

## Lichttechnischer Prüfbefund

Familie  
Silica® 21

Bestell-Nr.: 51MX24DB45BB  
EAN: 4058352905418

LP-Nummer  
59270\_84



**Ausführung** Anbauleuchte, Reflektor, schwarz, direkt strahlend, asymmetrisch strahlend

**Bestückung** LED 4000 K | CRI ≥ 80

**Betriebsgerät** EVG-DALI

**Bemessungswerte** Nettolichtstrom = 5400 lm  
Systemleistung = 37.6 W  
Lichtausbeute = 143.6 lm/W

Seriendokumentation  
02.08.2023

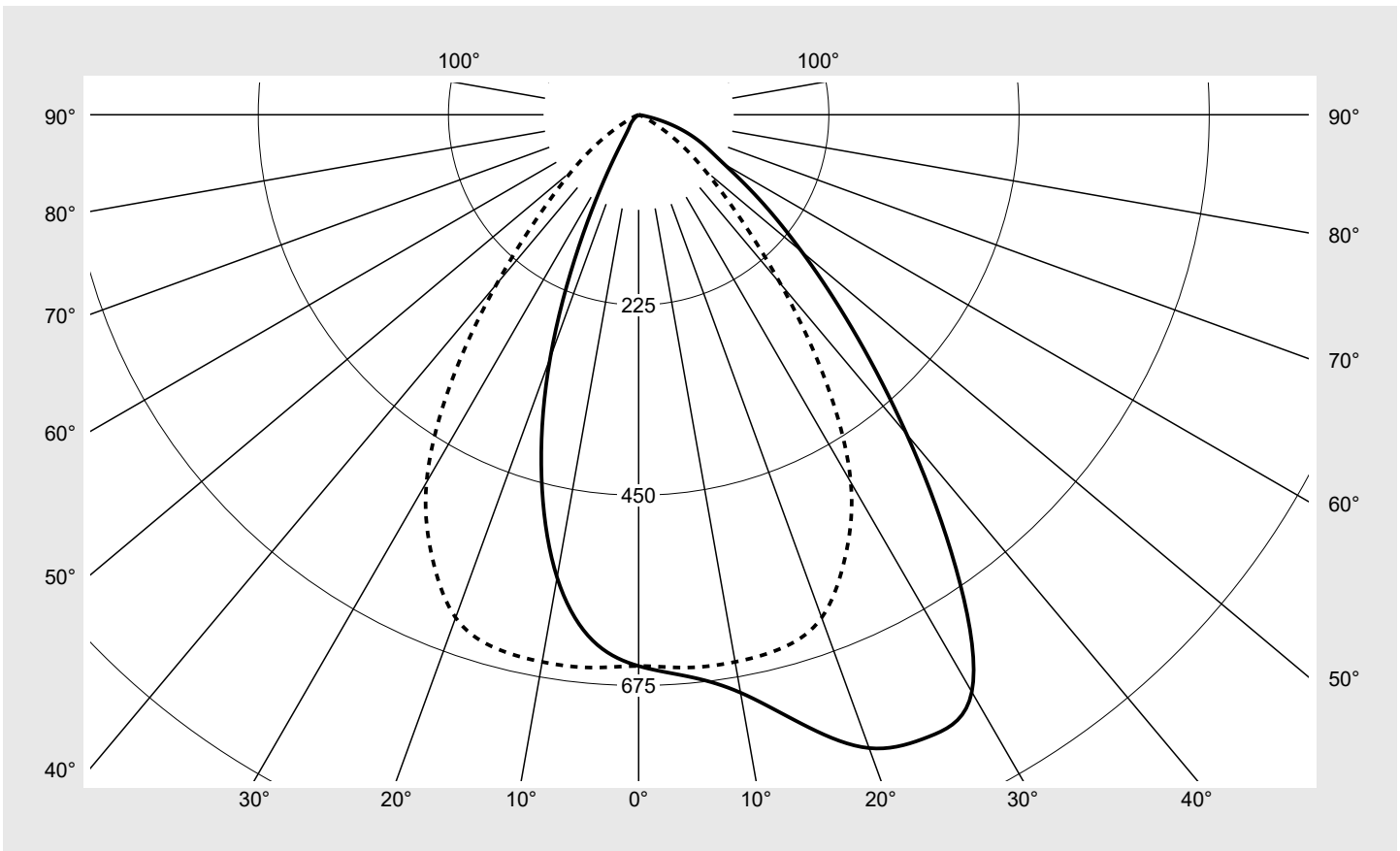
siteco

Lichtstärke in cd/klm

C180-0

C270-90

Imax: 826 cd/klm



## Klassifizierungen

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

## Leuchtenbetriebswirkungsgrade

$\eta_{LB}$  100,0%  
 $\phi_u$  100,0%  
 $\phi_o$  0,0%

## Messbedingungen

DIN EN 13032 und DIN 5032

## Lichttechnischer Prüfbefund

<b>Familie</b> <b>Silica® 21</b>	<b>Bestell-Nr.: 51MX24DB45BB</b> <b>EAN: 4058352905418</b>	<b>LP-Nummer</b> <b>59270_84</b>
<b>Wertetabelle Lichtstärkemessung</b>		<b>Maximale Lichtstärke</b>
		<b>siteco</b>

C- Ebenen	0°	15° 345°	30° 330°	45° 315°	60° 300°	75° 285°	90° 270°
$\gamma$	Lichtstärke 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

## Lichttechnischer Prüfbefund

<b>Familie</b> <b>Silica® 21</b>	<b>Bestell-Nr.: 51MX24DB45BB</b> <b>EAN: 4058352905418</b>	<b>LP-Nummer</b> <b>59270_84</b>
<b>Wertetabelle Lichtstärkemessung</b>		<b>Maximale Lichtstärke</b>
		<b>siteco</b>

C- Ebenen	105° 255°	120° 240°	135° 225°	150° 210°	165° 195°	180°	Phi-Zone	Summe Phi-Zone
$\gamma$	Lichtstärke in cd/klm						Lichtstrom 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

## Lichttechnischer Prüfbefund

<b>Familie</b> Silica® 21	<b>Bestell-Nr.: 51MX24DB45BB</b> <b>EAN: 4058352905418</b>	<b>LP-Nummer</b> 59270_84
------------------------------	---	------------------------------

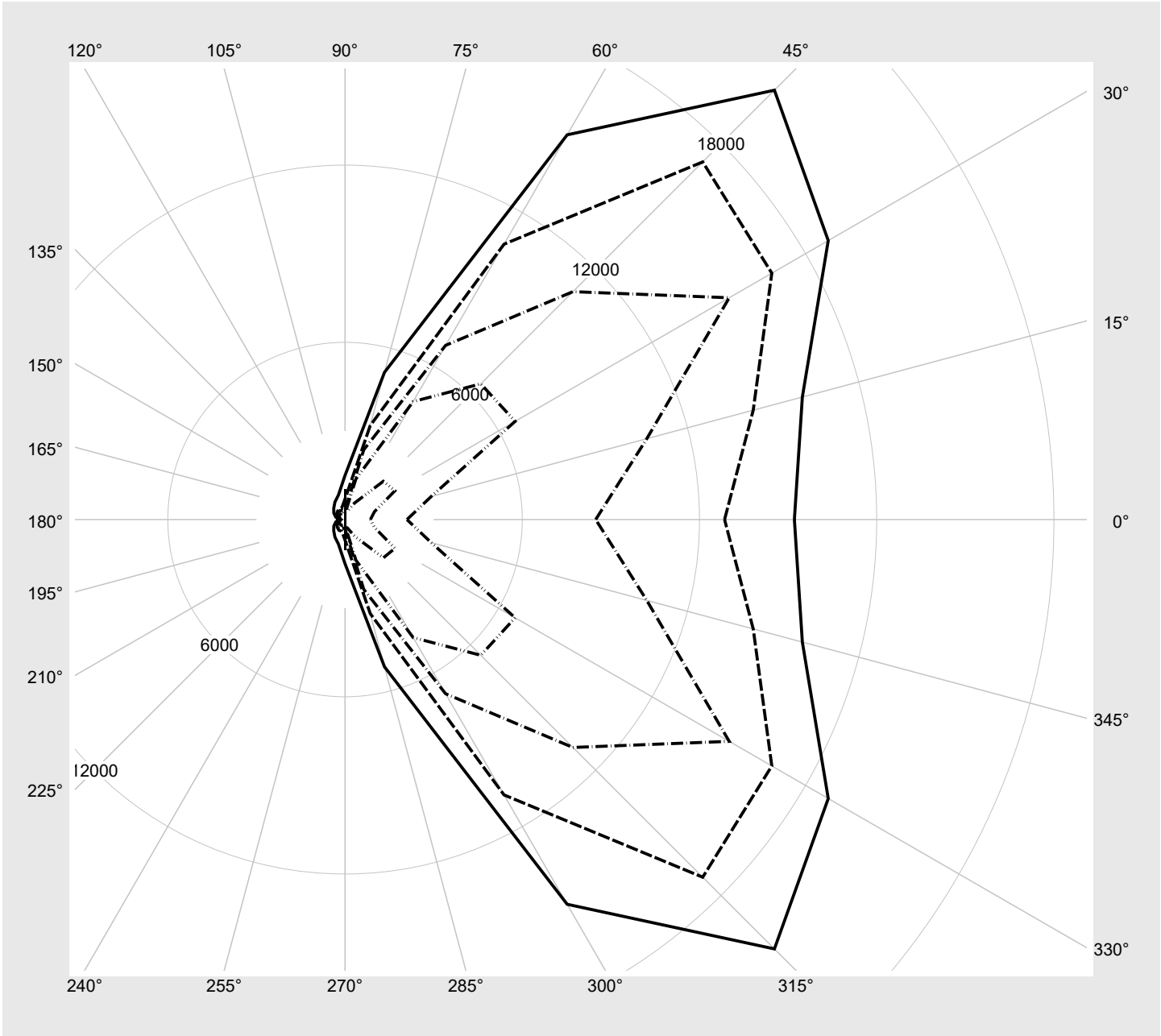
UGR-Tabelle		Standardraum									
		Blickrichtung quer zur Leuchte (C0)					Blickrichtung längs zur Leuchte (C90)				
Raumabmessungen											
x	y										
2H	2H	25,0	26,4	25,4	26,7	27,0	20,4	21,8	20,8	22,1	22,4
	3H	25,5	26,8	25,9	27,1	27,5	20,4	21,6	20,7	21,9	22,3
	4H	25,7	26,8	26,1	27,2	27,5	20,3	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

Leuchtdichten-Tabelle		Max. für $\gamma \geq 65^\circ$											
		Lichttechnische Abmessungen in mm: L = 1470 B = 49											
C-Ebenen	0°	15° 345°	30° 330°	45° 315°	60° 300°	75° 285°	90° 270°	105° 255°	120° 240°	135° 225°	150° 210°	165° 195°	180°
$\gamma$	Leuchtdichte in cd/m <sup>2</sup>												
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

**Lichttechnischer Prüfbefund**

<b>Familie</b> Silica® 21	<b>Bestell-Nr.:</b> 51MX24DB45BB <b>EAN:</b> 4058352905418	<b>LP-Nummer</b> 59270_84
------------------------------	---	------------------------------

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



## Lichttechnischer Prüfbefund

<b>Familie</b> <b>Silica® 21</b>	<b>Bestell-Nr.: 51MX24DB45BB</b> <b>EAN: 4058352905418</b>	<b>LP-Nummer</b> <b>59270_84</b>
-------------------------------------	---	-------------------------------------

<b>Dimmstufen-Tabelle</b>	Umgebungstemperatur: 25°C	<b>sITeco</b>
---------------------------	---------------------------	---------------

Lichtstrom [%]	Dimmstufe linear	Dimmstufe logarithmisch	Lichtstrom [lm]	Systemleistung [W]
100	254	254	5400	37.6
95	240	252	5123	35.5
90	227	250	4863	33.6
85	214	248	4599	31.8
80	200	245	4313	29.7
75	187	243	4046	27.8
70	174	240	3777	26.0
65	161	237	3506	24.1
60	148	234	3233	22.3
55	136	231	2979	20.5
50	123	227	2700	18.7
45	110	223	2422	16.8
40	98	219	2163	15.1
35	85	214	1880	13.3
30	73	208	1618	11.6
25	61	202	1354	9.9
20	49	194	1088	8.4
15	37	183	820	6.6
10	24	168	530	4.8
5	12	142	260	3.2
2	5	110	102	2.2