

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: STREETWORKS

Report Number: P477524

Luminaire Tested: **IFLD-L-SA8B-827-U-T3**

Issue Date: 02/26/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P477524  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 02/26/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: IFLD-L-SA8B-827-U-T3  
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ T3  
distribution lens  
Light Source: (128) 2700K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

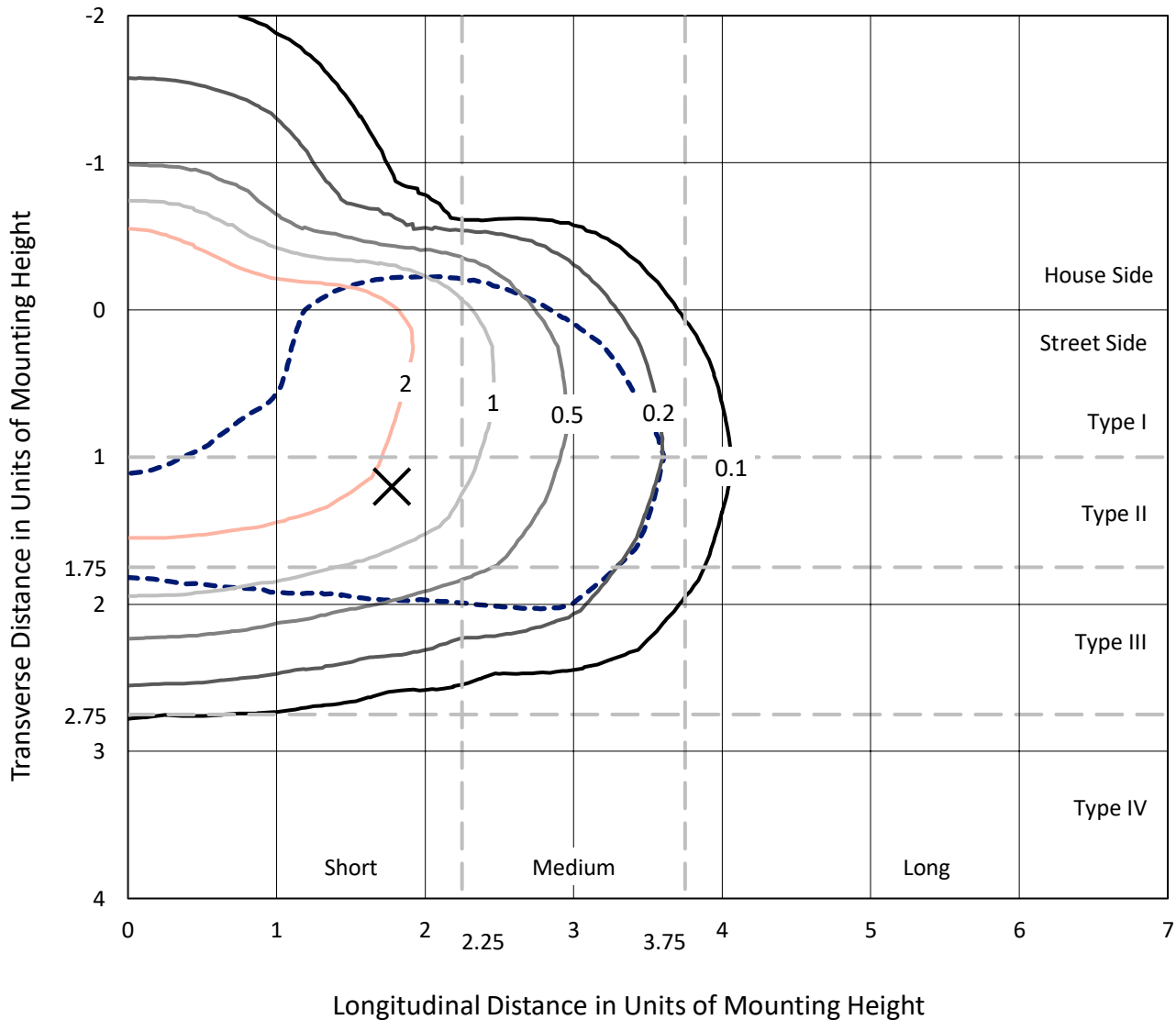
Lumens per Lamp: N/A  
Luminaire Lumens: 30471.7 lumens  
Efficiency: N/A  
Efficacy: 95.2 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 1' x H: 0.5')  
IES Classification: Type III - Short  
BUG Rating: B3 - U0 - G4

Input Watts (W): 320  
Input Voltage (V): 120  
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

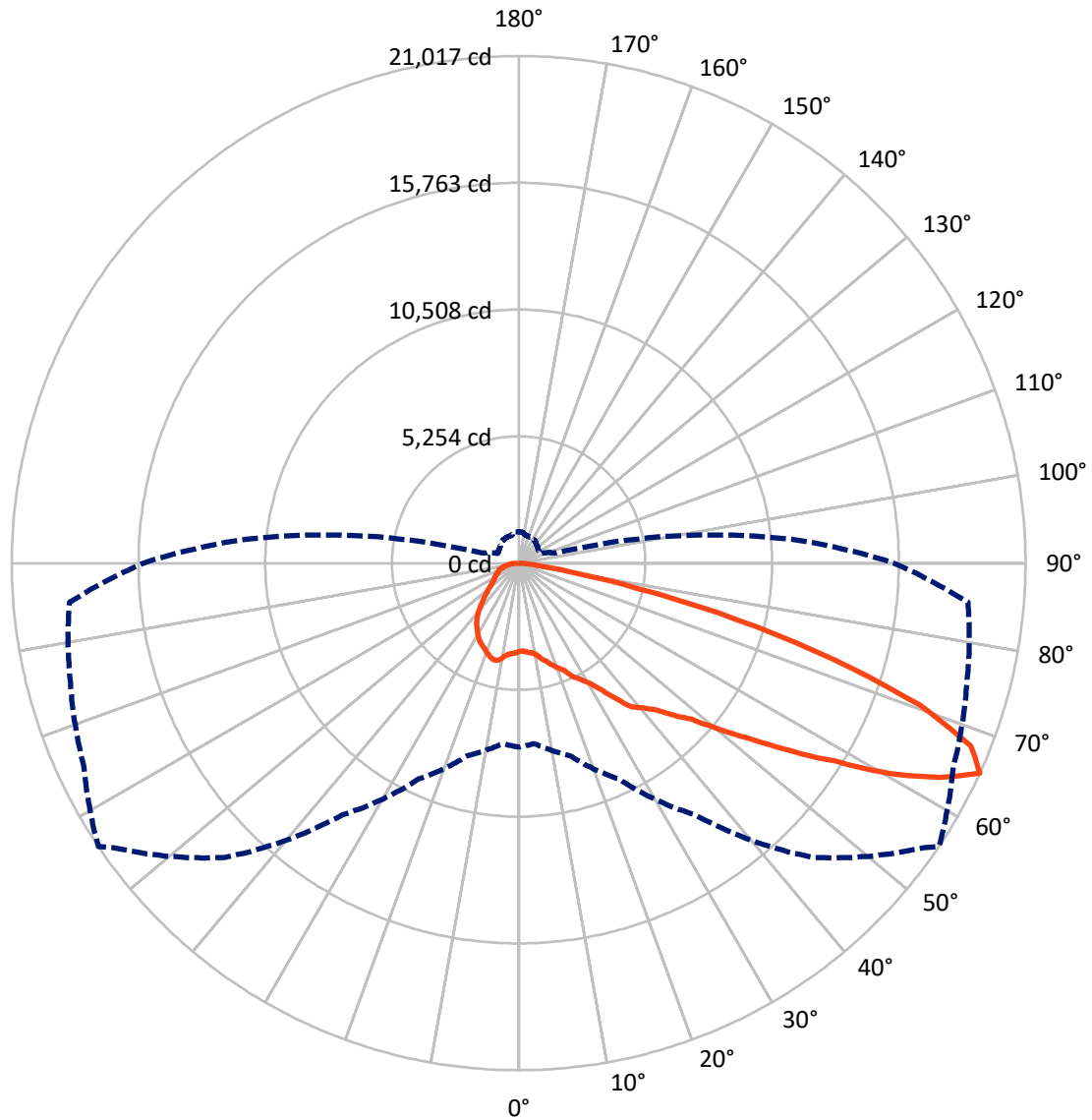
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.7 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 6833.8   | 0.0    | 6833.8  |
|                    | % Fixture | 22.4     | 0.0    | 22.4    |
| <b>Street Side</b> | Lumens    | 23637.9  | 0.0    | 23637.9 |
|                    | % Fixture | 77.6     | 0.0    | 77.6    |
| <b>Total</b>       | Lumens    | 30471.7  | 0.0    | 30471.7 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 362.4   | 1.2       |
| 10°-20°   | 1176.9  | 3.9       |
| 20°-30°   | 2095.5  | 6.9       |
| 30°-40°   | 3138.0  | 10.3      |
| 40°-50°   | 4649.4  | 15.3      |
| 50°-60°   | 7164.0  | 23.5      |
| 60°-70°   | 8110.5  | 26.6      |
| 70°-80°   | 3366.0  | 11.0      |
| 80°-90°   | 408.9   | 1.3       |
| 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°    | 30471.7 | 100.0     |
| 0°-180°   | 30471.7 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P477524

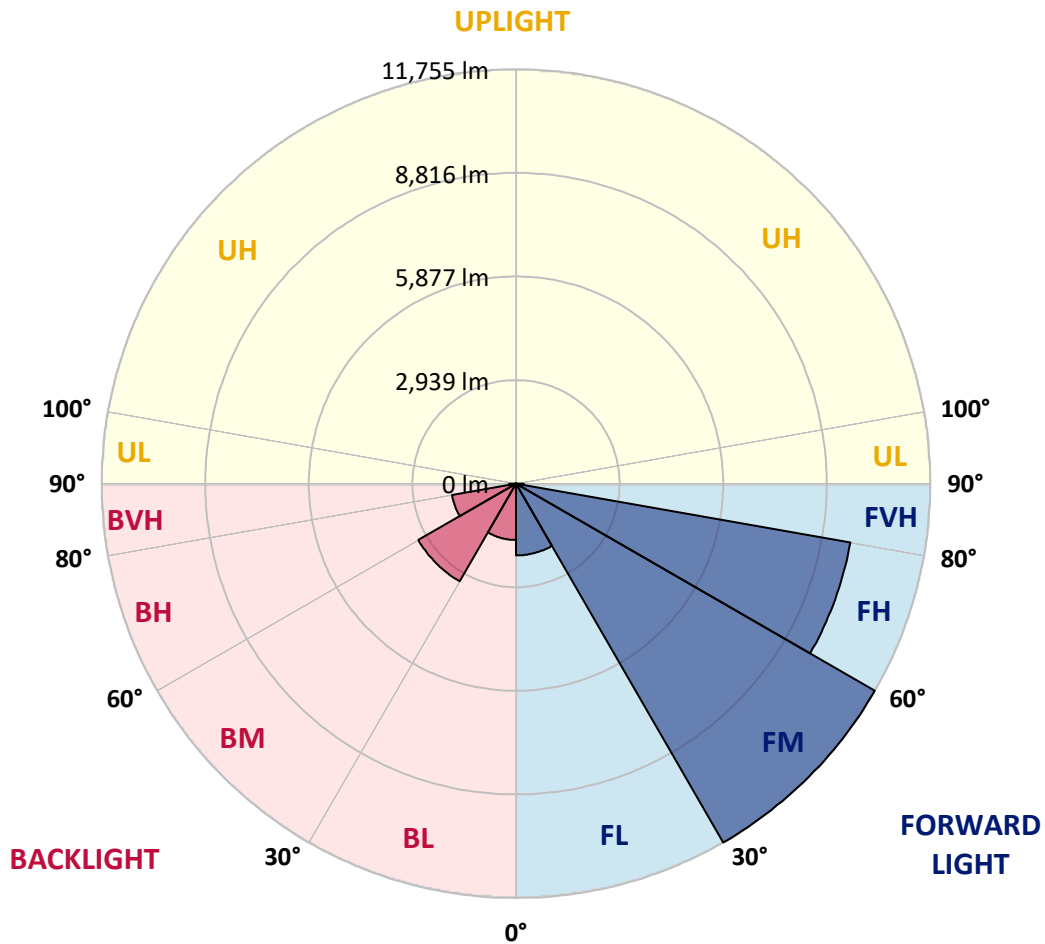
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|----------------|---------|-----------|-------------------------|------|----------|
|                |         |           | B                       | U    | G        |
| FL (0°-30°)    | 2036.4  | 6.7       |                         |      |          |
| FM (30°-60°)   | 11754.6 | 38.6      |                         |      |          |
| FH (60°-80°)   | 9631.1  | 31.6      |                         |      | G4/12000 |
| FVH (80°-90°)  | 215.7   | 0.7       |                         |      | G2/225   |
| BL (0°-30°)    | 1598.5  | 5.2       | B3/2500                 |      |          |
| BM (30°-60°)   | 3196.7  | 10.5      | B3/5000                 |      |          |
| BH (60°-80°)   | 1845.4  | 6.1       | B3/2500                 |      | G3/2500  |
| BVH (80°-90°)  | 193.2   | 0.6       |                         |      | G2/225   |
| UL (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |          |
| UH (100°-180°) | 0.0     | 0.0       |                         | U0/0 |          |

**BUG Rating: B3-U0-G4**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 56°     | 65°     | 75°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 3657.5  | 3657.5  | 3657.5  | 3657.5  | 3657.5  | 3657.5  | 3657.5  | 3657.5  | 3657.5  | 3657.5  |
| 2.5°  | 3561.8  | 3580.9  | 3568.2  | 3606.5  | 3638.3  | 3638.3  | 3663.8  | 3644.7  | 3670.2  | 3705.3  |
| 5°    | 3679.8  | 3603.3  | 3644.7  | 3663.8  | 3654.3  | 3670.2  | 3644.7  | 3708.5  | 3667.0  | 3734.0  |
| 7.5°  | 3708.5  | 3737.2  | 3772.3  | 3740.4  | 3769.1  | 3753.1  | 3756.3  | 3746.8  | 3724.4  | 3778.6  |
| 10°   | 3918.9  | 3877.5  | 3957.2  | 3909.4  | 3903.0  | 3896.6  | 3883.9  | 3836.0  | 3890.2  | 3893.4  |
| 12.5° | 4161.3  | 4123.0  | 4119.8  | 4081.6  | 4132.6  | 4040.1  | 4059.3  | 4033.7  | 4043.3  | 4056.1  |
| 15°   | 4336.7  | 4320.7  | 4394.1  | 4349.4  | 4282.5  | 4241.0  | 4285.7  | 4215.5  | 4250.6  | 4244.2  |
| 17.5° | 4684.2  | 4681.1  | 4626.8  | 4553.5  | 4515.2  | 4454.7  | 4445.1  | 4416.4  | 4441.9  | 4429.1  |
| 20°   | 4926.6  | 4961.7  | 4971.2  | 4885.1  | 4738.5  | 4671.5  | 4655.5  | 4633.2  | 4661.9  | 4652.4  |
| 22.5° | 5296.5  | 5242.3  | 5283.7  | 5133.9  | 5079.6  | 4920.2  | 4862.8  | 4830.9  | 4968.0  | 4933.0  |
| 25°   | 5532.4  | 5589.8  | 5548.4  | 5497.4  | 5376.2  | 5178.5  | 5137.0  | 5207.2  | 5261.4  | 5223.1  |
| 27.5° | 6065.0  | 6007.6  | 5969.3  | 5816.2  | 5736.5  | 5529.3  | 5481.4  | 5455.9  | 5468.7  | 5491.0  |
| 30°   | 6469.9  | 6501.8  | 6415.7  | 6307.3  | 6106.4  | 5896.0  | 5784.4  | 5762.0  | 5717.4  | 5679.1  |
| 32.5° | 7047.1  | 6999.3  | 6948.2  | 6878.1  | 6705.9  | 6428.5  | 6320.1  | 6237.2  | 6103.2  | 5924.7  |
| 35°   | 7324.5  | 7461.6  | 7423.4  | 7235.2  | 7104.5  | 6999.3  | 6967.4  | 6839.8  | 6728.2  | 6447.6  |
| 37.5° | 7786.9  | 7844.3  | 7790.1  | 7729.5  | 7668.9  | 7557.3  | 7519.0  | 7554.1  | 7334.1  | 6871.7  |
| 40°   | 8086.6  | 8207.8  | 8319.4  | 8150.4  | 8137.6  | 8160.0  | 7924.0  | 7882.5  | 7429.7  | 7187.4  |
| 42.5° | 8698.9  | 8749.9  | 8772.2  | 8765.8  | 8839.2  | 8839.2  | 8389.5  | 8300.3  | 7978.2  | 7780.5  |
| 45°   | 9508.8  | 9550.2  | 9630.0  | 9687.4  | 9604.5  | 9645.9  | 9005.0  | 8969.9  | 8682.9  | 8644.6  |
| 47.5° | 10210.3 | 10309.2 | 10487.7 | 10656.7 | 10765.1 | 10624.8 | 9923.3  | 9674.6  | 9601.3  | 9830.9  |
| 50°   | 10822.5 | 10704.6 | 11122.3 | 11294.5 | 11769.6 | 12002.4 | 10937.3 | 10838.5 | 10720.5 | 11160.6 |
| 52.5° | 10883.1 | 11042.6 | 11632.5 | 11976.9 | 12955.8 | 13386.3 | 12180.9 | 12139.5 | 11996.0 | 12503.0 |
| 55°   | 11316.8 | 11297.7 | 11890.8 | 12636.9 | 13800.8 | 14524.7 | 13800.8 | 13775.3 | 13462.8 | 13944.3 |
| 57.5° | 11243.5 | 11438.0 | 11906.7 | 12949.4 | 14562.9 | 15745.9 | 15679.0 | 15503.6 | 15066.7 | 15459.0 |
| 60°   | 10994.7 | 11045.8 | 11616.5 | 12939.9 | 15006.2 | 16999.1 | 17707.0 | 17742.1 | 16849.2 | 17161.7 |
| 62.5° | 9585.3  | 9703.3  | 10427.1 | 11922.7 | 14690.5 | 17863.3 | 19687.2 | 19562.9 | 18848.6 | 18491.4 |
| 65°   | 7624.3  | 7506.3  | 8258.8  | 9875.5  | 12726.2 | 17251.0 | 20554.5 | 21016.9 | 19894.5 | 19240.8 |
| 67.5° | 4674.7  | 4646.0  | 5369.8  | 6795.2  | 9521.5  | 14680.9 | 19862.6 | 20222.9 | 19604.3 | 19081.4 |
| 70°   | 2407.5  | 2334.1  | 2786.9  | 3791.4  | 5985.2  | 10771.5 | 17286.1 | 17640.0 | 18230.0 | 17113.9 |
| 72.5° | 1122.4  | 1106.5  | 1348.8  | 1865.4  | 3048.4  | 6332.8  | 13386.3 | 13641.4 | 14885.0 | 14429.0 |
| 75°   | 660.1   | 669.6   | 806.7   | 975.8   | 1485.9  | 2984.7  | 8883.8  | 9378.1  | 10726.9 | 10398.4 |
| 77.5° | 494.3   | 494.3   | 574.0   | 679.2   | 867.3   | 1154.3  | 4384.5  | 5038.2  | 6272.2  | 5640.9  |
| 80°   | 363.5   | 369.9   | 440.0   | 510.2   | 602.7   | 596.3   | 1741.0  | 2040.8  | 2876.2  | 2458.5  |
| 82.5° | 283.8   | 293.4   | 341.2   | 379.5   | 424.1   | 360.3   | 714.3   | 768.5   | 1183.0  | 940.7   |
| 85°   | 197.7   | 204.1   | 267.9   | 258.3   | 258.3   | 200.9   | 296.6   | 312.5   | 468.7   | 446.4   |
| 87.5° | 47.8    | 54.2    | 130.7   | 143.5   | 108.4   | 60.6    | 92.5    | 105.2   | 169.0   | 194.5   |
| 90°   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |



REPORT NUMBER: P477524  
 CATALOG NUMBER: IFLD-L-SA8B-827-U-T3

**CANDELA DISTRIBUTION (continued):**

| 85°     |       | 90°     | 95°     | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   |
|---------|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|
| 3657.5  | 0°    | 3657.5  | 3657.5  | 3657.5 | 3657.5 | 3657.5 | 3657.5 | 3657.5 | 3657.5 | 3657.5 | 3657.5 |
| 3721.2  | 2.5°  | 3673.4  | 3686.2  | 3740.4 | 3711.7 | 3727.6 | 3660.7 | 3714.9 | 3670.2 | 3708.5 | 3689.4 |
| 3749.9  | 5°    | 3775.5  | 3746.8  | 3778.6 | 3756.3 | 3756.3 | 3781.8 | 3820.1 | 3791.4 | 3848.8 | 3823.3 |
| 3772.3  | 7.5°  | 3816.9  | 3820.1  | 3839.2 | 3842.4 | 3826.5 | 3906.2 | 3909.4 | 3899.8 | 3954.0 | 3941.3 |
| 3925.3  | 10°   | 3918.9  | 3922.1  | 3957.2 | 3976.3 | 3960.4 | 3989.1 | 3957.2 | 3931.7 | 3928.5 | 3915.8 |
| 4046.5  | 12.5° | 4081.6  | 4113.5  | 4107.1 | 4123.0 | 4126.2 | 4005.0 | 3931.7 | 3807.3 | 3791.4 | 3807.3 |
| 4225.1  | 15°   | 4231.4  | 4218.7  | 4225.1 | 4257.0 | 4123.0 | 3928.5 | 3797.8 | 3692.5 | 3698.9 | 3702.1 |
| 4457.8  | 17.5° | 4410.0  | 4419.6  | 4429.1 | 4282.5 | 4036.9 | 3807.3 | 3692.5 | 3692.5 | 3660.7 | 3673.4 |
| 4620.5  | 20°   | 4614.1  | 4575.8  | 4492.9 | 4285.7 | 3887.1 | 3667.0 | 3632.0 | 3632.0 | 3593.7 | 3568.2 |
| 4795.8  | 22.5° | 4773.5  | 4697.0  | 4572.6 | 4186.8 | 3753.1 | 3612.8 | 3526.7 | 3466.1 | 3421.5 | 3370.5 |
| 4990.4  | 25°   | 4875.6  | 4834.1  | 4591.8 | 4084.8 | 3654.3 | 3469.3 | 3341.8 | 3249.3 | 3191.9 | 3125.0 |
| 5143.4  | 27.5° | 5031.8  | 4952.1  | 4646.0 | 3966.8 | 3545.9 | 3325.8 | 3128.1 | 2984.7 | 2876.2 | 2806.1 |
| 5376.2  | 30°   | 5242.3  | 5127.5  | 4607.7 | 3797.8 | 3380.1 | 3077.1 | 2844.3 | 2659.4 | 2535.0 | 2477.6 |
| 5596.2  | 32.5° | 5414.5  | 5264.6  | 4575.8 | 3644.7 | 3195.1 | 2825.2 | 2515.9 | 2327.8 | 2257.6 | 2184.3 |
| 5966.1  | 35°   | 5742.9  | 5446.3  | 4553.5 | 3558.6 | 3029.3 | 2573.3 | 2248.1 | 2085.4 | 1996.1 | 1887.7 |
| 6186.1  | 37.5° | 5994.8  | 5762.0  | 4499.3 | 3380.1 | 2815.6 | 2327.8 | 2044.0 | 1897.3 | 1763.4 | 1648.6 |
| 6696.3  | 40°   | 6390.2  | 6202.1  | 4502.5 | 3128.1 | 2563.7 | 2117.3 | 1884.5 | 1731.5 | 1562.5 | 1463.6 |
| 7452.1  | 42.5° | 7133.2  | 6635.7  | 4521.6 | 2927.3 | 2279.9 | 1945.1 | 1741.0 | 1559.3 | 1390.3 | 1307.4 |
| 8313.0  | 45°   | 8045.2  | 7232.0  | 4403.6 | 2745.5 | 1989.8 | 1782.5 | 1568.9 | 1387.1 | 1278.7 | 1218.1 |
| 9483.3  | 47.5° | 9094.3  | 7815.6  | 4244.2 | 2404.3 | 1747.4 | 1610.3 | 1409.4 | 1304.2 | 1224.5 | 1189.4 |
| 10991.5 | 50°   | 10267.7 | 8651.0  | 4199.6 | 2091.8 | 1559.3 | 1463.6 | 1332.9 | 1253.2 | 1199.0 | 1157.5 |
| 12691.1 | 52.5° | 11779.2 | 9623.6  | 4110.3 | 1769.7 | 1396.7 | 1345.6 | 1304.2 | 1250.0 | 1202.2 | 1167.1 |
| 14275.9 | 55°   | 13223.7 | 10701.4 | 4014.6 | 1505.1 | 1281.9 | 1288.2 | 1310.6 | 1262.7 | 1221.3 | 1167.1 |
| 16052.1 | 57.5° | 14849.9 | 11801.5 | 3660.7 | 1310.6 | 1195.8 | 1259.5 | 1304.2 | 1250.0 | 1208.5 | 1167.1 |
| 17869.6 | 60°   | 15854.4 | 12420.1 | 2968.7 | 1141.6 | 1119.2 | 1205.3 | 1265.9 | 1208.5 | 1163.9 | 1179.8 |
| 18705.1 | 62.5° | 16262.5 | 12094.8 | 2238.5 | 1036.3 | 1065.0 | 1132.0 | 1205.3 | 1183.0 | 1151.1 | 1211.7 |
| 18695.5 | 65°   | 15567.4 | 11345.5 | 1600.7 | 947.1  | 991.7  | 1058.7 | 1151.1 | 1176.6 | 1186.2 | 1304.2 |
| 17171.3 | 67.5° | 13851.8 | 9878.7  | 1176.6 | 873.7  | 915.2  | 1014.0 | 1189.4 | 1230.8 | 1224.5 | 1371.2 |
| 14409.9 | 70°   | 11084.0 | 7726.3  | 918.4  | 813.1  | 886.5  | 1049.1 | 1243.6 | 1243.6 | 1199.0 | 1371.2 |
| 10991.5 | 72.5° | 8064.3  | 5446.3  | 790.8  | 743.0  | 813.1  | 963.0  | 1237.2 | 1234.0 | 1176.6 | 1253.2 |
| 6999.3  | 75°   | 4881.9  | 3169.6  | 698.3  | 672.8  | 698.3  | 825.9  | 1183.0 | 1163.9 | 1084.2 | 1077.8 |
| 3367.3  | 77.5° | 2433.0  | 1594.4  | 570.8  | 596.3  | 609.0  | 692.0  | 1039.5 | 1068.2 | 959.8  | 934.3  |
| 1329.7  | 80°   | 1026.8  | 695.1   | 475.1  | 513.4  | 513.4  | 583.5  | 864.1  | 883.3  | 797.2  | 749.4  |
| 526.1   | 82.5° | 468.7   | 398.6   | 405.0  | 446.4  | 417.7  | 452.8  | 685.6  | 707.9  | 647.3  | 567.6  |
| 223.2   | 85°   | 197.7   | 226.4   | 309.3  | 350.8  | 309.3  | 293.4  | 471.9  | 497.4  | 420.9  | 350.8  |
| 95.7    | 87.5° | 89.3    | 124.4   | 194.5  | 255.1  | 156.2  | 137.1  | 251.9  | 261.5  | 210.5  | 156.2  |
| 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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| <u>180°</u> |
|-------------|
| 3657.5      |
| 3654.3      |
| 3788.2      |
| 3922.1      |
| 3915.8      |
| 3813.7      |
| 3746.8      |
| 3676.6      |
| 3529.9      |
| 3341.8      |
| 3137.7      |
| 2838.0      |
| 2509.5      |
| 2181.1      |
| 1878.2      |
| 1651.8      |
| 1473.2      |
| 1313.8      |
| 1230.8      |
| 1183.0      |
| 1163.9      |
| 1163.9      |
| 1163.9      |
| 1163.9      |
| 1167.1      |
| 1195.8      |
| 1304.2      |
| 1380.7      |
| 1342.5      |
| 1208.5      |
| 1065.0      |
| 918.4       |
| 733.4       |
| 554.8       |
| 353.9       |
| 146.7       |
| 0.0         |

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