

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: P316983

Luminaire Tested: **GAN-SA9D-830-U-5NQ**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P316983  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-SA9D-830-U-5NQ  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V  
NARROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 56858 lumens  
Efficiency: N/A  
Efficacy: 98.9 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B5 - U0 - G4

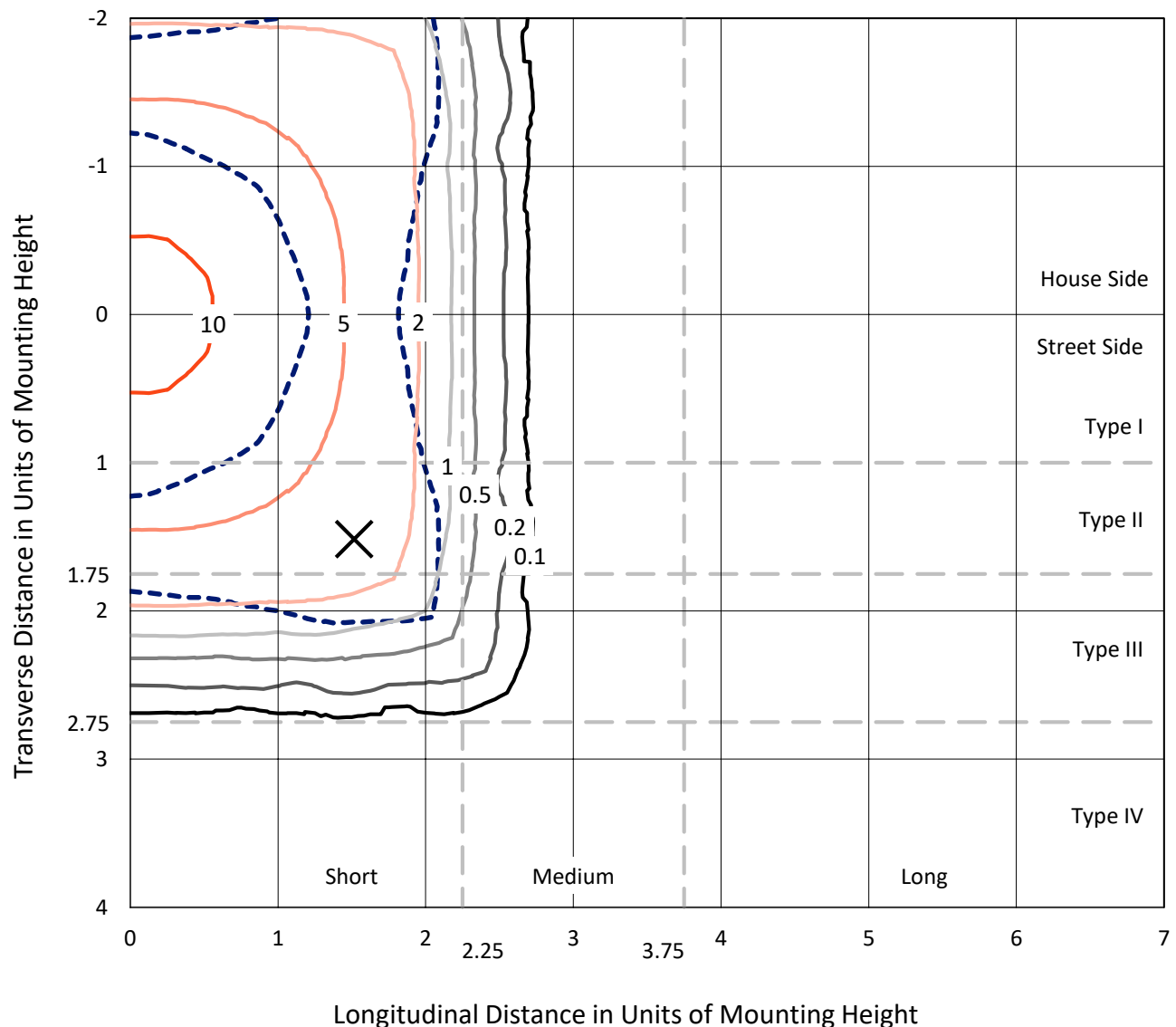
Input Watts (W): 575  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P316983  
 CATALOG NUMBER: GAN-SA9D-830-U-5NQ

## Iso-Footcandle Lines of Horizontal Illumination

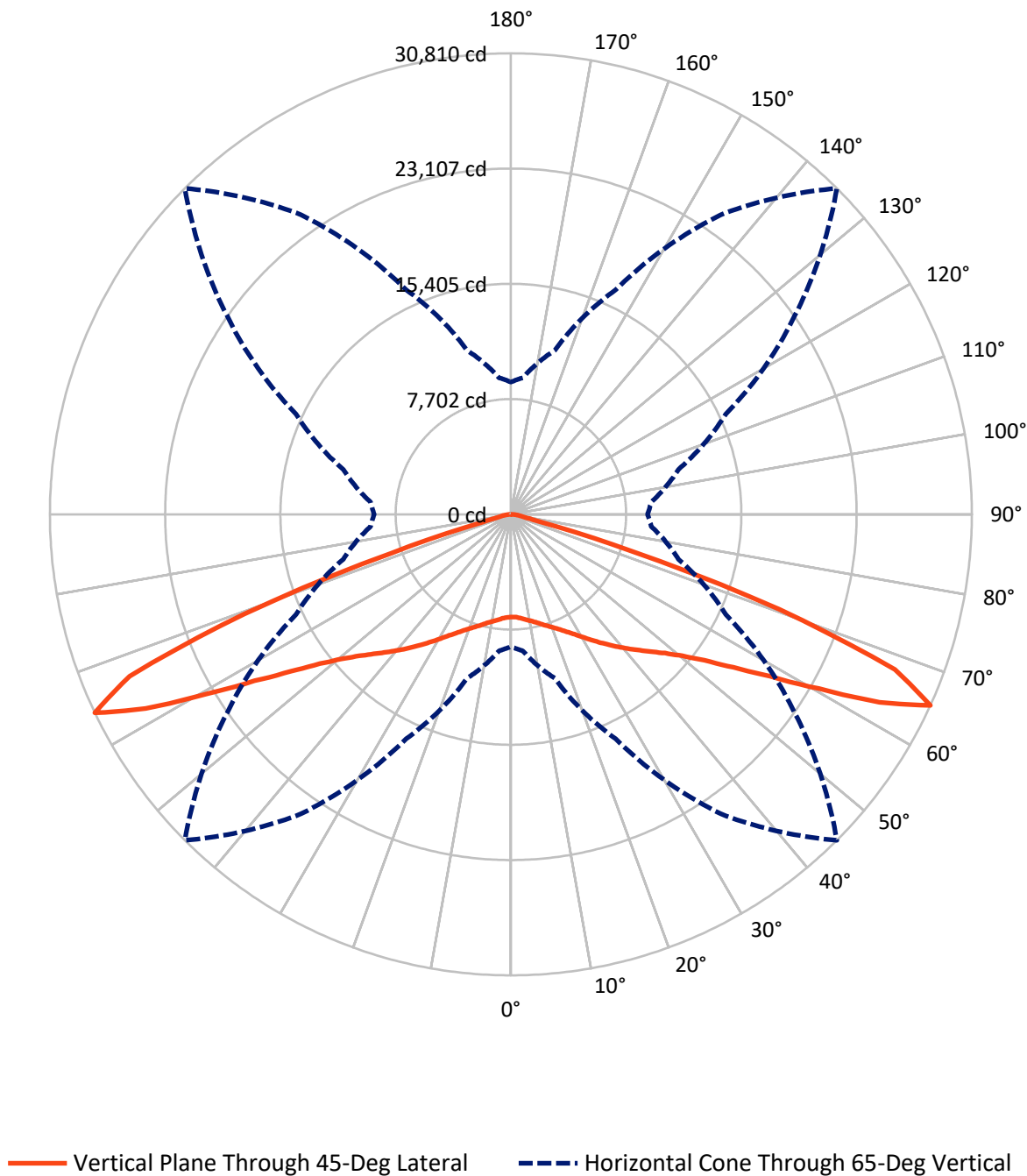
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.1 fc  
 Type V - Short - N/A

REPORT NUMBER: P316983  
CATALOG NUMBER: GAN-SA9D-830-U-5NQ

## Luminous Intensity Polar Plot



REPORT NUMBER: P316983

CATALOG NUMBER: GAN-SA9D-830-U-5NQ

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 28429.0  | 0.0    | 28429.0 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 28429.0  | 0.0    | 28429.0 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 56858.0  | 0.0    | 56858.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 673.7   | 1.2       |
| 10°-20°   | 2165.4  | 3.8       |
| 20°-30°   | 4062.7  | 7.1       |
| 30°-40°   | 6718.8  | 11.8      |
| 40°-50°   | 10406.6 | 18.3      |
| 50°-60°   | 15960.8 | 28.1      |
| 60°-70°   | 14893.2 | 26.2      |
| 70°-80°   | 1733.3  | 3.0       |
| 80°-90°   | 243.6   | 0.4       |
| 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°    | 56858.0 | 100.0     |
| 0°-180°   | 56858.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P316983

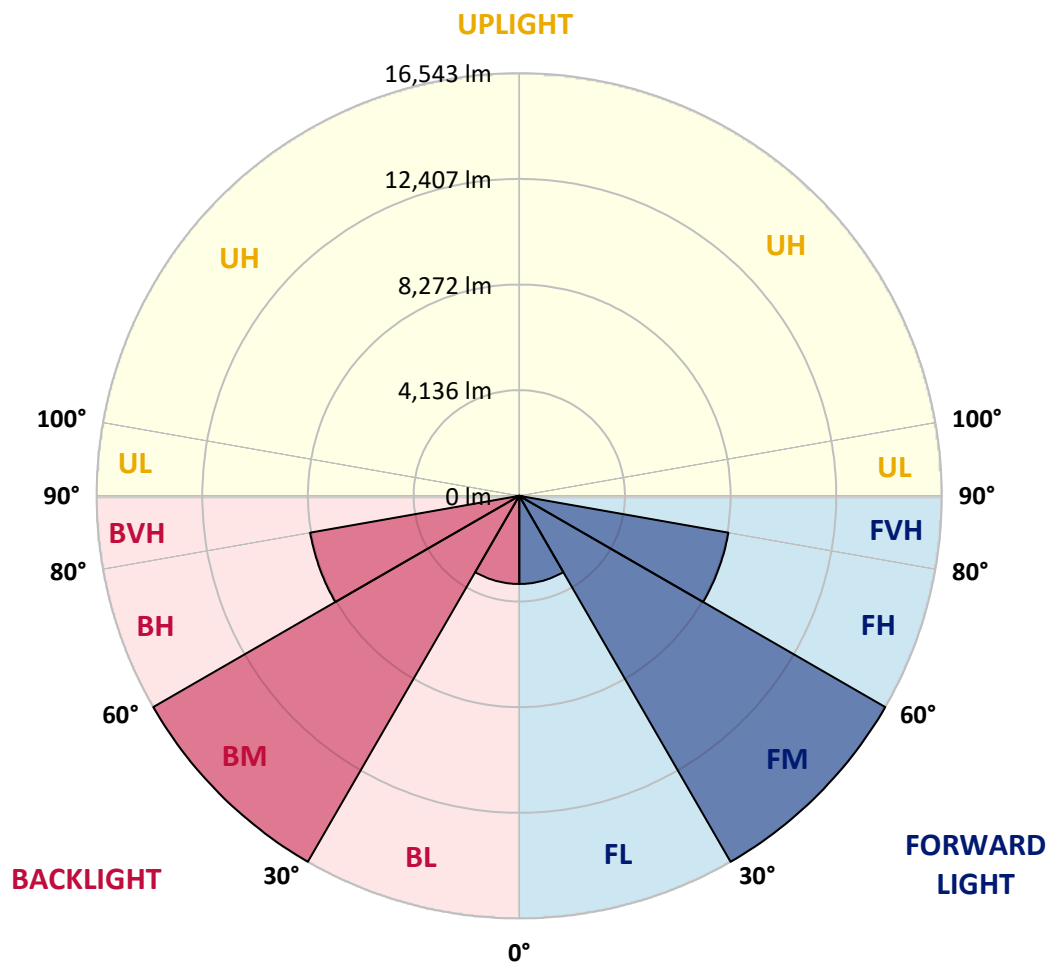
CATALOG NUMBER: GAN-SA9D-830-U-5NQ

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

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|---------|-----------|-------------------------|------|----------|
|      |             |         |           | B                       | U    | G        |
| FL   | (0°-30°)    | 3450.9  | 6.1       |                         |      |          |
| FM   | (30°-60°)   | 16543.1 | 29.1      |                         |      |          |
| FH   | (60°-80°)   | 8313.3  | 14.6      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 121.8   | 0.2       |                         |      | G2/225   |
| BL   | (0°-30°)    | 3450.9  | 6.1       | B4/5000                 |      |          |
| BM   | (30°-60°)   | 16543.1 | 29.1      | B5                      |      |          |
| BH   | (60°-80°)   | 8313.3  | 14.6      | B5                      |      | G4/12000 |
| BVH  | (80°-90°)   | 121.8   | 0.2       |                         |      | G2/225   |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |          |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |          |

**BUG Rating: B5-U0-G4**

Type V Short





REPORT NUMBER: P316983

CATALOG NUMBER: GAN-SA9D-830-U-5NQ

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 85°     | 90°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 6866.3  | 6866.3  | 6866.3  | 6866.3  | 6866.3  | 6866.3  | 6866.3  | 6866.3  | 6866.3  | 6866.3  | 6866.3  |
| 2.5°  | 6889.0  | 6885.2  | 6889.0  | 6890.9  | 6879.5  | 6885.2  | 6883.3  | 6892.7  | 6896.5  | 6892.7  | 6892.7  |
| 5°    | 6968.2  | 6962.6  | 6970.1  | 6979.6  | 6964.5  | 6968.2  | 6962.6  | 6973.9  | 6977.7  | 6970.1  | 6975.8  |
| 7.5°  | 7077.7  | 7079.6  | 7087.1  | 7104.1  | 7094.7  | 7102.2  | 7090.9  | 7092.8  | 7090.9  | 7079.6  | 7081.5  |
| 10°   | 7196.6  | 7198.5  | 7211.7  | 7234.4  | 7238.1  | 7238.1  | 7230.6  | 7224.9  | 7217.4  | 7209.8  | 7211.7  |
| 12.5° | 7340.1  | 7349.5  | 7358.9  | 7387.2  | 7387.2  | 7402.3  | 7398.6  | 7383.5  | 7370.3  | 7358.9  | 7358.9  |
| 15°   | 7534.5  | 7532.6  | 7543.9  | 7572.2  | 7585.4  | 7610.0  | 7610.0  | 7589.2  | 7572.2  | 7560.9  | 7557.1  |
| 17.5° | 7738.3  | 7744.0  | 7751.5  | 7785.5  | 7806.2  | 7834.6  | 7838.3  | 7821.3  | 7810.0  | 7794.9  | 7785.5  |
| 20°   | 7976.1  | 7985.5  | 8015.7  | 8029.0  | 8047.8  | 8074.3  | 8083.7  | 8079.9  | 8068.6  | 8061.0  | 8062.9  |
| 22.5° | 8253.6  | 8278.1  | 8297.0  | 8315.8  | 8338.5  | 8357.4  | 8366.8  | 8380.0  | 8368.7  | 8363.0  | 8359.2  |
| 25°   | 8589.5  | 8606.5  | 8644.2  | 8678.2  | 8693.3  | 8699.0  | 8710.3  | 8729.2  | 8727.3  | 8714.1  | 8714.1  |
| 27.5° | 8970.8  | 9002.8  | 9050.0  | 9099.1  | 9099.1  | 9080.2  | 9118.0  | 9150.1  | 9138.7  | 9121.8  | 9099.1  |
| 30°   | 9433.2  | 9463.4  | 9518.1  | 9586.1  | 9552.1  | 9538.9  | 9589.8  | 9648.3  | 9631.3  | 9603.0  | 9599.3  |
| 32.5° | 9931.4  | 9959.8  | 10031.5 | 10105.1 | 10061.7 | 10042.8 | 10097.5 | 10182.5 | 10152.3 | 10095.6 | 10061.7 |
| 35°   | 10471.2 | 10499.5 | 10601.5 | 10690.2 | 10616.6 | 10584.5 | 10629.8 | 10722.3 | 10669.4 | 10563.7 | 10537.3 |
| 37.5° | 11058.2 | 11073.3 | 11205.4 | 11296.0 | 11245.1 | 11160.1 | 11216.8 | 11284.7 | 11239.4 | 11111.1 | 11060.1 |
| 40°   | 11667.8 | 11722.6 | 11875.5 | 11981.1 | 11892.4 | 11758.4 | 11852.8 | 11947.2 | 11879.2 | 11715.0 | 11628.2 |
| 42.5° | 12379.4 | 12420.9 | 12624.7 | 12719.1 | 12575.7 | 12386.9 | 12515.3 | 12643.6 | 12575.7 | 12417.1 | 12341.6 |
| 45°   | 13119.2 | 13183.4 | 13426.9 | 13521.3 | 13313.6 | 13073.9 | 13230.6 | 13455.2 | 13449.5 | 13221.2 | 13141.9 |
| 47.5° | 13925.2 | 13989.3 | 14280.0 | 14404.6 | 14180.0 | 13859.1 | 14079.9 | 14397.0 | 14374.4 | 14123.3 | 14059.2 |
| 50°   | 14855.6 | 14923.6 | 15286.0 | 15442.6 | 15233.1 | 14859.4 | 15191.6 | 15470.9 | 15429.4 | 15119.9 | 15125.5 |
| 52.5° | 16023.9 | 16020.2 | 16471.2 | 16743.0 | 16527.9 | 16197.6 | 16503.3 | 16775.1 | 16603.4 | 16174.9 | 16161.7 |
| 55°   | 17046.9 | 17109.2 | 17667.9 | 18183.1 | 18169.9 | 18043.4 | 18166.1 | 18177.4 | 17686.7 | 17116.7 | 17046.9 |
| 57.5° | 17718.8 | 17837.7 | 18624.8 | 19557.1 | 20255.5 | 20423.4 | 20185.6 | 19464.6 | 18315.2 | 17403.6 | 17292.3 |
| 60°   | 17305.5 | 17486.7 | 18722.9 | 20623.5 | 22680.8 | 23667.9 | 22325.9 | 20089.4 | 17826.4 | 16556.2 | 16405.2 |
| 62.5° | 14515.9 | 14821.7 | 16631.7 | 20108.2 | 24768.2 | 27654.0 | 23877.4 | 19087.2 | 15882.4 | 14132.8 | 13874.2 |
| 65°   | 8840.5  | 9163.3  | 11345.1 | 16550.5 | 24430.4 | 30809.7 | 23169.6 | 15842.7 | 11592.3 | 9416.2  | 9136.9  |
| 67.5° | 2946.2  | 3040.6  | 4325.9  | 9148.2  | 19200.4 | 27682.3 | 19232.5 | 9484.1  | 5045.0  | 3344.5  | 3246.3  |
| 70°   | 1153.2  | 1162.6  | 1372.1  | 2651.8  | 9067.0  | 19013.6 | 10005.1 | 2699.0  | 1434.4  | 1134.3  | 1158.9  |
| 72.5° | 847.4   | 851.2   | 909.7   | 1107.9  | 2363.0  | 8376.2  | 2447.9  | 1113.6  | 885.2   | 794.6   | 794.6   |
| 75°   | 681.3   | 681.3   | 722.9   | 807.8   | 1058.8  | 1921.4  | 1073.9  | 798.4   | 692.7   | 634.2   | 626.6   |
| 77.5° | 537.9   | 549.2   | 581.3   | 636.1   | 717.2   | 924.8   | 743.6   | 632.3   | 558.7   | 503.9   | 492.6   |
| 80°   | 400.1   | 411.5   | 464.3   | 490.7   | 515.3   | 641.7   | 549.2   | 494.5   | 441.6   | 377.5   | 366.2   |
| 82.5° | 262.3   | 273.7   | 339.7   | 354.8   | 349.2   | 419.0   | 369.9   | 364.3   | 324.6   | 243.5   | 232.1   |
| 85°   | 171.8   | 175.5   | 226.5   | 235.9   | 217.0   | 190.6   | 235.9   | 249.1   | 226.5   | 158.5   | 152.9   |
| 87.5° | 81.2    | 81.2    | 115.1   | 107.6   | 98.1    | 79.3    | 107.6   | 126.5   | 128.3   | 77.4    | 75.5    |
| 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)