

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: P316339

Luminaire Tested: **GAN-SA5D-830-U-5WQ**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P316339  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-SA5D-830-U-5WQ  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 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: 32459 lumens  
Efficiency: N/A  
Efficacy: 101.4 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B5 - U0 - G4

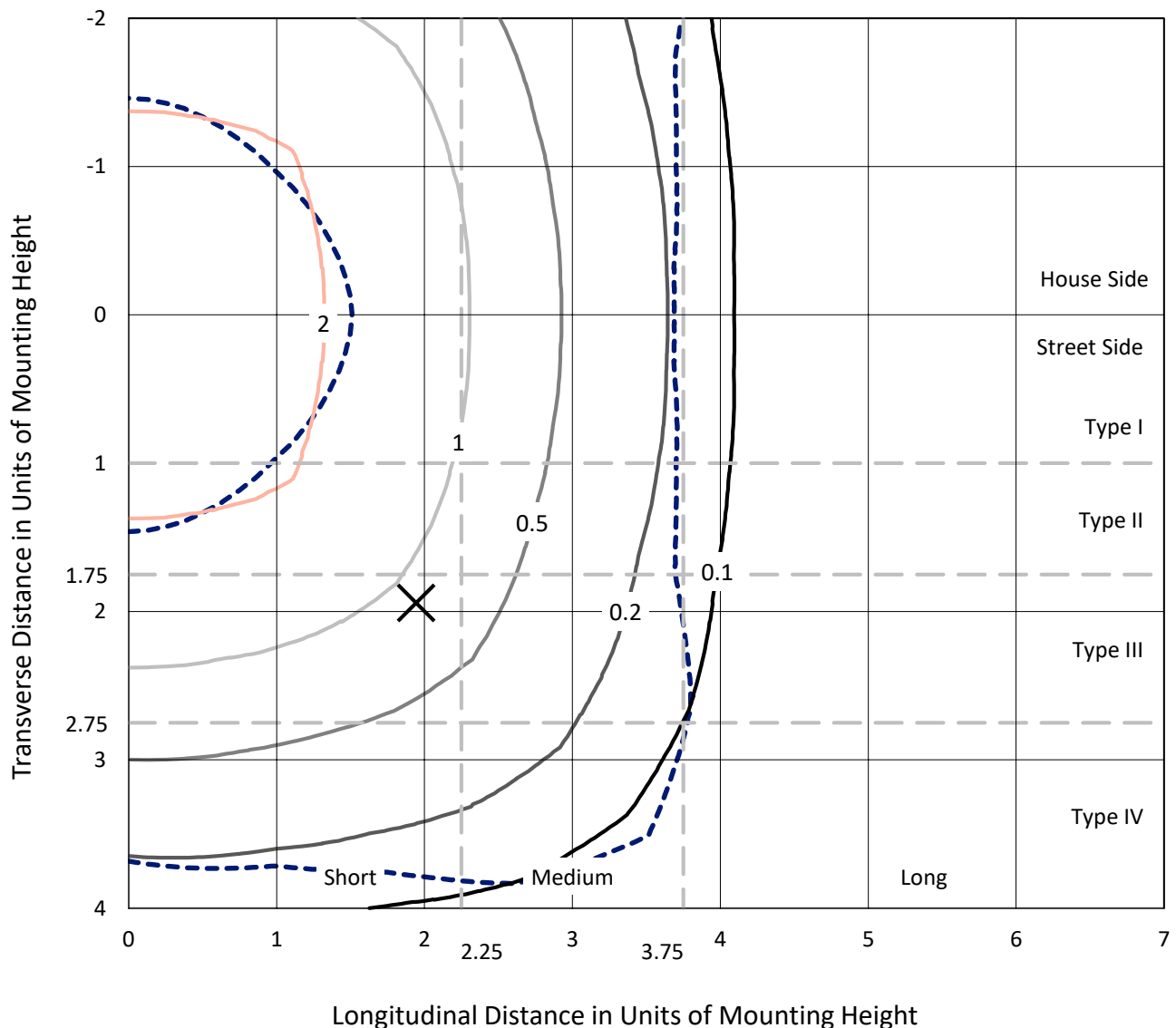
Input Watts (W): 320  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

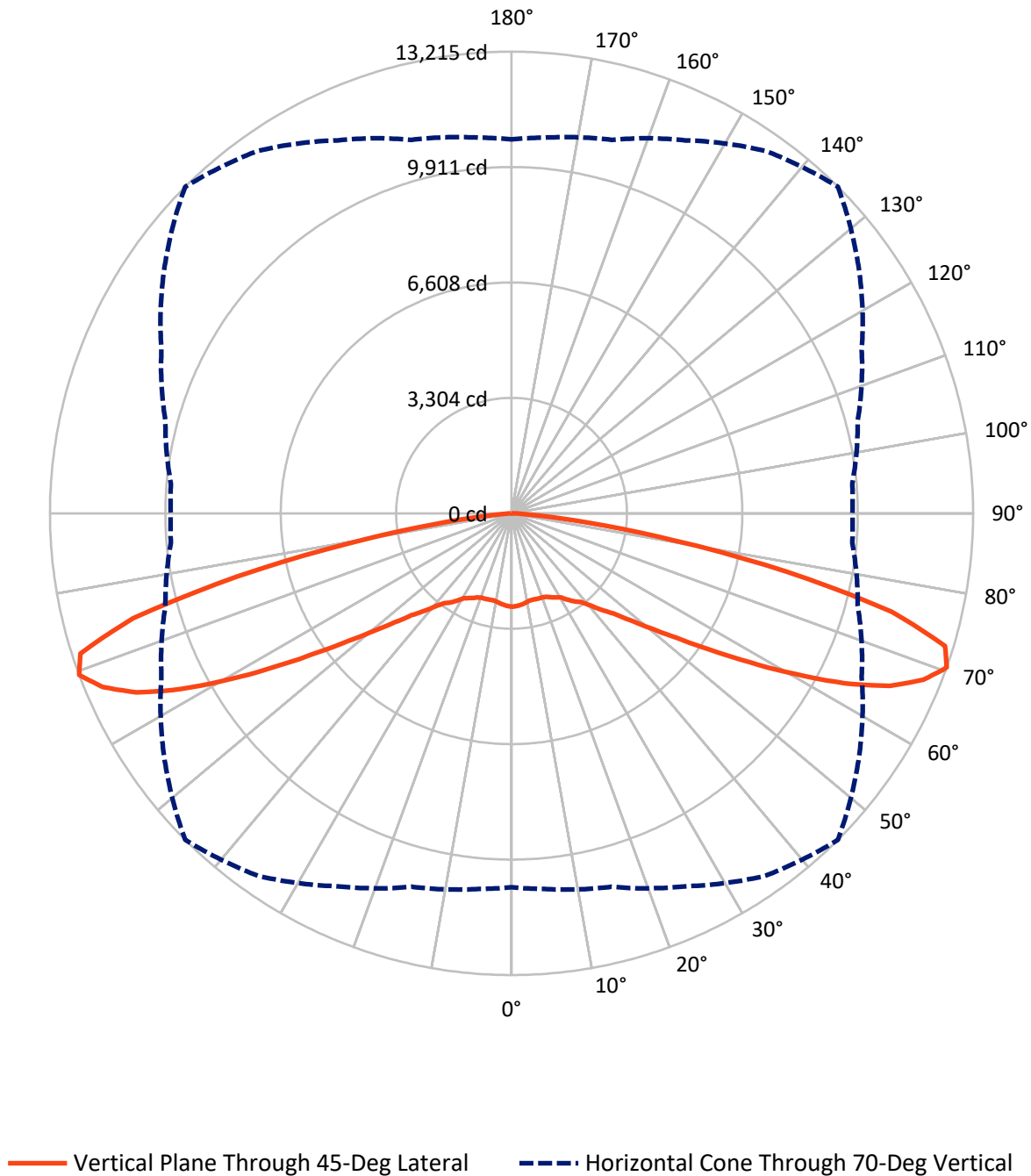
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.3 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    | 16229.5  | 0.0    | 16229.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 16229.5  | 0.0    | 16229.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 32459.0  | 0.0    | 32459.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 249.3   | 0.8       |
| 10°-20°   | 728.3   | 2.2       |
| 20°-30°   | 1241.7  | 3.8       |
| 30°-40°   | 1940.2  | 6.0       |
| 40°-50°   | 3288.2  | 10.1      |
| 50°-60°   | 5996.4  | 18.5      |
| 60°-70°   | 10323.1 | 31.8      |
| 70°-80°   | 8091.7  | 24.9      |
| 80°-90°   | 600.0   | 1.8       |
| 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°    | 32459.0 | 100.0     |
| 0°-180°   | 32459.0 | 100.0     |

**Coefficient of Utilization**



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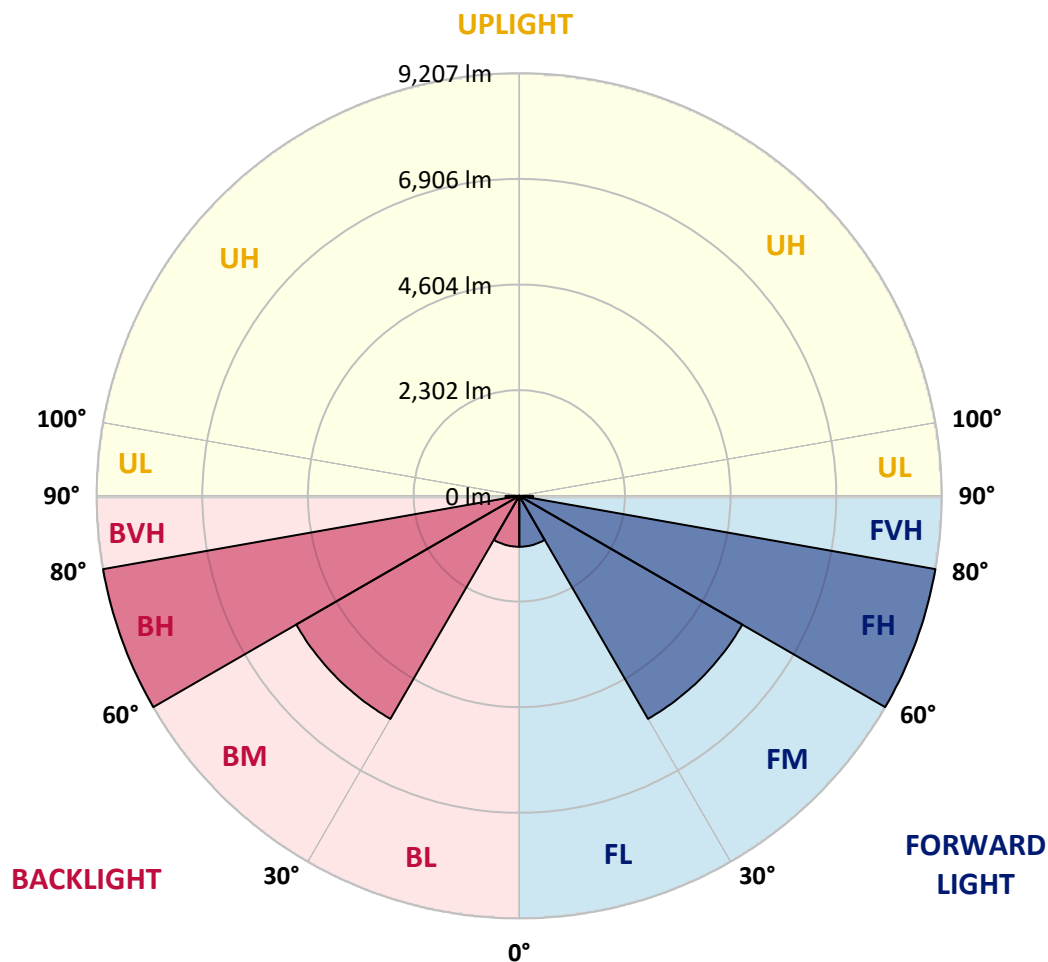
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|--------|-----------|-------------------------|------|----------|
|      |             |        |           | B                       | U    | G        |
| FL   | (0°-30°)    | 1109.7 | 3.4       |                         |      |          |
| FM   | (30°-60°)   | 5612.4 | 17.3      |                         |      |          |
| FH   | (60°-80°)   | 9207.4 | 28.4      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 300.0  | 0.9       |                         |      | G3/500   |
| BL   | (0°-30°)    | 1109.7 | 3.4       | B3/2500                 |      |          |
| BM   | (30°-60°)   | 5612.4 | 17.3      | B4/8500                 |      |          |
| BH   | (60°-80°)   | 9207.4 | 28.4      | B5                      |      | G4/12000 |
| BVH  | (80°-90°)   | 300.0  | 0.9       |                         |      | G3/500   |
| 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





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 85°     | 90°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 2671.4  | 2671.4  | 2671.4  | 2671.4  | 2671.4  | 2671.4  | 2671.4  | 2671.4  | 2671.4  | 2671.4  | 2671.4  |
| 2.5°  | 2659.6  | 2662.8  | 2659.6  | 2661.7  | 2656.3  | 2658.5  | 2658.5  | 2658.5  | 2657.4  | 2658.5  | 2656.3  |
| 5°    | 2635.9  | 2638.1  | 2633.8  | 2635.9  | 2632.7  | 2635.9  | 2637.0  | 2635.9  | 2633.8  | 2634.9  | 2630.6  |
| 7.5°  | 2600.5  | 2602.7  | 2599.4  | 2602.7  | 2598.4  | 2603.7  | 2602.7  | 2599.4  | 2596.2  | 2596.2  | 2591.9  |
| 10°   | 2581.2  | 2582.3  | 2573.7  | 2570.5  | 2560.8  | 2562.9  | 2566.2  | 2569.4  | 2572.6  | 2579.0  | 2578.0  |
| 12.5° | 2582.3  | 2582.3  | 2569.4  | 2555.4  | 2541.5  | 2544.7  | 2550.1  | 2561.9  | 2574.7  | 2586.6  | 2587.6  |
| 15°   | 2593.0  | 2591.9  | 2572.6  | 2550.1  | 2540.4  | 2550.1  | 2553.3  | 2560.8  | 2581.2  | 2601.6  | 2602.7  |
| 17.5° | 2600.5  | 2600.5  | 2570.5  | 2544.7  | 2543.6  | 2558.6  | 2557.6  | 2560.8  | 2583.3  | 2613.4  | 2614.5  |
| 20°   | 2614.5  | 2614.5  | 2575.8  | 2547.9  | 2547.9  | 2564.0  | 2565.1  | 2570.5  | 2593.0  | 2626.3  | 2631.7  |
| 22.5° | 2645.6  | 2646.7  | 2605.9  | 2583.3  | 2585.5  | 2595.1  | 2598.4  | 2607.0  | 2627.4  | 2663.9  | 2670.3  |
| 25°   | 2689.6  | 2691.8  | 2649.9  | 2637.0  | 2644.5  | 2662.8  | 2660.6  | 2667.1  | 2689.6  | 2725.1  | 2731.5  |
| 27.5° | 2750.8  | 2745.5  | 2706.8  | 2701.4  | 2709.0  | 2721.8  | 2720.8  | 2721.8  | 2740.1  | 2772.3  | 2779.8  |
| 30°   | 2830.3  | 2828.1  | 2800.2  | 2803.4  | 2800.2  | 2795.9  | 2797.0  | 2805.6  | 2815.3  | 2841.0  | 2848.5  |
| 32.5° | 2907.6  | 2909.7  | 2892.6  | 2908.7  | 2932.3  | 2948.4  | 2923.7  | 2900.1  | 2889.3  | 2903.3  | 2909.7  |
| 35°   | 3047.2  | 3052.5  | 3025.7  | 3015.0  | 3047.2  | 3094.4  | 3024.6  | 2986.0  | 3007.5  | 3025.7  | 3031.1  |
| 37.5° | 3284.5  | 3287.7  | 3242.6  | 3199.6  | 3176.0  | 3221.1  | 3151.3  | 3154.5  | 3229.7  | 3264.1  | 3263.0  |
| 40°   | 3555.0  | 3556.1  | 3526.1  | 3488.5  | 3447.7  | 3458.4  | 3430.5  | 3439.1  | 3488.5  | 3519.6  | 3528.2  |
| 42.5° | 3877.2  | 3873.9  | 3826.7  | 3773.0  | 3761.2  | 3771.9  | 3724.7  | 3718.2  | 3775.1  | 3831.0  | 3832.1  |
| 45°   | 4294.8  | 4287.3  | 4226.1  | 4167.1  | 4110.1  | 4086.5  | 4074.7  | 4105.9  | 4184.2  | 4235.8  | 4236.8  |
| 47.5° | 4744.7  | 4724.3  | 4692.1  | 4644.9  | 4595.5  | 4571.8  | 4552.5  | 4567.5  | 4624.5  | 4644.9  | 4647.0  |
| 50°   | 5207.5  | 5211.8  | 5218.2  | 5200.0  | 5181.7  | 5174.2  | 5123.7  | 5094.7  | 5111.9  | 5074.3  | 5069.0  |
| 52.5° | 5756.1  | 5764.7  | 5827.0  | 5879.6  | 5910.8  | 5926.9  | 5831.3  | 5731.4  | 5675.6  | 5602.6  | 5581.1  |
| 55°   | 6403.6  | 6417.5  | 6508.8  | 6654.8  | 6805.1  | 6884.6  | 6711.7  | 6524.9  | 6352.0  | 6215.7  | 6171.7  |
| 57.5° | 7125.1  | 7149.8  | 7275.4  | 7555.7  | 7863.8  | 8051.7  | 7759.7  | 7420.4  | 7086.5  | 6890.0  | 6855.6  |
| 60°   | 7971.2  | 7994.8  | 8168.8  | 8570.3  | 9069.6  | 9352.0  | 8909.6  | 8354.5  | 7939.0  | 7751.1  | 7687.7  |
| 62.5° | 8978.3  | 8980.5  | 9194.1  | 9663.4  | 10322.6 | 10715.6 | 10116.5 | 9374.5  | 8946.1  | 8719.6  | 8658.4  |
| 65°   | 10061.7 | 10067.1 | 10288.2 | 10795.0 | 11476.8 | 11904.2 | 11227.7 | 10454.7 | 9930.7  | 9596.8  | 9549.5  |
| 67.5° | 10827.2 | 10849.8 | 11082.8 | 11692.7 | 12330.4 | 12715.9 | 12015.8 | 11141.8 | 10536.3 | 10137.9 | 10098.2 |
| 70°   | 10704.8 | 10792.9 | 11066.7 | 11778.6 | 12665.4 | 13215.2 | 12143.6 | 11060.2 | 10261.4 | 9791.1  | 9757.8  |
| 72.5° | 9335.9  | 9504.4  | 9869.5  | 10803.6 | 12222.0 | 12979.0 | 11446.8 | 9906.0  | 9001.9  | 8601.5  | 8541.3  |
| 75°   | 6357.4  | 6631.2  | 7182.0  | 8529.5  | 10441.8 | 11237.4 | 9636.5  | 7898.2  | 7047.8  | 6493.8  | 6453.0  |
| 77.5° | 2834.6  | 2896.9  | 3594.8  | 5146.3  | 7205.6  | 8070.0  | 7001.6  | 5166.7  | 3878.2  | 3093.3  | 2928.0  |
| 80°   | 790.2   | 799.9   | 1067.3  | 1916.6  | 3606.6  | 4741.5  | 3871.8  | 2013.2  | 1131.7  | 797.8   | 751.6   |
| 82.5° | 251.2   | 272.7   | 332.8   | 497.1   | 1212.2  | 2163.5  | 1244.4  | 536.9   | 382.2   | 304.9   | 274.9   |
| 85°   | 122.4   | 121.3   | 168.6   | 201.9   | 309.2   | 478.9   | 329.6   | 249.1   | 218.0   | 145.0   | 131.0   |
| 87.5° | 51.5    | 52.6    | 78.4    | 70.9    | 90.2    | 77.3    | 106.3   | 111.7   | 117.0   | 64.4    | 55.8    |
| 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)