

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: P961296

Luminaire Tested: **NAV-SB2A-722-U-5NQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961296
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-SB2A-722-U-5NQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2200K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V NARROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7960.1 lumens
Efficiency: N/A
Efficacy: 138.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B3 - U0 - G1

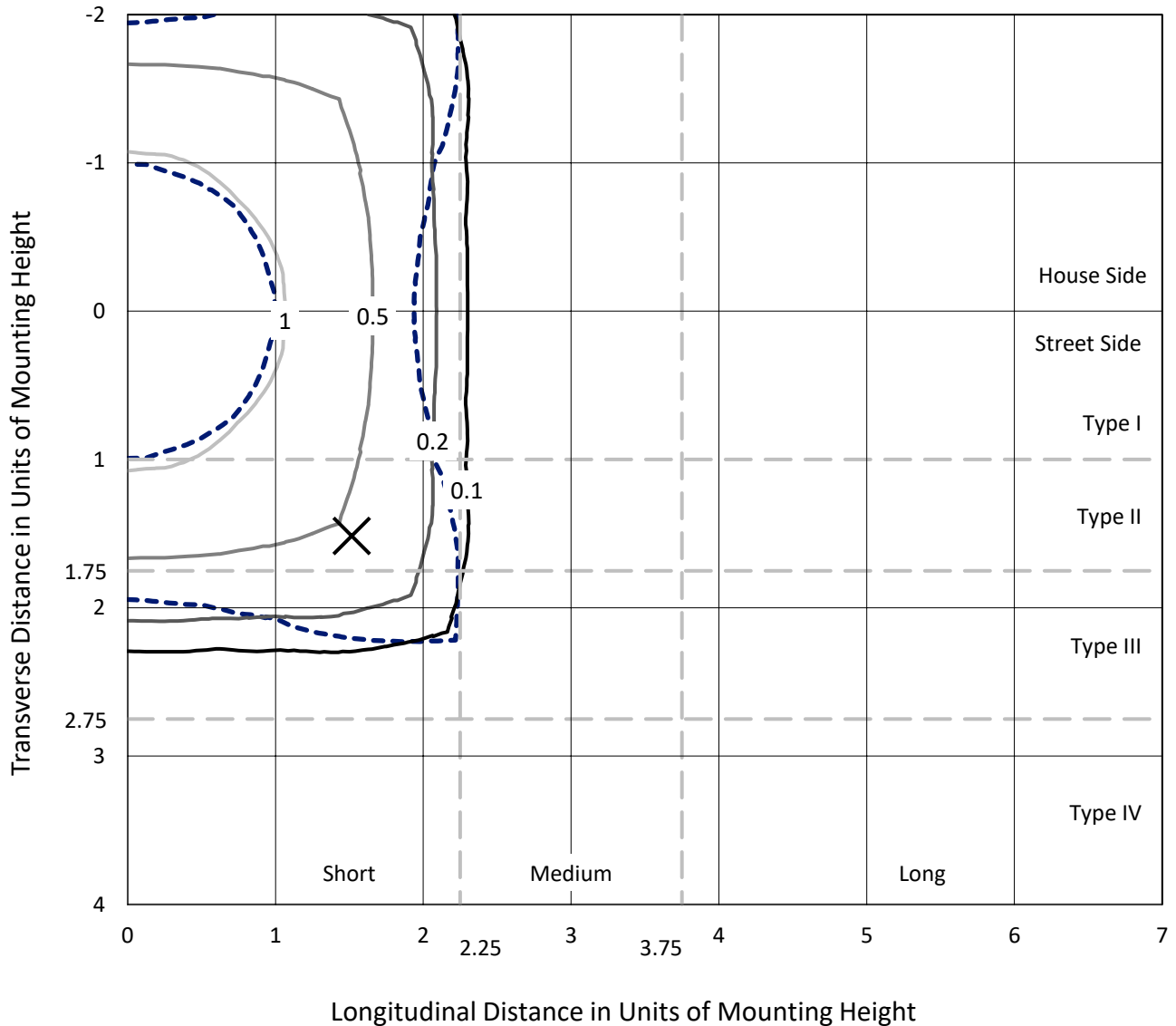
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

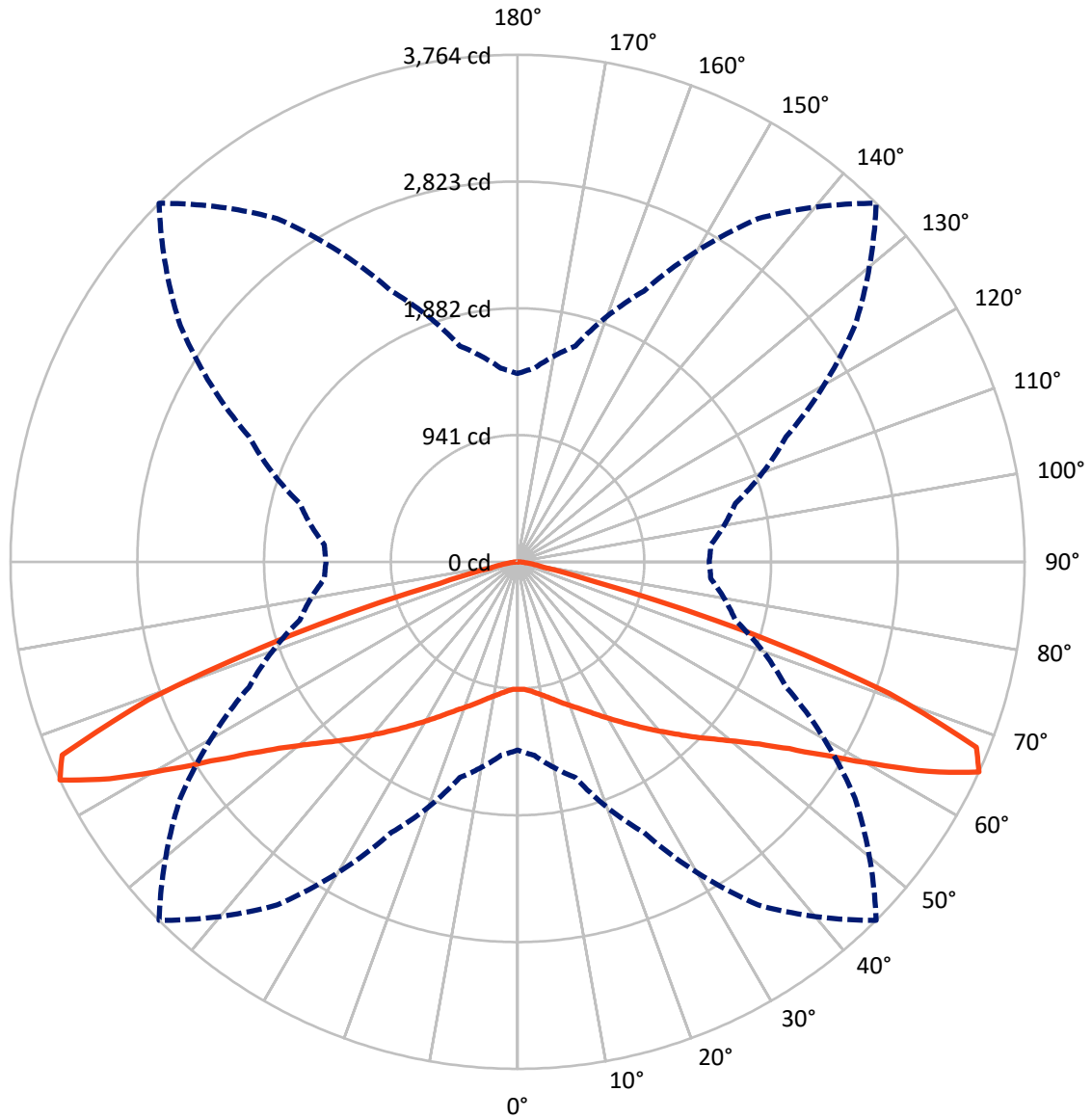
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.5 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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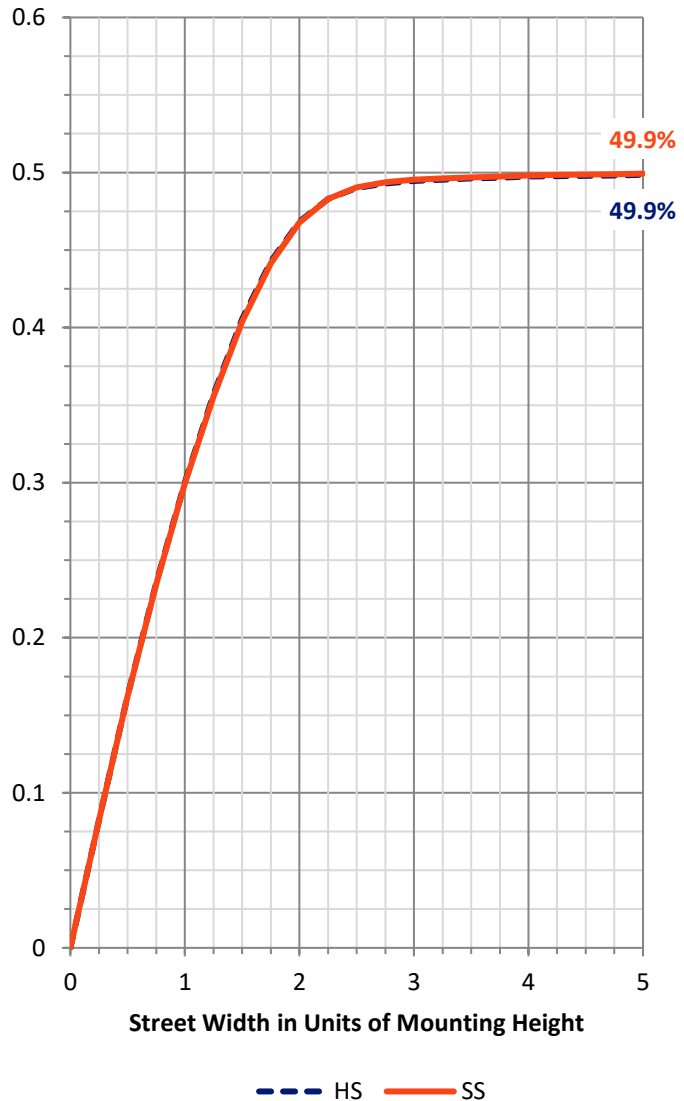
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 3980.1 | 0.0 | 3980.1 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 3980.1 | 0.0 | 3980.1 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 7960.1 | 0.0 | 7960.1 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 93.5 | 1.2 |
| 10°-20° | 305.1 | 3.8 |
| 20°-30° | 576.0 | 7.2 |
| 30°-40° | 943.2 | 11.8 |
| 40°-50° | 1462.5 | 18.4 |
| 50°-60° | 2160.3 | 27.1 |
| 60°-70° | 2056.4 | 25.8 |
| 70°-80° | 331.8 | 4.2 |
| 80°-90° | 31.3 | 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° | 7960.1 | 100.0 |
| 0°-180° | 7960.1 | 100.0 |

Coefficient of Utilization



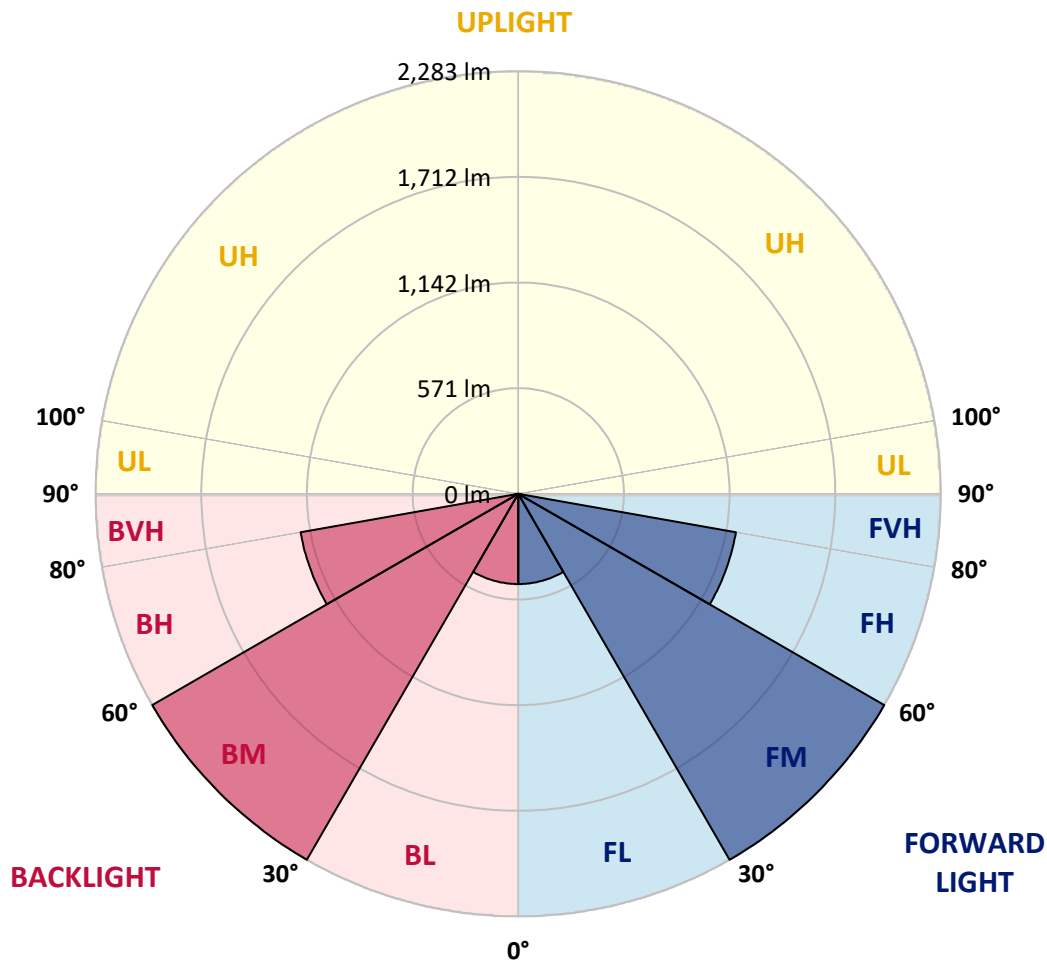
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 487.3 | 6.1 | | | |
| FM (30°-60°) | 2283.0 | 28.7 | | | |
| FH (60°-80°) | 1194.1 | 15.0 | | | G1/1800 |
| FVH (80°-90°) | 15.6 | 0.2 | | | G1/100 |
| BL (0°-30°) | 487.3 | 6.1 | B1/500 | | |
| BM (30°-60°) | 2283.0 | 28.7 | B2/2500 | | |
| BH (60°-80°) | 1194.1 | 15.0 | B3/2500 | | G1/1800 |
| BVH (80°-90°) | 15.6 | 0.2 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G1

Type V Short



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 947.3 | 947.3 | 947.3 | 947.3 | 947.3 | 947.3 | 947.3 | 947.3 | 947.3 | 947.3 | 947.3 |
| 2.5° | 953.8 | 950.5 | 952.9 | 950.9 | 949.4 | 947.7 | 948.5 | 951.3 | 952.5 | 952.9 | 952.9 |
| 5° | 966.5 | 963.7 | 964.9 | 964.9 | 962.1 | 961.3 | 961.8 | 963.7 | 966.1 | 966.1 | 966.1 |
| 7.5° | 987.3 | 984.5 | 987.3 | 985.6 | 983.3 | 982.5 | 982.1 | 983.7 | 987.3 | 987.3 | 986.0 |
| 10° | 1012.4 | 1009.2 | 1010.9 | 1010.0 | 1007.3 | 1006.0 | 1005.6 | 1008.1 | 1011.3 | 1010.9 | 1010.0 |
| 12.5° | 1040.0 | 1036.4 | 1038.4 | 1036.0 | 1035.2 | 1034.0 | 1034.0 | 1033.6 | 1035.6 | 1034.0 | 1034.8 |
| 15° | 1070.7 | 1068.4 | 1069.2 | 1067.5 | 1068.8 | 1067.9 | 1064.8 | 1063.1 | 1063.9 | 1061.6 | 1062.0 |
| 17.5° | 1107.1 | 1101.5 | 1104.3 | 1103.5 | 1103.5 | 1105.1 | 1099.9 | 1097.9 | 1099.5 | 1097.1 | 1099.1 |
| 20° | 1149.0 | 1143.4 | 1144.6 | 1143.1 | 1141.0 | 1142.7 | 1136.2 | 1137.9 | 1139.1 | 1137.4 | 1141.0 |
| 22.5° | 1194.9 | 1187.8 | 1187.4 | 1188.2 | 1183.8 | 1184.2 | 1179.8 | 1183.8 | 1186.1 | 1181.8 | 1186.1 |
| 25° | 1242.1 | 1234.5 | 1239.6 | 1237.7 | 1232.0 | 1233.3 | 1230.1 | 1234.1 | 1236.0 | 1230.5 | 1236.9 |
| 27.5° | 1292.0 | 1286.8 | 1291.6 | 1292.8 | 1286.0 | 1290.8 | 1286.0 | 1289.7 | 1291.6 | 1283.2 | 1289.7 |
| 30° | 1350.3 | 1345.1 | 1349.5 | 1352.7 | 1344.7 | 1352.3 | 1348.3 | 1350.7 | 1351.2 | 1341.1 | 1347.2 |
| 32.5° | 1413.8 | 1405.8 | 1417.1 | 1418.6 | 1409.8 | 1419.0 | 1413.8 | 1417.1 | 1419.0 | 1405.5 | 1414.6 |
| 35° | 1491.3 | 1481.3 | 1494.1 | 1492.1 | 1484.5 | 1492.1 | 1487.3 | 1492.1 | 1496.9 | 1480.5 | 1490.5 |
| 37.5° | 1574.8 | 1564.4 | 1578.0 | 1574.4 | 1567.2 | 1572.4 | 1569.6 | 1572.8 | 1580.3 | 1562.8 | 1573.6 |
| 40° | 1666.6 | 1653.8 | 1672.2 | 1665.8 | 1659.1 | 1658.2 | 1659.9 | 1661.8 | 1671.8 | 1652.3 | 1658.7 |
| 42.5° | 1764.8 | 1751.3 | 1778.9 | 1768.8 | 1759.3 | 1752.9 | 1758.1 | 1762.1 | 1771.7 | 1749.7 | 1761.3 |
| 45° | 1877.1 | 1861.5 | 1897.5 | 1885.5 | 1870.3 | 1857.1 | 1865.5 | 1871.5 | 1885.5 | 1859.1 | 1872.7 |
| 47.5° | 2000.9 | 1983.4 | 2021.7 | 2018.1 | 1993.3 | 1964.6 | 1983.8 | 2000.9 | 2011.3 | 1979.4 | 1990.1 |
| 50° | 2122.0 | 2108.3 | 2158.6 | 2163.1 | 2132.7 | 2092.3 | 2119.1 | 2145.1 | 2147.9 | 2106.0 | 2111.1 |
| 52.5° | 2235.3 | 2221.8 | 2294.9 | 2322.4 | 2295.3 | 2247.3 | 2275.7 | 2302.0 | 2280.8 | 2226.6 | 2228.1 |
| 55° | 2326.0 | 2314.9 | 2407.9 | 2479.0 | 2488.2 | 2448.6 | 2465.4 | 2464.6 | 2395.1 | 2311.6 | 2314.4 |
| 57.5° | 2348.0 | 2346.3 | 2463.8 | 2614.4 | 2710.2 | 2715.0 | 2681.8 | 2597.1 | 2447.4 | 2335.2 | 2328.0 |
| 60° | 2248.1 | 2258.1 | 2419.5 | 2685.1 | 2940.6 | 3046.9 | 2903.5 | 2661.9 | 2387.9 | 2232.1 | 2213.8 |
| 62.5° | 1949.3 | 1975.8 | 2170.2 | 2598.8 | 3126.8 | 3428.7 | 3081.3 | 2563.6 | 2143.5 | 1940.2 | 1928.2 |
| 65° | 1397.1 | 1443.0 | 1657.8 | 2217.8 | 3110.0 | 3764.2 | 3055.7 | 2199.9 | 1673.8 | 1439.4 | 1422.2 |
| 67.5° | 633.9 | 680.6 | 863.0 | 1518.4 | 2703.4 | 3673.1 | 2697.1 | 1534.4 | 906.2 | 683.0 | 672.9 |
| 70° | 229.6 | 237.6 | 296.3 | 607.8 | 1727.7 | 2926.7 | 1801.6 | 612.2 | 315.1 | 253.2 | 250.0 |
| 72.5° | 139.0 | 140.2 | 152.5 | 217.7 | 600.2 | 1776.8 | 625.9 | 224.9 | 155.8 | 138.2 | 140.6 |
| 75° | 88.3 | 87.4 | 108.6 | 133.0 | 212.9 | 599.5 | 223.2 | 133.0 | 108.2 | 98.6 | 99.4 |
| 77.5° | 63.6 | 65.5 | 77.9 | 99.4 | 134.2 | 203.3 | 131.8 | 95.0 | 77.9 | 63.9 | 65.1 |
| 80° | 47.6 | 48.7 | 56.7 | 77.5 | 94.3 | 126.6 | 83.8 | 70.3 | 58.7 | 40.0 | 41.1 |
| 82.5° | 34.3 | 34.3 | 37.1 | 56.3 | 57.5 | 68.3 | 45.5 | 49.5 | 38.7 | 28.4 | 28.4 |
| 85° | 20.4 | 20.0 | 23.2 | 33.5 | 29.9 | 25.1 | 20.8 | 30.3 | 24.4 | 17.5 | 17.2 |
| 87.5° | 7.2 | 7.6 | 7.2 | 9.6 | 8.0 | 6.8 | 6.4 | 8.4 | 6.8 | 5.9 | 5.6 |
| 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)