

PRODUCT DATASHEET CA12377_TINA2-M

TINA2-M

~30° medium beam. Assembly with holder, installation tape and location pins.

SPECIFICATION:

Dimensions	Ø 16.0 mm
Height	9.5 mm
Fastening	tape, pin
ROHS compliant	yes 🛈



MATERIALS:

Component TINA2-XP-M TINA2-HLD-BLK TINA-TAPE3

Туре	Μ
Single lens	PI
Holder	P
Таре	Ad

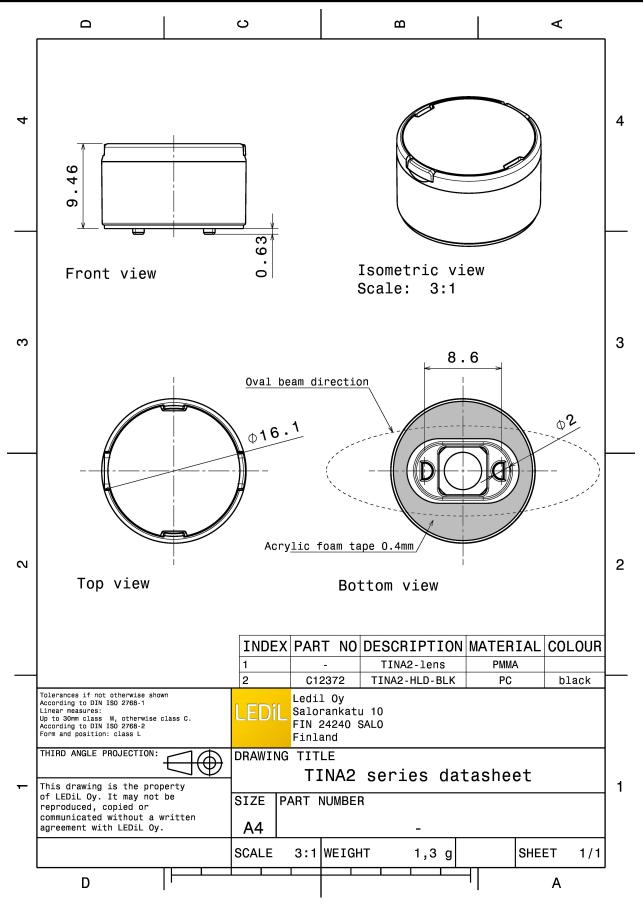
Material	Colour	Finish
PMMA	clear	
PC	black	
Acrylic foam	black	

ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CA12377_TINA2-M	Single lens	4140	230	230	8.3
» Box size: 451 x 241 x 298 mm					



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



			50°
LEDS	ХВ-Н		
FWHM / FWTM	31.0° / 54.0°		75°
Efficiency	85 %		
Peak intensity	2.7 cd/lm		60° 60°
LEDs/each optic	1		
Light colour	White		43 ¹ 1630 43 ¹
Required componer			$K \neq A = A + A = 2$
Required component	l5.		
			2430
			36 ⁶ 15 ⁹ 0 ⁸ 35 ⁹ 36 ⁶
			90 ⁺
LED	XD16		
FWHM / FWTM	30.0° / 52.0°		3.
Efficiency	83 %		60 ⁵
Peak intensity	2.8 cd/lm		
LEDs/each optic	1		
Light colour	White		45° 45°
Required componer			
			2400
			15 ⁵ 0 ⁶ 15 ⁵
		100	
LED	XQ-E HD		
FWHM / FWTM	29.0° / 51.0°		
Efficiency	84 %		
Peak intensity	3.2 cd/lm		
LEDs/each optic	1		
Light colour	White		
Required componer	ts:		
UMIL	EDS		50 ⁴
	LUXEON CZ		75.
FWHM / FWTM	28.0° / 47.0°		
Efficiency	89 %		60° 60°
Peak intensity	3.4 cd/lm		
LEDs/each optic	1		45*
Light colour	White		
Required componer	IS:		- 2100
			220
			30° 15° 0° 15° 30°





M	EDC	
UMIL	EDS	90 ⁴
LED	LUXEON TX	
FWHM / FWTM	30.0° / 53.0°	
Efficiency	86 %	60r 6
Peak intensity	2.8 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone	ents:	30 ⁴ 250 0 ⁴ 15 ⁴ 2
UMIL	.EDS	241337_0(446)=0(444000_0(45))
LED	LUXEON Z ES	
FWHM / FWTM	31.0° / 50.0°	70
Efficiency	88 %	
Peak intensity	3.2 cd/lm	
LEDs/each optic	1	
Light colour	White	<i>y</i>
Required compone	ents:	
ØNICHI/	<u> </u>	34 ¹ 25 ¹ 0 ¹ 25 ¹
LED	NVSxx19B/NVSxx19C	
FWHM / FWTM	29.0° / 55.0°	
Efficiency	85 %	
Peak intensity	2.7 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone		
<i></i>		
ØNICHI/		90 [*]
LED	NWSx229A	7
FWHM / FWTM	26.0° / 52.0°	
Efficiency	86 %	50° 500 5
Peak intensity	2.2 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone	nts:	260
		15° 36° 15°

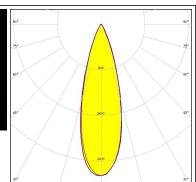


OSRAM

LED	0
FWHM / FWTM	30
Efficiency	85
Peak intensity	2.
LEDs/each optic	1
Light colour	W
Required compone	nts:







OSRAM Opto Semiconductor

LED	05	
FWHM / FWTM	29	
Efficiency	86	
Peak intensity	2.4	
LEDs/each optic	1	
Light colour	W	
Required components:		

OSLON Square PC 29.0° / 53.0° 86 % 2.4 cd/lm 1 White hts:

OSRAM Opto Semiconductore

LED	SFH 4170S		
FWHM / FWTM	28.0° / 50.0°		
Efficiency	%		
LEDs/each optic	1		
Light colour	IR		
Required components:			

OSRAM

LED	SFH 4180S
FWHM / FWTM	29.0° / 49.0°
Efficiency	%
LEDs/each optic	1
Light colour	IR
Required compon	ents:





OSRAM Opto Semiconductors			
LED	SFH 4715S		
FWHM / FWTM	28.0° / 56.0°		
Efficiency	%		
LEDs/each optic	1		
Light colour	IR		
Required compone	ents:		
OSRAM Opto Semiconductors			
LED	SFH 4725S		
FWHM / FWTM	27.0° / 54.0°		
Efficiency	%		
LEDs/each optic	1		
Light colour	IR		
Required compone	ents:		
SEOUL SEMICONDUCTOR			90° 90°
LED	Z5M3		
FWHM / FWTM	30.0° / 57.0°		75°
Efficiency	83 %		
Peak intensity	2.5 cd/lm		60 ⁵
LEDs/each optic	1		
Light colour	White		95' 43'
Required compone			100
			30° 30°
			15° 0° 15°





		90 ⁴ 90 ⁵
LED	XB-D	75
FWHM / FWTM	30.0° / 55.0°	
Efficiency	86 %	60°
Peak intensity	2.7 cd/lm	
LEDs/each optic	1	45 ⁴ 1600 45 ⁴
Light colour	White	
Required components:		
		2400
		30° 15° 0° 15° 30°
		90* 50*
LED	XE-G	
FWHM / FWTM	29.0° / 53.0°	75.
Efficiency	89 %	
Peak intensity	3.1 cd/lm	69°
LEDs/each optic	1	
Light colour	' White	45° 45°
Required components:	White	
Required components.		2430
		30° 3200 30°
		90°
		30*
LED	XQ-E HI	75°
FWHM / FWTM	29.0° / 51.0°	- 00-
Efficiency	90 %	60* 60*
Peak intensity	3.2 cd/lm	1500
LEDs/each optic	1	57° (57°
Light colour	White	
Required components:		2430
		3200
		36° 36° 36°
)S	90°
LED	LUXEON 2835 Line	
FWHM / FWTM	30.0° / 55.0°	75.
Efficiency	96 %	
Peak intensity	2.9 cd/lm	60° 60°
LEDs/each ontic		
LEDs/each optic	1	
Light colour		97
	1	97
Light colour	1	gr - 500
Light colour	1	, 200 ex.
Light colour	1	oʻ er



ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON C 30.0° / 52.0° 93 % 2.9 cd/lm 1 White	91 ⁴ 92 ⁴ 93 ⁴ 94 95 95 96 96 96 96 96 96 96 96 97 96 96 97 97 98 97 98 98 97 98 98 98 98 98 98 98 98 98 98 98 98 98
LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required components:	LUXEON IR Compact 29.0° / 51.0° 83 % 1 IR	
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON Rubix 28.0° / 53.0° 91 % 3.1 cd/lm 1 White	95° 95° 95° 95° 96° 96° 96° 96° 26.9 60° 26.9 60° 26.9 60°
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON Rubix 29.0° / 52.0° 91 % 3.1 cd/lm 1 Red	20 20 20 20 20 20 20 20 20 20





)S	30*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON Rubix 30.0° / 53.0° 91 % 3 cd/lm 1 Blue	
	05	50'
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON SunPlus 20 Line (150 deg) 30.0° / 53.0° 89 % 3 cd/lm 1 White	75
ΜΝΙCΗΙΛ		30*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	NFSx757G 29.0° / 53.0° 90 % 3 cd/lm 1 White	75 64 67 200 200 200 200 200 200 200 200 200 20
OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Duris S5 (2 chip) 29.0° / 54.0° 92 % 3 cd/lm 1 White	





OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	OSCONIQ P 3030 26.0° / 50.0 + 52.0° 90 % 3.6 cd/lm 1 Blue	5° 75 60 60 60 60 60 60 60 60 60 60 60 60 60
		36° 35° 35°
OSRAM Opto Semiconductors		90* 90*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	OSLON Black Flat (LUW HWQP) 28.0° / 49.0° 91 % 3.5 cd/lm 1 White	57 60 64 55 50 50 50 50 50 50 50 50 50
OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	OSLON Square CSSRM2/CSSRM3 30.0° / 56.0° 90 % 2.8 cd/lm 1 White	99 92 64 65 75 75 80 80 80 80 80 80 80 80 80 80 80 80 80
		200 200 200 200 200 200
OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	OSLON Square CSSRM2/CSSRM3 29.0° / 54.0° 90 % 2.9 cd/lm 1 White	30 30 30 30 30 30 30 30 30 30



OSRAM Opto Semiconductors		50°
LED	OSLON Square Flat	
FWHM / FWTM	29.0° / 52.0°	75.
Efficiency	89 %	
Peak intensity	3.1 cd/lm	60°
LEDs/each optic	1	1600
Light colour	White	524
Required components:		$\times \wedge \times \times$
		200
		30° 300 30°
		125 ⁰ 0 ⁰ 15 ⁰
OSRAM Opto Semiconductors		90° 90°
LED	OSLON SSL 150	
FWHM / FWTM	29.0° / 54.0°	27
Efficiency	90 %	60* 60*
Peak intensity	3 cd/lm	$f \times / (\land \times)$
LEDs/each optic	1	169
Light colour	White	gy
Required components:		\times / \times
		2430
		\times / \vee / \times
		30° 35° 35° 3°
OSRAM		
OSRAM Opto Semiconductors		90* 90*
Opto Semiconductors	OSLON SSL 80	35 37 38 39
Opto Semiconductors LED FWHM / FWTM	29.0° / 53.0°	
Opto Semiconductors LED FWHM / FWTM Efficiency	29.0° / 53.0° 89 %	77
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	29.0° / 53.0° 89 % 3 cd/lm	77
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	29.0° / 53.0° 89 % 3 cd/lm 1	73°
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	29.0° / 53.0° 89 % 3 cd/lm	50 50 75 75 75
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	29.0° / 53.0° 89 % 3 cd/lm 1	gr
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	29.0° / 53.0° 89 % 3 cd/lm 1	50 50 75 75 75
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	29.0° / 53.0° 89 % 3 cd/lm 1	57 00 07 07 07 07 07 07 07 07 07 07 07 07
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	29.0° / 53.0° 89 % 3 cd/lm 1	gr
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	29.0° / 53.0° 89 % 3 cd/lm 1	75 60 61 61 61 61 61 61 61 61 61 61 61 61 61
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	29.0° / 53.0° 89 % 3 cd/lm 1	25 69 69 69 150 200 200 200 200 200 200 200 2
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	29.0° / 53.0° 89 % 3 cd/lm 1 White	25 69 69 69 150 200 200 200 200 200 200 200 2
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	29.0° / 53.0° 89 % 3 cd/lm 1 White SFH 4715S	30, 30,
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM	29.0° / 53.0° 89 % 3 cd/lm 1 White SFH 4715S 28.0° / 51.0°	22. 23. 20. 20. 20. 20. 20. 20. 20. 20
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency	29.0° / 53.0° 89 % 3 cd/lm 1 White SFH 4715S 28.0° / 51.0° 90 %	22. 23. 20. 20. 20. 20. 20. 20. 20. 20
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic	29.0° / 53.0° 89 % 3 cd/lm 1 White SFH 4715S 28.0° / 51.0° 90 % 1	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour	29.0° / 53.0° 89 % 3 cd/lm 1 White SFH 4715S 28.0° / 51.0° 90 %	gr 100 gr <
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic	29.0° / 53.0° 89 % 3 cd/lm 1 White SFH 4715S 28.0° / 51.0° 90 % 1	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour	29.0° / 53.0° 89 % 3 cd/lm 1 White SFH 4715S 28.0° / 51.0° 90 % 1	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour	29.0° / 53.0° 89 % 3 cd/lm 1 White SFH 4715S 28.0° / 51.0° 90 % 1	



OSRAM		
Opto Semiconductors		
LED	SFH 4770S	
FWHM / FWTM	27.0° / 51.0°	
Efficiency	85 %	
LEDs/each optic	1	
Light colour	IR	
Required components:		
OSRAM Opto Semiconductors		90* 91*
LED	Synios P2720 1 mm	
FWHM / FWTM	27.0° / 50.0°	23. 20.
Efficiency	91 %	internet in the second se
Peak intensity	3.6 cd/lm	
LEDs/each optic	1	
Light colour	White	g
Required components:		2400
		300 300
		159 00 159
OSRAM Opto Semiconductors		90° 90°
LED	Synios P2720 1/2 mm	
FWHM / FWTM	29.0° / 51.0°	23.
Efficiency	93 %	
Peak intensity	3.4 cd/lm	
LEDs/each optic	1	
Light colour	White	e.
Required components:		2400
		30* 31*
OSRAM		15 ⁵ 0 ⁶ 15 ⁵
Opto Semiconductors		90* 90*
LED	Synios P2720 1/4 mm	75'
FWHM / FWTM	28.0° / 50.0°	
Efficiency	91 %	60°
Peak intensity	3.1 cd/lm	1000
LEDs/each optic	1	
Light colour	White	er et
Demoised encoderates		
Required components:		200
Requirea components:		200
Required components:		200
Required components:		200





SAMSU	NG	93 ⁴ 95 ⁴
LED	LH181B	87
FWHM / FWTM	29.0° / 53.5°	$ \land \land$
Efficiency	90 %	60°
Peak intensity	3 cd/lm	$(X \land X)$
LEDs/each optic	1	
Light colour	White	
Required component	s:	200
		30 ⁴ 33 ⁰ 33 ⁰ 35 ⁴