

Photometric test report

Family
Silica® 21

Order number: 51MX33DC4DBB
EAN: 4058352893623

LP number
59331_91



Version Suspended luminaire, with homogeneous illumination, prismatic cover, direct-/ indirect distribution, extremely wide distribution, $UGR \leq 16$ ($L65 \leq 3000 \text{cd/m}^2$)

Lamps LED 4000 K | CRI ≥ 80

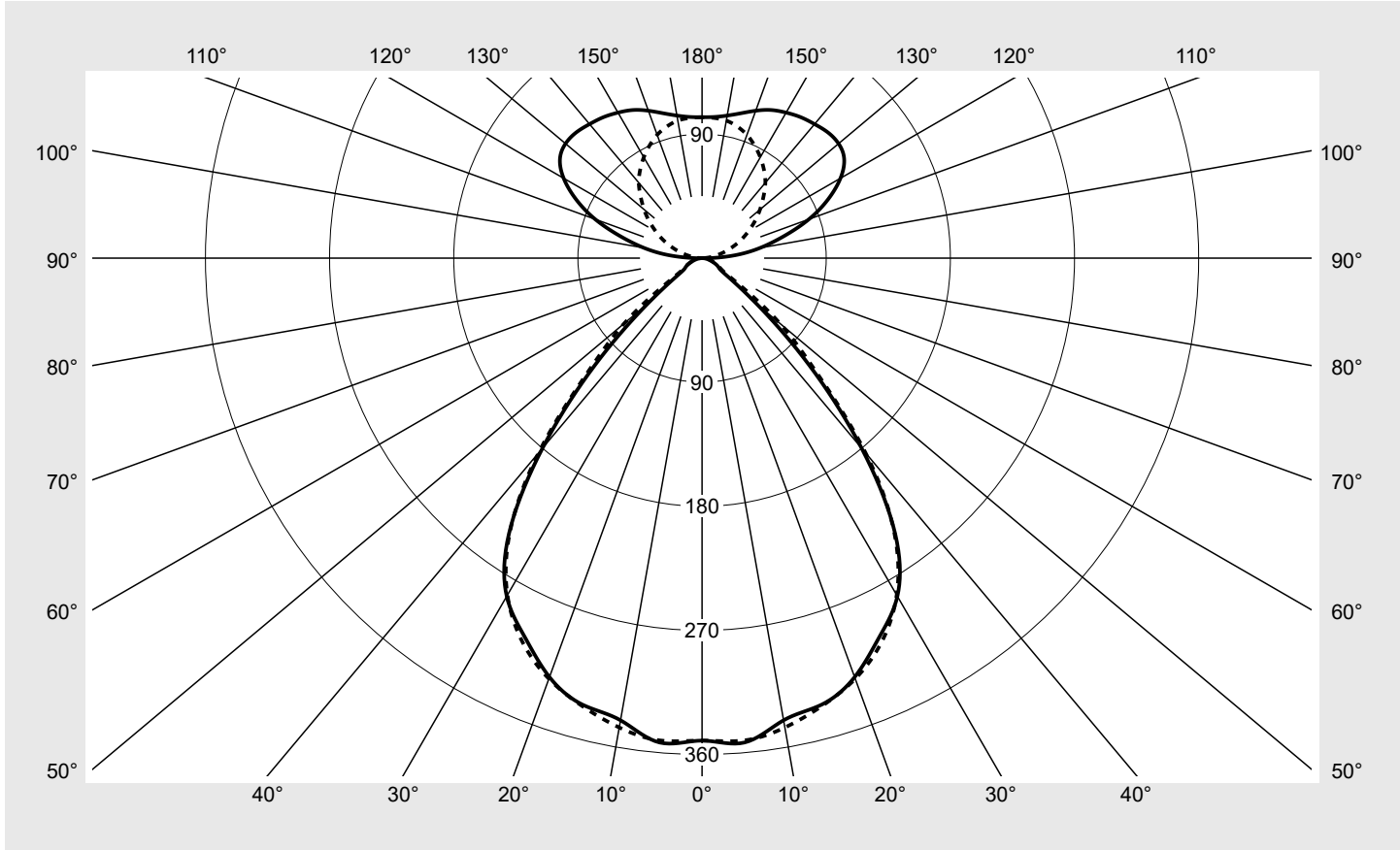
Controlgear ECG-DALI

Rated values Net luminous flux = 14790 lm
Power consumption = 93.9 W
Luminous efficacy = 157.5 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	16.7	17.9	15.4	15.9	16.4	16.9	18.1
	6H	15.2	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	16.1	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	16.5	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	15.2	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	17.7	15.4	15.7	16.4	16.7	18.0

Luminance table	Max. for $\gamma \geq 65^\circ$	Photometric dimensions in mm:	L = 3000 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°		15353.1	15319.9	15512.0	15694.8	15864.7	16067.4	16381.7	
50°		7928.8	9185.6	10329.9	9453.8	8519.8	10118.7	11296.1	
55°		3605.0	4856.1	4587.1	5240.1	3957.7	5465.0	5079.8	
60°		2790.0	2895.3	3060.5	2836.9	2847.4	3028.2	3165.3	
65°		2710.6	2689.3	2797.4	2728.8	2844.5	2840.3	2827.9	
70°		2425.1	2470.3	2570.4	2570.4	2610.7	2640.7	2643.9	
75°		2226.7	2311.3	2547.1	2432.4	2488.4	2615.7	2530.0	
80°		2011.2	2130.4	2349.6	2557.4	2372.3	2646.6	2657.4	
85°		1986.6	1999.0	2074.8	2398.4	2521.7	2875.8	2998.0	

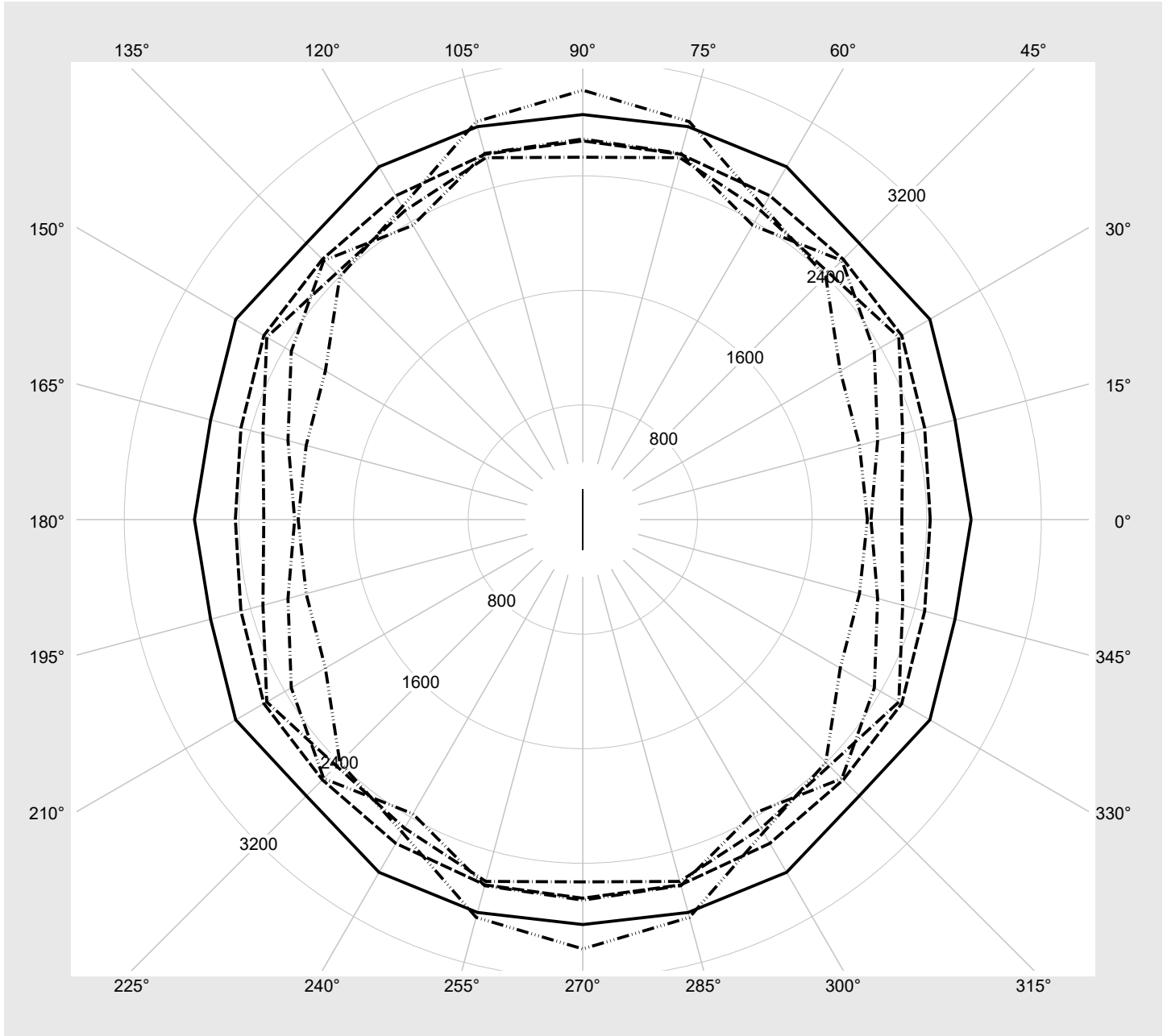
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Luminance values in cd/m²

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	14790	93.9
95	241	252	14068	88.9
90	227	250	13286	83.9
85	214	248	12555	79.1
80	201	245	11822	74.8
75	188	243	11082	70.1
70	175	240	10336	65.1
65	162	238	9587	60.4
60	150	235	8894	56.5
55	137	231	8139	51.7
50	124	228	7380	47.4
45	112	224	6676	43.1
40	99	219	5910	38.6
35	87	215	5200	34.3
30	74	209	4428	29.5
25	62	202	3712	25.3
20	49	194	2928	20.6
15	37	183	2206	16.3
10	25	169	1482	12.0
5	13	145	755	7.4
2	6	117	329	4.1