

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P949284

Luminaire Tested: **GALN-SB4A-830-U-AFL-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P949284  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SB4A-830-U-AFL-HSS  
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE  
(4) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE  
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

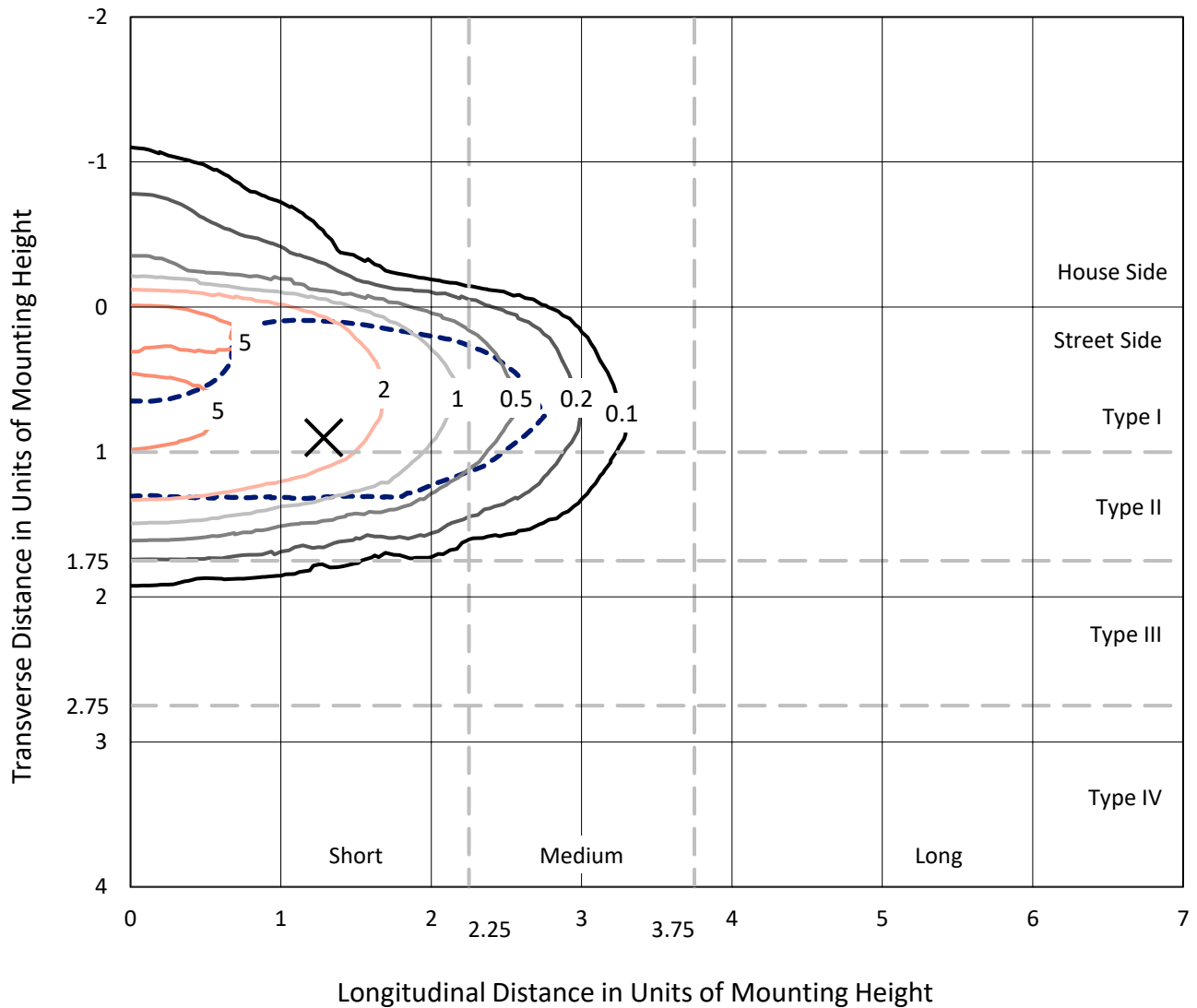
Lumens per Lamp: N/A  
Luminaire Lumens: 13773 lumens  
Efficiency: N/A  
Efficacy: 120.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 114  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

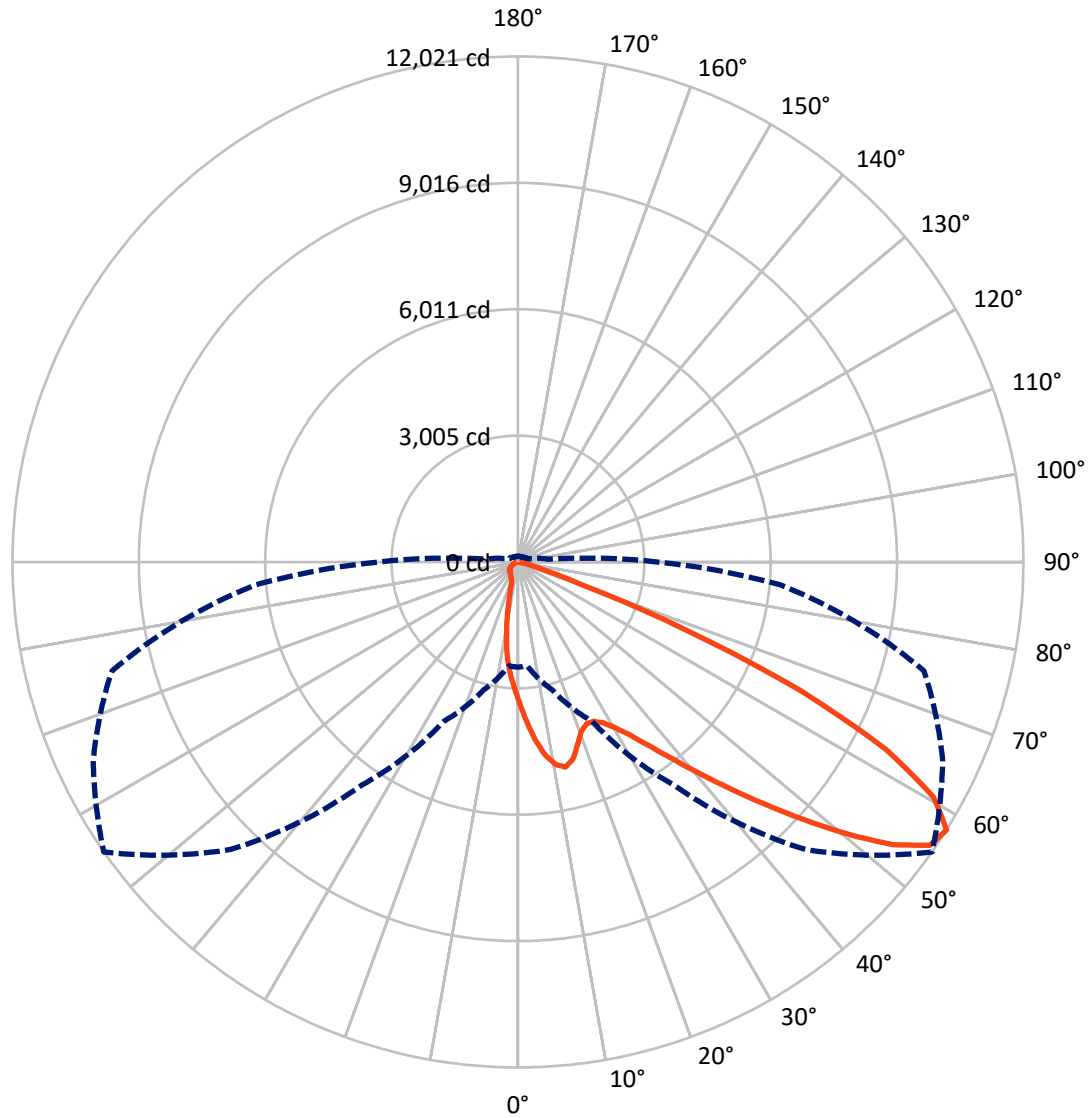
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.6 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral      - - - Horizontal Cone Through 57.5-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1075.6   | 0.0    | 1075.6  |
|                    | % Fixture | 7.8      | 0.0    | 7.8     |
| <b>Street Side</b> | Lumens    | 12697.4  | 0.0    | 12697.4 |
|                    | % Fixture | 92.2     | 0.0    | 92.2    |
| <b>Total</b>       | Lumens    | 13773.0  | 0.0    | 13773.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 308.8   | 2.2       |
| 10°-20°   | 745.9   | 5.4       |
| 20°-30°   | 1193.5  | 8.7       |
| 30°-40°   | 2020.0  | 14.7      |
| 40°-50°   | 3316.5  | 24.1      |
| 50°-60°   | 3645.0  | 26.5      |
| 60°-70°   | 2090.8  | 15.2      |
| 70°-80°   | 427.2   | 3.1       |
| 80°-90°   | 25.2    | 0.2       |
| 90°-100°  | 0.0     | 0.0       |
| 100°-110° | 0.0     | 0.0       |
| 110°-120° | 0.0     | 0.0       |
| 120°-130° | 0.0     | 0.0       |
| 130°-140° | 0.0     | 0.0       |
| 140°-150° | 0.0     | 0.0       |
| 150°-160° | 0.0     | 0.0       |
| 160°-170° | 0.0     | 0.0       |
| 170°-180° | 0.0     | 0.0       |
| 0°-90°    | 13773.0 | 100.0     |
| 0°-180°   | 13773.0 | 100.0     |

**Coefficient of Utilization**



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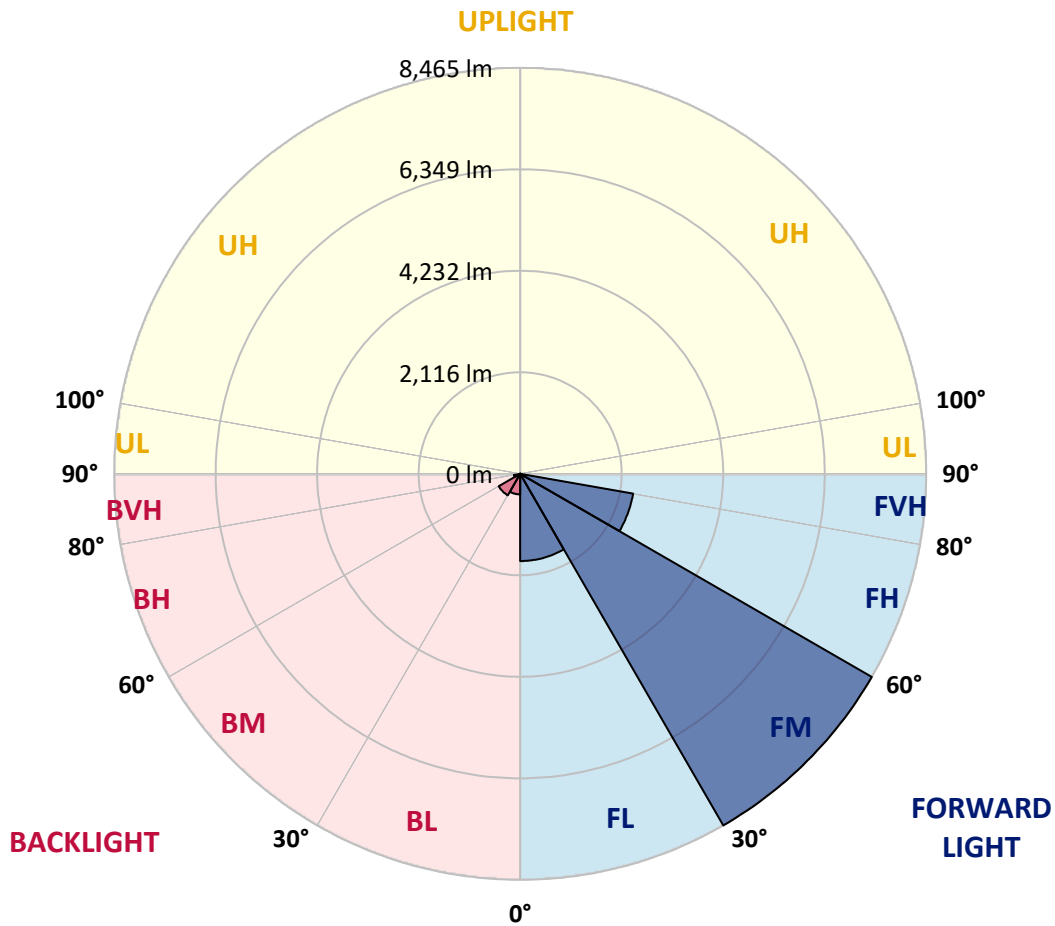
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 1818.8 | 13.2      |                         |      |         |
| FM (30°-60°)   | 8465.0 | 61.5      |                         |      |         |
| FH (60°-80°)   | 2390.1 | 17.4      |                         |      | G2/5000 |
| FVH (80°-90°)  | 23.5   | 0.2       |                         |      | G1/100  |
| BL (0°-30°)    | 429.4  | 3.1       | B1/500                  |      |         |
| BM (30°-60°)   | 516.6  | 3.8       | B1/1000                 |      |         |
| BH (60°-80°)   | 127.9  | 0.9       | B1/500                  |      | G1/500  |
| BVH (80°-90°)  | 1.7    | 0.0       |                         |      | G0/10   |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G2**

Type II Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°     | 55°     | 65°     | 75°     | 85°    |
|-------|--------|--------|--------|--------|--------|---------|---------|---------|---------|--------|
| 0°    | 3319.0 | 3319.0 | 3319.0 | 3319.0 | 3319.0 | 3319.0  | 3319.0  | 3319.0  | 3319.0  | 3319.0 |
| 2.5°  | 4118.1 | 4066.3 | 4058.7 | 4048.5 | 3950.0 | 3876.1  | 3769.1  | 3651.9  | 3520.2  | 3386.0 |
| 5°    | 4757.6 | 4716.9 | 4709.2 | 4661.7 | 4549.5 | 4423.9  | 4233.6  | 3993.3  | 3747.8  | 3459.1 |
| 7.5°  | 4881.6 | 4874.0 | 4908.8 | 4907.1 | 4891.8 | 4792.4  | 4631.9  | 4345.7  | 3977.1  | 3549.1 |
| 10°   | 4328.7 | 4348.3 | 4451.9 | 4542.8 | 4788.2 | 4930.9  | 4896.1  | 4660.0  | 4213.2  | 3651.9 |
| 12.5° | 3825.1 | 3802.2 | 3876.1 | 3978.8 | 4264.2 | 4688.8  | 5005.6  | 4922.4  | 4483.3  | 3768.2 |
| 15°   | 3509.2 | 3499.8 | 3541.5 | 3589.0 | 3806.4 | 4234.5  | 4878.2  | 5135.5  | 4743.2  | 3905.8 |
| 17.5° | 3408.1 | 3400.5 | 3413.2 | 3425.1 | 3566.1 | 3897.3  | 4575.0  | 5266.3  | 4992.0  | 4062.9 |
| 20°   | 3490.5 | 3480.3 | 3478.6 | 3469.3 | 3527.9 | 3753.8  | 4300.7  | 5275.7  | 5215.4  | 4205.6 |
| 22.5° | 3730.9 | 3719.0 | 3677.3 | 3640.0 | 3645.1 | 3773.3  | 4178.4  | 5182.3  | 5383.5  | 4338.9 |
| 25°   | 4166.5 | 4147.0 | 4060.4 | 3934.7 | 3854.8 | 3909.2  | 4197.1  | 5059.1  | 5544.0  | 4443.4 |
| 27.5° | 4711.8 | 4686.3 | 4575.0 | 4388.2 | 4205.6 | 4139.3  | 4332.1  | 4974.2  | 5677.4  | 4523.2 |
| 30°   | 5246.0 | 5212.8 | 5103.3 | 4958.0 | 4691.4 | 4482.5  | 4575.9  | 5011.6  | 5836.2  | 4606.4 |
| 32.5° | 5822.6 | 5791.2 | 5646.0 | 5465.9 | 5245.1 | 4964.0  | 4909.6  | 5194.1  | 6030.7  | 4722.8 |
| 35°   | 6552.1 | 6502.9 | 6296.5 | 6051.1 | 5816.7 | 5532.2  | 5361.5  | 5509.2  | 6289.7  | 4900.3 |
| 37.5° | 7382.7 | 7316.5 | 7094.0 | 6755.1 | 6449.4 | 6130.9  | 5911.8  | 5942.4  | 6669.3  | 5138.1 |
| 40°   | 8165.7 | 8105.4 | 7899.9 | 7580.6 | 7196.7 | 6810.3  | 6576.8  | 6508.8  | 7193.3  | 5427.7 |
| 42.5° | 8635.4 | 8581.0 | 8494.4 | 8359.4 | 8035.8 | 7641.7  | 7347.0  | 7200.1  | 7813.3  | 5774.2 |
| 45°   | 8661.7 | 8614.2 | 8730.5 | 8887.6 | 8823.9 | 8561.5  | 8202.3  | 7933.0  | 8435.8  | 6099.5 |
| 47.5° | 8240.5 | 8208.2 | 8561.5 | 9110.1 | 9383.6 | 9494.0  | 9162.8  | 8604.8  | 8949.6  | 6333.0 |
| 50°   | 7092.3 | 7080.4 | 7807.4 | 8814.6 | 9596.8 | 10311.0 | 10176.0 | 9229.9  | 9347.9  | 6453.6 |
| 52.5° | 6149.6 | 6106.3 | 6530.0 | 7868.5 | 9286.8 | 10740.7 | 11166.2 | 9843.1  | 9626.5  | 6476.5 |
| 55°   | 4664.2 | 4626.0 | 5157.6 | 6285.5 | 8287.2 | 10587.9 | 11890.7 | 10475.8 | 9826.1  | 6417.9 |
| 57.5° | 2502.0 | 2478.2 | 3149.9 | 4183.5 | 6478.2 | 9670.7  | 12021.4 | 11145.0 | 9994.2  | 6262.5 |
| 60°   | 974.1  | 969.9  | 1221.3 | 2029.8 | 3937.2 | 7867.7  | 11361.6 | 11546.7 | 10099.5 | 6071.4 |
| 62.5° | 589.4  | 602.1  | 642.9  | 911.3  | 1739.3 | 4887.6  | 9840.5  | 11089.8 | 10170.0 | 5896.5 |
| 65°   | 487.5  | 488.3  | 493.4  | 625.9  | 833.1  | 2045.0  | 7408.2  | 9586.6  | 9995.9  | 5584.8 |
| 67.5° | 417.8  | 425.5  | 445.0  | 496.8  | 587.7  | 896.8   | 4265.0  | 7426.0  | 8936.9  | 4859.5 |
| 70°   | 329.5  | 339.7  | 364.3  | 408.5  | 453.5  | 561.4   | 1576.2  | 4941.1  | 6827.3  | 3662.9 |
| 72.5° | 277.7  | 276.9  | 289.6  | 332.1  | 360.1  | 394.9   | 606.4   | 2768.6  | 3967.8  | 1748.7 |
| 75°   | 214.9  | 223.4  | 239.5  | 277.7  | 294.7  | 286.2   | 328.7   | 1011.5  | 1421.7  | 529.9  |
| 77.5° | 168.2  | 174.9  | 189.4  | 226.8  | 243.7  | 203.0   | 189.4   | 361.8   | 456.9   | 190.2  |
| 80°   | 75.6   | 81.5   | 129.1  | 167.3  | 198.7  | 140.1   | 102.8   | 185.1   | 203.0   | 86.6   |
| 82.5° | 13.6   | 22.9   | 75.6   | 88.3   | 101.9  | 90.9    | 53.5    | 96.0    | 99.4    | 34.8   |
| 85°   | 0.8    | 1.7    | 26.3   | 32.3   | 40.8   | 29.7    | 16.1    | 38.2    | 33.1    | 11.9   |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.8    | 0.8    | 4.2     | 5.1     | 6.8     | 5.1     | 4.2    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     | 0.0    |

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**CANDELA DISTRIBUTION (continued):**

| 90°    |       | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|--------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 3319.0 | 0°    | 3319.0 | 3319.0 | 3319.0 | 3319.0 | 3319.0 | 3319.0 | 3319.0 | 3319.0 | 3319.0 | 3319.0 |
| 3326.6 | 2.5°  | 3265.4 | 3144.9 | 3027.7 | 2931.7 | 2875.6 | 2780.5 | 2717.7 | 2707.5 | 2681.2 | 2704.1 |
| 3335.1 | 5°    | 3202.6 | 2986.9 | 2768.6 | 2573.3 | 2412.8 | 2205.6 | 2051.0 | 1985.6 | 1928.7 | 1948.2 |
| 3357.2 | 7.5°  | 3172.9 | 2832.3 | 2492.6 | 2158.8 | 1815.7 | 1484.5 | 1238.2 | 1135.5 | 1057.3 | 1068.4 |
| 3381.8 | 10°   | 3133.0 | 2671.8 | 2139.3 | 1629.8 | 1170.3 | 843.3  | 673.5  | 610.6  | 575.8  | 576.7  |
| 3418.3 | 12.5° | 3102.4 | 2479.9 | 1729.1 | 1104.9 | 712.5  | 538.4  | 485.8  | 470.5  | 460.3  | 461.2  |
| 3473.5 | 15°   | 3087.1 | 2254.0 | 1324.0 | 736.3  | 509.6  | 456.1  | 443.3  | 436.5  | 429.7  | 428.9  |
| 3534.7 | 17.5° | 3061.6 | 2002.6 | 969.0  | 537.6  | 445.9  | 427.2  | 416.1  | 408.5  | 400.0  | 398.3  |
| 3587.3 | 20°   | 3023.4 | 1717.2 | 708.3  | 454.4  | 417.8  | 403.4  | 388.1  | 377.9  | 367.7  | 366.0  |
| 3620.4 | 22.5° | 2952.9 | 1415.7 | 544.4  | 420.4  | 397.5  | 381.3  | 362.6  | 350.7  | 340.6  | 338.9  |
| 3604.3 | 25°   | 2822.1 | 1132.9 | 458.6  | 399.2  | 379.6  | 360.1  | 339.7  | 323.6  | 314.2  | 312.5  |
| 3569.5 | 27.5° | 2656.5 | 890.0  | 416.1  | 379.6  | 356.7  | 338.9  | 315.9  | 300.6  | 292.1  | 290.5  |
| 3523.6 | 30°   | 2461.2 | 685.4  | 391.5  | 357.5  | 329.5  | 314.2  | 293.8  | 281.1  | 276.0  | 276.0  |
| 3491.4 | 32.5° | 2250.6 | 547.8  | 381.3  | 335.5  | 305.7  | 288.8  | 272.6  | 267.5  | 265.8  | 265.0  |
| 3509.2 | 35°   | 2052.7 | 475.6  | 376.2  | 317.6  | 284.5  | 268.4  | 261.6  | 262.4  | 265.8  | 265.8  |
| 3564.4 | 37.5° | 1876.9 | 452.7  | 373.7  | 304.9  | 265.8  | 251.4  | 255.6  | 263.3  | 259.9  | 259.9  |
| 3661.2 | 40°   | 1718.1 | 455.2  | 372.0  | 295.5  | 250.5  | 242.0  | 250.5  | 244.6  | 236.1  | 235.2  |
| 3779.3 | 42.5° | 1596.6 | 476.4  | 368.6  | 287.9  | 241.2  | 235.2  | 231.9  | 222.5  | 221.7  | 223.4  |
| 3901.6 | 45°   | 1508.3 | 495.1  | 367.7  | 284.5  | 231.0  | 220.0  | 215.7  | 206.4  | 223.4  | 227.6  |
| 3951.7 | 47.5° | 1403.8 | 495.1  | 367.7  | 272.6  | 214.0  | 209.8  | 203.0  | 192.8  | 209.8  | 214.0  |
| 3904.1 | 50°   | 1268.8 | 463.7  | 353.3  | 259.0  | 200.4  | 197.9  | 186.0  | 173.3  | 169.9  | 172.4  |
| 3792.8 | 52.5° | 1098.1 | 406.8  | 316.8  | 240.3  | 186.8  | 181.7  | 167.3  | 158.0  | 155.4  | 155.4  |
| 3593.3 | 55°   | 903.6  | 340.6  | 267.5  | 213.2  | 172.4  | 163.1  | 152.9  | 148.6  | 146.1  | 144.4  |
| 3313.9 | 57.5° | 734.6  | 279.4  | 214.9  | 189.4  | 158.8  | 146.9  | 143.5  | 138.4  | 134.2  | 131.6  |
| 3080.3 | 60°   | 603.0  | 220.0  | 177.5  | 168.2  | 145.2  | 134.2  | 133.3  | 126.5  | 115.5  | 113.8  |
| 2887.5 | 62.5° | 465.4  | 161.4  | 149.5  | 146.1  | 131.6  | 122.3  | 120.6  | 107.0  | 90.0   | 86.6   |
| 2614.1 | 65°   | 328.7  | 125.7  | 120.6  | 128.2  | 117.2  | 108.7  | 104.5  | 84.1   | 66.2   | 63.7   |
| 2187.7 | 67.5° | 231.0  | 105.3  | 95.1   | 112.1  | 101.9  | 90.9   | 88.3   | 71.3   | 55.2   | 53.5   |
| 1654.4 | 70°   | 164.8  | 85.8   | 78.1   | 96.0   | 81.5   | 79.8   | 74.7   | 59.4   | 45.0   | 43.3   |
| 818.7  | 72.5° | 116.4  | 65.4   | 60.3   | 83.2   | 56.1   | 68.8   | 61.1   | 45.9   | 34.0   | 32.3   |
| 278.6  | 75°   | 85.8   | 46.7   | 42.5   | 48.4   | 40.8   | 51.8   | 43.3   | 30.6   | 21.2   | 20.4   |
| 125.7  | 77.5° | 62.8   | 29.7   | 25.5   | 23.8   | 23.8   | 32.3   | 23.8   | 12.7   | 9.3    | 8.5    |
| 63.7   | 80°   | 44.2   | 13.6   | 11.9   | 10.2   | 9.3    | 7.6    | 3.4    | 1.7    | 0.8    | 0.8    |
| 22.1   | 82.5° | 26.3   | 5.9    | 5.9    | 4.2    | 2.5    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 8.5    | 85°   | 5.9    | 2.5    | 2.5    | 0.8    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 3.4    | 87.5° | 0.8    | 0.8    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 0.0    | 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

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