

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: P962349

Luminaire Tested: **NAV-SB2C-722-U-5MQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962349
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-SB2C-722-U-5MQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2200K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V MEDIUM OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13280.9 lumens
Efficiency: N/A
Efficacy: 131.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B4 - U0 - G2

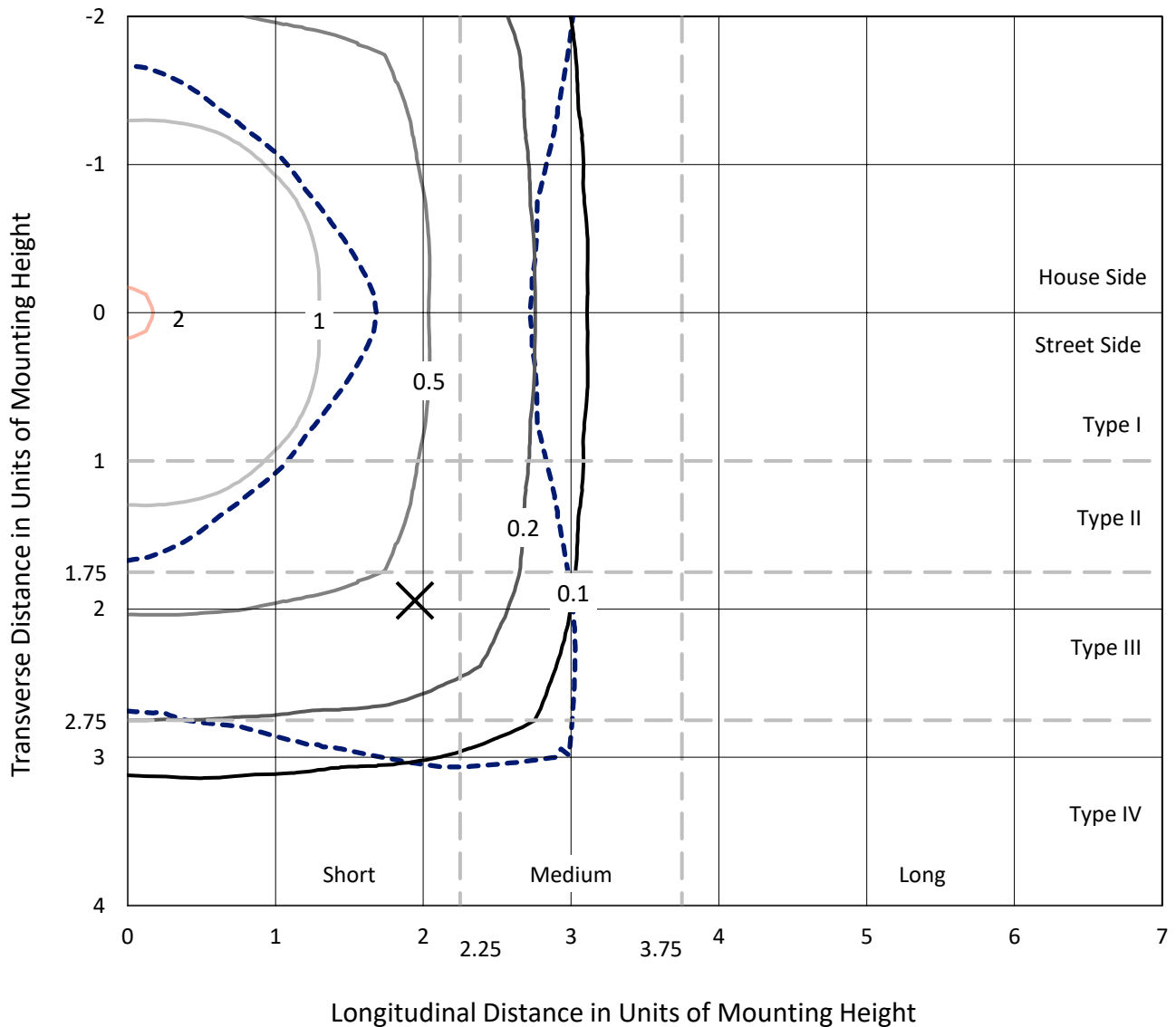
Input Watts (W): 100.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

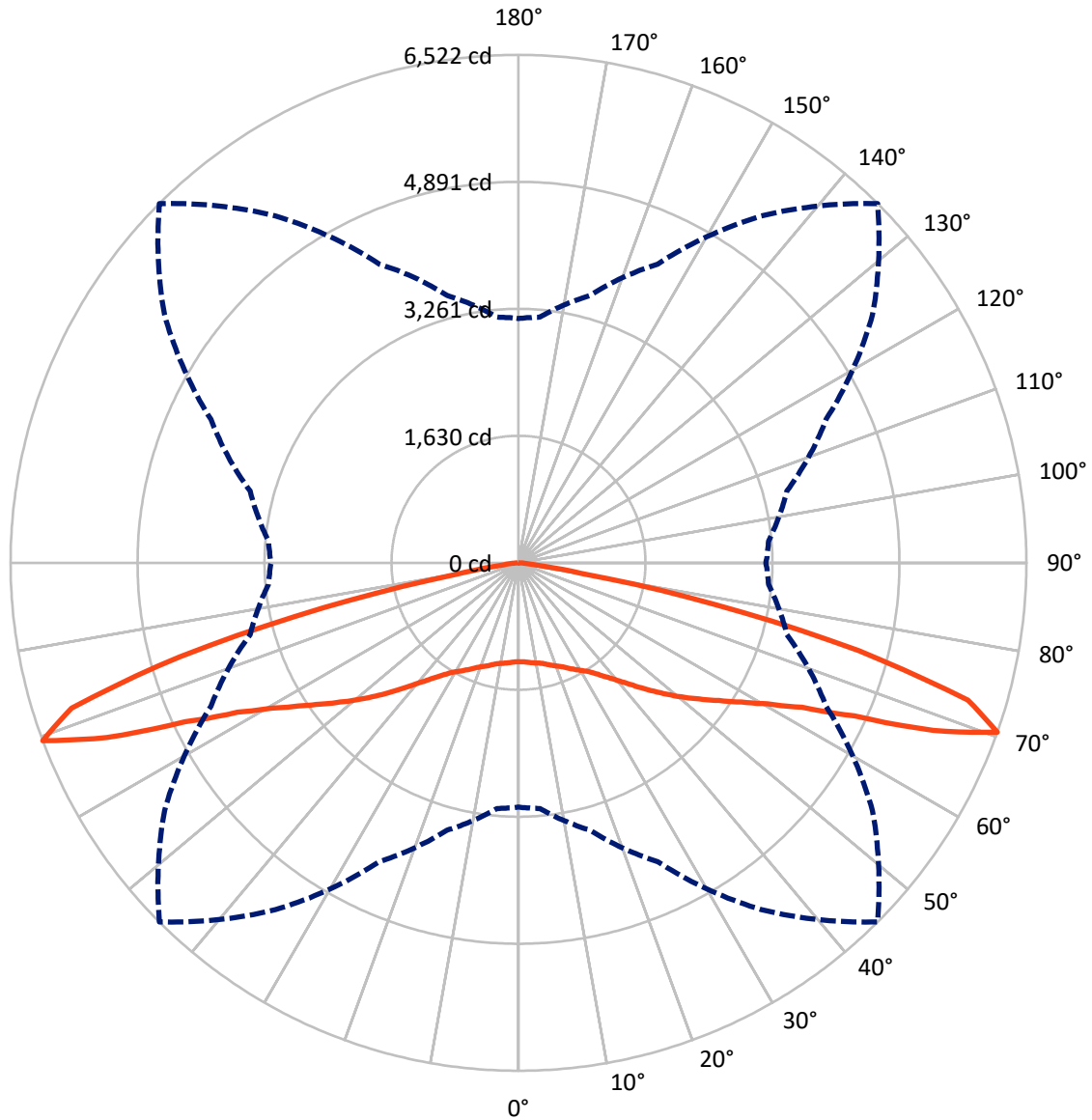
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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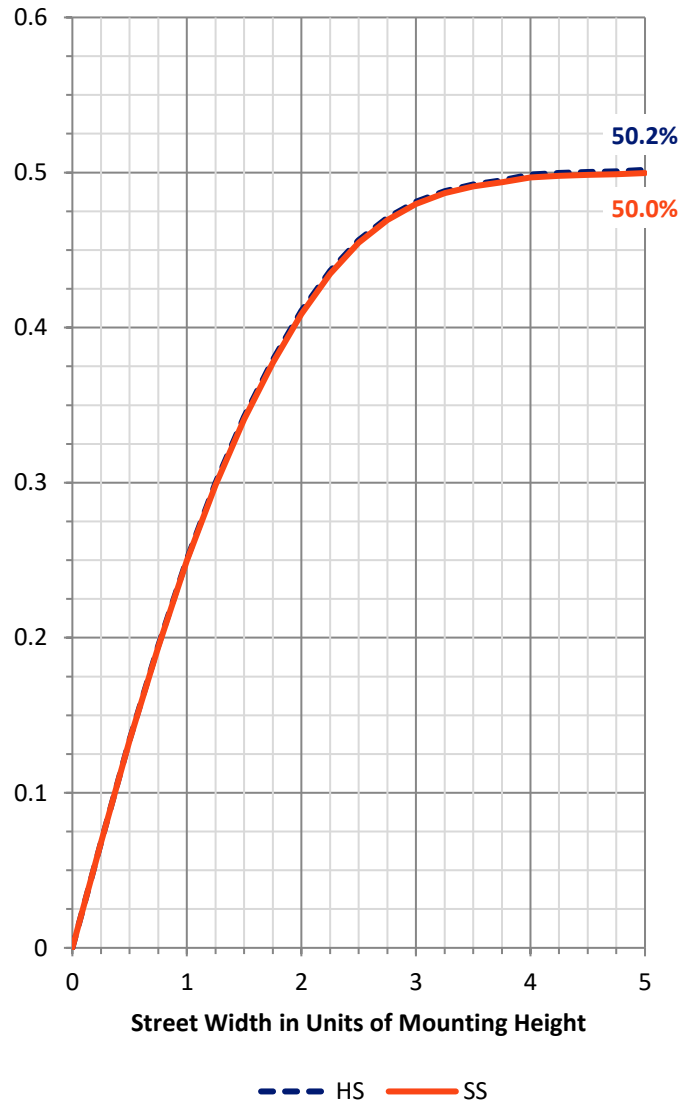
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 6640.5 | 0.0 | 6640.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 6640.5 | 0.0 | 6640.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 13280.9 | 0.0 | 13280.9 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 123.6 | 0.9 |
| 10°-20° | 383.2 | 2.9 |
| 20°-30° | 684.9 | 5.2 |
| 30°-40° | 1110.2 | 8.4 |
| 40°-50° | 1808.4 | 13.6 |
| 50°-60° | 2757.1 | 20.8 |
| 60°-70° | 4101.8 | 30.9 |
| 70°-80° | 2235.6 | 16.8 |
| 80°-90° | 76.1 | 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° | 13280.9 | 100.0 |
| 0°-180° | 13280.9 | 100.0 |

Coefficient of Utilization



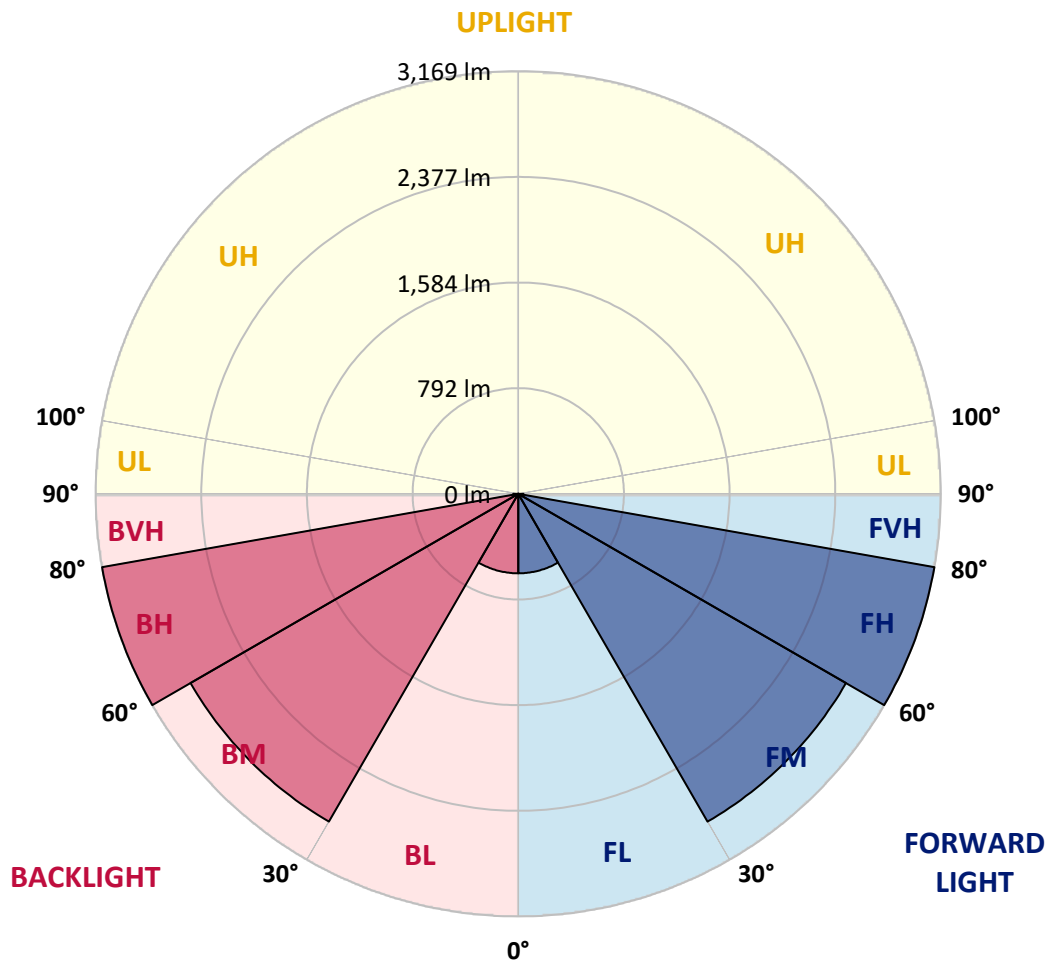
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 595.9 | 4.5 | | | |
| FM (30°-60°) | 2837.9 | 21.4 | | | |
| FH (60°-80°) | 3168.7 | 23.9 | | | G2/5000 |
| FVH (80°-90°) | 38.1 | 0.3 | | | G1/100 |
| BL (0°-30°) | 595.9 | 4.5 | B2/1000 | | |
| BM (30°-60°) | 2837.9 | 21.4 | B3/5000 | | |
| BH (60°-80°) | 3168.7 | 23.9 | B4/5000 | | G2/5000 |
| BVH (80°-90°) | 38.1 | 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° | 1272.1 | 1272.1 | 1272.1 | 1272.1 | 1272.1 | 1272.1 | 1272.1 | 1272.1 | 1272.1 | 1272.1 | 1272.1 |
| 2.5° | 1278.2 | 1279.5 | 1276.8 | 1275.5 | 1274.2 | 1272.1 | 1272.8 | 1276.1 | 1278.9 | 1278.2 | 1278.9 |
| 5° | 1288.8 | 1290.2 | 1288.2 | 1287.5 | 1284.8 | 1284.2 | 1284.2 | 1287.5 | 1289.6 | 1288.2 | 1288.8 |
| 7.5° | 1300.8 | 1302.9 | 1299.5 | 1298.9 | 1297.5 | 1296.2 | 1295.5 | 1298.9 | 1300.8 | 1300.8 | 1300.8 |
| 10° | 1312.2 | 1314.2 | 1311.5 | 1309.5 | 1308.2 | 1308.2 | 1306.9 | 1309.5 | 1312.8 | 1312.2 | 1312.2 |
| 12.5° | 1324.2 | 1325.5 | 1322.9 | 1321.5 | 1321.5 | 1323.5 | 1321.5 | 1322.9 | 1325.5 | 1324.2 | 1323.5 |
| 15° | 1338.9 | 1339.5 | 1338.9 | 1340.8 | 1344.2 | 1350.8 | 1344.9 | 1343.5 | 1344.9 | 1341.5 | 1341.5 |
| 17.5° | 1358.8 | 1360.2 | 1362.8 | 1367.6 | 1372.2 | 1384.2 | 1373.5 | 1370.2 | 1370.2 | 1363.6 | 1363.6 |
| 20° | 1383.5 | 1385.5 | 1389.5 | 1397.5 | 1403.5 | 1414.9 | 1404.1 | 1399.5 | 1397.5 | 1388.9 | 1388.9 |
| 22.5° | 1409.5 | 1412.9 | 1418.9 | 1429.6 | 1440.2 | 1450.9 | 1440.2 | 1432.2 | 1426.2 | 1414.9 | 1414.2 |
| 25° | 1439.5 | 1443.5 | 1452.8 | 1470.2 | 1484.9 | 1500.2 | 1487.6 | 1471.5 | 1459.5 | 1443.5 | 1442.9 |
| 27.5° | 1482.3 | 1486.9 | 1498.2 | 1519.6 | 1538.2 | 1551.5 | 1539.6 | 1518.8 | 1502.2 | 1482.9 | 1482.3 |
| 30° | 1542.2 | 1546.9 | 1560.3 | 1582.9 | 1595.5 | 1604.2 | 1596.2 | 1580.2 | 1560.3 | 1538.2 | 1538.2 |
| 32.5° | 1619.6 | 1625.5 | 1640.2 | 1661.5 | 1664.2 | 1665.5 | 1662.9 | 1654.9 | 1640.2 | 1613.6 | 1614.3 |
| 35° | 1717.6 | 1724.3 | 1740.9 | 1758.3 | 1755.6 | 1758.3 | 1754.3 | 1751.6 | 1740.9 | 1710.2 | 1710.2 |
| 37.5° | 1837.6 | 1845.6 | 1862.9 | 1876.3 | 1869.6 | 1866.2 | 1866.9 | 1867.5 | 1861.6 | 1827.6 | 1827.6 |
| 40° | 1976.9 | 1987.6 | 2000.3 | 2014.2 | 2003.0 | 1992.9 | 1999.6 | 2004.9 | 1999.6 | 1964.9 | 1964.9 |
| 42.5° | 2120.3 | 2135.6 | 2148.9 | 2169.0 | 2159.7 | 2147.0 | 2156.3 | 2162.3 | 2151.0 | 2113.7 | 2116.3 |
| 45° | 2279.6 | 2294.4 | 2311.7 | 2341.6 | 2335.0 | 2321.6 | 2335.0 | 2336.3 | 2317.0 | 2272.9 | 2277.7 |
| 47.5° | 2444.3 | 2459.7 | 2485.6 | 2525.7 | 2523.0 | 2508.4 | 2525.7 | 2516.4 | 2491.7 | 2439.0 | 2435.7 |
| 50° | 2600.3 | 2621.7 | 2661.7 | 2717.7 | 2723.0 | 2705.1 | 2728.3 | 2710.4 | 2669.0 | 2603.0 | 2601.7 |
| 52.5° | 2747.0 | 2769.8 | 2833.1 | 2909.1 | 2928.4 | 2905.1 | 2936.4 | 2905.1 | 2843.0 | 2758.4 | 2750.4 |
| 55° | 2901.1 | 2926.4 | 3001.7 | 3101.1 | 3139.8 | 3122.5 | 3151.8 | 3104.4 | 3016.4 | 2913.8 | 2899.7 |
| 57.5° | 3082.4 | 3097.8 | 3187.7 | 3305.8 | 3371.1 | 3375.1 | 3388.4 | 3308.5 | 3201.8 | 3085.0 | 3069.1 |
| 60° | 3279.1 | 3300.5 | 3398.5 | 3539.8 | 3643.2 | 3676.5 | 3662.5 | 3543.8 | 3419.8 | 3285.7 | 3264.4 |
| 62.5° | 3531.1 | 3554.5 | 3671.9 | 3841.2 | 4004.6 | 4087.2 | 4032.6 | 3860.6 | 3707.2 | 3546.5 | 3518.5 |
| 65° | 3739.8 | 3765.8 | 3977.9 | 4279.9 | 4577.3 | 4743.3 | 4605.9 | 4289.2 | 4013.2 | 3786.6 | 3749.1 |
| 67.5° | 3588.5 | 3620.5 | 3953.2 | 4508.0 | 5247.4 | 5742.8 | 5272.7 | 4576.0 | 4035.2 | 3727.8 | 3681.8 |
| 70° | 3136.4 | 3166.4 | 3554.5 | 4232.5 | 5436.1 | 6521.6 | 5549.5 | 4357.3 | 3567.2 | 3223.1 | 3177.1 |
| 72.5° | 2082.3 | 2178.9 | 2571.7 | 3385.2 | 4854.0 | 6034.8 | 4902.0 | 3316.5 | 2385.7 | 2077.6 | 2010.2 |
| 75° | 690.7 | 768.1 | 1036.2 | 1754.9 | 3251.1 | 4513.3 | 3095.1 | 1552.9 | 820.8 | 590.7 | 558.7 |
| 77.5° | 174.0 | 200.7 | 276.8 | 502.0 | 1296.8 | 2569.7 | 1167.5 | 410.1 | 223.3 | 156.0 | 139.4 |
| 80° | 84.7 | 93.4 | 133.4 | 167.4 | 324.7 | 816.8 | 304.7 | 157.3 | 105.4 | 81.4 | 74.7 |
| 82.5° | 46.6 | 47.4 | 75.3 | 94.7 | 120.6 | 211.4 | 125.4 | 92.0 | 60.7 | 49.3 | 49.3 |
| 85° | 28.7 | 28.0 | 40.0 | 50.6 | 50.6 | 75.3 | 60.0 | 50.6 | 34.6 | 30.6 | 32.0 |
| 87.5° | 11.4 | 11.4 | 14.7 | 16.0 | 14.0 | 19.4 | 15.4 | 16.7 | 13.3 | 12.7 | 13.3 |
| 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)