

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: LUMARK

Report Number: P971525

Luminaire Tested: **NAV-SB6D-827-U-5MQ**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P971525  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-20)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB6D-827-U-5MQ  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(6) 80 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V MEDIUM OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 57599.9 lumens  
Efficiency: N/A  
Efficacy: 130.9 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B5 - U0 - G5

Input Watts (W): 440.1  
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



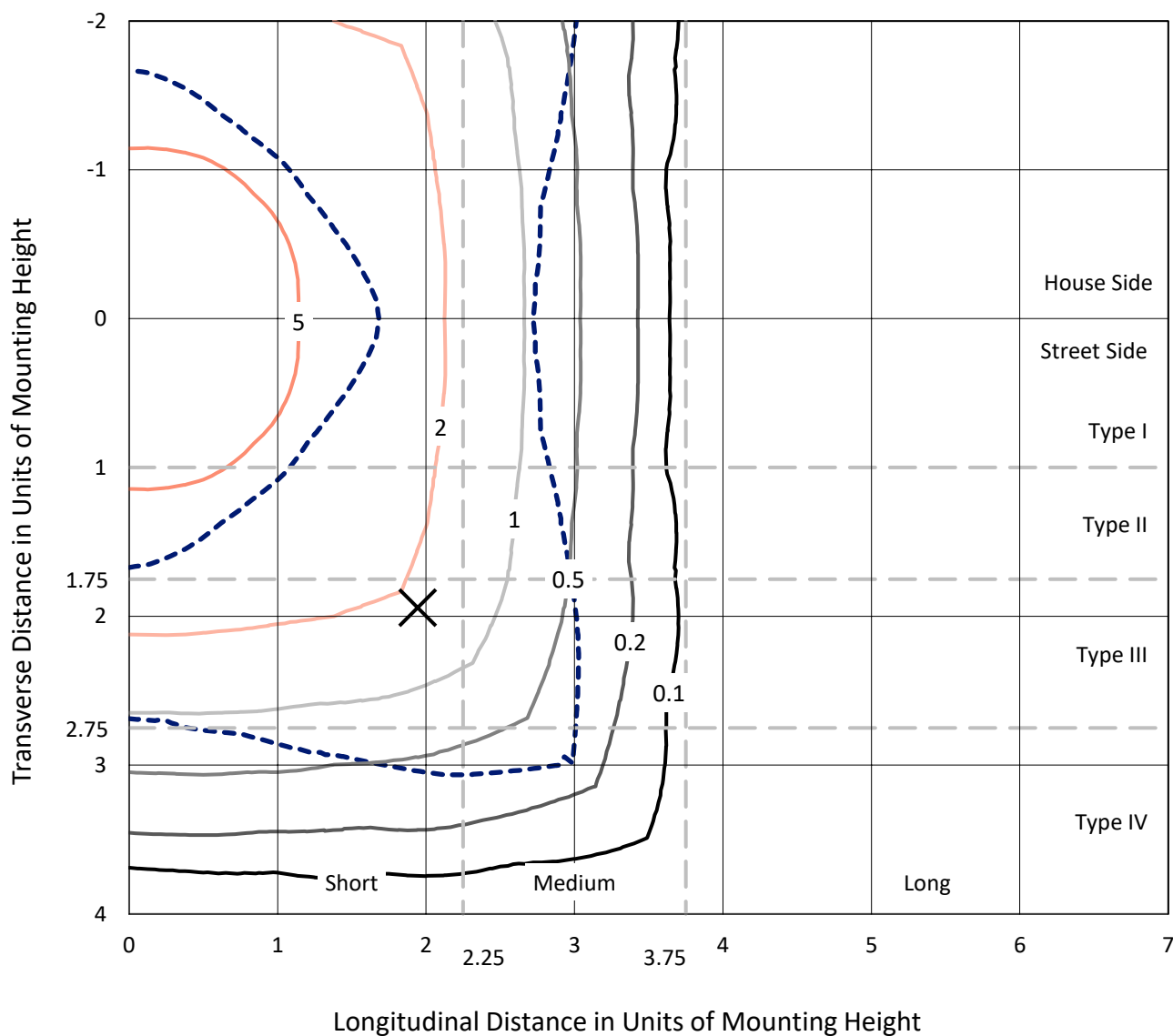
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

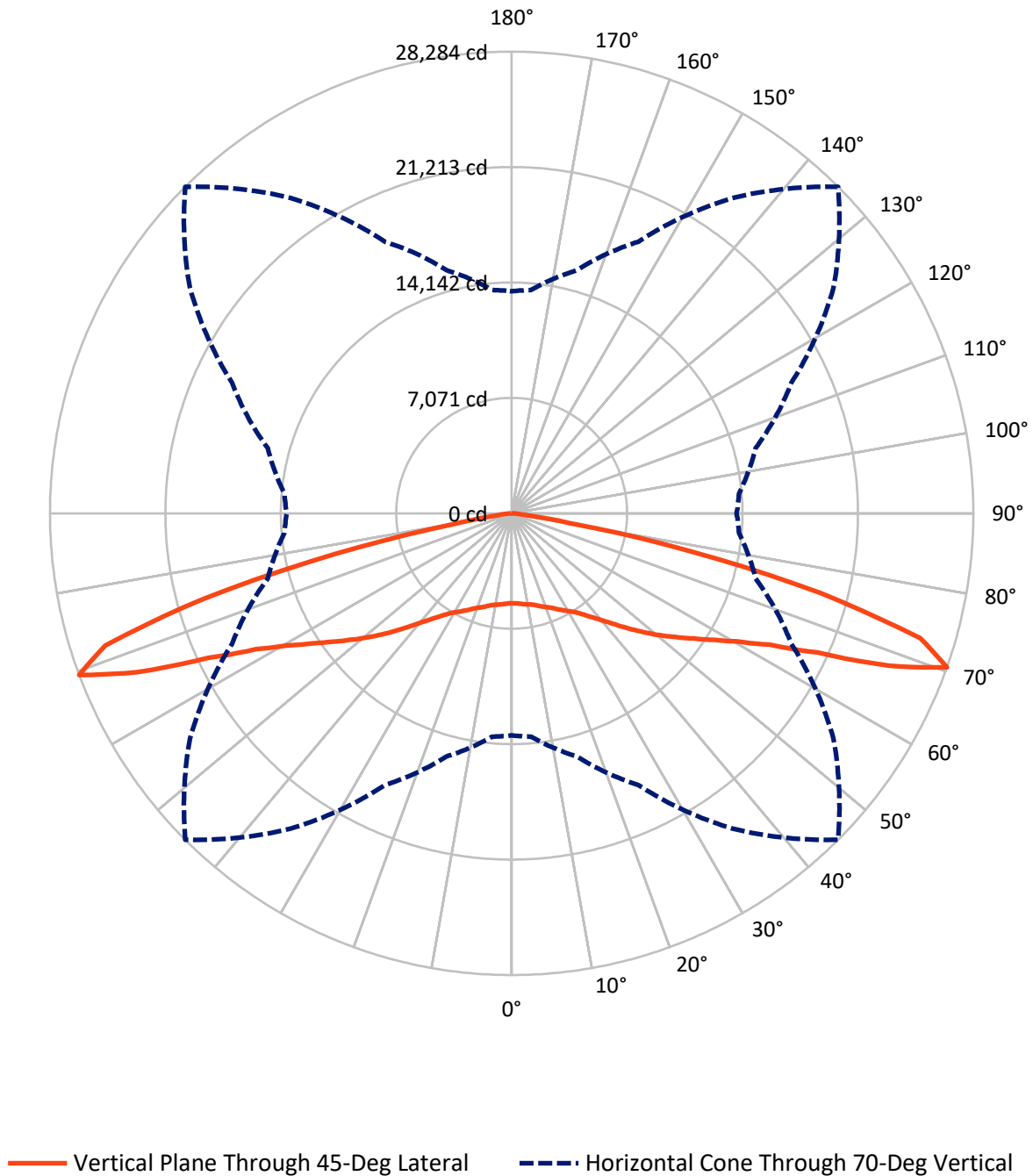


Based on 25 foot mounting height. Maximum calculated value = 8.8 fc

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    | 28799.9  | 0.0    | 28799.9 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 28799.9  | 0.0    | 28799.9 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 57599.9  | 0.0    | 57599.9 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 536.0   | 0.9       |
| 10°-20°   | 1662.1  | 2.9       |
| 20°-30°   | 2970.4  | 5.2       |
| 30°-40°   | 4815.1  | 8.4       |
| 40°-50°   | 7842.9  | 13.6      |
| 50°-60°   | 11957.8 | 20.8      |
| 60°-70°   | 17789.4 | 30.9      |
| 70°-80°   | 9695.8  | 16.8      |
| 80°-90°   | 330.2   | 0.6       |
| 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°    | 57599.9 | 100.0     |
| 0°-180°   | 57599.9 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P971525

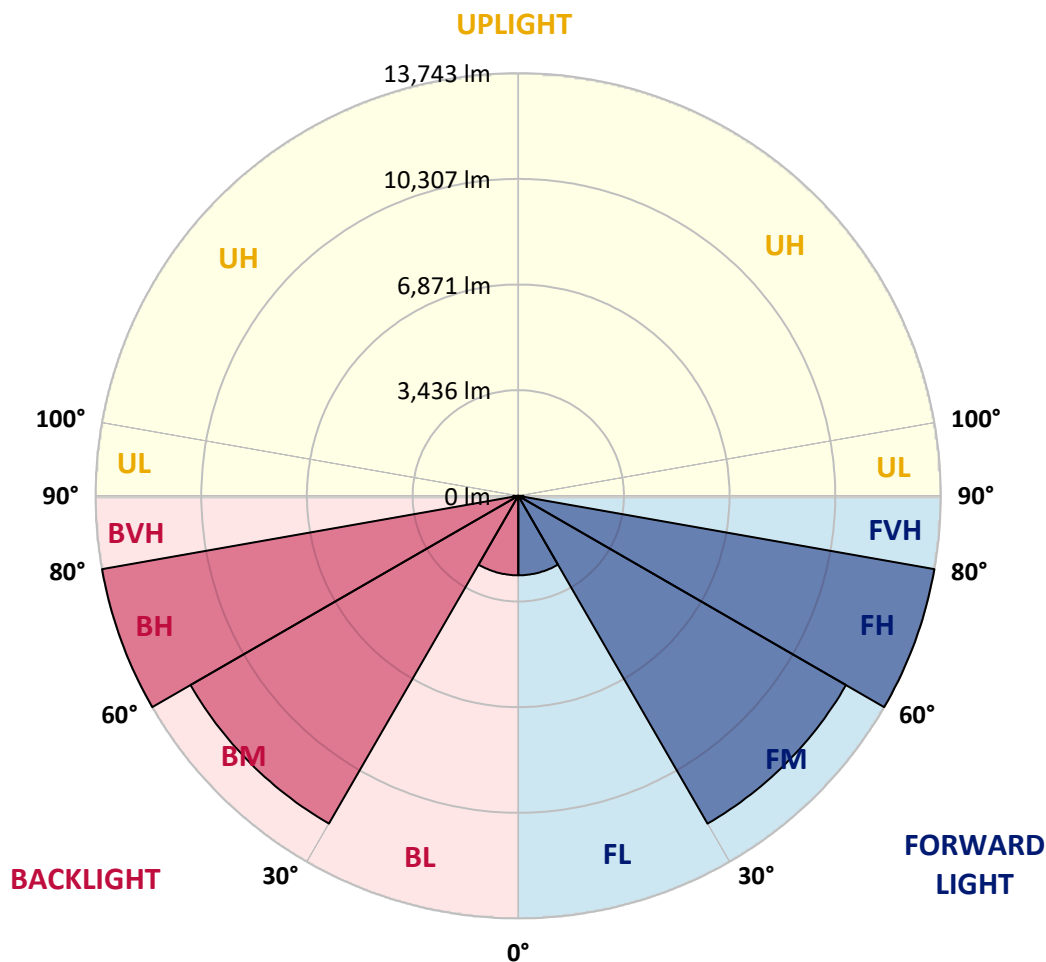
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |        |
|------|-------------|---------|-----------|-------------------------|------|--------|
|      |             |         |           | B                       | U    | G      |
| FL   | (0°-30°)    | 2584.3  | 4.5       |                         |      |        |
| FM   | (30°-60°)   | 12307.9 | 21.4      |                         |      |        |
| FH   | (60°-80°)   | 13742.6 | 23.9      |                         |      | G5     |
| FVH  | (80°-90°)   | 165.1   | 0.3       |                         |      | G2/225 |
| BL   | (0°-30°)    | 2584.3  | 4.5       | B4/5000                 |      |        |
| BM   | (30°-60°)   | 12307.9 | 21.4      | B5                      |      |        |
| BH   | (60°-80°)   | 13742.6 | 23.9      | B5                      |      | G5     |
| BVH  | (80°-90°)   | 165.1   | 0.3       |                         |      | 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 V Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 85°     | 90°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 5517.5  | 5517.5  | 5517.5  | 5517.5  | 5517.5  | 5517.5  | 5517.5  | 5517.5  | 5517.5  | 5517.5  | 5517.5  |
| 2.5°  | 5543.5  | 5549.2  | 5537.7  | 5531.9  | 5526.2  | 5517.5  | 5520.3  | 5534.8  | 5546.4  | 5543.5  | 5546.4  |
| 5°    | 5589.7  | 5595.6  | 5586.9  | 5584.0  | 5572.4  | 5569.5  | 5569.5  | 5584.0  | 5592.7  | 5586.9  | 5589.7  |
| 7.5°  | 5641.8  | 5650.5  | 5636.1  | 5633.1  | 5627.4  | 5621.6  | 5618.6  | 5633.1  | 5641.8  | 5641.8  | 5641.8  |
| 10°   | 5691.0  | 5699.6  | 5688.1  | 5679.4  | 5673.6  | 5673.6  | 5667.8  | 5679.4  | 5693.9  | 5691.0  | 5691.0  |
| 12.5° | 5743.1  | 5748.8  | 5737.2  | 5731.5  | 5731.5  | 5740.1  | 5731.5  | 5737.2  | 5748.8  | 5743.1  | 5740.1  |
| 15°   | 5806.6  | 5809.5  | 5806.6  | 5815.3  | 5829.8  | 5858.7  | 5832.7  | 5826.9  | 5832.7  | 5818.2  | 5818.2  |
| 17.5° | 5893.4  | 5899.2  | 5910.8  | 5931.0  | 5951.3  | 6003.3  | 5957.0  | 5942.5  | 5942.5  | 5913.6  | 5913.6  |
| 20°   | 6000.3  | 6009.1  | 6026.4  | 6061.1  | 6087.2  | 6136.3  | 6090.0  | 6069.8  | 6061.1  | 6023.5  | 6023.5  |
| 22.5° | 6113.2  | 6127.7  | 6153.7  | 6199.9  | 6246.1  | 6292.5  | 6246.1  | 6211.5  | 6185.5  | 6136.3  | 6133.4  |
| 25°   | 6243.3  | 6260.7  | 6301.2  | 6376.3  | 6440.0  | 6506.5  | 6451.6  | 6382.1  | 6330.1  | 6260.7  | 6257.7  |
| 27.5° | 6428.4  | 6448.6  | 6497.8  | 6590.3  | 6671.3  | 6729.1  | 6677.1  | 6587.5  | 6515.1  | 6431.3  | 6428.4  |
| 30°   | 6688.6  | 6708.8  | 6766.7  | 6865.0  | 6920.0  | 6957.6  | 6922.8  | 6853.5  | 6766.7  | 6671.3  | 6671.3  |
| 32.5° | 7024.1  | 7050.1  | 7113.7  | 7206.3  | 7217.8  | 7223.6  | 7212.0  | 7177.4  | 7113.7  | 6998.1  | 7001.0  |
| 35°   | 7449.2  | 7478.1  | 7550.4  | 7625.6  | 7614.0  | 7625.6  | 7608.2  | 7596.7  | 7550.4  | 7417.3  | 7417.3  |
| 37.5° | 7969.7  | 8004.4  | 8079.6  | 8137.4  | 8108.5  | 8094.0  | 8096.9  | 8099.9  | 8073.8  | 7926.3  | 7926.3  |
| 40°   | 8574.0  | 8620.4  | 8675.3  | 8736.0  | 8686.9  | 8643.4  | 8672.4  | 8695.5  | 8672.4  | 8522.1  | 8522.1  |
| 42.5° | 9195.8  | 9262.3  | 9320.1  | 9406.8  | 9366.4  | 9311.4  | 9351.9  | 9377.9  | 9328.8  | 9166.9  | 9178.5  |
| 45°   | 9886.9  | 9950.5  | 10025.7 | 10155.8 | 10126.9 | 10069.1 | 10126.9 | 10132.7 | 10048.9 | 9858.0  | 9878.2  |
| 47.5° | 10601.2 | 10667.7 | 10780.4 | 10954.0 | 10942.4 | 10878.8 | 10954.0 | 10913.5 | 10806.5 | 10578.0 | 10563.5 |
| 50°   | 11277.9 | 11370.4 | 11543.9 | 11786.8 | 11809.9 | 11731.8 | 11833.1 | 11755.0 | 11575.7 | 11289.5 | 11283.6 |
| 52.5° | 11914.1 | 12012.4 | 12287.1 | 12616.7 | 12700.6 | 12599.4 | 12735.3 | 12599.4 | 12330.4 | 11963.2 | 11928.5 |
| 55°   | 12582.1 | 12692.0 | 13018.7 | 13449.5 | 13617.3 | 13542.1 | 13669.3 | 13464.0 | 13082.3 | 12637.0 | 12576.2 |
| 57.5° | 13368.6 | 13435.1 | 13825.5 | 14337.3 | 14620.7 | 14638.0 | 14695.9 | 14348.9 | 13886.2 | 13380.1 | 13310.8 |
| 60°   | 14221.7 | 14314.2 | 14739.3 | 15352.3 | 15800.6 | 15945.1 | 15884.4 | 15369.7 | 14831.9 | 14250.6 | 14158.0 |
| 62.5° | 15314.7 | 15416.0 | 15924.9 | 16659.4 | 17367.9 | 17726.5 | 17489.4 | 16743.3 | 16078.1 | 15381.3 | 15259.8 |
| 65°   | 16219.9 | 16332.7 | 17252.2 | 18562.2 | 19851.9 | 20572.0 | 19976.2 | 18602.6 | 17405.5 | 16422.2 | 16260.4 |
| 67.5° | 15563.4 | 15702.3 | 17145.2 | 19551.2 | 22758.1 | 24906.7 | 22868.1 | 19846.2 | 17501.0 | 16167.8 | 15968.3 |
| 70°   | 13602.8 | 13733.0 | 15416.0 | 18356.8 | 23576.5 | 28284.3 | 24068.1 | 18897.6 | 15470.9 | 13978.7 | 13779.2 |
| 72.5° | 9031.0  | 9450.3  | 11153.5 | 14681.5 | 21052.0 | 26173.3 | 21260.2 | 14383.6 | 10346.7 | 9010.7  | 8718.6  |
| 75°   | 2995.9  | 3331.4  | 4493.8  | 7611.1  | 14100.2 | 19574.3 | 13423.5 | 6734.9  | 3559.7  | 2562.1  | 2423.3  |
| 77.5° | 754.7   | 870.4   | 1200.1  | 2177.5  | 5624.5  | 11144.8 | 5063.5  | 1778.5  | 968.7   | 676.7   | 604.3   |
| 80°   | 367.3   | 404.9   | 578.3   | 725.8   | 1408.2  | 3542.4  | 1321.5  | 682.4   | 456.9   | 352.8   | 323.9   |
| 82.5° | 202.4   | 205.3   | 326.8   | 410.6   | 523.4   | 916.7   | 543.7   | 399.0   | 263.1   | 214.0   | 214.0   |
| 85°   | 124.3   | 121.5   | 173.5   | 219.8   | 219.8   | 326.8   | 260.2   | 219.8   | 150.4   | 133.0   | 138.8   |
| 87.5° | 49.2    | 49.2    | 63.7    | 69.4    | 60.7    | 83.8    | 66.5    | 72.3    | 57.8    | 54.9    | 57.8    |
| 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)