

LUMINAIRE PHOTOMETRIC TEST REPORT

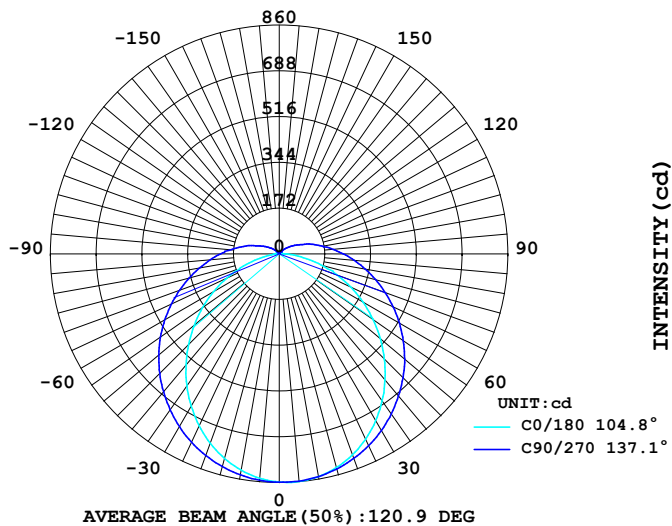
Report number:

| | | |
|---------------------------|-------------|-------------|
| MANUFACTURER: ILUMEN GMBH | Address: | |
| NAME: IL-TL15-N02040-120 | TYPE: 4000K | WEIGHT: |
| SPECIFICATION: | DIMENSION: | SERIAL No.: |

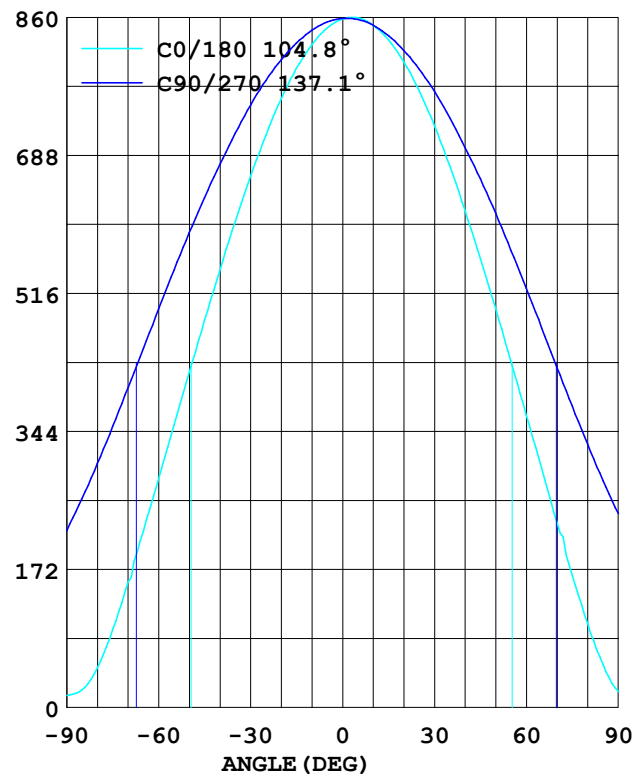
| | | | | | |
|-------------------|--------|--------------------|--------|-------------------|-------|
| DATA OF LAMP | | Imax(cd) | 860.1 | S/MH (C0/180) | 1.16 |
| MODEL | | EFFICIENCY (%) | 100.0 | S/MH (C90/270) | 1.30 |
| NOMINAL POWER(W) | 20 | TOTAL FLUX(lm) | 3030.5 | Voltage(V) | 230.3 |
| RATED VOLTAGE (V) | 230 | EFFICIENCY (lm/W) | 150.8 | Current(A) | 0.091 |
| NOMINAL FLUX(lm) | 3030.6 | η up (%) | 9.0 | Power(W) | 20.10 |
| LAMPS QUANTITY | 1 | η down (%) | 91.0 | Power Factor (PF) | 0.956 |
| TEST VOLTAGE (V) | 230.3 | Effective Flux(lm) | 2919.9 | EEI | 0.094 |

LUMINOUS INTENSITY DISTRIBUTION

LUMINOUS INTENSITY DISTRIBUTION



INTENSITY (cd)



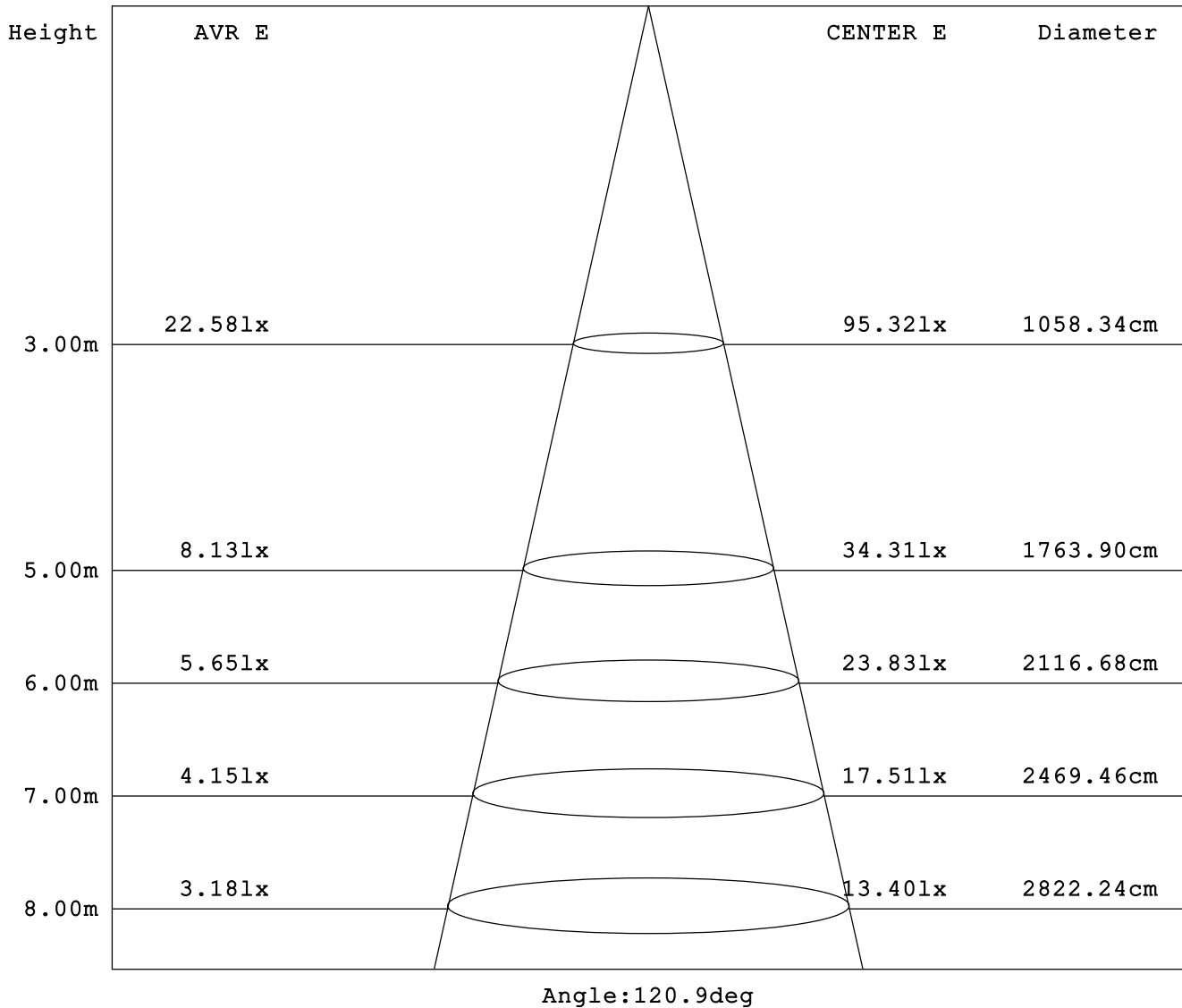
Test System:
Temperature: 25.3 DEG
Operators:
Test Date: 2024.12.25

Test Set: 5.0 deg/s C-Gamma (TYPE C)
Humidity: 65.0%
Test Distance: 10.000 m
Remarks:

AVERAGE AND CENTER E Figure

Report number:

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Operators:
Test Date: 2024.12.25

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Remarks:

ZONAL FLUX DIAGRAM

Report number:

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| NAME: IL-TL15-N02040-120 | TYPE: 4000K | WEIGHT: |
| SPECIFICATION: | DIMENSION: | SERIAL No.: |

| γ | C0 | C90 | C180 | C270 | | | | | γ | Zone | total |
|-------|-----------------------|-------|-------|-------|--|--|--|--|---------|---------|-------|
| 5.0 | 846.7 | 854.3 | 859.7 | 857.5 | | | | | 0- 5 | 20.47 | 20.47 |
| 10.0 | 825.8 | 844.0 | 850.4 | 850.3 | | | | | 5- 10 | 60.71 | 81.19 |
| 15.0 | 796.7 | 827.9 | 831.9 | 837.3 | | | | | 10- 15 | 98.83 | 180.0 |
| 20.0 | 758.4 | 807.3 | 804.8 | 818.9 | | | | | 15- 20 | 133.5 | 313.6 |
| 25.0 | 712.9 | 781.3 | 768.9 | 795.5 | | | | | 20- 25 | 163.8 | 477.4 |
| 30.0 | 662.4 | 750.6 | 725.0 | 768.1 | | | | | 25- 30 | 188.7 | 666.1 |
| 35.0 | 605.5 | 715.8 | 675.3 | 735.0 | | | | | 30- 35 | 207.5 | 873.6 |
| 40.0 | 544.9 | 676.7 | 619.3 | 697.6 | | | | | 35- 40 | 219.8 | 1093 |
| 45.0 | 482.8 | 635.4 | 559.0 | 658.9 | | | | | 40- 45 | 225.6 | 1319 |
| 50.0 | 417.4 | 591.9 | 496.9 | 615.7 | | | | | 45- 50 | 225.1 | 1544 |
| 55.0 | 352.5 | 545.0 | 431.4 | 569.4 | | | | | 50- 55 | 218.4 | 1763 |
| 60.0 | 285.6 | 497.3 | 364.0 | 522.5 | | | | | 55- 60 | 206.0 | 1969 |
| 65.0 | 219.7 | 447.5 | 298.2 | 473.0 | | | | | 60- 65 | 188.7 | 2158 |
| 70.0 | 156.3 | 398.2 | 231.0 | 423.5 | | | | | 65- 70 | 167.2 | 2325 |
| 75.0 | 97.13 | 350.5 | 164.2 | 375.4 | | | | | 70- 75 | 143.4 | 2468 |
| 80.0 | 49.20 | 304.0 | 104.4 | 328.0 | | | | | 75- 80 | 118.2 | 2587 |
| 85.0 | 22.11 | 260.3 | 53.48 | 282.7 | | | | | 80- 85 | 94.91 | 2682 |
| 90.0 | 15.10 | 220.4 | 19.68 | 241.5 | | | | | 85- 90 | 75.92 | 2757 |
| 95.0 | 13.44 | 183.4 | 10.71 | 203.2 | | | | | 90- 95 | 62.09 | 2820 |
| 100.0 | 12.37 | 150.5 | 9.840 | 168.5 | | | | | 95-100 | 50.85 | 2870 |
| 105.0 | 11.39 | 121.5 | 9.158 | 137.8 | | | | | 100-105 | 41.48 | 2912 |
| 110.0 | 10.52 | 90.31 | 8.573 | 110.3 | | | | | 105-110 | 32.68 | 2945 |
| 115.0 | 9.840 | 69.95 | 8.086 | 82.52 | | | | | 110-115 | 24.41 | 2969 |
| 120.0 | 9.255 | 52.70 | 7.599 | 63.91 | | | | | 115-120 | 18.45 | 2987 |
| 125.0 | 8.671 | 37.99 | 7.209 | 47.15 | | | | | 120-125 | 13.51 | 3001 |
| 130.0 | 8.183 | 25.03 | 6.819 | 32.54 | | | | | 125-130 | 9.420 | 3010 |
| 135.0 | 7.696 | 14.22 | 6.527 | 20.55 | | | | | 130-135 | 6.135 | 3017 |
| 140.0 | 7.307 | 7.014 | 6.332 | 11.00 | | | | | 135-140 | 3.672 | 3020 |
| 145.0 | 7.014 | 6.819 | 6.137 | 9.645 | | | | | 140-145 | 2.544 | 3023 |
| 150.0 | 6.722 | 6.527 | 6.040 | 9.060 | | | | | 145-150 | 2.133 | 3025 |
| 155.0 | 6.722 | 6.235 | 5.943 | 8.476 | | | | | 150-155 | 1.758 | 3027 |
| 160.0 | 6.722 | 6.040 | 5.943 | 7.989 | | | | | 155-160 | 1.416 | 3028 |
| 165.0 | 6.819 | 5.943 | 6.137 | 7.696 | | | | | 160-165 | 1.100 | 3029 |
| 170.0 | 6.819 | 5.943 | 6.332 | 7.599 | | | | | 165-170 | 0.789 | 3030 |
| 175.0 | 6.819 | 5.943 | 6.527 | 7.501 | | | | | 170-175 | 0.478 | 3030 |
| 180.0 | 6.819 | 5.943 | 6.819 | 7.307 | | | | | 175-180 | 0.160 | 3031 |
| DEG | LUMINOUS INTENSITY:cd | | | | | | | | | UNIT:lm | |

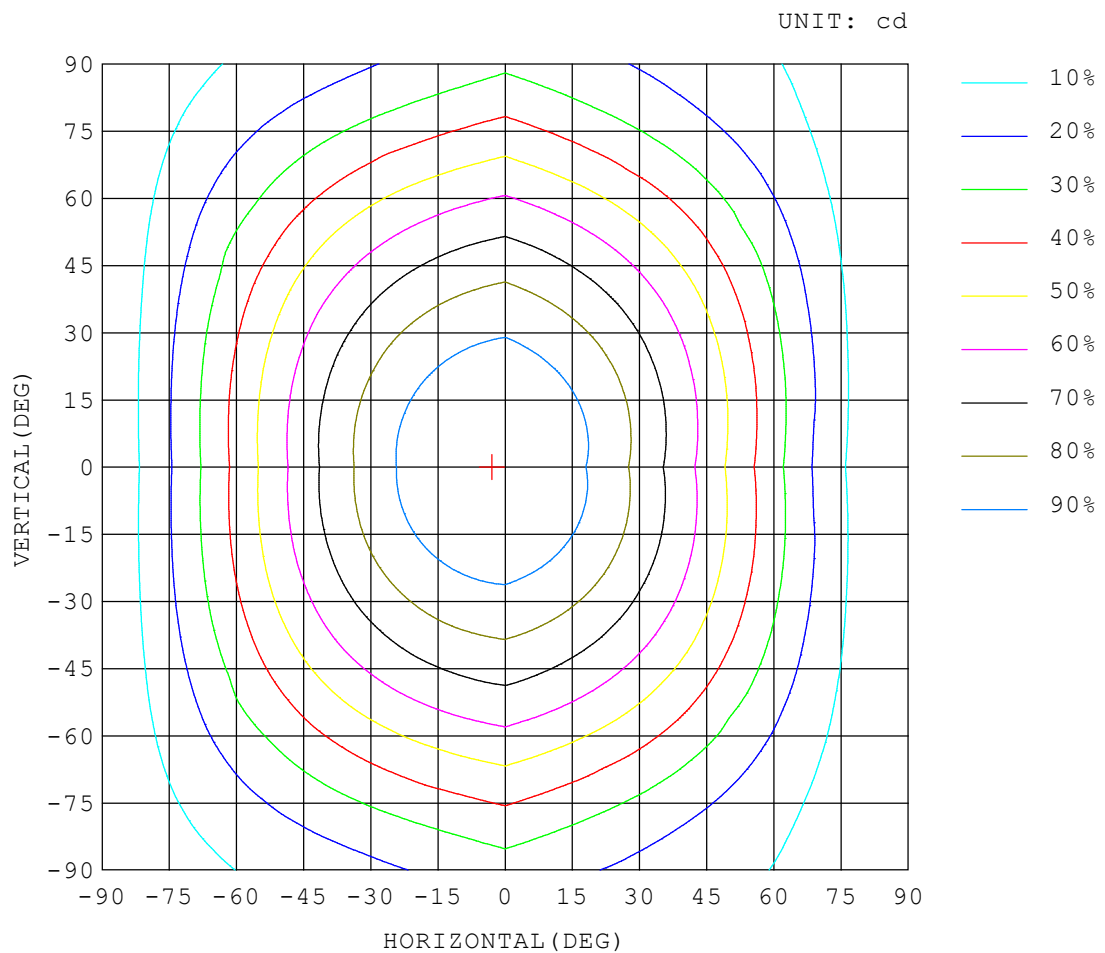
Test System:
Temperature:25.3DEG
Operators:
Test Date:2024.12.25

Test Set: 5.0deg/s C-Gamma (TYPE C)
Humidity:65.0%
Test Distance:10.000 m
Remarks:

ISOCANDELA DIAGRAM

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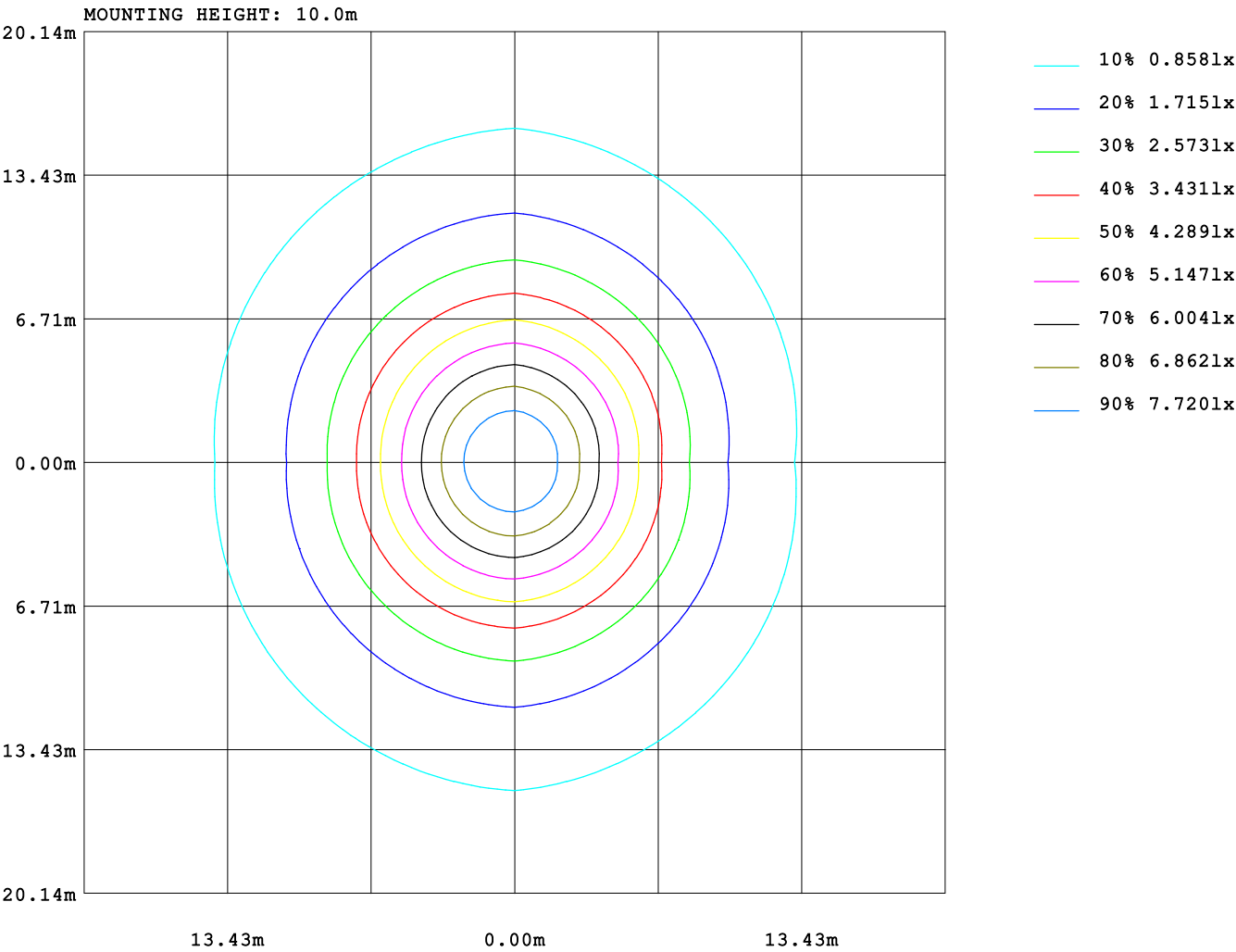
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ISOLUX DIAGRAM

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LUMINOUS DISTRIBUTION INTENSITY DATA

Report number:

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|----------------------------------|--------------------|--------------------|
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UNIT: cd

| C (DEG) γ (DEG) | 0 | 90 | 180 | 270 |
|--------------------|------|------|------|------|
| 0.0 | 858 | 859 | 858 | 859 |
| 5.0 | 847 | 854 | 860 | 858 |
| 10.0 | 826 | 844 | 850 | 850 |
| 15.0 | 797 | 828 | 832 | 837 |
| 20.0 | 758 | 807 | 805 | 819 |
| 25.0 | 713 | 781 | 769 | 796 |
| 30.0 | 662 | 751 | 725 | 768 |
| 35.0 | 606 | 716 | 675 | 735 |
| 40.0 | 545 | 677 | 619 | 698 |
| 45.0 | 483 | 635 | 559 | 659 |
| 50.0 | 417 | 592 | 497 | 616 |
| 55.0 | 353 | 545 | 431 | 569 |
| 60.0 | 286 | 497 | 364 | 523 |
| 65.0 | 220 | 448 | 298 | 473 |
| 70.0 | 156 | 398 | 231 | 424 |
| 75.0 | 97.1 | 351 | 164 | 375 |
| 80.0 | 49.2 | 304 | 104 | 328 |
| 85.0 | 22.1 | 260 | 53.4 | 283 |
| 90.0 | 15.1 | 220 | 19.6 | 242 |
| 95.0 | 13.4 | 183 | 10.7 | 203 |
| 100.0 | 12.3 | 151 | 9.84 | 169 |
| 105.0 | 11.3 | 122 | 9.15 | 138 |
| 110.0 | 10.5 | 90.3 | 8.57 | 110 |
| 115.0 | 9.84 | 69.9 | 8.08 | 82.5 |
| 120.0 | 9.25 | 52.7 | 7.59 | 63.9 |
| 125.0 | 8.67 | 37.9 | 7.20 | 47.1 |
| 130.0 | 8.18 | 25.0 | 6.81 | 32.5 |
| 135.0 | 7.69 | 14.2 | 6.52 | 20.5 |
| 140.0 | 7.30 | 7.01 | 6.33 | 11.0 |
| 145.0 | 7.01 | 6.81 | 6.13 | 9.64 |
| 150.0 | 6.72 | 6.52 | 6.04 | 9.06 |
| 155.0 | 6.72 | 6.23 | 5.94 | 8.47 |
| 160.0 | 6.72 | 6.04 | 5.94 | 7.98 |
| 165.0 | 6.81 | 5.94 | 6.13 | 7.69 |
| 170.0 | 6.81 | 5.94 | 6.33 | 7.59 |
| 175.0 | 6.81 | 5.94 | 6.52 | 7.50 |
| 180.0 | 6.81 | 5.94 | 6.81 | 7.30 |

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