

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: P451524

Luminaire Tested: **GALN-SA2B-830-U-5MQ**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P451524  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA2B-830-U-5MQ  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 80 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V MEDIUM OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9537 lumens  
Efficiency: N/A  
Efficacy: 116.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B3 - U0 - G2

Input Watts (W): 82  
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



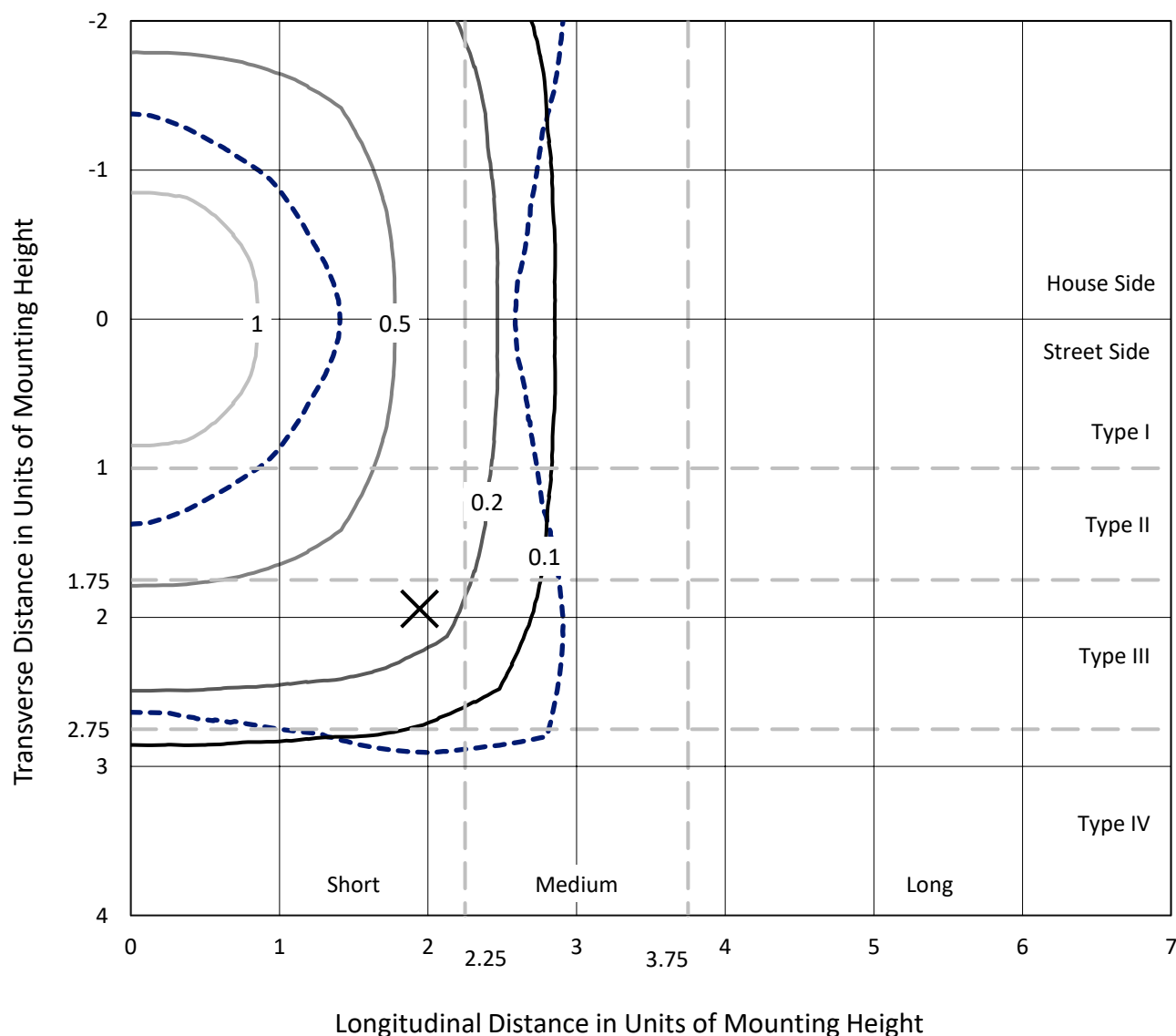
REPORT NUMBER: P451524

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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd



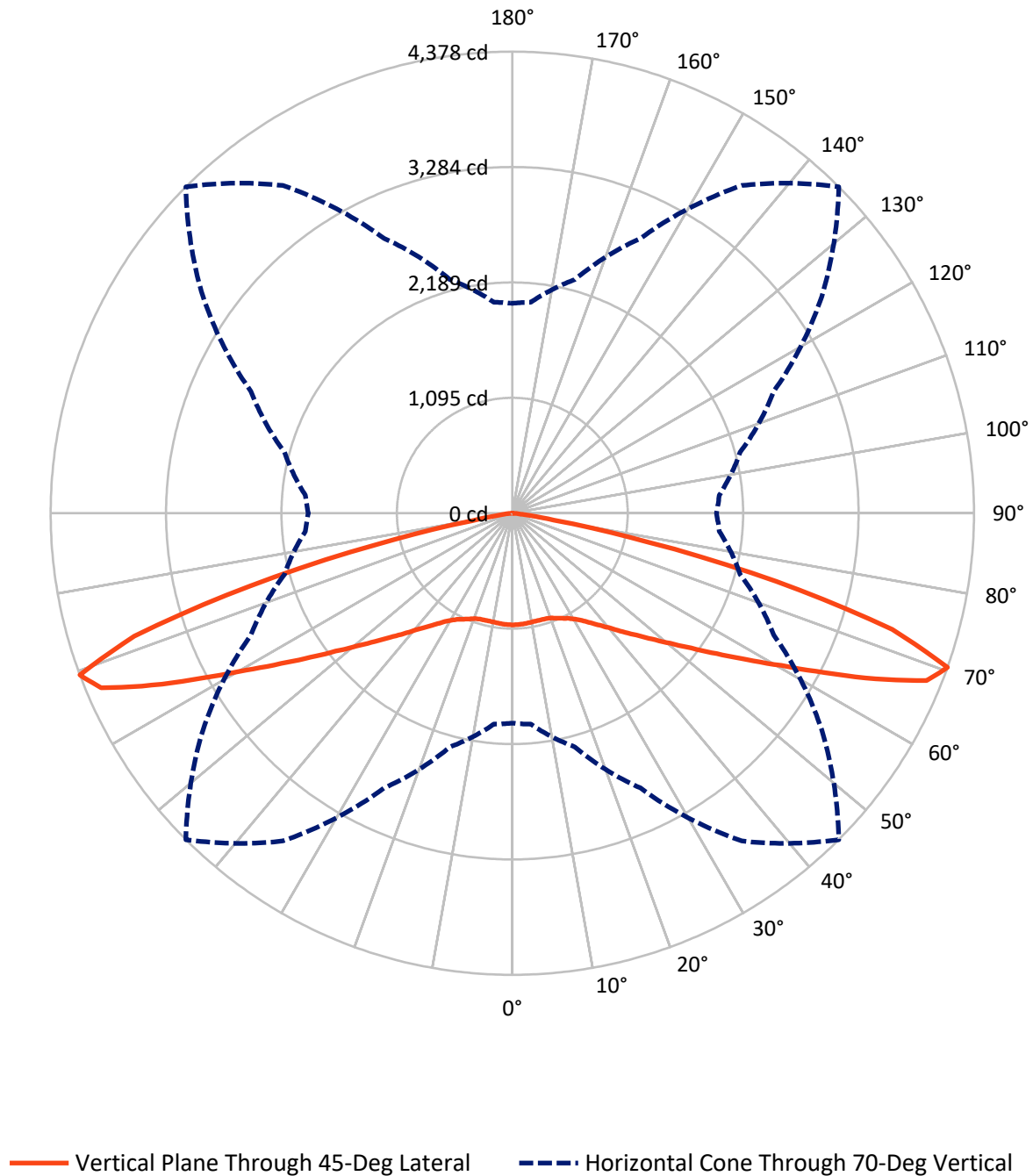
Based on 25 foot mounting height. Maximum calculated value = 1.7 fc

Type V - Short - N/A

REPORT NUMBER: P451524

CATALOG NUMBER: GALN-SA2B-830-U-5MQ

## Luminous Intensity Polar Plot



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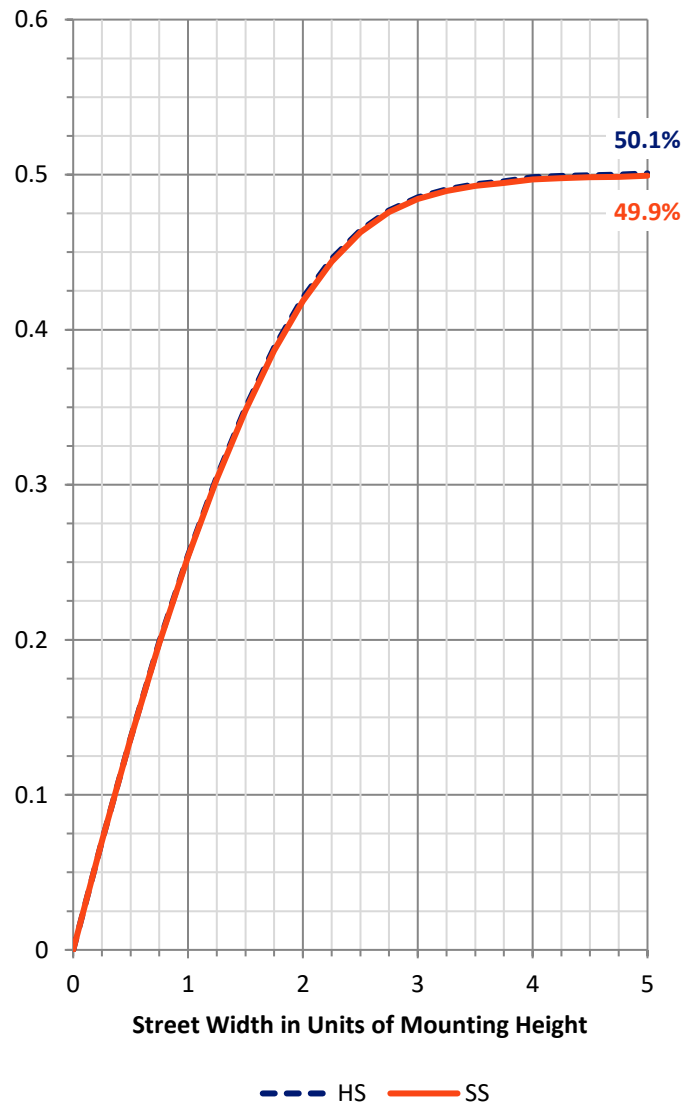
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 4768.5   | 0.0    | 4768.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Street Side</b> | Lumens    | 4768.5   | 0.0    | 4768.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Total</b>       | Lumens    | 9537.0   | 0.0    | 9537.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 100.4  | 1.1       |
| 10°-20°   | 294.7  | 3.1       |
| 20°-30°   | 504.0  | 5.3       |
| 30°-40°   | 800.0  | 8.4       |
| 40°-50°   | 1290.6 | 13.5      |
| 50°-60°   | 2099.8 | 22.0      |
| 60°-70°   | 3044.0 | 31.9      |
| 70°-80°   | 1350.2 | 14.2      |
| 80°-90°   | 53.2   | 0.6       |
| 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°    | 9537.0 | 100.0     |
| 0°-180°   | 9537.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P451524

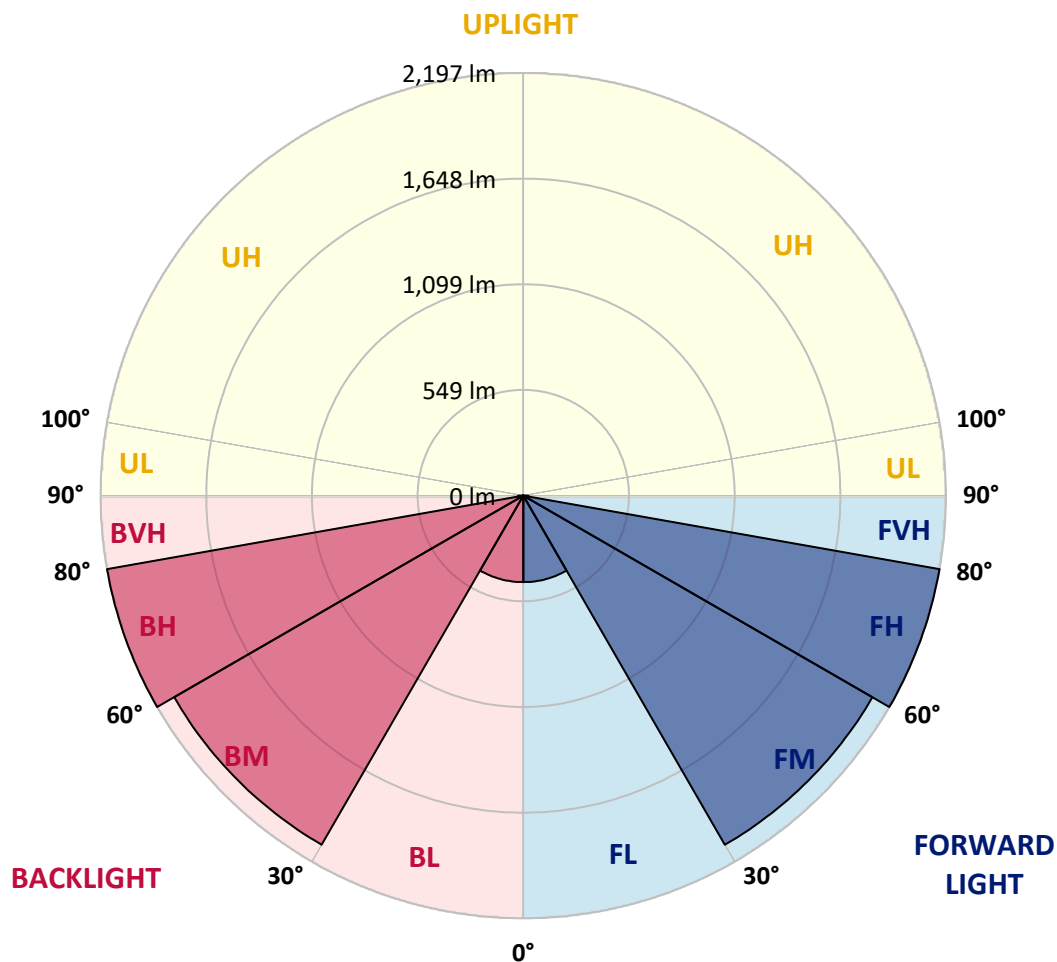
CATALOG NUMBER: GALN-SA2B-830-U-5MQ

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 449.6  | 4.7       |                         |      |         |
| FM   | (30°-60°)   | 2095.2 | 22.0      |                         |      |         |
| FH   | (60°-80°)   | 2197.1 | 23.0      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 26.6   | 0.3       |                         |      | G1/100  |
| BL   | (0°-30°)    | 449.6  | 4.7       | B1/500                  |      |         |
| BM   | (30°-60°)   | 2095.2 | 22.0      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 2197.1 | 23.0      | B3/2500                 |      | G2/5000 |
| BVH  | (80°-90°)   | 26.6   | 0.3       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G2**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1059.0 | 1059.0 | 1059.0 | 1059.0 | 1059.0 | 1059.0 | 1059.0 | 1059.0 | 1059.0 | 1059.0 | 1059.0 |
| 2.5°  | 1059.0 | 1060.0 | 1058.5 | 1057.5 | 1057.0 | 1057.0 | 1056.5 | 1057.0 | 1060.0 | 1060.5 | 1059.0 |
| 5°    | 1056.0 | 1057.0 | 1056.5 | 1055.5 | 1055.0 | 1055.0 | 1054.5 | 1054.0 | 1056.5 | 1057.5 | 1057.0 |
| 7.5°  | 1052.0 | 1052.5 | 1052.0 | 1051.5 | 1052.0 | 1051.5 | 1050.0 | 1049.0 | 1051.0 | 1051.0 | 1050.5 |
| 10°   | 1045.0 | 1046.0 | 1045.5 | 1046.0 | 1047.0 | 1047.0 | 1045.0 | 1043.0 | 1043.5 | 1042.5 | 1042.5 |
| 12.5° | 1036.4 | 1037.9 | 1038.4 | 1040.4 | 1043.0 | 1046.0 | 1041.4 | 1036.9 | 1035.9 | 1035.4 | 1034.9 |
| 15°   | 1030.9 | 1032.4 | 1034.4 | 1036.4 | 1040.9 | 1047.5 | 1040.9 | 1033.9 | 1031.9 | 1029.9 | 1028.9 |
| 17.5° | 1029.4 | 1031.4 | 1034.4 | 1037.4 | 1043.5 | 1050.0 | 1044.5 | 1037.4 | 1032.4 | 1029.4 | 1028.4 |
| 20°   | 1033.4 | 1034.9 | 1039.4 | 1045.0 | 1053.5 | 1060.0 | 1054.5 | 1047.0 | 1039.4 | 1034.9 | 1033.4 |
| 22.5° | 1041.4 | 1044.0 | 1049.5 | 1059.5 | 1071.6 | 1081.2 | 1073.6 | 1061.0 | 1049.0 | 1043.0 | 1040.9 |
| 25°   | 1059.0 | 1061.0 | 1067.6 | 1081.2 | 1095.2 | 1104.3 | 1096.2 | 1081.7 | 1065.1 | 1057.0 | 1054.5 |
| 27.5° | 1085.7 | 1088.7 | 1095.7 | 1111.8 | 1123.4 | 1128.4 | 1122.9 | 1112.8 | 1100.8 | 1092.2 | 1090.2 |
| 30°   | 1123.4 | 1126.9 | 1137.4 | 1154.5 | 1162.1 | 1165.1 | 1162.6 | 1156.0 | 1147.5 | 1138.5 | 1136.4 |
| 32.5° | 1174.1 | 1176.2 | 1188.2 | 1204.3 | 1211.3 | 1212.3 | 1209.3 | 1206.3 | 1192.2 | 1177.2 | 1176.2 |
| 35°   | 1230.9 | 1234.5 | 1249.0 | 1268.1 | 1274.7 | 1275.2 | 1269.1 | 1264.6 | 1248.0 | 1236.0 | 1236.0 |
| 37.5° | 1306.3 | 1307.8 | 1321.9 | 1343.5 | 1350.6 | 1348.6 | 1345.5 | 1341.5 | 1323.9 | 1308.3 | 1308.8 |
| 40°   | 1394.8 | 1397.8 | 1409.9 | 1435.0 | 1435.0 | 1432.5 | 1434.5 | 1431.5 | 1413.9 | 1398.8 | 1399.3 |
| 42.5° | 1499.8 | 1501.4 | 1515.9 | 1542.6 | 1540.6 | 1535.5 | 1537.5 | 1533.5 | 1522.5 | 1505.4 | 1499.3 |
| 45°   | 1611.9 | 1618.0 | 1643.1 | 1668.7 | 1664.7 | 1648.6 | 1656.7 | 1655.7 | 1645.6 | 1620.0 | 1621.5 |
| 47.5° | 1747.1 | 1757.2 | 1781.3 | 1812.0 | 1807.5 | 1782.3 | 1791.4 | 1797.4 | 1783.3 | 1755.2 | 1750.2 |
| 50°   | 1899.4 | 1906.0 | 1941.7 | 1970.3 | 1966.3 | 1939.6 | 1960.3 | 1961.3 | 1926.1 | 1886.4 | 1886.4 |
| 52.5° | 2061.8 | 2068.3 | 2116.6 | 2161.3 | 2163.8 | 2125.1 | 2141.7 | 2140.7 | 2083.4 | 2031.1 | 2021.1 |
| 55°   | 2243.7 | 2246.8 | 2309.1 | 2374.9 | 2389.0 | 2351.3 | 2353.3 | 2333.2 | 2258.8 | 2198.0 | 2192.5 |
| 57.5° | 2431.7 | 2442.8 | 2511.6 | 2597.1 | 2638.8 | 2615.7 | 2605.1 | 2551.3 | 2479.5 | 2409.6 | 2406.1 |
| 60°   | 2639.8 | 2640.3 | 2729.8 | 2830.8 | 2915.2 | 2930.8 | 2887.6 | 2815.7 | 2722.7 | 2630.3 | 2626.2 |
| 62.5° | 2784.1 | 2805.7 | 2918.8 | 3089.7 | 3241.0 | 3328.4 | 3214.3 | 3063.5 | 2880.6 | 2731.3 | 2716.2 |
| 65°   | 2813.7 | 2828.3 | 3000.7 | 3290.2 | 3599.3 | 3787.8 | 3523.9 | 3203.3 | 2891.1 | 2692.1 | 2682.0 |
| 67.5° | 2574.0 | 2589.5 | 2821.8 | 3266.1 | 3850.6 | 4237.2 | 3725.0 | 3135.9 | 2712.2 | 2465.9 | 2446.3 |
| 70°   | 1990.9 | 2008.5 | 2295.5 | 2875.0 | 3794.8 | 4378.4 | 3581.7 | 2735.3 | 2236.7 | 1970.8 | 1935.1 |
| 72.5° | 1058.5 | 1123.4 | 1368.7 | 1973.3 | 3080.1 | 3769.7 | 2936.9 | 1995.9 | 1442.5 | 1179.2 | 1131.9 |
| 75°   | 386.5  | 394.6  | 531.3  | 875.1  | 1791.9 | 2585.0 | 1860.7 | 952.0  | 547.4  | 422.7  | 401.1  |
| 77.5° | 159.8  | 159.3  | 174.9  | 264.4  | 650.9  | 1323.9 | 726.3  | 279.5  | 174.4  | 161.3  | 159.3  |
| 80°   | 94.5   | 94.5   | 104.0  | 110.1  | 171.4  | 399.6  | 191.5  | 124.7  | 104.5  | 95.5   | 97.0   |
| 82.5° | 42.2   | 44.7   | 65.8   | 69.4   | 82.9   | 109.6  | 92.5   | 79.4   | 68.4   | 47.2   | 42.7   |
| 85°   | 23.1   | 20.1   | 34.7   | 36.2   | 39.7   | 40.7   | 43.7   | 43.2   | 39.7   | 23.1   | 23.6   |
| 87.5° | 4.5    | 5.5    | 10.1   | 7.5    | 8.5    | 7.5    | 10.1   | 14.1   | 14.6   | 8.0    | 6.5    |
| 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)