

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: P648631

Luminaire Tested: **GALN-SA9B-835-U-5NQ-GRSBK**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P648631
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-5)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA9B-835-U-5NQ-GRSBK
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 3500K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V NARROW OPTICS WITH BLACK GLARE REDUCTION SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27747.2 lumens
Efficiency: N/A
Efficacy: 76.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G1

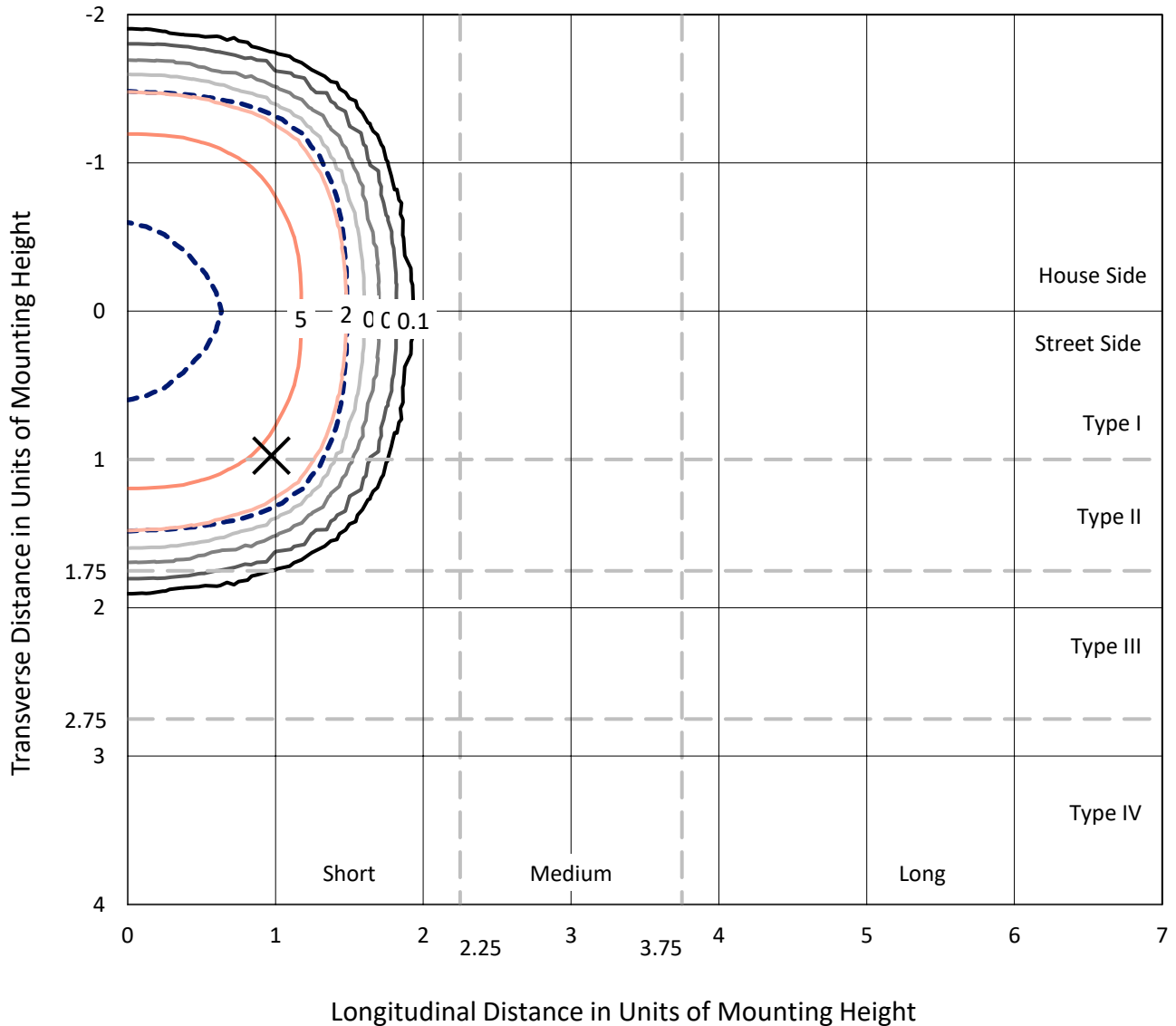
Input Watts (W): 364
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

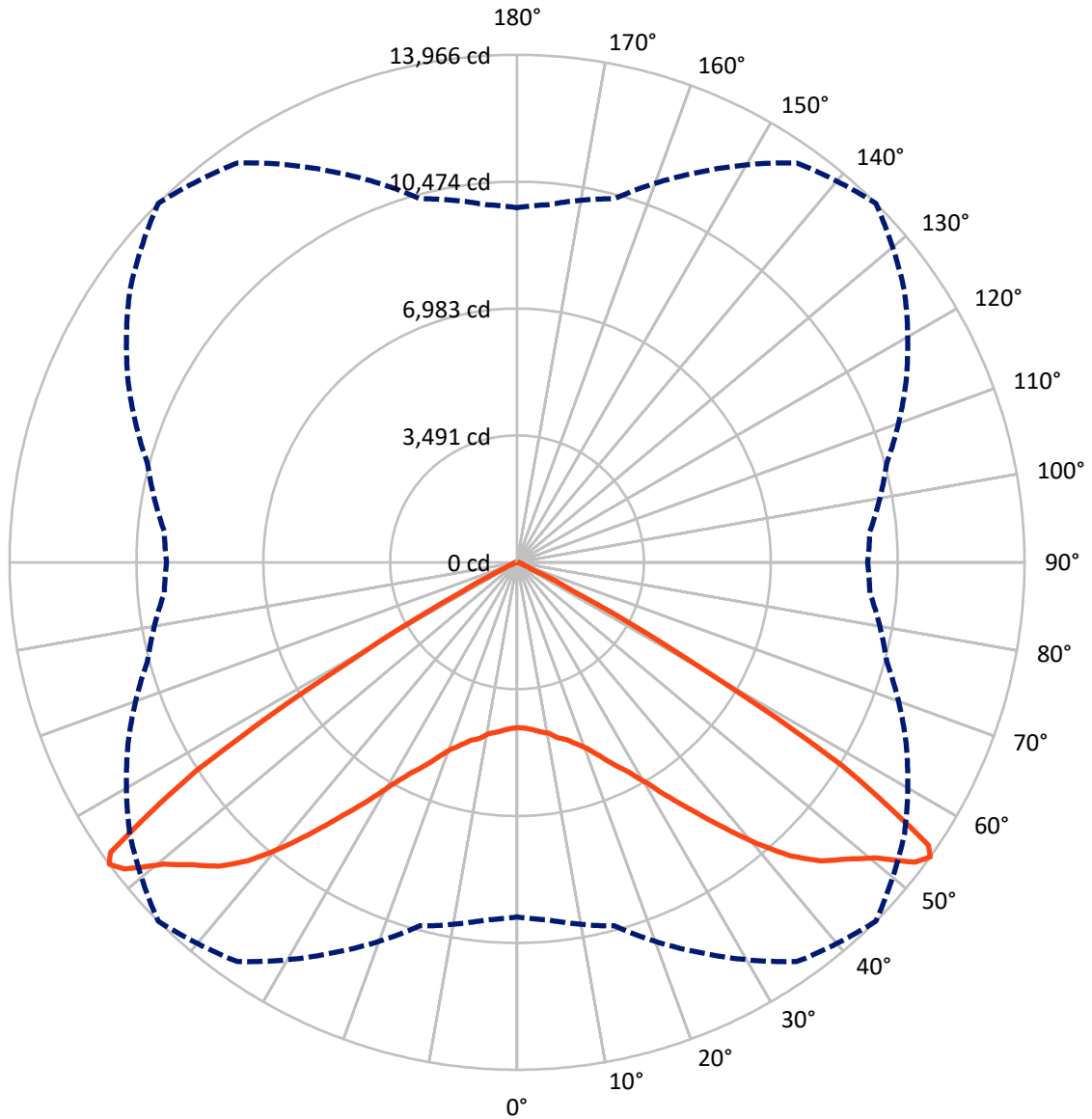
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.4 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 54-Deg Vertical

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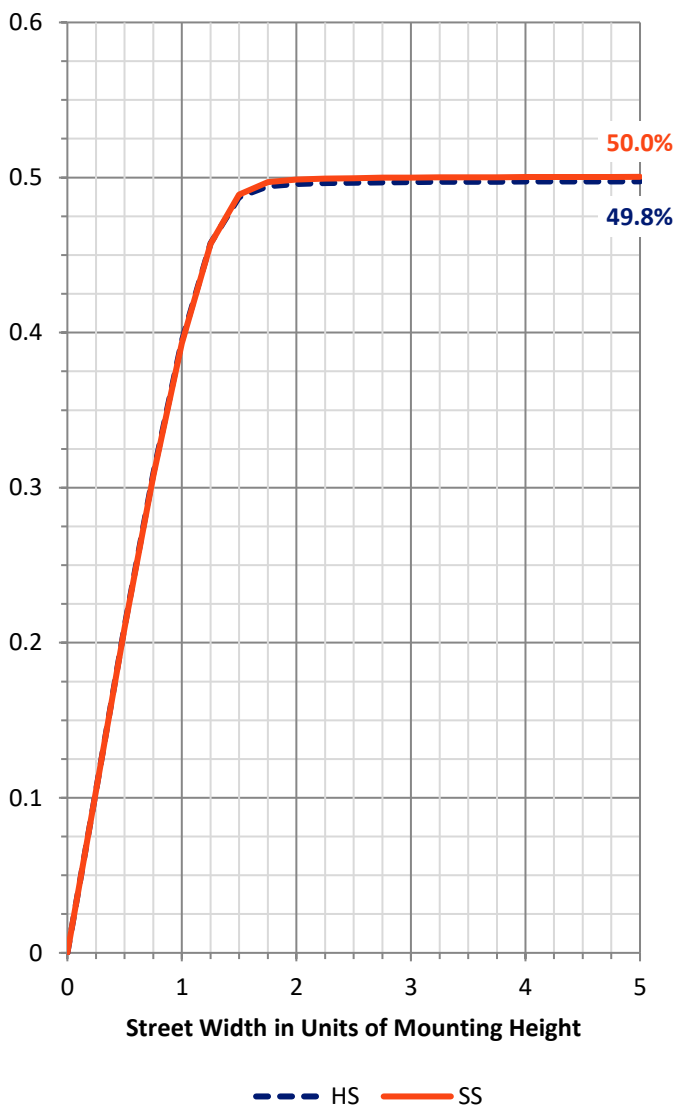
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 13873.6 | 0.0 | 13873.6 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 13873.6 | 0.0 | 13873.6 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 27747.2 | 0.0 | 27747.2 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 445.3 | 1.6 |
| 10°-20° | 1442.1 | 5.2 |
| 20°-30° | 2826.4 | 10.2 |
| 30°-40° | 5082.4 | 18.3 |
| 40°-50° | 8700.1 | 31.4 |
| 50°-60° | 8418.2 | 30.3 |
| 60°-70° | 720.6 | 2.6 |
| 70°-80° | 85.4 | 0.3 |
| 80°-90° | 26.8 | 0.1 |
| 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° | 27747.2 | 100.0 |
| 0°-180° | 27747.2 | 100.0 |

Coefficient of Utilization



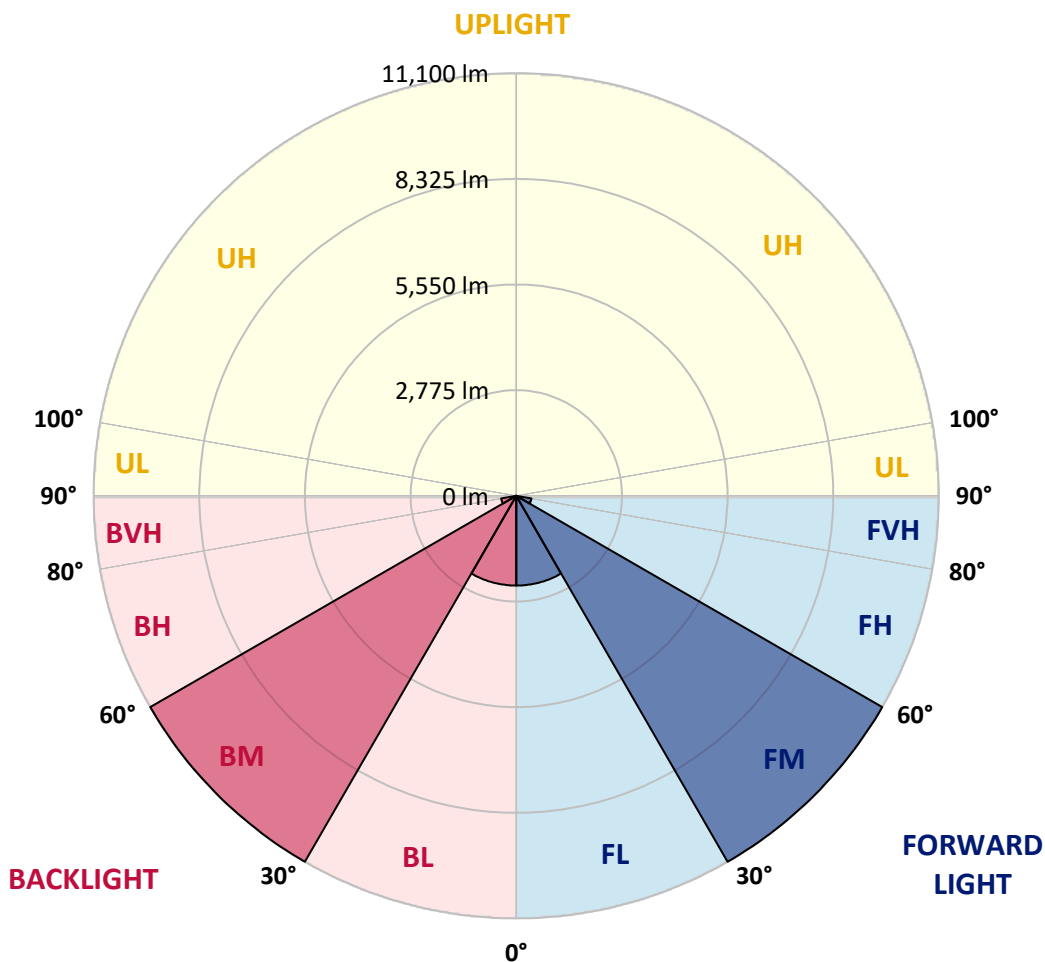
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|--------|
| | | | B | U | G |
| FL (0°-30°) | 2356.9 | 8.5 | | | |
| FM (30°-60°) | 11100.3 | 40.0 | | | |
| FH (60°-80°) | 403.0 | 1.5 | | | G0/660 |
| FVH (80°-90°) | 13.4 | 0.0 | | | G1/100 |
| BL (0°-30°) | 2356.9 | 8.5 | B3/2500 | | |
| BM (30°-60°) | 11100.3 | 40.0 | B5 | | |
| BH (60°-80°) | 403.0 | 1.5 | B1/500 | | G0/660 |
| BVH (80°-90°) | 13.4 | 0.0 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B5-U0-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 4549.7 | 4549.7 | 4549.7 | 4549.7 | 4549.7 | 4549.7 | 4549.7 | 4549.7 | 4549.7 | 4549.7 | 4549.7 |
| 2.5° | 4571.6 | 4598.0 | 4580.5 | 4593.6 | 4593.6 | 4571.6 | 4584.9 | 4532.1 | 4567.2 | 4540.9 | 4545.2 |
| 5° | 4642.0 | 4637.6 | 4637.6 | 4642.0 | 4624.4 | 4633.2 | 4615.6 | 4598.0 | 4584.9 | 4567.2 | 4620.0 |
| 7.5° | 4729.9 | 4729.9 | 4699.1 | 4707.9 | 4699.1 | 4712.3 | 4677.2 | 4642.0 | 4628.8 | 4615.6 | 4606.8 |
| 10° | 4813.4 | 4804.6 | 4791.4 | 4831.0 | 4800.3 | 4782.6 | 4765.1 | 4743.1 | 4694.7 | 4677.2 | 4659.6 |
| 12.5° | 4936.5 | 4932.1 | 4914.5 | 4954.1 | 4936.5 | 4954.1 | 4888.1 | 4831.0 | 4822.2 | 4765.1 | 4795.9 |
| 15° | 5081.6 | 5121.1 | 5090.4 | 5090.4 | 5081.6 | 5059.6 | 5033.2 | 5006.8 | 4927.7 | 4905.7 | 4910.1 |
| 17.5° | 5270.6 | 5257.4 | 5261.8 | 5261.8 | 5305.8 | 5248.6 | 5195.8 | 5129.9 | 5090.4 | 5077.2 | 5033.2 |
| 20° | 5450.8 | 5468.4 | 5464.0 | 5494.8 | 5521.2 | 5459.6 | 5402.5 | 5393.7 | 5283.8 | 5301.4 | 5239.8 |
| 22.5° | 5767.3 | 5754.1 | 5776.1 | 5798.1 | 5780.5 | 5771.7 | 5719.0 | 5653.0 | 5556.3 | 5512.3 | 5503.6 |
| 25° | 6101.4 | 6079.4 | 6039.8 | 6092.6 | 6119.0 | 6158.5 | 6057.4 | 6022.3 | 5872.8 | 5806.9 | 5811.3 |
| 27.5° | 6387.1 | 6417.9 | 6461.9 | 6483.9 | 6549.8 | 6536.6 | 6466.2 | 6351.9 | 6237.7 | 6162.9 | 6114.6 |
| 30° | 6778.4 | 6796.0 | 6870.7 | 6901.4 | 7015.8 | 7046.5 | 6936.6 | 6804.7 | 6602.5 | 6505.8 | 6448.6 |
| 32.5° | 7138.8 | 7261.9 | 7257.5 | 7411.3 | 7596.0 | 7723.4 | 7525.6 | 7323.4 | 7121.2 | 7006.9 | 6905.8 |
| 35° | 7723.4 | 7701.5 | 7829.0 | 7991.6 | 8290.5 | 8435.6 | 8220.2 | 7987.2 | 7679.5 | 7494.9 | 7415.7 |
| 37.5° | 8268.6 | 8277.3 | 8448.7 | 8708.1 | 9051.0 | 9275.2 | 9086.2 | 8703.7 | 8387.2 | 8149.9 | 8039.9 |
| 40° | 9059.8 | 9077.4 | 9253.2 | 9547.7 | 9934.5 | 10176.3 | 9956.5 | 9569.7 | 9147.7 | 8963.1 | 8963.1 |
| 42.5° | 9987.3 | 10062.0 | 10176.3 | 10431.3 | 10778.5 | 11046.7 | 10848.9 | 10545.6 | 10119.2 | 9881.8 | 9916.9 |
| 45° | 10941.2 | 10976.3 | 11051.1 | 11429.1 | 11591.8 | 11723.6 | 11539.0 | 11398.4 | 11112.6 | 10822.5 | 10774.2 |
| 47.5° | 11833.6 | 11846.7 | 12066.5 | 12185.2 | 12312.7 | 12202.8 | 12321.4 | 12136.9 | 11815.9 | 11534.6 | 11477.4 |
| 50° | 12229.1 | 12207.2 | 12519.3 | 12879.7 | 12976.4 | 12783.0 | 12681.9 | 12558.9 | 12070.9 | 11732.5 | 11583.0 |
| 52.5° | 11077.5 | 11205.0 | 11785.2 | 12787.4 | 13543.6 | 13706.2 | 13117.1 | 12550.1 | 11640.2 | 10980.8 | 10879.6 |
| 54° | 9758.7 | 9877.4 | 10356.6 | 11842.3 | 13416.0 | 13965.5 | 13016.0 | 11811.6 | 10528.0 | 9745.5 | 9644.4 |
| 55° | 8453.2 | 8321.3 | 9191.6 | 10708.2 | 12818.2 | 13737.0 | 12616.0 | 10857.7 | 9389.5 | 8673.0 | 8532.3 |
| 57.5° | 4576.0 | 4598.0 | 5332.2 | 6765.2 | 9007.0 | 10532.4 | 9301.6 | 7345.4 | 5547.6 | 4743.1 | 4672.8 |
| 60° | 1450.6 | 1485.8 | 1806.7 | 2734.2 | 4303.5 | 5138.7 | 4404.6 | 2949.6 | 2039.6 | 1635.2 | 1569.3 |
| 62.5° | 452.7 | 470.3 | 514.3 | 764.8 | 1178.1 | 1683.6 | 1318.7 | 791.2 | 589.1 | 540.7 | 549.5 |
| 65° | 276.9 | 276.9 | 281.3 | 298.9 | 351.6 | 408.8 | 395.6 | 347.3 | 334.1 | 325.3 | 320.9 |
| 67.5° | 180.2 | 175.9 | 184.6 | 197.8 | 206.6 | 211.0 | 224.2 | 237.4 | 232.9 | 224.2 | 224.2 |
| 70° | 109.9 | 105.5 | 114.3 | 131.9 | 136.2 | 145.1 | 158.2 | 175.9 | 171.4 | 162.6 | 167.0 |
| 72.5° | 61.5 | 61.5 | 65.9 | 79.2 | 92.3 | 101.1 | 114.3 | 127.5 | 131.9 | 127.5 | 127.5 |
| 75° | 22.0 | 26.4 | 35.2 | 48.4 | 57.2 | 70.3 | 83.5 | 96.7 | 109.9 | 101.1 | 96.7 |
| 77.5° | 8.8 | 8.8 | 17.6 | 30.8 | 43.9 | 57.2 | 79.2 | 92.3 | 101.1 | 92.3 | 83.5 |
| 80° | 4.4 | 4.4 | 13.2 | 26.4 | 39.5 | 52.8 | 65.9 | 79.2 | 83.5 | 74.7 | 65.9 |
| 82.5° | 4.4 | 4.4 | 13.2 | 26.4 | 39.5 | 48.4 | 70.3 | 79.2 | 87.9 | 79.2 | 65.9 |
| 85° | 0.0 | 4.4 | 13.2 | 26.4 | 35.2 | 39.5 | 39.5 | 26.4 | 22.0 | 13.2 | 13.2 |
| 87.5° | 0.0 | 0.0 | 4.4 | 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 | 0.0 |

(END OF REPORT)