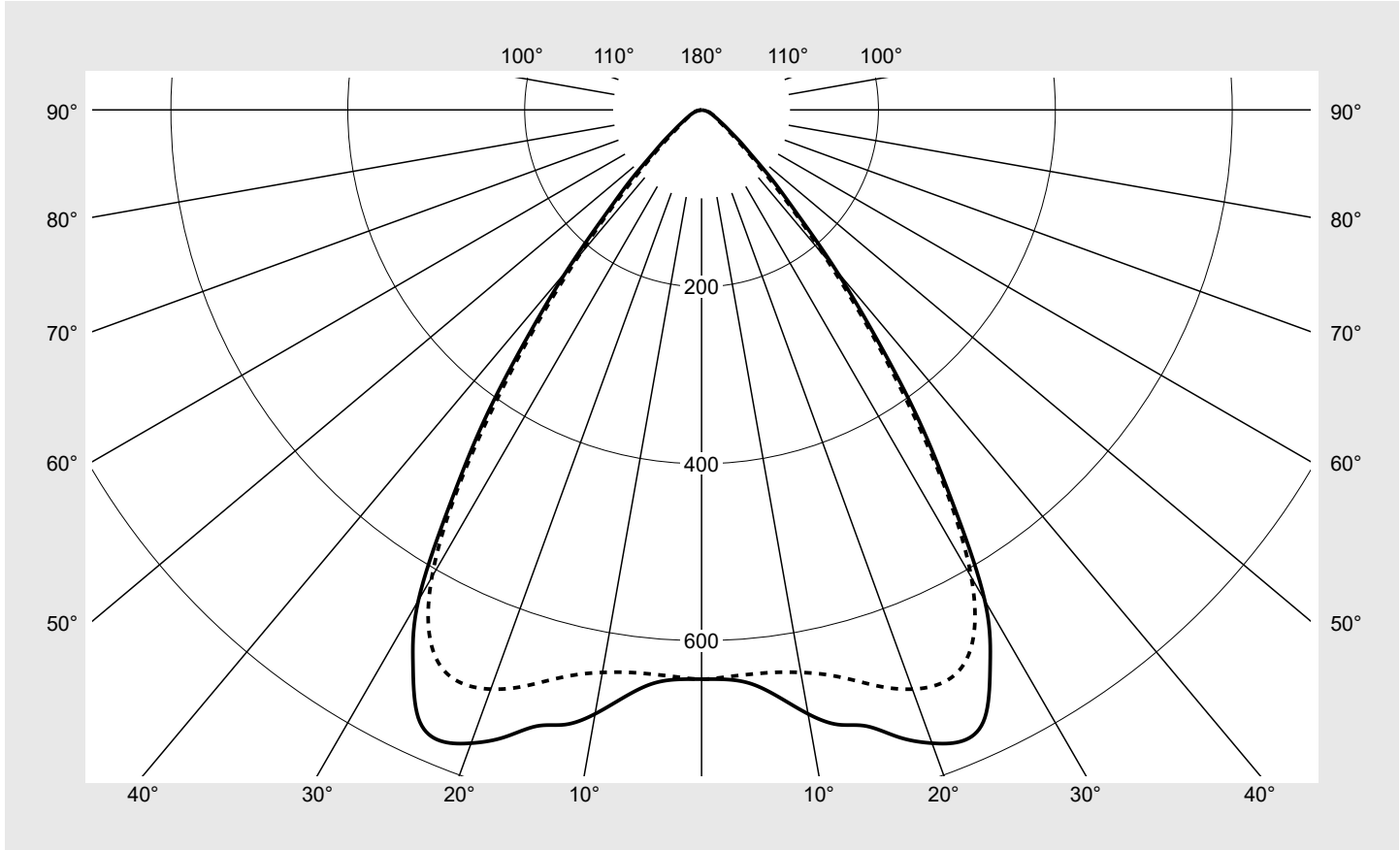


Photometric test report

| | | |
|---|---|--|
| Family Highbay 11 | Order number: 51HN12DA4MBA EAN: 4069025440426 | LP number 59710_349 |
|  | Version primary light control with lens, PMMA, housing, white, wide distribution | serial documentation 18.03.2025 |
| | Lamps LED 4000 K CRI ≥ 80 | |
| | Controlgear ECG-DALI | |
| | Setting AC-mode | |
| | Rated values Net luminous flux = 28000 lm Power consumption = 146.6 W Luminous efficacy = 191 lm/W | |



Luminous intensity in cd/klm C180-0 C270-90 **Imax: 772 cd/klm**



| Classifications | |
|-----------------|-------------------------------------|
| DIN 5040 | A 6 0 |
| CIE | N1=88 N2=98 N3=100 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 Highbay 11 | Order number: 51HN12DA4MBA EAN: 4069025440426 | LP number 59710_349 |
| Table of values for luminous intensities | | Maximum luminous intensity |
| | | siteco |

| C-planes γ | 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 | | |
| 0,0° | 643.6 | 643.6 | 643.6 | 643.6 | 643.6 | 643.6 | 643.6 | 1.0 | 1.0 |
| 2,5° | 644.5 | 645.1 | 645.0 | 644.3 | 644.2 | 643.7 | 641.7 | 7.7 | 8.7 |
| 5,0° | 651.5 | 652.3 | 650.7 | 647.5 | 645.3 | 643.2 | 640.4 | 15.5 | 24.1 |
| 7,5° | 669.6 | 669.1 | 664.2 | 657.2 | 651.2 | 645.8 | 641.3 | 23.5 | 47.6 |
| 10,0° | 693.4 | 691.0 | 681.5 | 670.0 | 659.9 | 651.2 | 645.8 | 31.9 | 79.6 |
| 12,5° | 711.8 | 709.4 | 700.3 | 685.9 | 671.9 | 660.7 | 654.0 | 40.7 | 120.2 |
| 15,0° | 721.3 | 721.7 | 717.1 | 704.9 | 689.4 | 675.9 | 667.7 | 49.7 | 169.9 |
| 17,5° | 743.8 | 740.8 | 737.9 | 726.5 | 708.9 | 693.0 | 684.2 | 59.4 | 229.3 |
| 20,0° | 761.9 | 761.9 | 759.6 | 745.2 | 724.0 | 705.6 | 696.8 | 69.2 | 298.5 |
| 22,5° | 772.0 | 771.2 | 770.0 | 754.7 | 731.1 | 710.8 | 702.6 | 78.2 | 376.7 |
| 25,0° | 758.1 | 756.6 | 756.3 | 743.6 | 722.7 | 703.3 | 695.6 | 85.1 | 461.8 |
| 27,5° | 706.7 | 709.5 | 709.5 | 700.0 | 685.7 | 672.3 | 667.0 | 87.8 | 549.7 |
| 30,0° | 640.4 | 635.6 | 633.7 | 626.6 | 621.7 | 614.1 | 609.9 | 85.8 | 635.5 |
| 32,5° | 530.6 | 537.6 | 535.6 | 526.2 | 530.2 | 524.1 | 520.8 | 78.1 | 713.6 |
| 35,0° | 428.2 | 426.4 | 425.9 | 411.9 | 420.8 | 414.2 | 411.4 | 66.0 | 779.6 |
| 37,5° | 322.5 | 323.4 | 327.0 | 311.0 | 319.4 | 310.8 | 308.2 | 53.0 | 832.6 |
| 40,0° | 236.1 | 234.0 | 241.6 | 230.8 | 230.9 | 219.8 | 218.4 | 40.7 | 873.3 |
| 42,5° | 162.3 | 165.3 | 172.9 | 171.1 | 161.7 | 151.3 | 150.8 | 30.2 | 903.5 |
| 45,0° | 117.3 | 114.9 | 119.4 | 122.5 | 109.3 | 102.6 | 102.3 | 21.9 | 925.4 |
| 47,5° | 80.5 | 81.4 | 82.8 | 85.5 | 75.2 | 71.4 | 70.8 | 15.9 | 941.3 |
| 50,0° | 59.4 | 58.0 | 58.0 | 59.0 | 52.9 | 50.5 | 49.6 | 11.7 | 953.0 |
| 52,5° | 43.3 | 42.8 | 42.8 | 43.0 | 39.3 | 37.2 | 36.6 | 8.9 | 961.8 |
| 55,0° | 33.3 | 32.4 | 32.9 | 33.7 | 30.5 | 28.7 | 28.3 | 7.1 | 968.9 |
| 57,5° | 25.9 | 25.4 | 25.9 | 26.8 | 24.5 | 22.9 | 22.9 | 5.8 | 974.7 |
| 60,0° | 20.9 | 20.2 | 21.2 | 21.8 | 20.4 | 18.9 | 19.2 | 4.9 | 979.5 |
| 62,5° | 16.9 | 16.2 | 17.4 | 18.0 | 17.2 | 15.9 | 16.4 | 4.1 | 983.6 |
| 65,0° | 14.9 | 13.6 | 14.4 | 15.1 | 14.8 | 13.6 | 14.4 | 3.6 | 987.2 |
| 67,5° | 12.3 | 11.4 | 12.5 | 12.4 | 13.0 | 11.7 | 12.6 | 3.1 | 990.3 |
| 70,0° | 10.4 | 9.5 | 10.5 | 10.1 | 11.1 | 10.1 | 11.0 | 2.7 | 993.0 |
| 72,5° | 8.2 | 7.7 | 7.9 | 8.2 | 8.7 | 8.6 | 9.5 | 2.2 | 995.2 |
| 75,0° | 6.5 | 6.0 | 6.0 | 6.4 | 6.6 | 7.1 | 7.9 | 1.7 | 996.9 |
| 77,5° | 4.5 | 4.3 | 4.4 | 4.7 | 5.1 | 5.6 | 6.3 | 1.3 | 998.2 |
| 80,0° | 2.9 | 2.7 | 2.9 | 3.1 | 3.5 | 4.1 | 4.7 | 0.9 | 999.1 |
| 82,5° | 1.3 | 1.4 | 1.6 | 1.8 | 2.2 | 2.7 | 3.3 | 0.5 | 999.7 |
| 85,0° | 0.6 | 0.6 | 0.6 | 0.7 | 1.0 | 1.4 | 1.8 | 0.3 | 999.9 |
| 87,5° | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.1 | 1000.0 |
| 90,0° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1000.0 |

Photometric test report

| | | |
|----------------------|--|------------------------|
| Family Highbay 11 | Order number: 51HN12DA4MBA EAN: 4069025440426 | LP number 59710_349 |
|----------------------|--|------------------------|

| | | | |
|-----------|---------------|--------|--|
| 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 | 22.1 | 23.4 | 22.5 | 23.7 | 24.0 | 21.8 | 23.1 | 22.2 | 23.4 | 23.7 |
| | 3H | 22.1 | 23.2 | 22.5 | 23.6 | 23.9 | 21.8 | 22.9 | 22.2 | 23.3 | 23.6 |
| | 4H | 22.1 | 23.1 | 22.5 | 23.5 | 23.9 | 21.8 | 22.9 | 22.2 | 23.2 | 23.6 |
| | 6H | 22.1 | 23.0 | 22.5 | 23.4 | 23.8 | 21.9 | 22.8 | 22.3 | 23.2 | 23.6 |
| | 8H | 22.1 | 22.9 | 22.6 | 23.3 | 23.7 | 22.0 | 22.8 | 22.4 | 23.1 | 23.5 |
| | 12H | 22.1 | 22.8 | 22.5 | 23.2 | 23.6 | 21.9 | 22.7 | 22.4 | 23.1 | 23.5 |
| 4H | 2H | 22.0 | 23.0 | 22.4 | 23.4 | 23.8 | 21.7 | 22.7 | 22.1 | 23.1 | 23.5 |
| | 3H | 22.0 | 22.9 | 22.4 | 23.3 | 23.7 | 21.8 | 22.6 | 22.2 | 23.0 | 23.4 |
| | 4H | 22.0 | 22.8 | 22.5 | 23.2 | 23.6 | 21.8 | 22.6 | 22.3 | 23.0 | 23.4 |
| | 6H | 22.0 | 22.6 | 22.5 | 23.1 | 23.6 | 21.9 | 22.5 | 22.3 | 22.9 | 23.4 |
| | 8H | 22.0 | 22.6 | 22.5 | 23.0 | 23.5 | 21.9 | 22.5 | 22.3 | 22.9 | 23.4 |
| | 12H | 22.0 | 22.5 | 22.5 | 22.9 | 23.4 | 21.9 | 22.4 | 22.4 | 22.8 | 23.3 |
| 8H | 4H | 22.0 | 22.5 | 22.4 | 23.0 | 23.5 | 21.8 | 22.3 | 22.2 | 22.8 | 23.3 |
| | 6H | 21.9 | 22.4 | 22.4 | 22.9 | 23.4 | 21.8 | 22.3 | 22.3 | 22.8 | 23.3 |
| | 8H | 21.9 | 22.3 | 22.4 | 22.8 | 23.3 | 21.8 | 22.2 | 22.3 | 22.7 | 23.3 |
| | 12H | 21.9 | 22.2 | 22.4 | 22.7 | 23.3 | 21.9 | 22.2 | 22.4 | 22.7 | 23.2 |
| 12H | 4H | 22.0 | 22.4 | 22.5 | 22.9 | 23.4 | 21.8 | 22.2 | 22.3 | 22.7 | 23.2 |
| | 6H | 21.9 | 22.3 | 22.4 | 22.8 | 23.3 | 21.8 | 22.2 | 22.3 | 22.7 | 23.2 |
| | 8H | 21.9 | 22.2 | 22.4 | 22.7 | 23.3 | 21.8 | 22.1 | 22.3 | 22.6 | 23.2 |

| | | | |
|-----------------|---------------------------------|-------------------------------|--------------------|
| Luminance table | Max. for $\gamma \geq 65^\circ$ | Photometric dimensions in mm: | L = 426 B = 264 |
|-----------------|---------------------------------|-------------------------------|--------------------|

| C-planes | γ | Luminance in cd/m ² | | | | | | | |
|----------|----------|--------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-------------|--|
| | | 0° 180° | 15° 165° 195° 345° | 30° 150° 210° 330° | 45° 135° 225° 315° | 60° 120° 240° 300° | 75° 105° 255° 285° | 90° 270° | |
| 45,0° | | 41309.5 | 40449.3 | 42046.4 | 43124.2 | 38472.7 | 36122.1 | 36015.8 | |
| 50,0° | | 23016.1 | 22471.9 | 22448.3 | 22849.2 | 20503.5 | 19549.5 | 19214.1 | |
| 55,0° | | 14464.3 | 14077.5 | 14278.5 | 14606.2 | 13249.8 | 12455.0 | 12305.3 | |
| 60,0° | | 10403.4 | 10042.9 | 10552.3 | 10869.0 | 10176.3 | 9424.0 | 9544.0 | |
| 65,0° | | 8778.3 | 7985.4 | 8511.5 | 8878.5 | 8694.1 | 8040.2 | 8494.4 | |
| 70,0° | | 7545.1 | 6884.1 | 7614.9 | 7367.4 | 8082.3 | 7357.2 | 8035.0 | |
| 75,0° | | 6218.0 | 5759.1 | 5743.7 | 6143.0 | 6382.5 | 6831.7 | 7615.7 | |
| 80,0° | | 4198.0 | 3917.0 | 4145.0 | 4477.6 | 5054.0 | 5944.3 | 6775.9 | |
| 85,0° | | 1676.8 | 1668.3 | 1722.5 | 2016.8 | 2982.3 | 3973.5 | 5147.6 | |

Photometric test report

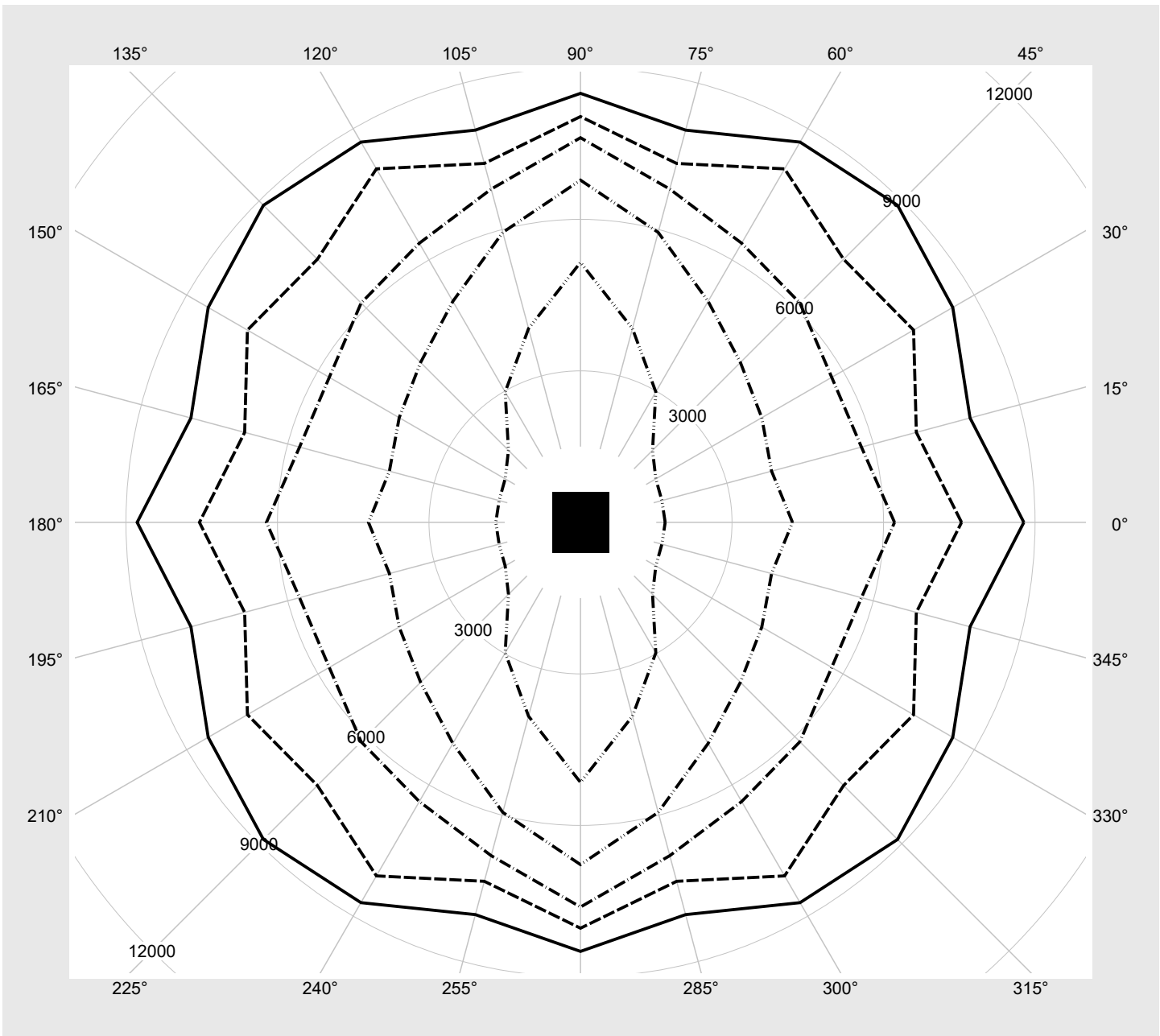
Family
Highbay 11

Order number: 51HN12DA4MBA
EAN: 4069025440426

LP number
59710_349

Luminance values in cd/m²

γ 65°
 γ 70°
 γ 75°
 γ 80°
 γ 85°



Photometric test report

| | | |
|----------------------|--|------------------------|
| Family Highbay 11 | Order number: 51HN12DA4MBA EAN: 4069025440426 | LP number 59710_349 |
|----------------------|--|------------------------|

| | | |
|----------------------|---------------------------------|---------------|
| 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 | 28000 | 146.6 |
| 95 | 240 | 252 | 26584 | 138.2 |
| 90 | 227 | 250 | 25246 | 130.3 |
| 85 | 213 | 248 | 23796 | 121.9 |
| 80 | 200 | 245 | 22443 | 114.2 |
| 75 | 186 | 243 | 20975 | 105.9 |
| 70 | 173 | 240 | 19598 | 98.3 |
| 65 | 160 | 237 | 18213 | 90.7 |
| 60 | 147 | 234 | 16807 | 83.1 |
| 55 | 134 | 231 | 15399 | 75.7 |
| 50 | 121 | 227 | 13971 | 68.3 |
| 45 | 109 | 223 | 12641 | 61.5 |
| 40 | 96 | 218 | 11192 | 54.1 |
| 35 | 84 | 213 | 9836 | 47.3 |
| 30 | 71 | 207 | 8355 | 40.2 |
| 25 | 59 | 201 | 6969 | 33.5 |
| 20 | 47 | 192 | 5572 | 27.0 |
| 15 | 35 | 181 | 4154 | 20.6 |
| 10 | 24 | 168 | 2843 | 14.6 |
| 5 | 12 | 142 | 1395 | 7.8 |
| 2 | 5 | 110 | 539 | 3.9 |