

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: P967728

Luminaire Tested: **NAV-SB5A-735-U-T1**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P967728  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5A-735-U-T1  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE I OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 22976.4 lumens  
Efficiency: N/A  
Efficacy: 162.1 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type I - Short  
BUG Rating: B4 - U0 - G4

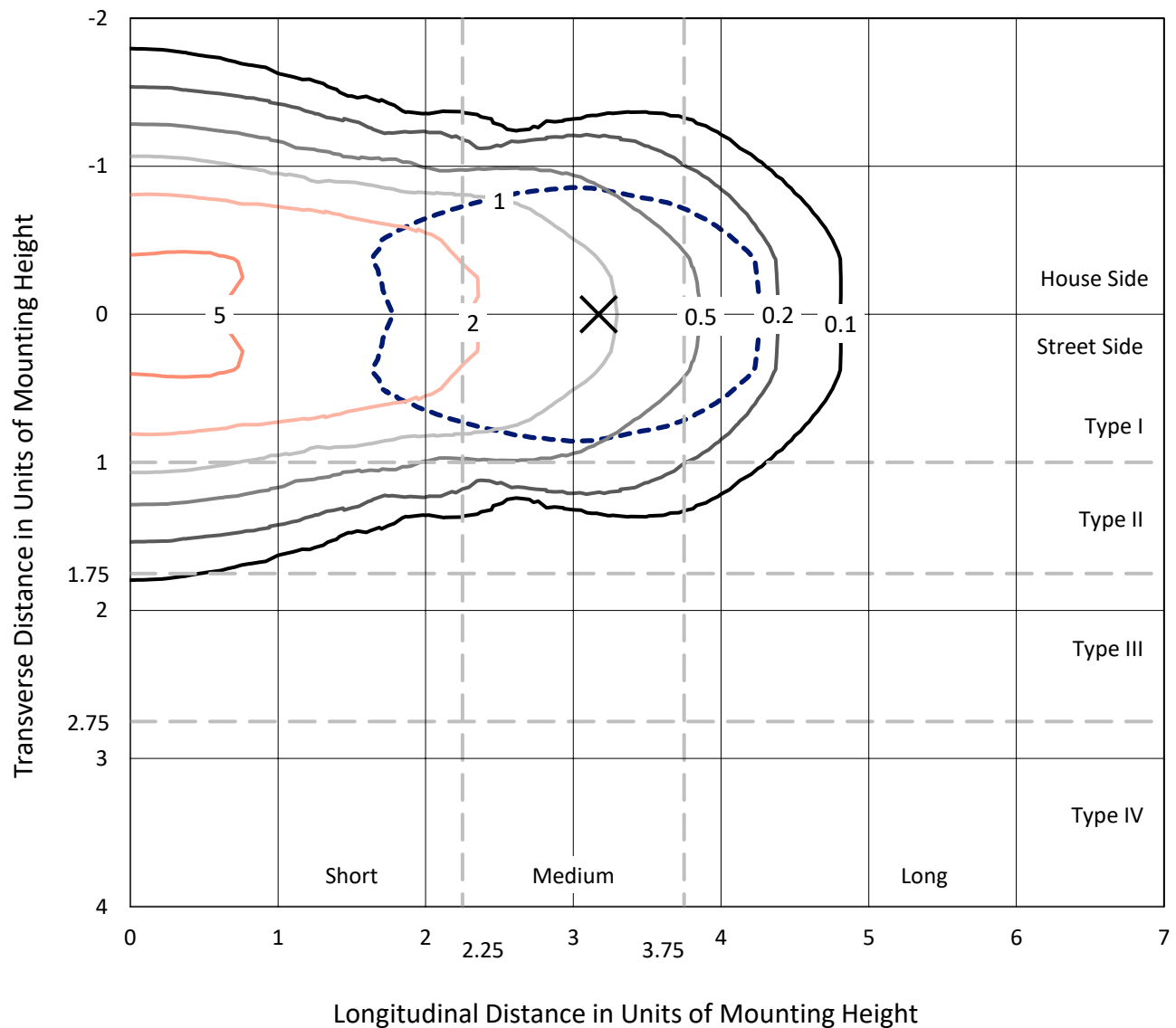
Input Watts (W): 141.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

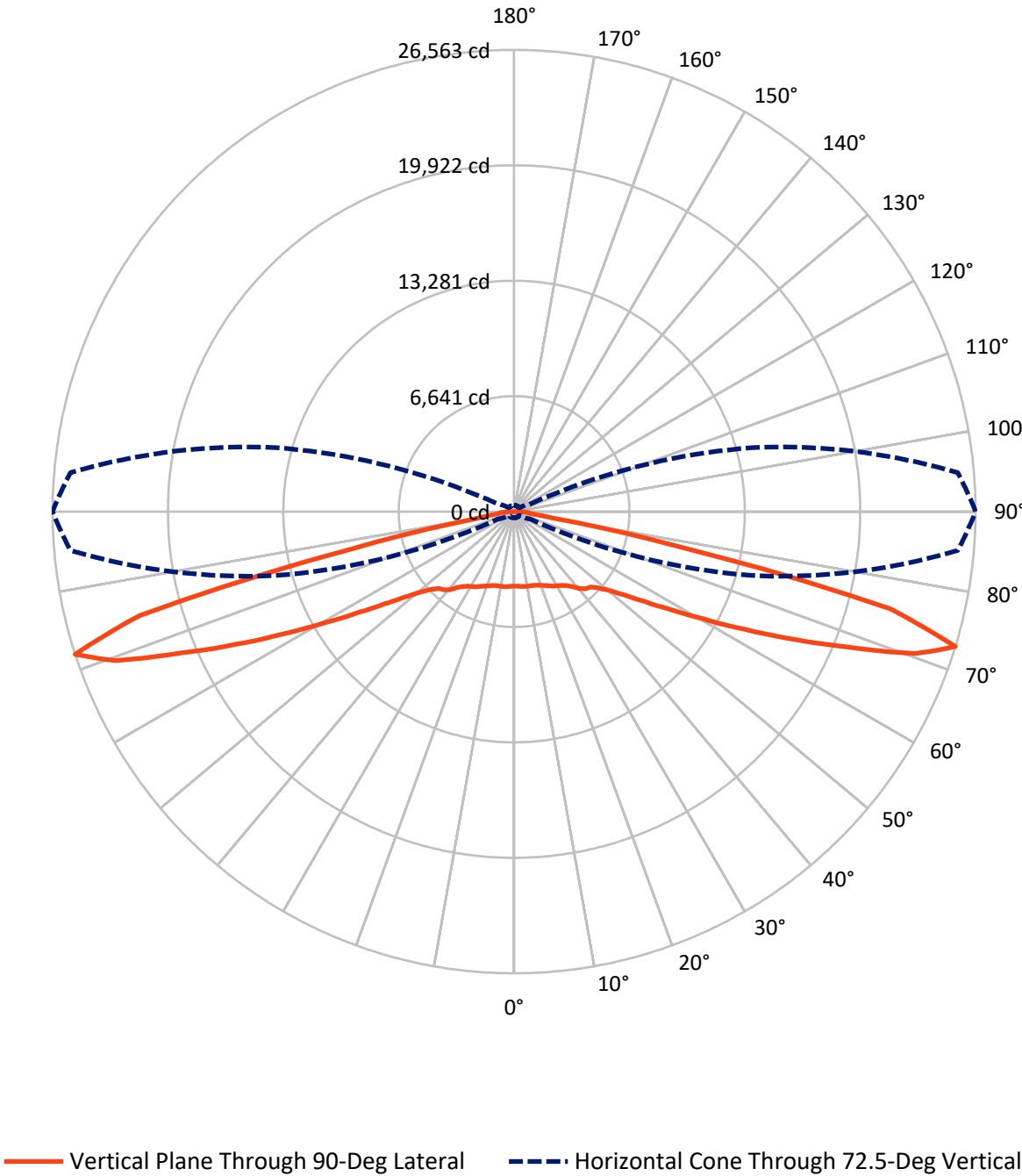
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.9 fc  
Type I - Short - N/A

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Luminous Intensity Polar Plot



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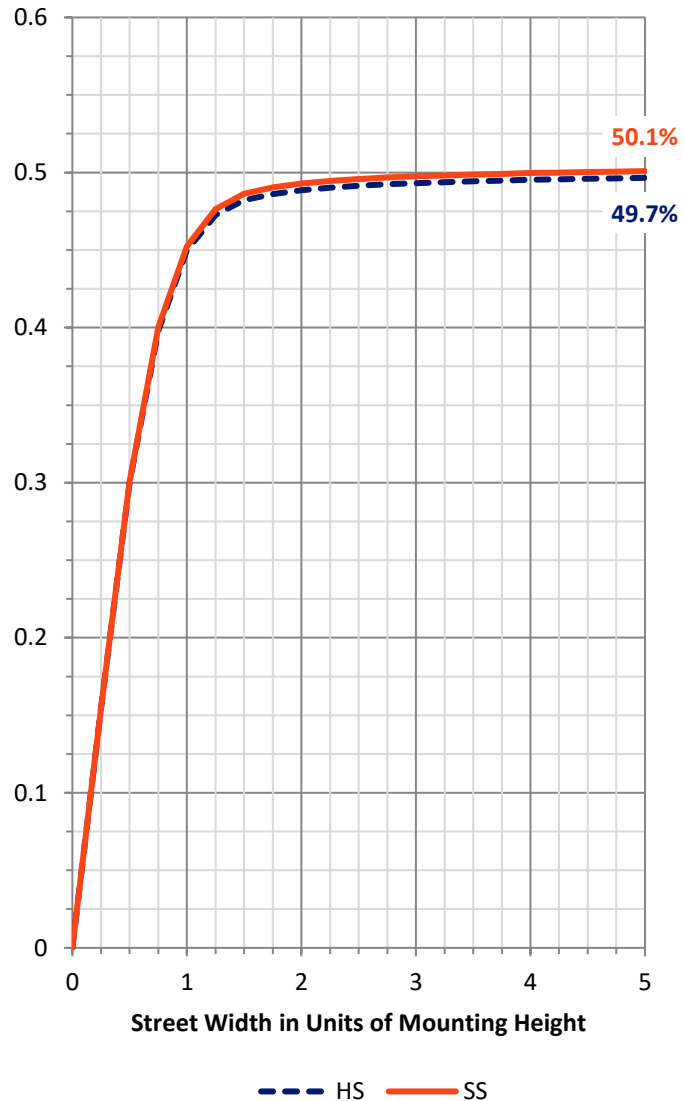
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 11488.2  | 0.0    | 11488.2 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 11488.2  | 0.0    | 11488.2 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 22976.4  | 0.0    | 22976.4 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 416.3   | 1.8       |
| 10°-20°   | 1272.9  | 5.5       |
| 20°-30°   | 2122.4  | 9.2       |
| 30°-40°   | 2918.9  | 12.7      |
| 40°-50°   | 3564.8  | 15.5      |
| 50°-60°   | 4123.1  | 17.9      |
| 60°-70°   | 4916.1  | 21.4      |
| 70°-80°   | 3431.1  | 14.9      |
| 80°-90°   | 210.7   | 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°    | 22976.4 | 100.0     |
| 0°-180°   | 22976.4 | 100.0     |

**Coefficient of Utilization**



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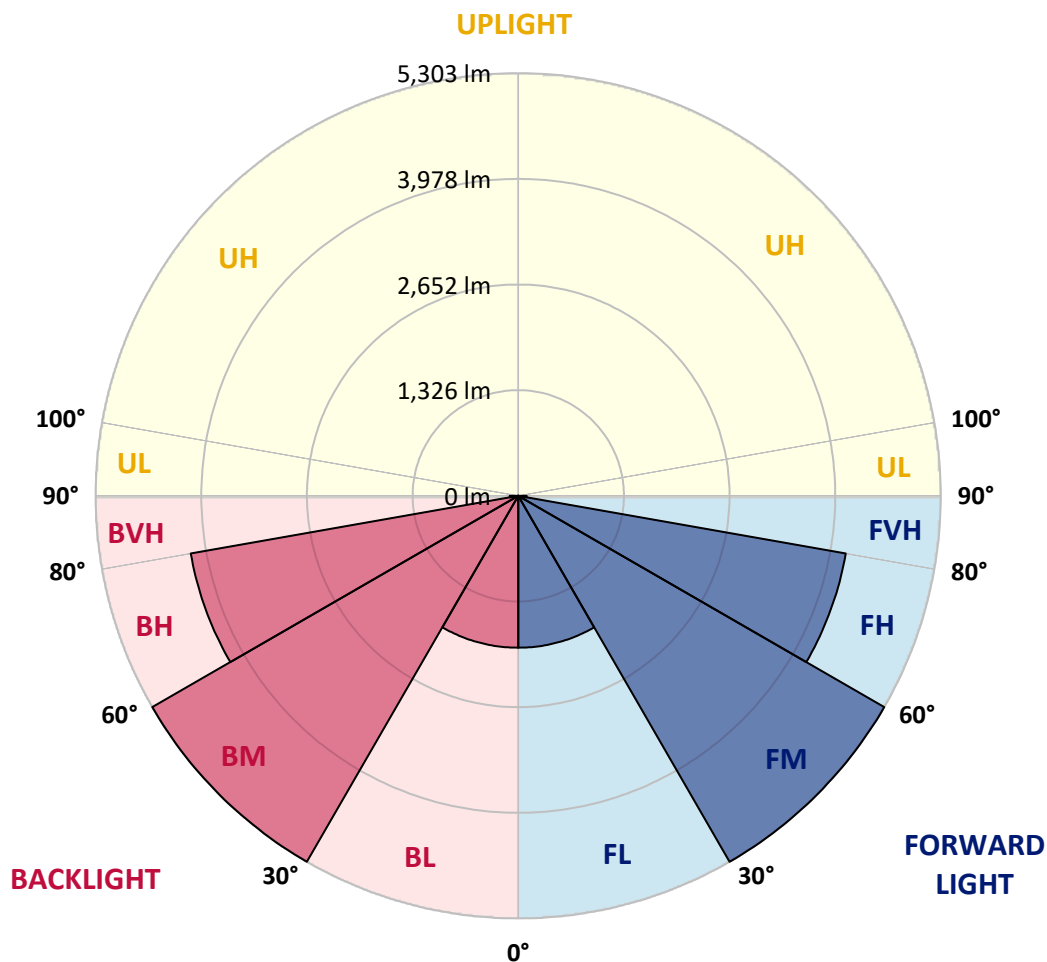
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1905.8 | 8.3       |                         |      |         |
| FM   | (30°-60°)   | 5303.4 | 23.1      |                         |      |         |
| FH   | (60°-80°)   | 4173.6 | 18.2      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 105.4  | 0.5       |                         |      | G2/225  |
| BL   | (0°-30°)    | 1905.8 | 8.3       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 5303.4 | 23.1      | B4/8500                 |      |         |
| BH   | (60°-80°)   | 4173.6 | 18.2      | B4/5000                 |      | G4/5000 |
| BVH  | (80°-90°)   | 105.4  | 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 I Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°     | 85°     | 90°     |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|
| 0°    | 4293.4 | 4293.4 | 4293.4 | 4293.4 | 4293.4 | 4293.4 | 4293.4 | 4293.4 | 4293.4  | 4293.4  | 4293.4  |
| 2.5°  | 4297.0 | 4301.9 | 4301.9 | 4298.2 | 4306.8 | 4299.5 | 4299.5 | 4295.8 | 4299.5  | 4295.8  | 4295.8  |
| 5°    | 4319.0 | 4325.1 | 4327.5 | 4326.3 | 4337.4 | 4331.2 | 4331.2 | 4326.3 | 4327.5  | 4323.9  | 4323.9  |
| 7.5°  | 4360.6 | 4369.1 | 4374.0 | 4380.0 | 4395.9 | 4388.6 | 4383.7 | 4369.1 | 4363.0  | 4353.2  | 4353.2  |
| 10°   | 4374.0 | 4383.7 | 4399.6 | 4431.4 | 4468.0 | 4469.2 | 4454.5 | 4418.0 | 4389.9  | 4367.8  | 4364.2  |
| 12.5° | 4332.5 | 4345.9 | 4378.9 | 4443.6 | 4525.4 | 4558.4 | 4535.1 | 4474.1 | 4419.2  | 4380.0  | 4374.0  |
| 15°   | 4280.0 | 4294.6 | 4344.7 | 4442.3 | 4563.2 | 4640.2 | 4637.7 | 4557.2 | 4469.2  | 4408.1  | 4398.4  |
| 17.5° | 4198.1 | 4212.8 | 4284.8 | 4421.6 | 4592.5 | 4719.5 | 4753.7 | 4670.7 | 4547.4  | 4465.5  | 4452.1  |
| 20°   | 4050.4 | 4063.8 | 4164.0 | 4355.6 | 4602.4 | 4803.8 | 4892.9 | 4819.7 | 4665.8  | 4554.7  | 4534.0  |
| 22.5° | 3858.7 | 3879.4 | 3996.7 | 4242.1 | 4579.1 | 4891.7 | 5051.7 | 5001.6 | 4803.8  | 4649.9  | 4621.8  |
| 25°   | 3653.5 | 3675.5 | 3812.3 | 4102.9 | 4519.3 | 4955.3 | 5239.7 | 5208.0 | 4960.1  | 4768.4  | 4729.3  |
| 27.5° | 3476.5 | 3499.7 | 3648.7 | 3964.9 | 4426.5 | 4979.7 | 5425.3 | 5441.2 | 5149.4  | 4899.1  | 4857.6  |
| 30°   | 3337.3 | 3359.2 | 3518.0 | 3853.8 | 4306.8 | 4955.3 | 5587.8 | 5697.7 | 5342.3  | 5012.7  | 4952.8  |
| 32.5° | 3184.7 | 3212.8 | 3380.0 | 3718.3 | 4165.2 | 4896.6 | 5729.4 | 5974.8 | 5565.7  | 5134.7  | 5059.0  |
| 35°   | 2991.7 | 3017.3 | 3193.2 | 3532.7 | 3979.6 | 4802.5 | 5847.8 | 6282.5 | 5885.7  | 5320.4  | 5236.1  |
| 37.5° | 2757.2 | 2781.6 | 2956.3 | 3300.6 | 3795.2 | 4670.7 | 5938.2 | 6629.4 | 6266.6  | 5587.8  | 5475.4  |
| 40°   | 2521.6 | 2544.8 | 2708.4 | 3041.8 | 3574.2 | 4502.2 | 5969.9 | 6968.8 | 6703.8  | 5955.2  | 5835.6  |
| 42.5° | 2305.4 | 2326.2 | 2476.4 | 2786.6 | 3326.2 | 4287.3 | 5928.4 | 7264.3 | 7095.8  | 6211.7  | 6057.9  |
| 45°   | 2106.4 | 2124.7 | 2257.8 | 2547.2 | 3068.6 | 4026.0 | 5803.9 | 7581.8 | 7562.2  | 6394.9  | 6187.3  |
| 47.5° | 1879.2 | 1897.6 | 2035.5 | 2315.2 | 2811.0 | 3719.4 | 5592.6 | 7894.4 | 8210.7  | 6810.1  | 6570.8  |
| 50°   | 1602.1 | 1618.0 | 1759.6 | 2047.7 | 2543.5 | 3393.5 | 5299.6 | 8139.8 | 9028.8  | 7438.9  | 7138.5  |
| 52.5° | 1273.6 | 1290.7 | 1428.6 | 1716.9 | 2226.1 | 3043.0 | 4913.7 | 8299.8 | 9974.0  | 8357.2  | 7987.2  |
| 55°   | 947.6  | 959.8  | 1079.4 | 1338.3 | 1832.9 | 2643.7 | 4430.2 | 8345.0 | 11046.0 | 9612.4  | 9149.7  |
| 57.5° | 687.5  | 694.8  | 771.7  | 964.6  | 1389.6 | 2144.3 | 3842.8 | 8227.8 | 12322.1 | 11221.9 | 10639.4 |
| 60°   | 556.8  | 559.2  | 582.5  | 667.9  | 965.9  | 1580.1 | 3133.3 | 7824.8 | 13706.8 | 13296.5 | 12562.7 |
| 62.5° | 505.5  | 505.5  | 511.7  | 534.8  | 653.3  | 1042.8 | 2274.9 | 6989.6 | 15191.7 | 15918.2 | 14935.3 |
| 65°   | 470.2  | 470.2  | 472.5  | 483.6  | 515.3  | 664.3  | 1436.0 | 5629.3 | 16443.4 | 18989.4 | 17746.2 |
| 67.5° | 438.4  | 439.6  | 438.4  | 442.1  | 460.3  | 490.9  | 832.8  | 3887.9 | 17117.4 | 22171.5 | 20829.5 |
| 70°   | 405.4  | 407.8  | 401.7  | 401.7  | 416.4  | 417.6  | 521.4  | 2132.0 | 16558.1 | 24838.4 | 24485.5 |
| 72.5° | 366.3  | 370.0  | 360.2  | 357.8  | 368.8  | 363.9  | 392.0  | 1023.3 | 14216.0 | 25634.5 | 26562.6 |
| 75°   | 332.1  | 337.0  | 315.1  | 308.9  | 308.9  | 305.2  | 318.7  | 525.1  | 9226.6  | 20911.3 | 22366.8 |
| 77.5° | 301.7  | 311.4  | 275.9  | 256.5  | 251.5  | 240.6  | 260.1  | 321.1  | 4035.7  | 9817.7  | 9613.7  |
| 80°   | 249.1  | 262.5  | 227.1  | 203.9  | 195.4  | 183.2  | 205.1  | 224.7  | 1200.4  | 2279.8  | 2183.4  |
| 82.5° | 185.6  | 191.7  | 161.2  | 145.3  | 138.0  | 129.5  | 153.9  | 156.3  | 390.7   | 807.2   | 912.1   |
| 85°   | 118.5  | 120.8  | 98.9   | 85.5   | 81.8   | 78.1   | 97.7   | 85.5   | 148.9   | 593.5   | 862.1   |
| 87.5° | 41.5   | 47.7   | 37.8   | 34.2   | 36.6   | 30.5   | 45.2   | 25.6   | 41.5    | 418.8   | 519.0   |
| 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)