

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: P968773

Luminaire Tested: **NAV-SB5C-735-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968773
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-735-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 38542 lumens
Efficiency: N/A
Efficacy: 154.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B4 - U0 - G4

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



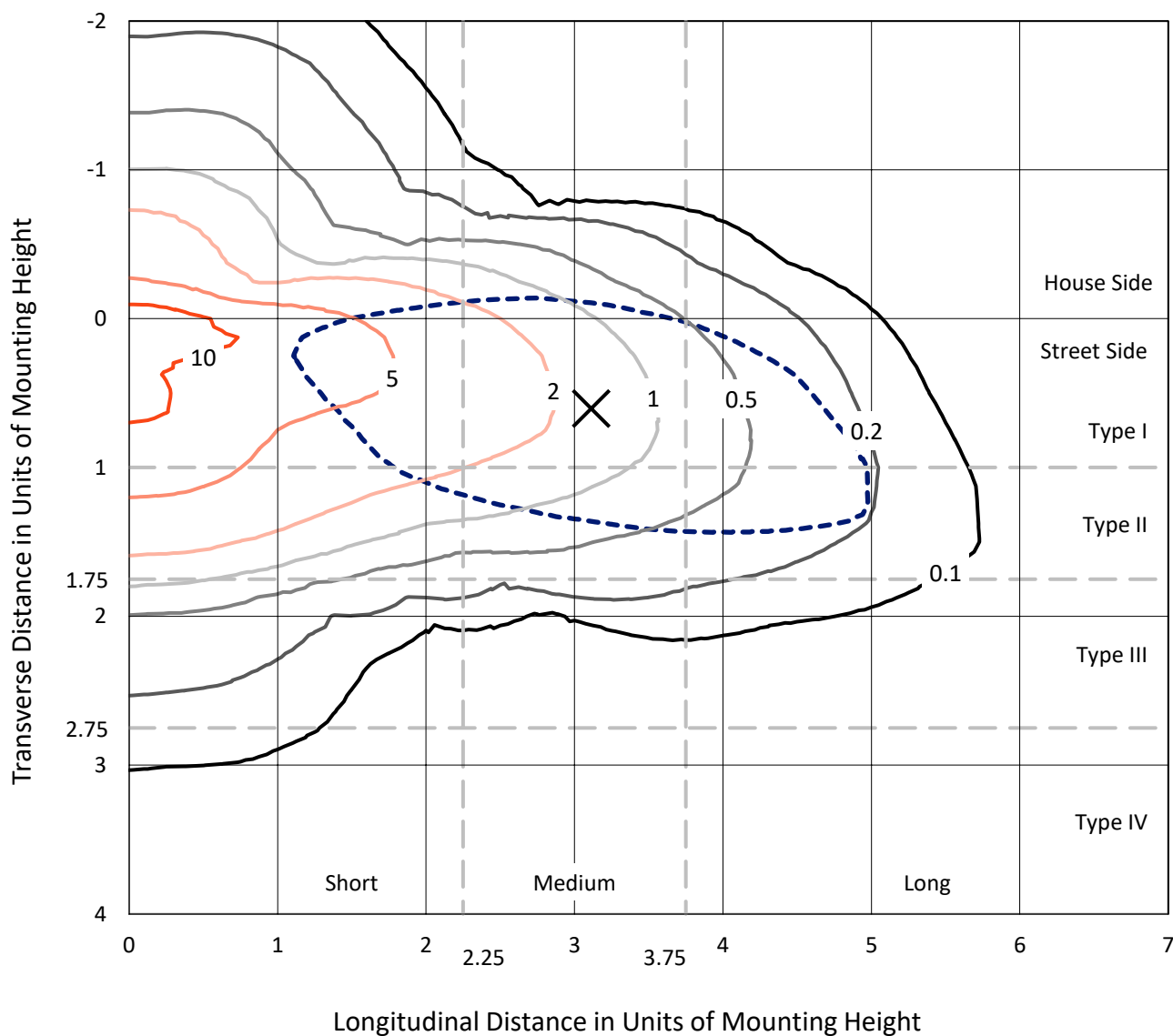
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

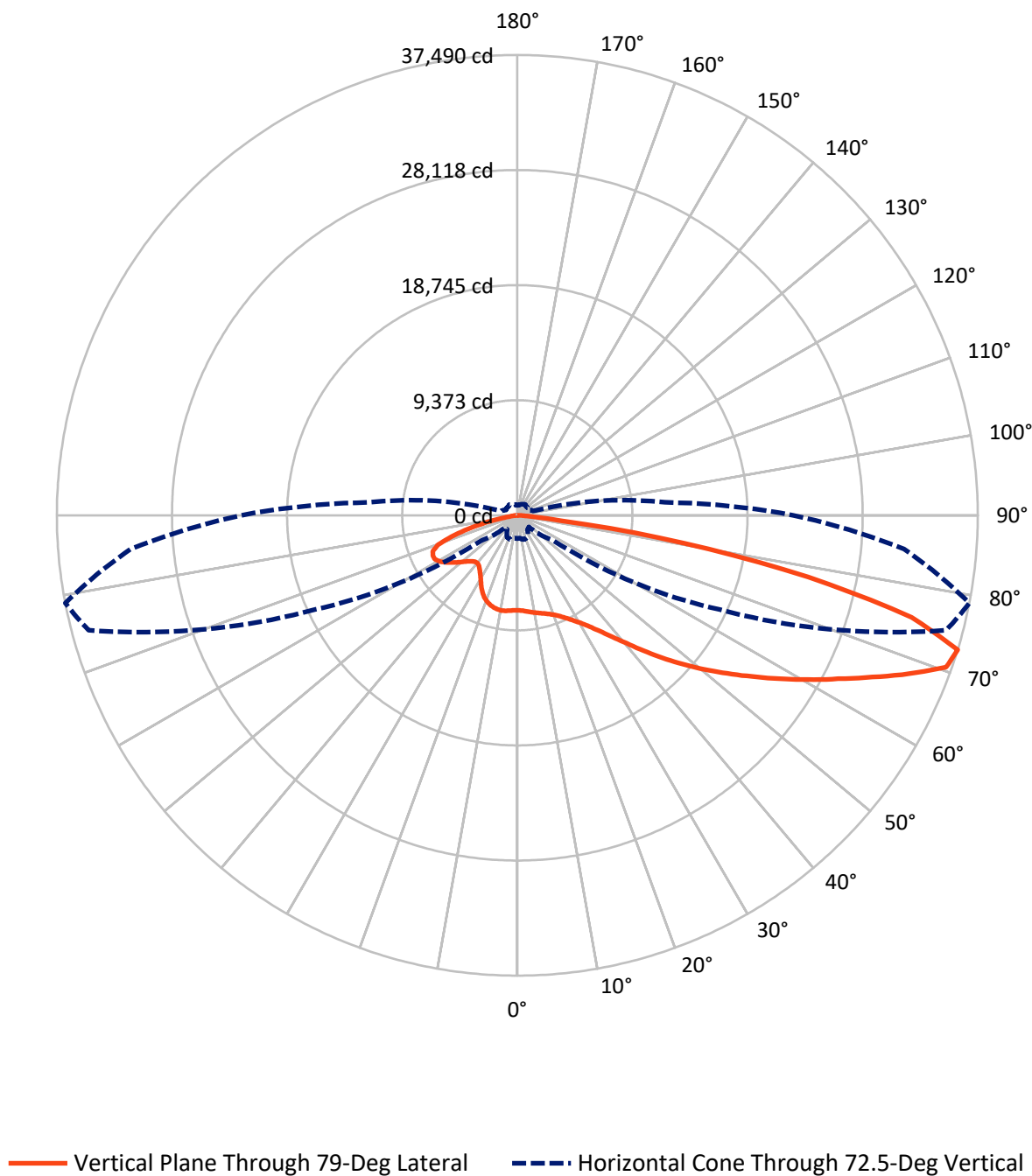
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.4 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8481.4	0.0	8481.4
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	30060.7	0.0	30060.7
	% Fixture	78.0	0.0	78.0
Total	Lumens	38542.0	0.0	38542.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	702.3	1.8
10°-20°	1836.1	4.8
20°-30°	2962.8	7.7
30°-40°	4446.7	11.5
40°-50°	6307.9	16.4
50°-60°	7966.1	20.7
60°-70°	8090.6	21.0
70°-80°	5514.1	14.3
80°-90°	715.4	1.9
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°	38542.0	100.0
0°-180°	38542.0	100.0

Coefficient of Utilization



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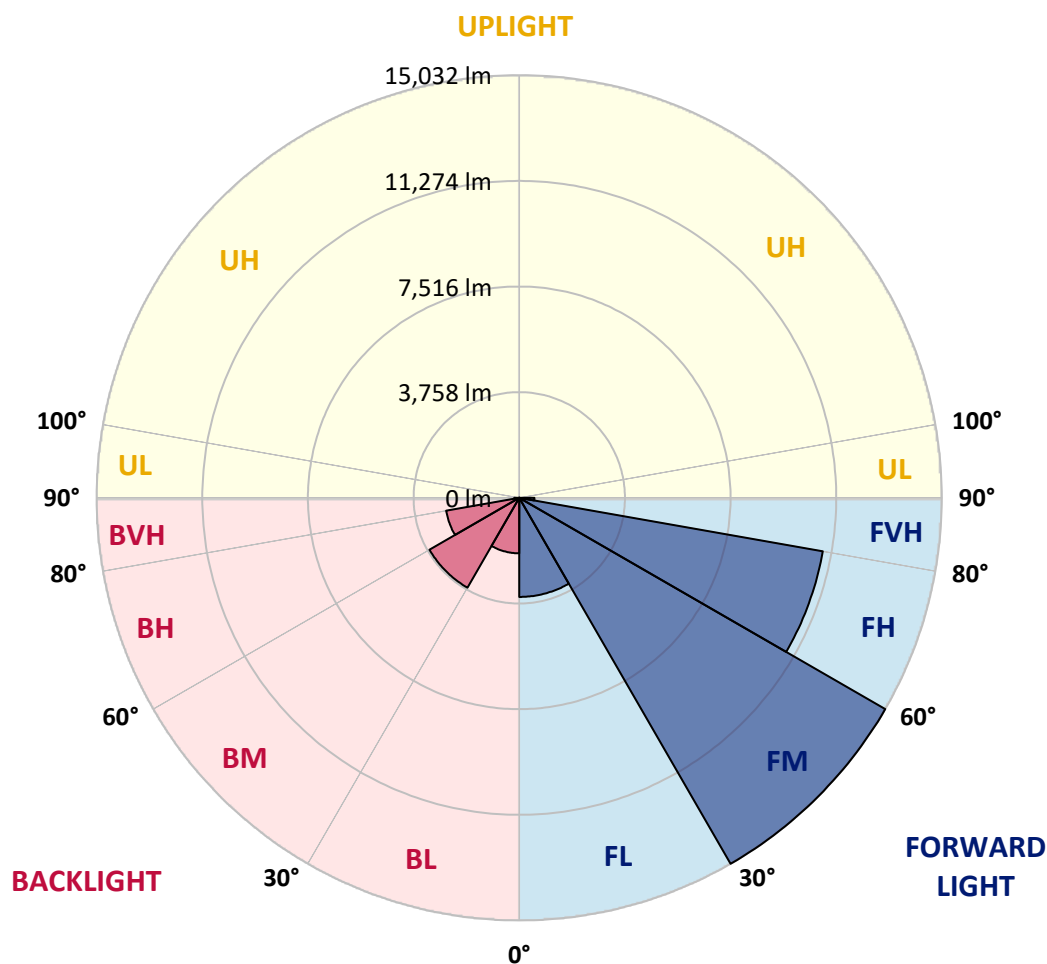
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3525.7	9.1			
FM	(30°-60°)	15032.2	39.0			
FH	(60°-80°)	10963.9	28.4			G4/12000
FVH	(80°-90°)	538.9	1.4			G4/750
BL	(0°-30°)	1975.6	5.1	B3/2500		
BM	(30°-60°)	3688.5	9.6	B3/5000		
BH	(60°-80°)	2640.8	6.9	B4/5000		G4/5000
BVH	(80°-90°)	176.5	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	7736.9	7736.9	7736.9	7736.9	7736.9	7736.9	7736.9	7736.9	7736.9	7736.9	7736.9
2.5°	7741.0	7704.3	7726.8	7718.6	7728.8	7741.0	7745.1	7751.3	7771.7	7769.6	7767.6
5°	7724.7	7688.0	7718.6	7708.4	7735.0	7763.5	7787.9	7810.3	7843.0	7857.2	7836.8
7.5°	7690.1	7665.6	7696.2	7726.8	7775.6	7818.5	7853.1	7904.1	7951.0	7959.1	7973.5
10°	7488.2	7469.9	7541.2	7620.8	7755.3	7871.5	7946.9	8006.1	8057.0	8065.2	8085.6
12.5°	7278.2	7255.8	7335.3	7443.3	7661.6	7871.5	8030.6	8108.0	8152.8	8179.4	8209.9
15°	7243.6	7225.2	7270.1	7363.9	7545.3	7816.4	8087.7	8230.3	8269.1	8299.6	8311.8
17.5°	7410.7	7376.1	7394.5	7427.0	7533.0	7765.5	8132.5	8368.9	8428.1	8460.7	8460.7
20°	7798.1	7749.2	7720.6	7655.4	7637.1	7773.6	8128.4	8536.1	8613.6	8654.4	8664.5
22.5°	8313.9	8281.3	8220.1	8055.0	7875.6	7873.5	8205.8	8750.2	8894.9	8933.7	8909.2
25°	8937.8	8888.8	8811.3	8587.1	8242.5	8071.3	8336.3	9023.4	9266.0	9276.1	9204.8
27.5°	9655.4	9582.0	9476.0	9180.4	8715.6	8381.2	8536.1	9337.3	9692.1	9688.0	9541.2
30°	10411.7	10338.4	10226.2	9867.4	9282.3	8799.1	8813.4	9675.8	10197.7	10175.3	9924.5
32.5°	10964.2	10909.2	10886.7	10609.5	9934.7	9292.4	9131.4	10050.9	10821.5	10801.1	10450.5
35°	11388.3	11316.9	11343.5	11202.7	10646.2	9845.0	9520.8	10497.3	11579.9	11577.9	11141.6
37.5°	11808.3	11745.1	11767.5	11673.7	11304.7	10546.3	9995.9	11043.8	12519.8	12564.7	11977.5
40°	12191.6	12124.3	12214.0	12126.4	11816.4	11292.5	10536.1	11661.5	13608.5	13694.1	12988.7
42.5°	12422.0	12368.9	12517.7	12519.8	12260.8	11922.5	11129.3	12342.4	14868.4	15060.0	14232.3
45°	12501.4	12483.1	12707.3	12754.3	12654.3	12287.4	11663.6	13084.5	16226.2	16568.7	15649.2
47.5°	12415.8	12381.2	12691.0	12864.4	12943.8	12458.7	12106.0	13887.7	17612.5	18114.0	17194.6
50°	11983.6	11916.3	12377.1	12742.0	13025.4	12570.8	12552.5	14815.4	19188.4	19736.9	18748.1
52.5°	11206.8	11155.9	11679.9	12313.8	12846.0	12625.8	13053.9	15828.7	20684.9	21394.3	20340.3
55°	10214.0	10146.7	10723.7	11551.4	12399.5	12607.5	13555.4	16962.2	22450.4	23170.1	21985.5
57.5°	8640.1	8505.6	9235.5	10214.0	11671.7	12585.1	14077.4	18089.6	24244.5	25106.9	23740.9
60°	6344.5	6144.7	7039.7	8199.7	10248.7	12366.9	14723.6	19353.5	26397.3	27174.1	25657.3
62.5°	3694.2	3578.0	4163.0	5245.6	7724.7	11082.5	15086.6	20823.5	28513.6	29329.0	27541.1
65°	2868.5	2835.9	2886.8	2970.4	4299.7	8297.6	13967.3	22256.7	31204.7	31775.5	29504.4
67.5°	2623.8	2599.4	2621.8	2464.8	2181.4	4621.8	11049.9	22619.6	34087.4	34434.1	31223.0
70°	2332.3	2303.8	2377.2	2242.6	1716.6	2102.0	7139.6	21302.6	36381.0	37031.3	32529.8
72.5°	1900.0	1867.4	2038.7	1977.5	1445.5	1349.6	3586.1	18173.1	36140.5	37490.1	31594.1
75°	1459.7	1441.4	1645.2	1696.2	1178.3	1062.2	1720.7	13508.6	31804.1	33163.9	27229.1
77.5°	1133.5	1119.3	1223.2	1408.8	950.1	823.7	1058.1	8568.8	23967.2	24205.8	18764.4
80°	850.1	809.3	905.2	1090.7	740.0	601.5	717.6	4996.9	15149.7	13732.8	8167.1
82.5°	532.1	511.7	591.2	727.9	521.9	413.9	466.9	2760.4	6071.3	3575.9	1575.9
85°	303.8	295.6	322.2	415.9	283.4	238.5	267.1	1219.1	1109.0	762.5	475.0
87.5°	122.3	118.3	146.8	185.5	103.9	87.6	93.8	293.6	244.7	226.3	157.0
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°	7736.9	7736.9	7736.9	7736.9	7736.9	7736.9	7736.9	7736.9	7736.9	7736.9	7736.9
2.5°	7759.4	7759.4	7730.9	7686.0	7635.0	7602.4	7549.4	7535.1	7480.0	7463.7	7490.3
5°	7853.1	7836.8	7749.2	7622.8	7449.5	7290.5	7115.1	7005.1	6850.1	6795.0	6835.8
7.5°	7971.4	7926.5	7775.6	7498.4	7135.5	6778.7	6407.7	6126.3	5857.3	5761.4	5773.6
10°	8079.5	8016.2	7759.4	7274.1	6646.2	6028.5	5437.3	5023.4	4709.5	4581.0	4609.5
12.5°	8187.5	8071.3	7651.3	6901.1	5951.0	5113.1	4483.1	4161.0	3967.4	3812.4	3863.3
15°	8289.5	8126.3	7484.1	6401.6	5188.5	4338.4	3873.6	3616.7	3461.7	3359.8	3378.2
17.5°	8407.7	8173.2	7233.4	5767.6	4462.7	3802.2	3423.0	3268.1	3237.5	3225.3	3233.4
20°	8572.8	8216.1	6903.1	5058.1	3928.6	3374.1	3178.3	3164.1	3162.0	3156.0	3176.4
22.5°	8750.2	8267.0	6466.8	4413.9	3474.0	3107.0	3072.3	3043.8	3025.5	3023.4	3045.9
25°	8960.1	8283.3	5920.4	3885.8	3086.6	2980.6	2939.8	2897.1	2884.8	2884.8	2897.1
27.5°	9164.0	8228.3	5284.4	3427.1	2868.5	2864.4	2811.4	2797.1	2795.1	2801.2	2817.5
30°	9367.9	8124.4	4652.4	3003.0	2742.1	2742.1	2723.7	2733.9	2742.1	2762.5	2776.7
32.5°	9643.2	8014.2	4124.3	2689.1	2632.0	2611.6	2629.9	2650.3	2658.5	2685.0	2707.4
35°	10046.8	7936.8	3704.3	2517.8	2517.8	2491.4	2501.5	2497.4	2479.1	2466.9	2495.4
37.5°	10581.0	7932.7	3357.8	2438.3	2422.0	2418.0	2419.9	2393.5	2322.1	2236.4	2238.5
40°	11223.1	8042.8	3090.7	2383.2	2371.0	2395.5	2383.2	2311.9	2116.2	1967.4	1963.3
42.5°	12085.6	8356.7	2919.4	2316.0	2352.7	2383.2	2334.3	2087.6	1955.1	1855.2	1851.2
45°	13100.8	8866.4	2831.8	2244.6	2318.0	2354.7	2118.3	2010.2	1904.1	1783.9	1775.7
47.5°	14250.7	9508.6	2811.4	2177.3	2240.5	2263.0	2026.5	1977.5	1857.3	1726.8	1716.6
50°	15502.4	10269.1	2866.4	2097.9	2128.4	2050.9	1995.9	1951.1	1826.7	1698.2	1684.0
52.5°	16797.0	11107.0	2976.5	1989.8	2016.3	1930.7	1983.7	1944.9	1808.3	1635.1	1622.8
55°	18069.2	11951.0	3082.6	1863.3	1902.1	1822.7	1949.0	1920.4	1724.8	1529.0	1518.8
57.5°	19361.7	12791.0	3186.5	1751.2	1792.0	1718.6	1894.0	1855.2	1631.0	1431.2	1427.1
60°	20705.3	13606.5	3235.4	1643.2	1671.8	1622.8	1810.4	1743.1	1525.0	1331.3	1325.1
62.5°	21963.2	14285.3	3156.0	1535.1	1553.5	1533.1	1700.3	1610.6	1418.9	1219.1	1217.1
65°	23225.2	14689.0	2911.3	1429.2	1433.3	1423.0	1545.4	1467.9	1294.6	1121.2	1109.0
67.5°	24368.9	14915.3	2521.9	1315.0	1304.8	1300.7	1400.6	1312.9	1174.3	1023.5	1011.2
70°	24611.5	14340.4	1926.6	1180.4	1180.4	1170.2	1241.6	1151.9	1041.8	919.4	915.4
72.5°	22479.0	12063.1	1368.0	1027.6	1043.9	1023.5	1082.6	1007.2	907.2	825.6	801.2
75°	18126.3	8846.1	994.9	870.5	899.0	864.4	919.4	866.4	780.8	778.8	701.3
77.5°	12454.6	5469.9	721.7	717.6	738.0	693.2	756.3	727.9	650.4	615.7	577.0
80°	5314.9	2181.4	526.0	554.5	554.5	513.7	587.1	595.3	528.1	511.7	511.7
82.5°	1058.1	619.8	369.0	381.2	358.9	346.6	415.9	460.7	636.1	707.5	709.5
85°	318.1	228.4	222.2	208.0	183.5	185.5	244.7	462.8	570.8	326.2	281.4
87.5°	87.6	57.1	59.1	46.8	38.7	50.9	83.5	350.7	191.7	81.6	69.3
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)