

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: STREETWORKS

Report Number: P882792

Luminaire Tested: **NVN-SB2D-830-U-5WQ**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882792
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: STREETWORKS
Catalog Number: NVN-SB2D-830-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18356 lumens
Efficiency: N/A
Efficacy: 124.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G3

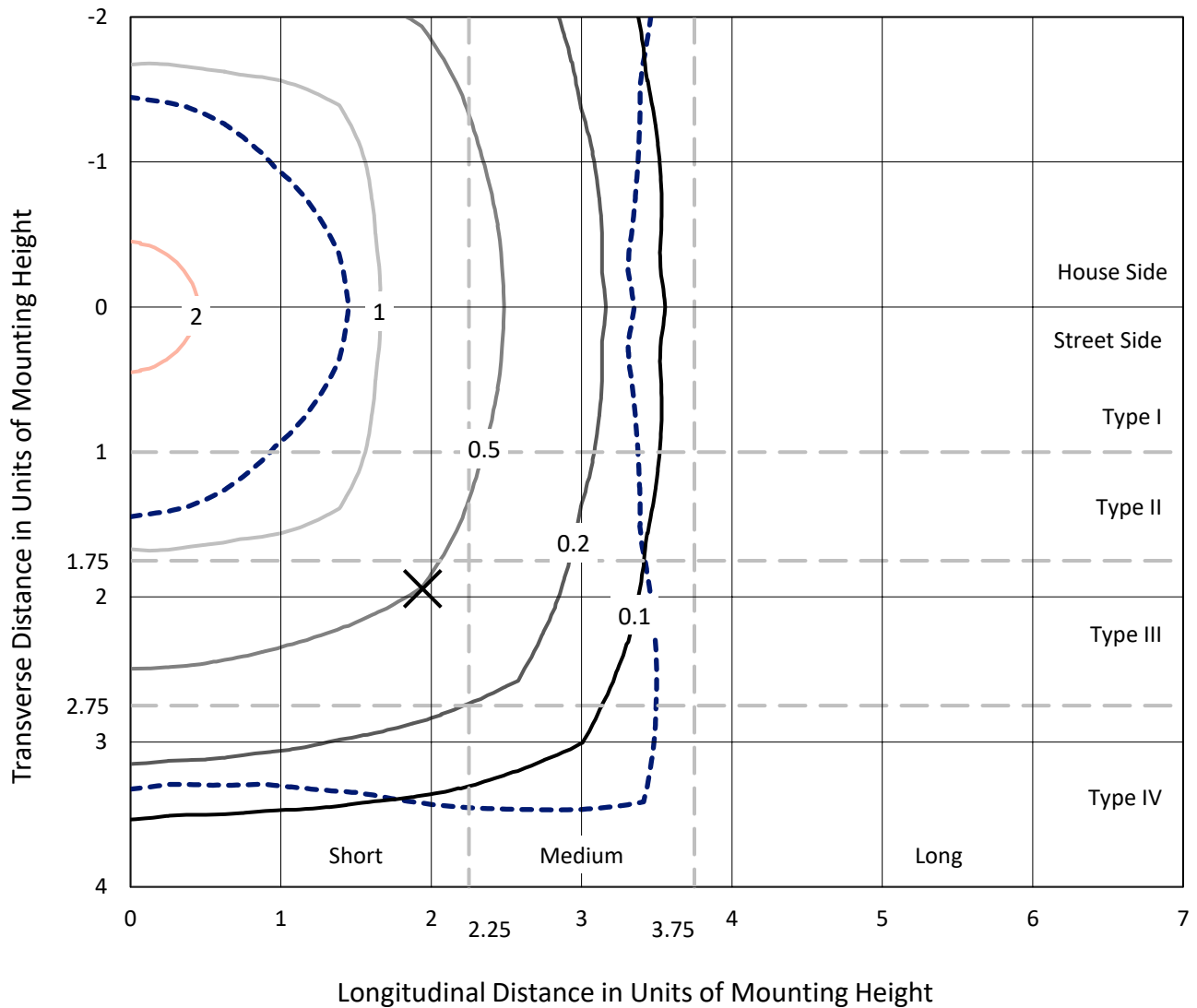
Input Watts (W): 147.6
Input Voltage (V): 120.0
Input Current (Ain): 1.234
Voltage Rise (V): NR
Power Factor: 0.999
Total Harmonic Distortion (THDi): 3.108
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

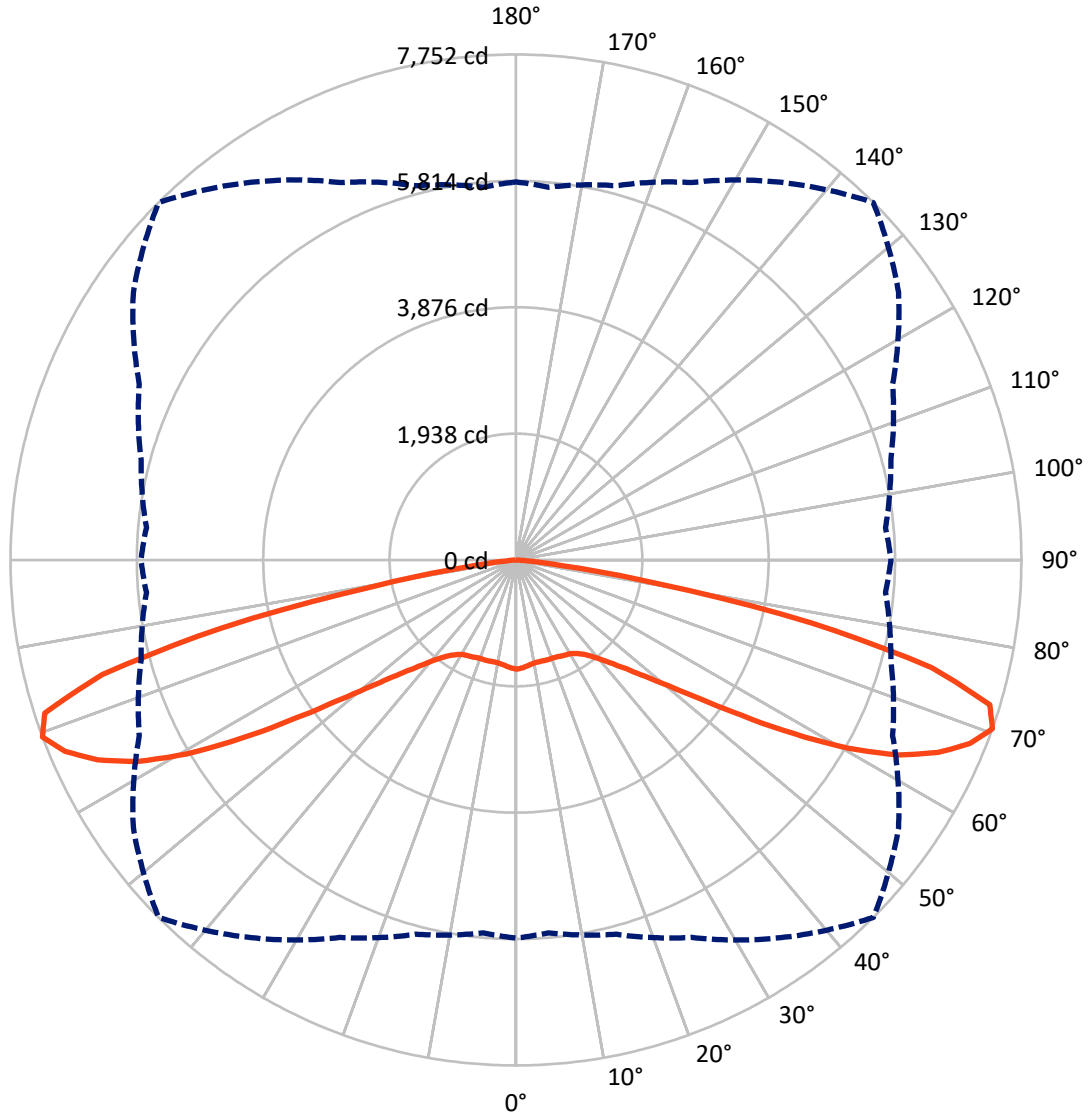
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 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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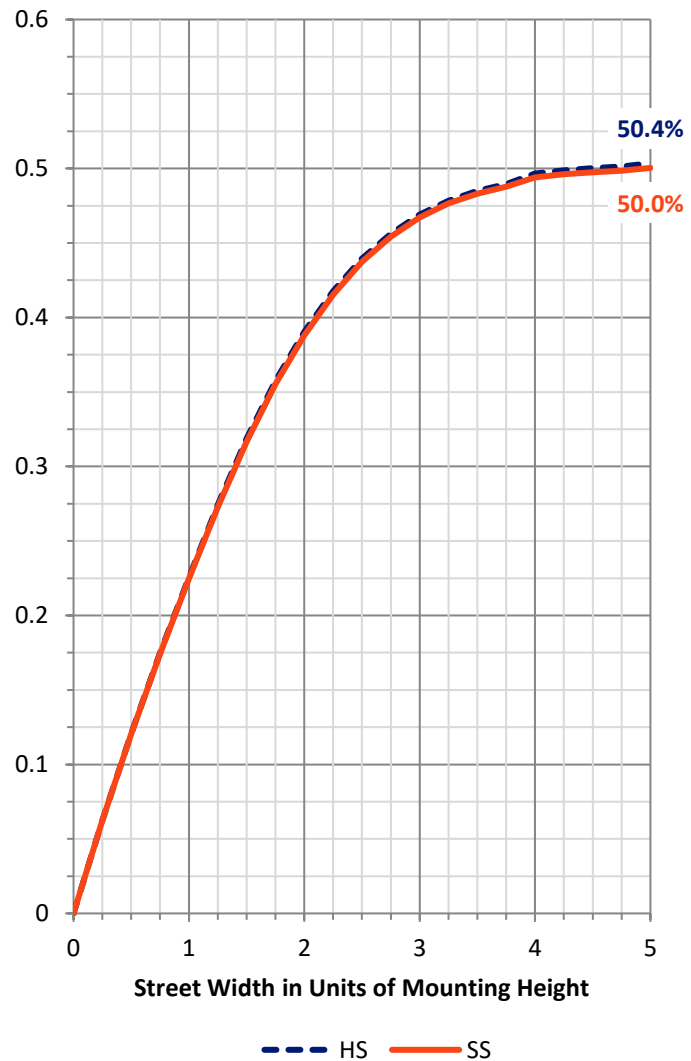
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 9178.0 | 0.0 | 9178.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 9178.0 | 0.0 | 9178.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 18356.0 | 0.0 | 18356.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 155.8 | 0.8 |
| 10°-20° | 457.4 | 2.5 |
| 20°-30° | 761.1 | 4.1 |
| 30°-40° | 1151.0 | 6.3 |
| 40°-50° | 1912.7 | 10.4 |
| 50°-60° | 3609.2 | 19.7 |
| 60°-70° | 6094.4 | 33.2 |
| 70°-80° | 4004.6 | 21.8 |
| 80°-90° | 209.8 | 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° | 18356.0 | 100.0 |
| 0°-180° | 18356.0 | 100.0 |

Coefficient of Utilization



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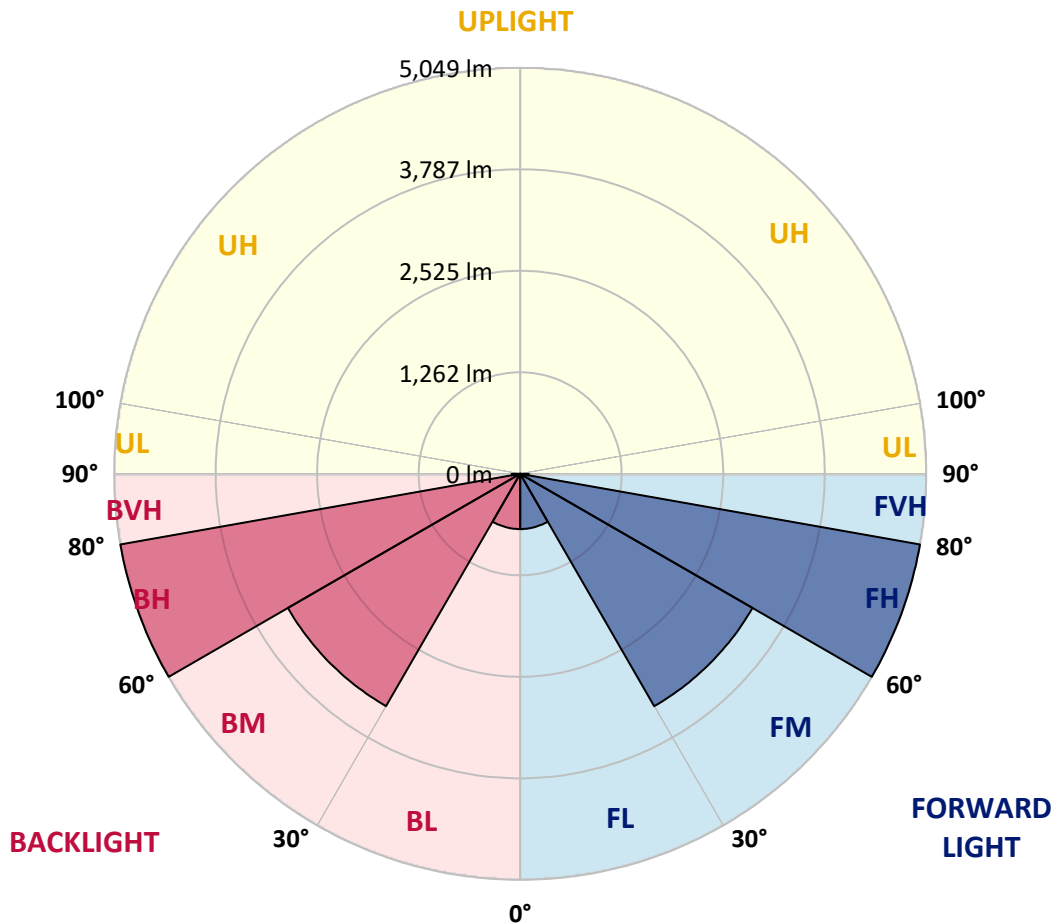
CATALOG NUMBER: NVN-SB2D-830-U-5WQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 687.1 | 3.7 | | | |
| FM (30°-60°) | 3336.5 | 18.2 | | | |
| FH (60°-80°) | 5049.5 | 27.5 | | | G3/7500 |
| FVH (80°-90°) | 104.9 | 0.6 | | | G2/225 |
| BL (0°-30°) | 687.1 | 3.7 | B2/1000 | | |
| BM (30°-60°) | 3336.5 | 18.2 | B3/5000 | | |
| BH (60°-80°) | 5049.5 | 27.5 | B5 | | G3/7500 |
| BVH (80°-90°) | 104.9 | 0.6 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B5-U0-G3

Type V Short



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1674.4 | 1674.4 | 1674.4 | 1674.4 | 1674.4 | 1674.4 | 1674.4 | 1674.4 | 1674.4 | 1674.4 | 1674.4 |
| 2.5° | 1663.9 | 1668.7 | 1666.8 | 1663.0 | 1663.0 | 1660.1 | 1663.0 | 1664.9 | 1667.8 | 1669.7 | 1668.7 |
| 5° | 1642.0 | 1645.8 | 1644.9 | 1642.0 | 1643.0 | 1640.1 | 1642.0 | 1644.9 | 1646.8 | 1647.7 | 1647.7 |
| 7.5° | 1622.9 | 1626.7 | 1624.8 | 1620.1 | 1620.1 | 1617.2 | 1618.1 | 1621.0 | 1623.9 | 1624.8 | 1624.8 |
| 10° | 1618.1 | 1622.0 | 1616.2 | 1608.6 | 1605.7 | 1601.9 | 1602.9 | 1605.7 | 1611.5 | 1614.3 | 1614.3 |
| 12.5° | 1620.1 | 1622.9 | 1617.2 | 1605.7 | 1602.9 | 1599.1 | 1599.1 | 1601.9 | 1609.6 | 1613.4 | 1614.3 |
| 15° | 1625.8 | 1628.6 | 1620.1 | 1607.7 | 1604.8 | 1601.9 | 1601.0 | 1604.8 | 1613.4 | 1620.1 | 1621.0 |
| 17.5° | 1636.3 | 1639.1 | 1625.8 | 1608.6 | 1604.8 | 1605.7 | 1604.8 | 1607.7 | 1621.0 | 1633.4 | 1633.4 |
| 20° | 1645.8 | 1647.7 | 1629.6 | 1608.6 | 1604.8 | 1605.7 | 1604.8 | 1610.5 | 1627.7 | 1644.9 | 1645.8 |
| 22.5° | 1648.7 | 1650.6 | 1633.4 | 1615.3 | 1612.4 | 1613.4 | 1612.4 | 1618.1 | 1634.4 | 1651.5 | 1651.5 |
| 25° | 1649.6 | 1652.5 | 1639.1 | 1624.8 | 1629.6 | 1631.5 | 1629.6 | 1630.5 | 1643.0 | 1658.2 | 1657.3 |
| 27.5° | 1663.9 | 1667.8 | 1655.4 | 1643.0 | 1645.8 | 1644.9 | 1647.7 | 1650.6 | 1660.1 | 1675.4 | 1671.6 |
| 30° | 1693.5 | 1696.4 | 1685.9 | 1673.5 | 1671.6 | 1664.9 | 1673.5 | 1683.0 | 1693.5 | 1706.9 | 1704.0 |
| 32.5° | 1742.2 | 1747.9 | 1734.5 | 1721.2 | 1712.6 | 1708.8 | 1715.5 | 1731.7 | 1746.0 | 1760.3 | 1754.6 |
| 35° | 1823.3 | 1827.1 | 1814.7 | 1789.9 | 1774.6 | 1774.6 | 1780.3 | 1801.3 | 1824.2 | 1842.4 | 1835.7 |
| 37.5° | 1937.8 | 1942.5 | 1920.6 | 1891.0 | 1868.1 | 1868.1 | 1875.8 | 1897.7 | 1932.0 | 1957.8 | 1948.3 |
| 40° | 2077.1 | 2083.7 | 2056.1 | 2025.5 | 2003.6 | 1999.8 | 2009.3 | 2034.1 | 2066.6 | 2099.0 | 2088.5 |
| 42.5° | 2245.0 | 2252.6 | 2216.4 | 2189.6 | 2172.5 | 2172.5 | 2177.2 | 2200.1 | 2229.7 | 2269.8 | 2266.9 |
| 45° | 2459.7 | 2473.0 | 2423.4 | 2396.7 | 2380.5 | 2384.3 | 2387.1 | 2407.2 | 2433.9 | 2479.7 | 2477.8 |
| 47.5° | 2715.4 | 2728.7 | 2676.2 | 2648.6 | 2645.7 | 2663.8 | 2652.4 | 2666.7 | 2681.0 | 2733.5 | 2718.2 |
| 50° | 3005.4 | 3028.3 | 2992.0 | 2990.1 | 2995.9 | 3029.3 | 3002.5 | 3010.2 | 2994.0 | 3027.3 | 3007.3 |
| 52.5° | 3360.3 | 3393.7 | 3387.0 | 3398.5 | 3462.4 | 3531.1 | 3470.0 | 3443.3 | 3382.3 | 3392.8 | 3357.5 |
| 55° | 3790.6 | 3841.2 | 3850.7 | 3919.4 | 4064.4 | 4204.7 | 4074.9 | 3967.1 | 3837.4 | 3813.5 | 3776.3 |
| 57.5° | 4280.1 | 4320.1 | 4365.9 | 4506.2 | 4777.2 | 5026.2 | 4777.2 | 4538.6 | 4334.5 | 4285.8 | 4251.4 |
| 60° | 4806.7 | 4856.3 | 4900.2 | 5107.3 | 5509.9 | 5860.1 | 5502.3 | 5123.5 | 4853.5 | 4787.6 | 4730.4 |
| 62.5° | 5372.5 | 5436.4 | 5467.0 | 5696.9 | 6166.3 | 6584.2 | 6173.0 | 5714.1 | 5414.5 | 5343.9 | 5286.6 |
| 65° | 5915.4 | 5967.9 | 6002.2 | 6247.4 | 6695.8 | 7114.7 | 6726.4 | 6274.1 | 5966.0 | 5873.4 | 5827.6 |
| 67.5° | 6168.2 | 6196.8 | 6280.8 | 6558.4 | 7031.7 | 7509.7 | 7111.8 | 6588.0 | 6243.6 | 6081.4 | 6083.3 |
| 70° | 5798.0 | 5739.8 | 5942.1 | 6386.7 | 7071.8 | 7752.0 | 7163.3 | 6373.4 | 5951.6 | 5688.3 | 5751.3 |
| 72.5° | 4480.4 | 4380.3 | 4731.4 | 5491.8 | 6613.8 | 7597.5 | 6659.6 | 5534.7 | 4949.8 | 4415.6 | 4548.2 |
| 75° | 2437.7 | 2324.2 | 2808.9 | 3770.6 | 5274.2 | 6585.2 | 5395.4 | 3878.4 | 3127.5 | 2419.6 | 2577.0 |
| 77.5° | 687.9 | 645.0 | 1036.1 | 1824.2 | 3172.4 | 4623.5 | 3294.5 | 1864.3 | 1228.9 | 728.9 | 810.0 |
| 80° | 210.9 | 204.2 | 276.7 | 549.6 | 1347.2 | 2214.5 | 1294.7 | 556.2 | 352.1 | 222.3 | 234.7 |
| 82.5° | 125.0 | 114.5 | 137.4 | 200.4 | 343.5 | 695.5 | 333.9 | 208.9 | 167.9 | 112.6 | 122.1 |
| 85° | 71.6 | 66.8 | 81.1 | 97.3 | 115.4 | 147.9 | 96.4 | 99.2 | 89.7 | 60.1 | 63.0 |
| 87.5° | 29.6 | 26.7 | 31.5 | 30.5 | 26.7 | 34.3 | 25.8 | 30.5 | 36.3 | 23.9 | 21.9 |
| 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)