

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: P882972

Luminaire Tested: **NAV-SB3A-835-U-5WQ**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882972
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-1)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-835-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11483 lumens
Efficiency: N/A
Efficacy: 135.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type V - Short
BUG Rating: B4 - U0 - G2

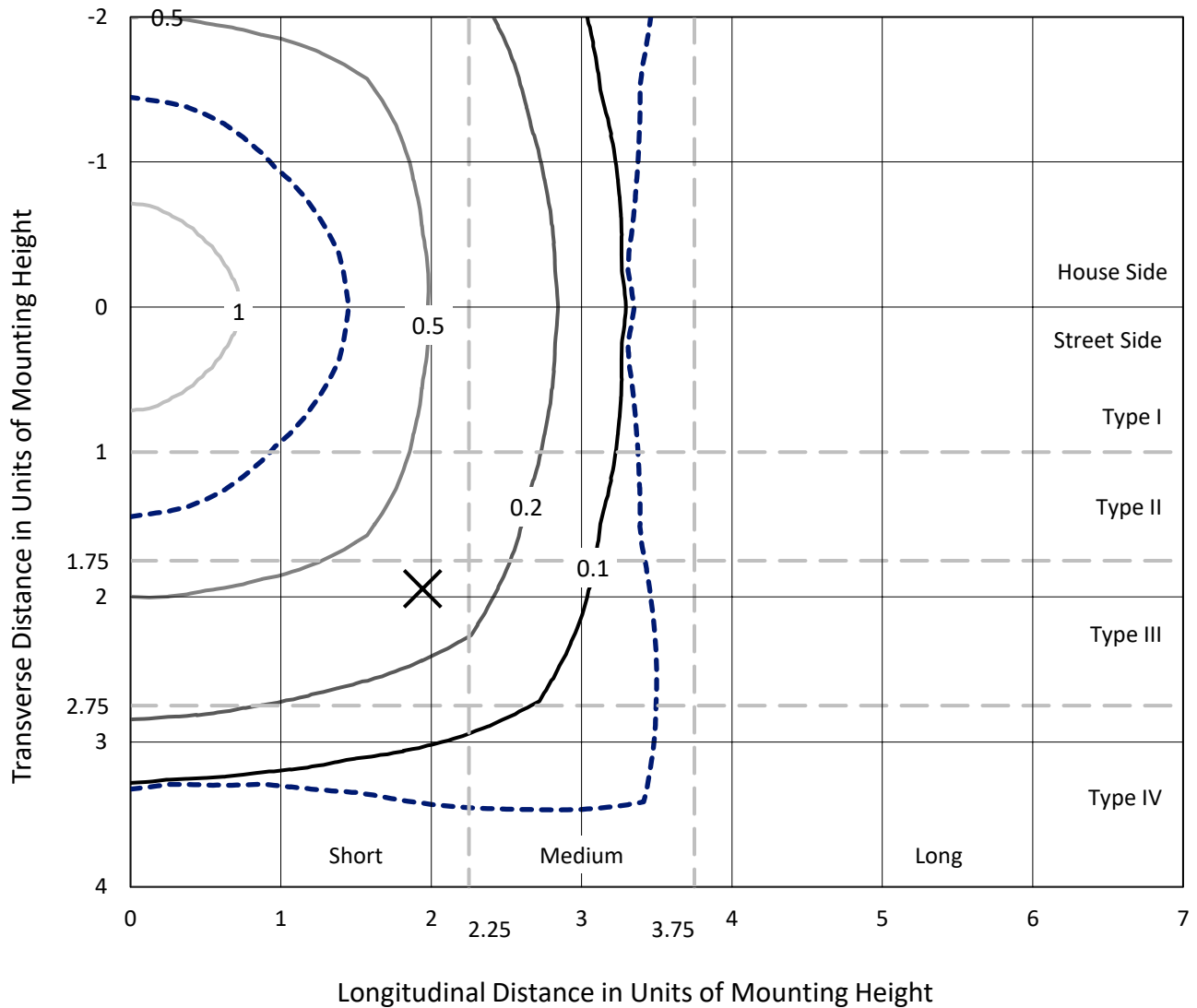
Input Watts (W): 84.7
Input Voltage (V): 120.0
Input Current (Ain): 0.717
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 11.969
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

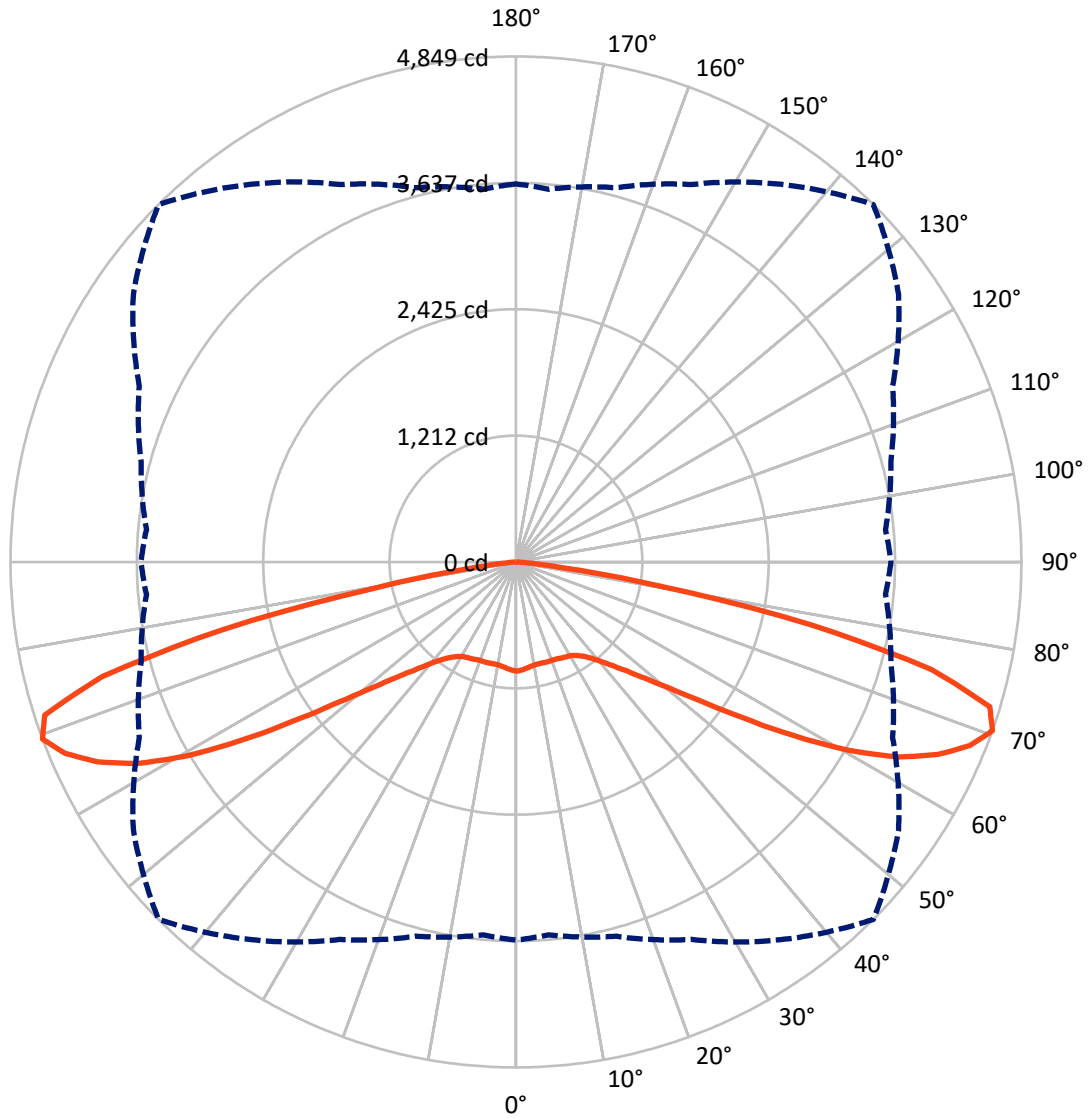
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 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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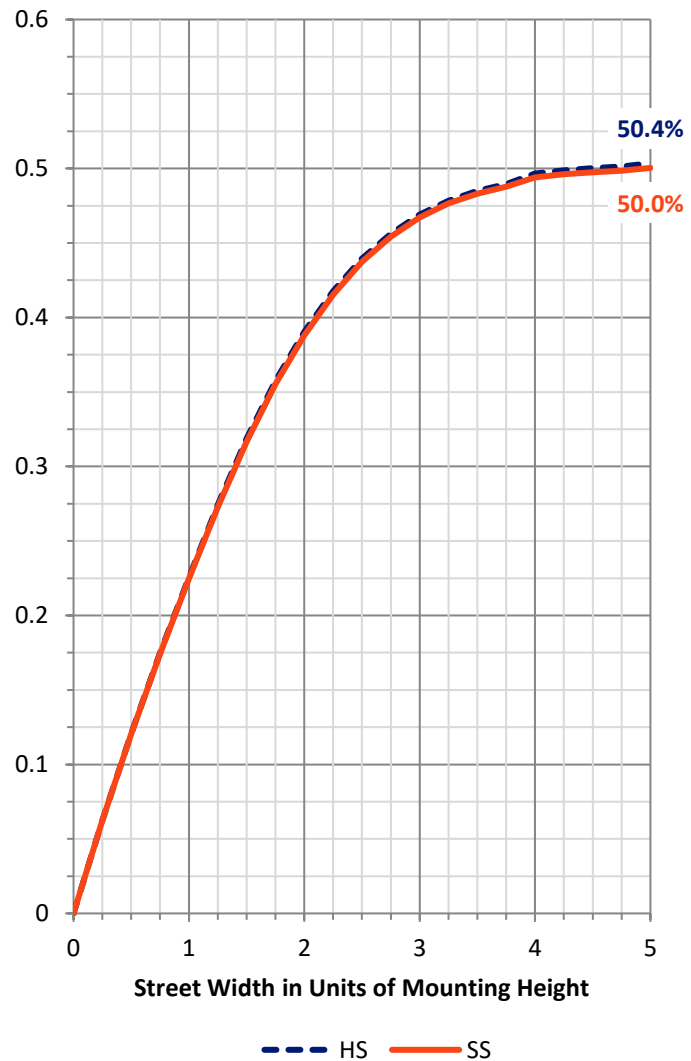
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 5741.5 | 0.0 | 5741.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 5741.5 | 0.0 | 5741.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 11483.0 | 0.0 | 11483.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 97.4 | 0.8 |
| 10°-20° | 286.1 | 2.5 |
| 20°-30° | 476.1 | 4.1 |
| 30°-40° | 720.0 | 6.3 |
| 40°-50° | 1196.5 | 10.4 |
| 50°-60° | 2257.8 | 19.7 |
| 60°-70° | 3812.5 | 33.2 |
| 70°-80° | 2505.2 | 21.8 |
| 80°-90° | 131.2 | 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° | 11483.0 | 100.0 |
| 0°-180° | 11483.0 | 100.0 |

Coefficient of Utilization



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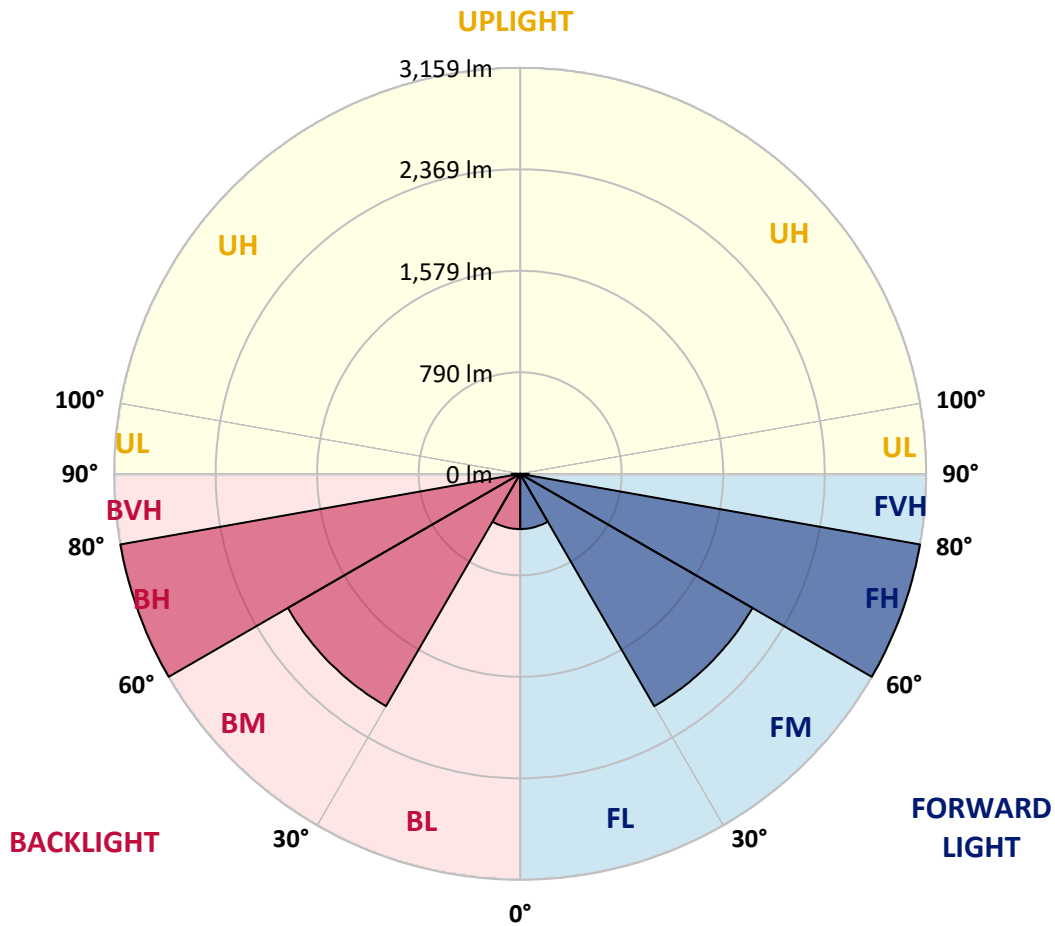
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 429.8 | 3.7 | | | |
| FM (30°-60°) | 2087.2 | 18.2 | | | |
| FH (60°-80°) | 3158.8 | 27.5 | | | G2/5000 |
| FVH (80°-90°) | 65.6 | 0.6 | | | G1/100 |
| BL (0°-30°) | 429.8 | 3.7 | B1/500 | | |
| BM (30°-60°) | 2087.2 | 18.2 | B2/2500 | | |
| BH (60°-80°) | 3158.8 | 27.5 | B4/5000 | | G2/5000 |
| BVH (80°-90°) | 65.6 | 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° | 1047.5 | 1047.5 | 1047.5 | 1047.5 | 1047.5 | 1047.5 | 1047.5 | 1047.5 | 1047.5 | 1047.5 | 1047.5 |
| 2.5° | 1040.9 | 1043.9 | 1042.7 | 1040.3 | 1040.3 | 1038.5 | 1040.3 | 1041.5 | 1043.3 | 1044.5 | 1043.9 |
| 5° | 1027.2 | 1029.6 | 1029.0 | 1027.2 | 1027.8 | 1026.0 | 1027.2 | 1029.0 | 1030.2 | 1030.8 | 1030.8 |
| 7.5° | 1015.3 | 1017.6 | 1016.4 | 1013.5 | 1013.5 | 1011.7 | 1012.3 | 1014.1 | 1015.8 | 1016.4 | 1016.4 |
| 10° | 1012.3 | 1014.7 | 1011.1 | 1006.3 | 1004.5 | 1002.1 | 1002.7 | 1004.5 | 1008.1 | 1009.9 | 1009.9 |
| 12.5° | 1013.5 | 1015.3 | 1011.7 | 1004.5 | 1002.7 | 1000.3 | 1000.3 | 1002.1 | 1006.9 | 1009.3 | 1009.9 |
| 15° | 1017.0 | 1018.8 | 1013.5 | 1005.7 | 1003.9 | 1002.1 | 1001.5 | 1003.9 | 1009.3 | 1013.5 | 1014.1 |
| 17.5° | 1023.6 | 1025.4 | 1017.0 | 1006.3 | 1003.9 | 1004.5 | 1003.9 | 1005.7 | 1014.1 | 1021.8 | 1021.8 |
| 20° | 1029.6 | 1030.8 | 1019.4 | 1006.3 | 1003.9 | 1004.5 | 1003.9 | 1007.5 | 1018.2 | 1029.0 | 1029.6 |
| 22.5° | 1031.4 | 1032.6 | 1021.8 | 1010.5 | 1008.7 | 1009.3 | 1008.7 | 1012.3 | 1022.4 | 1033.2 | 1033.2 |
| 25° | 1032.0 | 1033.8 | 1025.4 | 1016.4 | 1019.4 | 1020.6 | 1019.4 | 1020.0 | 1027.8 | 1037.3 | 1036.7 |
| 27.5° | 1040.9 | 1043.3 | 1035.5 | 1027.8 | 1029.6 | 1029.0 | 1030.8 | 1032.6 | 1038.5 | 1048.1 | 1045.7 |
| 30° | 1059.4 | 1061.2 | 1054.6 | 1046.9 | 1045.7 | 1041.5 | 1046.9 | 1052.9 | 1059.4 | 1067.8 | 1066.0 |
| 32.5° | 1089.9 | 1093.4 | 1085.1 | 1076.7 | 1071.4 | 1069.0 | 1073.1 | 1083.3 | 1092.2 | 1101.2 | 1097.6 |
| 35° | 1140.6 | 1143.0 | 1135.2 | 1119.7 | 1110.2 | 1110.2 | 1113.7 | 1126.9 | 1141.2 | 1152.5 | 1148.3 |
| 37.5° | 1212.2 | 1215.2 | 1201.5 | 1183.0 | 1168.6 | 1168.6 | 1173.4 | 1187.1 | 1208.6 | 1224.7 | 1218.8 |
| 40° | 1299.4 | 1303.5 | 1286.2 | 1267.1 | 1253.4 | 1251.0 | 1257.0 | 1272.5 | 1292.8 | 1313.1 | 1306.5 |
| 42.5° | 1404.4 | 1409.2 | 1386.5 | 1369.8 | 1359.0 | 1359.0 | 1362.0 | 1376.3 | 1394.9 | 1419.9 | 1418.1 |
| 45° | 1538.7 | 1547.0 | 1516.0 | 1499.3 | 1489.2 | 1491.5 | 1493.3 | 1505.9 | 1522.6 | 1551.2 | 1550.0 |
| 47.5° | 1698.6 | 1707.0 | 1674.2 | 1656.9 | 1655.1 | 1666.4 | 1659.3 | 1668.2 | 1677.2 | 1710.0 | 1700.4 |
| 50° | 1880.1 | 1894.4 | 1871.7 | 1870.5 | 1874.1 | 1895.0 | 1878.3 | 1883.1 | 1872.9 | 1893.8 | 1881.3 |
| 52.5° | 2102.1 | 2123.0 | 2118.8 | 2126.0 | 2166.0 | 2209.0 | 2170.8 | 2154.1 | 2115.9 | 2122.4 | 2100.3 |
| 55° | 2371.3 | 2402.9 | 2408.9 | 2451.9 | 2542.6 | 2630.3 | 2549.2 | 2481.7 | 2400.6 | 2385.6 | 2362.4 |
| 57.5° | 2677.5 | 2702.6 | 2731.2 | 2818.9 | 2988.5 | 3144.2 | 2988.5 | 2839.2 | 2711.5 | 2681.1 | 2659.6 |
| 60° | 3007.0 | 3038.0 | 3065.4 | 3195.0 | 3446.8 | 3665.9 | 3442.1 | 3205.1 | 3036.2 | 2995.0 | 2959.2 |
| 62.5° | 3360.9 | 3400.9 | 3420.0 | 3563.8 | 3857.5 | 4118.9 | 3861.7 | 3574.6 | 3387.2 | 3343.0 | 3307.2 |
| 65° | 3700.5 | 3733.3 | 3754.8 | 3908.2 | 4188.7 | 4450.7 | 4207.8 | 3924.9 | 3732.1 | 3674.2 | 3645.6 |
| 67.5° | 3858.7 | 3876.6 | 3929.1 | 4102.8 | 4398.8 | 4697.8 | 4449.0 | 4121.3 | 3905.8 | 3804.4 | 3805.5 |
| 70° | 3627.1 | 3590.7 | 3717.2 | 3995.3 | 4423.9 | 4849.4 | 4481.2 | 3987.0 | 3723.2 | 3558.5 | 3597.8 |
| 72.5° | 2802.8 | 2740.2 | 2959.8 | 3435.5 | 4137.4 | 4752.8 | 4166.0 | 3462.4 | 3096.5 | 2762.2 | 2845.2 |
| 75° | 1525.0 | 1453.9 | 1757.1 | 2358.8 | 3299.4 | 4119.5 | 3375.2 | 2426.2 | 1956.5 | 1513.6 | 1612.1 |
| 77.5° | 430.3 | 403.5 | 648.2 | 1141.2 | 1984.5 | 2892.4 | 2060.9 | 1166.3 | 768.7 | 456.0 | 506.7 |
| 80° | 131.9 | 127.7 | 173.1 | 343.8 | 842.8 | 1385.3 | 809.9 | 348.0 | 220.2 | 139.1 | 146.8 |
| 82.5° | 78.2 | 71.6 | 85.9 | 125.3 | 214.9 | 435.1 | 208.9 | 130.7 | 105.0 | 70.4 | 76.4 |
| 85° | 44.8 | 41.8 | 50.7 | 60.9 | 72.2 | 92.5 | 60.3 | 62.1 | 56.1 | 37.6 | 39.4 |
| 87.5° | 18.5 | 16.7 | 19.7 | 19.1 | 16.7 | 21.5 | 16.1 | 19.1 | 22.7 | 14.9 | 13.7 |
| 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)