

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: P456180

Luminaire Tested: **GALN-SA7B-830-U-T1**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P456180  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA7B-830-U-T1  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(7) 80 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE I OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 31439 lumens  
Efficiency: N/A  
Efficacy: 109.9 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type I - Short  
BUG Rating: B5 - U0 - G5

Input Watts (W): 286  
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

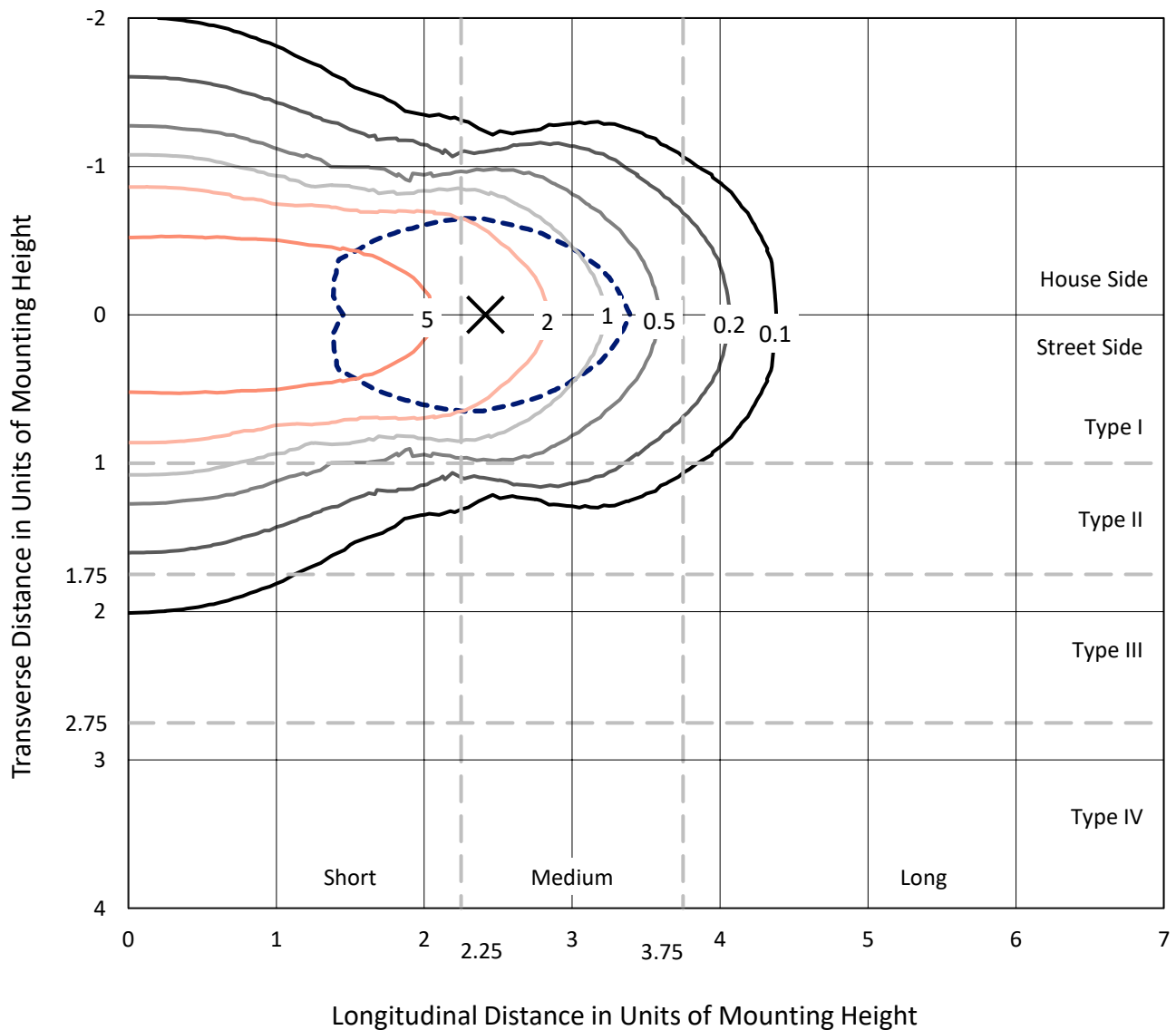


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

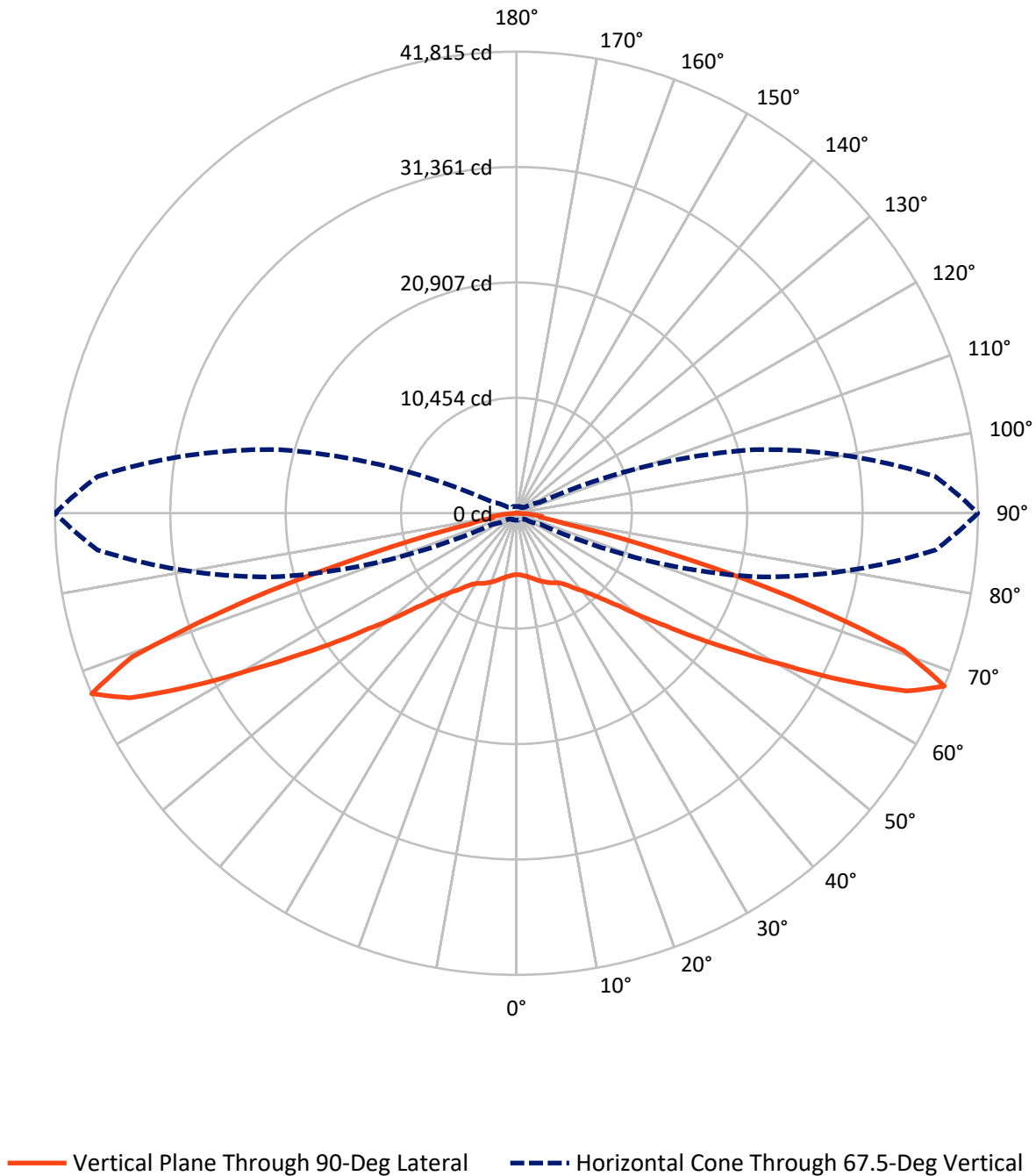


Based on 25 foot mounting height. Maximum calculated value = 9.4 fc  
 Type I - Short - N/A

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 15719.5  | 0.0    | 15719.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 15719.5  | 0.0    | 15719.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 31439.0  | 0.0    | 31439.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 554.9   | 1.8       |
| 10°-20°   | 1775.4  | 5.6       |
| 20°-30°   | 2971.5  | 9.5       |
| 30°-40°   | 4025.6  | 12.8      |
| 40°-50°   | 5099.1  | 16.2      |
| 50°-60°   | 6370.1  | 20.3      |
| 60°-70°   | 7487.8  | 23.8      |
| 70°-80°   | 2864.4  | 9.1       |
| 80°-90°   | 290.2   | 0.9       |
| 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°    | 31439.0 | 100.0     |
| 0°-180°   | 31439.0 | 100.0     |

**Coefficient of Utilization**



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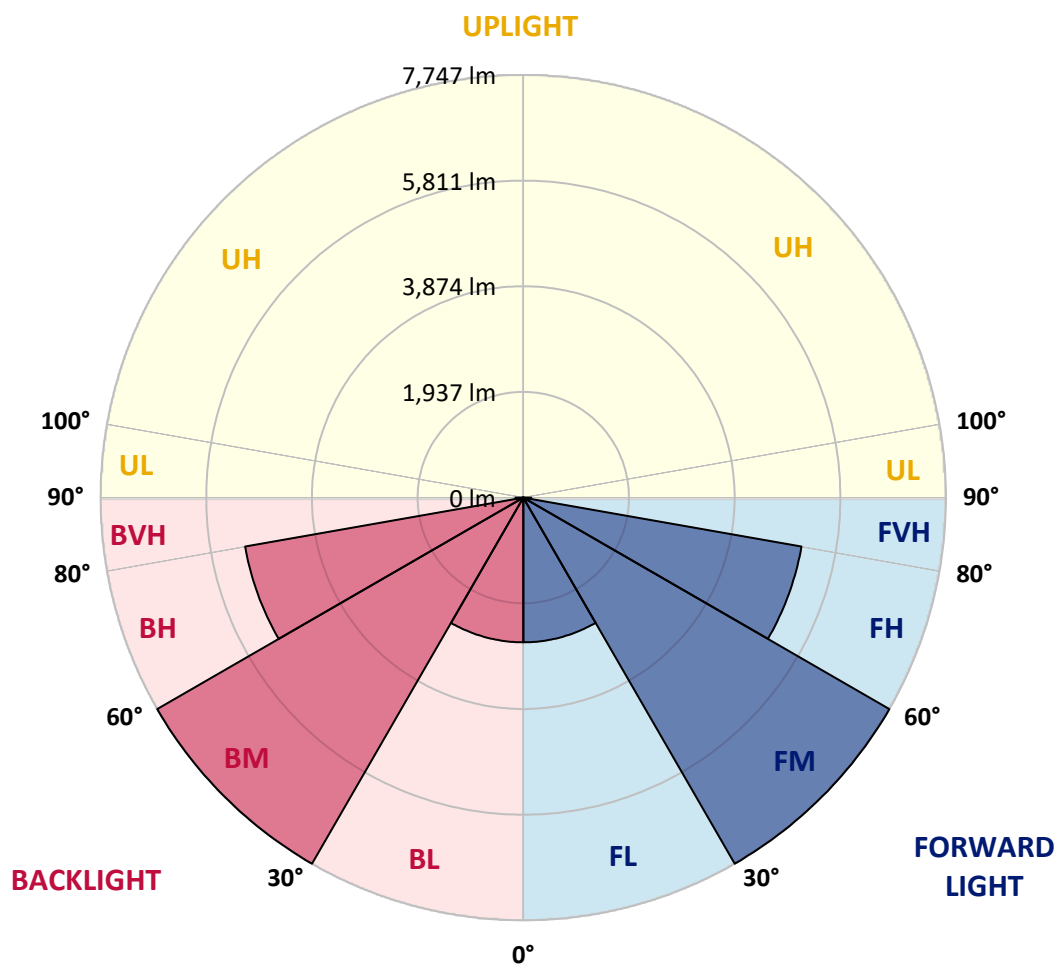
CATALOG NUMBER: GALN-SA7B-830-U-T1

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2650.9 | 8.4       |                         |      |         |
| FM   | (30°-60°)   | 7747.4 | 24.6      |                         |      |         |
| FH   | (60°-80°)   | 5176.1 | 16.5      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 145.1  | 0.5       |                         |      | G2/225  |
| BL   | (0°-30°)    | 2650.9 | 8.4       | B4/5000                 |      |         |
| BM   | (30°-60°)   | 7747.4 | 24.6      | B4/8500                 |      |         |
| BH   | (60°-80°)   | 5176.1 | 16.5      | B5                      |      | G5      |
| BVH  | (80°-90°)   | 145.1  | 0.5       |                         |      | G2/225  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B5-U0-G5**

Type I Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°     | 75°     | 85°     | 90°     |
|-------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|
| 0°    | 5565.7 | 5565.7 | 5565.7 | 5565.7 | 5565.7 | 5565.7 | 5565.7 | 5565.7  | 5565.7  | 5565.7  | 5565.7  |
| 2.5°  | 5637.1 | 5633.6 | 5635.3 | 5633.6 | 5638.8 | 5635.3 | 5614.4 | 5597.0  | 5583.1  | 5584.8  | 5579.6  |
| 5°    | 5757.2 | 5758.9 | 5760.7 | 5752.0 | 5764.1 | 5757.2 | 5724.1 | 5696.2  | 5668.4  | 5657.9  | 5654.5  |
| 7.5°  | 5856.4 | 5865.1 | 5870.3 | 5879.0 | 5899.9 | 5899.9 | 5882.5 | 5842.5  | 5781.6  | 5746.7  | 5745.0  |
| 10°   | 5955.6 | 5962.6 | 5978.3 | 6006.1 | 6040.9 | 6074.0 | 6067.1 | 6013.1  | 5934.8  | 5875.6  | 5861.6  |
| 12.5° | 5990.5 | 5999.2 | 6051.4 | 6131.5 | 6209.8 | 6274.2 | 6274.2 | 6230.7  | 6129.7  | 6039.2  | 6013.1  |
| 15°   | 5868.6 | 5884.3 | 5978.3 | 6148.9 | 6354.3 | 6495.3 | 6526.7 | 6465.7  | 6357.8  | 6218.5  | 6187.2  |
| 17.5° | 5626.6 | 5664.9 | 5802.4 | 6054.9 | 6396.1 | 6688.6 | 6779.1 | 6749.5  | 6610.2  | 6432.7  | 6396.1  |
| 20°   | 5367.2 | 5409.0 | 5555.2 | 5889.5 | 6361.3 | 6801.7 | 7064.6 | 7071.6  | 6899.2  | 6641.6  | 6587.6  |
| 22.5° | 5081.7 | 5113.0 | 5301.1 | 5692.8 | 6256.8 | 6827.8 | 7310.1 | 7430.2  | 7196.9  | 6850.5  | 6773.9  |
| 25°   | 4761.4 | 4796.2 | 4992.9 | 5416.0 | 6060.1 | 6798.2 | 7534.6 | 7799.3  | 7508.5  | 7073.3  | 6975.8  |
| 27.5° | 4455.0 | 4468.9 | 4679.6 | 5109.6 | 5800.7 | 6721.6 | 7700.0 | 8138.7  | 7853.2  | 7257.8  | 7134.2  |
| 30°   | 4160.8 | 4193.8 | 4380.1 | 4804.9 | 5503.0 | 6571.9 | 7842.8 | 8525.2  | 8224.0  | 7451.1  | 7292.7  |
| 32.5° | 3849.1 | 3889.2 | 4091.1 | 4521.1 | 5205.3 | 6347.3 | 7929.8 | 8948.3  | 8741.1  | 7764.4  | 7595.6  |
| 35°   | 3549.7 | 3575.8 | 3779.5 | 4197.3 | 4914.6 | 6086.2 | 7945.5 | 9425.3  | 9407.9  | 8239.7  | 8015.1  |
| 37.5° | 3243.3 | 3281.6 | 3487.0 | 3887.4 | 4606.4 | 5809.4 | 7867.2 | 9931.9  | 10212.2 | 8899.5  | 8657.5  |
| 40°   | 2949.1 | 2982.2 | 3184.1 | 3588.0 | 4256.5 | 5471.7 | 7680.9 | 10395.0 | 11150.5 | 9578.5  | 9235.5  |
| 42.5° | 2628.8 | 2637.5 | 2858.6 | 3269.4 | 3913.6 | 5080.0 | 7412.8 | 10807.6 | 12196.8 | 10489.0 | 10062.4 |
| 45°   | 2264.9 | 2287.6 | 2493.0 | 2896.9 | 3520.1 | 4641.3 | 7048.9 | 11148.8 | 13523.4 | 11751.1 | 11169.7 |
| 47.5° | 1901.1 | 1920.2 | 2108.2 | 2506.9 | 3090.1 | 4138.1 | 6488.4 | 11448.2 | 14884.8 | 13354.5 | 12592.0 |
| 50°   | 1545.9 | 1556.4 | 1709.6 | 2063.0 | 2606.1 | 3608.9 | 5793.7 | 11544.0 | 16423.7 | 15624.6 | 14651.5 |
| 52.5° | 1222.1 | 1237.8 | 1354.4 | 1631.2 | 2089.1 | 2983.9 | 5043.4 | 11307.2 | 18220.3 | 18316.1 | 16944.3 |
| 55°   | 990.6  | 995.8  | 1082.8 | 1286.5 | 1633.0 | 2329.3 | 4138.1 | 10647.4 | 20152.7 | 21764.8 | 20015.2 |
| 57.5° | 853.0  | 856.5  | 905.3  | 1018.4 | 1256.9 | 1756.6 | 3210.2 | 9399.2  | 21888.4 | 25805.5 | 23556.2 |
| 60°   | 774.7  | 776.4  | 804.3  | 870.5  | 995.8  | 1347.5 | 2299.7 | 7637.4  | 23601.5 | 30302.2 | 27957.2 |
| 62.5° | 726.0  | 726.0  | 745.1  | 781.7  | 842.6  | 1034.1 | 1666.0 | 5510.0  | 24774.9 | 34865.2 | 33381.9 |
| 65°   | 679.0  | 679.0  | 692.9  | 719.0  | 752.1  | 846.1  | 1230.8 | 3593.2  | 24745.3 | 38188.6 | 38837.9 |
| 67.5° | 625.0  | 625.0  | 635.4  | 661.5  | 680.7  | 727.7  | 950.5  | 2353.7  | 22227.9 | 38115.4 | 41814.9 |
| 70°   | 560.6  | 560.6  | 574.5  | 597.1  | 612.8  | 642.4  | 750.3  | 1610.3  | 16329.7 | 32544.5 | 37187.5 |
| 72.5° | 496.2  | 497.9  | 506.6  | 529.2  | 541.4  | 558.8  | 623.2  | 1128.1  | 10017.2 | 22160.0 | 26002.2 |
| 75°   | 424.8  | 428.3  | 437.0  | 459.6  | 470.0  | 477.0  | 525.8  | 804.3   | 5067.8  | 11947.8 | 13603.5 |
| 77.5° | 343.0  | 349.9  | 355.1  | 379.5  | 386.5  | 396.9  | 433.5  | 581.5   | 2224.9  | 4293.1  | 4331.4  |
| 80°   | 250.7  | 259.4  | 275.1  | 297.7  | 302.9  | 309.9  | 330.8  | 412.6   | 1008.0  | 1960.3  | 2129.1  |
| 82.5° | 184.5  | 196.7  | 177.6  | 207.2  | 207.2  | 198.5  | 233.3  | 276.8   | 463.1   | 1941.1  | 2322.4  |
| 85°   | 101.0  | 102.7  | 92.3   | 106.2  | 113.2  | 111.4  | 123.6  | 135.8   | 224.6   | 1295.2  | 1335.3  |
| 87.5° | 24.4   | 26.1   | 27.9   | 33.1   | 40.0   | 40.0   | 43.5   | 38.3    | 73.1    | 419.6   | 240.2   |
| 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)