

Photometric test report

Family
Silica® 21

Order number: 51MX33DA37BB
EAN: 4058352888865

LP number
59331_90



Version Suspended luminaire, with homogeneous illumination, prismatic cover, direct-/ indirect distribution, extremely wide distribution, UGR≤16 (L65≤3000cd/m²)

Lamps LED 3000 K | CRI ≥ 80

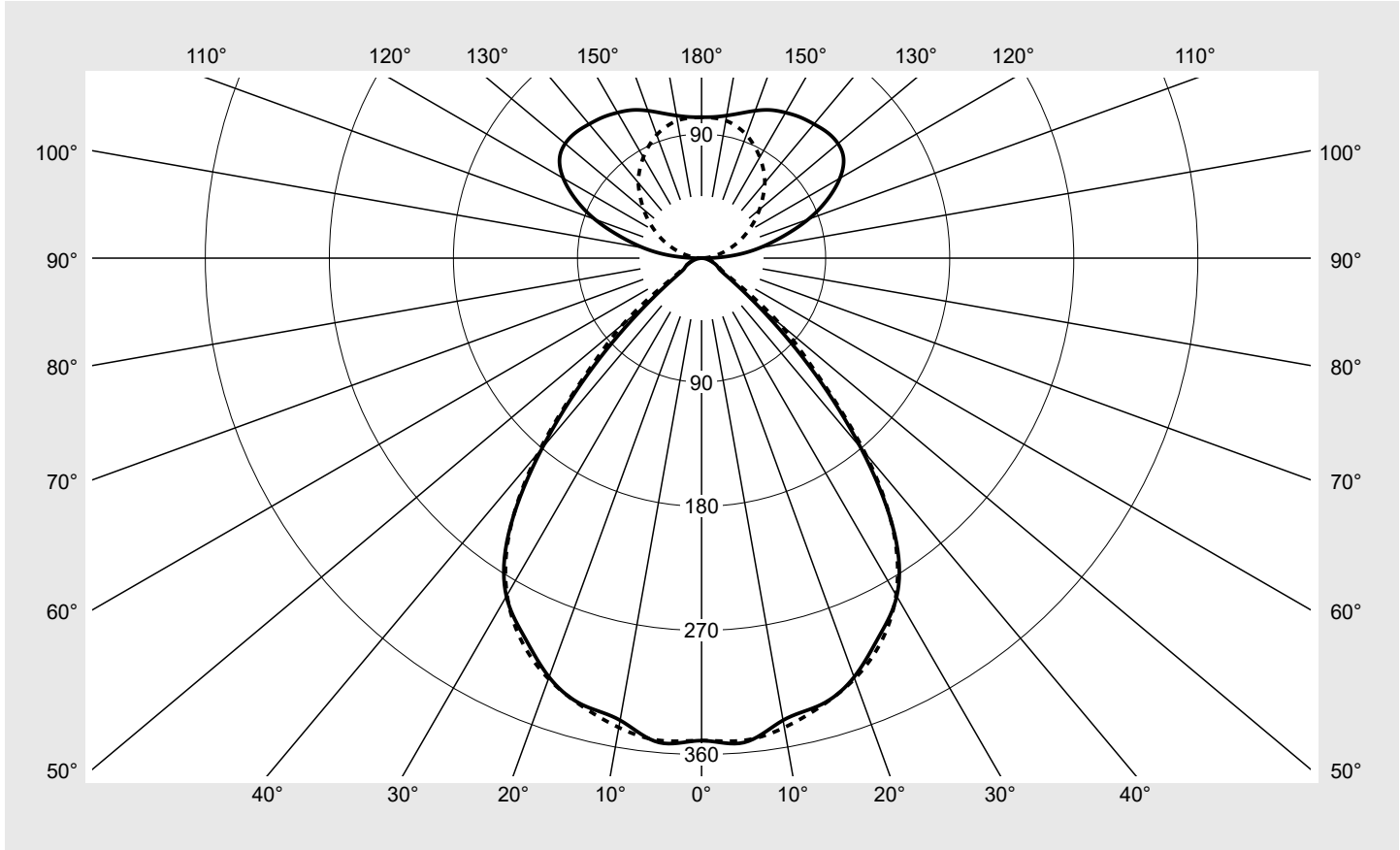
Controlgear ECG-DALI

Rated values Net luminous flux = 5910 lm
Power consumption = 41.3 W
Luminous efficacy = 143.1 lm/W

serial documentation
02.08.2023



Luminous intensity in cd/klm C180-0 C270-90 **Imax: 353 cd/klm**



Classifications

DIN 5040	C 6 2
CIE	N1=78 N2=96 N3=99 N4=55 N5=100

Luminaire light output ratios

η_{LB}	100.0%
ϕ_u	55.4%
ϕ_o	44.6%

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°	349.9	349.9	349.9	349.9	349.9	349.9	349.9	2.1	2.1
5°	352.7	353.3	353.1	353.3	352.9	352.0	351.1	16.9	18.9
10°	340.4	339.5	339.7	341.6	345.2	345.5	345.7	32.6	51.5
15°	335.2	334.1	331.5	331.4	333.4	336.4	336.2	47.3	98.9
20°	323.4	322.7	318.7	319.6	318.0	320.3	324.7	60.1	159.0
25°	303.6	304.4	302.2	302.2	302.6	302.3	307.6	70.2	229.2
30°	283.2	283.0	279.5	280.9	281.3	280.3	282.2	77.1	306.3
35°	244.1	243.6	241.2	242.6	243.2	242.2	242.9	76.3	382.6
40°	179.9	179.6	180.9	182.1	183.5	183.3	184.4	64.1	446.7
45°	110.1	109.9	111.2	112.6	113.8	115.2	117.5	43.7	490.4
50°	51.7	59.9	67.3	61.6	55.5	66.0	73.6	26.1	516.5
55°	21.0	28.2	26.7	30.5	23.0	31.8	29.6	12.4	528.9
60°	14.1	14.7	15.5	14.4	14.4	15.4	16.1	7.1	536.0
65°	11.6	11.5	12.0	11.7	12.2	12.2	12.1	5.9	541.9
70°	8.4	8.6	8.9	8.9	9.1	9.2	9.2	4.6	546.5
75°	5.8	6.1	6.7	6.4	6.5	6.9	6.6	3.4	549.9
80°	3.5	3.8	4.1	4.5	4.2	4.7	4.7	2.3	552.2
85°	1.8	1.8	1.8	2.1	2.2	2.5	2.7	1.2	553.3
90°	5.2	5.0	5.3	5.2	3.1	1.1	0.4	2.0	555.4
95°	23.9	24.4	26.2	24.8	15.9	8.2	4.2	10.3	565.7
100°	42.8	43.9	44.3	38.8	26.0	14.7	9.7	17.5	583.2
105°	61.3	62.6	61.4	52.4	35.9	22.2	16.3	24.1	607.3
110°	82.4	82.7	77.5	64.5	46.0	30.0	23.3	30.4	637.7
115°	100.7	99.8	92.0	75.7	55.8	37.9	31.1	35.4	673.0
120°	115.9	114.0	103.9	84.8	64.9	45.6	38.7	38.8	711.8
125°	125.7	122.3	111.1	93.1	72.6	52.9	46.8	40.3	752.1
130°	129.2	126.3	114.5	98.0	78.5	60.4	54.8	39.9	792.0
135°	129.0	126.3	115.8	101.3	83.2	67.4	62.9	38.1	830.1
140°	126.9	124.9	116.2	103.6	87.1	74.0	71.4	35.5	865.6
145°	124.8	123.4	116.1	105.0	90.7	80.2	78.2	32.3	897.9
150°	121.9	121.3	114.8	104.9	93.7	86.1	84.5	28.5	926.4
155°	118.5	118.2	111.9	104.4	96.0	91.3	90.1	24.2	950.6
160°	113.8	113.5	108.5	103.6	98.0	95.4	95.1	19.5	970.1
165°	108.8	108.2	105.6	102.3	100.0	98.6	98.8	14.6	984.7
170°	105.0	104.5	103.8	102.4	101.4	101.2	101.3	9.8	994.5
175°	102.8	102.7	102.1	101.9	102.0	102.0	102.0	4.9	999.4
180°	102.2	102.2	102.2	102.2	102.2	102.2	102.2	0.6	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	15.4	16.3	16.3	17.2	18.3	15.6	16.5	16.5	17.4	18.5
	3H	15.3	16.1	16.2	17.0	18.1	15.6	16.3	16.5	17.2	18.4
	4H	15.3	16.0	16.2	16.9	18.1	15.6	16.3	16.5	17.2	18.4
	6H	15.2	15.8	16.1	16.8	18.0	15.5	16.2	16.5	17.1	18.3
	8H	15.1	15.7	16.1	16.7	17.9	15.4	16.0	16.4	17.0	18.2
	12H	15.0	15.6	16.0	16.5	17.8	15.5	16.0	16.4	16.9	18.2
4H	2H	15.2	15.9	16.1	16.8	17.9	15.3	16.0	16.2	16.9	18.1
	3H	15.2	15.7	16.1	16.7	17.9	15.4	15.9	16.3	16.9	18.1
	4H	15.2	15.7	16.1	16.6	17.9	15.4	15.9	16.4	16.9	18.1
	6H	15.1	15.6	16.1	16.6	17.8	15.5	15.9	16.4	16.9	18.1
	8H	15.1	15.5	16.1	16.5	17.8	15.5	15.9	16.5	16.9	18.1
	12H	15.0	15.4	16.0	16.4	17.7	15.5	15.8	16.5	16.8	18.1
8H	4H	15.0	15.4	16.0	16.4	17.7	15.2	15.6	16.2	16.6	17.9
	6H	15.1	15.5	16.1	16.4	17.7	15.4	15.7	16.4	16.7	18.0
	8H	15.1	15.4	16.1	16.4	17.7	15.5	15.8	16.5	16.8	18.1
	12H	15.1	15.3	16.1	16.3	17.7	15.5	15.8	16.6	16.8	18.1
12H	4H	15.0	15.3	16.0	16.3	17.6	15.1	15.5	16.2	16.5	17.8
	6H	15.1	15.3	16.1	16.3	17.6	15.3	15.6	16.3	16.6	17.9
	8H	15.1	15.3	16.1	16.3	17.6	15.4	15.7	16.4	16.7	18.0

Luminance table	Max. for $\gamma \geq 65^\circ$	Photometric dimensions in mm:	L = 1200 B = 50
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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°		15337.5	15304.3	15496.3	15678.9	15848.6	16051.1	16365.1	
50°		7920.8	9176.2	10319.4	9444.3	8511.2	10108.4	11284.7	
55°		3601.3	4851.2	4582.4	5234.8	3953.7	5459.5	5074.6	
60°		2787.2	2892.4	3057.4	2834.0	2844.5	3025.1	3162.0	
65°		2707.8	2686.6	2794.5	2726.0	2841.6	2837.4	2825.1	
70°		2422.6	2467.8	2567.8	2567.8	2608.1	2638.0	2641.2	
75°		2224.5	2308.9	2544.5	2430.0	2485.9	2613.0	2527.4	
80°		2009.2	2128.3	2347.2	2554.8	2369.9	2643.9	2654.7	
85°		1984.6	1997.0	2072.7	2395.9	2519.1	2872.9	2994.9	

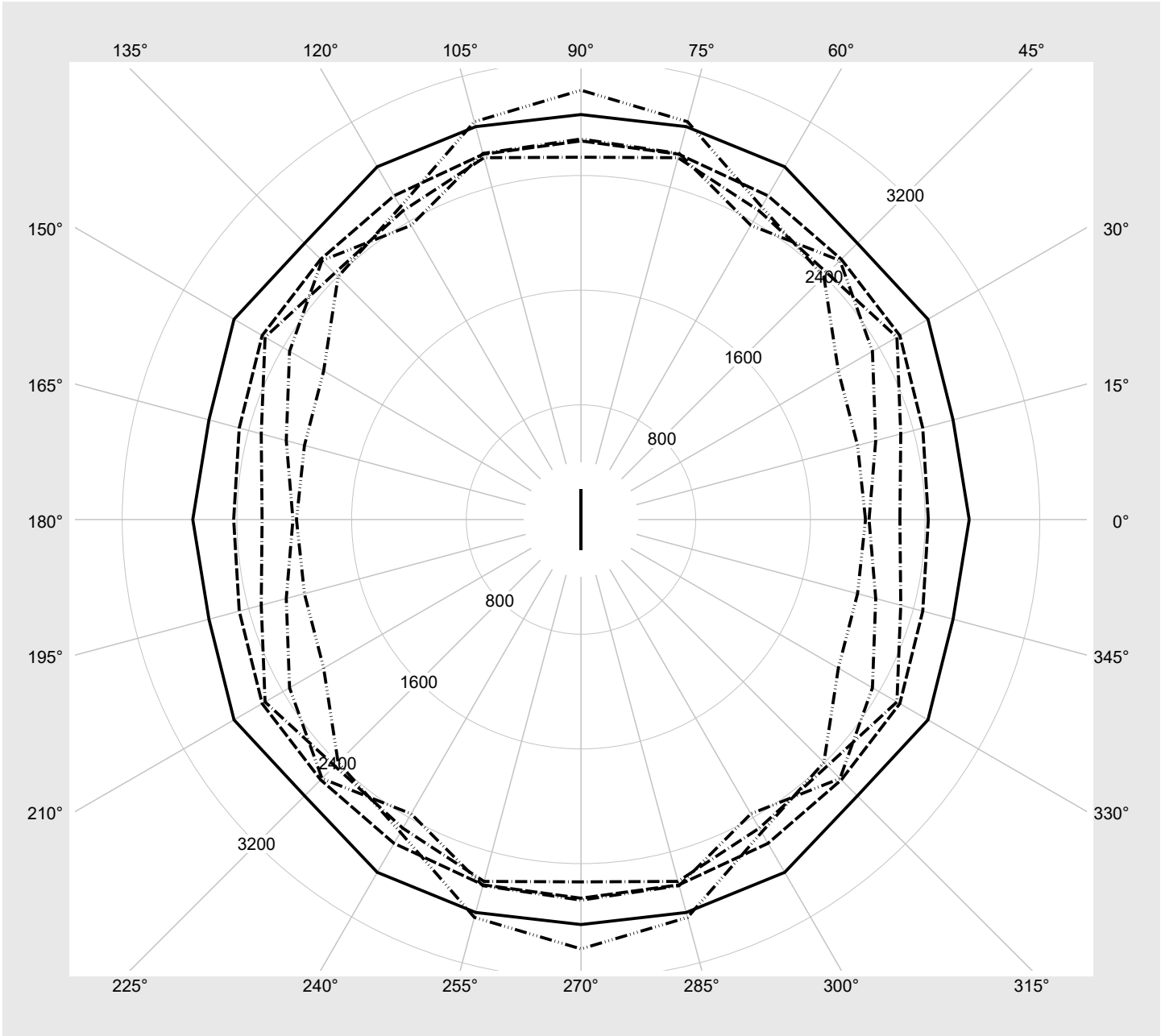
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Luminance values in cd/m²

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	5910	41.3
95	241	252	5623	39.2
90	227	250	5312	37.0
85	214	248	5021	34.9
80	201	245	4728	32.9
75	188	243	4434	30.8
70	175	240	4138	28.8
65	162	238	3840	26.8
60	149	234	3541	24.7
55	136	231	3239	22.7
50	124	228	2959	20.9
45	111	224	2654	18.9
40	99	219	2372	17.0
35	86	214	2064	15.0
30	74	209	1778	13.1
25	61	202	1466	11.1
20	49	194	1177	9.2
15	37	183	887	7.3
10	25	169	596	5.6
5	13	145	304	3.9
2	6	117	133	3.4