

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: P964237

Luminaire Tested: **NAV-SB3B-835-U-T4FT**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964237
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-835-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15876.2 lumens
Efficiency: N/A
Efficacy: 145.4 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



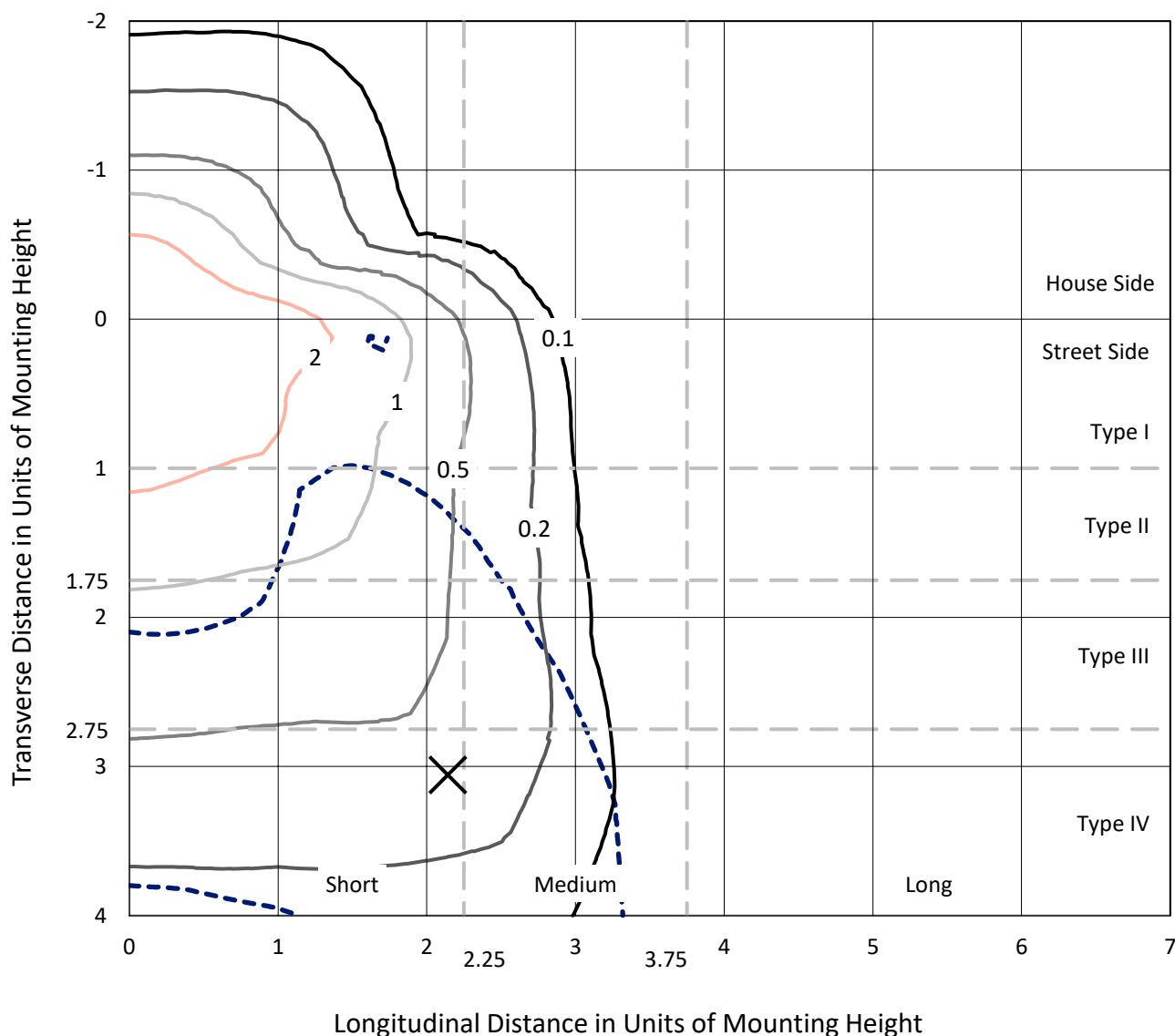
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

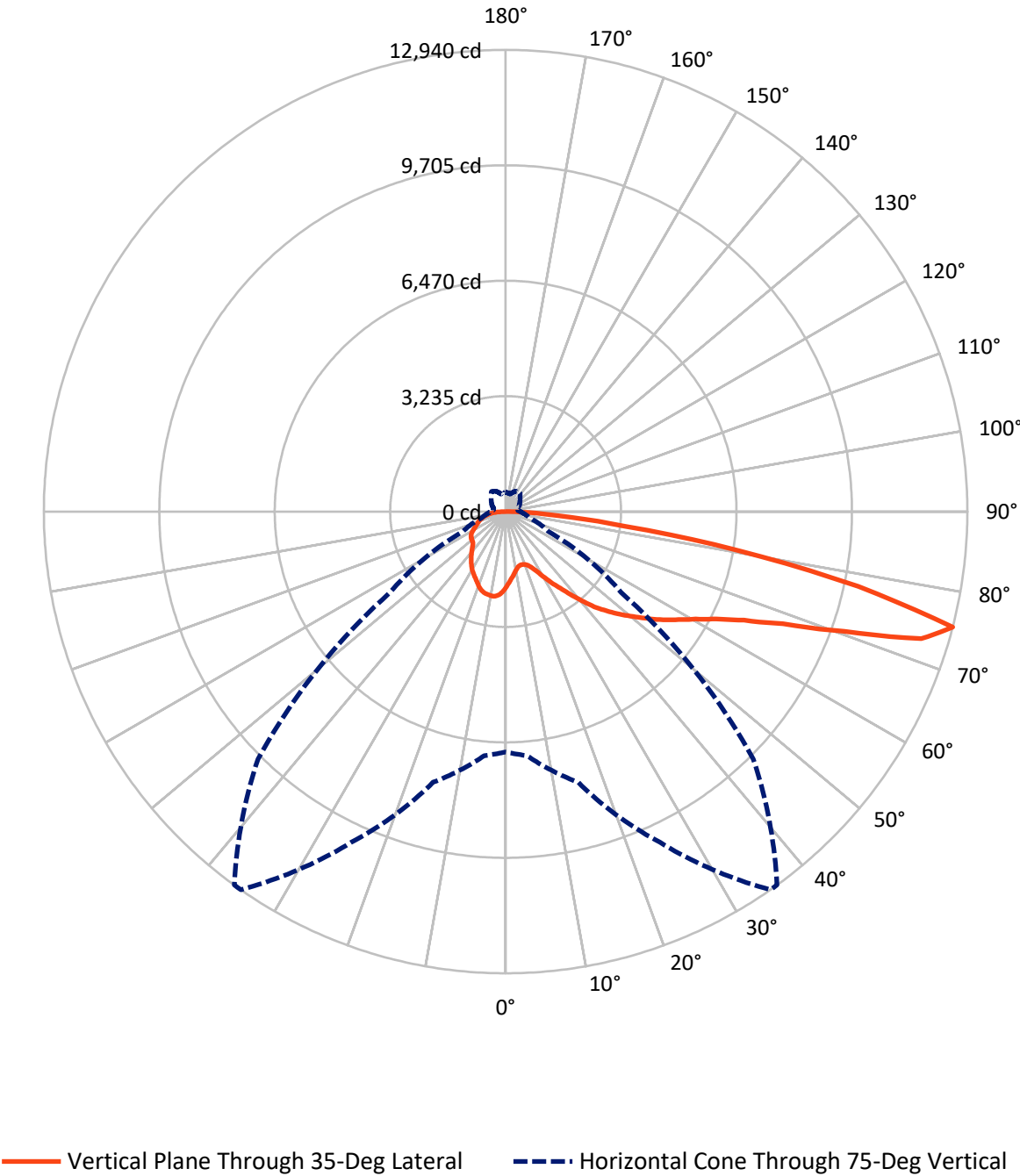


Based on 25 foot mounting height. Maximum calculated value = 3.7 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3778.1	0.0	3778.1
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	12098.1	0.0	12098.1
	% Fixture	76.2	0.0	76.2
Total	Lumens	15876.2	0.0	15876.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	200.3	1.3
10°-20°	577.8	3.6
20°-30°	970.2	6.1
30°-40°	1507.9	9.5
40°-50°	2238.1	14.1
50°-60°	3089.8	19.5
60°-70°	3748.6	23.6
70°-80°	3098.0	19.5
80°-90°	445.6	2.8
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°	15876.2	100.0
0°-180°	15876.2	100.0

Coefficient of Utilization



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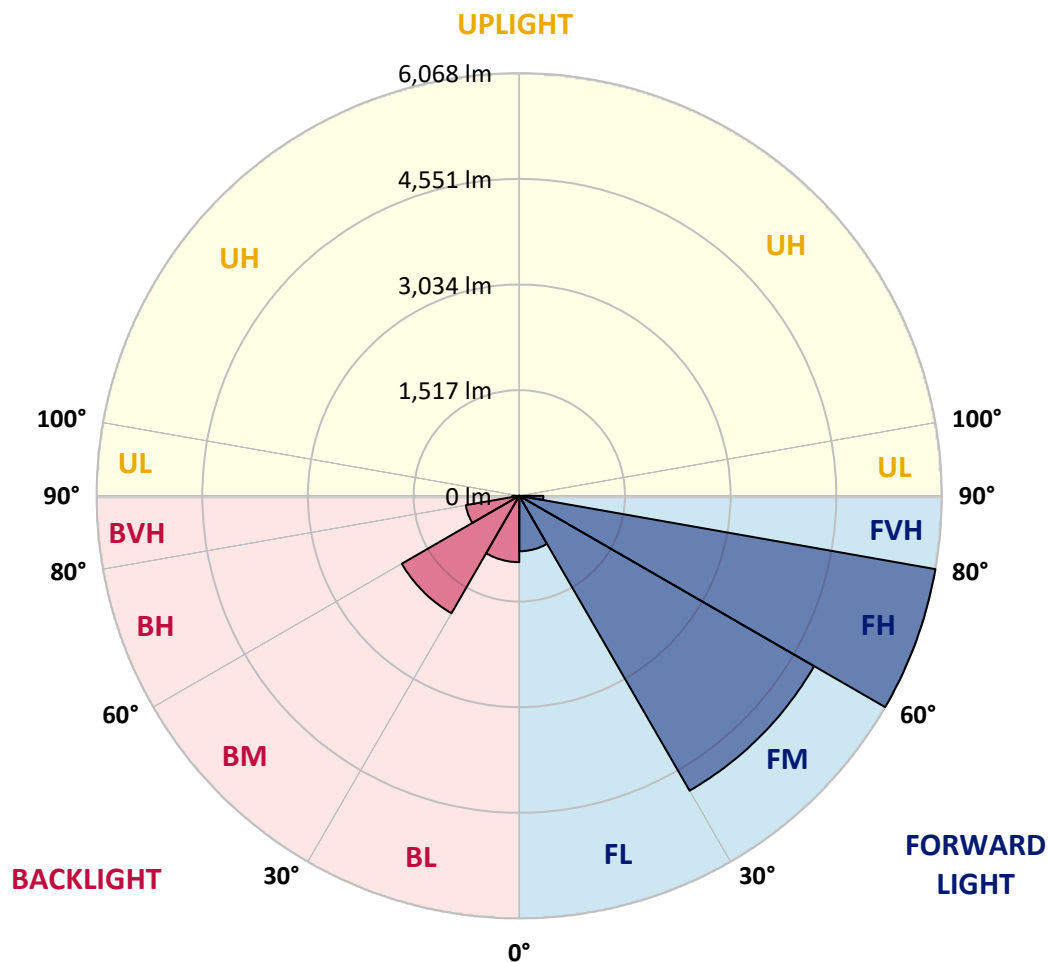
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	796.2	5.0			
FM	(30°-60°)	4889.0	30.8			
FH	(60°-80°)	6067.7	38.2			G3/7500
FVH	(80°-90°)	345.2	2.2			G3/500
BL	(0°-30°)	952.1	6.0	B2/1000		
BM	(30°-60°)	1946.7	12.3	B2/2500		
BH	(60°-80°)	778.9	4.9	B2/1000		G2/1000
BVH	(80°-90°)	100.3	0.6			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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	2115.6	2115.6	2115.6	2115.6	2115.6	2115.6	2115.6	2115.6	2115.6	2115.6	2115.6
2.5°	1950.8	1962.9	1968.0	1965.4	1978.2	1976.6	1994.6	2016.9	2047.8	2077.9	2121.6
5°	1800.6	1813.5	1824.7	1835.0	1859.9	1867.5	1895.9	1938.8	1995.5	2053.0	2125.0
7.5°	1660.7	1671.9	1689.1	1708.0	1750.0	1757.7	1804.9	1871.9	1950.8	2034.9	2134.5
10°	1546.6	1557.8	1575.7	1597.3	1649.5	1659.1	1719.1	1808.4	1911.3	2017.8	2144.8
12.5°	1497.6	1501.1	1511.4	1532.9	1578.3	1584.3	1650.5	1752.5	1872.8	2004.9	2160.3
15°	1495.1	1501.9	1502.9	1513.9	1551.7	1554.3	1615.3	1716.6	1848.7	2002.3	2183.5
17.5°	1520.8	1526.0	1518.2	1525.1	1556.9	1561.2	1609.2	1699.3	1841.0	2013.5	2222.9
20°	1589.5	1593.8	1570.6	1561.2	1584.3	1587.8	1635.0	1710.5	1848.7	2036.7	2276.9
22.5°	1735.4	1738.0	1681.3	1642.7	1644.4	1646.2	1687.4	1756.0	1878.7	2078.7	2345.6
25°	1962.9	1961.1	1871.0	1796.3	1753.5	1744.0	1771.4	1829.8	1929.4	2134.5	2434.1
27.5°	2228.9	2216.0	2126.0	2014.3	1920.7	1907.0	1901.1	1926.0	2001.4	2208.3	2542.2
30°	2529.3	2517.3	2420.3	2274.4	2144.8	2122.5	2065.8	2053.0	2108.7	2308.7	2692.4
32.5°	2858.8	2851.1	2735.3	2558.5	2385.1	2359.3	2264.1	2229.8	2273.6	2460.6	2901.8
35°	3135.3	3128.4	3032.3	2850.3	2638.2	2606.6	2509.5	2471.0	2493.2	2655.5	3175.6
37.5°	3385.0	3381.6	3299.2	3155.9	2936.9	2898.4	2789.3	2776.5	2772.2	2912.1	3507.8
40°	3616.7	3608.1	3522.3	3446.8	3284.6	3249.4	3153.2	3142.1	3109.4	3227.9	3883.6
42.5°	3873.4	3851.0	3726.6	3691.3	3647.6	3618.5	3561.0	3562.6	3490.5	3584.1	4281.8
45°	4082.8	4069.9	3941.9	3921.4	3968.6	3956.6	4006.3	4019.2	3879.3	3957.4	4695.5
47.5°	4307.7	4295.6	4187.4	4172.9	4300.8	4304.2	4480.2	4484.4	4258.7	4345.4	5110.1
50°	4584.8	4567.7	4460.4	4478.4	4621.7	4634.6	4956.5	4927.3	4608.0	4739.3	5521.2
52.5°	4767.7	4777.9	4754.8	4784.0	4979.7	4991.6	5425.1	5350.4	4953.9	5128.1	5924.6
55°	4902.4	4923.0	4995.1	5062.1	5357.3	5369.3	5867.1	5752.9	5240.5	5488.6	6304.0
57.5°	5075.8	5046.6	5181.4	5311.8	5716.0	5747.8	6297.1	6140.9	5494.6	5799.2	6564.0
60°	5324.7	5304.1	5408.7	5601.8	6117.7	6168.3	6752.0	6490.2	5680.9	6045.6	6614.6
62.5°	5829.3	5777.8	5794.1	5964.9	6624.1	6691.0	7265.2	6794.8	5773.5	6141.7	6343.4
65°	6583.7	6495.3	6412.9	6531.4	7337.3	7403.4	7844.5	7034.3	5739.2	5955.5	5623.4
67.5°	7533.9	7446.3	7345.0	7456.6	8387.8	8440.2	8559.5	7169.1	5468.9	5238.0	4350.5
70°	8317.4	8284.8	8405.8	8865.0	10065.7	10067.4	9476.0	7057.4	4728.1	3713.7	2517.3
72.5°	8213.5	8193.8	8831.5	10251.0	12180.5	12135.0	10343.8	6212.9	3185.0	1675.4	943.2
75°	6738.2	6866.1	7854.0	10226.2	12940.0	12934.0	9812.5	3949.7	1317.4	694.3	487.5
77.5°	3613.3	3815.9	5099.0	7550.2	10101.8	10253.7	6898.7	1381.8	565.6	444.5	337.3
80°	1178.4	1355.2	2032.4	3844.2	6564.0	6535.7	2956.7	542.4	387.0	315.0	233.5
82.5°	500.4	521.0	908.0	1815.2	3368.7	3316.3	941.5	311.6	272.0	215.5	144.2
85°	195.7	218.8	400.8	839.4	1459.1	1427.3	339.9	154.5	174.2	140.7	85.8
87.5°	64.4	78.1	143.3	287.5	454.0	437.7	83.2	53.2	75.5	64.4	30.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2115.6	2115.6	2115.6	2115.6	2115.6	2115.6	2115.6	2115.6	2115.6	2115.6	2115.6
2.5°	2133.6	2147.4	2163.7	2187.7	2208.3	2225.5	2243.5	2254.7	2258.9	2271.8	2271.0
5°	2149.1	2179.1	2219.4	2258.9	2297.5	2320.7	2341.3	2351.7	2361.1	2368.0	2369.7
7.5°	2174.8	2213.5	2276.9	2328.5	2361.1	2379.9	2393.7	2390.3	2393.7	2395.4	2398.0
10°	2197.2	2251.2	2326.8	2375.6	2400.5	2401.4	2398.0	2386.0	2379.9	2380.8	2382.5
12.5°	2223.7	2283.8	2365.4	2406.6	2413.5	2394.5	2379.9	2359.3	2351.7	2348.2	2346.5
15°	2259.8	2328.5	2407.4	2422.9	2405.7	2381.7	2356.8	2323.3	2306.1	2292.4	2296.7
17.5°	2303.6	2379.1	2440.0	2428.8	2391.9	2352.5	2312.2	2261.6	2226.3	2211.7	2212.6
20°	2364.5	2432.3	2464.9	2416.0	2360.3	2300.1	2231.5	2169.7	2137.0	2122.5	2120.7
22.5°	2438.3	2503.6	2489.0	2393.7	2314.8	2218.6	2132.8	2087.3	2071.0	2060.7	2062.4
25°	2526.7	2582.5	2506.1	2361.1	2240.0	2110.5	2044.4	2029.8	2022.0	2014.3	2014.3
27.5°	2641.7	2671.8	2519.0	2313.0	2123.3	1995.5	1971.4	1974.0	1971.4	1958.6	1961.1
30°	2793.6	2787.6	2531.0	2234.9	1989.4	1891.6	1893.3	1904.4	1906.2	1897.6	1901.9
32.5°	2993.6	2932.7	2537.0	2133.6	1861.6	1800.6	1802.4	1814.4	1823.0	1808.4	1815.2
35°	3235.6	3101.8	2527.5	2006.6	1762.9	1713.9	1701.1	1704.5	1707.0	1693.3	1702.8
37.5°	3518.0	3291.5	2485.5	1865.9	1681.3	1628.9	1601.6	1578.3	1564.6	1551.7	1560.4
40°	3827.9	3498.2	2408.2	1728.6	1590.4	1538.8	1497.6	1453.9	1407.5	1390.4	1398.1
42.5°	4152.3	3711.1	2314.8	1597.3	1485.6	1443.6	1399.8	1336.3	1266.8	1231.6	1235.9
45°	4488.7	3929.1	2222.9	1467.6	1378.3	1360.4	1309.7	1233.3	1157.8	1113.1	1109.8
47.5°	4818.3	4135.1	2088.1	1337.2	1278.0	1297.6	1258.2	1187.9	1103.7	1033.3	1025.6
50°	5133.3	4328.2	1867.5	1205.0	1196.4	1278.8	1241.1	1139.8	1043.7	953.6	945.8
52.5°	5445.6	4484.4	1585.2	1084.9	1152.6	1273.7	1218.7	1107.2	989.5	895.1	884.9
55°	5710.9	4565.0	1313.1	981.8	1089.2	1229.9	1192.1	1068.6	913.2	812.7	804.2
57.5°	5862.0	4499.9	1086.6	880.6	1001.6	1157.8	1146.7	986.2	822.3	745.0	734.7
60°	5796.7	4235.5	901.2	792.2	918.3	1079.7	1067.6	904.6	752.7	679.8	669.4
62.5°	5437.1	3731.7	754.4	714.9	842.9	999.9	988.7	841.9	699.5	629.1	618.0
65°	4712.7	3035.6	640.2	650.6	766.4	903.7	920.0	789.6	657.4	588.8	577.6
67.5°	3594.4	2198.8	551.0	594.8	691.8	809.3	856.6	751.8	622.3	557.0	546.7
70°	2048.7	1248.8	475.5	540.7	625.7	721.8	807.6	721.8	584.5	530.4	523.6
72.5°	776.7	573.3	411.1	486.7	562.1	648.0	753.6	674.6	540.7	500.4	493.5
75°	414.5	349.3	345.8	423.1	489.2	575.8	685.7	628.2	508.1	528.7	545.8
77.5°	282.4	247.2	289.3	362.2	409.4	496.1	613.7	557.9	440.2	438.6	404.3
80°	195.7	175.1	235.1	291.8	316.7	417.1	535.6	478.9	358.7	334.8	320.1
82.5°	117.6	114.2	176.0	218.0	224.0	321.8	443.7	401.7	293.6	255.7	257.5
85°	64.4	67.8	112.4	127.9	130.5	224.9	347.6	310.7	225.7	189.6	191.4
87.5°	18.0	23.2	41.2	50.6	62.6	116.7	206.8	184.5	113.3	78.9	78.9
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)