

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: P968775

Luminaire Tested: **NAV-SB5C-735-U-SL3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968775
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-12)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-735-U-SL3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 37897.3 lumens
Efficiency: N/A
Efficacy: 151.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G5

Input Watts (W): 249.5
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

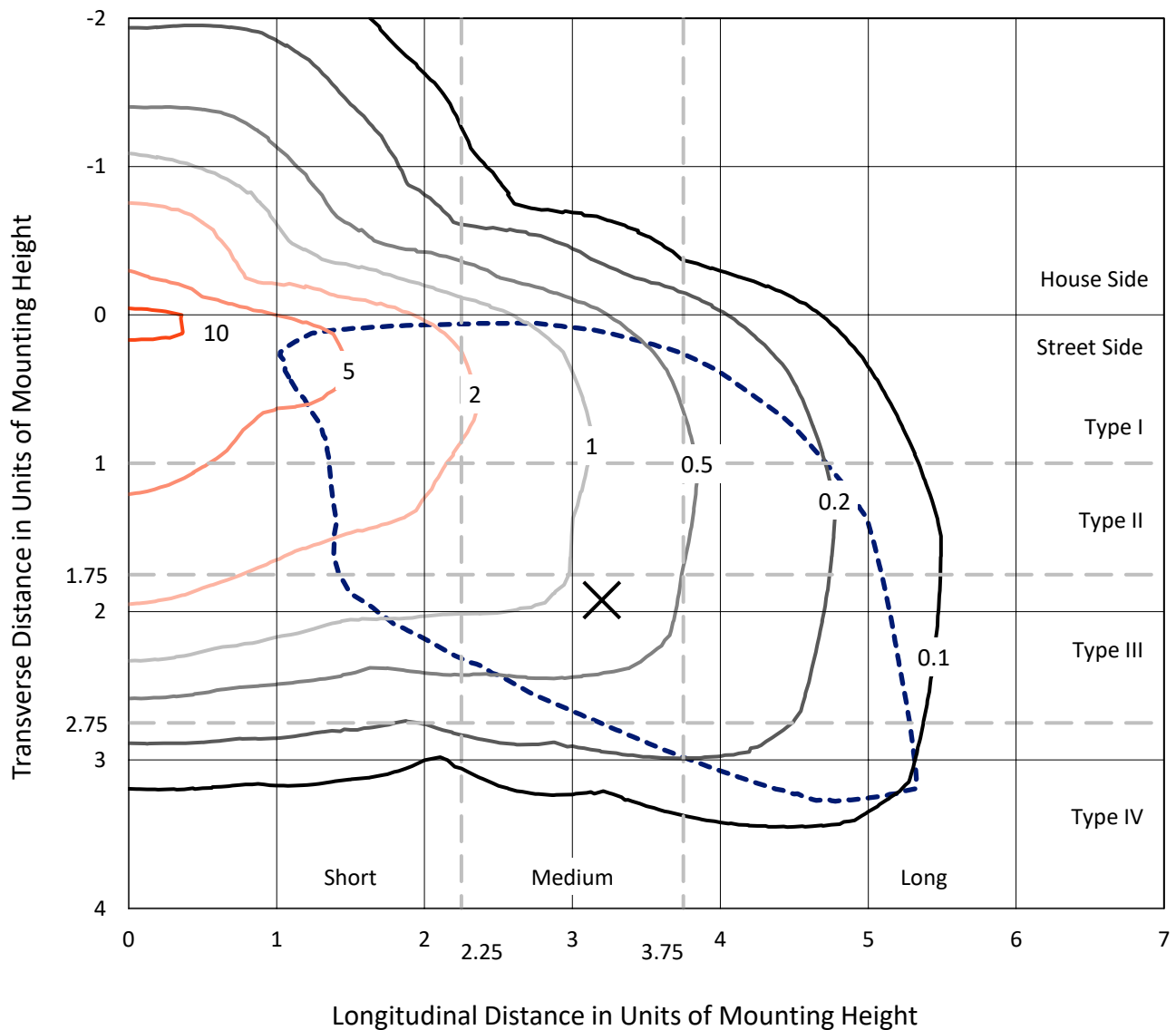


REPORT NUMBER: P968775

CATALOG NUMBER: NAV-SB5C-735-U-SL3

Iso-Footcandle Lines of Horizontal Illumination

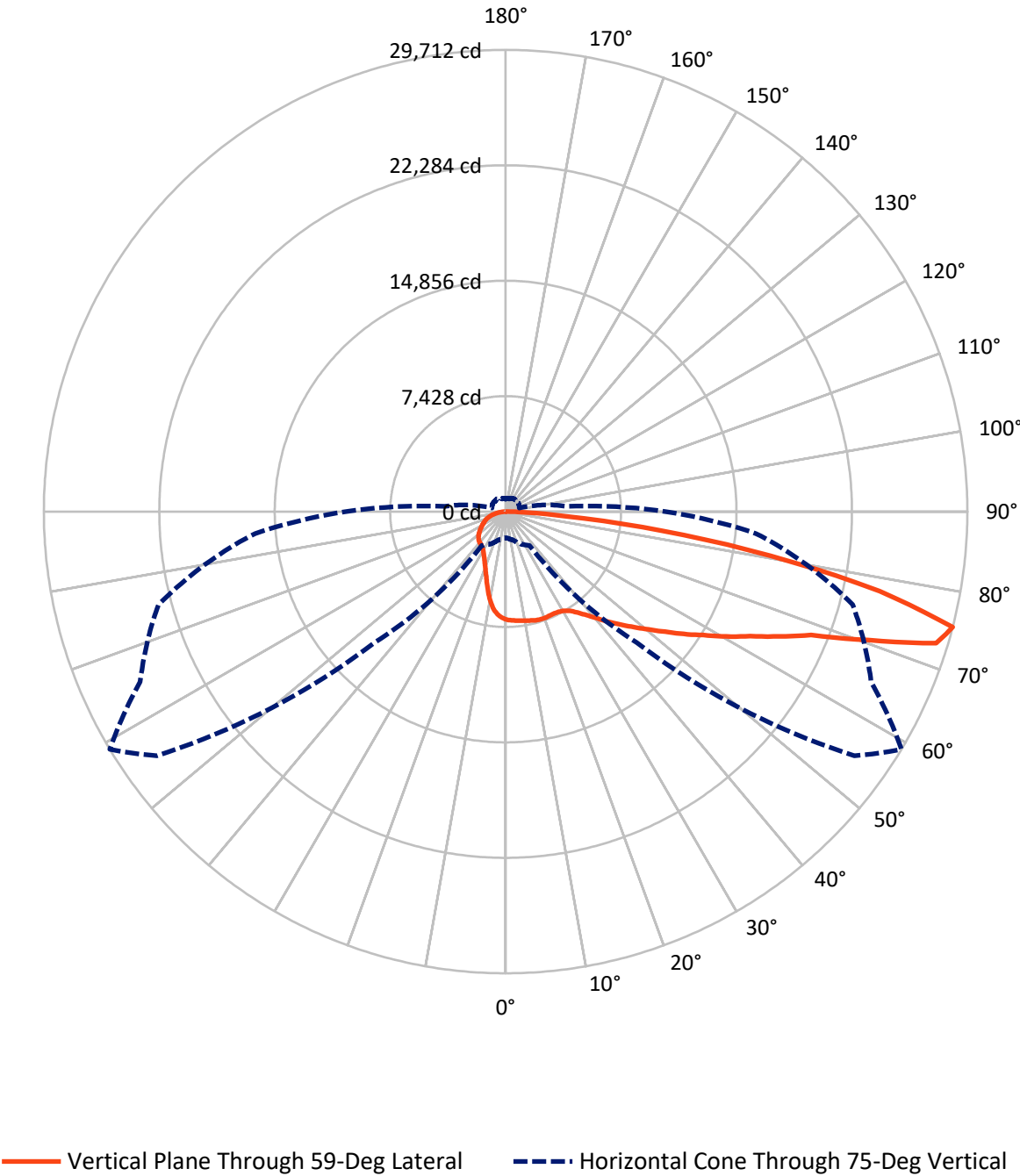
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.1 fc
Type IV - Medium - N/A

REPORT NUMBER: P968775
CATALOG NUMBER: NAV-SB5C-735-U-SL3

Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7107.9	0.0	7107.9
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	30789.4	0.0	30789.4
	% Fixture	81.2	0.0	81.2
Total	Lumens	37897.3	0.0	37897.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	623.7	1.6
10°-20°	1594.3	4.2
20°-30°	2421.6	6.4
30°-40°	3599.6	9.5
40°-50°	5353.2	14.1
50°-60°	7266.3	19.2
60°-70°	8871.0	23.4
70°-80°	6961.8	18.4
80°-90°	1206.0	3.2
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°	37897.3	100.0
0°-180°	37897.3	100.0

Coefficient of Utilization



REPORT NUMBER: P968775

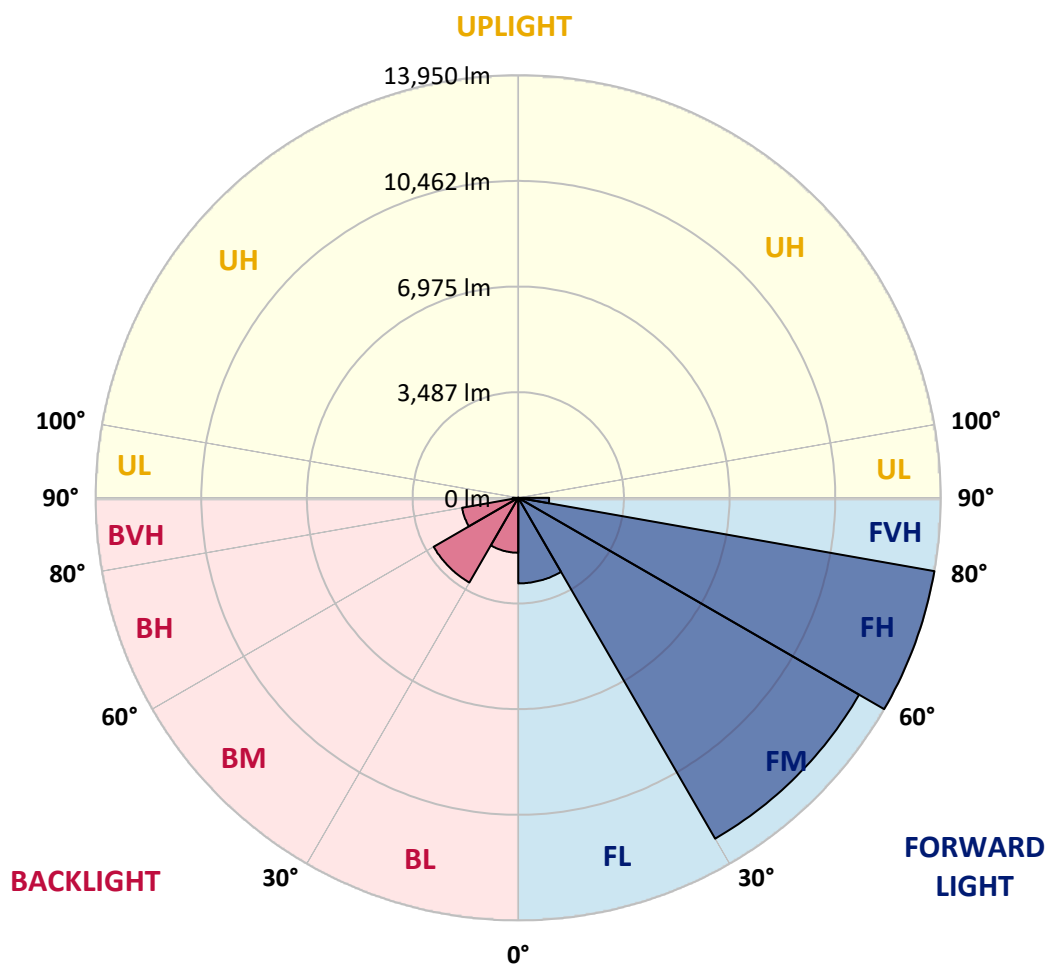
CATALOG NUMBER: NAV-SB5C-735-U-SL3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2825.7	7.5			
FM	(30°-60°)	12992.8	34.3			
FH	(60°-80°)	13949.6	36.8			G5
FVH	(80°-90°)	1021.4	2.7			G5
BL	(0°-30°)	1813.9	4.8	B3/2500		
BM	(30°-60°)	3226.3	8.5	B3/5000		
BH	(60°-80°)	1883.2	5.0	B3/2500		G3/2500
BVH	(80°-90°)	184.6	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Medium



REPORT NUMBER: P968775

CATALOG NUMBER: NAV-SB5C-735-U-SL3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	6956.0	6956.0	6956.0	6956.0	6956.0	6956.0	6956.0	6956.0	6956.0	6956.0	6956.0
2.5°	7015.1	6990.6	7015.1	7004.8	7000.9	6992.7	6994.7	7009.0	7000.9	7011.0	6976.4
5°	6968.2	6953.9	6978.4	6972.3	6998.8	7002.9	7029.3	7045.6	7055.9	7057.9	7031.4
7.5°	6890.8	6876.4	6911.2	6939.7	6996.8	7013.0	7068.1	7094.6	7108.9	7133.4	7094.6
10°	6607.4	6601.2	6686.9	6794.9	6929.5	7013.0	7096.6	7141.5	7163.9	7229.1	7184.3
12.5°	6105.8	6114.0	6226.2	6434.0	6703.2	6972.3	7129.3	7194.5	7229.1	7310.7	7290.3
15°	5626.7	5624.7	5747.1	5969.3	6346.4	6792.9	7145.6	7257.7	7316.9	7437.1	7420.8
17.5°	5349.5	5341.4	5427.0	5596.2	5946.8	6517.7	7104.8	7292.4	7418.7	7569.6	7555.4
20°	5298.5	5282.2	5327.0	5410.7	5659.3	6215.9	6998.8	7292.4	7500.3	7696.0	7687.8
22.5°	5484.1	5457.5	5439.2	5429.0	5539.1	5967.2	6878.5	7267.9	7620.6	7877.4	7863.2
25°	5857.2	5816.4	5722.6	5630.8	5598.2	5855.1	6772.5	7261.8	7799.9	8122.1	8069.1
27.5°	6460.6	6409.6	6220.0	5999.8	5802.1	5912.2	6725.6	7298.5	7997.8	8381.0	8275.0
30°	7208.7	7153.7	6915.2	6576.8	6222.1	6124.2	6784.7	7406.5	8250.5	8725.5	8517.6
32.5°	7879.5	7818.3	7614.4	7269.9	6790.8	6491.1	6972.3	7612.5	8648.0	9204.6	8882.5
35°	8474.8	8403.5	8220.0	7901.9	7488.0	7006.9	7310.7	7977.4	9212.8	9983.4	9377.9
37.5°	9057.8	8974.3	8774.5	8438.1	8148.5	7694.0	7777.6	8446.2	9963.0	10929.4	10034.3
40°	9710.2	9589.9	9347.4	9015.1	8733.7	8499.3	8391.2	9021.1	10725.5	11985.4	10853.9
42.5°	10342.2	10228.1	9938.6	9655.2	9302.5	9235.2	9102.7	9693.9	11559.3	13145.4	11685.7
45°	11023.2	10886.5	10535.9	10177.1	9954.9	9724.5	9791.7	10366.6	12376.8	14327.9	12558.3
47.5°	11661.2	11508.3	11094.5	10695.0	10572.6	10136.3	10423.7	11106.7	13226.9	15526.6	13422.7
50°	12005.8	11854.9	11510.3	11149.5	11053.7	10643.9	11108.7	11920.1	14117.8	16721.2	14252.4
52.5°	12293.2	12130.2	11679.6	11479.8	11451.3	11196.4	11952.7	12849.8	15008.8	17777.3	15053.6
55°	12599.0	12417.6	11842.6	11663.3	11793.8	11816.2	12953.7	13903.8	15950.6	18806.8	15809.9
57.5°	12951.7	12721.4	11999.7	11818.2	12128.1	12541.9	14103.6	14996.5	16876.2	19760.9	16482.7
60°	13284.0	13051.6	12301.3	12064.9	12488.9	13383.9	15422.6	16319.6	17924.1	20611.0	17118.7
62.5°	13349.3	13157.6	12541.9	12540.0	12978.2	14366.6	16984.2	17654.9	18839.4	21451.0	17689.7
65°	12219.8	12099.5	11734.6	12521.6	13679.5	15781.4	18723.3	19363.4	20003.5	22184.9	18191.1
67.5°	9300.4	9316.7	9290.3	10809.0	13112.8	17814.0	21241.0	21192.1	21440.7	23008.5	18768.1
70°	4252.7	4348.5	4972.4	7461.6	10505.3	18048.4	25404.0	24769.9	23245.1	24074.8	19267.5
72.5°	2297.6	2371.0	2625.8	3614.6	6315.8	16046.5	28515.0	28965.6	25644.6	24792.4	18719.2
75°	1686.0	1726.7	1904.1	2297.6	2652.3	11926.3	27399.8	29711.7	25944.2	23118.6	16164.7
77.5°	1262.0	1280.3	1425.1	1820.5	1357.7	6287.2	21893.4	24606.9	22209.4	18994.4	11940.5
80°	915.3	935.7	1043.8	1365.9	952.0	2299.6	15033.2	17271.7	15210.6	12107.7	5950.9
82.5°	632.0	640.1	687.1	929.7	664.6	893.0	8529.8	10128.1	8491.1	4248.6	1606.5
85°	381.2	391.4	411.8	542.3	377.2	424.0	3681.9	3808.3	2538.1	1015.3	499.5
87.5°	156.9	167.2	183.5	228.4	148.8	118.3	607.5	762.5	475.0	297.7	155.0
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: P968775

CATALOG NUMBER: NAV-SB5C-735-U-SL3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6956.0	6956.0	6956.0	6956.0	6956.0	6956.0	6956.0	6956.0	6956.0	6956.0	6956.0
2.5°	6966.2	6951.9	6913.1	6860.1	6811.2	6750.0	6723.6	6701.1	6680.7	6642.0	6623.7
5°	7009.0	6970.2	6866.3	6731.7	6578.9	6411.7	6248.5	6136.5	6040.6	5969.3	5910.2
7.5°	7074.2	7000.9	6811.2	6536.0	6185.4	5826.5	5502.4	5272.0	5098.8	5035.5	4925.4
10°	7141.5	7053.8	6723.6	6238.4	5632.9	5080.4	4650.2	4413.8	4275.1	4230.3	4161.0
12.5°	7221.0	7092.6	6587.0	5824.5	5015.1	4409.7	4034.5	3895.9	3824.6	3800.1	3806.2
15°	7337.2	7125.2	6381.0	5306.6	4426.0	3920.4	3677.8	3582.0	3545.3	3543.2	3551.4
17.5°	7424.9	7131.3	6061.0	4752.2	3973.4	3624.8	3424.9	3388.2	3412.7	3449.4	3463.7
20°	7522.7	7076.3	5641.0	4246.6	3655.4	3365.9	3282.3	3306.8	3365.9	3418.9	3437.2
22.5°	7592.1	6976.4	5133.4	3853.1	3380.1	3217.1	3213.0	3263.9	3296.5	3323.0	3337.3
25°	7653.2	6807.1	4595.2	3522.8	3153.8	3127.4	3172.2	3155.9	3133.4	3155.9	3170.1
27.5°	7698.1	6540.1	4114.0	3233.4	2994.8	3066.2	3039.6	3002.9	3000.9	3013.2	3033.6
30°	7683.8	6183.3	3718.6	2958.1	2882.7	2952.0	2888.8	2882.7	2876.6	2882.7	2905.2
32.5°	7683.8	5777.6	3414.8	2768.5	2811.4	2784.8	2778.7	2764.4	2740.0	2738.0	2764.4
35°	7726.6	5371.9	3153.8	2666.6	2752.2	2689.0	2693.1	2658.4	2607.5	2583.0	2607.5
37.5°	7814.3	5045.8	2894.9	2617.6	2648.3	2646.2	2629.9	2570.8	2481.1	2403.6	2430.1
40°	8026.3	4949.9	2717.6	2595.2	2599.3	2623.8	2581.0	2466.8	2262.9	2136.5	2152.8
42.5°	8358.6	5111.0	2678.8	2540.2	2566.7	2591.2	2507.6	2242.5	2097.8	2022.3	2022.3
45°	8780.6	5392.3	2762.4	2460.7	2489.2	2532.1	2283.3	2156.9	2091.7	2093.8	2103.9
47.5°	9314.7	5687.9	2917.4	2391.3	2377.1	2401.6	2134.5	2057.1	1967.3	1989.7	2046.8
50°	9932.5	5987.6	3064.1	2297.6	2252.7	2173.2	2038.7	1965.3	1851.2	1798.2	1812.4
52.5°	10601.2	6277.1	3123.3	2183.5	2118.2	2026.4	1973.4	1883.7	1745.1	1657.4	1655.4
55°	11235.1	6540.1	3058.0	2046.8	1983.7	1912.2	1904.1	1849.1	1700.3	1578.0	1578.0
57.5°	11834.5	6760.3	2894.9	1908.2	1847.0	1804.2	1859.2	1832.8	1645.2	1488.2	1480.1
60°	12342.1	6911.2	2658.4	1767.5	1724.8	1702.3	1785.9	1777.8	1567.7	1392.5	1386.3
62.5°	12745.8	6970.2	2397.5	1633.0	1622.8	1582.0	1684.0	1684.0	1469.8	1298.7	1292.5
65°	13061.8	6913.1	2132.4	1500.5	1520.9	1459.7	1559.5	1547.3	1365.9	1215.0	1206.9
67.5°	13341.1	6725.6	1838.8	1370.0	1416.9	1339.4	1429.2	1400.6	1251.7	1131.5	1123.3
70°	13465.4	6289.3	1504.5	1239.5	1296.6	1221.2	1298.7	1245.7	1123.3	1041.8	1025.4
72.5°	12466.6	5227.2	1184.5	1102.9	1151.9	1090.7	1157.9	1096.9	984.7	948.0	917.4
75°	10313.7	3922.4	911.3	954.1	990.8	943.9	988.7	943.9	841.9	868.5	793.0
77.5°	7490.1	2648.3	697.2	797.1	813.4	788.9	827.7	776.7	685.0	678.9	648.3
80°	3724.6	1551.4	546.3	630.0	623.8	607.5	652.4	627.9	550.4	583.0	577.0
82.5°	1078.5	664.6	397.5	442.4	430.2	434.2	466.9	479.1	717.6	711.5	727.9
85°	338.5	261.0	238.5	246.7	234.4	240.6	275.2	546.3	505.6	295.6	320.1
87.5°	87.6	89.7	59.1	63.2	65.2	77.5	87.6	332.3	159.0	103.9	110.1
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)