

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: STREETWORKS

Report Number: P316656

Luminaire Tested: **GAN-SA2D-830-U-5MQ**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P316656  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-SA2D-830-U-5MQ  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V  
MEDIUM OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13251 lumens  
Efficiency: N/A  
Efficacy: 102.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B4 - U0 - G2

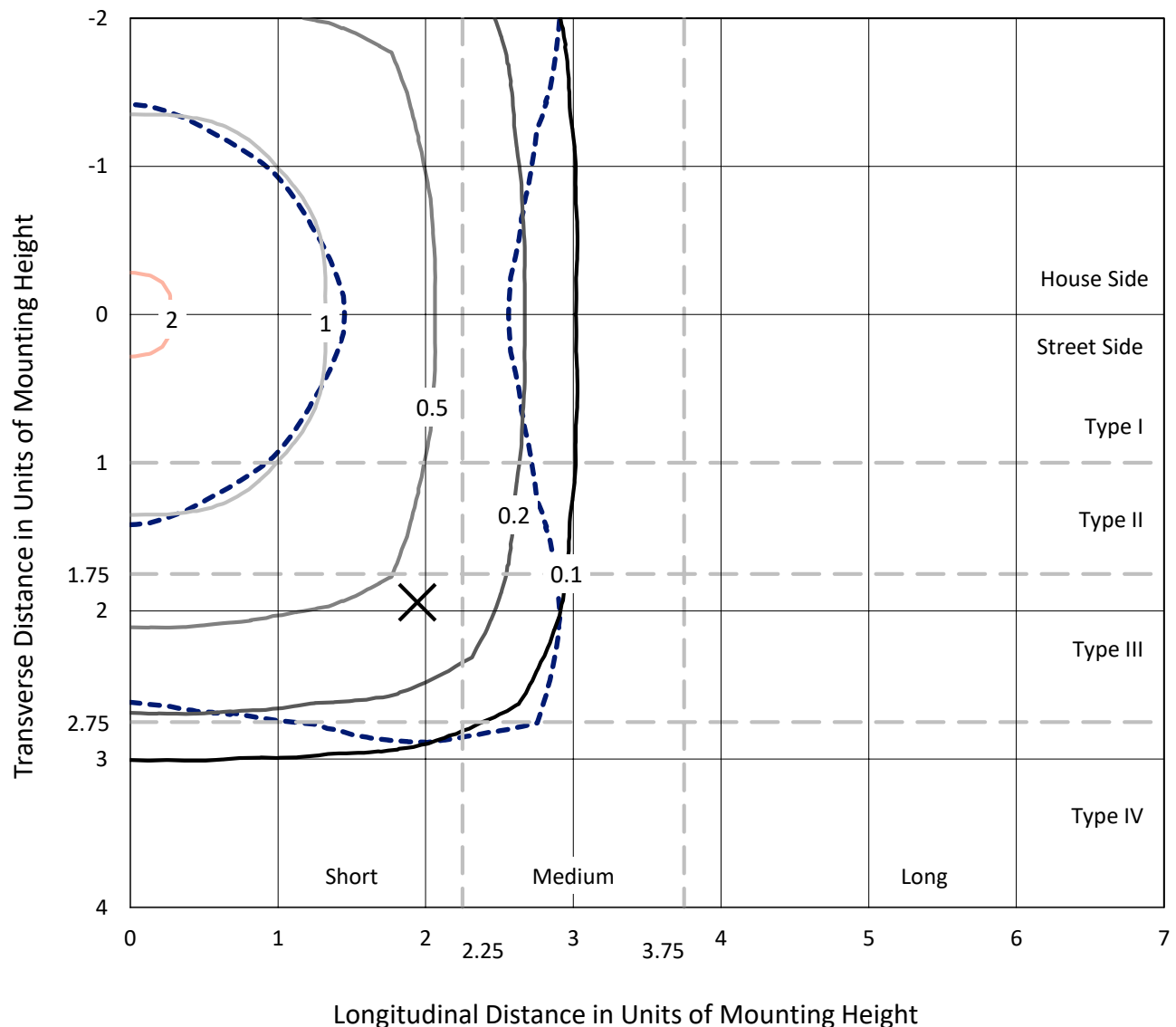
Input Watts (W): 129  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

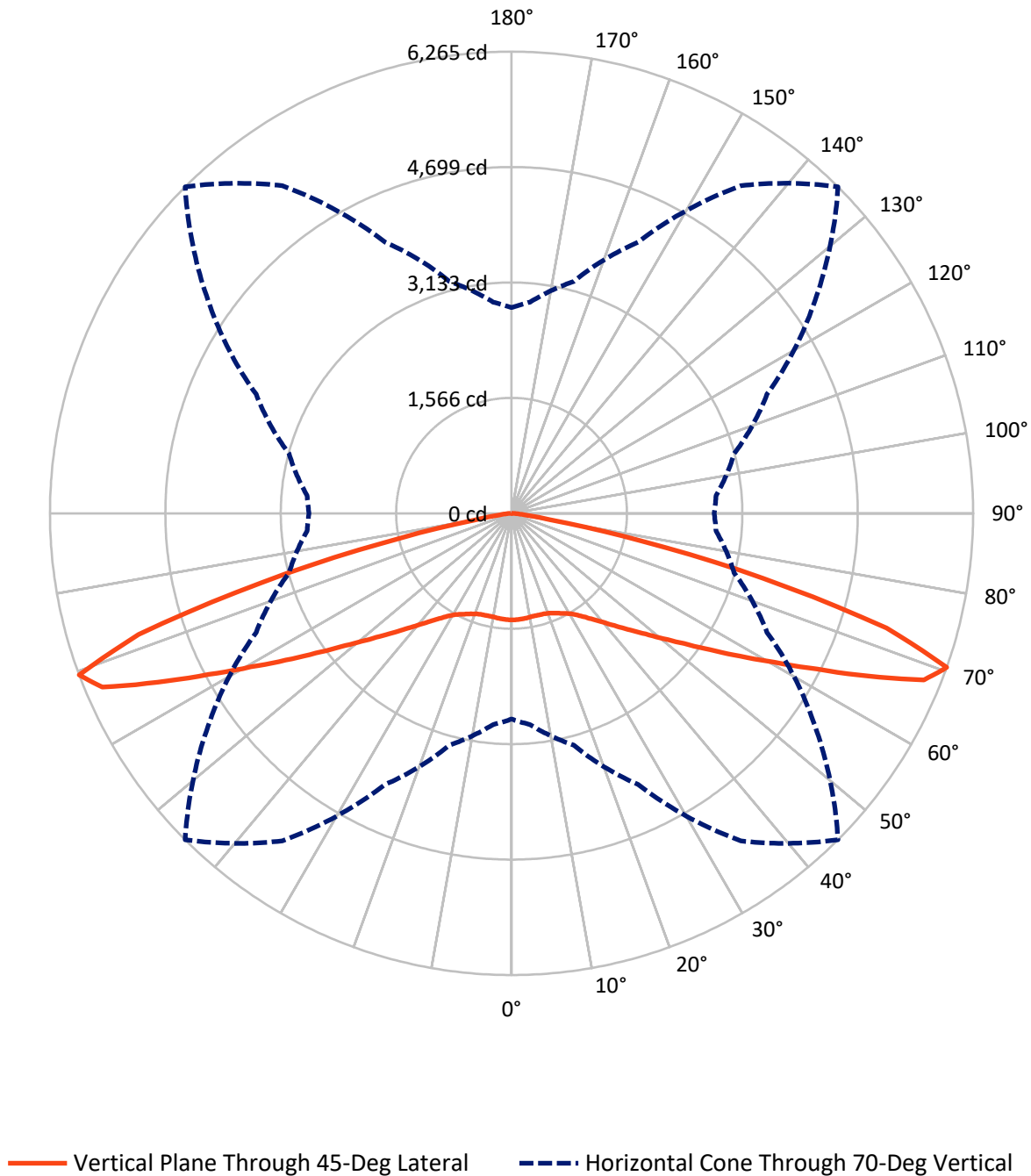
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 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    | 6625.5   | 0.0    | 6625.5  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 6625.5   | 0.0    | 6625.5  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 13251.0  | 0.0    | 13251.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 137.1   | 1.0       |
| 10°-20°   | 402.4   | 3.0       |
| 20°-30°   | 685.0   | 5.2       |
| 30°-40°   | 1086.4  | 8.2       |
| 40°-50°   | 1767.9  | 13.3      |
| 50°-60°   | 2915.0  | 22.0      |
| 60°-70°   | 4279.3  | 32.3      |
| 70°-80°   | 1892.3  | 14.3      |
| 80°-90°   | 85.7    | 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°    | 13251.0 | 100.0     |
| 0°-180°   | 13251.0 | 100.0     |

**Coefficient of Utilization**



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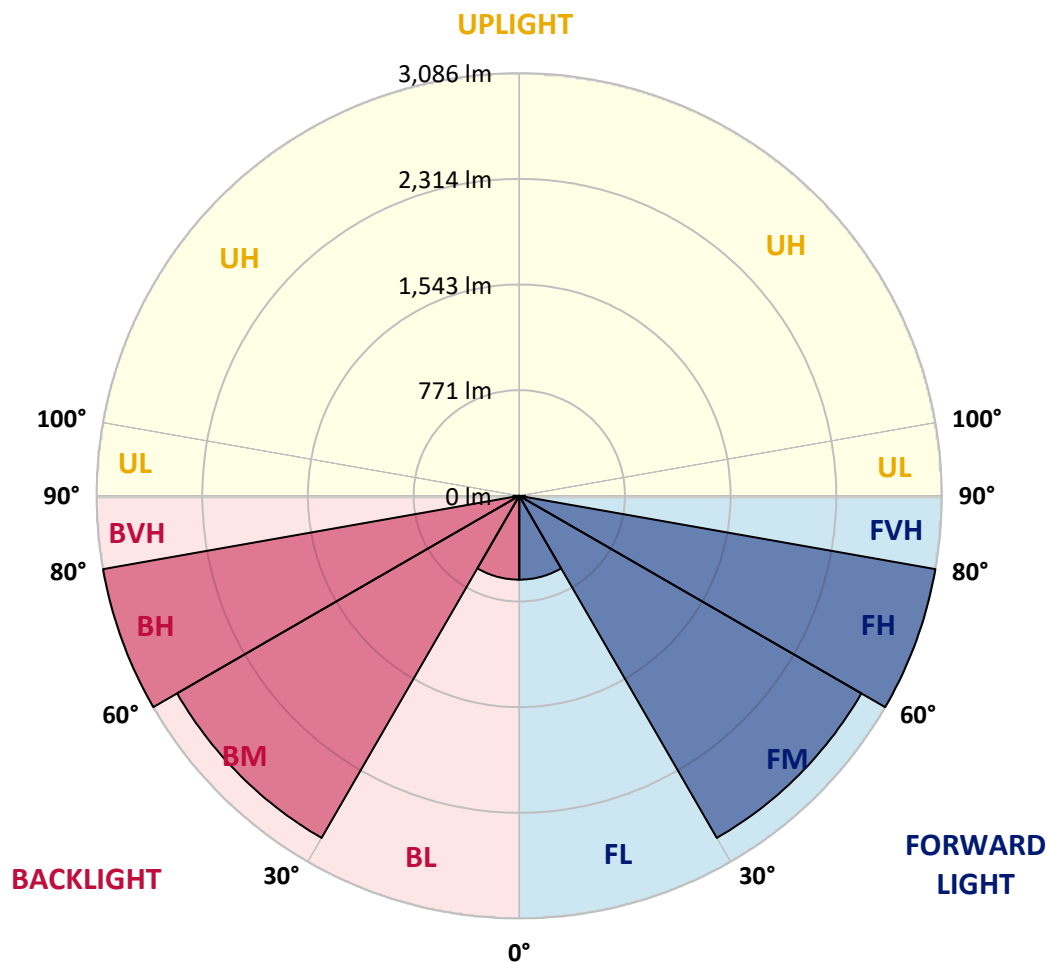
CATALOG NUMBER: GAN-SA2D-830-U-5MQ

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 612.2  | 4.6       |                         |      |         |
| FM   | (30°-60°)   | 2884.6 | 21.8      |                         |      |         |
| FH   | (60°-80°)   | 3085.8 | 23.3      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 42.8   | 0.3       |                         |      | G1/100  |
| BL   | (0°-30°)    | 612.2  | 4.6       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 2884.6 | 21.8      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 3085.8 | 23.3      | B4/5000                 |      | G2/5000 |
| BVH  | (80°-90°)   | 42.8   | 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°    | 1447.2 | 1447.2 | 1447.2 | 1447.2 | 1447.2 | 1447.2 | 1447.2 | 1447.2 | 1447.2 | 1447.2 | 1447.2 |
| 2.5°  | 1445.0 | 1443.7 | 1446.8 | 1446.3 | 1443.7 | 1444.1 | 1444.1 | 1445.5 | 1445.5 | 1444.6 | 1444.6 |
| 5°    | 1439.8 | 1438.9 | 1442.4 | 1442.4 | 1439.8 | 1440.6 | 1441.5 | 1442.8 | 1442.4 | 1441.5 | 1441.1 |
| 7.5°  | 1433.2 | 1432.7 | 1436.3 | 1436.3 | 1434.5 | 1435.4 | 1434.5 | 1434.9 | 1434.1 | 1433.2 | 1431.9 |
| 10°   | 1422.2 | 1423.1 | 1426.2 | 1427.0 | 1427.0 | 1427.5 | 1426.6 | 1424.4 | 1423.1 | 1421.8 | 1420.5 |
| 12.5° | 1412.1 | 1411.7 | 1416.1 | 1418.3 | 1421.8 | 1425.7 | 1423.1 | 1417.0 | 1414.3 | 1411.7 | 1410.8 |
| 15°   | 1405.6 | 1406.0 | 1410.4 | 1414.3 | 1420.5 | 1428.8 | 1425.7 | 1416.1 | 1410.8 | 1407.7 | 1406.9 |
| 17.5° | 1404.2 | 1405.1 | 1410.8 | 1417.8 | 1424.4 | 1433.6 | 1431.9 | 1422.2 | 1413.4 | 1407.7 | 1406.4 |
| 20°   | 1407.3 | 1407.7 | 1416.5 | 1426.6 | 1438.0 | 1446.8 | 1442.8 | 1432.3 | 1420.5 | 1411.7 | 1409.5 |
| 22.5° | 1413.0 | 1414.8 | 1425.7 | 1441.5 | 1459.1 | 1470.9 | 1466.1 | 1448.1 | 1429.7 | 1418.7 | 1415.6 |
| 25°   | 1431.0 | 1431.4 | 1446.3 | 1467.8 | 1488.9 | 1502.5 | 1496.8 | 1471.3 | 1447.7 | 1435.4 | 1431.4 |
| 27.5° | 1468.3 | 1469.6 | 1484.5 | 1509.5 | 1527.5 | 1536.2 | 1532.7 | 1512.1 | 1491.9 | 1478.8 | 1480.1 |
| 30°   | 1522.2 | 1524.0 | 1540.6 | 1568.3 | 1579.2 | 1581.4 | 1580.5 | 1570.9 | 1552.5 | 1534.9 | 1536.2 |
| 32.5° | 1588.0 | 1588.9 | 1611.2 | 1636.2 | 1645.0 | 1646.8 | 1645.0 | 1636.2 | 1614.3 | 1590.6 | 1591.9 |
| 35°   | 1672.6 | 1675.3 | 1696.8 | 1720.9 | 1727.9 | 1731.4 | 1728.3 | 1716.9 | 1694.1 | 1670.9 | 1670.0 |
| 37.5° | 1777.0 | 1777.4 | 1799.8 | 1824.8 | 1833.6 | 1834.5 | 1830.9 | 1823.5 | 1795.0 | 1773.9 | 1772.6 |
| 40°   | 1898.0 | 1899.8 | 1926.1 | 1952.9 | 1956.4 | 1952.4 | 1957.2 | 1952.9 | 1923.5 | 1899.4 | 1903.3 |
| 42.5° | 2045.4 | 2049.3 | 2080.9 | 2107.2 | 2097.1 | 2095.0 | 2098.0 | 2099.3 | 2075.7 | 2046.3 | 2043.6 |
| 45°   | 2216.9 | 2220.4 | 2259.8 | 2280.9 | 2274.3 | 2259.8 | 2266.0 | 2276.5 | 2243.6 | 2207.2 | 2210.7 |
| 47.5° | 2412.5 | 2421.2 | 2463.3 | 2483.1 | 2466.8 | 2447.1 | 2459.0 | 2474.7 | 2436.1 | 2391.0 | 2388.8 |
| 50°   | 2630.0 | 2640.9 | 2697.1 | 2724.7 | 2708.5 | 2672.1 | 2691.8 | 2702.3 | 2646.7 | 2588.3 | 2583.5 |
| 52.5° | 2862.0 | 2872.9 | 2943.5 | 3000.6 | 2990.0 | 2933.5 | 2961.1 | 2950.1 | 2886.1 | 2807.6 | 2801.5 |
| 55°   | 3124.7 | 3129.1 | 3205.4 | 3297.5 | 3308.0 | 3266.3 | 3264.6 | 3246.6 | 3151.9 | 3061.1 | 3056.7 |
| 57.5° | 3394.8 | 3397.9 | 3496.6 | 3605.3 | 3654.9 | 3654.9 | 3605.8 | 3567.6 | 3441.7 | 3336.5 | 3325.5 |
| 60°   | 3686.5 | 3697.4 | 3806.6 | 3954.4 | 4070.2 | 4104.4 | 4017.6 | 3913.6 | 3776.8 | 3648.3 | 3635.6 |
| 62.5° | 3946.1 | 3958.8 | 4125.9 | 4346.0 | 4532.0 | 4656.5 | 4444.3 | 4275.0 | 4025.9 | 3819.8 | 3795.7 |
| 65°   | 3979.0 | 4013.2 | 4256.6 | 4655.2 | 5071.4 | 5320.1 | 4913.1 | 4496.0 | 4042.1 | 3755.7 | 3731.2 |
| 67.5° | 3633.8 | 3691.7 | 4020.6 | 4641.2 | 5501.2 | 6034.9 | 5212.6 | 4369.7 | 3750.9 | 3434.3 | 3407.1 |
| 70°   | 2792.2 | 2876.5 | 3255.8 | 4059.7 | 5427.1 | 6265.1 | 5024.9 | 3825.5 | 3127.3 | 2786.5 | 2748.4 |
| 72.5° | 1531.9 | 1566.5 | 1907.7 | 2780.0 | 4350.9 | 5324.0 | 4191.2 | 2828.6 | 2073.9 | 1687.5 | 1623.5 |
| 75°   | 485.9  | 498.2  | 671.9  | 1137.6 | 2461.1 | 3526.4 | 2662.4 | 1388.4 | 764.4  | 563.5  | 557.0  |
| 77.5° | 215.8  | 217.1  | 243.0  | 332.0  | 847.7  | 1786.7 | 1018.3 | 378.0  | 260.5  | 227.6  | 235.1  |
| 80°   | 136.4  | 136.4  | 150.4  | 164.5  | 230.7  | 518.8  | 275.4  | 179.8  | 153.5  | 142.5  | 145.6  |
| 82.5° | 65.3   | 72.4   | 97.8   | 105.3  | 126.7  | 174.5  | 141.2  | 117.5  | 102.6  | 76.3   | 71.0   |
| 85°   | 43.0   | 36.0   | 61.8   | 69.7   | 73.7   | 83.8   | 82.0   | 77.6   | 67.1   | 38.2   | 42.5   |
| 87.5° | 19.3   | 18.4   | 32.0   | 29.4   | 27.6   | 21.1   | 31.6   | 39.0   | 37.7   | 18.9   | 18.9   |
| 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)