

## Lichttechnischer Prüfbefund

Familie  
Silica® 21

Bestell-Nr.: 51MX53SG4DB  
EAN: 4058352602324

LP-Nummer  
59247\_5



**Ausführung** Stehleuchte, Prismenabdeckung, homogen leuchtend, symmetrisch strahlend, indirekt-/direkt strahlend,  $UGR \leq 19$  ( $L65 \leq 3000 \text{ cd/m}^2$ )

**Bestückung** LED 4000 K | CRI  $\geq 80$

**Betriebsgerät** EVG

**Bemessungswerte** Nettolichtstrom = 15000 lm  
Systemleistung = 106.4 W  
Lichtausbeute = 141 lm/W

Seriendokumentation  
22.07.2022

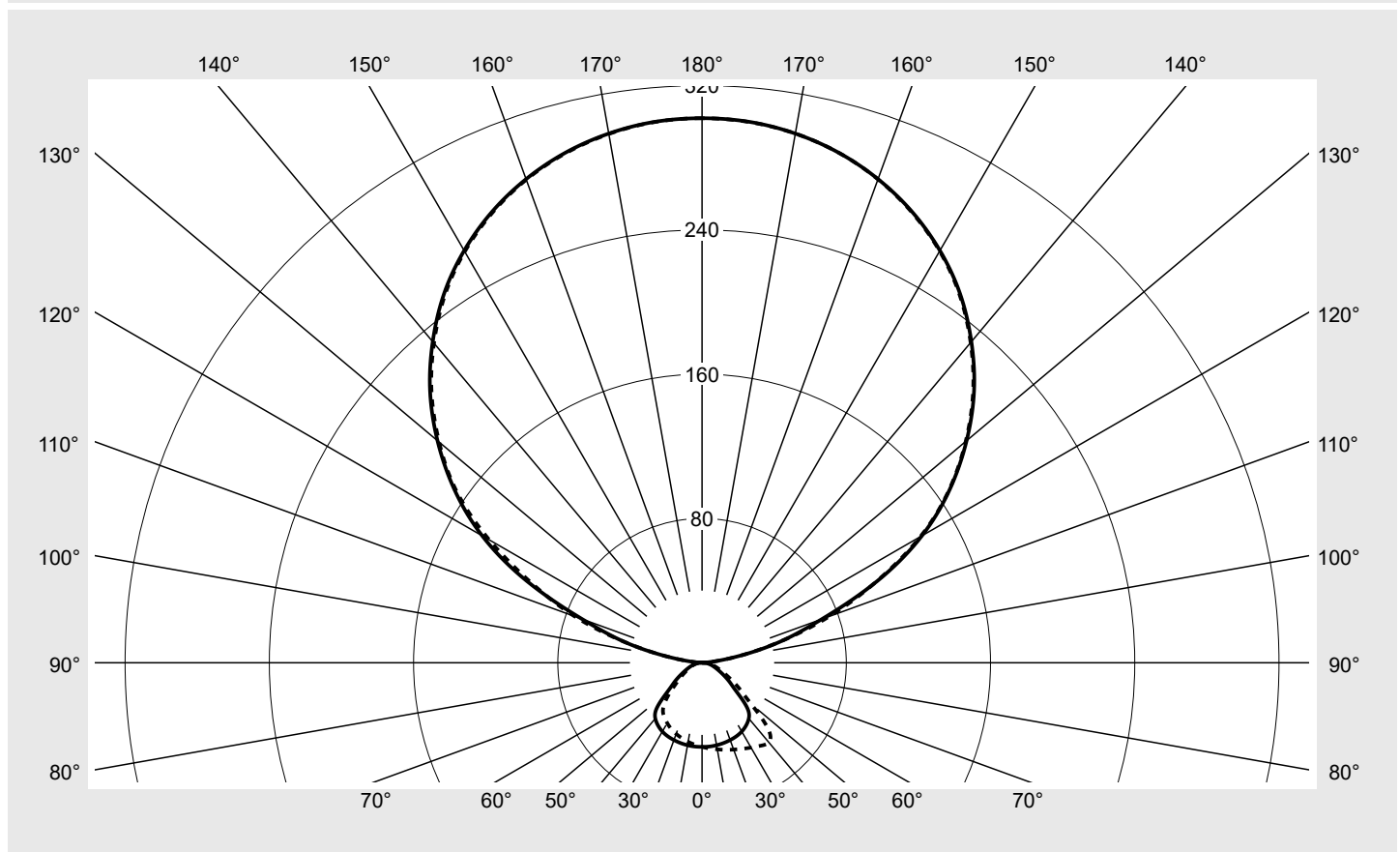
siteco

Lichtstärke in cd/klm

C180-0

C270-90

Imax: 302 cd/klm



## Klassifizierungen

DIN 5040 D 4 3  
CIE N1=54 N2=85 N3=97  
N4=13 N5=100

## Leuchtenbetriebswirkungsgrade

$\eta_{LB}$  100,0%  
 $\phi_u$  13,1%  
 $\phi_o$  86,9%

## Messbedingungen

DIN EN 13032 und DIN 5032

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<b>Wertetabelle Lichtstärkemessung</b>		<b>Maximale Lichtstärke</b>
<b>siteco</b>		

C- Ebenen	0° 180°	15° 165°	30° 150°	45° 135°	60° 120°	75° 105°	90°
$\gamma$	Lichtstärke in cd/klm						
0°	46.6	46.6	46.6	46.6	46.6	46.6	46.6
5°	46.6	46.9	47.2	47.4	47.6	47.7	47.7
10°	46.4	47.0	47.5	48.0	48.4	48.7	48.8
15°	46.1	46.9	47.8	48.6	49.3	49.8	50.0
20°	45.6	46.8	47.9	49.1	50.2	50.9	51.2
25°	45.0	46.4	47.9	49.6	51.1	52.2	52.7
30°	44.0	45.8	47.7	49.9	52.1	53.6	54.3
35°	42.5	44.6	47.2	50.0	52.9	55.1	56.2
40°	40.3	42.9	45.9	49.4	53.2	56.1	57.6
45°	35.5	37.5	40.3	44.1	48.2	50.5	51.8
50°	25.1	27.1	29.0	31.0	32.5	34.9	35.4
55°	18.8	20.3	21.5	22.7	24.4	25.2	25.6
60°	14.0	14.7	15.7	16.6	17.6	18.3	18.6
65°	10.3	10.7	11.3	11.8	12.6	12.9	13.4
70°	7.7	8.1	8.5	8.9	9.2	9.5	9.7
75°	5.7	6.1	6.4	6.6	6.8	7.1	7.3
80°	3.9	4.1	4.2	4.4	4.5	4.8	5.0
85°	1.8	2.0	2.1	2.1	2.2	2.4	2.7
90°	0.3	0.3	0.3	0.3	0.3	0.4	0.3
95°	4.2	4.0	3.9	3.9	3.8	4.0	4.2
100°	19.2	20.0	18.3	18.1	18.2	20.3	19.8
105°	44.4	43.4	42.9	41.4	45.0	45.0	44.1
110°	70.7	72.0	74.0	78.0	76.6	76.2	75.1
115°	107.3	109.0	110.5	111.3	111.1	109.7	106.8
120°	140.8	140.9	140.5	140.9	141.3	141.7	139.8
125°	167.8	167.9	167.9	167.7	168.3	168.8	167.4
130°	191.5	191.4	191.8	191.4	191.9	192.3	190.9
135°	213.4	213.1	213.6	213.6	213.6	214.0	212.6
140°	232.4	232.2	232.6	232.8	232.7	233.0	231.7
145°	249.6	249.3	249.7	249.8	250.0	250.1	249.0
150°	263.9	263.7	264.0	264.1	264.3	264.4	263.6
155°	275.8	275.5	275.8	275.8	276.1	276.2	275.5
160°	285.4	285.3	285.5	285.6	285.7	285.7	285.3
165°	292.8	292.8	292.9	293.0	293.0	293.0	292.8
170°	298.0	298.0	298.1	298.1	298.2	298.1	298.0
175°	301.1	301.0	301.2	301.1	301.2	301.1	301.0
180°	301.9	301.9	301.9	301.9	301.9	301.9	301.9

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<b>Wertetabelle Lichtstärkemessung</b>		<b>Maximale Lichtstärke</b>
		<b>sITeco</b>

C- Ebenen	195° 345°	210° 330°	225° 315°	240° 300°	255° 285°	270°	Phi-Zone	Summe Phi-Zone
$\gamma$	Lichtstärke in cd/klm						Lichtstrom in lm/klm	
0°	46.6	46.6	46.6	46.6	46.6	46.6	0.3	0.3
5°	46.4	46.1	45.9	45.7	45.6	45.6	2.2	2.5
10°	45.8	45.3	45.0	44.7	44.5	44.5	4.4	6.9
15°	45.3	44.5	44.0	43.5	43.3	43.3	6.6	13.5
20°	44.5	43.6	42.9	42.3	42.0	42.0	8.6	22.1
25°	43.5	42.4	41.6	40.9	40.5	40.5	10.6	32.7
30°	42.4	40.9	40.0	39.2	38.7	38.6	12.4	45.1
35°	40.7	39.2	38.0	37.1	36.6	36.6	13.9	59.0
40°	38.3	36.8	35.4	34.4	33.8	33.7	15.0	74.0
45°	32.8	31.0	29.6	28.8	27.7	27.5	14.4	88.4
50°	24.0	22.5	21.4	20.1	20.3	20.1	11.0	99.4
55°	18.0	16.9	16.0	15.6	15.1	15.0	8.8	108.2
60°	13.1	12.7	12.0	11.4	11.2	11.3	6.8	115.0
65°	9.7	9.3	8.8	8.6	8.4	8.6	5.2	120.2
70°	7.4	7.1	6.8	6.6	6.5	6.5	4.1	124.3
75°	5.6	5.3	5.1	5.0	5.0	5.0	3.1	127.4
80°	3.8	3.6	3.5	3.4	3.4	3.6	2.2	129.5
85°	1.8	1.8	1.8	1.7	1.7	1.9	1.1	130.6
90°	0.2	0.2	0.3	0.3	0.3	0.3	0.2	130.8
95°	4.0	3.9	3.8	3.5	3.5	4.0	2.1	132.9
100°	19.8	18.3	18.3	18.1	19.9	19.5	10.3	143.1
105°	43.2	41.4	41.2	45.4	45.5	44.4	23.1	166.2
110°	71.6	73.4	75.3	75.9	76.0	75.2	38.4	204.6
115°	108.6	110.0	110.4	107.2	106.4	104.2	54.1	258.7
120°	140.5	139.9	140.4	140.3	139.0	136.3	66.6	325.4
125°	167.7	167.5	167.3	167.8	168.0	166.5	75.3	400.7
130°	191.2	191.3	191.3	191.4	191.7	190.4	80.4	481.1
135°	213.0	213.1	213.5	213.3	213.4	212.2	82.7	563.8
140°	232.1	232.4	232.6	232.5	232.5	231.3	81.9	645.7
145°	249.3	249.5	249.7	249.8	249.8	248.7	78.5	724.2
150°	263.6	263.7	264.0	264.1	264.2	263.2	72.3	796.5
155°	275.5	275.6	275.7	275.9	275.8	275.3	63.9	860.4
160°	285.3	285.3	285.4	285.4	285.5	285.1	53.5	913.9
165°	292.7	292.8	292.8	292.9	292.8	292.5	41.5	955.4
170°	297.8	298.1	298.0	298.0	298.0	297.7	28.4	983.8
175°	301.0	301.0	301.0	301.0	301.0	301.0	14.4	998.2
180°	301.9	301.9	301.9	301.9	301.9	301.9	1.8	1000.0

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<b>UGR-Tabelle</b>	<b>Standardraum</b>	<b>sITeco</b>

Die UGR-Formel ist für diese Leuchtentype nicht anwendbar, siehe LiTG Publikation 20:

"Das UGR - Verfahren zur Bewertung der Direktblendung der künstlichen Beleuchtung in Innenräumen"

<b>Leuchtdichten-Tabelle</b>	<b>Max. für <math>\gamma \geq 65^\circ</math></b>	<b>Lichttechnische</b> <b>Abmessungen in mm:</b>	<b>L = 510</b> <b>B = 360</b>
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C- Ebenen	0° 180°	15° 165°	30° 150°	45° 135°	60° 120°	75° 105°	90°	195° 345°	210° 330°	225° 315°	240° 300°	255° 285°	270°
$\gamma$	Leuchtdichte in cd/m <sup>2</sup>												
45°	4098.0	4327.6	4651.9	5095.0	5569.5	5838.6	5988.9	3789.5	3576.0	3425.5	3322.7	3196.2	3180.4
50°	3185.3	3446.4	3690.0	3942.4	4134.0	4429.7	4499.4	3046.1	2863.2	2724.0	2558.7	2576.1	2558.7
55°	2672.4	2896.6	3062.4	3228.2	3472.2	3589.2	3647.7	2565.2	2409.1	2282.1	2223.6	2145.7	2135.9
60°	2282.4	2394.3	2562.1	2707.5	2875.5	2987.3	3032.0	2136.9	2069.8	1958.0	1868.5	1835.0	1846.1
65°	1985.6	2065.0	2184.1	2290.0	2435.6	2501.7	2581.2	1866.3	1800.2	1707.6	1654.6	1628.1	1654.6
70°	1831.9	1946.3	2028.0	2126.2	2207.9	2273.4	2322.6	1766.5	1701.0	1619.3	1570.1	1553.9	1553.9
75°	1793.9	1923.6	2010.1	2074.8	2139.9	2247.8	2291.1	1772.4	1686.0	1621.2	1578.0	1578.0	1578.0
80°	1836.3	1933.2	1997.7	2062.1	2126.6	2255.0	2352.0	1771.9	1707.4	1643.4	1611.0	1611.0	1675.4
85°	1732.3	1860.7	1925.4	1989.2	2053.8	2246.0	2502.8	1732.3	1732.3	1668.6	1604.8	1604.8	1797.0

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

