

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: P452452

Luminaire Tested: **GALN-SA3B-830-U-5MQ**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P452452  
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-SA3B-830-U-5MQ  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(3) 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: 14157 lumens  
Efficiency: N/A  
Efficacy: 117.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B4 - U0 - G2

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

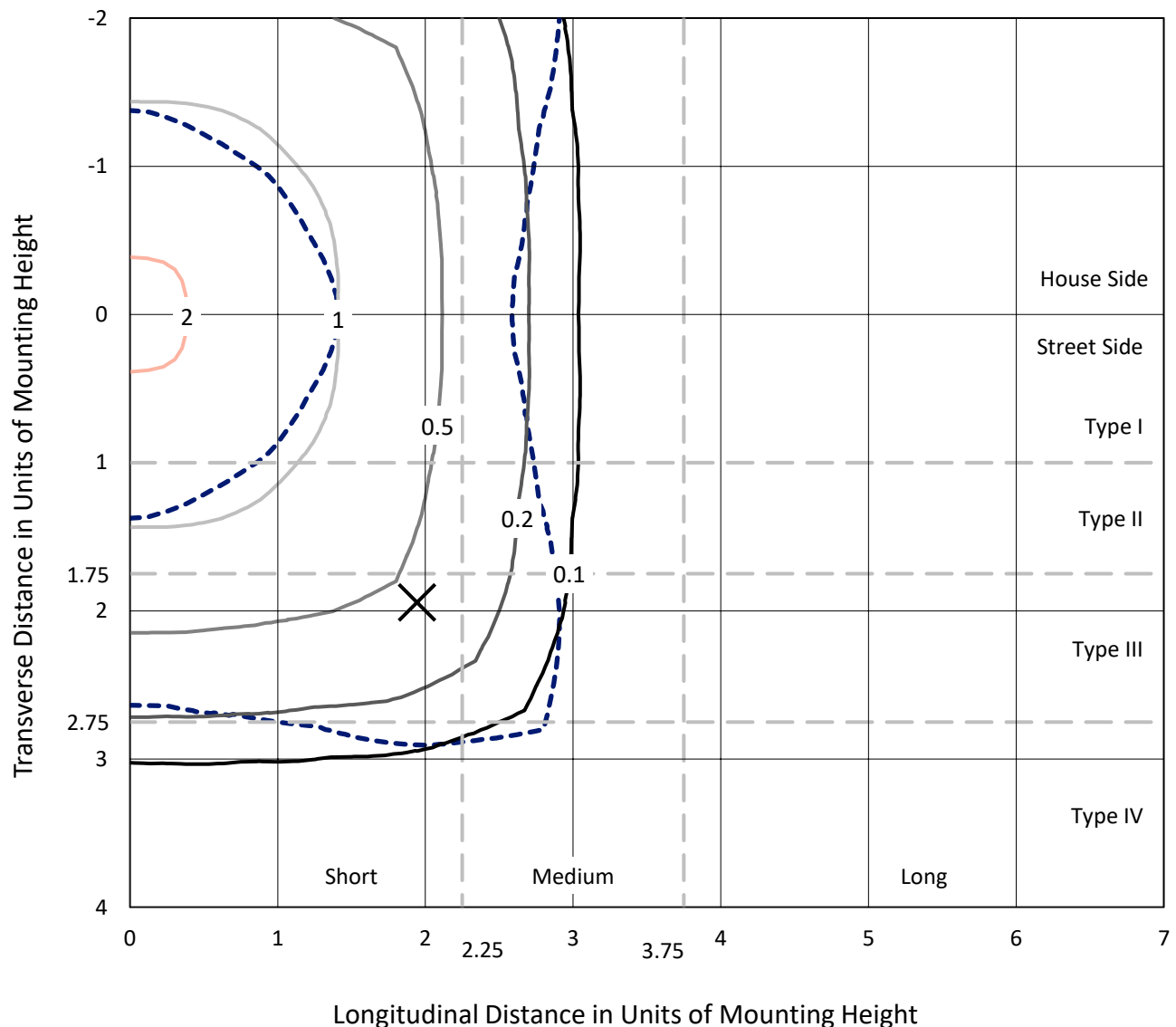


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## Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

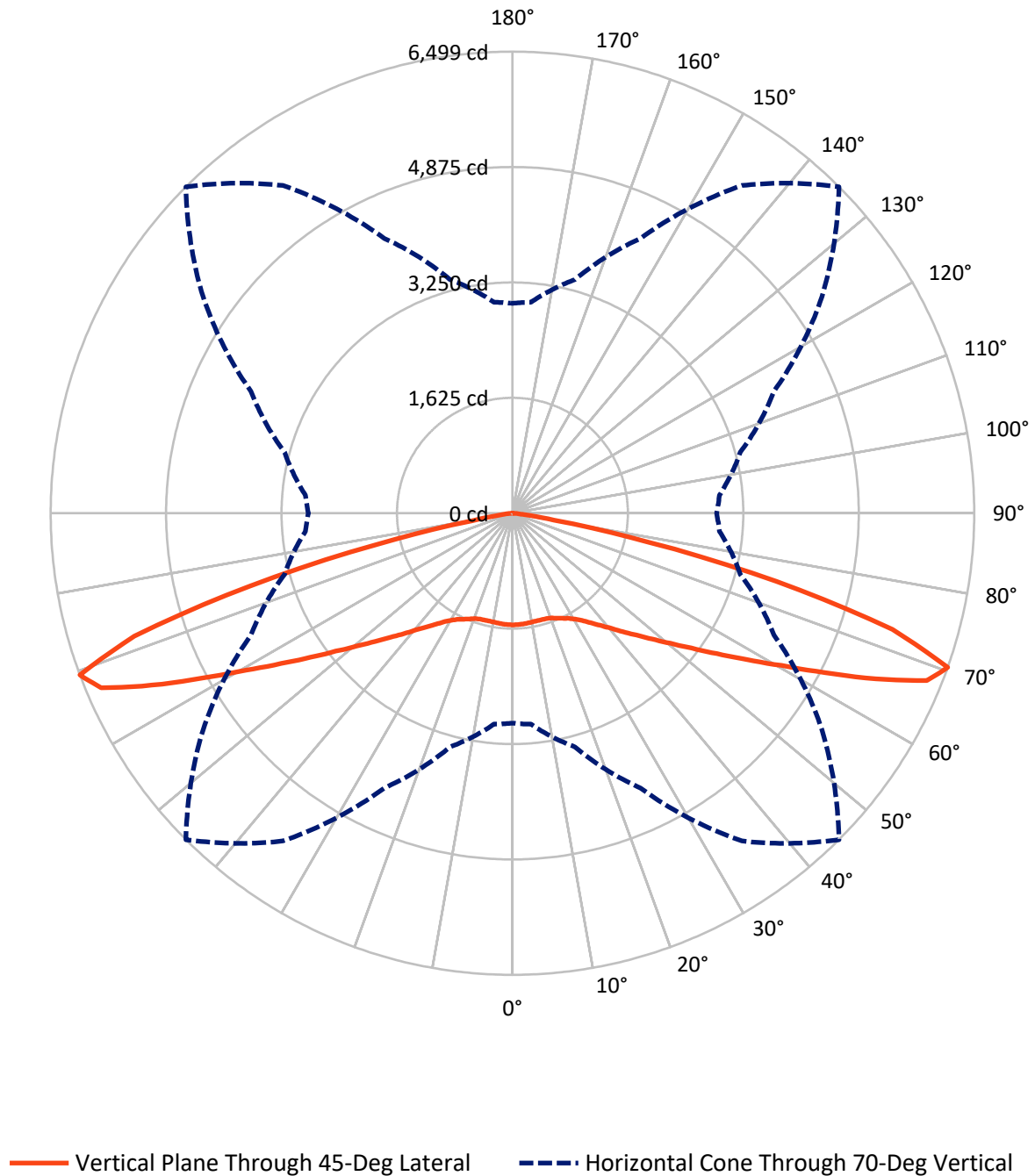


Based on 25 foot mounting height. Maximum calculated value = 2.5 fc  
 Type V - Short - N/A

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 7078.5   | 0.0    | 7078.5  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 7078.5   | 0.0    | 7078.5  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 14157.0  | 0.0    | 14157.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 149.1   | 1.1       |
| 10°-20°   | 437.5   | 3.1       |
| 20°-30°   | 748.2   | 5.3       |
| 30°-40°   | 1187.5  | 8.4       |
| 40°-50°   | 1915.8  | 13.5      |
| 50°-60°   | 3117.0  | 22.0      |
| 60°-70°   | 4518.6  | 31.9      |
| 70°-80°   | 2004.3  | 14.2      |
| 80°-90°   | 79.0    | 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°    | 14157.0 | 100.0     |
| 0°-180°   | 14157.0 | 100.0     |

**Coefficient of Utilization**



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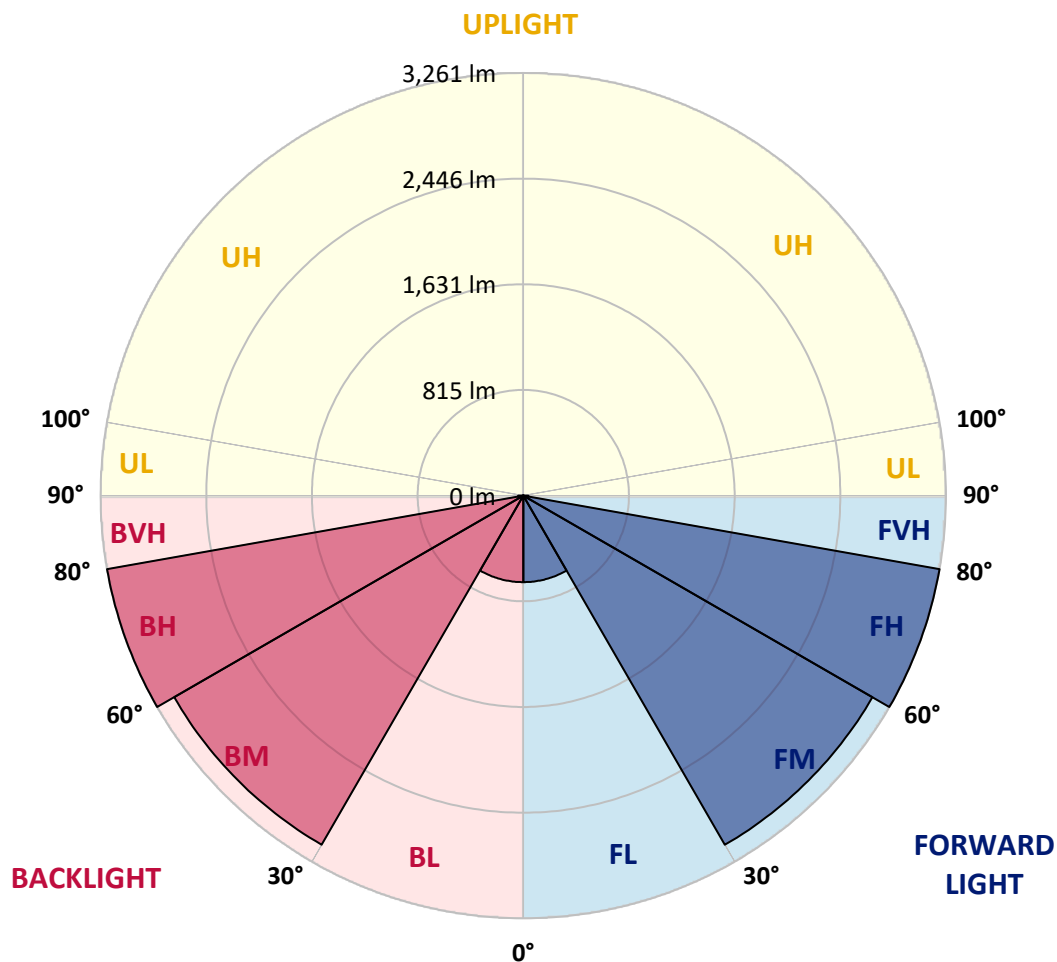
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 667.4  | 4.7       |                         |      |         |
| FM   | (30°-60°)   | 3110.2 | 22.0      |                         |      |         |
| FH   | (60°-80°)   | 3261.4 | 23.0      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 39.5   | 0.3       |                         |      | G1/100  |
| BL   | (0°-30°)    | 667.4  | 4.7       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 3110.2 | 22.0      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 3261.4 | 23.0      | B4/5000                 |      | G2/5000 |
| BVH  | (80°-90°)   | 39.5   | 0.3       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B4-U0-G2**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1572.1 | 1572.1 | 1572.1 | 1572.1 | 1572.1 | 1572.1 | 1572.1 | 1572.1 | 1572.1 | 1572.1 | 1572.1 |
| 2.5°  | 1572.1 | 1573.6 | 1571.3 | 1569.8 | 1569.1 | 1569.1 | 1568.3 | 1569.1 | 1573.6 | 1574.3 | 1572.1 |
| 5°    | 1567.6 | 1569.1 | 1568.3 | 1566.8 | 1566.1 | 1566.1 | 1565.4 | 1564.6 | 1568.3 | 1569.8 | 1569.1 |
| 7.5°  | 1561.6 | 1562.4 | 1561.6 | 1560.9 | 1561.6 | 1560.9 | 1558.6 | 1557.1 | 1560.1 | 1560.1 | 1559.4 |
| 10°   | 1551.2 | 1552.7 | 1551.9 | 1552.7 | 1554.2 | 1554.2 | 1551.2 | 1548.2 | 1548.9 | 1547.4 | 1547.4 |
| 12.5° | 1538.5 | 1540.7 | 1541.5 | 1544.5 | 1548.2 | 1552.7 | 1546.0 | 1539.2 | 1537.7 | 1537.0 | 1536.3 |
| 15°   | 1530.3 | 1532.5 | 1535.5 | 1538.5 | 1545.2 | 1554.9 | 1545.2 | 1534.8 | 1531.8 | 1528.8 | 1527.3 |
| 17.5° | 1528.0 | 1531.0 | 1535.5 | 1540.0 | 1548.9 | 1558.6 | 1550.4 | 1540.0 | 1532.5 | 1528.0 | 1526.6 |
| 20°   | 1534.0 | 1536.3 | 1543.0 | 1551.2 | 1563.9 | 1573.6 | 1565.4 | 1554.2 | 1543.0 | 1536.3 | 1534.0 |
| 22.5° | 1546.0 | 1549.7 | 1557.9 | 1572.8 | 1590.7 | 1604.9 | 1593.7 | 1575.1 | 1557.1 | 1548.2 | 1545.2 |
| 25°   | 1572.1 | 1575.1 | 1584.8 | 1604.9 | 1625.8 | 1639.2 | 1627.3 | 1605.6 | 1581.0 | 1569.1 | 1565.4 |
| 27.5° | 1611.6 | 1616.1 | 1626.5 | 1650.4 | 1667.6 | 1675.0 | 1666.8 | 1651.9 | 1634.0 | 1621.3 | 1618.3 |
| 30°   | 1667.6 | 1672.8 | 1688.5 | 1713.8 | 1725.0 | 1729.5 | 1725.8 | 1716.1 | 1703.4 | 1690.0 | 1687.0 |
| 32.5° | 1742.9 | 1745.9 | 1763.8 | 1787.7 | 1798.1 | 1799.6 | 1795.2 | 1790.7 | 1769.8 | 1747.4 | 1745.9 |
| 35°   | 1827.2 | 1832.5 | 1854.1 | 1882.5 | 1892.2 | 1892.9 | 1883.9 | 1877.2 | 1852.6 | 1834.7 | 1834.7 |
| 37.5° | 1939.2 | 1941.4 | 1962.3 | 1994.4 | 2004.8 | 2001.8 | 1997.4 | 1991.4 | 1965.3 | 1942.1 | 1942.9 |
| 40°   | 2070.5 | 2075.0 | 2092.9 | 2130.2 | 2130.2 | 2126.4 | 2129.4 | 2124.9 | 2098.8 | 2076.4 | 2077.2 |
| 42.5° | 2226.4 | 2228.7 | 2250.3 | 2289.8 | 2286.8 | 2279.4 | 2282.4 | 2276.4 | 2260.0 | 2234.6 | 2225.7 |
| 45°   | 2392.8 | 2401.8 | 2439.1 | 2477.1 | 2471.1 | 2447.3 | 2459.2 | 2457.7 | 2442.8 | 2404.7 | 2407.0 |
| 47.5° | 2593.5 | 2608.4 | 2644.2 | 2689.8 | 2683.0 | 2645.7 | 2659.2 | 2668.1 | 2647.2 | 2605.4 | 2598.0 |
| 50°   | 2819.6 | 2829.3 | 2882.2 | 2924.8 | 2918.8 | 2879.3 | 2909.9 | 2911.3 | 2859.1 | 2800.2 | 2800.2 |
| 52.5° | 3060.6 | 3070.3 | 3141.9 | 3208.3 | 3212.0 | 3154.6 | 3179.2 | 3177.7 | 3092.7 | 3015.1 | 3000.1 |
| 55°   | 3330.7 | 3335.1 | 3427.7 | 3525.4 | 3546.3 | 3490.3 | 3493.3 | 3463.5 | 3353.0 | 3262.8 | 3254.6 |
| 57.5° | 3609.7 | 3626.1 | 3728.3 | 3855.2 | 3917.1 | 3882.8 | 3867.1 | 3787.3 | 3680.6 | 3576.9 | 3571.7 |
| 60°   | 3918.6 | 3919.4 | 4052.2 | 4202.1 | 4327.5 | 4350.6 | 4286.4 | 4179.7 | 4041.7 | 3904.4 | 3898.5 |
| 62.5° | 4132.7 | 4164.8 | 4332.7 | 4586.4 | 4811.0 | 4940.8 | 4771.4 | 4547.6 | 4276.0 | 4054.4 | 4032.0 |
| 65°   | 4176.8 | 4198.4 | 4454.3 | 4884.1 | 5342.9 | 5622.7 | 5231.0 | 4755.0 | 4291.7 | 3996.2 | 3981.3 |
| 67.5° | 3820.9 | 3844.0 | 4188.7 | 4848.3 | 5716.0 | 6289.8 | 5529.5 | 4655.0 | 4026.0 | 3660.4 | 3631.4 |
| 70°   | 2955.4 | 2981.5 | 3407.5 | 4267.8 | 5633.2 | 6499.4 | 5316.8 | 4060.4 | 3320.2 | 2925.5 | 2872.5 |
| 72.5° | 1571.3 | 1667.6 | 2031.7 | 2929.3 | 4572.2 | 5595.9 | 4359.6 | 2962.8 | 2141.4 | 1750.4 | 1680.3 |
| 75°   | 573.8  | 585.7  | 788.6  | 1299.0 | 2659.9 | 3837.3 | 2762.1 | 1413.1 | 812.5  | 627.5  | 595.4  |
| 77.5° | 237.3  | 236.5  | 259.6  | 392.5  | 966.2  | 1965.3 | 1078.1 | 414.8  | 258.9  | 239.5  | 236.5  |
| 80°   | 140.3  | 140.3  | 154.4  | 163.4  | 254.4  | 593.2  | 284.3  | 185.0  | 155.2  | 141.8  | 144.0  |
| 82.5° | 62.7   | 66.4   | 97.7   | 103.0  | 123.1  | 162.7  | 137.3  | 117.9  | 101.5  | 70.1   | 63.4   |
| 85°   | 34.3   | 29.8   | 51.5   | 53.7   | 58.9   | 60.4   | 64.9   | 64.2   | 58.9   | 34.3   | 35.1   |
| 87.5° | 6.7    | 8.2    | 14.9   | 11.2   | 12.7   | 11.2   | 14.9   | 20.9   | 21.6   | 11.9   | 9.7    |
| 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)