

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: P961581

Luminaire Tested: **NAV-SB2A-835-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961581
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-835-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8476.8 lumens
Efficiency: N/A
Efficacy: 147.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

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

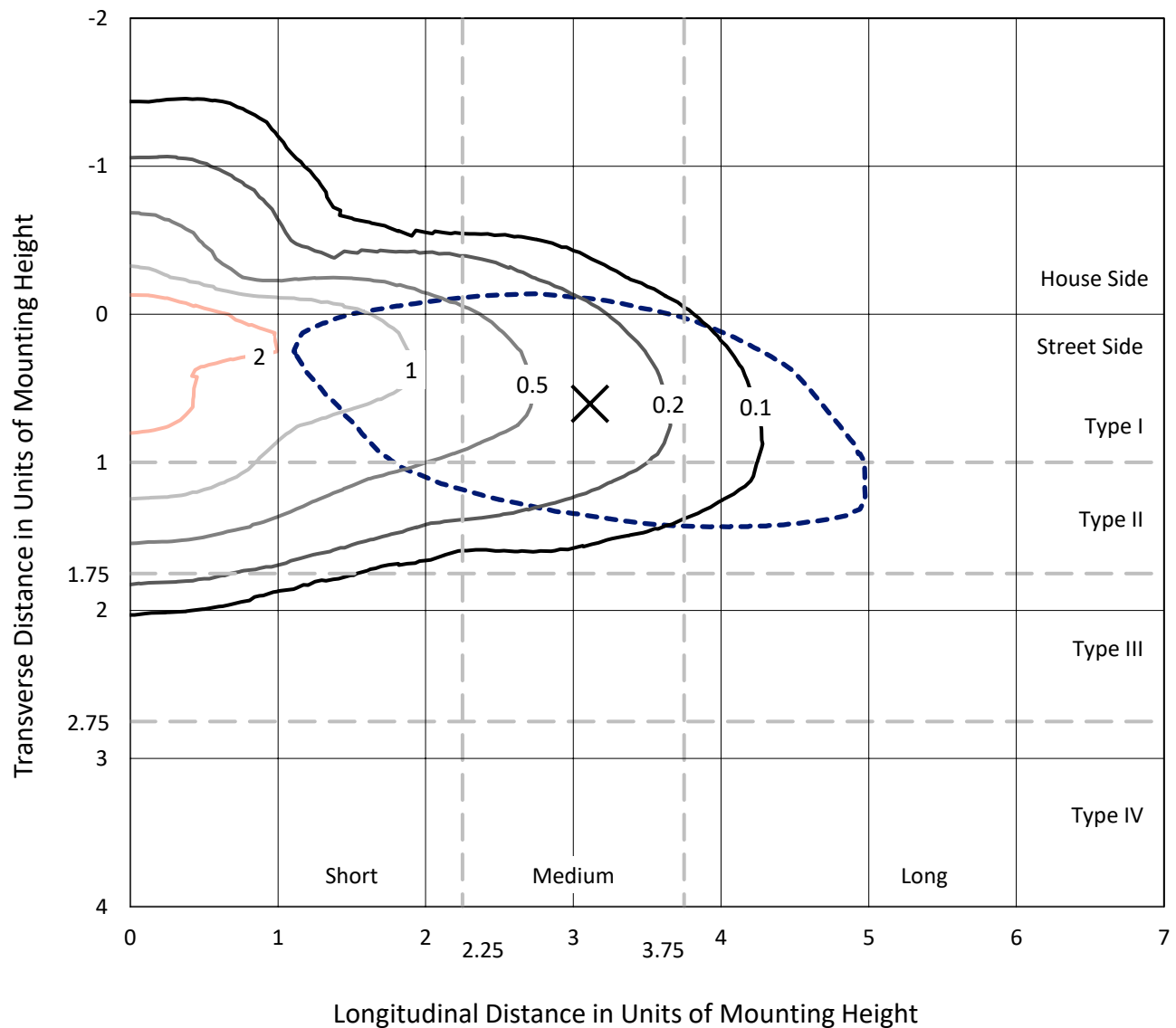


REPORT NUMBER: P961581

CATALOG NUMBER: NAV-SB2A-835-U-SL2

Iso-Footcandle Lines of Horizontal Illumination

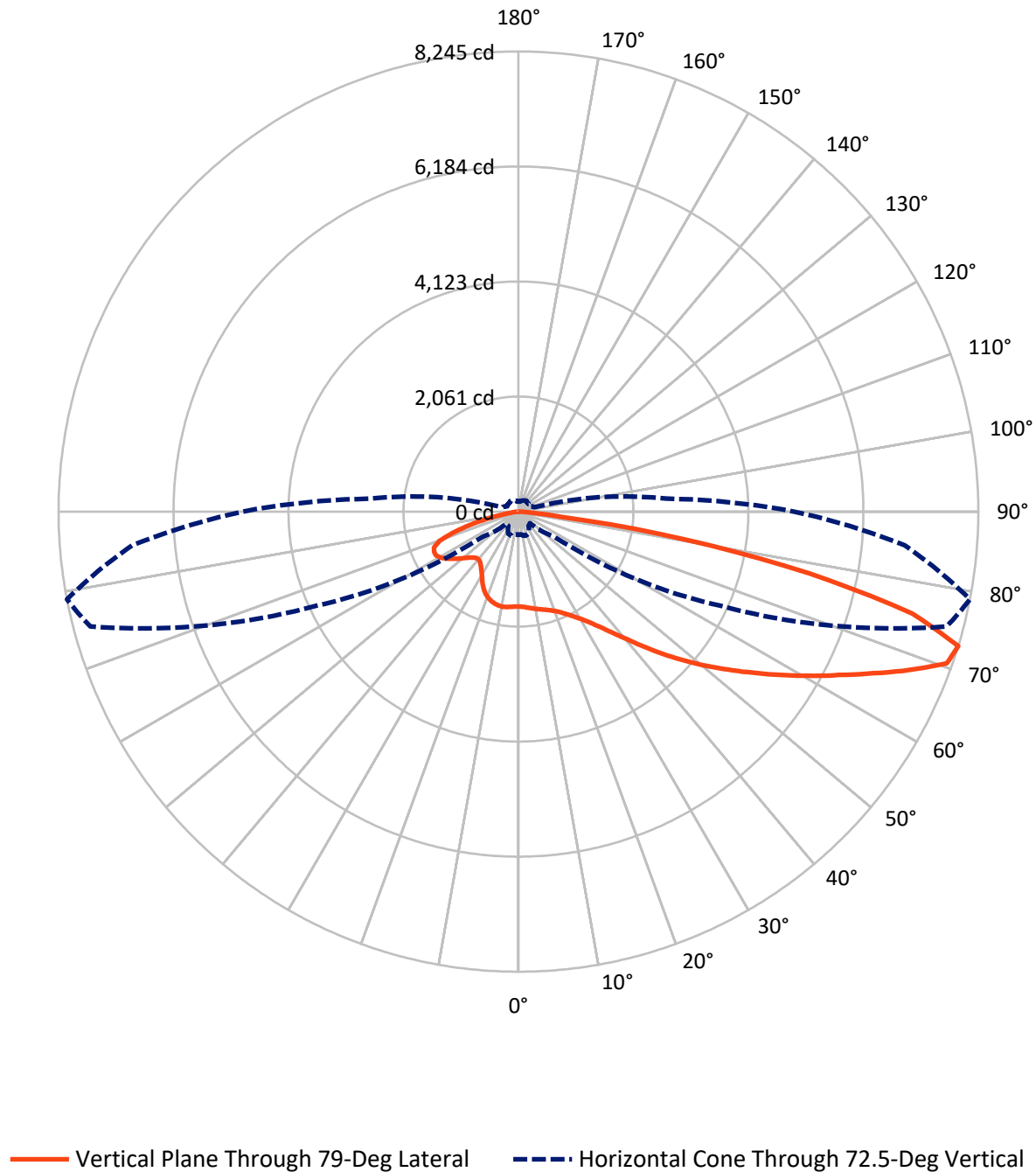
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 fc
Type II - Medium - N/A

REPORT NUMBER: P961581
CATALOG NUMBER: NAV-SB2A-835-U-SL2

Luminous Intensity Polar Plot



REPORT NUMBER: P961581

CATALOG NUMBER: NAV-SB2A-835-U-SL2

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1865.4	0.0	1865.4
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	6611.4	0.0	6611.4
	% Fixture	78.0	0.0	78.0
Total	Lumens	8476.8	0.0	8476.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.5	1.8
10°-20°	403.8	4.8
20°-30°	651.6	7.7
30°-40°	978.0	11.5
40°-50°	1387.3	16.4
50°-60°	1752.0	20.7
60°-70°	1779.4	21.0
70°-80°	1212.7	14.3
80°-90°	157.3	1.9
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°	8476.8	100.0
0°-180°	8476.8	100.0

Coefficient of Utilization



REPORT NUMBER: P961581

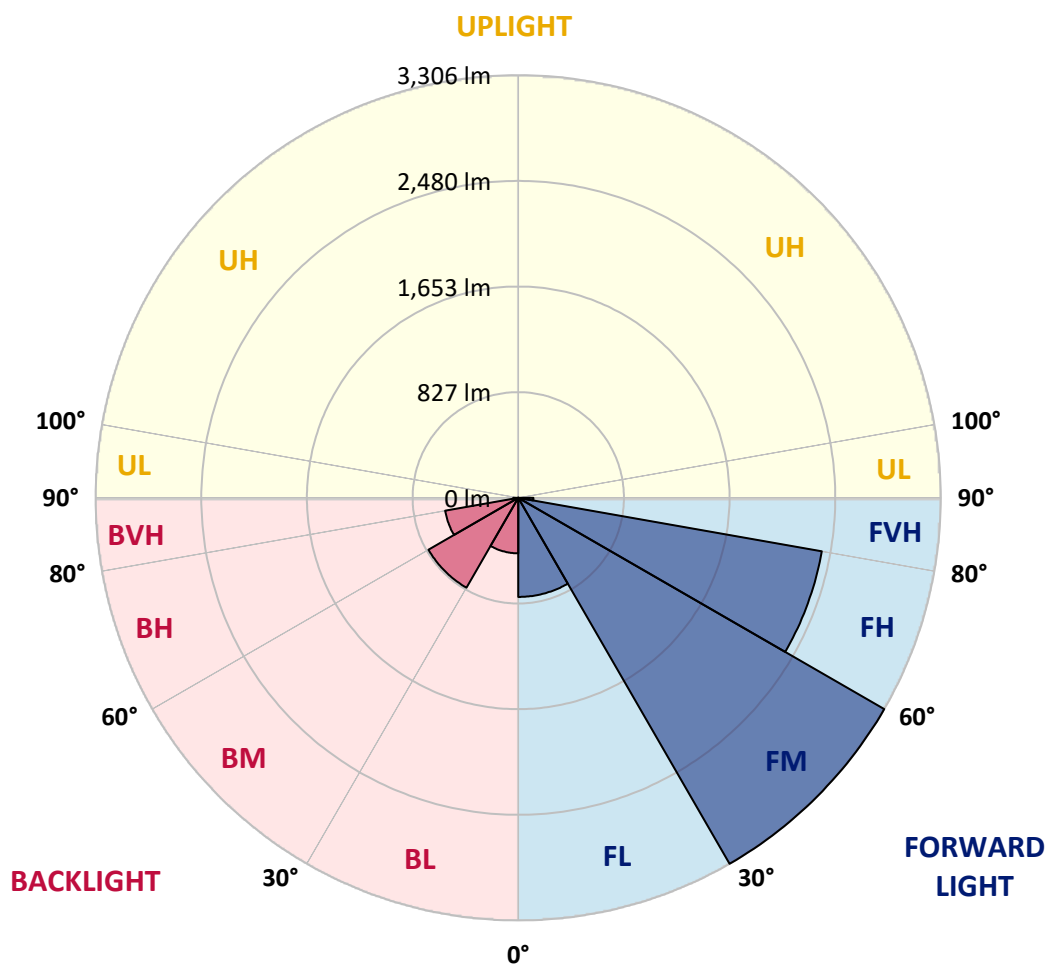
CATALOG NUMBER: NAV-SB2A-835-U-SL2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	775.4	9.1			
FM	(30°-60°)	3306.1	39.0			
FH	(60°-80°)	2411.4	28.4			G2/5000
FVH	(80°-90°)	118.5	1.4			G2/225
BL	(0°-30°)	434.5	5.1	B1/500		
BM	(30°-60°)	811.2	9.6	B1/1000		
BH	(60°-80°)	580.8	6.9	B2/1000		G2/1000
BVH	(80°-90°)	38.8	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Medium



REPORT NUMBER: P961581

CATALOG NUMBER: NAV-SB2A-835-U-SL2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6
2.5°	1702.5	1694.4	1699.3	1697.6	1699.9	1702.5	1703.4	1704.8	1709.3	1708.8	1708.4
5°	1698.9	1690.8	1697.6	1695.4	1701.2	1707.4	1712.9	1717.8	1725.0	1728.0	1723.6
7.5°	1691.4	1685.9	1692.7	1699.3	1710.1	1719.5	1727.2	1738.4	1748.8	1750.5	1753.7
10°	1647.0	1642.9	1658.6	1676.1	1705.7	1731.2	1747.8	1760.8	1772.0	1773.9	1778.3
12.5°	1600.7	1595.8	1613.2	1637.0	1685.0	1731.2	1766.2	1783.2	1793.1	1799.0	1805.6
15°	1593.2	1589.1	1598.9	1619.6	1659.5	1719.1	1778.8	1810.2	1818.7	1825.4	1828.1
17.5°	1629.9	1622.3	1626.3	1633.4	1656.8	1707.9	1788.6	1840.6	1853.6	1860.8	1860.8
20°	1715.0	1704.3	1698.0	1683.7	1679.7	1709.7	1787.7	1877.4	1894.4	1903.4	1905.7
22.5°	1828.5	1821.3	1807.9	1771.6	1732.1	1731.6	1804.7	1924.4	1956.3	1964.8	1959.5
25°	1965.7	1955.0	1938.0	1888.6	1812.8	1775.2	1833.4	1984.6	2037.9	2040.2	2024.5
27.5°	2123.6	2107.4	2084.1	2019.0	1916.9	1843.4	1877.4	2053.6	2131.6	2130.8	2098.5
30°	2290.0	2273.8	2249.2	2170.2	2041.5	1935.2	1938.4	2128.0	2242.8	2237.9	2182.7
32.5°	2411.4	2399.3	2394.4	2333.4	2185.0	2043.7	2008.3	2210.5	2380.0	2375.5	2298.5
35°	2504.7	2489.0	2494.8	2463.9	2341.5	2165.2	2094.0	2308.7	2546.8	2546.4	2450.5
37.5°	2597.0	2583.2	2588.1	2567.4	2486.3	2319.5	2198.4	2428.9	2753.6	2763.4	2634.2
40°	2681.4	2666.5	2686.3	2667.0	2598.9	2483.6	2317.2	2564.8	2993.0	3011.9	2856.7
42.5°	2732.0	2720.4	2753.0	2753.6	2696.6	2622.2	2447.7	2714.5	3270.1	3312.2	3130.1
45°	2749.5	2745.5	2794.8	2805.1	2783.2	2702.4	2565.3	2877.8	3568.7	3644.1	3441.8
47.5°	2730.7	2723.0	2791.2	2829.3	2846.8	2740.1	2662.5	3054.4	3873.6	3983.9	3781.7
50°	2635.6	2620.8	2722.2	2802.5	2864.8	2764.7	2760.7	3258.5	4220.2	4340.9	4123.4
52.5°	2464.8	2453.5	2568.9	2708.3	2825.3	2776.8	2871.0	3481.3	4549.4	4705.4	4473.5
55°	2246.4	2231.6	2358.5	2540.6	2727.1	2772.8	2981.3	3730.6	4937.6	5095.9	4835.4
57.5°	1900.2	1870.6	2031.1	2246.4	2567.0	2767.9	3096.1	3978.5	5332.3	5521.9	5221.5
60°	1395.3	1351.5	1548.3	1803.4	2254.1	2719.9	3238.3	4256.5	5805.7	5976.6	5642.9
62.5°	812.5	786.9	915.6	1153.7	1698.9	2437.4	3318.0	4579.8	6271.2	6450.5	6057.2
65°	630.9	623.7	634.9	653.3	945.7	1824.9	3071.9	4895.0	6863.0	6988.6	6489.1
67.5°	577.1	571.6	576.7	542.1	479.8	1016.5	2430.3	4974.8	7497.1	7573.2	6867.1
70°	512.9	506.7	522.9	493.2	377.5	462.3	1570.3	4685.2	8001.5	8144.4	7154.5
72.5°	417.9	410.7	448.4	434.9	318.0	296.8	788.7	3996.9	7948.6	8245.4	6948.7
75°	321.0	317.0	361.8	373.1	259.1	233.6	378.4	2971.0	6994.8	7293.9	5988.7
77.5°	249.3	246.2	269.1	309.9	209.0	181.1	232.7	1884.6	5271.3	5323.6	4127.0
80°	187.0	178.0	199.1	239.8	162.8	132.2	157.8	1099.0	3332.0	3020.4	1796.2
82.5°	117.1	112.5	130.1	160.1	114.8	91.0	102.7	607.1	1335.3	786.5	346.6
85°	66.8	65.0	70.8	91.4	62.3	52.5	58.7	268.1	244.0	167.7	104.4
87.5°	26.9	26.0	32.3	40.8	22.9	19.3	20.6	64.6	53.8	49.8	34.5
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: P961581

CATALOG NUMBER: NAV-SB2A-835-U-SL2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6	1701.6
2.5°	1706.5	1706.5	1700.3	1690.4	1679.3	1672.1	1660.4	1657.2	1645.1	1641.5	1647.4
5°	1727.2	1723.6	1704.3	1676.5	1638.4	1603.4	1564.9	1540.7	1506.5	1494.4	1503.5
7.5°	1753.2	1743.3	1710.1	1649.1	1569.4	1490.9	1409.3	1347.4	1288.2	1267.1	1269.9
10°	1776.9	1763.1	1706.5	1599.8	1461.8	1325.8	1195.9	1104.8	1035.8	1007.6	1013.8
12.5°	1800.7	1775.2	1682.8	1517.8	1308.8	1124.5	986.0	915.1	872.6	838.4	849.7
15°	1823.2	1787.3	1646.0	1407.9	1141.1	954.2	852.0	795.4	761.4	738.9	743.0
17.5°	1849.1	1797.5	1590.9	1268.4	981.5	836.2	752.9	718.7	712.1	709.3	711.1
20°	1885.5	1807.0	1518.2	1112.4	864.1	742.1	699.0	695.9	695.5	694.1	698.5
22.5°	1924.4	1818.2	1422.3	970.8	764.0	683.4	675.7	669.4	665.4	664.9	669.9
25°	1970.7	1821.8	1302.2	854.6	678.9	655.6	646.6	637.1	634.5	634.5	637.1
27.5°	2015.5	1809.6	1162.2	753.8	630.9	630.0	618.3	615.2	614.7	616.1	619.7
30°	2060.4	1786.8	1023.3	660.5	603.1	603.1	599.0	601.3	603.1	607.5	610.7
32.5°	2120.8	1762.6	907.1	591.4	578.8	574.4	578.4	582.9	584.7	590.5	595.4
35°	2209.7	1745.6	814.7	553.8	553.8	548.0	550.2	549.3	545.2	542.5	548.8
37.5°	2327.2	1744.7	738.5	536.3	532.7	531.8	532.3	526.4	510.8	491.9	492.3
40°	2468.4	1768.8	679.8	524.2	521.5	526.8	524.2	508.5	465.5	432.7	431.8
42.5°	2658.0	1837.9	642.1	509.3	517.4	524.2	513.4	459.1	430.0	408.1	407.1
45°	2881.4	1950.1	622.8	493.6	509.8	517.9	465.9	442.1	418.8	392.4	390.5
47.5°	3134.2	2091.3	618.3	478.9	492.8	497.7	445.7	434.9	408.5	379.8	377.5
50°	3409.6	2258.5	630.5	461.4	468.1	451.1	439.0	429.1	401.8	373.5	370.3
52.5°	3694.3	2442.8	654.7	437.7	443.4	424.7	436.2	427.7	397.7	359.6	356.9
55°	3974.0	2628.4	677.9	409.8	418.3	400.9	428.7	422.4	379.4	336.3	334.0
57.5°	4258.4	2813.2	700.8	385.2	394.1	378.0	416.6	408.1	358.7	314.8	313.9
60°	4553.8	2992.5	711.6	361.4	367.7	356.9	398.2	383.3	335.4	292.8	291.4
62.5°	4830.5	3141.8	694.1	337.6	341.6	337.2	373.9	354.2	312.1	268.1	267.7
65°	5108.0	3230.6	640.3	314.4	315.2	312.9	339.9	322.9	284.7	246.6	244.0
67.5°	5359.5	3280.4	554.6	289.3	287.0	286.1	308.0	288.7	258.3	225.1	222.4
70°	5412.9	3153.9	423.7	259.6	259.6	257.4	273.1	253.4	229.1	202.2	201.3
72.5°	4943.9	2653.1	300.8	226.0	229.6	225.1	238.1	221.5	199.6	181.6	176.2
75°	3986.6	1945.6	218.8	191.5	197.7	190.1	202.2	190.5	171.7	171.3	154.3
77.5°	2739.2	1203.0	158.8	157.8	162.4	152.4	166.4	160.1	143.0	135.4	126.9
80°	1168.9	479.8	115.7	122.0	122.0	113.0	129.1	130.9	116.1	112.5	112.5
82.5°	232.7	136.3	81.2	83.8	78.9	76.3	91.4	101.4	139.9	155.6	156.0
85°	69.9	50.2	48.9	45.7	40.4	40.8	53.8	101.8	125.6	71.8	61.9
87.5°	19.3	12.5	13.0	10.4	8.5	11.2	18.3	77.1	42.1	17.9	15.3
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)