

# PRODUCT DATASHEET C13604\_STRADA-2X2-FN

# STRADA-2X2-FN

Narrow forward throw beam for area lighting. Excellent for lighting stadiums and airports from high masts.

## **TECHNICAL SPECIFICATIONS:**

Dimensions Height Fastening ROHS compliant 50.0 x 50.0 mm 10 mm glue, pin, screw yes ①



#### **MATERIAL SPECIFICATIONS:**

Component STRADA-2X2-FN

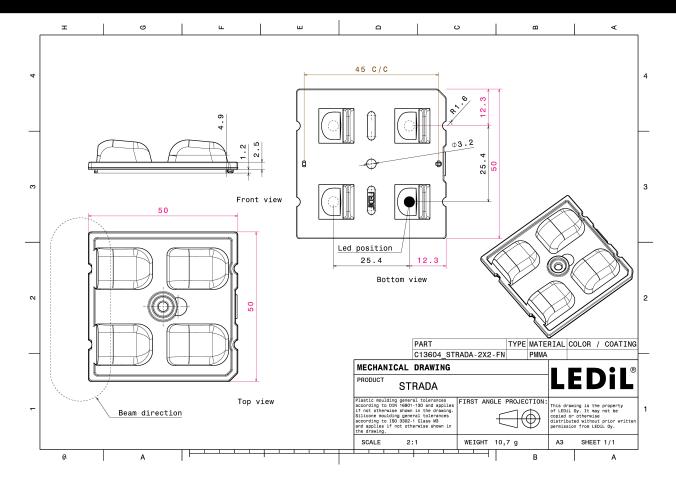
Туре
Multi-lens

Material	Colour	Finish
PMMA	clear	

#### **ORDERING INFORMATION:**

Component	Qty in box	MOQ	MPQ	Box weight (kg)
C13604_STRADA-2X2-FN	800	160	160	8.8
» Box size: 480 x 280 x 300 mm				

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



-		
		90*
LED	XD16	
FWHM / FWTM	Asymmetric	73°
Efficiency	94 %	400
Peak intensity	1.1 cd/lm	60 <sup>4</sup>
LEDs/each optic	4	00
Light colour	White	45* 45*
Required compone	nts:	
		1220
		$\times$ / $\times$
		1800
		/30*
		80°
LED	XD16	39 2
FWHM / FWTM	Asymmetric	730 730
Efficiency	94 %	400
Peak intensity	1.1 cd/lm	60* 60*
LEDs/each optic	1	
Light colour	White	45* 810 45*
Required compone		1000
		1200
		1430
		30° 15° 30°
		90° 90°
	XM-L	57
		97* 97* 90*
LED	XM-L	
LED FWHM / FWTM	XM-L Asymmetric	50° 50° 73° 60° 70° 70°
LED FWHM / FWTM Efficiency	XM-L Asymmetric 94 %	59° 59° 73° 600 70° 60° 60°
LED FWHM / FWTM Efficiency Peak intensity	XM-L Asymmetric 94 % 1.2 cd/lm	59° 59° 59° 59° 59° 59° 59° 59° 59° 59°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XM-L Asymmetric 94 % 1.2 cd/lm 1 White	60 <sup>4</sup> 000
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XM-L Asymmetric 94 % 1.2 cd/lm 1 White	60 <sup>4</sup> 000
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XM-L Asymmetric 94 % 1.2 cd/lm 1 White	60 <sup>4</sup> 000
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XM-L Asymmetric 94 % 1.2 cd/lm 1 White	6° 500 6°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XM-L Asymmetric 94 % 1.2 cd/lm 1 White nts:	53 <sup>1</sup> 80 67 100 160
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XM-L Asymmetric 94 % 1.2 cd/lm 1 White nts:	6° 500 6°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XM-L Asymmetric 94 % 1.2 cd/lm 1 White Ints:	6° 500 6°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XM-L Asymmetric 94 % 1.2 cd/lm 1 White nts:	6° 500 6°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone CREE LED EWHM / FWTM Efficiency	XM-L Asymmetric 94 % 1.2 cd/lm 1 White nts: XM-L2 Asymmetric 94 %	6° 500 6°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Required compone Equired compone	XM-L Asymmetric 94 % 1.2 cd/lm 1 White nts: XM-L2 Asymmetric 94 % 1.2 cd/lm	6° 500 6°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Required compone Efficiency Peak intensity LEDs/each optic	XM-L Asymmetric 94 % 1.2 cd/lm 1 White nts: XM-L2 Asymmetric 94 % 1.2 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone CREE Compone Efficiency Peak intensity LEDs/each optic Light colour	XM-L Asymmetric 94 % 1.2 cd/lm 1 White nts: XM-L2 Asymmetric 94 % 1.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Required compone Efficiency Peak intensity LEDs/each optic	XM-L Asymmetric 94 % 1.2 cd/lm 1 White nts: XM-L2 Asymmetric 94 % 1.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone CREE Compone Efficiency Peak intensity LEDs/each optic Light colour	XM-L Asymmetric 94 % 1.2 cd/lm 1 White nts: XM-L2 Asymmetric 94 % 1.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone CREE Compone Efficiency Peak intensity LEDs/each optic Light colour	XM-L Asymmetric 94 % 1.2 cd/lm 1 White nts: XM-L2 Asymmetric 94 % 1.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone CREE (LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XM-L Asymmetric 94 % 1.2 cd/lm 1 White nts: XM-L2 Asymmetric 94 % 1.2 cd/lm 1 White	



IED       XP-G3         FWHM / FWTM       Asymmetric         Efficiency       90 %         Peak intensity       1.1 cd/lm         LEDs/each optic       1         Light colour       White         Required components:       C17580_STRADA-2X2-SHD-WHT         CREECIED       Image: Component in the im	2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FWHM / FWTM       Asymmetric         Efficiency       90 %         Peak intensity       1.1 cd/lm         LEDs/each optic       1         Light colour       White         Required components:       C17580_STRADA-2X2-SHD-WHT         CREE\$LED       P	97. 64. 97.
Efficiency 90 % Peak intensity 1.1 cd/lm LEDs/each optic 1 Light colour White Required components: C17580_STRADA-2X2-SHD-WHT CCREECIED	694. 694. 304.
Efficiency 90 % Peak intensity 1.1 cd/lm LEDs/each optic 1 Light colour White Required components: C17580_STRADA-2X2-SHD-WHT CREE©LED	694. 
Peak intensity 1.1 cd/lm LEDs/each optic 1 Light colour White Required components: C17580_STRADA-2X2-SHD-WHT CREE©LED	
LEDs/each optic 1 Light colour White Required components: C17580_STRADA-2X2-SHD-WHT	30,
Light colour White Required components: C17580_STRADA-2X2-SHD-WHT CREE CLED	
Required components: C17580_STRADA-2X2-SHD-WHT	30*
C17580_STRADA-2X2-SHD-WHT	30*
	30*
	30*
	30*
	90*
FWHM / FWTM Asymmetric	-75*
Efficiency 80 %	$\sim$
Peak intensity 1.1 cd/lm	60*
LEDs/each optic 1	$\triangleleft$
Light colour White	
Required components:	
C17677_STRADA-2X2-SHD-BLK	$\prec$
	$\sim$
	X
30* 10 <sup>*</sup> 100 12*	30*
LED XP-G3	
FWHM / FWTM Asymmetric	75.
Efficiency 89 %	$\sim$
Peak intensity 1.1 cd/lm	604
LEDs/each optic 1	$\searrow$ /
	5
Required components:	45*
120 Internet components.	$\langle \rangle$
Protective plate, glass	$\times$
	$\sim$
have	30*
vete ho itee ***	
	90*
LED XP-G3	90*
LED XP-G3	90*
LED XP-G3 FWHM / FWTM Asymmetric	
LED XP-G3 FWHM / FWTM Asymmetric Efficiency 96 %	90 <sup>+</sup>
LED     XP-G3       FWHM / FWTM     Asymmetric       Efficiency     96 %       Peak intensity     1 cd/lm	99 <sup>+</sup>
LED     XP-G3       FWHM / FWTM     Asymmetric       Efficiency     96 %       Peak intensity     1 cd/lm       LEDs/each optic     1	80 <sup>+</sup>
LED XP-G3 FWHM / FWTM Asymmetric Efficiency 96 % Peak intensity 1 cd/lm LEDs/each optic 1 Light colour White Required components:	99
LEDXP-G3FWHM / FWTMAsymmetricEfficiency96 %Peak intensity1 cd/lmLEDs/each optic1	99
LED     XP-G3       FWHM / FWTM     Asymmetric       Efficiency     96 %       Peak intensity     1 cd/lm       LEDs/each optic     1       Light colour     White       Required components:	99 
LED     XP-G3       FWHM / FWTM     Asymmetric       Efficiency     96 %       Peak intensity     1 cd/lm       LEDs/each optic     1       Light colour     White       Required components:	6



LED	– XP-L HD	9
FWHM / FWTM	Asymmetric	759 200 78'
Efficiency	94 %	400
Peak intensity	1 cd/lm	50* 50
LEDs/each optic	1	
Light colour	White	45* 800
Required compone		1000
		1200
		1430
		(30* 15* 0° 15* 30*
		90° 99°
LED	XP-L HI	ZY P
FWHM / FWTM	Asymmetric	730 770
Efficiency	94 %	400
Peak intensity	1.1 cd/lm	50° 60°
LEDs/each optic	1	
Light colour	White	45* 810 45*
Required compone	nts:	1000
		1290
		30% 3400 30%
		15 <sup>3</sup> 0 <sup>9</sup> 15 <sup>4</sup>
		80°
	XP-L2	10 <sup>1</sup>
		70 70 70
LED	XP-L2	
LED FWHM / FWTM	XP-L2 Asymmetric	70 70 70
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XP-L2 Asymmetric 94 % 1 cd/lm 1	731
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XP-L2 Asymmetric 94 % 1 cd/lm 1 White	721
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XP-L2 Asymmetric 94 % 1 cd/lm 1 White	32°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XP-L2 Asymmetric 94 % 1 cd/lm 1 White	731
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XP-L2 Asymmetric 94 % 1 cd/lm 1 White	73 <sup>3</sup> 40 60 60 60 60 60 60 60 60 60 60 60 60 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XP-L2 Asymmetric 94 % 1 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen	XP-L2 Asymmetric 94 % 1 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	XP-L2 Asymmetric 94 % 1 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	XP-L2 Asymmetric 94 % 1 cd/lm 1 White Its:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	XP-L2 Asymmetric 94 % 1 cd/lm 1 White nts: EDS LUXEON 5050 Round LES Asymmetric	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Mequired component Efficiency	XP-L2 Asymmetric 94 % 1 cd/lm 1 White nts: EDS LUXEON 5050 Round LES Asymmetric 94 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Required component Efficiency Peak intensity	XP-L2 Asymmetric 94 % 1 cd/lm 1 White nts: EDS LUXEON 5050 Round LES Asymmetric 94 % 1.1 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Required component Efficiency Peak intensity LEDs/each optic	XP-L2 Asymmetric 94 % 1 cd/lm 1 White nts: EDS LUXEON 5050 Round LES Asymmetric 94 % 1.1 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Composition Required component Efficiency Peak intensity LEDs/each optic Light colour	XP-L2 Asymmetric 94 % 1 cd/lm 1 White nts: EDS LUXEON 5050 Round LES Asymmetric 94 % 1.1 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Required component Efficiency Peak intensity LEDs/each optic	XP-L2 Asymmetric 94 % 1 cd/lm 1 White nts: EDS LUXEON 5050 Round LES Asymmetric 94 % 1.1 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Composition Required component Efficiency Peak intensity LEDs/each optic Light colour	XP-L2 Asymmetric 94 % 1 cd/lm 1 White nts: EDS LUXEON 5050 Round LES Asymmetric 94 % 1.1 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Composition Required component Efficiency Peak intensity LEDs/each optic Light colour	XP-L2 Asymmetric 94 % 1 cd/lm 1 White nts: EDS LUXEON 5050 Round LES Asymmetric 94 % 1.1 cd/lm 1 White	



UMIL	EDS	30* 99*
LED	LUXEON MZ	19
FWHM / FWTM	Asymmetric	73%
Efficiency	94 %	400
Peak intensity	1.2 cd/lm	60* 60*
LEDs/each optic	1	
Light colour	White	45 <sup>+</sup> 65 <sup>+</sup>
Required componer	nts:	1200
		1600
•		15 <sup>5</sup> 0 <sup>6</sup> 15 <sup>6</sup>
UMIL	EDS	90° 99°
LED	LUXEON Q	29 2
FWHM / FWTM	Asymmetric	730 730
Efficiency	94 %	400
Peak intensity	1 cd/lm	60* 60*
LEDs/each optic	1	
Light colour	White	45* 800 45*
Required componer	nts:	1000
		1200
		30° 1400 30°
<i>(</i> )		135 <sup>3</sup> 0 <sup>3</sup> 10 <sup>4</sup>
UMIL	EDS	90* 90*
LED	LUXEON T	7/200
FWHM / FWTM	Asymmetric	729
Efficiency	94 %	
Efficiency Peak intensity	94 % 1.1 cd/lm	
Efficiency Peak intensity LEDs/each optic	94 % 1.1 cd/lm 1	
Efficiency Peak intensity LEDs/each optic Light colour	94 % 1.1 cd/lm 1 White	
Efficiency Peak intensity	94 % 1.1 cd/lm 1 White	
Efficiency Peak intensity LEDs/each optic Light colour	94 % 1.1 cd/lm 1 White	
Efficiency Peak intensity LEDs/each optic Light colour	94 % 1.1 cd/lm 1 White	
Efficiency Peak intensity LEDs/each optic Light colour	94 % 1.1 cd/lm 1 White	
Efficiency Peak intensity LEDs/each optic Light colour Required componer	94 % 1.1 cd/m 1 White hts:	
Efficiency Peak intensity LEDs/each optic Light colour Required componer	94 % 1.1 cd/lm 1 White hts: EDS	
Efficiency Peak intensity LEDs/each optic Light colour Required componer	94 % 1.1 cd/lm 1 White hts: EDS LUXEON TX	
Efficiency Peak intensity LEDs/each optic Light colour Required componer	94 % 1.1 cd/m 1 White hts: EDS LUXEON TX Asymmetric	20- 20- 20- 20- 20- 20- 20- 20-
Efficiency Peak intensity LEDs/each optic Light colour Required componer	94 % 1.1 cd/m 1 White hts: EDS LUXEON TX Asymmetric 94 %	
Efficiency Peak intensity LEDs/each optic Light colour Required componer <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b>	94 % 1.1 cd/m 1 White tts: EDS LUXEON TX Asymmetric 94 % 1.1 cd/m	
Efficiency Peak intensity LEDs/each optic Light colour Required componer <b>Composition</b> Required componer <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composit</b>	94 % 1.1 cd/m 1 White tts: EDS LUXEON TX Asymmetric 94 % 1.1 cd/m 1	
Efficiency Peak intensity LEDs/each optic Light colour Required componer <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b> <b>Composition</b>	94 % 1.1 cd/m 1 White tts: EDS LUXEON TX Asymmetric 94 % 1.1 cd/m 1 White	
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LUMILEDS       LED     LUXEON V       FWHM / FWTM     Asymmetric       Efficiency     94 %	
LED LUXEON V FWHM / FWTM Asymmetric	
FWHM / FWTM Asymmetric	90
	75
Peak intensity 1 cd/lm	60
LEDs/each optic 1	$\searrow$
Light colour White	
Required components:	*
30* 1500 15 <sup>2</sup> 0 <sup>3</sup>	15° 30
WST Your solutions	+1
	90
LED RecLED 122x50mm 1900lm 730 2x4 Opt G1	
FWHM / FWTM Asymmetric	X /
Efficiency 97 %	60
Peak intensity 1.4 cd/lm	$\searrow$
LEDs/each optic 1	
Light colour White	45
Required components:	
200	
30°	10* 30
LED NVSW219F	90
FWHM / FWTM Asymmetric	75
Efficiency 94 %	
Efficiency 94 %	
Peak intensity 1.1 cd/lm	~~~
Peak intensity 1.1 cd/lm LEDs/each optic 1	
Peak intensity     1.1 cd/lm       LEDs/each optic     1       Light colour     White	60
Peak intensity 1.1 cd/lm LEDs/each optic 1	6
Peak intensity     1.1 cd/lm       LEDs/each optic     1       Light colour     White       Required components:	e e
Peak intensity     1.1 cd/lm       LEDs/each optic     1       Light colour     White       Required components:	
Peak intensity     1.1 cd/lm       LEDs/each optic     1       Light colour     White       Required components:	67 12 <sup>1</sup> 30
Peak intensity 1.1 cd/lm LEDs/each optic 1 Light colour White Required components:	13 <sup>2</sup> 30
Peak intensity 1.1 cd/lm LEDs/each optic 1 Light colour White Required components:	67 15 <sup>1</sup> 20 15
Peak intensity 1.1 cd/lm LEDs/each optic 1 Light colour White Required components:	40 40 40 40 40 40 40 40 40 40 40 40 40 4
Peak intensity 1.1 cd/lm LEDs/each optic 1 Light colour White Required components:	
Peak intensity 1.1 cd/lm LEDs/each optic 1 Light colour White Required components:	
Peak intensity       1.1 cd/lm         LEDs/each optic       1         Light colour       White         Required components:       Image: Component set of the set	
Peak intensity       1.1 cd/m         LEDs/each optic       1         Light colour       White         Required components:       Image: Component of the second of t	
Peak intensity       1.1 cd/lm         LEDs/each optic       1         Light colour       White         Required components       Image: Component of the second of t	
Peak intensity       1.1 cd/lm         LEDs/each optic       1         Light colour       White         Required components:       Image: Component of the second of	
Peak intensity       1.1 cd/lm         LEDs/each optic       1         Light colour       White         Required components       Image: Component of the second of t	
Peak intensity 1.1 cd/m LEDs/each optic 1 Light colour White Required components:	



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ED FWHM / FWTM Efficiency	NVSW3x9A Asymmetric 94 %	95° - 26	
Peak intensity	1.1 cd/lm	-60 <sup>4</sup>	
LEDs/each optic	1		× + 00
Light colour	White		
Required componer			
		Nor	12 <sup>3</sup> 0 <sup>3</sup> 12 <sup>5</sup> 0 <sup>3</sup>
<b>ØNICHIA</b>		90*	80*
LED	NVSxE21A		
FWHM / FWTM	Asymmetric	.75°	775
Efficiency	94 %		
Peak intensity	1.5 cd/lm	,60°	
LEDs/each optic	1		
Light colour	White	45*	and the second s
Required componer	nts:		
			1200
		30*	1600 12 <sup>0</sup> 0 <sup>4</sup> 12 <sup>4</sup> 30 <sup>4</sup>
<b>MICHIA</b>		90*	90*
LED	NVSxx19B/NVSxx19C		24 2
	NV3XX19D/NV3XX19C		
EED FWHM / FWTM	Asymmetric	.75*	
		75°.	
FWHM / FWTM Efficiency	Asymmetric	75°. 60°	
FWHM / FWTM Efficiency	Asymmetric 94 %	• <del>در</del> ۲۵۶	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.1 cd/lm 1 White	۰۳۲ ۲۵۴ ۲۵۴	400
FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 94 % 1.1 cd/lm 1 White	،ور سر 10	00 60 60 87
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.1 cd/lm 1 White	75° 67°	100 60 60 60 72
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.1 cd/lm 1 White	73* 64*	00 00 1129
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.1 cd/lm 1 White	72* 64* 67	100
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	Asymmetric 94 % 1.1 cd/lm 1 White hts:	73* 64* 67	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	Asymmetric 94 % 1.1 cd/lm 1 White hts:	25" 64" 	100
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	Asymmetric 94 % 1.1 cd/lm 1 White hts: PL-BRICK HP 3800 2x8 SSG	25" 56" -0" -0" -0" -0" -0" -0" -0" -0" -0" -0	1000 300 1000 300 1000 300
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	Asymmetric 94 % 1.1 cd/lm 1 White hts: PL-BRICK HP 3800 2x8 SSG Asymmetric	25" 26" 20" 20" 20"	100 100 100 100 100 100 100 100 100 100
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer OSRAM LED FWHM / FWTM Efficiency	Asymmetric 94 % 1.1 cd/lm 1 White hts: PL-BRICK HP 3800 2x8 SSG Asymmetric 96 %	27" 64" 69 200 200 200 200 200 200 200 200 200 20	1000 300 1000 300 1000 300
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer <b>OSRAM</b> LED FWHM / FWTM Efficiency Peak intensity	Asymmetric 94 % 1.1 cd/lm 1 White hts: PL-BRICK HP 3800 2x8 SSG Asymmetric 96 % 1.3 cd/lm	25 26 26 26 20 20 20 20 20 20 20 20 20 20 20 20 20	1000 300 1000 300 1000 300
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer <b>OSRAM</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 94 % 1.1 cd/lm 1 White hts: PL-BRICK HP 3800 2x8 SSG Asymmetric 96 % 1.3 cd/lm 1	25 20 57 20 20 20 20 20 20 20 20 20 20 20 20 20	159
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer OSRAM LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.1 cd/lm 1 White hts: PL-BRICK HP 3800 2x8 SSG Asymmetric 96 % 1.3 cd/lm 1 White	25 20 5 20 20 20 20 20 20 20 20 20 20 20 20 20	159
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer <b>OSRAM</b> LED FWHM / FWTM Efficiency Peak intensity	Asymmetric 94 % 1.1 cd/lm 1 White hts: PL-BRICK HP 3800 2x8 SSG Asymmetric 96 % 1.3 cd/lm 1 White	25 65 	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer OSRAM LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.1 cd/lm 1 White hts: PL-BRICK HP 3800 2x8 SSG Asymmetric 96 % 1.3 cd/lm 1 White	25 64 - 97 - 97 - 97 - 97 - 97 - 97 - 97 - 9	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer OSRAM LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.1 cd/lm 1 White hts: PL-BRICK HP 3800 2x8 SSG Asymmetric 96 % 1.3 cd/lm 1 White	25 64 77 70 70 70 70 70 70 70 70 70 70 70 70	



OSRAM		
Opto Semiconductors		
LED	Duris S8	
FWHM / FWTM	Asymmetric	
Efficiency	%	
LEDs/each optic	1	
Light colour	White	
Required componer	11S:	
OSRAM Opto Semiconductors		90* 90*
LED	OSLON Square PC	77
FWHM / FWTM	Asymmetric	75*
Efficiency	94 %	400
Peak intensity	1.2 cd/lm	60 <sup>4</sup>
LEDs/each optic	1	
Light colour	White	45°
Required componer	nts:	$\times$
		1200
		30* 1550 30* 13 <sup>5</sup> 0 <sup>9</sup> 15*
PHILIP	S	90*
LED	Fortimo FastFlex LED 2x8 DA G4	
FWHM / FWTM	Asymmetric	73"
Efficiency	94 %	400
Peak intensity	1.2 cd/lm	164 100
LEDs/each optic	1	200
Light colour	White	451
Required componer		$\times$
		1200
		$\times$ / $\times$
		1600
		30° 15° 30°
PHILIP	S	
LED	Fortimo FastFlex LED 2x8 DA G4+	90° 90°
FWHM / FWTM	Asymmetric	75°
Efficiency	97 %	400
Peak intensity	97 % 1.1 cd/lm	.60 <sup>4</sup> 604
LEDs/each optic	1.1 cd/im 1	
LEDS/each optic	White	$ \ge 1 \times 1$
Required componer		der der
	lið.	1200
		$\times$
		1000
		30° 15° 305



DILLIP		
PHILIP	S	
LED	Fortimo FastFlex LED 2x8 DA G5	90° 90°
FWHM / FWTM	Asymmetric	73° 75°
Efficiency	97 %	400
Peak intensity	1.2 cd/lm	604 604
LEDs/each optic	1	
Light colour	White	45'
Required componer		
	ιυ.	1220
		$\times$
		1500
		30° 15° 30°
PHILIP	S	
		90* 90*
	Fortime FootFlow LED 200 DAY C4	730 700 700
LED FWHM / FWTM	Fortimo FastFlex LED 2x8 DAX G4 Asymmetric	
Efficiency	94 %	.50° 60°.
LEDs/each optic	1	500
Light colour	White	200
Required componer		61 61
	10.	2000
		1200
		30 <sup>4</sup> 13 <sup>5</sup> 0 <sup>6</sup> 15 <sup>5</sup> 30 <sup>4</sup>
SAMSU		
		90* 90*
LED	HiLOM RC12 Z (LH181B)	
		730 732
FWHM / FWTM	Asymmetric	73* 400 70*
Efficiency	Asymmetric 98 %	26 00 752 60 69
Efficiency Peak intensity	Asymmetric 98 % 1.4 cd/lm	2% 000 7% 600 600 600
Efficiency Peak intensity LEDs/each optic	Asymmetric 98 % 1.4 cd/lm 1	2 <sup>34</sup> 000 001
Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 98 % 1.4 cd/lm 1 White	5° - 129 - 6°
Efficiency Peak intensity LEDs/each optic	Asymmetric 98 % 1.4 cd/lm 1 White	204
Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 98 % 1.4 cd/lm 1 White	201 - 202 - 70 201 - 202 - 20
Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 98 % 1.4 cd/lm 1 White	23 - 60 60 60 60 109 60 60 60 60 60 60 60 60 60 60
Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 98 % 1.4 cd/lm 1 White	20- 12- 12- 12- 12- 12- 12- 12- 12
Efficiency Peak intensity LEDs/each optic Light colour Required componer	Asymmetric 98 % 1.4 cd/lm 1 White hts:	192
Efficiency Peak intensity LEDs/each optic Light colour Required componer	Asymmetric 98 % 1.4 cd/lm 1 White Its:	192
Efficiency Peak intensity LEDs/each optic Light colour Required componer	Asymmetric 98 % 1.4 cd/lm 1 White its: NG HILOM RH12 Z (LH351C)	30° 30° 30° 30° 30° 30° 30° 30° 30° 30°
Efficiency Peak intensity LEDs/each optic Light colour Required componer SAMSU LED FWHM / FWTM	Asymmetric 98 % 1.4 cd/lm 1 White Its: NG HiLOM RH12 Z (LH351C) Asymmetric	20 <sup>3</sup> 10 <sup>3</sup> 20 <sup>3</sup> 10 <sup>4</sup> 20 <sup>4</sup>
Efficiency Peak intensity LEDs/each optic Light colour Required componer <b>SANNSU</b> LED FWHM / FWTM Efficiency	Asymmetric 98 % 1.4 cd/lm 1 White hts: NG HiLOM RH12 Z (LH351C) Asymmetric 97 %	30° 30° 30° 30° 30° 30° 30° 30° 30° 30°
Efficiency Peak intensity LEDs/each optic Light colour Required componer <b>SAMSU</b> LED FWHM / FWTM Efficiency Peak intensity	Asymmetric 98 % 1.4 cd/lm 1 White tts: NG HiLOM RH12 Z (LH351C) Asymmetric 97 % 1.3 cd/lm	1000 1000 1000 1000 1000 1000 1000 100
Efficiency Peak intensity LEDs/each optic Light colour Required componen SANSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 98 % 1.4 cd/lm 1 White tts: NCC HILOM RH12 Z (LH351C) Asymmetric 97 % 1.3 cd/lm 1	
Efficiency Peak intensity LEDs/each optic Light colour Required componen SALMSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 98 % 1.4 cd/lm 1 White tts: NCC HILOM RH12 Z (LH351C) Asymmetric 97 % 1.3 cd/lm 1 White	30° 30° 30° 30° 30° 30° 30° 30° 30° 30°
Efficiency Peak intensity LEDs/each optic Light colour Required componer <b>SANNSU</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 98 % 1.4 cd/lm 1 White tts: NCC HILOM RH12 Z (LH351C) Asymmetric 97 % 1.3 cd/lm 1 White	
Efficiency Peak intensity LEDs/each optic Light colour Required componen SALMSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 98 % 1.4 cd/lm 1 White tts: NCC HILOM RH12 Z (LH351C) Asymmetric 97 % 1.3 cd/lm 1 White	
Efficiency Peak intensity LEDs/each optic Light colour Required componen SALMSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 98 % 1.4 cd/lm 1 White tts: NCC HILOM RH12 Z (LH351C) Asymmetric 97 % 1.3 cd/lm 1 White	



SAMSU	ING	
	HILOM RH16 (LH351C)	90* 90'
LED FWHM / FWTM	Asymmetric	75° 75
Efficiency	94 %	400
Peak intensity	1.3 cd/lm	eeee
LEDs/each optic	1	800
Light colour	White	
Required componer		45° 41
required componer		$\times$
		1690
		$\times$ / $\times$ ×
		30* 13 <sup>5</sup> 30
<u> SAMS</u>	ING	90*
LED	HILOM RM12 Z (LH502C)	
FWHM / FWTM	Asymmetric	55
Efficiency	97 %	
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	80
Light colour	White	45'
Required componer	ts:	1220
		$\times$
		1600
		$\times$ / $\setminus$ $\lambda$
		30* 13 <sup>5</sup> 0 <sup>6</sup> 13 <sup>5</sup> 30 <sup>4</sup>
SAMSU	ING	90* 90*
LED	HiLOM RM16 Z (LH502C)	9
FWHM / FWTM	Asymmetric	736 75
Efficiency	98 %	
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	White	45* 45
Required componer		
1	ts:	1200
1	ts:	
,	ts:	129
	ts:	100 100 100
	ING	
SAMSU		100 100 100 100 100 100 100 100 100
SAMSU LED FWHM / FWTM	ING	
<b>SAMSU</b> LED FWHM / FWTM Efficiency	HILOM RM8 Z (LH502C) Asymmetric 98 %	
<b>SAMSU</b> LED FWHM / FWTM Efficiency Peak intensity	HILOM RM8 Z (LH502C) Asymmetric	
SAMSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	HILOM RM8 Z (LH502C) Asymmetric 98 % 1.2 cd/lm 1	
SAMSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	HILOM RM8 Z (LH502C) Asymmetric 98 % 1.2 cd/lm 1 White	20 <sup>2</sup> 0 <sup>2</sup> 12 <sup>2</sup>
<b>SAMSU</b> LED FWHM / FWTM Efficiency	HILOM RM8 Z (LH502C) Asymmetric 98 % 1.2 cd/lm 1 White	20 <sup>4</sup> 00 10 <sup>4</sup>
SAMSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	HILOM RM8 Z (LH502C) Asymmetric 98 % 1.2 cd/lm 1 White	20 <sup>4</sup> 00 10 <sup>4</sup>
SAMSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	HILOM RM8 Z (LH502C) Asymmetric 98 % 1.2 cd/lm 1 White	20 <sup>2</sup> 0 <sup>2</sup> 12 <sup>2</sup>



СЛЛАСІ		THAN VHI
<u> </u> <b>S</b> ΛΜSI	JNG	30* 90'
LED	LH351B	
FWHM / FWTM	Asymmetric	
Efficiency	90 %	50* 400 50*
Peak intensity	1 cd/lm	
LEDs/each optic	1	
Light colour	White	- 67* 000 67*
Required compone	nts.	2000
Protective	plate, glass	1200
		30° 13 <sup>3</sup> 0° 15° 30°
SAMSI	ING	THY PHI
LED	LH351B	90° 80°
ED FWHM / FWTM	Asymmetric	73*
Efficiency	95 %	40
Peak intensity	1.1 cd/lm	50 <sup>4</sup> 500
LEDs/each optic	1	
Light colour	White	45, 300
Required compone	nts:	1000
		1200
		1000
		13 <sup>5</sup> 0° 15 <sup>5</sup>
		99* 99*
Elektronik GmbH	LED-Pa-L15c2W11c2-xxx-C050-01	B1. B1.
LED	LED-Pa-L15c2W11c2-xxx-C050-01 Asymmetric	124 264 264
LED FWHM / FWTM		
LED FWHM / FWTM Efficiency Peak intensity	Asymmetric	91°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 97 % 1.2 cd/Im 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 97 % 1.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 97 % 1.2 cd/lm 1 White	91 <sup>4</sup> 91 <sup>4</sup> 9
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 97 % 1.2 cd/lm 1 White	91 92 92 92 63 <sup>5</sup> 69 60 <sup>5</sup> 69 60 <sup>6</sup> 69 60 <sup>6</sup> 67 1200
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 97 % 1.2 cd/lm 1 White	9° 9° 6° 6° 6° 6° 6° 6° 6° 6° 6° 6°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Asymmetric 97 % 1.2 cd/lm 1 White	51 25 0° 25 50 50 50 50 50 50 50 50 50 50 50 50 50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 97 % 1.2 cd/lm 1 White	30* 300
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Asymmetric 97 % 1.2 cd/lm 1 White nts:	3x* <u>100</u> 30
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Asymmetric 97 % 1.2 cd/lm 1 White nts: Z5M1/Z5M2	30° 20° 20° 30°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Asymmetric 97 % 1.2 cd/lm 1 White nts: Z5M1/Z5M2 Asymmetric	20 <sup>4</sup> 10 <sup>5</sup> 20 <sup>4</sup> 20 <sup>4</sup> 20 <sup>4</sup>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone seou: semiconductor LED FWHM / FWTM Efficiency	Asymmetric 97 % 1.2 cd/lm 1 White nts: Z5M1/Z5M2 Asymmetric 94 %	10 <sup>10</sup> 10 <sup>10</sup> 10 <sup>10</sup> 10 <sup>10</sup>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone scoul semiconourcor LED FWHM / FWTM Efficiency Peak intensity	Asymmetric 97 % 1.2 cd/lm 1 White nts: Z5M1/Z5M2 Asymmetric 94 % 1.2 cd/lm	20 <sup>4</sup> 10 <sup>5</sup> 20 <sup>4</sup> 20 <sup>4</sup> 20 <sup>4</sup>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone scoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 97 % 1.2 cd/lm 1 White nts: Z5M1/Z5M2 Asymmetric 94 % 1.2 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone seous semiconoucror LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 97 % 1.2 cd/lm 1 White nts: Z5M1/Z5M2 Asymmetric 94 % 1.2 cd/lm 1 White	62 63 64 64 66 66 66 66 66 66 66 66
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone scoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 97 % 1.2 cd/lm 1 White nts: Z5M1/Z5M2 Asymmetric 94 % 1.2 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone stout semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 97 % 1.2 cd/lm 1 White nts: Z5M1/Z5M2 Asymmetric 94 % 1.2 cd/lm 1 White	62 63 64 64 66 66 66 66 66 66 66 66
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone stout semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 97 % 1.2 cd/lm 1 White nts: Z5M1/Z5M2 Asymmetric 94 % 1.2 cd/lm 1 White	00 00 00 00 00 00 00 00 00 00 00 00 00



SEOUL		
	7710	90* 90*
	Z5M3	772 200 7
FWHM / FWTM	Asymmetric	
Efficiency	94 %	60* 60*
Peak intensity	1 cd/lm	00
LEDs/each optic	1	
Light colour	White	45* 45*
Required compone	nts:	1000
		1200
		30* 1430 30*
SEOUL		
SEOUL SEMICONDUCTOR		90*
LED	Z8Y22	
FWHM / FWTM	Asymmetric	75* 75*
Efficiency	94 %	400
Peak intensity	1.2 cd/lm	60 <sup>4</sup>
LEDs/each optic	1	
Light colour	White	45* 65*
Required compone	nts:	
		1200
		30* 30* 30*
SEOUL		
SEOUL SEMICONDUCTOR	Z8Y22P	90°
FWHM / FWTM	Asymmetric	730 200 73 775
Efficiency	94 %	400
Peak intensity	1 cd/lm	60* 60*
LEDs/each optic	1	
Light colour	White	
Required compone		er <u>00</u> er
Required compone		1000
		1200
		20* 1400 30* 30*
TOSHIBA		
Leading Innovation >>>		90+ 90+
LED	TL1L3	77
FWHM / FWTM	Asymmetric	
Efficiency	94 %	.60 <sup>4</sup>
Peak intensity	0.9 cd/lm	
LEDs/each optic	1	
Light colour	White	457 810 451
Required compone	nts:	1000
		1230
		30° 15 <sup>5</sup> 0° 15° 30°
		15 <sup>3</sup> 0 <sup>6</sup> 15 <sup>4</sup>



TOSHIBA Leading Innovation >>>		90* 90*
LED	TL1L4	
FWHM / FWTM	Asymmetric	754 772
Efficiency	91 %	400
-	1.2 cd/lm	604 604
Peak intensity		
LEDs/each optic	1	
Light colour	White	45°
Required compone	ents:	1290
		1600 30* 30*
		15 <sup>5</sup> 0 <sup>6</sup> 13 <sup>9</sup>
TRIDON	NIC	
LED	RLE 2x4 2000lm HP EXC2 OTD	
FWHM / FWTM	Asymmetric	
Efficiency	94 %	
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	l White	
Required compone	ents:	
TRIDON		10° 50 10°
LED	RLE 2x8 4000lm HP EXC2 OTD	50° 50°
LED FWHM / FWTM	RLE 2x8 4000lm HP EXC2 OTD Asymmetric	90° 90°
LED FWHM / FWTM Efficiency	RLE 2x8 4000lm HP EXC2 OTD Asymmetric 94 %	99* 99* 729 60* 60*
LED FWHM / FWTM Efficiency Peak intensity	RLE 2x8 4000lm HP EXC2 OTD Asymmetric 94 % 1.2 cd/lm	90* 90* 751- 60* 60*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	RLE 2x8 4000lm HP EXC2 OTD Asymmetric 94 % 1.2 cd/lm 1	99* 750 60* 800 800
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	RLE 2x8 4000lm HP EXC2 OTD Asymmetric 94 % 1.2 cd/lm 1 White	99* 73 649 65* 66* 66* 66* 66* 66* 66* 66* 66* 66*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	RLE 2x8 4000lm HP EXC2 OTD Asymmetric 94 % 1.2 cd/lm 1 White	92* 23 649 65* 69 65* 69 65* 65* 65* 65* 65* 65* 65* 65*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	RLE 2x8 4000lm HP EXC2 OTD Asymmetric 94 % 1.2 cd/lm 1 White	5 <sup>3</sup> 5 <sup>3</sup> 6 <sup>3</sup> 6 <sup>3</sup> 6 <sup>3</sup> 7 <sup>3</sup> 6 <sup>3</sup> 6 <sup>3</sup> 6 <sup>3</sup> 6 <sup>3</sup> 6 <sup>3</sup> 6 <sup>3</sup> 6 <sup>3</sup> 6
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	RLE 2x8 4000lm HP EXC2 OTD Asymmetric 94 % 1.2 cd/lm 1 White	90 <sup>1</sup> 17 <sup>3</sup> 60 <sup>1</sup> 60 <sup>1</sup> 60 <sup>1</sup> 15 <sup>20</sup> 15 <sup>20</sup>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	RLE 2x8 4000lm HP EXC2 OTD Asymmetric 94 % 1.2 cd/lm 1 White	20° 20° 20° 60° 60° 60° 60° 60° 60° 60° 60° 60° 6
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	RLE 2x8 4000lm HP EXC2 OTD Asymmetric 94 % 1.2 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	RLE 2x8 4000lm HP EXC2 OTD Asymmetric 94 % 1.2 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	RLE 2x8 4000lm HP EXC2 OTD Asymmetric 94 % 1.2 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	RLE 2x8 4000lm HP EXC2 OTD Asymmetric 94 % 1.2 cd/lm 1 White ents:	20 <sup>-</sup> 20 <sup>-</sup> 20 <sup>-</sup> 20 <sup>-</sup> 20 <sup>-</sup>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	RLE 2x8 4000lm HP EXC2 OTD Asymmetric 94 % 1.2 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone TRIDON LED FWHM / FWTM Efficiency	RLE 2x8 4000lm HP EXC2 OTD Asymmetric 94 % 1.2 cd/lm 1 White ents:	1000 100 1000 1
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone <b>TRIDON</b> LED FWHM / FWTM Efficiency Peak intensity	RLE 2x8 4000lm HP EXC2 OTD Asymmetric 94 % 1.2 cd/lm 1 White ents:	1000 100 1000 1
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone <b>TRIDON</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	RLE 2x8 4000lm HP EXC2 OTD Asymmetric 94 % 1.2 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone TRIDON LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	RLE 2x8 4000lm HP EXC2 OTD Asymmetric 94 % 1.2 cd/lm 1 White ents:	1000 100 1000 1
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone <b>TRIDON</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	RLE 2x8 4000lm HP EXC2 OTD Asymmetric 94 % 1.2 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone TRIDON LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	RLE 2x8 4000lm HP EXC2 OTD Asymmetric 94 % 1.2 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone TRIDON LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	RLE 2x8 4000lm HP EXC2 OTD Asymmetric 94 % 1.2 cd/lm 1 White ents:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone <b>TRIDON</b> Efficiency Peak intensity LEDs/each optic Light colour	RLE 2x8 4000lm HP EXC2 OTD Asymmetric 94 % 1.2 cd/lm 1 White ents:	



TRIDO	NIC	30 <sup>*</sup>
LED	RLE G1 49x133mm 2000lm xxx EXC OTD	7
FWHM / FWTM	Asymmetric	78
Efficiency	94 %	
Peak intensity	1.3 cd/lm	
LEDs/each optic	1	100
Light colour	White	e.
Required compone	ents:	2030
		320
		$\times$ / $\top$ $\wedge$ $>$
		130 <sup>4</sup> 157 <sup>5</sup> 0 <sup>6</sup> 157 <sup>6</sup> 3
TRIDO		
LED	RLE G1 49x223mm 4000lm xxx EXC OTD	
FWHM / FWTM	Asymmetric	78
Efficiency	94 %	409
Peak intensity	1.3 cd/lm	
LEDs/each optic	1	00
Light colour	White	67
Required compone		-
		30° 13 <sup>5</sup> 0° 13°
TRIDO	NIC	80*
LED	RLE G1 49x245mm 4000lm xxx EXC OTD	
FWHM / FWTM	Asymmetric	70
Efficiency	94 %	***
Peak intensity	1.3 cd/lm	
LEDs/each optic	1	80
Light colour	White	et l
Required compone	ents:	1200
		$\times$ / $\times$
		360
		130* 15° 0° 15°



		90° 90°
	J Series 5050 Round LES	
FWHM / FWTM	Asymmetric	400
Efficiency	95 %	504 504
Peak intensity	1.3 cd/lm	
LEDs/each optic		1200
Light colour	White	45°
Required components:		1900
		X/T/X
		2000
		30° 15° 30°
LED	J Series 5050 Round LES	90* 90*
ED FWHM / FWTM	Asymmetric	734
Efficiency	84 %	400
Peak intensity	1.2 cd/lm	60 <sup>4</sup> 60 <sup>4</sup>
LEDs/each optic	1	200
Light colour	White	51 51
Required components:		1200
		$\times$ / $\times$
Protective plate	e, glass	1690
		$\times$ / T \ $\lambda$
		30° 15° 30°
		90° 90°
	XP-G2 HE	9°
LED FWHM / FWTM		90° 90° 78° 000 90°
LED FWHM / FWTM	XP-G2 HE Asymmetric 92 %	99° 99' 29° 600 72'
LED FWHM / FWTM Efficiency	Asymmetric	99° 99° 73° 409 60° 60'
LED FWHM / FWTM	Asymmetric 92 %	99° 99° 131 000 99° 60° 000 000
LED FWHM / FWTM Efficiency Peak intensity	Asymmetric 92 % 1.2 cd/lm	90° 90° 13° 60° 90° 60° 60°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 92 % 1.2 cd/lm 1	60 60 60 60 60 60 60 60 60 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 92 % 1.2 cd/lm 1	90° 100 100 100 100 100 100 100 1
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 92 % 1.2 cd/lm 1	99° 79° 60° 60° 60° 60° 60° 60° 60° 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 92 % 1.2 cd/lm 1	150
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 92 % 1.2 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 92 % 1.2 cd/lm 1 White	150
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 92 % 1.2 cd/lm 1 White XP-G3	100 20° 20° 20° 20°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 92 % 1.2 cd/lm 1 White XP-G3 Asymmetric	150
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 92 % 1.2 cd/m 1 White XP-G3 Asymmetric 78 %	100 30° 10° 20° 30°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 92 % 1.2 cd/m 1 White XP-G3 Asymmetric 78 % 1 cd/m	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 92 % 1.2 cd/m 1 White XP-G3 Asymmetric 78 % 1 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: CREE Components: LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 92 % 1.2 cd/m 1 White XP-G3 Asymmetric 78 % 1 cd/m	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: CREE CLED LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 92 % 1.2 cd/lm 1 White XP-G3 Asymmetric 78 % 1 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 92 % 1.2 cd/lm 1 White XP-G3 Asymmetric 78 % 1 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: C17580_STRADA-2X	Asymmetric 92 % 1.2 cd/lm 1 White XP-G3 Asymmetric 78 % 1 cd/lm 1 White 22-SHD-WHT	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: CREE (LED EWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 92 % 1.2 cd/lm 1 White XP-G3 Asymmetric 78 % 1 cd/lm 1 White 22-SHD-WHT	109 109 109 109 109 109 109 109



		90* 90*
LED	XP-L2	
FWHM / FWTM	Asymmetric	730 700
Efficiency	85 %	400
Peak intensity	1.1 cd/lm	60° 60°
		800
LEDs/each optic	1	
Light colour	White	6°
Required components:		
Protective plate	, glass	1039
		$\times$ / $\land$ $\lambda$
		20° 15° 0° 15° 30°
		50 <sup>+</sup>
LED	XT-E	73 0 400 775
FWHM / FWTM	Asymmetric	
Efficiency	%	60* 800 60°.
LEDs/each optic	1	
Light colour	White	5° 1200
Required components:		
		1600
		2000
		$\times$ / T / X
		30° 15° 2400 15° 30°
	S	
LED	LUXEON 3030 2D (Round LES)	
FWHM / FWTM	Asymmetric	75° 400 775°
Efficiency	83 %	
Peak intensity	1.4 cd/lm	.60 <sup>4</sup> 60 <sup>4</sup>
LEDs/each optic	1	
Light colour	White	45' 1200 45'
Required components:		$\times$
		1650
Protective plate	, glass	
		30* 12 <sup>5</sup> 0 <sup>6</sup> 15* 30*
MUMILED	S	90° 90°
LED	LUXEON 3030 2D (Round LES)	90'
FWHM / FWTM	Asymmetric	75° 400 75°.
Efficiency	94 %	
Peak intensity	1.6 cd/lm	.50 00 60*
LEDs/each optic	1	1290
Light colour	White	6°. (*
Required components:		1600
		2000
		X  =  X
1		2430



	DS	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components	LUXEON 5050 Round LES Asymmetric 85 % 1.2 cd/lm 1 White	
Protective pla	te, glass	100 50* 10
	DS	907 990
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components	LUXEON 5050 Square LES Asymmetric 95 % 1.3 cd/lm 1 White	
		30° 315° 0° 15° 30
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components Protective pla	LUXEON 5050 Square LES Asymmetric 87 % 1.2 cd/lm 1 White	
	DC	39° <u>12'</u> 0° <u>13</u> ° 30'
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components	LUXEON HL2X Asymmetric 92 % 1.4 cd/lm 1 White	



	)S	
LED	LUXEON HL2X-P	
FWHM / FWTM	Asymmetric	770 400 70
Efficiency	93 %	
Peak intensity	1.3 cd/lm	50 <sup>4</sup> 300
LEDs/each optic	1	
Light colour	White	45* 1200 45
Required components:		$\times$
		1600
		2000
		13 <sup>0</sup> 0 <sup>0</sup> 15 <sup>0</sup> 30
	DS	90* 90°
LED	LUXEON IR Domed 150	1 - We -
FWHM / FWTM	Asymmetric	75° 400 75'
Efficiency	93 %	
Peak intensity	1.4 cd/lm	
LEDs/each optic	1	1200
Light colour	White	6° 6
Required components:		1600
		X   X
		2000
		30* 30*
		THY KHI
		90° 90'
LED	LUXEON IR Domed 90	90° 99 70° 70° 70° 70° 70° 70° 70° 70° 70° 70°
LED FWHM / FWTM	LUXEON IR Domed 90 Asymmetric	94 <sup>4</sup> 99 <sup>2</sup>
LED FWHM / FWTM Efficiency	LUXEON IR Domed 90 Asymmetric 95 %	90° 90 73° 72° 72° 72° 72° 72° 72° 72° 72° 72° 72
LED FWHM / FWTM Efficiency Peak intensity	LUXEON IR Domed 90 Asymmetric 95 % 1.7 cd/lm	30 <sup>4</sup> 90 33 61 <sup>4</sup> 00 129
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON IR Domed 90 Asymmetric 95 % 1.7 cd/lm 1	25° (87
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON IR Domed 90 Asymmetric 95 % 1.7 cd/lm	5)* 122
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON IR Domed 90 Asymmetric 95 % 1.7 cd/lm 1	61 <sup>4</sup> 120
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON IR Domed 90 Asymmetric 95 % 1.7 cd/lm 1	61 <sup>4</sup> 120
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON IR Domed 90 Asymmetric 95 % 1.7 cd/lm 1	61 <sup>4</sup> 120
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON IR Domed 90 Asymmetric 95 % 1.7 cd/lm 1	61 <sup>4</sup> 120
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON IR Domed 90 Asymmetric 95 % 1.7 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON IR Domed 90 Asymmetric 95 % 1.7 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON IR Domed 90 Asymmetric 95 % 1.7 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON IR Domed 90 Asymmetric 95 % 1.7 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON IR Domed 90 Asymmetric 95 % 1.7 cd/lm 1 White S LUXEON V2 Asymmetric 94 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>WIM / COMPARENT</b> EFWHM / FWTM Efficiency Peak intensity	LUXEON IR Domed 90 Asymmetric 95 % 1.7 cd/lm 1 White S LUXEON V2 Asymmetric 94 % 1.5 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>WIM / COMPARENT</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON IR Domed 90 Asymmetric 95 % 1.7 cd/lm 1 White S LUXEON V2 Asymmetric 94 % 1.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>CONTINUES</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON IR Domed 90 Asymmetric 95 % 1.7 cd/lm 1 White S LUXEON V2 Asymmetric 94 % 1.5 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>CONTINUES</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON IR Domed 90 Asymmetric 95 % 1.7 cd/lm 1 White S LUXEON V2 Asymmetric 94 % 1.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>CONTINUES</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON IR Domed 90 Asymmetric 95 % 1.7 cd/lm 1 White S LUXEON V2 Asymmetric 94 % 1.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>WIM / COMPARENT</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON IR Domed 90 Asymmetric 95 % 1.7 cd/lm 1 White S LUXEON V2 Asymmetric 94 % 1.5 cd/lm 1	



<b>Μ</b> ΝΙCΗΙΛ		30 <sup>4</sup>
LED	NV4WB35AM	
FWHM / FWTM	Asymmetric	73* 400 75*
Efficiency	95 %	
Peak intensity	1.4 cd/lm	60° 800 60°.
LEDs/each optic	1	
Light colour	White	art 1230
Required components:		
		1000
		2000
		30* <u>13</u> <sup>5</sup> 0* <u>15</u> * 30*
<b>ΜΝΙCΗΙΛ</b>		90* 90*
LED	NVSW519A	
FWHM / FWTM	Asymmetric	75°
Efficiency	88 %	
Peak intensity	1.1 cd/lm	6 <sup>4</sup>
LEDs/each optic	1	$\times$
Light colour	White	45'
Required components:		1220
Drata stiva alata		
Protective plate	a, glass	1600
		30*
1		15° 0° 15°
<b>Μ</b> ΝΙCΗΙΛ		122_0 <sup>1</sup> _125 <sup>-</sup>
	NVSW519A	89°. 80°.
<b>WNICHIA</b> LED FWHM / FWTM	NVSW519A Asymmetric	20° 0° 10° 90° 90° 90°
LED FWHM / FWTM	NVSW519A Asymmetric 93 %	99° 99° 90° 90° 90° 90° 90° 90°
LED FWHM / FWTM Efficiency	Asymmetric	23 <sup>2</sup> 0 <sup>4</sup> 10 <sup>4</sup>
LED FWHM / FWTM	Asymmetric 93 %	
LED FWHM / FWTM Efficiency Peak intensity	Asymmetric 93 % 1.2 cd/lm	23 <sup>2</sup> 0 <sup>3</sup> 13 <sup>3</sup>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 93 % 1.2 cd/lm 1	43,         1120         62,           61,         500         50,           22,         00         25,           30,         64,         50,
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 93 % 1.2 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 93 % 1.2 cd/lm 1	132 0° 137 95° 0° 133 0° 137 95° 0° 150 150 150 150 65°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 93 % 1.2 cd/lm 1	100
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 93 % 1.2 cd/lm 1	232 0° 133 0° 10° 0° 10° 10° 10° 10° 10° 10° 1
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 93 % 1.2 cd/lm 1 White	109
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 93 % 1.2 cd/m 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 93 % 1.2 cd/m 1 White NVSxE21A Asymmetric	100
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 93 % 1.2 cd/m 1 White NVSxE21A Asymmetric 83 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 93 % 1.2 cd/m 1 White NVSxE21A Asymmetric 83 % 1.5 cd/m	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 93 % 1.2 cd/lm 1 White NVSxE21A Asymmetric 83 % 1.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 93 % 1.2 cd/m 1 White NVSxE21A Asymmetric 83 % 1.5 cd/m	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 93 % 1.2 cd/lm 1 White NVSxE21A Asymmetric 83 % 1.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>ED</b> FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 93 % 1.2 cd/lm 1 White NVSxE21A Asymmetric 83 % 1.5 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 93 % 1.2 cd/lm 1 White NVSxE21A Asymmetric 83 % 1.5 cd/lm 1 White	



<b>Μ</b> ΝΙCΗΙΛ		90° qo*
LED	NWSx229A	
FWHM / FWTM	Asymmetric	730 77
Efficiency	93 %	
Peak intensity	1.2 cd/lm	604
LEDs/each optic	1	
Light colour	White	$Z \times I \cap X $
Required components:	White	45" 1200 45
Required components.		
		1600
		30* 2000 30* 30*
OSRAM		
		90* 90*
LED	PrevaLED Brick HP 2x8	700
FWHM / FWTM	Asymmetric	400
Efficiency	91 %	50 <sup>4</sup>
Peak intensity	1.5 cd/lm	
LEDs/each optic	1	
Light colour	White	45*
Required components:		
		1220
		$\times$ / $\times$ /
		30* 1500 30* 30*
OSRAM		
Opto Semiconductors	Duris 040	90* 90*
LED		
	Duris S10	750 () 750
FWHM / FWTM	Asymmetric	751
FWHM / FWTM Efficiency	Asymmetric 94 %	50 50 50 50 50 50 50 50 50 50 50 50 50 5
FWHM / FWTM Efficiency Peak intensity	Asymmetric 94 % 1.2 cd/lm	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 94 % 1.2 cd/lm 1	6) 20 20 20
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.2 cd/lm	6°. 6°. 5°. 5°. 6°. 5°. 6°. 6°. 6°. 6°. 6°. 6°. 6°. 6°. 6°. 6
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.2 cd/lm 1	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 94 % 1.2 cd/lm 1	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.2 cd/lm 1	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 94 % 1.2 cd/lm 1	No.         Th         O.         Th         No.           No.         Th         O.         Th         T
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 94 % 1.2 cd/lm 1	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 94 % 1.2 cd/lm 1 White	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 94 % 1.2 cd/lm 1 White	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM	Asymmetric 94 % 1.2 cd/m 1 White Duris S8 Asymmetric	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency	Asymmetric 94 % 1.2 cd/m 1 White	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	Asymmetric 94 % 1.2 cd/m 1 White Duris S8 Asymmetric 87 % 1.1 cd/m	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 94 % 1.2 cd/lm 1 White Duris S8 Asymmetric 87 % 1.1 cd/lm 1	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 94 % 1.2 cd/m 1 White Duris S8 Asymmetric 87 % 1.1 cd/m	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 94 % 1.2 cd/lm 1 White Duris S8 Asymmetric 87 % 1.1 cd/lm 1	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.2 cd/lm 1 White Duris S8 Asymmetric 87 % 1.1 cd/lm 1 White	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 94 % 1.2 cd/lm 1 White Duris S8 Asymmetric 87 % 1.1 cd/lm 1 White	



OSRAM		
Opto Semiconductors		90* 90*
	OSCONIQ P 3737 (2W version)	75° 400 75°
FWHM / FWTM	Asymmetric	
Efficiency	94 %	50* 900 50*
Peak intensity	1.6 cd/lm	
LEDs/each optic	1	1220
Light colour	White	45+ 1690 45+
Required components:		$\times$
		2000
		2450
		30° 30°
		15 <sup>6</sup> 0 <sup>8</sup> 15 <sup>9</sup>
OSRAM Opto Semiconductors		90*
LED	OSCONIQ P 3737 (3W version)	
FWHM / FWTM	Asymmetric	759 400 75°
Efficiency	94 %	
Peak intensity	1.4 cd/lm	60* 000 60*
LEDs/each optic	1	
Light colour	White	45* 1230 45*
Required components:		$\times$
		1600
		2000
		30° 15° 30°
OSRAM		THY FFT
Opto Semiconductors		»·
Opto Semiconductors	OSCONIQ P 3737 Flat	99° 90° 794 900 75°
opto Semiconductors LED FWHM / FWTM	Asymmetric	90° 73° 600 75°
opto Semiconductors LED FWHM / FWTM Efficiency	Asymmetric 94 %	
<sup>opto Semiconductors</sup> LED FWHM / FWTM Efficiency Peak intensity	Asymmetric 94 % 1.5 cd/lm	
<sup>opto semiconductors</sup> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 94 % 1.5 cd/lm 1	60* 899 60*
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.5 cd/lm	60* 899 60*
<sup>opto Semiconductors</sup> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 94 % 1.5 cd/lm 1	67 99 67
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.5 cd/lm 1	60 <sup>4</sup> 899 60 <sup>4</sup>
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.5 cd/lm 1	60 <sup>4</sup> 899 60 <sup>4</sup>
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.5 cd/lm 1	60 <sup>4</sup> 800 60 <sup>4</sup>
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 94 % 1.5 cd/lm 1	6 <sup>1</sup> 120 5 <sup>1</sup> 150 5 <sup>1</sup> 150
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 94 % 1.5 cd/lm 1 White	6 <sup>1</sup> 120 5 <sup>1</sup> 150 5 <sup>1</sup> 150
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSERAM Opto Semiconductors LED	Asymmetric 94 % 1.5 cd/lm 1 White OSLON Square CSSRM2/CSSRM3	6 <sup>1</sup> 120 5 <sup>1</sup> 150 5 <sup>1</sup> 150
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM	Asymmetric 94 % 1.5 cd/lm 1 White OSLON Square CSSRM2/CSSRM3 Asymmetric	6 <sup>1</sup> 120 5 <sup>1</sup> 150 5 <sup>1</sup> 150
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency	Asymmetric 94 % 1.5 cd/lm 1 White OSLON Square CSSRM2/CSSRM3 Asymmetric 86 %	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 94 % 1.5 cd/lm 1 White OSLON Square CSSRM2/CSSRM3 Asymmetric 86 % 1.3 cd/lm	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OPTO Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 94 % 1.5 cd/lm 1 White OSLON Square CSSRM2/CSSRM3 Asymmetric 86 % 1.3 cd/lm 1	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:  DOSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.5 cd/lm 1 White OSLON Square CSSRM2/CSSRM3 Asymmetric 86 % 1.3 cd/lm	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OPTO Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 94 % 1.5 cd/lm 1 White OSLON Square CSSRM2/CSSRM3 Asymmetric 86 % 1.3 cd/lm 1	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: COSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 94 % 1.5 cd/lm 1 White OSLON Square CSSRM2/CSSRM3 Asymmetric 86 % 1.3 cd/lm 1 White	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:  DOSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 94 % 1.5 cd/lm 1 White OSLON Square CSSRM2/CSSRM3 Asymmetric 86 % 1.3 cd/lm 1 White	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:  ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 94 % 1.5 cd/lm 1 White OSLON Square CSSRM2/CSSRM3 Asymmetric 86 % 1.3 cd/lm 1 White	



(		
OSRAM Opto Semiconductors		ITA ATI
	OSI ON Square CSSDM2/CSSDM2	90° 90°
	OSLON Square CSSRM2/CSSRM3	750 (200 ) 75°
FWHM / FWTM	Asymmetric	
Efficiency	87 %	504 604
Peak intensity	1 cd/lm	60
LEDs/each optic	1	
Light colour	White	45* 47*
Required components:		1000
Protective plate		1200
	, 9000	1430
		30* 15 <sup>2</sup> 0 <sup>6</sup> 15 <sup>4</sup> 30 <sup>4</sup>
OSRAM		
Opto Semiconductors		90* 90*
LED	OSLON Square CSSRM2/CSSRM3	734
FWHM / FWTM	Asymmetric	
Efficiency	91 %	.50* 60*
Peak intensity	1.5 cd/lm	
LEDs/each optic	1	80
Light colour	White	65°
Required components:		
		1200
		$\times$ / $\setminus$ $\times$
		30* 1500 30*
OSRAM		30* <u>150</u> 30* 30*
USRAW		
Opto Semiconductors		90°
	OSLON Square Flat	90° 90°
Opto Semiconductors	OSLON Square Flat Asymmetric	9° 99° 73' 90° 75°
Opto Semiconductors		90° 90° 73° 600 75°
<sup>Opto Semiconductors</sup> LED FWHM / FWTM	Asymmetric	90° 90° 75° 400 75° 50° 60° 60°
<sup>opto Semiconductors</sup> LED FWHM / FWTM Efficiency	Asymmetric 96 %	9° 73 60 72 64 60 60 6120
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	Asymmetric 96 % 1.6 cd/lm	97 75 66 60 129 60 60 60 60 60 60 60 60 60 60 60 60 60
<sup>opto Semiconductors</sup> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 96 % 1.6 cd/lm 1	$\bigvee \bigvee / \top \setminus \bigvee \lor$
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 96 % 1.6 cd/lm 1	$\bigvee \bigvee / \top \setminus \bigvee \lor$
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 96 % 1.6 cd/lm 1	$\bigvee \bigvee / \top \setminus \bigvee \lor$
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 96 % 1.6 cd/lm 1	5° 100 6° 200 200
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 96 % 1.6 cd/lm 1	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 96 % 1.6 cd/lm 1	40° 1000 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0°
opto semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 96 % 1.6 cd/lm 1	45° 1000 46° 2009
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 96 % 1.6 cd/lm 1 White	5° 500 2000 2000 2000 2000 2000 2000 200
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Asymmetric 96 % 1.6 cd/lm 1 White OSTAR Projection Compact (Kx.CSLNM1.xx)	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM	Asymmetric 96 % 1.6 cd/lm 1 White OSTAR Projection Compact (Kx.CSLNM1.xx) Asymmetric	5° 100 6° 200 200 30° 10° 10° 50° 10° 10° 50° 10° 10°
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency	Asymmetric 96 % 1.6 cd/lm 1 White OSTAR Projection Compact (Kx.CSLNM1.xx) Asymmetric 96 %	1000 00° 1000 0
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 96 % 1.6 cd/lm 1 White OSTAR Projection Compact (Kx.CSLNM1.xx) Asymmetric 96 % 1.6 cd/lm 1	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:  COSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Asymmetric 96 % 1.6 cd/lm 1 White OSTAR Projection Compact (Kx.CSLNM1.xx) Asymmetric 96 % 1.6 cd/lm	5 1999 6° 1999 6° 1999 7° 2099 7° 2099 7° 10° 7° 10° 7° 10° 7° 10° 10° 10° 10° 10° 10° 10° 10
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Asymmetric 96 % 1.6 cd/lm 1 White OSTAR Projection Compact (Kx.CSLNM1.xx) Asymmetric 96 % 1.6 cd/lm 1	
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PHILIPS		90* 99
LED	Fortimo FastFlex LED 2x8 DA G4+	
FWHM / FWTM	Asymmetric	72%
Efficiency	74 %	
Peak intensity	1.1 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required components:		12200
C17677_STRADA-2	X2-SHD-BLK	$\times$
Protective pla	te, glass	1000 30 <sup>4</sup> 22 <sup>4</sup> 0 <sup>4</sup> 22 <sup>4</sup> 3
PHILIPS	6	90°
LED	Fortimo FastFlex LED 2x8 DA G4+	
FWHM / FWTM	Asymmetric	73° Inc. 7
Efficiency	79 %	
Peak intensity	1.2 cd/lm	60 <sup>4</sup>
LEDs/each optic	1	
Light colour	White	45* 1220
Required components:		
C17677_STRADA-2	X2-SHD-BLK	1000
		$\times$ / $\wedge$ $\times$
		2000
SAMSUI	NG	90° 99
LED	HiLOM RH12 Z (LH351C)	
FWHM / FWTM	Asymmetric	75%
Efficiency	86 %	
Peak intensity	1.2 cd/lm	
LEDs/each optic	1	
Light colour	White	45'
Required components:		1220
		$\times$
Protective pla	te, glass	1600
		30*
SAMSUI	VG	<u> </u>
LED FWHM / FWTM	LH231B	
Efficiency	Asymmetric 93 %	
Peak intensity	93 % 1.5 cd/lm	
LEDs/each optic	4	
Light colour	4 White	
Required components:		



SAMSUN	<b>IG</b>	
LED	LH351D	
FWHM / FWTM	Asymmetric	
Efficiency	84 %	
Peak intensity	1.1 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required components:	· · · · · ·	
Protective plate	e, glass	
SAMSUN	IG	 90 <sup>+</sup>
LED	LH351D	
FWHM / FWTM	Asymmetric	734
Efficiency	92 %	$\times \times /$
Peak intensity	1.4 cd/lm	.604
LEDs/each optic	1	
Light colour	White	45*
Required components:		
		$\mathbf{X}$
		 '30* 15 <sup>3</sup>
SAMSUN	<b>IG</b>	90*
LED	LM301B	
FWHM / FWTM	Asymmetric	73*
Efficiency	95 %	
Peak intensity	1.6 cd/lm	60%
LEDs/each optic	1	$\times \wedge$
Light colour	White	
Required components:		XF
		$\sqrt{+}$
		30.
SEOUL		 
SEOUL SEMICONDUCTOR		90°
LED	MJT 5050	
FWHM / FWTM	Asymmetric	754
Efficiency	93 %	
Peak intensity	1.2 cd/lm	60°
LEDs/each optic	1	
Light colour	White	
Required components:		
		$\times$
		20* 25 <sup>3</sup>
		 135



SEOUL SEMICONDUCTOR		20' 20'
LED	Z8Y22T	
FWHM / FWTM	Asymmetric	754 400 772
Efficiency	94 %	
Peak intensity	1.6 cd/lm	
LEDs/each optic	1	120
Light colour	White	5 <sup>1</sup> 6 <sup>1</sup>
Required component	IS:	300
		200
		200
		20 <sup>4</sup> 12 <sup>5</sup> 0 <sup>4</sup> 13 <sup>5</sup> 20 <sup>5</sup>



# PRODUCT DATASHEET C13604\_STRADA-2X2-FN

#### **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:

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