

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: P967345

Luminaire Tested: **NAV-SB4D-830-U-RW**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P967345  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB4D-830-U-RW  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND RECTANGULAR  
WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 38679.4 lumens  
Efficiency: N/A  
Efficacy: 131.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B5 - U0 - G5

Input Watts (W): 293.6  
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

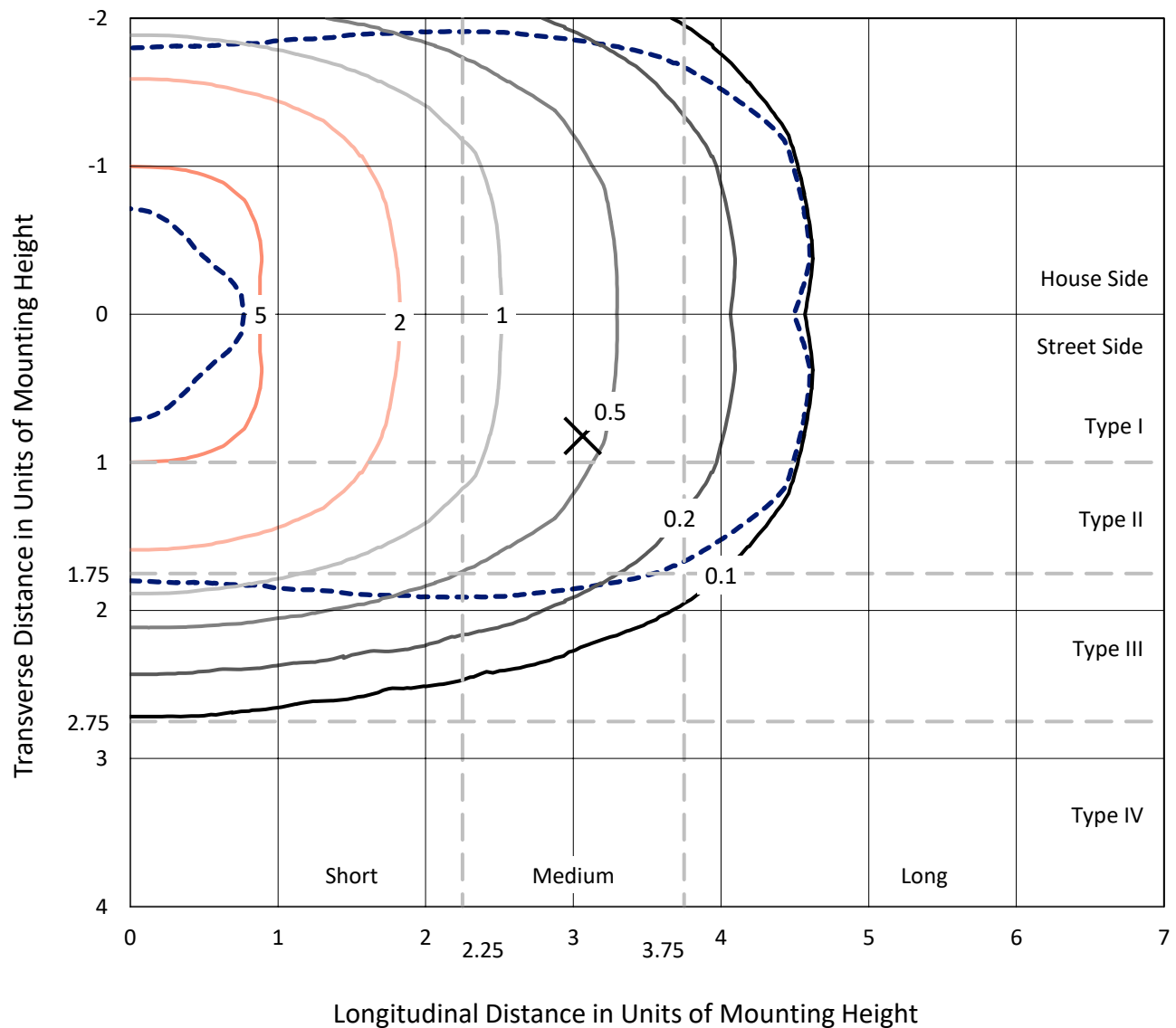


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## Iso-Footcandle Lines of Horizontal Illumination

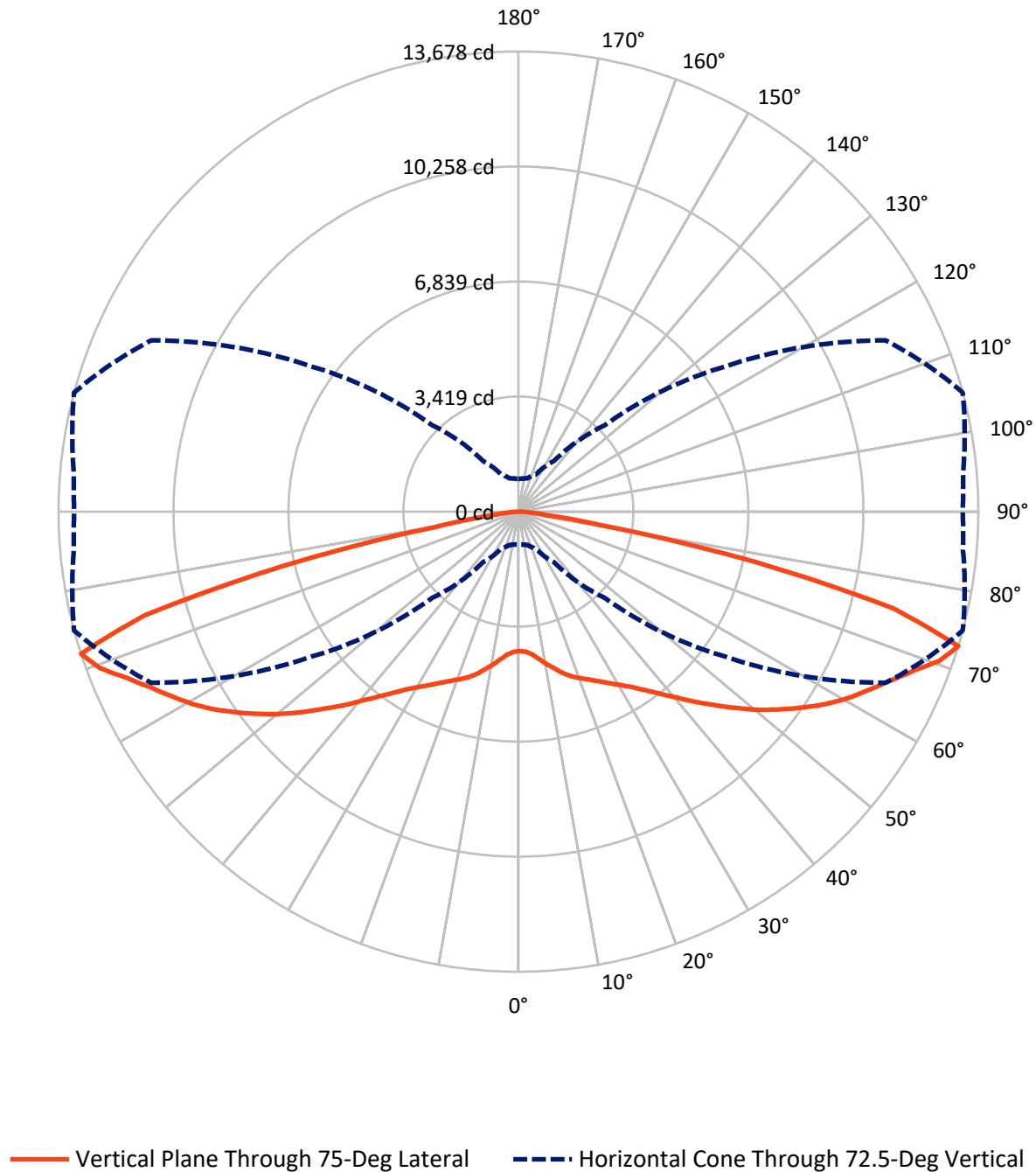
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.3 fc  
Type III - 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    | 19339.7  | 0.0    | 19339.7 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 19339.7  | 0.0    | 19339.7 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 38679.4  | 0.0    | 38679.4 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 405.9   | 1.0       |
| 10°-20°   | 1338.6  | 3.5       |
| 20°-30°   | 2586.6  | 6.7       |
| 30°-40°   | 4367.7  | 11.3      |
| 40°-50°   | 6926.7  | 17.9      |
| 50°-60°   | 9274.0  | 24.0      |
| 60°-70°   | 8825.9  | 22.8      |
| 70°-80°   | 4605.5  | 11.9      |
| 80°-90°   | 348.6   | 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°    | 38679.4 | 100.0     |
| 0°-180°   | 38679.4 | 100.0     |

**Coefficient of Utilization**



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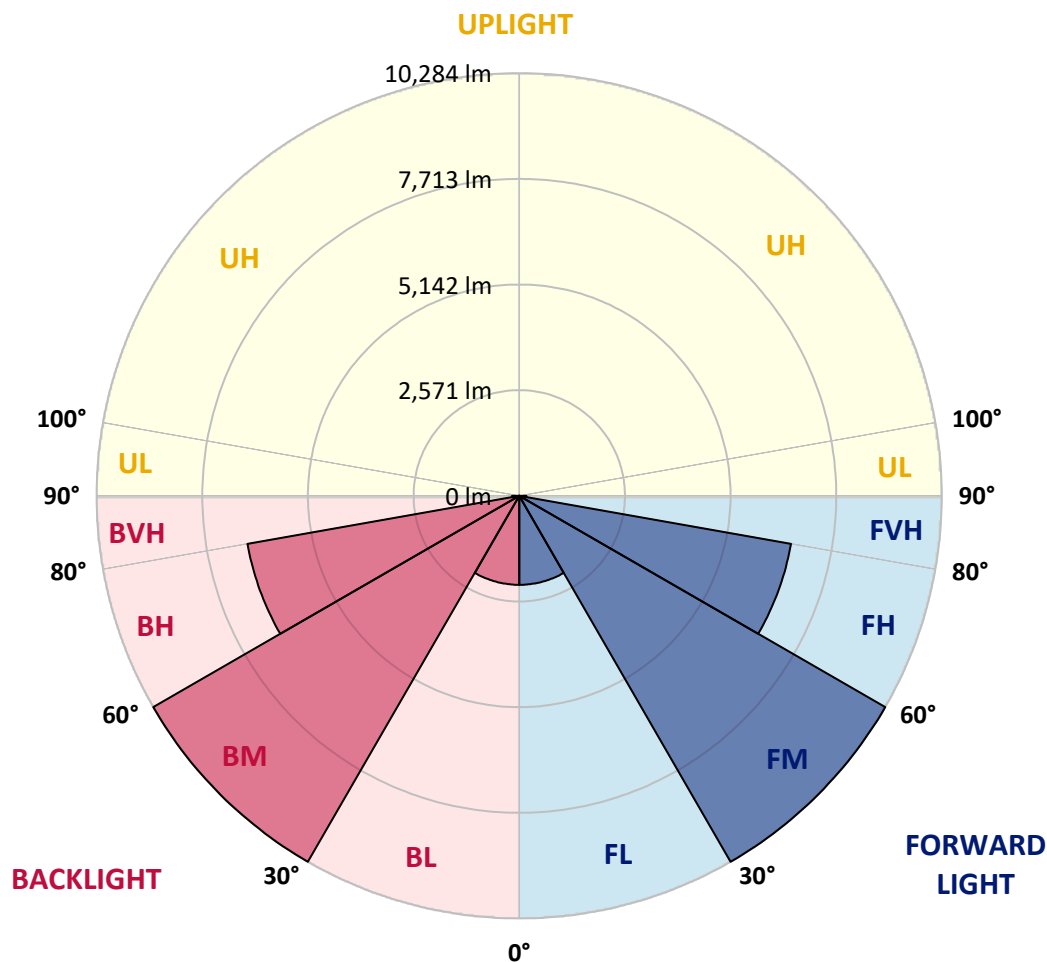
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2165.6  | 5.6       |                         |      |         |
| FM   | (30°-60°)   | 10284.2 | 26.6      |                         |      |         |
| FH   | (60°-80°)   | 6715.7  | 17.4      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 174.3   | 0.5       |                         |      | G2/225  |
| BL   | (0°-30°)    | 2165.6  | 5.6       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 10284.2 | 26.6      | B5                      |      |         |
| BH   | (60°-80°)   | 6715.7  | 17.4      | B5                      |      | G5      |
| BVH  | (80°-90°)   | 174.3   | 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 III Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 85°     | 90°     |
|-------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 4143.3 | 4143.3 | 4143.3 | 4143.3  | 4143.3  | 4143.3  | 4143.3  | 4143.3  | 4143.3  | 4143.3  | 4143.3  |
| 2.5°  | 4143.3 | 4139.3 | 4143.3 | 4147.3  | 4145.2  | 4145.2  | 4155.1  | 4161.0  | 4172.9  | 4170.9  | 4168.9  |
| 5°    | 4115.6 | 4113.6 | 4129.4 | 4147.3  | 4161.0  | 4184.8  | 4214.4  | 4236.1  | 4263.7  | 4269.6  | 4269.6  |
| 7.5°  | 4101.7 | 4095.9 | 4123.5 | 4155.1  | 4198.5  | 4257.7  | 4315.0  | 4374.3  | 4421.7  | 4437.5  | 4441.4  |
| 10°   | 4111.7 | 4113.6 | 4151.1 | 4210.4  | 4279.5  | 4362.5  | 4443.5  | 4544.1  | 4611.3  | 4627.1  | 4642.9  |
| 12.5° | 4157.1 | 4153.1 | 4216.3 | 4311.2  | 4406.0  | 4510.6  | 4605.3  | 4715.9  | 4789.0  | 4826.5  | 4842.4  |
| 15°   | 4240.0 | 4232.1 | 4321.0 | 4461.2  | 4599.5  | 4721.9  | 4798.9  | 4903.6  | 4988.5  | 5035.9  | 5053.7  |
| 17.5° | 4338.7 | 4342.7 | 4459.3 | 4640.9  | 4822.6  | 4960.9  | 5033.9  | 5087.3  | 5152.4  | 5193.9  | 5213.7  |
| 20°   | 4512.6 | 4520.5 | 4650.8 | 4866.1  | 5073.4  | 5231.4  | 5290.6  | 5270.9  | 5288.7  | 5320.3  | 5343.9  |
| 22.5° | 4745.5 | 4749.5 | 4895.7 | 5128.7  | 5346.0  | 5519.7  | 5559.2  | 5478.2  | 5428.9  | 5450.6  | 5466.4  |
| 25°   | 5016.1 | 5041.8 | 5187.9 | 5427.0  | 5650.1  | 5816.0  | 5833.8  | 5711.3  | 5588.8  | 5594.8  | 5604.7  |
| 27.5° | 5346.0 | 5369.7 | 5517.8 | 5754.8  | 5981.9  | 6126.0  | 6124.1  | 5960.2  | 5780.4  | 5735.0  | 5748.8  |
| 30°   | 5703.4 | 5729.0 | 5881.1 | 6126.0  | 6337.4  | 6463.8  | 6436.1  | 6240.5  | 5983.8  | 5898.9  | 5908.8  |
| 32.5° | 6128.0 | 6143.7 | 6297.8 | 6542.7  | 6738.2  | 6838.9  | 6781.7  | 6540.7  | 6220.8  | 6124.1  | 6147.7  |
| 35°   | 6641.5 | 6665.2 | 6779.7 | 7010.8  | 7182.6  | 7265.5  | 7168.7  | 6884.4  | 6524.9  | 6416.3  | 6432.1  |
| 37.5° | 7228.0 | 7212.2 | 7342.5 | 7547.9  | 7690.1  | 7741.4  | 7609.1  | 7271.5  | 6872.5  | 6744.2  | 6767.9  |
| 40°   | 7840.2 | 7832.3 | 7974.5 | 8172.0  | 8249.0  | 8280.6  | 8085.1  | 7715.8  | 7273.4  | 7135.1  | 7180.6  |
| 42.5° | 8395.2 | 8389.2 | 8580.8 | 8799.9  | 8892.8  | 8857.2  | 8610.4  | 8187.8  | 7737.5  | 7579.5  | 7619.0  |
| 45°   | 8839.5 | 8831.6 | 9066.5 | 9374.6  | 9556.4  | 9497.1  | 9165.3  | 8709.1  | 8207.5  | 8043.6  | 8081.1  |
| 47.5° | 9181.1 | 9185.0 | 9437.9 | 9819.0  | 10136.9 | 10158.7 | 9732.1  | 9240.4  | 8724.9  | 8539.3  | 8594.6  |
| 50°   | 9427.9 | 9439.8 | 9710.3 | 10133.0 | 10567.4 | 10759.0 | 10310.8 | 9785.5  | 9260.2  | 9050.8  | 9114.0  |
| 52.5° | 9489.2 | 9511.0 | 9836.8 | 10332.5 | 10844.0 | 11209.3 | 10899.2 | 10308.7 | 9767.6  | 9568.2  | 9619.5  |
| 55°   | 9163.4 | 9206.8 | 9619.5 | 10316.6 | 11013.8 | 11505.5 | 11416.7 | 10840.0 | 10279.1 | 10073.8 | 10131.0 |
| 57.5° | 8414.8 | 8476.1 | 8958.0 | 9868.4  | 10976.3 | 11709.0 | 11817.5 | 11349.5 | 10790.6 | 10593.2 | 10638.6 |
| 60°   | 7366.3 | 7439.3 | 7901.4 | 8894.7  | 10447.0 | 11784.0 | 12099.9 | 11845.2 | 11260.6 | 11069.1 | 11110.6 |
| 62.5° | 5784.4 | 5879.2 | 6432.1 | 7597.3  | 9329.2  | 11434.5 | 12340.9 | 12293.5 | 11683.3 | 11444.3 | 11472.0 |
| 65°   | 3710.8 | 3811.5 | 4394.1 | 5770.5  | 7838.2  | 10364.1 | 12415.9 | 12730.0 | 12129.5 | 11795.8 | 11837.3 |
| 67.5° | 2237.5 | 2283.0 | 2571.3 | 3497.5  | 5729.0  | 8750.6  | 11780.0 | 13213.8 | 12651.0 | 12236.2 | 12267.8 |
| 70°   | 1431.8 | 1457.4 | 1629.2 | 2053.9  | 3238.8  | 6384.7  | 10204.1 | 13304.6 | 13282.9 | 12688.5 | 12684.5 |
| 72.5° | 971.6  | 979.5  | 1025.0 | 1216.5  | 1832.7  | 3627.8  | 7526.2  | 12044.7 | 13677.9 | 13271.1 | 13207.8 |
| 75°   | 710.9  | 754.4  | 827.5  | 861.0   | 1040.8  | 1812.9  | 4313.1  | 8462.3  | 11527.3 | 11705.0 | 11274.5 |
| 77.5° | 529.3  | 531.3  | 631.9  | 671.5   | 742.5   | 965.8   | 1824.8  | 4723.8  | 7156.9  | 7514.4  | 6702.7  |
| 80°   | 448.3  | 424.6  | 422.6  | 541.1   | 558.9   | 602.3   | 815.6   | 1631.2  | 2563.3  | 1554.2  | 1175.1  |
| 82.5° | 373.2  | 347.6  | 314.0  | 422.6   | 381.2   | 369.3   | 353.5   | 663.6   | 815.6   | 400.9   | 341.6   |
| 85°   | 260.7  | 248.9  | 237.0  | 276.4   | 217.2   | 185.6   | 169.8   | 310.1   | 343.6   | 169.8   | 150.1   |
| 87.5° | 112.5  | 116.5  | 118.5  | 122.5   | 90.8    | 65.2    | 65.2    | 86.9    | 86.9    | 67.1    | 49.4    |
| 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)