

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: P841621

Luminaire Tested: **ARCH4-200-750-U-5WQ**

Issue Date: 5/27/2024

### Test Information

Test Method: LM-79-08  
Report Number: P841621  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH4-200-750-U-5WQ  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 800mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 32243 lumens  
Efficiency: N/A  
Efficacy: 158.3 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type V - Medium  
BUG Rating: B5 - U0 - G3

Input Watts (W): 203.7  
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

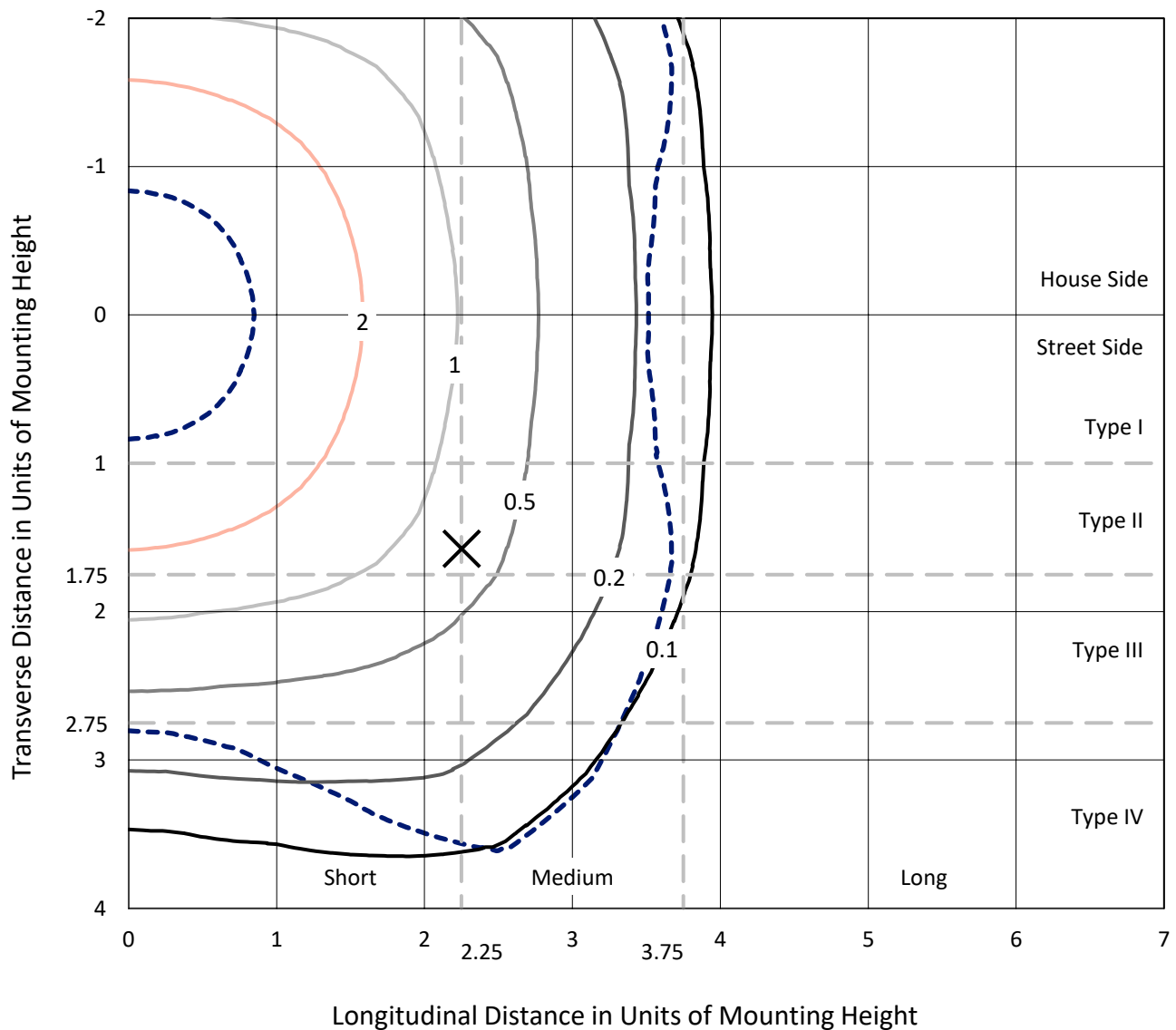


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## Iso-Footcandle Lines of Horizontal Illumination

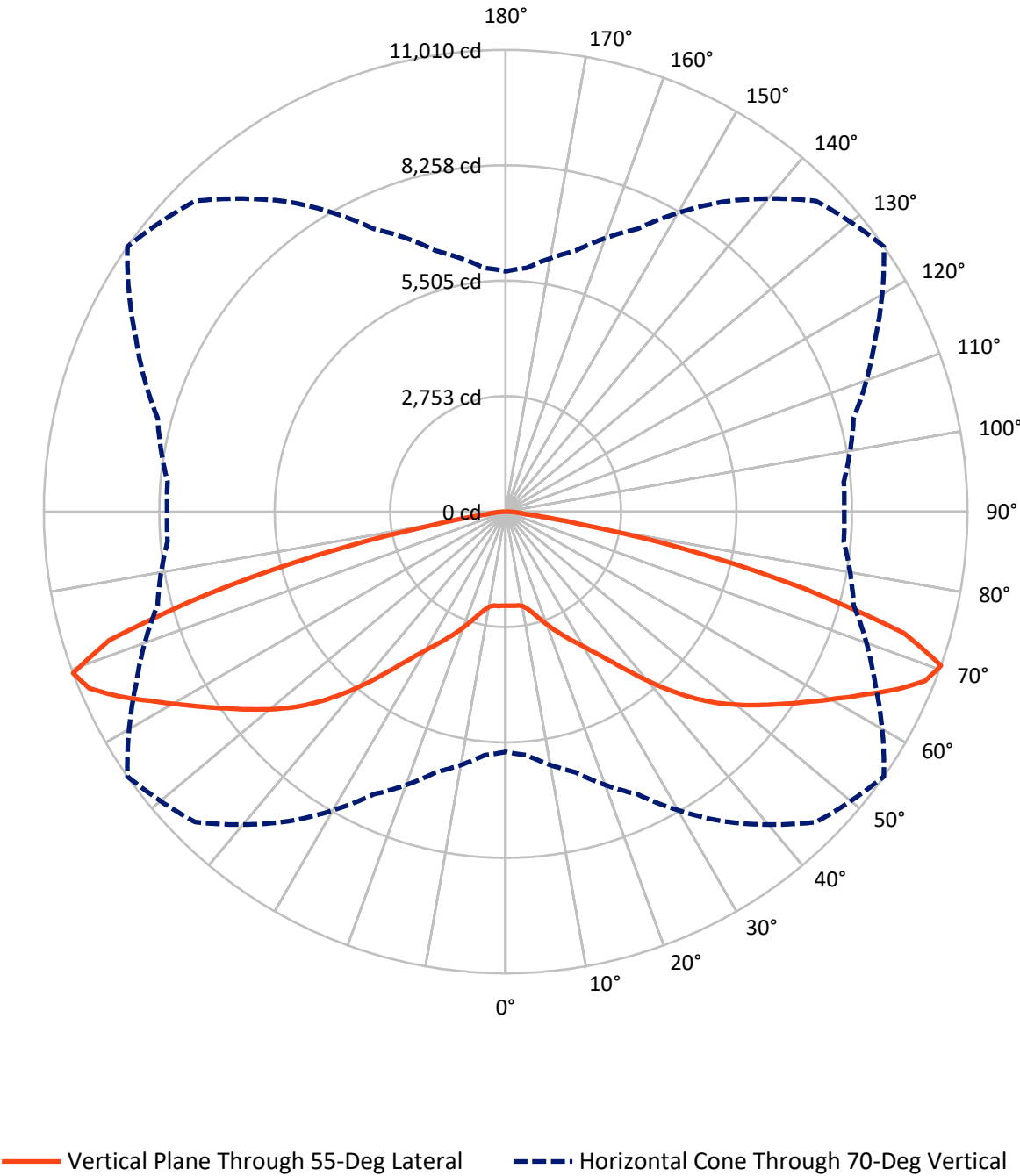
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4 fc  
Type V - Medium - N/A

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Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 16121.5  | 0.0    | 16121.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 16121.5  | 0.0    | 16121.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 32243.0  | 0.0    | 32243.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 217.0   | 0.7       |
| 10°-20°   | 738.5   | 2.3       |
| 20°-30°   | 1534.5  | 4.8       |
| 30°-40°   | 2834.1  | 8.8       |
| 40°-50°   | 4978.9  | 15.4      |
| 50°-60°   | 7180.8  | 22.3      |
| 60°-70°   | 8788.5  | 27.3      |
| 70°-80°   | 5592.3  | 17.3      |
| 80°-90°   | 378.4   | 1.2       |
| 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°    | 32243.0 | 100.0     |
| 0°-180°   | 32243.0 | 100.0     |

**Coefficient of Utilization**



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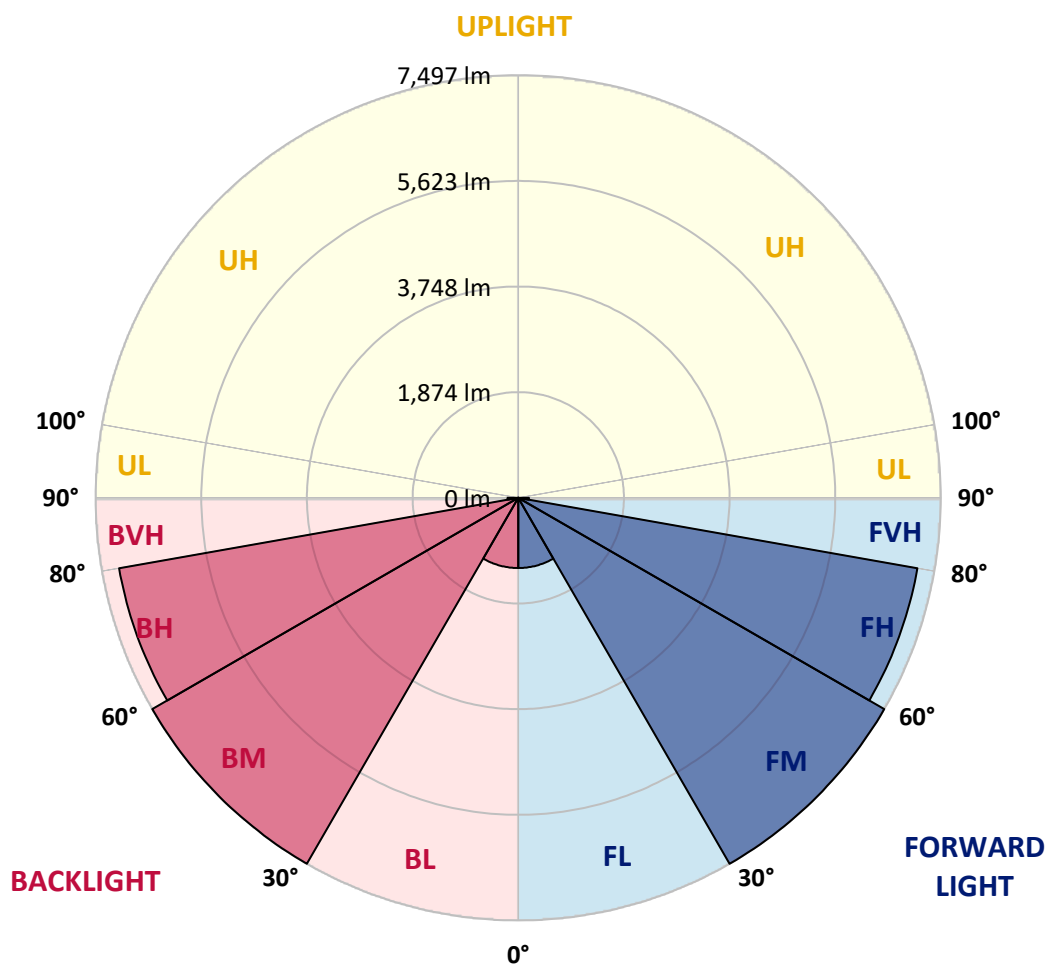
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1245.0 | 3.9       |                         |      |         |
| FM   | (30°-60°)   | 7496.9 | 23.3      |                         |      |         |
| FH   | (60°-80°)   | 7190.4 | 22.3      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 189.2  | 0.6       |                         |      | G2/225  |
| BL   | (0°-30°)    | 1245.0 | 3.9       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 7496.9 | 23.3      | B4/8500                 |      |         |
| BH   | (60°-80°)   | 7190.4 | 22.3      | B5                      |      | G3/7500 |
| BVH  | (80°-90°)   | 189.2  | 0.6       |                         |      | G2/225  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B5-U0-G3**

Type V Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°     | 55°     | 65°     | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|---------|---------|---------|--------|--------|--------|
| 0°    | 2247.6 | 2247.6 | 2247.6 | 2247.6 | 2247.6 | 2247.6  | 2247.6  | 2247.6  | 2247.6 | 2247.6 | 2247.6 |
| 2.5°  | 2277.6 | 2277.6 | 2271.6 | 2271.6 | 2259.6 | 2253.6  | 2247.6  | 2247.6  | 2241.6 | 2241.6 | 2235.7 |
| 5°    | 2289.6 | 2289.6 | 2289.6 | 2283.6 | 2277.6 | 2271.6  | 2259.6  | 2247.6  | 2241.6 | 2235.7 | 2229.7 |
| 7.5°  | 2295.6 | 2295.6 | 2289.6 | 2289.6 | 2283.6 | 2277.6  | 2259.6  | 2241.6  | 2235.7 | 2229.7 | 2229.7 |
| 10°   | 2343.5 | 2337.5 | 2331.6 | 2319.6 | 2319.6 | 2319.6  | 2295.6  | 2277.6  | 2271.6 | 2271.6 | 2271.6 |
| 12.5° | 2457.4 | 2451.4 | 2439.4 | 2421.5 | 2421.5 | 2427.5  | 2391.5  | 2367.5  | 2367.5 | 2361.5 | 2361.5 |
| 15°   | 2625.2 | 2619.3 | 2607.3 | 2577.3 | 2571.3 | 2583.3  | 2529.3  | 2505.4  | 2505.4 | 2505.4 | 2499.4 |
| 17.5° | 2811.1 | 2799.1 | 2781.1 | 2757.1 | 2757.1 | 2757.1  | 2703.2  | 2673.2  | 2655.2 | 2655.2 | 2649.2 |
| 20°   | 2966.9 | 2960.9 | 2960.9 | 2954.9 | 2972.9 | 2972.9  | 2901.0  | 2853.0  | 2811.1 | 2787.1 | 2781.1 |
| 22.5° | 3104.7 | 3098.7 | 3110.7 | 3134.7 | 3170.7 | 3182.7  | 3098.7  | 3026.8  | 2960.9 | 2912.9 | 2901.0 |
| 25°   | 3290.5 | 3284.6 | 3278.6 | 3314.5 | 3374.5 | 3392.4  | 3302.5  | 3212.6  | 3146.7 | 3122.7 | 3110.7 |
| 27.5° | 3488.3 | 3494.3 | 3500.3 | 3536.3 | 3584.2 | 3614.2  | 3524.3  | 3440.4  | 3386.4 | 3350.5 | 3338.5 |
| 30°   | 3710.1 | 3722.1 | 3740.1 | 3794.0 | 3830.0 | 3842.0  | 3764.0  | 3704.1  | 3656.2 | 3626.2 | 3608.2 |
| 32.5° | 3991.8 | 4015.8 | 4039.8 | 4087.7 | 4105.7 | 4093.7  | 4057.7  | 4015.8  | 3979.8 | 3937.9 | 3931.9 |
| 35°   | 4411.4 | 4435.3 | 4429.4 | 4447.3 | 4453.3 | 4441.3  | 4423.4  | 4399.4  | 4381.4 | 4327.5 | 4321.5 |
| 37.5° | 4938.8 | 4962.8 | 4926.8 | 4908.8 | 4866.9 | 4872.9  | 4866.9  | 4884.9  | 4890.9 | 4836.9 | 4830.9 |
| 40°   | 5472.3 | 5496.2 | 5448.3 | 5400.3 | 5358.4 | 5340.4  | 5370.4  | 5430.3  | 5430.3 | 5394.3 | 5394.3 |
| 42.5° | 6041.7 | 6059.6 | 5981.7 | 5921.8 | 5867.8 | 5855.9  | 5873.8  | 5945.8  | 5963.7 | 5957.7 | 5957.7 |
| 45°   | 6611.1 | 6599.1 | 6497.2 | 6437.2 | 6389.3 | 6359.3  | 6365.3  | 6419.3  | 6455.2 | 6473.2 | 6473.2 |
| 47.5° | 7048.6 | 7030.6 | 6946.7 | 6898.8 | 6868.8 | 6826.8  | 6826.8  | 6856.8  | 6874.8 | 6880.8 | 6880.8 |
| 50°   | 7396.2 | 7378.3 | 7294.3 | 7288.4 | 7288.4 | 7270.4  | 7252.4  | 7246.4  | 7234.4 | 7240.4 | 7240.4 |
| 52.5° | 7695.9 | 7671.9 | 7612.0 | 7624.0 | 7677.9 | 7689.9  | 7666.0  | 7618.0  | 7570.1 | 7552.1 | 7558.1 |
| 55°   | 8019.6 | 7983.6 | 7935.7 | 7971.6 | 8079.5 | 8127.5  | 8091.5  | 7995.6  | 7911.7 | 7857.8 | 7857.8 |
| 57.5° | 8277.3 | 8235.4 | 8235.4 | 8337.3 | 8535.0 | 8630.9  | 8553.0  | 8373.2  | 8229.4 | 8169.4 | 8175.4 |
| 60°   | 8097.5 | 8061.5 | 8205.4 | 8654.9 | 9026.5 | 9188.4  | 9056.5  | 8738.8  | 8505.1 | 8433.2 | 8445.1 |
| 62.5° | 7743.9 | 7719.9 | 7899.7 | 8595.0 | 9470.1 | 9805.7  | 9607.9  | 9152.4  | 8804.8 | 8720.8 | 8720.8 |
| 65°   | 7222.4 | 7216.4 | 7468.2 | 8325.3 | 9572.0 | 10399.1 | 10231.3 | 9601.9  | 9152.4 | 9038.5 | 9062.5 |
| 67.5° | 6683.0 | 6683.0 | 6910.7 | 7863.7 | 9452.1 | 10650.8 | 10782.7 | 10009.5 | 9320.2 | 9038.5 | 9044.5 |
| 70°   | 5730.0 | 5831.9 | 6437.2 | 7438.2 | 9014.5 | 10471.0 | 11010.4 | 9721.8  | 8589.0 | 8091.5 | 8073.5 |
| 72.5° | 3776.0 | 3907.9 | 5112.6 | 6695.0 | 8583.0 | 9817.7  | 9937.6  | 8541.0  | 7132.5 | 6551.1 | 6521.2 |
| 75°   | 2277.6 | 2391.5 | 3314.5 | 5226.5 | 7546.1 | 7905.7  | 7378.3  | 6695.0  | 5328.4 | 4872.9 | 4872.9 |
| 77.5° | 671.3  | 749.2  | 1528.4 | 3314.5 | 5220.5 | 5196.5  | 4549.2  | 3943.9  | 3152.7 | 2679.2 | 2715.2 |
| 80°   | 395.6  | 407.6  | 497.5  | 1510.4 | 2163.7 | 2277.6  | 1756.2  | 1096.8  | 1096.8 | 815.1  | 791.2  |
| 82.5° | 305.7  | 305.7  | 317.7  | 377.6  | 521.5  | 581.4   | 443.5   | 377.6   | 431.5  | 365.6  | 347.6  |
| 85°   | 215.8  | 215.8  | 215.8  | 221.8  | 227.8  | 233.8   | 245.7   | 251.7   | 275.7  | 227.8  | 215.8  |
| 87.5° | 65.9   | 71.9   | 77.9   | 89.9   | 107.9  | 113.9   | 119.9   | 107.9   | 107.9  | 101.9  | 95.9   |
| 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)