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20.0mm Narrow Spot Frosted TIR (10138)

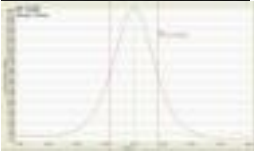
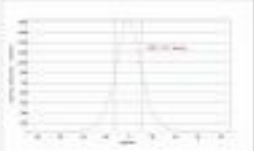


Part no.	10138
Drawing no.	60424
Family	20mm
Type	TIR
Diameter	20.0
Beam	Narrow Spot
Finish	Frosted



LEDs & Performances

Select LED to view available holders

Manu.	Performance Data	Images	IES/STP
 Avago Jade White	Eff: 91.6 FWHM: 17 Cd/lm: 7.6	 	View
 Cree XLamp CSP XD16 Cool White	Eff: 87.5 FWHM: 13 Cd/lm: 11.1	 	



[Cree XLamp MH-B White](#)

Eff: 86
FWHM: 24
Cd/lm: 2.81

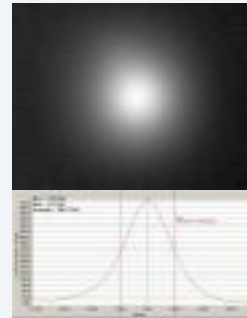


[View](#)



[Cree XLamp MX-6 White](#)

Eff: 89.9
FWHM: 20
Cd/lm: 5.5

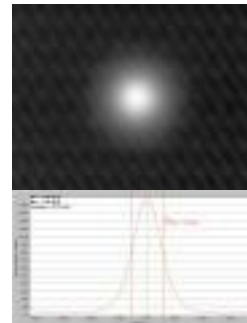


[View](#)



[Cree XLamp XB-D White](#)

Eff: 86.4
FWHM: 12
Cd/lm: 17.5

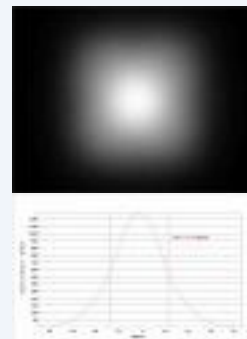


[View](#)



[Cree XLamp XHP-50 White](#)

Eff: 86
FWHM: 25
Cd/lm: 2.7

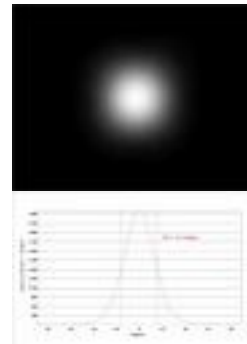


[View](#)



[Cree XLamp XHP35 HI White](#)

Eff: 85.4
FWHM: 16
Cd/lm: 8.2

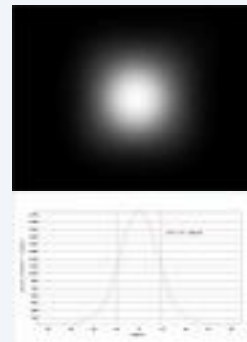


[View](#)



[Cree XLamp XHP35 White](#)

Eff: 84.7
FWHM: 20
Cd/lm: 5

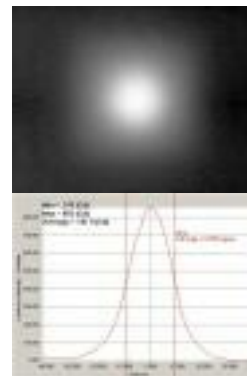


[View](#)



[Cree XLamp XM-L White](#)

Eff: 86.1
FWHM: 19
Cd/lm: 7.3



[View](#)

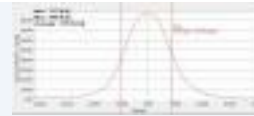


FWHM: 18
Cd/lm: 7.4



[View](#)

Cree XLamp XM-L2 White



Cree XLamp XP-C White

Eff: 86.8
FWHM: 9
Cd/lm: 24.8



[View](#)



Cree XLamp XP-E2 White

Eff: 82.8
FWHM: 10
Cd/lm: 23.6



[View](#)



Cree XLamp XP-G White

Eff: 86.4
FWHM: 14
Cd/lm: 11.4



[View](#)



Eff: 83.3
FWHM: 13



[View](#)

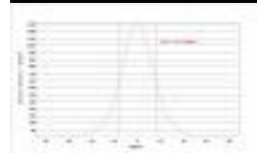
[Cree XLamp XP-G2 White](#)

Cd/lm: 13.8



[Cree XLamp XP-G3 White](#)

Eff: 86
FWHM: 16
Cd/lm: 7.7



[View](#)



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

Eff: 85.3
FWHM: 14
Cd/lm: 9.3

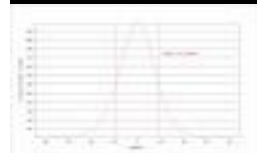
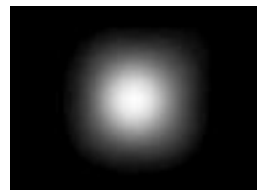


[View](#)



[Cree XLamp XP-L White](#)

Eff: 85.4
FWHM: 18
Cd/lm: 6.2

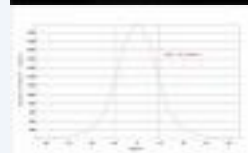


[View](#)



[Cree XLamp XP-L2 White](#)

Eff: 85.5
FWHM: 20
Cd/lm: 4.9

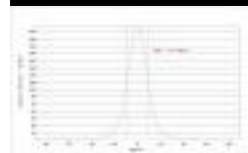


[View](#)



[Cree XLamp XQ-A Blue](#)

Eff: 87.5
FWHM: 9
Cd/lm: 20.6



[View](#)



[Cree XLamp XQ-A Green](#)

Eff: 87.5
FWHM: 9
Cd/lm: 20.6



[View](#)



[Cree XLamp XQ-A Red](#)

Eff: 87.5
FWHM: 10
Cd/lm: 19.6

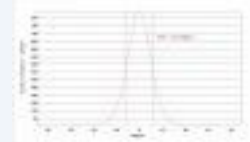
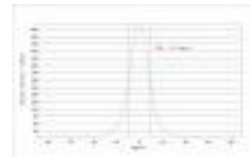


[View](#)



[Cree XLamp XQ-A White](#)

Eff: 84
FWHM: 12
Cd/lm: 14.9

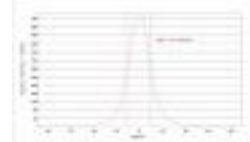


[View](#)



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

Eff: 87
FWHM: 11
Cd/lm: 15.1

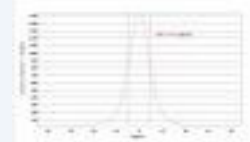
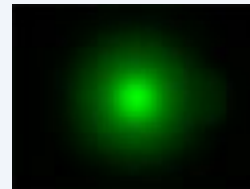


[View](#)



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

Eff: 87
FWHM: 11
Cd/lm: 15.2



[View](#)



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

Eff: 87
FWHM: 10
Cd/lm: 15.8

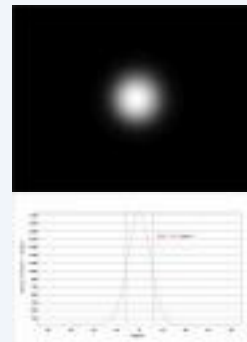


[View](#)



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

Eff: 85
FWHM: 11
Cd/lm: 14.72

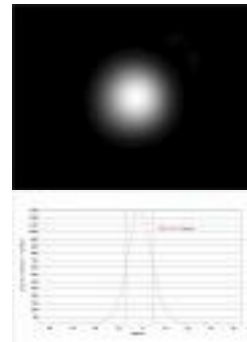


[View](#)



[Cree XLamp XQ-E White](#)

Eff: 85
FWHM: 12
Cd/lm: 12.8



[View](#)

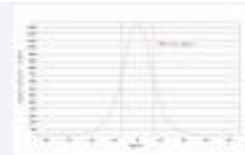


[Cree XLamp XT-E HE White](#)

Eff: 87.5
FWHM: 14
Cd/lm: 9



[View](#)



[Cree XLamp XT-E White](#)

FWHM: 14
Cd/lm: 13.7



[View](#)



[Everlight Shuen White](#)

Eff: 86.3
FWHM: 14
Cd/lm: 10.3

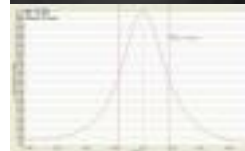


[View](#)



[LEDEngin 3W White](#)

Eff: 86
FWHM: 17
Cd/lm: 5.9



[View](#)

Eff: 85.7



[LEDEngin 5W White](#)

FWHM: 17
Cd/lm: 5.8



[View](#)



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

Eff: 91.5
FWHM: 12
Cd/lm: 12.6

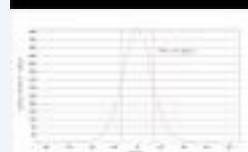


[View](#)



[LUMILEDS LUXEON 3030 White](#)

Eff: 84
FWHM: 14
Cd/lm: 9.52

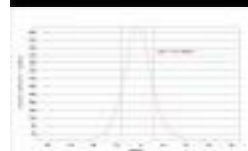


[View](#)



[LUMILEDS LUXEON 3535 HV White](#)

Eff: 85
FWHM: 14
Cd/lm: 10.61

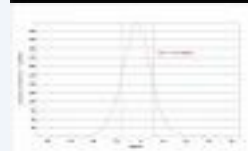


[View](#)



[LUMILEDS LUXEON 3535 L White](#)

Eff: 85
FWHM: 14
Cd/lm: 10.14

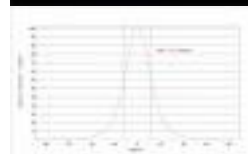


[View](#)



[LUMILEDS LUXEON 3535L Blue](#)

Eff: 88
FWHM: 13
Cd/lm: 11.5



[View](#)



[LUMILEDS LUXEON 3535L Green](#)

Eff: 88
FWHM: 12
Cd/lm: 11.6



[View](#)



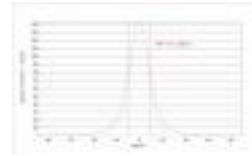
Eff: 88
FWHM: 10



[View](#)

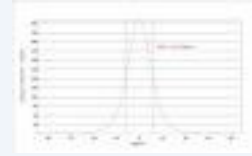
[LUMILEDS LUXEON 3535L Red](#)

Cd/lm: 15.7



[LUMILEDS LUXEON C Blue](#)

Eff: 83
FWHM: 12
Cd/lm: 12.1

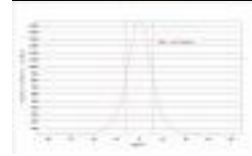


[View](#)



[LUMILEDS LUXEON C Lime](#)

Eff: 84
FWHM: 12
Cd/lm: 12.3

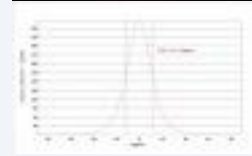


[View](#)



[LUMILEDS LUXEON C Red](#)

Eff: 82
FWHM: 13
Cd/lm: 11.2

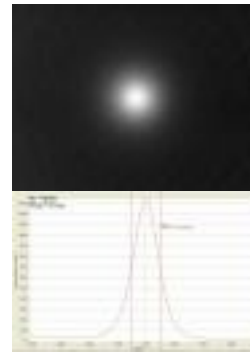


[View](#)



LUMILEDS LUXEON C White

Eff: 85.6
FWHM: 10
Cd/lm: 19.7



[View](#)



LUMILEDS LUXEON CSP 05 White

Eff: 84
FWHM: 13
Cd/lm: 10.9

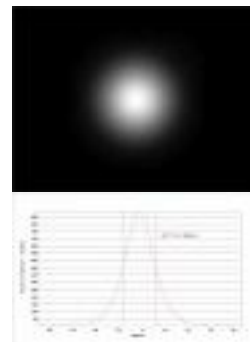


[View](#)



LUMILEDS LUXEON CSP 10 White

Eff: 83
FWHM: 15
Cd/lm: 7

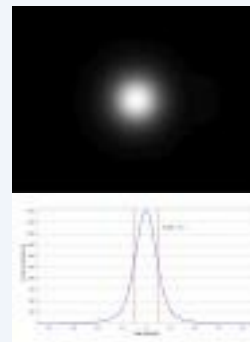


[View](#)



LUMILEDS LUXEON CZ

Eff: 88.5
FWHM: 11
Cd/lm: 18.1

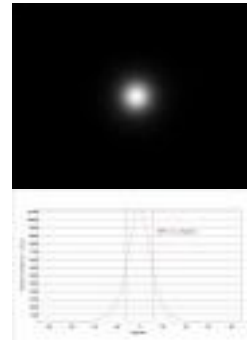


[View](#)



[LUMILEDS LUXEON IR Compact 850nm](#)

Eff: 90.5
FWHM: 12
Cd/lm: 14.3

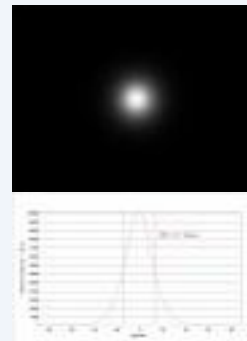


[View](#)



[LUMILEDS LUXEON IR Domed 150 Degree](#)

Eff: 91.5
FWHM: 14
Cd/lm: 11.2

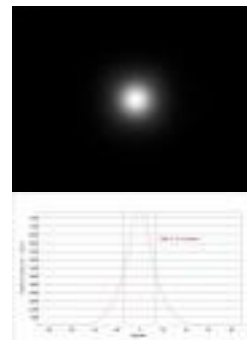


[View](#)



[LUMILEDS LUXEON IR Domed 60 Degree](#)

Eff: 89
FWHM: 14
Cd/lm: 9.9



[View](#)

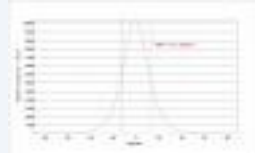


[LUMILEDS LUXEON IR Domed 90 Degree](#)

Eff: 90.5
FWHM: 13
Cd/lm: 11.5



[View](#)



[LUMILEDS LUXEON MZ White](#)

Eff: 87
FWHM: 21
Cd/lm: 3.9

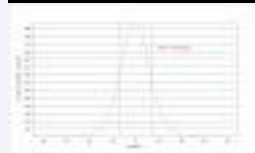


[View](#)



[LUMILEDS LUXEON Q White](#)

Eff: 84
FWHM: 15
Cd/lm: 8.8



[View](#)



[LUMILEDS LUXEON TX White](#)

Eff: 85
FWHM: 14
Cd/lm: 9.5



[View](#)

Eff: 85



[LUMILEDS LUXEON V White](#)

FWHM: 20
Cd/lm: 5.1



[View](#)



[LUMILEDS LUXEON V2 White](#)

Eff: 87.5
FWHM: 15
Cd/lm: 8.8



[View](#)



[LUMILEDS LUXEON Z ES White](#)

FWHM: 11
Cd/lm: 15.7



[View](#)



[LUMILEDS LUXEON Z White](#)

Eff: 84.7
FWHM: 11
Cd/lm: 15.6



[View](#)



[Luminus Devices SST-50 White](#)

Eff: 84.6
FWHM: 24
Cd/lm: 3.8



[View](#)



[Nichia 219 White](#)

Eff: 83.3
FWHM: 14
Cd/lm: 12.3



[View](#)



[Nichia 229A White](#)

Eff: 85.5
FWHM: 20
Cd/lm: 5

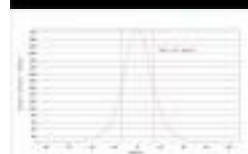


[View](#)



[Nichia 757G White](#)

Eff: 88
FWHM: 15
Cd/lm: 9.3

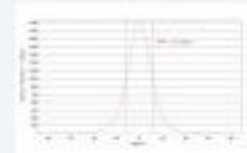


[View](#)



[Nichia NCSW E17A White](#)

Eff: 87.5
FWHM: 12
Cd/lm: 14.4

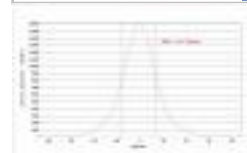


[View](#)



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

Eff: 88
FWHM: 15
Cd/lm: 8.5

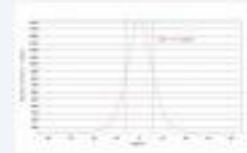


[View](#)



[Nichia NVSL 219B White](#)

Eff: 86.5
FWHM: 13
Cd/lm: 11.7

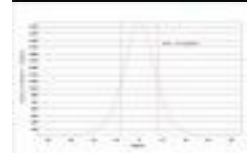


[View](#)



[Nichia NVSW 219C White](#)

Eff: 86.5
FWHM: 16
Cd/lm: 8.1

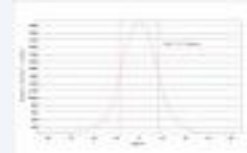


[View](#)



[Nichia NVSW 319A White](#)

Eff: 86.5
FWHM: 18
Cd/lm: 6.8

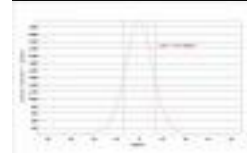


[View](#)



[Nichia NVSW E21A White](#)

Eff: 84
FWHM: 14
Cd/lm: 10.9

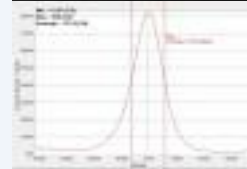


[View](#)



[Nichia Top Emitting NCSL 119-H3 White](#)

Eff: 87
FWHM: 12
Cd/lm: 14.3



[View](#)

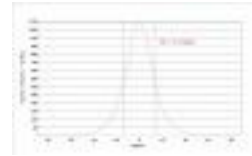


[Osram OS DURIS E 2835 White](#)

Eff: 88
FWHM: 13.
Cd/lm: 10.5



[View](#)



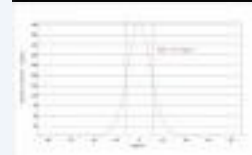
OSRAM
Opto Semiconductors

[Osram OS DURIS E2 White](#)

Eff: 85
FWHM: 12
Cd/lm: 14.05



[View](#)



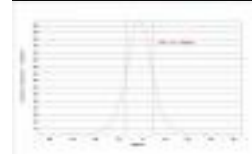
OSRAM
Opto Semiconductors

[Osram OS DURIS E3 White](#)

Eff: 88.6
FWHM: 13
Cd/lm: 13.1



[View](#)



OSRAM
Opto Semiconductors

[Osram OS DURIS P8 White](#)

Eff: 85.4
FWHM: 14
Cd/lm: 10



[View](#)

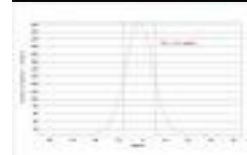


Eff: 90



[Osram OS DURIS S2 White](#)

FWHM: 14
Cd/lm: 10.7

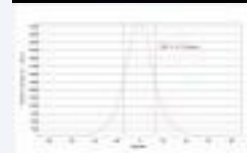


[View](#)



[Osram OS DURIS S5 Deep Blue](#)

Eff: 87
FWHM: 14
Cd/lm: 10.4

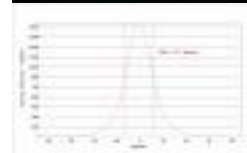


[View](#)



[Osram OS DURIS S5 Green](#)

Eff: 88.5
FWHM: 13
Cd/lm: 11.4

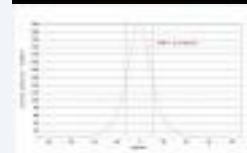


[View](#)



[Osram OS DURIS S5 Red](#)

Eff: 89.5
FWHM: 12
Cd/lm: 13

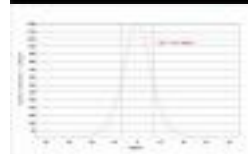


[View](#)



[Osram OS DURIS S5 White](#)

Eff: 85
FWHM: 14
Cd/lm: 9.86

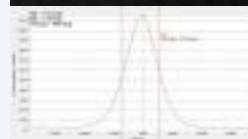


[View](#)



[Osram OS Golden DRAGON Plus W5AM White](#)

Eff: 87.3
FWHM: 12
Cd/lm: 13.4



[View](#)



[Osram OS Osconiq P3737 White](#)

Eff: 86
FWHM: 18
Cd/lm: 6.3



[View](#)



[Osram OS OSLON Pure CSP GW VJLPE1 White](#)

Eff: 88.5
FWHM: 11
Cd/lm: 18.2

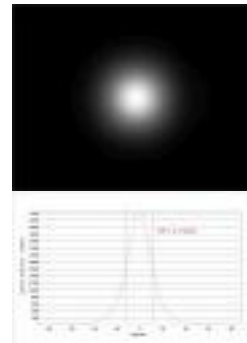


[View](#)



[Osram OS OSLON Square Flat White](#)

Eff: 88
FWHM: 12
Cd/lm: 13.3

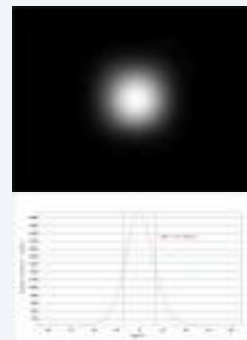


[View](#)



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

Eff: 85.3
FWHM: 14
Cd/lm: 9.8

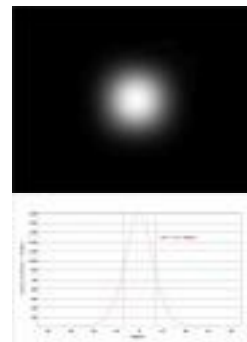


[View](#)



[Osram OS OSLON Square White](#)

Eff: 85
FWHM: 14
Cd/lm: 9.77

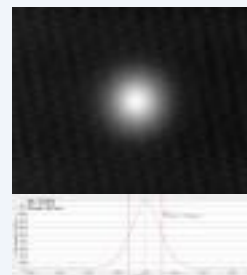


[View](#)



[Osram OS OSLON SSL 150 degree White](#)

Eff: 87.3
FWHM: 12
Cd/lm: 17.3

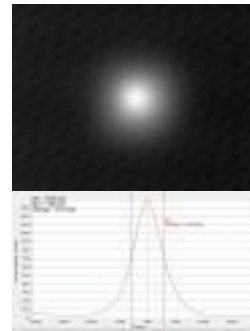


[View](#)



[Osram OS OSLON SSL 80 degree White](#)

Eff: 86.4
FWHM: 12
Cd/lm: 14.7

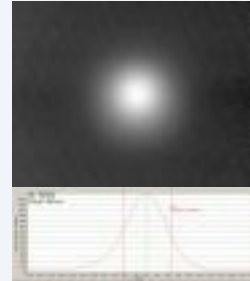


[View](#)



[Samsung 3535 LH351A White](#)

FWHM: 13
Cd/lm: 13.9

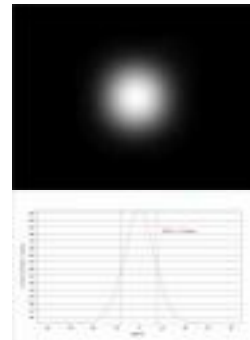


[View](#)



[Samsung 3535 LH351B White](#)

Eff: 85
FWHM: 15
Cd/lm: 8.23

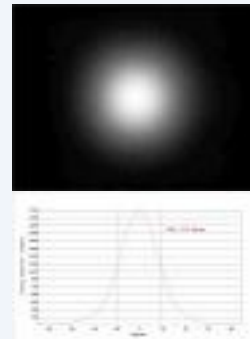


[View](#)



[Samsung 3535 LH351D White](#)

Eff: 87
FWHM: 20
Cd/lm: 5.5

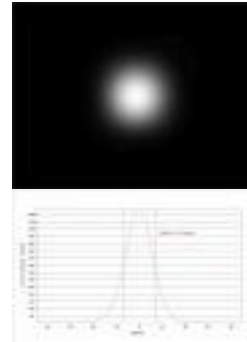


[View](#)



[Samsung 3535 LH351Z White](#)

Eff: 85
FWHM: 14
Cd/lm: 10.5

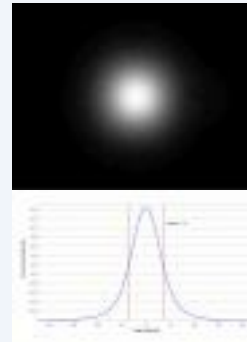


[View](#)



[Samsung CSP LH181B White](#)

Eff: 88.5
FWHM: 14
Cd/lm: 9.9

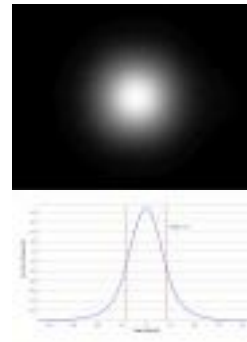


[View](#)



[Samsung CSP LH231B White](#)

Eff: 88.5
FWHM: 16
Cd/lm: 7.8



[View](#)

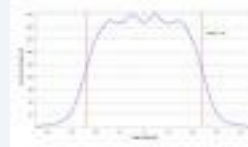


[Samsung CSP LM101B White](#)

Eff: 89
FWHM: 7
Cd/lm: 36.4



[View](#)

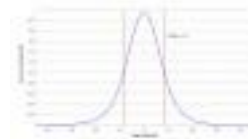


[Seoul CSP SZ8Y22 White](#)

Eff: 88.5
FWHM: 16
Cd/lm: 8



[View](#)

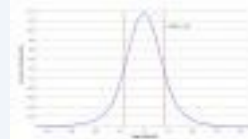


[Seoul CSP SZ8Y22P White](#)

Eff: 88.5
FWHM: 17
Cd/lm: 7.4



[View](#)



[Seoul MidPower MJT3030 White](#)

Eff: 85.3
FWHM: 14
Cd/lm: 9.4



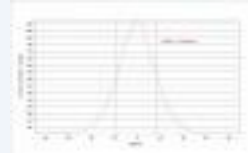
[View](#)





[Seoul MidPower MJT4040 White](#)

Eff: 86
FWHM: 18
Cd/lm: 6

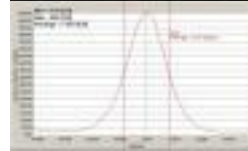


[View](#)



[Seoul P4 White](#)

Eff: 85.3
FWHM: 16
Cd/lm: 7.8

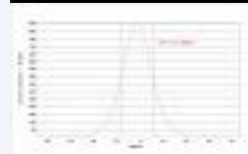


[View](#)



[Seoul P4 White](#)

Eff: 84.35
FWHM: 15
Cd/lm: 9.03

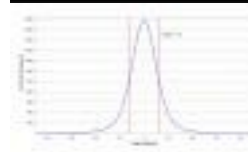


[View](#)



[Seoul SZ8Y11 White](#)

Eff: 88
FWHM: 12
Cd/lm: 14.1

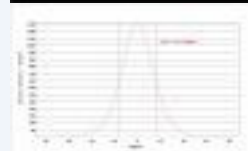


[View](#)



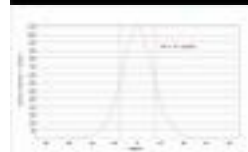
[Seoul SZ8Y15 White](#)

Eff: 88
FWHM: 11
Cd/lm: 16.7



[Seoul SZ8Y19 White](#)

Eff: 86
FWHM: 15
Cd/lm: 7.57

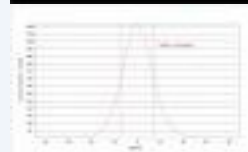


[View](#)



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

Eff: 85.5
FWHM: 15
Cd/lm: 8.73



[View](#)



[Seoul Z - Power Z5M White](#)

Eff: 84.3
FWHM: 13
Cd/lm: 13.2



[View](#)



[SSC Z - Power Z1 White](#)

Eff: 84.9
FWHM: 21
Cd/lm: 4.4



[View](#)



[SSC Z - Power Z5 White](#)

Eff: 88.2
FWHM: 12
Cd/lm: 14



[View](#)



[SSC Z - Power Z5P White](#)

FWHM: 13
Cd/lm: 14.3



[View](#)



Eff: 83
FWHM: 19
Cd/lm: 5.9



[View](#)

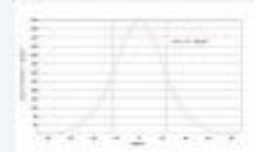
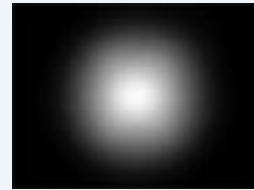
Stanley 1N White



STANLEY

Stanley 6J White

Eff: 87
FWHM: 23
Cd/lm: 3.26

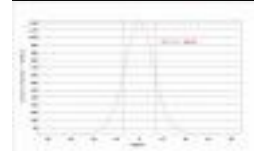


[View](#)

TOSHIBA

Toshiba TL 1L2 White

Eff: 85
FWHM: 15
Cd/lm: 9

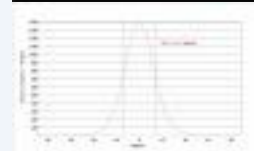


[View](#)

TOSHIBA

Toshiba TL 1L4 White

Eff: 85
FWHM: 15
Cd/lm: 8.8



[View](#)