

Photometric test report

Family
Silica® 21

Order number: **51MX24DC3ABB**
EAN: **4058352905470**

LP number
59270_87

serial
documentation
02.08.2023

siteco



Version surface-mounted luminaire, reflector, black,
direct distribution, asymmetric distribution

Lamps LED 3000 K | CRI ≥ 80

Controlgear ECG-DALI

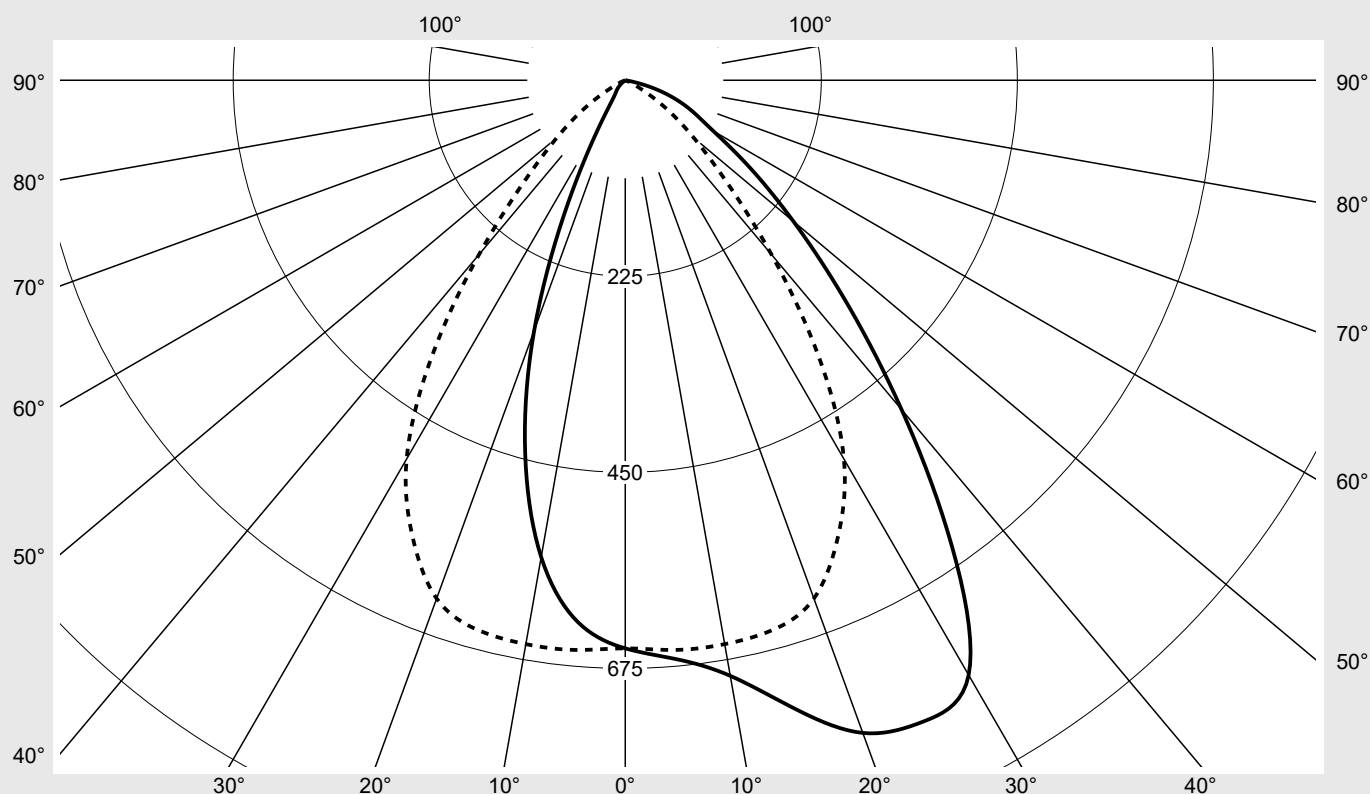
Rated values Net luminous flux = 10800 lm
Power consumption = 79.0 W
Luminous efficacy = 136.7 lm/W

Luminous intensity in cd/klm

C180-0

C270-90

Imax: 826 cd/klm



Classifications

DIN 5040 A 6 0
CIE N1=74 N2=94 N3=99
N4=100 N5=100

Luminaire light output ratios

η_{LB} 100.0%
 ϕ_u 100.0%
 ϕ_o 0.0%

Measurement conditions

DIN EN 13032 and DIN 5032

Photometric test report

Family Silica® 21	Order number: 51MX24DC3ABB EAN: 4058352905470	LP number 59270_87
Table of values for luminous intensities		Maximum luminous intensity
		siteco

C- planes	0°	15° 345°	30° 330°	45° 315°	60° 300°	75° 285°	90° 270°
γ	Luminous intensity in cd/klm						
0°	652.0	652.0	652.0	652.0	652.0	652.0	652.0
5°	666.9	669.0	664.7	668.1	665.8	658.5	656.3
10°	694.1	699.5	694.9	697.8	687.8	669.7	657.2
15°	745.9	757.8	758.6	751.7	720.3	681.6	653.2
20°	797.2	810.9	815.9	795.0	737.5	674.0	633.0
25°	811.7	825.8	812.3	769.4	703.1	631.1	577.8
30°	788.3	790.4	769.6	695.9	622.5	550.2	501.9
35°	654.2	653.0	648.0	598.2	512.7	433.1	387.1
40°	493.4	503.0	513.6	491.7	407.8	312.4	261.1
45°	356.9	371.2	396.6	382.3	311.7	212.0	163.2
50°	252.0	264.9	292.8	285.3	227.0	141.1	102.4
55°	174.1	185.5	214.4	210.2	168.5	93.5	60.0
60°	116.9	126.6	154.3	157.4	127.4	55.1	26.1
65°	85.8	90.4	106.5	115.9	84.8	29.1	8.4
70°	58.6	65.3	76.1	78.1	49.1	15.0	3.2
75°	29.3	36.5	51.8	37.7	23.5	8.4	1.1
80°	4.9	7.0	15.4	15.1	10.7	3.3	0.5
85°	1.0	1.2	2.3	2.1	0.8	0.3	0.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Photometric test report

Family Silica® 21	Order number: 51MX24DC3ABB EAN: 4058352905470	LP number 59270_87
Table of values for luminous intensities		Maximum luminous intensity
		siteco

C- planes	105° 255°	120° 240°	135° 225°	150° 210°	165° 195°	180°	Phi-zone	Total Phi-zone
γ	Luminous intensity in cd/klm						Luminous flux in lm/klm	
0°	652.0	652.0	652.0	652.0	652.0	652.0	3.9	3.9
5°	648.8	644.3	634.4	624.8	623.0	624.2	31.1	35.0
10°	640.2	622.4	598.9	573.5	560.8	555.7	61.3	96.3
15°	627.5	590.3	536.8	485.9	456.2	443.8	90.0	186.3
20°	595.4	535.2	448.1	369.0	322.8	305.6	113.9	300.1
25°	535.8	444.7	330.5	240.5	178.2	155.1	126.1	426.3
30°	439.6	334.4	213.1	117.0	65.0	52.1	126.1	552.3
35°	312.5	213.9	111.2	44.6	25.1	21.7	112.1	664.4
40°	197.6	120.2	49.4	22.0	16.7	15.5	92.5	756.9
45°	117.6	62.5	22.8	14.8	11.5	10.5	72.7	829.5
50°	69.7	30.7	13.3	9.8	7.0	5.9	55.0	884.6
55°	38.5	15.6	8.4	6.0	3.7	3.2	40.9	925.5
60°	14.7	7.6	5.1	3.5	2.8	2.3	29.3	954.8
65°	4.9	3.9	3.0	2.5	1.8	1.2	20.5	975.2
70°	1.9	1.9	1.7	1.4	1.0	0.6	13.9	989.2
75°	0.7	0.9	0.9	0.8	0.6	0.5	7.8	997.0
80°	0.4	0.5	0.5	0.5	0.4	0.4	2.6	999.6
85°	0.4	0.4	0.4	0.4	0.3	0.3	0.4	1000.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0

Photometric test report

Family Silica® 21	Order number: 51MX24DC3ABB EAN: 4058352905470	LP number 59270_87
----------------------	--	-----------------------

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	25.0	26.4	25.4	26.7	27.0	20.4	21.8	20.8	22.1	22.4	
	3H	25.5	26.8	25.9	27.1	27.5	20.4	21.6	20.7	21.9	22.3	
	4H	25.7	26.8	26.1	27.2	27.5	20.3	21.5	20.7	21.8	22.2	
	6H	25.7	26.7	26.1	27.1	27.5	20.2	21.3	20.7	21.7	22.1	
	8H	25.6	26.6	26.1	27.0	27.4	20.2	21.2	20.7	21.6	22.0	
	12H	25.7	26.5	26.1	26.9	27.3	20.3	21.1	20.7	21.5	21.9	
4H	2H	25.4	26.5	25.8	26.9	27.3	21.2	22.4	21.6	22.8	23.1	
	3H	26.1	27.1	26.5	27.5	27.9	21.4	22.4	21.8	22.8	23.2	
	4H	26.4	27.2	26.8	27.6	28.1	21.4	22.2	21.8	22.7	23.1	
	6H	26.4	27.1	26.8	27.5	28.0	21.3	22.1	21.8	22.5	23.0	
	8H	26.3	27.0	26.8	27.4	27.9	21.3	22.0	21.8	22.4	22.9	
	12H	26.3	26.9	26.8	27.4	27.9	21.3	21.9	21.8	22.3	22.8	
8H	4H	26.4	27.1	26.9	27.5	28.0	21.6	22.3	22.1	22.7	23.2	
	6H	26.5	27.0	26.9	27.5	28.0	21.6	22.1	22.1	22.6	23.1	
	8H	26.4	26.9	26.9	27.4	27.9	21.6	22.0	22.1	22.5	23.1	
	12H	26.4	26.8	26.9	27.3	27.8	21.5	21.9	22.1	22.4	23.0	
12H	4H	26.4	27.0	26.9	27.4	27.9	21.7	22.2	22.2	22.7	23.2	
	6H	26.5	26.9	27.0	27.4	27.9	21.6	22.1	22.1	22.6	23.1	
	8H	26.4	26.8	26.9	27.3	27.8	21.6	22.0	22.1	22.5	23.0	

Luminance table		Max. for $\gamma \geq 65^\circ$										Photometric dimensions in mm:		L = 2940 B = 49	
C-planes		0°	15° 345°	30° 330°	45° 315°	60° 300°	75° 285°	90° 270°	105° 255°	120° 240°	135° 225°	150° 210°	165° 195°	180°	
γ		Luminance in cd/m²													
45°		37839.4	39355.2	42043.7	40527.9	33048.7	22474.8	17303.7	12471.6	6626.9	2419.6	1571.7	1222.7	1112.6	
50°		29386.5	30896.8	34153.2	33272.3	26476.2	16458.3	11940.3	8123.8	3582.1	1555.9	1146.8	814.9	682.8	
55°		22760.1	24248.1	28024.4	27469.0	22017.9	12219.3	7847.1	5028.1	2036.2	1094.8	781.0	481.3	412.5	
60°		17526.2	18986.4	23128.3	23597.5	19103.7	8263.5	3917.4	2206.5	1140.6	766.5	529.9	412.6	347.9	
65°		15212.9	16028.7	18890.4	20558.2	15040.6	5161.0	1495.4	861.4	684.4	540.7	437.8	325.3	215.4	
70°		12849.2	14306.8	16684.0	17124.5	10764.8	3293.6	697.7	416.9	416.9	369.6	307.5	221.8	135.9	
75°		8486.1	10576.2	15018.4	10912.3	6809.8	2445.9	320.4	210.9	257.8	246.2	226.5	183.6	148.6	
80°		2096.5	3022.1	6650.3	6498.8	4612.1	1426.9	203.8	192.1	227.1	233.1	221.5	192.1	174.8	
85°		858.4	1032.2	1949.1	1833.0	649.4	289.9	278.7	313.1	348.4	359.6	336.3	289.9	278.7	

Photometric test report

Family
Silica® 21

Order number: 51MX24DC3ABB
EAN: 4058352905470

LP number
59270_87

Luminance values in cd/m²

γ 65°

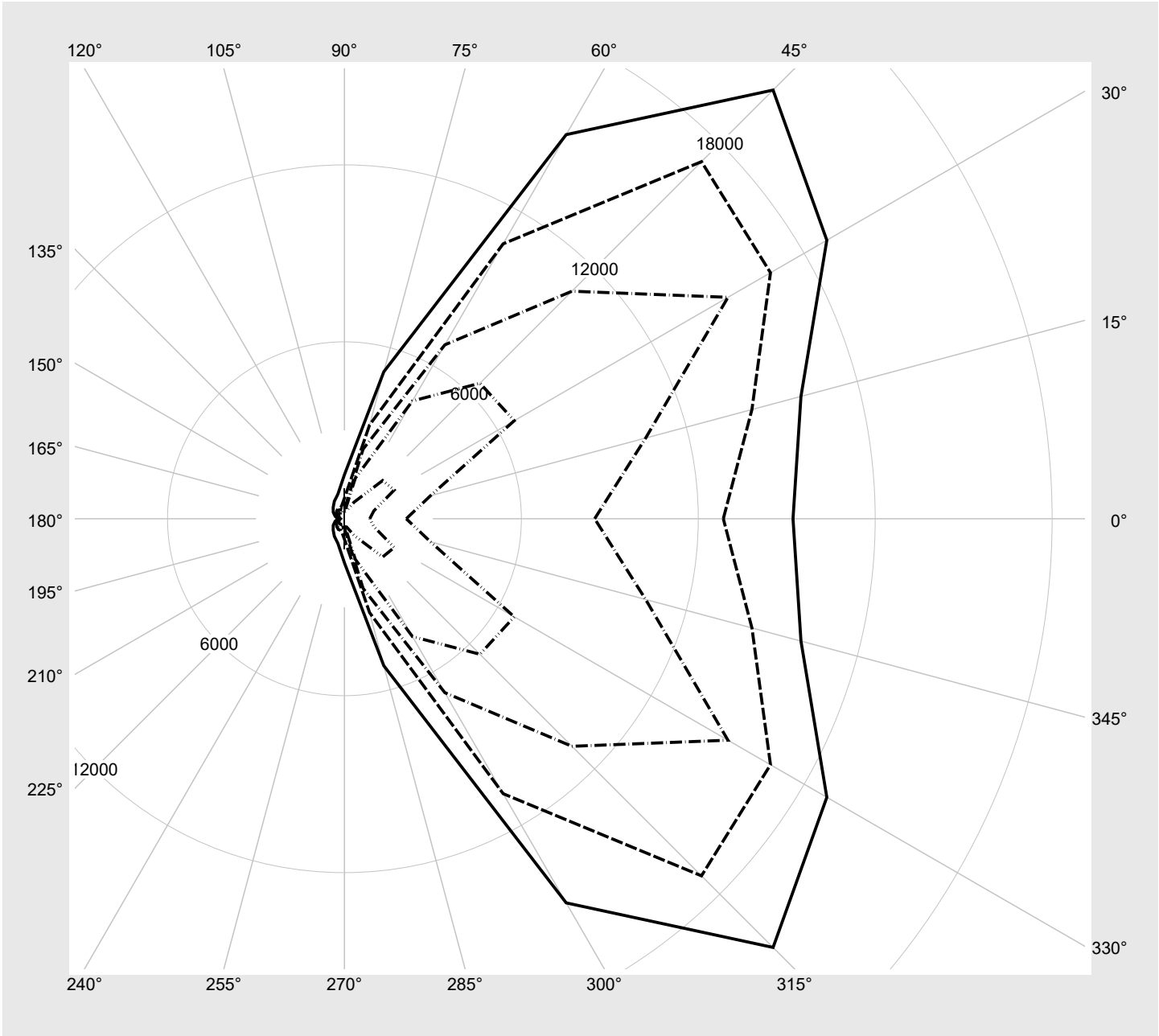
γ 70°

γ 75°

γ 80°

γ 85°

siteco



Photometric test report

Family Silica® 21	Order number: 51MX24DC3ABB EAN: 4058352905470	LP number 59270_87
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	10800	79.0
95	240	252	10250	74.7
90	227	250	9735	70.7
85	213	248	9176	66.4
80	200	245	8648	62.5
75	187	243	8115	58.5
70	174	240	7579	54.6
65	161	237	7040	50.8
60	148	234	6494	46.8
55	135	231	5945	43.0
50	122	227	5391	39.1
45	110	223	4872	35.6
40	97	219	4310	31.7
35	85	214	3787	28.2
30	73	208	3259	24.7
25	60	201	2684	20.9
20	48	193	2151	17.5
15	36	182	1611	13.8
10	24	168	1070	10.3
5	12	142	527	6.4
3	7	122	300	4.3