

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: P960923

Luminaire Tested: **NAV-SB1D-750-U-5MQ**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P960923  
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-SB1D-750-U-5MQ  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 5000K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE V MEDIUM OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11560 lumens  
Efficiency: N/A  
Efficacy: 145.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B4 - U0 - G2

Input Watts (W): 79.6  
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



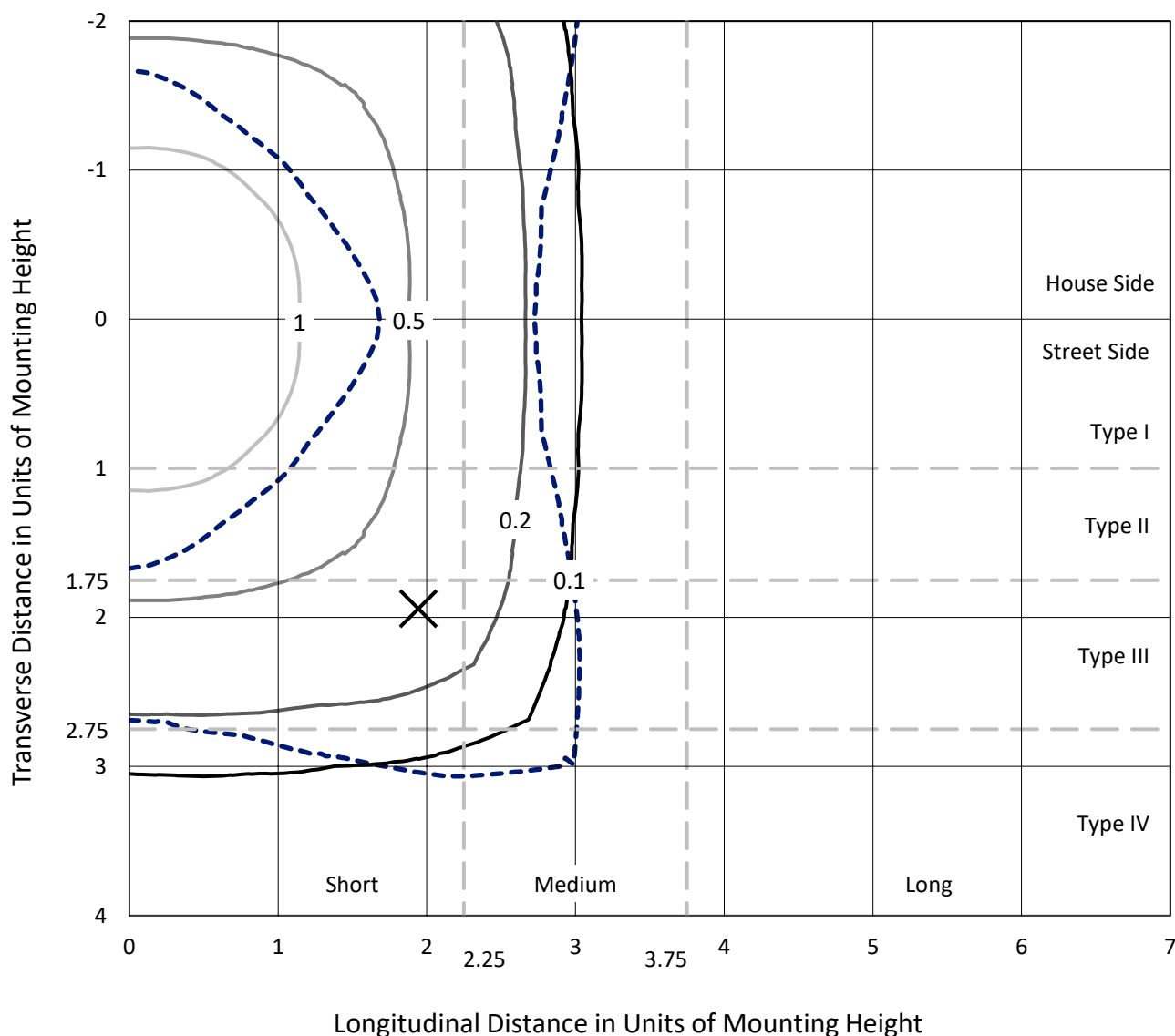
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

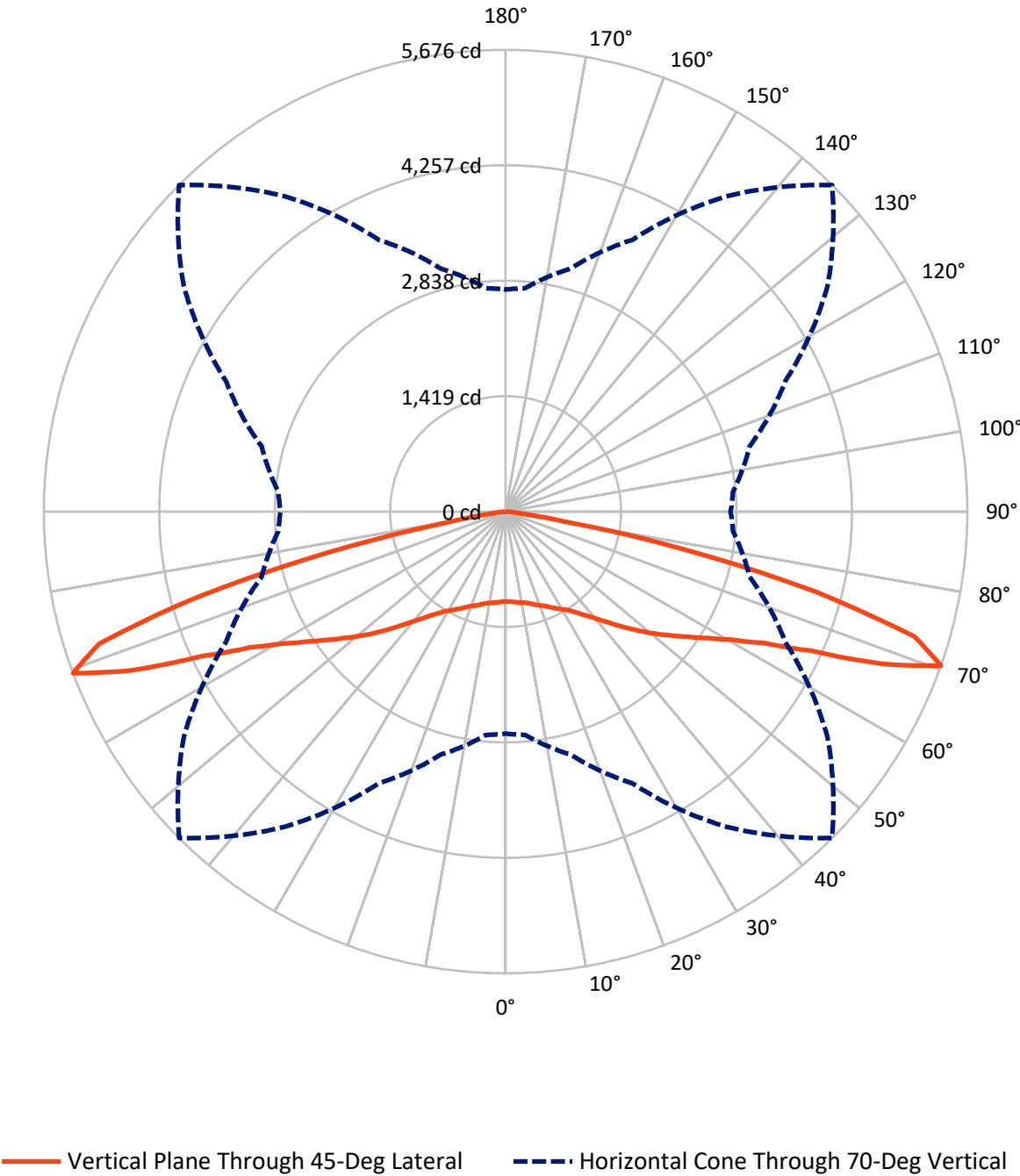


Based on 25 foot mounting height. Maximum calculated value = 1.8 fc

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    | 5780.0   | 0.0    | 5780.0  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 5780.0   | 0.0    | 5780.0  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 11560.0  | 0.0    | 11560.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 107.6   | 0.9       |
| 10°-20°   | 333.6   | 2.9       |
| 20°-30°   | 596.2   | 5.2       |
| 30°-40°   | 966.4   | 8.4       |
| 40°-50°   | 1574.0  | 13.6      |
| 50°-60°   | 2399.9  | 20.8      |
| 60°-70°   | 3570.2  | 30.9      |
| 70°-80°   | 1945.9  | 16.8      |
| 80°-90°   | 66.3    | 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°    | 11560.0 | 100.0     |
| 0°-180°   | 11560.0 | 100.0     |

**Coefficient of Utilization**



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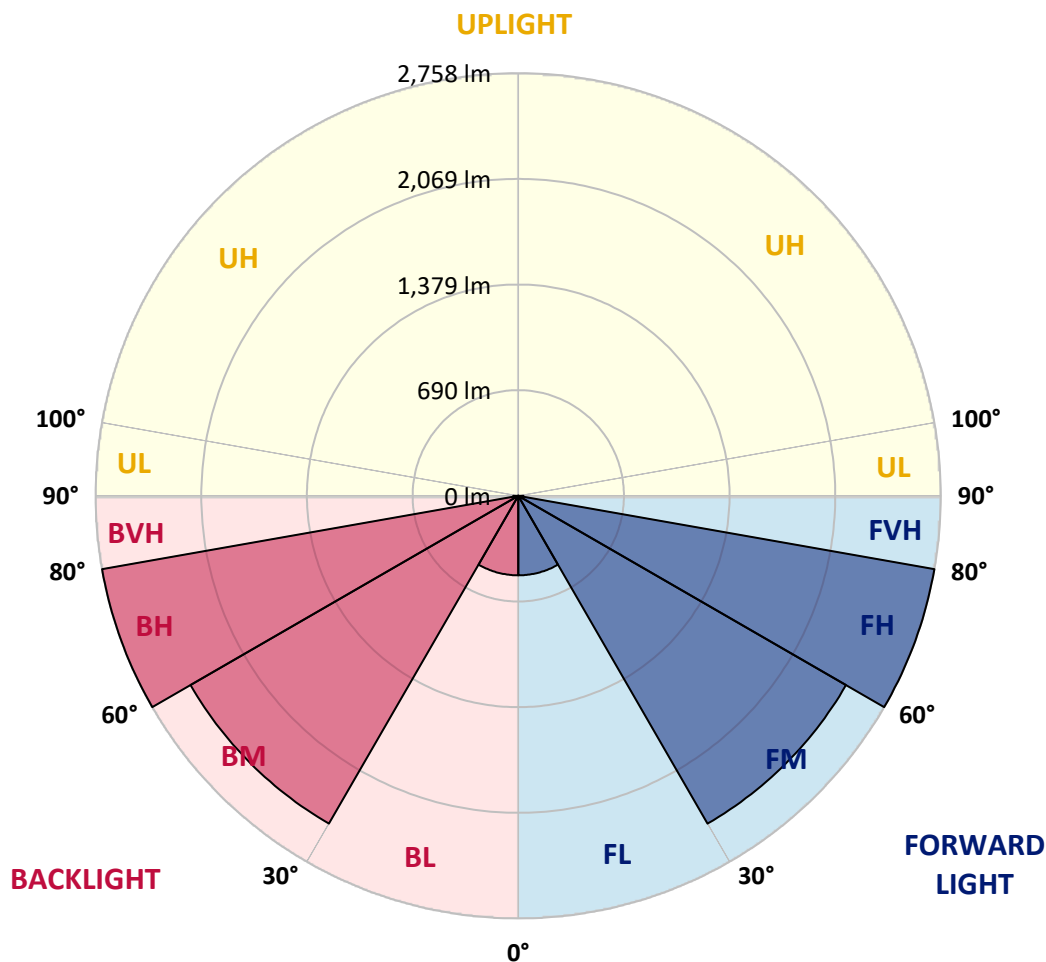
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 518.7  | 4.5       |                         |      |         |
| FM   | (30°-60°)   | 2470.1 | 21.4      |                         |      |         |
| FH   | (60°-80°)   | 2758.1 | 23.9      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 33.1   | 0.3       |                         |      | G1/100  |
| BL   | (0°-30°)    | 518.7  | 4.5       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 2470.1 | 21.4      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 2758.1 | 23.9      | B4/5000                 |      | G2/5000 |
| BVH  | (80°-90°)   | 33.1   | 0.3       |                         |      | 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°    | 1107.3 | 1107.3 | 1107.3 | 1107.3 | 1107.3 | 1107.3 | 1107.3 | 1107.3 | 1107.3 | 1107.3 | 1107.3 |
| 2.5°  | 1112.5 | 1113.7 | 1111.4 | 1110.2 | 1109.0 | 1107.3 | 1107.9 | 1110.8 | 1113.1 | 1112.5 | 1113.1 |
| 5°    | 1121.9 | 1123.0 | 1121.2 | 1120.6 | 1118.4 | 1117.8 | 1117.8 | 1120.6 | 1122.4 | 1121.2 | 1121.9 |
| 7.5°  | 1132.3 | 1134.1 | 1131.1 | 1130.6 | 1129.3 | 1128.2 | 1127.6 | 1130.6 | 1132.3 | 1132.3 | 1132.3 |
| 10°   | 1142.2 | 1143.9 | 1141.5 | 1139.8 | 1138.7 | 1138.7 | 1137.5 | 1139.8 | 1142.8 | 1142.2 | 1142.2 |
| 12.5° | 1152.6 | 1153.7 | 1151.4 | 1150.3 | 1150.3 | 1152.0 | 1150.3 | 1151.4 | 1153.7 | 1152.6 | 1152.0 |
| 15°   | 1165.3 | 1165.9 | 1165.3 | 1167.1 | 1170.0 | 1175.8 | 1170.6 | 1169.4 | 1170.6 | 1167.7 | 1167.7 |
| 17.5° | 1182.7 | 1184.0 | 1186.2 | 1190.3 | 1194.3 | 1204.8 | 1195.6 | 1192.6 | 1192.6 | 1186.8 | 1186.8 |
| 20°   | 1204.3 | 1206.0 | 1209.5 | 1216.5 | 1221.7 | 1231.5 | 1222.2 | 1218.2 | 1216.5 | 1208.9 | 1208.9 |
| 22.5° | 1226.9 | 1229.8 | 1235.0 | 1244.2 | 1253.6 | 1262.9 | 1253.6 | 1246.6 | 1241.4 | 1231.5 | 1230.9 |
| 25°   | 1253.0 | 1256.4 | 1264.6 | 1279.7 | 1292.4 | 1305.8 | 1294.8 | 1280.8 | 1270.4 | 1256.4 | 1255.9 |
| 27.5° | 1290.2 | 1294.2 | 1304.1 | 1322.7 | 1338.9 | 1350.5 | 1340.1 | 1322.0 | 1307.6 | 1290.7 | 1290.2 |
| 30°   | 1342.3 | 1346.4 | 1358.0 | 1377.8 | 1388.8 | 1396.4 | 1389.4 | 1375.4 | 1358.0 | 1338.9 | 1338.9 |
| 32.5° | 1409.7 | 1414.9 | 1427.7 | 1446.3 | 1448.5 | 1449.8 | 1447.4 | 1440.4 | 1427.7 | 1404.5 | 1405.1 |
| 35°   | 1495.0 | 1500.8 | 1515.4 | 1530.4 | 1528.1 | 1530.4 | 1526.9 | 1524.6 | 1515.4 | 1488.6 | 1488.6 |
| 37.5° | 1599.5 | 1606.5 | 1621.6 | 1633.1 | 1627.3 | 1624.4 | 1625.0 | 1625.5 | 1620.3 | 1590.8 | 1590.8 |
| 40°   | 1720.8 | 1730.1 | 1741.1 | 1753.3 | 1743.4 | 1734.7 | 1740.4 | 1745.2 | 1740.4 | 1710.3 | 1710.3 |
| 42.5° | 1845.5 | 1858.8 | 1870.5 | 1887.9 | 1879.7 | 1868.8 | 1876.9 | 1882.1 | 1872.3 | 1839.8 | 1842.0 |
| 45°   | 1984.2 | 1997.0 | 2012.1 | 2038.2 | 2032.4 | 2020.8 | 2032.4 | 2033.6 | 2016.8 | 1978.5 | 1982.6 |
| 47.5° | 2127.6 | 2140.9 | 2163.6 | 2198.4 | 2196.1 | 2183.4 | 2198.4 | 2190.3 | 2168.8 | 2123.0 | 2120.0 |
| 50°   | 2263.4 | 2282.0 | 2316.8 | 2365.5 | 2370.2 | 2354.5 | 2374.8 | 2359.1 | 2323.2 | 2265.8 | 2264.5 |
| 52.5° | 2391.1 | 2410.8 | 2465.9 | 2532.1 | 2549.0 | 2528.6 | 2555.9 | 2528.6 | 2474.7 | 2401.0 | 2394.0 |
| 55°   | 2525.2 | 2547.2 | 2612.7 | 2699.2 | 2733.0 | 2717.8 | 2743.3 | 2702.1 | 2625.5 | 2536.2 | 2524.0 |
| 57.5° | 2683.0 | 2696.4 | 2774.7 | 2877.4 | 2934.3 | 2937.8 | 2949.3 | 2879.7 | 2786.9 | 2685.3 | 2671.4 |
| 60°   | 2854.2 | 2872.8 | 2958.0 | 3081.1 | 3171.0 | 3200.0 | 3188.0 | 3084.6 | 2976.7 | 2860.0 | 2841.4 |
| 62.5° | 3073.6 | 3093.9 | 3196.1 | 3343.4 | 3485.6 | 3557.6 | 3510.0 | 3360.3 | 3226.8 | 3086.9 | 3062.6 |
| 65°   | 3255.2 | 3277.8 | 3462.4 | 3725.4 | 3984.2 | 4128.7 | 4009.1 | 3733.5 | 3493.2 | 3295.9 | 3263.4 |
| 67.5° | 3123.5 | 3151.4 | 3440.9 | 3923.8 | 4567.4 | 4998.6 | 4589.4 | 3983.0 | 3512.4 | 3244.7 | 3204.8 |
| 70°   | 2730.0 | 2756.1 | 3093.9 | 3684.2 | 4731.7 | 5676.4 | 4830.3 | 3792.6 | 3104.9 | 2805.4 | 2765.4 |
| 72.5° | 1812.5 | 1896.7 | 2238.4 | 2946.5 | 4225.0 | 5252.8 | 4266.8 | 2886.7 | 2076.5 | 1808.4 | 1749.8 |
| 75°   | 601.3  | 668.6  | 901.9  | 1527.5 | 2829.8 | 3928.4 | 2694.0 | 1351.7 | 714.4  | 514.2  | 486.4  |
| 77.5° | 151.5  | 174.7  | 240.9  | 437.1  | 1128.8 | 2236.7 | 1016.2 | 356.9  | 194.4  | 135.8  | 121.3  |
| 80°   | 73.7   | 81.3   | 116.0  | 145.7  | 282.6  | 710.9  | 265.3  | 136.9  | 91.7   | 70.8   | 65.0   |
| 82.5° | 40.6   | 41.2   | 65.6   | 82.4   | 105.1  | 184.0  | 109.1  | 80.1   | 52.8   | 42.9   | 42.9   |
| 85°   | 24.9   | 24.4   | 34.8   | 44.1   | 44.1   | 65.6   | 52.3   | 44.1   | 30.1   | 26.6   | 27.9   |
| 87.5° | 9.8    | 9.8    | 12.8   | 13.9   | 12.2   | 16.8   | 13.3   | 14.6   | 11.6   | 11.1   | 11.6   |
| 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)