

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: P884617

Luminaire Tested: **NAV-SB5C-735-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884617
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-735-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 37654 lumens
Efficiency: N/A
Efficacy: 150.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B4 - U0 - G4

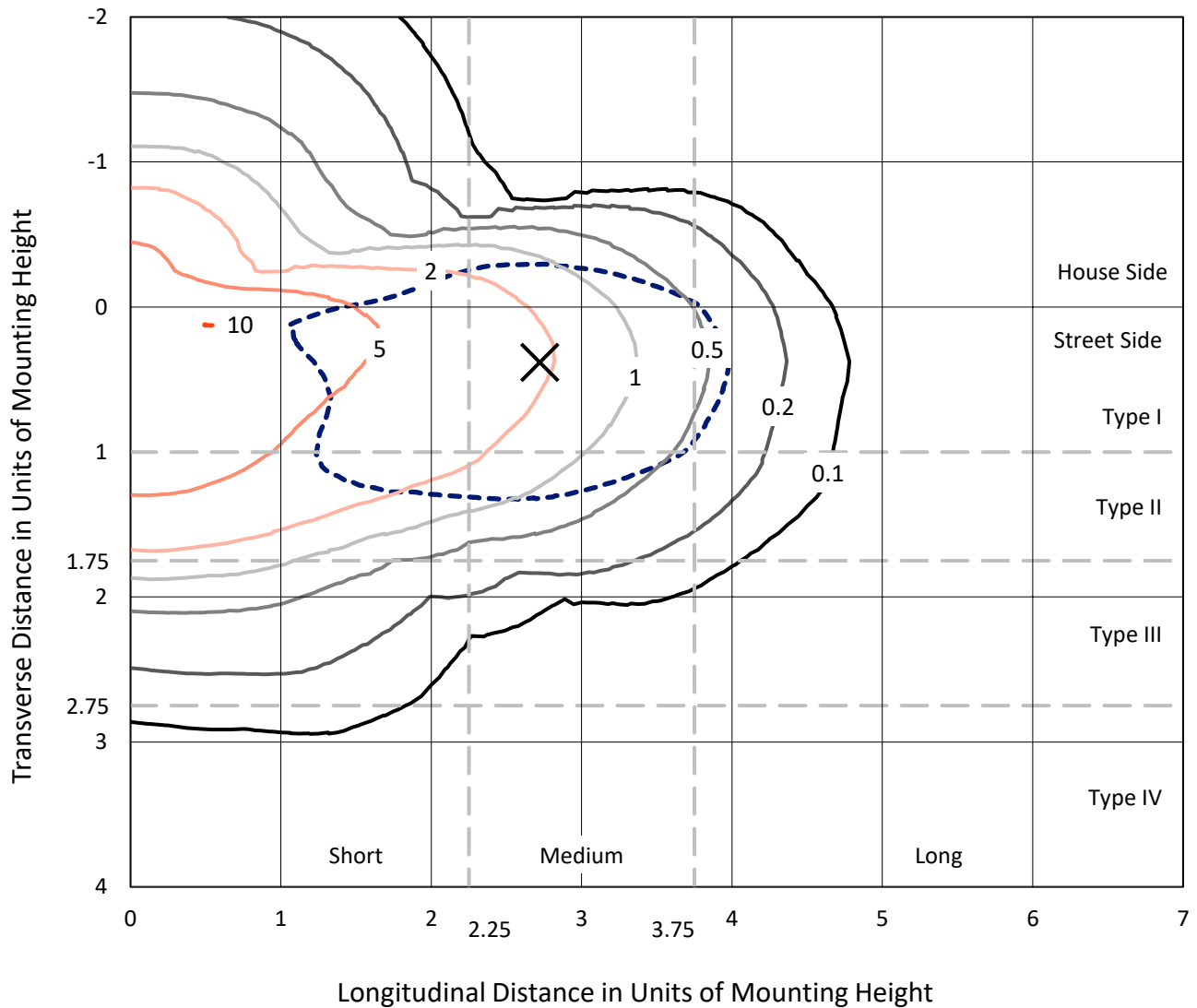
Input Watts (W): 249.5
Input Voltage (V): 120.0
Input Current (Ain): 2.116
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 7.885
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

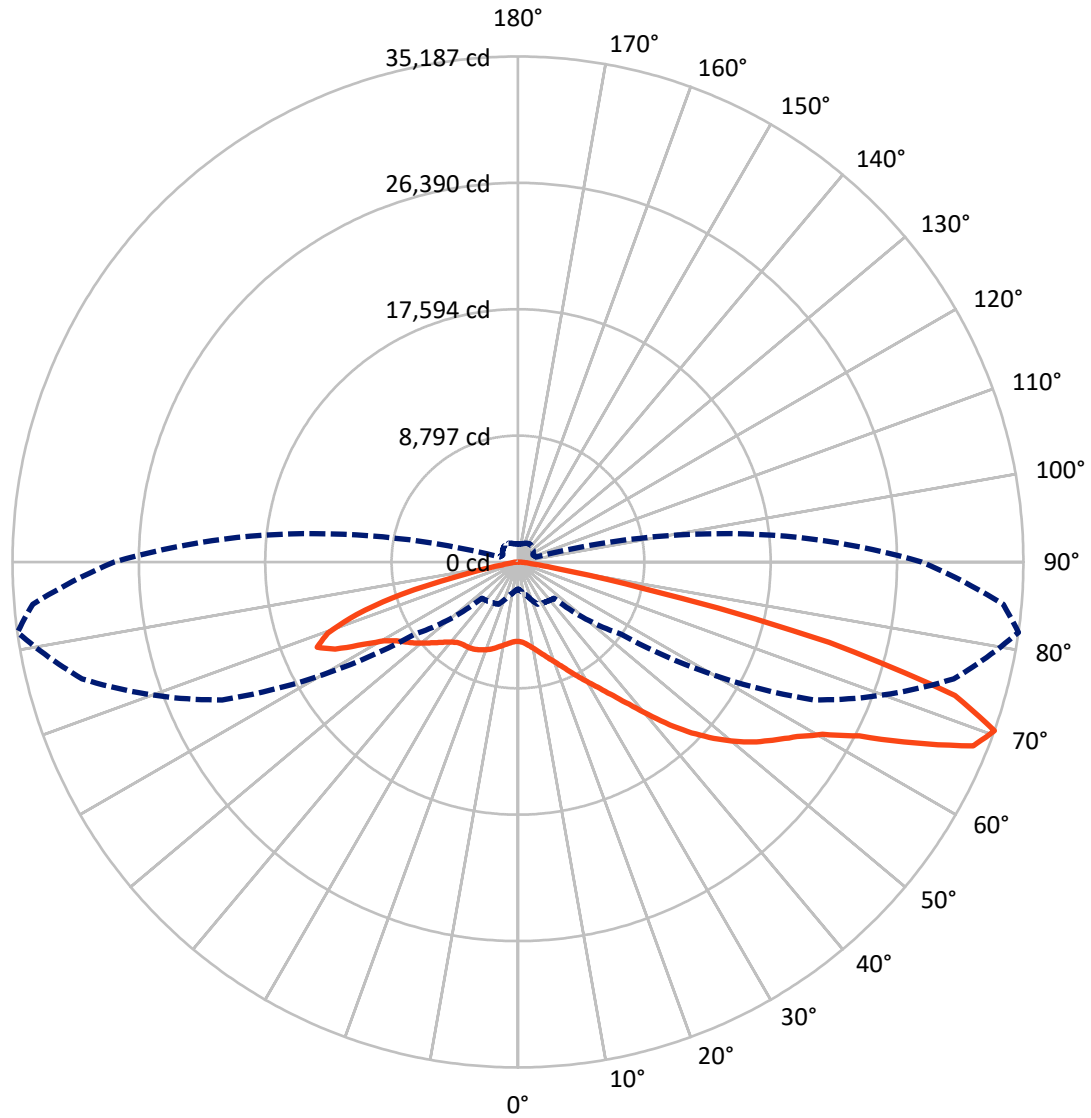
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9282.6	0.0	9282.6
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	28371.4	0.0	28371.4
	% Fixture	75.3	0.0	75.3
Total	Lumens	37654.0	0.0	37654.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	521.2	1.4
10°-20°	1497.5	4.0
20°-30°	2505.2	6.7
30°-40°	3913.8	10.4
40°-50°	6233.2	16.6
50°-60°	8674.3	23.0
60°-70°	9073.7	24.1
70°-80°	4742.4	12.6
80°-90°	492.4	1.3
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°	37654.0	100.0
0°-180°	37654.0	100.0

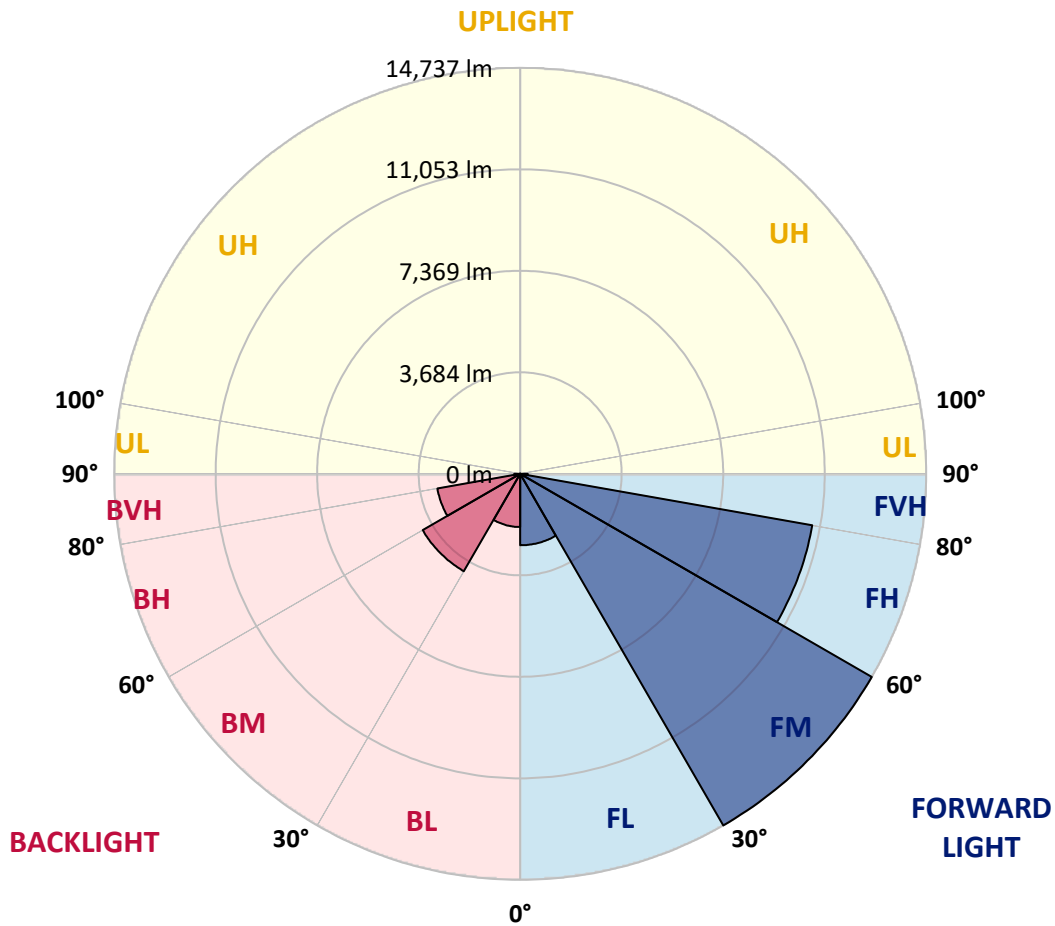


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2592.9	6.9			
FM (30°-60°)	14737.4	39.1			
FH (60°-80°)	10765.4	28.6			G4/12000
FVH (80°-90°)	275.7	0.7			G3/500
BL (0°-30°)	1931.1	5.1	B3/2500		
BM (30°-60°)	4084.0	10.8	B3/5000		
BH (60°-80°)	3050.7	8.1	B4/5000		G4/5000
BVH (80°-90°)	216.8	0.6			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°	82°	85°
0°	5520.5	5520.5	5520.5	5520.5	5520.5	5520.5	5520.5	5520.5	5520.5	5520.5	5520.5
2.5°	5652.4	5684.4	5674.4	5664.4	5664.4	5650.4	5648.4	5628.4	5612.5	5586.5	5580.5
5°	5724.3	5758.3	5754.3	5762.3	5788.3	5794.3	5800.3	5788.3	5756.3	5724.3	5710.4
7.5°	5660.4	5698.4	5710.4	5758.3	5838.2	5910.2	5964.1	5986.1	5956.1	5910.2	5888.2
10°	5444.6	5486.6	5528.5	5642.4	5784.3	5954.1	6098.0	6183.9	6177.9	6133.9	6096.0
12.5°	5007.1	5051.0	5140.9	5362.7	5622.4	5922.2	6189.9	6369.7	6431.6	6399.7	6333.7
15°	4657.4	4695.4	4763.3	4991.1	5328.7	5784.3	6223.9	6573.5	6731.4	6713.4	6633.4
17.5°	4647.4	4663.4	4705.4	4813.2	5073.0	5568.5	6187.9	6773.3	7075.0	7073.0	6973.1
20°	4823.2	4829.2	4853.2	4875.2	5023.0	5404.7	6096.0	6939.1	7460.6	7460.6	7352.7
22.5°	5067.0	5063.0	5087.0	5067.0	5138.9	5390.7	6038.0	7085.0	7890.2	7922.2	7786.3
25°	5432.6	5412.7	5406.7	5360.7	5374.7	5520.5	6102.0	7250.8	8399.7	8465.6	8295.8
27.5°	5920.2	5888.2	5866.2	5760.3	5724.3	5788.3	6297.8	7450.6	8967.1	9081.0	8865.2
30°	6555.5	6497.6	6465.6	6281.8	6151.9	6161.9	6593.5	7716.4	9560.6	9744.4	9470.6
32.5°	7422.7	7332.8	7246.8	6945.1	6707.4	6629.5	6975.1	8084.0	10203.9	10497.6	10146.0
35°	8393.7	8321.8	8229.9	7764.3	7398.7	7218.9	7490.6	8597.5	10957.2	11422.7	10965.2
37.5°	9328.8	9266.8	9310.8	8683.4	8211.9	7950.1	8165.9	9286.8	11886.3	12573.6	11992.2
40°	10295.8	10247.9	10253.9	9654.5	9105.0	8811.3	8985.1	10152.0	12951.2	13942.2	13226.9
42.5°	11346.8	11310.8	11190.9	10659.5	10042.1	9768.4	9928.2	11151.0	14094.1	15500.7	14581.6
45°	12523.6	12501.7	12389.8	11780.4	11073.1	10765.4	10981.2	12253.9	15242.9	16967.2	15942.3
47.5°	13540.6	13558.6	13544.6	13031.1	12297.9	11846.3	12104.0	13404.8	16311.9	18345.9	17247.0
50°	14030.1	14124.0	14261.9	14102.1	13646.5	13187.0	13236.9	14515.7	17330.9	19638.6	18497.7
52.5°	13774.4	13952.2	14327.8	14583.6	14759.4	14663.5	14529.6	15618.6	18289.9	20805.5	19680.6
55°	12821.3	13071.1	13694.5	14311.9	15209.0	15906.3	16082.1	16841.4	19225.0	21832.4	20799.5
57.5°	11085.1	11490.7	12050.1	13298.9	14809.4	16507.7	17892.3	18537.7	20216.0	22929.4	21970.3
60°	8108.0	8651.5	9346.8	11204.9	13410.8	16186.0	19432.8	21143.1	21624.6	24349.9	23494.8
62.5°	5188.9	5524.5	6163.9	7914.2	10449.7	14537.6	19904.3	24399.9	24012.3	26679.6	25780.5
65°	3552.5	3768.3	4353.7	5336.7	6755.3	10821.3	18641.6	26841.5	27804.5	30372.0	29688.7
67.5°	2581.5	2745.3	3244.8	4105.9	4401.7	6403.7	14465.7	26729.6	31490.9	34176.2	33113.3
70°	1882.1	1998.0	2417.6	3244.8	3386.7	3562.5	8763.3	22721.6	31411.0	35187.2	33914.5
72.5°	1394.6	1474.5	1756.3	2517.5	2741.3	2405.6	4337.7	16513.7	26991.3	31826.6	30805.6
75°	1009.0	1068.9	1276.7	1926.1	2193.8	1832.2	2163.9	9650.5	18827.4	22387.9	22567.7
77.5°	771.2	817.2	953.1	1410.6	1756.3	1374.6	1342.7	4439.6	8927.2	8971.1	9474.6
80°	619.4	649.4	723.3	993.0	1346.7	1029.0	875.1	1792.2	2821.2	2387.6	2505.5
82.5°	455.6	505.5	611.4	697.3	963.0	709.3	533.5	905.1	1072.9	923.1	931.1
85°	259.7	293.7	369.6	499.5	615.4	433.6	305.7	401.6	499.5	409.6	365.6
87.5°	91.9	119.9	129.9	195.8	267.7	179.8	117.9	115.9	163.8	121.9	101.9
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°	5520.5	5520.5	5520.5	5520.5	5520.5	5520.5	5520.5	5520.5	5520.5	5520.5	5520.5
2.5°	5560.5	5550.5	5510.6	5456.6	5400.7	5346.7	5328.7	5290.8	5264.8	5250.8	5266.8
5°	5672.4	5640.4	5546.5	5426.6	5300.8	5164.9	5069.0	4981.1	4917.1	4857.2	4881.2
7.5°	5832.2	5776.3	5614.5	5404.7	5180.9	4955.1	4787.3	4659.4	4573.5	4517.5	4529.5
10°	6018.1	5932.1	5684.4	5370.7	5025.0	4701.4	4503.6	4393.7	4339.7	4309.7	4317.7
12.5°	6231.8	6110.0	5756.3	5292.8	4787.3	4417.6	4281.8	4249.8	4251.8	4253.8	4257.8
15°	6495.6	6325.8	5814.3	5122.9	4477.6	4199.9	4175.9	4227.8	4281.8	4307.7	4305.7
17.5°	6793.3	6553.5	5824.2	4843.2	4173.9	4060.0	4135.9	4247.8	4329.7	4365.7	4373.7
20°	7113.0	6785.3	5752.3	4447.6	3924.1	3946.1	4082.0	4225.8	4315.7	4361.7	4373.7
22.5°	7478.6	7033.1	5580.5	4032.0	3720.3	3822.2	3982.1	4121.9	4215.8	4261.8	4273.8
25°	7896.2	7310.8	5310.8	3682.4	3544.5	3682.4	3842.2	3958.1	4034.0	4076.0	4088.0
27.5°	8359.7	7600.5	4951.1	3404.6	3390.7	3538.5	3670.4	3760.3	3800.2	3832.2	3844.2
30°	8825.3	7864.2	4515.5	3194.8	3256.8	3396.6	3490.6	3530.5	3542.5	3548.5	3562.5
32.5°	9328.8	8092.0	4058.0	3021.0	3128.9	3258.8	3314.7	3332.7	3276.8	3238.8	3250.8
35°	9938.2	8335.8	3610.4	2883.2	3003.0	3114.9	3132.9	3116.9	3051.0	2973.1	2977.1
37.5°	10691.4	8639.5	3252.8	2785.2	2885.2	2959.1	2937.1	2933.1	2939.1	2847.2	2853.2
40°	11614.5	9035.1	2991.0	2709.3	2789.2	2805.2	2743.3	2777.3	2807.2	2667.4	2671.4
42.5°	12639.5	9512.6	2825.2	2657.4	2709.3	2671.4	2575.5	2613.4	2609.4	2425.6	2423.6
45°	13684.5	10032.1	2767.3	2619.4	2635.4	2559.5	2453.6	2463.6	2379.6	2213.8	2219.8
47.5°	14723.5	10589.5	2803.2	2587.4	2543.5	2457.6	2375.7	2331.7	2207.8	2083.9	2083.9
50°	15742.5	11175.0	2935.1	2523.5	2417.6	2367.7	2307.7	2229.8	2097.9	1992.0	1984.0
52.5°	16687.5	11764.4	3083.0	2417.6	2259.8	2289.7	2251.8	2161.9	2032.0	1924.1	1926.1
55°	17582.6	12353.8	3140.9	2271.8	2111.9	2221.8	2199.8	2034.0	1878.1	1790.2	1782.2
57.5°	18557.7	13063.1	3077.0	2085.9	1992.0	2143.9	2060.0	1876.1	1786.2	1720.3	1714.3
60°	19908.3	14176.0	2939.1	1856.2	1878.1	2028.0	1884.1	1808.2	1710.3	1636.4	1632.4
62.5°	22152.1	16251.9	2717.3	1628.4	1744.3	1856.2	1800.2	1724.3	1624.4	1552.5	1552.5
65°	25468.8	19137.1	2299.7	1450.6	1594.4	1688.3	1710.3	1634.4	1530.5	1454.6	1458.6
67.5°	28266.1	20947.3	1740.3	1302.7	1440.6	1552.5	1614.4	1540.5	1430.6	1356.7	1358.7
70°	28112.2	19632.6	1328.7	1156.9	1304.7	1418.6	1498.5	1440.6	1322.7	1252.8	1258.8
72.5°	24969.3	16423.8	1074.9	1009.0	1166.8	1278.7	1374.6	1330.7	1210.8	1142.9	1142.9
75°	18343.9	11658.5	859.2	859.2	995.0	1132.9	1238.8	1210.8	1100.9	1053.0	1039.0
77.5°	7732.4	4891.2	673.3	713.3	827.2	973.0	1104.9	1114.9	1019.0	1078.9	979.0
80°	2056.0	1348.7	513.5	561.4	649.4	803.2	961.1	957.1	853.2	797.2	741.3
82.5°	783.2	531.5	365.6	395.6	469.5	615.4	761.2	785.2	681.3	589.4	589.4
85°	301.7	227.8	225.8	237.8	273.7	407.6	575.4	595.4	513.5	435.6	449.6
87.5°	77.9	67.9	83.9	79.9	125.9	217.8	329.7	341.7	313.7	181.8	259.7
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)