

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: P965139

Luminaire Tested: **NAV-SB3D-750-U-5MQ**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P965139  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-20)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB3D-750-U-5MQ  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 70 CRI, 5000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V MEDIUM OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 34673.7 lumens  
Efficiency: N/A  
Efficacy: 159.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B5 - U0 - G4

Input Watts (W): 218.1  
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



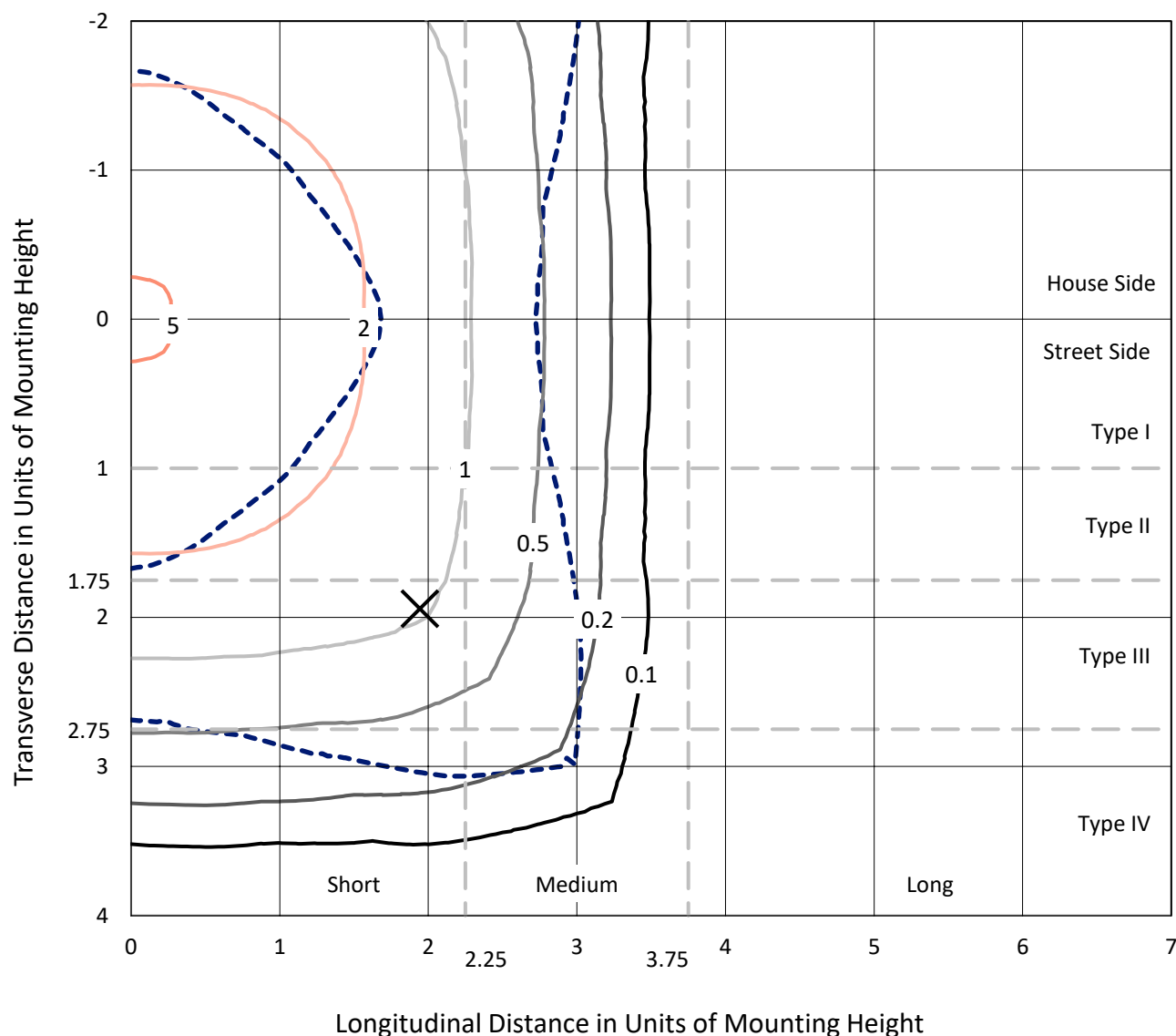
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

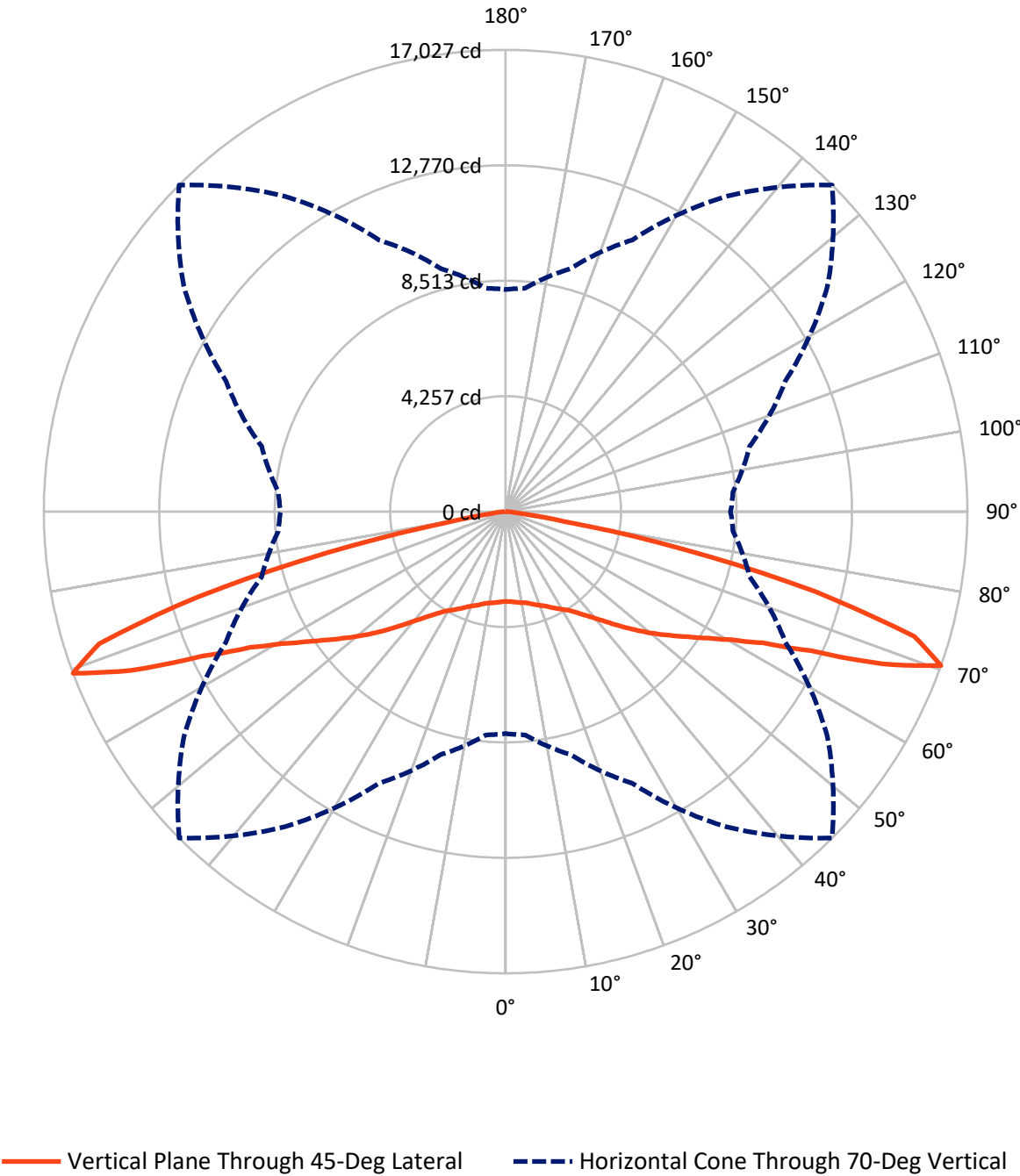


Based on 25 foot mounting height. Maximum calculated value = 5.3 fc

Type V - Short - N/A

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Luminous Intensity Polar Plot



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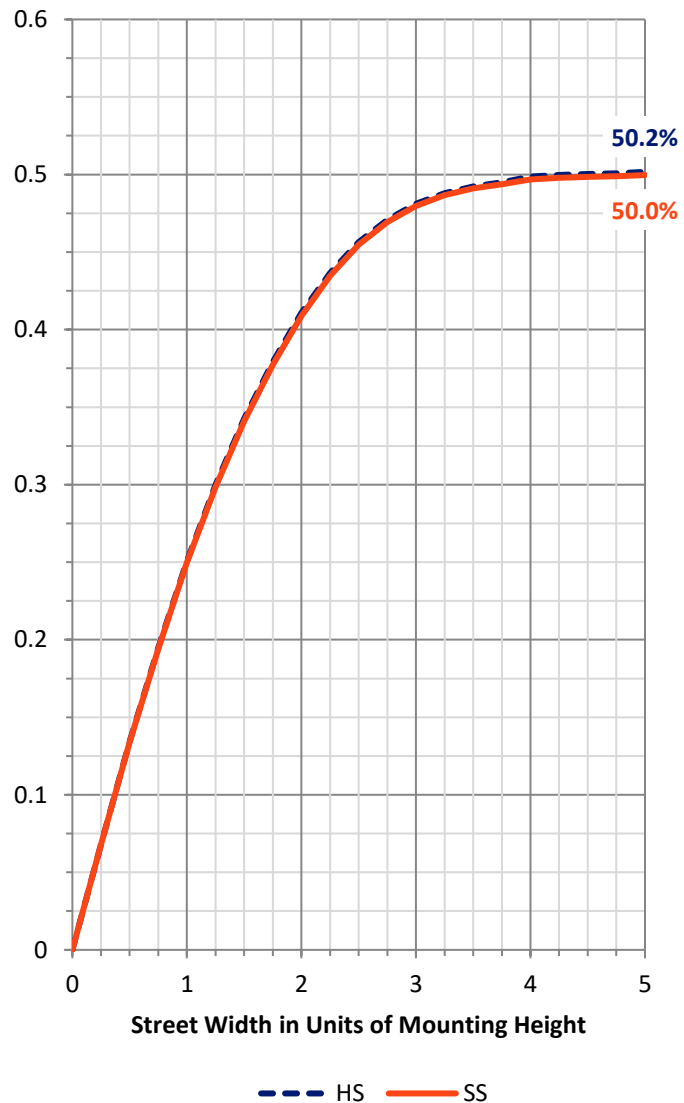
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 17336.8  | 0.0    | 17336.8 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 17336.8  | 0.0    | 17336.8 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 34673.7  | 0.0    | 34673.7 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 322.7   | 0.9       |
| 10°-20°   | 1000.6  | 2.9       |
| 20°-30°   | 1788.1  | 5.2       |
| 30°-40°   | 2898.5  | 8.4       |
| 40°-50°   | 4721.2  | 13.6      |
| 50°-60°   | 7198.3  | 20.8      |
| 60°-70°   | 10708.8 | 30.9      |
| 70°-80°   | 5836.7  | 16.8      |
| 80°-90°   | 198.8   | 0.6       |
| 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°    | 34673.7 | 100.0     |
| 0°-180°   | 34673.7 | 100.0     |

**Coefficient of Utilization**



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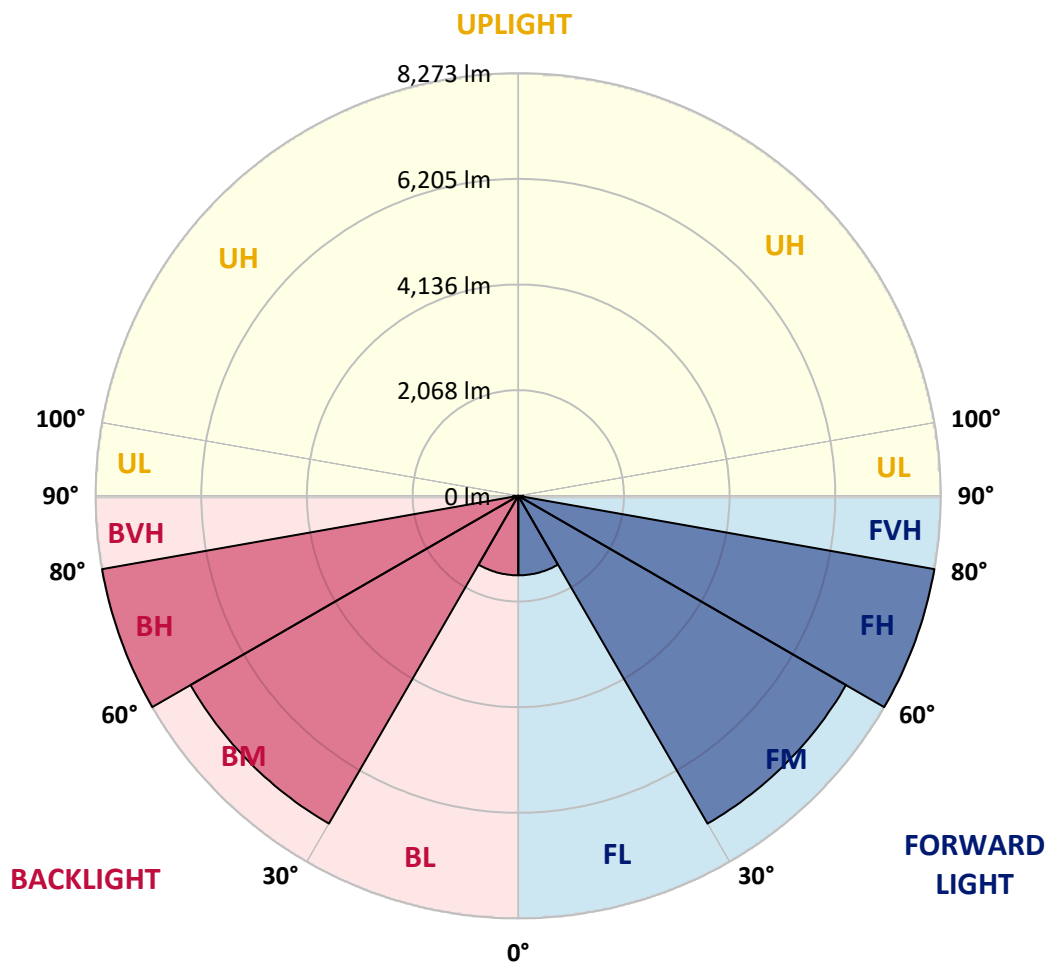
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|--------|-----------|-------------------------|------|----------|
|      |             |        |           | B                       | U    | G        |
| FL   | (0°-30°)    | 1555.7 | 4.5       |                         |      |          |
| FM   | (30°-60°)   | 7409.1 | 21.4      |                         |      |          |
| FH   | (60°-80°)   | 8272.7 | 23.9      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 99.4   | 0.3       |                         |      | G1/100   |
| BL   | (0°-30°)    | 1555.7 | 4.5       | B3/2500                 |      |          |
| BM   | (30°-60°)   | 7409.1 | 21.4      | B4/8500                 |      |          |
| BH   | (60°-80°)   | 8272.7 | 23.9      | B5                      |      | G4/12000 |
| BVH  | (80°-90°)   | 99.4   | 0.3       |                         |      | G1/100   |
| 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°    | 3321.4 | 3321.4 | 3321.4  | 3321.4  | 3321.4  | 3321.4  | 3321.4  | 3321.4  | 3321.4  | 3321.4 | 3321.4 |
| 2.5°  | 3337.1 | 3340.6 | 3333.6  | 3330.1  | 3326.6  | 3321.4  | 3323.2  | 3331.9  | 3338.8  | 3337.1 | 3338.8 |
| 5°    | 3364.9 | 3368.4 | 3363.1  | 3361.4  | 3354.4  | 3352.7  | 3352.7  | 3361.4  | 3366.6  | 3363.1 | 3364.9 |
| 7.5°  | 3396.2 | 3401.5 | 3392.7  | 3391.0  | 3387.5  | 3384.0  | 3382.3  | 3391.0  | 3396.2  | 3396.2 | 3396.2 |
| 10°   | 3425.9 | 3431.1 | 3424.1  | 3418.9  | 3415.4  | 3415.4  | 3411.9  | 3418.9  | 3427.6  | 3425.9 | 3425.9 |
| 12.5° | 3457.1 | 3460.6 | 3453.6  | 3450.2  | 3450.2  | 3455.4  | 3450.2  | 3453.6  | 3460.6  | 3457.1 | 3455.4 |
| 15°   | 3495.5 | 3497.2 | 3495.5  | 3500.7  | 3509.4  | 3526.8  | 3511.1  | 3507.7  | 3511.1  | 3502.4 | 3502.4 |
| 17.5° | 3547.7 | 3551.1 | 3558.1  | 3570.3  | 3582.5  | 3613.8  | 3586.0  | 3577.2  | 3577.2  | 3559.8 | 3559.8 |
| 20°   | 3612.1 | 3617.3 | 3627.8  | 3648.7  | 3664.3  | 3693.9  | 3666.0  | 3653.8  | 3648.7  | 3626.0 | 3626.0 |
| 22.5° | 3680.0 | 3688.7 | 3704.3  | 3732.2  | 3760.0  | 3787.9  | 3760.0  | 3739.2  | 3723.5  | 3693.9 | 3692.2 |
| 25°   | 3758.3 | 3768.7 | 3793.1  | 3838.4  | 3876.7  | 3916.7  | 3883.6  | 3841.9  | 3810.5  | 3768.7 | 3767.0 |
| 27.5° | 3869.7 | 3881.9 | 3911.5  | 3967.2  | 4016.0  | 4050.8  | 4019.4  | 3965.4  | 3922.0  | 3871.4 | 3869.7 |
| 30°   | 4026.4 | 4038.6 | 4073.3  | 4132.6  | 4165.7  | 4188.3  | 4167.4  | 4125.6  | 4073.3  | 4016.0 | 4016.0 |
| 32.5° | 4228.3 | 4244.0 | 4282.2  | 4338.0  | 4345.0  | 4348.5  | 4341.5  | 4320.6  | 4282.2  | 4212.6 | 4214.4 |
| 35°   | 4484.2 | 4501.6 | 4545.2  | 4590.4  | 4583.4  | 4590.4  | 4579.9  | 4573.0  | 4545.2  | 4465.1 | 4465.1 |
| 37.5° | 4797.5 | 4818.4 | 4863.7  | 4898.5  | 4881.2  | 4872.4  | 4874.2  | 4875.9  | 4860.2  | 4771.5 | 4771.5 |
| 40°   | 5161.4 | 5189.3 | 5222.3  | 5258.9  | 5229.2  | 5203.1  | 5220.5  | 5234.5  | 5220.5  | 5130.0 | 5130.0 |
| 42.5° | 5535.6 | 5575.7 | 5610.4  | 5662.7  | 5638.3  | 5605.3  | 5629.6  | 5645.3  | 5615.7  | 5518.2 | 5525.2 |
| 45°   | 5951.7 | 5990.0 | 6035.2  | 6113.6  | 6096.2  | 6061.3  | 6096.2  | 6099.7  | 6049.1  | 5934.2 | 5946.4 |
| 47.5° | 6381.6 | 6421.7 | 6489.6  | 6594.0  | 6587.1  | 6548.7  | 6594.0  | 6569.6  | 6505.3  | 6367.7 | 6359.0 |
| 50°   | 6789.0 | 6844.6 | 6949.1  | 7095.4  | 7109.3  | 7062.2  | 7123.2  | 7076.2  | 6968.3  | 6796.0 | 6792.5 |
| 52.5° | 7171.9 | 7231.2 | 7396.5  | 7594.9  | 7645.5  | 7584.5  | 7666.3  | 7584.5  | 7422.6  | 7201.5 | 7180.6 |
| 55°   | 7574.0 | 7640.2 | 7836.9  | 8096.3  | 8197.2  | 8152.0  | 8228.6  | 8105.0  | 7875.2  | 7607.1 | 7570.5 |
| 57.5° | 8047.6 | 8087.6 | 8322.6  | 8630.7  | 8801.3  | 8811.7  | 8846.6  | 8637.7  | 8359.2  | 8054.6 | 8012.7 |
| 60°   | 8561.1 | 8616.8 | 8872.7  | 9241.7  | 9511.6  | 9598.6  | 9562.0  | 9252.2  | 8928.4  | 8578.5 | 8522.8 |
| 62.5° | 9219.1 | 9280.0 | 9586.4  | 10028.6 | 10455.0 | 10670.9 | 10528.2 | 10079.0 | 9678.7  | 9259.1 | 9186.0 |
| 65°   | 9763.9 | 9831.8 | 10385.4 | 11173.9 | 11950.4 | 12383.8 | 12025.2 | 11198.3 | 10477.7 | 9885.8 | 9788.3 |
| 67.5° | 9368.8 | 9452.3 | 10321.0 | 11769.4 | 13699.8 | 14993.2 | 13766.0 | 11946.9 | 10535.2 | 9732.6 | 9612.6 |
| 70°   | 8188.5 | 8266.9 | 9280.0  | 11050.4 | 14192.5 | 17026.5 | 14488.4 | 11375.9 | 9313.0  | 8414.8 | 8294.7 |
| 72.5° | 5436.4 | 5688.9 | 6714.2  | 8837.9  | 12672.8 | 15755.7 | 12798.2 | 8658.6  | 6228.4  | 5424.2 | 5248.4 |
| 75°   | 1803.4 | 2005.4 | 2705.2  | 4581.6  | 8488.0  | 11783.2 | 8080.6  | 4054.3  | 2142.9  | 1542.3 | 1458.8 |
| 77.5° | 454.4  | 524.0  | 722.4   | 1310.8  | 3385.8  | 6708.9  | 3048.0  | 1070.6  | 583.1   | 407.3  | 363.8  |
| 80°   | 221.1  | 243.7  | 348.2   | 437.0   | 847.8   | 2132.4  | 795.5   | 410.8   | 275.0   | 212.4  | 195.0  |
| 82.5° | 121.9  | 123.6  | 196.7   | 247.2   | 315.1   | 551.9   | 327.3   | 240.3   | 158.4   | 128.8  | 128.8  |
| 85°   | 74.8   | 73.1   | 104.4   | 132.3   | 132.3   | 196.7   | 156.6   | 132.3   | 90.5    | 80.1   | 83.5   |
| 87.5° | 29.6   | 29.6   | 38.3    | 41.8    | 36.6    | 50.5    | 40.1    | 43.6    | 34.8    | 33.1   | 34.8   |
| 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)