

EMERALD-A

Asymmetric	; beam
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SPECIFICATION:

Dimensions	Ø 21.6 mm
Height	6.9 mm
Fastening	glue, pin
ROHS compliant	yes 🛈



PRODUCT DATASHEET C13155_EMERALD-A

MATERIALS:

Component EMERALD-A

Type Single lens

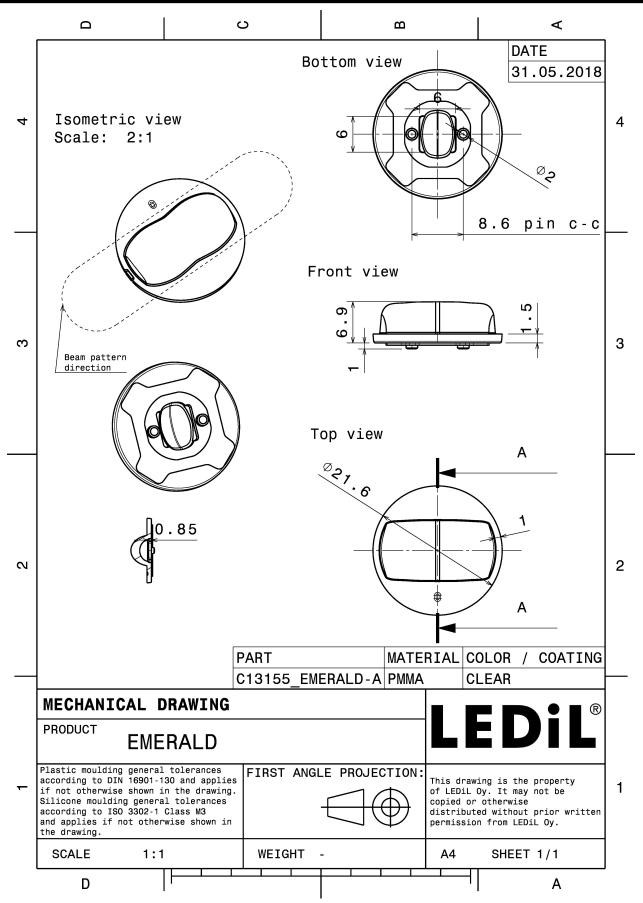
Material	Colour	Finish
PMMA	clear	

ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
C13155_EMERALD-A	2128	336	112	4.8
» Box size: 480 x 280 x 300 mm				



PRODUCT DATASHEET C13155_EMERALD-A



See also our general installation guide: <u>www.ledil.com/installation_guide</u>



LED	XB-D	90*
		175° 400 73°.
FWHM / FWTM	157.0 + 62.0°	
Efficiency	90 %	. 60 ⁴ 1230 60 ⁴
Peak intensity	2 cd/lm	150
LEDs/each optic	1	2020
Light colour	White	45* 2400 45*
Required compone	nts:	200
		220
		350
		30* 4000 30*
		13 ⁵ 0 ⁶ 1 ⁶
		gr* gr*
LED	XM-L	
FWHM / FWTM	157.0 + 83.0°	75° 600 75°
Efficiency	94 %	$X \times X / \setminus X \times X$
Peak intensity	1.1 cd/im	50° 800 60°.
LEDs/each optic	1	
Light colour	' White	1230
		6' d
Required compone	IIS.	1670
		30* 15 ³ 2920 15* 30*
CREE ≑		
LEDS		90* 90*
LED	XM-L2	
FWHM / FWTM	169.0 + 73.0°	78 400 78*
FWHM / FWTM Efficiency	169.0 + 73.0° 94 %	
		177 - 400 - 727. 614 - 800 - 804
Efficiency	94 %	
Efficiency Peak intensity	94 % 1.1 cd/lm	
Efficiency Peak intensity LEDs/each optic	94 % 1.1 cd/lm 1 White	.6 ¹⁴ 00 6 ¹⁴
Efficiency Peak intensity LEDs/each optic Light colour	94 % 1.1 cd/lm 1 White	.6 ¹⁴ <u>80</u> 60 ⁴ .
Efficiency Peak intensity LEDs/each optic Light colour	94 % 1.1 cd/lm 1 White	.6 ¹⁴ 00 6 ¹⁴
Efficiency Peak intensity LEDs/each optic Light colour	94 % 1.1 cd/lm 1 White	.6 ¹⁴ 00 6 ¹⁴
Efficiency Peak intensity LEDs/each optic Light colour Required compone	94 % 1.1 cd/lm 1 White	.6 ¹⁴ 00 6 ¹⁴
Efficiency Peak intensity LEDs/each optic Light colour	94 % 1.1 cd/lm 1 White	.6 ¹⁴ 00 6 ¹⁴
Efficiency Peak intensity LEDs/each optic Light colour Required compone	94 % 1.1 cd/lm 1 White nts:	.6 ¹⁴ 00 6 ¹⁴
Efficiency Peak intensity LEDs/each optic Light colour Required compone	94 % 1.1 cd/lm 1 White nts: XP-E	.6 ¹⁴ 00 6 ¹⁴
Efficiency Peak intensity LEDs/each optic Light colour Required compone	94 % 1.1 cd/lm 1 White nts: XP-E 158.0 + 73.0°	.6 ¹⁴ 00 6 ¹⁴
Efficiency Peak intensity LEDs/each optic Light colour Required compone CREE \$ LED FWHM / FWTM Efficiency	94 % 1.1 cd/lm 1 White nts: XP-E 158.0 + 73.0° 93 %	.6 ¹⁴ 00 6 ¹⁴
Efficiency Peak intensity LEDs/each optic Light colour Required compone CREE LED FWHM / FWTM Efficiency Peak intensity	94 % 1.1 cd/lm 1 White nts: XP-E 158.0 + 73.0° 93 % 2.3 cd/lm	
Efficiency Peak intensity LEDs/each optic Light colour Required compone EEE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	94 % 1.1 cd/lm 1 White nts: XP-E 158.0 + 73.0° 93 % 2.3 cd/lm 1	
Efficiency Peak intensity LEDs/each optic Light colour Required compone CREE ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	94 % 1.1 cd/lm 1 White nts: XP-E 158.0 + 73.0° 93 % 2.3 cd/lm 1 White	
Efficiency Peak intensity LEDs/each optic Light colour Required compone EEE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	94 % 1.1 cd/lm 1 White nts: XP-E 158.0 + 73.0° 93 % 2.3 cd/lm 1 White	
Efficiency Peak intensity LEDs/each optic Light colour Required compone CREE ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	94 % 1.1 cd/lm 1 White nts: XP-E 158.0 + 73.0° 93 % 2.3 cd/lm 1 White	
Efficiency Peak intensity LEDs/each optic Light colour Required compone CREE ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	94 % 1.1 cd/lm 1 White nts: XP-E 158.0 + 73.0° 93 % 2.3 cd/lm 1 White	
Efficiency Peak intensity LEDs/each optic Light colour Required compone CREE ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	94 % 1.1 cd/lm 1 White nts: XP-E 158.0 + 73.0° 93 % 2.3 cd/lm 1 White	



CREE €	
	EFT.
LED XP-E2	
FWHM / FWTM 156.0 + 72.0°	800 75"
	(MXX)
Efficiency 93 %	1630 60*
Peak intensity 2.5 cd/lm	$ X \rangle $
LEDs/each optic 1	2400
Light colour White	3230 45*
Required components:	
	4000
	4600
3°	0° 15* 30*
CREE € LEDs	90*
LED XP-G	400
FWHM / FWTM 159.0 + 79.0°	
Efficiency 89 %	800
Peak intensity 1.6 cd/lm	1200 60*
LEDs/each optic 1	1600
Light colour White	$X \times X$
Required components:	2000 45*
	2430
	2800
	3200
20*	00 150 300
CREE ≑	YATT
LEDS	90*
LED XP-G2	400 75°
FWHM / FWTM 158.0 + 79.0°	4 800 × 1
Efficiency 94 %	1200 60*
Peak intensity 1.8 cd/lm	1600
LEDs/each optic 1	2000
Light colour White	65+
Required components:	2430
\times	2800
X	3230
21	3600 30*
CREE €	0 ⁰ 15 ⁰
LEDs **	90.
LED XT-E	400
FWHM / FWTM 157.0 + 61.0°	
Efficiency 89 %	
Peak intensity 1.8 cd/lm	1230 60*
	1630
LEDs/each optic 1	2000 45+
	2400
Light colour White et al.	
	2200
Light colour White et al.	
Light colour White et al.	2000



M LUMIL	EDS	
LED	LUXEON A	
FWHM / FWTM	156.0 + 75.0°	730 400 750
Efficiency	92 %	
Peak intensity	1.6 cd/lm	50 ⁴ 50 ⁴ .
LEDs/each optic	1	
Light colour	White	45°
Required component		200
		2430
		2800
		30 ⁴ 3200 30 ⁴ 30 ⁴ 30 ⁴
UMIL	EDS	
LED	LUXEON R	90* 90*
ED FWHM / FWTM	LUXEON R 153.0 + 73.0°	73° 400 73°
Efficiency	92 %	80
Peak intensity	92 % 1.7 cd/lm	.60* <u>1200</u> 60*.
LEDs/each optic	1	100
Light colour	White	
Required component		45"
	ιυ.	2430
		2200
		30* 15 ⁵ 0° 15* 30*
1		
	EDS	
		51 ³ 59 ⁴
LED	LUXEON Rebel	92° 92° 39° 80° 92°
LED FWHM / FWTM	LUXEON Rebel 152.0 + 67.0°	
LED FWHM / FWTM Efficiency	LUXEON Rebel 152.0 + 67.0° 92 %	9° 7° 8° 6° 500 6°
LED FWHM / FWTM Efficiency Peak intensity	LUXEON Rebel 152.0 + 67.0° 92 % 2.5 cd/m	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON Rebel 152.0 + 67.0° 92 % 2.5 cd/m 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON Rebel 152.0 + 67.0° 92 % 2.5 cd/m 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON Rebel 152.0 + 67.0° 92 % 2.5 cd/m 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON Rebel 152.0 + 67.0° 92 % 2.5 cd/m 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON Rebel 152.0 + 67.0° 92 % 2.5 cd/m 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON Rebel 152.0 + 67.0° 92 % 2.5 cd/m 1 White	80° 1500 00°.
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	LUXEON Rebel 152.0 + 67.0° 92 % 2.5 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	LUXEON Rebel 152.0 + 67.0° 92 % 2.5 cd/lm 1 White hts:	60° 100 00° 00° 00° 00° 00° 00° 00° 00° 0
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	LUXEON Rebel 152.0 + 67.0° 92 % 2.5 cd/lm 1 White hts: EDS LUXEON Rebel ES	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Mequired component LED FWHM / FWTM	LUXEON Rebel 152.0 + 67.0° 92 % 2.5 cd/lm 1 White hts: EDS LUXEON Rebel ES 153.0 + 74.0°	60° 100 00° 00° 00° 00° 00° 00° 00° 00° 0
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Mequired component ELUMIL LED FWHM / FWTM Efficiency	LUXEON Rebel 152.0 + 67.0° 92 % 2.5 cd/m 1 White hts: EDS LUXEON Rebel ES 153.0 + 74.0° 90 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Mequired component Equired component Component Required component Efficiency Peak intensity	LUXEON Rebel 152.0 + 67.0° 92 % 2.5 cd/lm 1 White hts: EDS LUXEON Rebel ES 153.0 + 74.0° 90 % 1.7 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Required component Equired component Equired component Required component Equired component Required component Equired component Required component Equired	LUXEON Rebel 152.0 + 67.0° 92 % 2.5 cd/lm 1 White hts: EDS LUXEON Rebel ES 153.0 + 74.0° 90 % 1.7 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Equired component Component Required component Efficiency Peak intensity LEDs/each optic Light colour	LUXEON Rebel 152.0 + 67.0° 92 % 2.5 cd/lm 1 White hts: EDS LUXEON Rebel ES 153.0 + 74.0° 90 % 1.7 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Required component Equired component Equired component Required component Equired component Required component Equired component Required component Equired	LUXEON Rebel 152.0 + 67.0° 92 % 2.5 cd/lm 1 White hts: EDS LUXEON Rebel ES 153.0 + 74.0° 90 % 1.7 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Equired component Component Required component Efficiency Peak intensity LEDs/each optic Light colour	LUXEON Rebel 152.0 + 67.0° 92 % 2.5 cd/lm 1 White hts: EDS LUXEON Rebel ES 153.0 + 74.0° 90 % 1.7 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Equired component Ketter Component Efficiency Peak intensity LEDs/each optic Light colour	LUXEON Rebel 152.0 + 67.0° 92 % 2.5 cd/lm 1 White hts: EDS LUXEON Rebel ES 153.0 + 74.0° 90 % 1.7 cd/lm 1 White	



🤭 LUMIL	EDS	
		90* 90*
	LUXEON T	730 400 730
FWHM / FWTM	155.0 + 76.0°	
Efficiency	93 %	.604
Peak intensity	2.3 cd/lm	1220
LEDs/each optic	1	1000
Light colour	White	65° 2000 65°
Required compone	nts:	
		2400
		2000
		200
		90° 15 ⁵ 0° 15° 30°
	EDC	
LUMIL	EDS	90* 90*
LED	LUXEON TX	400
FWHM / FWTM	156.0 + 73.0°	735
Efficiency	94 %	80
Peak intensity	1.7 cd/lm	50 ⁴ 1239 50 ⁴ .
LEDs/each optic	1	1630
Light colour	White	-5° 2009 - 3°
Required compone		
	113.	2130
		2800
		300
1		140 00 140
A		
ØNICHI∕		
	NCSxx19A	
LED FWHM / FWTM	NCSxx19A	20 20 20 20 20 20 20 20 20 20 20 20 20 2
LED FWHM / FWTM Efficiency	NCSxx19A 151.0 + 65.0° 92 %	200 - 200 -
LED FWHM / FWTM Efficiency Peak intensity	NCSxx19A 151.0 + 65.0° 92 % 2.2 cd/lm	200 200 200 200 200 200 200 200 200 200
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	NCSxx19A 151.0 + 65.0° 92 % 2.2 cd/lm 1	1000
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	NCSxx19A 151.0 + 65.0° 92 % 2.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	NCSxx19A 151.0 + 65.0° 92 % 2.2 cd/lm 1 White	1000
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	NCSxx19A 151.0 + 65.0° 92 % 2.2 cd/lm 1 White	1000
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	NCSxx19A 151.0 + 65.0° 92 % 2.2 cd/lm 1 White	1000
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	NCSxx19A 151.0 + 65.0° 92 % 2.2 cd/lm 1 White	109
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NCSxx19A 151.0 + 65.0° 92 % 2.2 cd/lm 1 White ints:	6°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	NCSxx19A 151.0 + 65.0° 92 % 2.2 cd/lm 1 White ints:	6°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NCSxx19A 151.0 + 65.0° 92 % 2.2 cd/lm 1 White ints:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NCSxx19A 151.0 + 65.0° 92 % 2.2 cd/Im 1 White Ints:	6°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NCSxx19A 151.0 + 65.0° 92 % 2.2 cd/lm 1 White ints: NVSxx19A 153.0 + 71.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NCSxx19A 151.0 + 65.0° 92 % 2.2 cd/lm 1 White ints: NVSxx19A 153.0 + 71.0° 91 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone MICHIM LED FWHM / FWTM Efficiency Peak intensity	NCSxx19A 151.0 + 65.0° 92 % 2.2 cd/lm 1 White ints: NVSxx19A 153.0 + 71.0° 91 % 1.7 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone MICHIM LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	NCSxx19A 151.0 + 65.0° 92 % 2.2 cd/lm 1 White ints: NVSxx19A 153.0 + 71.0° 91 % 1.7 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Equired compone NICHIA Efficiency Peak intensity LEDs/each optic Light colour	NCSxx19A 151.0 + 65.0° 92 % 2.2 cd/lm 1 White nts: NVSxx19A 153.0 + 71.0° 91 % 1.7 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone MICHIM LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	NCSxx19A 151.0 + 65.0° 92 % 2.2 cd/lm 1 White nts: NVSxx19A 153.0 + 71.0° 91 % 1.7 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Equired compone NICHIA Efficiency Peak intensity LEDs/each optic Light colour	NCSxx19A 151.0 + 65.0° 92 % 2.2 cd/lm 1 White nts: NVSxx19A 153.0 + 71.0° 91 % 1.7 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone MICHIM LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	NCSxx19A 151.0 + 65.0° 92 % 2.2 cd/lm 1 White nts: NVSxx19A 153.0 + 71.0° 91 % 1.7 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Equired compone NICHIA Efficiency Peak intensity LEDs/each optic Light colour	NCSxx19A 151.0 + 65.0° 92 % 2.2 cd/lm 1 White nts: NVSxx19A 153.0 + 71.0° 91 % 1.7 cd/lm 1 White	



Ø NICHIЛ		
		90* 90
LED	NVSxx19B/NVSxx19C	73% 400 75
FWHM / FWTM	155.0 + 80.0° / 168.0 + 158.0°	
Efficiency	92 %	50° 800 560
Peak intensity	1.4 cd/lm	1220
LEDs/each optic	1	
Light colour	White	45* 1600 45
Required componer	nts:	2000
		2400
		30* 2 <u>5</u> 0 [*] 1 <u>5</u> * 30
OSRAM		
Opto Semiconductors		90
LED	OSLON Square EC	75% 400 770
FWHM / FWTM	156.0 + 80.0°	
Efficiency	93 %	50* 3200 50
Peak intensity	1.7 cd/lm	
LEDs/each optic	1	1690
Light colour	White	45* 2000 45
Required componer	nts:	2450
		2200
		3200
		30* 13 ⁵ 3850 15* 30
OSRAM Opto Semiconductors		
LED	OSLON Square PC	9°-
FWHM / FWTM	156.0 + 83.0°	73% 400 75
Efficiency	93 %	30
Peak intensity	1.7 cd/lm	.60 ⁴ 1220 60
LEDs/each optic		
		1600
	1 White	$X \times I = X \times X$
Light colour	White	6' 200 6
	White	$X \times I = X \times X$
Light colour	White	6' 200 6
Light colour	White	47 <u>200</u> 4
Light colour	White	-0° 399 6 -209 -399
Light colour	White	5° 500 6 200 200 200 200
Light colour Required componer	White nts:	5° 500 6 200 200 200 200
Light colour Required componen Opto Semiconductors LED	White nts: OSLON SSL 150	5° 500 6 200 200 200 200
Light colour Required componen Opto Semiconductors LED FWHM / FWTM	White nts: OSLON SSL 150 157.0 + 86.0°	4° 300 6 300 300 300 40 40 40 40 40 40 40 40 40 40 40 40 4
Light colour Required componen Opto Semiconductors LED FWHM / FWTM Efficiency	White nts: OSLON SSL 150 157.0 + 86.0° 92 %	
Light colour Required component Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	White nts: OSLON SSL 150 157.0 + 86.0° 92 % 2.9 cd/lm	
Light colour Required component Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	White nts: OSLON SSL 150 157.0 + 86.0° 92 % 2.9 cd/lm 1	
Light colour Required componen Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	White nts: OSLON SSL 150 157.0 + 86.0° 92 % 2.9 cd/lm 1 White	
Light colour Required component Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	White nts: OSLON SSL 150 157.0 + 86.0° 92 % 2.9 cd/lm 1 White	
Light colour Required componen OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	White nts: OSLON SSL 150 157.0 + 86.0° 92 % 2.9 cd/lm 1 White	
Light colour Required componen OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	White nts: OSLON SSL 150 157.0 + 86.0° 92 % 2.9 cd/lm 1 White	



OSRAM Opto Semiconductors		50° 50°
LED	OSLON SSL 80	
FWHM / FWTM	147.0 + 52.0°	75 000 75'
Efficiency	89 %	
Peak intensity	1.9 cd/lm	60 ⁴ <u>150</u> 69.
LEDs/each optic	1	200
Light colour	White	.65*
Required compone	ents:	300
		000
		34* 35 ³ 4 <u>50</u> 35* 30*
		115 ⁵ 466 ⁶ 10 ⁹
0.0.0.0		
SAMSI	UNG	90 ⁴ 99 ⁵
	UNG LH351Z	50° 50°
		25 40 75
LED	LH351Z	73- 400 727
LED FWHM / FWTM	LH351Z 154.0 + 76.0°	25 40 75
LED FWHM / FWTM Efficiency	LH351Z 154.0 + 76.0° 94 %	73- 400 727
LED FWHM / FWTM Efficiency Peak intensity	LH351Z 154.0 + 76.0° 94 % 1.7 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LH351Z 154.0 + 76.0° 94 % 1.7 cd/lm 1 White	23 ⁴
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH351Z 154.0 + 76.0° 94 % 1.7 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH351Z 154.0 + 76.0° 94 % 1.7 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH351Z 154.0 + 76.0° 94 % 1.7 cd/lm 1 White	



OPTICAL RESULTS (SIMULATED):

LEDS	XHP35 HD	
FWHM / FWTM	164.0 + 68.0°	78° 78°
Efficiency	91 %	. 601
Peak intensity	0.8 cd/lm	
LEDs/each optic	1	
Light colour	White	45* 45*
Required components:		
		1220
		3430
		30* 1600 30*
		12 ³ 0 ⁴ 10 ⁴
		90* 90* 90*
LED	XHP35 HI	
FWHM / FWTM	162.0 + 51.0° / 176.0 + 146.0°	73° 75°
Efficiency	90 %	40
Peak intensity	0.9 cd/lm	60° 80° 60°
LEDs/each optic	1	200
Light colour	White	5° 1000 5°
Required components:	wille	45* 45*
		1430
		1600
		30 ⁺ 15 ⁵ 0 ⁶ 15 ⁵ 30 ⁴
CREE ≑		
LEDS		90* 90*
LED	XP-L HI	720 400 700
FWHM / FWTM	159.0°	
Efficiency	89 %	50 ⁴
Peak intensity	1.3 cd/lm	
LEDs/each optic	1	120
Light colour	White	45* 1600 45*
Required components:		
		2000
		2430
		30* 30*
		30" 126 3660 15* 30"
ΜΝΙΟΗΙΛ		
LED	NF2W757G-MT (Tunable White)	
FWHM / FWTM	159.0 + 59.0° / 172.0 + 158.0°	75 400 78°
Efficiency	94 %	
Peak intensity		.50° 800 60°.
	1.1 cd/lm	X/TVX
LEDs/each optic	1 Turable White	
Light colour	Tunable White	-6°*
Required components:		
		\times / \top / \times
		2000
		30* 30*
		13 ⁵ 0 ⁶ 15°



OPTICAL RESULTS (SIMULATED):

OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	OSLON Square CSSRM2/CSSRM3 158.0 + 70.0° 93 % 1.5 cd/lm 1 White	90° 100 100 100 100 100 100 100 1
SAMSUN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LH351D 86.0 + 164.0° / 166.0 + 176.0° 91 % 0.7 cd/lm 1 White	
SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Z5M4 154.0 + 66.0° / 168.0 + 144.0° 91 % 1.1 cd/lm 1 White	



PRODUCT DATASHEET C13155_EMERALD-A

GENERAL INFORMATION:

NOTE: The typical beam angle will be changed by different color, chip size and chip position tolerance. The typical total beam angle is the full angle measured where the luminous intensity is half of the peak value.

MATERIALS:

As part of our continuous research and improvement processes, and to ensure the best possible quality and availability of our products, LEDiL reserves the right to change material grades without notice.

PRODUCT DATA USER AGREEMENT AND DISCLAIMER:

The measured data in the provided downloadable LEDiL Product Datasheets and Mechanical 2D-Drawings is rounded and provided as reference for planning. LEDiL Oy's optical specifications have been verified by conducting performance testing of the products in accordance with the company's quality system. The reported data are averaged results of multiple measurements with typical variation. LEDiL Oy reserves the right to without prior notification make changes and improvements to its products.

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LEDiL Oy

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