

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: P459066

Luminaire Tested: **GALN-SA5D-735-U-5WQ**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P459066  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA5D-735-U-5WQ  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 3500K, 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: 37771 lumens  
Efficiency: N/A  
Efficacy: 122.2 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B5 - U0 - G4

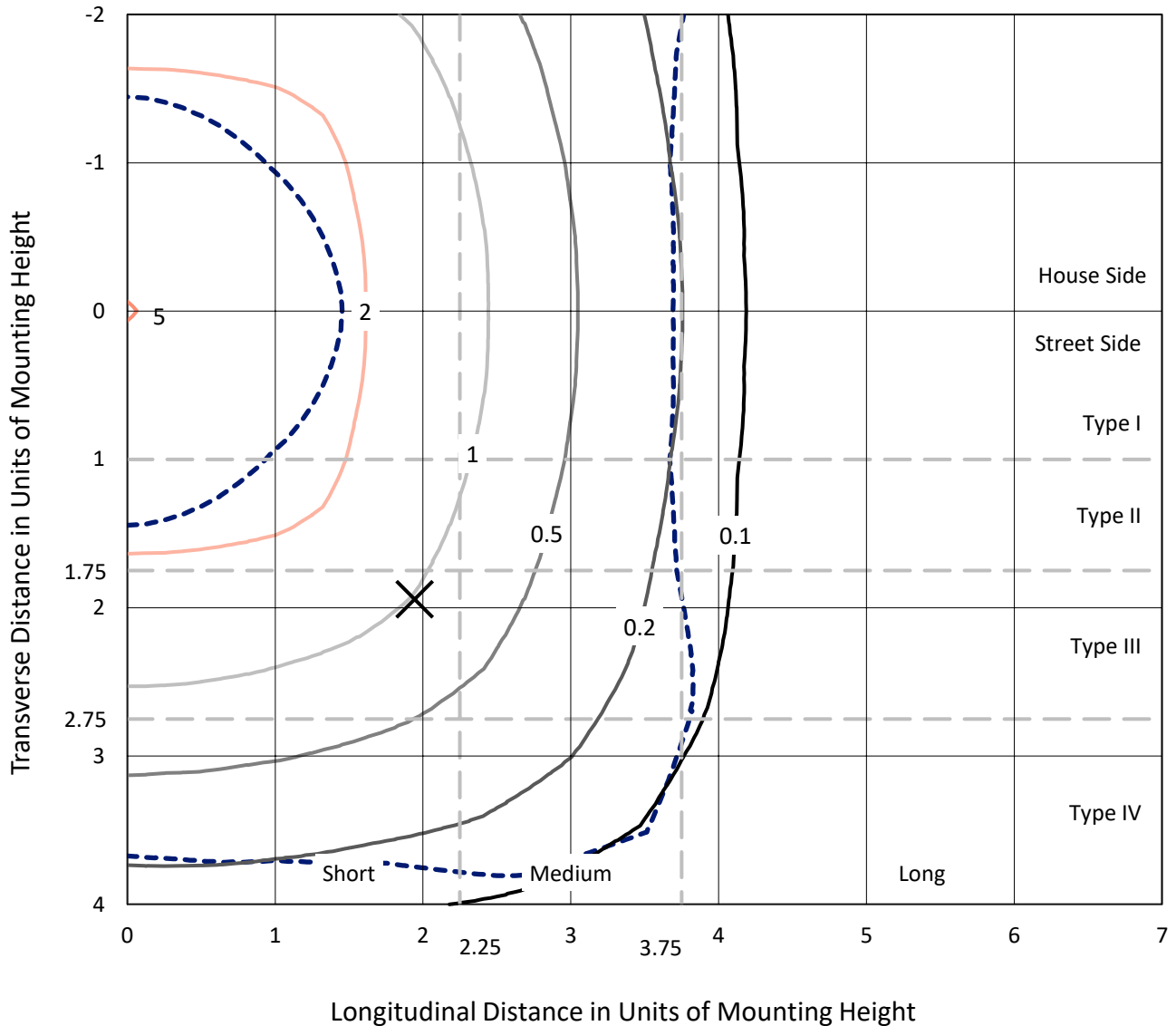
Input Watts (W): 309  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

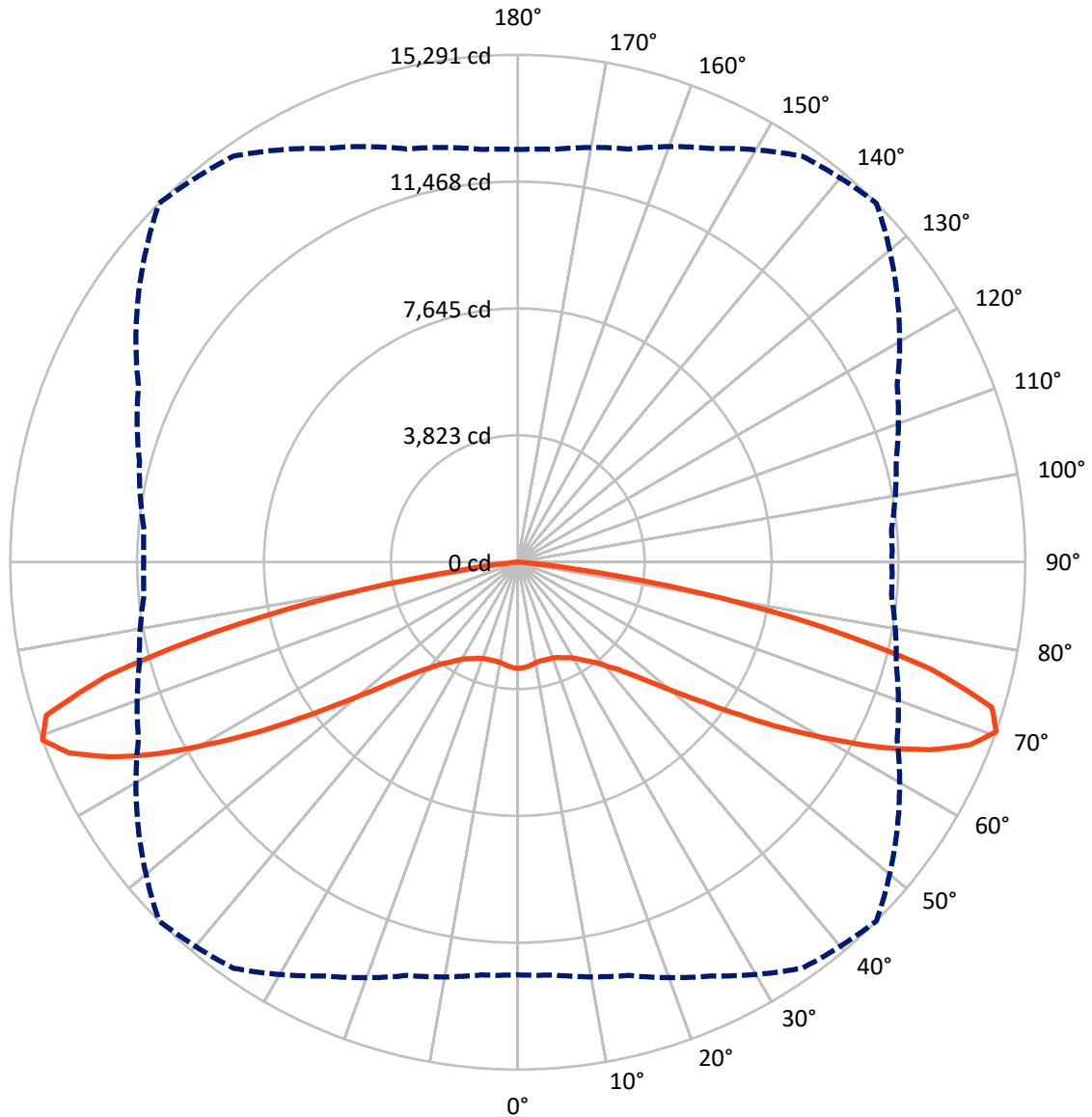
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 fc  
 Type V - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 18885.5  | 0.0    | 18885.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 18885.5  | 0.0    | 18885.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 37771.0  | 0.0    | 37771.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 299.1   | 0.8       |
| 10°-20°   | 875.5   | 2.3       |
| 20°-30°   | 1491.6  | 3.9       |
| 30°-40°   | 2312.0  | 6.1       |
| 40°-50°   | 3891.5  | 10.3      |
| 50°-60°   | 7080.3  | 18.7      |
| 60°-70°   | 11986.8 | 31.7      |
| 70°-80°   | 9278.3  | 24.6      |
| 80°-90°   | 556.0   | 1.5       |
| 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°    | 37771.0 | 100.0     |
| 0°-180°   | 37771.0 | 100.0     |

**Coefficient of Utilization**



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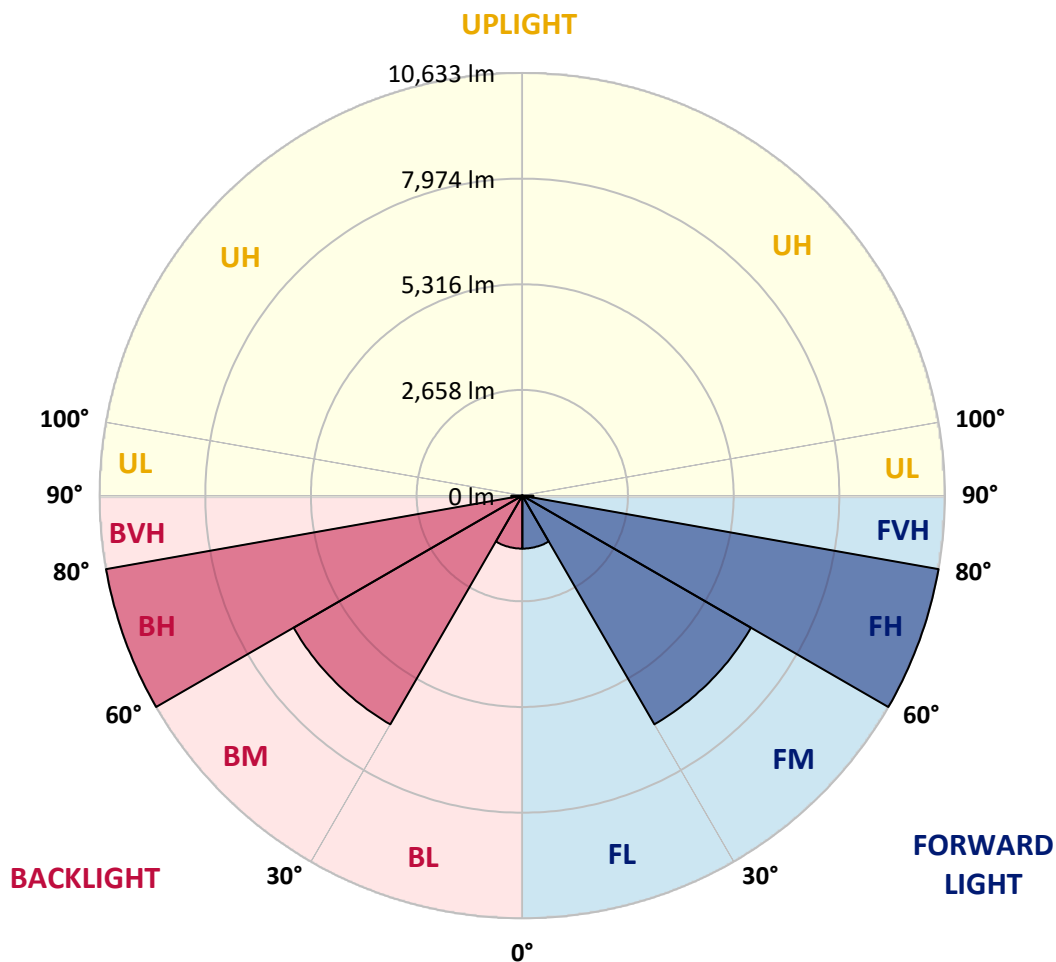
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|---------|-----------|-------------------------|------|----------|
|      |             |         |           | B                       | U    | G        |
| FL   | (0°-30°)    | 1333.1  | 3.5       |                         |      |          |
| FM   | (30°-60°)   | 6641.9  | 17.6      |                         |      |          |
| FH   | (60°-80°)   | 10632.5 | 28.1      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 278.0   | 0.7       |                         |      | G3/500   |
| BL   | (0°-30°)    | 1333.1  | 3.5       | B3/2500                 |      |          |
| BM   | (30°-60°)   | 6641.9  | 17.6      | B4/8500                 |      |          |
| BH   | (60°-80°)   | 10632.5 | 28.1      | B5                      |      | G4/12000 |
| BVH  | (80°-90°)   | 278.0   | 0.7       |                         |      | 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°    | 3197.8  | 3197.8  | 3197.8  | 3197.8  | 3197.8  | 3197.8  | 3197.8  | 3197.8  | 3197.8  | 3197.8  | 3197.8  |
| 2.5°  | 3189.8  | 3191.8  | 3191.8  | 3187.8  | 3185.8  | 3185.8  | 3183.8  | 3183.8  | 3189.8  | 3191.8  | 3193.8  |
| 5°    | 3161.9  | 3161.9  | 3161.9  | 3159.9  | 3155.9  | 3155.9  | 3151.9  | 3151.9  | 3153.9  | 3159.9  | 3155.9  |
| 7.5°  | 3124.0  | 3128.0  | 3128.0  | 3120.0  | 3114.0  | 3114.0  | 3112.0  | 3114.0  | 3116.0  | 3122.0  | 3120.0  |
| 10°   | 3112.0  | 3114.0  | 3104.0  | 3090.1  | 3080.1  | 3074.1  | 3076.1  | 3080.1  | 3090.1  | 3094.0  | 3096.0  |
| 12.5° | 3120.0  | 3120.0  | 3102.0  | 3082.1  | 3064.1  | 3056.1  | 3054.1  | 3068.1  | 3086.1  | 3098.0  | 3102.0  |
| 15°   | 3130.0  | 3126.0  | 3104.0  | 3078.1  | 3060.1  | 3058.1  | 3056.1  | 3066.1  | 3092.0  | 3116.0  | 3118.0  |
| 17.5° | 3135.9  | 3133.9  | 3106.0  | 3074.1  | 3064.1  | 3064.1  | 3062.1  | 3070.1  | 3098.0  | 3128.0  | 3130.0  |
| 20°   | 3155.9  | 3149.9  | 3118.0  | 3084.1  | 3076.1  | 3080.1  | 3074.1  | 3084.1  | 3114.0  | 3149.9  | 3157.9  |
| 22.5° | 3195.8  | 3189.8  | 3157.9  | 3124.0  | 3120.0  | 3120.0  | 3118.0  | 3128.0  | 3159.9  | 3197.8  | 3203.8  |
| 25°   | 3243.7  | 3237.7  | 3207.8  | 3183.8  | 3187.8  | 3195.8  | 3191.8  | 3193.8  | 3219.7  | 3251.6  | 3261.6  |
| 27.5° | 3307.5  | 3297.5  | 3271.6  | 3251.6  | 3263.6  | 3263.6  | 3263.6  | 3261.6  | 3277.6  | 3307.5  | 3317.5  |
| 30°   | 3385.3  | 3381.3  | 3353.4  | 3351.4  | 3361.4  | 3351.4  | 3351.4  | 3353.4  | 3355.4  | 3383.3  | 3393.3  |
| 32.5° | 3487.0  | 3479.1  | 3465.1  | 3461.1  | 3489.0  | 3497.0  | 3469.1  | 3443.1  | 3457.1  | 3485.0  | 3491.0  |
| 35°   | 3654.6  | 3642.6  | 3622.7  | 3600.7  | 3622.7  | 3660.6  | 3600.7  | 3580.8  | 3616.7  | 3654.6  | 3658.6  |
| 37.5° | 3882.0  | 3876.0  | 3844.1  | 3804.2  | 3802.2  | 3842.1  | 3780.3  | 3778.3  | 3846.1  | 3892.0  | 3898.0  |
| 40°   | 4167.3  | 4173.3  | 4133.4  | 4095.5  | 4075.5  | 4107.4  | 4059.6  | 4077.5  | 4143.3  | 4195.2  | 4191.2  |
| 42.5° | 4568.3  | 4546.3  | 4484.5  | 4448.6  | 4426.6  | 4414.6  | 4402.7  | 4430.6  | 4504.4  | 4560.3  | 4604.2  |
| 45°   | 5037.0  | 5029.1  | 4951.3  | 4907.4  | 4859.5  | 4841.6  | 4837.6  | 4887.4  | 4977.2  | 5045.0  | 5051.0  |
| 47.5° | 5567.7  | 5549.7  | 5499.9  | 5454.0  | 5436.0  | 5414.1  | 5394.1  | 5432.0  | 5521.8  | 5569.7  | 5583.6  |
| 50°   | 6114.3  | 6118.3  | 6118.3  | 6110.3  | 6128.2  | 6132.2  | 6078.4  | 6092.3  | 6142.2  | 6138.2  | 6134.2  |
| 52.5° | 6738.7  | 6760.6  | 6864.3  | 6874.3  | 6960.1  | 7018.0  | 6920.2  | 6862.4  | 6844.4  | 6736.7  | 6744.7  |
| 55°   | 7472.8  | 7492.7  | 7648.3  | 7803.9  | 8035.3  | 8133.1  | 7927.6  | 7748.1  | 7620.4  | 7456.8  | 7464.8  |
| 57.5° | 8388.4  | 8398.4  | 8546.0  | 8845.3  | 9212.3  | 9441.7  | 9080.7  | 8725.6  | 8466.2  | 8310.6  | 8248.8  |
| 60°   | 9373.9  | 9383.9  | 9599.3  | 9964.4  | 10534.9 | 10814.2 | 10367.3 | 9786.8  | 9459.7  | 9222.3  | 9238.2  |
| 62.5° | 10556.9 | 10596.8 | 10790.3 | 11293.0 | 11985.2 | 12298.4 | 11705.9 | 10929.9 | 10487.0 | 10191.8 | 10203.8 |
| 65°   | 11823.6 | 11891.4 | 12102.9 | 12655.5 | 13293.8 | 13631.0 | 12904.8 | 12009.1 | 11458.5 | 11097.5 | 11135.4 |
| 67.5° | 12645.5 | 12705.3 | 13010.5 | 13621.0 | 14416.9 | 14696.2 | 13758.6 | 12715.3 | 12027.1 | 11596.2 | 11516.4 |
| 70°   | 12436.0 | 12485.9 | 12892.8 | 13758.6 | 14937.6 | 15290.7 | 13962.1 | 12611.6 | 11801.7 | 11304.9 | 11273.0 |
| 72.5° | 10977.8 | 10874.0 | 11468.5 | 12711.3 | 14343.1 | 14935.6 | 13321.7 | 11518.4 | 10499.0 | 9988.3  | 9928.5  |
| 75°   | 7275.3  | 7500.7  | 8378.5  | 9842.7  | 12134.8 | 12868.9 | 11370.8 | 9248.2  | 7965.5  | 7540.6  | 7474.8  |
| 77.5° | 2431.7  | 2605.3  | 3385.3  | 5579.7  | 8272.7  | 9375.9  | 8284.7  | 6048.4  | 4279.0  | 3447.1  | 3463.1  |
| 80°   | 644.3   | 636.4   | 823.9   | 1534.1  | 3574.8  | 5430.0  | 4161.3  | 2048.7  | 1121.1  | 811.9   | 770.0   |
| 82.5° | 231.4   | 259.3   | 333.1   | 424.9   | 947.6   | 1687.7  | 1190.9  | 574.5   | 420.9   | 311.2   | 301.2   |
| 85°   | 101.7   | 99.7    | 143.6   | 169.6   | 237.4   | 315.2   | 279.3   | 243.4   | 213.5   | 141.6   | 131.7   |
| 87.5° | 21.9    | 21.9    | 33.9    | 25.9    | 41.9    | 41.9    | 51.9    | 61.8    | 63.8    | 41.9    | 33.9    |
| 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)