

Photometric test report

Family
Silica® 21

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

LP number
59279_104

serial
documentation
02.08.2023



Version

Suspended luminaire, reflector, black, direct-/indirect distribution, wide distribution, $UGR \leq 16$ ($L65 \leq 1000 \text{ cd/m}^2$)

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

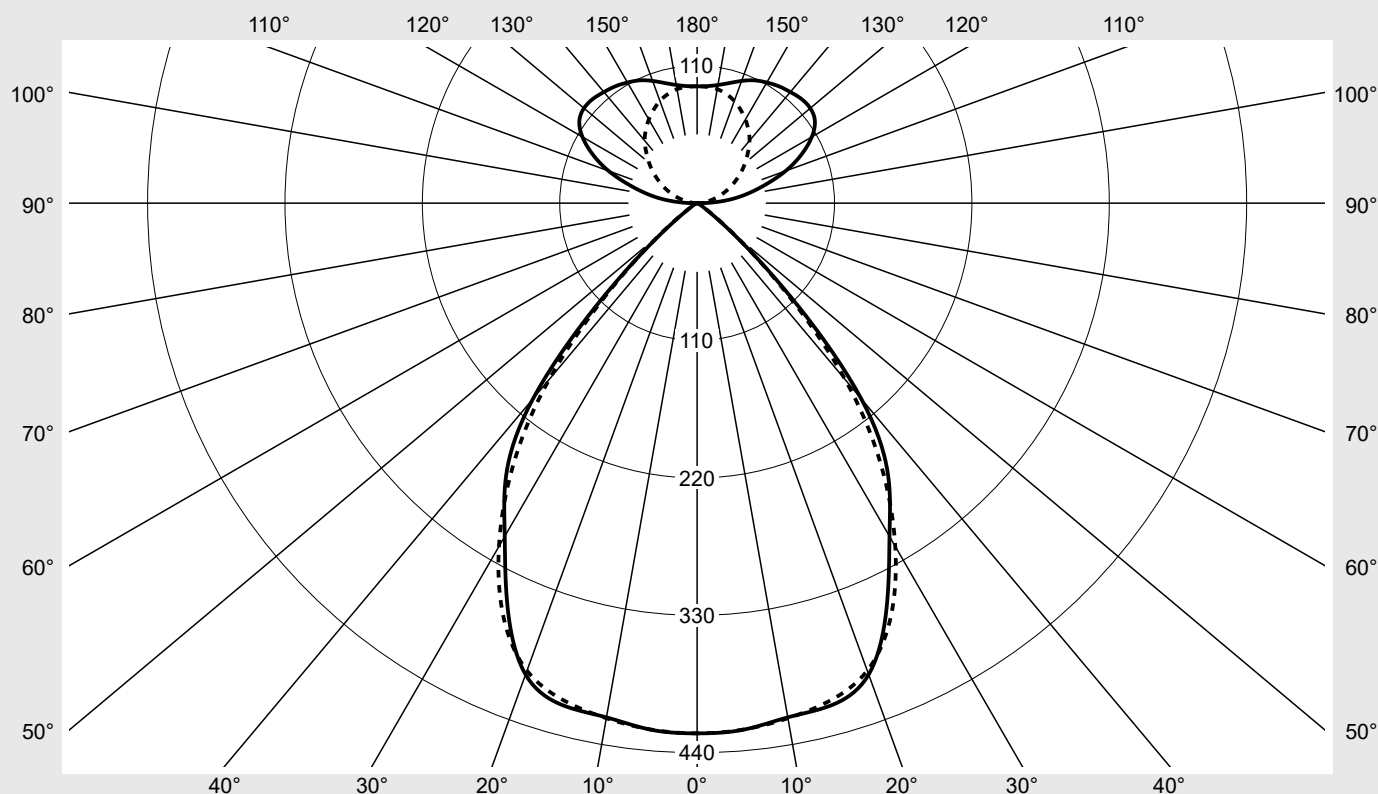
siteco

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

η_{LB} 100.0%
 ϕ_u 59.2%
 ϕ_o 40.8%

Measurement conditions

DIN EN 13032 and DIN 5032

Photometric test report

Family Silica® 21	Order number: 51MX32DB49BB EAN: 4058352886953	LP number 59279_104
Table of values for luminous intensities		Maximum luminous intensity
		siteco

C- planes	0° 180°	15° 165° 195° 345°	30° 150° 210° 330°	45° 135° 225° 315°	60° 120° 240° 300°	75° 105° 255° 285°	90° 270°	Phi-zone	Total Phi-zone
γ	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

Photometric test report

Family Silica® 21	Order number: 51MX32DB49BB EAN: 4058352886953	LP number 59279_104
----------------------	--	------------------------

UGR-Table		Standard room							siteco		
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

Luminance table		Max. for $\gamma \geq 65^\circ$		Photometric dimensions in mm:		L = 1470 B = 49	
C-planes	0° 180°	15° 165° 195° 345°	30° 150° 210° 330°	45° 135° 225° 315°	60° 120° 240° 300°	75° 105° 255° 285°	90° 270°
γ	Luminance in cd/m²						
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

Photometric test report

Family
Silica® 21

Order number: 51MX32DB49BB
EAN: 4058352886953

LP number
59279_104

Luminance values in cd/m²

γ 65°

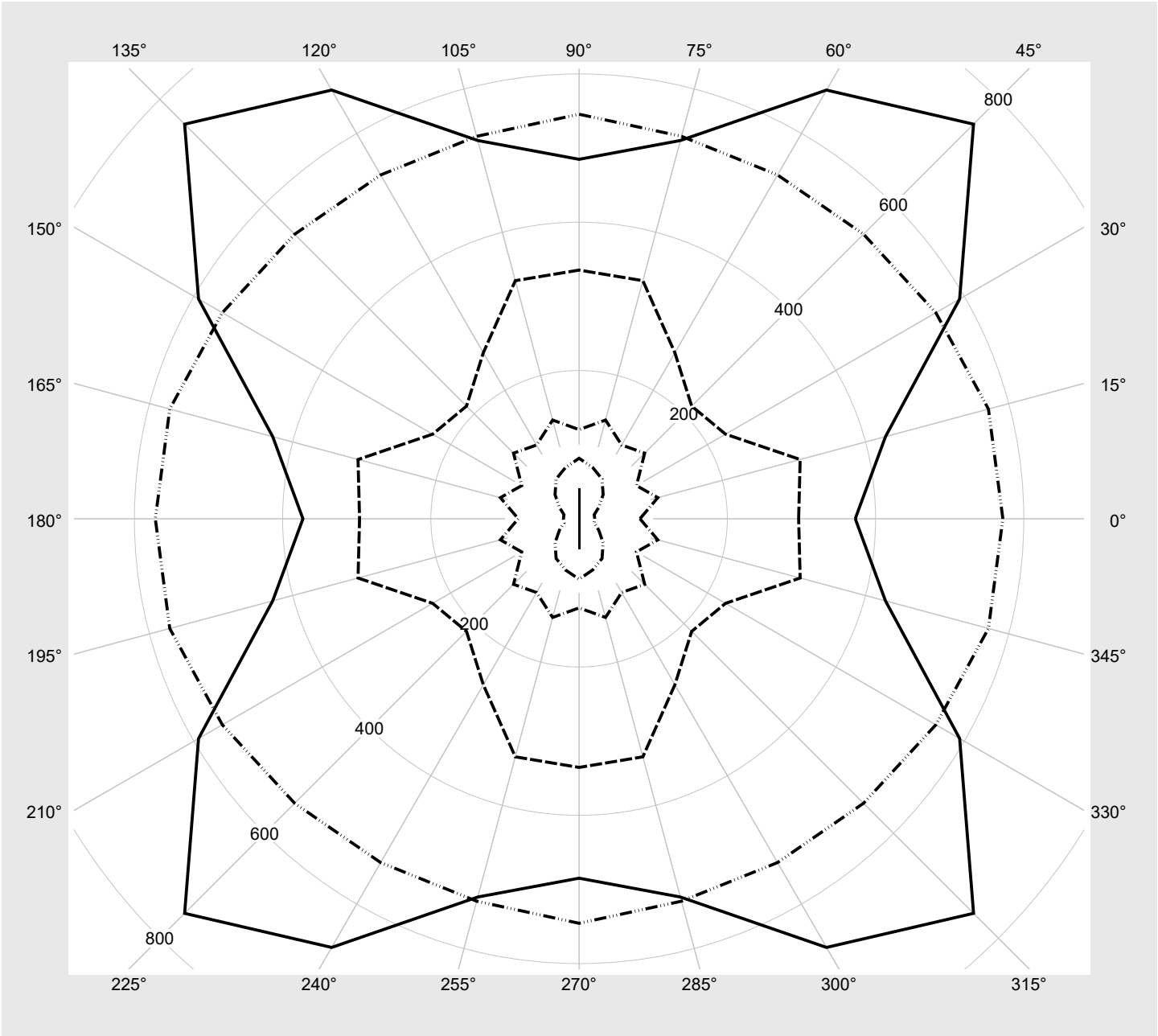
γ 70°

γ 75°

γ 80°

γ 85°

siteco



Photometric test report

Family Silica® 21	Order number: 51MX32DB49BB EAN: 4058352886953	LP number 59279_104
Dimming levels table		environmental temperature: 25°C
		siteco

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