

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: P884441

Luminaire Tested: **NAV-SB5B-730-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884441
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-730-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27800 lumens
Efficiency: N/A
Efficacy: 152.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

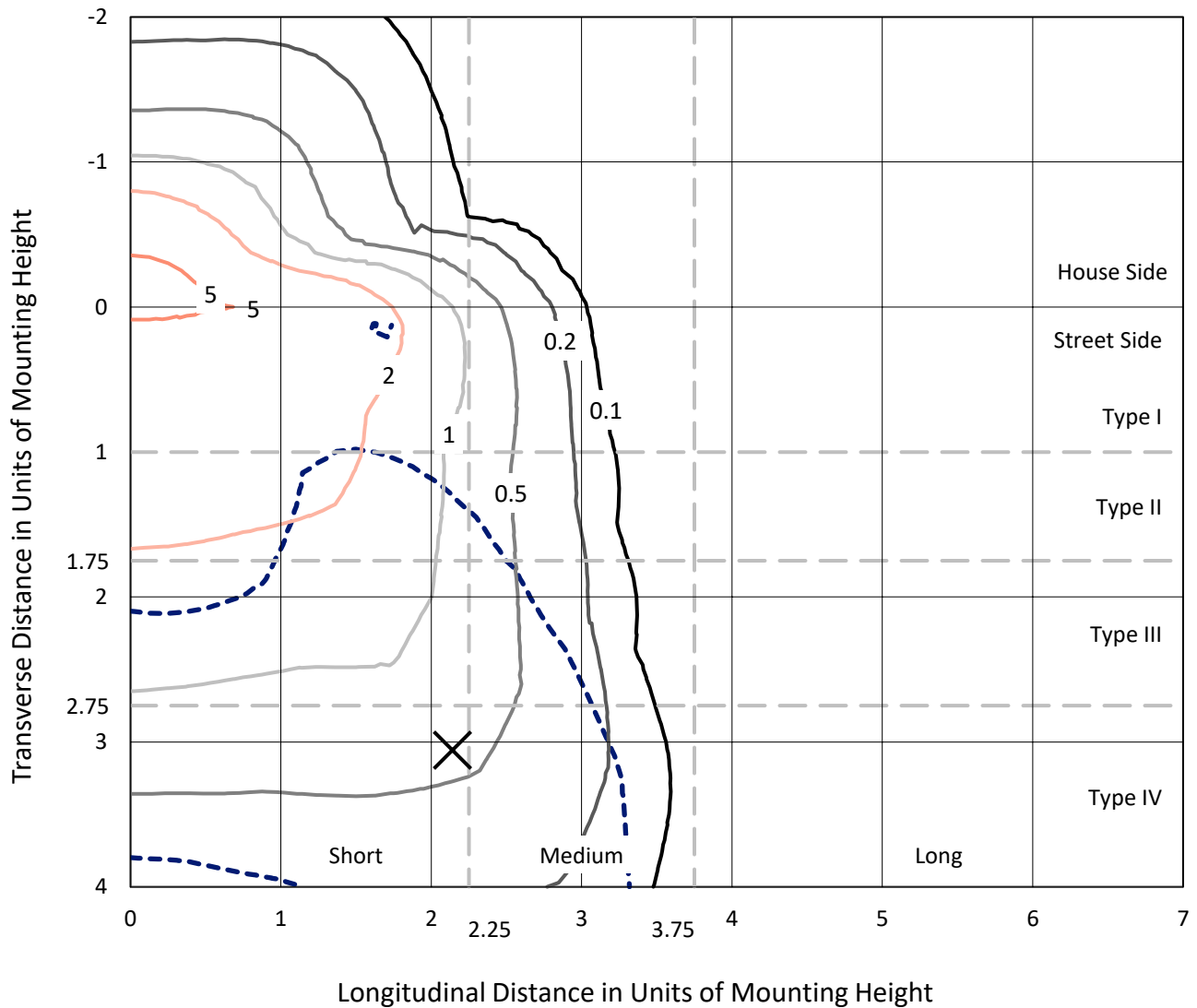
Input Watts (W): 182.7
Input Voltage (V): 120.0
Input Current (Ain): 1.547
Voltage Rise (V): NR
Power Factor: 0.992
Total Harmonic Distortion (THDi): 11.125
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

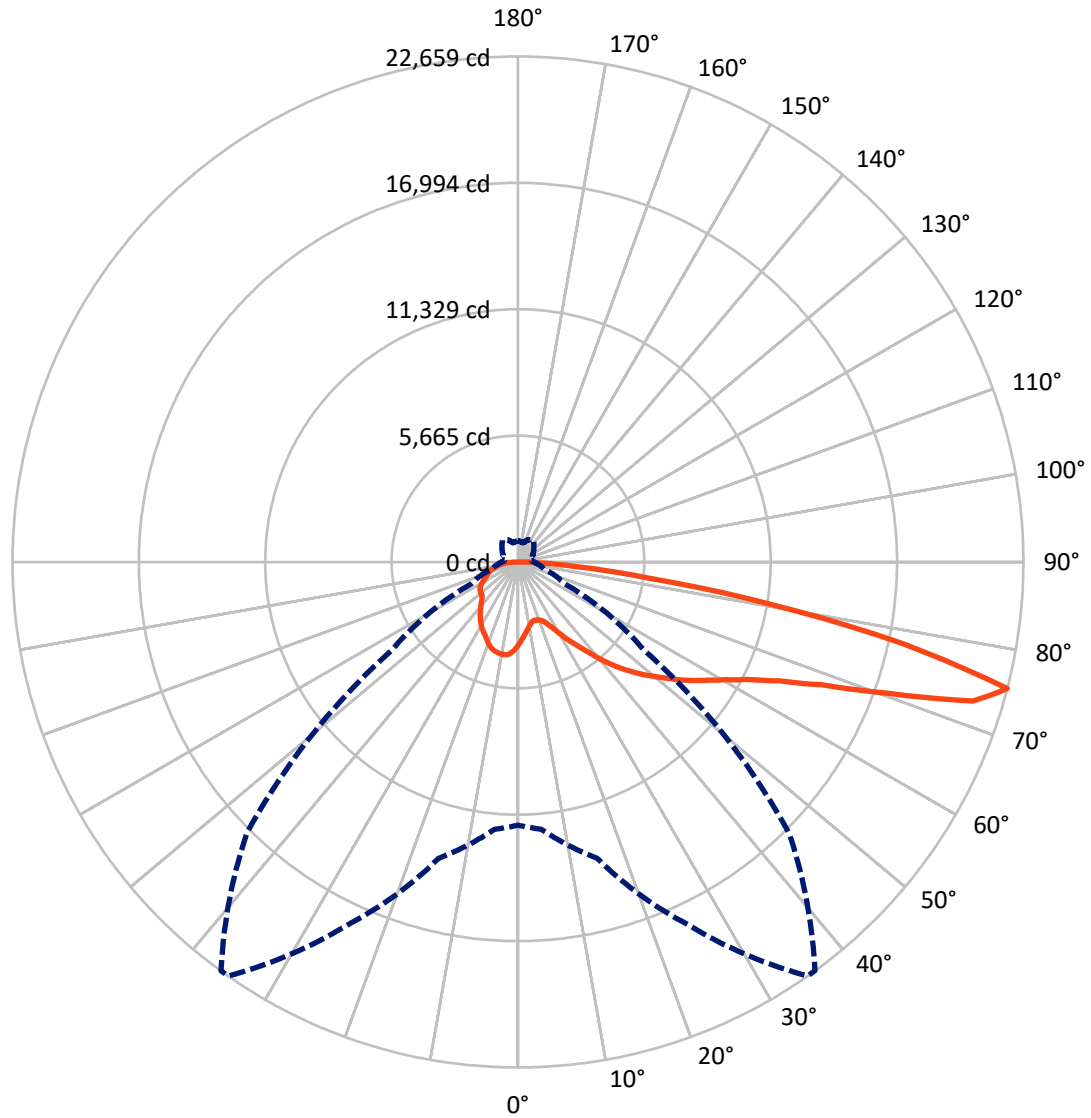
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.6 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6615.7	0.0	6615.7
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	21184.3	0.0	21184.3
	% Fixture	76.2	0.0	76.2
Total	Lumens	27800.0	0.0	27800.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	350.7	1.3
10°-20°	1011.7	3.6
20°-30°	1698.9	6.1
30°-40°	2640.3	9.5
40°-50°	3919.0	14.1
50°-60°	5410.4	19.5
60°-70°	6564.0	23.6
70°-80°	5424.7	19.5
80°-90°	780.2	2.8
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°	27800.0	100.0
0°-180°	27800.0	100.0

Coefficient of Utilization



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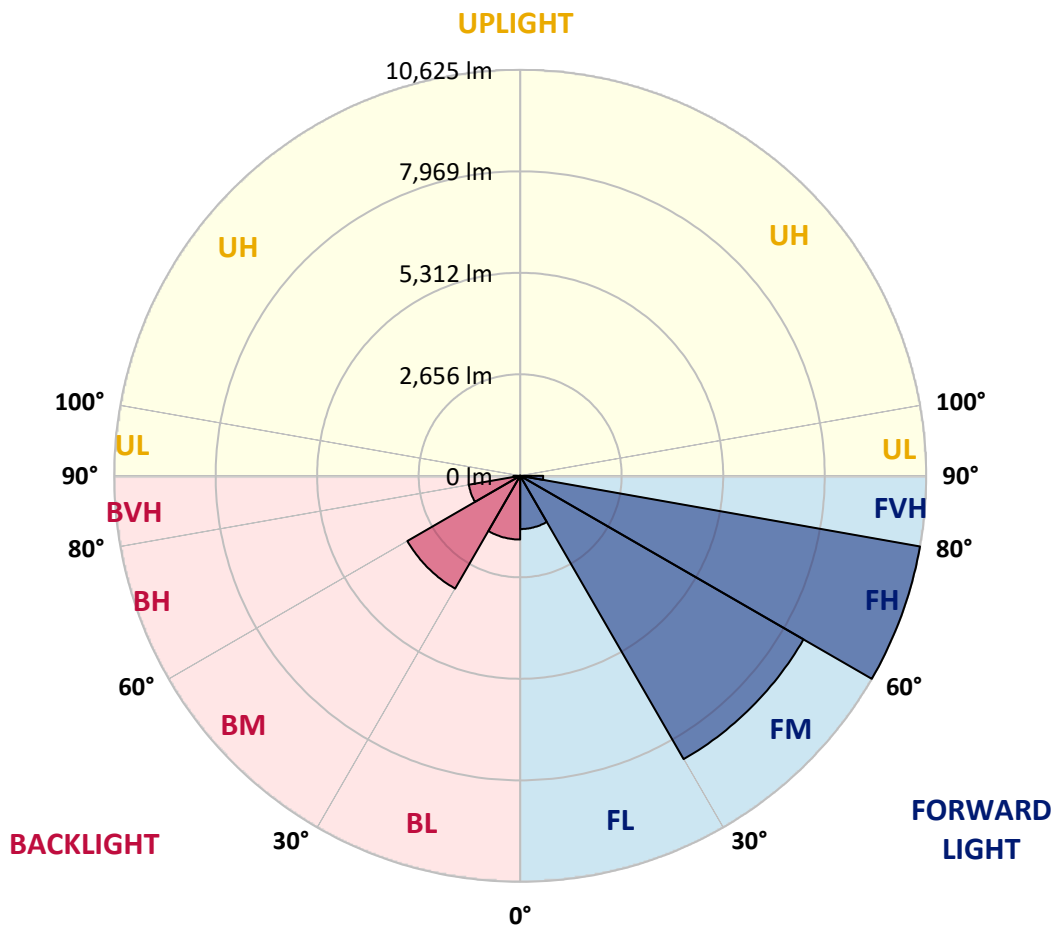
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1394.1	5.0			
FM (30°-60°)	8560.9	30.8			
FH (60°-80°)	10624.7	38.2			G4/12000
FVH (80°-90°)	604.5	2.2			G4/750
BL (0°-30°)	1667.2	6.0	B3/2500		
BM (30°-60°)	3408.8	12.3	B3/5000		
BH (60°-80°)	1364.0	4.9	B3/2500		G3/2500
BVH (80°-90°)	175.7	0.6			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	3704.5	3704.5	3704.5	3704.5	3704.5	3704.5	3704.5	3704.5	3704.5	3704.5	3704.5
2.5°	3416.0	3437.0	3446.0	3441.5	3464.1	3461.1	3492.6	3531.7	3585.8	3638.4	3715.1
5°	3153.0	3175.5	3195.1	3213.1	3256.7	3270.2	3319.8	3394.9	3494.1	3594.8	3721.1
7.5°	2908.0	2927.6	2957.6	2990.7	3064.3	3077.8	3160.5	3277.7	3416.0	3563.3	3737.6
10°	2708.1	2727.7	2759.2	2796.8	2888.5	2905.0	3010.2	3166.5	3346.9	3533.2	3755.6
12.5°	2622.5	2628.5	2646.5	2684.1	2763.8	2774.3	2890.0	3068.8	3279.2	3510.7	3782.7
15°	2618.0	2630.0	2631.5	2651.0	2717.2	2721.7	2828.4	3005.7	3237.2	3506.2	3823.3
17.5°	2663.1	2672.1	2658.6	2670.6	2726.2	2733.7	2817.9	2975.7	3223.6	3525.7	3892.4
20°	2783.3	2790.8	2750.2	2733.7	2774.3	2780.3	2862.9	2995.2	3237.2	3566.3	3987.1
22.5°	3038.8	3043.3	2944.1	2876.5	2879.5	2882.5	2954.6	3074.8	3289.8	3639.9	4107.3
25°	3437.0	3434.0	3276.2	3145.5	3070.3	3053.8	3101.9	3204.1	3378.4	3737.6	4262.1
27.5°	3902.9	3880.4	3722.6	3527.2	3363.4	3339.3	3328.8	3372.4	3504.7	3866.8	4451.5
30°	4428.9	4407.9	4238.1	3982.6	3755.6	3716.6	3617.4	3594.8	3692.5	4042.7	4714.5
32.5°	5006.0	4992.5	4789.6	4480.0	4176.4	4131.3	3964.5	3904.4	3981.1	4308.7	5081.2
35°	5489.9	5477.9	5309.6	4991.0	4619.8	4564.2	4394.3	4326.7	4365.8	4649.8	5560.6
37.5°	5927.3	5921.2	5777.0	5526.0	5142.8	5075.1	4884.3	4861.7	4854.2	5099.2	6142.2
40°	6333.0	6318.0	6167.7	6035.5	5751.4	5689.8	5521.5	5502.0	5444.8	5652.2	6800.4
42.5°	6782.4	6743.3	6525.4	6463.8	6387.1	6336.0	6235.3	6238.4	6112.1	6275.9	7497.7
45°	7149.1	7126.5	6902.6	6866.5	6949.2	6928.2	7015.3	7037.9	6792.9	6929.7	8222.1
47.5°	7542.8	7521.8	7332.4	7306.9	7530.8	7536.8	7844.9	7852.4	7457.2	7609.0	8948.0
50°	8028.3	7998.2	7810.3	7841.9	8092.9	8115.4	8679.0	8627.9	8068.8	8298.8	9667.9
52.5°	8348.4	8366.4	8325.8	8376.9	8719.6	8740.6	9499.5	9368.8	8674.5	8979.6	10374.2
55°	8584.3	8620.4	8746.6	8863.8	9380.8	9401.9	10273.5	10073.6	9176.4	9610.8	11038.5
57.5°	8887.9	8836.8	9072.7	9301.2	10009.0	10064.6	11026.4	10752.9	9621.3	10154.8	11493.8
60°	9323.7	9287.6	9471.0	9809.1	10712.4	10801.0	11823.0	11364.6	9947.4	10586.1	11582.5
62.5°	10207.4	10117.2	10145.8	10444.8	11599.0	11716.3	12721.7	11898.1	10109.7	10754.4	11107.6
65°	11528.4	11373.6	11229.3	11436.7	12847.9	12963.6	13736.1	12317.4	10049.6	10428.3	9846.7
67.5°	13192.1	13038.8	12861.4	13056.8	14687.4	14779.1	14988.0	12553.3	9576.2	9171.9	7618.0
70°	14564.2	14507.1	14719.0	15523.0	17625.5	17628.5	16593.0	12358.0	8279.2	6502.9	4407.9
72.5°	14382.3	14347.8	15464.4	17950.1	21328.5	21248.9	18112.4	10879.2	5577.1	2933.6	1651.6
75°	11798.9	12022.8	13752.6	17906.5	22658.5	22648.0	17182.1	6916.1	2306.9	1215.8	853.6
77.5°	6327.0	6681.7	8928.5	13220.6	17688.6	17954.6	12080.0	2419.6	990.4	778.5	590.6
80°	2063.4	2373.0	3558.8	6731.3	11493.8	11444.2	5177.3	949.8	677.8	551.5	408.8
82.5°	876.2	912.2	1590.0	3178.5	5898.7	5807.0	1648.6	545.5	476.4	377.2	252.5
85°	342.7	383.2	701.8	1469.8	2554.9	2499.2	595.1	270.5	305.1	246.5	150.3
87.5°	112.7	136.8	251.0	503.5	795.0	766.5	145.8	93.2	132.3	112.7	54.1
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°	3704.5	3704.5	3704.5	3704.5	3704.5	3704.5	3704.5	3704.5	3704.5	3704.5	3704.5
2.5°	3736.1	3760.1	3788.7	3830.8	3866.8	3896.9	3928.5	3948.0	3955.5	3978.1	3976.6
5°	3763.1	3815.7	3886.4	3955.5	4023.1	4063.7	4099.8	4117.8	4134.4	4146.4	4149.4
7.5°	3808.2	3875.9	3987.1	4077.2	4134.4	4167.4	4191.5	4185.5	4191.5	4194.5	4199.0
10°	3847.3	3942.0	4074.2	4159.9	4203.5	4205.0	4199.0	4177.9	4167.4	4168.9	4171.9
12.5°	3893.9	3999.1	4141.9	4214.0	4226.0	4193.0	4167.4	4131.3	4117.8	4111.8	4108.8
15°	3957.0	4077.2	4215.5	4242.6	4212.5	4170.4	4126.8	4068.2	4038.2	4014.1	4021.6
17.5°	4033.7	4165.9	4272.6	4253.1	4188.5	4119.3	4048.7	3960.0	3898.4	3872.9	3874.4
20°	4140.4	4259.1	4316.2	4230.5	4132.9	4027.7	3907.4	3799.2	3742.1	3716.6	3713.6
22.5°	4269.6	4383.8	4358.3	4191.5	4053.2	3884.9	3734.6	3654.9	3626.4	3608.4	3611.4
25°	4424.4	4522.1	4388.3	4134.4	3922.5	3695.5	3579.8	3554.3	3540.7	3527.2	3527.2
27.5°	4625.8	4678.4	4410.9	4050.2	3718.1	3494.1	3452.1	3456.6	3452.1	3429.5	3434.0
30°	4891.8	4881.3	4431.9	3913.4	3483.6	3312.3	3315.3	3334.8	3337.8	3322.8	3330.3
32.5°	5242.0	5135.3	4442.4	3736.1	3259.7	3153.0	3156.0	3177.0	3192.1	3166.5	3178.5
35°	5665.8	5431.3	4425.9	3513.7	3086.9	3001.2	2978.7	2984.7	2989.2	2965.1	2981.7
37.5°	6160.2	5763.4	4352.3	3267.2	2944.1	2852.4	2804.3	2763.8	2739.7	2717.2	2732.2
40°	6702.7	6125.6	4217.0	3026.8	2784.8	2694.6	2622.5	2545.8	2464.7	2434.6	2448.2
42.5°	7270.8	6498.3	4053.2	2796.8	2601.4	2527.8	2451.2	2339.9	2218.2	2156.6	2164.1
45°	7859.9	6880.1	3892.4	2569.9	2413.6	2382.0	2293.4	2159.6	2027.4	1949.2	1943.2
47.5°	8437.0	7240.8	3656.4	2341.4	2237.8	2272.3	2203.2	2080.0	1932.7	1809.4	1795.9
50°	8988.6	7578.9	3270.2	2110.0	2095.0	2239.3	2173.1	1995.8	1827.5	1669.7	1656.1
52.5°	9535.6	7852.4	2775.8	1899.6	2018.3	2230.2	2134.1	1938.7	1732.8	1567.5	1549.4
55°	10000.0	7993.7	2299.4	1719.3	1907.1	2153.6	2087.5	1871.1	1599.0	1423.2	1408.2
57.5°	10264.5	7879.5	1902.6	1541.9	1753.8	2027.4	2007.8	1726.8	1439.7	1304.5	1286.4
60°	10150.3	7416.6	1578.0	1387.1	1608.1	1890.6	1869.6	1584.0	1318.0	1190.3	1172.2
62.5°	9520.6	6534.4	1321.0	1251.9	1475.8	1750.8	1731.3	1474.3	1224.8	1101.6	1082.1
65°	8252.2	5315.6	1121.1	1139.2	1342.0	1582.5	1611.1	1382.6	1151.2	1031.0	1011.4
67.5°	6294.0	3850.3	964.8	1041.5	1211.3	1417.2	1499.8	1316.5	1089.6	975.4	957.3
70°	3587.3	2186.7	832.6	946.8	1095.6	1263.9	1414.2	1263.9	1023.4	928.8	916.7
72.5°	1360.1	1003.9	719.9	852.1	984.4	1134.7	1319.5	1181.2	946.8	876.2	864.1
75°	725.9	611.7	605.7	740.9	856.6	1008.4	1200.8	1100.1	889.7	925.8	955.8
77.5°	494.4	432.8	506.5	634.2	716.9	868.7	1074.5	976.9	771.0	768.0	707.8
80°	342.7	306.6	411.8	511.0	554.6	730.4	937.8	838.6	628.2	586.1	560.6
82.5°	205.9	199.9	308.1	381.7	392.2	563.6	777.0	703.3	514.0	447.9	450.9
85°	112.7	118.7	196.9	223.9	228.4	393.7	608.7	544.0	395.3	332.1	335.1
87.5°	31.6	40.6	72.1	88.7	109.7	204.4	362.2	323.1	198.4	138.3	138.3
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)