

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: P885005

Luminaire Tested: **NAV-SB6A-830-U-T1**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P885005  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB6A-830-U-T1  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(6) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE I OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

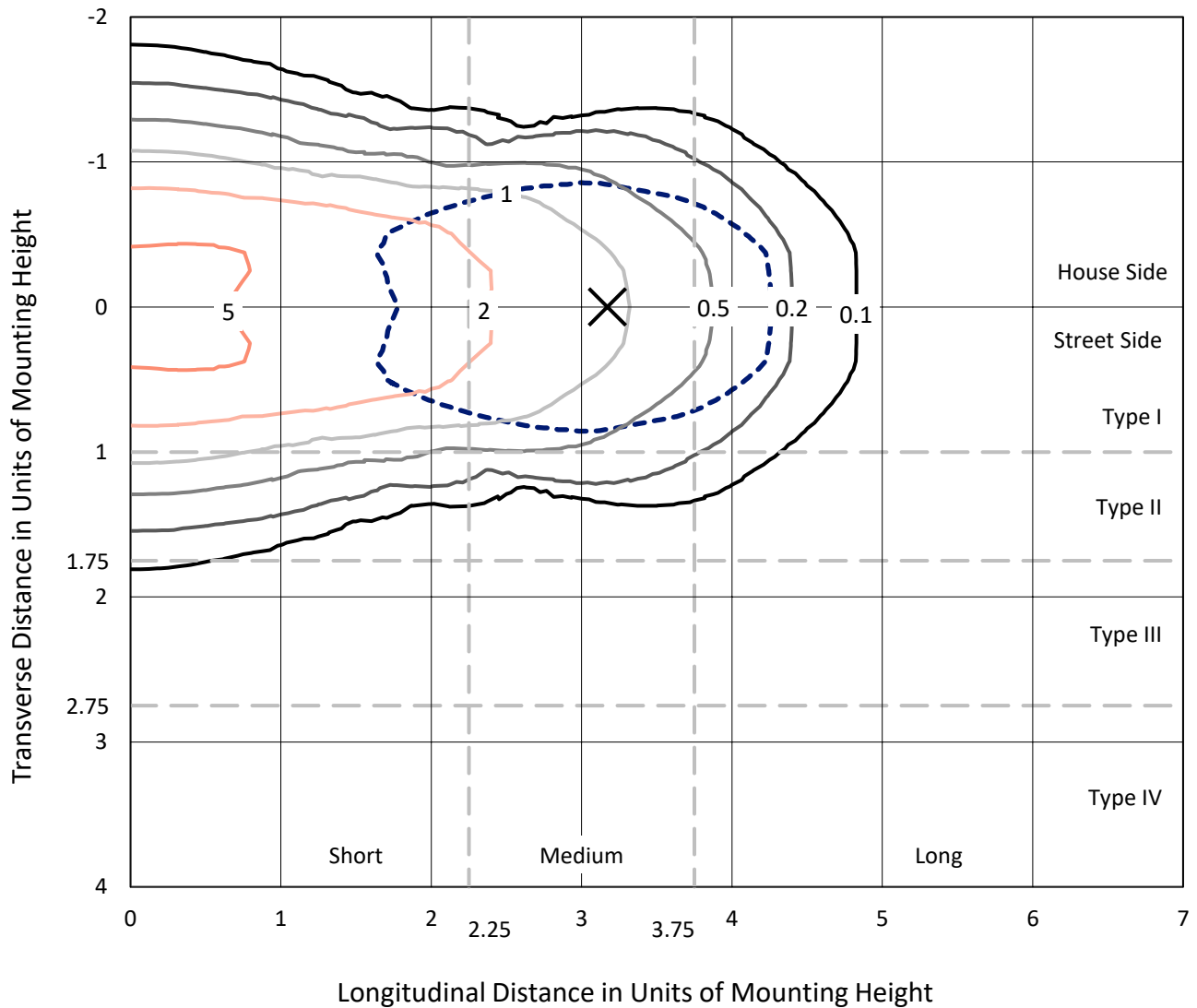
Lumens per Lamp: N/A  
Luminaire Lumens: 23568 lumens  
Efficiency: N/A  
Efficacy: 137.9 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type I - Short  
BUG Rating: B4 - U0 - G4  
  
Input Watts (W): 170.9  
Input Voltage (V): 120.0  
Input Current (Ain): 1.434  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 11.969  
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

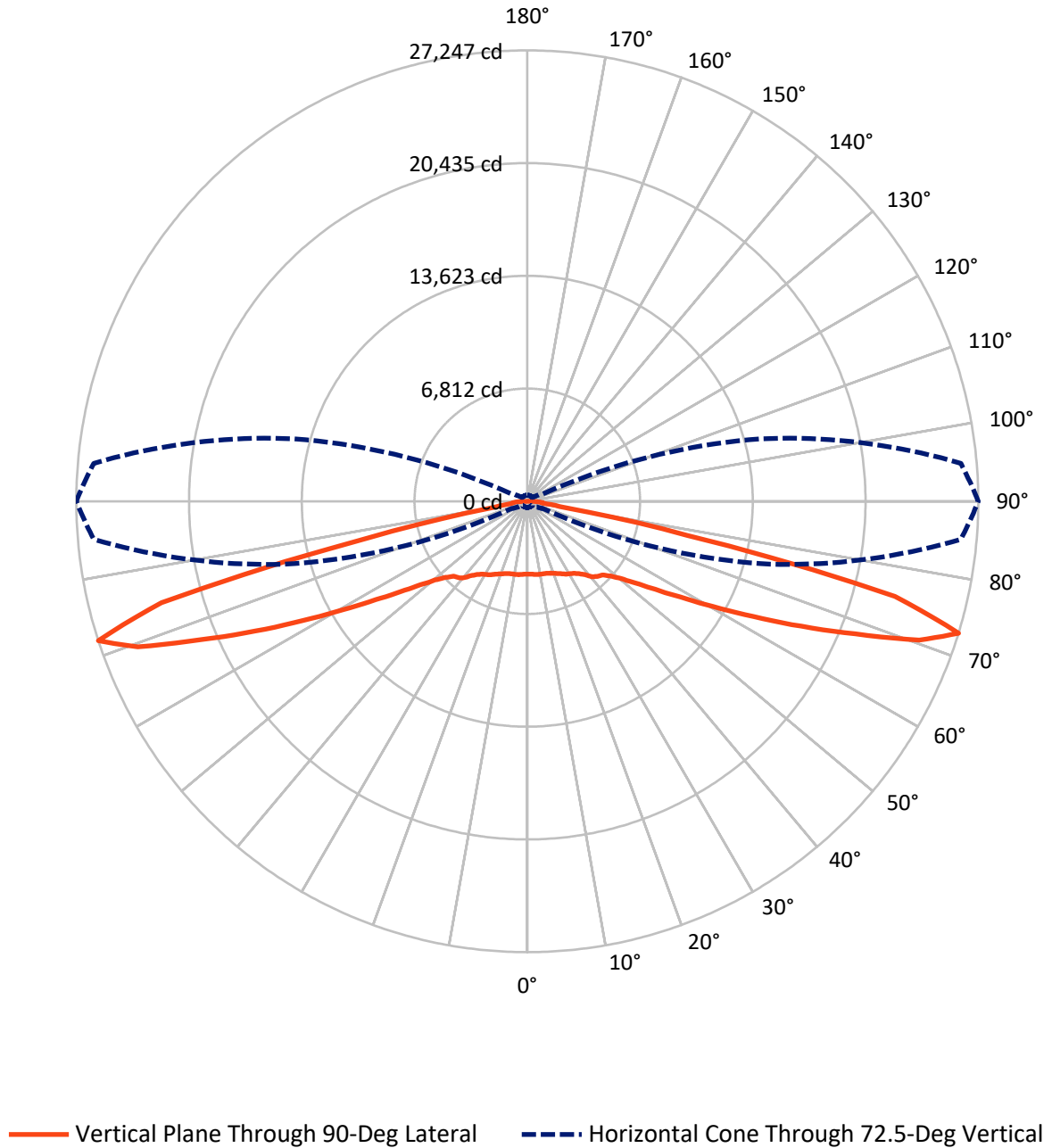
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7 fc  
 Type I - 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    | 11784.0  | 0.0    | 11784.0 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 11784.0  | 0.0    | 11784.0 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 23568.0  | 0.0    | 23568.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 427.0   | 1.8       |
| 10°-20°   | 1305.6  | 5.5       |
| 20°-30°   | 2177.0  | 9.2       |
| 30°-40°   | 2994.1  | 12.7      |
| 40°-50°   | 3656.6  | 15.5      |
| 50°-60°   | 4229.3  | 17.9      |
| 60°-70°   | 5042.7  | 21.4      |
| 70°-80°   | 3519.5  | 14.9      |
| 80°-90°   | 216.2   | 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°    | 23568.0 | 100.0     |
| 0°-180°   | 23568.0 | 100.0     |



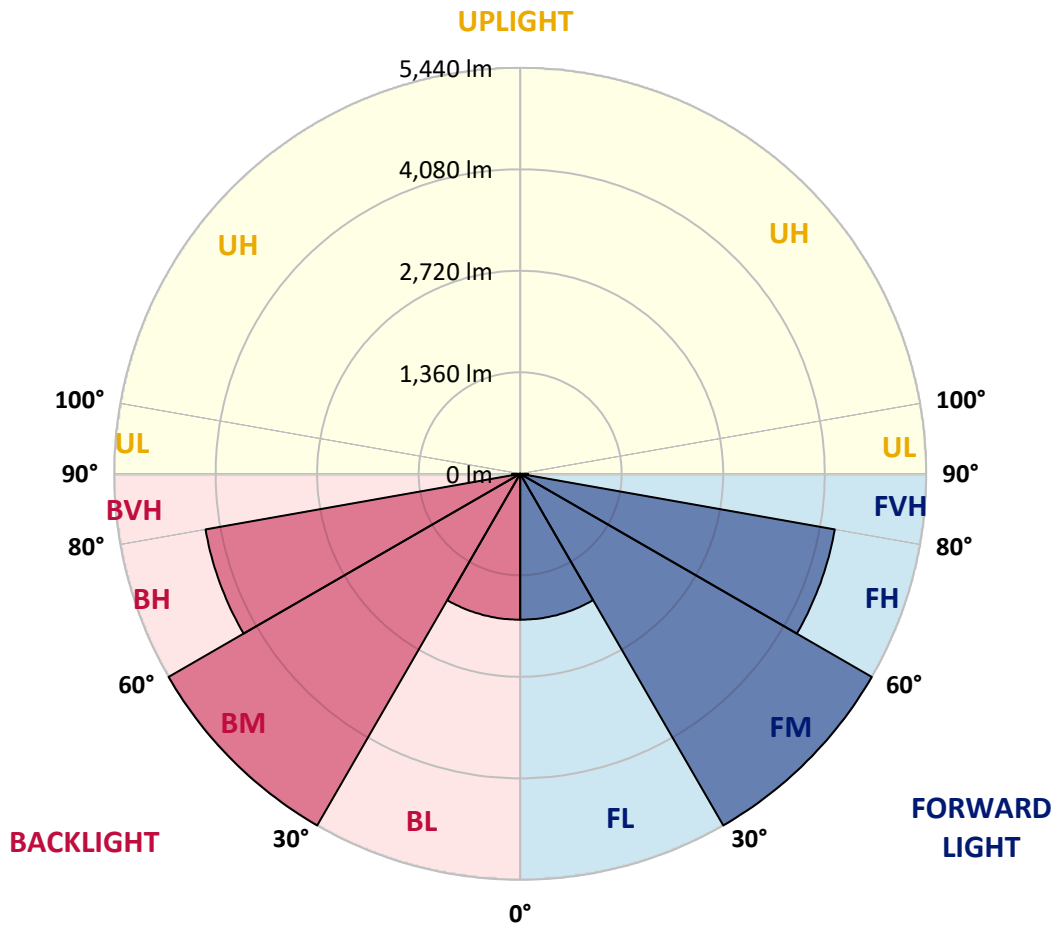
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 1954.8 | 8.3       |                         |      |         |
| FM (30°-60°)   | 5440.0 | 23.1      |                         |      |         |
| FH (60°-80°)   | 4281.1 | 18.2      |                         |      | G2/5000 |
| FVH (80°-90°)  | 108.1  | 0.5       |                         |      | G2/225  |
| BL (0°-30°)    | 1954.8 | 8.3       | B3/2500                 |      |         |
| BM (30°-60°)   | 5440.0 | 23.1      | B4/8500                 |      |         |
| BH (60°-80°)   | 4281.1 | 18.2      | B4/5000                 |      | G4/5000 |
| BVH (80°-90°)  | 108.1  | 0.5       |                         |      | G2/225  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B4-U0-G4**

Type I Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°     | 85°     | 90°     |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|
| 0°    | 4403.9 | 4403.9 | 4403.9 | 4403.9 | 4403.9 | 4403.9 | 4403.9 | 4403.9 | 4403.9  | 4403.9  | 4403.9  |
| 2.5°  | 4407.7 | 4412.7 | 4412.7 | 4408.9 | 4417.7 | 4410.2 | 4410.2 | 4406.4 | 4410.2  | 4406.4  | 4406.4  |
| 5°    | 4430.2 | 4436.5 | 4439.0 | 4437.7 | 4449.0 | 4442.8 | 4442.8 | 4437.7 | 4439.0  | 4435.2  | 4435.2  |
| 7.5°  | 4472.8 | 4481.6 | 4486.6 | 4492.9 | 4509.1 | 4501.6 | 4496.6 | 4481.6 | 4475.3  | 4465.3  | 4465.3  |
| 10°   | 4486.6 | 4496.6 | 4512.9 | 4545.5 | 4583.0 | 4584.3 | 4569.3 | 4531.7 | 4502.9  | 4480.3  | 4476.6  |
| 12.5° | 4444.0 | 4457.8 | 4491.6 | 4558.0 | 4641.9 | 4675.7 | 4651.9 | 4589.3 | 4532.9  | 4492.9  | 4486.6  |
| 15°   | 4390.2 | 4405.2 | 4456.5 | 4556.7 | 4680.7 | 4759.7 | 4757.1 | 4674.5 | 4584.3  | 4521.7  | 4511.6  |
| 17.5° | 4306.2 | 4321.3 | 4395.2 | 4535.4 | 4710.8 | 4841.1 | 4876.1 | 4791.0 | 4664.5  | 4580.5  | 4566.8  |
| 20°   | 4154.7 | 4168.5 | 4271.2 | 4467.8 | 4720.8 | 4927.5 | 5018.9 | 4943.8 | 4786.0  | 4672.0  | 4650.7  |
| 22.5° | 3958.0 | 3979.3 | 4099.6 | 4351.3 | 4697.0 | 5017.7 | 5181.8 | 5130.4 | 4927.5  | 4769.7  | 4740.9  |
| 25°   | 3747.6 | 3770.1 | 3910.4 | 4208.5 | 4635.6 | 5082.8 | 5374.6 | 5342.1 | 5087.8  | 4891.2  | 4851.1  |
| 27.5° | 3566.0 | 3589.8 | 3742.6 | 4067.0 | 4540.5 | 5107.9 | 5565.0 | 5581.3 | 5282.0  | 5025.2  | 4982.6  |
| 30°   | 3423.2 | 3445.7 | 3608.6 | 3953.0 | 4417.7 | 5082.8 | 5731.6 | 5844.4 | 5479.9  | 5141.7  | 5080.3  |
| 32.5° | 3266.6 | 3295.4 | 3467.0 | 3814.0 | 4272.4 | 5022.7 | 5876.9 | 6128.7 | 5709.1  | 5266.9  | 5189.3  |
| 35°   | 3068.7 | 3095.0 | 3275.4 | 3623.6 | 4082.0 | 4926.2 | 5998.4 | 6444.3 | 6037.2  | 5457.3  | 5370.9  |
| 37.5° | 2828.2 | 2853.3 | 3032.4 | 3385.6 | 3892.9 | 4791.0 | 6091.1 | 6800.0 | 6428.0  | 5731.6  | 5616.4  |
| 40°   | 2586.5 | 2610.3 | 2778.1 | 3120.1 | 3666.2 | 4618.1 | 6123.7 | 7148.2 | 6876.4  | 6108.6  | 5985.9  |
| 42.5° | 2364.8 | 2386.1 | 2540.2 | 2858.3 | 3411.9 | 4397.7 | 6081.1 | 7451.4 | 7278.5  | 6371.7  | 6213.8  |
| 45°   | 2160.6 | 2179.4 | 2315.9 | 2612.8 | 3147.6 | 4129.6 | 5953.3 | 7777.0 | 7757.0  | 6559.6  | 6346.6  |
| 47.5° | 1927.7 | 1946.4 | 2088.0 | 2374.8 | 2883.3 | 3815.2 | 5736.6 | 8097.7 | 8422.1  | 6985.4  | 6739.9  |
| 50°   | 1643.3 | 1659.6 | 1804.9 | 2100.5 | 2609.0 | 3480.8 | 5436.0 | 8349.4 | 9261.3  | 7630.5  | 7322.3  |
| 52.5° | 1306.4 | 1323.9 | 1465.5 | 1761.1 | 2283.4 | 3121.3 | 5040.2 | 8513.5 | 10230.7 | 8572.4  | 8192.9  |
| 55°   | 972.0  | 984.5  | 1107.2 | 1372.8 | 1880.1 | 2711.7 | 4544.2 | 8559.9 | 11330.5 | 9860.0  | 9385.3  |
| 57.5° | 705.2  | 712.7  | 791.6  | 989.5  | 1425.4 | 2199.5 | 3941.7 | 8439.6 | 12639.4 | 11510.8 | 10913.4 |
| 60°   | 571.2  | 573.7  | 597.5  | 685.1  | 990.8  | 1620.8 | 3214.0 | 8026.3 | 14059.8 | 13638.9 | 12886.1 |
| 62.5° | 518.6  | 518.6  | 524.8  | 548.6  | 670.1  | 1069.7 | 2333.5 | 7169.5 | 15582.8 | 16328.1 | 15319.8 |
| 65°   | 482.2  | 482.2  | 484.7  | 496.0  | 528.6  | 681.4  | 1473.0 | 5774.2 | 16866.7 | 19478.2 | 18203.2 |
| 67.5° | 449.7  | 450.9  | 449.7  | 453.4  | 472.2  | 503.5  | 854.2  | 3988.1 | 17558.1 | 22742.4 | 21365.8 |
| 70°   | 415.8  | 418.3  | 412.1  | 412.1  | 427.1  | 428.4  | 534.8  | 2186.9 | 16984.4 | 25477.9 | 25115.9 |
| 72.5° | 375.8  | 379.5  | 369.5  | 367.0  | 378.3  | 373.3  | 402.1  | 1049.6 | 14582.1 | 26294.6 | 27246.5 |
| 75°   | 340.7  | 345.7  | 323.2  | 316.9  | 316.9  | 313.1  | 326.9  | 538.6  | 9464.2  | 21449.7 | 22942.8 |
| 77.5° | 309.4  | 319.4  | 283.1  | 263.0  | 258.0  | 246.8  | 266.8  | 329.4  | 4139.6  | 10070.4 | 9861.2  |
| 80°   | 255.5  | 269.3  | 233.0  | 209.2  | 200.4  | 187.9  | 210.4  | 230.5  | 1231.2  | 2338.5  | 2239.5  |
| 82.5° | 190.4  | 196.6  | 165.3  | 149.1  | 141.5  | 132.8  | 157.8  | 160.3  | 400.8   | 827.9   | 935.6   |
| 85°   | 121.5  | 124.0  | 101.5  | 87.7   | 83.9   | 80.2   | 100.2  | 87.7   | 152.8   | 608.7   | 884.3   |
| 87.5° | 42.6   | 48.8   | 38.8   | 35.1   | 37.6   | 31.3   | 46.3   | 26.3   | 42.6    | 429.6   | 532.3   |
| 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)