

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: P451123

Luminaire Tested: **GALN-SA2A-727-U-RW**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P451123
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-SA2A-727-U-RW
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7935 lumens
Efficiency: N/A
Efficacy: 126.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 63
Input Voltage (V): NR
Input Current (A_{in}): 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

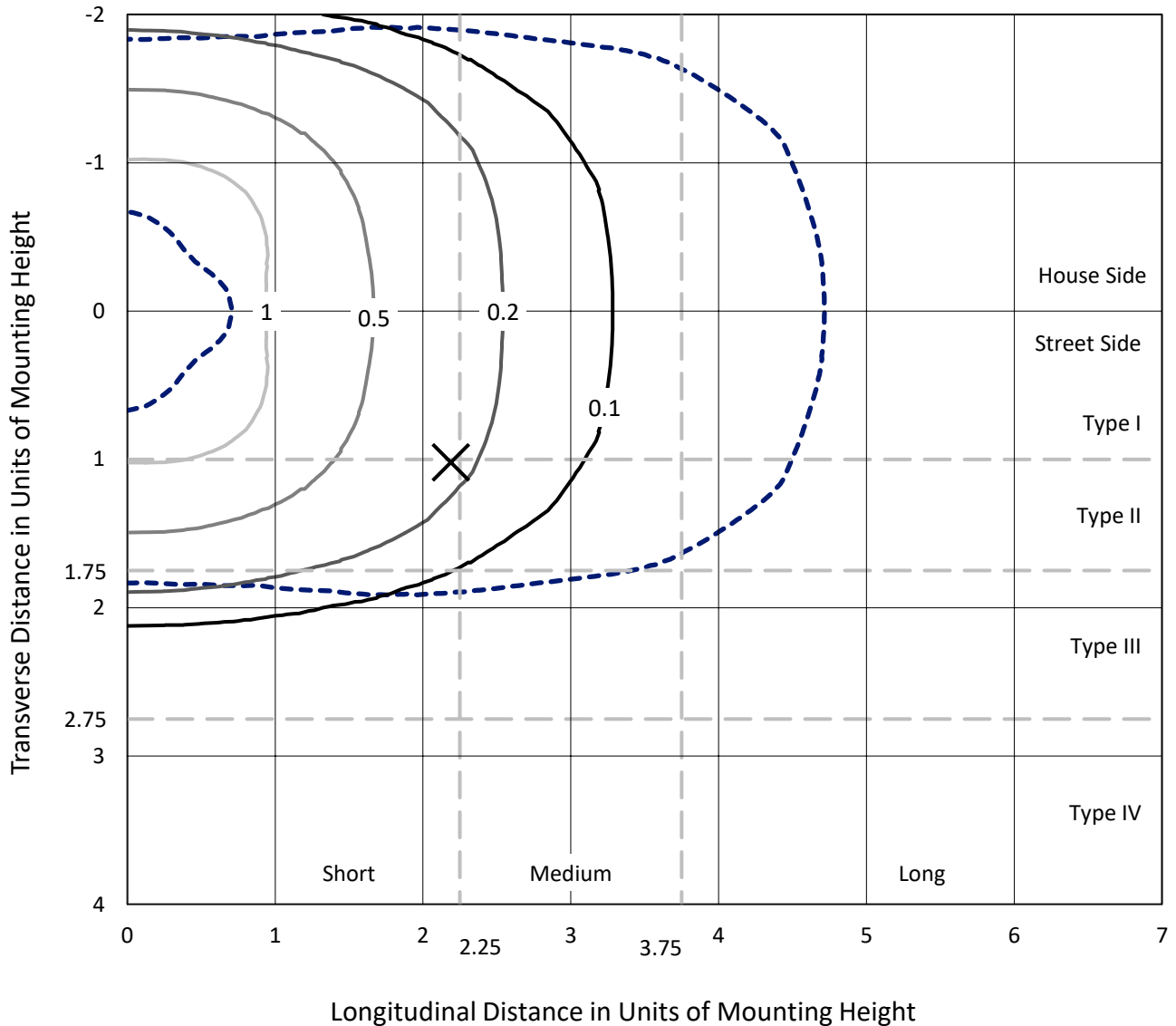




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Iso-Footcandle Lines of Horizontal Illumination

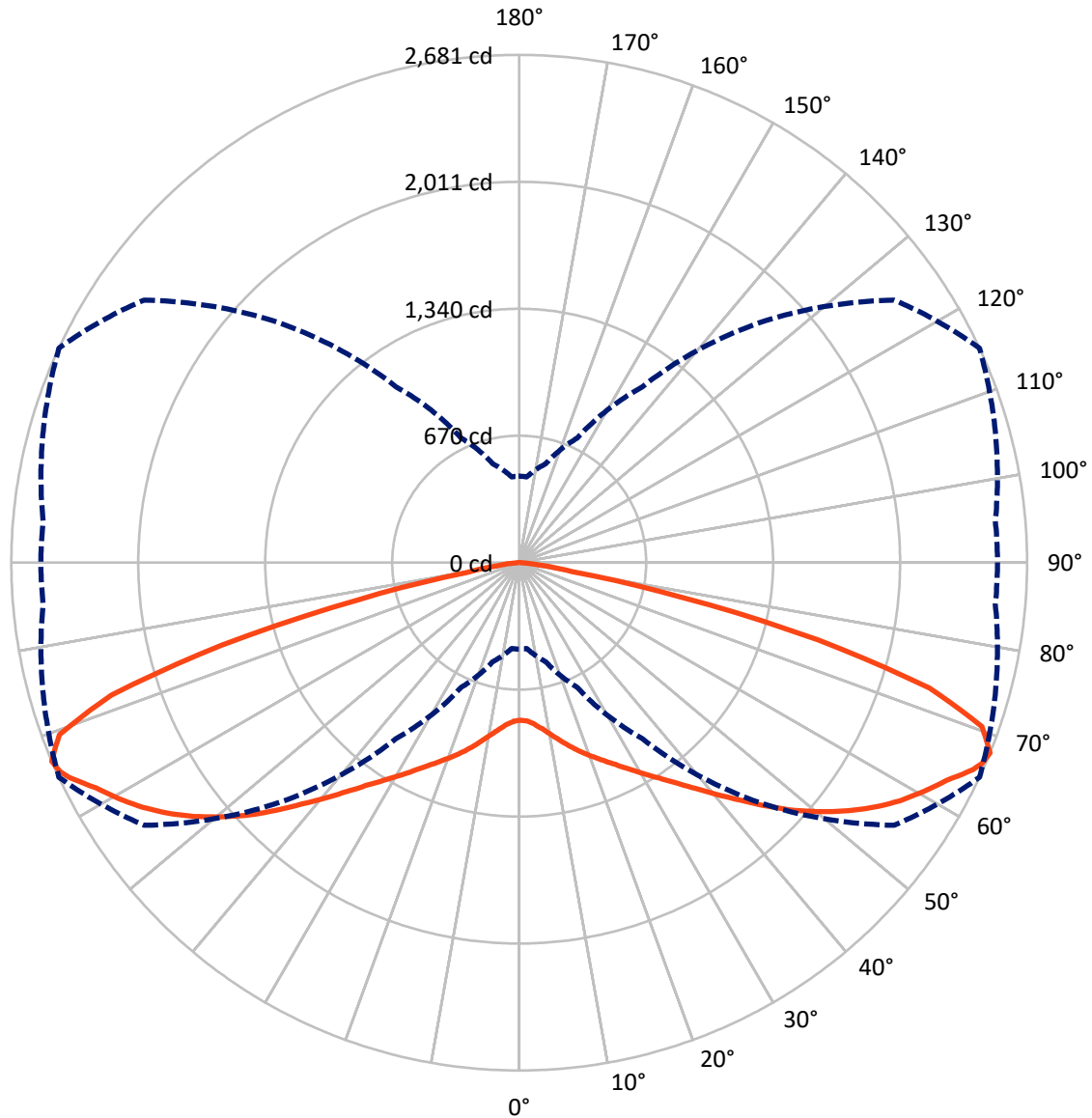
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.5 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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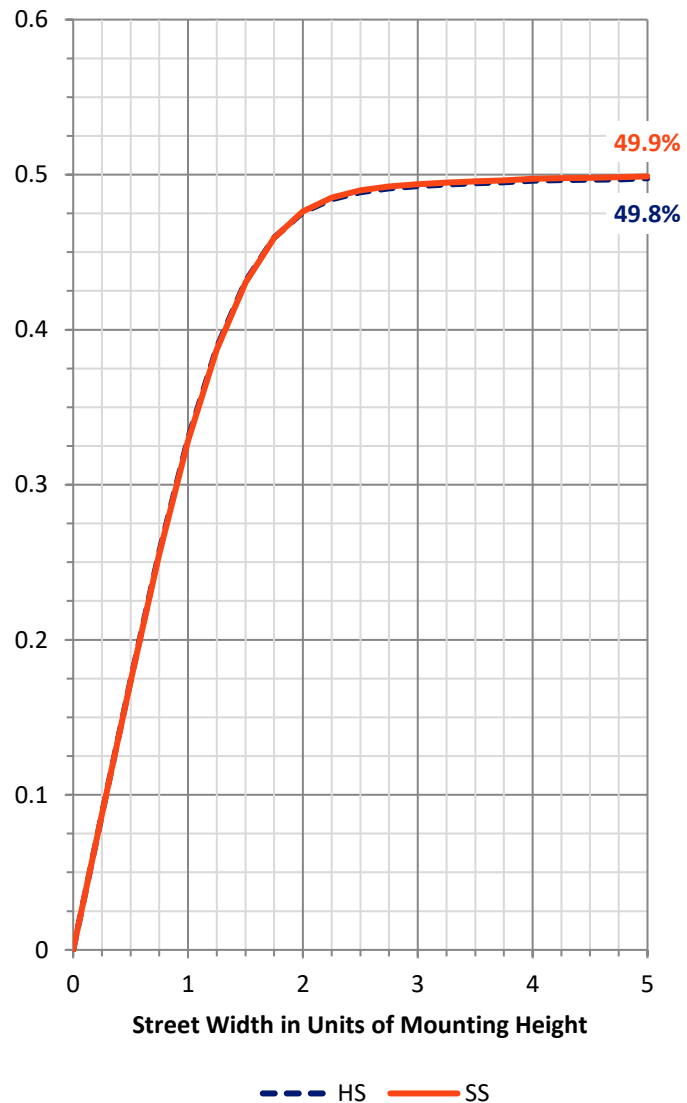
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 3967.5 | 0.0 | 3967.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 3967.5 | 0.0 | 3967.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 7935.0 | 0.0 | 7935.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 82.0 | 1.0 |
| 10°-20° | 274.3 | 3.5 |
| 20°-30° | 536.6 | 6.8 |
| 30°-40° | 912.8 | 11.5 |
| 40°-50° | 1444.6 | 18.2 |
| 50°-60° | 1915.6 | 24.1 |
| 60°-70° | 1807.0 | 22.8 |
| 70°-80° | 893.3 | 11.3 |
| 80°-90° | 68.8 | 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° | 7935.0 | 100.0 |
| 0°-180° | 7935.0 | 100.0 |



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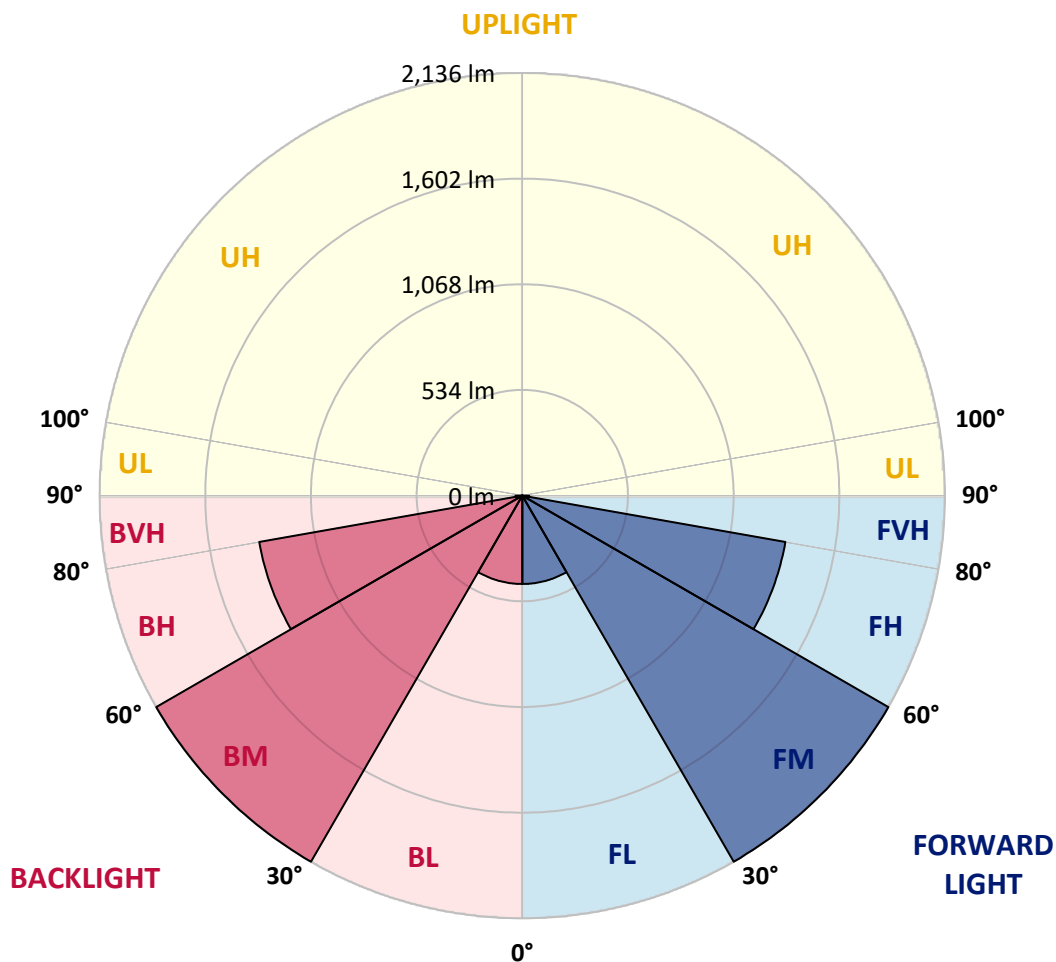
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 446.5 | 5.6 | | | |
| FM | (30°-60°) | 2136.5 | 26.9 | | | |
| FH | (60°-80°) | 1350.1 | 17.0 | | | G1/1800 |
| FVH | (80°-90°) | 34.4 | 0.4 | | | G1/100 |
| BL | (0°-30°) | 446.5 | 5.6 | B1/500 | | |
| BM | (30°-60°) | 2136.5 | 26.9 | B2/2500 | | |
| BH | (60°-80°) | 1350.1 | 17.0 | B3/2500 | | G3/2500 |
| BVH | (80°-90°) | 34.4 | 0.4 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G3

Type III Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 831.1 | 831.1 | 831.1 | 831.1 | 831.1 | 831.1 | 831.1 | 831.1 | 831.1 | 831.1 | 831.1 |
| 2.5° | 826.9 | 827.7 | 828.6 | 829.8 | 831.5 | 834.1 | 835.8 | 837.1 | 840.5 | 840.9 | 840.5 |
| 5° | 823.9 | 824.7 | 826.9 | 830.7 | 836.2 | 843.9 | 849.8 | 857.1 | 862.6 | 866.4 | 865.6 |
| 7.5° | 823.5 | 825.2 | 828.6 | 836.6 | 847.3 | 860.5 | 874.1 | 886.4 | 897.0 | 905.5 | 904.2 |
| 10° | 830.3 | 832.4 | 837.9 | 849.8 | 866.4 | 885.5 | 904.7 | 922.9 | 938.3 | 949.3 | 953.1 |
| 12.5° | 841.7 | 843.4 | 853.7 | 871.5 | 895.3 | 919.1 | 940.8 | 963.3 | 984.6 | 1003.3 | 1003.3 |
| 15° | 861.7 | 864.7 | 877.5 | 903.4 | 932.7 | 960.4 | 982.5 | 1006.3 | 1029.2 | 1050.5 | 1056.9 |
| 17.5° | 889.4 | 893.6 | 912.7 | 945.9 | 983.3 | 1008.8 | 1029.7 | 1049.2 | 1069.2 | 1089.6 | 1092.6 |
| 20° | 927.2 | 931.5 | 957.0 | 996.9 | 1041.1 | 1071.7 | 1085.8 | 1090.4 | 1100.2 | 1119.8 | 1122.3 |
| 22.5° | 978.6 | 982.9 | 1011.4 | 1056.4 | 1105.8 | 1138.9 | 1144.9 | 1133.8 | 1131.3 | 1146.6 | 1148.3 |
| 25° | 1036.9 | 1040.7 | 1073.4 | 1121.9 | 1172.9 | 1209.1 | 1207.4 | 1180.1 | 1164.8 | 1174.2 | 1176.7 |
| 27.5° | 1102.4 | 1107.9 | 1141.0 | 1191.2 | 1246.5 | 1278.4 | 1273.3 | 1233.7 | 1201.0 | 1199.3 | 1200.1 |
| 30° | 1186.1 | 1192.1 | 1223.5 | 1271.6 | 1326.0 | 1355.3 | 1344.7 | 1291.5 | 1240.9 | 1223.9 | 1223.9 |
| 32.5° | 1274.5 | 1289.4 | 1321.3 | 1371.5 | 1414.0 | 1435.2 | 1419.1 | 1355.3 | 1288.1 | 1264.3 | 1263.0 |
| 35° | 1389.7 | 1397.8 | 1429.3 | 1478.2 | 1510.0 | 1526.6 | 1495.6 | 1427.1 | 1349.8 | 1321.7 | 1317.9 |
| 37.5° | 1502.4 | 1509.2 | 1545.8 | 1592.5 | 1631.2 | 1630.4 | 1588.3 | 1512.6 | 1426.3 | 1394.8 | 1392.3 |
| 40° | 1617.6 | 1624.8 | 1666.5 | 1709.4 | 1748.1 | 1744.7 | 1693.7 | 1609.1 | 1517.3 | 1482.0 | 1488.8 |
| 42.5° | 1717.5 | 1725.6 | 1772.8 | 1834.0 | 1868.9 | 1868.0 | 1808.9 | 1713.7 | 1618.0 | 1586.6 | 1592.5 |
| 45° | 1808.5 | 1815.7 | 1870.6 | 1940.7 | 1991.7 | 1998.1 | 1933.5 | 1832.7 | 1734.5 | 1694.1 | 1695.8 |
| 47.5° | 1872.7 | 1886.3 | 1943.7 | 2024.0 | 2093.3 | 2115.9 | 2052.5 | 1953.9 | 1840.8 | 1798.7 | 1801.3 |
| 50° | 1921.6 | 1930.1 | 1992.6 | 2084.0 | 2171.5 | 2218.3 | 2167.3 | 2066.1 | 1947.1 | 1902.4 | 1908.4 |
| 52.5° | 1927.5 | 1937.7 | 2005.7 | 2111.2 | 2223.4 | 2294.4 | 2269.3 | 2175.8 | 2055.5 | 2009.6 | 2022.3 |
| 55° | 1879.1 | 1885.0 | 1966.2 | 2094.2 | 2243.8 | 2350.9 | 2357.3 | 2277.8 | 2158.8 | 2123.9 | 2132.4 |
| 57.5° | 1740.9 | 1756.2 | 1859.1 | 2014.7 | 2215.8 | 2381.1 | 2423.2 | 2370.5 | 2263.4 | 2228.9 | 2242.5 |
| 60° | 1514.3 | 1529.6 | 1632.9 | 1830.2 | 2109.9 | 2367.1 | 2477.6 | 2452.6 | 2358.2 | 2330.5 | 2337.8 |
| 62.5° | 1186.5 | 1185.3 | 1313.2 | 1555.1 | 1899.5 | 2298.2 | 2518.0 | 2531.6 | 2451.7 | 2416.8 | 2427.9 |
| 65° | 769.1 | 772.9 | 896.6 | 1157.2 | 1581.9 | 2123.1 | 2526.9 | 2632.4 | 2543.5 | 2490.8 | 2498.9 |
| 66° | 618.6 | 630.0 | 735.0 | 975.2 | 1419.9 | 2008.3 | 2500.2 | 2662.1 | 2571.6 | 2507.8 | 2511.6 |
| 67.5° | 456.6 | 454.5 | 540.8 | 726.1 | 1133.8 | 1790.2 | 2416.4 | 2680.8 | 2603.5 | 2523.1 | 2524.8 |
| 70° | 260.6 | 260.2 | 290.8 | 398.8 | 666.6 | 1260.5 | 2036.8 | 2591.1 | 2668.1 | 2578.4 | 2573.7 |
| 72.5° | 190.5 | 189.2 | 193.4 | 220.2 | 325.2 | 636.4 | 1405.0 | 2264.6 | 2634.9 | 2569.5 | 2556.3 |
| 75° | 159.8 | 159.0 | 158.1 | 161.5 | 182.4 | 288.2 | 745.7 | 1629.1 | 2286.3 | 2411.7 | 2398.1 |
| 77.5° | 130.5 | 130.5 | 130.9 | 130.1 | 130.9 | 151.8 | 309.1 | 873.2 | 1392.3 | 1554.3 | 1592.1 |
| 80° | 102.0 | 101.6 | 108.8 | 105.9 | 99.1 | 97.4 | 136.9 | 281.0 | 462.1 | 459.6 | 379.2 |
| 82.5° | 75.2 | 70.1 | 82.9 | 80.8 | 73.1 | 62.1 | 79.9 | 119.9 | 154.3 | 100.3 | 74.4 |
| 85° | 47.6 | 47.2 | 58.7 | 53.6 | 44.6 | 29.3 | 38.3 | 51.4 | 63.8 | 38.7 | 31.5 |
| 87.5° | 8.5 | 8.1 | 18.7 | 13.6 | 13.6 | 8.5 | 10.6 | 14.0 | 20.8 | 14.5 | 10.6 |
| 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)