

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: P968954

Luminaire Tested: **NAV-SB5C-835-U-5WQ**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P968954  
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-835-U-5WQ  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 80 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 36380.3 lumens  
Efficiency: N/A  
Efficacy: 145.8 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

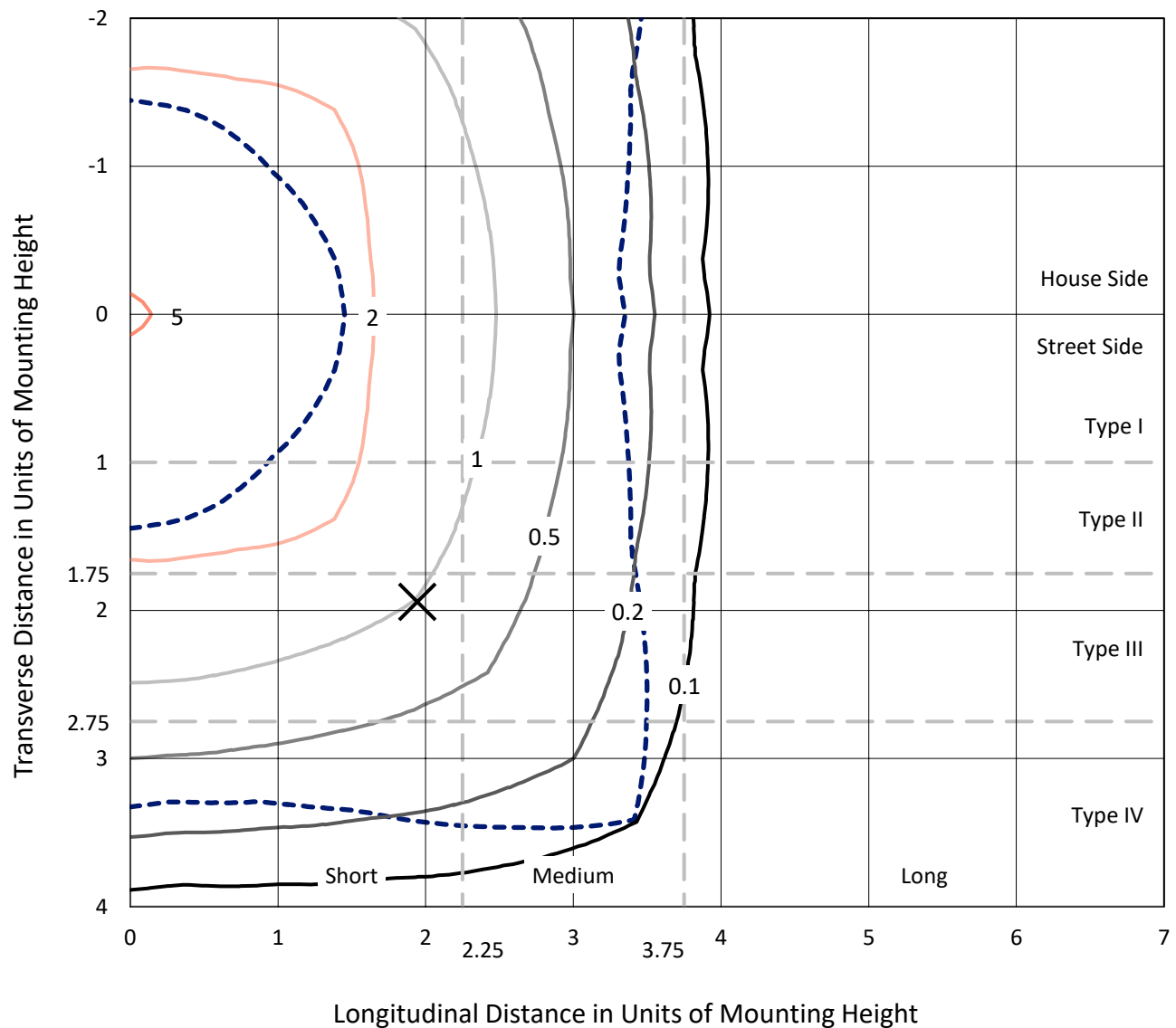


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## Iso-Footcandle Lines of Horizontal Illumination

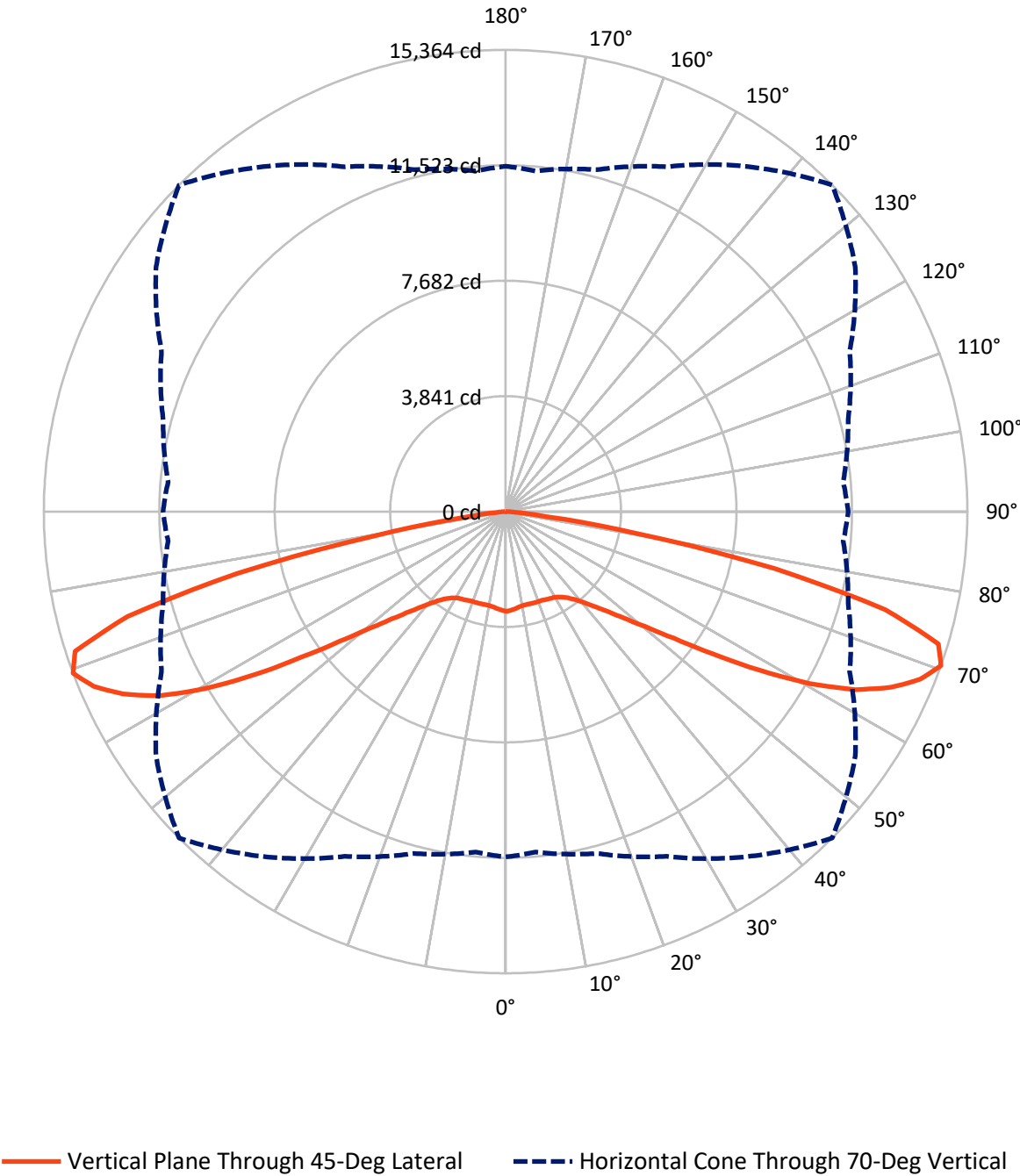
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.3 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    | 18190.2  | 0.0    | 18190.2 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 18190.2  | 0.0    | 18190.2 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 36380.3  | 0.0    | 36380.3 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 308.7   | 0.8       |
| 10°-20°   | 906.4   | 2.5       |
| 20°-30°   | 1508.5  | 4.1       |
| 30°-40°   | 2281.3  | 6.3       |
| 40°-50°   | 3790.9  | 10.4      |
| 50°-60°   | 7153.3  | 19.7      |
| 60°-70°   | 12078.6 | 33.2      |
| 70°-80°   | 7936.9  | 21.8      |
| 80°-90°   | 415.8   | 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°    | 36380.3 | 100.0     |
| 0°-180°   | 36380.3 | 100.0     |

**Coefficient of Utilization**



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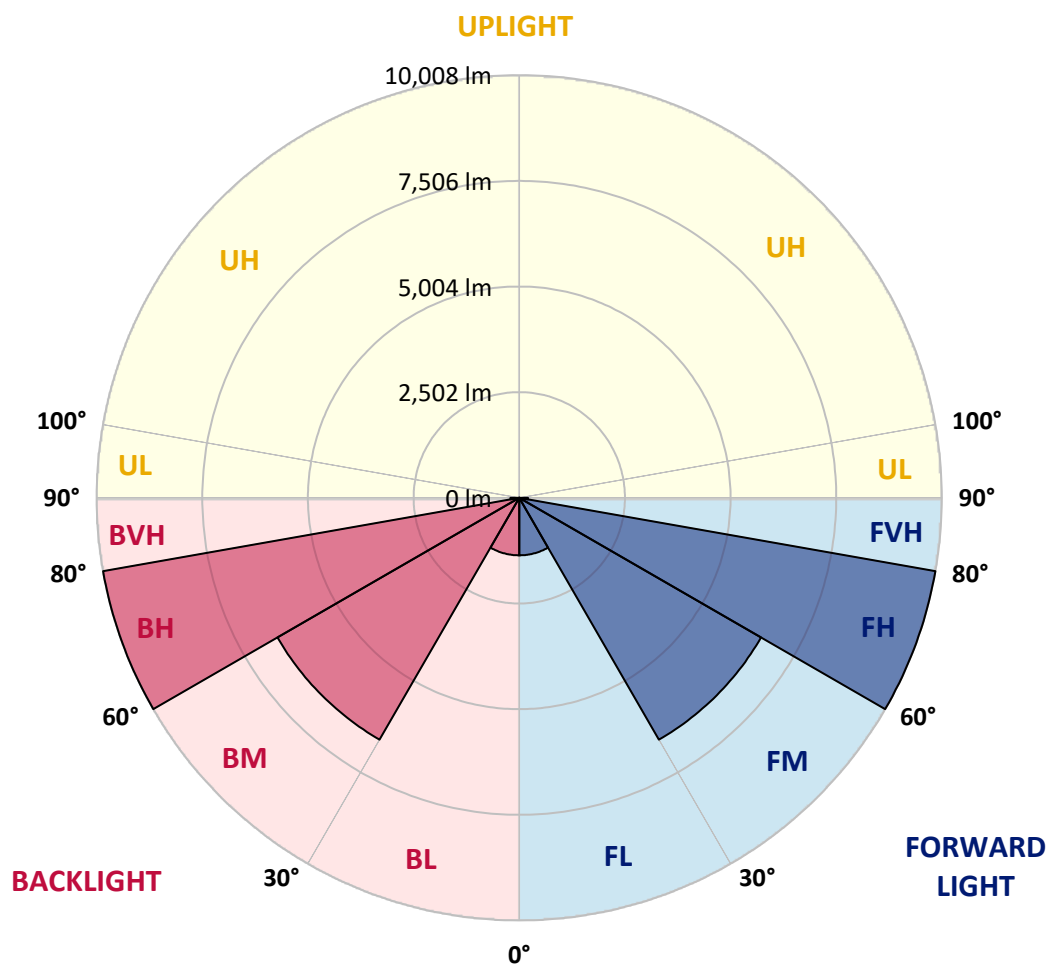
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|---------|-----------|-------------------------|------|----------|
|      |             |         |           | B                       | U    | G        |
| FL   | (0°-30°)    | 1361.8  | 3.7       |                         |      |          |
| FM   | (30°-60°)   | 6612.7  | 18.2      |                         |      |          |
| FH   | (60°-80°)   | 10007.7 | 27.5      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 207.9   | 0.6       |                         |      | G2/225   |
| BL   | (0°-30°)    | 1361.8  | 3.7       | B3/2500                 |      |          |
| BM   | (30°-60°)   | 6612.7  | 18.2      | B4/8500                 |      |          |
| BH   | (60°-80°)   | 10007.7 | 27.5      | B5                      |      | G4/12000 |
| BVH  | (80°-90°)   | 207.9   | 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°    | 3318.6  | 3318.6  | 3318.6  | 3318.6  | 3318.6  | 3318.6  | 3318.6  | 3318.6  | 3318.6  | 3318.6  | 3318.6  |
| 2.5°  | 3297.8  | 3307.3  | 3303.5  | 3295.9  | 3295.9  | 3290.2  | 3295.9  | 3299.7  | 3305.4  | 3309.2  | 3307.3  |
| 5°    | 3254.4  | 3261.9  | 3260.0  | 3254.4  | 3256.2  | 3250.6  | 3254.4  | 3260.0  | 3263.8  | 3265.6  | 3265.6  |
| 7.5°  | 3216.6  | 3224.0  | 3220.2  | 3210.8  | 3210.8  | 3205.2  | 3207.0  | 3212.8  | 3218.4  | 3220.2  | 3220.2  |
| 10°   | 3207.0  | 3214.6  | 3203.2  | 3188.2  | 3182.4  | 3174.9  | 3176.8  | 3182.4  | 3193.8  | 3199.5  | 3199.5  |
| 12.5° | 3210.8  | 3216.6  | 3205.2  | 3182.4  | 3176.8  | 3169.2  | 3169.2  | 3174.9  | 3190.0  | 3197.6  | 3199.5  |
| 15°   | 3222.2  | 3227.8  | 3210.8  | 3186.2  | 3180.6  | 3174.9  | 3173.0  | 3180.6  | 3197.6  | 3210.8  | 3212.8  |
| 17.5° | 3243.0  | 3248.6  | 3222.2  | 3188.2  | 3180.6  | 3182.4  | 3180.6  | 3186.2  | 3212.8  | 3237.3  | 3237.3  |
| 20°   | 3261.9  | 3265.6  | 3229.8  | 3188.2  | 3180.6  | 3182.4  | 3180.6  | 3192.0  | 3226.0  | 3260.0  | 3261.9  |
| 22.5° | 3267.6  | 3271.4  | 3237.3  | 3201.4  | 3195.7  | 3197.6  | 3195.7  | 3207.0  | 3239.2  | 3273.2  | 3273.2  |
| 25°   | 3269.4  | 3275.1  | 3248.6  | 3220.2  | 3229.8  | 3233.6  | 3229.8  | 3231.6  | 3256.2  | 3286.5  | 3284.6  |
| 27.5° | 3297.8  | 3305.4  | 3280.8  | 3256.2  | 3261.9  | 3260.0  | 3265.6  | 3271.4  | 3290.2  | 3320.5  | 3312.9  |
| 30°   | 3356.5  | 3362.1  | 3341.3  | 3316.7  | 3312.9  | 3299.7  | 3316.7  | 3335.7  | 3356.5  | 3382.9  | 3377.3  |
| 32.5° | 3452.9  | 3464.2  | 3437.7  | 3411.3  | 3394.3  | 3386.7  | 3399.9  | 3432.1  | 3460.4  | 3488.8  | 3477.4  |
| 35°   | 3613.6  | 3621.1  | 3596.6  | 3547.4  | 3517.2  | 3517.2  | 3528.6  | 3570.1  | 3615.5  | 3651.5  | 3638.2  |
| 37.5° | 3840.5  | 3850.0  | 3806.4  | 3747.9  | 3702.5  | 3702.5  | 3717.6  | 3761.1  | 3829.2  | 3880.2  | 3861.3  |
| 40°   | 4116.6  | 4129.8  | 4075.0  | 4014.5  | 3971.0  | 3963.5  | 3982.3  | 4031.5  | 4095.8  | 4160.1  | 4139.3  |
| 42.5° | 4449.4  | 4464.5  | 4392.6  | 4339.7  | 4305.7  | 4305.7  | 4315.1  | 4360.6  | 4419.2  | 4498.5  | 4492.9  |
| 45°   | 4874.9  | 4901.3  | 4803.0  | 4750.1  | 4718.0  | 4725.5  | 4731.2  | 4770.9  | 4823.9  | 4914.6  | 4910.8  |
| 47.5° | 5381.7  | 5408.1  | 5304.1  | 5249.2  | 5243.6  | 5279.6  | 5256.8  | 5285.2  | 5313.6  | 5417.5  | 5387.3  |
| 50°   | 5956.5  | 6001.9  | 5930.0  | 5926.2  | 5937.6  | 6003.7  | 5950.8  | 5965.9  | 5933.8  | 5999.9  | 5960.3  |
| 52.5° | 6659.9  | 6726.2  | 6712.8  | 6735.6  | 6862.3  | 6998.4  | 6877.3  | 6824.4  | 6703.4  | 6724.2  | 6654.3  |
| 55°   | 7512.7  | 7613.0  | 7631.8  | 7768.1  | 8055.5  | 8333.5  | 8076.3  | 7862.6  | 7605.4  | 7558.1  | 7484.3  |
| 57.5° | 8482.8  | 8562.2  | 8652.9  | 8930.9  | 9468.0  | 9961.6  | 9468.0  | 8995.3  | 8590.6  | 8494.2  | 8426.1  |
| 60°   | 9526.7  | 9625.0  | 9711.9  | 10122.3 | 10920.2 | 11614.2 | 10905.1 | 10154.4 | 9619.2  | 9488.8  | 9375.4  |
| 62.5° | 10647.9 | 10774.6 | 10835.2 | 11290.9 | 12221.2 | 13049.5 | 12234.4 | 11324.9 | 10731.1 | 10591.2 | 10477.8 |
| 65°   | 11723.8 | 11827.9 | 11895.9 | 12381.9 | 13270.7 | 14100.8 | 13331.2 | 12434.9 | 11824.1 | 11640.7 | 11549.9 |
| 67.5° | 12225.0 | 12281.8 | 12448.1 | 12998.4 | 13936.3 | 14883.7 | 14095.2 | 13057.0 | 12374.4 | 12052.9 | 12056.7 |
| 70°   | 11491.3 | 11376.0 | 11776.8 | 12658.0 | 14015.7 | 15363.9 | 14197.3 | 12631.6 | 11795.7 | 11273.9 | 11398.6 |
| 72.5° | 8879.9  | 8681.3  | 9377.2  | 10884.3 | 13108.1 | 15057.7 | 13198.8 | 10969.4 | 9810.3  | 8751.3  | 9014.2  |
| 75°   | 4831.3  | 4606.3  | 5567.0  | 7473.1  | 10453.2 | 13051.3 | 10693.3 | 7686.7  | 6198.6  | 4795.5  | 5107.5  |
| 77.5° | 1363.4  | 1278.3  | 2053.6  | 3615.5  | 6287.5  | 9163.5  | 6529.5  | 3694.9  | 2435.5  | 1444.6  | 1605.5  |
| 80°   | 417.9   | 404.7   | 548.4   | 1089.2  | 2670.0  | 4388.8  | 2566.0  | 1102.4  | 697.7   | 440.5   | 465.1   |
| 82.5° | 247.7   | 226.9   | 272.3   | 397.1   | 680.7   | 1378.5  | 661.8   | 414.1   | 332.8   | 223.1   | 242.0   |
| 85°   | 141.9   | 132.3   | 160.7   | 192.9   | 228.8   | 293.0   | 191.0   | 196.7   | 177.7   | 119.1   | 124.8   |
| 87.5° | 58.6    | 53.0    | 62.4    | 60.5    | 53.0    | 68.1    | 51.0    | 60.5    | 71.9    | 47.3    | 43.5    |
| 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)