

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: P964220

Luminaire Tested: **NAV-SB3B-835-U-SL4**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964220
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-835-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15922.3 lumens
Efficiency: N/A
Efficacy: 145.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - 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



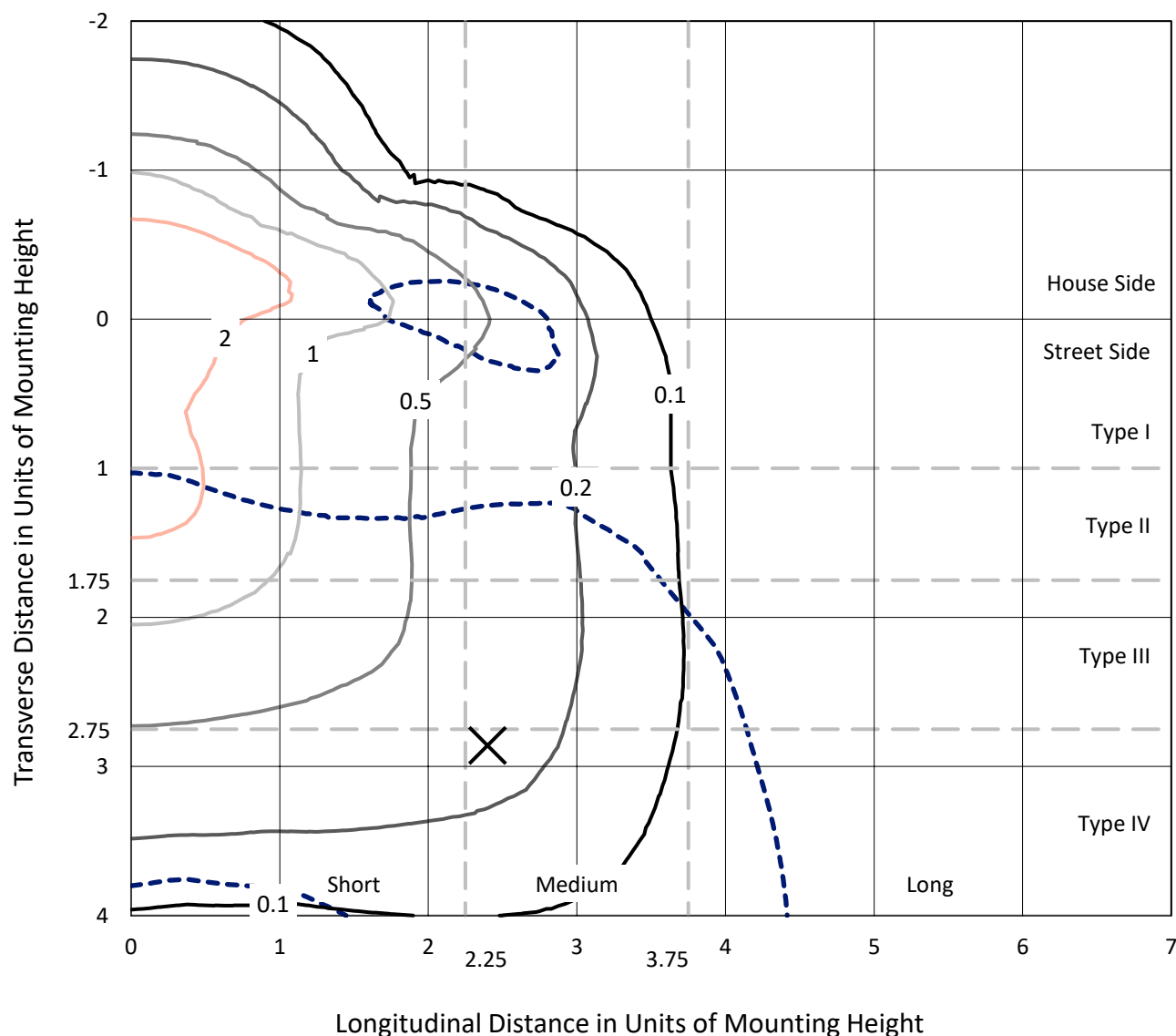
REPORT NUMBER: P964220

CATALOG NUMBER: NAV-SB3B-835-U-SL4

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

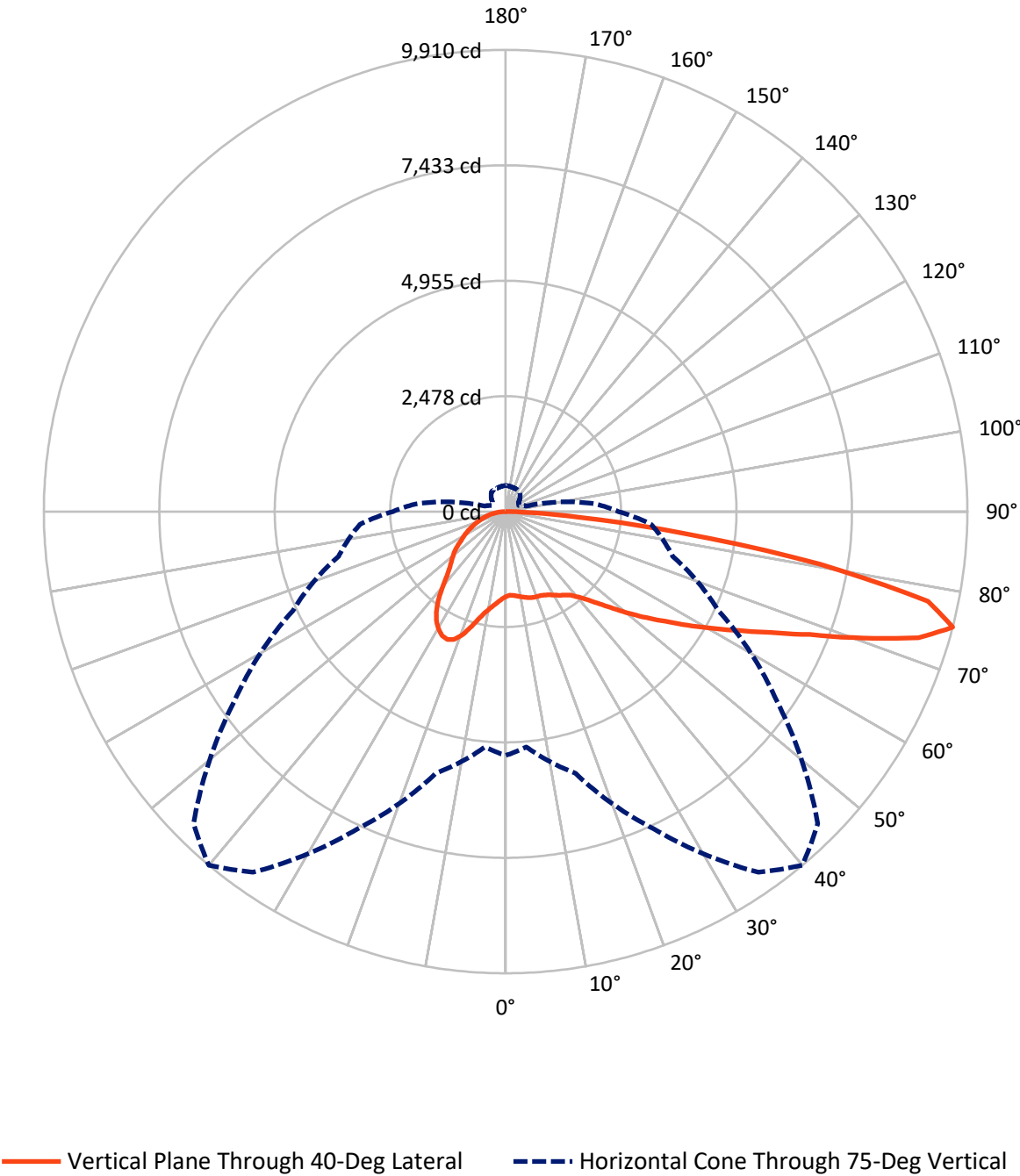
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 fc
Type IV - Medium - N/A

REPORT NUMBER: P964220
CATALOG NUMBER: NAV-SB3B-835-U-SL4

Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4933.3	0.0	4933.3
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	10989.1	0.0	10989.1
	% Fixture	69.0	0.0	69.0
Total	Lumens	15922.3	0.0	15922.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.7	1.1
10°-20°	610.2	3.8
20°-30°	1114.2	7.0
30°-40°	1580.2	9.9
40°-50°	2133.8	13.4
50°-60°	2870.5	18.0
60°-70°	3643.3	22.9
70°-80°	3306.5	20.8
80°-90°	482.0	3.0
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°	15922.3	100.0
0°-180°	15922.3	100.0

Coefficient of Utilization



REPORT NUMBER: P964220

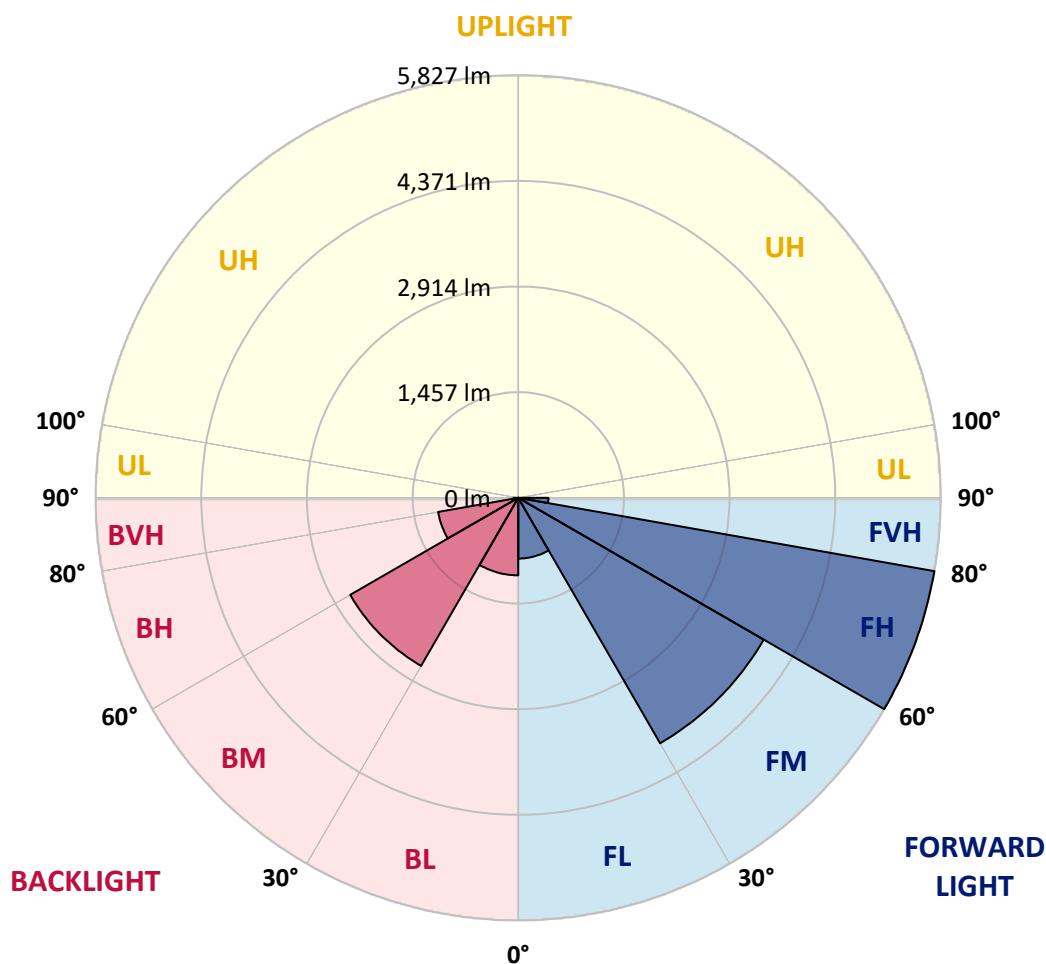
CATALOG NUMBER: NAV-SB3B-835-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	837.5	5.3			
FM	(30°-60°)	3908.6	24.5			
FH	(60°-80°)	5827.3	36.6			G3/7500
FVH	(80°-90°)	415.6	2.6			G3/500
BL	(0°-30°)	1068.6	6.7	B3/2500		
BM	(30°-60°)	2675.9	16.8	B3/5000		
BH	(60°-80°)	1122.5	7.0	B3/2500		G3/2500
BVH	(80°-90°)	66.4	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type IV Medium



REPORT NUMBER: P964220

CATALOG NUMBER: NAV-SB3B-835-U-SL4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	1820.7	1820.7	1820.7	1820.7	1820.7	1820.7	1820.7	1820.7	1820.7	1820.7	1820.7
2.5°	1792.8	1803.0	1800.5	1797.1	1797.1	1798.0	1797.1	1803.0	1808.9	1814.9	1824.1
5°	1811.5	1821.6	1816.5	1812.3	1808.9	1808.1	1805.5	1804.7	1808.1	1815.7	1828.3
7.5°	1847.8	1857.9	1850.3	1842.7	1836.0	1832.6	1829.2	1824.1	1821.6	1825.8	1843.6
10°	1888.3	1898.4	1889.2	1875.6	1864.7	1860.5	1857.1	1852.0	1848.6	1851.2	1870.5
12.5°	1928.8	1939.0	1926.3	1907.7	1893.4	1890.8	1886.6	1885.0	1884.1	1883.2	1902.7
15°	1966.9	1975.3	1959.3	1937.2	1922.1	1917.9	1913.7	1916.1	1920.4	1925.5	1947.4
17.5°	1996.4	2004.8	1981.2	1952.5	1938.2	1936.4	1933.9	1942.4	1954.2	1966.9	1993.8
20°	2023.5	2031.9	2001.4	1962.6	1945.8	1945.8	1946.6	1964.3	1981.2	1999.8	2037.0
22.5°	2061.4	2068.1	2031.0	1977.8	1953.3	1955.0	1961.7	1979.5	2000.6	2025.9	2077.5
25°	2118.0	2123.1	2077.5	2006.5	1978.7	1983.7	1989.6	1998.1	2018.3	2048.0	2117.1
27.5°	2209.2	2213.4	2153.5	2057.2	2014.9	2023.5	2031.9	2025.9	2035.2	2060.6	2149.2
30°	2337.6	2340.1	2264.1	2136.6	2076.6	2080.9	2082.5	2058.1	2040.3	2060.6	2172.1
32.5°	2489.6	2488.7	2398.4	2232.9	2146.8	2142.5	2128.1	2080.0	2038.6	2056.4	2192.4
35°	2725.2	2715.9	2599.4	2368.0	2226.1	2200.0	2166.1	2104.5	2047.0	2052.2	2210.1
37.5°	3115.4	3086.7	2925.4	2589.3	2344.4	2277.7	2227.8	2144.2	2065.7	2050.4	2231.2
40°	3555.3	3519.0	3341.7	2892.4	2521.7	2414.4	2334.2	2200.8	2096.0	2058.1	2262.4
42.5°	4077.2	4025.7	3834.8	3249.7	2746.3	2590.9	2470.1	2272.5	2140.8	2082.5	2304.6
45°	4718.2	4649.8	4379.6	3652.5	3029.2	2822.3	2661.0	2381.5	2209.2	2129.8	2368.0
47.5°	5366.0	5382.9	4998.6	4113.5	3368.7	3107.8	2900.0	2545.3	2308.8	2205.8	2470.1
50°	6054.3	6066.1	5614.2	4624.5	3753.8	3430.4	3168.6	2728.5	2447.4	2313.9	2623.0
52.5°	6591.4	6593.0	6173.3	5159.0	4154.9	3785.0	3458.2	2938.1	2607.8	2457.5	2826.5
55°	6927.5	6923.3	6565.1	5664.9	4616.1	4157.5	3779.2	3176.2	2803.8	2626.4	3082.4
57.5°	7171.5	7158.8	6835.4	6099.8	5107.6	4597.4	4142.2	3446.4	3035.1	2827.4	3419.4
60°	7264.4	7256.8	7018.7	6475.6	5624.4	5083.9	4561.1	3748.7	3297.7	3064.6	3852.6
62.5°	7299.8	7314.2	7198.5	6839.6	6177.5	5622.6	5021.4	4110.1	3593.3	3333.2	4309.5
65°	7424.9	7451.0	7427.4	7315.9	6802.4	6253.5	5632.0	4540.0	3915.9	3621.2	4786.6
67.5°	7672.3	7698.5	7708.6	7885.9	7565.8	7039.8	6393.7	5075.5	4293.4	3920.2	5145.5
70°	7666.4	7658.8	7837.8	8339.4	8521.8	8128.4	7420.6	5734.2	4743.6	4168.5	5191.1
72.5°	6978.1	6917.3	7340.4	8334.4	9317.4	9265.0	8674.7	6583.7	5132.1	4198.8	4504.6
75°	5235.1	5072.9	5820.3	7511.0	9450.0	9910.2	9471.9	7110.7	5039.9	3709.9	3134.8
77.5°	2238.8	2075.8	2956.6	5560.2	8457.7	9264.2	8740.6	6203.7	4023.2	2453.2	1539.6
80°	586.1	585.3	893.5	2520.8	5751.9	6841.3	6001.9	4006.3	2298.8	876.6	424.8
82.5°	242.4	236.5	328.5	980.5	2810.4	3839.1	3133.1	1787.0	830.1	237.3	141.0
85°	90.4	89.5	159.6	338.7	991.5	1583.4	1145.9	456.8	206.9	115.7	63.3
87.5°	25.3	24.5	34.6	117.4	241.5	366.5	195.9	75.1	58.2	45.6	18.6
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: P964220

CATALOG NUMBER: NAV-SB3B-835-U-SL4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1820.7	1820.7	1820.7	1820.7	1820.7	1820.7	1820.7	1820.7	1820.7	1820.7	1820.7
2.5°	1826.7	1830.9	1838.4	1844.4	1852.0	1860.5	1872.3	1879.8	1887.4	1892.6	1889.2
5°	1834.2	1843.6	1862.9	1882.4	1905.2	1926.3	1950.8	1968.5	1982.9	1987.1	1988.8
7.5°	1851.2	1866.3	1899.3	1932.2	1968.5	2003.2	2038.6	2069.1	2093.6	2102.8	2103.6
10°	1880.7	1901.0	1947.4	1993.8	2042.0	2095.2	2140.8	2184.7	2219.3	2233.7	2234.5
12.5°	1917.9	1943.2	2004.0	2068.1	2134.9	2208.4	2267.5	2321.5	2364.6	2384.0	2384.0
15°	1966.0	1999.0	2076.6	2162.8	2260.7	2362.9	2438.1	2498.0	2546.2	2569.8	2568.1
17.5°	2018.3	2062.3	2160.2	2290.3	2430.5	2564.8	2652.6	2696.5	2746.3	2769.1	2768.3
20°	2069.1	2123.1	2263.3	2452.4	2639.1	2781.7	2852.7	2864.6	2868.0	2870.4	2877.2
22.5°	2121.3	2194.0	2392.5	2656.8	2857.0	2955.8	2965.8	2915.2	2844.3	2811.4	2820.6
25°	2178.8	2275.1	2561.4	2882.3	3044.5	3056.2	2978.5	2855.2	2721.0	2659.4	2668.6
27.5°	2234.5	2368.8	2764.0	3097.7	3179.5	3075.7	2908.4	2733.7	2571.5	2506.4	2514.1
30°	2290.3	2476.1	2987.9	3285.9	3241.2	3027.5	2797.8	2602.8	2439.8	2371.3	2378.9
32.5°	2346.8	2601.0	3245.5	3422.0	3230.2	2925.4	2660.2	2455.8	2312.2	2240.4	2249.8
35°	2411.0	2754.8	3489.5	3496.3	3156.7	2775.0	2478.7	2280.1	2155.2	2097.8	2110.4
37.5°	2494.6	2949.8	3704.9	3514.8	3028.4	2554.6	2253.2	2072.4	1969.3	1943.2	1961.7
40°	2598.5	3184.6	3869.5	3485.2	2838.3	2286.9	2006.5	1862.1	1803.9	1809.7	1830.0
42.5°	2733.7	3447.3	3985.2	3409.3	2574.1	2010.7	1790.4	1726.2	1754.0	1777.7	1799.6
45°	2909.3	3720.0	4057.0	3280.0	2275.1	1776.8	1662.9	1678.0	1699.1	1701.7	1718.5
47.5°	3133.9	3996.2	4104.3	3084.9	1970.3	1612.1	1581.8	1585.2	1580.9	1563.1	1576.7
50°	3414.3	4264.7	4146.5	2826.5	1710.9	1509.1	1468.6	1456.7	1398.5	1341.1	1348.7
52.5°	3733.6	4511.3	4164.3	2505.6	1509.1	1423.0	1357.1	1282.8	1173.8	1156.1	1162.0
55°	4088.2	4739.3	4118.7	2111.3	1339.4	1312.3	1212.7	1123.2	1111.4	1096.1	1098.7
57.5°	4512.2	4985.1	4025.7	1671.3	1165.4	1183.2	1086.0	1096.1	1075.0	1051.4	1047.1
60°	4975.8	5239.3	3862.7	1270.1	985.5	1021.8	1053.1	1052.3	1046.3	1026.9	1020.2
62.5°	5392.9	5406.5	3541.8	972.8	827.6	896.9	982.2	981.3	976.2	965.2	961.0
65°	5641.3	5381.1	3006.4	766.0	697.5	793.9	885.9	892.7	893.5	892.7	892.7
67.5°	5597.3	5084.7	2271.7	609.8	590.3	689.1	790.5	799.7	806.5	808.2	809.9
70°	5100.8	4433.6	1481.2	486.5	494.9	597.1	700.1	709.4	715.2	722.0	725.4
72.5°	3975.9	3259.8	847.9	393.5	411.2	517.7	610.6	621.6	624.9	637.6	642.7
75°	2422.9	1917.1	457.8	310.0	337.8	442.5	521.9	534.5	540.5	555.7	557.4
77.5°	1151.9	830.1	261.0	241.5	271.9	361.4	440.9	455.2	439.1	447.6	440.9
80°	389.3	308.2	164.7	184.1	207.8	282.1	353.0	367.4	333.5	331.9	328.5
82.5°	135.9	124.9	104.8	122.5	134.3	201.8	266.9	285.5	248.3	247.4	235.6
85°	53.2	50.6	58.2	66.7	80.3	124.1	175.7	184.9	152.8	123.3	121.6
87.5°	11.0	11.8	14.3	15.2	24.5	43.0	63.3	77.7	61.6	52.4	48.2
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)