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20.0mm Medium Spot Plain TIR (10003)









Part no.	10003
Drawing no.	60318
Family	20mm
Type	TIR
Diameter	20.0
Beam	Medium Spot
Finish	Plain



LEDs & Performances

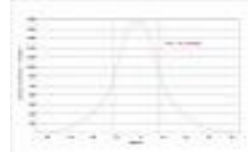
Select LED to view available holders

Manu.	Performance Data	Images	IES/STP
 Avago Jade White	Eff: 90.1 FWHM: 11 Cd/lm: 12	 	View
 Cree XLamp CSP XD16 Cool White	Eff: 87.5 FWHM: 10 Cd/lm: 20.9	 	View



[Cree XLamp MH-B White](#)

Eff: 87
FWHM: 20
Cd/lm: 3.34

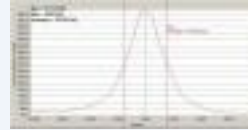


[View](#)



[Cree XLamp MX-6 White](#)

Eff: 90.2
FWHM: 15
Cd/lm: 8.5



[View](#)



[Cree XLamp XB-D White](#)

Eff: 87.2
FWHM: 9
Cd/lm: 27.7

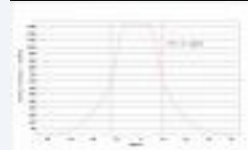


[View](#)



[Cree XLamp XHP-50 White](#)

Eff: 86.5
FWHM: 22
Cd/lm: 2.9



[View](#)



[Cree XLamp XHP35 HI White](#)

Eff: 85.3
FWHM: 13
Cd/lm: 11.6



[View](#)



[Cree XLamp XHP35 White](#)

Eff: 84.7
FWHM: 19
Cd/lm: 5.8

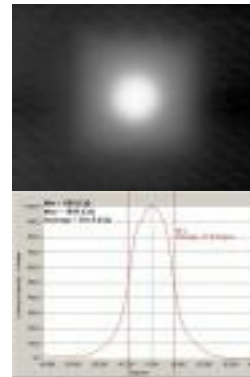


[View](#)



[Cree XLamp XM-L White](#)

Eff: 87.4
FWHM: 17
Cd/lm: 8.6



[View](#)

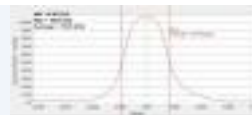


Eff: 87
FWHM: 17
Cd/lm: 9.1



[View](#)

[Cree XLamp XM-L2 White](#)



Eff: 86.3
FWHM: 5
Cd/lm: 64



[View](#)

[Cree XLamp XP-C White](#)



FWHM: 8
Cd/lm: 40.3

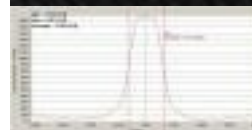


[View](#)

[Cree XLamp XP-E2 White](#)



Eff: 87.9
FWHM: 12
Cd/lm: 16.7



[View](#)

[Cree XLamp XP-G White](#)



FWHM: 11
Cd/lm: 20.5



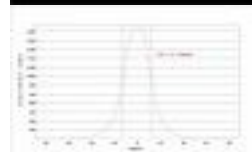
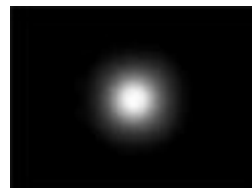
[View](#)

[Cree XLamp XP-G2 White](#)



[Cree XLamp XP-G3 White](#)

Eff: 85
FWHM: 13
Cd/lm: 11.38

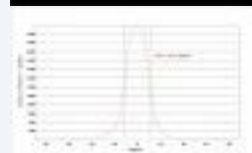


[View](#)



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

Eff: 85.3
FWHM: 11
Cd/lm: 15.6

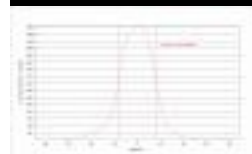


[View](#)



[Cree XLamp XP-L White](#)

Eff: 85.4
FWHM: 17
Cd/lm: 7.8

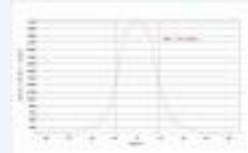


[View](#)



[Cree XLamp XP-L2 White](#)

Eff: 86
FWHM: 18
Cd/lm: 6.2

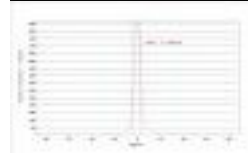
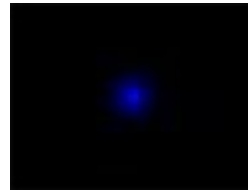


[View](#)



[Cree XLamp XQ-A Blue](#)

Eff: 87.5
FWHM: 3
Cd/lm: 132.7

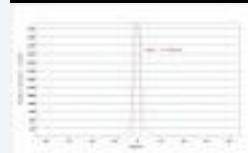
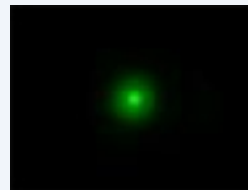


[View](#)



[Cree XLamp XQ-A Green](#)

Eff: 87.5
FWHM: 3
Cd/lm: 133



[View](#)

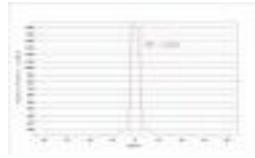


[Cree XLamp XQ-A Red](#)

Eff: 87.5
FWHM: 4
Cd/lm: 91.5

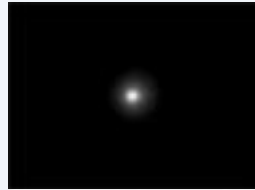


[View](#)

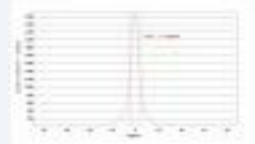


[Cree XLamp XQ-A White](#)

Eff: 85
FWHM: 4
Cd/lm: 75.07

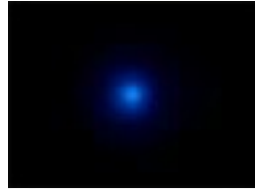


[View](#)

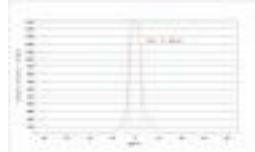


[Cree XLamp XQ-E HI Blue](#)

Eff: 87
FWHM: 6
Cd/lm: 48.8



[View](#)

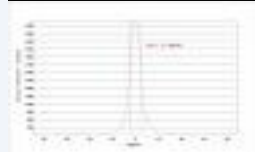


[Cree XLamp XQ-E HI Green](#)

Eff: 87
FWHM: 5
Cd/lm: 49.7



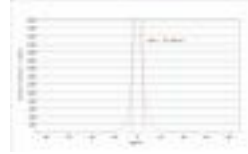
[View](#)





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

Eff: 87
FWHM: 5
Cd/lm: 56.9

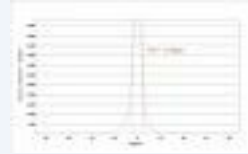
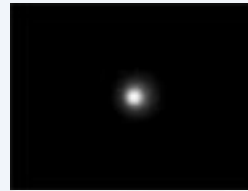


[View](#)



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

Eff: 85
FWHM: 5
Cd/lm: 64.9

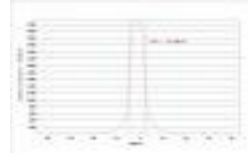
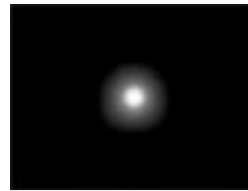


[View](#)



[Cree XLamp XQ-E White](#)

Eff: 85
FWHM: 7
Cd/lm: 38



[View](#)

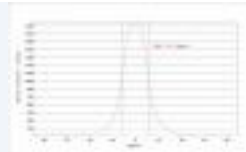


[Cree XLamp XT-E HE White](#)

Eff: 87.5
FWHM: 12
Cd/lm: 14.1



[View](#)



[Cree XLamp XTE White](#)

Eff: 88.2
FWHM: 12
Cd/lm: 19



[View](#)



[Everlight Shuen White](#)

Eff: 87.7
FWHM: 11
Cd/lm: 16.7



[View](#)



[LEDEngin 3W White](#)

Eff: 86.8
FWHM: 11
Cd/lm: 10



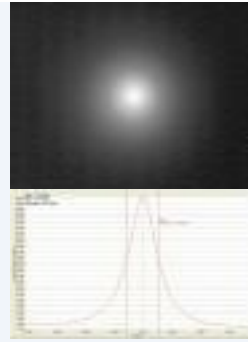
[View](#)

Eff: 85.7



[LEDEngin 5W White](#)

FWHM: 11
Cd/lm: 9.9

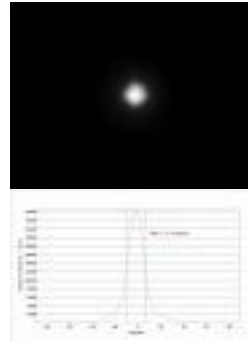


[View](#)



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

Eff: 91.5
FWHM: 8
Cd/lm: 26.1

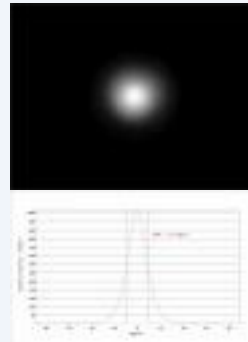


[View](#)



[LUMILEDS LUXEON 3030 White](#)

Eff: 84
FWHM: 9
Cd/lm: 17.8

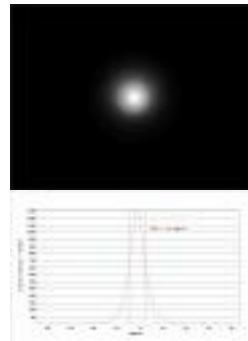


[View](#)



[LUMILEDS LUXEON 3535 HV White](#)

Eff: 85
FWHM: 7
Cd/lm: 23.43

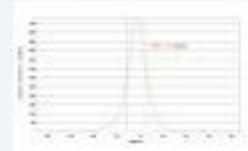
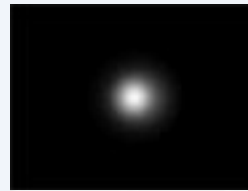


[View](#)



[LUMILEDS LUXEON 3535 L White](#)

Eff: 85
FWHM: 9
Cd/lm: 19.83

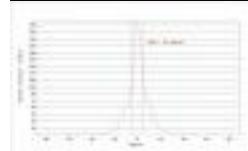


[View](#)



[LUMILEDS LUXEON 3535L Blue](#)

Eff: 88
FWHM: 5
Cd/lm: 37.2

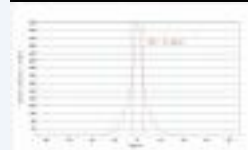
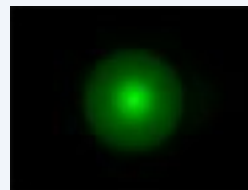


[View](#)



[LUMILEDS LUXEON 3535L Green](#)

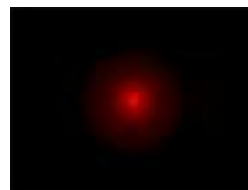
Eff: 88
FWHM: 5
Cd/lm: 41.4



[View](#)



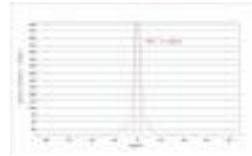
Eff: 88
FWHM: 3



[View](#)

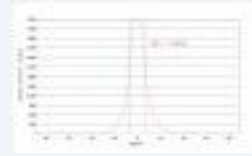
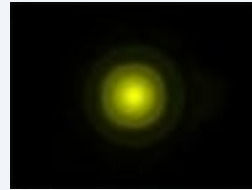
[LUMILEDS LUXEON 3535L Red](#)

Cd/lm: 98.7



[LUMILEDS LUXEON C Lime](#)

Eff: 84
FWHM: 8
Cd/lm: 27.8

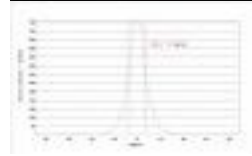


[View](#)



[LUMILEDS LUXEON C Red](#)

Eff: 82
FWHM: 8
Cd/lm: 23.9



[View](#)



[LUMILEDS LUXEON C White](#)

Eff: 86.2
FWHM: 6
Cd/lm: 58.4

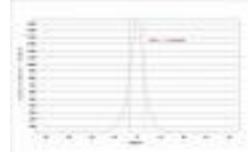
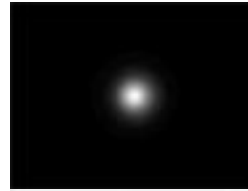


[View](#)



[LUMILEDS LUXEON CSP 05 White](#)

Eff: 84
FWHM: 7
Cd/lm: 25.8

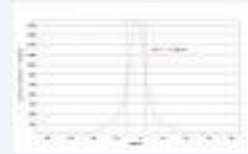


[View](#)



[LUMILEDS LUXEON CSP 10 White](#)

Eff: 84
FWHM: 8
Cd/lm: 12.88

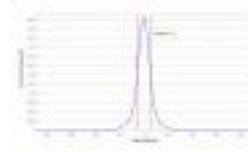
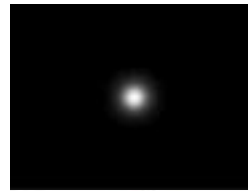


[View](#)



[LUMILEDS LUXEON CZ](#)

Eff: 88.5
FWHM: 6
Cd/lm: 62

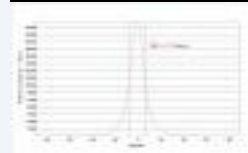
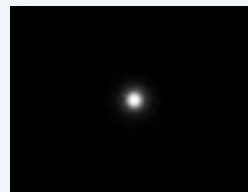


[View](#)



[LUMILEDS LUXEON IR Compact 850nm](#)

Eff: 90.5
FWHM: 7
Cd/lm: 34.4

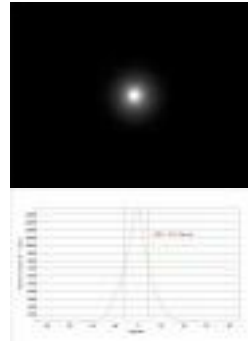


[View](#)



[LUMILEDS LUXEON IR Domed 150 Degree](#)

Eff: 91
FWHM: 11
Cd/lm: 19.4



[View](#)



[LUMILEDS LUXEON IR Domed 60 Degree](#)

Eff: 89.5
FWHM: 10
Cd/lm: 19.6

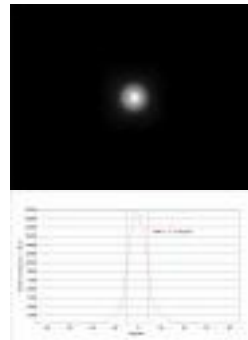


[View](#)



[LUMILEDS LUXEON IR Domed 90 Degree](#)

Eff: 90.5
FWHM: 9.4
Cd/lm: 24

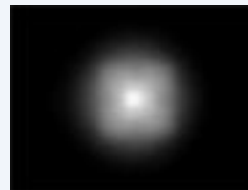


[View](#)

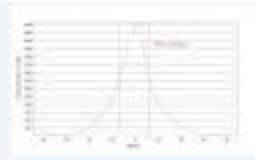


[LUMILEDS LUXEON MZ White](#)

Eff: 87.1
FWHM: 13
Cd/lm: 5.5

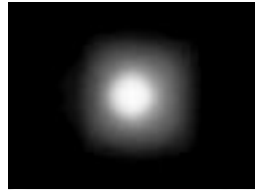


[View](#)

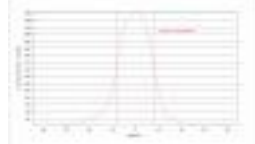


[LUMILEDS LUXEON Q White](#)

Eff: 84
FWHM: 12
Cd/lm: 14.2



[View](#)

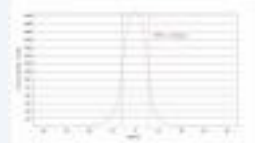


[LUMILEDS LUXEON TX White](#)

Eff: 84.9
FWHM: 11
Cd/lm: 15.7



[View](#)

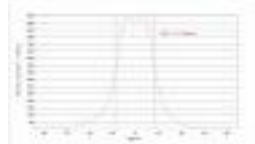


[LUMILEDS LUXEON V White](#)

Eff: 85
FWHM: 18
Cd/lm: 6.4



[View](#)

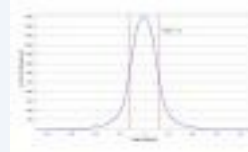


Eff: 88



FWHM: 12
Cd/lm: 13.4

[LUMILEDS LUXEON V2 White](#)

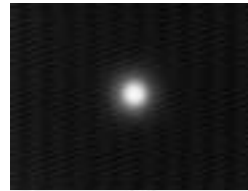


[View](#)



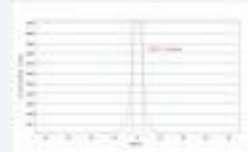
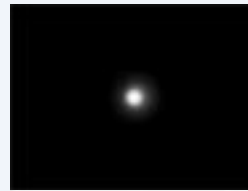
Eff: 86.8
FWHM: 9
Cd/lm: 30.4

[LUMILEDS LUXEON Z ES White](#)



Eff: 84.7
FWHM: 5
Cd/lm: 50.3

[LUMILEDS LUXEON Z White](#)

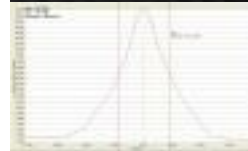


[View](#)



Eff: 86
FWHM: 18
Cd/lm: 5.5

[Luminus Devices SST-50 White](#)

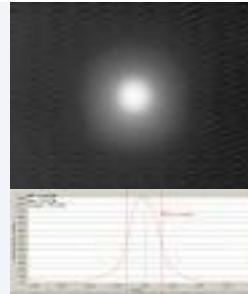


[View](#)



[Nichia 219 White](#)

FWHM: 12
Cd/lm: 17.3

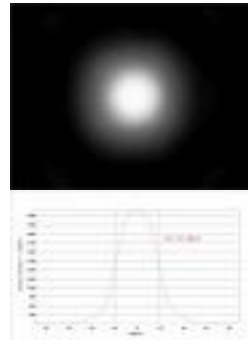


[View](#)



[Nichia 229A White](#)

Eff: 86
FWHM: 20
Cd/lm: 6.1

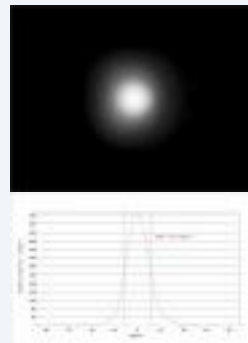


[View](#)



[Nichia 757G White](#)

Eff: 88
FWHM: 12
Cd/lm: 15.7

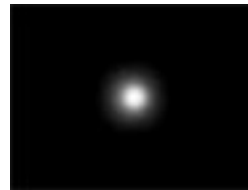


[View](#)

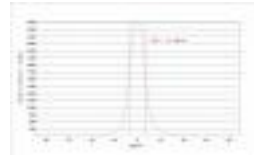


[Nichia NCSW E17A White](#)

Eff: 87.5
FWHM: 8
Cd/lm: 33.8

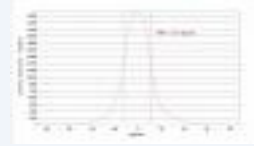
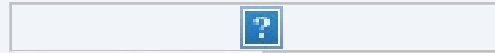


[View](#)



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

Eff: 88
FWHM: 13
Cd/lm: 13.1

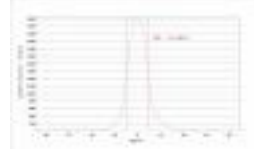
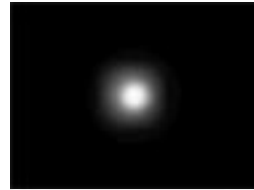


[View](#)



[Nichia NVSL 219B White](#)

Eff: 86.5
FWHM: 9
Cd/lm: 22.2

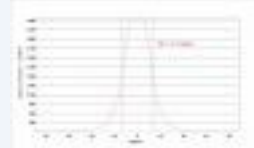


[View](#)



[Nichia NVSW 219C White](#)

Eff: 87
FWHM: 13
Cd/lm: 11.5



[View](#)

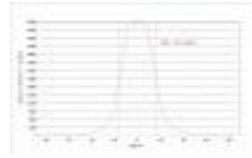


[Nichia NVSW 319A White](#)

Eff: 86.5
FWHM: 16
Cd/lm: 8.9

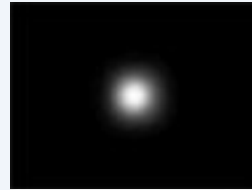


[View](#)

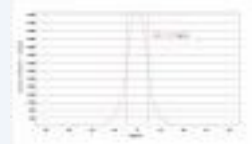


[Nichia NVSW E21A White](#)

Eff: 84
FWHM: 10
Cd/lm: 19.9



[View](#)

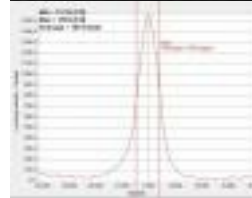


[Nichia Top Emitting NCSL 119-H3 White](#)

Eff: 88.8
FWHM: 9
Cd/lm: 27.3



[View](#)

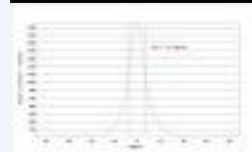


[Osram OS DURIS E 2835 White](#)

Eff: 88
FWHM: 8
Cd/lm: 22.7



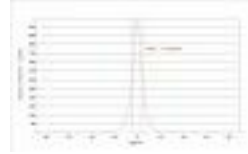
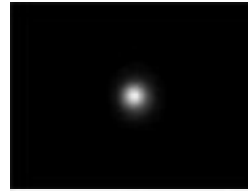
[View](#)



OSRAM
Opto Semiconductors

[Osram OS DURIS E2 White](#)

Eff: 85
FWHM: 4
Cd/lm: 42.7

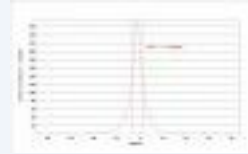
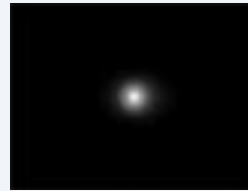


[View](#)

OSRAM
Opto Semiconductors

[Osram OS DURIS E3 White](#)

Eff: 88.6
FWHM: 4
Cd/lm: 36.2

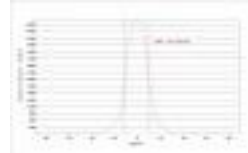
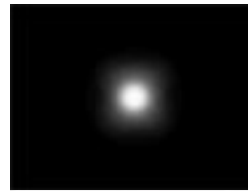


[View](#)

OSRAM
Opto Semiconductors

[Osram OS DURIS P8 White](#)

Eff: 85.3
FWHM: 11
Cd/lm: 17

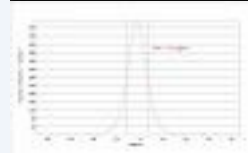


[View](#)

OSRAM
Opto Semiconductors

[Osram OS DURIS S2 White](#)

Eff: 90
FWHM: 10
Cd/lm: 19.5

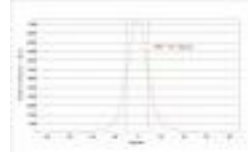
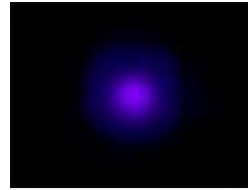


[View](#)

OSRAM
Opto Semiconductors

[Osram OS DURIS S5 Deep Blue](#)

Eff: 87
FWHM: 10
Cd/lm: 21.1

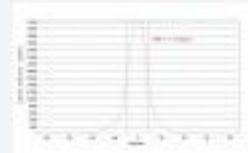
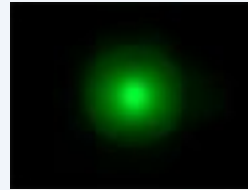


[View](#)

OSRAM
Opto Semiconductors

[Osram OS DURIS S5 Green](#)

Eff: 88.5
FWHM: 9
Cd/lm: 22

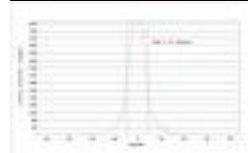


[View](#)

OSRAM
Opto Semiconductors

[Osram OS DURIS S5 Red](#)

Eff: 89.5
FWHM: 9
Cd/lm: 26.6



[View](#)

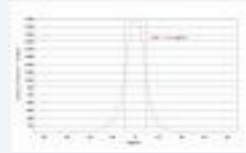
Eff: 85
FWHM: 9



[View](#)

OSRAM
Opto Semiconductors

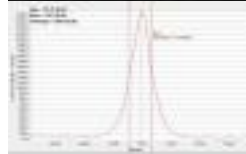
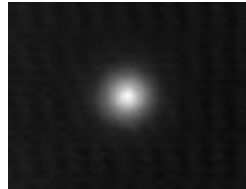
Cd/lm: 18.5



[Osram OS DURIS S5 White](#)

OSRAM
Opto Semiconductors

Eff: 88.2
FWHM: 8
Cd/lm: 28.7

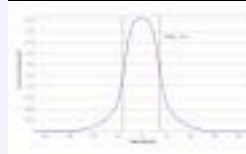


[Osram OS Golden DRAGON Plus W5AM White](#)

[View](#)

OSRAM
Opto Semiconductors

Eff: 86.5
FWHM: 16
Cd/lm: 8.1

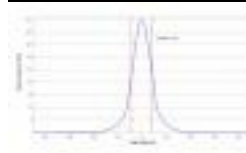


[Osram OS Osconiq P3737 White](#)

[View](#)

OSRAM
Opto Semiconductors

Eff: 92.5
FWHM: 9
Cd/lm: 32.3



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

[View](#)

OSRAM
Opto Semiconductors

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

Eff: 88.5
FWHM: 5
Cd/lm: 67

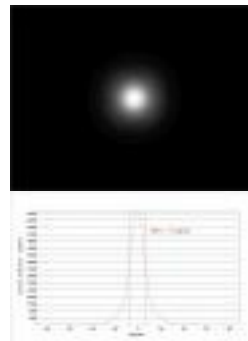


[View](#)

OSRAM
Opto Semiconductors

[Osram OS OSOLON Square Flat White](#)

Eff: 88.5
FWHM: 7
Cd/lm: 30.1

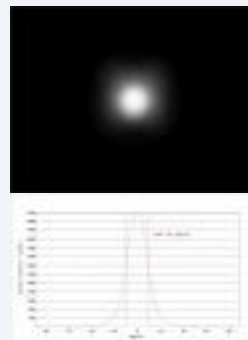


[View](#)

OSRAM
Opto Semiconductors

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

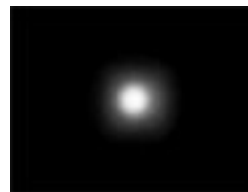
Eff: 85.2
FWHM: 10
Cd/lm: 17.2



[View](#)

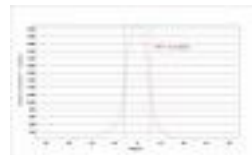
OSRAM
Opto Semiconductors

Eff: 85
FWHM: 11
Cd/lm: 16.76



[View](#)

[Osram OS OSLON Square White](#)



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

Eff: 87
FWHM: 7
Cd/lm: 37.4



[View](#)



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

Eff: 86.1
FWHM: 7
Cd/lm: 33.8



[View](#)



[Samsung 3535 LH351A White](#)

Eff: 86.9
FWHM: 11
Cd/lm: 21.4

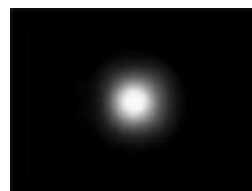


[View](#)



[Samsung 3535 LH351B White](#)

Eff: 85
FWHM: 13
Cd/lm: 12

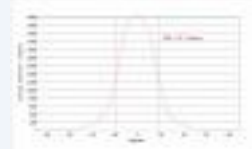
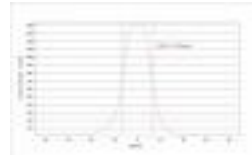


[View](#)



[Samsung 3535 LH351D White](#)

Eff: 87
FWHM: 18
Cd/lm: 6.5

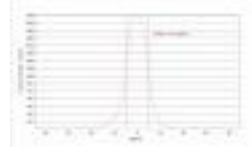


[View](#)



[Samsung 3535 LH351Z White](#)

Eff: 85
FWHM: 10
Cd/lm: 18.7

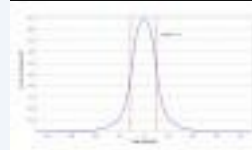
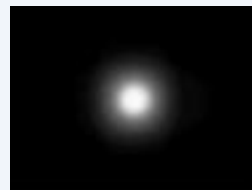


[View](#)



[Samsung CSP LH181B White](#)

Eff: 89
FWHM: 11
Cd/lm: 15.8

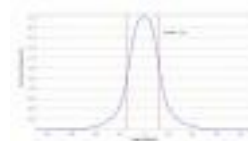


[View](#)



[Samsung CSP LH231B White](#)

Eff: 89
FWHM: 14
Cd/lm: 11.2

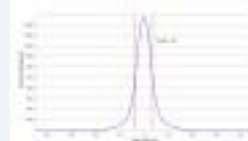
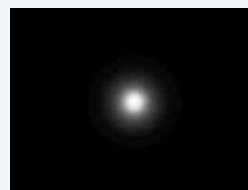


[View](#)



[Samsung CSP LM101B White](#)

Eff: 89
FWHM: 7
Cd/lm: 36.4

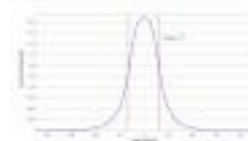


[View](#)



[Seoul CSP SZ8Y22 White](#)

Eff: 88.5
FWHM: 13
Cd/lm: 11.3



[View](#)



[Seoul CSP SZ8Y22P White](#)

Eff: 88.5
FWHM: 14
Cd/lm: 10.5

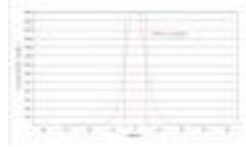
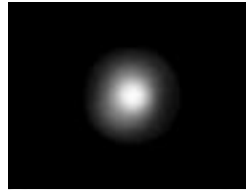
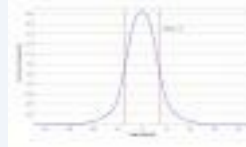


[View](#)



[Seoul MidPower MJT3030 White](#)

Eff: 85.3
FWHM: 10
Cd/lm: 17

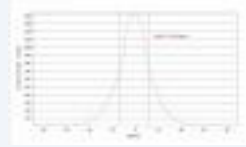


[View](#)



[Seoul MidPower MJT4040 White](#)

Eff: 86
FWHM: 13
Cd/lm: 8.75

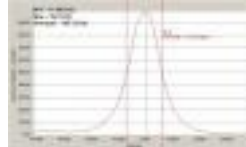


[View](#)



[Seoul P4 White](#)

Eff: 87.7
FWHM: 10
Cd/lm: 12.5

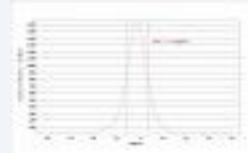


[View](#)



[Seoul P4 White](#)

Eff: 84.38
FWHM: 9
Cd/lm: 16.63

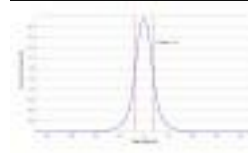


[View](#)



[Seoul SZ8Y11 White](#)

Eff: 88
FWHM: 8
Cd/lm: 31.3

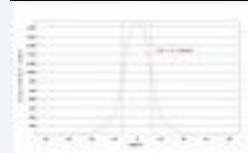


[View](#)



[Seoul SZ8Y15 White](#)

Eff: 88
FWHM: 7
Cd/lm: 45.1



[View](#)



[Seoul SZ8Y19 White](#)

Eff: 86
FWHM: 11
Cd/lm: 12.6

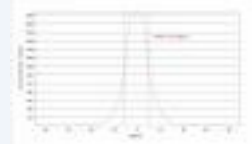
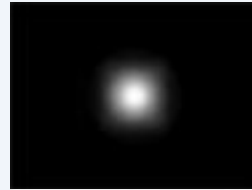
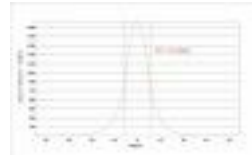


[View](#)



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

Eff: 85.4
FWHM: 11
Cd/lm: 14.4

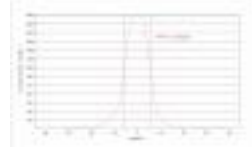
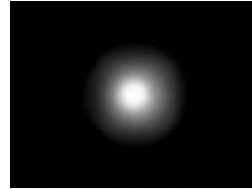


[View](#)



[Seoul Z - Power Z5M White](#)

Eff: 84.9
FWHM: 12
Cd/lm: 14.4



[View](#)



[SSC Z - Power Z1 White](#)

Eff: 87.1
FWHM: 18
Cd/lm: 6.4



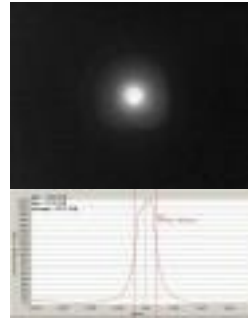
[View](#)

Eff: 88



[SSC Z - Power Z5 White](#)

FWHM: 8
Cd/lm: 35.4

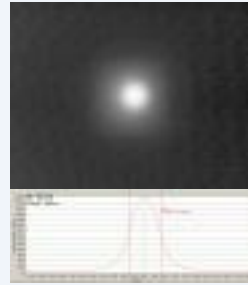


[View](#)



[SSC Z - Power Z5P White](#)

Eff: 85.8
FWHM: 9
Cd/lm: 27

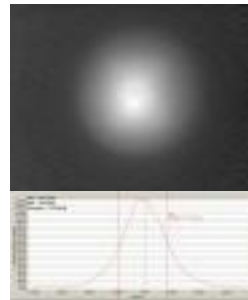


[View](#)



[Stanley 1N White](#)

FWHM: 17
Cd/lm: 7.6

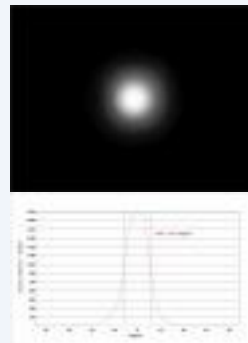


[View](#)



[Toshiba TL 1L2 White](#)

Eff: 85
FWHM: 12
Cd/lm: 14.36

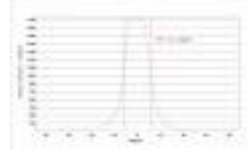


[View](#)

TOSHIBA

[Toshiba TL 1L4 White](#)

Eff: 85
FWHM: 12
Cd/lm: 13.5



[View](#)