

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: P962985

Luminaire Tested: **NAV-SB2D-735-U-T1**

Issue Date: 1/21/2025

### Test Information

Test Method: LM-79-08  
Report Number: P962985  
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-SB2D-735-U-T1  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE I OPTICS  
Light Source: -  
Ballast/Driver: -

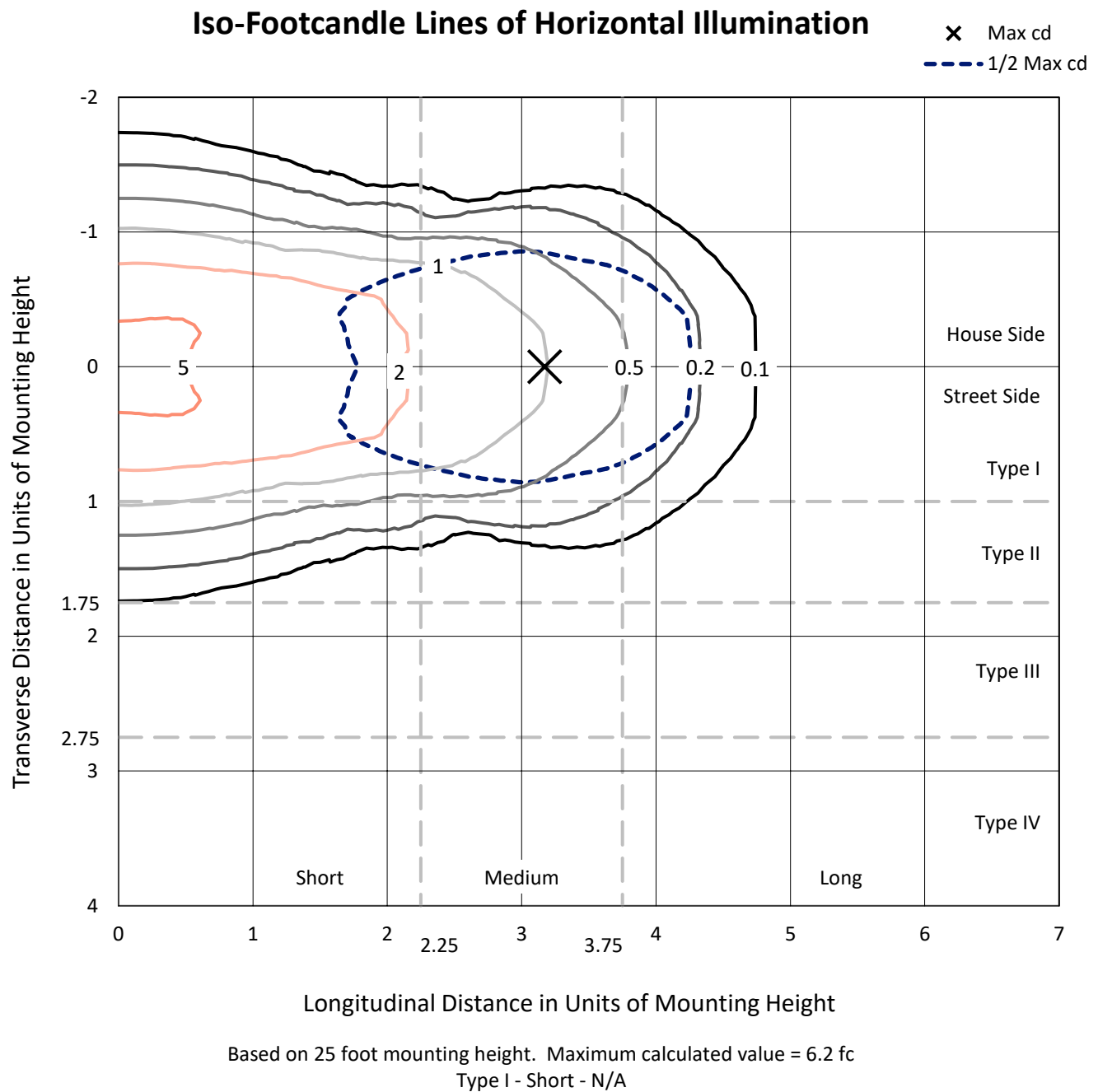
### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 20635.3 lumens  
Efficiency: N/A  
Efficacy: 139.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type I - Short  
BUG Rating: B4 - U0 - G4

Input Watts (W): 147.6  
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

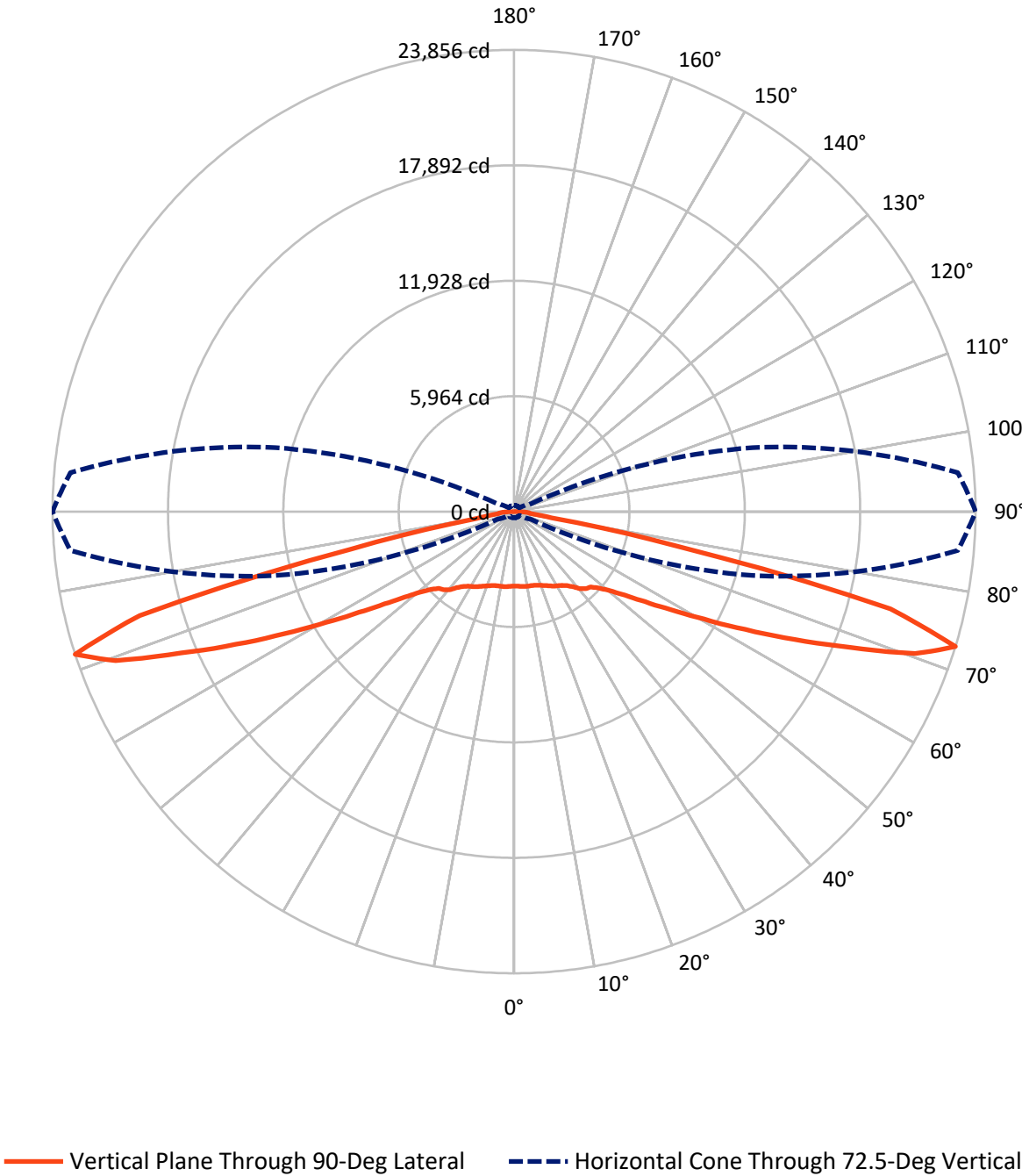


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Luminous Intensity Polar Plot



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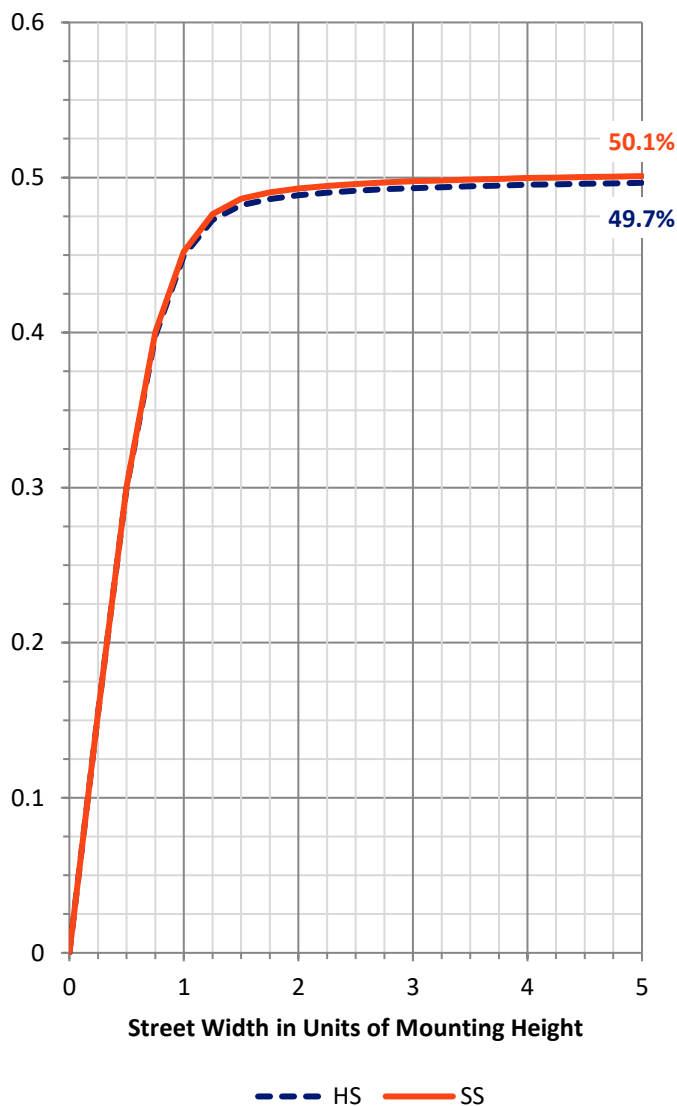
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 10317.7  | 0.0    | 10317.7 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 10317.7  | 0.0    | 10317.7 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 20635.3  | 0.0    | 20635.3 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 373.9   | 1.8       |
| 10°-20°   | 1143.2  | 5.5       |
| 20°-30°   | 1906.1  | 9.2       |
| 30°-40°   | 2621.5  | 12.7      |
| 40°-50°   | 3201.6  | 15.5      |
| 50°-60°   | 3703.0  | 17.9      |
| 60°-70°   | 4415.2  | 21.4      |
| 70°-80°   | 3081.5  | 14.9      |
| 80°-90°   | 189.3   | 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°    | 20635.3 | 100.0     |
| 0°-180°   | 20635.3 | 100.0     |

**Coefficient of Utilization**



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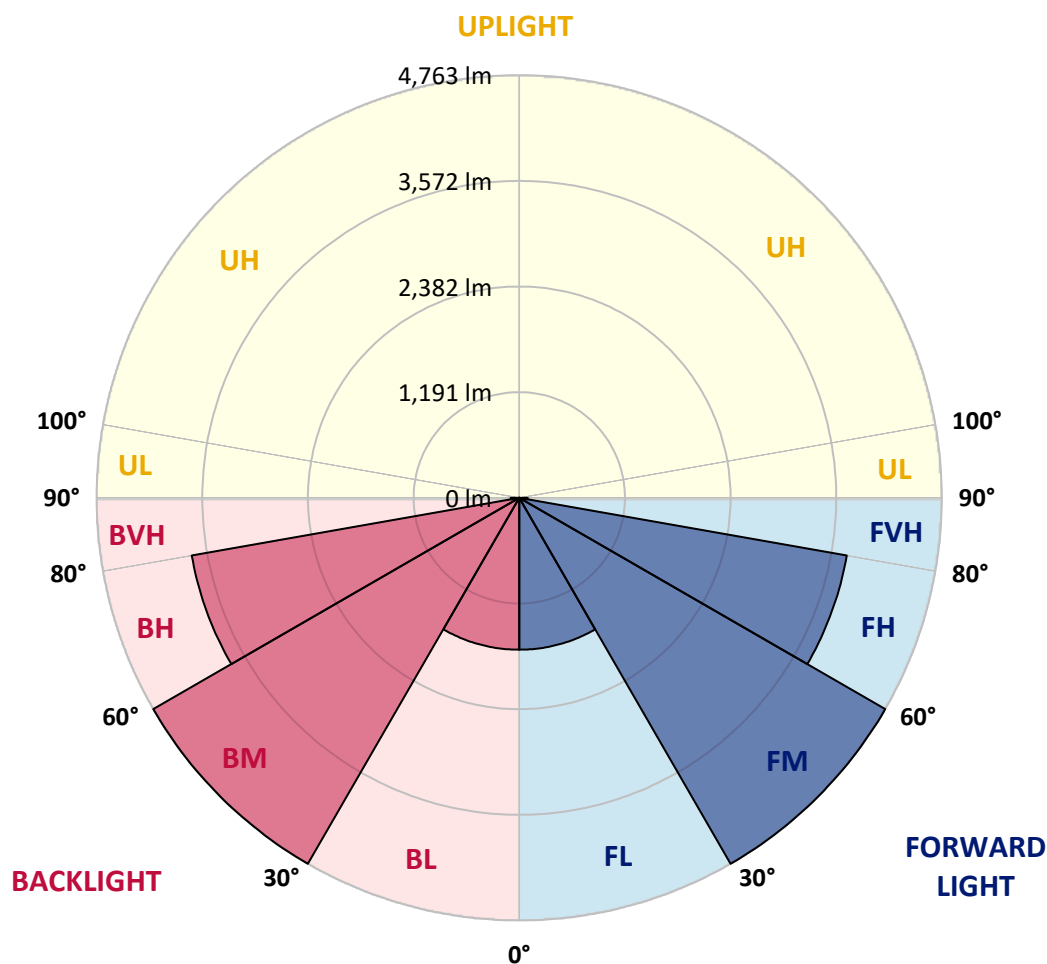
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1711.6 | 8.3       |                         |      |         |
| FM   | (30°-60°)   | 4763.1 | 23.1      |                         |      |         |
| FH   | (60°-80°)   | 3748.4 | 18.2      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 94.6   | 0.5       |                         |      | G1/100  |
| BL   | (0°-30°)    | 1711.6 | 8.3       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 4763.1 | 23.1      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 3748.4 | 18.2      | B4/5000                 |      | G4/5000 |
| BVH  | (80°-90°)   | 94.6   | 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 I Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°     | 85°     | 90°     |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|
| 0°    | 3855.9 | 3855.9 | 3855.9 | 3855.9 | 3855.9 | 3855.9 | 3855.9 | 3855.9 | 3855.9  | 3855.9  | 3855.9  |
| 2.5°  | 3859.2 | 3863.6 | 3863.6 | 3860.4 | 3867.9 | 3861.4 | 3861.4 | 3858.1 | 3861.4  | 3858.1  | 3858.1  |
| 5°    | 3878.9 | 3884.4 | 3886.6 | 3885.6 | 3895.4 | 3889.9 | 3889.9 | 3885.6 | 3886.6  | 3883.3  | 3883.3  |
| 7.5°  | 3916.2 | 3923.9 | 3928.3 | 3933.7 | 3948.1 | 3941.4 | 3937.1 | 3923.9 | 3918.5  | 3909.7  | 3909.7  |
| 10°   | 3928.3 | 3937.1 | 3951.4 | 3979.9 | 4012.8 | 4013.8 | 4000.7 | 3967.8 | 3942.6  | 3922.8  | 3919.5  |
| 12.5° | 3891.0 | 3903.1 | 3932.7 | 3990.8 | 4064.3 | 4094.0 | 4073.0 | 4018.2 | 3968.9  | 3933.7  | 3928.3  |
| 15°   | 3843.9 | 3857.0 | 3902.0 | 3989.7 | 4098.3 | 4167.3 | 4165.2 | 4092.8 | 4013.8  | 3959.1  | 3950.2  |
| 17.5° | 3770.4 | 3783.6 | 3848.3 | 3971.1 | 4124.6 | 4238.7 | 4269.3 | 4194.8 | 4084.0  | 4010.5  | 3998.5  |
| 20°   | 3637.7 | 3649.7 | 3739.7 | 3911.8 | 4133.4 | 4314.3 | 4394.4 | 4328.6 | 4190.4  | 4090.6  | 4072.0  |
| 22.5° | 3465.5 | 3484.2 | 3589.4 | 3809.8 | 4112.5 | 4393.3 | 4537.0 | 4492.0 | 4314.3  | 4176.2  | 4150.9  |
| 25°   | 3281.2 | 3301.0 | 3423.8 | 3684.9 | 4058.8 | 4450.3 | 4705.9 | 4677.4 | 4454.8  | 4282.6  | 4247.4  |
| 27.5° | 3122.3 | 3143.1 | 3276.9 | 3561.0 | 3975.5 | 4472.3 | 4872.5 | 4886.8 | 4624.7  | 4399.9  | 4362.6  |
| 30°   | 2997.2 | 3017.0 | 3159.6 | 3461.1 | 3867.9 | 4450.3 | 5018.4 | 5117.1 | 4797.9  | 4501.9  | 4448.1  |
| 32.5° | 2860.2 | 2885.4 | 3035.6 | 3339.3 | 3740.7 | 4397.7 | 5145.6 | 5366.1 | 4998.6  | 4611.6  | 4543.5  |
| 35°   | 2686.8 | 2709.9 | 2867.8 | 3172.7 | 3574.1 | 4313.2 | 5252.0 | 5642.4 | 5286.0  | 4778.2  | 4702.6  |
| 37.5° | 2476.3 | 2498.2 | 2655.1 | 2964.3 | 3408.4 | 4194.8 | 5333.2 | 5953.9 | 5628.2  | 5018.4  | 4917.5  |
| 40°   | 2264.6 | 2285.4 | 2432.4 | 2731.8 | 3210.0 | 4043.4 | 5361.7 | 6258.8 | 6020.7  | 5348.6  | 5241.0  |
| 42.5° | 2070.5 | 2089.2 | 2224.0 | 2502.6 | 2987.4 | 3850.4 | 5324.4 | 6524.1 | 6372.8  | 5578.8  | 5440.6  |
| 45°   | 1891.7 | 1908.2 | 2027.8 | 2287.7 | 2755.9 | 3615.8 | 5212.5 | 6809.3 | 6791.8  | 5743.3  | 5556.8  |
| 47.5° | 1687.8 | 1704.3 | 1828.2 | 2079.3 | 2524.6 | 3340.5 | 5022.8 | 7090.0 | 7374.1  | 6116.2  | 5901.2  |
| 50°   | 1438.8 | 1453.1 | 1580.3 | 1839.2 | 2284.4 | 3047.6 | 4759.6 | 7310.5 | 8108.9  | 6681.0  | 6411.2  |
| 52.5° | 1143.8 | 1159.2 | 1283.1 | 1541.9 | 1999.3 | 2733.0 | 4413.0 | 7454.1 | 8957.7  | 7505.7  | 7173.4  |
| 55°   | 851.1  | 862.0  | 969.4  | 1201.9 | 1646.2 | 2374.3 | 3978.7 | 7494.7 | 9920.6  | 8633.1  | 8217.4  |
| 57.5° | 617.5  | 624.0  | 693.1  | 866.3  | 1248.0 | 1925.8 | 3451.3 | 7389.4 | 11066.6 | 10078.5 | 9555.4  |
| 60°   | 500.1  | 502.2  | 523.2  | 599.9  | 867.5  | 1419.1 | 2814.0 | 7027.5 | 12310.2 | 11941.8 | 11282.6 |
| 62.5° | 454.1  | 454.1  | 459.5  | 480.3  | 586.7  | 936.5  | 2043.1 | 6277.4 | 13643.8 | 14296.3 | 13413.5 |
| 65°   | 422.2  | 422.2  | 424.5  | 434.3  | 462.8  | 596.6  | 1289.7 | 5055.7 | 14767.9 | 17054.5 | 15938.0 |
| 67.5° | 393.7  | 394.8  | 393.7  | 397.0  | 413.5  | 440.9  | 747.9  | 3491.9 | 15373.3 | 19912.4 | 18707.2 |
| 70°   | 364.1  | 366.3  | 360.8  | 360.8  | 373.9  | 375.0  | 468.3  | 1914.8 | 14871.0 | 22307.6 | 21990.7 |
| 72.5° | 329.0  | 332.3  | 323.5  | 321.3  | 331.2  | 326.8  | 352.0  | 919.0  | 12767.5 | 23022.6 | 23856.1 |
| 75°   | 298.3  | 302.7  | 282.9  | 277.5  | 277.5  | 274.2  | 286.3  | 471.6  | 8286.5  | 18780.7 | 20087.8 |
| 77.5° | 270.9  | 279.6  | 247.8  | 230.3  | 225.9  | 216.1  | 233.6  | 288.4  | 3624.5  | 8817.3  | 8634.2  |
| 80°   | 223.8  | 235.7  | 204.0  | 183.2  | 175.5  | 164.5  | 184.2  | 201.8  | 1078.0  | 2047.5  | 1960.8  |
| 82.5° | 166.7  | 172.2  | 144.7  | 130.5  | 123.9  | 116.2  | 138.2  | 140.4  | 351.0   | 724.9   | 819.2   |
| 85°   | 106.4  | 108.5  | 88.9   | 76.8   | 73.5   | 70.2   | 87.7   | 76.8   | 133.8   | 533.0   | 774.3   |
| 87.5° | 37.3   | 42.7   | 34.0   | 30.7   | 32.9   | 27.4   | 40.6   | 23.1   | 37.3    | 376.2   | 466.1   |
| 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)