

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: P967778

Luminaire Tested: **NAV-SB5A-750-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967778
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-14)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5A-750-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 5000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24990.5 lumens
Efficiency: N/A
Efficacy: 176.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G2

Input Watts (W): 141.7
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



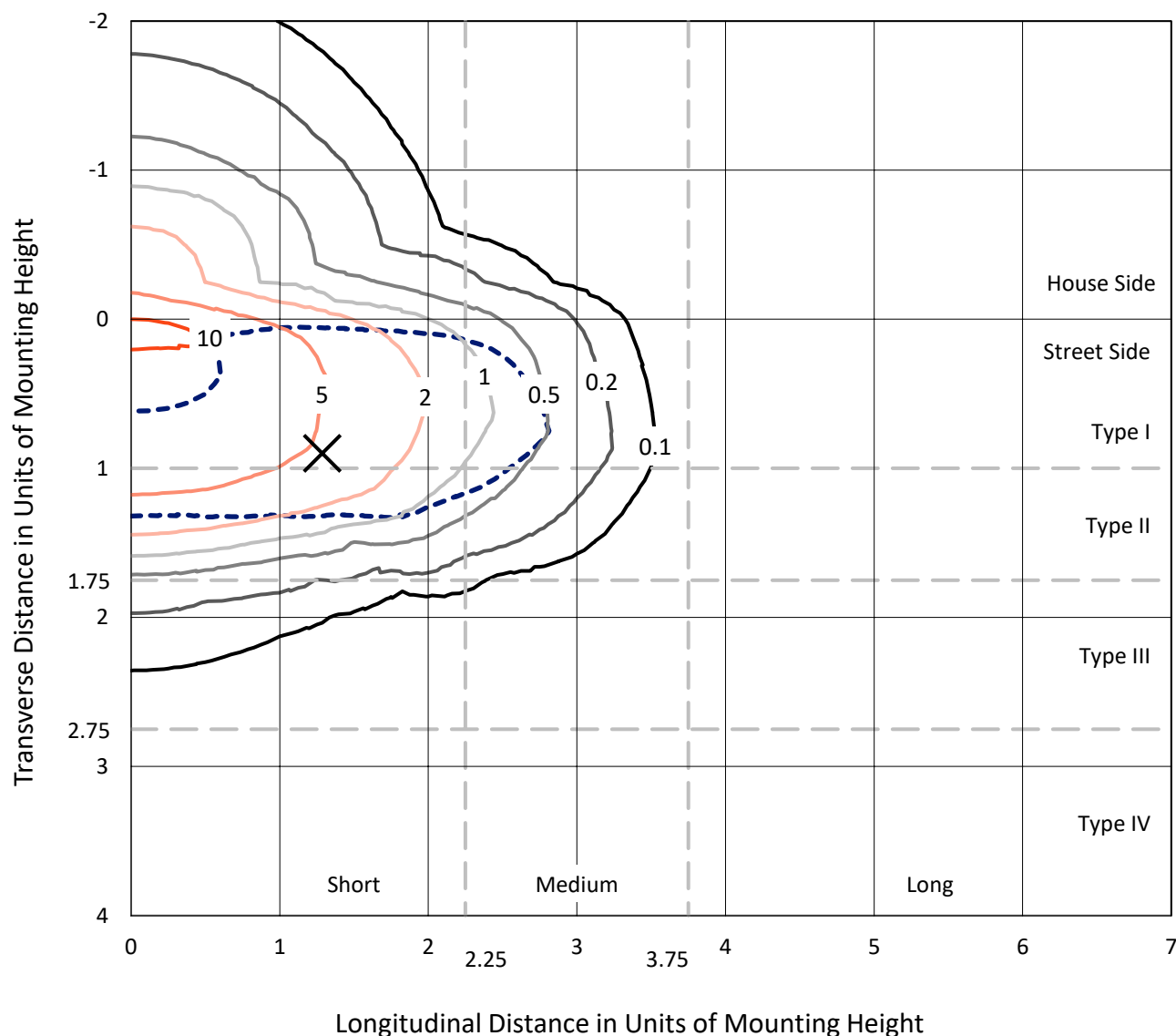
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

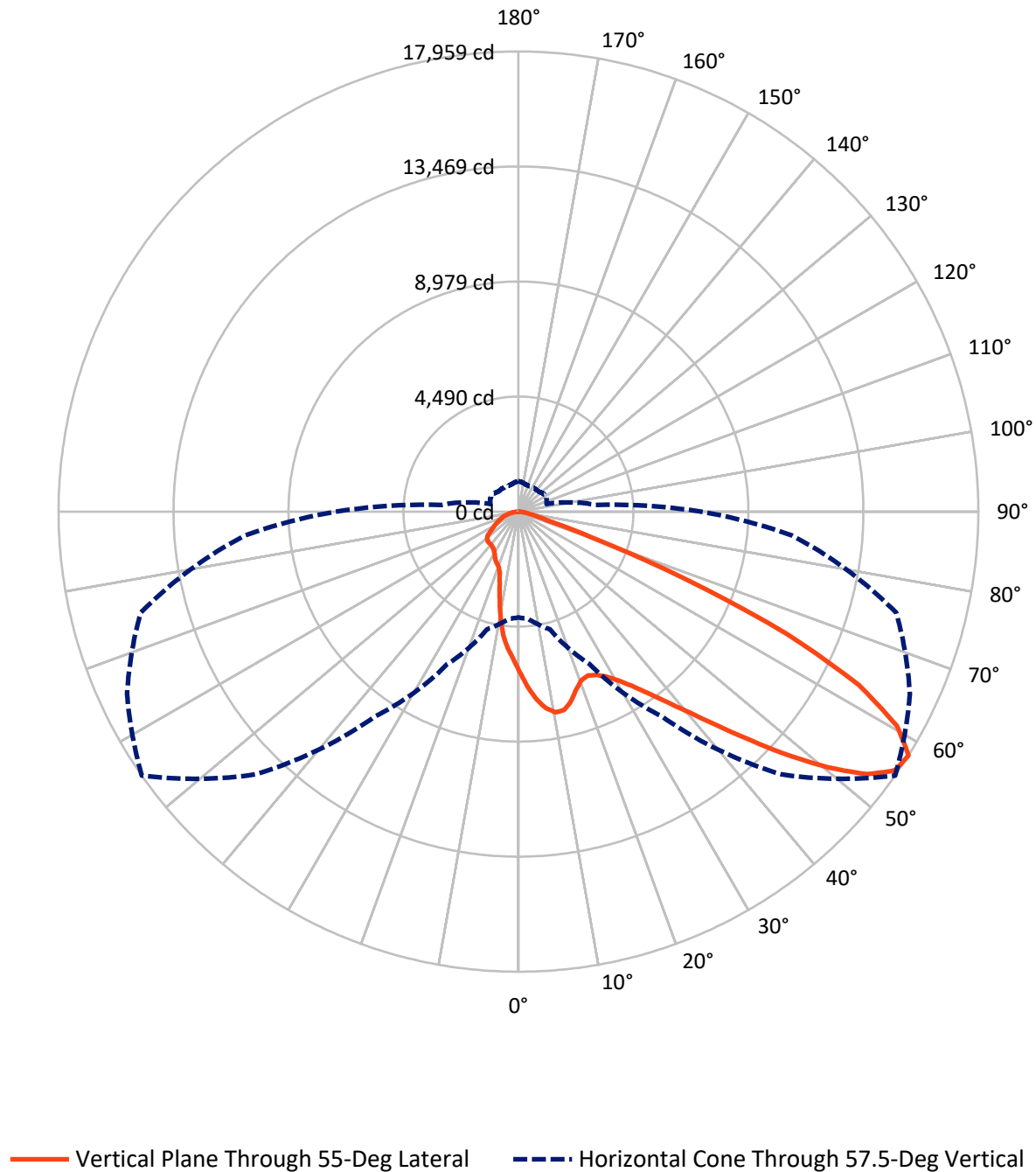


Based on 25 foot mounting height. Maximum calculated value = 12.1 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4521.9	0.0	4521.9
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	20468.6	0.0	20468.6
	% Fixture	81.9	0.0	81.9
Total	Lumens	24990.5	0.0	24990.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	581.1	2.3
10°-20°	1466.6	5.9
20°-30°	2340.3	9.4
30°-40°	3705.3	14.8
40°-50°	5671.3	22.7
50°-60°	6074.5	24.3
60°-70°	3821.5	15.3
70°-80°	1130.1	4.5
80°-90°	199.8	0.8
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°	24990.5	100.0
0°-180°	24990.5	100.0

Coefficient of Utilization



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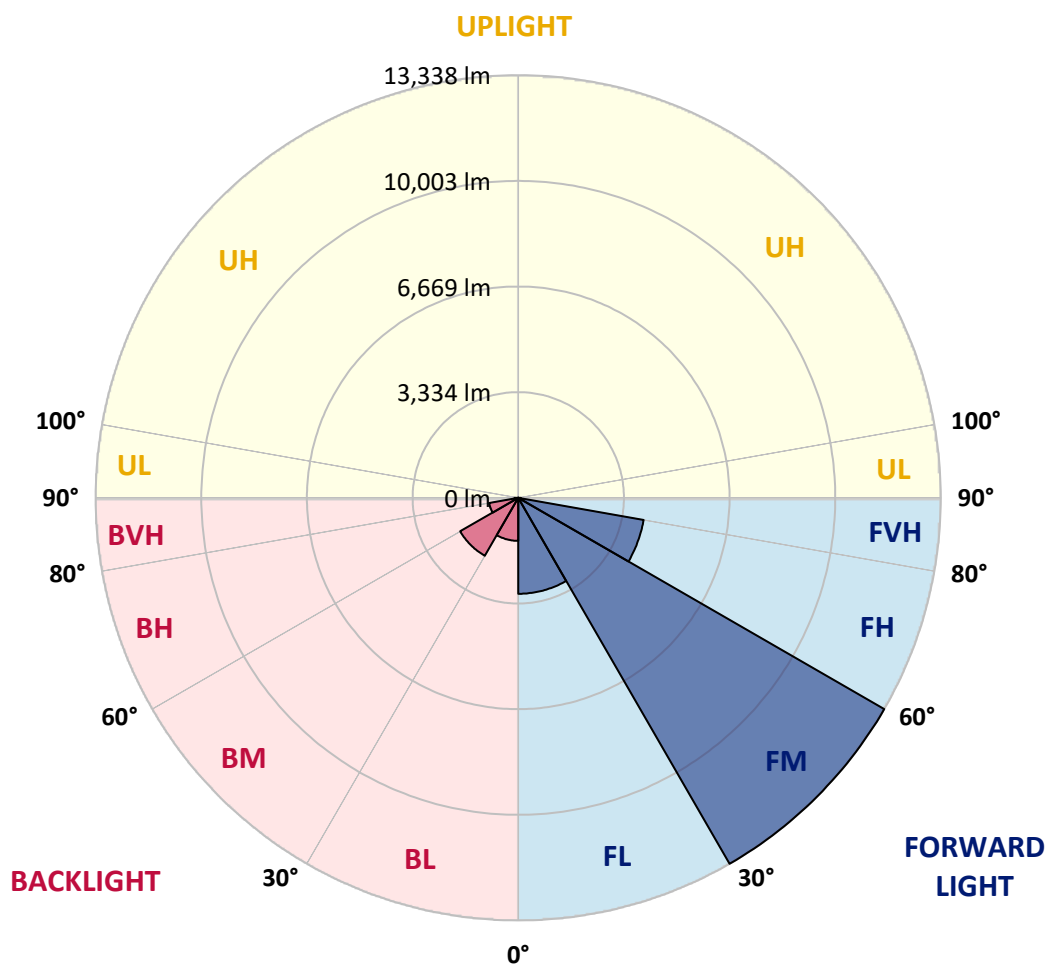
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3028.9	12.1			
FM	(30°-60°)	13337.6	53.4			
FH	(60°-80°)	4017.7	16.1			G2/5000
FVH	(80°-90°)	84.4	0.3			G1/100
BL	(0°-30°)	1359.1	5.4	B3/2500		
BM	(30°-60°)	2113.5	8.5	B2/2500		
BH	(60°-80°)	933.9	3.7	B2/1000		G2/1000
BVH	(80°-90°)	115.4	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-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	6261.8	6261.8	6261.8	6261.8	6261.8	6261.8	6261.8	6261.8	6261.8	6261.8	6261.8
2.5°	7184.2	7179.1	7207.5	7110.6	7044.7	6955.5	6838.0	6688.1	6526.7	6356.1	6282.5
5°	7831.5	7786.2	7815.9	7743.6	7671.3	7536.9	7362.5	7118.3	6819.9	6480.2	6299.2
7.5°	7729.4	7698.4	7774.6	7839.2	7893.5	7876.7	7748.8	7493.0	7108.0	6614.5	6352.2
10°	6906.4	6871.6	6978.8	7202.3	7530.5	7815.9	7971.0	7812.0	7402.6	6761.8	6403.9
12.5°	6180.4	6163.6	6234.7	6415.6	6779.9	7327.6	7942.5	8091.1	7708.7	6936.2	6473.7
15°	5870.4	5849.7	5894.9	5986.6	6219.2	6729.4	7684.2	8282.3	8009.8	7137.7	6584.8
17.5°	5801.9	5778.6	5798.0	5845.8	5995.6	6384.5	7294.0	8376.6	8323.7	7362.5	6677.8
20°	5928.5	5909.1	5911.7	5909.1	6013.8	6322.5	7022.8	8340.4	8597.6	7569.2	6768.3
22.5°	6234.7	6202.4	6203.7	6135.2	6192.0	6431.1	6951.7	8243.6	8841.8	7750.1	6836.7
25°	6733.3	6675.2	6686.9	6512.4	6497.0	6674.0	7062.8	8168.6	9084.6	7894.8	6849.7
27.5°	7415.5	7349.6	7314.7	7055.1	6931.0	7018.9	7288.9	8194.5	9314.6	8020.1	6817.4
30°	8268.2	8188.0	8117.0	7748.8	7524.0	7491.7	7640.2	8365.0	9585.9	8151.8	6761.8
32.5°	9313.3	9220.3	9091.0	8602.7	8286.2	8117.0	8095.0	8668.6	9903.7	8319.8	6733.3
35°	10557.4	10435.9	10252.5	9620.8	9220.3	8874.0	8694.5	9106.6	10339.1	8573.0	6765.6
37.5°	11839.0	11702.0	11534.0	10782.2	10290.0	9779.6	9425.7	9700.8	10919.1	8916.7	6850.9
40°	13021.0	12867.2	12710.9	12041.8	11513.4	10898.4	10320.9	10452.7	11628.3	9327.5	6995.6
42.5°	13718.6	13604.9	13545.5	13183.8	12775.5	12151.6	11434.6	11344.1	12425.5	9800.3	7161.0
45°	13687.6	13641.1	13824.6	13974.4	13877.6	13531.3	12739.4	12329.8	13225.2	10209.8	7313.4
47.5°	12956.4	12987.5	13397.0	14239.3	14610.0	14791.0	14225.1	13297.4	13920.2	10516.0	7381.8
50°	10966.9	10992.7	11940.9	13757.3	14798.6	15818.0	15699.1	14241.9	14458.9	10703.4	7366.4
52.5°	9392.1	9408.9	9815.8	12328.6	14176.0	16334.7	17027.2	15132.0	14852.9	10755.0	7279.9
55°	7074.4	7132.6	7588.6	9672.4	12555.9	15925.2	17835.9	16049.2	15102.2	10760.1	7189.4
57.5°	4132.8	4196.0	4759.4	6565.4	9759.0	14497.6	17958.6	16863.1	15271.5	10718.8	7135.1
60°	2024.4	2051.5	2297.0	3450.7	6017.7	11747.2	16971.6	17257.1	15365.8	10696.9	7132.6
62.5°	1364.3	1360.4	1370.7	1702.7	2964.9	7547.3	14914.9	16567.3	15315.4	10613.0	7106.7
65°	1173.0	1158.9	1120.1	1195.0	1536.1	3451.9	11523.7	14508.0	14931.7	10402.3	6929.7
67.5°	1014.1	1015.5	1016.7	993.4	1096.9	1593.0	7042.2	11428.1	13554.6	9405.0	6247.6
70°	839.8	851.4	856.5	856.5	894.0	1045.2	3006.2	7832.7	10691.7	7374.2	5031.9
72.5°	764.8	740.3	742.8	729.9	729.9	795.8	1210.5	4440.2	6735.9	4148.3	3070.8
75°	624.0	639.5	642.1	633.0	603.3	607.2	718.3	1862.9	2882.2	1720.8	1518.0
77.5°	538.7	538.7	543.9	537.4	514.1	454.8	479.3	722.2	980.5	705.4	758.3
80°	432.8	431.5	453.5	466.4	430.2	335.9	306.2	399.2	435.3	310.1	394.0
82.5°	210.5	223.4	311.4	355.3	326.9	242.9	187.4	248.0	232.6	136.9	177.0
85°	122.7	116.2	139.5	197.6	187.4	134.4	90.4	129.1	121.5	69.8	71.0
87.5°	38.7	36.2	28.4	67.1	54.2	37.5	24.5	37.5	33.6	15.5	15.5
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6261.8	6261.8	6261.8	6261.8	6261.8	6261.8	6261.8	6261.8	6261.8	6261.8
2.5°	6190.8	6038.3	5887.2	5748.9	5665.0	5610.7	5556.4	5495.7	5472.5	5437.6
5°	6128.8	5834.2	5571.9	5345.9	5140.5	4978.9	4816.2	4684.5	4625.0	4665.1
7.5°	6092.6	5666.2	5261.8	4847.2	4448.0	4128.9	3851.1	3656.1	3568.2	3590.2
10°	6060.3	5476.4	4860.1	4205.2	3631.5	3236.2	2952.0	2803.4	2747.8	2759.5
12.5°	6030.6	5263.2	4375.6	3513.9	2904.1	2643.2	2561.8	2563.1	2573.5	2581.2
15°	6025.4	5006.1	3834.3	2909.4	2511.5	2494.6	2582.5	2638.0	2667.8	2676.8
17.5°	6017.7	4698.6	3282.7	2497.2	2415.8	2529.5	2610.9	2647.1	2670.3	2671.7
20°	5986.6	4308.5	2773.6	2300.8	2395.2	2493.3	2543.7	2572.1	2591.5	2598.0
22.5°	5891.1	3874.4	2377.1	2213.0	2312.5	2391.3	2450.8	2483.1	2494.6	2502.4
25°	5719.2	3388.6	2103.2	2129.0	2197.5	2297.0	2344.8	2351.2	2347.4	2359.0
27.5°	5494.4	2868.1	1932.6	2015.4	2103.2	2188.5	2214.3	2210.4	2202.7	2215.6
30°	5223.1	2400.3	1824.2	1887.4	2007.6	2085.2	2108.3	2099.3	2083.8	2098.1
32.5°	4936.3	2017.9	1735.0	1798.4	1928.8	2005.0	2028.3	2019.2	2007.6	2019.2
35°	4668.9	1750.5	1652.3	1738.9	1866.8	1941.8	1971.4	1972.7	1972.7	1987.0
37.5°	4423.5	1594.2	1583.8	1701.4	1824.2	1891.3	1934.0	1936.5	1881.0	1884.9
40°	4196.0	1528.3	1552.9	1676.9	1782.8	1847.5	1850.0	1705.3	1603.2	1600.6
42.5°	4010.0	1515.4	1561.9	1674.3	1753.1	1755.7	1573.5	1461.1	1432.7	1434.0
45°	3835.7	1511.6	1582.6	1674.3	1709.2	1516.7	1394.0	1364.3	1366.8	1377.2
47.5°	3640.6	1496.0	1586.5	1651.1	1582.6	1348.7	1312.6	1299.6	1294.5	1297.0
50°	3427.4	1440.4	1537.4	1604.5	1365.5	1276.4	1231.1	1227.3	1233.8	1237.6
52.5°	3202.6	1350.0	1453.3	1520.6	1266.1	1213.1	1162.7	1171.8	1200.2	1209.2
55°	3055.3	1244.1	1342.2	1352.6	1196.3	1153.6	1111.0	1131.7	1184.7	1201.5
57.5°	3016.6	1131.7	1215.6	1204.1	1107.2	1102.0	1076.1	1094.2	1161.4	1185.9
60°	3005.0	1030.9	1091.6	1082.6	1020.6	1045.2	1038.6	1047.8	1071.0	1078.7
62.5°	2914.5	950.8	980.5	967.6	943.1	985.7	1001.2	981.8	999.9	1009.0
65°	2684.6	886.2	872.1	862.9	873.3	912.0	943.1	904.4	921.2	947.0
67.5°	2304.7	798.4	759.6	770.0	802.3	823.0	862.9	819.1	833.2	877.2
70°	1864.2	687.3	652.4	682.1	713.1	755.7	762.2	732.5	766.1	815.2
72.5°	1319.1	574.9	550.3	611.1	621.4	676.9	662.8	648.5	695.1	711.9
75°	914.7	463.8	449.6	496.1	533.5	581.4	571.0	587.8	686.0	693.7
77.5°	578.8	360.4	351.4	381.1	432.8	485.7	502.6	693.7	1171.8	1218.2
80°	335.9	268.8	258.4	281.7	326.9	376.0	484.4	851.4	772.5	763.5
82.5°	187.4	184.7	171.8	178.2	218.3	271.3	684.7	599.4	487.1	502.6
85°	87.8	108.5	93.0	89.2	122.7	317.9	457.4	342.3	227.3	222.2
87.5°	23.3	20.7	20.7	23.3	51.7	273.9	182.1	146.0	86.5	83.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)