

# PRODUCT DATASHEET CP16109\_CARMEN-50-W-C

## CARMEN-50-W-C

~55° wide beam. Assembly with holder C compatible with LEDiL HEKLA.

#### **SPECIFICATION:**

Dimensions	Ø 50.0 mm
Height	25.5 mm
Fastening	socket
ROHS compliant	yes 🛈



#### **MATERIALS:**

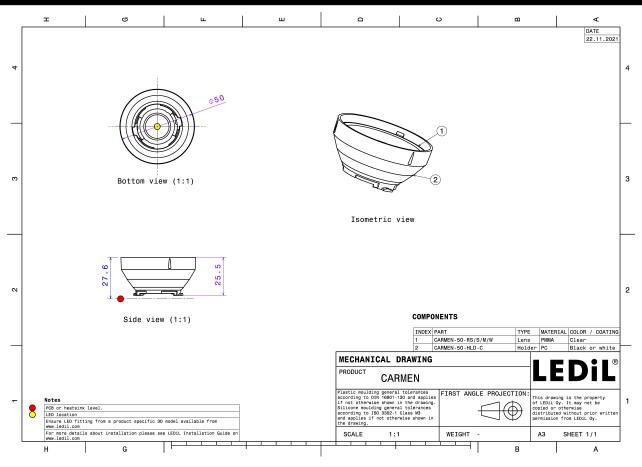
Component	Туре	Material	Colour	Finish
CARMEN-50-W	Single lens	PMMA	clear	
CARMEN-50-HLD-C	Holder	PC	black	

#### **ORDERING INFORMATION:**

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CP16109_CARMEN-50-W-C	Single lens	308	112	28	5.7
» Box size: 476 x 273 x 292 mm					



## PRODUCT DATASHEET CP16109\_CARMEN-50-W-C



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



bridgetux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F15253_HEKLA-	
bridgetux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F15255_HEKLA-	
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F15859_HEKLA	
bridgeluX. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen C16142_HEKLA	



bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone		
C16142_HEKLA Bender Wirth: 4§		30° 00 33°
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA Bender Wirth: 50	-SOCKET-K	
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA Bender Wirth: 48	-SOCKET-K	
CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	CLL02x/CLU02x (LES10) 54.0° / 81.0° 80 % 1 cd/lm 1 White nts:	



	N	30*	5
LED	CLU700/701/702/703		
FWHM / FWTM	52.0° / 76.0°		
Efficiency	85 %		~
Peak intensity	1.2 cd/lm		
LEDs/each optic	1		
Light colour	White	g.	
Required compone	nts:		
F15255_HEKLA	-SOCKET-C		
		30° 2200 20° 0° 25°	2
CITIZE	N	29*	
LED	CLU710/711		
FWHM / FWTM	52.0° / 77.0°		7
Efficiency	78 %		
Peak intensity	1.1 cd/lm		6
LEDs/each optic	1		
Light colour	White		>
Required compone			
F15859_HEKLA			
			X
		127 128 127	_
CITIZE	N	20*	5
LED	CLU7A2/7A3		
FWHM / FWTM	53.0° / 73.0°		
Efficiency	87 %		
Peak intensity	1.2 cd/lm		
	1.2 cd/lm 1		
LEDs/each optic			X
LEDs/each optic	1 White	97	$\times$
LEDs/each optic Light colour	1 White nts:	gr	X
LEDs/each optic Light colour Required compone	1 White nts:		X
LEDs/each optic Light colour Required compone	1 White nts:		X
LEDs/each optic Light colour Required compone F15255_HEKLA	1 White nts: -SOCKET-C		
LEDs/each optic Light colour Required compone F15255_HEKLA	1 White nts: -SOCKET-C		, , ,
LEDs/each optic Light colour Required compone F15255_HEKLA	1 White nts: -SOCKET-C N CLU7B2		
LEDs/each optic Light colour Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM	1 White nts: -SOCKET-C N CLU7B2 51.0° / 72.0°		
LEDs/each optic Light colour Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM Efficiency	1 White nts: -SOCKET-C <b>N</b> CLU7B2 51.0° / 72.0° 85 %		
LEDs/each optic Light colour Required compone F15255_HEKLA CITIZE LED FWHM / FWTM Efficiency Peak intensity	1 White Ints: -SOCKET-C N CLU7B2 51.0° / 72.0° 85 % 1.2 cd/lm		
LEDs/each optic Light colour Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	1 White Ints: -SOCKET-C N CLU7B2 51.0° / 72.0° 85 % 1.2 cd/lm 1		
LEDs/each optic Light colour Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	1 White nts: -SOCKET-C N CLU7B2 51.0° / 72.0° 85 % 1.2 cd/lm 1 White		
LEDs/each optic Light colour Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	1 White nts: -SOCKET-C N CLU7B2 51.0° / 72.0° 85 % 1.2 cd/lm 1 White nts:		
LEDs/each optic Light colour Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	1 White nts: -SOCKET-C N CLU7B2 51.0° / 72.0° 85 % 1.2 cd/lm 1 White nts:		
LEDs/each optic Light colour Required compone F15255_HEKLA CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	1 White nts: -SOCKET-C N CLU7B2 51.0° / 72.0° 85 % 1.2 cd/lm 1 White nts:		



			90°	90*
LED	CMA1516			
FWHM / FWTM	57.0° / 81.0°		75	
Efficiency	83 %			<
Peak intensity	1 cd/lm		60° - 400	60.
LEDs/each optic	1			$\langle \rangle$
Light colour	White			45*
Required compone				/
F15256_HEKLA				1
_				$\sim$
				365
			25° 0° 35°	
			50*	90°
LED	CMT14xx			_1
FWHM / FWTM	55.0° / 81.0°			- A
Efficiency	54 %		- 200	
Peak intensity	0.7 cd/lm			
LEDs/each optic	1			
Light colour	White		95* 400	45°
Required compone	nts:			
F15255_HEKLA	-SOCKET-C			$\langle \rangle$
				$\langle \cdot \rangle$
			*	360
			15 0, 15,	<u> </u>
CREE 🚖		and the second se		6.3.2
			90*	90°
LED	CXA/B 13xx		39 <sup>4</sup>	90* 25*
LED FWHM / FWTM	54.0° / 77.0°		35 <sup>4</sup>	90* 75*
LED FWHM / FWTM Efficiency	54.0° / 77.0° 86 %		39 <sup>4</sup>	90° 25° 60°
LED FWHM / FWTM Efficiency Peak intensity	54.0° / 77.0° 86 % 1.1 cd/lm		99 <sup>4</sup>	90* 25* 60*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	54.0° / 77.0° 86 % 1.1 cd/lm 1		90 <sup>4</sup> 39 6 <sup>4</sup> 97	90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	54.0° / 77.0° 86 % 1.1 cd/lm 1 White		94* 79 6)* 57	90* 75* 60*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	54.0° / 77.0° 86 % 1.1 cd/lm 1 White nts:		94* 79 00* 00* 00* 00*	90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	54.0° / 77.0° 86 % 1.1 cd/lm 1 White nts:		54* 75 04 75 00 00	99° 75°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	54.0° / 77.0° 86 % 1.1 cd/lm 1 White nts:		5° 5° 5° 5° 50	60°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	54.0° / 77.0° 86 % 1.1 cd/lm 1 White nts:		94° 94° 94° 94° 94° 94° 96° 96° 96° 96° 96° 96° 96° 96° 96° 96	90* 25* 65* 5*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA	54.0° / 77.0° 86 % 1.1 cd/lm 1 White nts:			90* 73* 60* 5* 90*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA	54.0° / 77.0° 86 % 1.1 cd/lm 1 White nts: -SOCKET-J		7	90* 25* 6* 9.
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA	54.0° / 77.0° 86 % 1.1 cd/lm 1 White nts: -SOCKET-J		7	90" 25" 60" 30" 25"
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA	54.0° / 77.0° 86 % 1.1 cd/lm 1 White nts: -SOCKET-J CXA/B 13xx 54.0° / 76.0°		7	90* 25* 60* 55* 55* 25*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA CREEE F15956_HEKLA	54.0° / 77.0° 86 % 1.1 cd/lm 1 White nts: -SOCKET-J CXA/B 13xx 54.0° / 76.0° 88 %		7	90* 25* 60* 35* 35*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA CREECS LED FWHM / FWTM Efficiency Peak intensity	54.0° / 77.0° 86 % 1.1 cd/lm 1 White nts: -SOCKET-J CXA/B 13xx 54.0° / 76.0°		7	90* 25* 63* 35* 99*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA ENTERSE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	54.0° / 77.0° 86 % 1.1 cd/lm 1 White nts: -SOCKET-J CXA/B 13xx 54.0° / 76.0° 88 % 1.2 cd/lm 1		7	90* 25* 43* 90* 90*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA CREE F15956_HEKLA CREE ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	54.0° / 77.0° 86 % 1.1 cd/lm 1 White nts: -SOCKET-J CXA/B 13xx 54.0° / 76.0° 88 % 1.2 cd/lm 1 White		7	90* 25* 60* 50* 50* 50*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA CREE ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	54.0° / 77.0° 86 % 1.1 cd/lm 1 White nts: -SOCKET-J CXA/B 13xx 54.0° / 76.0° 88 % 1.2 cd/lm 1 White nts:		7	90* 25* 62* 55* 50* 50*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA CREE F15956_HEKLA CREE ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	54.0° / 77.0° 86 % 1.1 cd/lm 1 White nts: -SOCKET-J CXA/B 13xx 54.0° / 76.0° 88 % 1.2 cd/lm 1 White nts:		7	90° 25° 60° 50° 90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15956_HEKLA CREE ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	54.0° / 77.0° 86 % 1.1 cd/lm 1 White nts: -SOCKET-J CXA/B 13xx 54.0° / 76.0° 88 % 1.2 cd/lm 1 White nts:		7	90° 75° 60° 75° 60°



		30* 90*
LED	CXA/B 15xx	
FWHM / FWTM	56.0° / 81.0°	3. 2.
Efficiency	84 %	
Peak intensity	1 cd/lm	
LEDs/each optic	1	
Light colour	White	g. g.
Required compone	ents:	
F15256_HEKLA	A-SOCKET-D	
	EDS	90° 300
LED	LUXEON CoB 1202HD	
FWHM / FWTM	54.0° / 76.0°	
Efficiency	85 %	
Peak intensity	1.1 cd/lm	69 <sup>4</sup>
LEDs/each optic	1	
Light colour	White	gr at
Required compone		
F15848_HEKLA		
		30° <u>12</u> % 30°
	.EDS	90 <sup>3</sup> 90 <sup>3</sup>
LED	LUXEON CoB 1202s	
FWHM / FWTM	52.0° / 75.0°	
Efficiency	85 %	
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	White	₫ <sup>×</sup> 6,
Required compone		
F15848_HEKLA	A-SOCKET-G	
		30 <sup>4</sup> 1220 10 <sup>5</sup> 0 <sup>4</sup> 10 <sup>5</sup>
	.EDS	
LED	LUXEON CX Plus CoB - HD S01H4	
FWHM / FWTM	45.0° / 67.0°	
Efficiency	78 %	
Peak intensity	1.4 cd/lm	
LEDs/each optic	1	
Light colour	White	a. <u>80</u>
Required compone	ents:	
Bender Wirth: 6	34c Hekla	
1		



🖉 LUMIL	EDS	30 <sup>4</sup>
LED	LUXEON CX Plus CoB - HD S02H6	
FWHM / FWTM	45.0° / 68.0°	
Efficiency	77 %	
Peak intensity	1.4 cd/lm	
LEDs/each optic	1	
Light colour	White	gr (* * * * * * * * * * * * * * * * * * *
Required compone	ents:	
Bender Wirth: 6	34c Hekla	
M	EDC	<u>109</u> 09 100
	EDS	90° 90
LED	LUXEON CX Plus CoB - HD S04H9	75
FWHM / FWTM	49.0° / 74.0°	
Efficiency	76 %	90 <sup>4</sup> 600 500
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	White	of a second s
Required compone	ents:	
Bender Wirth: 6	34c Hekla	
		30° 1200 30
	.EDS	90°
LED	LUXEON CX Plus CoB M02 / M03 (Gen2)	
FWHM / FWTM	48.0° / 72.0°	
Efficiency	75 %	
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	White	gr e
Required compone	ents:	
Bender Wirth: 6	41a Hekla	
		34
	FDS	
		9 <sup>4</sup>
	LUXEON CX Plus CoB S01 (Gen2)	
FWHM / FWTM	45.0° / 67.0°	
Efficiency		50°
Peak intensity	1.4 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone		
Bender Wirth: 6	34C HEKIA	100
		300 100 00 100 3



ELUM	INUS	20,	<b>9</b> 0°
LED	CDM-6 (Dim-To-Warm)		$\land$
FWHM / FWTM	44.0° / 68.0°	10	73
Efficiency	68 %		400
Peak intensity	1.3 cd/lm		60,
LEDs/each optic	1		
Light colour	White	g	
Required compone			
C16142_HEKLA			
Bender Wirth: 4			
		and the second sec	1200 36
LUM	INUS	<u></u>	90
LED	CDM-9 (Dim-To-Warm)		$\sum$
FWHM / FWTM	48.0° / 72.0°	7	
Efficiency	67 %		
Peak intensity	1.1 cd/lm		400 60
LEDs/each optic	1		
Light colour	White		
Required compone			X
C16142_HEKLA			800
Bender Wirth: 4			
Bondor Wintin.	55 T)p 25		$\checkmark$ $\lambda$
		30"	30
		15	0" 15"
() LUM	INUS		90'
LED	CTM-9 (Tunable White)		90
		25°	×
LED	CTM-9 (Tunable White)		e9
LED FWHM / FWTM	CTM-9 (Tunable White) 48.0° / 72.0°		er32
LED FWHM / FWTM Efficiency	CTM-9 (Tunable White) 48.0° / 72.0° 67 %		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CTM-9 (Tunable White) 48.0° / 72.0° 67 % 1 cd/lm		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CTM-9 (Tunable White) 48.0° / 72.0° 67 % 1 cd/lm 1 White		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CTM-9 (Tunable White) 48.0° / 72.0° 67 % 1 cd/lm 1 White ents:		67 357 39
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	CTM-9 (Tunable White) 48.0° / 72.0° 67 % 1 cd/lm 1 White ents: A-SOCKET-K		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA	CTM-9 (Tunable White) 48.0° / 72.0° 67 % 1 cd/lm 1 White ents: A-SOCKET-K		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA	CTM-9 (Tunable White) 48.0° / 72.0° 67 % 1 cd/lm 1 White ents: A-SOCKET-K 95 Typ L8		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKL4 Bender Wirth: 4	CTM-9 (Tunable White) 48.0° / 72.0° 67 % 1 cd/lm 1 White ents: A-SOCKET-K 95 Typ L8		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKL/ Bender Wirth: 4	CTM-9 (Tunable White) 48.0° / 72.0° 67 % 1 cd/lm 1 White ents: A-SOCKET-K 95 Typ L8		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKL/ Bender Wirth: 4	CTM-9 (Tunable White) 48.0° / 72.0° 67 % 1 cd/lm 1 White ents: A-SOCKET-K 95 Typ L8		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA Bender Wirth: 4	CTM-9 (Tunable White) 48.0° / 72.0° 67 % 1 cd/lm 1 White ents: A-SOCKET-K 95 Typ L8 INUS CXM-3 51.0° / 73.0°		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKLA Bender Wirth: 4	CTM-9 (Tunable White) 48.0° / 72.0° 67 % 1 cd/lm 1 White ents: A-SOCKET-K 95 Typ L8 <b>INUS</b> CXM-3 51.0° / 73.0° 87 %		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKL/ Bender Wirth: 4 Efficiency Peak intensity LEDs/each optic	CTM-9 (Tunable White) 48.0° / 72.0° 67 % 1 cd/lm 1 White ents: A-SOCKET-K 95 Typ L8 <b>INUS</b> CXM-3 51.0° / 73.0° 87 % 1.2 cd/lm		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKL/ Bender Wirth: 4: Efficiency Peak intensity LEDs/each optic Light colour	CTM-9 (Tunable White) 48.0° / 72.0° 67 % 1 cd/lm 1 White ents: A-SOCKET-K 95 Typ L8 <b>INUS</b> CXM-3 51.0° / 73.0° 87 % 1.2 cd/lm 1 White		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKL/ Bender Wirth: 4: Efficiency Peak intensity LEDs/each optic Light colour Required compone	CTM-9 (Tunable White) 48.0° / 72.0° 67 % 1 cd/lm 1 White ents: A-SOCKET-K 95 Typ L8 <b>INUS</b> CXM-3 51.0° / 73.0° 87 % 1.2 cd/lm 1 White ents:		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKL/ Bender Wirth: 4 Efficiency Peak intensity LEDs/each optic Light colour	CTM-9 (Tunable White) 48.0° / 72.0° 67 % 1 cd/lm 1 White ents: A-SOCKET-K 95 Typ L8 <b>INUS</b> CXM-3 51.0° / 73.0° 87 % 1.2 cd/lm 1 White ents:		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C16142_HEKL/ Bender Wirth: 4: WHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CTM-9 (Tunable White) 48.0° / 72.0° 67 % 1 cd/lm 1 White ents: A-SOCKET-K 95 Typ L8 <b>INUS</b> CXM-3 51.0° / 73.0° 87 % 1.2 cd/lm 1 White ents:		



<b>ELUM</b>	INUS	50°
LED	CXM-4	
FWHM / FWTM	50.0° / 73.0°	
Efficiency	83 %	
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	White	gi -
Required compone	ents:	
F15255_HEKLA		
		34.6
<b>E</b> LUM	INUS	94°
LED		
FWHM / FWTM	CxM-9 (13.5x13.5) 55.0° / 81.0°	75
Efficiency	83 %	
Peak intensity	63 % 1 cd/lm	80 <sup>5</sup> 400
LEDs/each optic	1	
Light colour	' White	er /
Required compone		
F15255_HEKLA		
110200_1121(2)		
		30 <sup>4</sup> 15 <sup>5</sup> 0 <sup>4</sup> 15 <sup>5</sup>
ØNICHI/	N Contraction of the second seco	90'
		*u
	COB S-Type (LES 7) 53.0° / 78.0°	3°*
LED	COB S-Type (LES 7)	
LED FWHM / FWTM	COB S-Type (LES 7) 53.0° / 78.0°	
LED FWHM / FWTM Efficiency	COB S-Type (LES 7) 53.0° / 78.0° 83 %	954 75 964 960
LED FWHM / FWTM Efficiency Peak intensity	COB S-Type (LES 7) 53.0° / 78.0° 83 % 1.1 cd/lm	954 97 97 97 97 400
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	COB S-Type (LES 7) 53.0° / 78.0° 83 % 1.1 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	COB S-Type (LES 7) 53.0° / 78.0° 83 % 1.1 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	COB S-Type (LES 7) 53.0° / 78.0° 83 % 1.1 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	COB S-Type (LES 7) 53.0° / 78.0° 83 % 1.1 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	COB S-Type (LES 7) 53.0° / 78.0° 83 % 1.1 cd/lm 1 White ents: A-SOCKET-G	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA	COB S-Type (LES 7) 53.0° / 78.0° 83 % 1.1 cd/lm 1 White ents: A-SOCKET-G	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA	COB S-Type (LES 7) 53.0° / 78.0° 83 % 1.1 cd/lm 1 White ents: A-SOCKET-G NJCWL024Z-V1MT: COB L-Type Tunable White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA	COB S-Type (LES 7) 53.0° / 78.0° 83 % 1.1 cd/lm 1 White ents: A-SOCKET-G	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA	COB S-Type (LES 7) 53.0° / 78.0° 83 % 1.1 cd/lm 1 White ents: A-SOCKET-G NJCWL024Z-V1MT: COB L-Type Tunable White 42.0° / 67.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA	COB S-Type (LES 7) 53.0° / 78.0° 83 % 1.1 cd/lm 1 White ents: A-SOCKET-G NJCWL024Z-V1MT: COB L-Type Tunable White 42.0° / 67.0° 66 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA	COB S-Type (LES 7) 53.0° / 78.0° 83 % 1.1 cd/lm 1 White ents: A-SOCKET-G NJCWL024Z-V1MT: COB L-Type Tunable White 42.0° / 67.0° 66 % 1.3 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA	COB S-Type (LES 7) 53.0° / 78.0° 83 % 1.1 cd/lm 1 White ents: A-SOCKET-G NJCWL024Z-V1MT: COB L-Type Tunable White 42.0° / 67.0° 66 % 1.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA	COB S-Type (LES 7) 53.0° / 78.0° 83 % 1.1 cd/lm 1 White ents: A-SOCKET-G NJCWL024Z-V1MT: COB L-Type Tunable White 42.0° / 67.0° 66 % 1.3 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA	COB S-Type (LES 7) 53.0° / 78.0° 83 % 1.1 cd/lm 1 White ents: A-SOCKET-G NJCWL024Z-V1MT: COB L-Type Tunable White 42.0° / 67.0° 66 % 1.3 cd/lm 1 White ents: A-SOCKET-K	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15848_HEKLA	COB S-Type (LES 7) 53.0° / 78.0° 83 % 1.1 cd/lm 1 White ents: A-SOCKET-G NJCWL024Z-V1MT: COB L-Type Tunable White 42.0° / 67.0° 66 % 1.3 cd/lm 1 White ents: A-SOCKET-K	



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ØNICHI/	N Contraction of the second	90 <sup>4</sup>
LED	NVCWJ024Z-V1MT: COB J-Type Tunable White	
FWHM / FWTM	49.0° / 74.0°	
Efficiency	65 %	
Peak intensity	1 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone	ents:	
C16142_HEKL	A-SOCKET-K	
Bender Wirth: 4	98 Typ L8	
		30* 25* 01 25*
PHILI	DS	
LED	Fortimo SLM L09 CoB	
FWHM / FWTM	55.0° / 79.0°	
Efficiency	81 %	
Peak intensity	1.1 cd/lm	
LEDs/each optic	1	
Light colour	White	g.,
Required compone	ents:	
F15858_HEKLA		
		3/*
		155 <sup>4</sup> 0 <sup>6</sup> 155
<b>CUWUS</b>	ING	
		20 <sup>4</sup>
LED	LC003D / LC006D / LC009D / LC013D	<u>29-</u>
LED FWHM / FWTM	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0°	32
LED FWHM / FWTM Efficiency	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 %	60 c c c c c c c c c c c c c c c c c c c
LED FWHM / FWTM Efficiency Peak intensity	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 % 1 cd/lm	90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 % 1 cd/lm 1	29* 29* 09* 09*
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 % 1 cd/lm 1 White	954 72 05 05 05 05 05 05 05 05 05 05 05 05 05
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 % 1 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 % 1 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 % 1 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 % 1 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 % 1 cd/lm 1 White ents: -SOCKET-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 % 1 cd/lm 1 White ents: -SOCKET-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 % 1 cd/lm 1 White ents: 	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 % 1 cd/lm 1 White ents: 	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA SAMSI LED FWHM / FWTM	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 % 1 cd/lm 1 White ents: SOCKET-C	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA SAMSI LED FWHM / FWTM Efficiency	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 % 1 cd/lm 1 White ents: -SOCKET-C UNC LC010C G2 51.0° / 74.0° 85 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA SAMSS LED FWHM / FWTM Efficiency Peak intensity	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 % 1 cd/lm 1 White ents: A-SOCKET-C UNG LC010C G2 51.0° / 74.0° 85 % 1.2 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA SAMSS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 % 1 cd/lm 1 White ents: A-SOCKET-C UNC LC010C G2 51.0° / 74.0° 85 % 1.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA SAMSS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 % 1 cd/lm 1 White ents: A-SOCKET-C UNC LC010C G2 51.0° / 74.0° 85 % 1.2 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA SAMSS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 % 1 cd/lm 1 White ents: A-SOCKET-C UNC LC010C G2 51.0° / 74.0° 85 % 1.2 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F15255_HEKLA SAMSS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LC003D / LC006D / LC009D / LC013D 56.0° / 82.0° 82 % 1 cd/lm 1 White ents: A-SOCKET-C UNC LC010C G2 51.0° / 74.0° 85 % 1.2 cd/lm 1 White ents:	



SAMSU	JNG	99°
LED	LC010T (Tunable White)	
FWHM / FWTM	47.0° / 72.0°	
Efficiency	67 %	80
Peak intensity	1.1 cd/lm	
LEDs/each optic	1	
Light colour	Tunable White	¢r (
Required compone	nts:	
C16142_HEKLA	-SOCKET-K	
Bender Wirth: 50	01 Typ L8	
		30 <sup>+</sup> 25 <sup>-</sup> 0 <sup>+</sup> 13 <sup>-</sup>
<u> </u> <b> <b>     S</b>     M     S     I     </b>	JNG	50°
LED	LC020C G2	
FWHM / FWTM	53.0° / 77.0°	
Efficiency	79 %	
Peak intensity	1.1 cd/lm	
LEDs/each optic	1	
Light colour	White	σ
Required compone	nts:	
F15859_HEKLA		
TRIDON		9°
LED	SLE G7 LES09	
FWHM / FWTM	53.0° / 79.0°	
Efficiency	82 %	50°
Peak intensity	1.1 cd/lm	
LEDs/each optic	1	
Light colour	White	¢.
Required compone		
F15255_HEKLA	-SOCKET-C	
		30* 120 120 127
		30° 100 100 100 30°
TRIDON		30* 135 135 90*
LED	SLE G7 LES13	34* 35* 350 39* 39
LED FWHM / FWTM	SLE G7 LES13 64.0° / 87.0°	
LED FWHM / FWTM Efficiency	SLE G7 LES13 64.0° / 87.0° 73 %	
LED FWHM / FWTM Efficiency Peak intensity	SLE G7 LES13 64.0° / 87.0° 73 % 0.7 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	SLE G7 LES13 64.0° / 87.0° 73 % 0.7 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	SLE G7 LES13 64.0° / 87.0° 73 % 0.7 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	SLE G7 LES13 64.0° / 87.0° 73 % 0.7 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	SLE G7 LES13 64.0° / 87.0° 73 % 0.7 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	SLE G7 LES13 64.0° / 87.0° 73 % 0.7 cd/lm 1 White nts:	



XICATO	0			90°
LED	XOB 6 mm			
FWHM / FWTM	50.0° / 73.0°			
Efficiency	82 %			400
Peak intensity	1.2 cd/lm		1000	
LEDs/each optic	1			
Light colour	White			937 43*
Required compone	ents:			
F15255_HEKLA	A-SOCKET-C			
				30* 320
				15° 0° 15°
XICATO	<b>)</b>	100 million (1997)		90* 90*
LED	XOB 9.8 mm			
FWHM / FWTM	54.0° / 79.0°			73*
Efficiency	83 %			
Peak intensity	1.1 cd/lm			
LEDs/each optic	1			
Light colour	White			
Required compone	ents:			
F15255_HEKL	A-SOCKET-C			
				30° 320



bridgelux.		90° 90°
LED	V10 Gen7	
FWHM / FWTM	54.0° / 76.0°	73*
Efficiency	84 %	
Peak intensity	1.2 cd/lm	NO- NO- NO-
LEDs/each optic	1	$  \times / /   \times   \times  $
Light colour	White	45"
Required components:		/ T 000 /
F15255_HEKLA-SO	CKET-C	
		30° 30° 30° 30° 30°
bridgelux.		50° 50°
LED	V6 Gen6	
FWHM / FWTM	46.0° / 63.0°	13
Efficiency	85 %	400
Peak intensity	1.5 cd/lm	60° 60°
LEDs/each optic	1	
Light colour	White	450 456
Required components:		
F15253_HEKLA-SO	CKET-A	
		1229
		30 <u>150</u> 00 <u>15</u>
bridgelux		80*
bridgelux. LED	V8 Gen7	30 <sup>1</sup> 30 <sup>2</sup>
LED	V8 Gen7 54.0° / 74.0°	2 <sup>1</sup> 2 <sup>1</sup> 2 <sup>1</sup> 2 <sup>1</sup>
		5° 5° 5° 5° 5° 5°
LED FWHM / FWTM	54.0° / 74.0°	99 <sup>4</sup> 99 <sup>4</sup> 99 <sup>4</sup> 99 <sup>4</sup> 99 <sup>4</sup> 99 <sup>4</sup> 99 <sup>4</sup> 99 <sup>4</sup>
LED FWHM / FWTM Efficiency	54.0° / 74.0° 90 %	97 97 97 99 00 00
LED FWHM / FWTM Efficiency Peak intensity	54.0° / 74.0° 90 % 1.2 cd/lm	gr
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	54.0° / 74.0° 90 % 1.2 cd/lm 1	97 97 97 97 97 97 97 97 97 97 97 97 97 9
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	54.0° / 74.0° 90 % 1.2 cd/lm 1 White	6. 6. 6. 6. 7. 60 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7.
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	54.0° / 74.0° 90 % 1.2 cd/lm 1 White	gr
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	54.0° / 74.0° 90 % 1.2 cd/lm 1 White	27
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15253_HEKLA-SO	54.0° / 74.0° 90 % 1.2 cd/lm 1 White	20° 20° 20° 20° 20° 20° 20° 20°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	54.0° / 74.0° 90 % 1.2 cd/lm 1 White	30,         10,         20,           26,         00         00           6,         00         00           8,         00         00           8,         00         00           8,         00         00           8,         00         00           8,         00         00           8,         00         00
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15253_HEKLA-SO	54.0° / 74.0° 90 % 1.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15253_HEKLA-SO	54.0° / 74.0° 90 % 1.2 cd/lm 1 White CKET-A	99° 99° 99° 99° 99° 99° 99° 99° 99° 99°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15253_HEKLA-SO bridgeLux. LED FWHM / FWTM Efficiency	54.0° / 74.0° 90 % 1.2 cd/lm 1 White CKET-A VERO10 49.0° / 73.0° 83 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15253_HEKLA-SO	54.0° / 74.0° 90 % 1.2 cd/lm 1 White CKET-A	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15253_HEKLA-SO bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	54.0° / 74.0° 90 % 1.2 cd/lm 1 White CKET-A VERO10 49.0° / 73.0° 83 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15253_HEKLA-SO bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	54.0° / 74.0° 90 % 1.2 cd/lm 1 White CKET-A VERO10 49.0° / 73.0° 83 % 1.3 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15253_HEKLA-SO bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	54.0° / 74.0° 90 % 1.2 cd/lm 1 White CKET-A VERO10 49.0° / 73.0° 83 % 1.3 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15253_HEKLA-SO bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	54.0° / 74.0° 90 % 1.2 cd/lm 1 White CKET-A VERO10 49.0° / 73.0° 83 % 1.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15253_HEKLA-SO bridgelux LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	54.0° / 74.0° 90 % 1.2 cd/lm 1 White CKET-A VERO10 49.0° / 73.0° 83 % 1.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: F15253_HEKLA-SO bridgelux LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	54.0° / 74.0° 90 % 1.2 cd/lm 1 White CKET-A VERO10 49.0° / 73.0° 83 % 1.3 cd/lm 1 White	5° 000 0° 0°



r		
MICHIΛ		90* 90
LED	COB L-Type (LES 11)	
FWHM / FWTM	65.0° / 87.0°	75
Efficiency	84 %	400
Peak intensity	0.8 cd/lm	
LEDs/each optic	1	
Light colour	White	47 <sup>4</sup> 42
Required components		
F15858_HEKLA-SO	DCKET-H	
		30° 1230 38
<b>Μ</b> ΝΙCΗΙΛ		50° 38
LED		
LED FWHM / FWTM	COB L-Type (LES 9) 62.0° / 81.0°	75'
Efficiency	62.0° / 81.0° 89 %	
Peak intensity	89 % 1 cd/lm	60 <sup>6</sup> 60
LEDs/each optic	1	
Light colour	' White	47* 45
Required components		
F15858_HEKLA-SC		
T 13030_HEREA-OC		
		1230
		36° 36 15° 0° 15°
<b>Μ</b> ΝΙCΗΙΛ		90*
LED	COB S-Type (LES 6)	
FWHM / FWTM	48.0° / 67.0°	
Efficiency	79 %	400
Peak intensity	1.4 cd/lm	60°
LEDs/each optic	1	
Light colour	White	45 <sup>4</sup> 65
Required components		
F15848_HEKLA-SC	DCKET-G	
		1220
		30%
		 15 0% 15
SAMSU	NG	90*90
LED	LC003D / LC006D / LC009D / LC013D	
FWHM / FWTM	53.0° / 75.0°	
Efficiency	79 %	60° 400 m
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	$   \times / /   \times   \times  $
Light colour	White	gr e
Required components	:	
F17435_HEKLA-G2	2-C	
		30- 1200 3
		15° 0° 15°



SAMSU	NG	90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components F17435_HEKLA-G:	LC003D / LC006D / LC009D / LC013D 52.0° / 74.0° 80 % 1.2 cd/lm 1 White	77 77 90 90 90 90 90
SNMSU	NG	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components F17435_HEKLA-G	LC010C 51.0° / 68.0° 84 % 1.3 cd/lm 1 White	
SAMSU	NG	90 <sup>4</sup>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components	LH231B 50.0° / 73.0° 82 % 1.2 cd/lm 7 White	77 90 90 90 90 90 90 90 90 90 90 90 90 90
F15255_HEKLA-S	DCKET-C	30 <sup>4</sup> 15 <sup>5</sup> 0 <sup>4</sup> 15 <sup>5</sup> 2
SEOUL		50°
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity	MJT COB LES 6 53.0° / 70.0° 86 % 1.3 cd/lm	77 get 400
LEDs/each optic Light colour Required components F17435_HEKLA-Gi	1 White S:	gri



SEOUL SEMICONDUCTOR		90*
LED	MJT COB LES 9.8	75
FWHM / FWTM	53.0° / 75.0°	
Efficiency	81 %	607 - 607 - 607 - 607 - 607 - 607 - 607 - 607 - 607 - 607 - 607 - 607 - 607 - 607 - 607 - 607 - 607 - 607 - 607
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required component	s:	
F17435_HEKLA-0	62-C	
		31" 30
		15° 0 <sup>†</sup> 15°
<b>XICATO</b>		50 <sup>4</sup> 5
LED	XTM - 9mm LES	
FWHM / FWTM	55.0° / 76.0 + 6.0°	
Efficiency	87 %	
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	White	gr
Required component	S:	
C15743_XTM-AD	APTER-50-B	



## PRODUCT DATASHEET CP16109\_CARMEN-50-W-C

#### **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.

Due to use of high power COB's with this product, special attention to proper thermal design is highly recommended. LEDiL has no liability for direct, indirect or consecutive damages arising from the LEDiL products being used outside of the recommended temperature range.

#### **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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