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20.0mm Narrow Spot Plain TIR (10193)

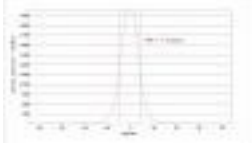
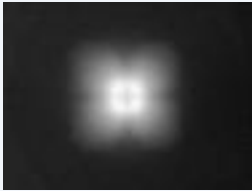


Part no.	10193
Drawing no.	60431
Family	20mm
Type	TIR
Diameter	20.0
Beam	Narrow Spot
Finish	Plain



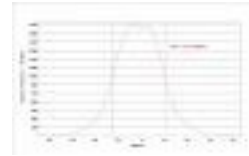
LEDs & Performances

Select LED to view available holders

Manu.	Performance Data	Images	IES/STP
 Cree XLamp CSP XD16 Cool White	Eff: 86.5 FWHM: 9 Cd/lm: 22.9	 	View
 Cree XLamp MC-E White	Eff: 84.5 FWHM: 20 Cd/lm: 5.8		View
	Eff: 86 FWHM: 24		View

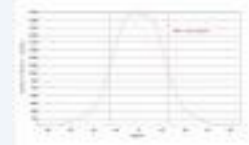
[Cree XLamp MH-B White](#)

Cd/lm: 3.7



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

Eff: 87
FWHM: 26
Cd/lm: 3.4

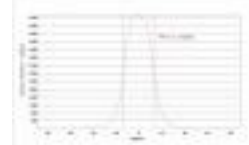
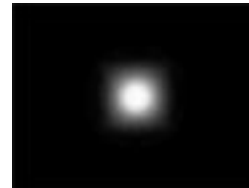


[View](#)



[Cree XLamp XHP35 HI White](#)

Eff: 85.9
FWHM: 13
Cd/lm: 12.6

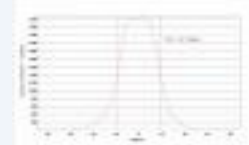


[View](#)



[Cree XLamp XHP35 White](#)

Eff: 85.8
FWHM: 19
Cd/lm: 6.2

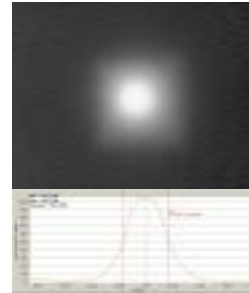


[View](#)



[Cree XLamp XM-L White](#)

FWHM: 16
Cd/lm: 10.1

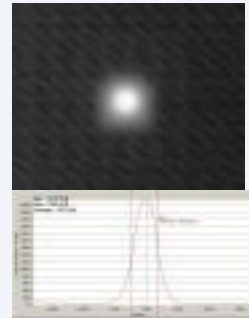


[View](#)



[Cree XLamp XP-E White](#)

Eff: 87.3
FWHM: 8
Cd/lm: 36.3

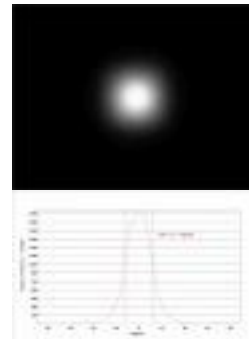


[View](#)



[Cree XLamp XP-G3 White](#)

Eff: 87
FWHM: 13
Cd/lm: 11.95



[View](#)



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

Eff: 86.2
FWHM: 10
Cd/lm: 17.5

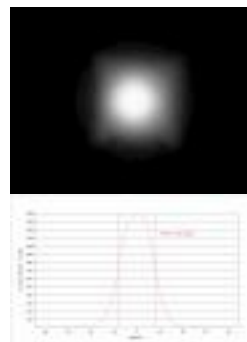


[View](#)



[Cree XLamp XP-L White](#)

Eff: 85.9
FWHM: 16
Cd/lm: 8.4

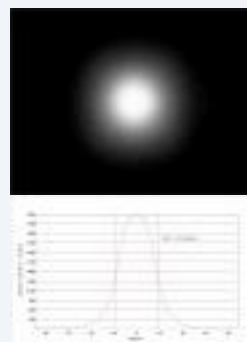


[View](#)



[Cree XLamp XP-L2 White](#)

Eff: 86.5
FWHM: 18
Cd/lm: 6.8

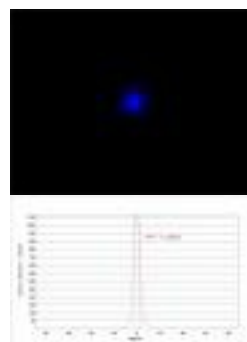


[View](#)



[Cree XLamp XQ-A Blue](#)

Eff: 87.5
FWHM: 3
Cd/lm: 162



[View](#)



[Cree XLamp XQ-A Green](#)

Eff: 87.5
FWHM: 3
Cd/lm: 157.3



[View](#)



[Cree XLamp XQ-A Red](#)

Eff: 87.5
FWHM: 4
Cd/lm: 105.3

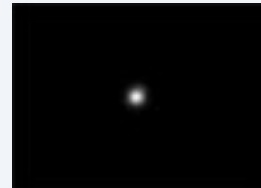


[View](#)



[Cree XLamp XQ-A White](#)

Eff: 86
FWHM: 3
Cd/lm: 137



[View](#)



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

Eff: 86
FWHM: 6
Cd/lm: 52.9

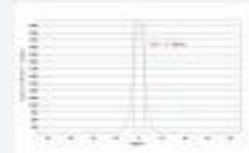
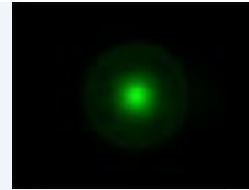


[View](#)



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

Eff: 86
FWHM: 5
Cd/lm: 54.3

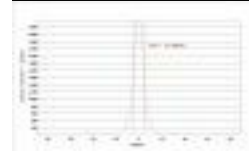


[View](#)



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

Eff: 86.5
FWHM: 5
Cd/lm: 63.1

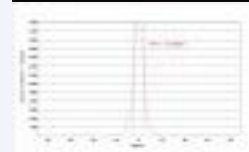
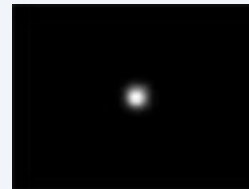


[View](#)



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

Eff: 86
FWHM: 5
Cd/lm: 71.9



[View](#)



[Cree XLamp XTE HE White](#)

Eff: 87.5
FWHM: 12
Cd/lm: 15.2

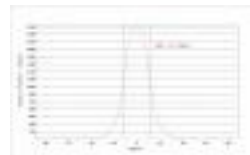


[View](#)



[LG 3535LG White](#)

FWHM: 11
Cd/lm: 21.1

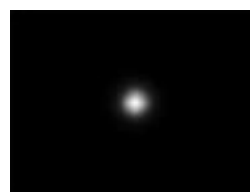


[View](#)



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

Eff: 91
FWHM: 9
Cd/lm: 27.9

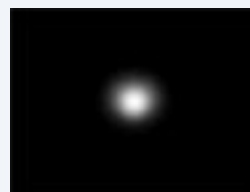


[View](#)



[LUMILEDS LUXEON 3030 White](#)

Eff: 84
FWHM: 9
Cd/lm: 22.35

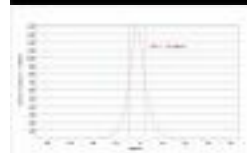
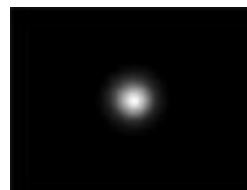


[View](#)



[LUMILEDS LUXEON 3535 HV White](#)

Eff: 85
FWHM: 7
Cd/lm: 25.7

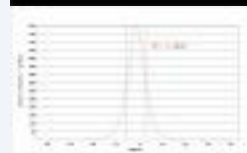
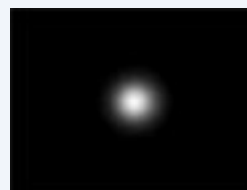


[View](#)



[LUMILEDS LUXEON 3535 L White](#)

Eff: 86
FWHM: 8
Cd/lm: 21.96



[View](#)



[LUMILEDS LUXEON 3535L Blue](#)

Eff: 88
FWHM: 5
Cd/lm: 42.2

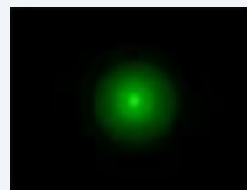


[View](#)



[LUMILEDS LUXEON 3535L Green](#)

Eff: 88
FWHM: 3 x 3
Cd/lm: 59.1

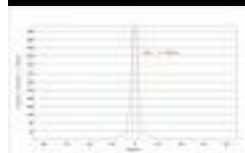
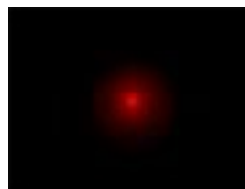


[View](#)



[LUMILEDS LUXEON 3535L Red](#)

Eff: 88
FWHM: 3
Cd/lm: 110.2



[View](#)



[LUMILEDS LUXEON 5050 White](#)

Eff: 87.5
FWHM: 21
Cd/lm: 5.3



[View](#)



[LUMILEDS LUXEON C Blue](#)

Eff: 83
FWHM: 8
Cd/lm: 25.8

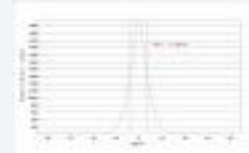
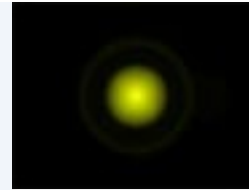


[View](#)



[LUMILEDS LUXEON C Lime](#)

Eff: 85
FWHM: 8
Cd/lm: 27.1

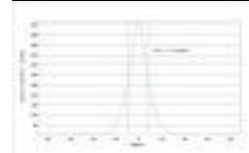


[View](#)



[LUMILEDS LUXEON C Red](#)

Eff: 82.5
FWHM: 9
Cd/lm: 22.4

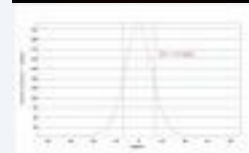


[View](#)



[LUMILEDS LUXEON C Red](#)

Eff: 82.5
FWHM: 14
Cd/lm: 10.3

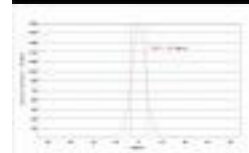
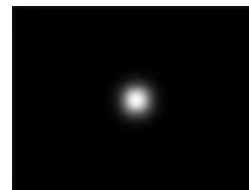


[View](#)



[LUMILEDS LUXEON CSP 05 White](#)

Eff: 85
FWHM: 7
Cd/lm: 27.8

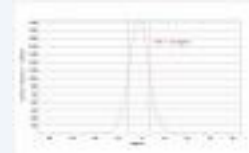
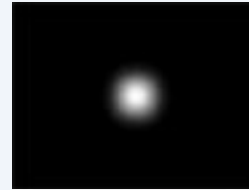


[View](#)



[LUMILEDS LUXEON CSP 10 White](#)

Eff: 85
FWHM: 10
Cd/lm: 15.92

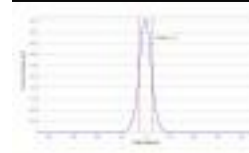
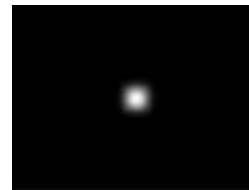


[View](#)



[LUMILEDS LUXEON CZ](#)

Eff: 87.5
FWHM: 6
Cd/lm: 67.5

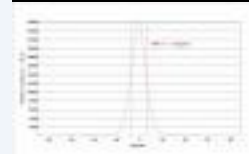
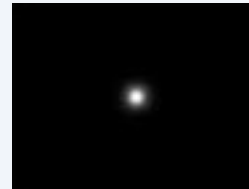


[View](#)



[LUMILEDS LUXEON IR Compact 850nm](#)

Eff: 91
FWHM: 7
Cd/lm: 38.5

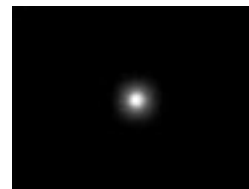


[View](#)



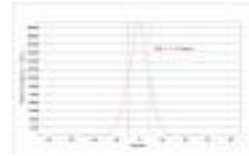
[LUMILEDS LUXEON IR Domed 150](#)

Eff: 91.5
FWHM: 10
Cd/lm: 26.5



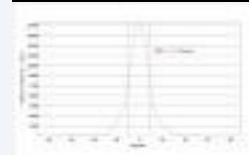
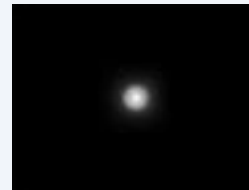
[View](#)

Degree



LUMILEDS LUXEON IR Domed 60 Degree

Eff: 89.5
FWHM: 9
Cd/lm: 23.5

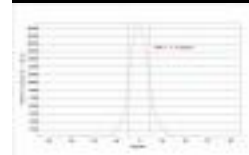
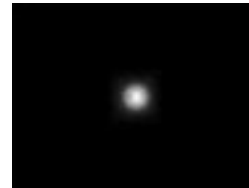


[View](#)



LUMILEDS LUXEON IR Domed 90 Degree

Eff: 90.5
FWHM: 9
Cd/lm: 25.5

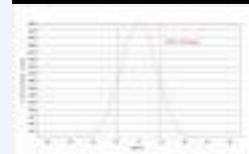


[View](#)



LUMILEDS LUXEON MZ White

Eff: 85.7
FWHM: 19
Cd/lm: 6.1



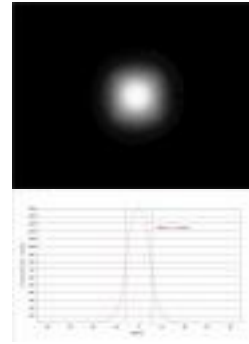
[View](#)

Eff: 84



[LUMILEDS LUXEON Q White](#)

FWHM: 11
Cd/lm: 14.9



[View](#)



[LUMILEDS LUXEON R White](#)

Eff: 85.6
FWHM: 12
Cd/lm: 18.2

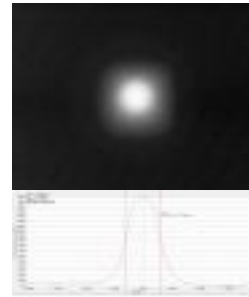


[View](#)



[LUMILEDS LUXEON Rebel ES White](#)

Eff: 85.6
FWHM: 12
Cd/lm: 18.2

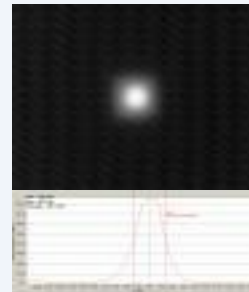


[View](#)



[LUMILEDS LUXEON Rebel White](#)

Eff: 87.1
FWHM: 9
Cd/lm: 32.5



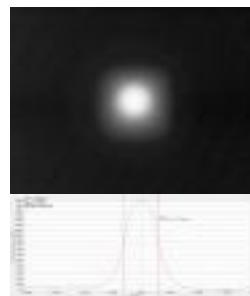
[View](#)

Eff: 85.6



[LUMILEDS LUXEON T White](#)

FWHM: 12
Cd/lm: 18.2

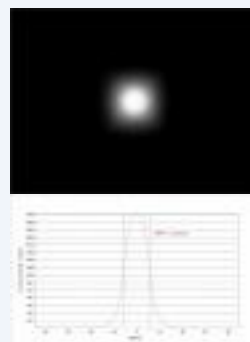


[View](#)



[LUMILEDS LUXEON TX White](#)

Eff: 85.8
FWHM: 11
Cd/lm: 16.5

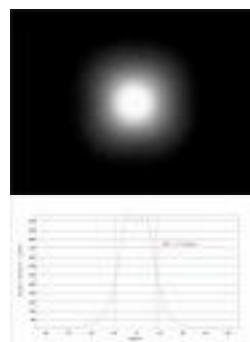


[View](#)



[LUMILEDS LUXEON V White](#)

Eff: 85
FWHM: 18
Cd/lm: 6.7

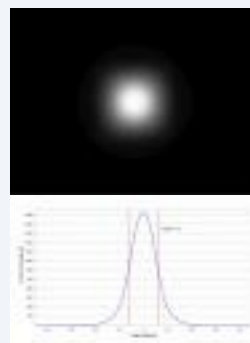


[View](#)



[LUMILEDS LUXEON V2 White](#)

Eff: 87.5
FWHM: 12
Cd/lm: 13.9

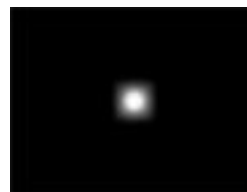


[View](#)



[LUMILEDS LUXEON Z ES White](#)

Eff: 86
FWHM: 8

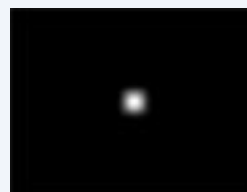


[View](#)



[LUMILEDS LUXEON Z White](#)

Eff: 85.9
FWHM: 5
Cd/lm: 54.2

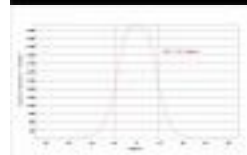


[View](#)



[Nichia 229A White](#)

Eff: 85.5
FWHM: 19
Cd/lm: 6.6



[View](#)

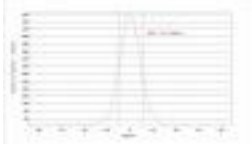
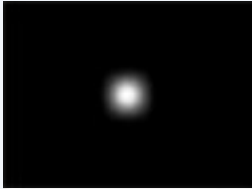
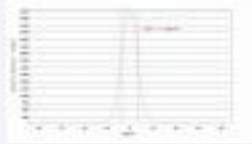
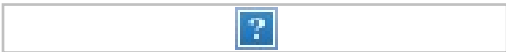
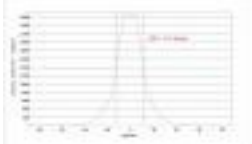
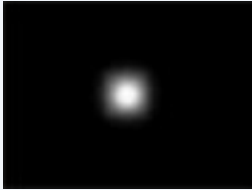


[Nichia 757G White](#)

Eff: 87.5
FWHM: 11
Cd/lm: 18.2



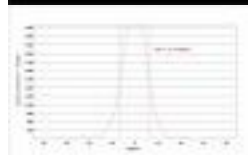
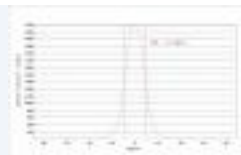
[View](#)

 Nichia 757G White	Eff: 87.5 FWHM: 11 Cd/lm: 18.2	 	View
 Nichia NCSW E17A White	Eff: 87 FWHM: 8 Cd/lm: 34	 	View
 Nichia NF2W 385AR-V2 White	Eff: 87.5 FWHM: 12 Cd/lm: 14.3	 	View
 Nichia NVSL 219B White	Eff: 85.5 FWHM: 9 Cd/lm: 23.1		View



[Nichia NVSW 219C White](#)

Eff: 86
FWHM: 13
Cd/lm: 12.5

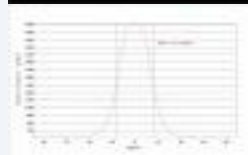


[View](#)



[Nichia NVSW 319A White](#)

Eff: 86
FWHM: 16
Cd/lm: 9.5

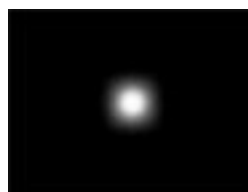


[View](#)



[Nichia NVSW E21A White](#)

Eff: 84
FWHM: 10
Cd/lm: 20.66

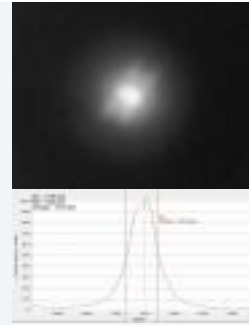


[View](#)



[Nichia Top Emitting 083 White](#)

Eff: 86.9
FWHM: 10
Cd/lm: 12.1

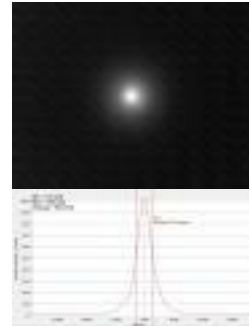


[View](#)



[Nichia Top Emitting NFSW 036 White](#)

Eff: 88.6
FWHM: 5
Cd/lm: 41.4

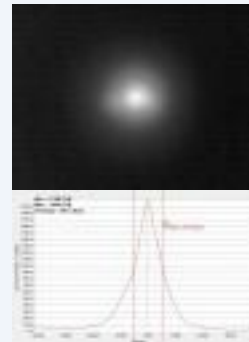


[View](#)



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

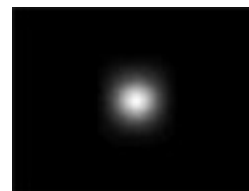
Eff: 89.3
FWHM: 9
Cd/lm: 23.1



[View](#)



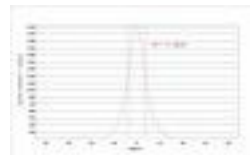
Eff: 87.5
FWHM: 8



[View](#)

[Osram OS DURIS E 2835 White](#)

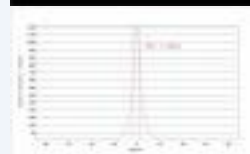
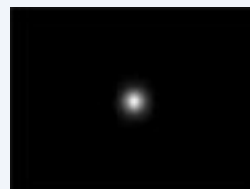
Cd/lm: 25.6



OSRAM
Opto Semiconductors

[Osram OS DURIS E2 White](#)

Eff: 86
FWHM: 4
Cd/lm: 51.67

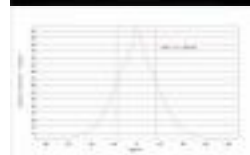


[View](#)

OSRAM
Opto Semiconductors

[Osram OS DURIS E2 White](#)

Eff: 84
FWHM: 18
Cd/lm: 4.16

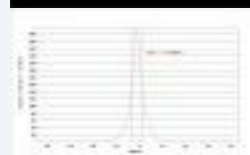
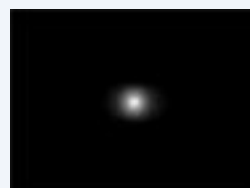


[View](#)

OSRAM
Opto Semiconductors

[Osram OS DURIS E3 White](#)

Eff: 89.2
FWHM: 4
Cd/lm: 41.7

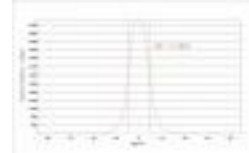
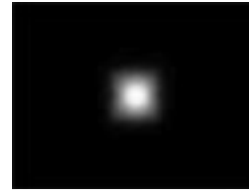


[View](#)



[Osram OS DURIS P8 White](#)

Eff: 85.9
FWHM: 10
Cd/lm: 18

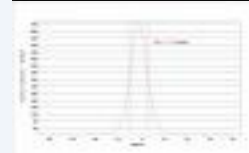
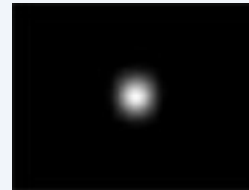


[View](#)



[Osram OS DURIS S2 White](#)

Eff: 90.7
FWHM: 8
Cd/lm: 23.1

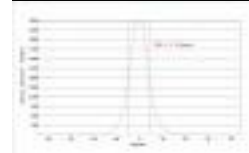
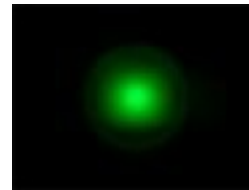


[View](#)



[Osram OS DURIS S5 Green](#)

Eff: 88
FWHM: 9
Cd/lm: 24.4

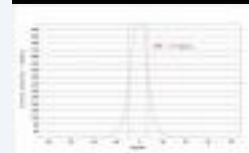


[View](#)



[Osram OS DURIS S5 Red](#)

Eff: 88.5
FWHM: 8
Cd/lm: 29.5

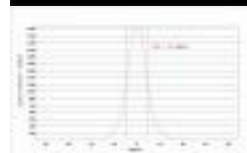
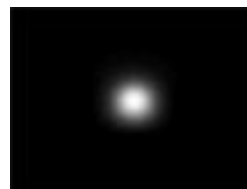


[View](#)



[Osram OS DURIS S5 White](#)

Eff: 86
FWHM: 9
Cd/lm: 20.34

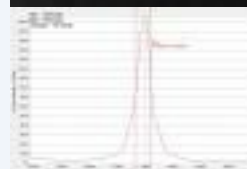


[View](#)



[Osram OS GOLDEN DRAGON W5SM White](#)

Eff: 90
FWHM: 5
Cd/lm: 30

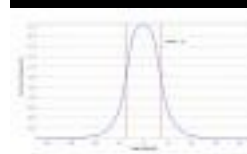


[View](#)



[Osram OS Osconiq P3737 White](#)

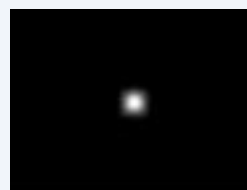
Eff: 85.5
FWHM: 15
Cd/lm: 8.8



[View](#)

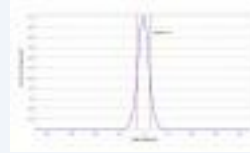


Eff: 87.5



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

FWHM: 5 x 5
Cd/lm: 82.6

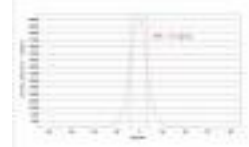
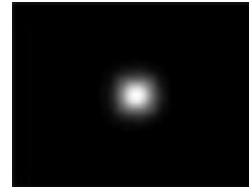


[View](#)

OSRAM
Opto Semiconductors

[Osram OS OSLON Square Flat White](#)

Eff: 87.5
FWHM: 8
Cd/lm: 31.3

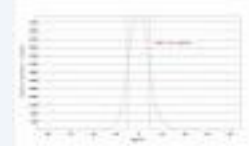
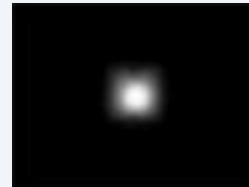


[View](#)

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

Eff: 85.9
FWHM: 10
Cd/lm: 18.3

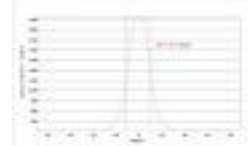
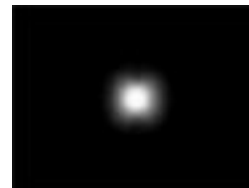


[View](#)

OSRAM
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[Osram OS OSLON Square White](#)

Eff: 85
FWHM: 10
Cd/lm: 18.27

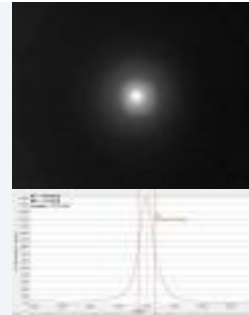


[View](#)



[Osram OS PLATINUM DRAGON W5SN White](#)

Eff: 86
FWHM: 6
Cd/lm: 36

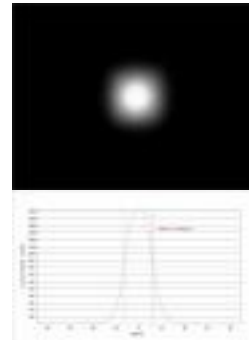


[View](#)



[Samsung 3535 LH351B White](#)

Eff: 86
FWHM: 13
Cd/lm: 13.45

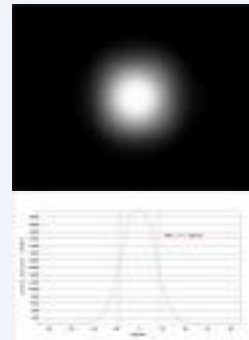


[View](#)



[Samsung 3535 LH351D White](#)

Eff: 88
FWHM: 18
Cd/lm: 7.5

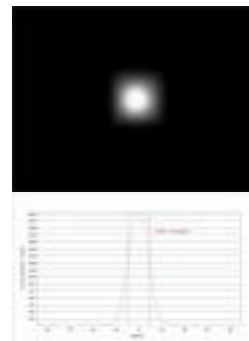


[View](#)



[Samsung 3535 LH351Z White](#)

Eff: 85.5
FWHM: 10
Cd/lm: 20.31

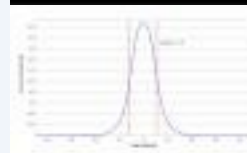


[View](#)



[Samsung CSP LH181B White](#)

Eff: 88.5
FWHM: 11 x 11
Cd/lm: 16.4



[View](#)



[Samsung CSP LH231B White](#)

Eff: 87.5
FWHM: 13
Cd/lm: 11.7

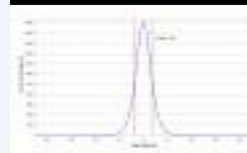
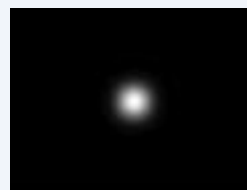


[View](#)



[Samsung CSP LM101B White](#)

Eff: 87.5
FWHM: 7
Cd/lm: 38.8



[View](#)



[Samsung WH5 White](#)

Eff: 88.3
FWHM: 12
Cd/lm: 9.9

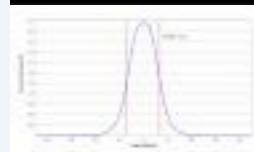
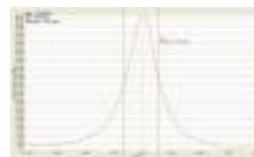


[View](#)



[Seoul CSP SZ8Y22 White](#)

Eff: 87
FWHM: 14
Cd/lm: 11.7

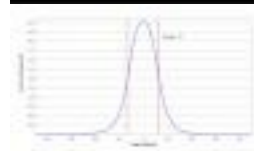


[View](#)



[Seoul CSP SZ8Y22P White](#)

Eff: 86
FWHM: 13
Cd/lm: 11.4

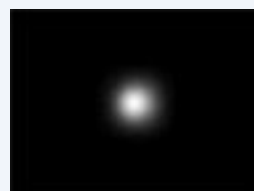


[View](#)



[Seoul MidPower MJT3030 White](#)

Eff: 86
FWHM: 8
Cd/lm: 20.7

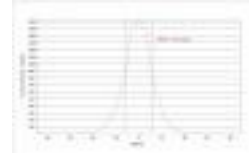
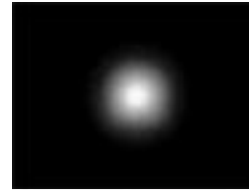


[View](#)



[Seoul MidPower MJT4040 White](#)

Eff: 87
FWHM: 12
Cd/lm: 9.8

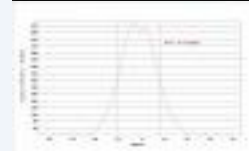


[View](#)



[Seoul P4 White](#)

Eff: 85.19
FWHM: 18
Cd/lm: 6.65

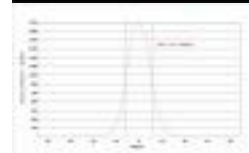
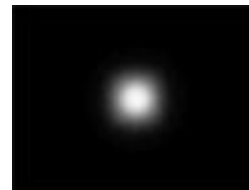


[View](#)



[Seoul SZ8Y19 White](#)

Eff: 87
FWHM: 12
Cd/lm: 12.9

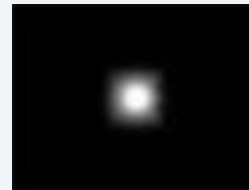


[View](#)



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

Eff: 85
FWHM: 11
Cd/lm: 15.77

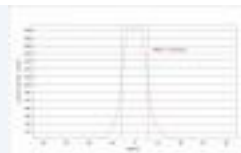


[View](#)



[SSC Acrich A2000 White](#)

Eff: 87.5
FWHM: 21
Cd/lm: 5.9

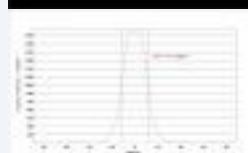


[View](#)

TOSHIBA

[Toshiba TL 1L2 White](#)

Eff: 86
FWHM: 11
Cd/lm: 15.3



[View](#)

TOSHIBA

[Toshiba TL 1L4 White](#)

Eff: 86
FWHM: 12
Cd/lm: 14.7



[View](#)