

# Photometric test report

**Family**  
**Silica® 21**

**Order number: 51MX30DA44BB**  
**EAN: 4058352884546**

**LP number**  
**59413\_60**



**Version** Suspended luminaire, with homogeneous illumination, cover, opal, direct-/ indirect distribution, extremely wide distribution, UGR≤25

**Lamps** LED 4000 K | CRI ≥ 80

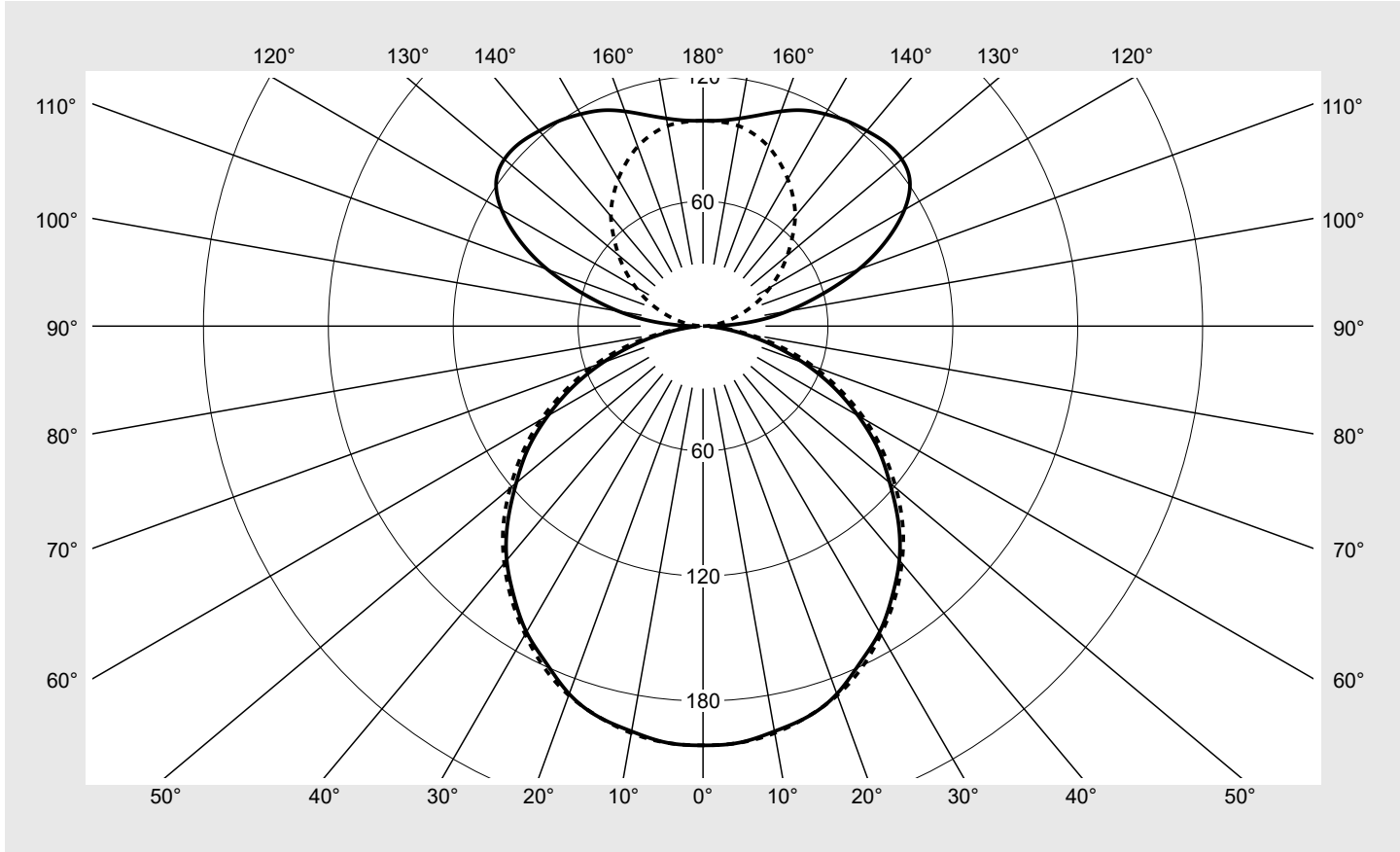
**Controlgear** ECG-DALI

**Rated values** Net luminous flux = 4210 lm  
Power consumption = 26.0 W  
Luminous efficacy = 161.9 lm/W

**serial documentation**  
**02.08.2023**



**Luminous intensity in cd/klm** C180-0 C270-90 **Imax: 201 cd/klm**



**Classifications**

DIN 5040	C 4 2
CIE	N1=47 N2=79 N3=96 N4=57 N5=100

**Luminaire light output ratios**

$\eta_{LB}$	100.0%
$\phi_u$	57.0%
$\phi_o$	43.0%

**Measurement conditions**  
DIN EN 13032 and DIN 5032

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<b>Table of values for luminous intensities</b>		<b>Maximum luminous intensity</b>



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°	201.3	201.3	201.3	201.3	201.3	201.3	201.3	1.2	1.2
5°	200.8	201.1	200.5	200.6	200.7	201.0	200.8	9.6	10.8
10°	197.6	197.2	197.1	197.6	198.5	197.9	198.4	18.8	29.6
15°	194.2	193.6	192.5	193.4	194.0	194.3	194.2	27.5	57.1
20°	188.0	187.6	186.2	187.1	187.3	187.7	188.7	35.1	92.2
25°	178.4	178.6	177.9	178.8	179.9	179.8	180.8	41.5	133.7
30°	169.6	169.4	168.2	169.6	170.9	170.8	170.9	46.6	180.3
35°	158.4	158.6	157.6	158.2	158.8	159.6	160.3	49.9	230.1
40°	146.7	146.4	146.5	146.2	147.1	147.3	148.6	51.7	281.9
45°	132.6	132.7	133.0	133.0	133.6	133.9	135.7	51.7	333.6
50°	117.1	118.0	118.4	118.9	120.0	120.2	120.9	50.0	383.6
55°	102.6	102.7	103.4	103.9	104.8	104.8	105.8	46.7	430.3
60°	86.0	86.4	86.9	87.2	88.6	88.7	90.0	41.6	471.9
65°	69.1	69.7	70.6	71.5	72.2	72.9	72.9	35.4	507.3
70°	51.3	52.3	52.8	54.1	55.2	55.9	56.2	27.8	535.1
75°	33.8	34.6	35.2	36.4	37.6	38.6	38.9	19.3	554.4
80°	17.8	18.1	18.7	19.5	20.7	21.6	21.9	10.7	565.1
85°	5.8	6.0	6.3	6.7	7.3	8.0	8.2	3.8	568.8
90°	5.3	5.2	5.5	5.5	3.6	1.7	1.1	2.3	571.1
95°	23.1	23.6	25.3	23.9	15.3	7.9	4.1	10.0	581.1
100°	41.3	42.4	42.7	37.4	25.1	14.2	9.3	16.8	597.9
105°	59.2	60.4	59.2	50.6	34.6	21.4	15.7	23.3	621.2
110°	79.5	79.8	74.8	62.3	44.4	29.0	22.5	29.3	650.4
115°	97.2	96.3	88.8	73.1	53.8	36.6	30.0	34.1	684.6
120°	111.8	110.0	100.3	81.8	62.6	44.0	37.3	37.4	722.0
125°	121.3	118.0	107.2	89.8	70.0	51.0	45.1	38.9	760.9
130°	124.6	121.9	110.5	94.5	75.7	58.3	52.9	38.5	799.3
135°	124.4	121.9	111.7	97.7	80.2	65.0	60.7	36.8	836.1
140°	122.4	120.5	112.1	100.0	84.0	71.4	68.8	34.3	870.4
145°	120.4	119.1	112.0	101.3	87.5	77.3	75.5	31.2	901.5
150°	117.6	117.1	110.8	101.2	90.4	83.0	81.5	27.5	929.0
155°	114.3	114.0	108.0	100.7	92.6	88.1	86.9	23.3	952.4
160°	109.8	109.5	104.7	99.9	94.6	92.0	91.8	18.8	971.2
165°	104.9	104.4	101.9	98.7	96.5	95.2	95.3	14.1	985.3
170°	101.3	100.8	100.1	98.8	97.8	97.7	97.7	9.4	994.7
175°	99.2	99.0	98.5	98.3	98.4	98.4	98.4	4.7	999.4
180°	98.6	98.6	98.6	98.6	98.6	98.6	98.6	0.6	1000.0

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<b>UGR-Table</b>	<b>Standard room</b>	<b>siteco</b>
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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	18.5	19.5	19.3	20.4	21.5	18.7	19.7	19.5	20.5	21.6
	3H	19.9	20.8	20.7	21.7	22.8	20.2	21.1	21.0	22.0	23.1
	4H	20.4	21.2	21.2	22.1	23.2	20.8	21.6	21.6	22.5	23.6
	6H	20.6	21.4	21.5	22.3	23.4	21.1	21.9	22.0	22.8	24.0
	8H	20.6	21.3	21.5	22.3	23.4	21.1	21.8	22.0	22.8	23.9
	12H	20.6	21.2	21.5	22.2	23.4	21.2	21.9	22.1	22.8	24.0
4H	2H	19.1	20.0	20.0	20.8	22.0	19.2	20.0	20.0	20.9	22.0
	3H	20.7	21.4	21.6	22.3	23.5	20.9	21.6	21.8	22.5	23.7
	4H	21.2	21.9	22.2	22.8	24.0	21.6	22.2	22.5	23.2	24.3
	6H	21.6	22.1	22.5	23.1	24.3	22.0	22.6	23.0	23.5	24.7
	8H	21.6	22.1	22.6	23.1	24.3	22.2	22.7	23.1	23.6	24.8
	12H	21.6	22.0	22.6	23.0	24.3	22.2	22.6	23.1	23.6	24.8
8H	4H	21.4	21.9	22.4	22.9	24.1	21.7	22.2	22.6	23.2	24.4
	6H	21.9	22.3	22.8	23.3	24.5	22.3	22.7	23.2	23.6	24.9
	8H	22.0	22.4	23.0	23.3	24.6	22.5	22.8	23.5	23.8	25.1
	12H	22.0	22.3	23.0	23.3	24.6	22.6	22.9	23.6	23.9	25.2
12H	4H	21.4	21.8	22.3	22.8	24.0	21.6	22.1	22.6	23.0	24.3
	6H	21.9	22.2	22.8	23.2	24.5	22.3	22.6	23.2	23.6	24.9
	8H	22.0	22.3	23.0	23.3	24.6	22.5	22.8	23.5	23.8	25.1

<b>Luminance table</b>	<b>Max. for <math>\gamma \geq 65^\circ</math></b>	<b>Photometric dimensions in mm:</b>	<b>L = 1200</b> <b>B = 50</b>
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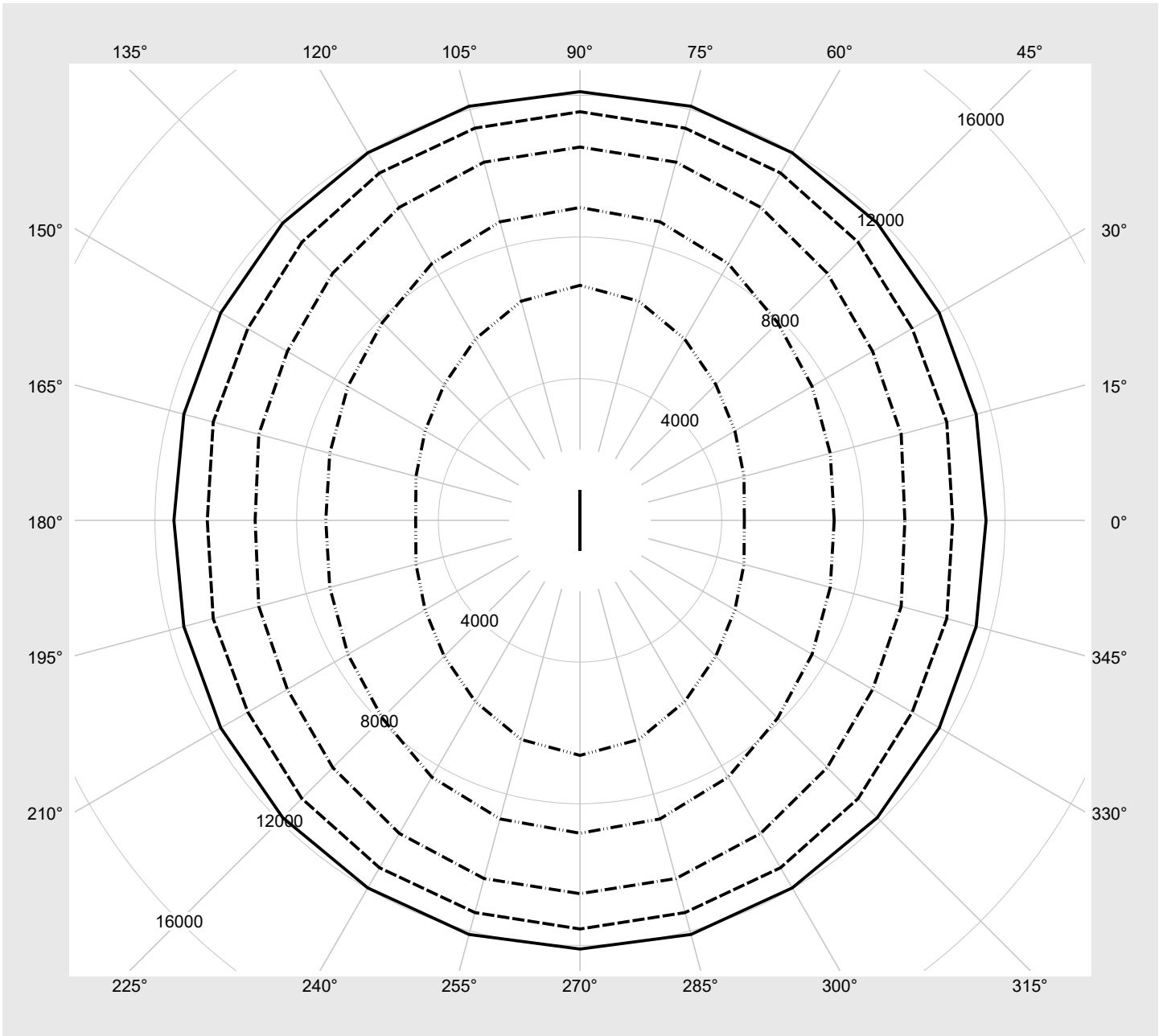
C-planes	$\gamma$	Luminance in cd/m <sup>2</sup>							
		0° 180°	15° 165° 195° 345°	30° 150° 210° 330°	45° 135° 225° 315°	60° 120° 240° 300°	75° 105° 255° 285°	90° 270°	
45°		13162.4	13170.4	13195.2	13196.9	13255.4	13290.5	13466.7	
50°		12786.7	12883.9	12920.5	12975.2	13095.4	13118.2	13200.2	
55°		12554.9	12568.9	12644.5	12707.5	12824.5	12825.5	12942.7	
60°		12072.2	12120.3	12190.6	12238.8	12433.7	12450.2	12623.4	
65°		11465.6	11580.3	11713.8	11869.5	11982.9	12103.3	12102.6	
70°		10523.8	10721.3	10830.5	11106.4	11324.1	11463.6	11536.4	
75°		9172.2	9389.4	9541.5	9871.4	10204.3	10469.2	10539.1	
80°		7177.6	7314.9	7566.7	7894.4	8369.6	8726.4	8833.1	
85°		4640.4	4794.2	5051.0	5423.8	5910.0	6406.8	6635.4	

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**Luminance values in cd/m<sup>2</sup>**

γ 65°
γ 70°
γ 75°
γ 80°
γ 85°



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<b>Dimming levels table</b>	environmental temperature: 25°C	<b>sITeco</b>
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Luminous flux %	Dimming level linear	Dimming level logarithmic	Luminous flux [lm]	Power consumption [W]
100	254	254	4210	26.0
95	241	252	4000	24.7
90	228	250	3790	23.5
85	215	248	3579	22.3
80	202	246	3367	21.1
75	189	243	3154	19.9
70	176	241	2941	18.7
65	164	238	2743	17.5
60	151	235	2528	16.3
55	138	232	2313	15.0
50	126	228	2113	13.8
45	113	224	1895	12.5
40	100	220	1677	11.1
35	88	215	1476	9.9
30	75	209	1258	8.6
25	63	203	1055	7.4
20	50	194	836	6.1
15	38	184	632	4.8
10	26	171	428	3.5
8	20	161	327	2.8