

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: P968770

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

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968770
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-SB5C-735-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

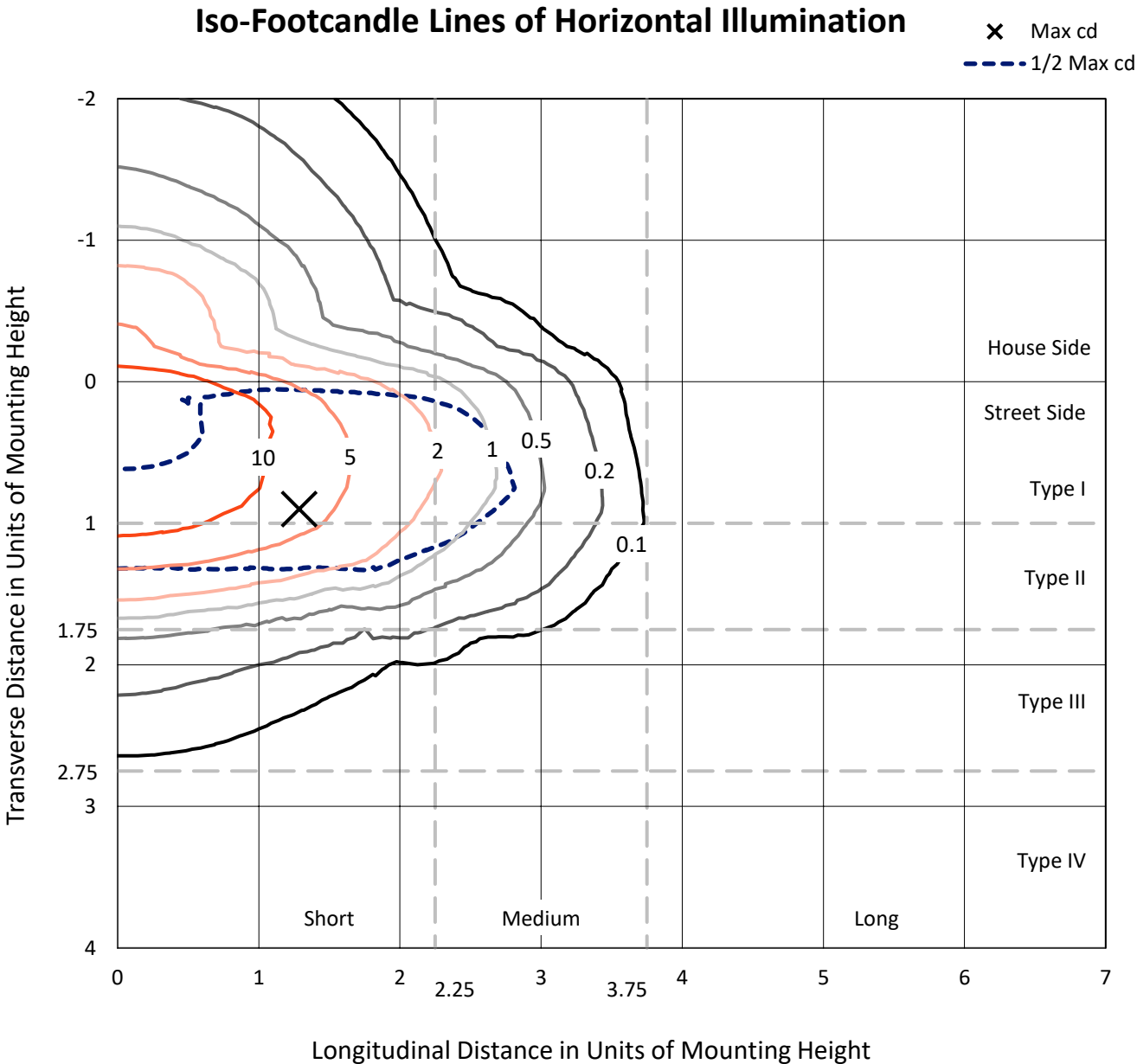
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 39436.9 lumens
Efficiency: N/A
Efficacy: 158.1 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): 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



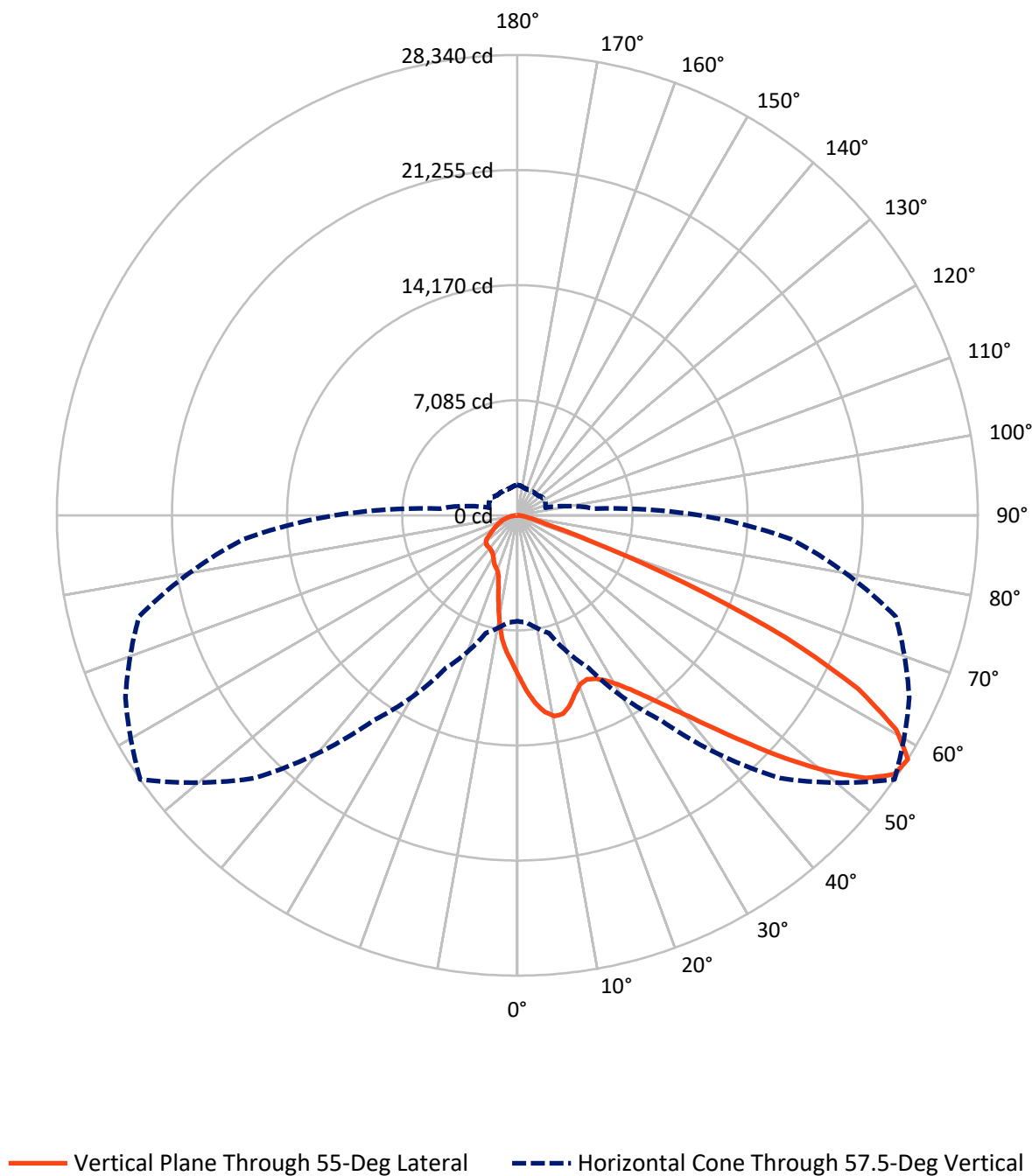
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Based on 25 foot mounting height. Maximum calculated value = 19.1 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7135.9	0.0	7135.9
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	32301.0	0.0	32301.0
	% Fixture	81.9	0.0	81.9
Total	Lumens	39436.9	0.0	39436.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	916.9	2.3
10°-20°	2314.4	5.9
20°-30°	3693.2	9.4
30°-40°	5847.2	14.8
40°-50°	8949.7	22.7
50°-60°	9586.0	24.3
60°-70°	6030.6	15.3
70°-80°	1783.4	4.5
80°-90°	315.3	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°	39436.9	100.0
0°-180°	39436.9	100.0

Coefficient of Utilization



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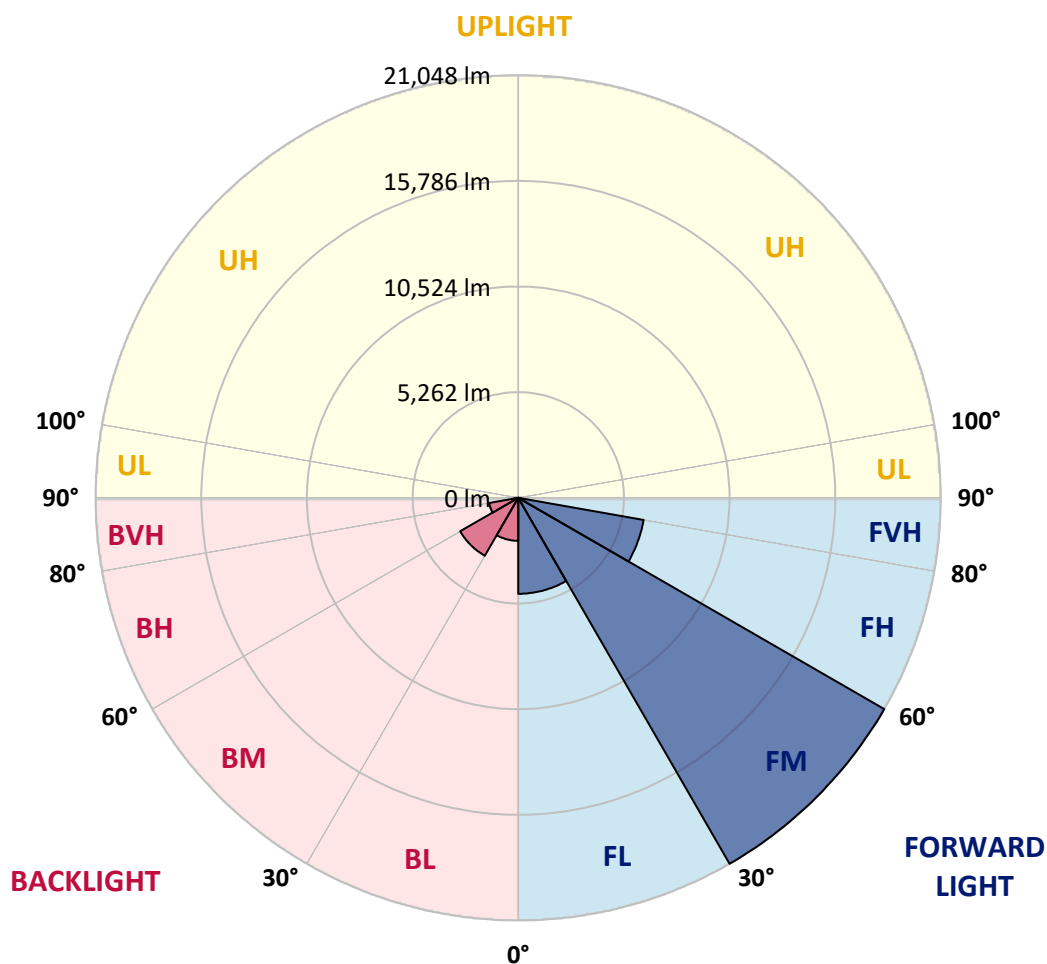
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4779.7	12.1			
FM	(30°-60°)	21047.7	53.4			
FH	(60°-80°)	6340.2	16.1			G3/7500
FVH	(80°-90°)	133.2	0.3			G2/225
BL	(0°-30°)	2144.8	5.4	B3/2500		
BM	(30°-60°)	3335.3	8.5	B3/5000		
BH	(60°-80°)	1473.7	3.7	B3/2500		G3/2500
BVH	(80°-90°)	182.1	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°	9881.6	9881.6	9881.6	9881.6	9881.6	9881.6	9881.6	9881.6	9881.6	9881.6	9881.6
2.5°	11337.2	11329.1	11373.9	11221.0	11117.0	10976.4	10790.9	10554.3	10299.5	10030.4	9914.2
5°	12358.6	12287.3	12334.1	12219.9	12105.9	11893.8	11618.6	11233.3	10762.3	10226.1	9940.8
7.5°	12197.6	12148.6	12268.9	12370.8	12456.5	12430.0	12228.1	11824.5	11217.0	10438.2	10024.3
10°	10898.9	10843.9	11013.1	11365.8	11883.6	12334.1	12578.8	12328.1	11681.8	10670.6	10105.9
12.5°	9753.2	9726.6	9838.8	10124.2	10699.2	11563.5	12533.9	12768.4	12164.9	10945.8	10216.0
15°	9263.8	9231.3	9302.6	9447.3	9814.3	10619.6	12126.3	13070.2	12640.0	11263.8	10391.2
17.5°	9155.8	9119.1	9149.7	9225.1	9461.7	10075.2	11510.5	13218.9	13135.4	11618.6	10538.0
20°	9355.6	9325.0	9329.1	9325.0	9490.2	9977.5	11082.4	13161.9	13567.6	11944.7	10680.8
22.5°	9838.8	9787.8	9789.9	9681.8	9771.5	10148.6	10970.3	13009.0	13952.9	12230.2	10788.8
25°	10625.8	10534.0	10552.4	10277.1	10252.7	10532.0	11145.6	12890.7	14336.2	12458.6	10809.2
27.5°	11702.1	11598.2	11543.1	11133.3	10937.7	11076.3	11502.3	12931.5	14699.0	12656.3	10758.2
30°	13047.7	12921.4	12809.2	12228.1	11873.4	11822.5	12056.9	13200.6	15127.2	12864.3	10670.6
32.5°	14697.1	14550.3	14346.4	13575.7	13076.2	12809.2	12774.5	13679.8	15628.7	13129.2	10625.8
35°	16660.2	16468.7	16179.1	15182.2	14550.3	14003.9	13720.4	14370.8	16315.7	13528.9	10676.7
37.5°	18682.7	18466.6	18201.5	17015.0	16238.3	15433.0	14874.4	15308.7	17231.2	14071.1	10811.3
40°	20548.1	20305.5	20058.8	19002.8	18168.9	17198.5	16287.2	16495.1	18350.4	14719.4	11039.6
42.5°	21649.0	21469.5	21375.9	20804.9	20160.7	19176.0	18044.6	17901.8	19608.2	15465.6	11300.5
45°	21600.0	21526.6	21816.2	22052.7	21899.7	21353.4	20103.6	19457.4	20870.2	16111.9	11541.1
47.5°	20446.2	20495.1	21141.3	22470.6	23055.7	23341.1	22448.2	20984.4	21967.1	16595.1	11649.1
50°	17306.6	17347.3	18843.7	21710.1	23353.4	24961.9	24774.4	22474.7	22817.2	16890.7	11624.7
52.5°	14821.4	14847.8	15490.1	19455.3	22370.7	25777.4	26870.2	23879.3	23439.0	16972.3	11488.1
55°	11164.0	11255.7	11975.4	15263.8	19814.2	25131.2	28146.4	25326.8	23832.5	16980.4	11345.4
57.5°	6521.8	6621.7	7510.6	10360.7	15400.4	22878.3	28340.0	26611.3	24099.5	16915.2	11259.7
60°	3194.6	3237.5	3624.8	5445.4	9496.3	18537.9	26782.4	27233.0	24248.3	16880.5	11255.7
62.5°	2152.9	2146.8	2163.1	2687.0	4678.8	11910.1	23536.9	26144.4	24168.9	16748.0	11214.9
65°	1851.2	1828.7	1767.5	1885.8	2424.0	5447.5	18185.2	22894.6	23563.3	16415.7	10935.6
67.5°	1600.3	1602.4	1604.4	1567.7	1730.8	2513.7	11112.9	18034.4	21390.1	14841.8	9859.2
70°	1325.1	1343.5	1351.7	1351.7	1410.8	1649.3	4744.1	12360.7	16872.3	11636.9	7940.8
72.5°	1206.9	1168.2	1172.3	1151.9	1151.9	1255.8	1910.3	7007.0	10629.8	6546.3	4846.0
75°	984.7	1009.1	1013.2	999.0	952.1	958.2	1133.5	2939.8	4548.3	2715.5	2395.5
77.5°	850.1	850.1	858.3	848.1	811.4	717.6	756.3	1139.6	1547.3	1113.1	1196.7
80°	683.0	680.9	715.6	735.9	678.9	530.0	483.2	630.0	687.1	489.3	621.8
82.5°	332.3	352.7	491.3	560.7	515.8	383.2	295.6	391.4	367.0	216.1	279.3
85°	193.7	183.5	220.2	311.9	295.6	212.1	142.7	203.9	191.7	110.1	112.1
87.5°	61.2	57.1	44.9	106.0	85.6	59.1	38.7	59.1	53.0	24.5	24.5
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°	9881.6	9881.6	9881.6	9881.6	9881.6	9881.6	9881.6	9881.6	9881.6	9881.6
2.5°	9769.5	9528.9	9290.4	9072.3	8939.7	8854.1	8768.5	8672.6	8635.9	8580.9
5°	9671.6	9206.8	8793.0	8436.2	8112.1	7857.1	7600.3	7392.3	7298.5	7361.8
7.5°	9614.5	8941.8	8303.6	7649.3	7019.3	6515.7	6077.3	5769.5	5630.9	5665.6
10°	9563.6	8642.1	7669.6	6636.0	5730.8	5107.0	4658.4	4424.0	4336.4	4354.7
12.5°	9516.7	8305.7	6905.1	5545.2	4583.0	4171.2	4042.7	4044.8	4061.0	4073.3
15°	9508.5	7900.0	6050.9	4591.2	3963.3	3936.7	4075.4	4163.0	4209.9	4224.2
17.5°	9496.3	7414.7	5180.3	3940.8	3812.4	3991.8	4120.2	4177.3	4214.0	4216.0
20°	9447.3	6799.0	4377.1	3631.0	3779.8	3934.7	4014.2	4059.1	4089.6	4099.8
22.5°	9296.4	6114.1	3751.2	3492.3	3649.3	3773.6	3867.4	3918.4	3936.7	3949.0
25°	9025.3	5347.5	3319.1	3359.7	3467.9	3624.8	3700.2	3710.4	3704.3	3722.7
27.5°	8670.6	4525.9	3049.9	3180.4	3319.1	3453.5	3494.3	3488.2	3476.0	3496.4
30°	8242.4	3787.9	2878.6	2978.5	3168.2	3290.5	3327.2	3312.9	3288.4	3310.9
32.5°	7789.9	3184.5	2738.0	2837.9	3043.7	3164.1	3200.8	3186.5	3168.2	3186.5
35°	7367.9	2762.5	2607.5	2744.1	2946.0	3064.1	3111.1	3113.1	3113.1	3135.6
37.5°	6980.6	2515.8	2499.5	2685.0	2878.6	2984.7	3051.9	3056.0	2968.4	2974.4
40°	6621.7	2411.8	2450.6	2646.2	2813.4	2915.3	2919.4	2691.1	2530.0	2525.9
42.5°	6328.1	2391.4	2464.8	2642.1	2766.5	2770.6	2483.2	2305.7	2260.9	2263.0
45°	6052.9	2385.3	2497.4	2642.1	2697.2	2393.5	2199.8	2152.9	2156.9	2173.3
47.5°	5745.0	2360.8	2503.6	2605.4	2497.4	2128.4	2071.3	2050.9	2042.8	2046.8
50°	5408.7	2273.1	2426.1	2532.1	2155.0	2014.2	1942.9	1936.7	1947.0	1953.0
52.5°	5054.0	2130.5	2293.5	2399.5	1997.9	1914.4	1834.9	1849.1	1894.0	1908.2
55°	4821.5	1963.3	2118.3	2134.6	1887.8	1820.6	1753.3	1785.9	1869.5	1896.0
57.5°	4760.4	1785.9	1918.4	1900.0	1747.2	1739.0	1698.2	1726.8	1832.8	1871.5
60°	4742.1	1626.9	1722.7	1708.5	1610.6	1649.3	1639.1	1653.4	1690.1	1702.3
62.5°	4599.3	1500.5	1547.3	1526.9	1488.3	1555.5	1580.0	1549.4	1578.0	1592.2
65°	4236.4	1398.5	1376.2	1361.8	1378.2	1439.3	1488.3	1427.1	1453.6	1494.3
67.5°	3637.0	1259.9	1198.7	1215.0	1266.1	1298.7	1361.8	1292.5	1315.0	1384.3
70°	2941.9	1084.6	1029.5	1076.5	1125.3	1192.7	1202.8	1156.0	1209.0	1286.4
72.5°	2081.5	907.2	868.5	964.3	980.6	1068.3	1045.8	1023.5	1096.9	1123.3
75°	1443.4	731.8	709.5	782.9	841.9	917.4	901.1	927.6	1082.5	1094.8
77.5°	913.4	568.8	554.5	601.4	683.0	766.6	793.0	1094.8	1849.1	1922.5
80°	530.0	424.0	407.7	444.4	515.8	593.3	764.5	1343.5	1219.1	1204.9
82.5°	295.6	291.5	271.1	281.4	344.5	428.1	1080.6	946.0	768.5	793.0
85°	138.7	171.3	146.8	140.6	193.7	501.5	721.7	540.3	358.9	350.7
87.5°	36.7	32.6	32.6	36.7	81.6	432.2	287.4	230.4	136.6	132.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)