

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: P452918

Luminaire Tested: **GALN-SA3D-830-U-5WQ**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P452918  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA3D-830-U-5WQ  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(3) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19206 lumens  
Efficiency: N/A  
Efficacy: 104.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B5 - U0 - G3

Input Watts (W): 184  
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

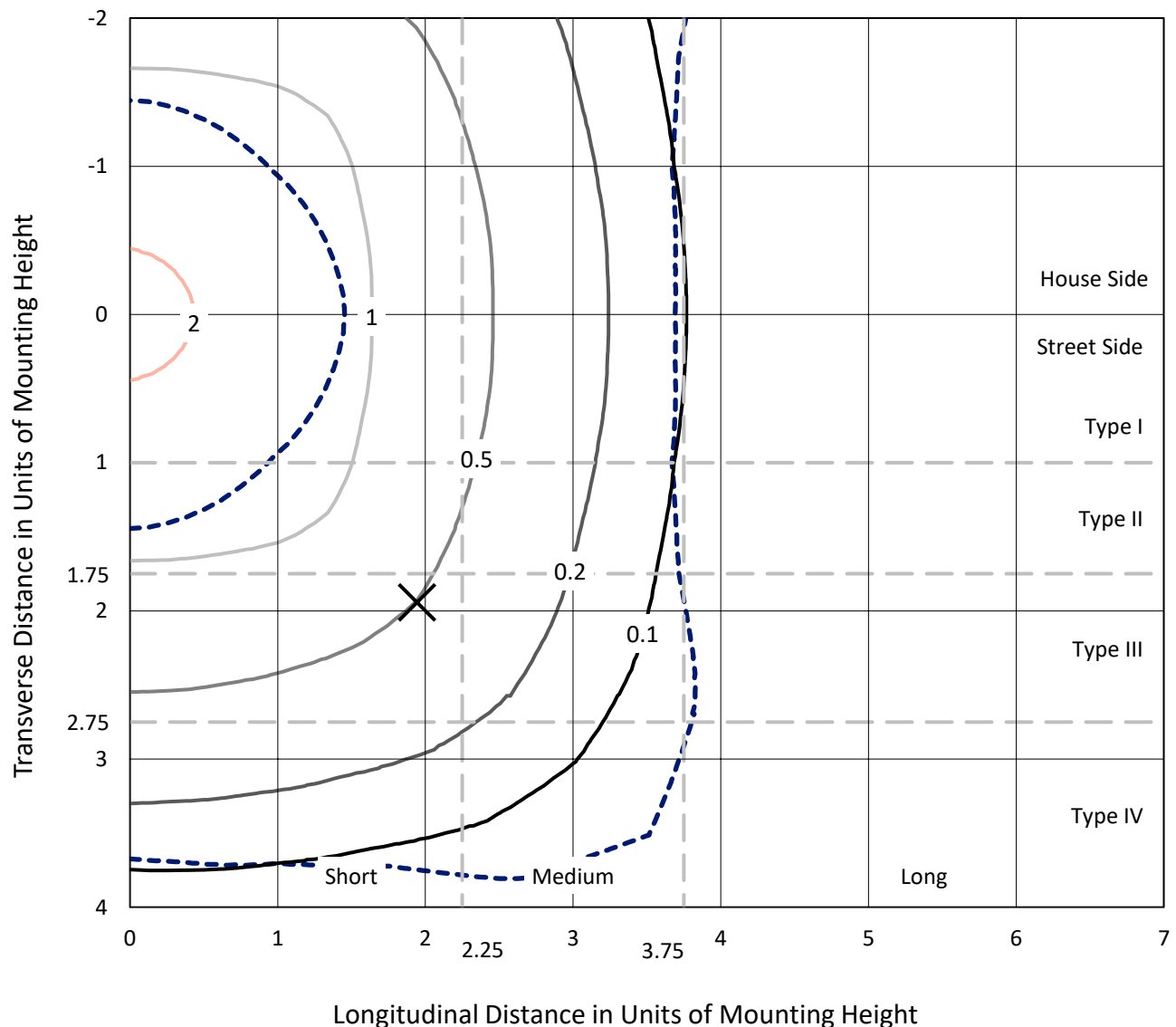


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## Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

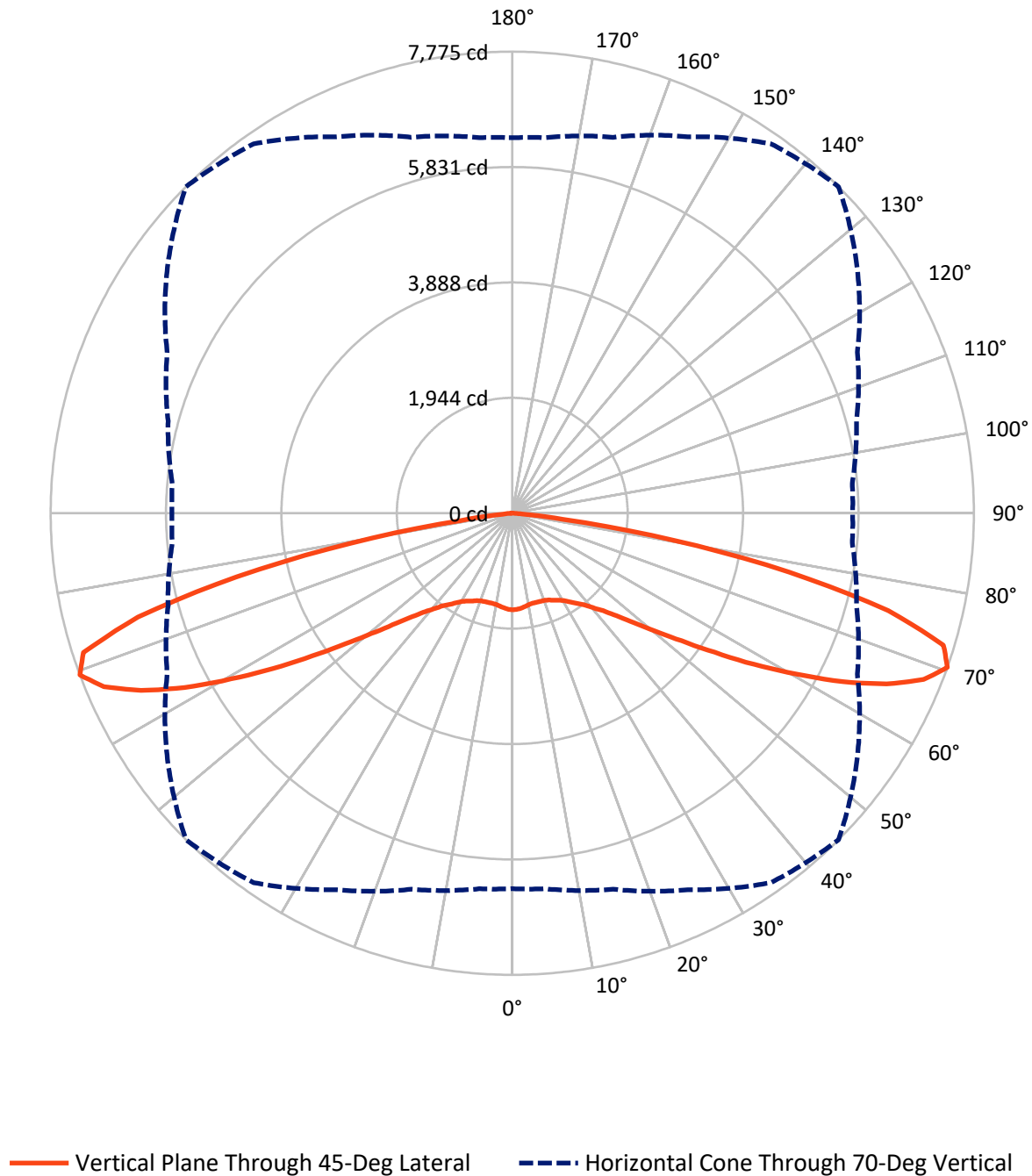


Based on 25 foot mounting height. Maximum calculated value = 2.6 fc  
 Type V - Short - N/A

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## Luminous Intensity Polar Plot



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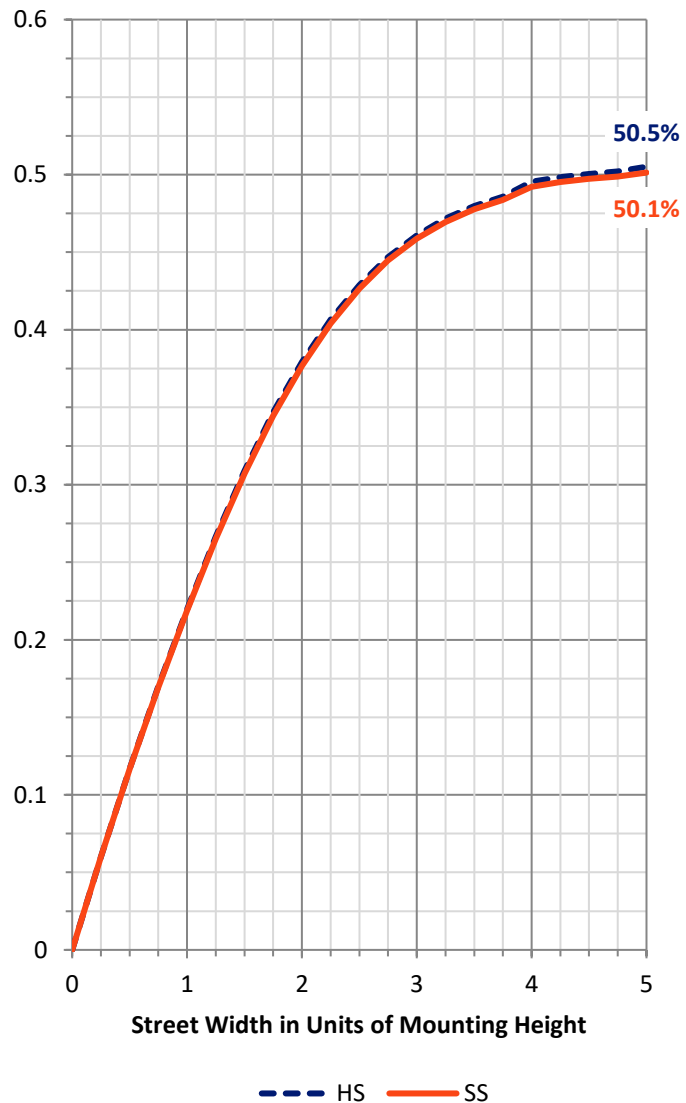
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 9603.0   | 0.0    | 9603.0  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 9603.0   | 0.0    | 9603.0  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 19206.0  | 0.0    | 19206.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 152.1   | 0.8       |
| 10°-20°   | 445.2   | 2.3       |
| 20°-30°   | 758.5   | 3.9       |
| 30°-40°   | 1175.6  | 6.1       |
| 40°-50°   | 1978.7  | 10.3      |
| 50°-60°   | 3600.2  | 18.7      |
| 60°-70°   | 6095.1  | 31.7      |
| 70°-80°   | 4717.9  | 24.6      |
| 80°-90°   | 282.7   | 1.5       |
| 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°    | 19206.0 | 100.0     |
| 0°-180°   | 19206.0 | 100.0     |



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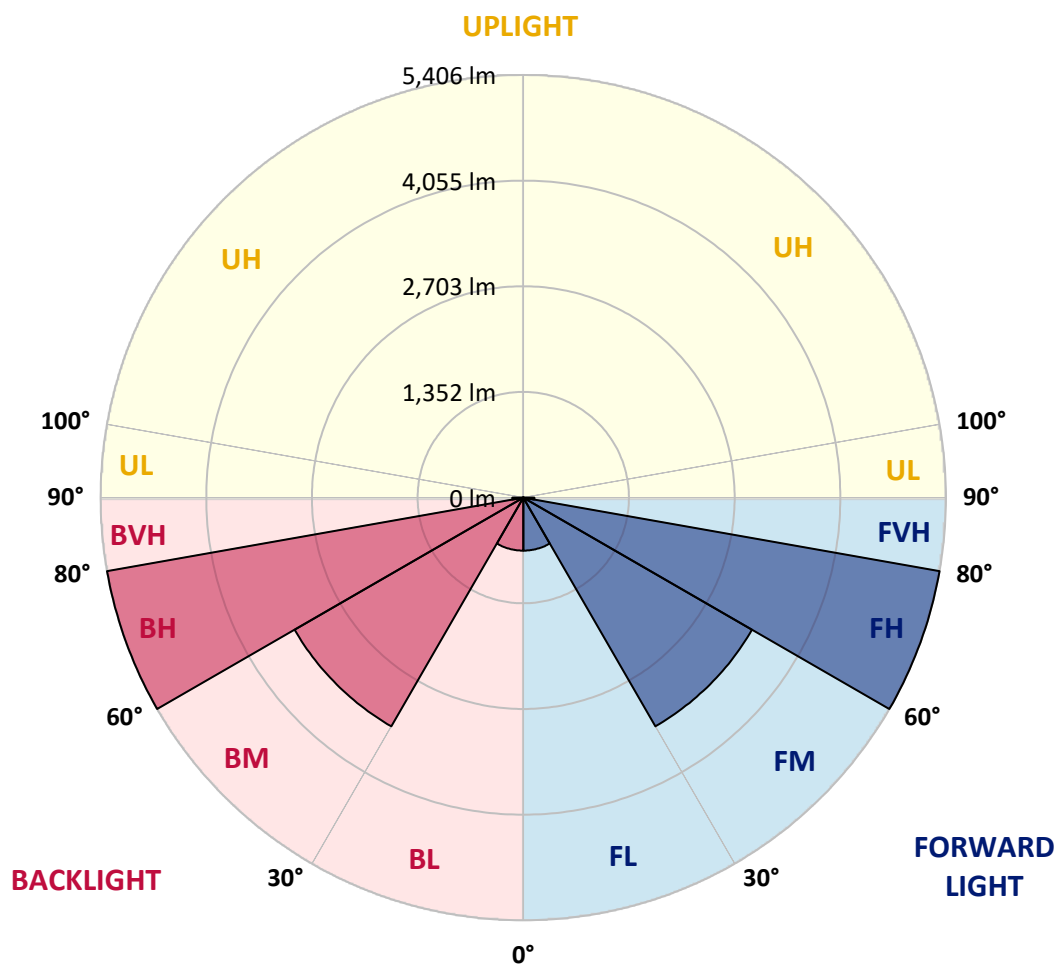
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 677.9  | 3.5       |                         |      |         |
| FM   | (30°-60°)   | 3377.3 | 17.6      |                         |      |         |
| FH   | (60°-80°)   | 5406.5 | 28.1      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 141.4  | 0.7       |                         |      | G2/225  |
| BL   | (0°-30°)    | 677.9  | 3.5       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 3377.3 | 17.6      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 5406.5 | 28.1      | B5                      |      | G3/7500 |
| BVH  | (80°-90°)   | 141.4  | 0.7       |                         |      | G2/225  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B5-U0-G3**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1626.0 | 1626.0 | 1626.0 | 1626.0 | 1626.0 | 1626.0 | 1626.0 | 1626.0 | 1626.0 | 1626.0 | 1626.0 |
| 2.5°  | 1622.0 | 1623.0 | 1623.0 | 1621.0 | 1619.9 | 1619.9 | 1618.9 | 1618.9 | 1622.0 | 1623.0 | 1624.0 |
| 5°    | 1607.8 | 1607.8 | 1607.8 | 1606.8 | 1604.7 | 1604.7 | 1602.7 | 1602.7 | 1603.7 | 1606.8 | 1604.7 |
| 7.5°  | 1588.5 | 1590.5 | 1590.5 | 1586.5 | 1583.4 | 1583.4 | 1582.4 | 1583.4 | 1584.4 | 1587.5 | 1586.5 |
| 10°   | 1582.4 | 1583.4 | 1578.3 | 1571.2 | 1566.2 | 1563.1 | 1564.1 | 1566.2 | 1571.2 | 1573.3 | 1574.3 |
| 12.5° | 1586.5 | 1586.5 | 1577.3 | 1567.2 | 1558.1 | 1554.0 | 1553.0 | 1560.1 | 1569.2 | 1575.3 | 1577.3 |
| 15°   | 1591.5 | 1589.5 | 1578.3 | 1565.2 | 1556.0 | 1555.0 | 1554.0 | 1559.1 | 1572.3 | 1584.4 | 1585.4 |
| 17.5° | 1594.6 | 1593.6 | 1579.4 | 1563.1 | 1558.1 | 1558.1 | 1557.0 | 1561.1 | 1575.3 | 1590.5 | 1591.5 |
| 20°   | 1604.7 | 1601.7 | 1585.4 | 1568.2 | 1564.1 | 1566.2 | 1563.1 | 1568.2 | 1583.4 | 1601.7 | 1605.7 |
| 22.5° | 1625.0 | 1622.0 | 1605.7 | 1588.5 | 1586.5 | 1586.5 | 1585.4 | 1590.5 | 1606.8 | 1626.0 | 1629.1 |
| 25°   | 1649.4 | 1646.3 | 1631.1 | 1618.9 | 1621.0 | 1625.0 | 1623.0 | 1624.0 | 1637.2 | 1653.4 | 1658.5 |
| 27.5° | 1681.8 | 1676.7 | 1663.6 | 1653.4 | 1659.5 | 1659.5 | 1659.5 | 1658.5 | 1666.6 | 1681.8 | 1686.9 |
| 30°   | 1721.4 | 1719.3 | 1705.1 | 1704.1 | 1709.2 | 1704.1 | 1704.1 | 1705.1 | 1706.2 | 1720.4 | 1725.4 |
| 32.5° | 1773.1 | 1769.0 | 1761.9 | 1759.9 | 1774.1 | 1778.2 | 1764.0 | 1750.8 | 1757.9 | 1772.1 | 1775.1 |
| 35°   | 1858.3 | 1852.2 | 1842.1 | 1830.9 | 1842.1 | 1861.4 | 1830.9 | 1820.8 | 1839.0 | 1858.3 | 1860.3 |
| 37.5° | 1973.9 | 1970.9 | 1954.7 | 1934.4 | 1933.4 | 1953.7 | 1922.2 | 1921.2 | 1955.7 | 1979.0 | 1982.1 |
| 40°   | 2119.0 | 2122.0 | 2101.8 | 2082.5 | 2072.3 | 2088.6 | 2064.2 | 2073.4 | 2106.8 | 2133.2 | 2131.2 |
| 42.5° | 2322.9 | 2311.7 | 2280.3 | 2262.0 | 2250.9 | 2244.8 | 2238.7 | 2252.9 | 2290.4 | 2318.8 | 2341.1 |
| 45°   | 2561.3 | 2557.2 | 2517.6 | 2495.3 | 2471.0 | 2461.9 | 2459.8 | 2485.2 | 2530.8 | 2565.3 | 2568.4 |
| 47.5° | 2831.1 | 2822.0 | 2796.6 | 2773.3 | 2764.1 | 2753.0 | 2742.8 | 2762.1 | 2807.8 | 2832.1 | 2839.2 |
| 50°   | 3109.0 | 3111.0 | 3111.0 | 3107.0 | 3116.1 | 3118.2 | 3090.8 | 3097.9 | 3123.2 | 3121.2 | 3119.2 |
| 52.5° | 3426.5 | 3437.7 | 3490.4 | 3495.5 | 3539.1 | 3568.5 | 3518.8 | 3489.4 | 3480.3 | 3425.5 | 3429.6 |
| 55°   | 3799.8 | 3809.9 | 3889.1 | 3968.2 | 4085.9 | 4135.6 | 4031.1 | 3939.8 | 3874.9 | 3791.7 | 3795.7 |
| 57.5° | 4265.4 | 4270.5 | 4345.5 | 4497.7 | 4684.3 | 4801.0 | 4617.4 | 4436.8 | 4305.0 | 4225.8 | 4194.4 |
| 60°   | 4766.5 | 4771.6 | 4881.1 | 5066.7 | 5356.8 | 5498.9 | 5271.6 | 4976.5 | 4810.1 | 4689.4 | 4697.5 |
| 62.5° | 5368.0 | 5388.3 | 5486.7 | 5742.3 | 6094.3 | 6253.5 | 5952.3 | 5557.7 | 5332.5 | 5182.4 | 5188.5 |
| 65°   | 6012.1 | 6046.6 | 6154.1 | 6435.1 | 6759.7 | 6931.1 | 6561.9 | 6106.5 | 5826.5 | 5642.9 | 5662.2 |
| 67.5° | 6430.0 | 6460.5 | 6615.7 | 6926.1 | 7330.8 | 7472.8 | 6996.1 | 6465.5 | 6115.6 | 5896.5 | 5855.9 |
| 70°   | 6323.5 | 6348.9 | 6555.8 | 6996.1 | 7595.5 | 7775.1 | 7099.5 | 6412.8 | 6001.0 | 5748.4 | 5732.2 |
| 72.5° | 5582.0 | 5529.3 | 5831.6 | 6463.5 | 7293.3 | 7594.5 | 6773.9 | 5856.9 | 5338.6 | 5078.9 | 5048.5 |
| 75°   | 3699.4 | 3814.0 | 4260.3 | 5004.9 | 6170.4 | 6543.7 | 5781.9 | 4702.6 | 4050.3 | 3834.3 | 3800.8 |
| 77.5° | 1236.5 | 1324.8 | 1721.4 | 2837.2 | 4206.6 | 4767.5 | 4212.6 | 3075.5 | 2175.8 | 1752.8 | 1760.9 |
| 80°   | 327.6  | 323.6  | 418.9  | 780.0  | 1817.7 | 2761.1 | 2116.0 | 1041.8 | 570.1  | 412.8  | 391.5  |
| 82.5° | 117.7  | 131.9  | 169.4  | 216.1  | 481.8  | 858.2  | 605.6  | 292.1  | 214.0  | 158.2  | 153.2  |
| 85°   | 51.7   | 50.7   | 73.0   | 86.2   | 120.7  | 160.3  | 142.0  | 123.8  | 108.5  | 72.0   | 66.9   |
| 87.5° | 11.2   | 11.2   | 17.2   | 13.2   | 21.3   | 21.3   | 26.4   | 31.4   | 32.5   | 21.3   | 17.2   |
| 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)