

VERONICA-SQ-MINI-W

~55° wide beam

SPECIFICATION:

Dimensions	13.9 x 13.9 mm
Height	8.9 mm
Fastening	tape, pin
ROHS compliant	yes 🛈



MATERIALS:

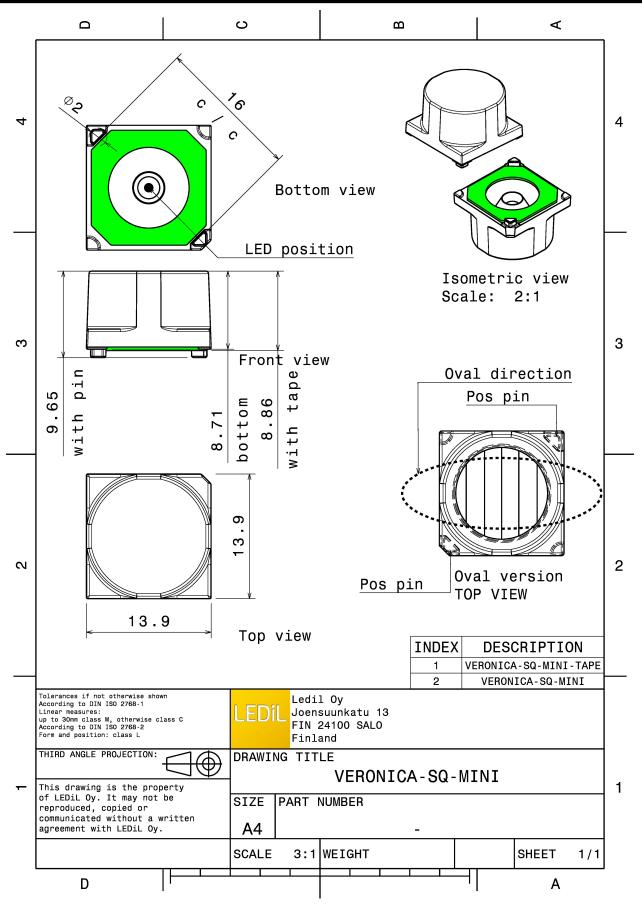
Component VERONICA-SQ-MINI-W VERONICA-SQ-MINI-TAPE **Type** Single lens Tape

Material	Colour	Finish
PMMA	clear	
Acrylic foam	clear	

ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CA15231_VERONICA-SQ-MINI-W	Single lens	5544	252	252	8.6
» Box size: 480 x 280 x 300 mm					





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



OPTICAL RESULTS (MEASURED):

-				
	D		50°	90°
LED	XP-G2			
FWHM / FWTM	56.8° / 87.5°		73*	75*
Efficiency	91 %			
Peak intensity	1 cd/lm		60 ⁸	
LEDs/each optic	1			
Light colour	White			45*
Required compone				
				K
			30*	30*
	_	_	15 ⁻ 0 ⁴ 15	r (*)
	D			90*
LED	XP-G3		73*	
FWHM / FWTM	49.0° / 89.0°			~
Efficiency	94 %		60*	60.
Peak intensity	1.1 cd/lm			
LEDs/each optic	1			
Light colour	White		95°	45*
Required compone	ents:			
			30* 100 10	30*
ØNICHI/	<u>۱</u>		90°	90°
LED	NCSxE17A		75	- 15.
LED FWHM / FWTM	NCSxE17A 28.0° / 65.0°		77	
LED FWHM / FWTM Efficiency	NCSxE17A 28.0° / 65.0° 91 %		27 27 28	60,
LED FWHM / FWTM Efficiency Peak intensity	NCSxE17A 28.0° / 65.0° 91 % 2.1 cd/lm		25 60 ⁴ 00	60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	NCSxE17A 28.0° / 65.0° 91 % 2.1 cd/lm 1		a. 60. 22.	6,
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	NCSxE17A 28.0° / 65.0° 91 % 2.1 cd/lm 1 White		2. 0. 22.	6. 6.
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	NCSxE17A 28.0° / 65.0° 91 % 2.1 cd/lm 1 White		6. 6. 2. 2.	6,
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	NCSxE17A 28.0° / 65.0° 91 % 2.1 cd/lm 1 White		e. 6. 6. 22.	6.
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	NCSxE17A 28.0° / 65.0° 91 % 2.1 cd/lm 1 White		5 ⁷ 6 ⁷ 6 ⁷ 6 ⁷ 500	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NCSxE17A 28.0° / 65.0° 91 % 2.1 cd/lm 1 White ents:			
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NCSxE17A 28.0° / 65.0° 91 % 2.1 cd/lm 1 White ents:		234 224 254 250 250 250 250 250 250 250 250 250 250	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NCSxE17A 28.0° / 65.0° 91 % 2.1 cd/lm 1 White ents:			
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NCSxE17A 28.0° / 65.0° 91 % 2.1 cd/lm 1 White ents: NVSxx19B/NVSxx19C 50.0° / 85.0°			
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NCSxE17A 28.0° / 65.0° 91 % 2.1 cd/lm 1 White ents: NVSxx19B/NVSxx19C 50.0° / 85.0° 92 %			
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone MICHIM LED FWHM / FWTM Efficiency Peak intensity	NCSxE17A 28.0° / 65.0° 91 % 2.1 cd/lm 1 White ents: NVSxx19B/NVSxx19C 50.0° / 85.0° 92 % 1.1 cd/lm			90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Required compone Efficiency Peak intensity LEDs/each optic	NCSxE17A 28.0° / 65.0° 91 % 2.1 cd/lm 1 White ents: NVSxx19B/NVSxx19C 50.0° / 85.0° 92 % 1.1 cd/lm 1			
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	NCSxE17A 28.0° / 65.0° 91 % 2.1 cd/lm 1 White ents: NVSxx19B/NVSxx19C 50.0° / 85.0° 92 % 1.1 cd/lm 1 White		34 ⁴	25
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Required compone Efficiency Peak intensity LEDs/each optic	NCSxE17A 28.0° / 65.0° 91 % 2.1 cd/lm 1 White ents: NVSxx19B/NVSxx19C 50.0° / 85.0° 92 % 1.1 cd/lm 1 White		34 ⁴	60,
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	NCSxE17A 28.0° / 65.0° 91 % 2.1 cd/lm 1 White ents: NVSxx19B/NVSxx19C 50.0° / 85.0° 92 % 1.1 cd/lm 1 White		34 ⁴	
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	NCSxE17A 28.0° / 65.0° 91 % 2.1 cd/lm 1 White ents: NVSxx19B/NVSxx19C 50.0° / 85.0° 92 % 1.1 cd/lm 1 White		34 ⁴	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Equired compone NICHIA Efficiency Peak intensity LEDs/each optic Light colour	NCSxE17A 28.0° / 65.0° 91 % 2.1 cd/lm 1 White ents: NVSxx19B/NVSxx19C 50.0° / 85.0° 92 % 1.1 cd/lm 1 White		34 ⁴	



OPTICAL RESULTS (MEASURED):

OSRAM Opto Ser LED Duris S5 (2 chip) FWHM / FWTM 34.0° / 69.0° Efficiency 82 % Peak intensity 1.7 cd/lm LEDs/each optic 1 Light colour White Required components: OSRAM Opto Se LED SFH 4170S FWHM / FWTM 31.0° / 72.0° Efficiency % LEDs/each optic 1 IR Light colour Required components: OSRAM Opto Semiconductor LED SFH 4180S FWHM / FWTM 30.0° / 72.0° Efficiency % LEDs/each optic 1 Light colour IR Required components: SAMSUNG 90 LED LH181A FWHM / FWTM 32.0° / 68.0° Efficiency 89 % Peak intensity 1.5 cd/lm LEDs/each optic 1 White Light colour Required components:



OPTICAL RESULTS (MEASURED):

SAMS	UNG	30* 20*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LH181B 37.0° / 71.0° 94 % 1.6 cd/lm 1 White	
seoul seuconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Z8Y22P 46.0° / 82.0° 92 % 1.1 cd/lm 1 White ents:	



OPTICAL RESULTS (SIMULATED):

CREE LED	J Series 3030 38.0° / 72.0° 96 % 1.8 cd/lm 1 White	51 ⁴ 51
CREE LED	XP-E2 66.0° / 84.0°	99°
Efficiency Peak intensity LEDs/each optic Light colour Required components:	96 % 1 cd/lm 1 White	69 60 60 60 60 60 60 60 60 60 60 60 60 60
LED	XQ-E HD	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	48.0° / 76.0° 96 % 1.4 cd/lm 1 White	600
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 2835 Line 41.0° / 74.0° 96 % 1.7 cd/lm 1 PC Amber	25° 66° 67° 67° 1200
		30° 30° 30°



OPTICAL RESULTS (SIMULATED):

LED LUXEON HL12 EMGanoy 95 % Peak intensity 2.7 cdm Light colour White Required components: ED LUXEON HL2X FWHM /FVTM 56.0° EMGanoy 95 % Public colour White Required components: ED LUXEON HL2X FWHM /FVTM 56.0° EMGanoy 95 % Peak intensity 0.9 cdm LEDbusedh optic 1 Light colour White Required components: ED NV5xE21A EMGanoy 94 % Peak intensity 1.9 cdm LED VV5xE21A EMGanoy 94 % Peak intensity 1.9 cdm Light colour White Required components: ED OSLON Square CSSRM0/CSSRM3 FWHM /FVTM 57.0° EMGanoy 97 % Peak intensity 1.3 cdm LED VV5xE21A EMGanoy 94 % Peak intensity 1.9 cdm Light colour White Required components: ED OSLON Square CSSRM0/CSSRM3 FWHM /FVTM 57.0° Peak intensity 1.3 cdm LED VV5xE21A EMGanoy 97 % Peak intensity 1.3 cdm LED VV5xE21A EMGANOY VV5xE21A EM		DS S	50°
Efficiency 95% Peak intensity 2.7 od/m LEDVeach option Kequired components: ED UNILEDS LED LUXEON HLZX FWHM / FWTM 98,0° / 88,0° Efficiency 93 od/m LEDVeach option 1 LEDVeach			75
Peak intensity 2.7 cd/m LEDs/each optic 1 LEDs/each optic 1 LEDs/each optic 1 LED LUXEON HLZX FVHM / FVTM 58,0° / B8.0° Efficiency 96 % Peak intensity 0.9 cd/m LEDs/each optic 1 Light colour White Required components: EED NUSKE21A FVHM / FVTM 34,0° / 68,0° Efficiency 94 % Peak intensity 1.9 cd/m LEDs/each optic 1 Light colour White Required components: EED NUSKE21A FVHM / FVTM 34,0° / 68,0° Efficiency 94 % Required components: ED SCOMPONENTS: ED SCOMPONEN			
LEDseach optic 1 Light colour White Required components: LED LUXEON HL2X EVH / EVTM 68.0° / 98.0° Efficiency 96.% Peak intensity 0.9 cd/m LEDs/each optic 1 LED visit A Required components: EVENCHIA LED NUSKE21A EVH / FVTM 34.0° / 88.0° Efficiency 94.% Peak intensity 1.9 cd/m LEDs/each optic 1 Light colour White Required components: ED SILON Square CSSRM2/CSSRM3 FVH / FVTM 57.0° / 80.0° Efficiency 97.% COSCOM ED SILON Square CSSRM2/CSSRM3 FVH / FVTM 57.0° / 80.0° Efficiency 97.% Peak intensity 1.3 cd/m LEDs/each optic 1 Light colour White Required components: ED OSLON Square CSSRM2/CSSRM3 FVH / FVTM 57.0° / 80.0° Efficiency 97.% Peak intensity 1.3 cd/m LEDs/each optic 1 LEDS VISLON Square CSSRM2/CSSRM3 FVH / FVTM 57.0° / 80.0° Efficiency 97.% Peak intensity 1.3 cd/m			60* 60*
Light colour White Required components: LED LUXEON HL2X FVHM / FVTM 85.0° / 98.0° Efficiency 99.5% Peak intensity 0.93 cd/m LEDs/each optic 1 Light colour White Required components: LED NVSxE21A FVHM / FVTM 34.0° / 68.0° Efficiency 94.% Peak intensity 1.9 cd/m LEDs/each optic 1 Light colour White Required components: ED SLON Square CSSRM2/CSSRM3 FVHM / FVTM 57.0° / 90.0° Efficiency 97.% Peak intensity 1.3 cd/m LED CSSRM2/CSSRM3 FVHM / FVTM 57.0° / 90.0° Efficiency 97.% Peak intensity 1.3 cd/m LEDs/each optic 1 Light colour White			
Required components: LED LUXEON HL2X FVHM / FVTM 86.0° / 89.0° Peak intensity 0.9 cd/m LED kieach optic 1 LED kieach optic 1 LED White Required components: EVINCENTA LED NVSxE21A FVHM / FVTM 34.0° / 68.0° Efficiency 94% Peak intensity 1.9 cd/m LED NVSxE21A FVHM / FVTM 34.0° / 68.0° Efficiency 94% Peak intensity 1.9 cd/m LED kieach optic 1 LED kieach optic 1 LED NVSxE21A FVHM / FVTM 34.0° / 68.0° Efficiency 94% Peak intensity 1.9 cd/m Required components: Efficiency 94% Peak intensity 1.9 cd/m Required components: ED SLON Square CSSRM2/CSSRM3 FVHM / FVTM 57.0° / 80.0° Efficiency 97% Peak intensity 1.3 cd/m LED Sieach optic 1 LED Sieach optic 1 LED SIEACH SIEC SSRM2/CSSRM3 FVHM / FVTM 57.0° / 80.0° Efficiency 97% Peak intensity 1.3 cd/m LED Sieach optic 1 LED			57° 1630 43°
LED LUXEON HL2X FWHM / FWTM 88.0* / 99.0* Efficiency 96 % Peak intensity 0.9 cd/m LEDs/each optic 1 Light colour White Required components: FWTM / FWTM 34.0* / 68.0* Efficiency 94 % Peak intensity 1.9 cd/m LEDS/each optic 1 Light colour White Required components: FWTM / FWTM 57.0* / 80.0* Efficiency 97 % Peak intensity 1.3 cd/m LEDS OSLON Square CSSRM2/CSSRM3 FWHM / FWTM 57.0* / 80.0* Efficiency 97 % Peak intensity 1.3 cd/m LEDS/each optic 1 Light colour White			36 ⁴ 15 ⁷ 0 ⁴ 15 ⁷ 3 ⁴
FWHM / FWTM 68.0° / 89.0° Efficiency 95 % Peak intensity 0.9 cd/m LEDs/each optic 1 Light colour White Required components:)S	50° 59°
FWHM / FWTM 68.0° / 88.0° Efficiency 96 % Peak intensity 0.9 cd/m LEDs/each optic 1 Light colour White Required components:			
Peak intensity 0.9 cd/m LEDs/each optic 1 Light colour White Required components:	FWHM / FWTM	68.0° / 89.0°	200
LEDs/each optic 1 Light colour White Required components: WICHIA LED NVSxE21A FWHM / FWTM 34.0° / 68.0° Efficiency 94 % Peak intensity 1.9 cd/m LEDs/each optic 1 Light colour White Required components: Wite Required components: COSCMM We want the set of the set	Efficiency	96 %	60° 60°
Light colour White Required components: WINCHIN LED NUSXE21A FWHM / FWTM 34.0° / 68.0° Efficiency 49 % Peak intensity 1.9 cd/lm LEDs/each optic 1 Light colour White Required components: White Required components: Required components:	Peak intensity	0.9 cd/lm	$\langle / / / / / / / / / / / / / / / / / / /$
Required components:		1	
Image: Discretion of the system of the sy		White	43°
LED NVSxE21A FWHM / FWTM 34.0° / 68.0° Efficiency 94 % Peak intensity 1.9 cd/lm LEDs/each optic 1 Light colour White Required components: CSREM Destinguisher LED OSLON Square CSSRM2/CSSRM3 FWHM / FWTM 57.0° / 80.0° Efficiency 97 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour White view of the second sec	Required components:		
LED NVSxE21A FWHM / FWTM 34.0° / 68.0° Efficiency 94 % Peak intensity 1.9 cd/lm LEDs/each optic 1 Light colour White Required components: CSREM Destinguisher LED OSLON Square CSSRM2/CSSRM3 FWHM / FWTM 57.0° / 80.0° Efficiency 97 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour White view of the second sec			
LED NVSxE21A FWHM / FWTM 34.0° / 68.0° Efficiency 94 % Peak intensity 1.9 cd/lm LEDs/each optic 1 Light colour White Required components: CSREM Destinguisher LED OSLON Square CSSRM2/CSSRM3 FWHM / FWTM 57.0° / 80.0° Efficiency 97 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour White view of the second sec			
LED NVSxE21A FWHM / FWTM 34.0° / 68.0° Efficiency 94 % Peak intensity 1.9 cd/lm LEDs/each optic 1 Light colour White Required components: CSREM Destinguisher LED OSLON Square CSSRM2/CSSRM3 FWHM / FWTM 57.0° / 80.0° Efficiency 97 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour White view of the second sec			30° 15° 0° 15° 30°
LED NVSxE21A FWHM / FWTM 34.0° / 68.0° Efficiency 94 % Peak intensity 1.9 cd/lm LEDs/each optic 1 Light colour White Required components: CSREM Destinguisher LED OSLON Square CSSRM2/CSSRM3 FWHM / FWTM 57.0° / 80.0° Efficiency 97 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour White view of the second sec	Μ ΝΙCΗΙΛ		90 ⁴ 90 ⁴
FWHM / FWTM 34.0° / 68.0° Efficiency 94 % Peak intensity 1.9 cd/lm LEDs/each optic 1 Light colour White Required components:		NVSxE21A	
Efficiency 94 % Peak intensity 1.9 cd/lm LEDs/each optic 1 Light colour White Required components: COSCAM Peak intensity 57.0° / 80.0° Efficiency 97 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour White the tensity 1.3 cd/lm LEDs/each optic 1 Light colour White the tensity tens			25* 25*
Peak intensity 1.9 cd/lm LEDs/each optic 1 Light colour White Required components:	Efficiency		
Light colour White Required components: Image: Colour and the second and the	Peak intensity	1.9 cd/lm	
Required components: Image: components in the second s	LEDs/each optic	1	
OSRAM Opto Semiconductors LED OSLON Square CSSRM2/CSSRM3 FWHM / FWTM 57.0° / 80.0° Efficiency 97 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour White	Light colour	White	47 ⁴ 1220 47 ⁴
OSRAM Opto Semiconductors LED OSLON Square CSSRM2/CSSRM3 FWHM / FWTM 57.0° / 80.0° Efficiency 97 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour White	Required components:		
OSRAM Semiconductors LED OSLON Square CSSRM2/CSSRM3 FWHM / FWTM 57.0° / 80.0° Efficiency 97 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour White			1630
OSRAM Semiconductors LED OSLON Square CSSRM2/CSSRM3 FWHM / FWTM 57.0° / 80.0° Efficiency 97 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour White			
Opto Semiconductors Description LED OSLON Square CSSRM2/CSSRM3 FWHM / FWTM 57.0° / 80.0° Efficiency 97 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour White			36° 2000 30°
LED OSLON Square CSSRM2/CSSRM3 FWHM / FWTM 57.0° / 80.0° Efficiency 97 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour White			90* 90*
FWHM / FWTM 57.0° / 80.0° Efficiency 97 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour White		OSLON Square CSSRM2/CSSRM3	
Efficiency 97 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour White			75
Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour White			
LEDs/each optic 1 Light colour White		1.3 cd/lm	
Required components:	Light colour	White	az* 63*
	Required components:		



OPTICAL RESULTS (SIMULATED):

SAMSU	NG	35*	90*
LED	LH351B		
FWHM / FWTM	65.0° / 90.0°	757	
Efficiency	94 %		
Peak intensity	0.9 cd/lm		
LEDs/each optic	1		$X \times$
Light colour	White	g-	43*
Required components	X.	900 900 900	35" 354
SEOUL		90*	90*
SEOUL SEMICONDUCTOR	78Y22T	90°	90*
seoul semiconductor	Z8Y22T 41.0° / 72.0°	30* 73	90*
seoul semiconductor LED FWHM / FWTM	41.0° / 72.0°		2.
seoul semiconductor LED FWHM / FWTM Efficiency		77	
seoul semconductor LED FWHM / FWTM Efficiency Peak intensity	41.0° / 72.0° 94 %	77	2.
seoul semiconductor LED FWHM / FWTM Efficiency	41.0° / 72.0° 94 % 1.6 cd/lm	77	2.
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	41.0° / 72.0° 94 % 1.6 cd/lm 1 White	73° 60° 55°	
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	41.0° / 72.0° 94 % 1.6 cd/lm 1 White	27 60 60 60	
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	41.0° / 72.0° 94 % 1.6 cd/lm 1 White	73° 60° 55°	
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	41.0° / 72.0° 94 % 1.6 cd/lm 1 White	73° 60° 55°	



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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