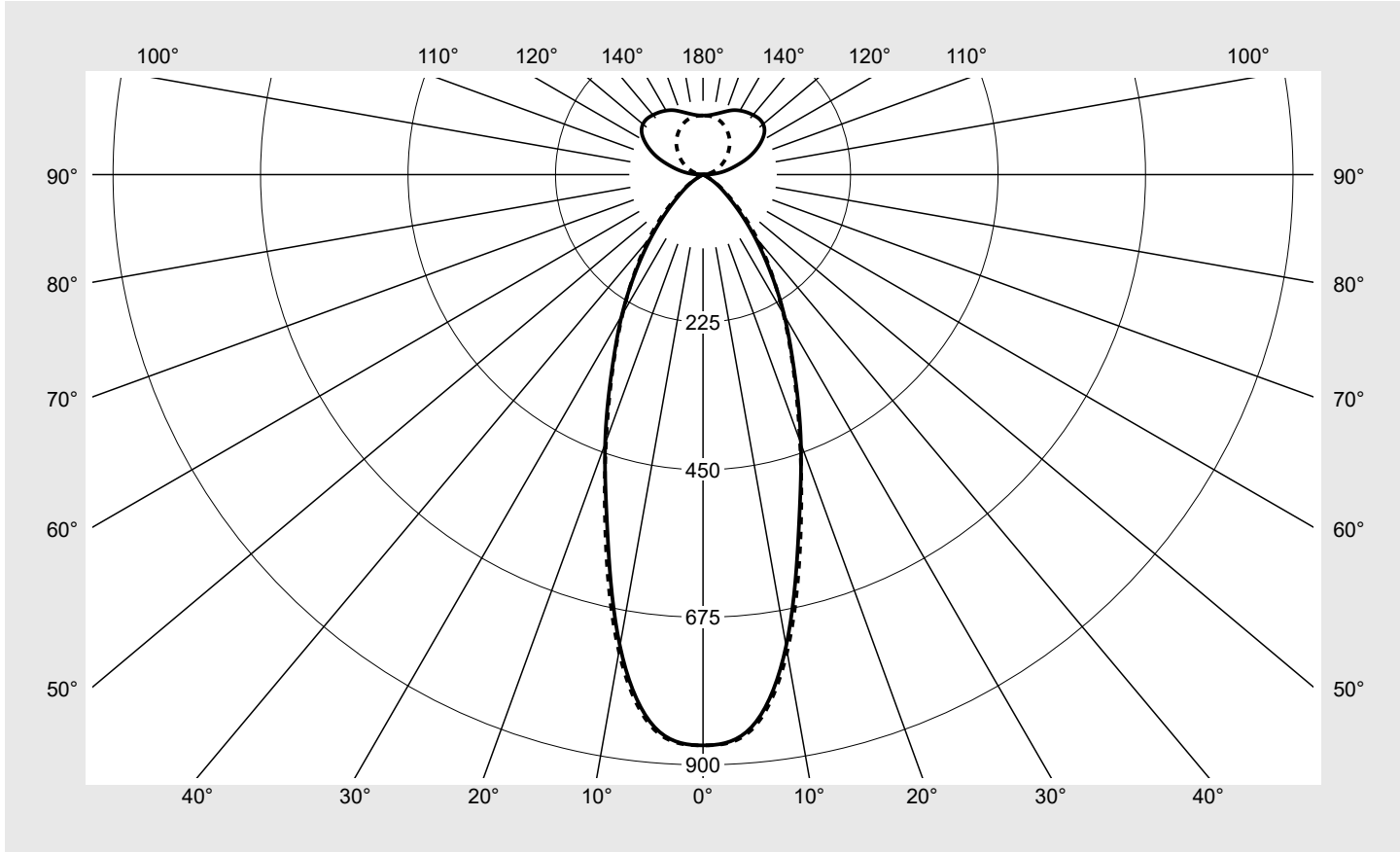


# Photometric test report

<b>Family</b> <b>Silica® 21</b>	<b>Order number: 51MX31TBT9W</b> <b>EAN: 4058352685426</b>	<b>LP number</b> <b>59310_40</b>
	<b>Version</b>	Suspended luminaire, reflector, black, direct-/indirect distribution, narrow distribution, UGR≤16 (L65≤3000cd/m²), tunable white
	<b>Lamps</b>	LED 6500 K   CRI ≥ 80
	<b>Controlgear</b>	ECG-DALI
	<b>Setting</b>	individual position
	<b>Rated values</b>	Net luminous flux = 7770 lm Power consumption = 67.0 W Luminous efficacy = 116 lm/W
		<b>serial documentation</b> 03.05.2023
		

**Luminous intensity in cd/klm**
C180-0
C270-90
**Imax: 870 cd/klm**




Classifications	
DIN 5040	C 7 2
CIE	N1=85 N2=99 N3=100
	N4=60 N5=100

Luminaire light output ratios	
$\eta_{LB}$	100.0%
$\phi_u$	59.6%
$\phi_o$	40.4%

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

## Photometric test report

Family <b>Silica® 21</b>	Order number: <b>51MX31TBT9W</b> EAN: <b>4058352685426</b>	LP number <b>59310_40</b>
Table of values for luminous intensities		
Maximum luminous intensity		

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°	870.3	870.3	870.3	870.3	870.3	870.3	870.3	5.2	5.2
5°	846.0	847.0	846.3	847.4	849.1	850.7	849.9	40.5	45.7
10°	729.9	730.5	735.4	740.2	741.6	737.5	738.7	70.1	115.8
15°	563.5	566.8	573.7	583.4	582.7	575.8	574.3	81.6	197.4
20°	436.6	435.3	429.7	429.7	431.1	427.8	432.4	80.9	278.3
25°	328.9	328.2	319.1	311.5	316.6	319.6	325.6	74.2	352.5
30°	247.8	246.0	233.3	230.7	239.5	241.8	245.2	65.7	418.2
35°	177.2	177.8	169.0	168.0	180.3	183.5	180.9	55.4	473.6
40°	120.1	121.7	120.2	121.8	131.6	132.5	129.5	44.2	517.8
45°	75.2	76.8	78.8	83.5	89.3	88.1	85.7	32.1	549.9
50°	44.3	46.1	49.1	53.4	57.3	54.4	51.5	21.6	571.5
55°	25.2	26.5	29.2	32.4	34.1	31.0	29.0	13.5	585.0
60°	8.3	10.2	15.9	18.3	18.2	12.9	10.8	6.7	591.7
65°	2.5	3.2	5.0	9.4	5.8	3.6	3.2	2.5	594.2
70°	1.1	1.1	1.0	1.8	1.2	1.4	1.5	0.7	594.9
75°	0.2	0.3	0.3	0.4	0.4	0.4	0.3	0.2	595.0
80°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	595.1
85°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.2	595.3
90°	5.7	5.5	5.8	5.6	3.2	1.1	0.4	2.2	597.5
95°	20.7	21.1	22.8	21.9	14.5	7.6	3.9	9.1	606.6
100°	36.3	37.4	38.2	34.3	23.7	13.6	9.0	15.3	621.9
105°	52.3	53.6	53.5	47.0	32.7	20.5	15.0	21.3	643.2
110°	71.5	72.2	68.8	58.2	41.9	27.5	21.3	27.0	670.2
115°	88.7	88.3	82.4	68.5	50.8	34.7	28.2	31.7	701.9
120°	103.3	102.0	94.0	77.2	59.3	41.7	35.0	35.1	737.0
125°	114.4	111.6	102.0	85.5	66.7	48.3	42.1	36.8	773.8
130°	119.7	117.2	106.2	90.6	72.3	55.0	49.2	36.8	810.6
135°	120.6	118.1	107.9	93.8	76.4	61.1	56.3	35.3	845.9
140°	118.7	116.7	108.1	95.8	79.5	66.7	63.6	32.8	878.7
145°	116.0	114.8	107.5	96.4	82.4	71.9	69.6	29.6	908.3
150°	112.6	112.0	105.4	95.3	84.5	76.9	75.0	25.9	934.3
155°	108.3	107.8	101.5	94.1	86.0	81.3	79.8	21.8	956.1
160°	102.5	102.2	97.5	92.7	87.4	84.6	84.2	17.4	973.5
165°	97.2	96.6	94.2	91.1	88.8	87.3	87.2	13.0	986.5
170°	93.2	92.7	92.0	90.7	89.7	89.4	89.3	8.7	995.2
175°	90.7	90.6	90.1	89.9	89.9	89.9	89.9	4.3	999.5
180°	90.1	90.1	90.1	90.1	90.1	90.1	90.1	0.5	1000.0

## Photometric test report

Family <b>Silica® 21</b>	Order number: <b>51MX31TBT9W</b> EAN: <b>4058352685426</b>	LP number <b>59310_40</b>
-----------------------------	---	------------------------------

<b>UGR-Table</b>	<b>Standard room</b>	<b>siteco</b>
------------------	----------------------	---------------

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	13.9	14.7	14.7	15.5	16.6	14.5	15.3	15.3	16.1	17.2
	3H	13.6	14.3	14.5	15.2	16.3	14.2	15.0	15.1	15.8	16.9
	4H	13.4	14.1	14.3	15.0	16.1	14.1	14.8	15.0	15.6	16.7
	6H	13.2	13.8	14.2	14.7	15.9	13.9	14.5	14.8	15.4	16.5
	8H	13.2	13.7	14.1	14.6	15.8	13.8	14.3	14.7	15.2	16.4
	12H	13.0	13.5	14.0	14.5	15.6	13.7	14.2	14.7	15.1	16.3
4H	2H	13.7	14.3	14.5	15.2	16.3	14.2	14.8	15.1	15.7	16.8
	3H	13.4	13.9	14.3	14.8	16.0	13.9	14.5	14.8	15.4	16.5
	4H	13.2	13.7	14.2	14.6	15.8	13.8	14.3	14.7	15.2	16.4
	6H	13.0	13.5	14.0	14.4	15.6	13.6	14.1	14.6	15.0	16.2
	8H	13.0	13.3	13.9	14.3	15.5	13.6	13.9	14.5	14.9	16.1
	12H	12.8	13.2	13.8	14.1	15.4	13.4	13.8	14.4	14.7	16.0
8H	4H	13.0	13.4	13.9	14.3	15.5	13.5	13.9	14.5	14.9	16.1
	6H	12.8	13.2	13.8	14.1	15.3	13.4	13.7	14.3	14.6	15.9
	8H	12.7	13.0	13.7	14.0	15.2	13.3	13.6	14.3	14.6	15.8
	12H	12.6	12.9	13.6	13.9	15.1	13.2	13.4	14.2	14.4	15.7
12H	4H	12.9	13.2	13.9	14.2	15.4	13.4	13.7	14.4	14.7	15.9
	6H	12.7	13.0	13.7	14.0	15.2	13.3	13.5	14.3	14.5	15.8
	8H	12.6	12.9	13.6	13.9	15.1	13.2	13.4	14.2	14.4	15.7

<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>
------------------------	---	--------------------------------------	----------------------------------

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°		11474.0	11721.3	12017.3	12739.6	13620.0	13445.3	13076.3	
50°		7438.9	7736.1	8247.4	8962.0	9607.6	9129.8	8639.8	
55°		4739.9	4991.3	5489.7	6088.3	6405.1	5836.1	5459.3	
60°		1793.9	2204.9	3435.3	3941.0	3927.6	2792.4	2335.6	
65°		638.4	807.6	1266.0	2392.9	1473.3	918.4	827.0	
70°		338.4	360.2	305.3	579.4	393.0	455.4	474.4	
75°		89.6	125.5	123.4	163.4	163.4	162.5	133.0	
80°		32.3	35.4	42.2	50.9	64.0	77.7	77.7	
85°		505.0	506.2	500.0	476.5	459.2	465.4	474.0	

**Photometric test report**

<b>Family</b> <b>Silica® 21</b>	<b>Order number: 51MX31TBT9W</b> <b>EAN: 4058352685426</b>	<b>LP number</b> <b>59310_40</b>
------------------------------------	---	-------------------------------------

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

