

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: P883921

Luminaire Tested: **NAV-SB4C-727-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883921
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-SB4C-727-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 2700K, 615mA 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: 27186 lumens
Efficiency: N/A
Efficacy: 135.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

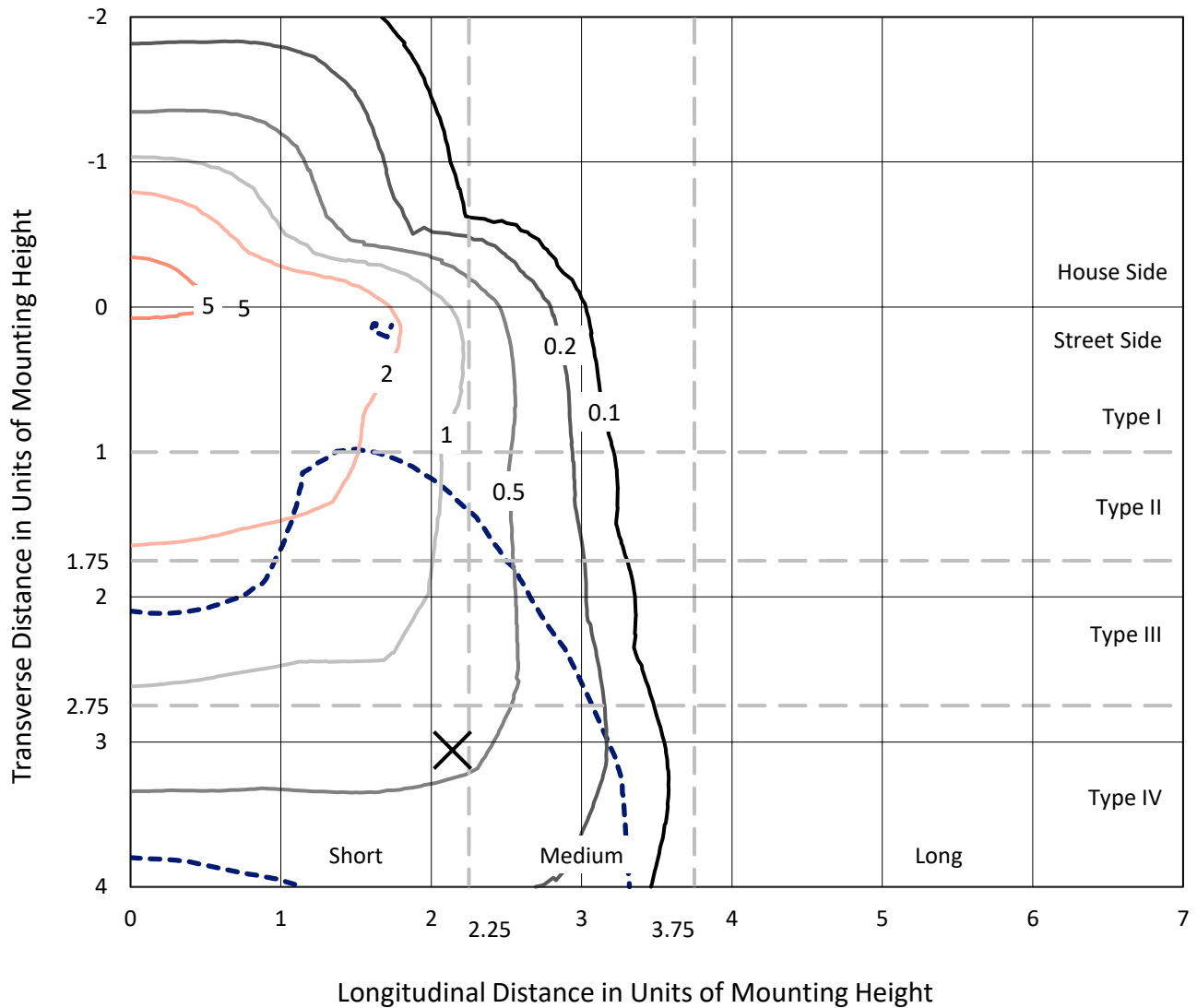
Input Watts (W): 200.7
Input Voltage (V): 120.0
Input Current (Ain): 1.714
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.472
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

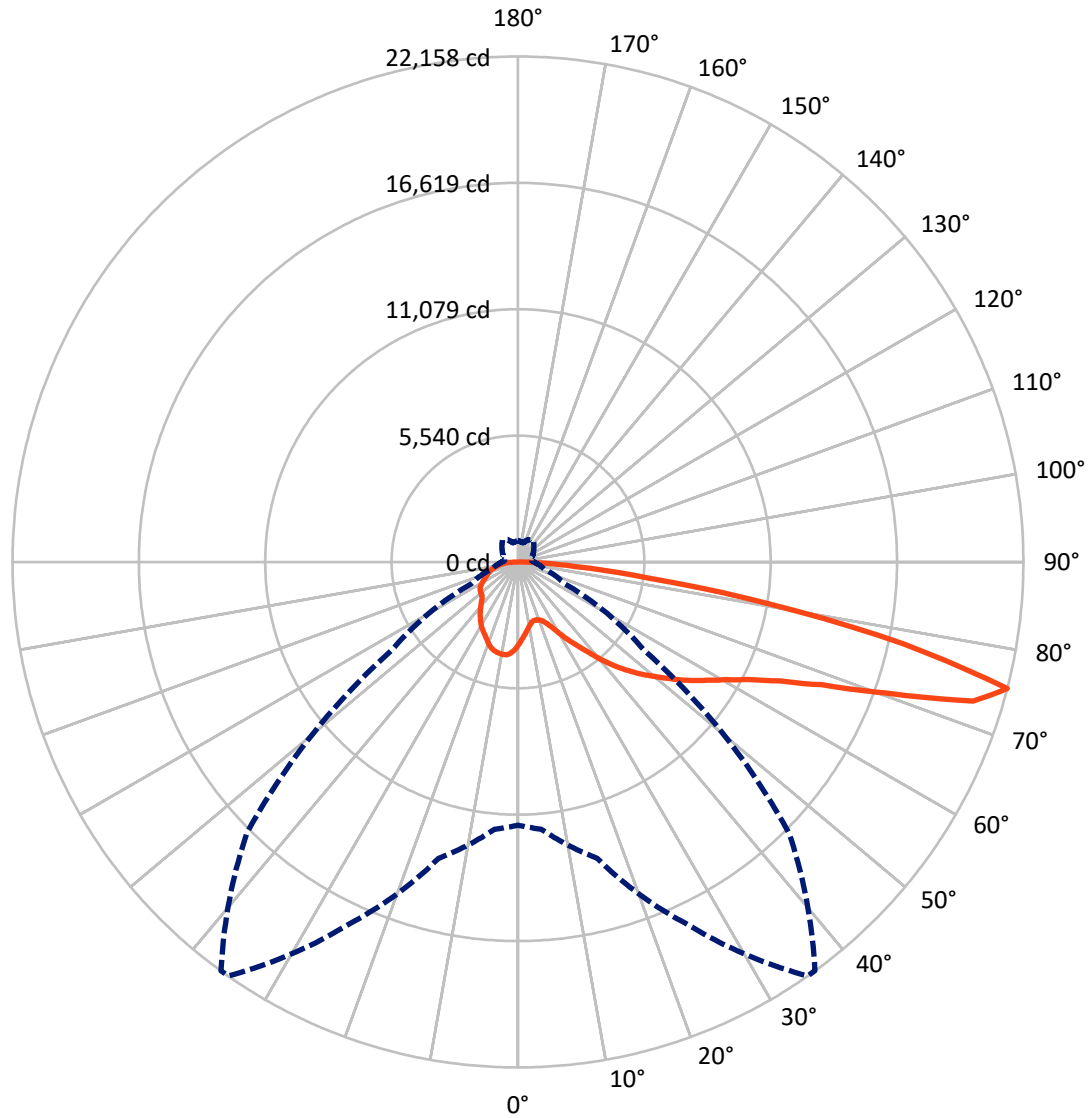
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.4 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	6469.6	0.0	6469.6
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	20716.4	0.0	20716.4
	% Fixture	76.2	0.0	76.2
Total	Lumens	27186.0	0.0	27186.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	343.0	1.3
10°-20°	989.4	3.6
20°-30°	1661.4	6.1
30°-40°	2582.0	9.5
40°-50°	3832.4	14.1
50°-60°	5290.9	19.5
60°-70°	6419.1	23.6
70°-80°	5304.9	19.5
80°-90°	763.0	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°	27186.0	100.0
0°-180°	27186.0	100.0

Coefficient of Utilization



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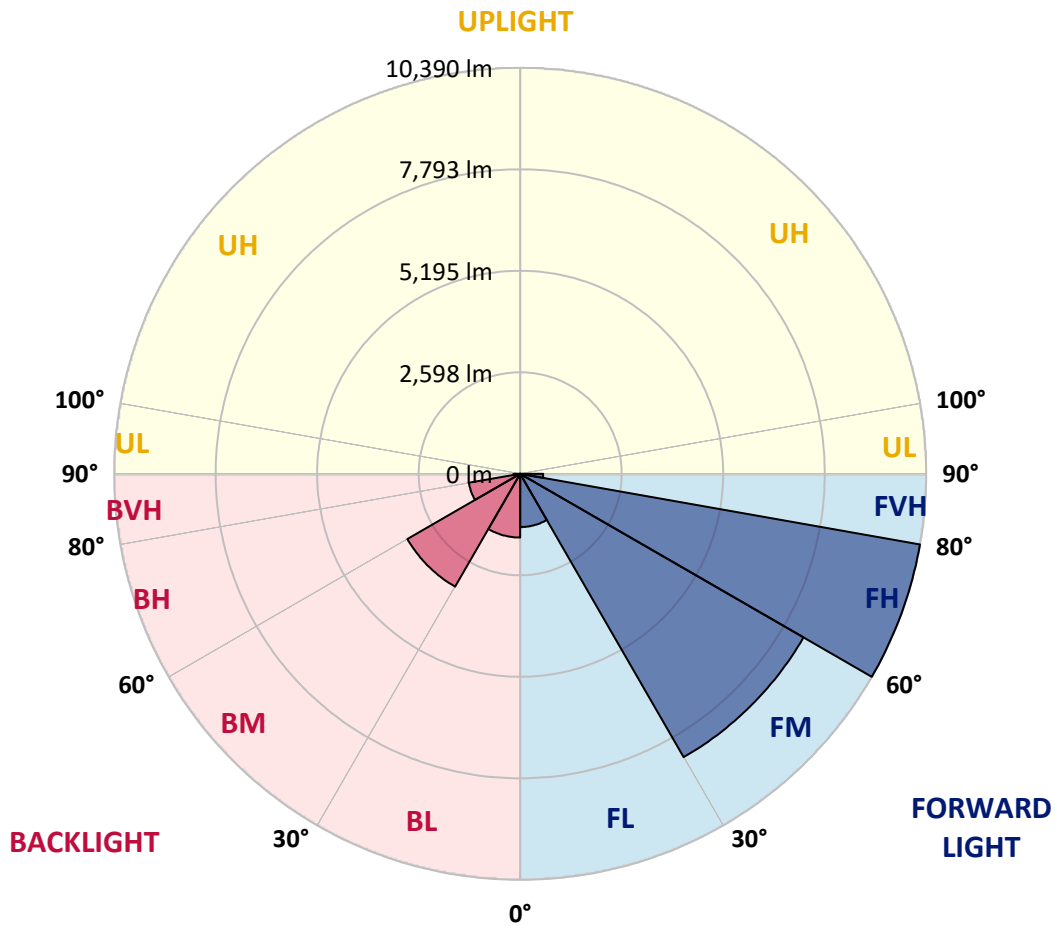
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1363.3	5.0			
FM (30°-60°)	8371.8	30.8			
FH (60°-80°)	10390.1	38.2			G4/12000
FVH (80°-90°)	591.2	2.2			G4/750
BL (0°-30°)	1630.4	6.0	B3/2500		
BM (30°-60°)	3333.5	12.3	B3/5000		
BH (60°-80°)	1333.8	4.9	B3/2500		G3/2500
BVH (80°-90°)	171.8	0.6			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: 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°	3622.7	3622.7	3622.7	3622.7	3622.7	3622.7	3622.7	3622.7	3622.7	3622.7	3622.7
2.5°	3340.5	3361.1	3369.9	3365.5	3387.6	3384.6	3415.5	3453.7	3506.6	3558.1	3633.0
5°	3083.4	3105.4	3124.5	3142.1	3184.8	3198.0	3246.5	3320.0	3417.0	3515.4	3638.9
7.5°	2843.8	2862.9	2892.3	2924.6	2996.6	3009.9	3090.7	3205.3	3340.5	3484.6	3655.1
10°	2648.3	2667.4	2698.3	2735.0	2824.7	2840.9	2943.7	3096.6	3272.9	3455.2	3672.7
12.5°	2564.6	2570.4	2588.1	2624.8	2702.7	2713.0	2826.2	3001.1	3206.8	3433.1	3699.1
15°	2560.2	2571.9	2573.4	2592.5	2657.2	2661.6	2765.9	2939.3	3165.7	3428.7	3738.8
17.5°	2604.2	2613.1	2599.8	2611.6	2666.0	2673.3	2755.6	2909.9	3152.4	3447.8	3806.4
20°	2721.8	2729.2	2689.5	2673.3	2713.0	2718.9	2799.7	2929.0	3165.7	3487.5	3899.0
22.5°	2971.7	2976.1	2879.1	2812.9	2815.9	2818.8	2889.4	3006.9	3217.1	3559.5	4016.6
25°	3361.1	3358.2	3203.9	3076.0	3002.5	2986.4	3033.4	3133.3	3303.8	3655.1	4168.0
27.5°	3816.7	3794.7	3640.4	3449.3	3289.1	3265.6	3255.3	3297.9	3427.3	3781.4	4353.1
30°	4331.1	4310.5	4144.4	3894.6	3672.7	3634.5	3537.5	3515.4	3611.0	3953.4	4610.3
32.5°	4895.4	4882.2	4683.8	4381.1	4084.2	4040.1	3877.0	3818.2	3893.1	4213.5	4968.9
35°	5368.7	5356.9	5192.3	4880.7	4517.7	4463.4	4297.3	4231.2	4269.4	4547.1	5437.8
37.5°	5796.3	5790.5	5649.4	5403.9	5029.2	4963.1	4776.4	4754.4	4747.0	4986.6	6006.5
40°	6193.2	6178.5	6031.5	5902.2	5624.4	5564.1	5399.5	5380.4	5324.6	5527.4	6650.2
42.5°	6632.6	6594.4	6381.3	6321.0	6246.1	6196.1	6097.6	6100.6	5977.1	6137.3	7332.1
45°	6991.2	6969.1	6750.2	6714.9	6795.7	6775.1	6860.4	6882.4	6642.9	6776.6	8040.5
47.5°	7376.2	7355.7	7170.5	7145.5	7364.5	7370.4	7671.6	7679.0	7292.5	7440.9	8750.4
50°	7850.9	7821.5	7637.8	7668.7	7914.1	7936.2	8487.3	8437.3	7890.6	8115.5	9454.3
52.5°	8164.0	8181.6	8141.9	8191.9	8527.0	8547.6	9289.7	9161.9	8482.9	8781.2	10145.1
55°	8394.7	8430.0	8553.4	8668.1	9173.6	9194.2	10046.6	9851.1	8973.8	9398.5	10794.7
57.5°	8691.6	8641.6	8872.4	9095.7	9788.0	9842.3	10782.9	10515.4	9408.8	9930.5	11240.0
60°	9117.8	9082.5	9261.8	9592.5	10475.8	10562.5	11561.8	11113.6	9727.7	10352.3	11326.7
62.5°	9981.9	9893.8	9921.7	10214.2	11342.9	11457.5	12440.7	11635.3	9886.4	10516.9	10862.3
65°	11273.8	11122.4	10981.3	11184.1	12564.1	12677.3	13432.7	12045.4	9827.6	10198.0	9629.2
67.5°	12900.7	12750.8	12577.4	12768.4	14363.0	14452.7	14656.9	12276.1	9364.7	8969.4	7449.7
70°	14242.5	14186.7	14393.9	15180.1	17236.2	17239.1	16226.5	12085.0	8096.4	6359.2	4310.5
72.5°	14064.7	14030.9	15122.8	17553.7	20857.5	20779.6	17712.4	10638.9	5453.9	2868.8	1615.2
75°	11538.3	11757.3	13448.9	17511.0	22158.1	22147.8	16802.7	6763.4	2255.9	1189.0	834.8
77.5°	6187.3	6534.1	8731.3	12928.6	17297.9	17558.1	11813.1	2366.2	968.5	761.3	577.6
80°	2017.8	2320.6	3480.2	6582.6	11240.0	11191.5	5063.0	928.8	662.8	539.4	399.7
82.5°	856.8	892.1	1554.9	3108.3	5768.4	5678.8	1612.2	533.5	465.9	368.9	246.9
85°	335.1	374.8	686.3	1437.3	2498.4	2444.0	582.0	264.5	298.3	241.0	147.0
87.5°	110.2	133.7	245.4	492.3	777.5	749.5	142.6	91.1	129.3	110.2	52.9
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°	3622.7	3622.7	3622.7	3622.7	3622.7	3622.7	3622.7	3622.7	3622.7	3622.7	3622.7
2.5°	3653.6	3677.1	3705.0	3746.2	3781.4	3810.8	3841.7	3860.8	3868.2	3890.2	3888.7
5°	3680.0	3731.5	3800.5	3868.2	3934.3	3974.0	4009.2	4026.9	4043.0	4054.8	4057.7
7.5°	3724.1	3790.3	3899.0	3987.2	4043.0	4075.4	4098.9	4093.0	4098.9	4101.8	4106.2
10°	3762.3	3854.9	3984.3	4068.0	4110.6	4112.1	4106.2	4085.7	4075.4	4076.8	4079.8
12.5°	3807.9	3910.8	4050.4	4120.9	4132.7	4100.4	4075.4	4040.1	4026.9	4021.0	4018.1
15°	3869.6	3987.2	4122.4	4148.9	4119.5	4078.3	4035.7	3978.4	3949.0	3925.5	3932.8
17.5°	3944.6	4073.9	4178.3	4159.1	4095.9	4028.3	3959.3	3872.6	3812.3	3787.3	3788.8
20°	4048.9	4165.0	4220.9	4137.1	4041.6	3938.7	3821.1	3715.3	3659.5	3634.5	3631.5
22.5°	4175.3	4287.0	4262.0	4098.9	3963.7	3799.1	3652.1	3574.2	3546.3	3528.7	3531.6
25°	4326.7	4422.2	4291.4	4043.0	3835.8	3613.9	3500.7	3475.8	3462.5	3449.3	3449.3
27.5°	4523.6	4575.1	4313.5	3960.7	3635.9	3417.0	3375.8	3380.2	3375.8	3353.8	3358.2
30°	4783.8	4773.5	4334.0	3827.0	3406.7	3239.1	3242.1	3261.2	3264.1	3249.4	3256.8
32.5°	5126.2	5021.8	4344.3	3653.6	3187.7	3083.4	3086.3	3106.9	3121.6	3096.6	3108.3
35°	5540.6	5311.4	4328.2	3436.1	3018.7	2934.9	2912.9	2918.8	2923.2	2899.6	2915.8
37.5°	6024.1	5636.2	4256.1	3195.0	2879.1	2789.4	2742.4	2702.7	2679.2	2657.2	2671.8
40°	6554.7	5990.3	4123.9	2959.9	2723.3	2635.1	2564.6	2489.6	2410.2	2380.9	2394.1
42.5°	7110.2	6354.8	3963.7	2735.0	2544.0	2472.0	2397.0	2288.3	2169.2	2109.0	2116.3
45°	7686.3	6728.1	3806.4	2513.1	2360.3	2329.4	2242.7	2111.9	1982.6	1906.2	1900.3
47.5°	8250.7	7080.8	3575.7	2289.7	2188.3	2222.1	2154.5	2034.0	1890.0	1769.5	1756.2
50°	8790.1	7411.5	3198.0	2063.4	2048.7	2189.8	2125.1	1951.7	1787.1	1632.8	1619.6
52.5°	9325.0	7679.0	2714.5	1857.7	1973.8	2181.0	2086.9	1895.9	1694.5	1532.9	1515.2
55°	9779.1	7817.1	2248.6	1681.3	1865.0	2106.0	2041.4	1829.7	1563.7	1391.8	1377.1
57.5°	10037.8	7705.4	1860.6	1507.9	1715.1	1982.6	1963.5	1688.6	1407.9	1275.7	1258.0
60°	9926.1	7252.8	1543.1	1356.5	1572.5	1848.8	1828.3	1549.0	1288.9	1164.0	1146.3
62.5°	9310.3	6390.1	1291.8	1224.2	1443.2	1712.2	1693.1	1441.7	1197.8	1077.3	1058.2
65°	8069.9	5198.2	1096.4	1114.0	1312.4	1547.6	1575.5	1352.1	1125.8	1008.2	989.1
67.5°	6154.9	3765.3	943.5	1018.5	1184.5	1385.9	1466.7	1287.4	1065.5	953.8	936.2
70°	3508.1	2138.4	814.2	925.9	1071.4	1236.0	1383.0	1236.0	1000.8	908.3	896.5
72.5°	1330.0	981.7	704.0	833.3	962.6	1109.6	1290.4	1155.2	925.9	856.8	845.1
75°	709.8	598.2	592.3	724.5	837.7	986.1	1174.3	1075.8	870.0	905.3	934.7
77.5°	483.5	423.3	495.3	620.2	701.0	849.5	1050.8	955.3	753.9	751.0	692.2
80°	335.1	299.8	402.7	499.7	542.3	714.3	917.1	820.1	614.3	573.2	548.2
82.5°	201.3	195.5	301.3	373.3	383.6	551.1	759.8	687.8	502.6	438.0	440.9
85°	110.2	116.1	192.5	219.0	223.4	385.1	595.2	532.0	386.5	324.8	327.7
87.5°	30.9	39.7	70.5	86.7	107.3	199.9	354.2	316.0	194.0	135.2	135.2
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)