

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: P968243

Luminaire Tested: **NAV-SB5B-735-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968243
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-SB5B-735-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29652.2 lumens
Efficiency: N/A
Efficacy: 162.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 182.7
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



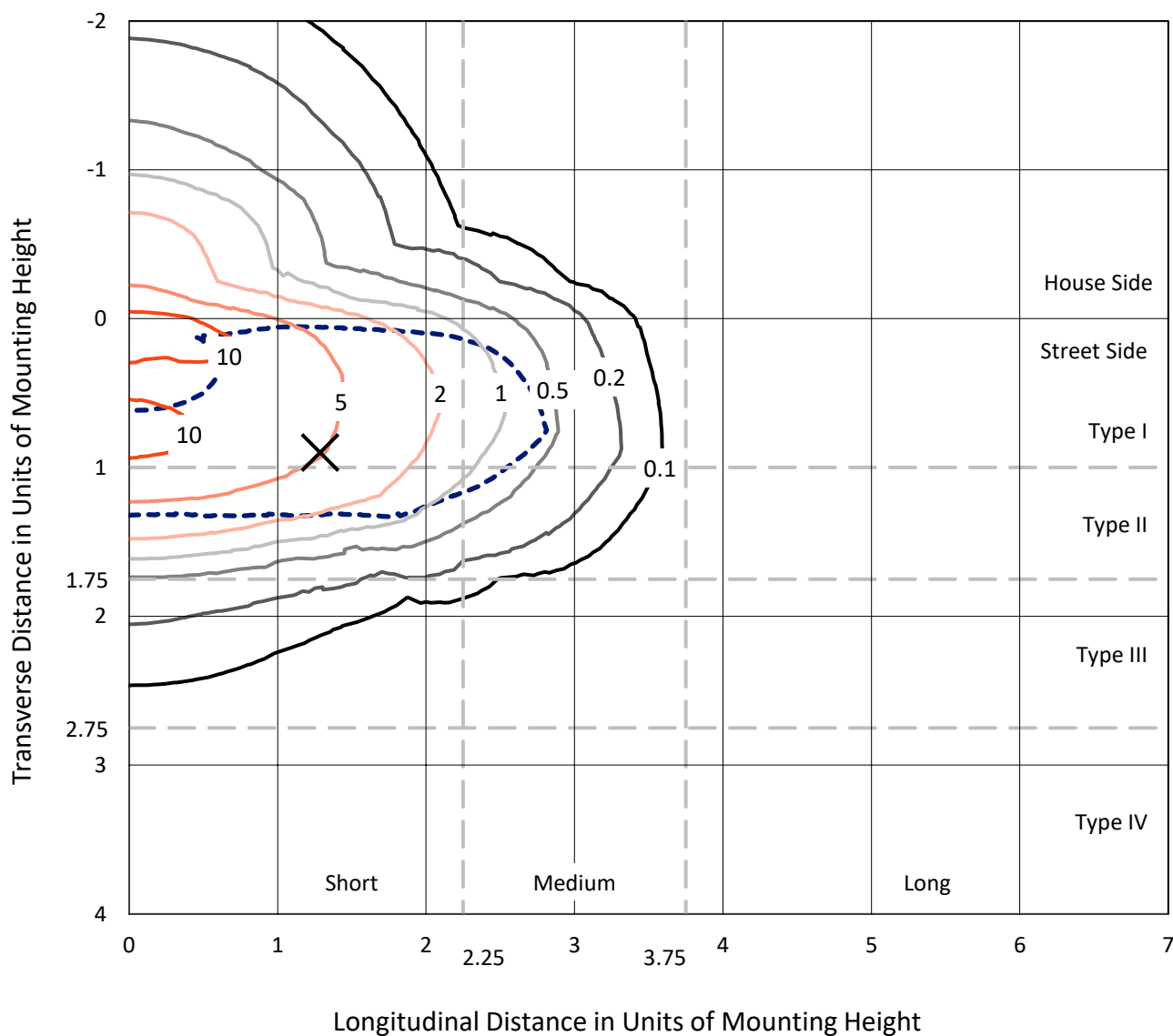
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd



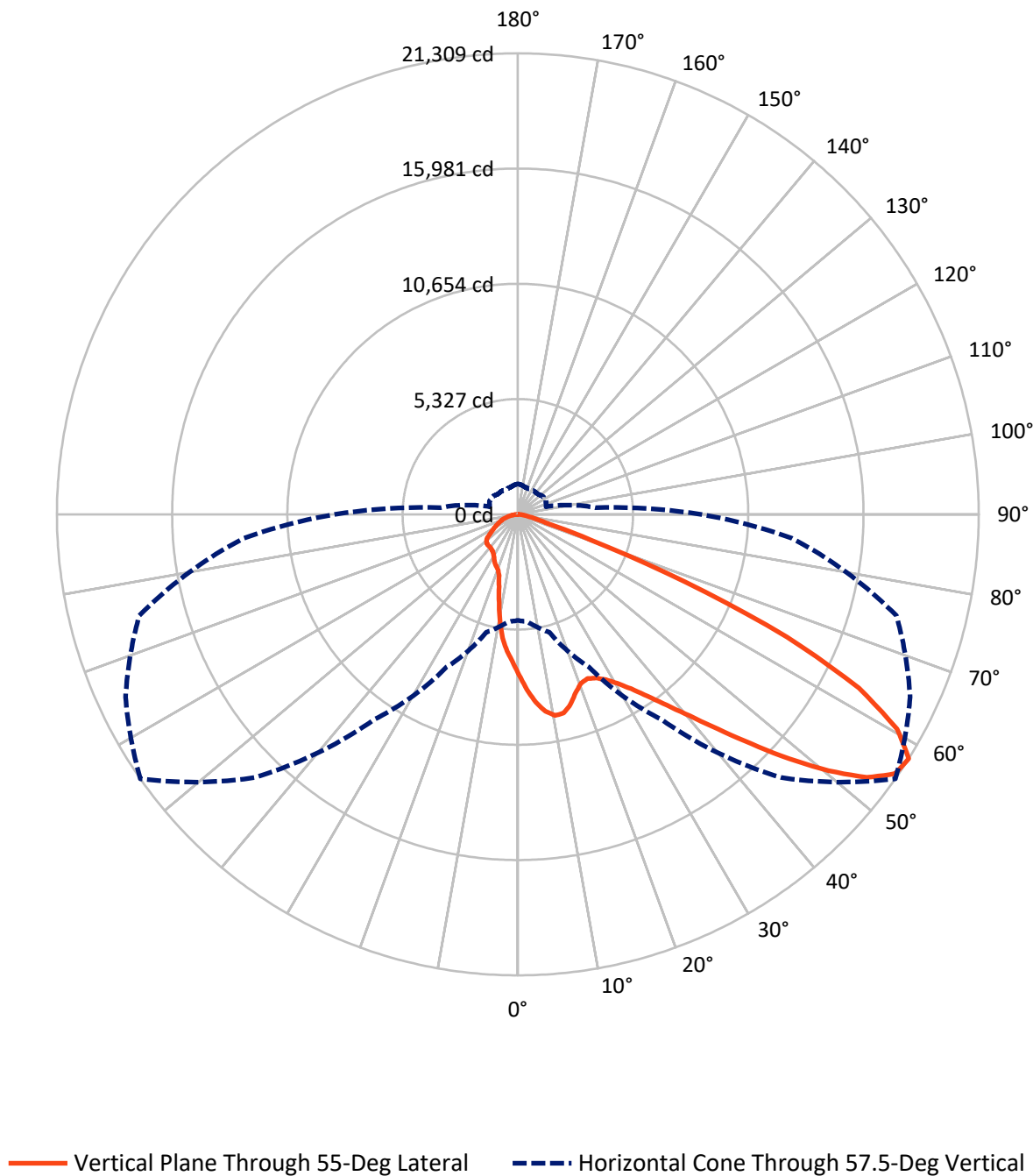
Based on 25 foot mounting height. Maximum calculated value = 14.4 fc

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	5365.4	0.0	5365.4
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	24286.8	0.0	24286.8
	% Fixture	81.9	0.0	81.9
Total	Lumens	29652.2	0.0	29652.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	689.4	2.3
10°-20°	1740.2	5.9
20°-30°	2776.9	9.4
30°-40°	4396.5	14.8
40°-50°	6729.2	22.7
50°-60°	7207.6	24.3
60°-70°	4534.4	15.3
70°-80°	1340.9	4.5
80°-90°	237.1	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°	29652.2	100.0
0°-180°	29652.2	100.0

Coefficient of Utilization



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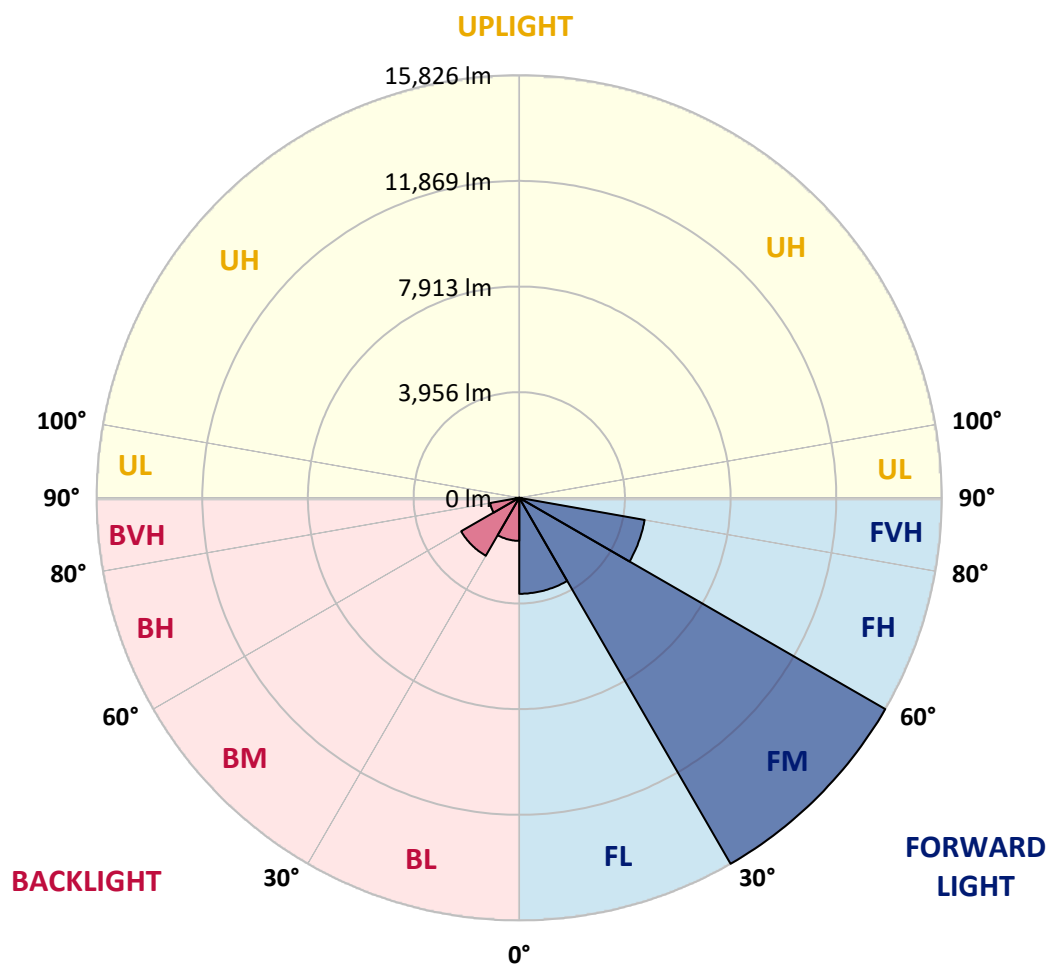
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3593.8	12.1			
FM	(30°-60°)	15825.6	53.4			
FH	(60°-80°)	4767.2	16.1			G2/5000
FVH	(80°-90°)	100.2	0.3			G2/225
BL	(0°-30°)	1612.7	5.4	B3/2500		
BM	(30°-60°)	2507.7	8.5	B3/5000		
BH	(60°-80°)	1108.1	3.7	B3/2500		G3/2500
BVH	(80°-90°)	136.9	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-G3

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	7429.9	7429.9	7429.9	7429.9	7429.9	7429.9	7429.9	7429.9	7429.9	7429.9	7429.9
2.5°	8524.4	8518.3	8552.0	8437.0	8358.8	8253.0	8113.6	7935.8	7744.1	7541.7	7454.4
5°	9292.3	9238.7	9273.9	9188.1	9102.3	8942.8	8735.9	8446.2	8092.1	7688.9	7474.3
7.5°	9171.3	9134.5	9224.9	9301.6	9365.9	9345.9	9194.2	8890.7	8433.9	7848.3	7537.2
10°	8194.8	8153.4	8280.7	8545.8	8935.1	9273.9	9457.9	9269.4	8783.4	8023.1	7598.5
12.5°	7333.4	7313.4	7397.7	7612.3	8044.6	8694.6	9424.2	9600.5	9146.7	8230.0	7681.2
15°	6965.4	6940.9	6994.5	7103.4	7379.3	7984.7	9117.6	9827.3	9503.9	8469.2	7813.1
17.5°	6884.2	6856.6	6879.6	6936.3	7114.1	7575.5	8654.7	9939.2	9876.4	8735.9	7923.5
20°	7034.4	7011.4	7014.5	7011.4	7135.5	7502.0	8332.7	9896.3	10201.3	8981.2	8030.8
22.5°	7397.7	7359.4	7360.9	7279.7	7347.1	7630.7	8248.5	9781.4	10491.1	9195.8	8112.1
25°	7989.4	7920.4	7934.2	7727.3	7708.8	7918.8	8380.3	9692.4	10779.2	9367.5	8127.3
27.5°	8798.7	8720.6	8679.2	8371.1	8223.9	8328.1	8648.5	9723.0	11052.1	9516.1	8089.0
30°	9810.5	9715.5	9631.1	9194.2	8927.5	8889.2	9065.5	9925.4	11374.0	9672.5	8023.1
32.5°	11050.5	10940.2	10786.9	10207.5	9831.9	9631.1	9605.1	10285.7	11751.1	9871.8	7989.4
35°	12526.7	12382.6	12165.0	11415.4	10940.2	10529.4	10316.3	10805.3	12267.7	10172.2	8027.7
37.5°	14047.3	13884.9	13685.6	12793.4	12209.4	11603.9	11183.9	11510.4	12955.9	10579.9	8128.9
40°	15449.9	15267.5	15082.1	14288.0	13661.1	12931.4	12246.2	12402.6	13797.5	11067.4	8300.6
42.5°	16277.7	16142.8	16072.3	15643.0	15158.7	14418.3	13567.5	13460.2	14743.3	11628.4	8496.7
45°	16240.9	16185.7	16403.4	16581.2	16466.2	16055.4	15115.8	14629.8	15692.1	12114.4	8677.6
47.5°	15373.3	15410.1	15896.0	16895.5	17335.4	17549.9	16878.6	15777.9	16516.8	12477.6	8758.9
50°	13012.7	13043.3	14168.5	16323.6	17559.2	18768.7	18627.6	16898.5	17156.0	12700.0	8740.5
52.5°	11144.1	11164.0	11646.9	14628.3	16820.4	19381.7	20203.4	17954.6	17623.5	12761.2	8637.8
55°	8394.0	8463.0	9004.1	11476.7	14898.1	18895.9	21163.0	19043.0	17919.4	12767.4	8530.5
57.5°	4903.7	4978.8	5647.1	7790.1	11579.4	17202.1	21308.6	20008.7	18120.3	12718.3	8466.1
60°	2402.0	2434.2	2725.5	4094.4	7140.2	13938.5	20137.5	20476.2	18232.1	12692.3	8463.0
62.5°	1618.7	1614.2	1626.4	2020.4	3518.0	8955.1	17697.1	19657.7	18172.3	12592.6	8432.4
65°	1391.8	1375.0	1329.0	1417.9	1822.6	4095.9	13673.3	17214.3	17717.0	12342.7	8222.3
67.5°	1203.4	1204.9	1206.4	1178.8	1301.4	1890.0	8355.7	13559.9	16083.0	11159.4	7413.0
70°	996.4	1010.1	1016.3	1016.3	1060.8	1240.1	3567.0	9293.9	12686.1	8749.7	5970.6
72.5°	907.4	878.3	881.4	866.1	866.1	944.2	1436.3	5268.5	7992.4	4922.0	3643.7
75°	740.4	758.8	761.9	751.1	715.9	720.5	852.3	2210.4	3419.9	2041.8	1801.1
77.5°	639.2	639.2	645.3	637.7	610.1	539.6	568.7	856.9	1163.5	836.9	899.8
80°	513.5	512.0	538.0	553.4	510.4	398.5	363.3	473.7	516.6	367.9	467.5
82.5°	249.9	265.2	369.4	421.6	387.9	288.2	222.2	294.3	275.9	162.5	210.0
85°	145.7	138.0	165.5	234.5	222.2	159.4	107.3	153.2	144.1	82.8	84.4
87.5°	46.0	42.9	33.7	79.7	64.4	44.5	29.1	44.5	39.9	18.3	18.3
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°	7429.9	7429.9	7429.9	7429.9	7429.9	7429.9	7429.9	7429.9	7429.9	7429.9
2.5°	7345.6	7164.6	6985.4	6821.4	6721.6	6657.3	6592.9	6520.8	6493.3	6451.9
5°	7272.0	6922.5	6611.4	6343.1	6099.4	5907.7	5714.6	5558.3	5487.7	5535.2
7.5°	7229.1	6723.2	6243.5	5751.4	5277.7	4899.1	4569.6	4338.1	4233.9	4259.9
10°	7190.8	6497.9	5766.8	4989.5	4308.9	3839.9	3502.6	3326.3	3260.4	3274.3
12.5°	7155.5	6245.0	5191.8	4169.4	3445.9	3136.3	3039.7	3041.3	3053.5	3062.7
15°	7149.4	5939.9	4549.6	3452.1	2979.9	2960.0	3064.2	3130.1	3165.4	3176.2
17.5°	7140.2	5575.1	3895.1	2963.1	2866.5	3001.4	3098.0	3140.9	3168.5	3170.0
20°	7103.4	5112.2	3291.1	2730.1	2841.9	2958.5	3018.2	3051.9	3075.0	3082.6
22.5°	6990.0	4597.1	2820.5	2625.8	2743.8	2837.4	2907.9	2946.2	2960.0	2969.2
25°	6786.1	4020.8	2495.6	2526.2	2607.4	2725.5	2782.2	2789.8	2785.2	2799.1
27.5°	6519.3	3403.0	2293.2	2391.3	2495.6	2596.7	2627.4	2622.8	2613.5	2628.9
30°	6197.5	2848.1	2164.4	2239.5	2382.1	2474.0	2501.6	2491.0	2472.5	2489.4
32.5°	5857.2	2394.4	2058.7	2133.7	2288.6	2379.0	2406.6	2395.9	2382.1	2395.9
35°	5539.8	2077.1	1960.5	2063.2	2215.0	2303.9	2339.2	2340.7	2340.7	2357.6
37.5°	5248.6	1891.5	1879.3	2018.8	2164.4	2244.1	2294.8	2297.7	2231.8	2236.4
40°	4978.8	1813.4	1842.5	1989.7	2115.4	2192.1	2195.1	2023.5	1902.3	1899.2
42.5°	4758.0	1798.1	1853.3	1986.7	2080.1	2083.2	1867.0	1733.7	1700.0	1701.5
45°	4551.1	1793.4	1877.8	1986.7	2028.0	1799.6	1653.9	1618.7	1621.8	1634.1
47.5°	4319.7	1775.1	1882.4	1959.0	1877.8	1600.3	1557.4	1542.1	1536.0	1539.0
50°	4066.8	1709.2	1824.1	1903.8	1620.2	1514.4	1460.8	1456.2	1463.9	1468.5
52.5°	3800.0	1601.9	1724.5	1804.2	1502.2	1439.4	1379.5	1390.3	1424.0	1434.8
55°	3625.2	1476.2	1592.6	1604.9	1419.4	1368.9	1318.3	1342.9	1405.7	1425.6
57.5°	3579.3	1342.9	1442.5	1428.6	1313.6	1307.6	1276.8	1298.4	1378.1	1407.2
60°	3565.5	1223.2	1295.3	1284.5	1210.9	1240.1	1232.5	1243.1	1270.8	1279.9
62.5°	3458.1	1128.2	1163.5	1148.1	1119.0	1169.6	1188.0	1165.0	1186.4	1197.2
65°	3185.3	1051.5	1034.7	1024.0	1036.3	1082.2	1119.0	1073.0	1093.0	1123.6
67.5°	2734.7	947.3	901.4	913.6	951.9	976.4	1024.0	971.8	988.7	1040.8
70°	2212.0	815.5	774.1	809.3	846.1	896.8	904.4	869.1	909.0	967.3
72.5°	1565.1	682.1	653.0	725.1	737.3	803.2	786.4	769.5	824.7	844.6
75°	1085.3	550.3	533.4	588.7	633.0	689.8	677.5	697.5	814.0	823.2
77.5°	686.7	427.6	417.0	452.2	513.5	576.4	596.2	823.2	1390.3	1445.6
80°	398.5	318.9	306.6	334.2	387.9	446.1	574.8	1010.1	916.7	905.9
82.5°	222.2	219.2	203.9	211.6	259.0	322.0	812.4	711.2	577.9	596.2
85°	104.2	128.7	110.4	105.8	145.7	377.1	542.6	406.2	269.8	263.6
87.5°	27.6	24.5	24.5	27.6	61.3	324.9	216.2	173.2	102.7	99.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)