

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: P651613

Luminaire Tested: **GALN-SA9D-840-U-RW**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P651613
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA9D-840-U-RW
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 60851.4 lumens
Efficiency: N/A
Efficacy: 110.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B5 - U0 - G5

Input Watts (W): 552
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

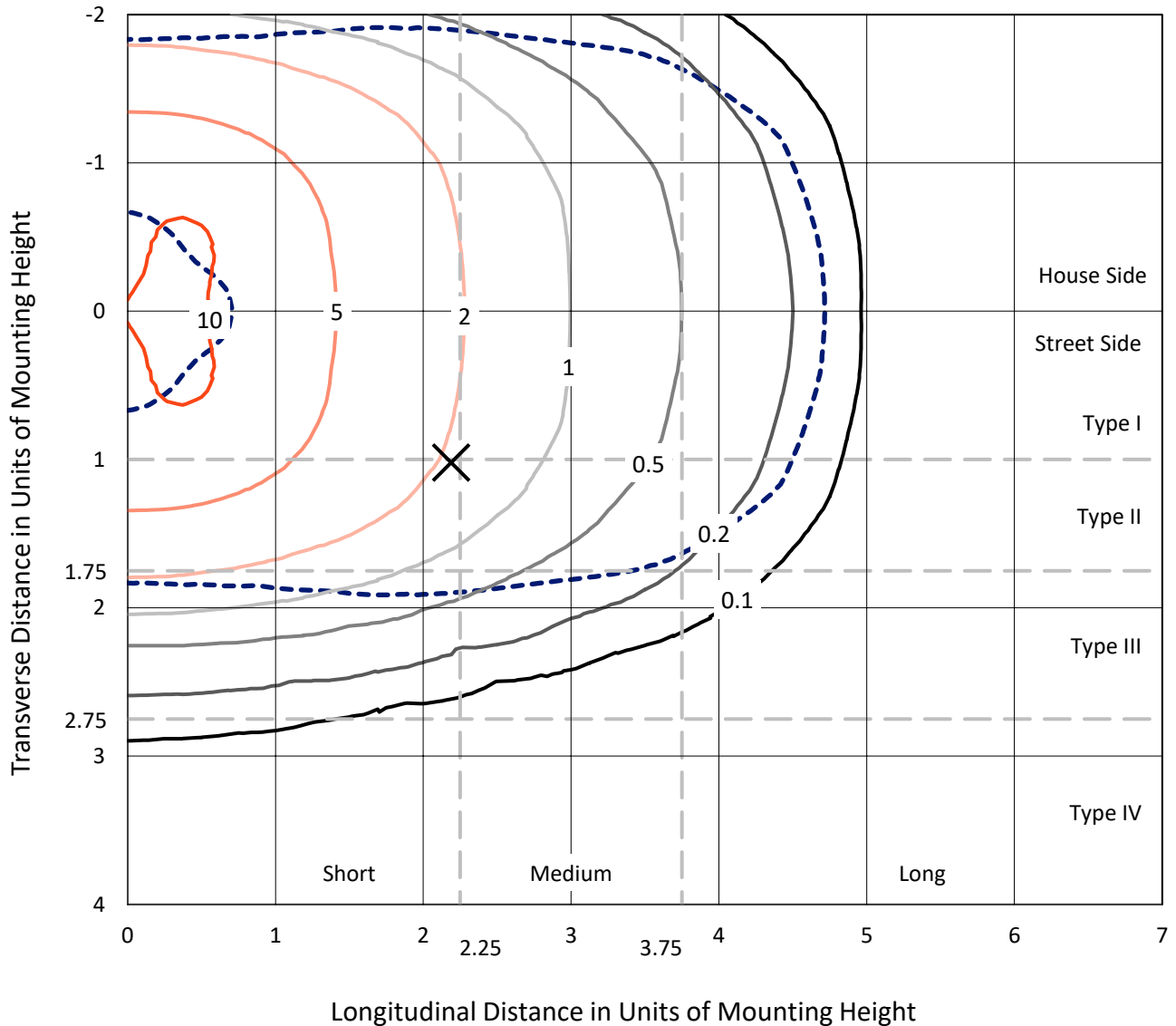




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Iso-Footcandle Lines of Horizontal Illumination

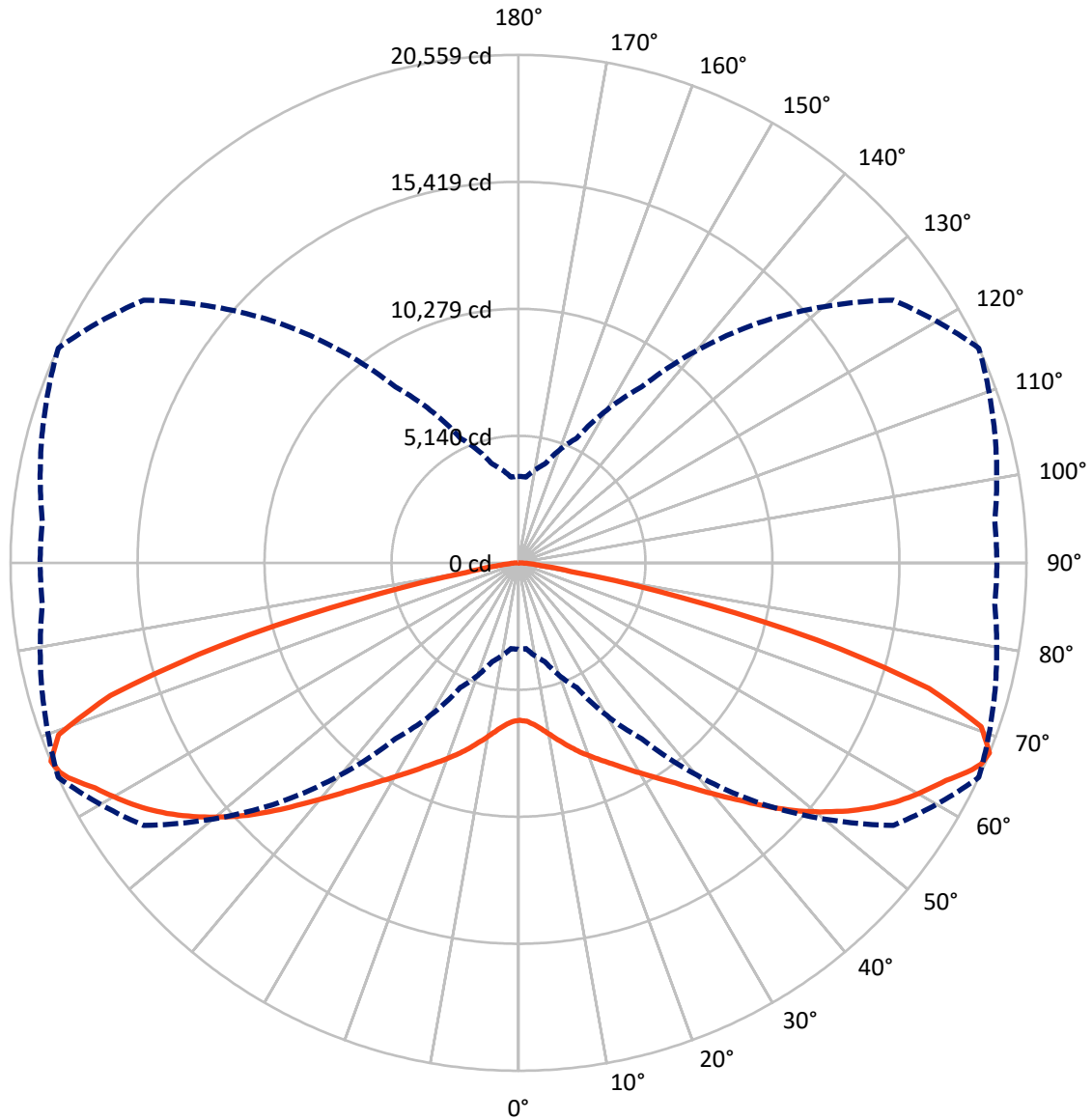
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.6 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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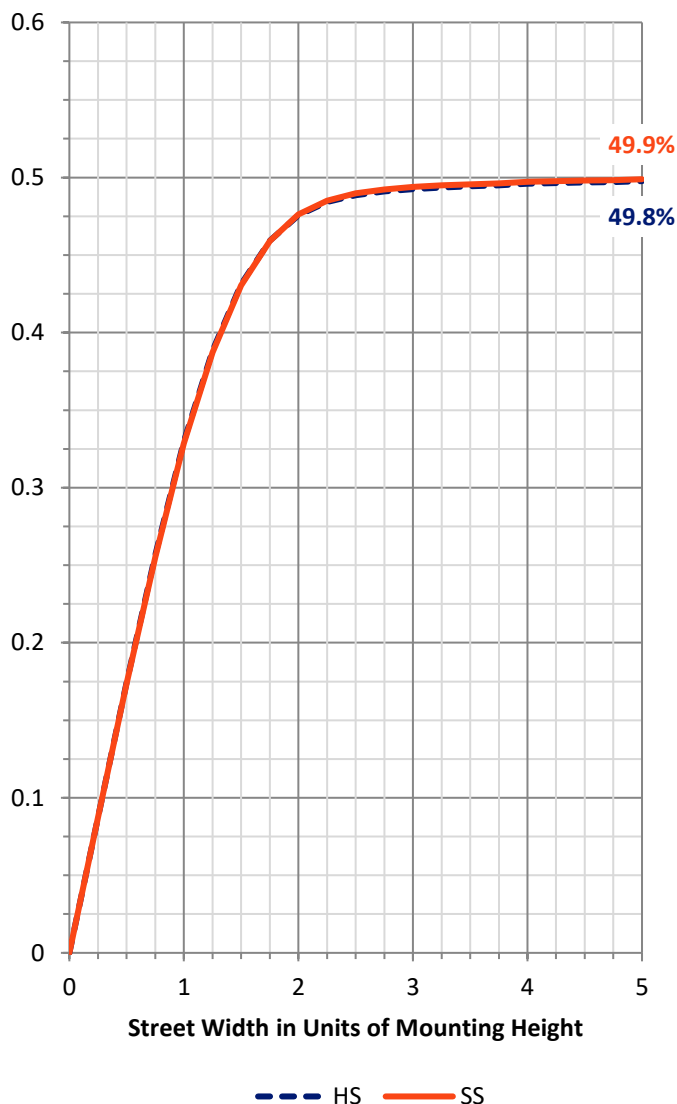
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 30425.7 | 0.0 | 30425.7 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 30425.7 | 0.0 | 30425.7 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 60851.4 | 0.0 | 60851.4 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 628.6 | 1.0 |
| 10°-20° | 2103.9 | 3.5 |
| 20°-30° | 4115.4 | 6.8 |
| 30°-40° | 6999.8 | 11.5 |
| 40°-50° | 11078.5 | 18.2 |
| 50°-60° | 14689.9 | 24.1 |
| 60°-70° | 13857.1 | 22.8 |
| 70°-80° | 6850.3 | 11.3 |
| 80°-90° | 527.9 | 0.9 |
| 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° | 60851.4 | 100.0 |
| 0°-180° | 60851.4 | 100.0 |

Coefficient of Utilization

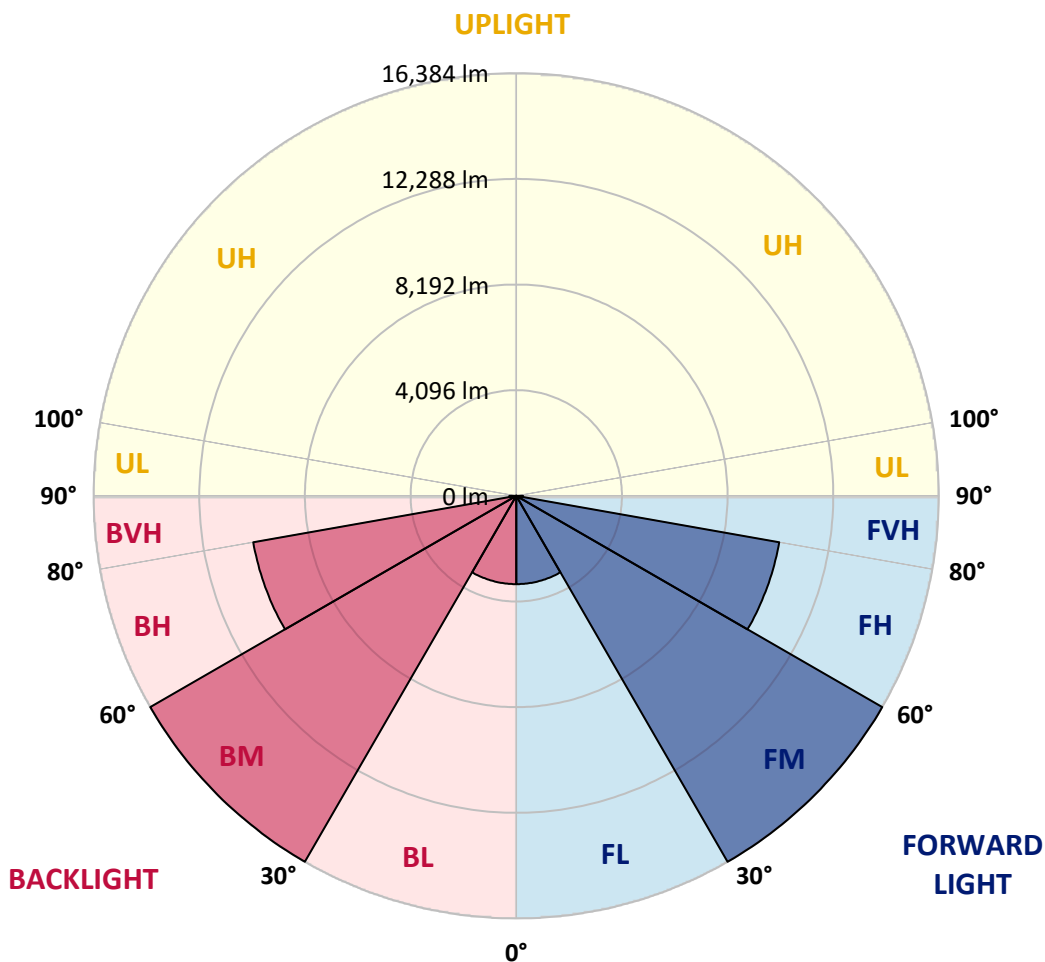


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|----------|
| | | | | B | U | G |
| FL | (0°-30°) | 3424.0 | 5.6 | | | |
| FM | (30°-60°) | 16384.1 | 26.9 | | | |
| FH | (60°-80°) | 10353.7 | 17.0 | | | G4/12000 |
| FVH | (80°-90°) | 264.0 | 0.4 | | | G3/500 |
| BL | (0°-30°) | 3424.0 | 5.6 | B4/5000 | | |
| BM | (30°-60°) | 16384.1 | 26.9 | B5 | | |
| BH | (60°-80°) | 10353.7 | 17.0 | B5 | | G5 |
| BVH | (80°-90°) | 264.0 | 0.4 | | | G3/500 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B5-U0-G5
 Type III Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 6373.7 | 6373.7 | 6373.7 | 6373.7 | 6373.7 | 6373.7 | 6373.7 | 6373.7 | 6373.7 | 6373.7 | 6373.7 |
| 2.5° | 6341.1 | 6347.5 | 6354.1 | 6363.8 | 6376.9 | 6396.5 | 6409.5 | 6419.3 | 6445.3 | 6448.6 | 6445.3 |
| 5° | 6318.3 | 6324.7 | 6341.1 | 6370.4 | 6412.8 | 6471.4 | 6517.1 | 6572.5 | 6614.9 | 6644.2 | 6637.8 |
| 7.5° | 6315.0 | 6328.0 | 6354.1 | 6416.0 | 6497.6 | 6598.6 | 6702.9 | 6797.5 | 6879.0 | 6944.1 | 6934.4 |
| 10° | 6367.1 | 6383.4 | 6425.8 | 6517.1 | 6644.2 | 6791.0 | 6937.7 | 7077.9 | 7195.2 | 7279.9 | 7309.3 |
| 12.5° | 6455.2 | 6468.2 | 6546.4 | 6683.3 | 6865.9 | 7048.5 | 7214.8 | 7387.6 | 7550.6 | 7694.1 | 7694.1 |
| 15° | 6608.4 | 6631.2 | 6729.0 | 6927.9 | 7152.8 | 7364.7 | 7534.3 | 7716.8 | 7892.9 | 8055.9 | 8104.8 |
| 17.5° | 6820.3 | 6852.9 | 6999.6 | 7253.9 | 7540.8 | 7736.4 | 7896.1 | 8046.1 | 8199.3 | 8355.8 | 8378.6 |
| 20° | 7110.5 | 7143.0 | 7338.7 | 7645.1 | 7984.2 | 8218.9 | 8326.5 | 8362.3 | 8437.3 | 8587.3 | 8606.9 |
| 22.5° | 7504.9 | 7537.5 | 7756.0 | 8101.5 | 8479.7 | 8734.0 | 8779.6 | 8694.9 | 8675.3 | 8792.7 | 8805.8 |
| 25° | 7951.6 | 7980.9 | 8232.0 | 8603.6 | 8994.8 | 9271.9 | 9258.9 | 9050.3 | 8932.8 | 9004.6 | 9024.2 |
| 27.5° | 8453.6 | 8496.0 | 8750.4 | 9135.0 | 9558.8 | 9803.4 | 9764.3 | 9461.0 | 9210.0 | 9196.9 | 9203.5 |
| 30° | 9095.9 | 9141.5 | 9382.8 | 9751.2 | 10168.5 | 10393.4 | 10311.9 | 9904.5 | 9516.4 | 9386.1 | 9386.1 |
| 32.5° | 9774.0 | 9888.1 | 10132.6 | 10517.3 | 10843.3 | 11006.3 | 10882.5 | 10393.4 | 9878.3 | 9695.8 | 9686.0 |
| 35° | 10657.5 | 10719.5 | 10960.8 | 11335.7 | 11580.1 | 11707.3 | 11469.3 | 10944.4 | 10351.0 | 10135.9 | 10106.5 |
| 37.5° | 11521.4 | 11573.6 | 11854.0 | 12212.7 | 12509.3 | 12502.8 | 12180.0 | 11599.7 | 10937.9 | 10696.7 | 10677.1 |
| 40° | 12405.0 | 12460.4 | 12779.9 | 13109.2 | 13405.9 | 13379.8 | 12988.6 | 12339.7 | 11635.6 | 11364.9 | 11417.2 |
| 42.5° | 13171.2 | 13233.1 | 13594.9 | 14064.4 | 14331.7 | 14325.3 | 13872.0 | 13141.8 | 12408.2 | 12167.0 | 12212.7 |
| 45° | 13868.8 | 13924.2 | 14344.8 | 14882.7 | 15273.9 | 15322.9 | 14827.3 | 14054.6 | 13301.5 | 12991.8 | 13004.9 |
| 47.5° | 14361.1 | 14465.4 | 14905.5 | 15521.7 | 16053.1 | 16225.9 | 15740.2 | 14983.8 | 14116.6 | 13793.8 | 13813.3 |
| 50° | 14736.0 | 14801.2 | 15280.5 | 15981.4 | 16653.0 | 17011.6 | 16620.3 | 15844.4 | 14931.6 | 14589.3 | 14634.9 |
| 52.5° | 14781.7 | 14859.9 | 15381.6 | 16190.0 | 17050.7 | 17595.1 | 17402.8 | 16685.6 | 15762.9 | 15410.8 | 15508.6 |
| 55° | 14409.9 | 14455.6 | 15078.3 | 16059.7 | 17207.2 | 18028.8 | 18077.7 | 17468.0 | 16555.2 | 16287.8 | 16353.1 |
| 57.5° | 13350.5 | 13467.8 | 14256.7 | 15450.0 | 16992.1 | 18260.2 | 18583.0 | 18178.7 | 17357.1 | 17093.1 | 17197.4 |
| 60° | 11612.8 | 11730.1 | 12522.3 | 14035.0 | 16180.3 | 18152.6 | 19000.3 | 18808.0 | 18084.2 | 17872.3 | 17927.7 |
| 62.5° | 9099.1 | 9089.4 | 10070.7 | 11925.7 | 14566.5 | 17624.5 | 19310.0 | 19414.3 | 18801.5 | 18534.1 | 18618.9 |
| 65° | 5897.7 | 5927.0 | 6875.7 | 8874.2 | 12131.1 | 16281.3 | 19378.5 | 20187.0 | 19505.6 | 19101.4 | 19163.4 |
| 66° | 4743.6 | 4831.5 | 5636.9 | 7478.8 | 10889.0 | 15401.1 | 19173.1 | 20415.2 | 19720.8 | 19231.8 | 19261.1 |
| 67.5° | 3501.4 | 3485.1 | 4147.0 | 5568.3 | 8694.9 | 13728.6 | 18530.8 | 20558.7 | 19965.3 | 19349.1 | 19362.2 |
| 70° | 1998.5 | 1995.2 | 2230.0 | 3058.0 | 5111.9 | 9666.5 | 15619.5 | 19870.8 | 20460.9 | 19773.0 | 19737.1 |
| 72.5° | 1460.6 | 1450.8 | 1483.4 | 1688.8 | 2494.1 | 4880.5 | 10774.9 | 17367.0 | 20206.5 | 19704.5 | 19603.5 |
| 75° | 1225.8 | 1219.3 | 1212.8 | 1238.9 | 1398.6 | 2210.4 | 5718.4 | 12493.0 | 17533.3 | 18495.0 | 18390.7 |
| 77.5° | 1000.9 | 1000.9 | 1004.2 | 997.6 | 1004.2 | 1163.9 | 2370.2 | 6696.4 | 10677.1 | 11919.2 | 12209.4 |
| 80° | 782.5 | 779.2 | 834.6 | 811.8 | 759.6 | 746.6 | 1049.7 | 2155.0 | 3543.8 | 3524.2 | 2908.1 |
| 82.5° | 577.0 | 537.9 | 635.7 | 619.4 | 560.8 | 476.0 | 612.9 | 919.4 | 1183.5 | 769.4 | 570.5 |
| 85° | 365.2 | 361.9 | 449.9 | 410.7 | 342.3 | 225.0 | 293.4 | 394.5 | 489.0 | 296.7 | 241.3 |
| 87.5° | 65.2 | 62.0 | 143.5 | 104.3 | 104.3 | 65.2 | 81.5 | 107.6 | 159.8 | 110.8 | 81.5 |
| 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)