

# PRODUCT DATASHEET CA12056\_TINA2-W

# TINA2-W

 ${\sim}45^\circ$  wide beam. Assembly with holder and installation tape.

### **SPECIFICATION:**

Dimensions	Ø 16.1 mm
Height	9.7 mm
Fastening	tape
ROHS compliant	yes 🛈



### MATERIALS:

**Component** TINA2-W-XP TINA2-XP-HLD-TAPE-BLK TINA-TAPE3

Туре	
Single lens	
Holder	
Таре	

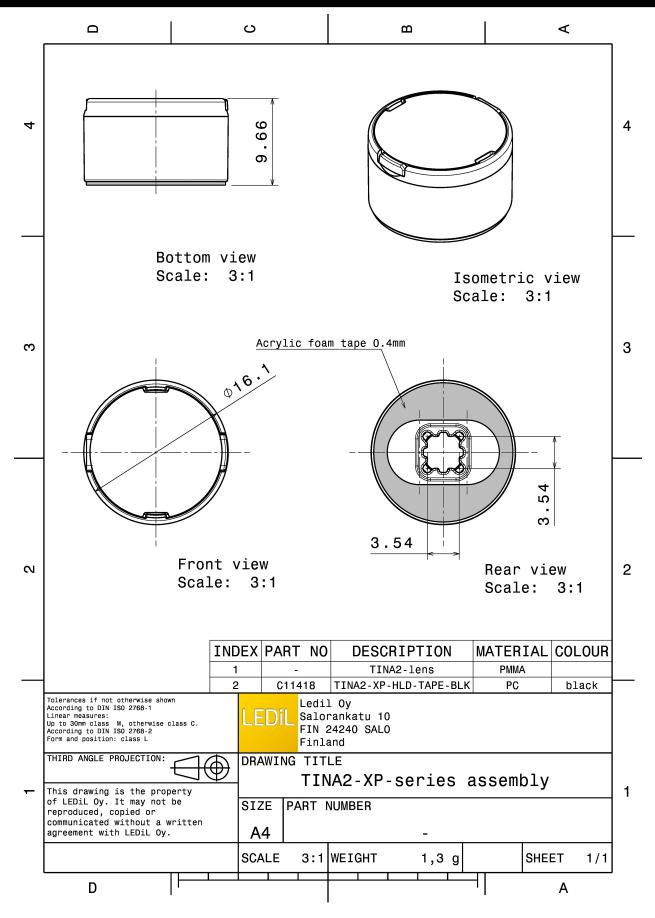
Material	Colour	Finish
PMMA	clear	
PC	black	
Acrylic foam	black	
	PMMA PC	PMMA clear PC black

### **ORDERING INFORMATION:**

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CA12056_TINA2-W	Single lens	4140	230	230	8.7
» Box size: 451 x 241 x 298 mm					



# PRODUCT DATASHEET CA12056\_TINA2-W



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



# **OPTICAL RESULTS (MEASURED):**

		90*
LED	XP-E	
FWHM / FWTM	50.0° / 68.0°	25*
Efficiency	88 %	60° 60°
Peak intensity	1.5 cd/lm	
LEDs/each optic	1	
Light colour	White	gr <sup>e</sup> <u>800</u> 63°
Required component	nts:	
		20 07 10 10 10 10 10 10 10 10 10 10 10 10 10
		90 <sup>6</sup>
LED	XP-E2	
FWHM / FWTM	52.0° / 70.0°	25
Efficiency	89 %	60° - 400 - 60°
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	White	aze aio aze
Required component	nts:	
		1230
		30° 30° 30°
		90* 90*
LED	XP-G	
FWHM / FWTM	57.0° / 81.0°	75'
FWHM / FWTM Efficiency		97 77
Efficiency Peak intensity	57.0° / 81.0°	6)4 (10) 25
Efficiency Peak intensity LEDs/each optic	57.0° / 81.0° 88 % 1 cd/lm 1	61,
Efficiency Peak intensity LEDs/each optic Light colour	57.0° / 81.0° 88 % 1 cd/lm 1 White	2. 2. 2. 2. 2.
Efficiency Peak intensity LEDs/each optic	57.0° / 81.0° 88 % 1 cd/lm 1 White	25°
Efficiency Peak intensity LEDs/each optic Light colour	57.0° / 81.0° 88 % 1 cd/lm 1 White	25
Efficiency Peak intensity LEDs/each optic Light colour	57.0° / 81.0° 88 % 1 cd/lm 1 White	2. 2. 6. 6. 25.
Efficiency Peak intensity LEDs/each optic Light colour	57.0° / 81.0° 88 % 1 cd/lm 1 White	20 20 20 20 20 20 20 20 20 20
Efficiency Peak intensity LEDs/each optic Light colour	57.0° / 81.0° 88 % 1 cd/lm 1 White nts:	00
Efficiency Peak intensity LEDs/each optic Light colour Required component	57.0° / 81.0° 88 % 1 cd/lm 1 White nts:	20°
Efficiency Peak intensity LEDs/each optic Light colour Required component	57.0° / 81.0° 88 % 1 cd/lm 1 White nts:	20°
Efficiency Peak intensity LEDs/each optic Light colour Required component	57.0° / 81.0° 88 % 1 cd/lm 1 White nts: XP-G2	20°
Efficiency Peak intensity LEDs/each optic Light colour Required component CREE LED LED FWHM / FWTM	57.0° / 81.0° 88 % 1 cd/lm 1 White nts: XP-G2 54.0° / 74.0°	20°
Efficiency Peak intensity LEDs/each optic Light colour Required component CREE LED LED FWHM / FWTM Efficiency	57.0° / 81.0° 88 % 1 cd/lm 1 White nts: XP-G2 54.0° / 74.0° 88 % 1 cd/lm 1	20° 0° 12° 20°
Efficiency Peak intensity LEDs/each optic Light colour Required component Equired component CREE ULED LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	57.0° / 81.0° 88 % 1 cd/lm 1 White nts: XP-G2 54.0° / 74.0° 88 % 1 cd/lm 1 White	20° 0° 22° 28°
Efficiency Peak intensity LEDs/each optic Light colour Required component Equired component CREE (LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	57.0° / 81.0° 88 % 1 cd/lm 1 White nts: XP-G2 54.0° / 74.0° 88 % 1 cd/lm 1 White	
Efficiency Peak intensity LEDs/each optic Light colour Required component CREECIENT LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	57.0° / 81.0° 88 % 1 cd/lm 1 White nts: XP-G2 54.0° / 74.0° 88 % 1 cd/lm 1 White	
Efficiency Peak intensity LEDs/each optic Light colour Required component CREECIENT LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	57.0° / 81.0° 88 % 1 cd/lm 1 White nts: XP-G2 54.0° / 74.0° 88 % 1 cd/lm 1 White	
Efficiency Peak intensity LEDs/each optic Light colour Required component CREEE LED EWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	57.0° / 81.0° 88 % 1 cd/lm 1 White nts: XP-G2 54.0° / 74.0° 88 % 1 cd/lm 1 White	



# **OPTICAL RESULTS (MEASURED):**

		90*
LED	XP-G3	
	47.0° / 68.0°	23.
	87 %	400
-	1.4 cd/lm	64* · · · · · · · · · · · · · · · · · · ·
LEDs/each optic	1	
	White	gr
Required componen		
		1200
		30° 153° 0° 153°
		100 <sup>4</sup> 100 <sup>4</sup>
LED	XQ-E HD	
	39.0° / 68.0°	
	72 %	60 400
	1.4 cd/lm	
LEDs/each optic	1	
	White	a. <u>800</u> a.
Required component	nts:	
		1220
		30" 30"
		125° 0 <sup>0</sup> 15°
		90 <sup>4</sup> 90 <sup>4</sup> 10 <sup>5</sup>
LED	XT-E	
LED FWHM / FWTM	XT-E 46.0° / 70.0°	
LED FWHM / FWTM Efficiency	XT-E 46.0° / 70.0° 87 %	
LED FWHM / FWTM Efficiency Peak intensity	XT-E 46.0° / 70.0° 87 % 1.4 cd/m	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XT-E 46.0° / 70.0° 87 % 1.4 cd/m 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XT-E 46.0° / 70.0° 87 % 1.4 cd/m 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XT-E 46.0° / 70.0° 87 % 1.4 cd/m 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XT-E 46.0° / 70.0° 87 % 1.4 cd/m 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XT-E 46.0° / 70.0° 87 % 1.4 cd/m 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XT-E 46.0° / 70.0° 87 % 1.4 cd/m 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen	XT-E 46.0° / 70.0° 87 % 1.4 cd/lm 1 White hts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen	XT-E 46.0° / 70.0° 87 % 1.4 cd/lm 1 White hts: EDS	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen	XT-E 46.0° / 70.0° 87 % 1.4 cd/lm 1 White hts: EDS LUXEON V2	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen	XT-E 46.0° / 70.0° 87 % 1.4 cd/lm 1 White hts: EDS LUXEON V2 49.0° / 70.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen	XT-E 46.0° / 70.0° 87 % 1.4 cd/lm 1 White hts: EDS LUXEON V2 49.0° / 70.0° 89 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen	XT-E 46.0° / 70.0° 87 % 1.4 cd/m 1 White ts: EDS LUXEON V2 49.0° / 70.0° 89 % 1.4 cd/m	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen	XT-E 46.0° / 70.0° 87 % 1.4 cd/m 1 White hts: EDS LUXEON V2 49.0° / 70.0° 89 % 1.4 cd/m 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen COMPART Efficiency Peak intensity LEDs/each optic Light colour	XT-E 46.0° / 70.0° 87 % 1.4 cd/m 1 White hts: EDS LUXEON V2 49.0° / 70.0° 89 % 1.4 cd/m 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen	XT-E 46.0° / 70.0° 87 % 1.4 cd/m 1 White hts: EDS LUXEON V2 49.0° / 70.0° 89 % 1.4 cd/m 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen COMPART Efficiency Peak intensity LEDs/each optic Light colour	XT-E 46.0° / 70.0° 87 % 1.4 cd/m 1 White hts: EDS LUXEON V2 49.0° / 70.0° 89 % 1.4 cd/m 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen COMPARIANCE Equired componen ELED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XT-E 46.0° / 70.0° 87 % 1.4 cd/m 1 White hts: EDS LUXEON V2 49.0° / 70.0° 89 % 1.4 cd/m 1 White	



# **OPTICAL RESULTS (MEASURED):**

SEOUL SEMICONDUCTOR		95*
LED	Z5	72
FWHM / FWTM	40.0° / 75.0°	
Efficiency	89 %	60-
Peak intensity	1.5 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone	nts:	
		34* 500
		25° 0° 15°
SEOUL		99 <sup>4</sup>
SEOUL SEMICONDUCTOR	Z5M3	30 <sup>4</sup>
SEOUL SEMICONDUCTOR	Z5M3 49.0° / 71.0°	20
seoul semiconductor LED FWHM / FWTM	49.0° / 71.0°	90 <sup>4</sup>
SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency	49.0° / 71.0° 86 %	
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity	49.0° / 71.0°	
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	49.0° / 71.0° 86 % 1.3 cd/lm	
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	49.0° / 71.0° 86 % 1.3 cd/lm 1 White	g. 400
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	49.0° / 71.0° 86 % 1.3 cd/lm 1 White	g. 400
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	49.0° / 71.0° 86 % 1.3 cd/lm 1 White	g. 400
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	49.0° / 71.0° 86 % 1.3 cd/lm 1 White	g. 400



# **OPTICAL RESULTS (SIMULATED):**

	XP-G2 HE	9°
FWHM / FWTM	58.0° / 73.0°	$  \lambda   $
Efficiency	81 %	60°
Peak intensity	1 cd/lm	400
LEDs/each optic	1	
Light colour	White	42. 42.
Required components:		30° 12° 0° 12° ×
		90° 90°
LED	XP-G3	
FWHM / FWTM	54.0° / 70.0°	
Efficiency	84 %	60 <sup>5</sup> 60 <sup>6</sup>
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	$ \times / $
Light colour	Royal Blue	gr et
Required components:		
		30* 1200 36*
<b>MNICHIA</b>		90° 90°
	NI//SvE21A	99 <sup>4</sup> 99 <sup>4</sup> 99 <sup>4</sup>
LED	NVSxE21A 34.6° / 57.8°	39*     39*       125*     0*
LED FWHM / FWTM	34.6° / 57.8°	32.     32.       80.     80.
LED FWHM / FWTM Efficiency	34.6° / 57.8° 90 %	80     000     64       34     25     25       80     35     35
LED FWHM / FWTM Efficiency Peak intensity	34.6° / 57.8° 90 % 2.5 cd/lm	60 60 90 90 90 90 90 90 90 90 90 9
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	34.6° / 57.8° 90 % 2.5 cd/lm 1	60     00     00'       32     32     32'       34'     32'     32'
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	34.6° / 57.8° 90 % 2.5 cd/lm	500 50 50 50 50 50 50 50 50 50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	34.6° / 57.8° 90 % 2.5 cd/lm 1	100     00     00       100     00     00
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	34.6° / 57.8° 90 % 2.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	34.6° / 57.8° 90 % 2.5 cd/lm 1	%     %       %     30%       %     30%       %     30%       %     30%       %     30%       %     30%       %     30%
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	34.6° / 57.8° 90 % 2.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	34.6° / 57.8° 90 % 2.5 cd/lm 1 White	30.     40.     40.
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	34.6° / 57.8° 90 % 2.5 cd/lm 1 White OSLON Square CSSRM2/CSSRM3	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OPTO SEMEM Opto Semiconductors LED FWHM / FWTM	34.6° / 57.8° 90 % 2.5 cd/lm 1 White OSLON Square CSSRM2/CSSRM3 54.0° / 68.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency	34.6° / 57.8° 90 % 2.5 cd/lm 1 White OSLON Square CSSRM2/CSSRM3 54.0° / 68.0° 91 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	34.6° / 57.8° 90 % 2.5 cd/lm 1 White OSLON Square CSSRM2/CSSRM3 54.0° / 68.0° 91 % 1.3 cd/lm	04 90 64   35 35 35   64 100 64   64 100 64   64 100 64   123 100 64   124 100 64   125 100 64   126 100 64   127 100 64   128 100 100   129 100 100
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Optio Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	34.6° / 57.8° 90 % 2.5 cd/lm 1 White OSLON Square CSSRM2/CSSRM3 54.0° / 68.0° 91 % 1.3 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	34.6° / 57.8° 90 % 2.5 cd/lm 1 White OSLON Square CSSRM2/CSSRM3 54.0° / 68.0° 91 % 1.3 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Optio Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	34.6° / 57.8° 90 % 2.5 cd/lm 1 White OSLON Square CSSRM2/CSSRM3 54.0° / 68.0° 91 % 1.3 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	34.6° / 57.8° 90 % 2.5 cd/lm 1 White OSLON Square CSSRM2/CSSRM3 54.0° / 68.0° 91 % 1.3 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	34.6° / 57.8° 90 % 2.5 cd/lm 1 White OSLON Square CSSRM2/CSSRM3 54.0° / 68.0° 91 % 1.3 cd/lm 1	



# **OPTICAL RESULTS (SIMULATED):**

SAMSU	NG	90°
LED	LH351B	79
FWHM / FWTM	56.0° / 71.0°	
Efficiency	88 %	80°
Peak intensity	1.2 cd/lm	60°
LEDs/each optic	1	
Light colour	White	9°
Required componen	is:	



#### **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.

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