

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: P529029

Luminaire Tested: **GALN-SA4A-830-U-5NQ-GRSBK**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P529029  
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-SA4A-830-U-5NQ-GRSBK  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 3000K, 615mA 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: 9876 lumens  
Efficiency: N/A  
Efficacy: 81.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B3 - U0 - G0

Input Watts (W): 121  
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



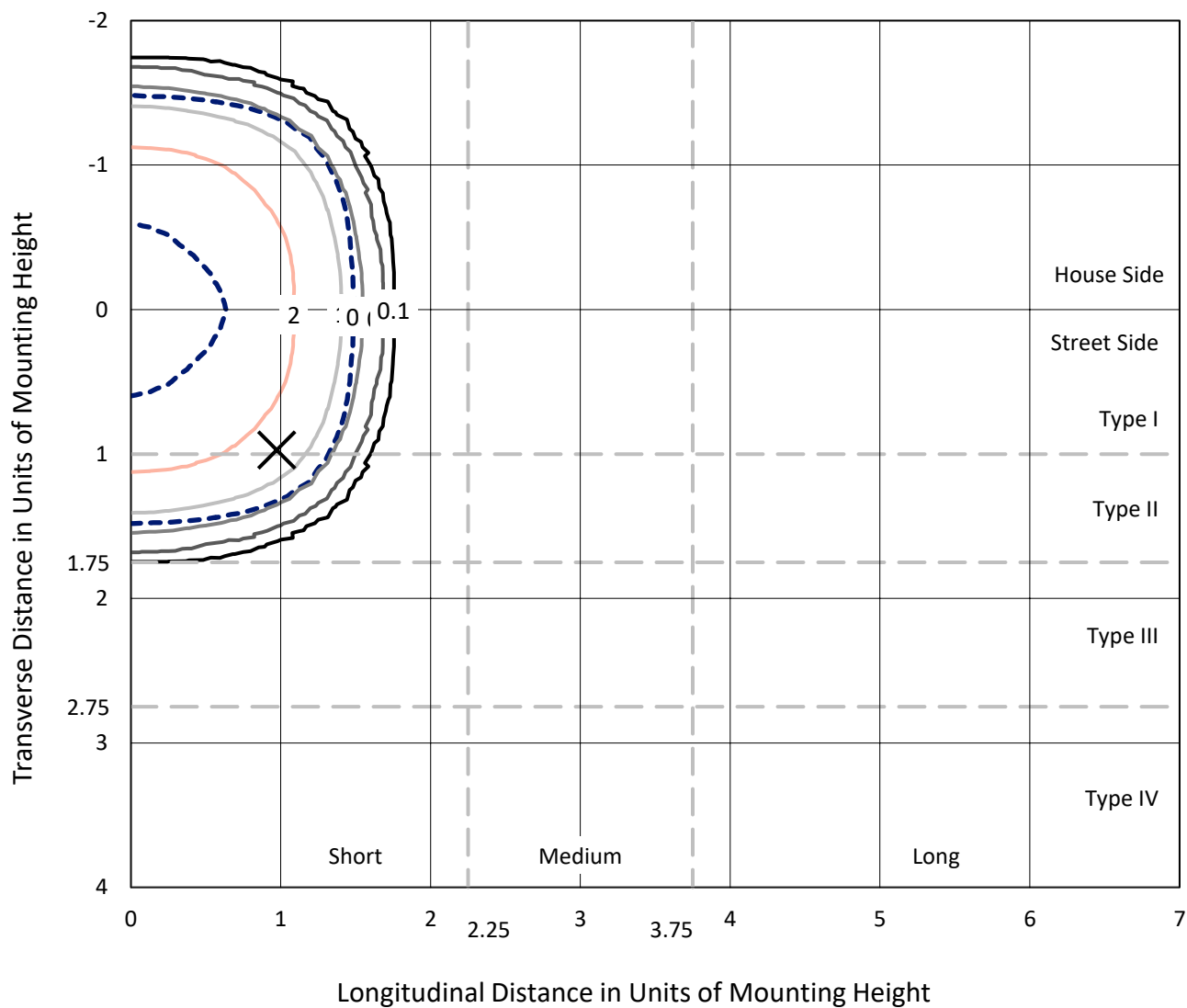
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## Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd

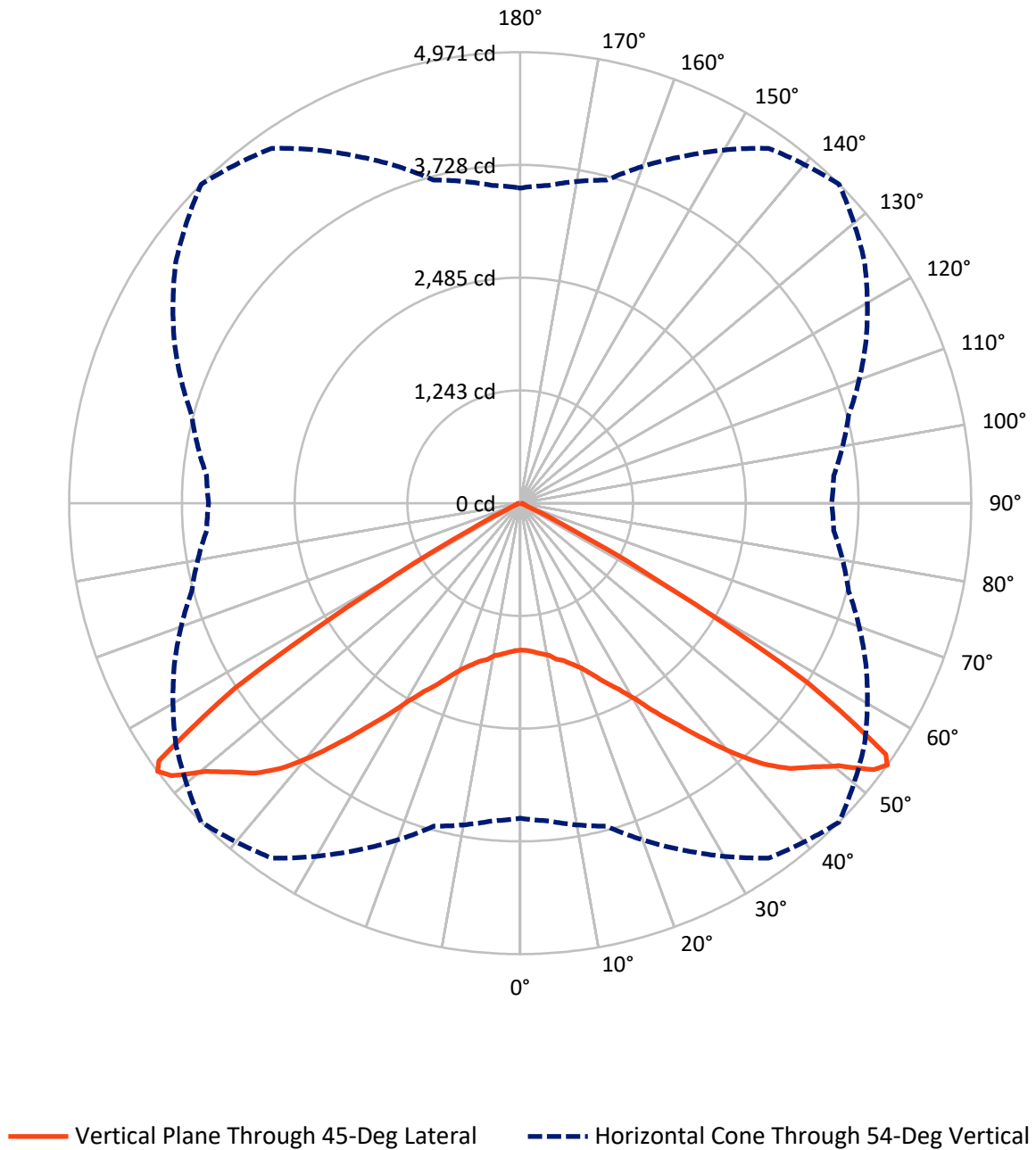


Based on 25 foot mounting height. Maximum calculated value = 2.6 fc

Type V - Short - N/A

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## Luminous Intensity Polar Plot



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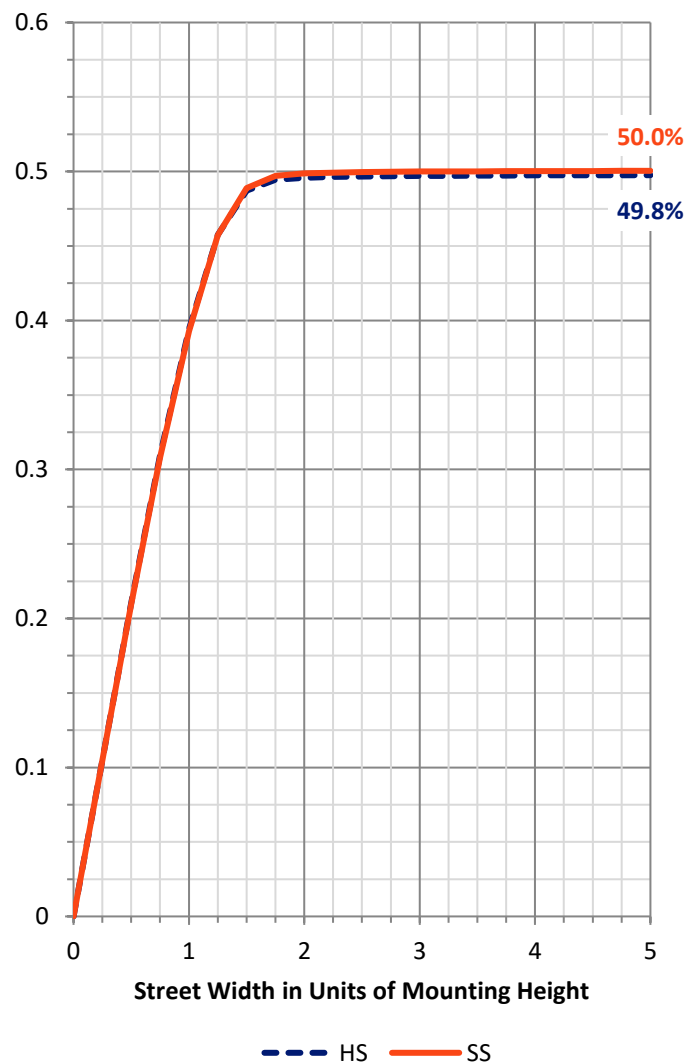
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 4938.0   | 0.0    | 4938.0 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Street Side</b> | Lumens    | 4938.0   | 0.0    | 4938.0 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Total</b>       | Lumens    | 9876.0   | 0.0    | 9876.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 158.5  | 1.6       |
| 10°-20°   | 513.3  | 5.2       |
| 20°-30°   | 1006.0 | 10.2      |
| 30°-40°   | 1809.0 | 18.3      |
| 40°-50°   | 3096.6 | 31.4      |
| 50°-60°   | 2996.3 | 30.3      |
| 60°-70°   | 256.5  | 2.6       |
| 70°-80°   | 30.4   | 0.3       |
| 80°-90°   | 9.5    | 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°    | 9876.0 | 100.0     |
| 0°-180°   | 9876.0 | 100.0     |

**Coefficient of Utilization**



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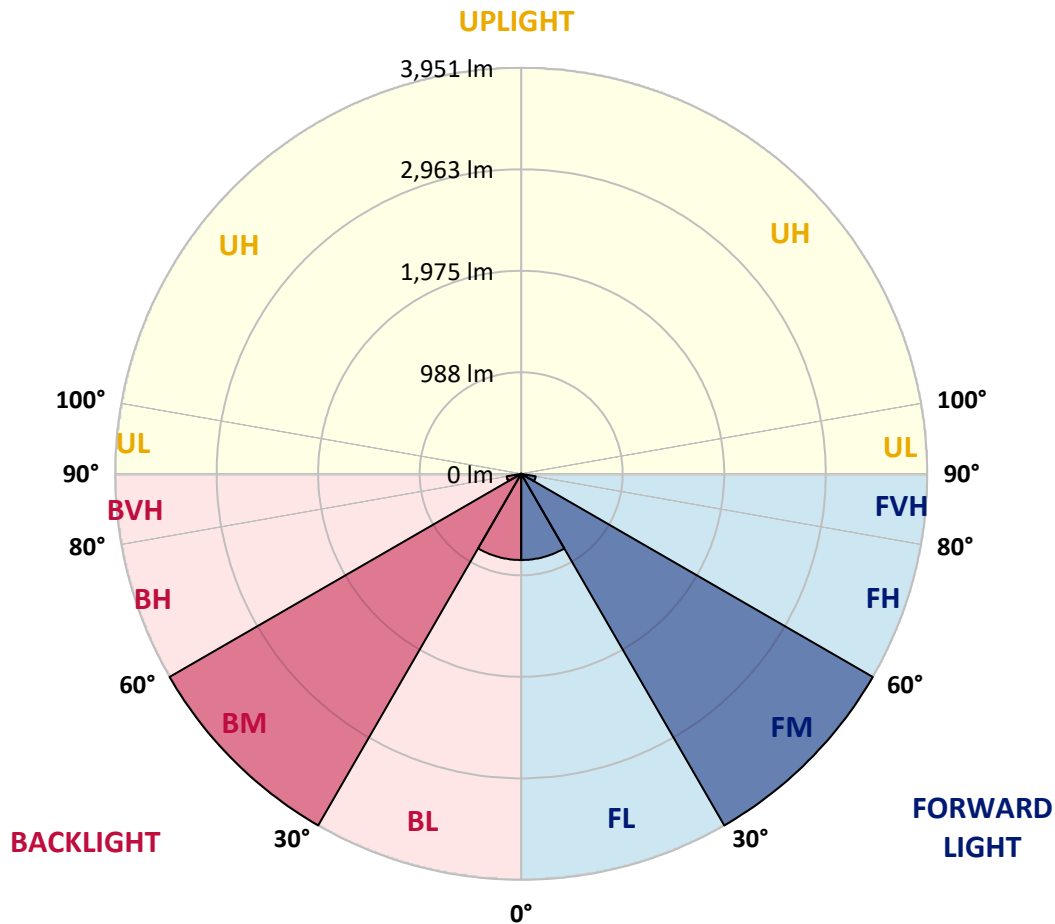
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |        |
|------|-------------|--------|-----------|-------------------------|------|--------|
|      |             |        |           | B                       | U    | G      |
| FL   | (0°-30°)    | 838.9  | 8.5       |                         |      |        |
| FM   | (30°-60°)   | 3950.9 | 40.0      |                         |      |        |
| FH   | (60°-80°)   | 143.4  | 1.5       |                         |      | G0/660 |
| FVH  | (80°-90°)   | 4.8    | 0.0       |                         |      | G0/10  |
| BL   | (0°-30°)    | 838.9  | 8.5       | B2/1000                 |      |        |
| BM   | (30°-60°)   | 3950.9 | 40.0      | B3/5000                 |      |        |
| BH   | (60°-80°)   | 143.4  | 1.5       | B1/500                  |      | G0/660 |
| BVH  | (80°-90°)   | 4.8    | 0.0       |                         |      | G0/10  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |        |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |        |

**BUG Rating: B3-U0-G0**

Type V Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1619.4 | 1619.4 | 1619.4 | 1619.4 | 1619.4 | 1619.4 | 1619.4 | 1619.4 | 1619.4 | 1619.4 | 1619.4 |
| 2.5°  | 1627.2 | 1636.6 | 1630.3 | 1635.0 | 1635.0 | 1627.2 | 1631.9 | 1613.1 | 1625.6 | 1616.2 | 1617.8 |
| 5°    | 1652.2 | 1650.6 | 1650.6 | 1652.2 | 1646.0 | 1649.1 | 1642.8 | 1636.6 | 1631.9 | 1625.6 | 1644.4 |
| 7.5°  | 1683.5 | 1683.5 | 1672.6 | 1675.7 | 1672.6 | 1677.2 | 1664.7 | 1652.2 | 1647.5 | 1642.8 | 1639.7 |
| 10°   | 1713.2 | 1710.1 | 1705.4 | 1719.5 | 1708.5 | 1702.3 | 1696.0 | 1688.2 | 1671.0 | 1664.7 | 1658.5 |
| 12.5° | 1757.0 | 1755.5 | 1749.2 | 1763.3 | 1757.0 | 1763.3 | 1739.8 | 1719.5 | 1716.4 | 1696.0 | 1707.0 |
| 15°   | 1808.7 | 1822.8 | 1811.8 | 1811.8 | 1808.7 | 1800.8 | 1791.5 | 1782.1 | 1753.9 | 1746.1 | 1747.7 |
| 17.5° | 1875.9 | 1871.3 | 1872.8 | 1872.8 | 1888.5 | 1868.1 | 1849.4 | 1825.9 | 1811.8 | 1807.1 | 1791.5 |
| 20°   | 1940.1 | 1946.4 | 1944.8 | 1955.7 | 1965.1 | 1943.2 | 1922.9 | 1919.8 | 1880.6 | 1886.9 | 1865.0 |
| 22.5° | 2052.7 | 2048.1 | 2055.9 | 2063.7 | 2057.4 | 2054.3 | 2035.5 | 2012.1 | 1977.6 | 1962.0 | 1958.9 |
| 25°   | 2171.7 | 2163.8 | 2149.8 | 2168.5 | 2177.9 | 2192.0 | 2156.0 | 2143.5 | 2090.3 | 2066.8 | 2068.4 |
| 27.5° | 2273.4 | 2284.3 | 2300.0 | 2307.8 | 2331.2 | 2326.6 | 2301.5 | 2260.8 | 2220.2 | 2193.6 | 2176.4 |
| 30°   | 2412.6 | 2418.9 | 2445.5 | 2456.4 | 2497.1 | 2508.0 | 2468.9 | 2422.0 | 2350.0 | 2315.6 | 2295.3 |
| 32.5° | 2540.9 | 2584.7 | 2583.1 | 2637.9 | 2703.6 | 2749.0 | 2678.6 | 2606.6 | 2534.6 | 2494.0 | 2458.0 |
| 35°   | 2749.0 | 2741.2 | 2786.5 | 2844.4 | 2950.8 | 3002.5 | 2925.8 | 2842.9 | 2733.3 | 2667.6 | 2639.5 |
| 37.5° | 2943.0 | 2946.1 | 3007.2 | 3099.5 | 3221.5 | 3301.3 | 3234.0 | 3097.9 | 2985.2 | 2900.8 | 2861.6 |
| 40°   | 3224.6 | 3230.9 | 3293.5 | 3398.3 | 3536.0 | 3622.0 | 3543.8 | 3406.1 | 3255.9 | 3190.2 | 3190.2 |
| 42.5° | 3554.8 | 3581.4 | 3622.0 | 3712.8 | 3836.4 | 3931.8 | 3861.4 | 3753.5 | 3601.7 | 3517.2 | 3529.7 |
| 45°   | 3894.3 | 3906.8 | 3933.4 | 4067.9 | 4125.8 | 4172.8 | 4107.1 | 4057.0 | 3955.3 | 3852.0 | 3834.8 |
| 47.5° | 4211.9 | 4216.6 | 4294.8 | 4337.1 | 4382.4 | 4343.3 | 4385.6 | 4319.8 | 4205.6 | 4105.5 | 4085.2 |
| 50°   | 4352.7 | 4344.9 | 4456.0 | 4584.3 | 4618.7 | 4549.8 | 4513.9 | 4470.0 | 4296.4 | 4175.9 | 4122.7 |
| 52.5° | 3942.8 | 3988.2 | 4194.7 | 4551.4 | 4820.5 | 4878.4 | 4668.8 | 4466.9 | 4143.0 | 3908.4 | 3872.4 |
| 54°   | 3473.4 | 3515.6 | 3686.2 | 4215.0 | 4775.1 | 4970.7 | 4632.8 | 4204.1 | 3747.2 | 3468.7 | 3432.7 |
| 55°   | 3008.7 | 2961.8 | 3271.6 | 3811.4 | 4562.4 | 4889.4 | 4490.4 | 3864.6 | 3342.0 | 3086.9 | 3036.9 |
| 57.5° | 1628.7 | 1636.6 | 1897.9 | 2407.9 | 3205.9 | 3748.8 | 3310.7 | 2614.4 | 1974.5 | 1688.2 | 1663.2 |
| 60°   | 516.3  | 528.8  | 643.0  | 973.2  | 1531.7 | 1829.0 | 1567.7 | 1049.8 | 726.0  | 582.0  | 558.6  |
| 62.5° | 161.2  | 167.4  | 183.1  | 272.2  | 419.3  | 599.2  | 469.4  | 281.6  | 209.7  | 192.4  | 195.6  |
| 65°   | 98.6   | 98.6   | 100.1  | 106.4  | 125.2  | 145.5  | 140.8  | 123.6  | 118.9  | 115.8  | 114.2  |
| 67.5° | 64.1   | 62.6   | 65.7   | 70.4   | 73.5   | 75.1   | 79.8   | 84.5   | 82.9   | 79.8   | 79.8   |
| 70°   | 39.1   | 37.6   | 40.7   | 46.9   | 48.5   | 51.6   | 56.3   | 62.6   | 61.0   | 57.9   | 59.5   |
| 72.5° | 21.9   | 21.9   | 23.5   | 28.2   | 32.9   | 36.0   | 40.7   | 45.4   | 46.9   | 45.4   | 45.4   |
| 75°   | 7.8    | 9.4    | 12.5   | 17.2   | 20.3   | 25.0   | 29.7   | 34.4   | 39.1   | 36.0   | 34.4   |
| 77.5° | 3.1    | 3.1    | 6.3    | 11.0   | 15.6   | 20.3   | 28.2   | 32.9   | 36.0   | 32.9   | 29.7   |
| 80°   | 1.6    | 1.6    | 4.7    | 9.4    | 14.1   | 18.8   | 23.5   | 28.2   | 29.7   | 26.6   | 23.5   |
| 82.5° | 1.6    | 1.6    | 4.7    | 9.4    | 14.1   | 17.2   | 25.0   | 28.2   | 31.3   | 28.2   | 23.5   |
| 85°   | 0.0    | 1.6    | 4.7    | 9.4    | 12.5   | 14.1   | 14.1   | 9.4    | 7.8    | 4.7    | 4.7    |
| 87.5° | 0.0    | 0.0    | 1.6    | 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)