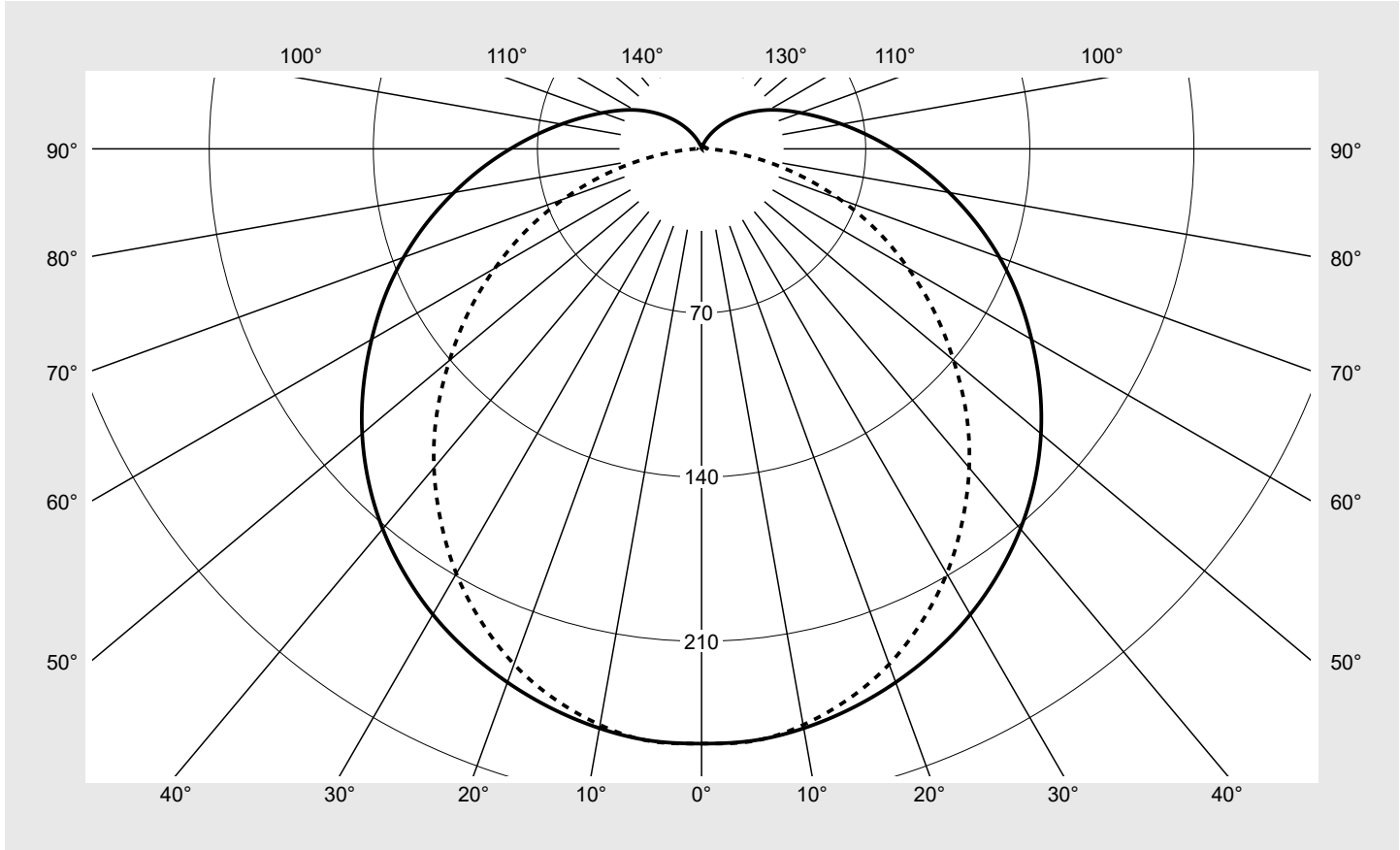


Photometric test report

Family Monsun® 21 Eco	Order number: 51FJ20ML45A EAN: 4058352554593	LP number 59396_1
	Version cover, frosted, polycarbonate, diffuse beam Lamps LED 4000 K CRI ≥ 80 Controlgear ECG Multilumen Rated values Net luminous flux = 4900 lm Power consumption = 36.0 W Luminous efficacy = 136.1 lm/W	serial documentation 10.02.2023
		

Luminous intensity in cd/klm C180-0 C270-90 **Imax: 254 cd/klm**



Classifications	
DIN 5040	B 3 1
CIE	N1=40 N2=69 N3=88 N4=88 N5=100

Luminaire light output ratios	
η_{LB}	100.0%
ϕ_u	87.8%
ϕ_o	12.2%

Measurement conditions
DIN EN 13032 and DIN 5032

Photometric test report

Family Monsun® 21 Eco	Order number: 51FJ20ML45A EAN: 4058352554593	LP number 59396_1
Table of values for luminous intensities		Maximum luminous intensity
		sITeco

C-planes γ	0° 180°	15°	30°	45°	60°	75°	90° 270°	Phi-zone	Total Phi-zone
		165° 195° 345°	150° 210° 330°	135° 225° 315°	120° 240° 300°	105° 255° 285°			
Luminous intensity in cd/klm								Luminous flux in lm/klm	
0°	253.6	253.6	253.6	253.6	253.6	253.6	253.6	1.5	1.5
5°	253.3	253.4	251.8	251.8	252.2	252.8	253.5	12.1	13.6
10°	250.9	251.0	249.2	248.5	248.6	248.8	249.5	23.7	37.3
15°	247.0	247.0	244.7	243.3	242.5	242.1	242.8	34.6	71.9
20°	242.1	241.8	239.0	236.2	234.5	233.2	233.9	44.5	116.4
25°	236.2	235.5	231.8	227.4	224.3	221.9	222.4	52.9	169.3
30°	229.3	228.3	223.7	217.6	212.6	209.1	209.2	59.9	229.2
35°	221.0	219.7	214.1	206.6	199.2	194.4	193.9	65.1	294.2
40°	211.6	209.9	203.5	194.5	185.2	178.4	177.6	68.5	362.7
45°	200.9	198.9	191.7	181.4	170.0	161.3	159.7	70.0	432.7
50°	189.0	186.8	179.1	167.5	154.4	143.4	140.3	69.7	502.4
55°	176.0	173.7	165.4	152.7	138.3	125.6	121.3	67.7	570.1
60°	162.5	160.0	151.1	137.3	122.2	107.3	101.7	64.1	634.2
65°	149.1	146.0	136.7	122.2	106.2	89.7	82.6	59.3	693.5
70°	135.2	131.9	122.0	106.7	89.7	71.7	62.6	53.3	746.8
75°	121.1	117.8	107.5	91.8	73.3	54.2	43.1	46.5	793.3
80°	107.2	103.7	93.6	77.4	58.2	37.6	24.6	39.3	832.5
85°	94.0	90.3	80.5	64.7	45.3	23.9	9.6	32.4	865.0
90°	81.6	78.0	68.6	53.6	35.2	15.2	2.6	26.7	891.7
95°	70.5	67.2	58.7	44.7	27.8	10.7	2.4	22.4	914.1
100°	60.6	57.8	49.8	37.2	22.6	8.2	2.2	18.6	932.7
105°	52.2	49.5	42.2	31.5	18.7	6.1	1.9	15.4	948.1
110°	44.9	42.2	36.1	26.6	15.2	4.5	1.8	12.7	960.9
115°	38.8	36.1	30.9	22.3	12.2	3.3	1.7	10.4	971.2
120°	33.2	30.8	26.1	18.4	9.5	2.5	1.6	8.3	979.5
125°	27.8	25.7	21.4	14.8	7.2	1.9	1.5	6.4	985.9
130°	22.8	20.9	17.2	11.4	5.3	1.7	1.4	4.8	990.7
135°	18.2	16.6	13.3	8.5	3.6	1.6	0.9	3.4	994.1
140°	13.8	12.5	9.8	6.0	2.3	1.3	1.0	2.3	996.5
145°	9.9	8.9	6.8	4.0	1.7	1.3	1.1	1.5	997.9
150°	6.5	5.7	4.3	2.4	1.6	1.3	1.2	0.9	998.8
155°	3.8	3.3	2.4	1.7	1.5	1.4	1.2	0.5	999.3
160°	2.0	1.8	1.7	1.5	1.4	1.4	1.3	0.3	999.6
165°	1.6	1.6	1.5	1.4	1.4	1.4	1.3	0.2	999.8
170°	1.5	1.5	1.4	1.4	1.4	1.4	1.3	0.1	999.9
175°	1.4	1.4	1.4	1.4	1.4	1.4	1.3	0.1	1000.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0

Photometric test report

Family Monsun® 21 Eco	Order number: 51FJ20ML45A EAN: 4058352554593	LP number 59396_1
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UGR-Table	Standard room	siteco
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Reflection factor of ceiling	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3	
Reflection factor of walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3	
Reflection factor of floor	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Room dimensions	View crosswise (C0)					View endwise (C90)					
x	y										
2H	2H	19.5	21.1	19.9	21.5	22.0	18.4	20.0	18.8	20.4	20.9
	3H	21.6	23.1	22.1	23.5	24.0	19.9	21.4	20.3	21.8	22.3
	4H	22.6	24.0	23.1	24.5	25.0	20.4	21.9	20.9	22.3	22.9
	6H	23.7	24.9	24.2	25.4	26.0	20.8	22.2	21.3	22.7	23.2
	8H	24.1	25.3	24.7	25.8	26.4	20.9	22.2	21.5	22.7	23.3
	12H	24.6	25.7	25.2	26.3	26.9	21.0	22.2	21.5	22.7	23.3
4H	2H	20.1	21.6	20.6	22.0	22.5	19.3	20.7	19.8	21.1	21.7
	3H	22.5	23.7	23.0	24.2	24.8	21.0	22.2	21.5	22.7	23.3
	4H	23.7	24.8	24.2	25.3	25.9	21.7	22.8	22.3	23.4	23.9
	6H	24.9	25.8	25.4	26.4	27.0	22.2	23.2	22.8	23.8	24.4
	8H	25.4	26.3	26.0	26.9	27.6	22.4	23.3	23.0	23.9	24.5
	12H	26.0	26.8	26.6	27.4	28.1	22.5	23.3	23.1	23.9	24.6
8H	4H	24.0	24.9	24.6	25.5	26.1	22.3	23.2	22.9	23.8	24.4
	6H	25.4	26.1	26.0	26.8	27.4	23.1	23.8	23.7	24.4	25.1
	8H	26.1	26.8	26.7	27.4	28.1	23.4	24.0	24.0	24.7	25.4
	12H	26.9	27.5	27.5	28.1	28.8	23.6	24.2	24.2	24.8	25.5
12H	4H	24.0	24.9	24.6	25.5	26.1	22.5	23.3	23.1	23.9	24.6
	6H	25.5	26.2	26.1	26.8	27.5	23.4	24.0	24.0	24.6	25.4
	8H	26.3	26.9	26.9	27.5	28.3	23.7	24.3	24.4	25.0	25.7

Luminance table	Max. for $\gamma \geq 65^\circ$	Photometric dimensions in mm:	L = 1277	H(C0) = 38	H(C180) = 38
			B = 90	H(C90) = 38	H(C270) = 38

C-planes	γ	Luminance in cd/m ²								
		0° 180°	15° 165° 195° 345°	30° 150° 210° 330°	45° 135° 225° 315°	60° 120° 240° 300°	75° 105° 255° 285°	90° 270°		
45°		8515.4	8471.3	8373.8	8290.3	8289.0	8548.4	9351.0		
50°		8338.6	8286.6	8173.9	8044.5	7988.3	8168.4	8987.8		
55°		8162.5	8103.3	7965.6	7792.7	7682.9	7796.8	8648.0		
60°		8003.5	7932.9	7766.0	7533.7	7390.4	7384.8	8248.1		
65°		7892.6	7786.7	7595.8	7311.8	7101.5	6982.1	7830.7		
70°		7803.5	7675.3	7436.2	7081.7	6777.0	6481.8	7218.7		
75°		7746.9	7606.2	7317.7	6893.6	6411.9	5894.4	6382.8		
80°		7755.2	7582.1	7275.6	6759.4	6100.2	5174.6	5161.2		
85°		7891.5	7679.8	7363.7	6802.2	5977.2	4541.6	3502.0		

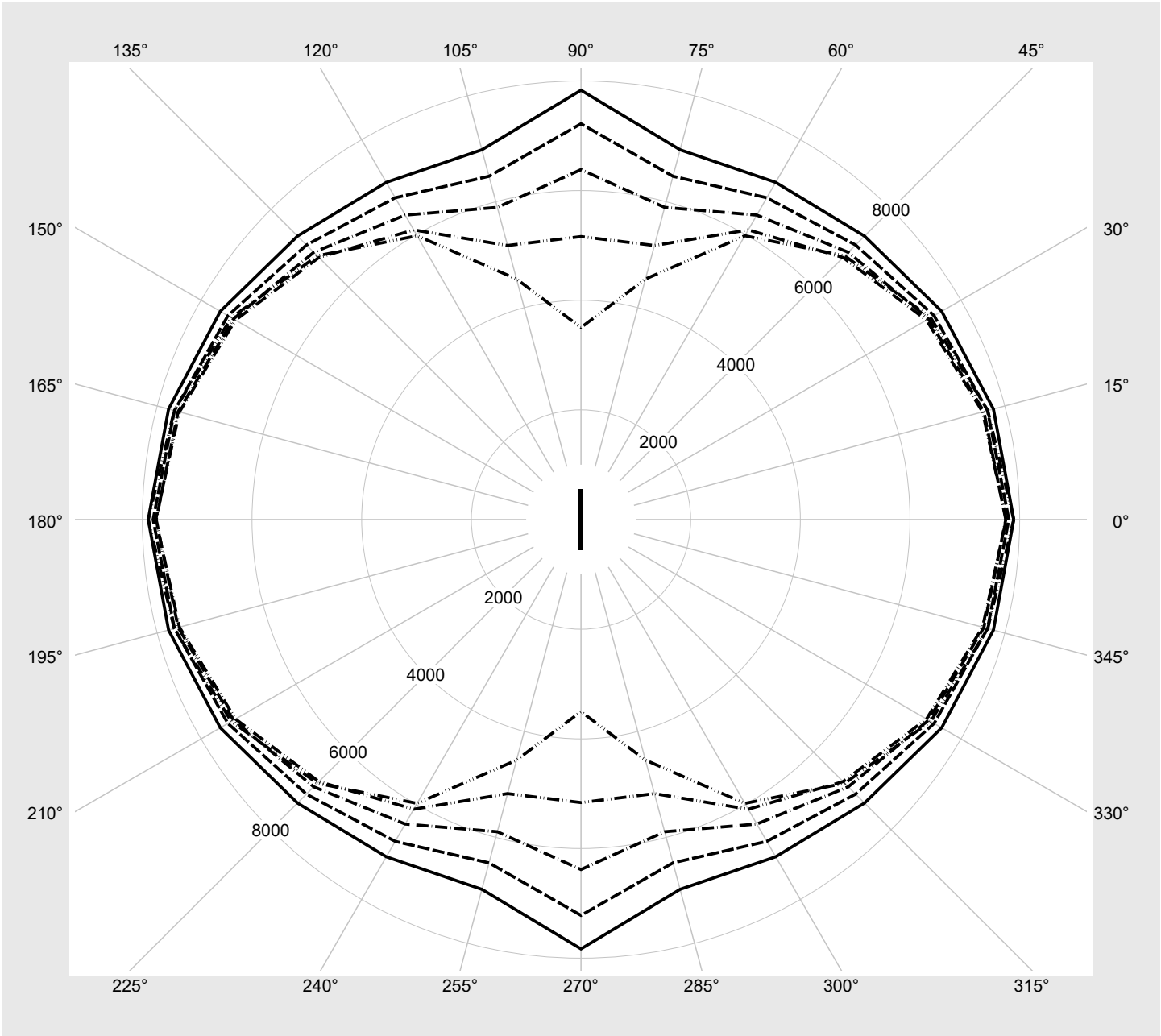
Photometric test report

Family Monsun® 21 Eco	Order number: 51FJ20ML45A EAN: 4058352554593	LP number 59396_1
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Luminance values in cd/m²

γ 65°
 γ 70°
 γ 75°
 γ 80°
 γ 85°



Photometric test report

Family Monsun® 21 Eco	Order number: 51FJ20ML45A EAN: 4058352554593	LP number 59396_1
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Multilumen Table	environmental temperature: 25°C	
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DIP-Step	Switch Setting		Luminous flux [lm]	Power consumption [W]
	1	2		
3	ON	ON	4900	36.0
2	ON	OFF	4000	31.0
1	OFF	ON	3300	25.0
0	OFF	OFF	2700	20.0