

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: P968923

Luminaire Tested: **NAV-SB5C-830-U-5WQ**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P968923  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5C-830-U-5WQ  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 35243.6 lumens  
Efficiency: N/A  
Efficacy: 141.3 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): 249.5  
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

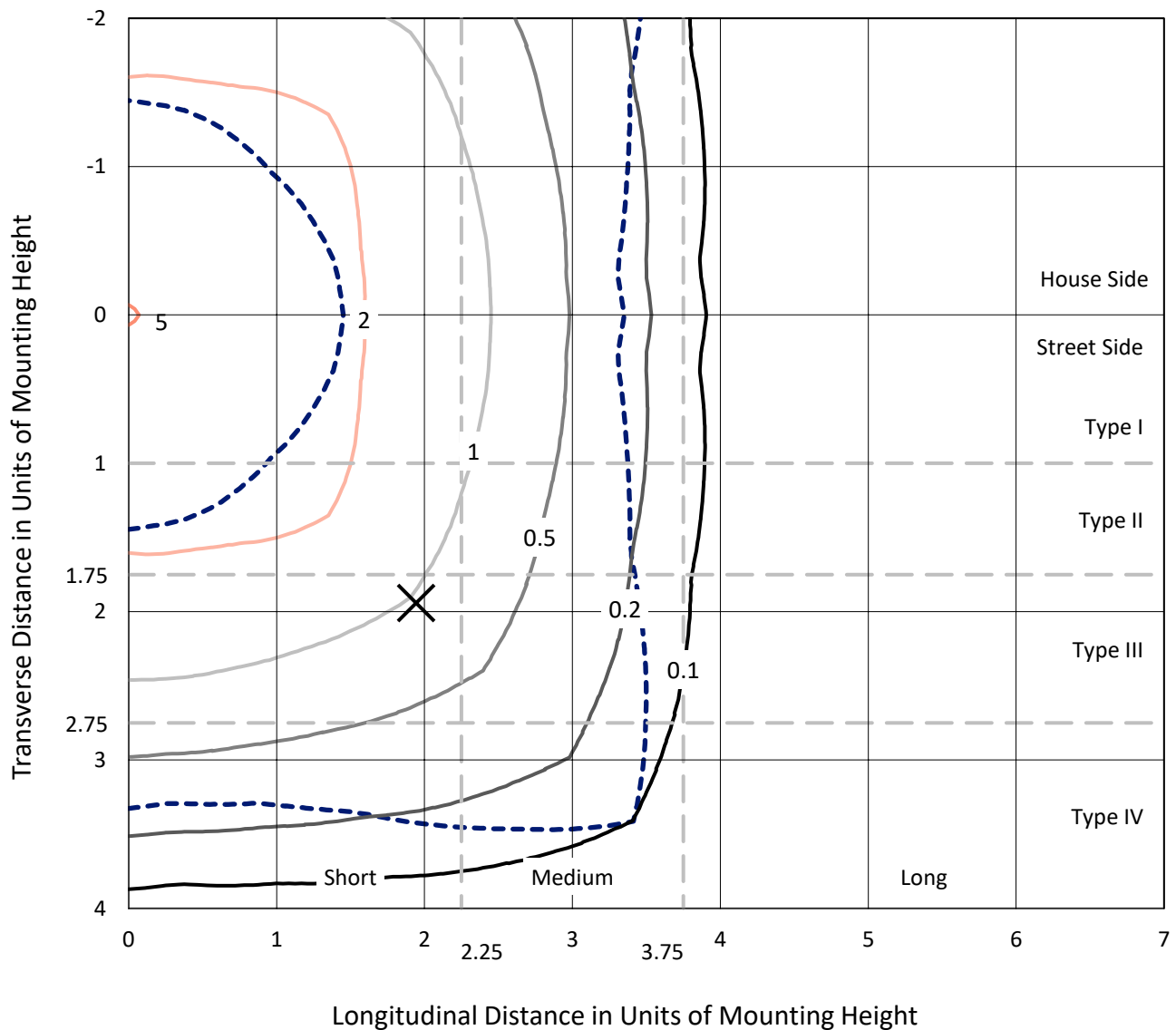


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## Iso-Footcandle Lines of Horizontal Illumination

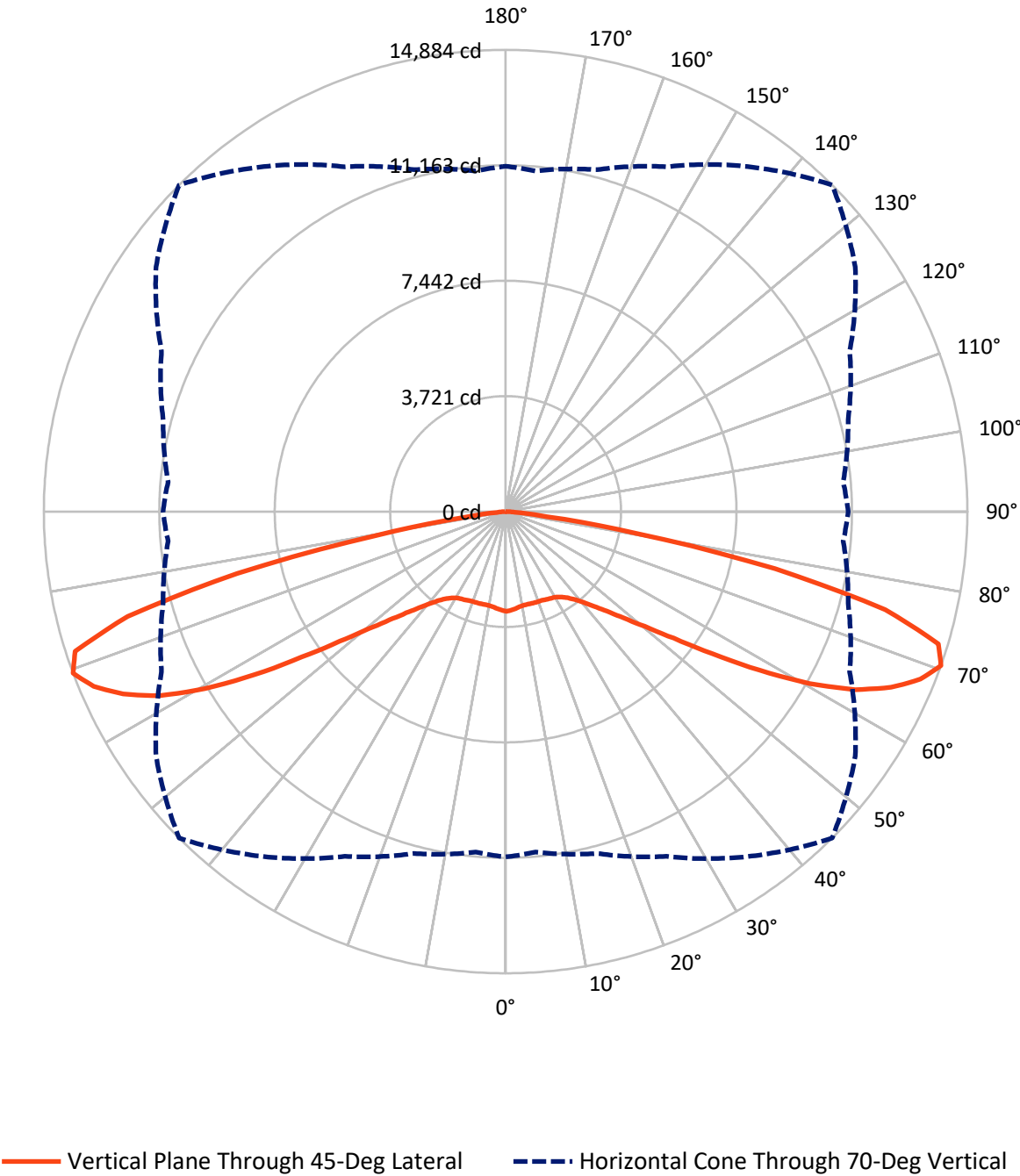
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 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    | 17621.8  | 0.0    | 17621.8 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 17621.8  | 0.0    | 17621.8 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 35243.6  | 0.0    | 35243.6 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 299.1   | 0.8       |
| 10°-20°   | 878.1   | 2.5       |
| 20°-30°   | 1461.3  | 4.1       |
| 30°-40°   | 2210.0  | 6.3       |
| 40°-50°   | 3672.4  | 10.4      |
| 50°-60°   | 6929.8  | 19.7      |
| 60°-70°   | 11701.2 | 33.2      |
| 70°-80°   | 7688.9  | 21.8      |
| 80°-90°   | 402.8   | 1.1       |
| 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°    | 35243.6 | 100.0     |
| 0°-180°   | 35243.6 | 100.0     |

**Coefficient of Utilization**



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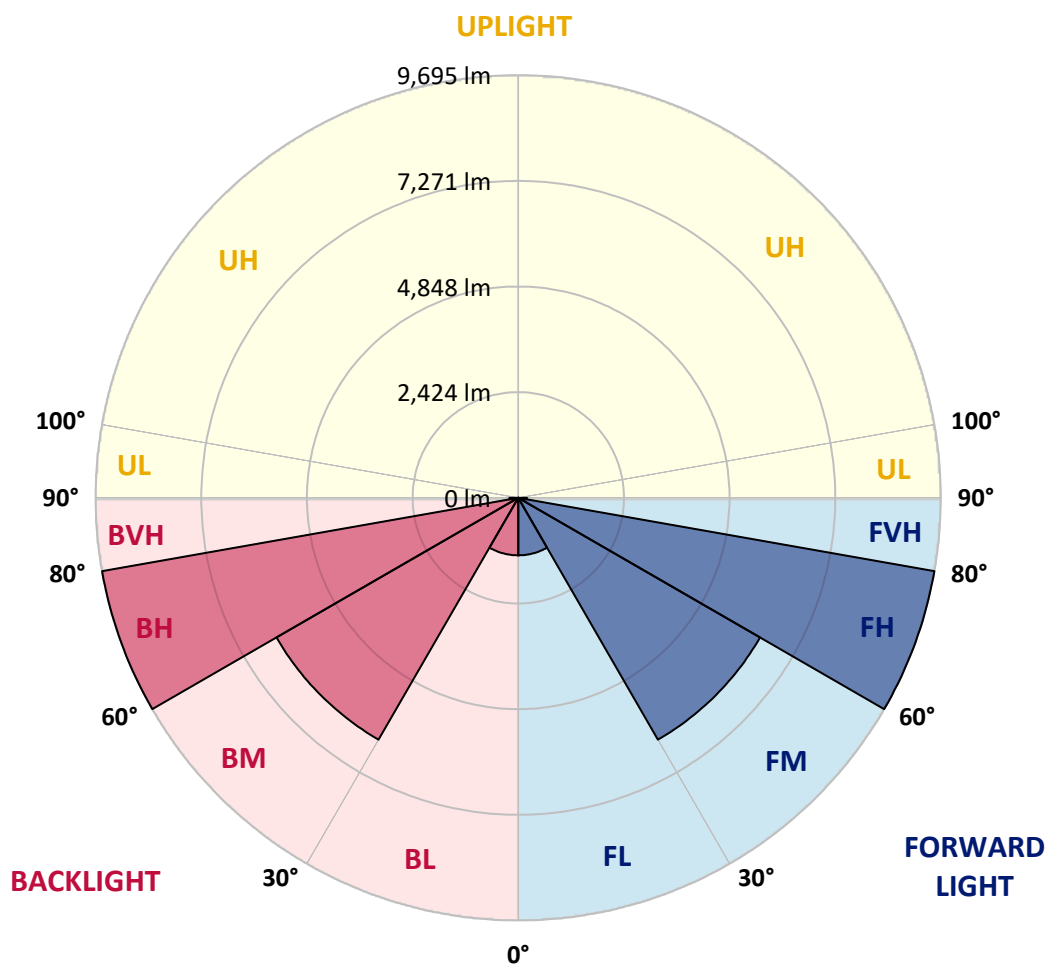
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|--------|-----------|-------------------------|------|----------|
|      |             |        |           | B                       | U    | G        |
| FL   | (0°-30°)    | 1319.3 | 3.7       |                         |      |          |
| FM   | (30°-60°)   | 6406.1 | 18.2      |                         |      |          |
| FH   | (60°-80°)   | 9695.1 | 27.5      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 201.4  | 0.6       |                         |      | G2/225   |
| BL   | (0°-30°)    | 1319.3 | 3.7       | B3/2500                 |      |          |
| BM   | (30°-60°)   | 6406.1 | 18.2      | B4/8500                 |      |          |
| BH   | (60°-80°)   | 9695.1 | 27.5      | B5                      |      | G4/12000 |
| BVH  | (80°-90°)   | 201.4  | 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-G4**

Type V Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 85°     | 90°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 3214.9  | 3214.9  | 3214.9  | 3214.9  | 3214.9  | 3214.9  | 3214.9  | 3214.9  | 3214.9  | 3214.9  | 3214.9  |
| 2.5°  | 3194.8  | 3203.9  | 3200.3  | 3193.0  | 3193.0  | 3187.4  | 3193.0  | 3196.6  | 3202.1  | 3205.8  | 3203.9  |
| 5°    | 3152.6  | 3160.0  | 3158.1  | 3152.6  | 3154.4  | 3149.0  | 3152.6  | 3158.1  | 3161.8  | 3163.7  | 3163.7  |
| 7.5°  | 3116.0  | 3123.4  | 3119.7  | 3110.5  | 3110.5  | 3105.0  | 3106.9  | 3112.3  | 3117.8  | 3119.7  | 3119.7  |
| 10°   | 3106.9  | 3114.2  | 3103.2  | 3088.5  | 3083.0  | 3075.7  | 3077.6  | 3083.0  | 3094.1  | 3099.5  | 3099.5  |
| 12.5° | 3110.5  | 3116.0  | 3105.0  | 3083.0  | 3077.6  | 3070.2  | 3070.2  | 3075.7  | 3090.4  | 3097.7  | 3099.5  |
| 15°   | 3121.5  | 3127.0  | 3110.5  | 3086.7  | 3081.1  | 3075.7  | 3073.9  | 3081.1  | 3097.7  | 3110.5  | 3112.3  |
| 17.5° | 3141.6  | 3147.2  | 3121.5  | 3088.5  | 3081.1  | 3083.0  | 3081.1  | 3086.7  | 3112.3  | 3136.2  | 3136.2  |
| 20°   | 3160.0  | 3163.7  | 3128.8  | 3088.5  | 3081.1  | 3083.0  | 3081.1  | 3092.2  | 3125.1  | 3158.1  | 3160.0  |
| 22.5° | 3165.5  | 3169.1  | 3136.2  | 3101.3  | 3095.8  | 3097.7  | 3095.8  | 3106.9  | 3138.0  | 3170.9  | 3170.9  |
| 25°   | 3167.2  | 3172.8  | 3147.2  | 3119.7  | 3128.8  | 3132.5  | 3128.8  | 3130.7  | 3154.4  | 3183.8  | 3181.9  |
| 27.5° | 3194.8  | 3202.1  | 3178.3  | 3154.4  | 3160.0  | 3158.1  | 3163.7  | 3169.1  | 3187.4  | 3216.8  | 3209.5  |
| 30°   | 3251.6  | 3257.0  | 3237.0  | 3213.1  | 3209.5  | 3196.6  | 3213.1  | 3231.4  | 3251.6  | 3277.2  | 3271.7  |
| 32.5° | 3345.0  | 3356.0  | 3330.3  | 3304.7  | 3288.2  | 3280.9  | 3293.7  | 3324.8  | 3352.4  | 3379.8  | 3368.8  |
| 35°   | 3500.7  | 3508.1  | 3484.2  | 3436.6  | 3407.3  | 3407.3  | 3418.3  | 3458.6  | 3502.5  | 3537.4  | 3524.5  |
| 37.5° | 3720.5  | 3729.7  | 3687.5  | 3630.8  | 3586.8  | 3586.8  | 3601.4  | 3643.6  | 3709.6  | 3759.0  | 3740.6  |
| 40°   | 3988.0  | 4000.8  | 3947.7  | 3889.1  | 3846.9  | 3839.5  | 3857.9  | 3905.6  | 3967.8  | 4030.1  | 4010.0  |
| 42.5° | 4310.4  | 4325.0  | 4255.4  | 4204.1  | 4171.1  | 4171.1  | 4180.4  | 4224.3  | 4281.1  | 4358.0  | 4352.6  |
| 45°   | 4722.6  | 4748.2  | 4653.0  | 4601.6  | 4570.5  | 4577.9  | 4583.3  | 4621.8  | 4673.1  | 4761.0  | 4757.3  |
| 47.5° | 5213.5  | 5239.2  | 5138.4  | 5085.2  | 5079.8  | 5114.5  | 5092.6  | 5120.1  | 5147.5  | 5248.3  | 5219.0  |
| 50°   | 5770.3  | 5814.3  | 5744.7  | 5741.0  | 5752.1  | 5816.2  | 5764.9  | 5779.6  | 5748.4  | 5812.5  | 5774.0  |
| 52.5° | 6451.9  | 6515.9  | 6503.1  | 6525.2  | 6647.8  | 6779.8  | 6662.5  | 6611.2  | 6494.0  | 6514.1  | 6446.3  |
| 55°   | 7278.0  | 7375.1  | 7393.4  | 7525.3  | 7803.7  | 8073.0  | 7823.9  | 7616.9  | 7367.8  | 7322.0  | 7250.5  |
| 57.5° | 8217.7  | 8294.7  | 8382.7  | 8651.9  | 9172.1  | 9650.3  | 9172.1  | 8714.1  | 8322.2  | 8228.7  | 8162.8  |
| 60°   | 9228.9  | 9324.2  | 9408.5  | 9806.0  | 10579.0 | 11251.3 | 10564.4 | 9837.1  | 9318.7  | 9192.3  | 9082.4  |
| 62.5° | 10315.2 | 10438.0 | 10496.6 | 10938.1 | 11839.4 | 12641.7 | 11852.2 | 10971.1 | 10395.9 | 10260.2 | 10150.4 |
| 65°   | 11357.6 | 11458.4 | 11524.3 | 11995.1 | 12856.1 | 13660.3 | 12914.7 | 12046.3 | 11454.7 | 11276.9 | 11189.0 |
| 67.5° | 11843.1 | 11898.0 | 12059.2 | 12592.2 | 13500.9 | 14418.6 | 13654.7 | 12649.0 | 11987.8 | 11676.3 | 11680.0 |
| 70°   | 11132.2 | 11020.5 | 11408.9 | 12262.5 | 13577.8 | 14883.9 | 13753.7 | 12236.9 | 11427.2 | 10921.6 | 11042.5 |
| 72.5° | 8602.4  | 8410.1  | 9084.3  | 10544.2 | 12698.5 | 14587.2 | 12786.5 | 10626.7 | 9503.7  | 8477.9  | 8732.5  |
| 75°   | 4680.5  | 4462.4  | 5393.0  | 7239.6  | 10126.6 | 12643.6 | 10359.2 | 7446.5  | 6004.9  | 4645.6  | 4947.9  |
| 77.5° | 1320.8  | 1238.3  | 1989.4  | 3502.5  | 6091.0  | 8877.2  | 6325.5  | 3579.5  | 2359.4  | 1399.5  | 1555.2  |
| 80°   | 404.9   | 392.1   | 531.3   | 1055.1  | 2586.6  | 4251.8  | 2485.8  | 1067.9  | 676.0   | 426.8   | 450.6   |
| 82.5° | 240.0   | 219.9   | 263.8   | 384.7   | 659.5   | 1335.5  | 641.1   | 401.2   | 322.4   | 216.2   | 234.5   |
| 85°   | 137.4   | 128.2   | 155.7   | 186.9   | 221.6   | 283.9   | 185.0   | 190.5   | 172.2   | 115.4   | 121.0   |
| 87.5° | 56.8    | 51.2    | 60.5    | 58.6    | 51.2    | 65.9    | 49.5    | 58.6    | 69.6    | 45.8    | 42.1    |
| 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)