

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: P883654

Luminaire Tested: **NAV-SB4A-835-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883654
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4A-835-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15205 lumens
Efficiency: N/A
Efficacy: 133.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G3

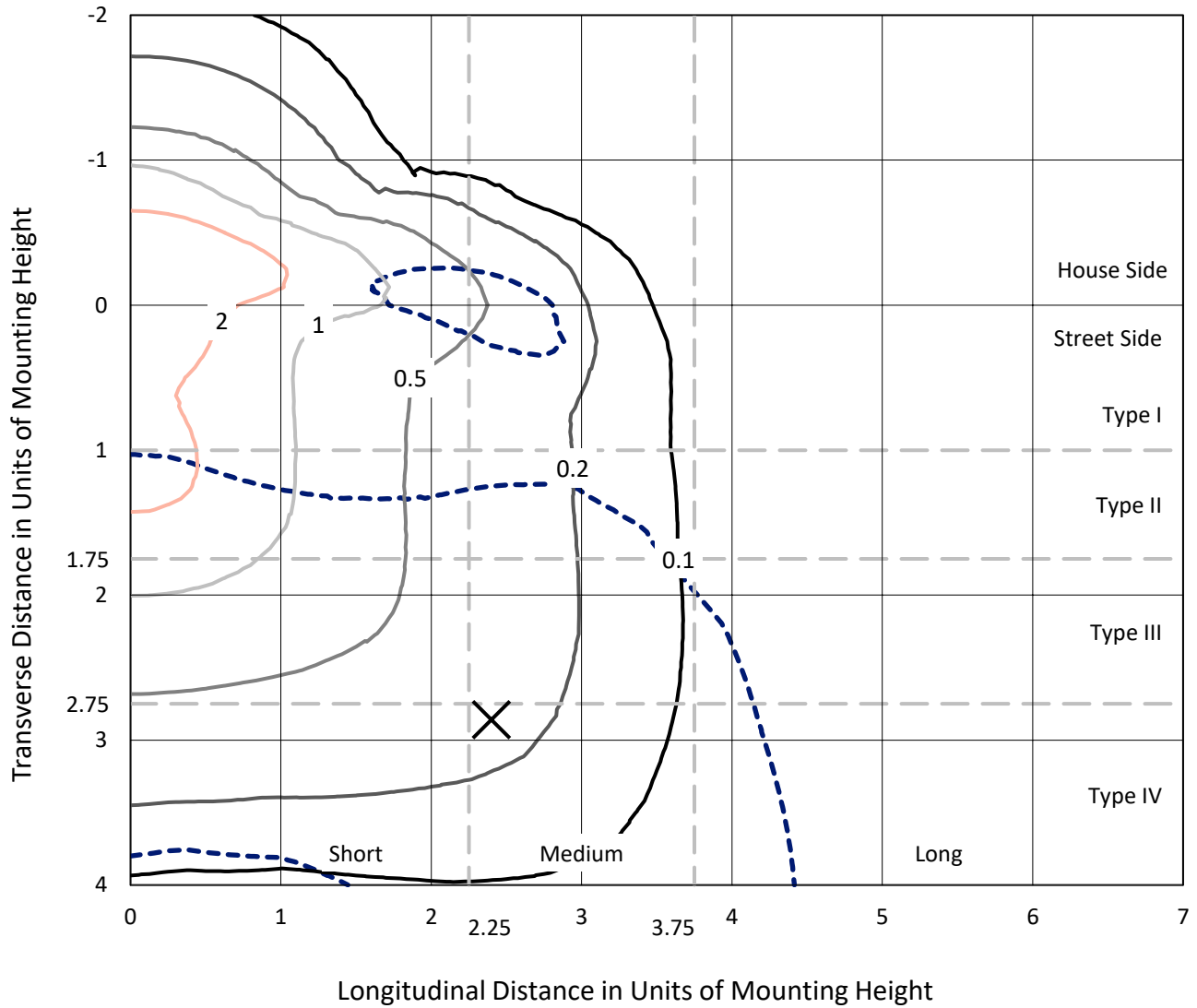
Input Watts (W): 114
Input Voltage (V): 120.0
Input Current (Ain): 0.952
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.206
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P883654
 CATALOG NUMBER: NAV-SB4A-835-U-SL4

Iso-Footcandle Lines of Horizontal Illumination

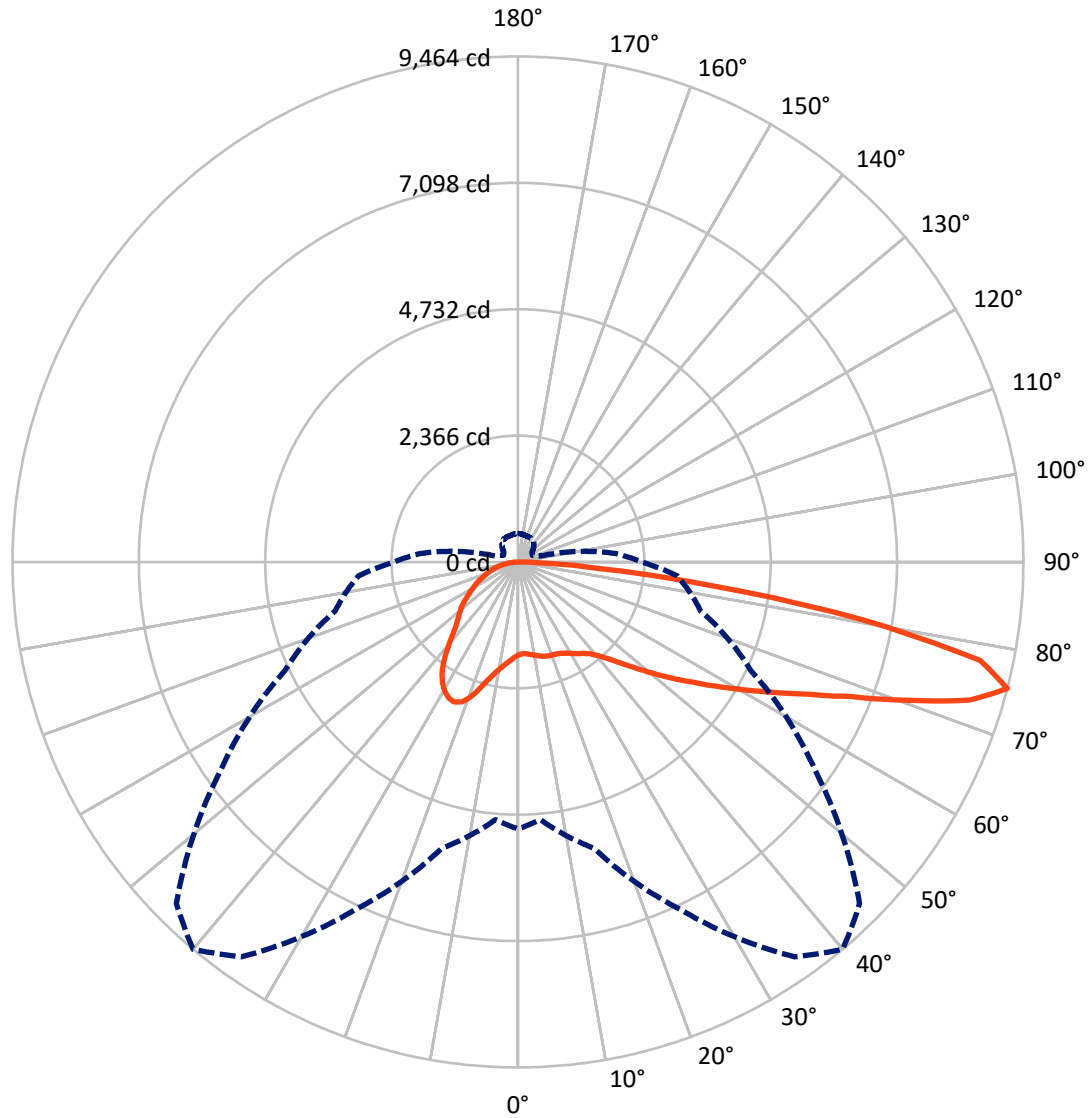
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 fc
 Type IV - Medium - N/A

REPORT NUMBER: P883654
CATALOG NUMBER: NAV-SB4A-835-U-SL4

Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P883654

CATALOG NUMBER: NAV-SB4A-835-U-SL4

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4711.0	0.0	4711.0
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	10494.0	0.0	10494.0
	% Fixture	69.0	0.0	69.0
Total	Lumens	15205.0	0.0	15205.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.6	1.1
10°-20°	582.7	3.8
20°-30°	1064.0	7.0
30°-40°	1509.0	9.9
40°-50°	2037.6	13.4
50°-60°	2741.1	18.0
60°-70°	3479.2	22.9
70°-80°	3157.5	20.8
80°-90°	460.3	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°	15205.0	100.0
0°-180°	15205.0	100.0

Coefficient of Utilization



REPORT NUMBER: P883654

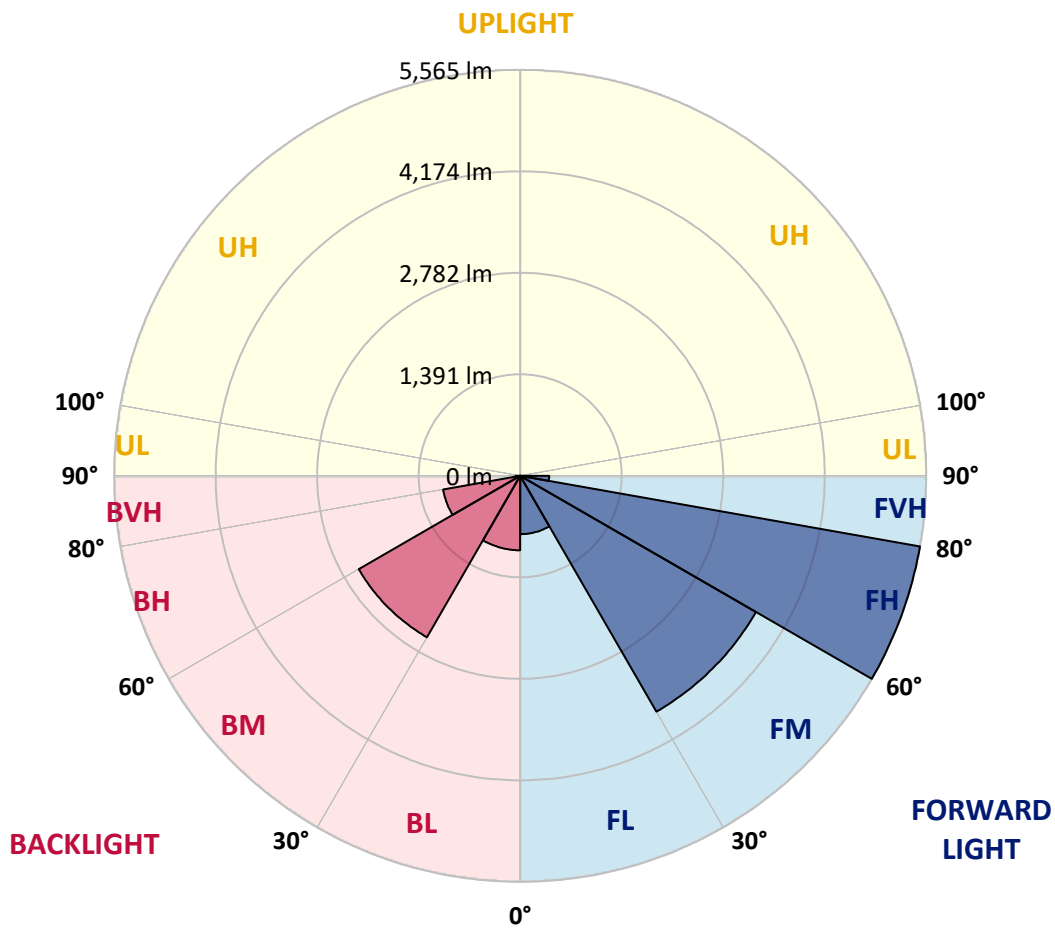
CATALOG NUMBER: NAV-SB4A-835-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	799.8	5.3			
FM (30°-60°)	3732.5	24.5			
FH (60°-80°)	5564.8	36.6			G3/7500
FVH (80°-90°)	396.9	2.6			G3/500
BL (0°-30°)	1020.5	6.7	B3/2500		
BM (30°-60°)	2555.3	16.8	B3/5000		
BH (60°-80°)	1071.9	7.0	B3/2500		G3/2500
BVH (80°-90°)	63.4	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: P883654

CATALOG NUMBER: NAV-SB4A-835-U-SL4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	1738.7	1738.7	1738.7	1738.7	1738.7	1738.7	1738.7	1738.7	1738.7	1738.7	1738.7
2.5°	1712.1	1721.8	1719.4	1716.1	1716.1	1716.9	1716.1	1721.8	1727.4	1733.1	1741.9
5°	1729.8	1739.5	1734.7	1730.6	1727.4	1726.6	1724.2	1723.4	1726.6	1733.9	1746.0
7.5°	1764.5	1774.2	1766.9	1759.7	1753.2	1750.0	1746.8	1741.9	1739.5	1743.6	1760.5
10°	1803.2	1812.9	1804.0	1791.1	1780.6	1776.6	1773.4	1768.6	1765.3	1767.7	1786.3
12.5°	1841.9	1851.6	1839.5	1821.8	1808.1	1805.6	1801.6	1800.0	1799.2	1798.4	1816.9
15°	1878.2	1886.3	1871.0	1850.0	1835.5	1831.5	1827.4	1829.8	1833.9	1838.7	1859.7
17.5°	1906.5	1914.5	1891.9	1864.5	1850.8	1849.2	1846.8	1854.8	1866.1	1878.2	1904.0
20°	1932.3	1940.3	1911.3	1874.2	1858.1	1858.1	1858.9	1875.8	1891.9	1909.7	1945.2
22.5°	1968.6	1975.0	1939.5	1888.7	1865.3	1866.9	1873.4	1890.3	1910.5	1934.7	1983.9
25°	2022.6	2027.4	1983.9	1916.1	1889.5	1894.4	1900.0	1908.1	1927.4	1955.6	2021.8
27.5°	2109.7	2113.7	2056.5	1964.5	1924.2	1932.3	1940.3	1934.7	1943.6	1967.7	2052.4
30°	2232.3	2234.7	2162.1	2040.3	1983.1	1987.1	1988.7	1965.3	1948.4	1967.7	2074.2
32.5°	2377.4	2376.6	2290.3	2132.3	2050.0	2046.0	2032.3	1986.3	1946.8	1963.7	2093.6
35°	2602.4	2593.6	2482.3	2261.3	2125.8	2100.8	2068.6	2009.7	1954.8	1959.7	2110.5
37.5°	2975.0	2947.6	2793.6	2472.6	2238.7	2175.0	2127.4	2047.6	1972.6	1958.1	2130.6
40°	3395.2	3360.5	3191.1	2762.1	2408.1	2305.6	2229.0	2101.6	2001.6	1965.3	2160.5
42.5°	3893.6	3844.4	3662.1	3103.2	2622.6	2474.2	2358.9	2170.2	2044.4	1988.7	2200.8
45°	4505.7	4440.3	4182.3	3487.9	2892.7	2695.2	2541.1	2274.2	2109.7	2033.9	2261.3
47.5°	5124.2	5140.3	4773.4	3928.2	3216.9	2967.7	2769.4	2430.6	2204.8	2106.5	2358.9
50°	5781.5	5792.7	5361.3	4416.1	3584.7	3275.8	3025.8	2605.6	2337.1	2209.7	2504.8
52.5°	6294.4	6296.0	5895.2	4926.6	3967.7	3614.5	3302.4	2805.6	2490.3	2346.8	2699.2
55°	6615.3	6611.3	6269.4	5409.7	4408.1	3970.2	3608.9	3033.1	2677.4	2508.1	2943.6
57.5°	6848.4	6836.3	6527.4	5825.0	4877.4	4390.3	3955.7	3291.1	2898.4	2700.0	3265.3
60°	6937.1	6929.8	6702.4	6183.9	5371.0	4854.8	4355.7	3579.8	3149.2	2926.6	3679.0
62.5°	6971.0	6984.7	6874.2	6531.5	5899.2	5369.4	4795.2	3925.0	3431.5	3183.1	4115.3
65°	7090.3	7115.3	7092.8	6986.3	6496.0	5971.8	5378.2	4335.5	3739.5	3458.1	4571.0
67.5°	7326.6	7351.6	7361.3	7530.7	7225.0	6722.6	6105.7	4846.8	4100.0	3743.6	4913.7
70°	7321.0	7313.7	7484.7	7963.7	8137.9	7762.1	7086.3	5475.8	4529.8	3980.7	4957.3
72.5°	6663.7	6605.7	7009.7	7958.9	8897.6	8847.6	8283.9	6287.1	4900.8	4009.7	4301.6
75°	4999.2	4844.4	5558.1	7172.6	9024.2	9463.7	9045.2	6790.3	4812.9	3542.7	2993.6
77.5°	2137.9	1982.3	2823.4	5309.7	8076.6	8846.8	8346.8	5924.2	3841.9	2342.7	1470.2
80°	559.7	558.9	853.2	2407.3	5492.7	6533.1	5731.5	3825.8	2195.2	837.1	405.6
82.5°	231.5	225.8	313.7	936.3	2683.9	3666.1	2991.9	1706.5	792.7	226.6	134.7
85°	86.3	85.5	152.4	323.4	946.8	1512.1	1094.4	436.3	197.6	110.5	60.5
87.5°	24.2	23.4	33.1	112.1	230.6	350.0	187.1	71.8	55.6	43.5	17.7
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: P883654
 CATALOG NUMBER: NAV-SB4A-835-U-SL4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1738.7	1738.7	1738.7	1738.7	1738.7	1738.7	1738.7	1738.7	1738.7	1738.7	1738.7
2.5°	1744.4	1748.4	1755.6	1761.3	1768.6	1776.6	1787.9	1795.2	1802.4	1807.3	1804.0
5°	1751.6	1760.5	1779.0	1797.6	1819.4	1839.5	1862.9	1879.8	1893.6	1897.6	1899.2
7.5°	1767.7	1782.3	1813.7	1845.2	1879.8	1912.9	1946.8	1975.8	1999.2	2008.1	2008.9
10°	1796.0	1815.3	1859.7	1904.0	1950.0	2000.8	2044.4	2086.3	2119.4	2133.1	2133.9
12.5°	1831.5	1855.6	1913.7	1975.0	2038.7	2108.9	2165.3	2216.9	2258.1	2276.6	2276.6
15°	1877.4	1908.9	1983.1	2065.3	2158.9	2256.5	2328.2	2385.5	2431.5	2454.0	2452.4
17.5°	1927.4	1969.4	2062.9	2187.1	2321.0	2449.2	2533.1	2575.0	2622.6	2644.4	2643.6
20°	1975.8	2027.4	2161.3	2341.9	2520.2	2656.5	2724.2	2735.5	2738.7	2741.1	2747.6
22.5°	2025.8	2095.2	2284.7	2537.1	2728.2	2822.6	2832.3	2783.9	2716.1	2684.7	2693.6
25°	2080.6	2172.6	2446.0	2752.4	2907.3	2918.6	2844.4	2726.6	2598.4	2539.5	2548.4
27.5°	2133.9	2262.1	2639.5	2958.1	3036.3	2937.1	2777.4	2610.5	2455.6	2393.6	2400.8
30°	2187.1	2364.5	2853.2	3137.9	3095.2	2891.1	2671.8	2485.5	2329.8	2264.5	2271.8
32.5°	2241.1	2483.9	3099.2	3267.7	3084.7	2793.6	2540.3	2345.2	2208.1	2139.5	2148.4
35°	2302.4	2630.6	3332.3	3338.7	3014.5	2650.0	2366.9	2177.4	2058.1	2003.2	2015.3
37.5°	2382.3	2816.9	3537.9	3356.5	2891.9	2439.5	2151.6	1979.0	1880.6	1855.6	1873.4
40°	2481.5	3041.1	3695.2	3328.2	2710.5	2183.9	1916.1	1778.2	1722.6	1728.2	1747.6
42.5°	2610.5	3291.9	3805.7	3255.6	2458.1	1920.2	1709.7	1648.4	1675.0	1697.6	1718.6
45°	2778.2	3552.4	3874.2	3132.3	2172.6	1696.8	1587.9	1602.4	1622.6	1625.0	1641.1
47.5°	2992.7	3816.1	3919.4	2946.0	1881.5	1539.5	1510.5	1513.7	1509.7	1492.7	1505.6
50°	3260.5	4072.6	3959.7	2699.2	1633.9	1441.1	1402.4	1391.1	1335.5	1280.6	1287.9
52.5°	3565.3	4308.1	3976.6	2392.7	1441.1	1358.9	1296.0	1225.0	1121.0	1104.0	1109.7
55°	3904.0	4525.8	3933.1	2016.1	1279.0	1253.2	1158.1	1072.6	1061.3	1046.8	1049.2
57.5°	4308.9	4760.5	3844.4	1596.0	1112.9	1129.8	1037.1	1046.8	1026.6	1004.0	1000.0
60°	4751.6	5003.2	3688.7	1212.9	941.1	975.8	1005.6	1004.8	999.2	980.6	974.2
62.5°	5150.0	5162.9	3382.3	929.0	790.3	856.5	937.9	937.1	932.3	921.8	917.7
65°	5387.1	5138.7	2871.0	731.5	666.1	758.1	846.0	852.4	853.2	852.4	852.4
67.5°	5345.2	4855.7	2169.4	582.3	563.7	658.1	754.8	763.7	770.2	771.8	773.4
70°	4871.0	4233.9	1414.5	464.5	472.6	570.2	668.5	677.4	683.1	689.5	692.7
72.5°	3796.8	3112.9	809.7	375.8	392.7	494.4	583.1	593.5	596.8	608.9	613.7
75°	2313.7	1830.6	437.1	296.0	322.6	422.6	498.4	510.5	516.1	530.6	532.3
77.5°	1100.0	792.7	249.2	230.6	259.7	345.2	421.0	434.7	419.4	427.4	421.0
80°	371.8	294.4	157.3	175.8	198.4	269.4	337.1	350.8	318.5	316.9	313.7
82.5°	129.8	119.4	100.0	116.9	128.2	192.7	254.8	272.6	237.1	236.3	225.0
85°	50.8	48.4	55.6	63.7	76.6	118.5	167.7	176.6	146.0	117.7	116.1
87.5°	10.5	11.3	13.7	14.5	23.4	41.1	60.5	74.2	58.9	50.0	46.0
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)