

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: P963529

Luminaire Tested: **NAV-SB3A-740-U-5WQ**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P963529  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB3A-740-U-5WQ  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 70 CRI, 4000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

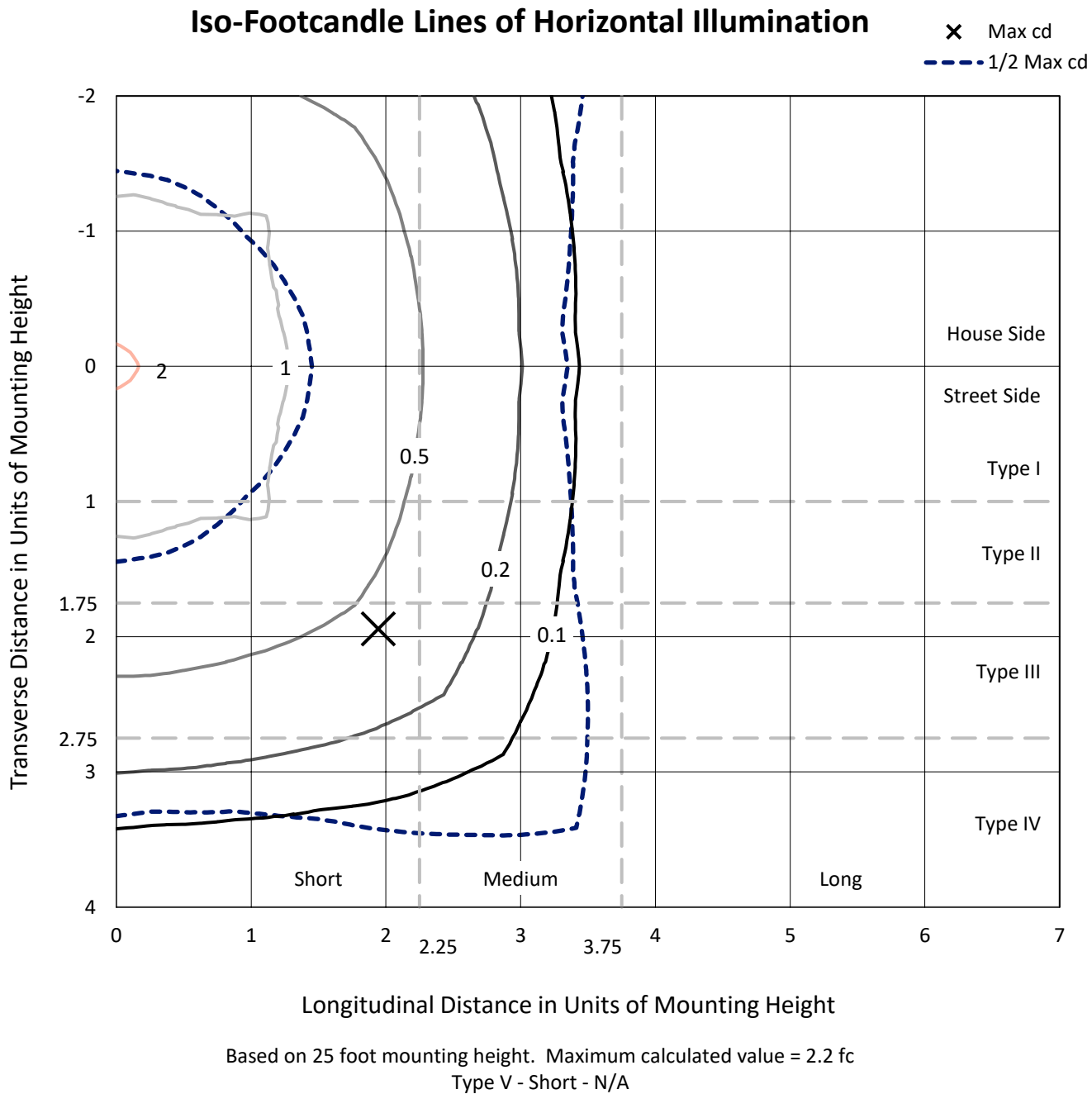
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14763.1 lumens  
Efficiency: N/A  
Efficacy: 174.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B4 - U0 - G2

Input Watts (W): 84.7  
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

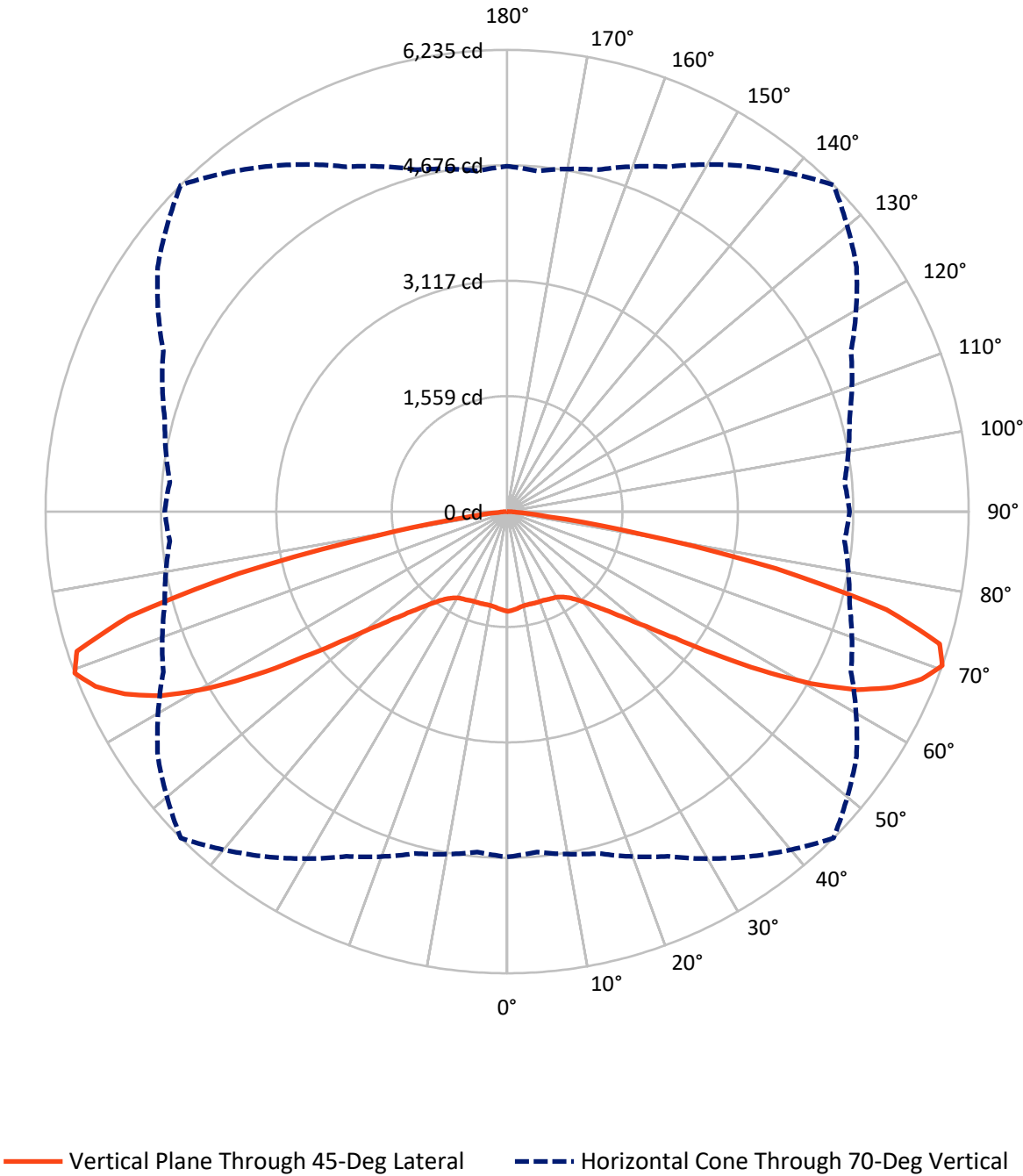


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Luminous Intensity Polar Plot



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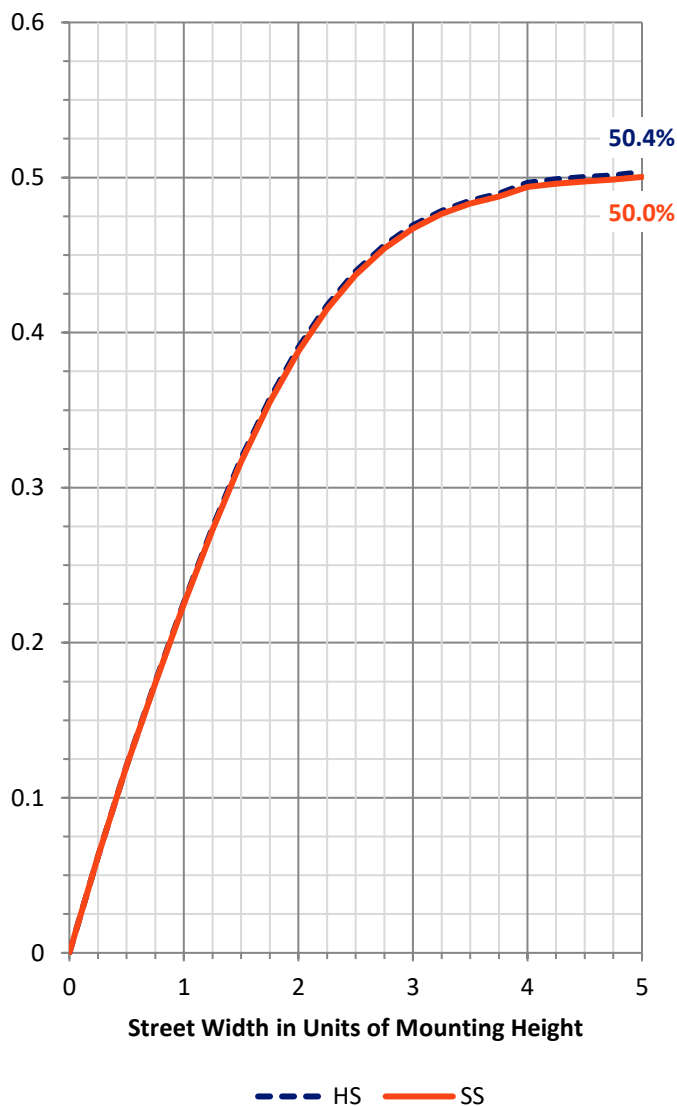
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 7381.5   | 0.0    | 7381.5  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 7381.5   | 0.0    | 7381.5  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 14763.1  | 0.0    | 14763.1 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 125.3   | 0.8       |
| 10°-20°   | 367.8   | 2.5       |
| 20°-30°   | 612.1   | 4.1       |
| 30°-40°   | 925.7   | 6.3       |
| 40°-50°   | 1538.3  | 10.4      |
| 50°-60°   | 2902.8  | 19.7      |
| 60°-70°   | 4901.5  | 33.2      |
| 70°-80°   | 3220.8  | 21.8      |
| 80°-90°   | 168.7   | 1.1       |
| 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°    | 14763.1 | 100.0     |
| 0°-180°   | 14763.1 | 100.0     |

**Coefficient of Utilization**



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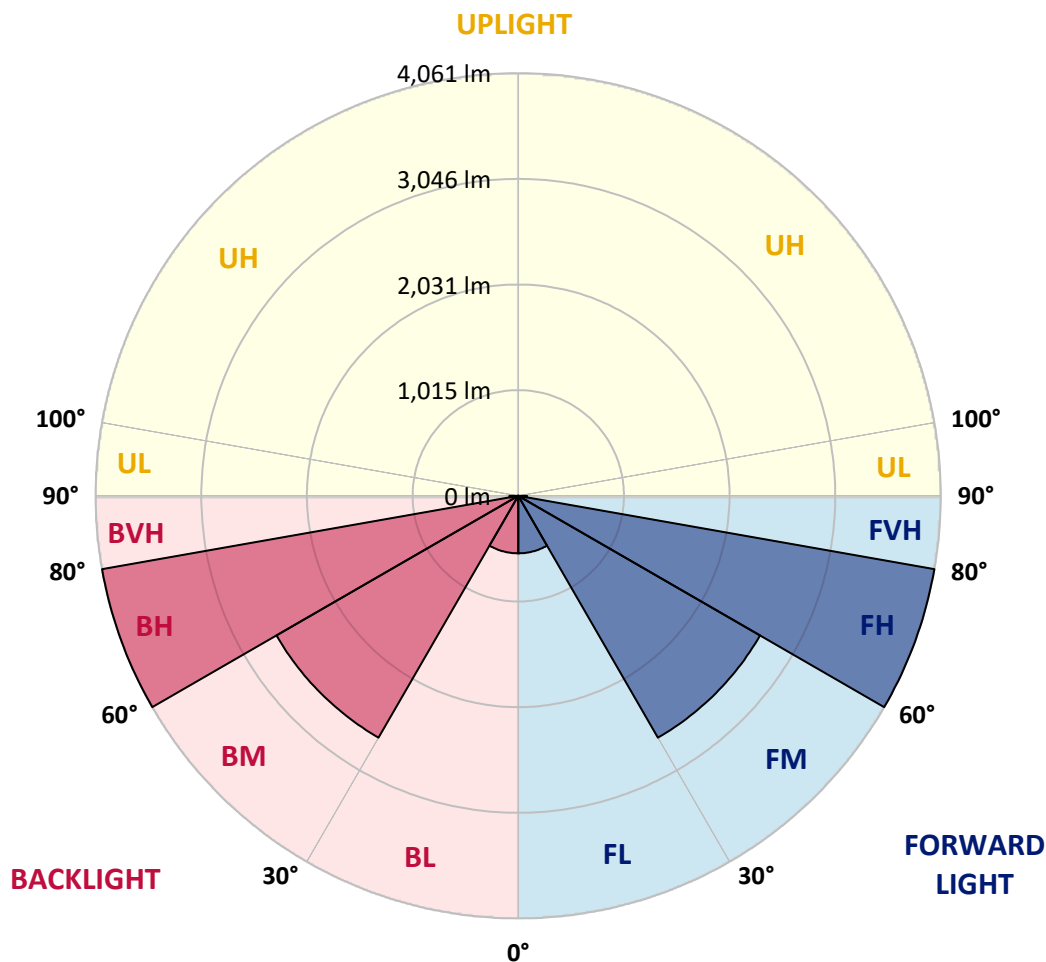
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 552.6  | 3.7       |                         |      |         |
| FM   | (30°-60°)   | 2683.4 | 18.2      |                         |      |         |
| FH   | (60°-80°)   | 4061.1 | 27.5      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 84.4   | 0.6       |                         |      | G1/100  |
| BL   | (0°-30°)    | 552.6  | 3.7       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 2683.4 | 18.2      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 4061.1 | 27.5      | B4/5000                 |      | G2/5000 |
| BVH  | (80°-90°)   | 84.4   | 0.6       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B4-U0-G2**

Type V Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1346.6 | 1346.6 | 1346.6 | 1346.6 | 1346.6 | 1346.6 | 1346.6 | 1346.6 | 1346.6 | 1346.6 | 1346.6 |
| 2.5°  | 1338.2 | 1342.1 | 1340.6 | 1337.5 | 1337.5 | 1335.2 | 1337.5 | 1339.1 | 1341.3 | 1342.9 | 1342.1 |
| 5°    | 1320.6 | 1323.7 | 1322.9 | 1320.6 | 1321.3 | 1319.1 | 1320.6 | 1322.9 | 1324.4 | 1325.2 | 1325.2 |
| 7.5°  | 1305.2 | 1308.3 | 1306.8 | 1303.0 | 1303.0 | 1300.6 | 1301.4 | 1303.7 | 1306.1 | 1306.8 | 1306.8 |
| 10°   | 1301.4 | 1304.5 | 1299.9 | 1293.8 | 1291.4 | 1288.3 | 1289.1 | 1291.4 | 1296.0 | 1298.4 | 1298.4 |
| 12.5° | 1303.0 | 1305.2 | 1300.6 | 1291.4 | 1289.1 | 1286.1 | 1286.1 | 1288.3 | 1294.5 | 1297.5 | 1298.4 |
| 15°   | 1307.6 | 1309.8 | 1303.0 | 1292.9 | 1290.7 | 1288.3 | 1287.6 | 1290.7 | 1297.5 | 1303.0 | 1303.7 |
| 17.5° | 1316.0 | 1318.3 | 1307.6 | 1293.8 | 1290.7 | 1291.4 | 1290.7 | 1292.9 | 1303.7 | 1313.7 | 1313.7 |
| 20°   | 1323.7 | 1325.2 | 1310.7 | 1293.8 | 1290.7 | 1291.4 | 1290.7 | 1295.3 | 1309.1 | 1322.9 | 1323.7 |
| 22.5° | 1325.9 | 1327.5 | 1313.7 | 1299.1 | 1296.8 | 1297.5 | 1296.8 | 1301.4 | 1314.5 | 1328.3 | 1328.3 |
| 25°   | 1326.8 | 1329.0 | 1318.3 | 1306.8 | 1310.7 | 1312.2 | 1310.7 | 1311.4 | 1321.3 | 1333.6 | 1332.9 |
| 27.5° | 1338.2 | 1341.3 | 1331.4 | 1321.3 | 1323.7 | 1322.9 | 1325.2 | 1327.5 | 1335.2 | 1347.5 | 1344.4 |
| 30°   | 1362.0 | 1364.4 | 1355.9 | 1345.9 | 1344.4 | 1339.1 | 1345.9 | 1353.6 | 1362.0 | 1372.8 | 1370.5 |
| 32.5° | 1401.2 | 1405.8 | 1395.0 | 1384.3 | 1377.4 | 1374.3 | 1379.6 | 1392.8 | 1404.2 | 1415.7 | 1411.1 |
| 35°   | 1466.4 | 1469.4 | 1459.5 | 1439.5 | 1427.2 | 1427.2 | 1431.8 | 1448.7 | 1467.2 | 1481.7 | 1476.4 |
| 37.5° | 1558.5 | 1562.3 | 1544.7 | 1520.9 | 1502.4 | 1502.4 | 1508.6 | 1526.2 | 1553.9 | 1574.6 | 1566.9 |
| 40°   | 1670.5 | 1675.9 | 1653.6 | 1629.0 | 1611.4 | 1608.3 | 1616.0 | 1636.0 | 1662.0 | 1688.2 | 1679.7 |
| 42.5° | 1805.5 | 1811.7 | 1782.6 | 1761.1 | 1747.2 | 1747.2 | 1751.1 | 1769.5 | 1793.2 | 1825.5 | 1823.2 |
| 45°   | 1978.2 | 1988.9 | 1949.0 | 1927.6 | 1914.5 | 1917.6 | 1919.9 | 1936.0 | 1957.5 | 1994.3 | 1992.8 |
| 47.5° | 2183.9 | 2194.6 | 2152.4 | 2130.2 | 2127.8 | 2142.5 | 2133.2 | 2144.7 | 2156.2 | 2198.4 | 2186.1 |
| 50°   | 2417.2 | 2435.5 | 2406.4 | 2404.9 | 2409.5 | 2436.3 | 2414.8 | 2420.9 | 2407.9 | 2434.8 | 2418.7 |
| 52.5° | 2702.6 | 2729.5 | 2724.0 | 2733.3 | 2784.7 | 2840.0 | 2790.9 | 2769.3 | 2720.2 | 2728.7 | 2700.3 |
| 55°   | 3048.7 | 3089.4 | 3097.0 | 3152.3 | 3268.9 | 3381.7 | 3277.3 | 3190.6 | 3086.3 | 3067.1 | 3037.2 |
| 57.5° | 3442.3 | 3474.5 | 3511.3 | 3624.2 | 3842.1 | 4042.4 | 3842.1 | 3650.2 | 3486.0 | 3446.9 | 3419.3 |
| 60°   | 3865.9 | 3905.8 | 3941.1 | 4107.6 | 4431.4 | 4713.1 | 4425.2 | 4120.6 | 3903.5 | 3850.5 | 3804.5 |
| 62.5° | 4320.9 | 4372.3 | 4396.8 | 4581.9 | 4959.4 | 5295.5 | 4964.7 | 4595.6 | 4354.7 | 4297.9 | 4251.9 |
| 65°   | 4757.5 | 4799.8 | 4827.3 | 5024.5 | 5385.2 | 5722.1 | 5409.7 | 5046.1 | 4798.2 | 4723.8 | 4686.9 |
| 67.5° | 4960.9 | 4983.9 | 5051.4 | 5274.8 | 5655.3 | 6039.8 | 5719.8 | 5298.5 | 5021.5 | 4891.1 | 4892.6 |
| 70°   | 4663.1 | 4616.4 | 4779.1 | 5136.6 | 5687.5 | 6234.7 | 5761.2 | 5125.8 | 4786.6 | 4574.9 | 4625.5 |
| 72.5° | 3603.5 | 3522.9 | 3805.3 | 4416.8 | 5319.2 | 6110.3 | 5356.0 | 4451.4 | 3981.0 | 3551.3 | 3657.9 |
| 75°   | 1960.5 | 1869.3 | 2259.1 | 3032.6 | 4241.9 | 5296.2 | 4339.3 | 3119.3 | 2515.4 | 1946.0 | 2072.5 |
| 77.5° | 553.3  | 518.8  | 833.3  | 1467.2 | 2551.4 | 3718.6 | 2649.6 | 1499.4 | 988.3  | 586.3  | 651.5  |
| 80°   | 169.5  | 164.2  | 222.5  | 442.0  | 1083.5 | 1781.0 | 1041.3 | 447.4  | 283.1  | 178.8  | 188.8  |
| 82.5° | 100.6  | 92.0   | 110.5  | 161.1  | 276.2  | 559.4  | 268.5  | 168.0  | 135.1  | 90.5   | 98.2   |
| 85°   | 57.5   | 53.7   | 65.2   | 78.3   | 92.9   | 118.9  | 77.5   | 79.8   | 72.2   | 48.4   | 50.6   |
| 87.5° | 23.8   | 21.5   | 25.3   | 24.6   | 21.5   | 27.7   | 20.7   | 24.6   | 29.1   | 19.2   | 17.6   |
| 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)