

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: P968427

Luminaire Tested: **NAV-SB5B-835-U-5WQ**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P968427  
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-SB5B-835-U-5WQ  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 80 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 27354.2 lumens  
Efficiency: N/A  
Efficacy: 149.7 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): 182.7  
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



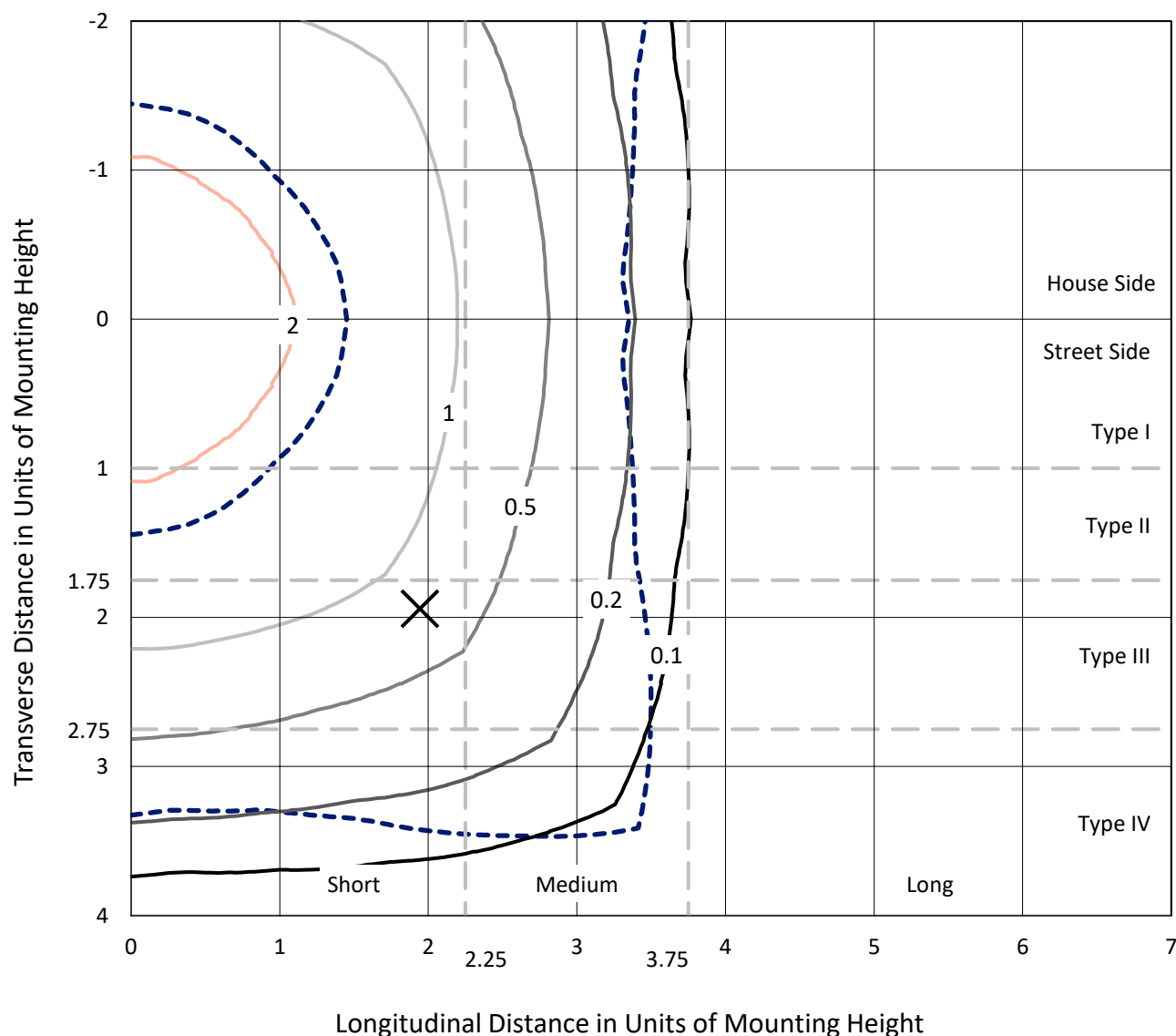
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

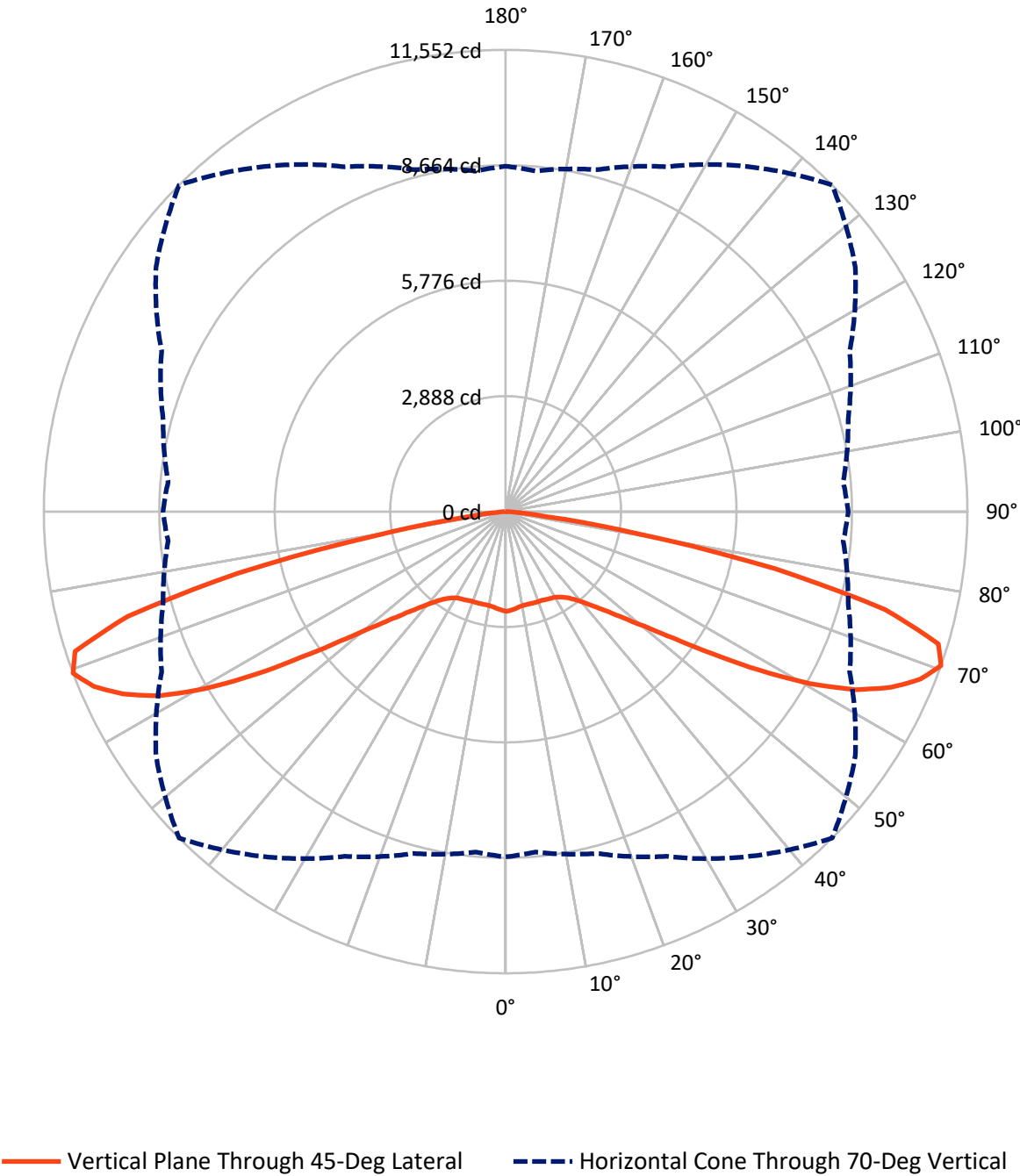


Based on 25 foot mounting height. Maximum calculated value = 4 fc

Type V - Short - N/A

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Luminous Intensity Polar Plot



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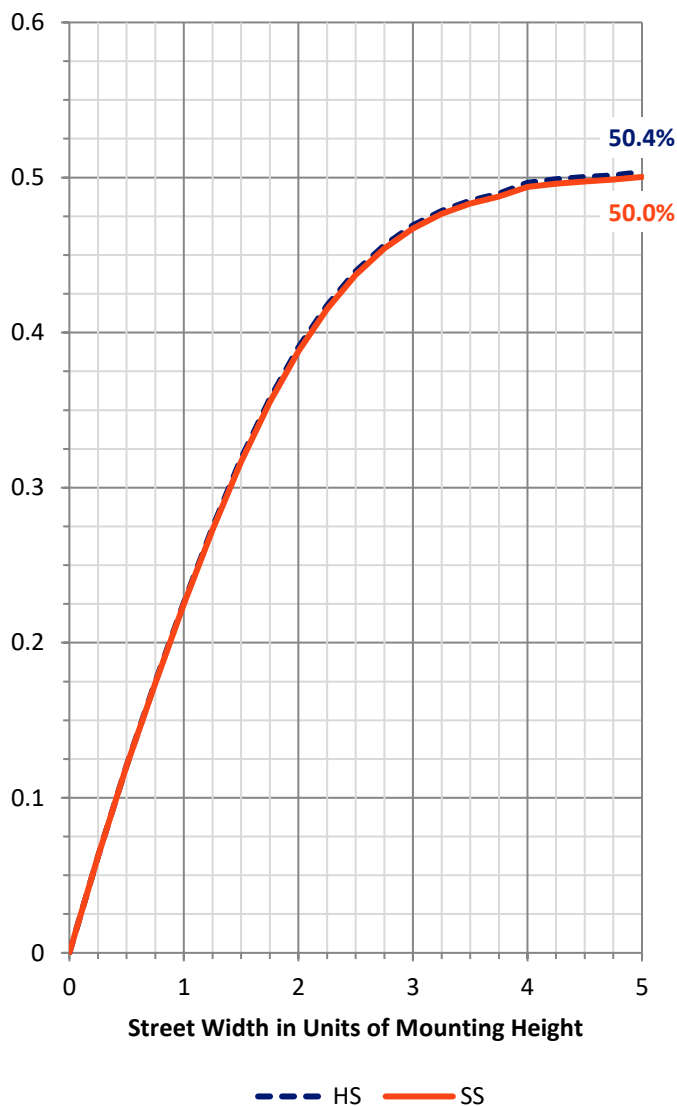
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 13677.1  | 0.0    | 13677.1 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 13677.1  | 0.0    | 13677.1 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 27354.2  | 0.0    | 27354.2 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 232.1   | 0.8       |
| 10°-20°   | 681.6   | 2.5       |
| 20°-30°   | 1134.2  | 4.1       |
| 30°-40°   | 1715.3  | 6.3       |
| 40°-50°   | 2850.4  | 10.4      |
| 50°-60°   | 5378.5  | 19.7      |
| 60°-70°   | 9081.8  | 33.2      |
| 70°-80°   | 5967.7  | 21.8      |
| 80°-90°   | 312.6   | 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°    | 27354.2 | 100.0     |
| 0°-180°   | 27354.2 | 100.0     |

**Coefficient of Utilization**



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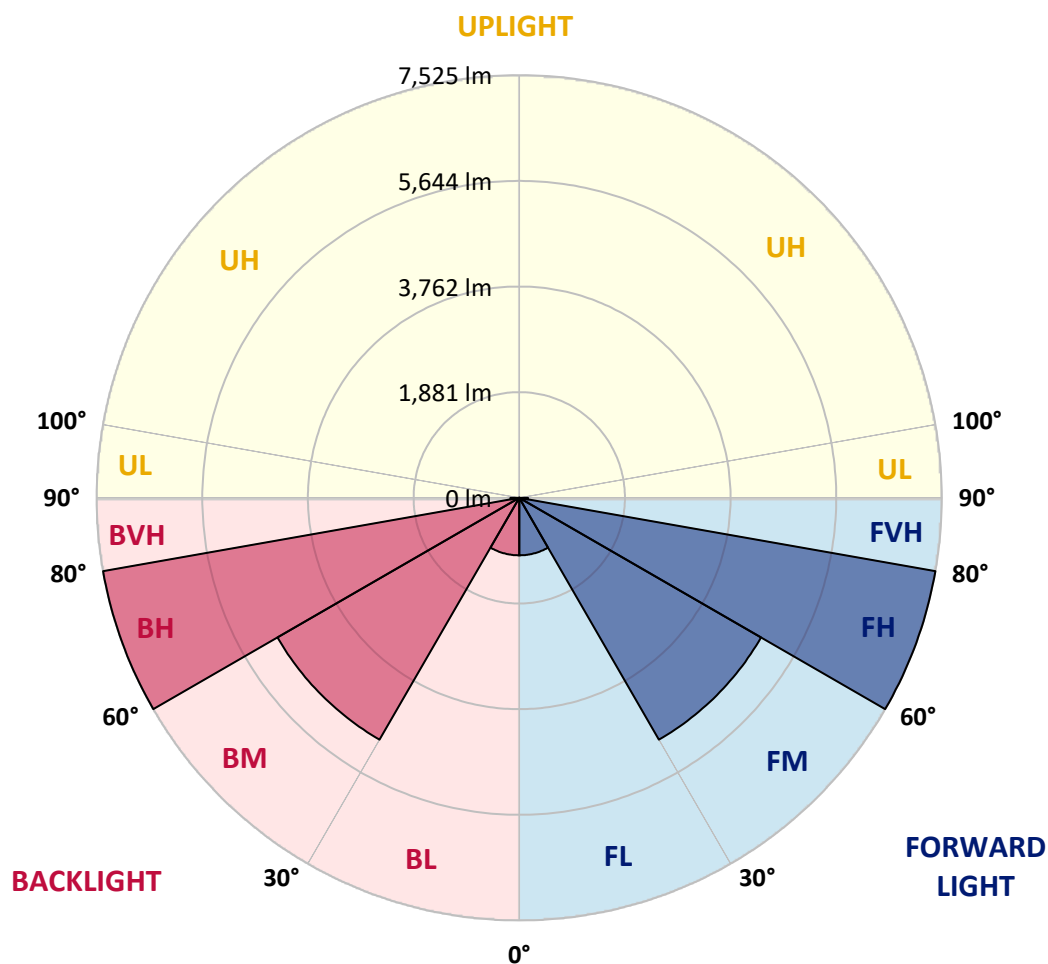
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|--------|-----------|-------------------------|------|----------|
|      |             |        |           | B                       | U    | G        |
| FL   | (0°-30°)    | 1023.9 | 3.7       |                         |      |          |
| FM   | (30°-60°)   | 4972.1 | 18.2      |                         |      |          |
| FH   | (60°-80°)   | 7524.8 | 27.5      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 156.3  | 0.6       |                         |      | G2/225   |
| BL   | (0°-30°)    | 1023.9 | 3.7       | B3/2500                 |      |          |
| BM   | (30°-60°)   | 4972.1 | 18.2      | B3/5000                 |      |          |
| BH   | (60°-80°)   | 7524.8 | 27.5      | B5                      |      | G4/12000 |
| BVH  | (80°-90°)   | 156.3  | 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°    | 2495.3 | 2495.3 | 2495.3 | 2495.3 | 2495.3  | 2495.3  | 2495.3  | 2495.3 | 2495.3 | 2495.3 | 2495.3 |
| 2.5°  | 2479.6 | 2486.8 | 2483.9 | 2478.1 | 2478.1  | 2473.9  | 2478.1  | 2481.0 | 2485.3 | 2488.2 | 2486.8 |
| 5°    | 2446.9 | 2452.6 | 2451.2 | 2446.9 | 2448.3  | 2444.1  | 2446.9  | 2451.2 | 2454.1 | 2455.5 | 2455.5 |
| 7.5°  | 2418.5 | 2424.1 | 2421.4 | 2414.2 | 2414.2  | 2410.0  | 2411.4  | 2415.6 | 2419.9 | 2421.4 | 2421.4 |
| 10°   | 2411.4 | 2417.1 | 2408.5 | 2397.2 | 2392.9  | 2387.2  | 2388.7  | 2392.9 | 2401.4 | 2405.7 | 2405.7 |
| 12.5° | 2414.2 | 2418.5 | 2410.0 | 2392.9 | 2388.7  | 2382.9  | 2382.9  | 2387.2 | 2398.6 | 2404.2 | 2405.7 |
| 15°   | 2422.7 | 2427.0 | 2414.2 | 2395.7 | 2391.4  | 2387.2  | 2385.8  | 2391.4 | 2404.2 | 2414.2 | 2415.6 |
| 17.5° | 2438.4 | 2442.7 | 2422.7 | 2397.2 | 2391.4  | 2392.9  | 2391.4  | 2395.7 | 2415.6 | 2434.1 | 2434.1 |
| 20°   | 2452.6 | 2455.5 | 2428.4 | 2397.2 | 2391.4  | 2392.9  | 2391.4  | 2400.0 | 2425.6 | 2451.2 | 2452.6 |
| 22.5° | 2456.8 | 2459.7 | 2434.1 | 2407.1 | 2402.8  | 2404.2  | 2402.8  | 2411.4 | 2435.5 | 2461.1 | 2461.1 |
| 25°   | 2458.3 | 2462.6 | 2442.7 | 2421.4 | 2428.4  | 2431.3  | 2428.4  | 2429.9 | 2448.3 | 2471.1 | 2469.6 |
| 27.5° | 2479.6 | 2485.3 | 2466.8 | 2448.3 | 2452.6  | 2451.2  | 2455.5  | 2459.7 | 2473.9 | 2496.7 | 2491.0 |
| 30°   | 2523.7 | 2528.0 | 2512.3 | 2493.8 | 2491.0  | 2481.0  | 2493.8  | 2508.1 | 2523.7 | 2543.6 | 2539.3 |
| 32.5° | 2596.2 | 2604.7 | 2584.8 | 2565.0 | 2552.1  | 2546.4  | 2556.4  | 2580.5 | 2601.9 | 2623.2 | 2614.7 |
| 35°   | 2717.1 | 2722.7 | 2704.3 | 2667.3 | 2644.5  | 2644.5  | 2653.1  | 2684.4 | 2718.5 | 2745.5 | 2735.5 |
| 37.5° | 2887.6 | 2894.8 | 2862.1 | 2818.0 | 2783.9  | 2783.9  | 2795.3  | 2828.0 | 2879.1 | 2917.6 | 2903.3 |
| 40°   | 3095.3 | 3105.2 | 3063.9 | 3018.5 | 2985.7  | 2980.1  | 2994.3  | 3031.2 | 3079.6 | 3128.0 | 3112.3 |
| 42.5° | 3345.5 | 3356.9 | 3302.9 | 3263.0 | 3237.5  | 3237.5  | 3244.5  | 3278.7 | 3322.7 | 3382.5 | 3378.2 |
| 45°   | 3665.4 | 3685.3 | 3611.4 | 3571.5 | 3547.4  | 3553.1  | 3557.4  | 3587.2 | 3627.0 | 3695.2 | 3692.4 |
| 47.5° | 4046.4 | 4066.4 | 3988.2 | 3946.9 | 3942.7  | 3969.6  | 3952.6  | 3973.9 | 3995.2 | 4073.5 | 4050.7 |
| 50°   | 4478.6 | 4512.8 | 4458.8 | 4455.9 | 4464.4  | 4514.2  | 4474.4  | 4485.8 | 4461.6 | 4511.3 | 4481.5 |
| 52.5° | 5007.5 | 5057.3 | 5047.4 | 5064.4 | 5159.7  | 5262.0  | 5171.0  | 5131.3 | 5040.2 | 5055.9 | 5003.3 |
| 55°   | 5648.8 | 5724.1 | 5738.4 | 5840.8 | 6056.8  | 6265.8  | 6072.5  | 5911.8 | 5718.5 | 5682.9 | 5627.5 |
| 57.5° | 6378.2 | 6437.9 | 6506.2 | 6715.2 | 7118.9  | 7490.0  | 7118.9  | 6763.5 | 6459.2 | 6386.7 | 6335.5 |
| 60°   | 7163.0 | 7236.9 | 7302.3 | 7610.8 | 8210.9  | 8732.7  | 8199.5  | 7635.0 | 7232.7 | 7134.6 | 7049.2 |
| 62.5° | 8006.2 | 8101.4 | 8146.9 | 8489.6 | 9189.0  | 9811.8  | 9199.1  | 8515.1 | 8068.7 | 7963.4 | 7878.2 |
| 65°   | 8815.1 | 8893.3 | 8944.6 | 9309.9 | 9978.2  | 10602.3 | 10023.7 | 9349.7 | 8890.4 | 8752.6 | 8684.3 |
| 67.5° | 9191.9 | 9234.5 | 9359.7 | 9773.4 | 10478.7 | 11190.9 | 10598.1 | 9817.4 | 9304.2 | 9062.5 | 9065.4 |
| 70°   | 8640.2 | 8553.5 | 8855.0 | 9517.5 | 10538.3 | 11552.1 | 10674.9 | 9497.5 | 8869.1 | 8476.8 | 8570.5 |
| 72.5° | 6676.7 | 6527.5 | 7050.7 | 8183.8 | 9855.9  | 11321.7 | 9924.2  | 8247.9 | 7376.3 | 6580.1 | 6777.7 |
| 75°   | 3632.7 | 3463.5 | 4185.8 | 5618.9 | 7859.7  | 9813.2  | 8040.3  | 5779.6 | 4660.7 | 3605.6 | 3840.3 |
| 77.5° | 1025.1 | 961.1  | 1544.1 | 2718.5 | 4727.5  | 6890.0  | 4909.4  | 2778.2 | 1831.3 | 1086.3 | 1207.1 |
| 80°   | 314.3  | 304.2  | 412.4  | 819.0  | 2007.6  | 3300.0  | 1929.4  | 828.9  | 524.6  | 331.3  | 349.7  |
| 82.5° | 186.2  | 170.7  | 204.7  | 298.6  | 511.9   | 1036.5  | 497.6   | 311.4  | 250.2  | 167.8  | 182.0  |
| 85°   | 106.6  | 99.5   | 120.8  | 145.0  | 172.0   | 220.4   | 143.6   | 147.9  | 133.7  | 89.6   | 93.8   |
| 87.5° | 44.1   | 39.8   | 46.9   | 45.5   | 39.8    | 51.1    | 38.4    | 45.5   | 54.0   | 35.6   | 32.7   |
| 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)