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## 20.0mm Narrow Spot Frosted TIR (10200)



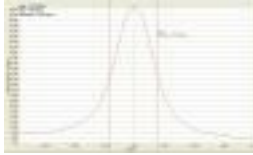


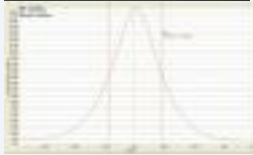


Part no.	10200
Drawing no.	60434
Family	20mm
Type	TIR
Diameter	20.0
Beam	Narrow Spot
Finish	Frosted



## LEDs & Performances

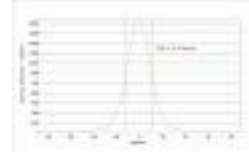
Select LED to view available holders

Manu.	Performance Data	Images	IES/STP
 <a href="#">Avago Moonstone RGB</a>	Eff: 85.1 FWHM: 17 Cd/lm: 6.7	 	<a href="#">View</a>
 <a href="#">Avago Moonstone White</a>	Eff: 88 FWHM: 18 Cd/lm: 5.3	 	<a href="#">View</a>



[Cree XLamp CSP XD16 Cool White](#)

Eff: 85  
FWHM: 12  
Cd/lm: 11.4

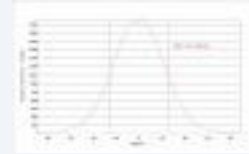


[View](#)



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

Eff: 86  
FWHM: 27  
Cd/lm: 3

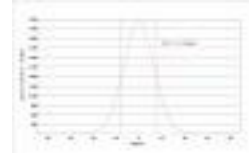
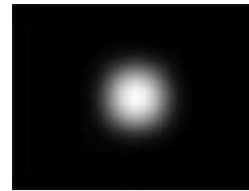


[View](#)



[Cree XLamp XHP35 HI White](#)

Eff: 86.5  
FWHM: 16  
Cd/lm: 7.9



[View](#)



[Cree XLamp XHP35 White](#)

Eff: 86  
FWHM: 20  
Cd/lm: 4.9

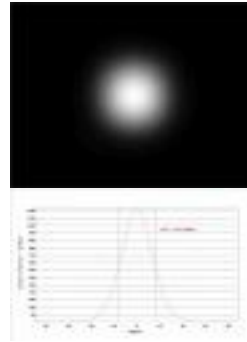


[View](#)



[Cree XLamp XP-G3 White](#)

Eff: 87  
FWHM: 16  
Cd/lm: 7.31

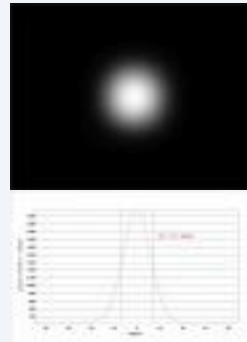


[View](#)



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

Eff: 86.5  
FWHM: 14  
Cd/lm: 9

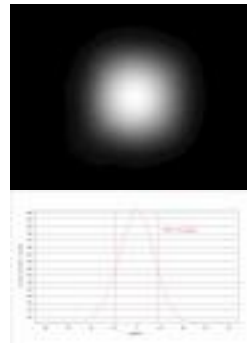


[View](#)



[Cree XLamp XP-L White](#)

Eff: 86.2  
FWHM: 18  
Cd/lm: 5.9



[View](#)

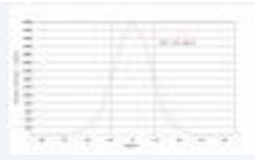


[Cree XLamp XP-L2 White](#)

Eff: 85.5  
FWHM: 19  
Cd/lm: 5.5

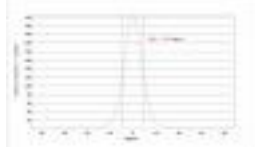


[View](#)



[Cree XLamp XQ-A Blue](#)

Eff: 86.5  
FWHM: 9  
Cd/lm: 23.1

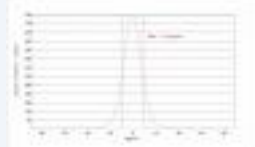
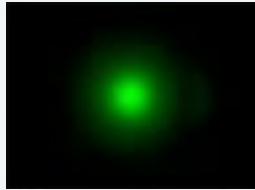


[View](#)



[Cree XLamp XQ-A Green](#)

Eff: 86.5  
FWHM: 9  
Cd/lm: 23.1

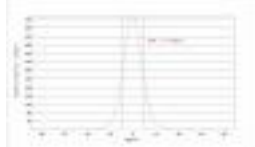


[View](#)



[Cree XLamp XQ-A Red](#)

Eff: 86.5  
FWHM: 9  
Cd/lm: 22.4

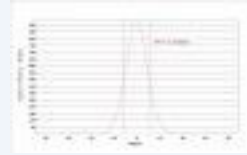
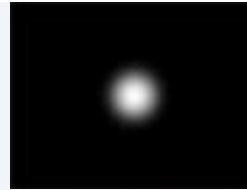


[View](#)



[Cree XLamp XQ-A White](#)

Eff: 86  
FWHM: 11  
Cd/lm: 16.9

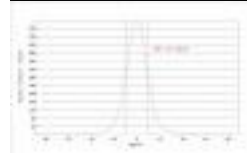


[View](#)



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

Eff: 84.5  
FWHM: 10  
Cd/lm: 15.2

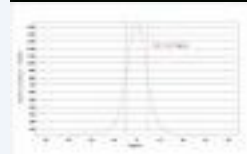
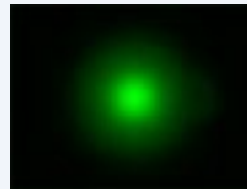


[View](#)



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

Eff: 84.5  
FWHM: 10  
Cd/lm: 15.5



[View](#)

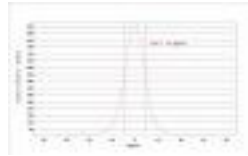


[Cree XLamp XQ-E HI Red](#)

Eff: 84.5  
FWHM: 7  
Cd/lm: 16.7

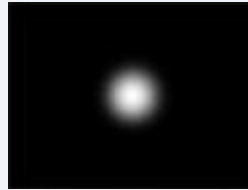


[View](#)

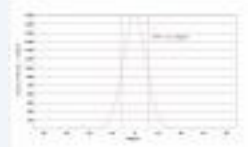


[Cree XLamp XQ-E HI White](#)

Eff: 87  
FWHM: 12  
Cd/lm: 13.3



[View](#)



[Cree XLamp XR White](#)

Eff: 87  
FWHM: 16  
Cd/lm: 5.6



[Cree XLamp XR-C White](#)

Eff: 86  
FWHM: 10  
Cd/lm: 19



[Cree XLamp XR-E White](#)

Eff: 90  
FWHM: 10  
Cd/lm: 17

[View](#)

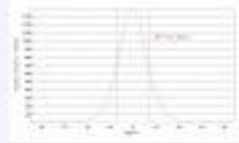


[Cree XLamp XT-E HE White](#)

Eff: 86  
FWHM: 14  
Cd/lm: 9.2



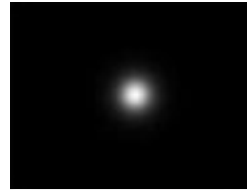
[View](#)



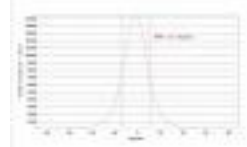
**LITEON**

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

Eff: 90.5  
FWHM: 12  
Cd/lm: 14.2



[View](#)



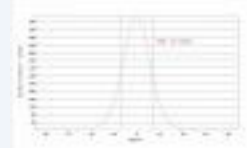
**LUMILEDS**

[LUMILEDS LUXEON 3030 White](#)

Eff: 85  
FWHM: 14  
Cd/lm: 9.81



[View](#)



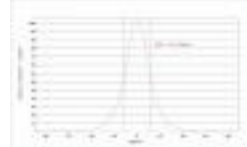
**LUMILEDS**

[LUMILEDS LUXEON 3535L Blue](#)

Eff: 85.5  
FWHM: 12  
Cd/lm: 11.9



[View](#)



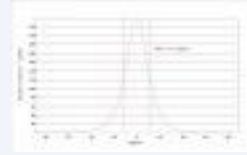
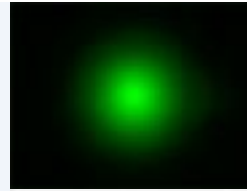
Eff: 85.5





FWHM: 11  
Cd/lm: 12.3

[LUMILEDS LUXEON 3535L Green](#)

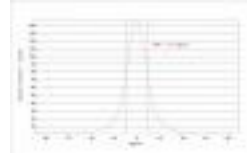


[View](#)



Eff: 86  
FWHM: 10  
Cd/lm: 16.4

[LUMILEDS LUXEON 3535L Red](#)

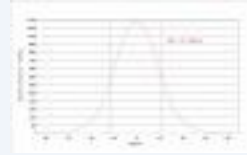
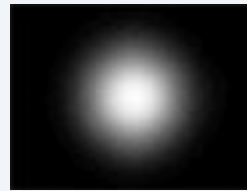


[View](#)



Eff: 86.5  
FWHM: 22  
Cd/lm: 4.4

[LUMILEDS LUXEON 5050 White](#)



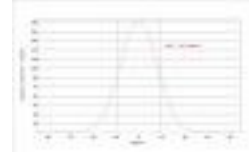
[View](#)

Eff: 83



[LUMILEDS LUXEON C Blue](#)

FWHM: 19  
Cd/lm: 5.3

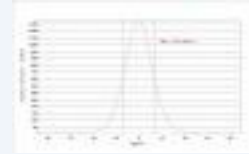
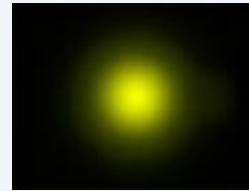


[View](#)



[LUMILEDS LUXEON C Lime](#)

Eff: 83.5  
FWHM: 14  
Cd/lm: 9.7

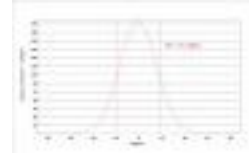


[View](#)



[LUMILEDS LUXEON C Red](#)

Eff: 82.5  
FWHM: 19  
Cd/lm: 5.7

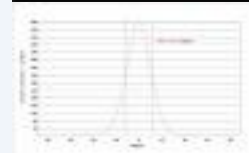


[View](#)



[LUMILEDS LUXEON CSP 05 White](#)

Eff: 86  
FWHM: 12  
Cd/lm: 9.31

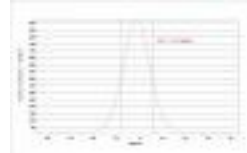


[View](#)



[LUMILEDS LUXEON CSP 10 White](#)

Eff: 85  
FWHM: 14  
Cd/lm: 7.36

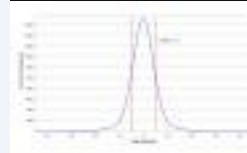


[View](#)



[LUMILEDS LUXEON CZ](#)

Eff: 86.5  
FWHM: 10  
Cd/lm: 19.3

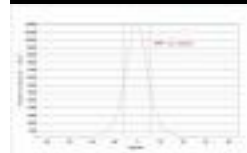


[View](#)



[LUMILEDS LUXEON IR Compact 850nm](#)

Eff: 89  
FWHM: 11  
Cd/lm: 15

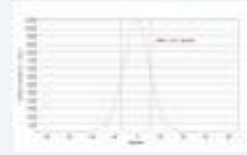
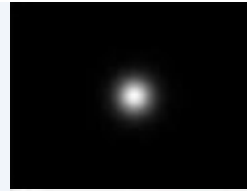


[View](#)



[LUMILEDS LUXEON IR Domed 150 Degree](#)

Eff: 89.5  
FWHM: 13  
Cd/lm: 12.2

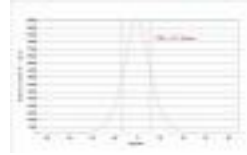


[View](#)



[LUMILEDS LUXEON IR Domed 60 Degree](#)

Eff: 89  
FWHM: 13  
Cd/lm: 11.7

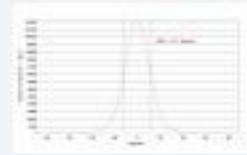


[View](#)



[LUMILEDS LUXEON IR Domed 90 Degree](#)

Eff: 89.5  
FWHM: 13  
Cd/lm: 13.4

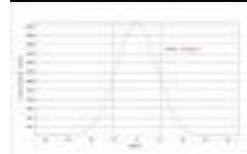


[View](#)



[LUMILEDS LUXEON MZ White](#)

Eff: 85.9  
FWHM: 21  
Cd/lm: 4.8

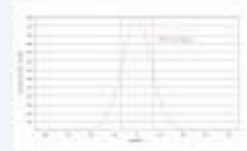
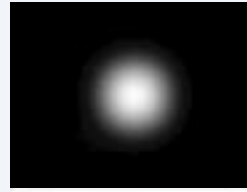


[View](#)



[LUMILEDS LUXEON Q White](#)

Eff: 84.4  
FWHM: 15  
Cd/lm: 7.8

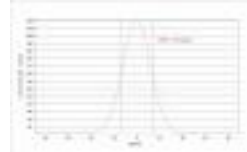
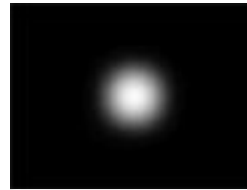


[View](#)



[LUMILEDS LUXEON TX White](#)

Eff: 86.6  
FWHM: 14  
Cd/lm: 8.9

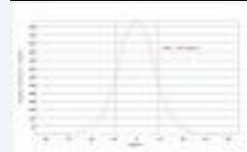


[View](#)



[LUMILEDS LUXEON V White](#)

Eff: 84  
FWHM: 19  
Cd/lm: 5.4



[View](#)



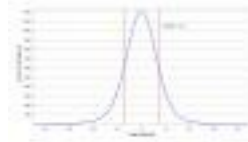
Eff: 85.5  
FWHM: 15



[View](#)

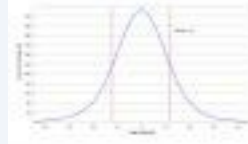
[LUMILEDS LUXEON V2 White](#)

Cd/lm: 9.1



[LUMILEDS LUXEON V2 White](#)

Eff: 85.5  
FWHM: 24  
Cd/lm: 3.3

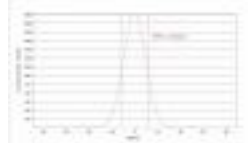
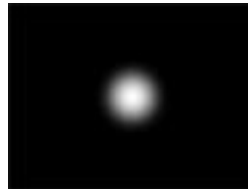


[View](#)



[LUMILEDS LUXEON Z White](#)

Eff: 86.2  
FWHM: 11  
Cd/lm: 14.5

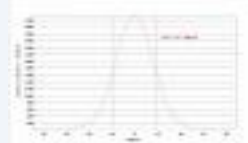


[View](#)



[Nichia 229A White](#)

Eff: 85  
FWHM: 20  
Cd/lm: 5.4

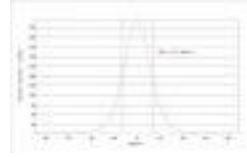


[View](#)



[Nichia 757G White](#)

Eff: 86.5  
FWHM: 14  
Cd/lm: 10.1

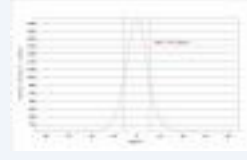
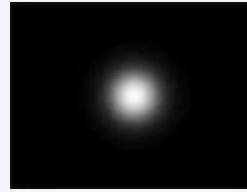


[View](#)



[Nichia NCSW E17A White](#)

Eff: 84.5  
FWHM: 11  
Cd/lm: 14.9

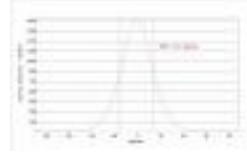
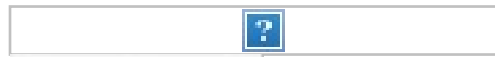


[View](#)



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

Eff: 86  
FWHM: 15  
Cd/lm: 8.9

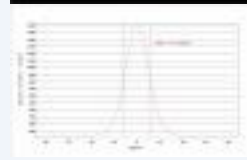


[View](#)



[Nichia NVSL 219B White](#)

Eff: 83.5  
FWHM: 12  
Cd/lm: 11.7

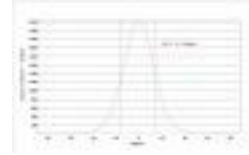


[View](#)



[Nichia NVSW 219C White](#)

Eff: 86  
FWHM: 16  
Cd/lm: 8.4

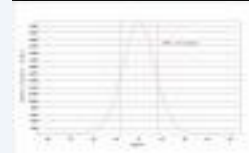


[View](#)



[Nichia NVSW 319A White](#)

Eff: 84.5  
FWHM: 17  
Cd/lm: 7.4

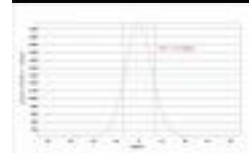
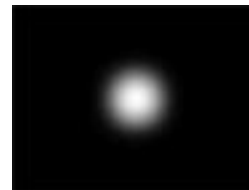


[View](#)



[Nichia NVSW E21A White](#)

Eff: 85  
FWHM: 14  
Cd/lm: 10.14



[View](#)



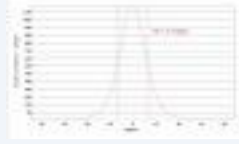
[Osram OS DURIS E 2835 White](#)

Eff: 86.5  
FWHM: 13  
Cd/lm: 11.1



[View](#)

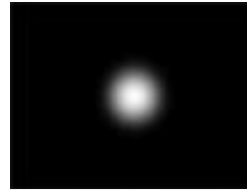




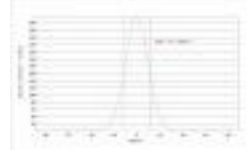
**OSRAM**  
Opto Semiconductors

[Osram OS DURIS E2 White](#)

Eff: 87  
FWHM: 12  
Cd/lm: 13.18



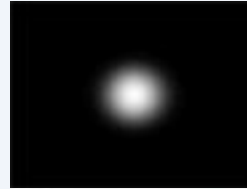
[View](#)



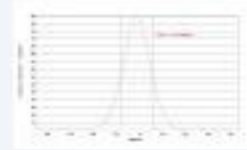
**OSRAM**  
Opto Semiconductors

[Osram OS DURIS E3 White](#)

Eff: 90  
FWHM: 13  
Cd/lm: 11.8



[View](#)



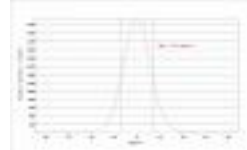
**OSRAM**  
Opto Semiconductors

[Osram OS DURIS P8 White](#)

Eff: 86.5  
FWHM: 14  
Cd/lm: 9.3



[View](#)

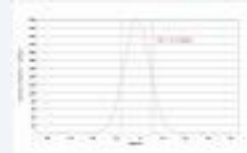
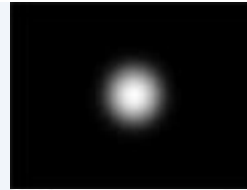


Eff: 91.7

**OSRAM**  
Opto Semiconductors

[Osram OS DURIS S2 White](#)

FWHM: 13  
Cd/lm: 9.8

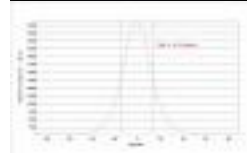


[View](#)

**OSRAM**  
Opto Semiconductors

[Osram OS DURIS S5 Deep Blue](#)

Eff: 85.5  
FWHM: 14  
Cd/lm: 10.4

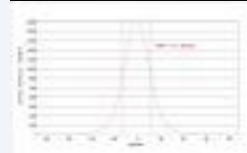


[View](#)

**OSRAM**  
Opto Semiconductors

[Osram OS DURIS S5 Green](#)

Eff: 87  
FWHM: 13  
Cd/lm: 12.2



[View](#)

**OSRAM**  
Opto Semiconductors

[Osram OS DURIS S5 Red](#)

Eff: 87.5  
FWHM: 12  
Cd/lm: 14.1

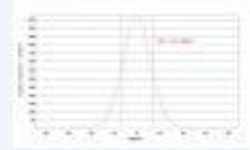
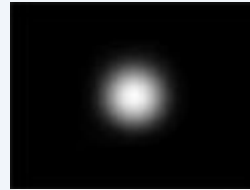
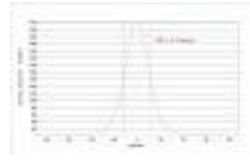


[View](#)

**OSRAM**  
Opto Semiconductors

[Osram OS DURIS S5 White](#)

Eff: 87  
FWHM: 14  
Cd/lm: 8.92

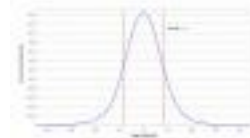


[View](#)

**OSRAM**  
Opto Semiconductors

[Osram OS Osconiq P3737 White](#)

Eff: 84  
FWHM: 17  
Cd/lm: 6.7

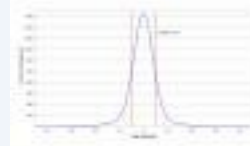


[View](#)

**OSRAM**  
Opto Semiconductors

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

Eff: 85.5  
FWHM: 10  
Cd/lm: 20.2



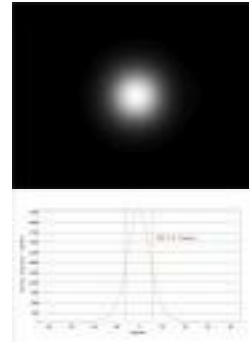
[View](#)

Eff: 85.5



[Osram OS OSLON Square Flat White](#)

FWHM: 12  
Cd/lm: 13.9

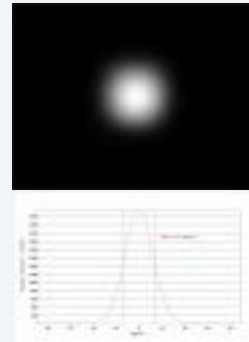


[View](#)



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

Eff: 86.2  
FWHM: 14  
Cd/lm: 9.2

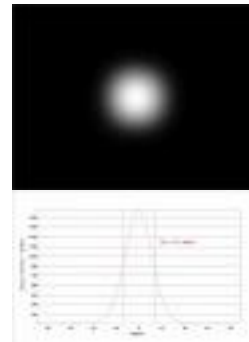


[View](#)



[Osram OS OSLON Square White](#)

Eff: 85  
FWHM: 14  
Cd/lm: 9.52

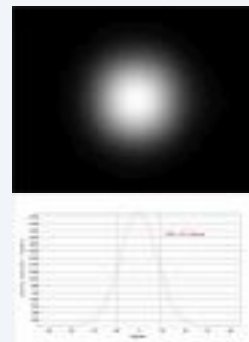


[View](#)



[Samsung 3535 LH351D White](#)

Eff: 87.5  
FWHM: 20  
Cd/lm: 6.1

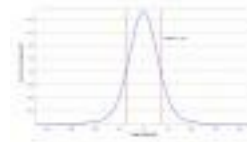


[View](#)



[Samsung CSP LH181B White](#)

Eff: 86.5  
FWHM: 14  
Cd/lm: 10.5

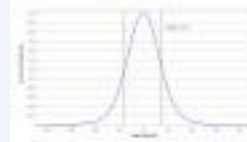


[View](#)



[Samsung CSP LH231B White](#)

Eff: 86.5  
FWHM: 16  
Cd/lm: 8.2

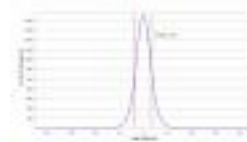
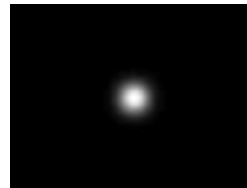


[View](#)



[Samsung CSP LM101B White](#)

Eff: 86.5  
FWHM: 7  
Cd/lm: 40.1

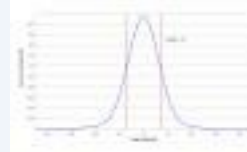


[View](#)



[Seoul CSP SZ8Y22 White](#)

Eff: 84  
FWHM: 15  
Cd/lm: 8

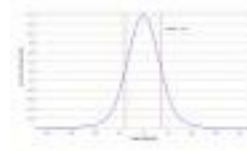


[View](#)



[Seoul CSP SZ8Y22P White](#)

Eff: 83.5  
FWHM: 16  
Cd/lm: 7.7

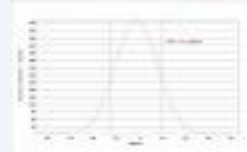


[View](#)



[Seoul P4 White](#)

Eff: 85.34  
FWHM: 22  
Cd/lm: 4.62

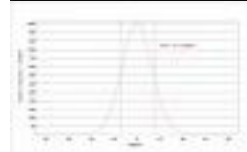


[View](#)



[Seoul SZ8Y19 White](#)

Eff: 88  
FWHM: 15  
Cd/lm: 7.1

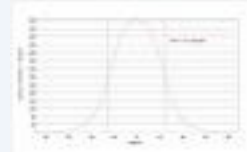


[View](#)

**STANLEY**

[Stanley 6J White](#)

Eff: 87  
FWHM: 24  
Cd/lm: 3.56

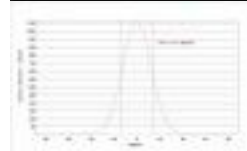


[View](#)

**TOSHIBA**

[Toshiba TL 1L2 White](#)

Eff: 87  
FWHM: 15  
Cd/lm: 8.4

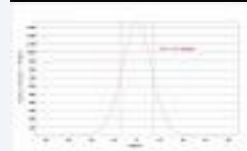


[View](#)

**TOSHIBA**

[Toshiba TL 1L4 White](#)

Eff: 85.7  
FWHM: 15  
Cd/lm: 8.5



[View](#)