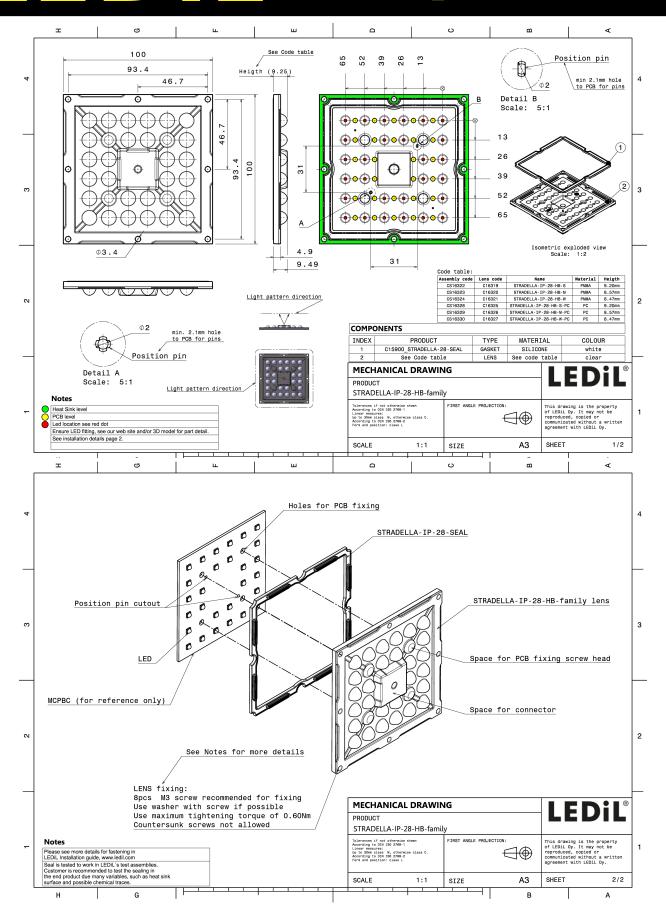


STRADELLA-IP-28-HB-M ~65° wide beam. Variant made from PMMA. **SPECIFICATION: Dimensions** 100.0 x 100.0 mm Height 9.5 mm Fastening pin, screw Ingress protection classes IP66, IP67 yes 🛈 **ROHS** compliant LEDiL **MATERIALS:** Material Colour Finish Component Туре STRADELLA-IP-28-HB-M Multi-lens PMMA clear STRADELLA-28-SEAL Seal Silicone white **ORDERING INFORMATION:** Component Qty in box MOQ MPQ Box weight (kg) CS16323_STRADELLA-IP-28-HB-M Multi-lens 78 156 78 5.8 » Box size: 476 x 273 x 247 mm



R

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



LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	HiQLED STR28 CR JE2835 4x7 xxx 56.0° / 113.0° 92 % 0.7 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	HiQLED STR28 CR JK3030 4x7 xxx 55.0° / 112.0° 92 % 0.7 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	QUICK FLUX STR28 XD2x14 xxx G8 71.0° / 126.0° 92 % 0.5 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	QUICK FLUX STR28 XP2x14 xxx G7 71.0° / 127.0° 94 % 0.6 cd/lm 1 White ents:	



LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	QUICK FLUX STR28 XT2x14 xxx G5 70.0° / 126.0° 94 % 0.6 cd/lm 1 White ents:	
CREE CLEU FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	J Series 2835 56.0° / 113.0° 92 % 0.7 cd/lm 1 White	
CREE (LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	J Series 3030 61.0° / 119.0° 95 % 0.7 cd/lm 1 White	
CREE CLEU FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	J Series 3030 55.0° / 112.0° 92 % 0.7 cd/lm 1 White	



FWH/ FWTM 71.0° / 126.0° Efficiency 92 % Peak intensity 0.5 cd/lm LEDs/each optic 1 Light colour White Required components: ************************************				
PWHAI / PWTM 7 0,0 / 126.0 * Efficiency 92 % Required components: CCREE 100 LED XP-G3 WHM / FWTM 7 10 / 127.0 * Efficiency 94 % PHAI / FWTM 7 0,0 / 127.0 * Efficiency 94 % PHAI / FWTM 7 0,0 / 127.0 * Efficiency 94 % PHAI / FWTM 7 0,0 / 127.0 * Efficiency 94 % PHAI / FWTM 7 0,0 / 127.0 * Efficiency 94 % PHAI / FWTM 7 0,0 / 128.0 * Efficiency 94 % Peak Intensity 0.6 cd/lm LED XFE PWHAI / FWTM 7 0,0 / 128.0 * Efficiency 94 % Peak Intensity 0.6 cd/lm Light colour White Required components: CCREE 100 LED XFE PWHAI / FWTM 7 0,0 / 128.0 * Efficiency 94 % Peak Intensity 0.6 cd/lm Light colour White Required components: CCREE 100 LED XFE PWHAI / FWTM 7 0,0 / 128.0 * Efficiency 94 % Peak Intensity 0.6 cd/lm Light colour White Required components:		D		90*
PWHAI / PWTM 7 0.0 / 126.0 / Efficiency 92 % Required components: CREESIED LED XP-G3 WHAI / PWTM Required components: CREESIED LED XP-G3 PWHAI / PWTM 06 cd/m LED aleach optic 1 Light colour White Required components: CREESIED LED XF-E Filmency 94 % Pack Intensity 06 cd/m LED XF-E Filmency 94 % Pack Intensity 06 cd/m Filmency 94 % Filmency 94 % F	LED	XD16		
Efficiency 92% Preak intensity 0.5 cd/m Light colour While Required components: CREE + LED Endemony 04% Preak intensity 0.5 cd/m LED Second price 1 Light colour While Required components: CREE + LED LED XT-E Findency 94% Preak intensity 0.5 cd/m LED Second price 1 Light colour While Required components: CREE + LED LED XT-E Findency 94% Preak intensity 0.5 cd/m LED Second price 1 Light colour While Required components: CREE + LED LED XT-E Findency 94% Preak intensity 0.5 cd/m LED Second Price 1 Light colour While Required components: CREE + LED Endemony 94% Preak intensity 0.5 cd/m LED Second Price 1 Light colour While Required components: CREE + LED Endemony 94% Preak intensity 0.5 cd/m LED Second Price 1 Light colour While Required components:	FWHM / FWTM	71.0° / 126.0°		78
Peak intensity 0.5 cd/m LED/seach optic 1 LED/seach optic 2 CREE \$ LED LED XP-G3 FWHM /FWTM 71.0° / 127.0° Efficiency 94 % Peak intensity 0.6 cd/m LED/seach optic 1 Light colour White Required components: CREE \$ LED Efficiency 94 % Peak intensity 0.6 cd/m LED/seach optic 1 Light colour White Required components: CREE \$ LED Efficiency 94 % Peak intensity 0.6 cd/m LED/seach optic 1 Light colour White Required components:				
LEDveach optic 1 Light colour White Required components: CREE \$ LED LED XP-G3 FWHM / TA ^C / 127.0° Efficiency 94 % Peak intensity 0.6 colm LEDveach optic 1 Light colour White Required components: CREE \$ LED LED XT-E FWMM / TAE / 126.0° Efficiency 94 % Peak intensity 0.6 colm LEDveach optic 1 Light colour White Required components: CREE \$ LED LED XT-E FWMM / TAE / 126.0° Efficiency 94 % Peak intensity 0.6 colm LEDveach optic 1 LEDveach optic 1				60° - 200 - °6′
Light colour White Required components:				
Required components:				99 ²
CREE ÷ LED LED XP-G3 FWHM / FVTM 7.0° / 127.0° Efficiency 44 % Peak intensity 0.6 cd/m LED dead of pit 1 Light colour White Required components: CREE ÷ LED LED XT E FWHM / FVTM 70.0° / 128.0° Efficiency 94 % Peak intensity 0.6 cd/m LED dead pit 1 Light colour White Required components: CNICCHIN LED NE2WSB5AR FWHM / FVTM 93 % Peak intensity 0.6 cd/m LED dead pit 1 Light colour White Required components: CNICCHIN LED NE2WSB5AR FWHM / FVTM 93 % Peak intensity 0.6 cd/m LED dead pit 1 Light colour White Required components: CNICCHIN LED MEAN Peak intensity 0.6 cd/m LED dead pit 1 Light colour White Required components: CNICCHIN LED MEAN FWHM / FVTM 70.0° / 128.0° FWHM / FVTM 70.0° / 128.				
CREE CONCUMN LED XP-G3 EVHM / FVTM 71.0 '/ 127.0 ° Efficiency 94 % Peak intensity 0.6 colm LED components: CREE CONCUMN LED XT-E EVHM / FVTM 70.0 '/ 128.0 ° Efficiency 94 % Peak intensity 0.6 colm LED Seach optic 1 Light colour White Required components: CNICCHIA LED NF2WS85AR PrVM / FVTM 68.0 °/ 128.0 ° Efficiency 93 % Peak intensity 0.6 colm LEDS Seach optic 1 Light colour White Required components: CNICCHIA LED NF2WS85AR Peak intensity 0.6 colm LEDS Seach optic 1 LEDS NF2WS85AR Peak intensity 0.6 colm LEDS Seach optic 1 LEDS NF2WS85AR Peak intensity 0.6 colm LEDS Seach optic 1 LEDS Seach optic 1 LEDS Seach optic 1 LEDS NF2WS85AR Peak intensity 0.6 colm				400
CREE CONCUMN LED XP-G3 EVHM / FVTM 71.0 '/ 127.0 ° Efficiency 94 % Peak intensity 0.6 colm LED components: CREE CONCUMN LED XT-E EVHM / FVTM 70.0 '/ 128.0 ° Efficiency 94 % Peak intensity 0.6 colm LED Seach optic 1 Light colour White Required components: CNICCHIA LED NF2WS85AR PrVM / FVTM 68.0 °/ 128.0 ° Efficiency 93 % Peak intensity 0.6 colm LEDS Seach optic 1 Light colour White Required components: CNICCHIA LED NF2WS85AR Peak intensity 0.6 colm LEDS Seach optic 1 LEDS NF2WS85AR Peak intensity 0.6 colm LEDS Seach optic 1 LEDS NF2WS85AR Peak intensity 0.6 colm LEDS Seach optic 1 LEDS Seach optic 1 LEDS Seach optic 1 LEDS NF2WS85AR Peak intensity 0.6 colm				
CREE CONCOMPONENTS: LED XP-G3 EHClancy 94 % Peak intensity 0.6 colm LED XT-E FWHM / FWTM 70.0° / 125.0° Efficiency 94 % Peak intensity 0.6 colm LED XT-E FWHM / FWTM 70.0° / 125.0° Efficiency 94 % Peak intensity 0.6 colm LEDSeach optic 1 Light colour White Required components: EVICHIA LED NF2WS35AR FWHM / FWTM 68.0° / 122.0° Efficiency 93 % Peak intensity 0.6 colm LEDSeach optic 1 Light colour White Required components: ED NF2WS35AR FWHM / FWTM 68.0° / 122.0° Efficiency 93 % Peak intensity 0.6 colm LEDSeach optic 1 LEDSeach optic 1 LEDSEACH / 122.0° Efficiency 93 % Peak intensity 0.6 colm LEDSeach optic 1 LEDSeach optic 1 LEDSEACH / 122.0° Efficiency 93 % Peak intensity 0.6 colm LEDSeach optic 1 LEDSEACH / 122.0° Efficiency 93 % Peak intensity 0.6 colm				
LED XP-G3 FWHM /FWTM 71.0° / 127.0° Efficiency 94 % Peak intensity 0.6 cd/m LEDs/each optic 1 Lght colour White Required components: CREE\$LED LED XTE FWHM /FWTM 70.0° / 126.0° Efficiency 94 % Peak intensity 0.6 cd/m LEDs/each optic 1 Lght colour White Required components:				30* 35 15* <u>Aba</u> 55*
EWHM / FWTM 71.0° / 127.0° Efficiency 94 % Peak intensity 0.6 cd/m LEDs/each optic 1 Light colour White Required components: ************************************		D		90* 95
Efficiency 94 % Peak intensity 0.6 cd/m LEDs/each optic 1 Light colour White Required components: CREEE_LED LED XT-E FWHM / FWTM 70.0° / 126.0° Efficiency 94 % Peak intensity 0.6 cd/m LEDs/each optic 1 Light colour White Required components: CNICHIN LED NF2WS85AR FWHM / FWTM 68.0° / 126.0° Efficiency 93 % Peak intensity 0.6 cd/m LEDS/each optic 1 Light colour White Required components: CNICHIN LED NF2WS85AR FWHM / FWTM 68.0° / 126.0° Efficiency 93 % Peak intensity 0.6 cd/m LEDS/each optic 1 Light colour White	LED	XP-G3		
Peak intensity 0.6 cd/m LEDs/each optic 1 Light colour White Required components: CREE COMP LED XT-E FWHM / FWTM 70.0° / 126.0° Efficiency 94% Peak intensity 0.6 cd/m LEDs/each optic 1 Light colour White Required components: ED NECHIN LED NE2W585AR FWHM / FWTM 68.0° / 126.0° Efficiency 93 % Peak intensity 0.6 cd/m LED NE2W585AR FWHM / FWTM 68.0° / 126.0° Efficiency 93 % Peak intensity 0.6 cd/m LED Ne2W585AR FWHM / FWTM 68.0° / 126.0° Efficiency 93 % Peak intensity 0.6 cd/m LED Ne2W585AR FWHM / FWTM 68.0° / 126.0° Efficiency 93 %	FWHM / FWTM	71.0° / 127.0°		
LEDs/each optic 1 Light colour White Required components: CREE COD LED XT-E FWHM / FWTM 70.0° / 126.0° Efficiency 94 % Peak intensity 0.6 col/m LEDs/each optic 1 Light colour White Required components: CNICHIA LED NF2W585AR FWHM / FWTM 68.0° / 126.0° Efficiency 93 % Peak intensity 0.6 col/m LED NF2W585AR FWHM / FWTM 68.0° / 126.0° Efficiency 93 % Peak intensity 0.6 col/m LED NF2W585AR FWHM / FWTM 68.0° / 126.0° Efficiency 93 % Peak intensity 0.6 col/m LED NF2W585AR FWHM / FWTM 68.0° / 126.0° Efficiency 93 % Peak intensity 0.6 col/m LED NF2W585AR FWHM / FWTM 68.0° / 126.0° Efficiency 93 %	Efficiency	94 %		
Light colour White Required components: CREE COMPANY 70.0° / 126.0° Efficiency 94 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White Required components: EVENT NERCHIA LED NF2W585AR EWHM / FWTM 68.0° / 126.0° Efficiency 93 % Peak intensity 0.6 cd/lm LED NF2W585AR EWHM / FWTM 68.0° / 126.0° Efficiency 93 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White	Peak intensity	0.6 cd/lm		
Required components:	LEDs/each optic	1		
Required components:	Light colour	White		gy. et
CREE ÷ LED LED XT-E FWHM / FWTM 70.0° / 126.0° Efficiency 94 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White Required components:		ents:	 _	
CREE\$LED LED XT-E FWHM / FWTM 70.0° / 126.0° Efficiency 94 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White Required components:				
CREE\$LED LED XT-E FWHM / FWTM 70.0° / 126.0° Efficiency 94 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White Required components:				
CREE\$LED LED XT-E FWHM / FWTM 70.0° / 126.0° Efficiency 94 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White Required components:				
LED XT-E FWHM / FWTM 70.0° / 126.0° Efficiency 94 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White Required components:		_		123 00 123
FWHM / FWTM 70.0° / 126.0° Efficiency 94 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White Required components:	CREE ÷ LE			90*
Efficiency 94 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White Required components:	LED			75. 77
Peak intensity 0.6 cd/m LEDs/each optic 1 Light colour White Required components:				
LEDs/each optic 1 Light colour White Required components:				601 200 er
Light colour White Required components: WICHIN LED NF2W585AR FWHM / FWTM 68.0° / 126.0° Efficiency 93 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White				
Required components:				
Image: Second system				45° 440
LED NF2W585AR FWHM / FWTM 68.0° / 126.0° Efficiency 93 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White	Required compone	ents:		
LED NF2W585AR FWHM / FWTM 68.0° / 126.0° Efficiency 93 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White				
LED NF2W585AR FWHM / FWTM 68.0° / 126.0° Efficiency 93 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White				
LED NF2W585AR FWHM / FWTM 68.0° / 126.0° Efficiency 93 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White				30 ⁴ 30 15 ⁵ 0 ⁴ 15 ⁵
LED NF2W585AR FWHM / FWTM 68.0° / 126.0° Efficiency 93 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White				90%
FWHM / FWTM 68.0° / 126.0° Efficiency 93 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White				
Efficiency 93 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White				75* 75
Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White				
LEDs/each optic 1 Light colour White				60 ⁻
Light colour White				
				95 a
				400
24 ⁺ 20 ⁻ 20 ⁻ 20 ⁻ 20 ⁻				
30 ⁴ 200 30 20 ⁵ 0 ⁴ 15 ⁵				
30 ⁴ 30 25 ⁵ 0 ⁴ 15 ⁴				
				30* 00 30 15° 0° 35°



ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NF2W585AR 67.0° / 125.0° 93 % 0.6 cd/lm 1 White ints:	92* 73 92 92 92 92 92 92 92 92 92 92 92 92 92	- 40 - 400 - 500 - 500 - 600 - 700 - 70 - 7
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NVSW219F 69.0° / 125.0° 94 % 0.6 cd/lm 1 White	94 96 97 97 97 97 97 97	
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NVSW319B 74.0° / 126.0° 94 % 0.6 cd/lm 1 White	99 ⁴ 73 97 97	200 - 54 200 - 64 440 - 67 600 - 54
Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	OSCONIQ S 3030 (QSLR31) 57.0° / 118.0° 94 % 0.7 cd/lm 1 White ints:		



OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	OSLON Square CSSRM2/CSSRM3 62.0° / 122.0° 94 % 0.7 cd/lm 1 White ents:	
SAMSI LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	HiLOM SC28 (LH181B) 57.0° / 111.0° 91 % 0.7 cd/lm 1 White	
SAMSU LED FWHM / FWTM Efficiency	UNG HiLOM SM28 (LM301B) 58.0° / 115.0° 93 %	
Peak intensity LEDs/each optic Light colour Required compone	0.7 cd/lm 1 White ents:	
stoul stauconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Z5M3 67.0° / 125.0° 94 % 0.6 cd/lm 1 White ents:	



		90° 90°
LED	J Series 5050 Round LES	
FWHM / FWTM	70.0° / 120.0°	73.
Efficiency	95 %	200
Peak intensity	0.6 cd/lm	60 ⁶
LEDs/each optic	1	
Light colour	White	97°
Required components:		
		30° 30° 30° 30°
		90°
LED	XP-G2 HE	
FWHM / FWTM	74.0° / 126.0°	
Efficiency	95 %	60°
Peak intensity	0.6 cd/lm	\mathbf{K}
LEDs/each optic	1	
Light colour	White	er et
Required components:		400
		30°
		15° 0° 15°
LUMILE)S	909 90%
LED	LUXEON 3030 2D (Round LES)	
FWHM / FWTM	58.0° / 118.0°	
Efficiency	92 %	60° - 200 - 60°
Peak intensity	0.8 cd/lm	$\Gamma \times \mathbb{P} / \mathbb{A} \times \mathbb{A}$
LEDs/each optic	1	
Light colour	White	ar
Required components:		
		30° 30°
	5	139 0 ⁰ 359
		90° 90°
LED	LUXEON 5050 Round LES	92- 95- 95- 95- 95- 95- 95- 95- 95- 95- 95
LED FWHM / FWTM	LUXEON 5050 Round LES 69.0° / 120.0°	20 20 20 20 20 20 20 20 20 0 4 20 20 20 20 20 20 20 20 20 20 20 20 20
LED FWHM / FWTM Efficiency	LUXEON 5050 Round LES 69.0° / 120.0° 94 %	800 800 800 800 800 800 800 800
LED FWHM / FWTM Efficiency Peak intensity	LUXEON 5050 Round LES 69.0° / 120.0° 94 % 0.7 cd/lm	900 00 00 00 00 00 00 00 00 00 00 00 00
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON 5050 Round LES 69.0° / 120.0° 94 % 0.7 cd/lm 1	250 00 200 250 00 250 00 25
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON 5050 Round LES 69.0° / 120.0° 94 % 0.7 cd/lm	25° 600 62° 90° 900 90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON 5050 Round LES 69.0° / 120.0° 94 % 0.7 cd/lm 1	57 600 65 90 60 90 757 757 757 757 757 757 757 757 757 75
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON 5050 Round LES 69.0° / 120.0° 94 % 0.7 cd/lm 1	52, 04 F2 52, 05 53, 05 50 50 50 50 50 50 50 50 50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON 5050 Round LES 69.0° / 120.0° 94 % 0.7 cd/lm 1	22° 00 00° 23° 00 00° 25° 00 00° 25° 00 00° 25° 00 00°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON 5050 Round LES 69.0° / 120.0° 94 % 0.7 cd/lm 1	30- 72- 0- 72- 9- 22- 000 000 02 30- 000 02 02 30- 000 02 02 30- 000 02 02 30- 000 000 02 30- 000 000 02 30- 000 000 02 30- 000 000 000 30- 000 000 000 30- 000 000 000 30- 000 000 000 30- 000 000 000 30- 000 000 000 30- 000 000 000 30- 000 000 000 000 30- 000 000 000 000 30- 000 000 000 000



	S S	30*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 5050 Square LES 70.0° / 120.0° 95 % 0.7 cd/lm 1 White	
ØNICHI Λ		50 T
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	NF2x757G 63.0° / 119.0° 94 % 0.7 cd/lm 1 White	20 ⁴ 00 00 00 00 00 00 00 00 00 00 00 00 00
Μ ΝΙCΗΙΛ		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	NF2x757G 63.0° / 119.0° 94 % 0.7 cd/m 1 White	
WICHIA LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	NVSxE21A 65.0° / 118.0° 93 % 0.6 cd/lm 1 White	



MICHIΛ		90° 90°
LED	NVSxx19B/NVSxx19C	
FWHM / FWTM	73.0° / 122.0°	75*
Efficiency	95 %	
Peak intensity	0.6 cd/lm	60*
LEDs/each optic	1	
Light colour	White	ga ⁴
Required components:		460
		30° 37°
		15° 0° 15°
OSRAM Opto Semiconductors		90* 90*
LED	Duris S5 (2 chip)	
FWHM / FWTM	64.0° / 119.0°	124
Efficiency	94 %	200
Peak intensity	1 cd/lm	be-
LEDs/each optic	1	
Light colour	White	45° 45°
Required components:		
		500
		30°
		15° 0° 35°
OSRAM Opto Semiconductors		90* 90*
OSRAM Opto Semiconductors	Duris S8	90 ⁴ 90 ²
Opto Semiconductors		3°
Opto Semiconductors	Duris S8 67.0° / 118.0° 94 %	
opto Semiconductors LED FWHM / FWTM	67.0° / 118.0°	50° 50°
opto Semiconductors LED FWHM / FWTM Efficiency	67.0° / 118.0° 94 %	50° 50°
^{opto Semiconductors} LED FWHM / FWTM Efficiency Peak intensity	67.0° / 118.0° 94 % 0.7 cd/lm	5°
^{opto Semiconductors} LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	67.0° / 118.0° 94 % 0.7 cd/lm 1	94* 90* 23 99 99 90 90 90 90 90 90 90 90 90 90 90
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	67.0° / 118.0° 94 % 0.7 cd/lm 1	97* 97* 97* 90* 95* 90* 90* 95* 90* 90* 95* 90* 90* 95* 90* 90* 90* 95* 90* 90* 90* 90* 90* 90* 90* 90* 90* 90
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	67.0° / 118.0° 94 % 0.7 cd/lm 1	50°
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	67.0° / 118.0° 94 % 0.7 cd/lm 1	50° 50° 60° 60° 60° 60° 60° 60° 60° 60° 60° 6
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	67.0° / 118.0° 94 % 0.7 cd/lm 1	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	67.0° / 118.0° 94 % 0.7 cd/lm 1	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	67.0° / 118.0° 94 % 0.7 cd/lm 1	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: ODSRAM Opto Semiconductors LED FWHM / FWTM	67.0° / 118.0° 94 % 0.7 cd/lm 1 White	20 20 20 20 20 20 20 20 20 20
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	67.0° / 118.0° 94 % 0.7 cd/lm 1 White	
opte Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Peak intensity LED FWHM / FWTM Efficiency Peak intensity	67.0° / 118.0° 94 % 0.7 cd/lm 1 White OSCONIQ C 2424 68.0° / 118.0°	
opte Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	67.0° / 118.0° 94 % 0.7 cd/lm 1 White OSCONIQ C 2424 68.0° / 118.0° 95 % 0.7 cd/lm 1	
opte Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: COSRAM Opte Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	67.0° / 118.0° 94 % 0.7 cd/lm 1 White OSCONIQ C 2424 68.0° / 118.0° 95 % 0.7 cd/lm	
opte Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	67.0° / 118.0° 94 % 0.7 cd/lm 1 White OSCONIQ C 2424 68.0° / 118.0° 95 % 0.7 cd/lm 1	
opte Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: COSRAM Opte Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	67.0° / 118.0° 94 % 0.7 cd/lm 1 White OSCONIQ C 2424 68.0° / 118.0° 95 % 0.7 cd/lm 1	
opte Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: COSRAM Opte Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	67.0° / 118.0° 94 % 0.7 cd/lm 1 White OSCONIQ C 2424 68.0° / 118.0° 95 % 0.7 cd/lm 1	
opte Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: COSRAM Opte Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	67.0° / 118.0° 94 % 0.7 cd/lm 1 White OSCONIQ C 2424 68.0° / 118.0° 95 % 0.7 cd/lm 1	



OSRAM		90° 90°
Opto Semiconductors	OSCONIQ P 3030	
FWHM / FWTM	56.0° / 119.0°	75'
Efficiency	96 %	-200
Peak intensity	0.8 cd/lm	60°
LEDs/each optic	1	400
Light colour	White	er er
Required components:	white	
		30° 30° 30° 15°
OSRAM Opto Semiconductors		90° 90°
LED	OSCONIQ P 3737 (2W version)	
FWHM / FWTM	68.0° / 121.0°	37
Efficiency	94 %	60°
Peak intensity	0.7 cd/lm	
LEDs/each optic	1	
Light colour	White	5° 400 5°
Required components:		
		eig
		30° 34°
		15° 0° 15°
SAMSUN	IG	99* 99*
	LH181B	90 ⁴ 90 ⁴
		25 [°] 0° 15 [°] 9° 9°
LED	LH181B	25 ⁵ 6 ⁴ 15 ⁵
LED FWHM / FWTM	LH181B 65.0° / 117.0°	
LED FWHM / FWTM Efficiency	LH181B 65.0° / 117.0° 94 %	
LED FWHM / FWTM Efficiency Peak intensity	LH181B 65.0° / 117.0° 94 % 0.7 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LH181B 65.0° / 117.0° 94 % 0.7 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH181B 65.0° / 117.0° 94 % 0.7 cd/lm 1	25° 0° 15° 99° 90° 90° 90° 90° 90° 90° 90
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH181B 65.0° / 117.0° 94 % 0.7 cd/lm 1	25° 0° 15° 19° 29° 200 60° 60° 60°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH181B 65.0° / 117.0° 94 % 0.7 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LH181B 65.0° / 117.0° 94 % 0.7 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH181B 65.0° / 117.0° 94 % 0.7 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LH181B 65.0° / 117.0° 94 % 0.7 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LH181B 65.0° / 117.0° 94 % 0.7 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LH181B 65.0° / 117.0° 94 % 0.7 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: SAMSUN LED FWHM / FWTM	LH181B 65.0° / 117.0° 94 % 0.7 cd/lm 1 White G LH351B 71.0° / 119.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: SAMSUN LED FWHM / FWTM Efficiency	LH181B 65.0° / 117.0° 94 % 0.7 cd/m 1 White C LH351B 71.0° / 119.0° 94 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: SAMSUN LED FWHM / FWTM Efficiency Peak intensity	LH181B 65.0° / 117.0° 94 % 0.7 cd/m 1 White LH351B 71.0° / 119.0° 94 % 0.7 cd/m	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: SAMSUN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LH181B 65.0° / 117.0° 94 % 0.7 cd/m 1 White C LH351B 71.0° / 119.0° 94 % 0.7 cd/m 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: SAMSUN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH181B 65.0° / 117.0° 94 % 0.7 cd/m 1 White C LH351B 71.0° / 119.0° 94 % 0.7 cd/m 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: SAMSUN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH181B 65.0° / 117.0° 94 % 0.7 cd/m 1 White C LH351B 71.0° / 119.0° 94 % 0.7 cd/m 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: SAMSUN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH181B 65.0° / 117.0° 94 % 0.7 cd/m 1 White C LH351B 71.0° / 119.0° 94 % 0.7 cd/m 1	



SAMSUN	IG	90° 90°
LED	LH351C	
FWHM / FWTM	75.0° / 119.0°	73. 27.
Efficiency	94 %	
Peak intensity	0.7 cd/lm	
LEDs/each optic	1	
Light colour	White	454 deg
Required components:		
		364 157 06 157
SAMSUN	IG	90 ⁴ 90
LED	LM28xB Series	
FWHM / FWTM	66.0° / 119.0°	73.
Efficiency	94 %	
Peak intensity	0.7 cd/lm	60° 60°
LEDs/each optic	1	
Light colour	White	450 450
Required components:		
		30. 30.
СЛВЛСИВ	10	(
SAMSUN	16	90° 90°
LED	LM301B	
		75°
	63.0° / 118.0°	
Efficiency	94 %	50
Efficiency Peak intensity	94 % 0.7 cd/lm	20
Efficiency Peak intensity LEDs/each optic	94 % 0.7 cd/lm 1	
Efficiency Peak intensity LEDs/each optic Light colour	94 % 0.7 cd/lm	20 2020 202020202020202020202020
Efficiency Peak intensity LEDs/each optic	94 % 0.7 cd/lm 1	2 ²
Light colour	94 % 0.7 cd/lm 1	22 200 02 get 400 02 get 60
Efficiency Peak intensity LEDs/each optic Light colour	94 % 0.7 cd/lm 1	22
Efficiency Peak intensity LEDs/each optic Light colour	94 % 0.7 cd/lm 1	er
Efficiency Peak intensity LEDs/each optic Light colour Required components:	94 % 0.7 cd/lm 1	
Efficiency Peak intensity LEDs/each optic Light colour Required components:	94 % 0.7 cd/lm 1 White	
Efficiency Peak intensity LEDs/each optic Light colour Required components: seoul semiconductor LED	94 % 0.7 cd/lm 1 White SEOUL 3030	
Efficiency Peak intensity LEDs/each optic Light colour Required components: seour semiconductor LED FWHM / FWTM	94 % 0.7 cd/lm 1 White SEOUL 3030 69.0° / 120.0°	
Efficiency Peak intensity LEDs/each optic Light colour Required components: seoul semiconductor LED FWHM / FWTM Efficiency	94 % 0.7 cd/lm 1 White SEOUL 3030 69.0° / 120.0° 95 %	22
Efficiency Peak intensity LEDs/each optic Light colour Required components: stout semconductor LED FWHM / FWTM Efficiency Peak intensity	94 % 0.7 cd/lm 1 White SEOUL 3030 69.0° / 120.0°	
Efficiency Peak intensity LEDs/each optic Light colour Required components: seous sewconoucror LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	94 % 0.7 cd/lm 1 White SEOUL 3030 69.0° / 120.0° 95 % 0.6 cd/lm	
Efficiency Peak intensity LEDs/each optic Light colour Required components: stout semconductor LED FWHM / FWTM Efficiency Peak intensity	94 % 0.7 cd/lm 1 White SEOUL 3030 69.0° / 120.0° 95 % 0.6 cd/lm 1	
Efficiency Peak intensity LEDs/each optic Light colour Required components: storus semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	94 % 0.7 cd/lm 1 White SEOUL 3030 69.0° / 120.0° 95 % 0.6 cd/lm 1	
Efficiency Peak intensity LEDs/each optic Light colour Required components: storus semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	94 % 0.7 cd/lm 1 White SEOUL 3030 69.0° / 120.0° 95 % 0.6 cd/lm 1	
Efficiency Peak intensity LEDs/each optic Light colour Required components: seous semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	94 % 0.7 cd/lm 1 White SEOUL 3030 69.0° / 120.0° 95 % 0.6 cd/lm 1	



SEOUL		90° 90°
LED	SEOUL DC 3030	757
FWHM / FWTM	68.0° / 120.0°	
Efficiency	96 %	60°
Peak intensity	0.6 cd/lm	
LEDs/each optic	1	
Light colour	White	43 ⁵
Required components:		
		300 00 00 300
SEOUL		
SEOUL SEMICONDUCTOR		90* 90*
LED	SEOUL DC 5050 6V	75*
FWHM / FWTM	69.0° / 120.0°	
Efficiency	94 %	80°
Peak intensity	0.7 cd/lm	
LEDs/each optic	1	
Light colour	White	45° 400 400
Required components:		
		en l
1		30" 30"
		15 ⁰ 0 ⁰ 15 ³
SEOUL SEMICONDUCTOR		90° 105 0° 10° 90°
	Z5M1/Z5M2	99. 90. 90. 90. 90. 90. 90. 90.
SEOUL SEMICONDUCTOR	Z5M1/Z5M2 70.0° / 122.0°	30* 30* 30* 90* 90* 90*
seoul semiconductor LED		30° 15° 0° 15° 30° 30° 30° 30° 30° 30° 75' 200 00° 00° 00°
seoul semiconductor LED FWHM / FWTM Efficiency	70.0° / 122.0°	00, 200 66, 33 36, 36, 30, 64, 36, 30, 64, 36, 30, 64, 36, 30, 64, 36,
seoul semiconductor LED FWHM / FWTM	70.0° / 122.0° 94 %	200 00°
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity	70.0° / 122.0° 94 % 0.6 cd/lm	22, 60 62, 83, 200 65, 33, 200 65, 34, 200 65, 35, 30, 30,
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	70.0° / 122.0° 94 % 0.6 cd/lm 1	27 - 27 - 27 - 27 - 27 - 27 - 27 - 27 -
SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	70.0° / 122.0° 94 % 0.6 cd/lm 1	27 - 27 - 27 - 27 - 27 - 27 - 27 - 27 -
SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	70.0° / 122.0° 94 % 0.6 cd/lm 1	27 - 27 - 27 - 27 - 27 - 27 - 27 - 27 -
SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	70.0° / 122.0° 94 % 0.6 cd/lm 1	27 - 27 - 27 - 27 - 27 - 27 - 27 - 27 -
SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	70.0° / 122.0° 94 % 0.6 cd/lm 1	27 - 27 - 27 - 27 - 27 - 27 - 27 - 27 -
SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	70.0° / 122.0° 94 % 0.6 cd/lm 1	30°
SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: SEOUL SEMICONDUCTOR	70.0° / 122.0° 94 % 0.6 cd/lm 1 White	30°
SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: SEOUL SEMICONDUCTOR LED	70.0° / 122.0° 94 % 0.6 cd/lm 1 White Z8Y19	30°
SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: SEOUL SEMICONDUCTOR LED FWHM / FWTM	70.0° / 122.0° 94 % 0.6 cd/lm 1 White Z8Y19 65.0° / 117.0°	
SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency	70.0° / 122.0° 94 % 0.6 cd/lm 1 White Z8Y19 65.0° / 117.0° 94 %	30°
SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity	70.0° / 122.0° 94 % 0.6 cd/lm 1 White Z8Y19 65.0° / 117.0° 94 % 0.7 cd/lm	
SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	70.0° / 122.0° 94 % 0.6 cd/lm 1 White Z8Y19 65.0° / 117.0° 94 % 0.7 cd/lm 1	
SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	70.0° / 122.0° 94 % 0.6 cd/lm 1 White Z8Y19 65.0° / 117.0° 94 % 0.7 cd/lm	
SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	70.0° / 122.0° 94 % 0.6 cd/lm 1 White Z8Y19 65.0° / 117.0° 94 % 0.7 cd/lm 1	
SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	70.0° / 122.0° 94 % 0.6 cd/lm 1 White Z8Y19 65.0° / 117.0° 94 % 0.7 cd/lm 1	
SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	70.0° / 122.0° 94 % 0.6 cd/lm 1 White Z8Y19 65.0° / 117.0° 94 % 0.7 cd/lm 1	



SECUL SECUL SEMICONDUCTOR		90° 99°
LED	Z8Y22	25*
FWHM / FWTM	76.0° / 130.0°	
Efficiency	92 %	60 ⁴ 60 [°]
Peak intensity	0.6 cd/lm	
LEDs/each optic	1	
Light colour	White	gr: 65°
Required components:		400
		30° 500 30°
		15° 0° 15°
		90° 99°
SEQUE SEMICONDUCTOR	Z8Y22T	5°
SEOUL SEMICONDUCTOR	Z8Y22T 69.0° / 118.0°	5 ¹ 5 ¹
seoul semiconductor LED		59 ¹ 75 207 207
seoul semiconductor LED FWHM / FWTM	69.0° / 118.0°	500 500 500 500 500 500 500 500 500 500
seoul semiconductor LED FWHM / FWTM Efficiency	69.0° / 118.0° 94 %	50° 50° 50°
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity	69.0° / 118.0° 94 % 0.6 cd/lm	50 50 50 50 50 50 50 50 50 50 50 50 50 5
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	69.0° / 118.0° 94 % 0.6 cd/lm 1	200 66*
SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	69.0° / 118.0° 94 % 0.6 cd/lm 1	200 66*
SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	69.0° / 118.0° 94 % 0.6 cd/lm 1	200 664
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	69.0° / 118.0° 94 % 0.6 cd/lm 1	200 664



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.

LEDiL Oy assumes neither warranty, nor guarantee nor any other liability of any kind for the contents and correctness of the provided data. The provided data has been generated with highest diligence but the provided data may in reality not represent the complete possible variation range of all intrinsic parameters. Therefore, in certain cases a deviation from the provided data could occur.

LEDiL Oy reserves the right to undertake technical changes of its products without further notification which could lead to changes in the provided data. LEDiL Oy assumes no liability of any kind for the possible deviation from any provided data or any other damage resulting from the usage of the provided data.

The user agrees to this disclaimer and user agreement with the download or usage of the provided files.

LEDiL Oy

Joensuunkatu 13 FI-24240 SALO Finland

LEDiL Inc. 228 West Page Street Suite D Sycamore IL 60178 USA

Ledil Optics Technology (Shenzhen) Co., Ltd. # 405 , Block B Casic Motor Building Shenzhen 518057 P.R.CHINA

Local sales and technical support www.ledil.com/ where_to_buy

Shipping locations Salo, Finland Hong Kong, China

Distribution Partners www.ledil.com/ where_to_buy