

Lichttechnischer Prüfbefund

**Familie**  
**Silica® 21 round M**

**Bestell-Nr.: 51MF33DB4MWA**  
**EAN: 4069025808233**

**LP-Nummer**  
**60080\_5**



**Ausführung**
Pendelleuchte, Gehäuse, weiß,  
Mikroprismenoptik, direkt-/ indirekt strahlend,  
breit strahlend, UGR≤19

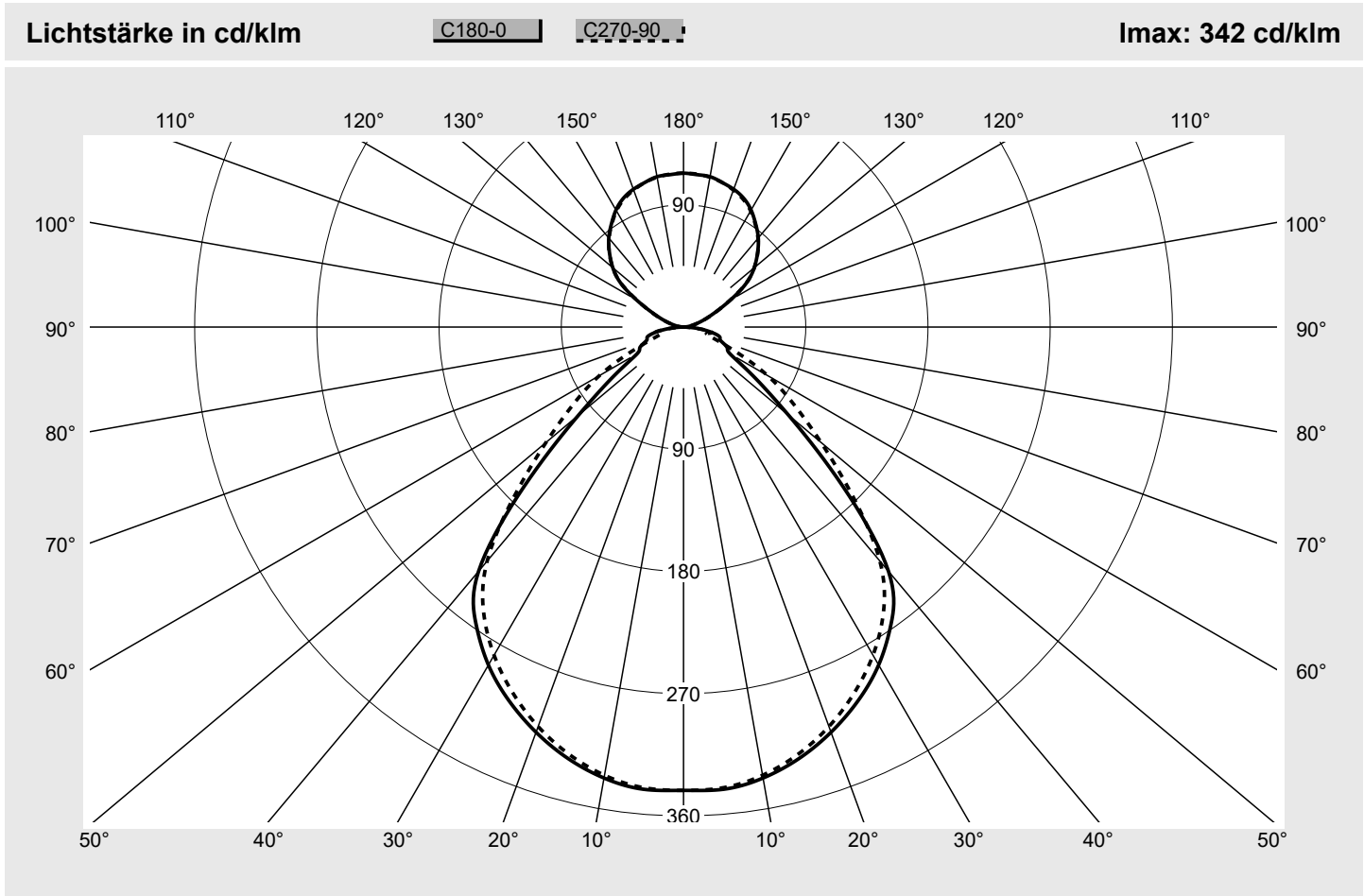
**Bestückung**
LED 4000 K | CRI ≥ 80

**Betriebsgerät**
EVG-DALI

**Bemessungswerte**
Nettolichtstrom = 7920 lm  
Systemleistung = 44.2 W  
Lichtausbeute = 179.2 lm/W

**Seriendokumentation**  
**20.05.2026**





| Klassifizierungen |                   | Leuchtenbetriebswirkungsgrade |        |
|-------------------|-------------------|-------------------------------|--------|
| DIN 5040          | B 5 3             | $\eta_{LB}$                   | 100,0% |
| CIE               | N1=64 N2=89 N3=97 | $\phi_u$                      | 70,2%  |
|                   | N4=70 N5=100      | $\phi_o$                      | 29,8%  |

| Messbedingungen           |
|---------------------------|
| DIN EN 13032 und DIN 5032 |

Lichttechnischer Prüfbefund

|                                 |                                                 |                      |
|---------------------------------|-------------------------------------------------|----------------------|
| Familie<br>Silica® 21 round M   | Bestell-Nr.: 51MF33DB4MWA<br>EAN: 4069025808233 | LP-Nummer<br>60080_5 |
| Wertetabelle Lichtstärkemessung |                                                 | Maximale Lichtstärke |

siteco

| C-<br>Ebenen | 0°<br>180°            | 15°<br>165°<br>195°<br>345° | 30°<br>150°<br>210°<br>330° | 45°<br>135°<br>225°<br>315° | 60°<br>120°<br>240°<br>300° | 75°<br>105°<br>255°<br>285° | 90°<br>270° | Phi-Zone             | Summe<br>Phi-Zone |
|--------------|-----------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-------------|----------------------|-------------------|
| γ            | Lichtstärke in cd/klm |                             |                             |                             |                             |                             |             | Lichtstrom in lm/klm |                   |
| 0°           | 341.2                 | 341.2                       | 341.2                       | 341.2                       | 341.2                       | 341.2                       | 341.2       | 2.0                  | 2.0               |
| 5°           | 341.7                 | 339.9                       | 337.9                       | 339.1                       | 340.7                       | 340.5                       | 340.5       | 16.2                 | 18.3              |
| 10°          | 337.3                 | 335.4                       | 333.2                       | 334.1                       | 335.5                       | 335.2                       | 335.2       | 31.9                 | 50.2              |
| 15°          | 328.9                 | 327.1                       | 324.7                       | 325.3                       | 326.3                       | 325.9                       | 325.7       | 46.3                 | 96.4              |
| 20°          | 317.5                 | 315.7                       | 313.0                       | 313.1                       | 313.8                       | 313.2                       | 313.1       | 58.9                 | 155.3             |
| 25°          | 303.8                 | 301.7                       | 298.3                       | 298.2                       | 298.8                       | 297.9                       | 297.4       | 69.3                 | 224.6             |
| 30°          | 287.4                 | 284.8                       | 280.9                       | 280.7                       | 281.6                       | 280.1                       | 279.0       | 77.3                 | 301.9             |
| 35°          | 266.6                 | 264.1                       | 259.3                       | 259.6                       | 260.3                       | 258.7                       | 256.6       | 81.9                 | 383.8             |
| 40°          | 234.8                 | 234.9                       | 230.6                       | 230.3                       | 226.5                       | 227.6                       | 225.0       | 81.0                 | 464.8             |
| 45°          | 166.0                 | 176.7                       | 179.3                       | 175.8                       | 160.5                       | 175.5                       | 176.3       | 67.1                 | 531.9             |
| 50°          | 100.9                 | 115.7                       | 135.1                       | 115.7                       | 100.2                       | 113.9                       | 132.2       | 48.8                 | 580.7             |
| 55°          | 62.2                  | 71.0                        | 100.7                       | 70.7                        | 61.6                        | 69.2                        | 99.0        | 34.0                 | 614.7             |
| 60°          | 39.6                  | 48.0                        | 70.7                        | 48.5                        | 39.5                        | 47.4                        | 71.5        | 24.5                 | 639.2             |
| 65°          | 35.4                  | 41.0                        | 43.7                        | 42.1                        | 36.2                        | 42.1                        | 41.4        | 20.2                 | 659.4             |
| 70°          | 29.0                  | 35.4                        | 22.4                        | 36.0                        | 29.2                        | 36.1                        | 22.1        | 15.9                 | 675.2             |
| 75°          | 27.4                  | 24.7                        | 19.6                        | 25.2                        | 27.8                        | 25.0                        | 18.0        | 12.8                 | 688.0             |
| 80°          | 19.7                  | 14.9                        | 19.5                        | 14.5                        | 19.9                        | 15.2                        | 20.8        | 9.4                  | 697.4             |
| 85°          | 9.2                   | 8.6                         | 7.3                         | 8.6                         | 9.1                         | 8.8                         | 7.3         | 4.6                  | 702.0             |
| 90°          | 0.6                   | 0.8                         | 0.5                         | 0.7                         | 0.5                         | 0.6                         | 0.3         | 0.3                  | 702.3             |
| 95°          | 2.6                   | 2.5                         | 2.5                         | 2.5                         | 2.5                         | 2.5                         | 2.5         | 1.4                  | 703.7             |
| 100°         | 5.8                   | 5.7                         | 5.7                         | 5.8                         | 5.8                         | 5.8                         | 5.8         | 3.1                  | 706.8             |
| 105°         | 10.2                  | 10.1                        | 10.3                        | 10.4                        | 10.5                        | 10.4                        | 10.4        | 5.5                  | 712.3             |
| 110°         | 16.8                  | 16.7                        | 17.0                        | 17.1                        | 17.2                        | 17.1                        | 17.1        | 8.8                  | 721.0             |
| 115°         | 25.9                  | 25.9                        | 26.1                        | 26.2                        | 26.4                        | 26.5                        | 26.4        | 13.0                 | 734.0             |
| 120°         | 40.0                  | 39.9                        | 39.7                        | 39.7                        | 39.7                        | 39.6                        | 39.6        | 18.9                 | 752.9             |
| 125°         | 56.5                  | 56.4                        | 56.4                        | 56.3                        | 56.6                        | 56.6                        | 56.3        | 25.3                 | 778.3             |
| 130°         | 68.0                  | 67.8                        | 68.0                        | 68.3                        | 68.6                        | 68.3                        | 68.0        | 28.6                 | 806.9             |
| 135°         | 77.1                  | 77.1                        | 77.4                        | 77.9                        | 77.8                        | 77.5                        | 77.3        | 30.0                 | 836.9             |
| 140°         | 85.6                  | 85.5                        | 85.5                        | 85.8                        | 85.7                        | 85.5                        | 85.3        | 30.1                 | 867.1             |
| 145°         | 92.6                  | 92.7                        | 92.9                        | 92.8                        | 92.5                        | 92.4                        | 92.2        | 29.1                 | 896.2             |
| 150°         | 99.5                  | 99.5                        | 99.5                        | 99.3                        | 99.0                        | 99.0                        | 98.8        | 27.2                 | 923.4             |
| 155°         | 104.7                 | 104.4                       | 104.2                       | 103.9                       | 103.9                       | 103.9                       | 103.9       | 24.1                 | 947.5             |
| 160°         | 108.0                 | 107.7                       | 107.5                       | 107.3                       | 107.5                       | 107.2                       | 107.3       | 20.1                 | 967.6             |
| 165°         | 110.2                 | 110.2                       | 110.1                       | 110.3                       | 110.2                       | 109.9                       | 110.2       | 15.6                 | 983.3             |
| 170°         | 112.4                 | 112.4                       | 112.4                       | 112.1                       | 111.7                       | 111.9                       | 112.1       | 10.7                 | 993.9             |
| 175°         | 112.7                 | 112.7                       | 112.8                       | 112.9                       | 112.9                       | 113.0                       | 113.1       | 5.4                  | 999.3             |
| 180°         | 113.3                 | 113.3                       | 113.3                       | 113.3                       | 113.3                       | 113.3                       | 113.3       | 0.7                  | 1000.0            |

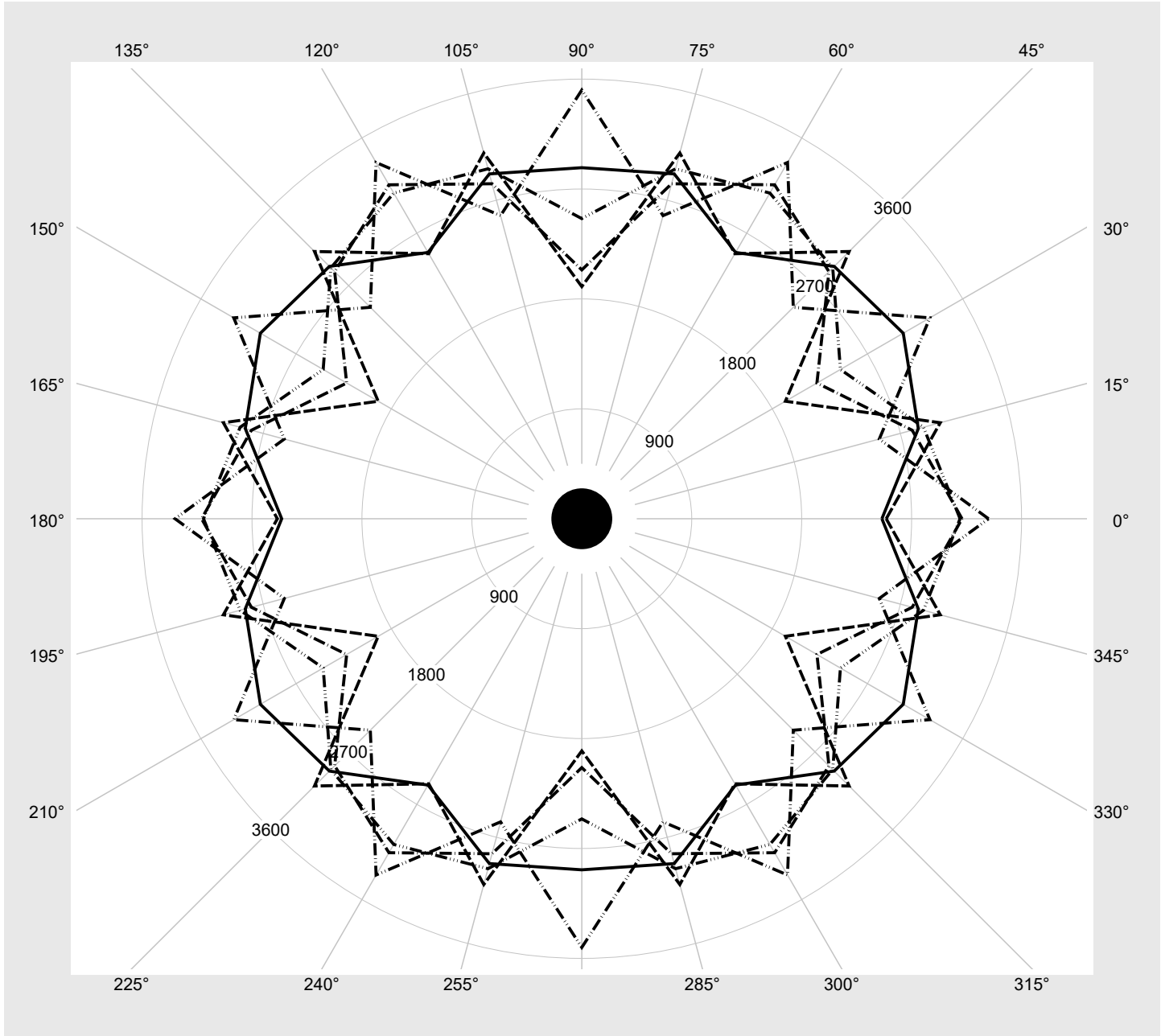
Lichttechnischer Prüfbefund

|                               |     |                                     |                                                 |      |      |      |                                       |      |                      |      |      |
|-------------------------------|-----|-------------------------------------|-------------------------------------------------|------|------|------|---------------------------------------|------|----------------------|------|------|
| Familie<br>Silica® 21 round M |     |                                     | Bestell-Nr.: 51MF33DB4MWA<br>EAN: 4069025808233 |      |      |      |                                       |      | LP-Nummer<br>60080_5 |      |      |
| UGR-Tabelle                   |     |                                     | Standardraum                                    |      |      |      |                                       |      | siteco               |      |      |
| Reflexionsgrad Decke          |     | 0,7                                 | 0,7                                             | 0,5  | 0,5  | 0,3  | 0,7                                   | 0,7  | 0,5                  | 0,5  | 0,3  |
| Reflexionsgrad Wände          |     | 0,5                                 | 0,3                                             | 0,5  | 0,3  | 0,3  | 0,5                                   | 0,3  | 0,5                  | 0,3  | 0,3  |
| Reflexionsgrad Boden          |     | 0,2                                 | 0,2                                             | 0,2  | 0,2  | 0,2  | 0,2                                   | 0,2  | 0,2                  | 0,2  | 0,2  |
| Raumabmessungen               |     | Blickrichtung quer zur Leuchte (C0) |                                                 |      |      |      | Blickrichtung längs zur Leuchte (C90) |      |                      |      |      |
| x                             | y   |                                     |                                                 |      |      |      |                                       |      |                      |      |      |
| 2H                            | 2H  | 15,0                                | 16,0                                            | 15,7 | 16,8 | 17,7 | 14,8                                  | 15,8 | 15,5                 | 16,6 | 17,5 |
|                               | 3H  | 15,5                                | 16,5                                            | 16,3 | 17,3 | 18,2 | 15,4                                  | 16,3 | 16,2                 | 17,1 | 18,1 |
|                               | 4H  | 16,0                                | 16,9                                            | 16,8 | 17,7 | 18,6 | 15,7                                  | 16,6 | 16,5                 | 17,4 | 18,3 |
|                               | 6H  | 16,4                                | 17,2                                            | 17,2 | 18,0 | 19,0 | 16,1                                  | 16,9 | 16,9                 | 17,7 | 18,7 |
|                               | 8H  | 16,6                                | 17,3                                            | 17,4 | 18,1 | 19,1 | 16,3                                  | 17,0 | 17,1                 | 17,9 | 18,9 |
|                               | 12H | 16,7                                | 17,4                                            | 17,5 | 18,2 | 19,2 | 16,4                                  | 17,1 | 17,3                 | 17,9 | 18,9 |
| 4H                            | 2H  | 15,1                                | 15,9                                            | 15,8 | 16,7 | 17,7 | 14,9                                  | 15,8 | 15,7                 | 16,6 | 17,6 |
|                               | 3H  | 15,8                                | 16,6                                            | 16,6 | 17,4 | 18,4 | 15,8                                  | 16,6 | 16,6                 | 17,4 | 18,4 |
|                               | 4H  | 16,4                                | 17,0                                            | 17,2 | 17,9 | 18,9 | 16,3                                  | 17,0 | 17,2                 | 17,8 | 18,8 |
|                               | 6H  | 17,0                                | 17,5                                            | 17,8 | 18,4 | 19,4 | 16,9                                  | 17,5 | 17,7                 | 18,3 | 19,3 |
|                               | 8H  | 17,1                                | 17,6                                            | 18,0 | 18,5 | 19,6 | 17,1                                  | 17,6 | 18,0                 | 18,5 | 19,5 |
|                               | 12H | 17,4                                | 17,8                                            | 18,2 | 18,7 | 19,8 | 17,3                                  | 17,8 | 18,2                 | 18,6 | 19,7 |
| 8H                            | 4H  | 16,5                                | 17,0                                            | 17,4 | 17,9 | 18,9 | 16,5                                  | 17,0 | 17,4                 | 17,9 | 18,9 |
|                               | 6H  | 17,3                                | 17,7                                            | 18,1 | 18,5 | 19,6 | 17,2                                  | 17,7 | 18,1                 | 18,5 | 19,6 |
|                               | 8H  | 17,6                                | 18,0                                            | 18,5 | 18,9 | 19,9 | 17,6                                  | 18,0 | 18,5                 | 18,9 | 20,0 |
|                               | 12H | 17,9                                | 18,3                                            | 18,8 | 19,1 | 20,2 | 17,9                                  | 18,2 | 18,8                 | 19,1 | 20,2 |
| 12H                           | 4H  | 16,6                                | 17,0                                            | 17,4 | 17,9 | 19,0 | 16,6                                  | 17,0 | 17,4                 | 17,9 | 18,9 |
|                               | 6H  | 17,4                                | 17,7                                            | 18,3 | 18,6 | 19,7 | 17,4                                  | 17,7 | 18,2                 | 18,6 | 19,7 |
|                               | 8H  | 17,7                                | 18,1                                            | 18,6 | 18,9 | 20,0 | 17,8                                  | 18,1 | 18,7                 | 19,0 | 20,1 |

| Leuchtdichten-Tabelle |                       | Max. für $\gamma \geq 65^\circ$ |                             | Lichttechnische<br>Abmessungen in mm: D = 586 |                             |                             |             |  |
|-----------------------|-----------------------|---------------------------------|-----------------------------|-----------------------------------------------|-----------------------------|-----------------------------|-------------|--|
| C-<br>Ebenen          | 0°<br>180°            | 15°<br>165°<br>195°<br>345°     | 30°<br>150°<br>210°<br>330° | 45°<br>135°<br>225°<br>315°                   | 60°<br>120°<br>240°<br>300° | 75°<br>105°<br>255°<br>285° | 90°<br>270° |  |
| $\gamma$              | Leuchtdichte in cd/m² |                                 |                             |                                               |                             |                             |             |  |
| 45°                   | 6895.7                | 7339.1                          | 7445.0                      | 7301.9                                        | 6663.9                      | 7287.7                      | 7322.0      |  |
| 50°                   | 4609.3                | 5287.9                          | 6174.0                      | 5284.8                                        | 4578.7                      | 5204.1                      | 6040.3      |  |
| 55°                   | 3183.8                | 3637.3                          | 5154.4                      | 3621.4                                        | 3154.5                      | 3542.7                      | 5068.8      |  |
| 60°                   | 2326.8                | 2819.0                          | 4150.4                      | 2849.9                                        | 2319.7                      | 2782.0                      | 4199.4      |  |
| 65°                   | 2456.9                | 2852.1                          | 3038.8                      | 2922.3                                        | 2518.1                      | 2923.4                      | 2874.8      |  |
| 70°                   | 2492.2                | 3038.1                          | 1924.6                      | 3095.0                                        | 2506.1                      | 3100.9                      | 1901.2      |  |
| 75°                   | 3112.8                | 2800.4                          | 2222.8                      | 2861.5                                        | 3157.7                      | 2840.0                      | 2037.9      |  |
| 80°                   | 3329.9                | 2521.4                          | 3290.4                      | 2448.5                                        | 3368.3                      | 2569.8                      | 3510.4      |  |
| 85°                   | 3096.8                | 2895.9                          | 2444.8                      | 2905.4                                        | 3079.6                      | 2966.7                      | 2457.9      |  |

Lichttechnischer Prüfbefund

|                                                                                                                                 |                                                               |                                    |
|---------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|------------------------------------|
| <b>Familie</b><br><b>Silica® 21 round M</b>                                                                                     | <b>Bestell-Nr.: 51MF33DB4MWA</b><br><b>EAN: 4069025808233</b> | <b>LP-Nummer</b><br><b>60080_5</b> |
| <b>Leuchtdichten in cd/m²</b> <div> <div>γ 65°</div> <div>γ 70°</div> <div>γ 75°</div> <div>γ 80°</div> <div>γ 85°</div> </div> |                                                               | <div>siteco</div>                  |



# Lichttechnischer Prüfbefund

|                                             |                                                               |                                    |
|---------------------------------------------|---------------------------------------------------------------|------------------------------------|
| <b>Familie</b><br><b>Silica® 21 round M</b> | <b>Bestell-Nr.: 51MF33DB4MWA</b><br><b>EAN: 4069025808233</b> | <b>LP-Nummer</b><br><b>60080_5</b> |
| <b>Dimmstufen-Tabelle</b>                   |                                                               | <b>Umgebungstemperatur: 25°C</b>   |

siteco

| Lichtstrom [%] | Dimmstufe linear | Dimmstufe logarithmisch | Lichtstrom [lm] | Systemleistung [W] |
|----------------|------------------|-------------------------|-----------------|--------------------|
| 100            | 254              | 254                     | 7920            | 44.2               |
| 95             | 241              | 252                     | 7520            | 42.0               |
| 90             | 228              | 250                     | 7119            | 39.8               |
| 85             | 215              | 248                     | 6717            | 37.7               |
| 80             | 203              | 246                     | 6345            | 35.7               |
| 75             | 190              | 243                     | 5940            | 33.5               |
| 70             | 177              | 241                     | 5534            | 31.3               |
| 65             | 165              | 238                     | 5158            | 29.3               |
| 60             | 152              | 235                     | 4750            | 27.1               |
| 55             | 140              | 232                     | 4372            | 25.1               |
| 50             | 127              | 229                     | 3961            | 22.8               |
| 45             | 114              | 225                     | 3549            | 20.6               |
| 40             | 102              | 221                     | 3168            | 18.5               |
| 35             | 90               | 216                     | 2785            | 16.4               |
| 30             | 77               | 210                     | 2369            | 14.3               |
| 25             | 65               | 204                     | 1984            | 12.4               |
| 20             | 53               | 197                     | 1598            | 10.4               |
| 15             | 40               | 186                     | 1179            | 8.0                |
| 10             | 28               | 173                     | 791             | 5.5                |
| 5              | 16               | 153                     | 401             | 2.7                |
| 1              | 7                | 122                     | 109             | 0.9                |