

# Photometric test report

**Family**  
Silica® 21

**Order number: 51MX32DC3DWB**  
**EAN: 4058352893463**

**LP number**  
**59279\_92**

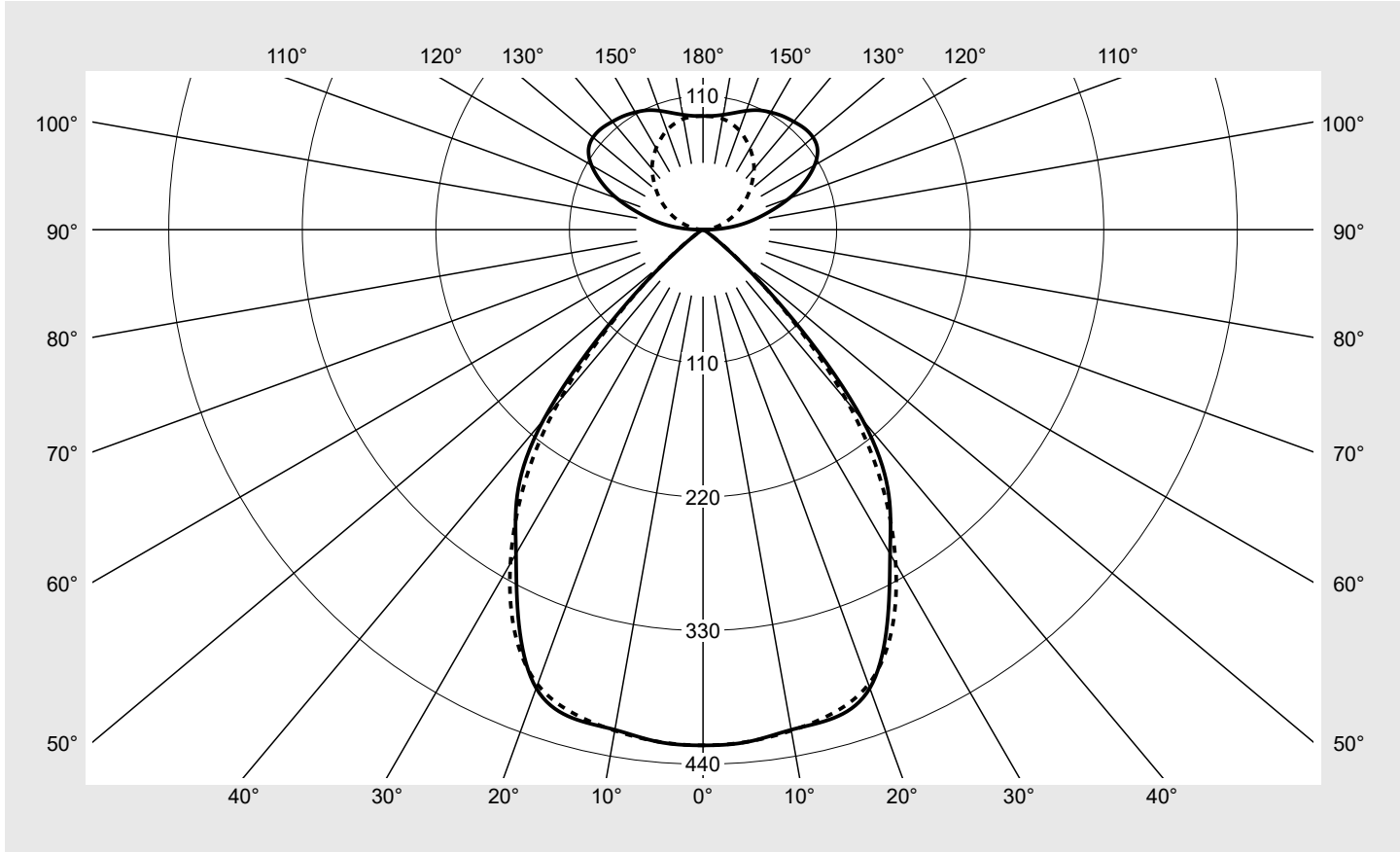


**Version** Suspended luminaire, reflector, black, direct-/indirect distribution, wide distribution, UGR≤16 (L65≤1000cd/m²)  
**Lamps** LED 3000 K | CRI ≥ 80  
**Controlgear** ECG-DALI  
**Rated values** Net luminous flux = 18220 lm  
 Power consumption = 113.0 W  
 Luminous efficacy = 161.2 lm/W

**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 = 2940</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	

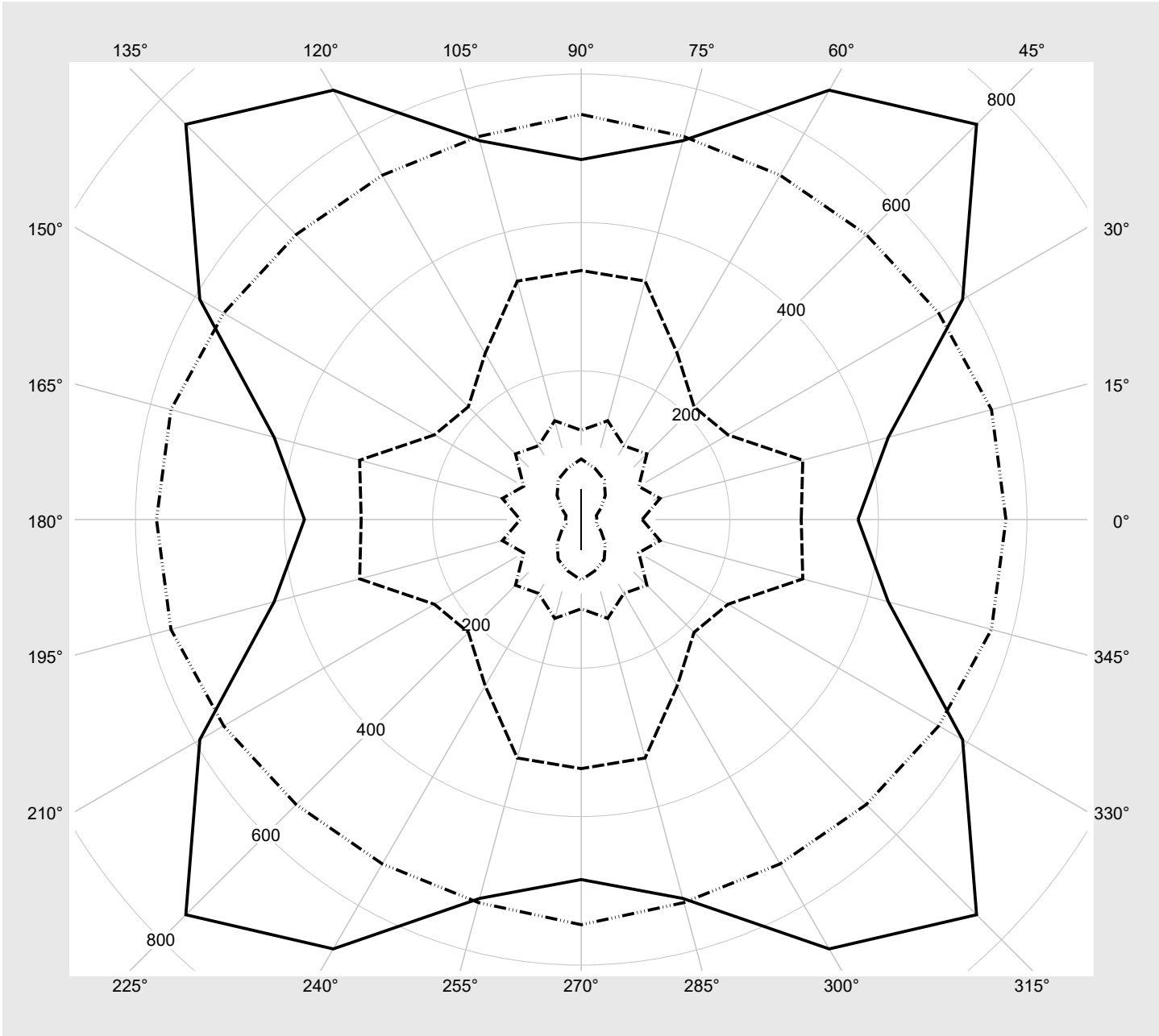
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**Luminance values in cd/m<sup>2</sup>**

$\gamma$  65°   
   $\gamma$  70°   
   $\gamma$  75°   
   $\gamma$  80°   
   $\gamma$  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	18220	113.0
95	240	252	17276	107.0
90	227	250	16390	100.9
85	214	248	15501	95.6
80	201	245	14606	90.1
75	187	243	13636	83.9
70	174	240	12727	78.0
65	161	237	11812	72.7
60	149	234	10962	67.2
55	136	231	10029	61.6
50	123	227	9094	56.2
45	111	224	8227	50.8
40	98	219	7280	45.5
35	86	214	6401	40.4
30	73	208	5442	34.9
25	61	202	4555	29.5
20	49	194	3661	24.4
15	37	183	2759	19.1
10	25	169	1857	13.8
5	12	142	874	8.0
2	5	110	343	4.1