

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: P967717

Luminaire Tested: **NAV-SB5A-735-U-RW**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P967717  
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-SB5A-735-U-RW  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND RECTANGULAR  
WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 23917.3 lumens  
Efficiency: N/A  
Efficacy: 168.8 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B4 - U0 - G4

Input Watts (W): 141.7  
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

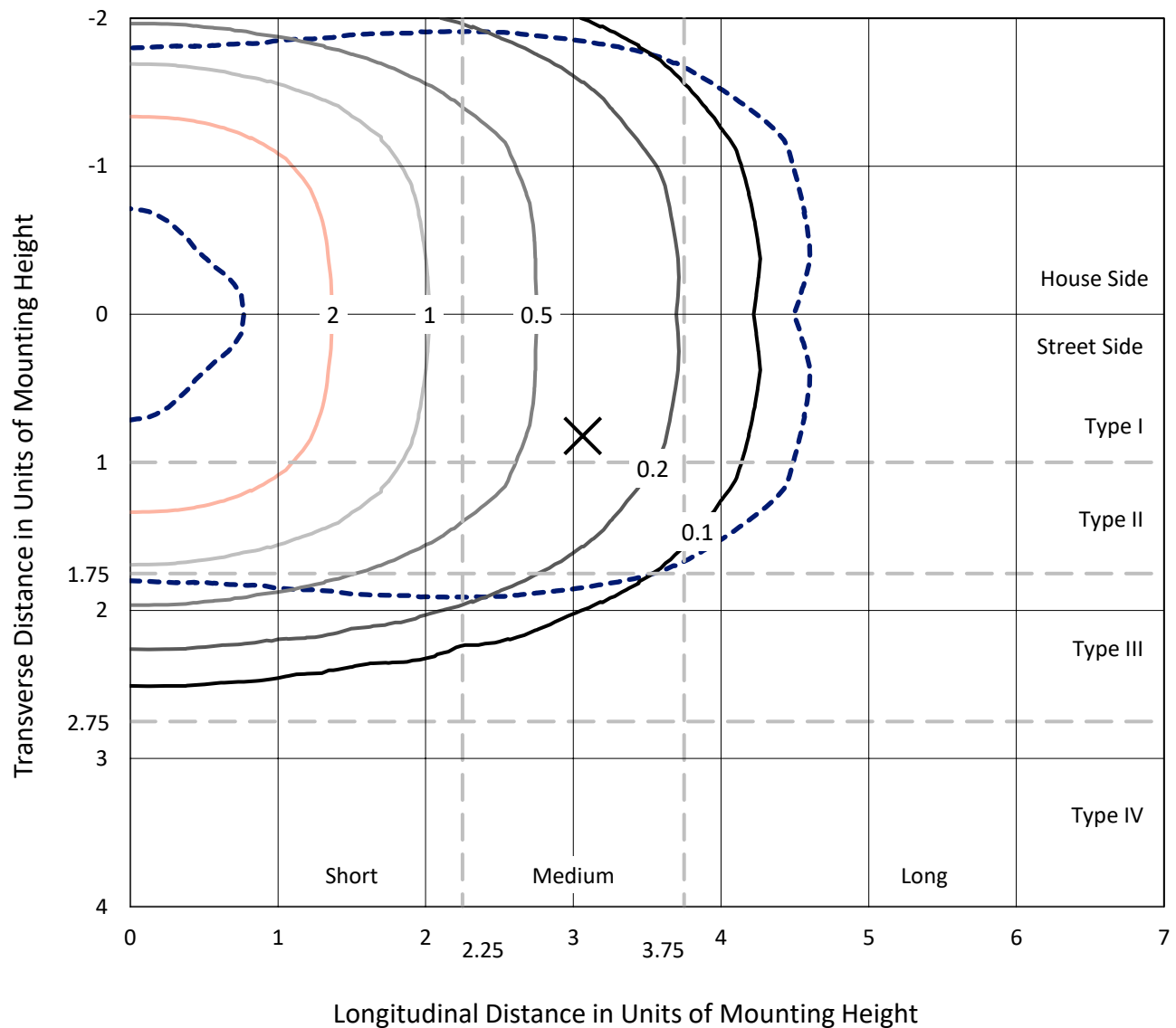


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
- - - 1/2 Max cd

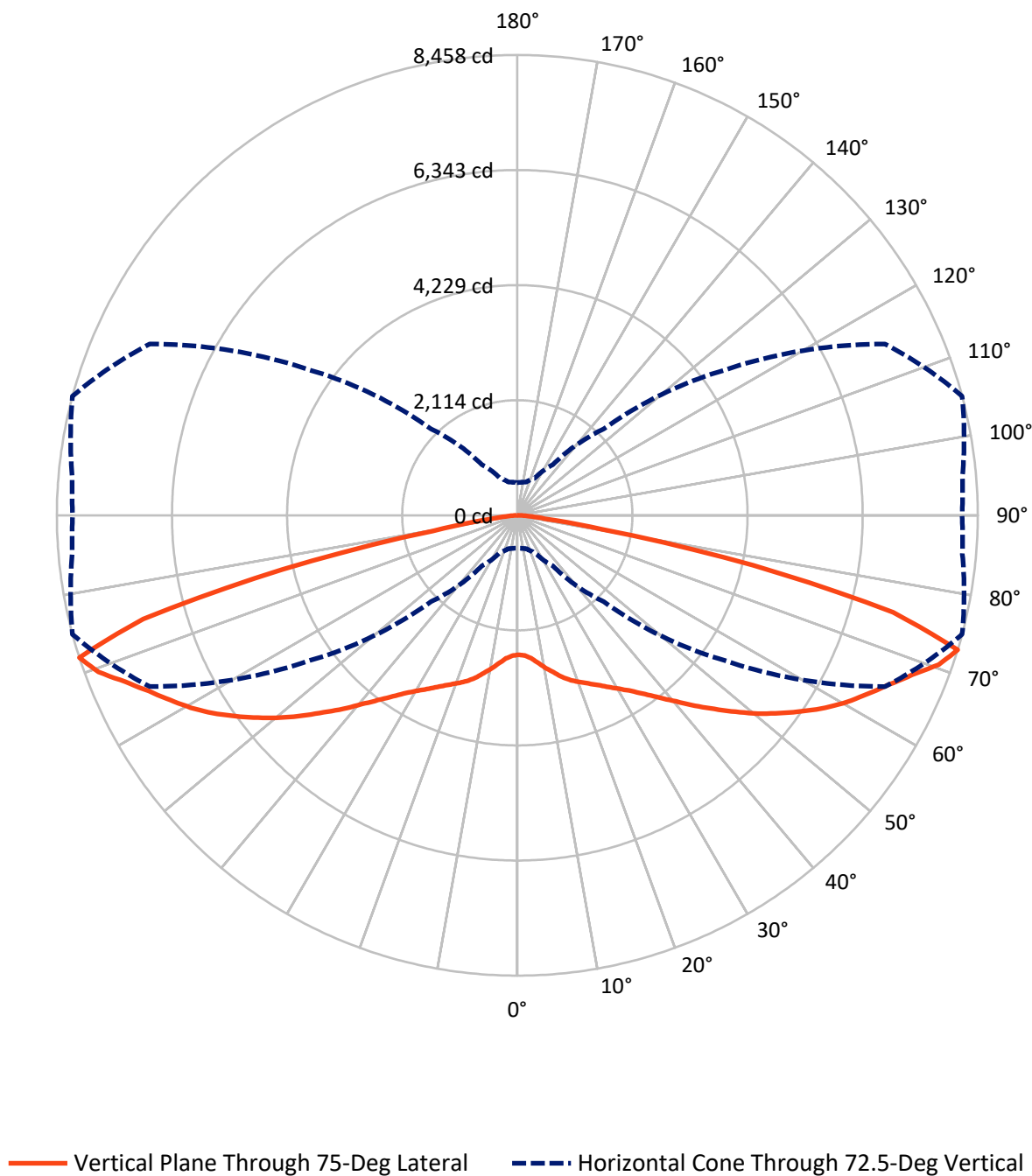


Based on 25 foot mounting height. Maximum calculated value = 4.5 fc  
Type III - Medium - N/A

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## Luminous Intensity Polar Plot



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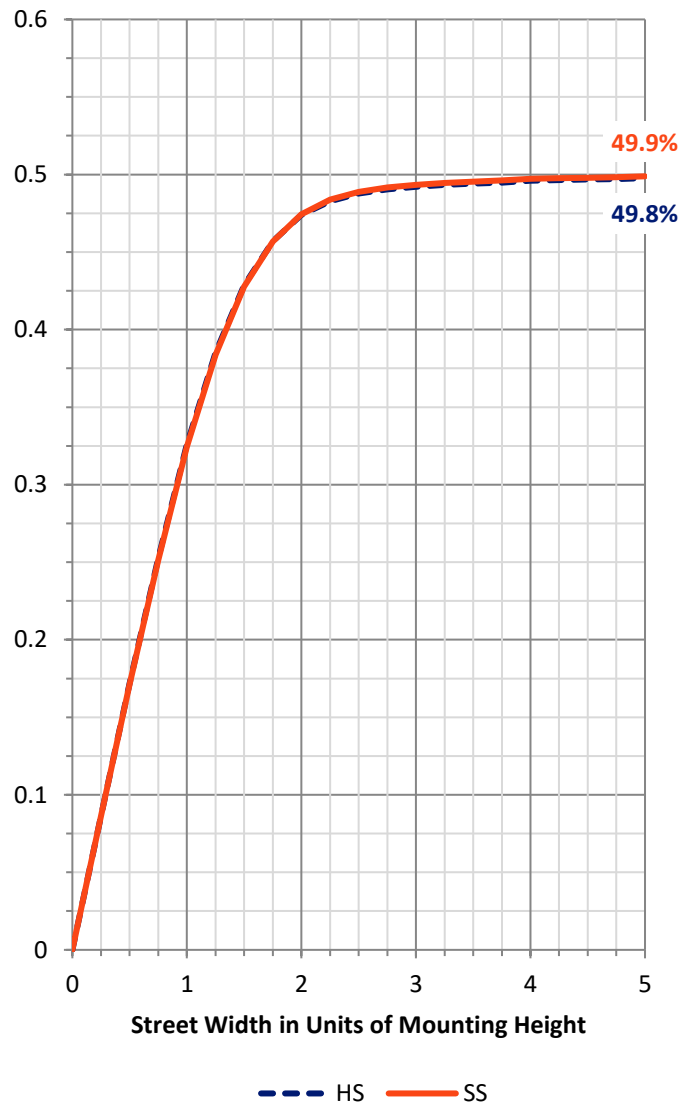
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 11958.7  | 0.0    | 11958.7 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 11958.7  | 0.0    | 11958.7 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 23917.3  | 0.0    | 23917.3 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 251.0   | 1.0       |
| 10°-20°   | 827.7   | 3.5       |
| 20°-30°   | 1599.4  | 6.7       |
| 30°-40°   | 2700.7  | 11.3      |
| 40°-50°   | 4283.1  | 17.9      |
| 50°-60°   | 5734.5  | 24.0      |
| 60°-70°   | 5457.4  | 22.8      |
| 70°-80°   | 2847.8  | 11.9      |
| 80°-90°   | 215.6   | 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°    | 23917.3 | 100.0     |
| 0°-180°   | 23917.3 | 100.0     |

**Coefficient of Utilization**



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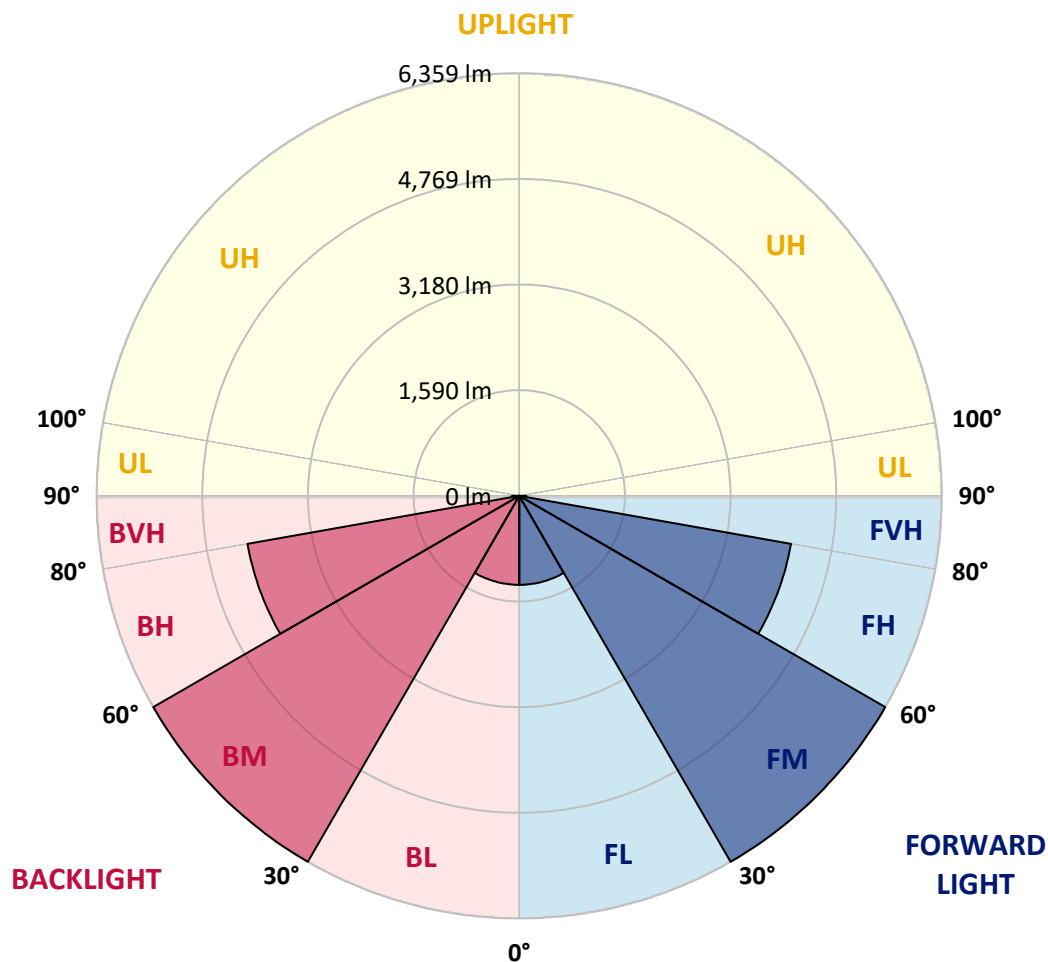
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1339.1 | 5.6       |                         |      |         |
| FM   | (30°-60°)   | 6359.2 | 26.6      |                         |      |         |
| FH   | (60°-80°)   | 4152.6 | 17.4      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 107.8  | 0.5       |                         |      | G2/225  |
| BL   | (0°-30°)    | 1339.1 | 5.6       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 6359.2 | 26.6      | B4/8500                 |      |         |
| BH   | (60°-80°)   | 4152.6 | 17.4      | B4/5000                 |      | G4/5000 |
| BVH  | (80°-90°)   | 107.8  | 0.5       |                         |      | G2/225  |
| 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°    | 2562.0 | 2562.0 | 2562.0 | 2562.0 | 2562.0 | 2562.0 | 2562.0 | 2562.0 | 2562.0 | 2562.0 | 2562.0 |
| 2.5°  | 2562.0 | 2559.5 | 2562.0 | 2564.4 | 2563.2 | 2563.2 | 2569.3 | 2573.0 | 2580.3 | 2579.1 | 2577.9 |
| 5°    | 2544.9 | 2543.6 | 2553.4 | 2564.4 | 2573.0 | 2587.6 | 2606.0 | 2619.4 | 2636.5 | 2640.1 | 2640.1 |
| 7.5°  | 2536.4 | 2532.7 | 2549.8 | 2569.3 | 2596.1 | 2632.8 | 2668.2 | 2704.9 | 2734.2 | 2743.9 | 2746.4 |
| 10°   | 2542.4 | 2543.6 | 2566.9 | 2603.5 | 2646.2 | 2697.5 | 2747.6 | 2809.8 | 2851.3 | 2861.2 | 2870.9 |
| 12.5° | 2570.5 | 2568.0 | 2607.2 | 2665.8 | 2724.3 | 2789.1 | 2847.8 | 2916.1 | 2961.3 | 2984.5 | 2994.2 |
| 15°   | 2621.8 | 2616.9 | 2671.9 | 2758.6 | 2844.1 | 2919.8 | 2967.4 | 3032.2 | 3084.6 | 3114.0 | 3124.9 |
| 17.5° | 2682.8 | 2685.3 | 2757.4 | 2869.7 | 2982.0 | 3067.5 | 3112.7 | 3145.7 | 3186.0 | 3211.6 | 3223.8 |
| 20°   | 2790.4 | 2795.2 | 2875.8 | 3008.9 | 3137.1 | 3234.8 | 3271.5 | 3259.3 | 3270.3 | 3289.7 | 3304.4 |
| 22.5° | 2934.5 | 2936.8 | 3027.2 | 3171.4 | 3305.6 | 3413.1 | 3437.5 | 3387.5 | 3357.0 | 3370.4 | 3380.1 |
| 25°   | 3101.8 | 3117.6 | 3207.9 | 3355.7 | 3493.7 | 3596.3 | 3607.3 | 3531.5 | 3455.9 | 3459.5 | 3465.6 |
| 27.5° | 3305.6 | 3320.3 | 3411.9 | 3558.4 | 3698.9 | 3788.0 | 3786.8 | 3685.4 | 3574.3 | 3546.2 | 3554.8 |
| 30°   | 3526.7 | 3542.6 | 3636.6 | 3788.0 | 3918.7 | 3996.8 | 3979.8 | 3858.8 | 3700.0 | 3647.6 | 3653.7 |
| 32.5° | 3789.2 | 3799.0 | 3894.3 | 4045.7 | 4166.5 | 4228.8 | 4193.5 | 4044.4 | 3846.6 | 3786.8 | 3801.4 |
| 35°   | 4106.8 | 4121.4 | 4192.2 | 4335.1 | 4441.3 | 4492.6 | 4432.8 | 4256.9 | 4034.7 | 3967.6 | 3977.3 |
| 37.5° | 4469.4 | 4459.7 | 4540.2 | 4667.2 | 4755.2 | 4787.0 | 4705.1 | 4496.3 | 4249.6 | 4170.2 | 4184.9 |
| 40°   | 4847.9 | 4843.1 | 4931.0 | 5053.1 | 5100.7 | 5120.3 | 4999.4 | 4771.1 | 4497.5 | 4412.0 | 4440.1 |
| 42.5° | 5191.1 | 5187.4 | 5305.9 | 5441.4 | 5498.8 | 5476.9 | 5324.3 | 5062.9 | 4784.5 | 4686.8 | 4711.2 |
| 45°   | 5465.9 | 5461.0 | 5606.3 | 5796.8 | 5909.1 | 5872.5 | 5667.3 | 5385.2 | 5075.1 | 4973.7 | 4997.0 |
| 47.5° | 5677.2 | 5679.6 | 5835.8 | 6071.6 | 6268.2 | 6281.6 | 6017.9 | 5713.8 | 5395.1 | 5280.3 | 5314.4 |
| 50°   | 5829.8 | 5837.1 | 6004.4 | 6265.7 | 6534.4 | 6652.9 | 6375.6 | 6050.8 | 5726.0 | 5596.5 | 5635.7 |
| 52.5° | 5867.6 | 5881.0 | 6082.6 | 6389.0 | 6705.3 | 6931.3 | 6739.6 | 6374.4 | 6039.8 | 5916.5 | 5948.3 |
| 55°   | 5666.1 | 5693.1 | 5948.3 | 6379.3 | 6810.4 | 7114.4 | 7059.5 | 6702.9 | 6356.1 | 6229.1 | 6264.5 |
| 57.5° | 5203.3 | 5241.1 | 5539.1 | 6102.1 | 6787.1 | 7240.2 | 7307.3 | 7018.0 | 6672.3 | 6550.3 | 6578.3 |
| 60°   | 4554.9 | 4600.1 | 4885.9 | 5500.0 | 6459.9 | 7286.6 | 7482.0 | 7324.4 | 6963.0 | 6844.5 | 6870.2 |
| 62.5° | 3576.7 | 3635.4 | 3977.3 | 4697.8 | 5768.7 | 7070.4 | 7631.0 | 7601.7 | 7224.3 | 7076.6 | 7093.7 |
| 65°   | 2294.6 | 2356.8 | 2717.1 | 3568.2 | 4846.7 | 6408.6 | 7677.4 | 7871.6 | 7500.3 | 7293.9 | 7319.6 |
| 67.5° | 1383.5 | 1411.6 | 1590.0 | 2162.6 | 3542.6 | 5410.9 | 7284.2 | 8170.7 | 7822.7 | 7566.2 | 7585.8 |
| 70°   | 885.3  | 901.2  | 1007.5 | 1270.0 | 2002.6 | 3948.0 | 6309.7 | 8226.9 | 8213.4 | 7845.9 | 7843.5 |
| 72.5° | 600.9  | 605.7  | 633.8  | 752.2  | 1133.2 | 2243.2 | 4653.8 | 7447.9 | 8457.7 | 8206.2 | 8167.1 |
| 75°   | 439.6  | 466.5  | 511.7  | 532.4  | 643.6  | 1121.0 | 2666.9 | 5232.6 | 7127.8 | 7237.7 | 6971.5 |
| 77.5° | 327.3  | 328.5  | 390.7  | 415.2  | 459.2  | 597.2  | 1128.3 | 2921.0 | 4425.4 | 4646.5 | 4144.6 |
| 80°   | 277.2  | 262.5  | 261.4  | 334.6  | 345.6  | 372.5  | 504.3  | 1008.7 | 1585.1 | 961.0  | 726.6  |
| 82.5° | 230.8  | 214.9  | 194.1  | 261.4  | 235.6  | 228.4  | 218.6  | 410.3  | 504.3  | 247.8  | 211.3  |
| 85°   | 161.2  | 153.9  | 146.6  | 171.0  | 134.4  | 114.8  | 105.1  | 191.7  | 212.5  | 105.1  | 92.8   |
| 87.5° | 69.6   | 72.1   | 73.3   | 75.7   | 56.2   | 40.3   | 40.3   | 53.7   | 53.7   | 41.5   | 30.5   |
| 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)