

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: P965702

Luminaire Tested: **NAV-SB4A-760-U-RW**

Issue Date: 1/21/2025

### Test Information

Test Method: LM-79-08  
Report Number: P965702  
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-SB4A-760-U-RW  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 70 CRI, 5700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND RECTANGULAR  
WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

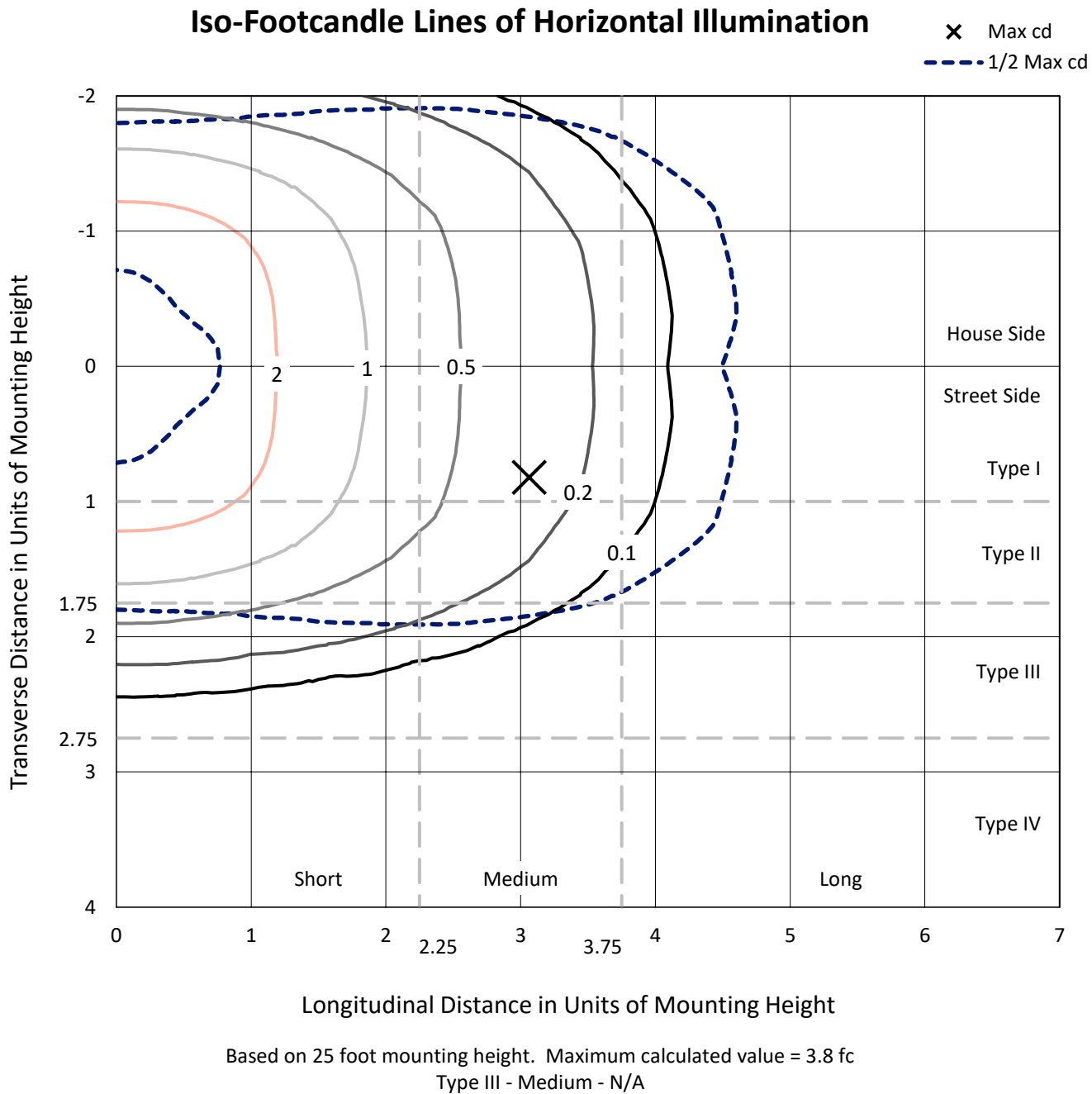
### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 20075.5 lumens  
Efficiency: N/A  
Efficacy: 176.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B4 - U0 - G4

Input Watts (W): 114  
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



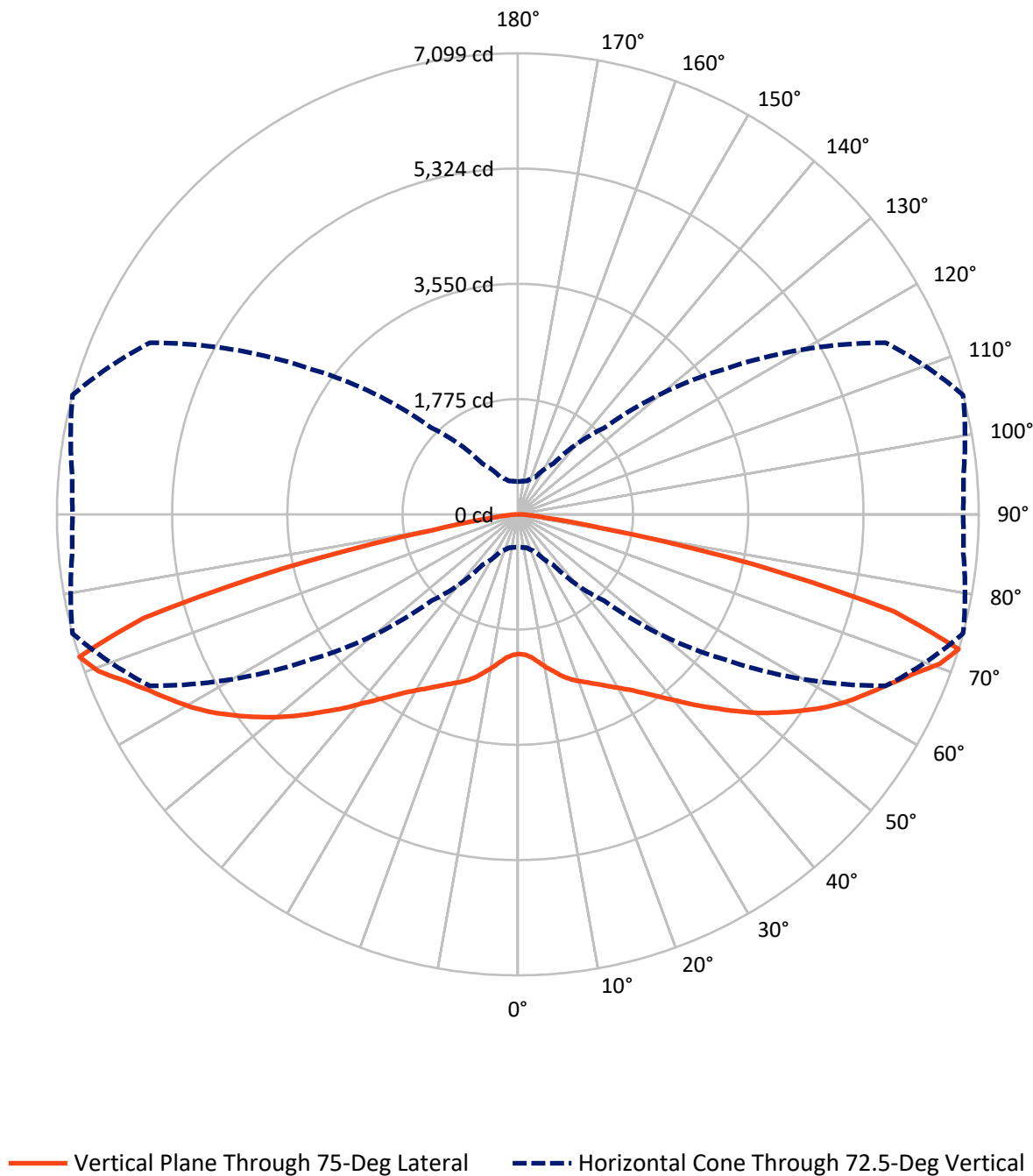
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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 10037.8  | 0.0    | 10037.8 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 10037.8  | 0.0    | 10037.8 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 20075.5  | 0.0    | 20075.5 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 210.7   | 1.0       |
| 10°-20°   | 694.8   | 3.5       |
| 20°-30°   | 1342.5  | 6.7       |
| 30°-40°   | 2266.9  | 11.3      |
| 40°-50°   | 3595.1  | 17.9      |
| 50°-60°   | 4813.4  | 24.0      |
| 60°-70°   | 4580.8  | 22.8      |
| 70°-80°   | 2390.4  | 11.9      |
| 80°-90°   | 180.9   | 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°    | 20075.5 | 100.0     |
| 0°-180°   | 20075.5 | 100.0     |

**Coefficient of Utilization**



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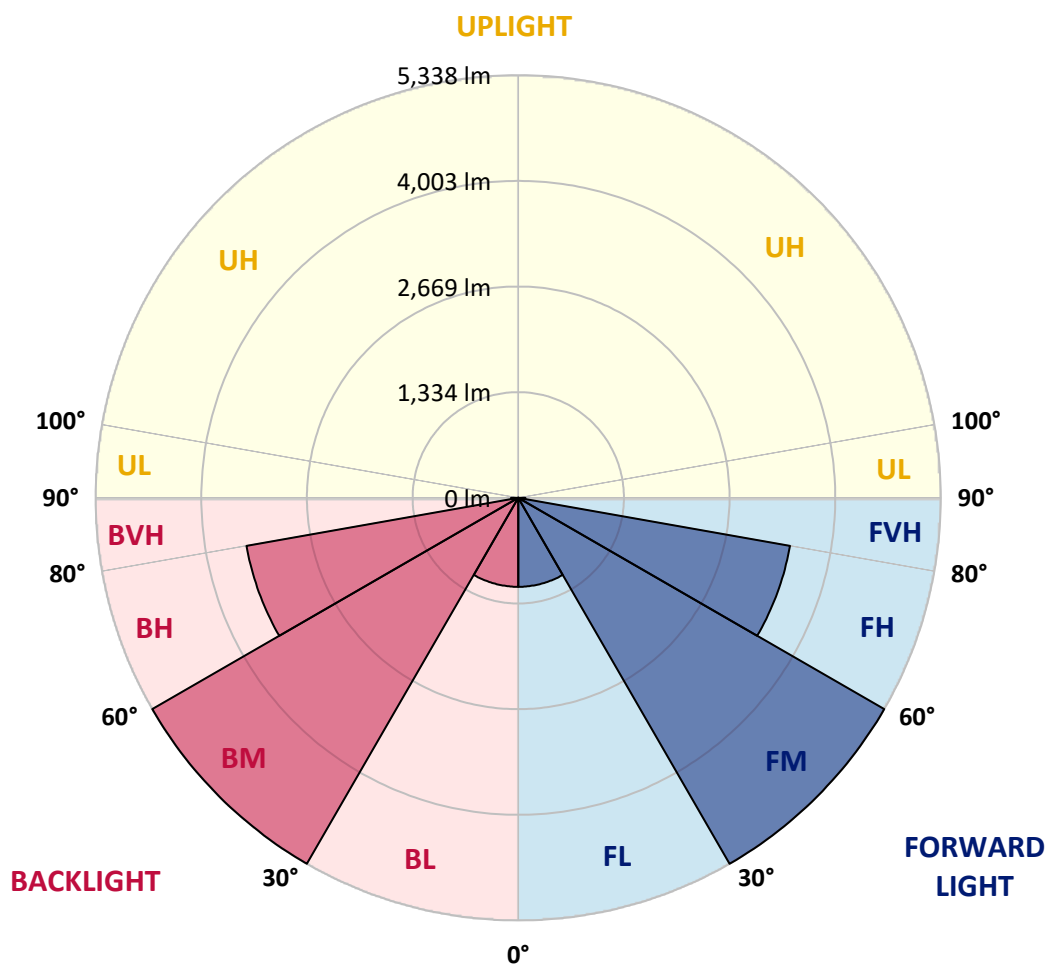
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1124.0 | 5.6       |                         |      |         |
| FM   | (30°-60°)   | 5337.7 | 26.6      |                         |      |         |
| FH   | (60°-80°)   | 3485.6 | 17.4      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 90.5   | 0.5       |                         |      | G1/100  |
| BL   | (0°-30°)    | 1124.0 | 5.6       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 5337.7 | 26.6      | B4/8500                 |      |         |
| BH   | (60°-80°)   | 3485.6 | 17.4      | B4/5000                 |      | G4/5000 |
| BVH  | (80°-90°)   | 90.5   | 0.5       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

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

Type III Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2150.4 | 2150.4 | 2150.4 | 2150.4 | 2150.4 | 2150.4 | 2150.4 | 2150.4 | 2150.4 | 2150.4 | 2150.4 |
| 2.5°  | 2150.4 | 2148.4 | 2150.4 | 2152.5 | 2151.5 | 2151.5 | 2156.6 | 2159.7 | 2165.8 | 2164.8 | 2163.8 |
| 5°    | 2136.1 | 2135.1 | 2143.3 | 2152.5 | 2159.7 | 2172.0 | 2187.4 | 2198.6 | 2213.0 | 2216.0 | 2216.0 |
| 7.5°  | 2128.9 | 2125.8 | 2140.2 | 2156.6 | 2179.1 | 2209.9 | 2239.6 | 2270.4 | 2295.0 | 2303.2 | 2305.2 |
| 10°   | 2134.0 | 2135.1 | 2154.5 | 2185.3 | 2221.2 | 2264.2 | 2306.2 | 2358.5 | 2393.4 | 2401.6 | 2409.8 |
| 12.5° | 2157.6 | 2155.6 | 2188.4 | 2237.6 | 2286.8 | 2341.1 | 2390.3 | 2447.7 | 2485.6 | 2505.1 | 2513.3 |
| 15°   | 2200.7 | 2196.6 | 2242.7 | 2315.5 | 2387.2 | 2450.8 | 2490.8 | 2545.1 | 2589.1 | 2613.8 | 2623.0 |
| 17.5° | 2251.9 | 2254.0 | 2314.4 | 2408.8 | 2503.0 | 2574.8 | 2612.7 | 2640.4 | 2674.2 | 2695.7 | 2706.0 |
| 20°   | 2342.1 | 2346.2 | 2413.9 | 2525.6 | 2633.2 | 2715.2 | 2746.0 | 2735.7 | 2745.0 | 2761.4 | 2773.6 |
| 22.5° | 2463.1 | 2465.1 | 2541.0 | 2661.9 | 2774.7 | 2864.9 | 2885.4 | 2843.4 | 2817.7 | 2829.0 | 2837.2 |
| 25°   | 2603.5 | 2616.8 | 2692.7 | 2816.7 | 2932.5 | 3018.6 | 3027.8 | 2964.3 | 2900.7 | 2903.8 | 2909.0 |
| 27.5° | 2774.7 | 2787.0 | 2863.8 | 2986.8 | 3104.7 | 3179.5 | 3178.5 | 3093.4 | 3000.2 | 2976.6 | 2983.8 |
| 30°   | 2960.2 | 2973.5 | 3052.4 | 3179.5 | 3289.2 | 3354.8 | 3340.5 | 3239.0 | 3105.7 | 3061.7 | 3066.8 |
| 32.5° | 3180.6 | 3188.8 | 3268.7 | 3395.8 | 3497.3 | 3549.6 | 3519.8 | 3394.8 | 3228.7 | 3178.5 | 3190.8 |
| 35°   | 3447.1 | 3459.4 | 3518.8 | 3638.7 | 3727.9 | 3771.0 | 3720.7 | 3573.2 | 3386.6 | 3330.2 | 3338.4 |
| 37.5° | 3751.5 | 3743.3 | 3811.0 | 3917.6 | 3991.3 | 4018.0 | 3949.3 | 3774.0 | 3567.0 | 3500.4 | 3512.7 |
| 40°   | 4069.2 | 4065.2 | 4139.0 | 4241.4 | 4281.4 | 4297.8 | 4196.3 | 4004.7 | 3775.1 | 3703.3 | 3726.9 |
| 42.5° | 4357.3 | 4354.2 | 4453.6 | 4567.4 | 4615.6 | 4597.1 | 4469.0 | 4249.6 | 4016.0 | 3934.0 | 3954.4 |
| 45°   | 4587.9 | 4583.8 | 4705.8 | 4865.7 | 4960.0 | 4929.2 | 4757.0 | 4520.2 | 4259.9 | 4174.8 | 4194.3 |
| 47.5° | 4765.2 | 4767.3 | 4898.5 | 5096.3 | 5261.3 | 5272.6 | 5051.2 | 4796.0 | 4528.4 | 4432.1 | 4460.8 |
| 50°   | 4893.3 | 4899.5 | 5039.9 | 5259.3 | 5484.8 | 5584.2 | 5351.5 | 5078.9 | 4806.2 | 4697.6 | 4730.4 |
| 52.5° | 4925.1 | 4936.4 | 5105.5 | 5362.8 | 5628.3 | 5817.9 | 5657.0 | 5350.5 | 5069.6 | 4966.1 | 4992.8 |
| 55°   | 4756.0 | 4778.5 | 4992.8 | 5354.6 | 5716.4 | 5971.6 | 5925.5 | 5626.2 | 5335.1 | 5228.5 | 5258.2 |
| 57.5° | 4367.5 | 4399.3 | 4649.4 | 5121.9 | 5697.0 | 6077.2 | 6133.6 | 5890.7 | 5600.6 | 5498.1 | 5521.7 |
| 60°   | 3823.2 | 3861.2 | 4101.0 | 4616.6 | 5422.2 | 6116.2 | 6280.2 | 6148.0 | 5844.5 | 5745.1 | 5766.6 |
| 62.5° | 3002.2 | 3051.4 | 3338.4 | 3943.2 | 4842.1 | 5934.7 | 6405.2 | 6380.6 | 6063.9 | 5939.9 | 5954.2 |
| 65°   | 1926.0 | 1978.2 | 2280.6 | 2995.0 | 4068.2 | 5379.2 | 6444.2 | 6607.2 | 6295.5 | 6122.3 | 6143.8 |
| 67.5° | 1161.3 | 1184.9 | 1334.6 | 1815.3 | 2973.5 | 4541.8 | 6114.1 | 6858.3 | 6566.2 | 6350.9 | 6367.3 |
| 70°   | 743.1  | 756.4  | 845.6  | 1066.0 | 1681.0 | 3313.8 | 5296.2 | 6905.4 | 6894.2 | 6585.6 | 6583.6 |
| 72.5° | 504.3  | 508.4  | 532.0  | 631.4  | 951.2  | 1882.9 | 3906.3 | 6251.5 | 7099.2 | 6888.0 | 6855.2 |
| 75°   | 369.0  | 391.5  | 429.5  | 446.9  | 540.2  | 941.0  | 2238.6 | 4392.1 | 5982.9 | 6075.2 | 5851.7 |
| 77.5° | 274.7  | 275.7  | 328.0  | 348.5  | 385.4  | 501.2  | 947.1  | 2451.8 | 3714.6 | 3900.1 | 3478.8 |
| 80°   | 232.7  | 220.4  | 219.4  | 280.8  | 290.1  | 312.6  | 423.3  | 846.6  | 1330.4 | 806.7  | 609.9  |
| 82.5° | 193.7  | 180.4  | 163.0  | 219.4  | 197.8  | 191.7  | 183.5  | 344.4  | 423.3  | 208.1  | 177.3  |
| 85°   | 135.3  | 129.1  | 123.0  | 143.5  | 112.7  | 96.4   | 88.1   | 160.9  | 178.4  | 88.1   | 77.9   |
| 87.5° | 58.4   | 60.5   | 61.5   | 63.6   | 47.2   | 33.8   | 33.8   | 45.1   | 45.1   | 34.8   | 25.6   |
| 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)