Photometric test report

Family
Monsun® 12

Order number: 51FP20EP460H
EAN: 4058352389331

Version	prismatic diffuser, opal, polycarbonate, wide distribution
Lamps	LED 4000 K | CRI ≥ 80
Controlgear	ECG-DALI
Rated values	Net luminous flux = 5450 lm Power consumption = 34.6 W Luminous efficacy = 157.5 lm/W

LP number
59060_31

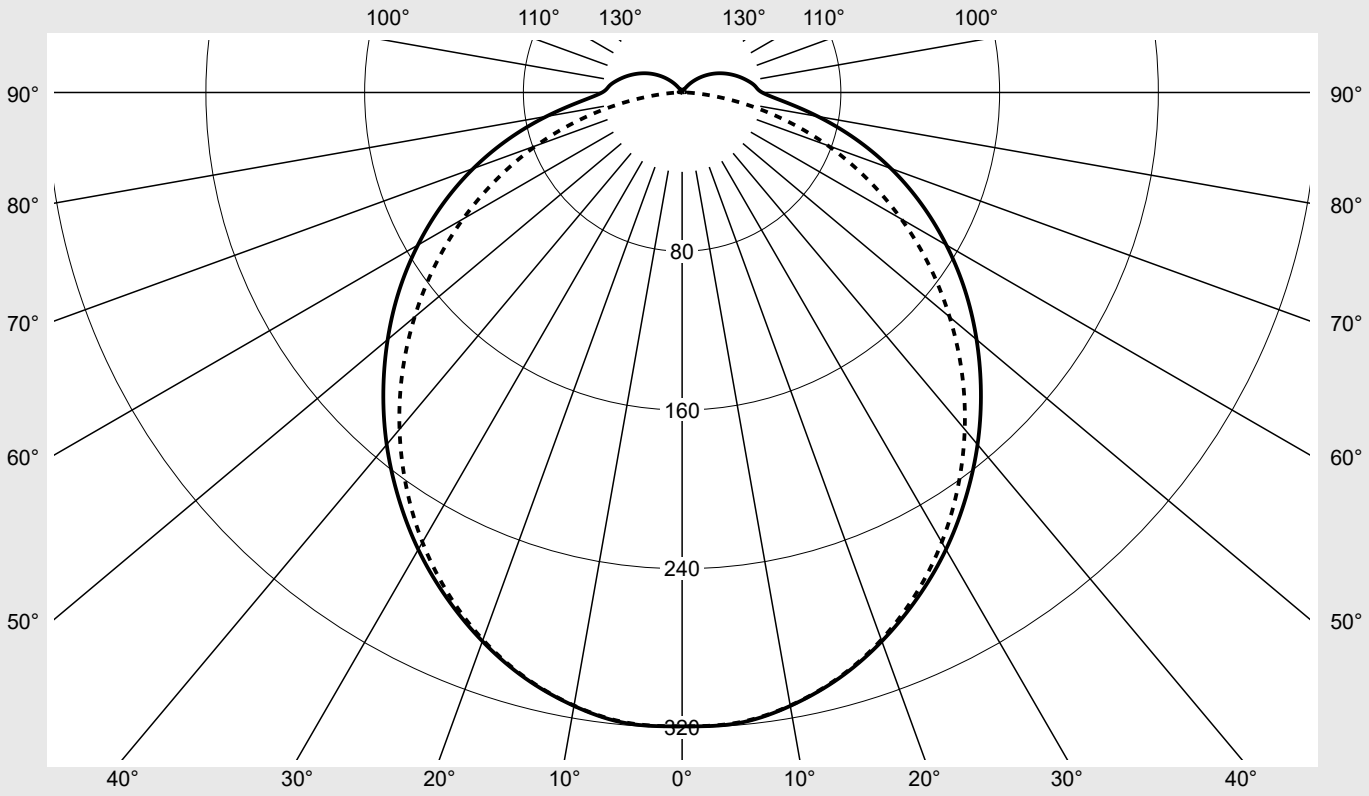
serial documentation
26.08.2020

siteco

Luminous intensity in cd/klm

C180-0 C270-90

Imax: 319 cd/klm



Classifications	
DIN 5040	A 4 1
CIE	N1=45 N2=75 N3=93 N4=94 N5=100

Luminaire light output ratios	
η_{LB}	100.0%
ϕ_u	93.7%
ϕ_o	6.3%

Measurement conditions

DIN EN 13032 and DIN 5032

Photometric test report

Family	Order number: 51FP20EP460H	LP number
Monsun® 12	EAN: 4058352389331	59060_31

siteco

Table of values for luminous intensities

Maximum luminous intensity

C-planes	0° 180°	15° 165° 195° 345°	30° 150° 210° 330°	45° 135° 225° 315°	60° 120° 240° 300°	75° 105° 255° 285°	90° 270°	Phi-zone	Total Phi-zone
γ	Luminous intensity in cd/klm							Luminous flux in lm/klm	
0°	319.4	319.4	319.4	319.4	319.4	319.4	319.4	1.9	1.9
5°	319.1	317.8	316.0	317.2	318.6	318.6	318.8	15.2	17.1
10°	313.9	312.8	311.0	312.1	313.5	313.5	313.7	29.8	46.9
15°	305.6	304.7	302.7	303.7	305.0	304.9	305.2	43.2	90.1
20°	294.3	293.5	291.4	292.2	293.3	293.1	293.5	54.9	145.0
25°	280.9	280.2	277.7	277.9	278.8	278.5	278.8	64.6	209.6
30°	265.9	265.3	262.4	261.6	261.9	261.4	261.7	72.0	281.6
35°	249.2	248.5	245.6	243.7	242.9	242.2	242.4	77.0	358.5
40°	231.6	230.8	227.5	224.6	222.7	221.4	221.6	79.5	438.0
45°	212.9	211.8	208.5	204.2	201.3	199.0	199.4	79.5	517.5
50°	193.7	192.3	188.8	183.7	179.4	175.9	176.0	77.3	594.9
55°	174.1	172.4	168.8	162.7	157.2	152.3	152.1	73.1	667.9
60°	153.8	152.1	148.1	141.4	134.9	128.8	127.5	66.9	734.9
65°	133.1	131.4	127.0	119.9	112.8	105.5	102.8	59.2	794.0
70°	112.0	110.4	105.0	98.0	90.2	82.2	78.2	49.9	843.9
75°	90.5	88.8	83.0	75.7	67.3	58.8	53.6	39.3	883.2
80°	69.4	67.4	62.0	54.0	45.3	36.4	30.4	28.3	911.6
85°	51.2	49.1	43.8	35.9	26.7	17.7	11.3	18.6	930.2
90°	40.3	38.3	33.0	25.3	16.4	7.5	1.9	12.9	943.1
95°	36.9	35.1	30.2	22.8	14.1	5.6	1.6	11.6	954.7
100°	33.7	31.9	27.1	20.1	11.9	4.0	1.5	10.1	964.8
105°	30.1	28.5	23.8	17.3	9.5	2.6	1.3	8.6	973.4
110°	26.5	24.6	20.5	14.4	7.3	1.5	1.2	7.1	980.4
115°	22.8	21.1	17.3	11.6	5.2	1.3	1.2	5.7	986.1
120°	19.1	17.5	14.1	8.9	3.4	1.3	1.1	4.4	990.5
125°	15.4	13.9	10.8	6.2	1.7	1.2	1.0	3.2	993.6
130°	11.8	10.5	7.7	3.9	1.4	1.2	1.0	2.2	995.8
135°	8.3	7.2	5.0	2.0	1.4	1.2	1.1	1.4	997.2
140°	5.1	4.3	2.5	1.6	1.3	1.1	1.0	0.8	998.0
145°	2.4	2.0	1.8	1.6	1.4	1.2	1.2	0.5	998.5
150°	1.9	1.9	1.8	1.5	1.4	1.3	1.2	0.4	999.0
155°	1.8	1.8	1.6	1.5	1.4	1.3	1.3	0.4	999.3
160°	1.6	1.6	1.5	1.5	1.4	1.4	1.3	0.3	999.6
165°	1.5	1.5	1.4	1.4	1.4	1.4	1.3	0.2	999.8
170°	1.4	1.4	1.4	1.4	1.4	1.4	1.3	0.1	999.9
175°	1.3	1.3	1.3	1.4	1.4	1.4	1.3	0.1	1000.0
180°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.0	1000.0

Photometric test report

Family	Order number: 51FP20EP460H	LP number
Monsun® 12	EAN: 4058352389331	59060_31

siteco

UGR-Table

Standard room

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 x	y	View crosswise (C0)					View endwise (C90)				
2H	2H	20.0	21.7	20.3	22.0	22.3	19.8	21.5	20.2	21.8	22.2
	3H	21.8	23.4	22.2	23.7	24.1	21.4	22.9	21.7	23.3	23.6
	4H	22.6	24.1	23.0	24.5	24.8	22.0	23.5	22.4	23.8	24.2
	6H	23.4	24.7	23.8	25.1	25.5	22.4	23.8	22.8	24.1	24.5
	8H	23.7	25.0	24.1	25.4	25.8	22.5	23.8	23.0	24.2	24.6
	12H	24.0	25.2	24.4	25.6	26.0	22.6	23.8	23.0	24.2	24.6
4H	2H	20.7	22.2	21.1	22.6	22.9	20.6	22.1	21.0	22.4	22.8
	3H	22.7	24.0	23.2	24.4	24.8	22.3	23.6	22.8	24.0	24.4
	4H	23.7	24.9	24.1	25.3	25.7	23.1	24.2	23.5	24.6	25.1
	6H	24.6	25.6	25.0	26.0	26.5	23.6	24.6	24.1	25.0	25.5
	8H	25.0	25.9	25.4	26.3	26.8	23.8	24.7	24.2	25.2	25.6
	12H	25.3	26.2	25.8	26.6	27.1	23.9	24.7	24.4	25.2	25.7
8H	4H	24.0	25.0	24.5	25.4	25.9	23.5	24.4	24.0	24.9	25.3
	6H	25.1	25.9	25.6	26.3	26.8	24.2	25.0	24.7	25.4	25.9
	8H	25.6	26.3	26.1	26.7	27.3	24.4	25.1	24.9	25.6	26.1
	12H	26.1	26.7	26.6	27.2	27.7	24.6	25.2	25.1	25.7	26.2
12H	4H	24.1	24.9	24.6	25.4	25.9	23.6	24.4	24.1	24.9	25.4
	6H	25.2	25.9	25.7	26.3	26.9	24.3	25.0	24.8	25.5	26.0
	8H	25.7	26.3	26.2	26.8	27.3	24.6	25.2	25.1	25.7	26.2

Luminance table

Max. for $\gamma >= 65°$

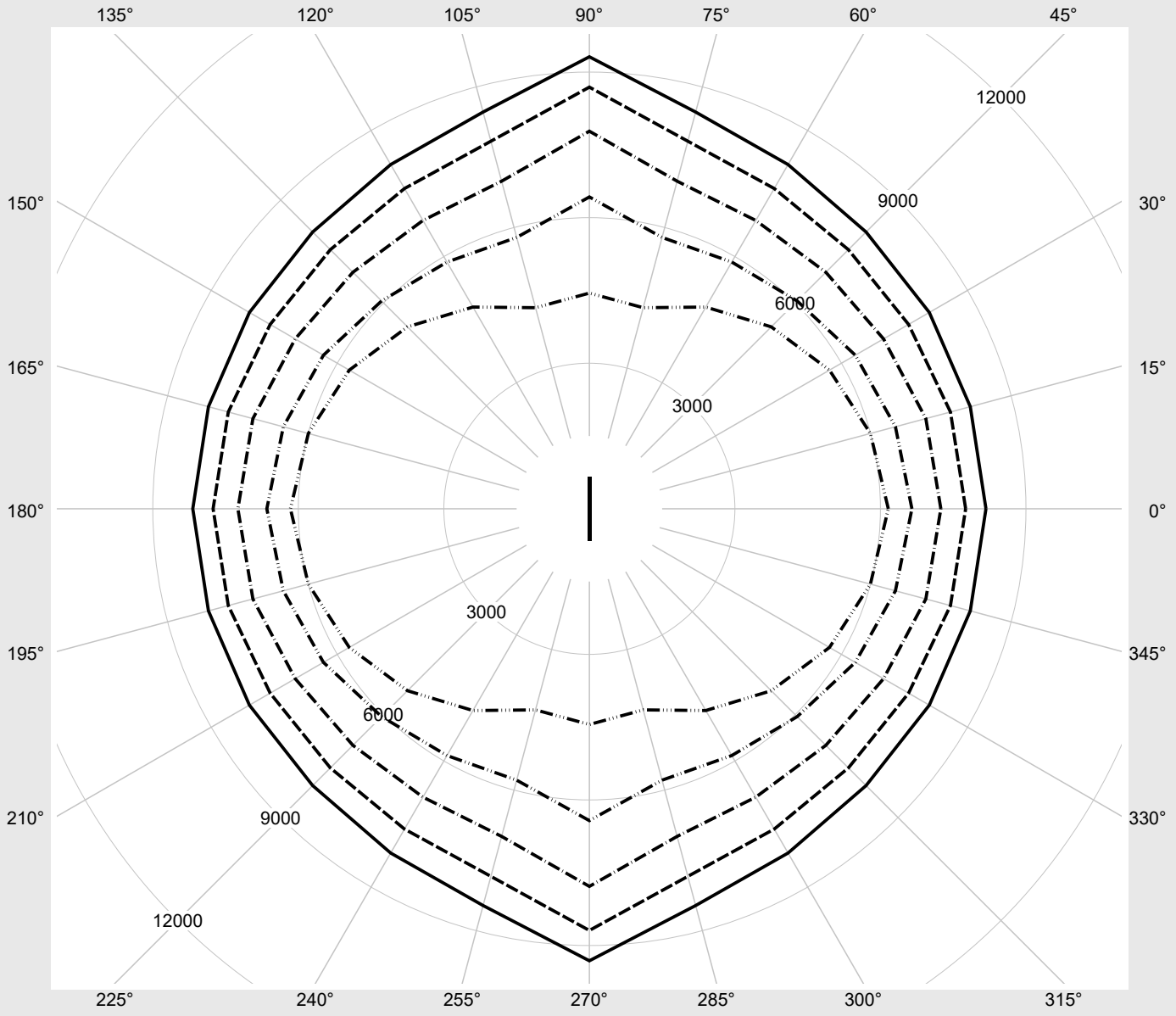
Photometric dimensions in mm: L = 1590, B = 87, H(C0) = 21, H(C90) = 21, H(C180) = 21, H(C270) = 21

C-planes	0° 180°	15° 165° 195° 345°	30° 150° 210° 330°	45° 135° 225° 315°	60° 120° 240° 300°	75° 105° 255° 285°	90° 270°
γ	Luminance in cd/m²						
45°	9558.0	9544.8	9555.5	9643.3	9904.7	10311.5	10963.1
50°	9220.8	9193.8	9208.3	9271.9	9500.7	9893.0	10618.5
55°	8893.5	8849.9	8863.1	8889.6	9083.7	9446.3	10252.9
60°	8543.5	8500.4	8496.8	8495.9	8651.6	8977.7	9822.6
65°	8175.6	8129.8	8092.5	8067.0	8192.0	8464.9	9315.1
70°	7757.0	7706.4	7598.7	7552.1	7621.8	7842.7	8689.8
75°	7245.7	7181.1	7002.5	6893.9	6861.6	6990.0	7781.7
80°	6649.3	6531.9	6330.6	6057.6	5871.5	5790.0	6426.7
85°	6162.6	5997.7	5715.3	5302.6	4800.8	4290.6	4445.2

Photometric test report

Family	Order number: 51FP20EP460H	LP number
Monsun® 12	EAN: 4058352389331	59060_31

Luminance values in cd/m² γ 65° γ 70° γ 75° γ 80° γ 85°



Photometric test report

Family	Order number: 51FP20EP460H	LP number
Monsun® 12	EAN: 4058352389331	59060_31

siteco

Dimming levels table

environmental temperature: 25°C

Luminous flux %	Dimming level linear	Dimming level logarithmic	Luminous flux [lm]	Power consumption [W]
100	254	254	5450	34.6
95	241	252	5185	33.0
90	227	250	4895	31.1
85	214	248	4624	29.4
80	201	245	4352	27.7
75	188	243	4078	26.0
70	176	241	3822	24.5
65	163	238	3545	22.8
60	150	235	3266	21.2
55	138	232	3007	19.6
50	125	228	2725	18.0
45	113	224	2463	16.4
40	100	220	2178	14.8
35	88	215	1913	13.2
30	75	209	1627	11.5
25	63	203	1360	10.0
20	51	195	1091	8.4
15	39	185	820	7.0
10	27	172	549	5.5
5	15	150	275	4.1
2	8	127	116	3.2