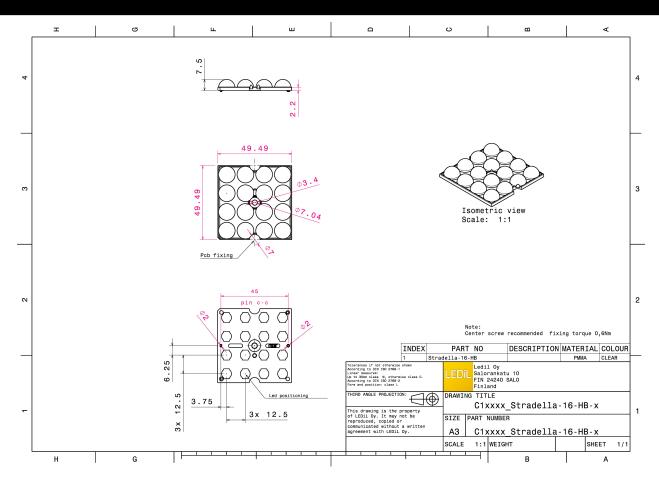


STRADELLA-16-HB-S					
~25° spot beam for industrial ap	plications				
SPECIFICATION:					
Dimensions	49.5 x 49.5 mm				Tran Million So
Height	7.5 mm		- SAL		
Fastening	pin, screw				
ROHS compliant	yes 🛈				
MATERIALS:		LEDIĽ			
<b>Component</b> STRADELLA-16-HB-S	<b>Type</b> Multi-lens	<b>Material</b> PMMA		<b>Colour</b> dear	Finish
ORDERING INFORMATION:					
<b>Component</b> C15430_STRADELLA-16-HB-S » Box size: 480 x 280 x 300 mm		<b>Qty in box</b> 800	<b>MOQ</b> 160	<b>MPQ</b> 160	Box weight (kg) 6.3



R

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



		90 <sup>4</sup> 90 <sup>4</sup>
LED	J Series 3030	
FWHM / FWTM	29.0° / 86.0°	77 77
Efficiency	91 %	
Peak intensity	1.5 cd/lm	
LEDs/each optic	1	
Light colour	' White	e <sup>1</sup>
Required compone		
required compone		120
		30 <sup>10</sup> 135 <sup>10</sup> 0 <sup>10</sup> 135 <sup>10</sup> 0 <sup>10</sup> 135 <sup>10</sup>
		80°
LED	EHP-223.5x50-1604-xx-70-LS30-06-NTC	
FWHM / FWTM	30.0° / 95.0°	
Efficiency	93 %	
Peak intensity	1.4 cd/lm	
LEDs/each optic	1	
Light colour	White	q
Required compone	ents:	
		120
		157 04 157
<b>Ø</b> NICHI∕	L	50* 50*
LED	NFSx757D	
FWHM / FWTM	25.0° / 78.0°	72
Efficiency	90 %	
Peak intensity	1.7 cd/lm	
LEDs/each optic	1	
Light colour	White	a,
Required compone	ents:	
		1600
		30-
		90 <sup>4</sup>
LED	NFSx757G	77
FWHM / FWTM	27.0° / 80.0°	
Efficiency	93 %	
Peak intensity	1.7 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone	ents:	
		150
		<u>25</u> 7 97 457



<b>ØNICHI</b>		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NVSW219D 32.0° / 83.0° 93 % 1.5 cd/lm 1 White	
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NVSW319B 37.0° / 97.0° 93 % 1.2 cd/lm 1 White	
OSRAN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	PrevaLED Brick MP 4x16 30.0° / 92.0° 92 % 1.4 cd/lm 1 White	
OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Duris S5 (2 chip) 27.0° / 83.0° 92 % 1.6 cd/lm 1 Purple ents:	



[			
OSRAM Opto Semiconductors			90°
LED	Duris S5 (Single chip)		
FWHM / FWTM	23.0° / 72.0°		7° 73° 73°
Efficiency	90 %		60°
Peak intensity	2 cd/lm		
LEDs/each optic	1		
Light colour	White		9 <sup>7</sup> 1230 5 <sup>5</sup>
Required compone	nts:		$\times$ / $\times$
			100
			30* 200 30*
OCDAM			
OSRAM Opto Semiconductors			90° 90°
LED	OSCONIQ S 3030 (QSLR31)	10 No.	75* 75*
FWHM / FWTM	28.0° / 82.0°		10 400
Efficiency	91 %		60°
Peak intensity	1.6 cd/lm		
LEDs/each optic	1		
Light colour	White		g*
Required compone	nts:		1230
			300 300
DIIIII			112, 0 <sub>6</sub> 32,
PHILIP		and the owner of the owner	90*
LED	Fortimo FastFlex LED 4x16 DHE G4		75'
FWHM / FWTM	29.0° / 88.0°		400
Efficiency	92 %		60* 60*
Peak intensity	1.5 cd/lm		
LEDs/each optic	1		a <sup>2</sup>
Light colour	White		6°
Required compone	nts:		
			1200
			$\times$ / $\vee$ $\times$
			30° 10° 30°
SAMSI	ING		50° 50°
			90° 90°
LED	HiLOM RM64 (LM301B)		75*
FWHM / FWTM	30.0° / 92.0°		400
Efficiency	93 %		60°
Peak intensity	1.4 cd/lm		
LEDs/each optic	1 Multite		87 <sup>4</sup> 800 me
Light colour	White		
Required compone	nits:		
			1220
			30° 15° 0° 15°



SAMSU LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LM231 A/B 22.0° / 70.0° 91 % 2 cd/lm 1 White	
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XLE-S44XTEHE (XT-E HE) 29.0° / 89.0° 92 % 1.4 cd/lm 1 White	
SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	SEOUL 3030 26.0° / 78.0° 90 % 1.7 cd/lm 1 White nts:	
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	SEOUL DC 3030 24.0° / 75.0° 94 % 1.9 cd/lm 1 White nts:	



73.
607 - 400 -
36 <sup>th</sup> 15 <sup>th</sup>
30°
P ADV2 OTD
30° 500 127
ADV2 OTD



LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Bridgelux SMD 2835 31.0° / 81.0° 94 % 1.8 cd/lm 1 White	50° 7° 6° 6° 6° 6° 6° 6° 6° 6° 6° 6° 6° 6° 6°
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	CSP 2727 (BXCP) 28.0° / 80.0 + 78.0° 93 % 1.9 cd/lm 1 White	20 20 20 20 20 20 20 20 20 20
bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Protective plate	CSP 2727 (BXCP) 28.0° / 80.0 + 78.0° 84 % 1.7 cd/lm 1 White	50 50 50 50 50 50 50 50 50 50
CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	XP-G2 HE 46.0° / 90.0° 90 % 1.1 cd/lm 1 White	



CREE ≑		90° 90°
LEDS	XP-G3	
FWHM / FWTM	37.0° / 95.0°	21.
Efficiency	91 %	
Peak intensity	1.3 cd/lm	60° 60°
LEDs/each optic	1	
Light colour	White	g
Required components:	White	
		1200
		30° 30° 15° 0° 15°
		50° 90°
LED	XT-E	
FWHM / FWTM	28.0° / 82.0°	75
Efficiency	91 %	
Peak intensity	1.7 cd/lm	
LEDs/each optic	1	
Light colour	White	ar at
Required components:		1230
		1600
		30°
		30° 135° 0° 135° 30°
	)S	20 <sup>4</sup> 25 <sup>5</sup> 0 <sup>4</sup> 15 <sup>5</sup> 30 <sup>4</sup>
	UXEON 2835 Line	25° 0° 15° 30°
		25 <sup>-</sup> 25 <sup>-</sup>
LED	LUXEON 2835 Line	73
LED FWHM / FWTM	LUXEON 2835 Line 28.0° / 78.0°	73
LED FWHM / FWTM Efficiency	LUXEON 2835 Line 28.0° / 78.0° 93 %	73
LED FWHM / FWTM Efficiency Peak intensity	LUXEON 2835 Line 28.0° / 78.0° 93 % 1.9 cd/lm	77. 00 00 00 00
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON 2835 Line 28.0° / 78.0° 93 % 1.9 cd/lm 1	73
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON 2835 Line 28.0° / 78.0° 93 % 1.9 cd/lm 1	75 40 50 50 50 50 50 60 60 60 60 60 60 60 60 60 6
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON 2835 Line 28.0° / 78.0° 93 % 1.9 cd/lm 1	77. 00 00 00 00
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON 2835 Line 28.0° / 78.0° 93 % 1.9 cd/lm 1	75'
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 2835 Line 28.0° / 78.0° 93 % 1.9 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 2835 Line 28.0° / 78.0° 93 % 1.9 cd/lm 1 White	75
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 2835 Line 28.0° / 78.0° 93 % 1.9 cd/lm 1 White S LUXEON 2835 Line	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 2835 Line 28.0° / 78.0° 93 % 1.9 cd/lm 1 White S LUXEON 2835 Line 30.0° / 78.0°	bit         bit           bit
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 2835 Line 28.0° / 78.0° 93 % 1.9 cd/lm 1 White S LUXEON 2835 Line 30.0° / 78.0° 85 %	32         30         32           33         30         32
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 2835 Line 28.0° / 78.0° 93 % 1.9 cd/lm 1 White S LUXEON 2835 Line 30.0° / 78.0° 85 % 1.7 cd/lm	32         30         32           33         30         32
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 2835 Line 28.0° / 78.0° 93 % 1.9 cd/lm 1 White S LUXEON 2835 Line 30.0° / 78.0° 85 % 1.7 cd/lm 1	32         30         32           33         30         32
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 2835 Line 28.0° / 78.0° 93 % 1.9 cd/lm 1 White S LUXEON 2835 Line 30.0° / 78.0° 85 % 1.7 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 2835 Line 28.0° / 78.0° 93 % 1.9 cd/lm 1 White S LUXEON 2835 Line 30.0° / 78.0° 85 % 1.7 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>WIM / COUNT</b> Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 2835 Line 28.0° / 78.0° 93 % 1.9 cd/lm 1 White S LUXEON 2835 Line 30.0° / 78.0° 85 % 1.7 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>WIM / COUNT</b> Efficiency Peak intensity LEDs/each optic Light colour	LUXEON 2835 Line 28.0° / 78.0° 93 % 1.9 cd/lm 1 White S LUXEON 2835 Line 30.0° / 78.0° 85 % 1.7 cd/lm 1 White	



NYMH / FWTM       25.0° / 96.0°         Efficiency       91 %         Reak intensity       1.5 c/m         LDS/sech optic       1         Jpit colour       White         Required components:       Image: Components:         Image: Componen	COMILEC	DS S	90 <sup>4</sup> 90 <sup>4</sup>
WHM / FWTM 25.0° / 96.0° Efficiency 91 % Pack intensity 1.5 cd/m ED0/each optic 1 ight colour White Required components:	LED	LUXEON C	
Pauk Intensity 1.5 collim EDS/activation of 1 EDS/activation of 1 EDS	FWHM / FWTM	25.0° / 96.0°	
EDViend option 1 Light colour White Required components: PLUMILEDS LED ULXEON C WMM / FWTM 25.0° / 105.0° Efficiency 91 % Pack Intensity 1.4 col/m Light colour RGBW Required components: PLUMILEDS LED ULXEON C WMM / FWTM 25.0° / 104.0° Efficiency 91 % Required components: PLUES LED ULXEON C WMM / FWTM 25.0° / 104.0° Efficiency 91 % Required components: PLUMILEDS LED ULXEON C WMM / FWTM 25.0° / 104.0° Efficiency 91 % PLUMILEDS LED ULXEON C WMM / FWTM 25.0° / 104.0° Efficiency 91 % PLUMILEDS LED ULXEON C WMM / FWTM 25.0° / 107.0° Efficiency 90 % PLUMILEDS LED ULXEON C WMM / FWTM 25.0° / 107.0° Efficiency 90 % PLUMILEDS LED ULXEON C WMM / FWTM 25.0° / 107.0° Efficiency 90 % PLUMILEDS LED ULXEON C WMM / FWTM 25.0° / 107.0° Efficiency 90 % PLUMILEDS LED ULXEON C WMM / FWTM 25.0° / 107.0° Efficiency 90 % PLUMILEDS LED ULXEON C WMM / FWTM 25.0° / 107.0° Efficiency 90 % PLUMILEDS LED ULXEON C WMM / FWTM 25.0° / 107.0° Efficiency 90 % PLUMILEDS LED ULXEON C WMM / FWTM 25.0° / 107.0° Efficiency 90 % PLUMILEDS LED ULXEON C WMM / FWTM 25.0° / 107.0° Efficiency 90 % PLUMILEDS LED ULXEON C WMM / FWTM 25.0° / 107.0° Efficiency 90 % PLUMILEDS LED ULXEON C PLUMILEDS LED ULXEON C PLUMILEDS LED ULXEON C PLUMILEDS LED ULXEON C LIXEON C HM / FWTM 25.0° / 107.0° HM / F	Efficiency	91 %	60 <sup>4</sup>
Jept colour White Required components:	Peak intensity	1.5 cd/lm	
Required components:	LEDs/each optic		
PLUMILEDS         .ED       LUXEON C         WHM / FWTM       25.07 / 105.0°         Bidency       91%         Pask intensity       1.4 cd/m         LEDWeach optic       1         Light colour       Bide         Public EDS       UXEON C         WHM / FWTM       25.07 / 104.0°         ED       LUXEON C         WHM / FWTM       25.07 / 104.0°         Endingency       91%         Pask intensity       1.4 cd/m         LEDWeach optic       1         Jight colour       Blue         Required components:       Image: Components	Light colour	White	
• LUNILEDS <ul> <li>LED</li> <li>LUXEON C</li> <li>With / FVTM</li> <li>25.0° / 105.0°</li> <li>Sticknowy</li> <li>91 %</li> <li>Pack infonsity</li> <li>14. dd/m</li> <li>EDa/taech optic</li> <li>1</li> <li>Jipt colour</li> <li>RGBW</li> </ul> <li>Reguired components:</li>	Required components:		
LUXEINE         LD       LUXEON C         WHM / FWTM       25.0° / 105.0°         Efficiency       91 %         Peak intensity       1.4 cd/m         LDS/each optic       1         Jght colour       RGBW         Required components:       Image: Component State St			
LUXEON C     WHM / FWTM 25.0° / 105.0° Hickency 91 % Peak intensity 1.4 cd/m EDBleach optic 1     Jght colour RGBW Required components:      UUXEON C     WHM / FWTM 25.0° / 104.0° Hickency 91 % Peak intensity 1.4 cd/m EDBleach optic 1     Jght colour Blue Required components:      UUXEON C     WHM / FWTM 25.0° / 104.0° Hickency 91 % Peak intensity 1.4 cd/m EDBleach optic 1     Jght colour Blue Required components:      UUXEON C     WHM / FWTM 25.0° / 104.0° Hickency 91 % Peak intensity 1.4 cd/m EDBleach optic 1     Jght colour Blue Required components:      UUXEON C     WHM / FWTM 25.0° / 107.0° Hickency 90 % Peak intensity 1.4 cd/m EDBreach optic 1     Jght colour Green Required components:			
ED       LUXEON C         WHM / FWTM       25.0° / 105.0°         Findency       91 %         Peak Intensity       1.4 cd/m         LEDs/each optic       1         .ight colour       RGBW         Required components:       Image: Color of the color			30° 1500 3
ED       LUXEON C         WHM / FWTM       25.0° / 105.0°         Findency       91 %         Peak Intensity       1.4 cd/m         LEDs/each optic       1         .ight colour       RGBW         Required components:       Image: Components:         Image: Components:       Image: Components:		DS	30 <sup>4</sup>
WHM / FWTM       25.0° / 105.0°         Efficiency       91 %         Pask intensity       1.4 cd/m         LEDs/each optic       1         Light colour       RGBW         Required components:       Image: Components:         Image: Compon	LED		
Efficiency 91 % Peak intensity 1.4 cd/m LEDs/each optic 1 CUMILEDS ED LUXEON C EVHM / FWTM 25.0° / 104.0° Efficiency 91 % Peak intensity 1.4 cd/m EDs/each optic 1 Light colour Blue Required components: CUMILEDS LED LUXEON C ED LUXEO	FWHM / FWTM		
Peak intensity 1.4 cd/m LEDs/each optic 1 .ight colour RGBW Required components:	Efficiency		
LEDs/each optic 1 Light colour RGBW Required components: LED LUXEON C WHIN / FWTM 25.0° / 104.0° Efficiency 91% Pack Intensity 1.4 dd/m LEDs/each optic 1 Light colour Blue Required components: ED LUXEON C VENTILEDS LED LUXEON C Second Components: ED Second Components: ED LUXEON C Second Components: ED LUXEON C Second Components: ED Second Compone	Peak intensity		$\sim$ / / / $\sim$
ight colour RGBW Required components: ED LUXEON C WHM / FWTM 25.0° / 104.0° Efficiency 91 % Peak intensity 1.4 cd/m LEDs/each optic 1 Light colour Blue Required components: ED LUXEON C WHILEDS LED LUXEON C HILEDS LED LUXEON C LUXEON C L	LEDs/each optic	1	
ED       LUXEON C         "WHM / FWTM       25.0° / 104.0°         "ficiency       91 %         Peak intensity       1.4 cd/lm         LEDs/each optic       1         .ight colour       Blue         Required components:       Image: Component State	Light colour	RGBW	e / / · · · · · · · · · · · · · · · · ·
Image: Second	Required components:		
Image: Second			
ED       LUXEON C         FWHM / FWTM       25.0° / 104.0°         Efficiency       91 %         Peak intensity       1.4 cd/m         LEDs/each optic       1         .ight colour       Blue         Required components:			
ED       LUXEON C         FWHM / FWTM       25.0° / 104.0°         Efficiency       91 %         Peak intensity       1.4 cd/lm         LEDs/each optic       1         .ight colour       Blue         Required components:       Image: Component State Stat			36*
ED       LUXEON C         FWHM / FWTM       25.0° / 104.0°         Efficiency       91 %         Peak intensity       1.4 cd/lm         LEDs/each optic       1         .ight colour       Blue         Required components:       Image: Component State Stat			
FWHM / FWTM       25.0° / 104.0°         Efficiency       91 %         Peak intensity       1.4 cd/lm         LEDs/each optic       1         Light colour       Blue         Required components:       Image: Component State			
Efficiency 91 % Peak intensity 1.4 cd/lm LEDs/each optic 1 Light colour Blue Required components: CUMILEDS ED LUXEON C FWHM FWTM 25.0° / 107.0° Efficiency 90 % Peak intensity 1.4 cd/lm LEDs/each optic 1 Light colour Green Required components:			90°
Peak intensity 1.4 cd/lm EDS/each optic 1 Light colour Blue Required components: ED LUXEON C WHM / FWTM 25.0° / 107.0° Efficiency 90 % Peak intensity 1.4 cd/lm EDS/each optic 1 Light colour Green Required components:	LED	LUXEON C	
LEDs/each optic 1 Light colour Blue Required components: ED LUXEON C WHM / FWTM 25.0° / 107.0° Efficiency 90 % Peak intensity 1.4 cd/lm LEDs/each optic 1 Light colour Green Required components:	LED FWHM / FWTM	LUXEON C 25.0° / 104.0°	
Light colour Blue Required components: SUMILEDS LUXEON C WHM / FWTM 25.0° / 107.0° Efficiency 90 % Peak intensity 1.4 cd/lm LEDs/each optic 1 Light colour Green Required components:	LED FWHM / FWTM Efficiency	LUXEON C 25.0° / 104.0° 91 %	400
Required components:	LED FWHM / FWTM Efficiency Peak intensity	LUXEON C 25.0° / 104.0° 91 % 1.4 cd/lm	400
ED       LUXEON C         WHM / FWTM       25.0° / 107.0°         Efficiency       90 %         Peak intensity       1.4 cd/lm         LEDs/each optic       1         Light colour       Green         Required components:       Image: Component State Stat	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON C 25.0° / 104.0° 91 % 1.4 cd/lm 1	60 <sup>1</sup>
ED       LUXEON C         WHM / FWTM       25.0° / 107.0°         Efficiency       90 %         Peak intensity       1.4 cd/lm         LEDs/each optic       1         Light colour       Green         Required components:       Image: Component (Component (	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON C 25.0° / 104.0° 91 % 1.4 cd/lm 1	60 <sup>1</sup>
LUXEON C         WHM / FWTM       25.0° / 107.0°         Efficiency       90 %         Peak intensity       1.4 cd/lm         LEDs/each optic       1         Light colour       Green         Required components:       Image: Component (Component (Compone	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON C 25.0° / 104.0° 91 % 1.4 cd/lm 1	60 <sup>1</sup>
LUXEON C         WHM / FWTM       25.0° / 107.0°         Efficiency       90 %         Peak intensity       1.4 cd/lm         LEDs/each optic       1         Light colour       Green         Required components:       Image: Component (Component (Compone	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON C 25.0° / 104.0° 91 % 1.4 cd/lm 1	501 - 60 57 - 60 60
LED     LUXEON C       FWHM / FWTM     25.0° / 107.0°       Efficiency     90 %       Peak intensity     1.4 cd/lm       LEDs/each optic     1       Light colour     Green       Required components:     ************************************	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON C 25.0° / 104.0° 91 % 1.4 cd/lm 1	gg gg 100 120 120
LED     LUXEON C       FWHM / FWTM     25.0° / 107.0°       Efficiency     90 %       Peak intensity     1.4 cd/lm       LEDs/each optic     1       Light colour     Green       Required components:     ************************************	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON C 25.0° / 104.0° 91 % 1.4 cd/lm 1	gg gg 100 120 120
FWHM / FWTM     25.0° / 107.0°       Efficiency     90 %       Peak intensity     1.4 cd/lm       LEDs/each optic     1       Light colour     Green       Required components:     ***	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON C 25.0° / 104.0° 91 % 1.4 cd/lm 1 Blue	99 - 40 99 - 90 90 - 90 129 -
Efficiency 90 % Peak intensity 1.4 cd/lm LEDs/each optic 1 Light colour Green Required components:	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON C 25.0° / 104.0° 91 % 1.4 cd/lm 1 Blue	99 - 40 99 - 90 90 - 90 129 -
Peak intensity     1.4 cd/lm       LEDs/each optic     1       Light colour     Green       Required components:     ************************************	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON C 25.0° / 104.0° 91 % 1.4 cd/lm 1 Blue	gg gg 100 120 120
LEDs/each optic 1 Light colour Green Required components:	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON C 25.0° / 104.0° 91 % 1.4 cd/lm 1 Blue S LUXEON C 25.0° / 107.0°	
Light colour Green	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON C 25.0° / 104.0° 91 % 1.4 cd/lm 1 Blue S LUXEON C 25.0° / 107.0° 90 %	
	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>WIM / COMPARENT</b> Efficiency Peak intensity	LUXEON C 25.0° / 104.0° 91 % 1.4 cd/lm 1 Blue S LUXEON C 25.0° / 107.0° 90 % 1.4 cd/lm	
	LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON C 25.0° / 104.0° 91 % 1.4 cd/lm 1 Blue S LUXEON C 25.0° / 107.0° 90 % 1.4 cd/lm 1	
300	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 C 25.0° / 104.0° 91 % 1.4 cd/lm 1 Blue S LUXEON C 25.0° / 107.0° 90 % 1.4 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 C 25.0° / 104.0° 91 % 1.4 cd/lm 1 Blue S LUXEON C 25.0° / 107.0° 90 % 1.4 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 C 25.0° / 104.0° 91 % 1.4 cd/lm 1 Blue S LUXEON C 25.0° / 107.0° 90 % 1.4 cd/lm 1	



	DS	90* 90*
LED	LUXEON CZ	75.
FWHM / FWTM	22.0° / 67.0°	
Efficiency	94 %	60 60
Peak intensity	2.4 cd/lm	
LEDs/each optic	1	
Light colour Required components:	White	·
Required components:		$L \neq A \mid A \mid A \mid A \mid A$
		$ \times / \times $
		36° 360 15° 0° 15°
UMILEC	DS	90° 90'
LED	LUXEON CZ	
FWHM / FWTM	23.0° / 70.0°	$ \land \land \land \land \land \land$
Efficiency	94 %	60° 60
Peak intensity	2.4 cd/lm	
LEDs/each optic	1	
Light colour	RGBW	es* es
Required components:		
		30° 24 <u>30</u> 30°
	)S	904 904
LED	LUXEON HL1Z	
FWHM / FWTM	18.0° / 62.0°	73
Efficiency	94 %	600 600
Peak intensity	2.8 cd/lm	$f \times / / $
LEDs/each optic	1	1600
Light colour	White	er e
Required components:		$\times$ / / $\times$
		2430
		30° 15° 0° 15°
<b>Μ</b> ΝΙCΗΙΛ		90* 90
	NCSxE17A	<u>N,</u>
<b>NICHIA</b> LED FWHM / FWTM	NCSxE17A 22.0° / 69.0°	25° 20 29°
LED FWHM / FWTM	NCSxE17A 22.0° / 69.0° 91 %	
	22.0° / 69.0°	
LED FWHM / FWTM Efficiency Peak intensity	22.0° / 69.0° 91 %	
LED FWHM / FWTM Efficiency	22.0° / 69.0° 91 % 2.3 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	22.0° / 69.0° 91 % 2.3 cd/lm 1	00-
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	22.0° / 69.0° 91 % 2.3 cd/lm 1	0 <sup>1</sup> 00 00
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	22.0° / 69.0° 91 % 2.3 cd/lm 1	9 <sup>0</sup> 000 00



		90°
	NFSWE11A	73.
FWHM / FWTM	16.0° / 56.0°	
Efficiency	90 %	50° 60°
Peak intensity	3 cd/lm	
LEDs/each optic	1	1690
Light colour	White	
Required components:		
		30° 330 30° 30°
<b>Μ</b> ΝΙCΗΙΛ		50°
LED	NVSW519A	
FWHM / FWTM	43.0° / 95.0°	
Efficiency	90 %	605 60°
Peak intensity	1.1 cd/im	$\wedge / / / \wedge \wedge /$
LEDs/each optic	1	
Light colour	White	e
Required components:		
		30° 1220 36°
Mauria		15 <sup>5</sup> 0 <sup>6</sup> 35 <sup>6</sup>
MICHIΛ		20° 10° 10°
	NVSxE21A	15 <sup>9</sup> 0 <sup>9</sup> 15 <sup>9</sup>
	25.0° / 74.0°	20° 0° 20°
LED FWHM / FWTM Efficiency	25.0° / 74.0° 92 %	
LED FWHM / FWTM Efficiency Peak intensity	25.0° / 74.0° 92 % 2.1 cd/lm	39*         39*         39*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	25.0° / 74.0° 92 % 2.1 cd/lm 1	127         00         32*           99*         30*         32*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	25.0° / 74.0° 92 % 2.1 cd/lm	55° 0° 35°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	25.0° / 74.0° 92 % 2.1 cd/lm 1	59° (00 ) 55° (0
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	25.0° / 74.0° 92 % 2.1 cd/lm 1	127         00         32*           99*         30*         32*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	25.0° / 74.0° 92 % 2.1 cd/lm 1	59° (00 ) 55° (0
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	25.0° / 74.0° 92 % 2.1 cd/lm 1	42,         60,         90,           23,         60,         90,           23,         90,         90,
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	25.0° / 74.0° 92 % 2.1 cd/lm 1	30         45%         5%           45%         6%         5%           5%         6%         5%           12%         6%         15%
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	25.0° / 74.0° 92 % 2.1 cd/lm 1 White	30         45%         5%           45%         6%         5%           5%         6%         5%           12%         6%         15%
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	25.0° / 74.0° 92 % 2.1 cd/lm 1 White	32     32       36     32       36     32       36     32       36     32       36     32       36     32       36     32
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: COSRAM Opto Semiconductors LED FWHM / FWTM	25.0° / 74.0° 92 % 2.1 cd/lm 1 White Duris E5 30.0° / 80.0°	30.         30.         30.         30.           30.         12.0         01         32.0           30.         12.0         00         00.0           30.         12.0         00         00.0           30.         12.0         00.0         00.0
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: SOSRAM Opto Semiconductors LED FWHM / FWTM Efficiency	25.0° / 74.0° 92 % 2.1 cd/lm 1 White Duris E5 30.0° / 80.0° 93 %	32     32       36     32       36     32       36     32       36     32       36     32       36     32       36     32
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: COSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	25.0° / 74.0° 92 % 2.1 cd/lm 1 White Duris E5 30.0° / 80.0° 93 % 1.8 cd/lm	33         33         35           36         35         35           36         36         35           36         36         35           36         36         35           36         36         35
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	25.0° / 74.0° 92 % 2.1 cd/lm 1 White Duris E5 30.0° / 80.0° 93 % 1.8 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	25.0° / 74.0° 92 % 2.1 cd/lm 1 White Duris E5 30.0° / 80.0° 93 % 1.8 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	25.0° / 74.0° 92 % 2.1 cd/lm 1 White Duris E5 30.0° / 80.0° 93 % 1.8 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	25.0° / 74.0° 92 % 2.1 cd/lm 1 White Duris E5 30.0° / 80.0° 93 % 1.8 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	25.0° / 74.0° 92 % 2.1 cd/lm 1 White Duris E5 30.0° / 80.0° 93 % 1.8 cd/lm 1	



OSRAM		90° 90°
Opto Semiconductors	OSCONIQ C 2424	
LED FWHM / FWTM	26.0° / 73.0°	75*
	93 %	
Efficiency	93 % 2.1 cd/lm	60* 60*
Peak intensity		
LEDs/each optic	1	5°
Light colour	White	
Required components:		1630
		30° 25° 0° 35° 3€°
OSRAM		90 <sup>4</sup> 90 <sup>4</sup>
Opto Semiconductors		
	OSCONIQ P 3030	750 750
FWHM / FWTM	22.0° / 60.0° 94 %	000
Efficiency		60°
Peak intensity	2.8 cd/lm	
LEDs/each optic	1	gr. 1600 gr.
Light colour	White	$ \land \land$
Required components:		
		200
		30° 15° 0° 15° 30°
OSRAM		a.e
Opto Semiconductors		50° 50°
Opto Semiconductors	OSLON Square CSSRM2/CSSRM3	35*
Opto Semiconductors LED FWHM / FWTM	32.0° / 87.0°	
opto Semiconductors LED FWHM / FWTM Efficiency	32.0° / 87.0° 94 %	77
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	32.0° / 87.0° 94 % 1.6 cd/lm	77
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	32.0° / 87.0° 94 % 1.6 cd/lm 1	27 66 60 60
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	32.0° / 87.0° 94 % 1.6 cd/lm	77
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	32.0° / 87.0° 94 % 1.6 cd/lm 1	297 400 609
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	32.0° / 87.0° 94 % 1.6 cd/lm 1	75 69 69 60 60 67 67
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	32.0° / 87.0° 94 % 1.6 cd/lm 1	75 69 69 60 60 67 67
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	32.0° / 87.0° 94 % 1.6 cd/lm 1	75 69 69 60 60 67
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	32.0° / 87.0° 94 % 1.6 cd/lm 1	25. 60 57 60 1228 1228 100 1228 100 1228 100 100 100 100 100 100 100 100 100 10
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	32.0° / 87.0° 94 % 1.6 cd/lm 1 Red	27. 60. 60. 60. 1220 1220 100 100 100 100 100 100 100 1
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED	32.0° / 87.0° 94 % 1.6 cd/lm 1 Red OSLON Square CSSRM2/CSSRM3	25. 60 57 60 1228 1228 100 1228 100 1228 100 100 100 100 100 100 100 100 100 10
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM	32.0° / 87.0° 94 % 1.6 cd/lm 1 Red OSLON Square CSSRM2/CSSRM3 25.0° / 74.0°	54 54 54 55 55 55 55 55 55 55
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency	32.0° / 87.0° 94 % 1.6 cd/lm 1 Red OSLON Square CSSRM2/CSSRM3 25.0° / 74.0° 94 %	59 <sup>4</sup> 59 <sup>4</sup> 50
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	32.0° / 87.0° 94 % 1.6 cd/lm 1 Red OSLON Square CSSRM2/CSSRM3 25.0° / 74.0° 94 % 2.2 cd/lm	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	32.0° / 87.0° 94 % 1.6 cd/lm 1 Red OSLON Square CSSRM2/CSSRM3 25.0° / 74.0° 94 % 2.2 cd/lm 1	
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 Light colour	32.0° / 87.0° 94 % 1.6 cd/lm 1 Red OSLON Square CSSRM2/CSSRM3 25.0° / 74.0° 94 % 2.2 cd/lm	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	32.0° / 87.0° 94 % 1.6 cd/lm 1 Red OSLON Square CSSRM2/CSSRM3 25.0° / 74.0° 94 % 2.2 cd/lm 1	
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 Light colour	32.0° / 87.0° 94 % 1.6 cd/lm 1 Red OSLON Square CSSRM2/CSSRM3 25.0° / 74.0° 94 % 2.2 cd/lm 1	
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 Light colour	32.0° / 87.0° 94 % 1.6 cd/lm 1 Red OSLON Square CSSRM2/CSSRM3 25.0° / 74.0° 94 % 2.2 cd/lm 1	
Optio Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Optio Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	32.0° / 87.0° 94 % 1.6 cd/lm 1 Red OSLON Square CSSRM2/CSSRM3 25.0° / 74.0° 94 % 2.2 cd/lm 1	



SAMSUN	IG	90* 90*
LED	LH231B	
FWHM / FWTM	31.0° / 80.0°	78.
Efficiency	83 %	400
Peak intensity	1.6 cd/lm	
LEDs/each optic	1	
Light colour	White	95*
Required components:		1200
Protective plate	a, glass	
		30° 255 30° 30°
SAMSUN	IG	90* 90*
LED	LH231B	75*
FWHM / FWTM	31.0° / 82.0°	400
Efficiency	91 %	60 <sup>2</sup> 60 <sup>2</sup>
Peak intensity	1.7 cd/lm	
LEDs/each optic	1	
Light colour	White	a. A se
Required components:		7 - 1290
		1600
SAMSUN	IG	90 <sup>4</sup> 90 <sup>4</sup>
	LH351B	75.
FWHM / FWTM	33.0° / 83.0° 94 %	- 400
Efficiency	94 % 1.6 cd/lm	60°
Peak intensity LEDs/each optic	1.6 cd/m	
Light colour	White	45°
Required components:	wille	
Required components.		1230
		yo yo yo
SAMSUN	IG	20 <sup>10</sup> 20 <sup>1</sup> 20 <sup>1</sup> 20 <sup>1</sup>
		90 <sup>6</sup> 90 <sup>7</sup>
SAMSUN LED FWHM / FWTM	LH351C	90 <sup>6</sup> 90 <sup>7</sup>
LED		
LED FWHM / FWTM Efficiency	LH351C 37.0° / 87.0°	90 <sup>6</sup> 90 <sup>7</sup>
LED FWHM / FWTM Efficiency Peak intensity	LH351C 37.0° / 87.0° 94 %	
LED FWHM / FWTM	LH351C 37.0° / 87.0° 94 % 1.5 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LH351C 37.0° / 87.0° 94 % 1.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH351C 37.0° / 87.0° 94 % 1.5 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH351C 37.0° / 87.0° 94 % 1.5 cd/lm 1	27 28 29 29 29 29 20 20 29 29 29 29 29 29 29 29 29 29
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LH351C 37.0° / 87.0° 94 % 1.5 cd/lm 1	27 28 29 29 29 29 20 20 29 29 29 29 29 29 29 29 29 29



SAMSUN	IG	90 <sup>4</sup> 90 <sup>4</sup>
LED	LH351D	
FWHM / FWTM	44.0° / 93.0°	78.
Efficiency	93 %	
Peak intensity	1.2 cd/lm	$\land$ /// $\land$ $\land$ /
LEDs/each optic	1	
Light colour	White	45× 45
Required components:		
		30° 1200 30° 30°
SAMSUN	IG	30*
LED	LM301B	
FWHM / FWTM	28.0° / 76.0°	73. 400
Efficiency	87 %	
Peak intensity	1.9 cd/lm	90° 00°
LEDs/each optic	1	
Light colour	White	e7" e7"
Required components:		
Protective plate		1639
Fiblective plate	, yiass	
		30° 2000 30° 30°
SAMSUN	IG	90* 90*
LED	LM301B	
FWHM / FWTM	27.0° / 78.0°	400
Efficiency	93 %	504
Peak intensity		ge
Peak intensity LEDs/each optic	93 % 1.9 cd/lm 1	50 000 000
Peak intensity LEDs/each optic Light colour	93 % 1.9 cd/lm	er an et
Peak intensity LEDs/each optic Light colour	93 % 1.9 cd/lm 1	er
Peak intensity LEDs/each optic Light colour	93 % 1.9 cd/lm 1	er
Peak intensity LEDs/each optic Light colour	93 % 1.9 cd/lm 1	60 00 00 00 00 00 00 00 00 00 00
Efficiency Peak intensity LEDs/each optic Light colour Required components:	93 % 1.9 cd/lm 1	60 000 000 000 000 000 000 000 000 000
Peak intensity LEDs/each optic Light colour Required components:	93 % 1.9 cd/lm 1 White	2°
Peak intensity LEDs/each optic Light colour Required components:	93 % 1.9 cd/lm 1 White	30,         30,
Peak intensity LEDs/each optic Light colour	93 % 1.9 cd/lm 1 White	2°
Peak intensity LEDs/each optic Light colour Required components: <b>SAMSUN</b> LED FWHM / FWTM	93 % 1.9 cd/lm 1 White G LM302D	22- 26- 26- 26- 26- 26- 26- 26- 26- 26-
Peak intensity LEDs/each optic Light colour Required components: SAMSUN	93 % 1.9 cd/lm 1 White G LM302D 29.0° / 79.0°	22- 26- 26- 26- 26- 26- 26- 26- 26- 26-
Peak intensity LEDs/each optic Light colour Required components: <b>SAMSUN</b> LED FWHM / FWTM Efficiency Peak intensity	93 % 1.9 cd/lm 1 White	25- 26- 26- 26- 26- 27- 27- 26- 27- 26- 27- 27- 26- 27- 27- 27- 27- 27- 27- 27- 27- 27- 27
Peak intensity LEDs/each optic Light colour Required components: <b>SAMSUN</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	93 % 1.9 cd/lm 1 White LM302D 29.0° / 79.0° 93 % 1.8 cd/lm	
Peak intensity LEDs/each optic Light colour Required components: <b>SAMSUN</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	93 % 1.9 cd/lm 1 White M302D 29.0° / 79.0° 93 % 1.8 cd/lm 1	25- 26- 26- 26- 26- 27- 27- 26- 27- 26- 27- 27- 26- 27- 27- 27- 27- 27- 27- 27- 27- 27- 27
Peak intensity LEDs/each optic Light colour Required components: <b>SAMSUN</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	93 % 1.9 cd/lm 1 White M302D 29.0° / 79.0° 93 % 1.8 cd/lm 1	50 000 50 0000 50 000 50 00
Peak intensity LEDs/each optic Light colour Required components: <b>SAMSUN</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	93 % 1.9 cd/lm 1 White M302D 29.0° / 79.0° 93 % 1.8 cd/lm 1	



сласия		
SAMSUN	10	90* 90
LED	LM302Z plus	
FWHM / FWTM	30.0° / 80.0°	75 20
Efficiency	93 %	
Peak intensity	1.8 cd/lm	
LEDs/each optic	1	
Light colour	White	9 <sup>2</sup>
Required components:		1230
		$\times \land \land \times$
		1600
		10 <sup>-</sup> 15 <sup>3</sup> 0 <sup>6</sup> 15 <sup>3</sup> 30
SAMSU	IG	90*
LED	LM302Z plus	
FWHM / FWTM	30.0° / 82.0°	73
Efficiency	87 %	
Peak intensity	1.6 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required components:		1200
- 1 1		
Protective plat	e, glass	
		304
		135° 0° 15°
SEOUL SEMICONDUCTOR		90° 90°
LED	SEOUL DC 3030C	
FWHM / FWTM	30.0° / 80.0°	400
Efficiency	93 %	
Peak intensity	1.8 cd/lm	
LEDs/each optic	1	
Light colour	White	99× et
Required components:		
		1600
		30° 30
		360 237 360 237 36
SEOUL SEMICONDUCTOR		30 <sup>4</sup> 30 <sup>4</sup> 30 50 <sup>4</sup> 50
SEOUL SEMICONDUCTOR	SEOUL DC 5050 6V	80 <sup>4</sup> 80 80 80 80 80 80 80 80 80 80 80 80 80
seoul semiconductor LED	SEOUL DC 5050 6V 45.0° / 100.0°	20° 20 20°
seoul semiconductor LED FWHM / FWTM		80° 80° 80°
	45.0° / 100.0°	80° 80° 80°
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity	45.0° / 100.0° 91 %	80 <sup>4</sup> 80 80 80 80 80 80 80 80 80 80 80 80 80
stoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	45.0° / 100.0° 91 % 1 cd/lm	80° 80° 80°
scoul semiconductor LED FWHM / FWTM Efficiency Peak intensity	45.0° / 100.0° 91 % 1 cd/lm 1	80° 80° 80°
stoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	45.0° / 100.0° 91 % 1 cd/lm 1	Bit
seou semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	45.0° / 100.0° 91 % 1 cd/lm 1	80° 80° 80°
stoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	45.0° / 100.0° 91 % 1 cd/lm 1	80° 80° 80°



SEQUE SEQUE SEMICONDUCTOR		50° 50°
LED	Z8Y22T	77
FWHM / FWTM	31.0° / 82.0°	
Efficiency	93 %	
Peak intensity	1.6 cd/lm	
LEDs/each optic	1	
Light colour	White	gr at
Required component	ts:	
		34 120 120 0 120 0 120 0 120 120