

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: P959963

Luminaire Tested: **NAV-SB1B-830-U-5NQ**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P959963  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1B-830-U-5NQ  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 80 CRI, 3000K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE V NARROW OPTICS  
Light Source: -  
Ballast/Driver: -

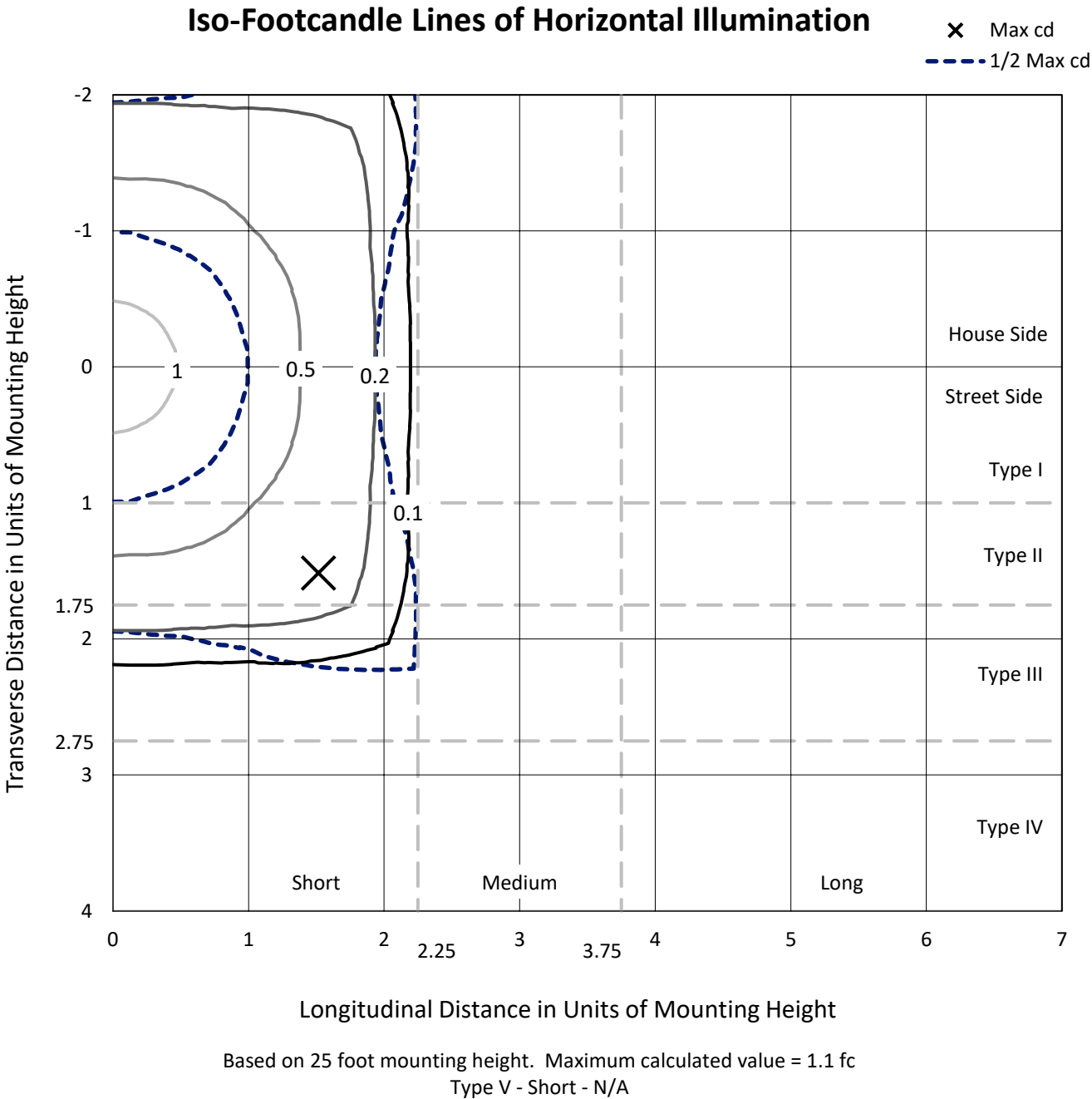
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5436.6 lumens  
Efficiency: N/A  
Efficacy: 136.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B2 - U0 - G1

Input Watts (W): 39.8  
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

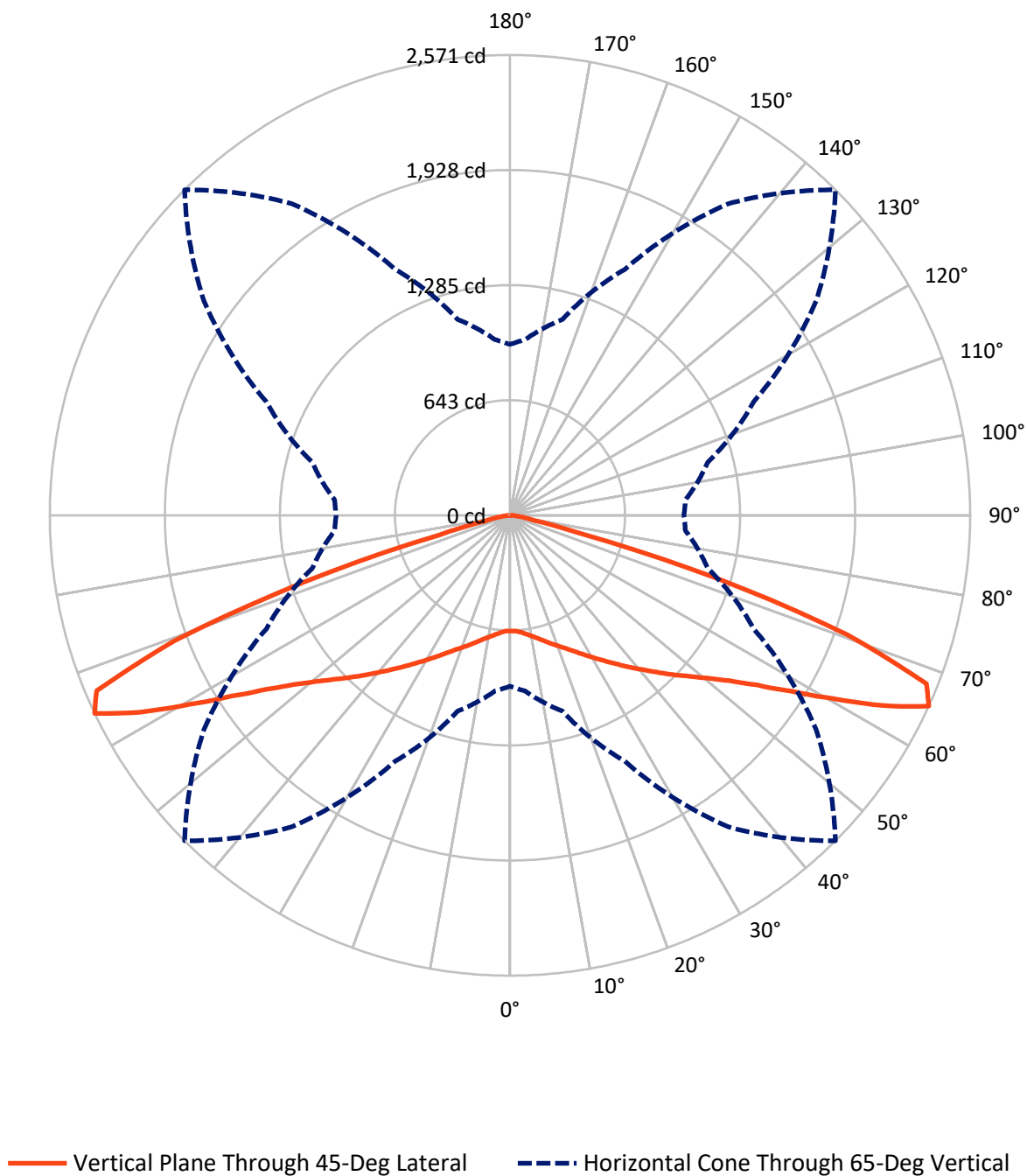


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## Luminous Intensity Polar Plot



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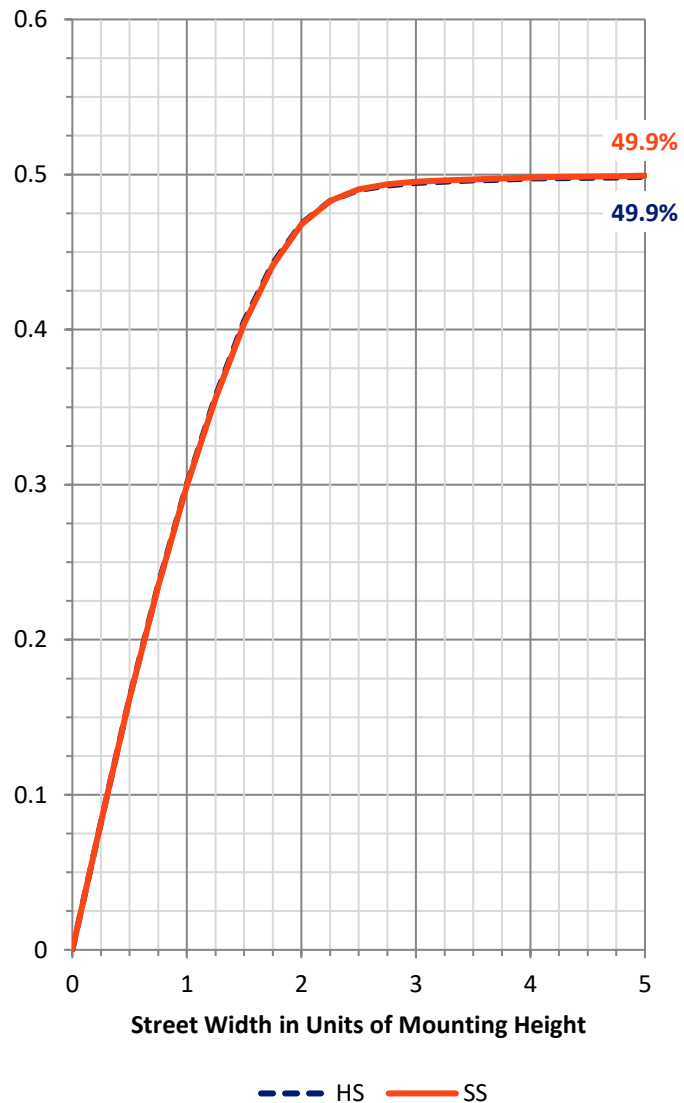
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 2718.3   | 0.0    | 2718.3 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Street Side</b> | Lumens    | 2718.3   | 0.0    | 2718.3 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Total</b>       | Lumens    | 5436.6   | 0.0    | 5436.6 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 63.9   | 1.2       |
| 10°-20°   | 208.4  | 3.8       |
| 20°-30°   | 393.4  | 7.2       |
| 30°-40°   | 644.2  | 11.8      |
| 40°-50°   | 998.8  | 18.4      |
| 50°-60°   | 1475.5 | 27.1      |
| 60°-70°   | 1404.5 | 25.8      |
| 70°-80°   | 226.6  | 4.2       |
| 80°-90°   | 21.4   | 0.4       |
| 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°    | 5436.6 | 100.0     |
| 0°-180°   | 5436.6 | 100.0     |

**Coefficient of Utilization**



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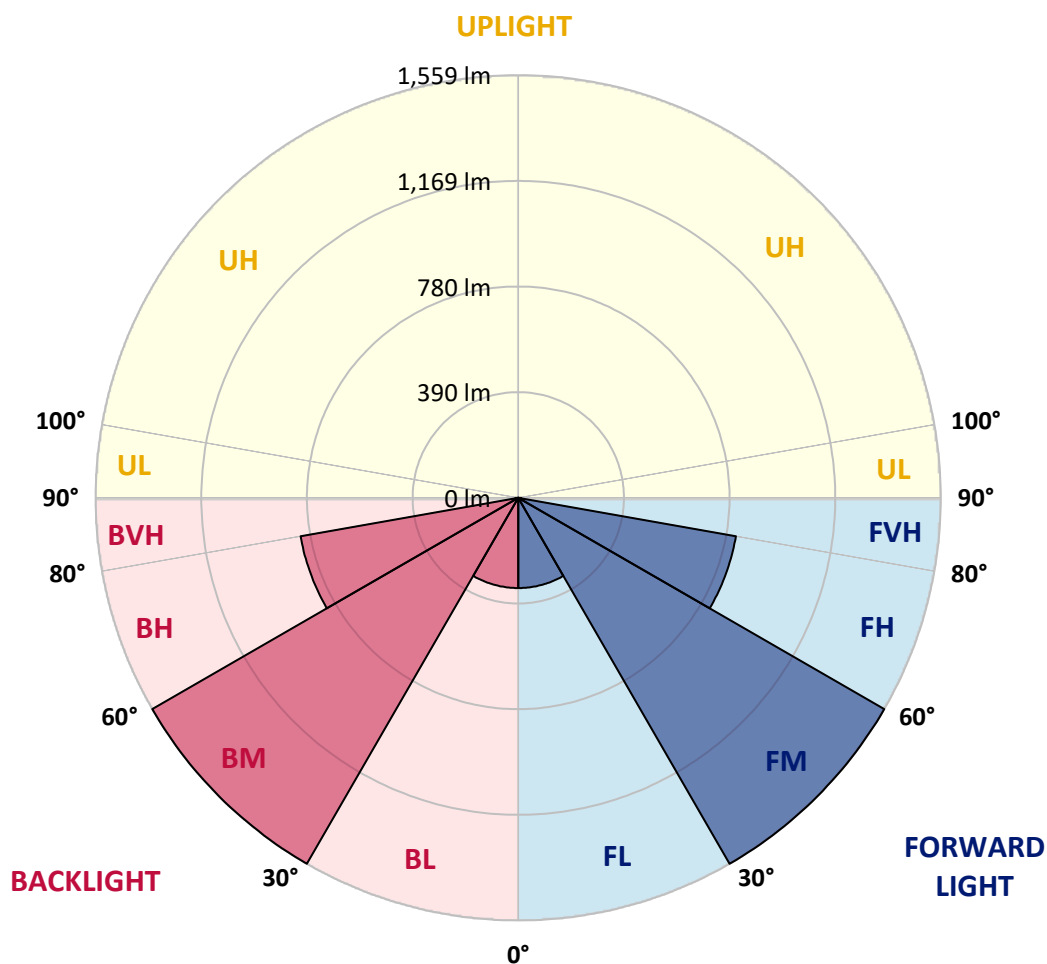
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 332.8  | 6.1       |                         |      |         |
| FM   | (30°-60°)   | 1559.2 | 28.7      |                         |      |         |
| FH   | (60°-80°)   | 815.6  | 15.0      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 10.7   | 0.2       |                         |      | G1/100  |
| BL   | (0°-30°)    | 332.8  | 6.1       | B1/500                  |      |         |
| BM   | (30°-60°)   | 1559.2 | 28.7      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 815.6  | 15.0      | B2/1000                 |      | G1/1800 |
| BVH  | (80°-90°)   | 10.7   | 0.2       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G1**

Type V Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 647.0  | 647.0  | 647.0  | 647.0  | 647.0  | 647.0  | 647.0  | 647.0  | 647.0  | 647.0  | 647.0  |
| 2.5°  | 651.4  | 649.2  | 650.9  | 649.4  | 648.4  | 647.3  | 647.8  | 649.7  | 650.6  | 650.9  | 650.9  |
| 5°    | 660.1  | 658.2  | 659.0  | 659.0  | 657.1  | 656.5  | 656.8  | 658.2  | 659.8  | 659.8  | 659.8  |
| 7.5°  | 674.2  | 672.4  | 674.2  | 673.2  | 671.6  | 671.0  | 670.8  | 671.8  | 674.2  | 674.2  | 673.4  |
| 10°   | 691.5  | 689.3  | 690.3  | 689.8  | 687.9  | 687.1  | 686.9  | 688.5  | 690.6  | 690.3  | 689.8  |
| 12.5° | 710.3  | 707.9  | 709.2  | 707.6  | 707.0  | 706.2  | 706.2  | 705.9  | 707.2  | 706.2  | 706.7  |
| 15°   | 731.3  | 729.7  | 730.2  | 729.1  | 729.9  | 729.4  | 727.2  | 726.1  | 726.6  | 725.0  | 725.3  |
| 17.5° | 756.1  | 752.3  | 754.2  | 753.7  | 753.7  | 754.7  | 751.2  | 749.9  | 750.9  | 749.3  | 750.7  |
| 20°   | 784.7  | 780.9  | 781.8  | 780.6  | 779.3  | 780.4  | 776.0  | 777.2  | 778.0  | 776.8  | 779.3  |
| 22.5° | 816.1  | 811.2  | 811.0  | 811.5  | 808.5  | 808.7  | 805.8  | 808.5  | 810.2  | 807.1  | 810.2  |
| 25°   | 848.3  | 843.2  | 846.6  | 845.3  | 841.5  | 842.3  | 840.1  | 842.9  | 844.2  | 840.4  | 844.8  |
| 27.5° | 882.4  | 878.8  | 882.1  | 882.9  | 878.3  | 881.6  | 878.3  | 880.8  | 882.1  | 876.4  | 880.8  |
| 30°   | 922.2  | 918.7  | 921.7  | 923.8  | 918.4  | 923.6  | 920.9  | 922.5  | 922.8  | 915.9  | 920.0  |
| 32.5° | 965.7  | 960.1  | 967.8  | 968.8  | 962.9  | 969.1  | 965.7  | 967.8  | 969.1  | 959.9  | 966.2  |
| 35°   | 1018.5 | 1011.7 | 1020.4 | 1019.1 | 1013.9 | 1019.1 | 1015.8 | 1019.1 | 1022.3 | 1011.2 | 1017.9 |
| 37.5° | 1075.5 | 1068.5 | 1077.7 | 1075.2 | 1070.3 | 1073.9 | 1071.9 | 1074.2 | 1079.3 | 1067.3 | 1074.7 |
| 40°   | 1138.3 | 1129.6 | 1142.1 | 1137.8 | 1133.0 | 1132.5 | 1133.6 | 1135.0 | 1141.8 | 1128.4 | 1132.8 |
| 42.5° | 1205.4 | 1196.1 | 1214.9 | 1208.1 | 1201.5 | 1197.2 | 1200.7 | 1203.5 | 1210.0 | 1195.0 | 1202.9 |
| 45°   | 1282.0 | 1271.4 | 1295.9 | 1287.7 | 1277.4 | 1268.3 | 1274.1 | 1278.2 | 1287.7 | 1269.8 | 1279.0 |
| 47.5° | 1366.5 | 1354.5 | 1380.8 | 1378.3 | 1361.4 | 1341.7 | 1354.8 | 1366.5 | 1373.7 | 1351.9 | 1359.3 |
| 50°   | 1449.2 | 1439.9 | 1474.4 | 1477.3 | 1456.6 | 1429.1 | 1447.3 | 1465.0 | 1467.0 | 1438.3 | 1441.9 |
| 52.5° | 1526.7 | 1517.4 | 1567.3 | 1586.2 | 1567.6 | 1534.8 | 1554.2 | 1572.2 | 1557.8 | 1520.7 | 1521.8 |
| 55°   | 1588.6 | 1581.0 | 1644.5 | 1693.1 | 1699.3 | 1672.4 | 1683.8 | 1683.3 | 1635.8 | 1578.8 | 1580.7 |
| 57.5° | 1603.6 | 1602.5 | 1682.7 | 1785.6 | 1851.0 | 1854.3 | 1831.7 | 1773.9 | 1671.6 | 1594.9 | 1590.0 |
| 60°   | 1535.4 | 1542.2 | 1652.4 | 1833.8 | 2008.4 | 2081.0 | 1983.1 | 1818.0 | 1630.9 | 1524.5 | 1512.0 |
| 62.5° | 1331.4 | 1349.4 | 1482.3 | 1774.9 | 2135.5 | 2341.7 | 2104.4 | 1750.9 | 1463.9 | 1325.1 | 1316.9 |
| 65°   | 954.2  | 985.5  | 1132.3 | 1514.6 | 2124.1 | 2570.9 | 2087.0 | 1502.4 | 1143.2 | 983.1  | 971.3  |
| 67.5° | 432.9  | 464.8  | 589.5  | 1037.1 | 1846.3 | 2508.7 | 1842.0 | 1048.0 | 618.9  | 466.5  | 459.6  |
| 70°   | 156.8  | 162.3  | 202.4  | 415.1  | 1180.0 | 1998.9 | 1230.5 | 418.2  | 215.2  | 172.9  | 170.8  |
| 72.5° | 94.9   | 95.7   | 104.2  | 148.6  | 410.0  | 1213.6 | 427.4  | 153.5  | 106.4  | 94.4   | 96.0   |
| 75°   | 60.3   | 59.8   | 74.2   | 90.8   | 145.3  | 409.4  | 152.5  | 90.8   | 73.9   | 67.3   | 68.0   |
| 77.5° | 43.4   | 44.7   | 53.2   | 68.0   | 91.6   | 138.9  | 90.0   | 64.9   | 53.2   | 43.7   | 44.5   |
| 80°   | 32.5   | 33.3   | 38.7   | 52.9   | 64.4   | 86.5   | 57.3   | 48.0   | 40.1   | 27.3   | 28.1   |
| 82.5° | 23.5   | 23.5   | 25.3   | 38.4   | 39.3   | 46.6   | 31.1   | 33.8   | 26.4   | 19.4   | 19.4   |
| 85°   | 13.9   | 13.6   | 15.8   | 23.0   | 20.5   | 17.2   | 14.1   | 20.7   | 16.6   | 12.0   | 11.7   |
| 87.5° | 4.9    | 5.2    | 4.9    | 6.6    | 5.4    | 4.6    | 4.4    | 5.7    | 4.6    | 4.1    | 3.8    |
| 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)