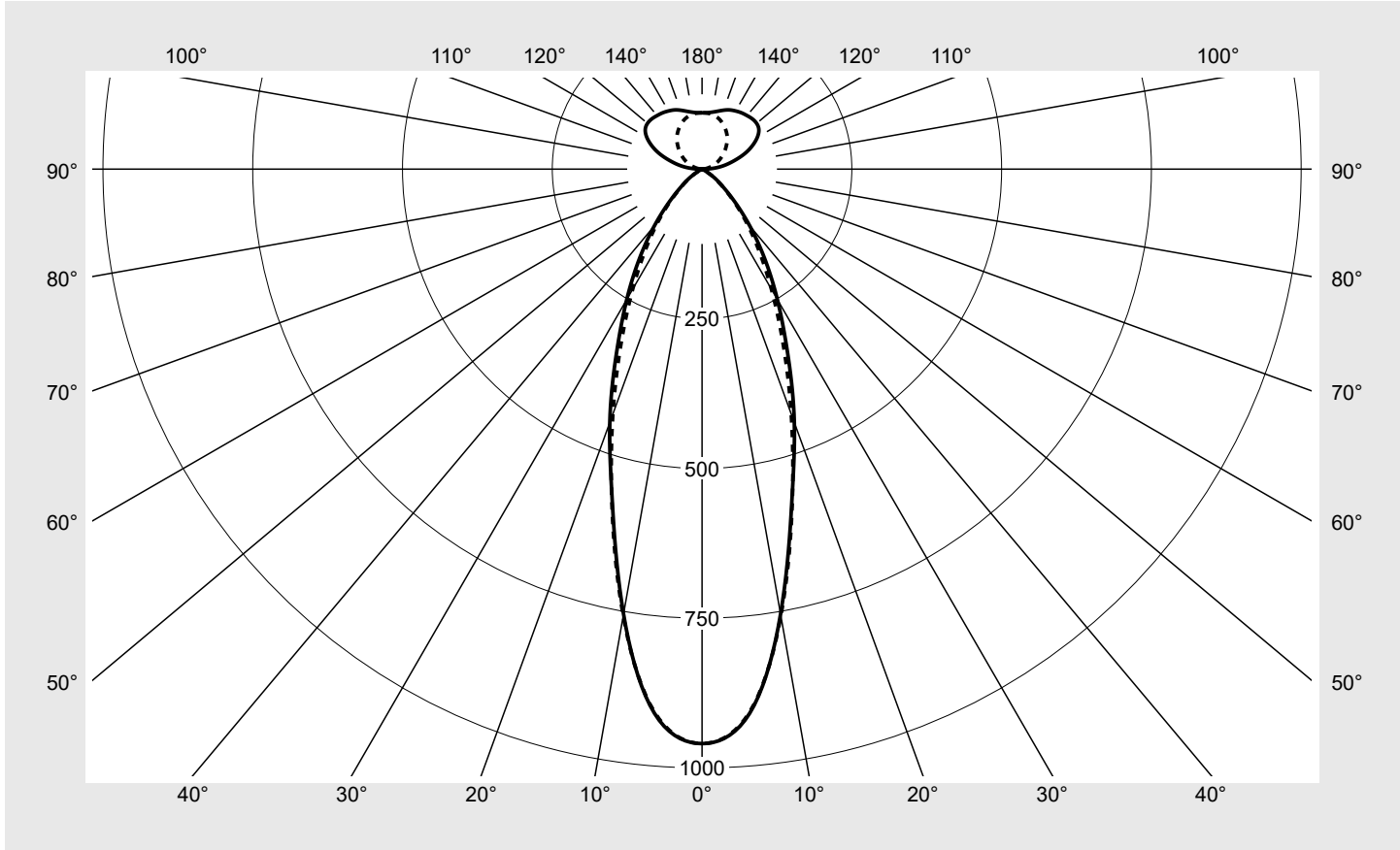


Photometric test report

Family Silica® 21	Order number: 51MX31DB49BB EAN: 4058352886779	LP number 59281_79
	Version Suspended luminaire, reflector, black, direct-/indirect distribution, narrow distribution, UGR≤16 (L65≤3000cd/m²) Lamps LED 4000 K CRI ≥ 80 Controlgear ECG-DALI Rated values Net luminous flux = 9120 lm Power consumption = 54.8 W Luminous efficacy = 166.4 lm/W	serial documentation 02.08.2023 

Luminous intensity in cd/klm C180-0 C270-90 **Imax: 959 cd/klm**



Classifications	
DIN 5040	C 7 2
CIE	N1=86 N2=99 N3=100 N4=59 N5=100

Luminaire light output ratios	
η_{LB}	100.0%
ϕ_u	59.0%
ϕ_o	41.0%

Measurement conditions
 DIN EN 13032 and DIN 5032

Photometric test report

Family Silica® 21	Order number: 51MX31DB49BB EAN: 4058352886779	LP number 59281_79
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°	959.4	959.4	959.4	959.4	959.4	959.4	959.4	5.7	5.7
5°	912.2	913.2	911.7	911.4	911.5	911.7	910.3	43.6	49.3
10°	754.6	755.9	762.5	767.9	766.9	758.5	757.5	72.5	121.8
15°	578.2	581.5	588.5	595.2	592.8	584.9	581.1	83.3	205.1
20°	450.2	447.9	438.1	432.3	432.3	433.7	435.2	82.1	287.1
25°	337.4	332.5	314.5	302.7	311.9	319.4	319.2	73.7	360.8
30°	251.3	246.8	227.0	216.4	227.8	237.2	231.6	63.8	424.6
35°	181.9	180.8	165.4	156.1	165.0	174.0	165.2	53.2	477.8
40°	124.1	124.5	116.4	111.0	116.6	120.7	113.9	41.6	519.4
45°	77.3	77.7	75.1	73.6	76.6	76.5	72.7	29.4	548.8
50°	44.9	46.1	46.4	46.4	47.6	45.7	43.0	19.3	568.1
55°	25.0	26.0	27.2	27.9	28.2	25.7	24.0	11.9	580.0
60°	7.9	9.6	14.5	15.8	15.1	10.6	8.6	5.8	585.9
65°	2.5	3.1	4.5	8.1	4.9	3.1	2.7	2.2	588.0
70°	1.0	1.1	0.9	1.6	1.1	1.3	1.3	0.6	588.6
75°	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	588.8
80°	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	588.8
85°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.2	589.1
90°	4.7	4.6	4.9	4.8	2.9	1.0	0.4	1.9	590.9
95°	22.0	22.5	24.1	22.8	14.6	7.5	3.9	9.5	600.4
100°	39.3	40.4	40.8	35.7	24.0	13.5	8.9	16.1	616.5
105°	56.4	57.6	56.5	48.2	33.0	20.5	15.0	22.2	638.7
110°	75.8	76.1	71.3	59.4	42.3	27.6	21.4	27.9	666.6
115°	92.7	91.8	84.7	69.7	51.3	34.9	28.6	32.5	699.2
120°	106.6	104.9	95.6	78.0	59.7	42.0	35.6	35.7	734.9
125°	115.7	112.5	102.2	85.6	66.8	48.7	43.0	37.1	771.9
130°	118.9	116.2	105.4	90.1	72.2	55.6	50.5	36.7	808.6
135°	118.7	116.2	106.6	93.2	76.5	62.0	57.9	35.1	843.7
140°	116.7	115.0	106.9	95.4	80.1	68.1	65.7	32.7	876.4
145°	114.8	113.6	106.8	96.6	83.5	73.7	72.0	29.7	906.1
150°	112.1	111.6	105.6	96.5	86.2	79.2	77.7	26.2	932.3
155°	109.0	108.7	103.0	96.1	88.3	84.0	82.9	22.2	954.6
160°	104.7	104.4	99.9	95.3	90.2	87.8	87.5	17.9	972.5
165°	100.1	99.5	97.2	94.2	92.0	90.8	90.9	13.5	985.9
170°	96.6	96.1	95.5	94.2	93.3	93.1	93.2	9.0	994.9
175°	94.6	94.5	94.0	93.8	93.8	93.9	93.9	4.5	999.4
180°	94.1	94.1	94.1	94.1	94.1	94.1	94.1	0.6	1000.0

Photometric test report

Family Silica® 21	Order number: 51MX31DB49BB EAN: 4058352886779	LP number 59281_79
-----------------------------	--	------------------------------

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	14.3	15.1	15.1	15.9	17.0	14.2	15.0	15.0	15.8	16.9
	3H	14.0	14.7	14.9	15.6	16.7	13.9	14.6	14.8	15.5	16.6
	4H	13.8	14.5	14.7	15.4	16.5	13.8	14.5	14.7	15.3	16.4
	6H	13.7	14.3	14.6	15.2	16.3	13.6	14.2	14.5	15.1	16.3
	8H	13.6	14.1	14.5	15.0	16.2	13.5	14.0	14.4	14.9	16.1
	12H	13.5	14.0	14.4	14.9	16.1	13.4	13.9	14.4	14.8	16.0
4H	2H	14.0	14.7	14.9	15.6	16.7	13.9	14.5	14.8	15.4	16.5
	3H	13.7	14.3	14.7	15.2	16.4	13.6	14.2	14.5	15.1	16.2
	4H	13.6	14.1	14.5	15.0	16.2	13.5	14.0	14.4	14.9	16.1
	6H	13.4	13.8	14.4	14.8	16.0	13.3	13.7	14.3	14.7	15.9
	8H	13.3	13.7	14.3	14.6	15.9	13.2	13.6	14.2	14.6	15.8
	12H	13.2	13.5	14.2	14.5	15.7	13.1	13.5	14.1	14.4	15.7
8H	4H	13.3	13.7	14.3	14.7	15.9	13.2	13.6	14.2	14.5	15.8
	6H	13.2	13.5	14.2	14.5	15.7	13.0	13.3	14.0	14.3	15.6
	8H	13.1	13.4	14.1	14.3	15.6	13.0	13.3	14.0	14.2	15.5
	12H	13.0	13.2	14.0	14.2	15.5	12.9	13.1	13.9	14.1	15.4
12H	4H	13.2	13.6	14.2	14.5	15.8	13.1	13.4	14.1	14.4	15.6
	6H	13.1	13.3	14.1	14.3	15.6	13.0	13.2	14.0	14.2	15.5
	8H	13.0	13.2	14.0	14.2	15.5	12.9	13.1	13.9	14.1	15.4

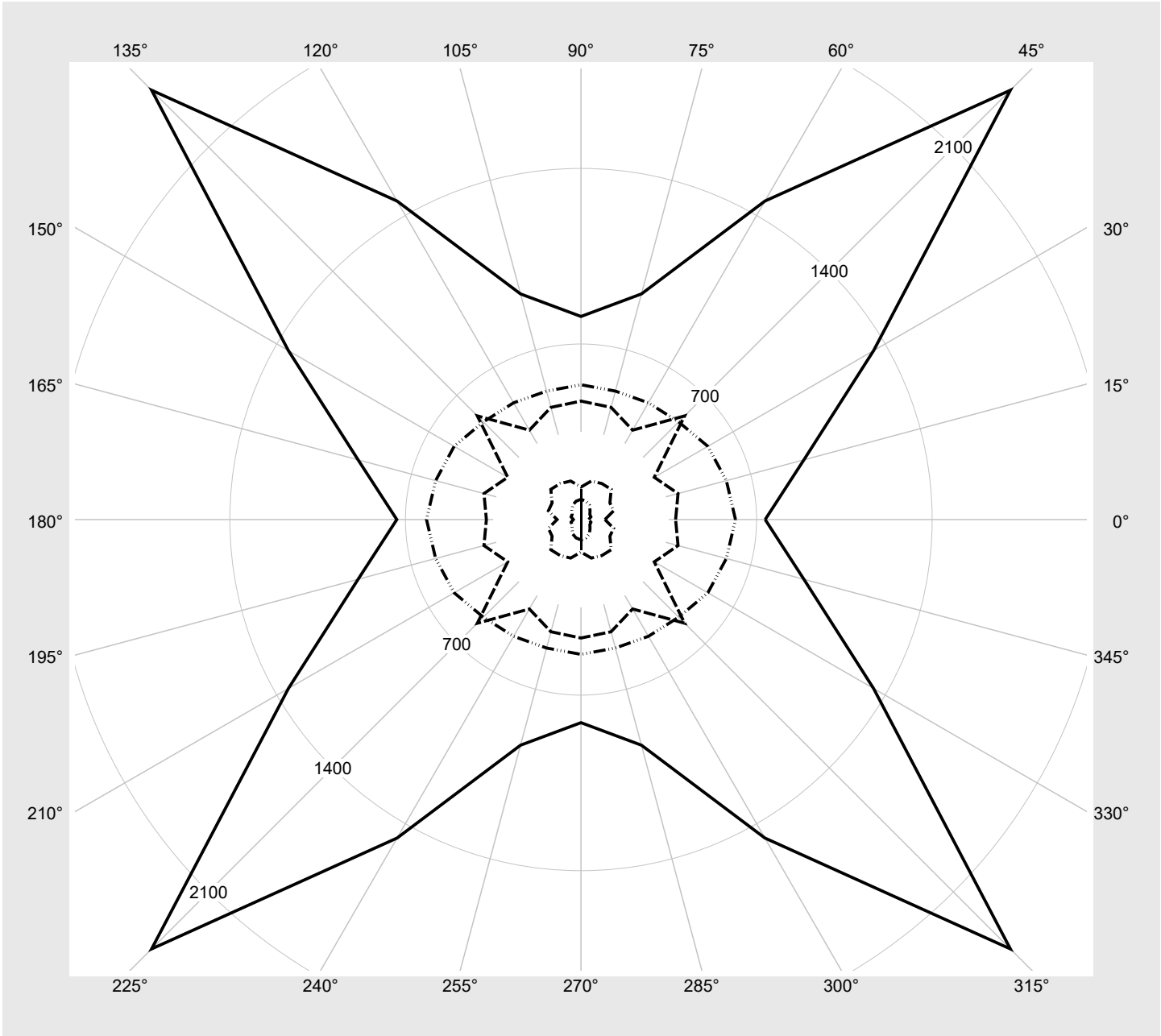
Luminance table	Max. for $\gamma \geq 65^\circ$	Photometric dimensions in mm:	L = 1470 B = 49
------------------------	---	--------------------------------------	----------------------------------

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°		13833.7	13904.5	13449.7	13183.4	13716.1	13704.6	13019.0	
50°		8851.1	9078.4	9131.6	9147.6	9383.9	9001.6	8476.3	
55°		5513.1	5735.8	5999.8	6164.7	6224.3	5678.4	5287.7	
60°		2000.5	2427.9	3682.7	3989.6	3827.8	2677.6	2169.7	
65°		734.3	920.1	1347.0	2421.0	1466.2	931.4	809.8	
70°		377.2	400.6	337.2	584.5	411.7	463.1	472.4	
75°		95.4	134.5	133.1	170.2	165.8	159.0	129.6	
80°		30.6	40.8	40.8	51.0	66.4	75.8	80.9	
85°		616.0	600.0	584.0	550.6	537.5	530.2	537.5	

Photometric test report

Family Silica® 21	Order number: 51MX31DB49BB EAN: 4058352886779	LP number 59281_79
-----------------------------	--	------------------------------

Luminance values in cd/m² γ 65° γ 70° γ 75° γ 80° γ 85° **siteco**



Photometric test report

Family Silica® 21	Order number: 51MX31DB49BB EAN: 4058352886779	LP number 59281_79
-----------------------------	--	------------------------------

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	9120	54.8
95	241	252	8678	52.1
90	227	250	8199	49.1
85	214	248	7751	46.3
80	201	245	7299	43.7
75	188	243	6845	40.9
70	175	240	6388	38.2
65	162	238	5929	35.5
60	149	234	5467	32.7
55	136	231	5001	30.1
50	124	228	4569	27.6
45	111	224	4100	24.9
40	99	219	3663	22.4
35	86	214	3187	19.8
30	74	209	2746	17.3
25	61	202	2264	14.6
20	49	194	1818	12.1
15	37	183	1371	9.7
10	25	169	922	7.3
5	13	145	471	5.1
2	6	117	207	4.2