

# Photometric test report

**Family**  
Silica® 21

**Order number: 51MX32DB49BB**  
**EAN: 4058352886953**

**LP number**  
**59279\_104**

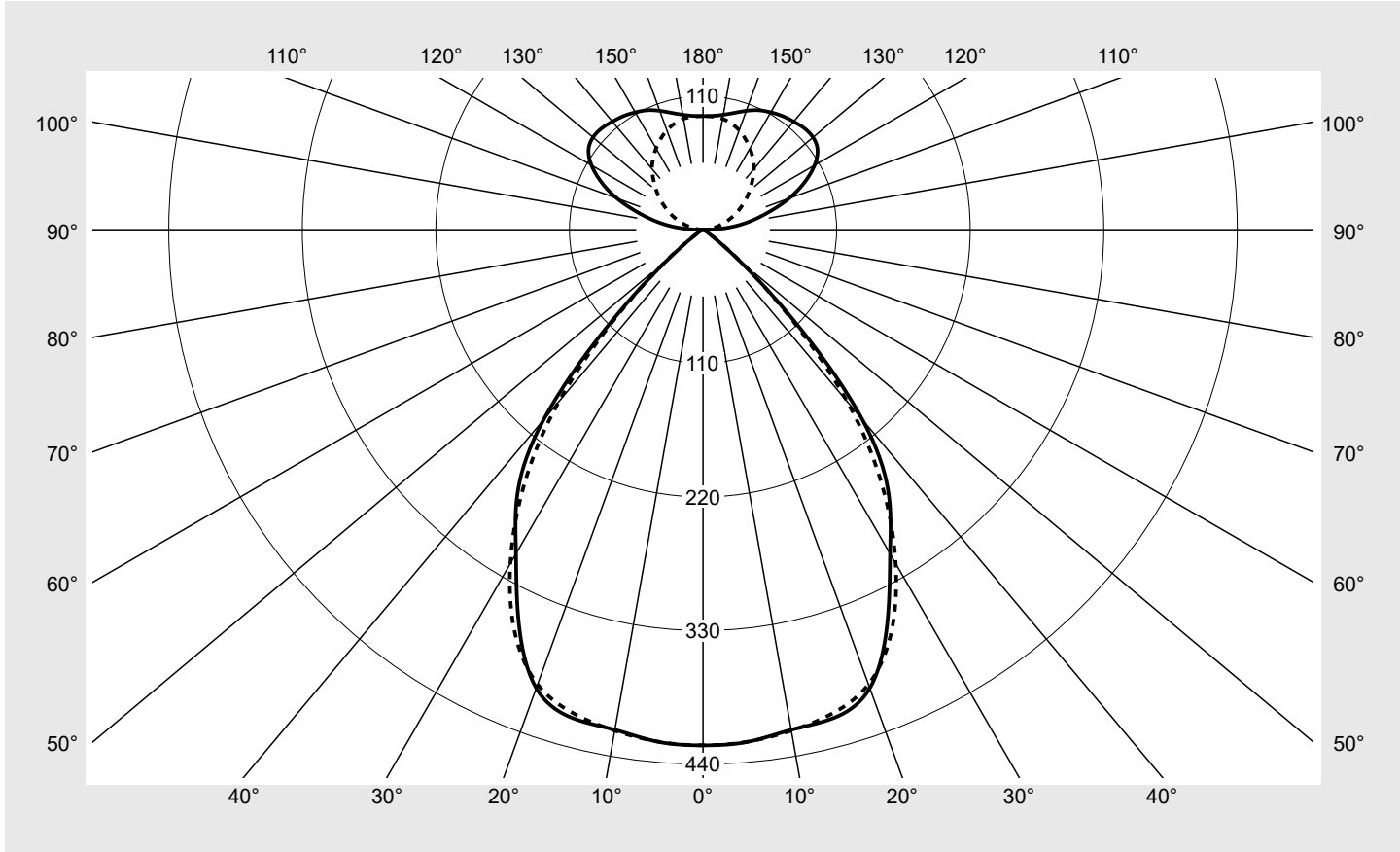


**Version** Suspended luminaire, reflector, black, direct-/indirect distribution, wide distribution, UGR≤16 (L65≤1000cd/m²)  
**Lamps** LED 4000 K | CRI ≥ 80  
**Controlgear** ECG-DALI  
**Rated values** Net luminous flux = 9110 lm  
 Power consumption = 54.7 W  
 Luminous efficacy = 166.5 lm/W

**serial documentation**  
02.08.2023



**Luminous intensity in cd/klm** C180-0 C270-90 **Imax: 425 cd/klm**



**Classifications**

DIN 5040	C 6 2
CIE	N1=86 N2=99 N3=100 N4=59 N5=100

**Luminaire light output ratios**

$\eta_{LB}$	100.0%
$\phi_u$	59.2%
$\phi_o$	40.8%

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

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

C-planes $\gamma$	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°	424.5	424.5	424.5	424.5	424.5	424.5	424.5	2.5	2.5
5°	423.2	423.7	423.1	423.1	423.3	423.7	423.1	20.2	22.8
10°	418.0	417.2	417.3	418.4	419.3	417.7	418.7	39.8	62.6
15°	416.1	416.5	413.5	413.8	413.5	412.7	412.2	58.7	121.3
20°	401.6	404.7	402.8	404.0	399.5	397.4	398.3	75.3	196.5
25°	358.7	364.9	370.6	376.3	375.4	369.4	366.5	85.7	282.2
30°	308.1	312.2	314.3	321.5	326.7	320.5	317.3	87.1	369.4
35°	266.7	269.2	262.0	257.7	262.2	261.4	257.3	82.5	451.9
40°	204.3	207.3	203.4	196.7	194.2	189.2	184.5	69.6	521.5
45°	105.6	109.2	112.9	113.5	110.1	103.6	98.8	42.1	563.6
50°	35.1	38.0	43.5	46.6	44.5	40.2	37.5	17.4	581.0
55°	9.3	10.9	14.6	18.5	15.5	12.0	10.3	6.1	587.1
60°	3.6	4.0	5.4	7.2	5.8	4.5	4.1	2.4	589.5
65°	1.2	1.4	2.0	2.5	2.2	1.8	1.6	0.9	590.5
70°	0.8	0.8	0.6	0.6	0.7	0.9	0.9	0.4	590.8
75°	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.1	591.0
80°	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	591.0
85°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.2	591.2
90°	4.7	4.5	4.8	4.8	2.8	1.0	0.4	1.9	593.1
95°	21.9	22.4	24.0	22.7	14.5	7.5	3.9	9.5	602.5
100°	39.1	40.2	40.5	35.5	23.8	13.4	8.9	16.0	618.5
105°	56.1	57.3	56.2	48.0	32.8	20.3	14.9	22.1	640.6
110°	75.4	75.7	70.9	59.1	42.1	27.5	21.3	27.8	668.4
115°	92.2	91.4	84.2	69.3	51.0	34.7	28.4	32.4	700.7
120°	106.0	104.3	95.1	77.6	59.4	41.8	35.4	35.5	736.3
125°	115.1	111.9	101.7	85.2	66.4	48.4	42.8	36.9	773.1
130°	118.2	115.6	104.8	89.7	71.8	55.3	50.2	36.5	809.6
135°	118.0	115.6	106.0	92.7	76.1	61.7	57.6	34.9	844.5
140°	116.1	114.4	106.3	94.9	79.7	67.7	65.3	32.5	877.0
145°	114.2	113.0	106.3	96.1	83.1	73.4	71.6	29.6	906.6
150°	111.5	111.1	105.1	96.0	85.8	78.8	77.3	26.1	932.7
155°	108.5	108.2	102.4	95.6	87.9	83.6	82.4	22.1	954.8
160°	104.1	103.9	99.3	94.8	89.7	87.3	87.1	17.8	972.6
165°	99.5	99.0	96.7	93.7	91.6	90.3	90.4	13.4	986.0
170°	96.1	95.6	95.0	93.7	92.8	92.7	92.7	9.0	995.0
175°	94.1	94.0	93.5	93.3	93.3	93.4	93.4	4.5	999.4
180°	93.6	93.6	93.6	93.6	93.6	93.6	93.6	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	16.3	17.1	17.1	18.0	19.0	16.1	17.0	16.9	17.8	18.8
	3H	16.0	16.7	16.9	17.6	18.7	15.8	16.6	16.7	17.5	18.5
	4H	15.8	16.5	16.7	17.4	18.5	15.7	16.4	16.6	17.3	18.4
	6H	15.7	16.3	16.6	17.2	18.3	15.5	16.2	16.4	17.1	18.2
	8H	15.6	16.1	16.5	17.1	18.2	15.4	15.9	16.3	16.9	18.0
	12H	15.5	16.0	16.4	16.9	18.1	15.3	15.9	16.3	16.8	18.0
4H	2H	15.9	16.6	16.8	17.5	18.6	15.7	16.4	16.6	17.2	18.4
	3H	15.6	16.2	16.5	17.1	18.3	15.4	16.0	16.3	16.9	18.1
	4H	15.5	16.0	16.4	16.9	18.1	15.3	15.8	16.2	16.7	17.9
	6H	15.3	15.7	16.2	16.7	17.9	15.1	15.6	16.1	16.5	17.7
	8H	15.2	15.6	16.2	16.5	17.8	15.0	15.4	16.0	16.4	17.6
	12H	15.1	15.4	16.1	16.4	17.6	14.9	15.3	15.9	16.2	17.5
8H	4H	15.2	15.6	16.2	16.6	17.8	15.0	15.4	16.0	16.4	17.6
	6H	15.1	15.4	16.1	16.4	17.6	14.9	15.2	15.8	16.1	17.4
	8H	15.0	15.3	16.0	16.3	17.5	14.8	15.1	15.8	16.1	17.3
	12H	14.9	15.1	15.9	16.1	17.4	14.7	15.0	15.7	15.9	17.2
12H	4H	15.1	15.5	16.1	16.4	17.7	14.9	15.3	15.9	16.2	17.4
	6H	15.0	15.3	16.0	16.2	17.5	14.8	15.1	15.8	16.0	17.3
	8H	14.9	15.1	15.9	16.1	17.4	14.7	14.9	15.7	15.9	17.2

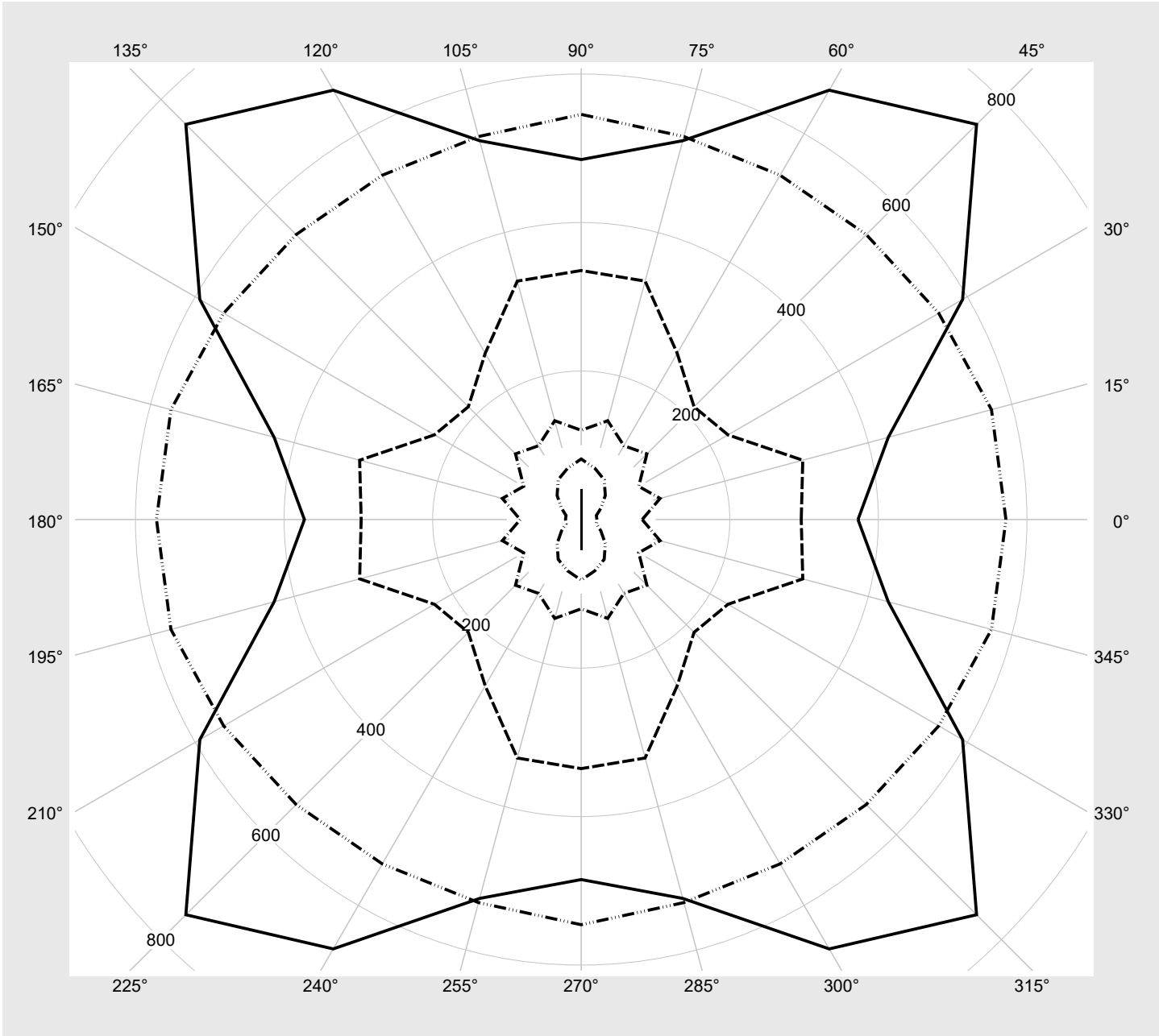
<b>Luminance table</b>	<b>Max. for <math>\gamma \geq 65^\circ</math></b>	<b>Photometric dimensions in mm:</b>	<b>L = 1470</b> <b>B = 49</b>
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C-planes	$\gamma$	Luminance in cd/m <sup>2</sup>							
		0° 180°	15° 165° 195° 345°	30° 150° 210° 330°	45° 135° 225° 315°	60° 120° 240° 300°	75° 105° 255° 285°	90° 270°	
45°		18894.2	19529.1	20193.1	20307.0	19696.2	18538.1	17678.6	
50°		6911.2	7475.3	8557.1	9160.0	8753.7	7916.1	7385.8	
55°		2044.1	2412.3	3214.0	4079.3	3423.3	2636.3	2266.8	
60°		914.2	1018.9	1361.1	1811.9	1470.9	1147.4	1042.2	
65°		372.6	427.9	592.8	752.7	667.7	528.2	484.8	
70°		296.2	308.8	228.2	214.8	258.5	332.4	335.4	
75°		82.1	109.9	89.4	125.1	114.8	137.8	120.2	
80°		21.1	21.1	30.6	45.9	61.9	71.4	81.6	
85°		571.7	571.7	555.8	542.7	535.5	534.0	545.6	

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**Luminance values in cd/m<sup>2</sup>**     γ 65°   γ 70°   γ 75°   γ 80°   γ 85°     **siteco**



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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	9110	54.7
95	241	252	8668	52.0
90	227	250	8190	49.0
85	214	248	7742	46.2
80	201	245	7291	43.6
75	188	243	6837	40.8
70	175	240	6381	38.1
65	162	238	5923	35.4
60	149	234	5460	32.7
55	136	231	4996	30.0
50	124	228	4564	27.5
45	111	224	4095	24.9
40	99	219	3659	22.4
35	86	214	3184	19.7
30	74	209	2743	17.3
25	61	202	2261	14.6
20	49	194	1816	12.0
15	37	183	1370	9.7
10	25	169	921	7.2
5	13	145	471	5.1
2	6	117	207	4.2