

Photometric test report

Family
Monsun® 12

Order number: **51FG20DP440H**
EAN: **4058352389218**

LP number
59060_38



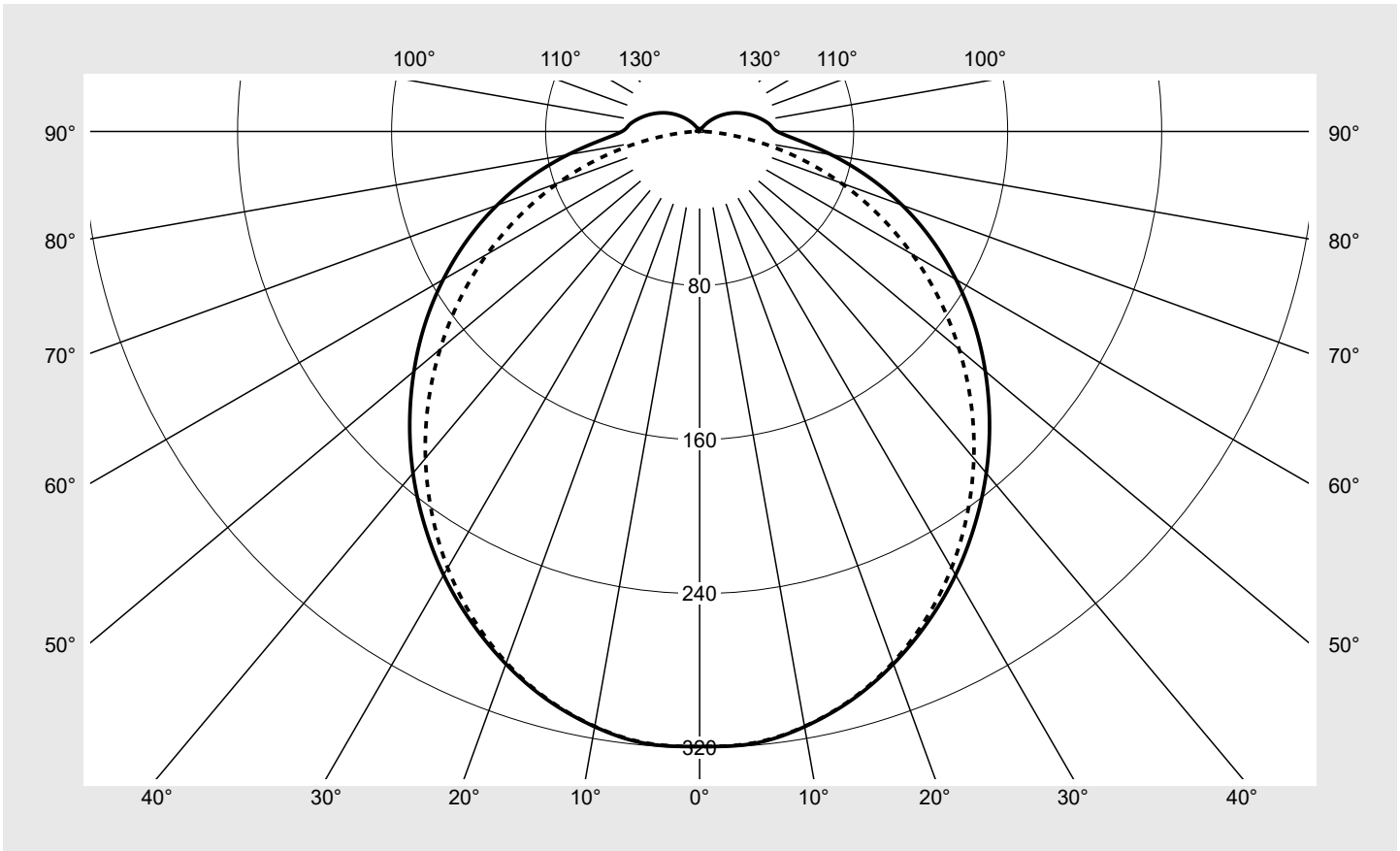
Version prismatic diffuser, opal, polycarbonate, wide distribution
Lamps LED 4000 K | CRI ≥ 80
Controlgear ECG-DALI
Rated values Net luminous flux = 4840 lm
Power consumption = 30.8 W
Luminous efficacy = 157.1 lm/W

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

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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	19.6	21.3	19.9	21.6	21.9	19.4	21.1	19.7	21.4	21.7
	3H	21.4	23.0	21.8	23.3	23.6	20.9	22.5	21.3	22.9	23.2
	4H	22.2	23.7	22.6	24.0	24.4	21.6	23.0	21.9	23.4	23.8
	6H	22.9	24.3	23.3	24.7	25.1	22.0	23.4	22.4	23.7	24.1
	8H	23.3	24.6	23.7	24.9	25.3	22.1	23.4	22.5	23.8	24.2
	12H	23.6	24.8	24.0	25.2	25.6	22.2	23.4	22.6	23.8	24.2
4H	2H	20.3	21.8	20.7	22.1	22.5	20.2	21.7	20.6	22.0	22.4
	3H	22.3	23.6	22.7	24.0	24.4	21.9	23.2	22.3	23.6	24.0
	4H	23.3	24.4	23.7	24.8	25.3	22.7	23.8	23.1	24.2	24.6
	6H	24.2	25.2	24.6	25.6	26.0	23.2	24.2	23.6	24.6	25.1
	8H	24.5	25.5	25.0	25.9	26.4	23.4	24.3	23.8	24.7	25.2
	12H	24.9	25.7	25.4	26.2	26.7	23.5	24.3	23.9	24.8	25.3
8H	4H	23.6	24.6	24.1	25.0	25.5	23.1	24.0	23.6	24.5	24.9
	6H	24.7	25.4	25.1	25.9	26.4	23.8	24.6	24.3	25.0	25.5
	8H	25.2	25.9	25.6	26.3	26.8	24.0	24.7	24.5	25.2	25.7
	12H	25.7	26.3	26.2	26.7	27.3	24.2	24.8	24.7	25.3	25.8
12H	4H	23.7	24.5	24.2	25.0	25.5	23.2	24.0	23.7	24.5	25.0
	6H	24.8	25.4	25.2	25.9	26.4	23.9	24.6	24.4	25.1	25.6
	8H	25.3	25.9	25.8	26.4	26.9	24.2	24.8	24.7	25.3	25.8

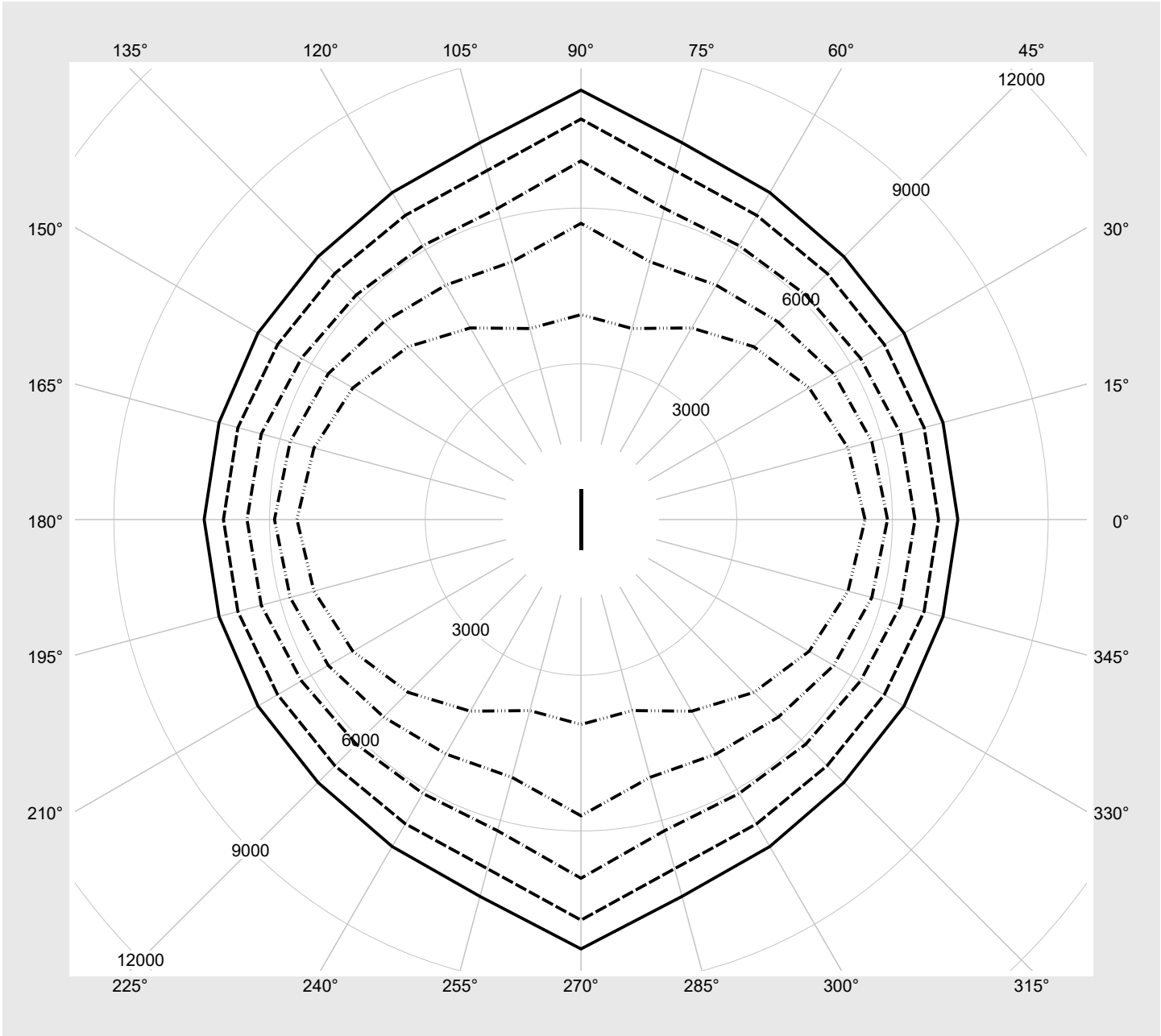
Luminance table	Max. for $\gamma \geq 65^\circ$	Photometric dimensions in mm:	L = 1590	H(C0) = 21	H(C180) = 21
			B = 87	H(C90) = 21	H(C270) = 21

C-planes	γ	Luminance in cd/m ²							
		0°	15° 165° 195° 345°	30° 150° 210° 330°	45° 135° 225° 315°	60° 120° 240° 300°	75° 105° 255° 285°	90° 270°	
45°		8488.2	8476.5	8486.0	8564.0	8796.1	9157.3	9736.1	
50°		8188.8	8164.8	8177.7	8234.1	8437.3	8785.7	9430.0	
55°		7898.1	7859.3	7871.1	7894.6	8067.0	8389.0	9105.3	
60°		7587.3	7549.0	7545.8	7544.9	7683.3	7972.9	8723.2	
65°		7260.5	7219.9	7186.7	7164.1	7275.1	7517.4	8272.5	
70°		6888.8	6843.9	6748.2	6706.8	6768.7	6964.9	7717.2	
75°		6434.7	6377.4	6218.8	6122.3	6093.6	6207.7	6910.8	
80°		5905.0	5800.8	5622.1	5379.6	5214.3	5141.9	5707.3	
85°		5472.9	5326.4	5075.6	4709.1	4263.5	3810.3	3947.7	

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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	4840	30.8
95	241	252	4600	29.3
90	228	250	4359	27.8
85	215	248	4117	26.3
80	202	246	3873	24.8
75	189	243	3629	23.3
70	176	241	3383	21.8
65	164	238	3155	20.5
60	151	235	2907	19.0
55	138	232	2657	17.6
50	126	228	2425	16.2
45	113	224	2173	14.8
40	101	220	1939	13.3
35	88	215	1688	11.8
30	76	210	1452	10.5
25	64	204	1215	9.1
20	52	196	977	7.8
15	39	185	718	6.4
10	27	172	477	5.1
5	15	150	235	3.9
2	8	127	95	3.1