

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: P964208

Luminaire Tested: **NAV-SB3B-830-U-T4W**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964208
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-830-U-T4W
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15530.8 lumens
Efficiency: N/A
Efficacy: 142.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G3

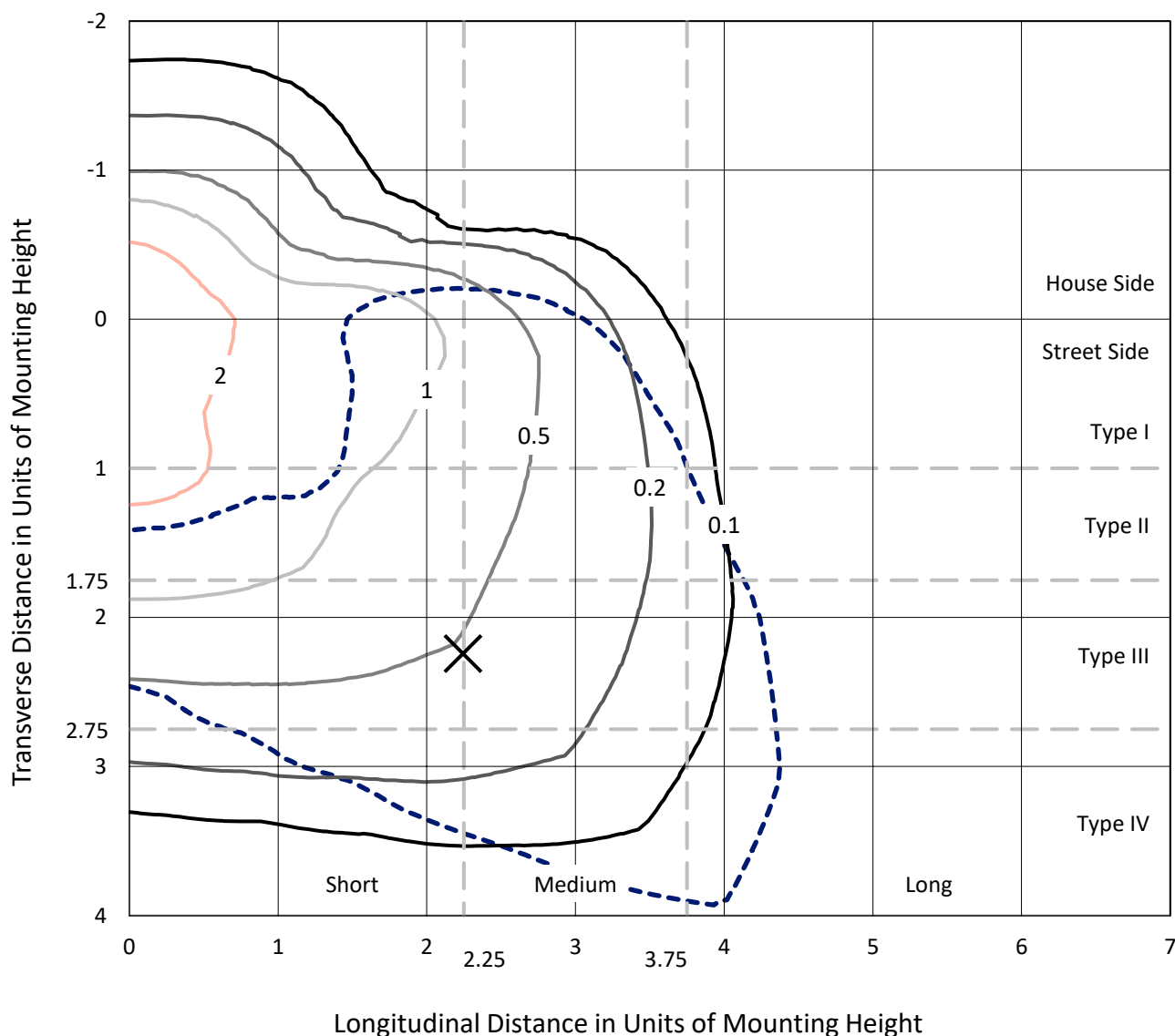
Input Watts (W): 109.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P964208
 CATALOG NUMBER: NAV-SB3B-830-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

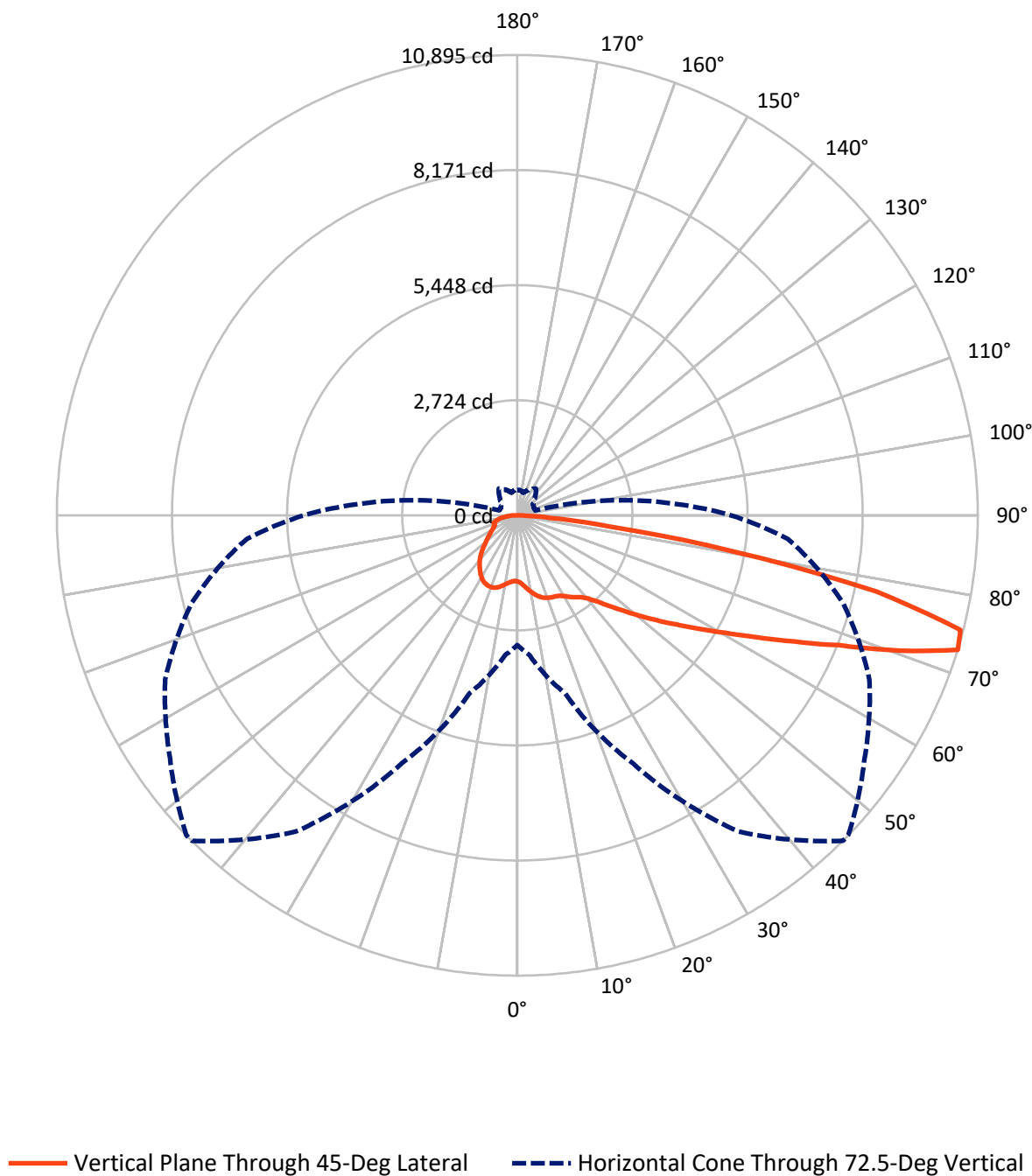
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 fc
 Type IV - Short - N/A

REPORT NUMBER: P964208
CATALOG NUMBER: NAV-SB3B-830-U-T4W

Luminous Intensity Polar Plot



REPORT NUMBER: P964208

CATALOG NUMBER: NAV-SB3B-830-U-T4W

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3511.0	0.0	3511.0
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	12019.8	0.0	12019.8
	% Fixture	77.4	0.0	77.4
Total	Lumens	15530.8	0.0	15530.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.5	1.0
10°-20°	531.7	3.4
20°-30°	924.9	6.0
30°-40°	1325.9	8.5
40°-50°	1866.9	12.0
50°-60°	2859.5	18.4
60°-70°	4142.5	26.7
70°-80°	3308.0	21.3
80°-90°	412.0	2.7
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°	15530.8	100.0
0°-180°	15530.8	100.0

Coefficient of Utilization



REPORT NUMBER: P964208

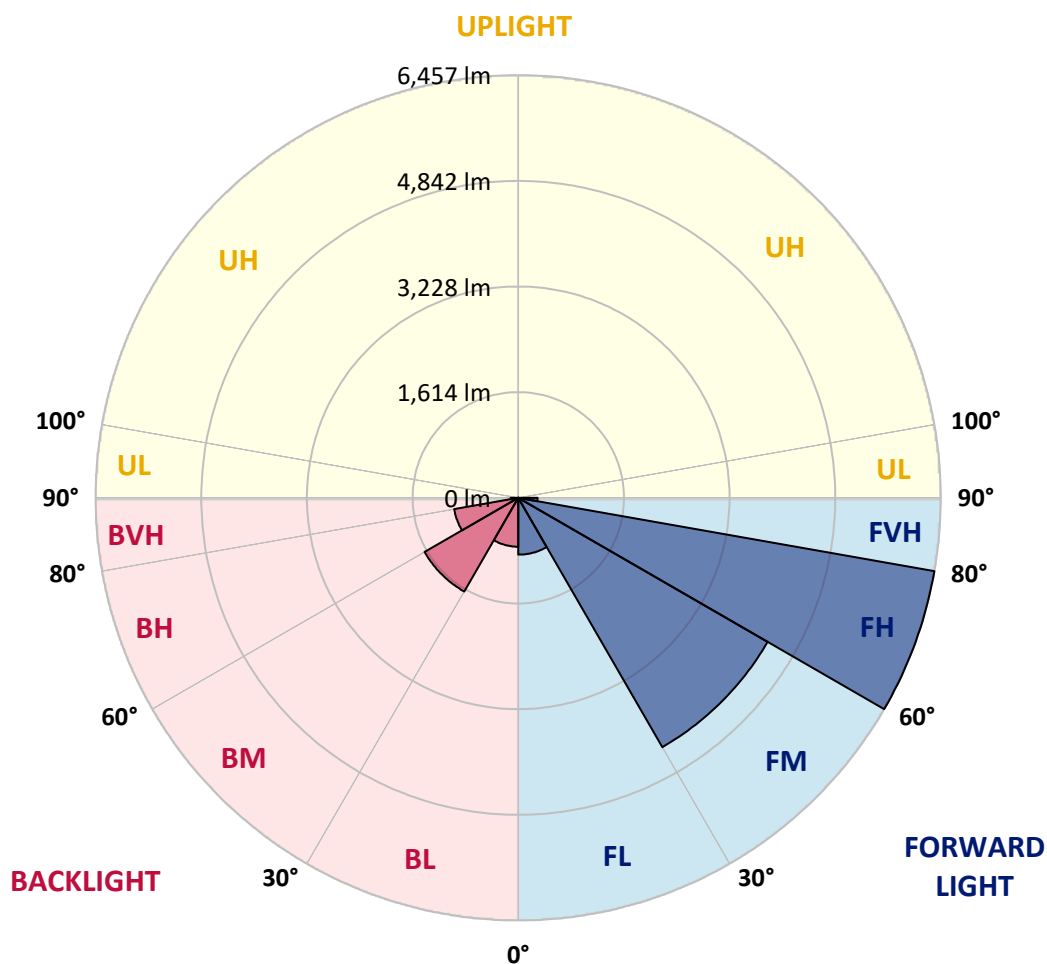
CATALOG NUMBER: NAV-SB3B-830-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	868.5	5.6			
FM	(30°-60°)	4399.1	28.3			
FH	(60°-80°)	6456.6	41.6			G3/7500
FVH	(80°-90°)	295.6	1.9			G3/500
BL	(0°-30°)	747.5	4.8	B2/1000		
BM	(30°-60°)	1653.2	10.6	B2/2500		
BH	(60°-80°)	993.9	6.4	B2/1000		G2/1000
BVH	(80°-90°)	116.4	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Short



REPORT NUMBER: P964208

CATALOG NUMBER: NAV-SB3B-830-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1566.7	1566.7	1566.7	1566.7	1566.7	1566.7	1566.7	1566.7	1566.7	1566.7	1566.7
2.5°	1628.1	1638.8	1628.9	1619.9	1615.8	1605.3	1604.4	1597.9	1593.8	1582.3	1579.0
5°	1741.9	1755.7	1739.4	1721.4	1705.0	1678.8	1675.6	1656.7	1635.5	1610.9	1597.1
7.5°	1870.3	1882.5	1863.8	1836.7	1808.1	1764.7	1763.9	1729.6	1696.1	1654.2	1630.6
10°	1982.4	1998.7	1973.3	1936.5	1900.6	1851.5	1845.7	1806.5	1763.9	1709.9	1673.9
12.5°	2081.4	2092.8	2068.2	2023.2	1981.5	1932.4	1925.2	1881.7	1834.3	1772.9	1727.1
15°	2159.9	2174.6	2141.9	2093.7	2049.5	2001.2	1994.6	1955.4	1907.9	1843.3	1784.4
17.5°	2211.4	2223.7	2190.2	2136.2	2093.7	2053.6	2048.7	2016.0	1974.2	1908.8	1845.7
20°	2231.1	2244.1	2209.0	2154.1	2114.9	2083.8	2081.4	2057.7	2029.0	1969.3	1905.5
22.5°	2250.7	2263.0	2217.2	2159.9	2125.5	2106.0	2105.1	2089.6	2078.1	2029.0	1966.9
25°	2330.1	2333.3	2272.0	2189.4	2140.3	2123.1	2122.3	2121.4	2126.4	2087.9	2033.1
27.5°	2398.8	2398.0	2345.6	2267.9	2191.9	2155.8	2155.0	2163.2	2178.7	2146.9	2101.9
30°	2499.5	2490.4	2428.2	2347.2	2277.8	2222.1	2217.2	2209.8	2222.1	2196.8	2170.5
32.5°	2713.0	2684.4	2583.7	2439.7	2348.9	2306.4	2299.8	2254.0	2258.9	2243.3	2230.3
35°	3018.9	2981.3	2847.1	2614.8	2437.2	2376.8	2373.5	2315.4	2305.5	2291.6	2296.5
37.5°	3383.0	3336.4	3180.2	2868.5	2589.5	2458.6	2453.6	2401.3	2361.2	2346.4	2374.3
40°	3748.7	3689.9	3560.5	3177.7	2813.6	2595.2	2579.6	2500.3	2454.5	2429.9	2488.8
42.5°	4103.8	4054.8	3944.3	3524.6	3090.2	2794.8	2760.4	2624.6	2590.3	2567.3	2673.7
45°	4418.0	4373.8	4292.8	3895.2	3414.2	3066.4	3032.9	2811.2	2800.5	2800.5	2954.4
47.5°	4673.3	4663.4	4577.5	4273.2	3796.2	3375.6	3317.6	3070.5	3099.2	3143.4	3352.8
50°	4956.4	4929.3	4837.7	4645.4	4245.3	3730.0	3682.5	3388.8	3496.0	3617.0	3928.7
52.5°	5216.5	5231.3	5129.0	5033.3	4752.6	4125.1	4041.7	3764.3	3995.9	4196.2	4603.7
55°	5484.1	5484.9	5456.3	5443.2	5284.4	4562.0	4470.3	4215.9	4584.1	4832.8	5390.8
57.5°	5735.2	5736.8	5779.4	5894.8	5901.3	5066.0	4962.0	4770.7	5237.8	5491.4	6202.4
60°	5959.3	5970.8	6087.1	6357.0	6443.8	5643.5	5545.5	5425.9	5913.5	6168.9	7055.7
62.5°	6034.7	6076.4	6334.9	6718.7	6979.6	6352.1	6255.6	6184.3	6623.8	6861.0	7769.2
65°	5907.1	6002.8	6502.6	7017.3	7531.1	7194.0	7098.2	7020.5	7361.8	7585.1	8355.0
67.5°	5593.7	5717.2	6492.9	7330.6	8200.3	8206.9	8117.7	7935.2	8152.8	8238.7	8545.5
70°	4768.2	4953.1	5920.9	7447.6	8968.5	9591.9	9506.1	9036.5	8942.4	8526.8	8008.8
72.5°	3072.1	3320.9	4359.9	6484.7	9139.5	10895.3	10890.4	10030.5	9191.9	7967.1	6423.3
75°	1120.8	1273.0	2025.7	4070.3	7671.8	10829.0	10860.9	9860.3	8391.0	6154.1	4001.6
77.5°	408.3	446.7	661.0	1564.3	4718.3	8688.7	8755.0	7882.9	5972.5	3088.5	1585.6
80°	214.3	235.6	338.8	607.1	2021.6	5160.1	5264.0	4684.8	2807.1	930.2	475.4
82.5°	118.6	128.4	189.8	329.7	910.6	2206.5	2268.7	1850.6	987.5	394.3	196.4
85°	63.9	68.0	89.2	180.0	445.1	765.0	782.2	553.1	393.5	231.5	94.9
87.5°	18.9	22.9	29.4	57.3	174.2	171.8	175.9	109.7	155.5	117.0	31.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P964208

CATALOG NUMBER: NAV-SB3B-830-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1566.7	1566.7	1566.7	1566.7	1566.7	1566.7	1566.7	1566.7	1566.7	1566.7	1566.7
2.5°	1574.1	1571.6	1562.7	1558.6	1553.7	1552.9	1557.0	1557.8	1558.6	1559.4	1562.7
5°	1588.9	1580.7	1572.5	1567.5	1569.2	1570.0	1578.2	1583.9	1588.0	1591.3	1593.0
7.5°	1617.4	1610.9	1597.1	1596.2	1598.7	1606.1	1616.6	1629.7	1637.1	1642.9	1644.5
10°	1660.0	1647.8	1631.4	1633.8	1638.8	1649.4	1671.5	1682.1	1694.4	1705.0	1702.5
12.5°	1703.3	1692.8	1673.9	1675.6	1683.8	1702.5	1723.8	1737.0	1745.1	1753.3	1756.5
15°	1759.8	1741.1	1720.6	1720.6	1735.3	1755.7	1765.6	1776.2	1781.1	1790.1	1793.3
17.5°	1817.9	1793.3	1766.4	1764.7	1782.8	1792.5	1798.3	1799.9	1801.5	1811.4	1814.7
20°	1876.1	1849.0	1810.6	1807.3	1811.4	1809.7	1808.9	1807.3	1809.7	1822.0	1827.0
22.5°	1933.3	1902.2	1849.0	1834.3	1822.9	1807.3	1806.5	1805.6	1807.3	1819.6	1827.8
25°	2000.4	1962.8	1891.5	1847.4	1808.9	1787.7	1790.1	1790.9	1792.5	1802.4	1815.5
27.5°	2073.2	2031.4	1930.8	1843.3	1773.8	1759.0	1754.9	1757.4	1763.1	1778.7	1794.2
30°	2146.0	2096.9	1966.9	1827.0	1729.6	1709.1	1696.1	1701.7	1719.7	1735.3	1752.4
32.5°	2212.3	2163.2	1995.5	1790.9	1673.1	1641.2	1624.0	1631.4	1649.4	1655.1	1675.6
35°	2290.0	2234.4	2007.8	1733.7	1611.7	1562.7	1539.8	1529.1	1538.1	1532.4	1550.4
37.5°	2376.8	2318.7	2006.1	1658.3	1539.8	1483.3	1451.4	1411.3	1392.5	1372.9	1385.1
40°	2505.2	2421.8	1986.4	1567.5	1450.6	1399.0	1341.7	1273.9	1231.3	1192.9	1195.4
42.5°	2680.3	2564.9	1950.5	1467.8	1349.9	1301.6	1224.0	1144.6	1077.5	1013.7	1008.0
45°	2941.2	2752.2	1905.5	1361.4	1241.2	1193.7	1109.5	1020.2	944.1	862.3	852.5
47.5°	3317.6	3004.3	1862.9	1240.4	1126.6	1083.2	1007.2	924.6	834.6	755.1	746.2
50°	3834.6	3365.9	1823.7	1122.5	1013.7	980.9	920.4	836.2	745.4	681.5	677.4
52.5°	4492.5	3857.6	1807.3	1008.8	908.2	895.8	847.6	769.1	683.2	629.1	625.0
55°	5247.6	4445.8	1807.3	900.0	815.7	819.8	786.3	713.4	639.0	590.7	585.8
57.5°	6018.3	5041.5	1774.6	799.3	737.2	754.3	733.1	669.2	602.2	552.3	544.1
60°	6728.4	5540.5	1642.0	707.7	667.6	694.6	680.7	625.9	544.1	502.4	495.8
62.5°	7274.1	5821.9	1386.7	634.9	610.4	641.4	634.1	568.6	533.4	516.3	510.6
65°	7547.4	5776.2	1060.4	570.2	562.1	610.4	594.8	592.3	564.6	544.9	538.3
67.5°	7379.7	5381.8	769.1	522.8	534.2	581.7	641.4	651.3	599.7	561.3	554.7
70°	6644.2	4668.4	572.7	477.8	499.1	582.5	731.4	681.5	588.2	543.2	535.9
72.5°	5054.5	3481.2	444.2	430.4	453.3	586.6	771.5	667.6	555.6	600.5	595.6
75°	2890.5	1911.2	356.7	372.3	396.0	548.2	751.0	631.6	530.1	551.4	551.4
77.5°	1102.1	734.7	294.5	315.0	318.3	478.6	718.3	629.1	504.8	492.5	449.2
80°	382.1	287.2	243.8	250.3	246.3	425.5	688.9	547.3	413.2	369.8	357.5
82.5°	156.3	143.2	193.1	184.9	175.1	330.6	556.4	447.5	337.9	298.6	295.3
85°	68.0	90.8	127.6	112.1	101.5	229.1	445.9	378.8	285.6	246.3	245.5
87.5°	13.9	34.3	54.0	50.7	52.4	153.0	316.6	269.2	202.1	151.4	118.6
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)