

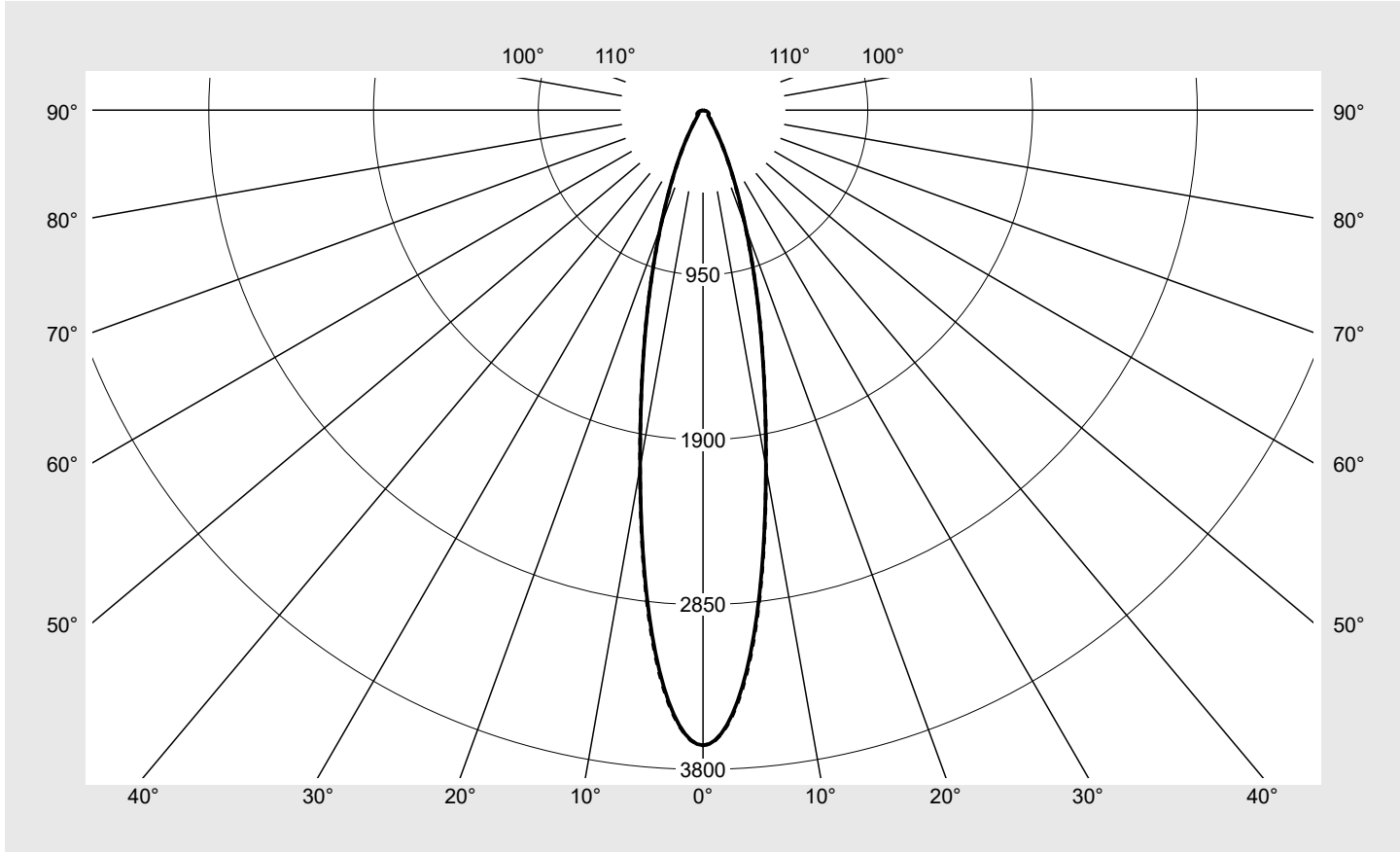


Photometric test report

| | | |
|---|---|--|
| Family Highbay 11 | Order number: 51HLA1D14FCA EAN: 4058352321720 | LP number 58918_2 |
|  | Version narrow distribution, UGR≤22 Lamps LED 4000 K CRI ≥ 80 Controlgear ECG-DALI Rated values Net luminous flux = 14060 lm Power consumption = 81.2 W Luminous efficacy = 173.2 lm/W | serial documentation 21.05.2019 |
| |  | |

Luminous intensity in cd/klm C180-0 C270-90 **Imax: 3662 cd/klm**



| Classifications | |
|-----------------|------------------------------------|
| DIN 5040 | A 7 0 |
| CIE | N1=88 N2=95 N3=99 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

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| Table of values for luminous intensities | Maximum luminous intensity |
|--|----------------------------|

| 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° | 3661.5 | 3661.5 | 3661.5 | 3661.5 | 3661.5 | 3661.5 | 3661.5 | 21.9 | 21.9 |
| 5° | 3142.6 | 3138.8 | 3148.7 | 3152.8 | 3150.8 | 3162.1 | 3157.3 | 150.5 | 172.4 |
| 10° | 2088.2 | 2082.4 | 2095.8 | 2102.6 | 2097.1 | 2098.1 | 2092.4 | 199.3 | 371.8 |
| 15° | 1265.5 | 1263.0 | 1272.3 | 1276.0 | 1271.9 | 1272.7 | 1269.2 | 180.2 | 552.0 |
| 20° | 717.4 | 718.4 | 730.4 | 738.2 | 732.8 | 722.5 | 712.3 | 136.1 | 688.1 |
| 25° | 380.2 | 383.6 | 397.1 | 405.5 | 395.8 | 382.2 | 373.9 | 90.4 | 778.5 |
| 30° | 189.9 | 192.8 | 203.8 | 209.2 | 205.7 | 196.2 | 189.8 | 54.7 | 833.2 |
| 35° | 93.4 | 93.2 | 98.1 | 106.1 | 108.6 | 103.6 | 99.4 | 31.8 | 865.0 |
| 40° | 56.8 | 57.1 | 60.0 | 67.1 | 71.1 | 71.1 | 70.3 | 22.9 | 887.9 |
| 45° | 41.2 | 40.8 | 44.9 | 50.9 | 50.2 | 47.6 | 46.5 | 18.0 | 905.9 |
| 50° | 41.3 | 41.9 | 46.2 | 48.9 | 40.8 | 33.1 | 32.5 | 17.3 | 923.2 |
| 55° | 41.3 | 42.1 | 45.2 | 43.2 | 36.0 | 29.8 | 29.9 | 17.4 | 940.6 |
| 60° | 39.0 | 39.2 | 40.5 | 39.6 | 33.4 | 27.4 | 27.5 | 16.9 | 957.4 |
| 65° | 33.8 | 33.6 | 34.5 | 34.8 | 29.3 | 24.3 | 24.5 | 15.4 | 972.8 |
| 70° | 26.5 | 26.3 | 27.0 | 27.6 | 23.9 | 20.0 | 20.0 | 12.7 | 985.5 |
| 75° | 15.9 | 16.7 | 18.0 | 19.3 | 17.3 | 15.5 | 15.6 | 9.0 | 994.6 |
| 80° | 6.4 | 6.9 | 7.9 | 9.2 | 9.9 | 9.6 | 10.9 | 4.7 | 999.3 |
| 85° | 0.5 | 0.5 | 0.6 | 1.0 | 1.8 | 2.4 | 3.4 | 0.7 | 1000.0 |
| 90° | 0.0 | 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 | 0.0 | 1000.0 |
| 100° | 0.0 | 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 | 0.0 | 1000.0 |
| 110° | 0.0 | 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 | 0.0 | 1000.0 |
| 120° | 0.0 | 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 | 0.0 | 1000.0 |
| 130° | 0.0 | 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 | 0.0 | 1000.0 |
| 140° | 0.0 | 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 | 0.0 | 1000.0 |
| 150° | 0.0 | 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 | 0.0 | 1000.0 |
| 160° | 0.0 | 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 | 0.0 | 1000.0 |
| 170° | 0.0 | 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 | 0.0 | 1000.0 |
| 180° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1000.0 |

Photometric test report

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| Family Highbay 11 | Order number: 51HLA1D14FCA EAN: 4058352321720 | LP number 58918_2 |
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|-----------|---------------|--------|--|--|--|--|--|--|--|--|
| 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 | 16.7 | 17.9 | 17.1 | 18.2 | 18.5 | 15.5 | 16.6 | 15.8 | 16.9 | 17.2 |
| | 3H | 18.6 | 19.6 | 19.0 | 19.9 | 20.3 | 17.1 | 18.0 | 17.5 | 18.4 | 18.7 |
| | 4H | 19.2 | 20.1 | 19.6 | 20.4 | 20.8 | 17.8 | 18.7 | 18.2 | 19.0 | 19.4 |
| | 6H | 19.4 | 20.2 | 19.8 | 20.6 | 21.0 | 18.4 | 19.3 | 18.9 | 19.6 | 20.0 |
| | 8H | 19.5 | 20.2 | 19.9 | 20.6 | 21.0 | 18.8 | 19.5 | 19.2 | 19.8 | 20.2 |
| | 12H | 19.5 | 20.1 | 19.9 | 20.5 | 20.9 | 18.8 | 19.5 | 19.3 | 19.9 | 20.3 |
| 4H | 2H | 17.5 | 18.4 | 17.9 | 18.8 | 19.2 | 16.6 | 17.5 | 17.0 | 17.9 | 18.3 |
| | 3H | 19.5 | 20.3 | 20.0 | 20.7 | 21.1 | 18.4 | 19.1 | 18.8 | 19.5 | 19.9 |
| | 4H | 20.2 | 20.9 | 20.6 | 21.3 | 21.7 | 19.1 | 19.8 | 19.6 | 20.2 | 20.7 |
| | 6H | 20.5 | 21.1 | 20.9 | 21.5 | 22.0 | 19.8 | 20.4 | 20.3 | 20.8 | 21.3 |
| | 8H | 20.5 | 21.0 | 21.0 | 21.5 | 21.9 | 20.1 | 20.6 | 20.5 | 21.0 | 21.5 |
| | 12H | 20.5 | 20.9 | 21.0 | 21.4 | 21.9 | 20.1 | 20.6 | 20.6 | 21.0 | 21.5 |
| 8H | 4H | 20.5 | 21.0 | 21.0 | 21.4 | 21.9 | 19.6 | 20.1 | 20.1 | 20.6 | 21.0 |
| | 6H | 20.9 | 21.3 | 21.4 | 21.7 | 22.2 | 20.4 | 20.8 | 20.9 | 21.3 | 21.8 |
| | 8H | 20.8 | 21.2 | 21.4 | 21.7 | 22.2 | 20.6 | 21.0 | 21.1 | 21.5 | 22.0 |
| | 12H | 20.8 | 21.1 | 21.3 | 21.6 | 22.2 | 20.7 | 21.0 | 21.2 | 21.5 | 22.1 |
| 12H | 4H | 20.5 | 20.9 | 21.0 | 21.4 | 21.9 | 19.6 | 20.0 | 20.1 | 20.5 | 21.0 |
| | 6H | 20.8 | 21.2 | 21.3 | 21.7 | 22.2 | 20.4 | 20.7 | 20.9 | 21.2 | 21.8 |
| | 8H | 20.9 | 21.2 | 21.4 | 21.7 | 22.2 | 20.6 | 20.9 | 21.1 | 21.4 | 22.0 |

| | | | |
|-----------------|---------------------------------|-------------------------------|--------------------|
| Luminance table | Max. for $\gamma \geq 65^\circ$ | Photometric dimensions in mm: | L = 300 B = 320 |
|-----------------|---------------------------------|-------------------------------|--------------------|

| 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° | 8526.4 | 8443.6 | 9306.7 | 10541.5 | 10400.9 | 9861.8 | 9630.2 | | |
| 50° | 9419.7 | 9555.3 | 10518.0 | 11145.0 | 9289.6 | 7548.4 | 7403.5 | | |
| 55° | 10554.1 | 10748.4 | 11549.4 | 11020.1 | 9183.4 | 7604.6 | 7645.7 | | |
| 60° | 11427.6 | 11481.5 | 11851.4 | 11605.4 | 9790.7 | 8026.5 | 8061.9 | | |
| 65° | 11704.7 | 11632.6 | 11940.0 | 12061.0 | 10169.9 | 8430.5 | 8501.6 | | |
| 70° | 11335.3 | 11246.7 | 11546.0 | 11834.6 | 10229.2 | 8578.9 | 8581.9 | | |
| 75° | 8988.3 | 9431.4 | 10163.1 | 10929.2 | 9796.4 | 8776.1 | 8826.5 | | |
| 80° | 5429.9 | 5794.3 | 6652.9 | 7766.2 | 8358.3 | 8110.3 | 9184.0 | | |
| 85° | 774.7 | 779.7 | 1065.4 | 1712.3 | 3043.2 | 3977.6 | 5763.8 | | |

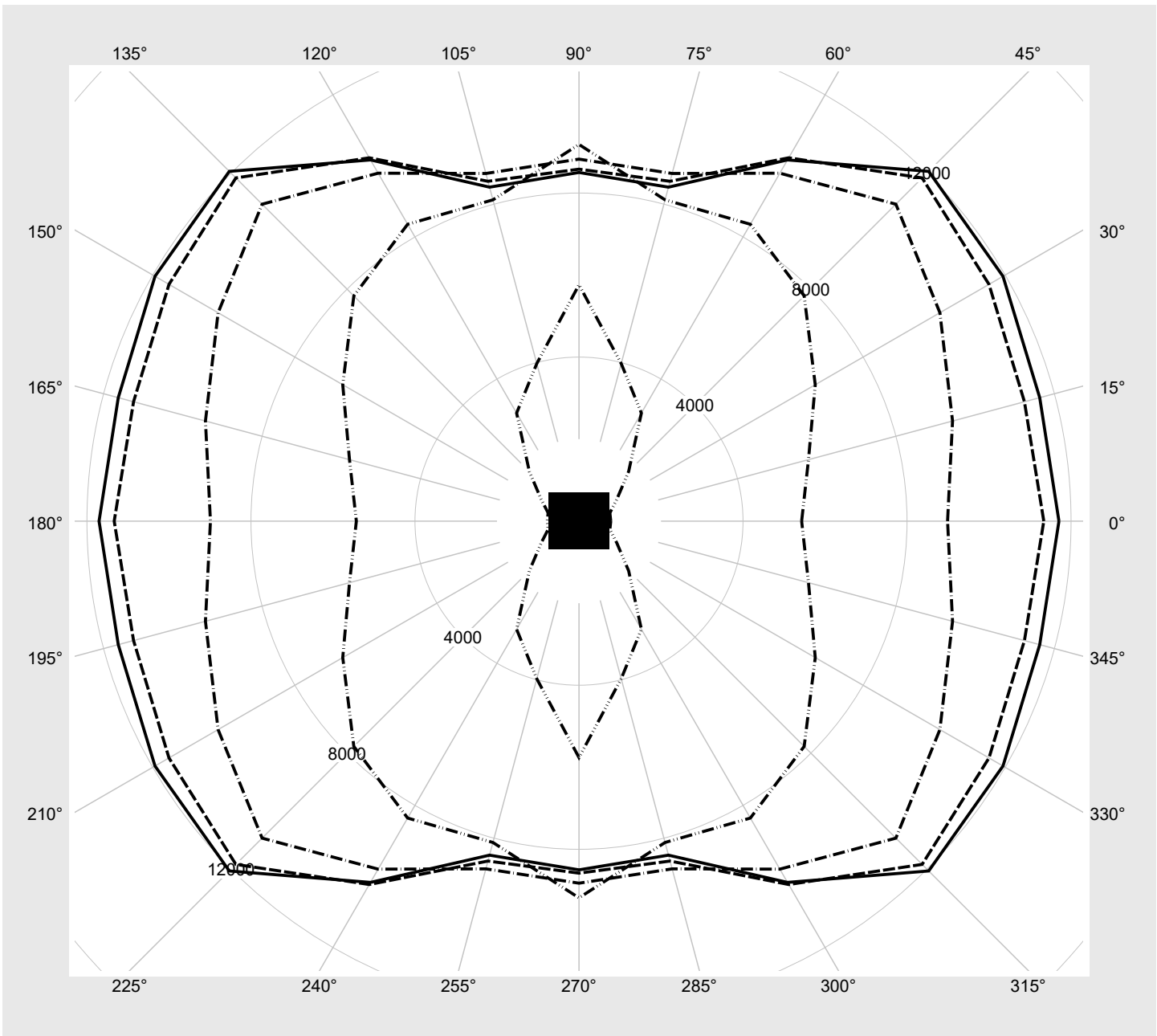
Photometric test report

Family
Highbay 11

Order number: 51HLA1D14FCA
EAN: 4058352321720

LP number
58918_2

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



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| Family Highbay 11 | Order number: 51HLA1D14FCA EAN: 4058352321720 | LP number 58918_2 |
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|-----------------------------|---------------------------------|---------------|
| 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 | 14060 | 81.2 |
| 95 | 241 | 252 | 13357 | 76.8 |
| 90 | 227 | 250 | 12654 | 72.5 |
| 85 | 214 | 248 | 11951 | 68.4 |
| 80 | 201 | 245 | 11248 | 64.2 |
| 75 | 188 | 243 | 10545 | 60.0 |
| 70 | 175 | 240 | 9842 | 56.0 |
| 65 | 162 | 237 | 9139 | 51.9 |
| 60 | 149 | 234 | 8436 | 48.0 |
| 55 | 136 | 231 | 7733 | 44.1 |
| 50 | 124 | 228 | 7030 | 40.1 |
| 45 | 111 | 224 | 6327 | 36.3 |
| 40 | 99 | 219 | 5624 | 32.5 |
| 35 | 86 | 215 | 4921 | 28.8 |
| 30 | 74 | 209 | 4218 | 25.1 |
| 25 | 62 | 203 | 3515 | 21.3 |
| 20 | 50 | 195 | 2812 | 17.6 |
| 15 | 38 | 185 | 2109 | 14.0 |
| 10 | 26 | 170 | 1405 | 10.4 |