

Photometric test report

Family
Monsun® 12

Order number: **51FP20DP460HR**
EAN: **4058352392355**

LP number
59060_44



Version prismatic diffuser, opal, polycarbonate, wide distribution, changeover relay
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

serial
documentation
10.09.2020

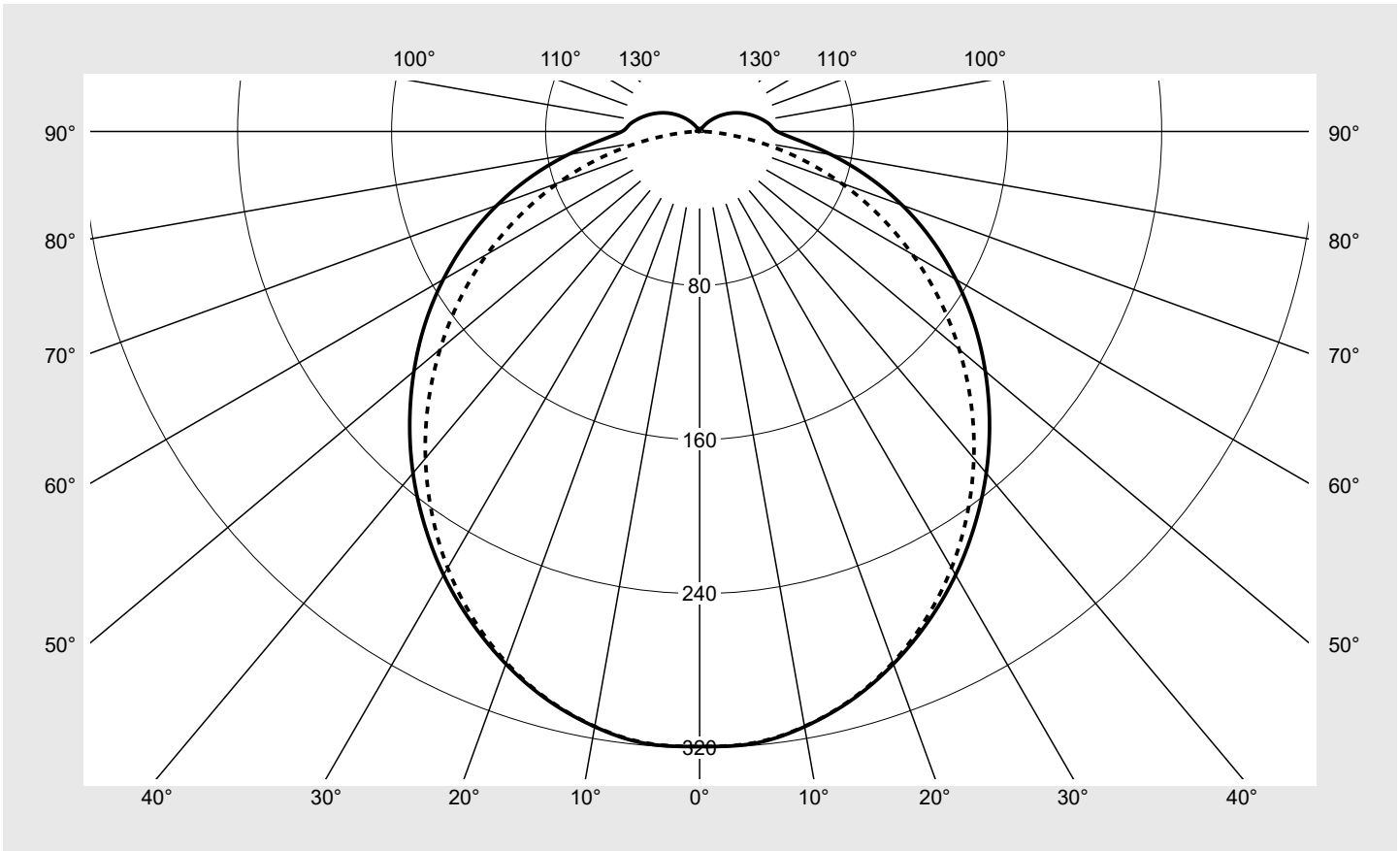
sitEco

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

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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°	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

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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	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

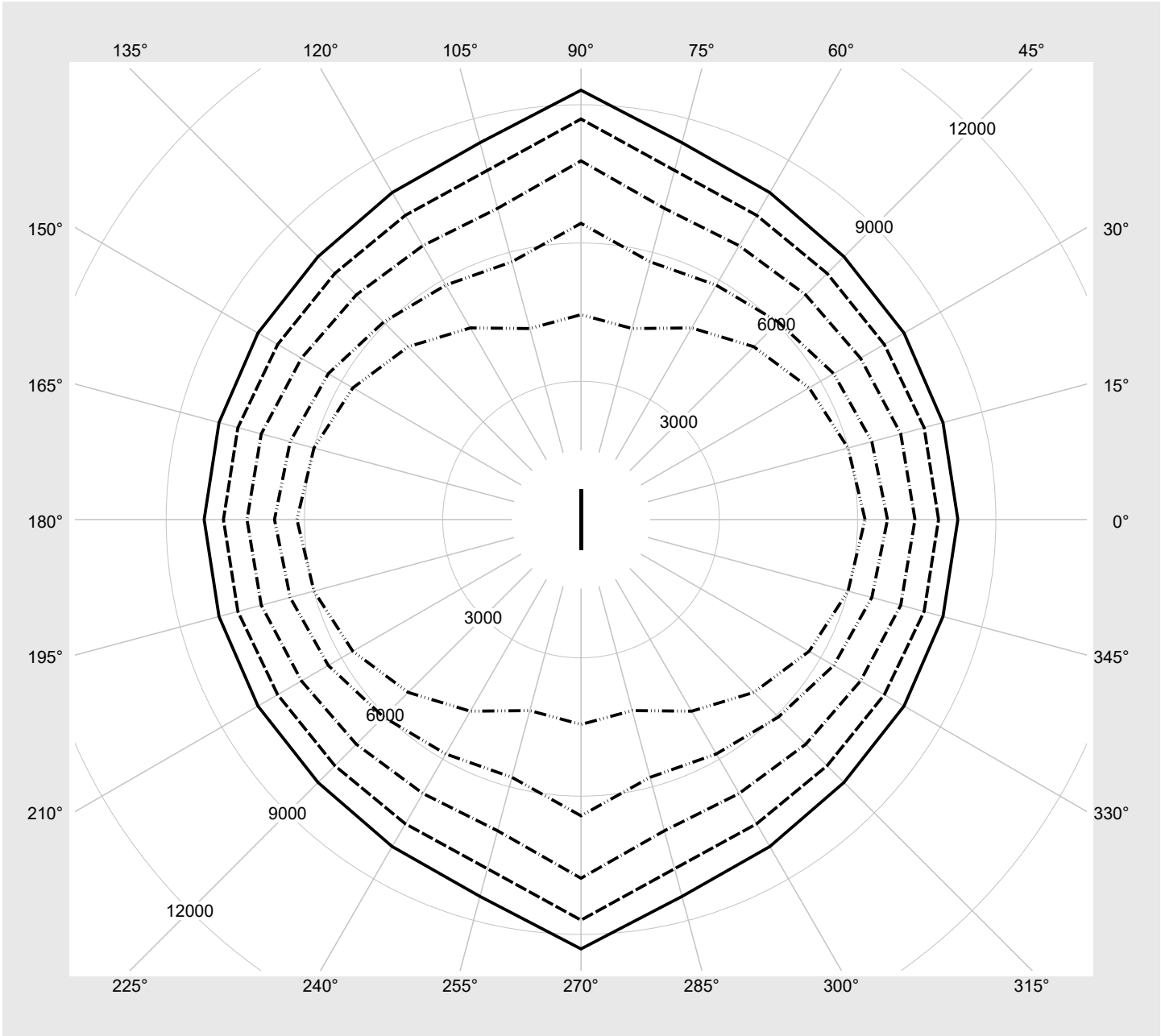
Luminance table	Max. for $\gamma \geq 65^\circ$	Photometric dimensions in mm:	L = 1590	H(C0) = 21	H(C180) = 21
			B = 87	H(C90) = 21	H(C270) = 21

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°		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	

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



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Dimming levels table	environmental temperature: 25°C	sITeco
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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