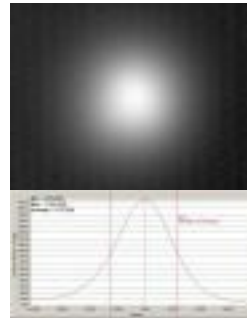


[View](#)



[SSC P5-II RGB](#)

Eff: 86.5  
FWHM: 24  
Cd/lm: 2.7

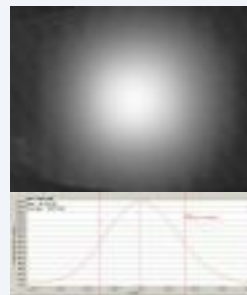


[View](#)



[Stanley 6J White](#)

FWHM: 32  
Cd/lm: 3.1

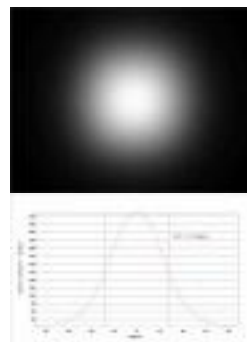


[View](#)



[Stanley 6J White](#)

Eff: 86  
FWHM: 27  
Cd/lm: 2.72

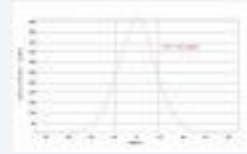


[View](#)

**TOSHIBA**

[Toshiba TL 1L2 White](#)

Eff: 86  
FWHM: 19  
Cd/lm: 4.9

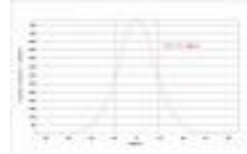


[View](#)

**TOSHIBA**

[Toshiba TL 1L4 White](#)

Eff: 86  
FWHM: 19  
Cd/lm: 5.1



[View](#)