

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: P966784

Luminaire Tested: **NAV-SB4C-827-U-5WQ**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P966784  
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-SB4C-827-U-5WQ  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 27060 lumens  
Efficiency: N/A  
Efficacy: 134.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B5 - U0 - G3

Input Watts (W): 200.7  
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

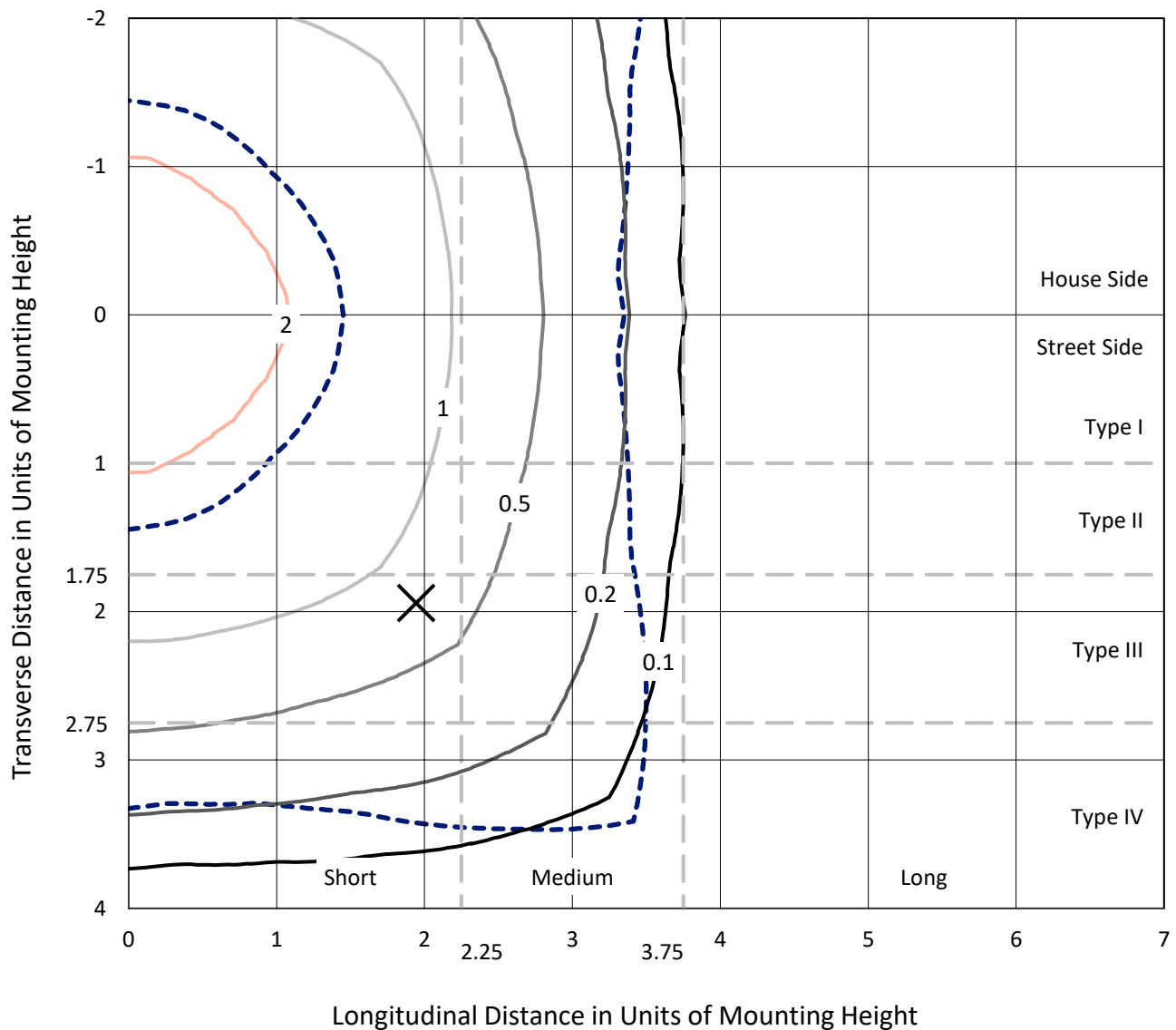


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
- - - 1/2 Max cd

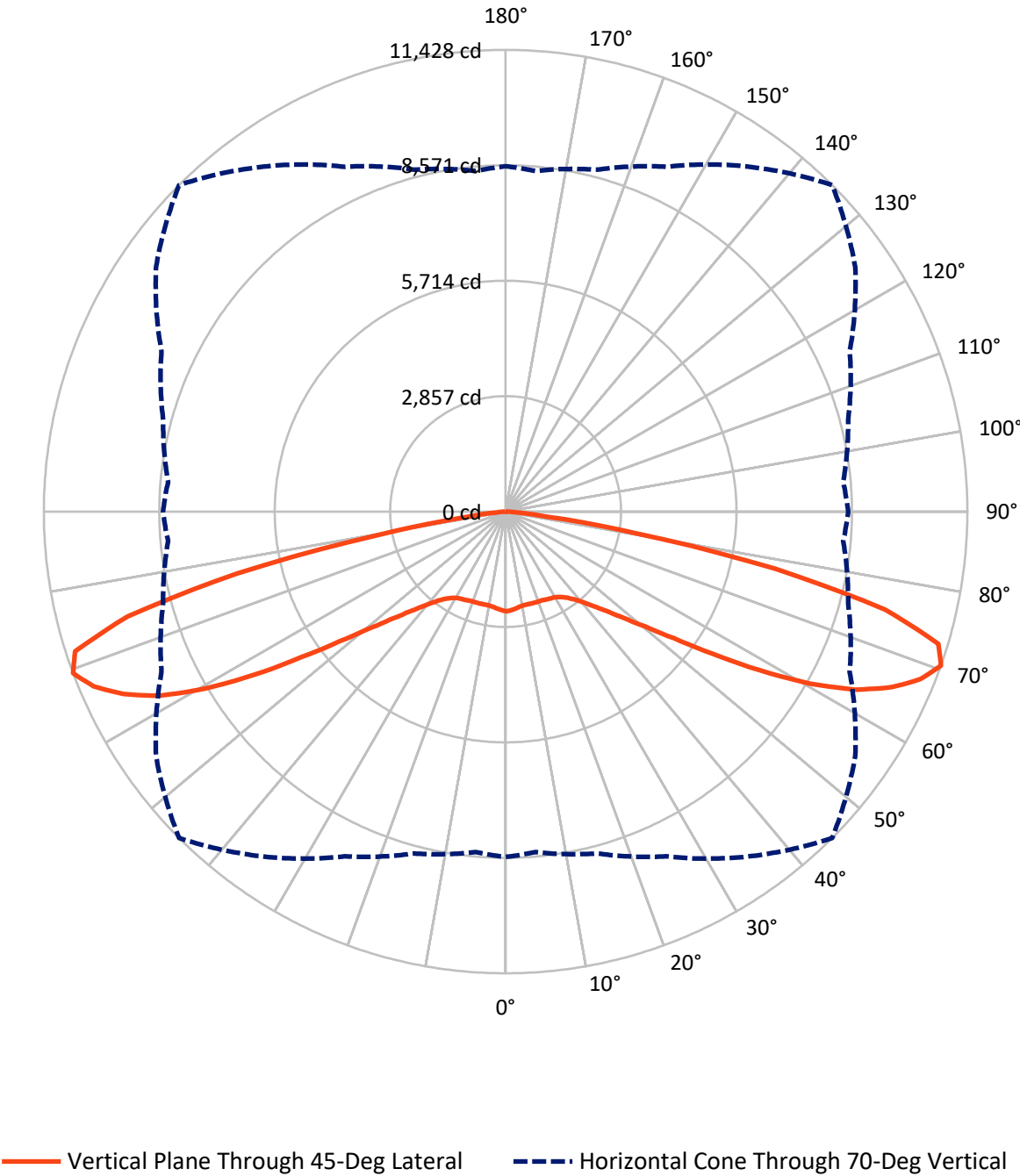


Based on 25 foot mounting height. Maximum calculated value = 3.9 fc

Type V - Short - N/A

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Luminous Intensity Polar Plot



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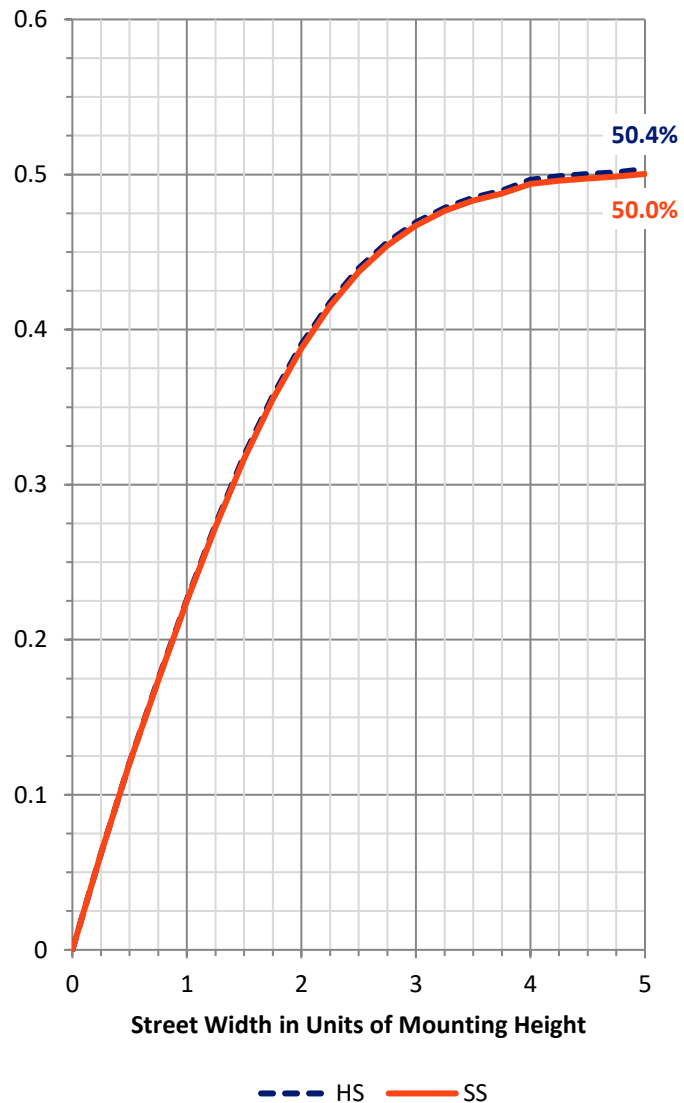
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 13530.0  | 0.0    | 13530.0 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 13530.0  | 0.0    | 13530.0 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 27060.0  | 0.0    | 27060.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 229.6   | 0.8       |
| 10°-20°   | 674.2   | 2.5       |
| 20°-30°   | 1122.0  | 4.1       |
| 30°-40°   | 1696.8  | 6.3       |
| 40°-50°   | 2819.7  | 10.4      |
| 50°-60°   | 5320.7  | 19.7      |
| 60°-70°   | 8984.2  | 33.2      |
| 70°-80°   | 5903.5  | 21.8      |
| 80°-90°   | 309.3   | 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°    | 27060.0 | 100.0     |
| 0°-180°   | 27060.0 | 100.0     |

**Coefficient of Utilization**



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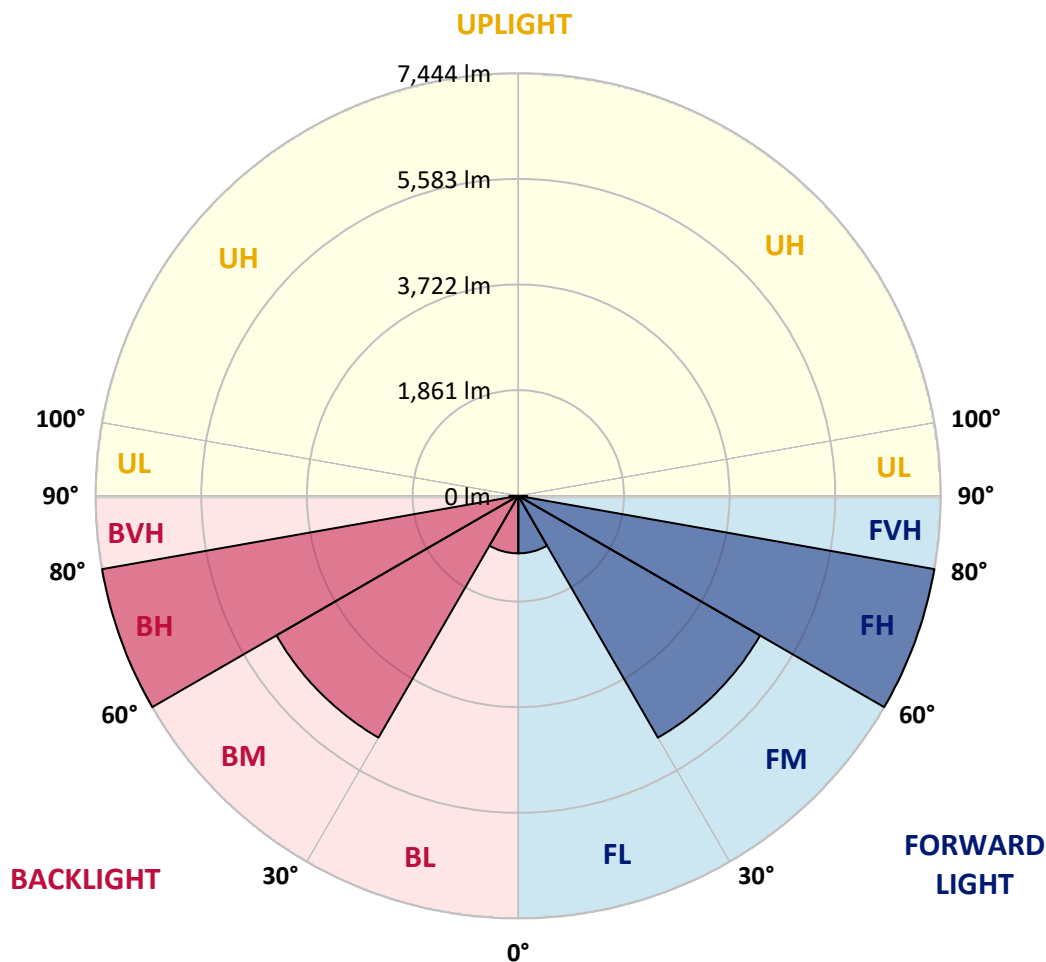
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1012.9 | 3.7       |                         |      |         |
| FM   | (30°-60°)   | 4918.6 | 18.2      |                         |      |         |
| FH   | (60°-80°)   | 7443.8 | 27.5      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 154.6  | 0.6       |                         |      | G2/225  |
| BL   | (0°-30°)    | 1012.9 | 3.7       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 4918.6 | 18.2      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 7443.8 | 27.5      | B5                      |      | G3/7500 |
| BVH  | (80°-90°)   | 154.6  | 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-G3**

Type V Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°     | 45°     | 55°     | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|---------|---------|---------|--------|--------|--------|--------|
| 0°    | 2468.4 | 2468.4 | 2468.4 | 2468.4 | 2468.4  | 2468.4  | 2468.4  | 2468.4 | 2468.4 | 2468.4 | 2468.4 |
| 2.5°  | 2452.9 | 2460.0 | 2457.1 | 2451.5 | 2451.5  | 2447.3  | 2451.5  | 2454.4 | 2458.6 | 2461.4 | 2460.0 |
| 5°    | 2420.6 | 2426.2 | 2424.8 | 2420.6 | 2422.0  | 2417.8  | 2420.6  | 2424.8 | 2427.6 | 2429.0 | 2429.0 |
| 7.5°  | 2392.5 | 2398.1 | 2395.3 | 2388.2 | 2388.2  | 2384.0  | 2385.5  | 2389.7 | 2393.9 | 2395.3 | 2395.3 |
| 10°   | 2385.5 | 2391.0 | 2382.6 | 2371.3 | 2367.1  | 2361.5  | 2362.9  | 2367.1 | 2375.5 | 2379.8 | 2379.8 |
| 12.5° | 2388.2 | 2392.5 | 2384.0 | 2367.1 | 2362.9  | 2357.3  | 2357.3  | 2361.5 | 2372.8 | 2378.4 | 2379.8 |
| 15°   | 2396.7 | 2400.9 | 2388.2 | 2370.0 | 2365.7  | 2361.5  | 2360.2  | 2365.7 | 2378.4 | 2388.2 | 2389.7 |
| 17.5° | 2412.1 | 2416.3 | 2396.7 | 2371.3 | 2365.7  | 2367.1  | 2365.7  | 2370.0 | 2389.7 | 2407.9 | 2407.9 |
| 20°   | 2426.2 | 2429.0 | 2402.3 | 2371.3 | 2365.7  | 2367.1  | 2365.7  | 2374.2 | 2399.5 | 2424.8 | 2426.2 |
| 22.5° | 2430.5 | 2433.2 | 2407.9 | 2381.2 | 2377.0  | 2378.4  | 2377.0  | 2385.5 | 2409.4 | 2434.7 | 2434.7 |
| 25°   | 2431.8 | 2436.1 | 2416.3 | 2395.3 | 2402.3  | 2405.2  | 2402.3  | 2403.7 | 2422.0 | 2444.5 | 2443.1 |
| 27.5° | 2452.9 | 2458.6 | 2440.3 | 2422.0 | 2426.2  | 2424.8  | 2429.0  | 2433.2 | 2447.3 | 2469.8 | 2464.2 |
| 30°   | 2496.6 | 2500.8 | 2485.3 | 2467.0 | 2464.2  | 2454.4  | 2467.0  | 2481.1 | 2496.6 | 2516.3 | 2512.0 |
| 32.5° | 2568.2 | 2576.7 | 2557.1 | 2537.3 | 2524.7  | 2519.0  | 2528.9  | 2552.8 | 2573.9 | 2595.0 | 2586.6 |
| 35°   | 2687.9 | 2693.5 | 2675.1 | 2638.6 | 2616.1  | 2616.1  | 2624.5  | 2655.5 | 2689.2 | 2715.9 | 2706.1 |
| 37.5° | 2856.6 | 2863.6 | 2831.3 | 2787.7 | 2754.0  | 2754.0  | 2765.1  | 2797.5 | 2848.2 | 2886.2 | 2872.0 |
| 40°   | 3062.0 | 3071.8 | 3031.0 | 2986.0 | 2953.6  | 2948.0  | 2962.1  | 2998.6 | 3046.5 | 3094.3 | 3078.8 |
| 42.5° | 3309.5 | 3320.8 | 3267.3 | 3227.9 | 3202.6  | 3202.6  | 3209.7  | 3243.4 | 3287.0 | 3346.1 | 3341.8 |
| 45°   | 3625.9 | 3645.6 | 3572.5 | 3533.2 | 3509.2  | 3514.8  | 3519.0  | 3548.7 | 3588.0 | 3655.5 | 3652.7 |
| 47.5° | 4002.9 | 4022.6 | 3945.2 | 3904.4 | 3900.2  | 3927.0  | 3910.1  | 3931.2 | 3952.3 | 4029.7 | 4007.1 |
| 50°   | 4430.5 | 4464.3 | 4410.8 | 4408.0 | 4416.4  | 4465.6  | 4426.3  | 4437.5 | 4413.6 | 4462.8 | 4433.3 |
| 52.5° | 4953.7 | 5002.9 | 4993.1 | 5010.0 | 5104.2  | 5205.5  | 5115.5  | 5076.1 | 4986.1 | 5001.5 | 4949.5 |
| 55°   | 5588.1 | 5662.6 | 5676.7 | 5777.9 | 5991.7  | 6198.5  | 6007.2  | 5848.2 | 5657.0 | 5621.8 | 5567.0 |
| 57.5° | 6309.6 | 6368.6 | 6436.2 | 6642.9 | 7042.4  | 7409.5  | 7042.4  | 6690.8 | 6389.7 | 6318.0 | 6267.4 |
| 60°   | 7085.9 | 7159.1 | 7223.8 | 7529.0 | 8122.6  | 8638.8  | 8111.3  | 7552.9 | 7154.9 | 7057.8 | 6973.5 |
| 62.5° | 7920.1 | 8014.3 | 8059.3 | 8398.2 | 9090.2  | 9706.3  | 9100.1  | 8423.6 | 7981.9 | 7877.8 | 7793.5 |
| 65°   | 8720.3 | 8797.7 | 8848.3 | 9209.8 | 9870.9  | 10488.3 | 9915.8  | 9249.2 | 8794.9 | 8658.5 | 8590.9 |
| 67.5° | 9093.1 | 9135.2 | 9259.0 | 9668.3 | 10365.9 | 11070.6 | 10484.1 | 9711.9 | 9204.2 | 8965.1 | 8967.8 |
| 70°   | 8547.4 | 8461.6 | 8759.8 | 9415.1 | 10425.0 | 11427.8 | 10560.1 | 9395.5 | 8773.8 | 8385.6 | 8478.4 |
| 72.5° | 6605.0 | 6457.3 | 6974.8 | 8095.9 | 9749.9  | 11200.0 | 9817.4  | 8159.1 | 7297.0 | 6509.3 | 6704.8 |
| 75°   | 3593.6 | 3426.3 | 4140.8 | 5558.5 | 7775.1  | 9707.7  | 7953.8  | 5717.4 | 4610.6 | 3566.9 | 3799.0 |
| 77.5° | 1014.1 | 950.8  | 1527.5 | 2689.2 | 4676.7  | 6815.9  | 4856.7  | 2748.3 | 1811.6 | 1074.6 | 1194.1 |
| 80°   | 310.9  | 301.0  | 407.8  | 810.2  | 1985.9  | 3264.5  | 1908.7  | 820.0  | 519.0  | 327.7  | 346.0  |
| 82.5° | 184.3  | 168.8  | 202.5  | 295.4  | 506.4   | 1025.3  | 492.3   | 308.0  | 247.5  | 165.9  | 180.0  |
| 85°   | 105.5  | 98.5   | 119.5  | 143.5  | 170.1   | 218.0   | 142.1   | 146.3  | 132.2  | 88.6   | 92.9   |
| 87.5° | 43.6   | 39.4   | 46.4   | 45.0   | 39.4    | 50.6    | 37.9    | 45.0   | 53.4   | 35.2   | 32.4   |
| 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)