

# ANGELA-M-B

~30° medium beam compatible with BJB connectors

### **TECHNICAL SPECIFICATIONS:**

Dimensions	Ø 119.5 mm
Height	74.5 mm
Fastening	socket
ROHS compliant	yes 🛈



## **MATERIAL SPECIFICATIONS:**

Component	Туре	Material	Colour	Finish	Coating
ANGELA-M-B	Reflector	PC	metal		HMDS

### **ORDERING INFORMATION:**

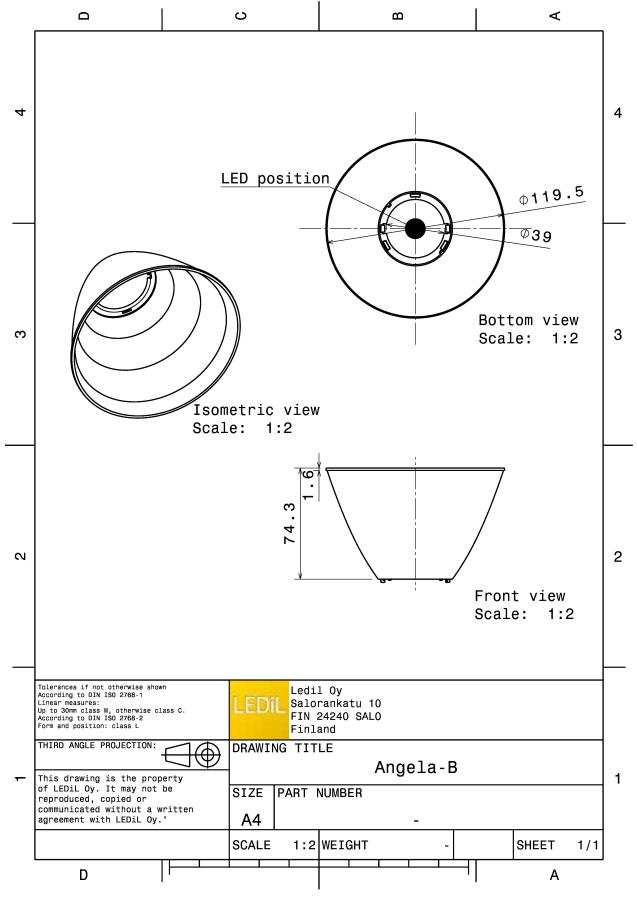
#### Component

- F13663\_ANGELA-M-B
- » Box size: 398 x 298 x 265 mm

Qty in box	MOQ	MPQ	Box weight (kg)
180	90	45	9.1

PRODUCT DATASHEET F13663\_ANGELA-M-B





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



bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone BJB: 47.319.204		
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F13671_ANGE- BJB: 47.319.222	RZ-LENS	
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone BJB: 47.319.222		
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F13671_ANGE- BJB: 47.319.227	RZ-LENS	



bridgelux LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer BJB: 47.319.235		
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen A.A.G. STUCCH		31,     32,     6,     15,0       61,     20,0     6,       13,     0,0     6,       14,     20,0     6,       15,0     0,0     6,       16,     0,0     6,       17,     10,0     6,       18,     10,0     10,0
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer F13671_ANGE-F A.A.G. STUCCH	Z-LENS	91 <sup>4</sup> 77 91 92 94 90 90 90 90 90 90 90 90 90 90 90 90 90
CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer BJB: 47.319.202	CLL03x/CLU03x 16.0° / 57.0° 83 % 3.8 cd/lm 1 White tts:	



CITIZE	Ν		90°
LED	CLL03x/CLU03x		
FWHM / FWTM	18.0° / 67.0°		
Efficiency	77 %		
Peak intensity	3 cd/lm		
LEDs/each optic	1		1600
Light colour	White		97
Required compone			
F13671_ANGE-I			2400
A.A.G. STUCCH			
			30- 30- 100
CITIZE	N		90 <sup>9</sup>
LED	CLL03x/CLU03x		
FWHM / FWTM	16.0° / 61.0°		75
Efficiency	83 %		
Peak intensity	3.6 cd/lm		
LEDs/each optic	1		
Light colour	White		
Required compone			
A.A.G. STUCCH			
			3230
			30 15° 4850 15°
CITIZE	Ν		90*
			90 <sup>4</sup>
LED	CLL04x/CLU04x		29*
LED FWHM / FWTM	CLL04x/CLU04x 22.0° / 70.0°		<u>12</u> No.
LED FWHM / FWTM Efficiency	CLL04x/CLU04x 22.0° / 70.0° 76 %		60 00 32 24
LED FWHM / FWTM Efficiency Peak intensity	CLL04x/CLU04x 22.0° / 70.0°		00 22 25 25
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CLL04x/CLU04x 22.0° / 70.0° 76 % 2.3 cd/lm		2. 62. 32. 23.
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CLL04x/CLU04x 22.0° / 70.0° 76 % 2.3 cd/lm 1 White		97 97 99 <sup>4</sup> 900
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CLL04x/CLU04x 22.0° / 70.0° 76 % 2.3 cd/lm 1 White ints:		5. 6. 90 90 90
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CLL04x/CLU04x 22.0° / 70.0° 76 % 2.3 cd/lm 1 White ints: RZ-LENS		27 64 90 90
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F13671_ANGE-I	CLL04x/CLU04x 22.0° / 70.0° 76 % 2.3 cd/lm 1 White ints: RZ-LENS		2 <sup>1</sup> 2 <sup>1</sup> 2 <sup>1</sup> 2 <sup>1</sup> 2 <sup>1</sup> 2 <sup>1</sup> 2 <sup>1</sup> 2 <sup>1</sup>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F13671_ANGE-I A.A.G. STUCCH	CLL04x/CLU04x 22.0° / 70.0° 76 % 2.3 cd/lm 1 White Ints: RZ-LENS II: 8102-G2		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F13671_ANGE-I A.A.G. STUCCH	CLL04x/CLU04x 22.0° / 70.0° 76 % 2.3 cd/lm 1 White II: 8102-G2 W		250 - 25 - 25 - 25 - 25 - 25
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F13671_ANGE-I A.A.G. STUCCH	CLL04x/CLU04x 22.0° / 70.0° 76 % 2.3 cd/lm 1 White Ints: RZ-LENS II: 8102-G2		250 - 25 - 25 - 25 - 25 - 25
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F13671_ANGE-I A.A.G. STUCCH <b>CITTIZE</b> LED FWHM / FWTM	CLL04x/CLU04x 22.0° / 70.0° 76 % 2.3 cd/lm 1 White Ints: RZ-LENS II: 8102-G2 N CLL04x/CLU04x 21.0° / 69.0°		250 - 25 - 25 - 25 - 25 - 25
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F13671_ANGE-I A.A.G. STUCCH <b>CITTIZE</b> LED FWHM / FWTM Efficiency	CLL04x/CLU04x 22.0° / 70.0° 76 % 2.3 cd/lm 1 White mts: RZ-LENS II: 8102-G2 N CLL04x/CLU04x 21.0° / 69.0° 81 %		25 <sup>4</sup> 25 <sup>4</sup> 25 <sup>4</sup> 25 <sup>4</sup>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F13671_ANGE-I A.A.G. STUCCH <b>CITTIZE</b> LED FWHM / FWTM Efficiency Peak intensity	CLL04x/CLU04x 22.0° / 70.0° 76 % 2.3 cd/lm 1 White Ints: RZ-LENS H: 8102-G2 N CLL04x/CLU04x 21.0° / 69.0° 81 % 2.7 cd/lm		25 <sup>4</sup> 25 <sup>4</sup> 25 <sup>4</sup> 25 <sup>4</sup>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F13671_ANGE-I A.A.G. STUCCH <b>CITTIZE</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	CLL04x/CLU04x 22.0° / 70.0° 76 % 2.3 cd/lm 1 White Ints: RZ-LENS H: 8102-G2 N CLL04x/CLU04x 21.0° / 69.0° 81 % 2.7 cd/lm 1		25 <sup>4</sup> 25 <sup>4</sup> 25 <sup>4</sup> 25 <sup>4</sup>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F13671_ANGE-I A.A.G. STUCCH <b>CITTIZE</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CLL04x/CLU04x 22.0° / 70.0° 76 % 2.3 cd/lm 1 White Ints: RZ-LENS H: 8102-G2 N CLL04x/CLU04x 21.0° / 69.0° 81 % 2.7 cd/lm 1 White		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F13671_ANGE-I A.A.G. STUCCH <b>CITTIZE</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CLL04x/CLU04x 22.0° / 70.0° 76 % 2.3 cd/lm 1 White ints: RZ-LENS H: 8102-G2 N CLL04x/CLU04x 21.0° / 69.0° 81 % 2.7 cd/lm 1 White ints:		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F13671_ANGE-I A.A.G. STUCCH <b>CITTIZE</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	CLL04x/CLU04x 22.0° / 70.0° 76 % 2.3 cd/lm 1 White ints: RZ-LENS H: 8102-G2 N CLL04x/CLU04x 21.0° / 69.0° 81 % 2.7 cd/lm 1 White ints:		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F13671_ANGE-I A.A.G. STUCCH CITIZEE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	CLL04x/CLU04x 22.0° / 70.0° 76 % 2.3 cd/lm 1 White ints: RZ-LENS H: 8102-G2 N CLL04x/CLU04x 21.0° / 69.0° 81 % 2.7 cd/lm 1 White ints:		



CITIZE	N	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone BJB: 47.319.203	CLL04x/CLU04x 21.0° / 62.0° 81 % 2.7 cd/lm 1 White nts:	
CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone BJB: 47.319.202	CLU720/721 14.0° / 50.0° 82 % 4.2 cd/lm 1 White nts:	
CITTIZE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone A.A.G. STUCCH	CLU720/721 14.0° / 53.0° 83 % 4 cd/lm 1 White nts:	
CREE (LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone A.A.G. STUCCH	CXA/B 25xx 18.0° / 67.0° 82 % 3.2 cd/lm 1 White nts:	



CREE\$LED         LED       CXA/B 25xx         FWHM / FWTM       21.0° / 69.0°         Efficiency       76 %         Peak intensity       2.4 cd/m         LEDs/each optic       1         Light colour       White         Required components:       F13671_ANGE-RZ-LENS         BJB: 47.319.2141	
FWHM / FWTM       21.0° / 69.0°         Efficiency       76 %         Peak intensity       2.4 cd/lm         LEDs/each optic       1         Light colour       White         Required components:       F13671_ANGE-RZ-LENS         BJB: 47.319.2141       Image: Component intensity         CREE       CXA/B 25xx         FWHM / FWTM       20.0° / 68.0°         Efficiency       79 %         Peak intensity       2.8 cd/lm         LEDs/each optic       1         Light colour       White         Required components:       BJB: 47.319.2141	
Peak intensity 2.4 cd/lm LEDs/each optic 1 Light colour White Required components: F13671_ANGE-RZ-LENS BJB: 47.319.2141 CREE CLED LED CXA/B 25xx FWHM / FWTM 20.0° / 68.0° Efficiency 79 % Peak intensity 2.8 cd/lm LEDs/each optic 1 Light colour White Required components: BJB: 47.319.2141	
LEDs/each optic 1 Light colour White Required components: F13671_ANGE-RZ-LENS BJB: 47.319.2141 CREE CLED LED CXA/B 25xx FWHM / FWTM 20.0° / 68.0° Efficiency 79 % Peak intensity 2.8 cd/m LEDs/each optic 1 Light colour White Required components: BJB: 47.319.2141	
Light colour White Required components: F13671_ANGE-RZ-LENS BJB: 47.319.2141 CREE CLED LED CXA/B 25xx FWHM / FWTM 20.0° / 68.0° Efficiency 79 % Peak intensity 2.8 cd/lm LEDs/each optic 1 Light colour White Required components: BJB: 47.319.2141	
Required components: F13671_ANGE-RZ-LENS BJB: 47.319.2141 CREE © LED LED CXA/B 25xx FWHM / FWTM 20.0° / 68.0° Efficiency 79 % Peak intensity 2.8 cd/lm LEDS/each optic 1 Light colour White Required components: BJB: 47.319.2141	
F13671_ANGE-RZ-LENS BJB: 47.319.2141	25°
Image: Creating of the second seco	15° X
LED CXA/B 25xx FWHM / FWTM 20.0° / 68.0° Efficiency 79 % Peak intensity 2.8 cd/lm LEDs/each optic 1 Light colour White Required components: BJB: 47.319.2141	
LED CXA/B 25xx FWHM / FWTM 20.0° / 68.0° Efficiency 79 % Peak intensity 2.8 cd/lm LEDs/each optic 1 Light colour White Required components: BJB: 47.319.2141	
FWHM / FWTM     20.0° / 68.0°       Efficiency     79 %       Peak intensity     2.8 cd/lm       LEDs/each optic     1       Light colour     White       Required components:       BJB: 47.319.2141	
Efficiency 79 % Peak intensity 2.8 cd/lm LEDs/each optic 1 Light colour White Required components: BJB: 47.319.2141	
Peak intensity 2.8 cd/lm LEDs/each optic 1 Light colour White Required components: BJB: 47.319.2141	e e
LEDs/each optic 1 Light colour White Required components: BJB: 47.319.2141	e
Light colour White Required components: BJB: 47.319.2141	
Required components: BJB: 47.319.2141	
BJB: 47.319.2141	H
200	H
	$l \rightarrow l$
	15° 30
	90
LED CXA/B 30xx	
FWHM / FWTM 21.0° / 68.0°	
Efficiency 80 %	$\langle \langle \rangle \rangle_{sc}$
Peak intensity 2.7 cd/lm	
LEDs/each optic 1	XX
Light colour White	T \ *
Required components:	
A.A.G. STUCCHI: 8404-G2	L
30 <sup>4</sup> 135 <sup>4</sup> 0 <sup>4</sup>	15°
LUMILEDS	90
LED LUXEON CoB 1204/1205	Lt.
FWHM / FWTM 16.0° / 56.0°	
Efficiency 82 %	
Peak intensity 3.8 cd/lm	KX 1
LEDs/each optic 1	$T \setminus X$
Light colour White	
Required components:	T V
A.A.G. STUCCHI: 8301-G2	
	$  \rangle \times$



🥙 LUMIL	EDS	90*
LED	LUXEON CoB 1208	
FWHM / FWTM	19.0° / 69.0°	
Efficiency	77 %	800
Peak intensity	2.7 cd/lm	$  \Gamma \times / /     \setminus \times \cap$
LEDs/each optic	1	
Light colour	White	95° - 1630 - 63°
Required componer	nts:	
F13671_ANGE-F	RZ-LENS	
A.A.G. STUCCH	l: 8301-G2	2400
		30° 25° 0° 35°
UMIL	EDS	90 <sup>+</sup> 90 <sup>+</sup>
LED	LUXEON CoB 1208	
FWHM / FWTM	17.0° / 64.0°	
Efficiency	83 %	605 60°
Peak intensity	3.5 cd/lm	1500
LEDs/each optic	1	
Light colour	White	er a
Required componer	nts:	
A.A.G. STUCCH	l: 8301-G2	X   X
		220
		36* 36*
		15° 0° 15°
	EDS	90 <sup>4</sup> 90 <sup>4</sup> 90 <sup>4</sup>
	EDS LUXEON CoB 1211	
		<u>35</u> , <u>6</u> , <u>35</u> , <u>8</u>
LED	LUXEON CoB 1211	
LED FWHM / FWTM	LUXEON CoB 1211 19.0° / 67.0°	
LED FWHM / FWTM Efficiency	LUXEON CoB 1211 19.0° / 67.0° 80 % 3 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON CoB 1211 19.0° / 67.0° 80 % 3 cd/lm 1 White	gy
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	LUXEON CoB 1211 19.0° / 67.0° 80 % 3 cd/lm 1 White hts:	gy
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON CoB 1211 19.0° / 67.0° 80 % 3 cd/lm 1 White hts:	gy
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	LUXEON CoB 1211 19.0° / 67.0° 80 % 3 cd/lm 1 White hts:	27 64 97 97 150 150
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	LUXEON CoB 1211 19.0° / 67.0° 80 % 3 cd/lm 1 White hts:	27 64 97 97 150 150
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	LUXEON CoB 1211 19.0° / 67.0° 80 % 3 cd/lm 1 White hts: 0	27 60 60 60 60 60 60 60 60 60 60 60 60 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen BJB: 47.319.203	LUXEON CoB 1211 19.0° / 67.0° 80 % 3 cd/lm 1 White hts: 0	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen BJB: 47.319.203	LUXEON CoB 1211 19.0° / 67.0° 80 % 3 cd/lm 1 White hts: 0	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen BJB: 47.319.203	LUXEON CoB 1211 19.0° / 67.0° 80 % 3 cd/lm 1 White hts: 0 EDS LUXEON CoB 1211	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen BJB: 47.319.203	LUXEON CoB 1211 19.0° / 67.0° 80 % 3 cd/lm 1 White hts: 0 EDS LUXEON CoB 1211 19.0° / 67.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen BJB: 47.319.203	LUXEON CoB 1211 19.0° / 67.0° 80 % 3 cd/lm 1 White hts: 0 EDS LUXEON CoB 1211 19.0° / 67.0° 81 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen BJB: 47.319.203	LUXEON CoB 1211 19.0° / 67.0° 80 % 3 cd/lm 1 White hts: 0 EDS LUXEON CoB 1211 19.0° / 67.0° 81 % 3.1 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen BJB: 47.319.203	LUXEON CoB 1211 19.0° / 67.0° 80 % 3 cd/lm 1 White hts: 0 EDS LUXEON CoB 1211 19.0° / 67.0° 81 % 3.1 cd/lm 1 White hts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen BJB: 47.319.203	LUXEON CoB 1211 19.0° / 67.0° 80 % 3 cd/lm 1 White hts: 0 EDS LUXEON CoB 1211 19.0° / 67.0° 81 % 3.1 cd/lm 1 White hts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen BJB: 47.319.203	LUXEON CoB 1211 19.0° / 67.0° 80 % 3 cd/lm 1 White hts: 0 EDS LUXEON CoB 1211 19.0° / 67.0° 81 % 3.1 cd/lm 1 White hts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen BJB: 47.319.203	LUXEON CoB 1211 19.0° / 67.0° 80 % 3 cd/lm 1 White hts: 0 EDS LUXEON CoB 1211 19.0° / 67.0° 81 % 3.1 cd/lm 1 White hts:	



	EDC	
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone BJB: 47.319.203	LUXEON CoB 1216/1812 22.0° / 69.0° 79 % 2.5 cd/lm 1 White nts:	
	EDS	90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone F13671_ANGE-I BJB: 47.319.203	LUXEON CoB 1216/1812 24.0° / 70.0° 75 % 2.2 cd/lm 1 White nts: RZ-LENS	
	EDS	50*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone BJB: 47.319.207	LUXEON K12 17.0° / 65.0° 87 % 3.7 cd/lm 1 White nts: 0	
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone BJB: 47.319.207	LUXEON K16 17.0° / 67.0° 87 % 3.7 cd/lm 1 White nts:	



ELUM	INUS	30 <sup>4</sup> 30 <sup>5</sup>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone BJB: 47.319.202		
ELUM	INUS	50°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone BJB: 47.319.203		
OSRAM		
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone A.A.G. STUCCH		
OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone BJB: 47.319.202		



OSRAM Opto Semiconductors		25 <sup>4</sup>
LED	Soleriq S19	
FWHM / FWTM	17.0° / 65.0°	
Efficiency	83 %	
Peak intensity	3.4 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone		200
A.A.G. STUCCH		
		1200
		25 00 25°
OSRAM Opto Semiconductors		90 <sup>4</sup>
LED	Soleriq S19	
FWHM / FWTM	18.0° / 65.0°	
Efficiency	83 %	e e e
Peak intensity	3.4 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone	nts:	
BJB: 47.319.217	0	
		220
		20
<u> </u> <b> <b>     S</b>     M     S     I     </b>	ING	
LED FWHM / FWTM	LC016D / LC019D / LC026D / LC033D 18.0° / 68.0°	77
	78 %	
FTTICIODCV		60° 66
Efficiency Peak intensity		
Peak intensity	2.9 cd/lm	
Peak intensity LEDs/each optic	2.9 cd/lm 1	
Peak intensity LEDs/each optic Light colour	2.9 cd/lm 1 White	
Peak intensity LEDs/each optic	2.9 cd/lm 1 White nts:	
Peak intensity LEDs/each optic Light colour Required component	2.9 cd/lm 1 White nts: RZ-LENS	
Peak intensity LEDs/each optic Light colour Required compone F13671_ANGE-F	2.9 cd/lm 1 White nts: RZ-LENS	
Peak intensity LEDs/each optic Light colour Required componel F13671_ANGE-F BJB: 47.319.202	2.9 cd/lm 1 White nts: RZ-LENS 1	
Peak intensity LEDs/each optic Light colour Required componen F13671_ANGE-F BJB: 47.319.202	2.9 cd/lm 1 White nts: RZ-LENS 1	
Peak intensity LEDs/each optic Light colour Required componen F13671_ANGE-F BJB: 47.319.202	2.9 cd/lm 1 White nts: RZ-LENS 1 UNG LC016D / LC019D / LC026D / LC033D	
Peak intensity LEDs/each optic Light colour Required componen F13671_ANGE-F BJB: 47.319.202	2.9 cd/lm 1 White nts: RZ-LENS 1 UNG LC016D / LC019D / LC026D / LC033D 18.0° / 68.0°	
Peak intensity LEDs/each optic Light colour Required componen F13671_ANGE-F BJB: 47.319.202 SAMSL LED FWHM / FWTM Efficiency	2.9 cd/lm 1 White nts: RZ-LENS 1 <b>JNG</b> LC016D / LC019D / LC026D / LC033D 18.0° / 68.0° 78 %	
Peak intensity LEDs/each optic Light colour Required componen F13671_ANGE-F BJB: 47.319.202 SAMSL LED FWHM / FWTM Efficiency Peak intensity	2.9 cd/lm 1 White nts: RZ-LENS 1 <b>DNG</b> LC016D / LC019D / LC026D / LC033D 18.0° / 68.0° 78 % 2.9 cd/lm	
Peak intensity LEDs/each optic Light colour Required componen F13671_ANGE-F BJB: 47.319.202 SAMSL LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	2.9 cd/lm 1 White nts: RZ-LENS 1 <b>DNG</b> LC016D / LC019D / LC026D / LC033D 18.0° / 68.0° 78 % 2.9 cd/lm 1	
Peak intensity LEDs/each optic Light colour Required componen F13671_ANGE-F BJB: 47.319.202 SANNSL LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	2.9 cd/lm 1 White nts: RZ-LENS 1 <b>DNG</b> LC016D / LC019D / LC026D / LC033D 18.0° / 68.0° 78 % 2.9 cd/lm 1 White	
Peak intensity LEDs/each optic Light colour Required componen F13671_ANGE-f BJB: 47.319.202 SAMSL ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	2.9 cd/lm 1 White nts: RZ-LENS 1 <b>ING</b> LC016D / LC019D / LC026D / LC033D 18.0° / 68.0° 78 % 2.9 cd/lm 1 White nts:	
Peak intensity LEDs/each optic Light colour Required componen F13671_ANGE-F BJB: 47.319.202 SANSE ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen F13671_ANGE-F	2.9 cd/lm 1 White nts: RZ-LENS 1 <b>DNG</b> LC016D / LC019D / LC026D / LC033D 18.0° / 68.0° 78 % 2.9 cd/lm 1 White nts: RZ-LENS	
Peak intensity LEDs/each optic Light colour Required componen F13671_ANGE-f BJB: 47.319.202 SANSL LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	2.9 cd/lm 1 White nts: RZ-LENS 1 <b>DNG</b> LC016D / LC019D / LC026D / LC033D 18.0° / 68.0° 78 % 2.9 cd/lm 1 White nts: RZ-LENS	



<u> </u> <b> <b>     S</b>     M     S     I     </b>	ING	90 <sup>1</sup> 90 <sup>2</sup>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone BJB: 47.319.202	LC016D / LC019D / LC026D / LC033D 17.0° / 66.0° 81 % 3.4 cd/lm 1 White nts:	
SVWSI	ING	300 <u>200</u> <u>00 200</u> <u>80</u>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LC016D / LC019D / LC026D / LC033D 17.0° / 66.0° 81 % 3.4 cd/lm 1	
Light colour Required compone A.A.G. STUCCH		
		20 <sup>4</sup>
LED FWHM / FWTM Efficiency Peak intensity	ZC12/18 16.0° / 57.0° 82 % 3.8 cd/lm	
LEDs/each optic Light colour Required compone	1 White nts:	
A.A.G. STUCCH	ll: 8101-G2	94 <sup>6</sup> 20 400 20 90
		90 <sup>4</sup>
LED	ZC25/40/60	
FWHM / FWTM	23.0° / 68.0° 81 %	
Efficiency Peak intensity	2.7 cd/lm	
LEDs/each optic	1	
Light colour	White	g+
Required compone	nts:	
BJB: 47.319.203		200



SEOUL		90* 90*
	7005/40/00	
LED FWHM / FWTM	ZC25/40/60 21.0° / 68.0°	75
Efficiency Peak intensity	81 % 2.7 cd/lm	60° 60°
LEDs/each optic	1 White	57 1590 57°
Light colour Required compone		$\mathbf{K} \neq \mathbf{A} + \mathbf{A} + \mathbf{A} \neq \mathbf{A}$
A.A.G. STUCCH		
A.A.O. 010001	n. 0102-02	2430
		36° 15° 0° 15° 34°
SEOUL		90° 90°
	7025/40/60	
	ZC25/40/60 24.0° / 69.0°	73
FWHM / FWTM Efficiency	24.0° / 69.0° 77 %	
Peak intensity	2.4 cd/lm	60° 60°
-	1	
LEDs/each optic Light colour	White	45°
Required compone		1630
F13671_ANGE-		
BJB: 47.319.203		
000. 47.019.200		
		30° 2400 30°
		(15°) 0° 35°
SHA	RP E	90° 90° 90°
SHA		
LED	Mega Zenigata (GW6DME)	
LED FWHM / FWTM	Mega Zenigata (GW6DME) 17.0° / 61.0°	
LED FWHM / FWTM Efficiency	Mega Zenigata (GW6DME) 17.0° / 61.0° 84 %	50° 50° 70° 50°
LED FWHM / FWTM Efficiency Peak intensity	Mega Zenigata (GW6DME) 17.0° / 61.0° 84 % 3.7 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Mega Zenigata (GW6DME) 17.0° / 61.0° 84 % 3.7 cd/lm 1	5°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Mega Zenigata (GW6DME) 17.0° / 61.0° 84 % 3.7 cd/lm 1 White	50° 50° 70° 50°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Mega Zenigata (GW6DME) 17.0° / 61.0° 84 % 3.7 cd/lm 1 White nts:	5°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Mega Zenigata (GW6DME) 17.0° / 61.0° 84 % 3.7 cd/lm 1 White nts:	94° 94° 73° 000 72° 1600 60°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Mega Zenigata (GW6DME) 17.0° / 61.0° 84 % 3.7 cd/lm 1 White nts:	9° 9° 9° 7° 90° 8° 9° 8° 9° 500 8° 500 8° 500 8°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone BJB: 47.319.201	Mega Zenigata (GW6DME) 17.0° / 61.0° 84 % 3.7 cd/lm 1 White nts: 1	94° 94° 73° 000 72° 1600 60°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone BJB: 47.319.201	Mega Zenigata (GW6DME) 17.0° / 61.0° 84 % 3.7 cd/lm 1 White nts: 1	20 20 20 20 20 20 20 20 20 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone BJB: 47.319.201	Mega Zenigata (GW6DME) 17.0° / 61.0° 84 % 3.7 cd/lm 1 White nts: 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone BJB: 47.319.201	Mega Zenigata (GW6DME) 17.0° / 61.0° 84 % 3.7 cd/lm 1 White nts: 1 REP Mega Zenigata (GW6DME)	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone BJB: 47.319.201	Mega Zenigata (GW6DME) 17.0° / 61.0° 84 % 3.7 cd/lm 1 White nts: 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone BJB: 47.319.201	Mega Zenigata (GW6DME) 17.0° / 61.0° 84 % 3.7 cd/lm 1 White nts: 1 RPP Mega Zenigata (GW6DME) 17.0° / 63.0° 83 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone BJB: 47.319.201 SHA LED FWHM / FWTM Efficiency Peak intensity	Mega Zenigata (GW6DME) 17.0° / 61.0° 84 % 3.7 cd/lm 1 White nts: 1 Mega Zenigata (GW6DME) 17.0° / 63.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone BJB: 47.319.201 SHA LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Mega Zenigata (GW6DME) 17.0° / 61.0° 84 % 3.7 cd/lm 1 White nts: 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone BJB: 47.319.201 SHAA LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Mega Zenigata (GW6DME) 17.0° / 61.0° 84 % 3.7 cd/lm 1 White nts: 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone BJB: 47.319.201 SHAA LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Mega Zenigata (GW6DME) 17.0° / 61.0° 84 % 3.7 cd/lm 1 White nts: 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone BJB: 47.319.201 SHAA LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Mega Zenigata (GW6DME) 17.0° / 61.0° 84 % 3.7 cd/lm 1 White nts: 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone BJB: 47.319.201 SEHAA LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Mega Zenigata (GW6DME) 17.0° / 61.0° 84 % 3.7 cd/lm 1 White nts: 1	



TRIDON	JIC	90 <sup>3</sup>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	SLE G7 LES17 H 17.0° / 66.0° 80 % 3.3 cd/lm 1 White	
TRIDON	NIC .	90
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	SLE G7 LES21 H 20.0° / 68.0° 80 % 2.8 cd/lm 1 White	
XICATO	<b>`</b>	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone BJB: 47.319.202	XOB 14.5 mm 17.0° / 66.0° 82 % 3.4 cd/lm 1 White ents: 21	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone C15743_XTM-A	XTM - 19mm LES 19.0° / 68.0° 81 % 3.1 cd/lm 1 White ents:	



# PHOTOMETRIC DATA (SIMULATED):

CITIZEN		<u>50*</u> 55*
LED	CLU730/731	73'
FWHM / FWTM	16.0° / 26.0°	
Efficiency	91 %	
LEDs/each optic	1	
Light colour	White	67° 63°
Required components:		
BJB: 47.319.2030		6130
		300
0000414		157 0000 157
OSRAM Opto Semiconductors		90*
LED	Soleriq S15	75'
FWHM / FWTM	18.0° / 30.0°	
Efficiency	90 %	60 <sup>1</sup> 60 <sup>1</sup>
Peak intensity	6 cd/lm	
LEDs/each optic	1	3200
Light colour	White	97° (8°
Required components:		
BJB: 47.319.2021		4800
		30° (13° (64)0 (13° 30°
SAMSUN	IG	90° 90°
LED	LC040D / LC060D / LC080D	
FWHM / FWTM	23.0° / 45.0°	75
Efficiency	87 %	
Peak intensity	3.8 cd/lm	60 <sup>1</sup> 60 <sup>4</sup>
LEDs/each optic	1	
Light colour	White	ay. 2430
Required components:		
BJB: 47.319.2030		220
		$\times$ / $\vee$ $\times$
		30- 4000 30-
		12 <sup>3</sup> 0 <sup>6</sup> 12 <sup>3</sup>



#### **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:**

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