

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: McGRAW-EDISON

Report Number: P300993

Luminaire Tested: **GLNA-AF-06-LED-E1-SL4-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300993
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24301)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-06-LED-E1-SL4-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(6) 70 CRI, 4000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V
Square Wide OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22207.6 lumens
Efficiency: N/A
Efficacy: 115.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G4

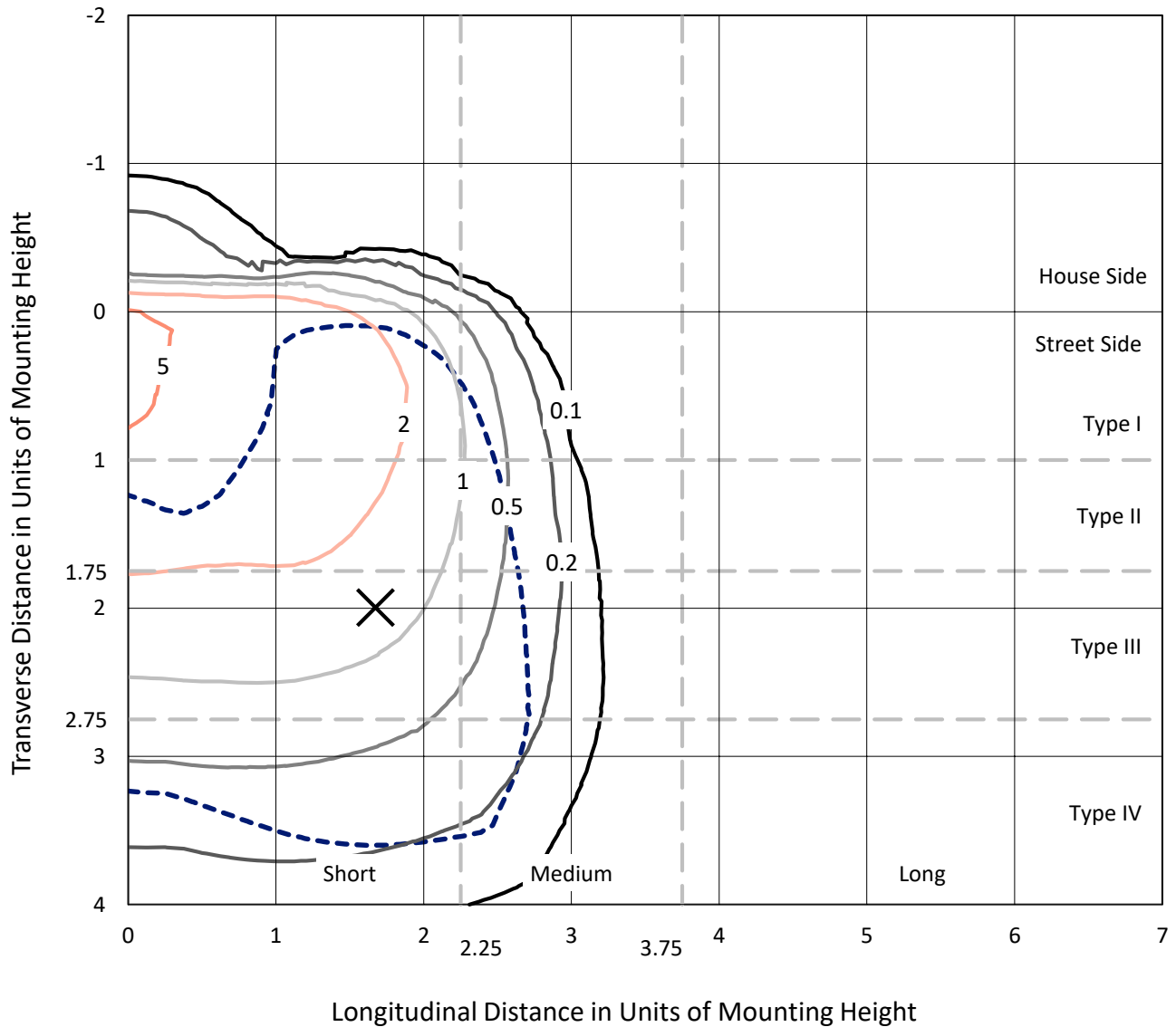
Input Watts (W): 193
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

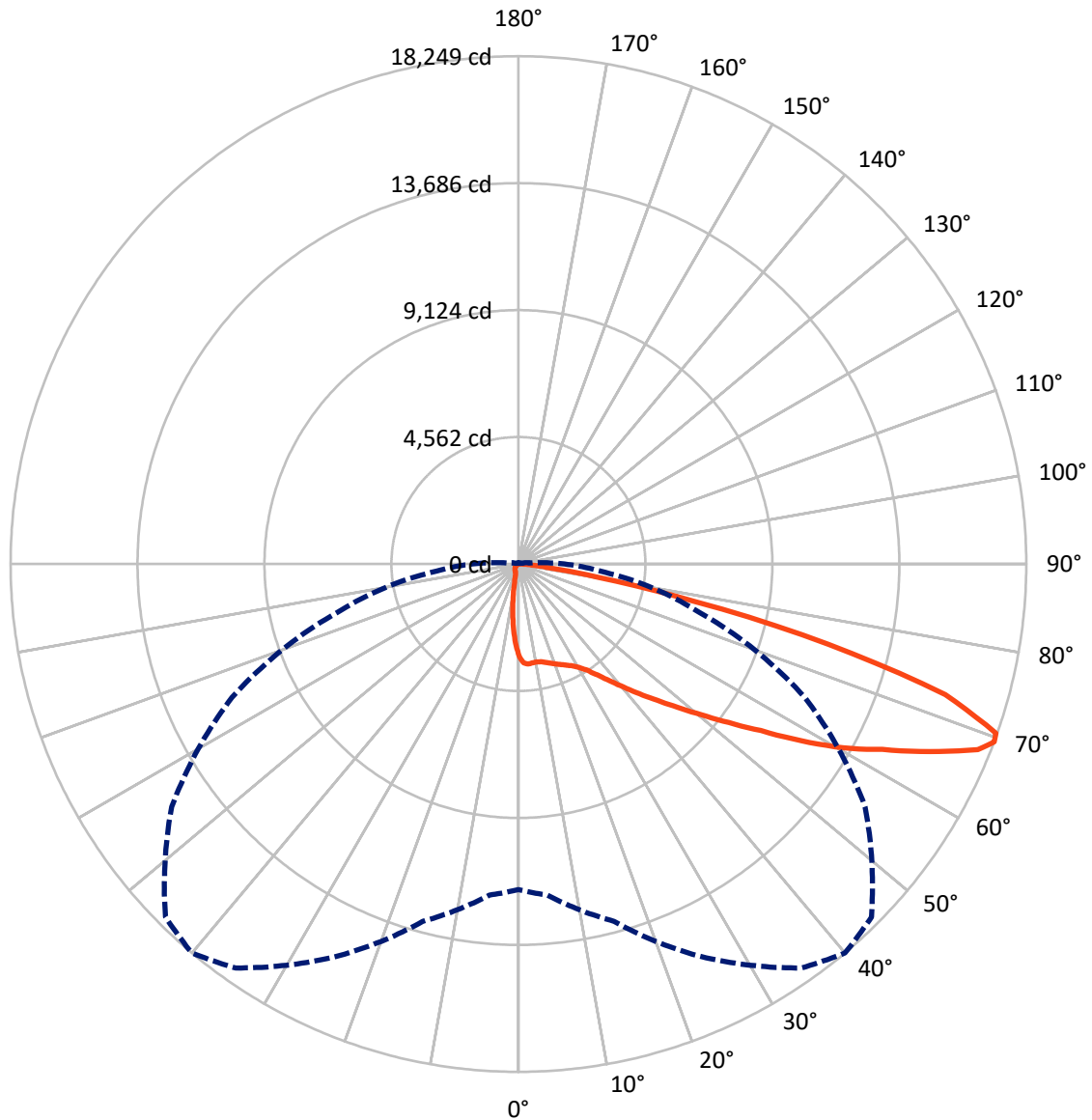
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.8 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1299.3	0.0	1299.3
	% Fixture	5.9	0.0	5.9
Street Side	Lumens	20908.3	0.0	20908.3
	% Fixture	94.1	0.0	94.1
Total	Lumens	22207.6	0.0	22207.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	269.0	1.2
10°-20°	661.6	3.0
20°-30°	1114.3	5.0
30°-40°	1824.1	8.2
40°-50°	3158.5	14.2
50°-60°	4974.9	22.4
60°-70°	6497.0	29.3
70°-80°	3346.2	15.1
80°-90°	362.0	1.6
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°	22207.6	100.0
0°-180°	22207.6	100.0



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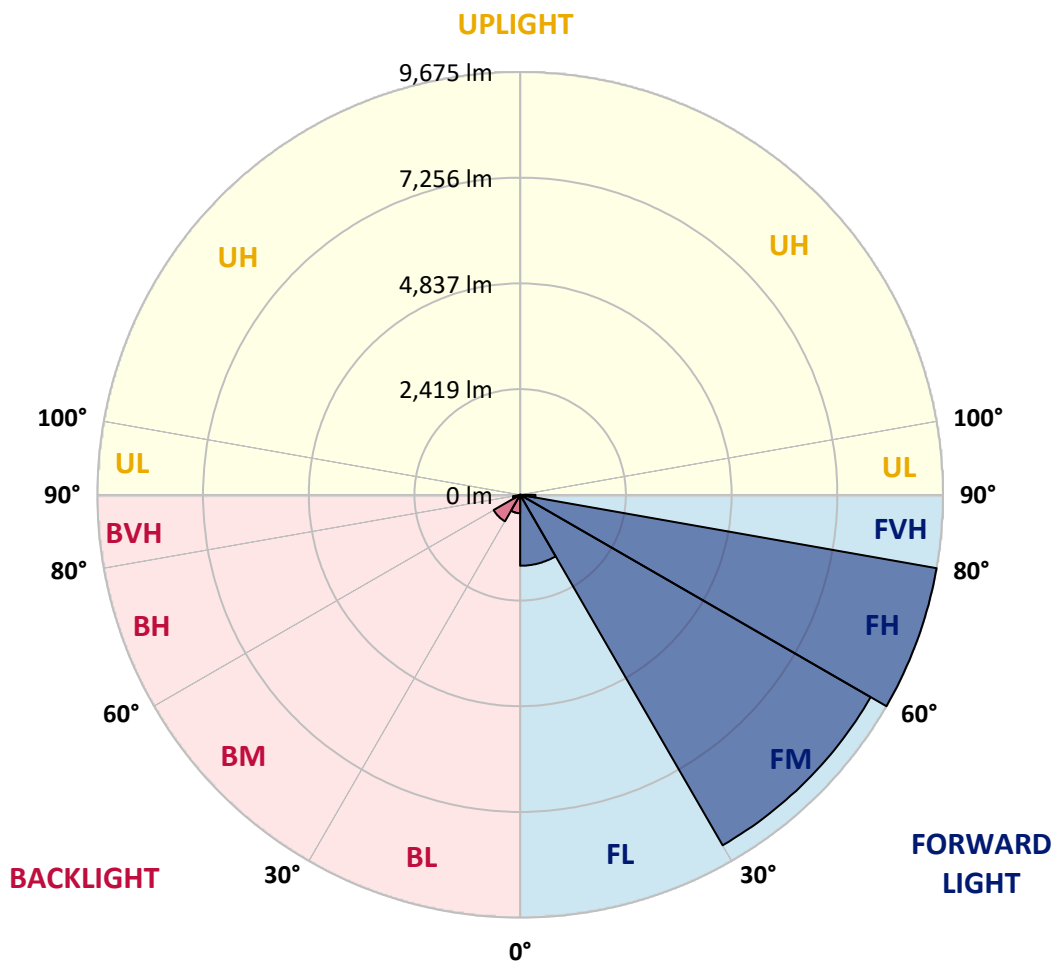
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1624.0	7.3			
FM	(30°-60°)	9259.2	41.7			
FH	(60°-80°)	9674.5	43.6			G4/12000
FVH	(80°-90°)	350.6	1.6			G3/500
BL	(0°-30°)	420.9	1.9	B1/500		
BM	(30°-60°)	698.3	3.1	B1/1000		
BH	(60°-80°)	168.7	0.8	B1/500		G1/500
BVH	(80°-90°)	11.4	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G4

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	3317.9	3317.9	3317.9	3317.9	3317.9	3317.9	3317.9	3317.9	3317.9	3317.9	3317.9
2.5°	3643.1	3623.3	3611.4	3595.5	3575.7	3558.5	3551.9	3503.0	3456.7	3393.3	3320.6
5°	3710.5	3703.9	3682.8	3661.6	3637.8	3611.4	3596.8	3538.7	3472.6	3380.1	3253.2
7.5°	3717.1	3709.2	3682.8	3653.7	3620.6	3588.9	3563.8	3505.6	3444.8	3351.0	3196.3
10°	3706.6	3697.3	3677.5	3645.7	3604.8	3574.4	3549.3	3493.7	3442.2	3357.6	3185.7
12.5°	3694.7	3685.4	3676.2	3660.3	3624.6	3603.4	3582.3	3529.4	3483.2	3411.8	3224.1
15°	3706.6	3701.3	3711.8	3705.2	3685.4	3666.9	3645.7	3598.2	3555.9	3496.4	3294.1
17.5°	3756.8	3756.8	3789.8	3793.8	3775.3	3748.9	3718.5	3670.9	3635.2	3584.9	3377.4
20°	3874.4	3870.5	3912.8	3920.7	3875.8	3834.8	3789.8	3731.7	3703.9	3672.2	3459.4
22.5°	4076.7	4058.2	4083.3	4075.4	3986.8	3923.3	3867.8	3796.4	3781.9	3767.4	3550.6
25°	4339.7	4329.2	4346.3	4268.4	4112.4	4026.5	3960.4	3879.7	3879.7	3894.3	3653.7
27.5°	4721.8	4682.1	4623.9	4486.5	4252.5	4142.8	4071.4	3985.5	4007.9	4062.1	3789.8
30°	5113.0	5069.4	4935.9	4724.4	4423.0	4308.0	4224.7	4134.8	4187.7	4286.9	3972.3
32.5°	5499.0	5450.1	5261.1	4994.1	4667.6	4552.6	4471.9	4372.8	4461.4	4627.9	4239.3
35°	5873.1	5829.5	5611.4	5296.8	4992.7	4897.6	4823.5	4737.6	4851.3	5084.0	4616.0
37.5°	6293.5	6245.9	5980.2	5639.1	5388.0	5319.3	5265.1	5179.1	5377.4	5718.5	5140.8
40°	6810.3	6729.7	6371.5	6031.7	5845.4	5812.3	5775.3	5763.4	6071.4	6543.3	5840.1
42.5°	7402.5	7270.3	6781.3	6445.5	6347.7	6371.5	6362.2	6415.1	6939.9	7569.1	6691.4
45°	7994.7	7824.2	7237.3	6887.0	6900.2	6983.5	7035.1	7246.6	8027.8	8745.6	7607.4
47.5°	8497.1	8329.2	7674.8	7364.2	7522.8	7686.7	7826.9	8227.4	9146.1	9903.5	8319.9
50°	8926.7	8768.0	8138.8	7889.0	8245.9	8510.3	8737.6	9331.2	10349.0	10785.2	8819.6
52.5°	9278.3	9172.5	8620.0	8490.4	9072.1	9459.4	9792.5	10503.7	11414.4	11501.7	9208.2
55°	9620.7	9545.3	9136.8	9205.6	10042.3	10569.8	10991.4	11747.6	12331.8	12099.2	9581.0
57.5°	10014.6	9945.8	9726.4	10112.4	11317.9	11981.5	12441.5	12850.0	13139.5	12709.9	9932.6
60°	10416.4	10376.8	10382.1	11119.7	12782.6	13419.7	13673.5	13779.3	13932.6	13284.9	9952.4
62.5°	10799.8	10875.1	11131.6	12240.6	14185.1	14674.2	14802.4	14906.9	14727.1	13376.1	9195.0
65°	11448.8	11571.8	12183.8	13741.0	15727.7	16251.2	16383.4	16025.2	14852.7	12197.0	7479.2
67.5°	11766.1	11990.8	13082.7	15139.5	17224.1	17805.7	17756.8	16097.9	13328.5	9300.8	4799.8
69°	11700.0	11939.2	13290.2	15567.8	17721.1	18248.6	17937.9	15208.2	11355.0	6737.6	2946.5
70°	11438.2	11680.1	13183.1	15551.9	17784.6	18202.3	17602.2	14109.8	9600.8	4926.7	1842.7
72.5°	9551.9	9760.8	11703.9	14056.9	16383.4	16043.7	14725.8	9775.3	4678.1	1341.7	415.1
75°	5879.7	5996.1	8397.9	10589.6	12374.1	11501.7	9811.0	4863.2	1394.6	379.4	230.0
77.5°	3106.4	3159.3	4597.5	6241.9	7844.0	6490.4	5028.4	1896.9	642.4	237.9	166.6
80°	1836.1	1875.7	2475.9	2853.9	3394.6	2835.4	2010.6	1164.6	460.0	149.4	148.1
82.5°	1050.9	1076.0	1795.1	1586.3	1337.7	1142.1	1000.7	1103.8	276.3	100.5	153.3
85°	386.0	391.3	1009.9	1206.9	795.8	473.2	497.0	914.7	74.0	63.5	120.3
87.5°	179.8	175.8	519.5	738.9	465.3	300.1	387.3	200.9	29.1	41.0	33.0
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°	3317.9	3317.9	3317.9	3317.9	3317.9	3317.9	3317.9	3317.9	3317.9	3317.9	3317.9
2.5°	3278.3	3229.4	3140.8	3049.6	2957.0	2885.7	2815.6	2760.1	2741.6	2707.2	2709.9
5°	3177.8	3087.9	2902.9	2715.1	2519.5	2358.2	2206.2	2083.3	2023.8	1963.0	1963.0
7.5°	3090.6	2959.7	2670.2	2364.8	2048.9	1783.2	1544.0	1364.2	1265.0	1185.7	1184.4
10°	3057.5	2880.4	2475.9	2038.3	1598.2	1236.0	951.8	769.3	675.5	614.7	612.0
12.5°	3072.1	2852.6	2326.5	1737.0	1184.4	794.5	551.2	433.6	393.9	375.4	375.4
15°	3114.4	2844.7	2177.1	1442.2	836.8	497.0	366.2	334.4	331.8	331.8	331.8
17.5°	3165.9	2847.3	2023.8	1155.3	569.7	355.6	315.9	312.0	314.6	314.6	314.6
20°	3218.8	2848.7	1858.6	889.6	401.9	309.3	297.4	296.1	298.7	298.7	300.1
22.5°	3283.6	2855.3	1693.3	664.9	331.8	292.1	282.9	282.9	284.2	284.2	282.9
25°	3357.6	2868.5	1521.5	493.1	302.7	280.2	272.3	271.0	272.3	271.0	269.7
27.5°	3450.1	2887.0	1329.8	386.0	289.5	268.3	261.7	261.7	260.4	259.1	257.8
30°	3566.4	2908.1	1114.3	327.8	276.3	257.8	251.2	249.8	248.5	245.9	245.9
32.5°	3743.6	2954.4	901.5	297.4	261.7	243.2	237.9	237.9	235.3	232.7	231.3
35°	4015.9	3045.6	711.2	278.9	245.9	227.4	220.8	220.8	218.1	216.8	215.5
37.5°	4392.6	3184.4	552.5	261.7	230.0	210.2	203.6	202.2	199.6	197.0	195.6
40°	4893.6	3356.3	434.9	245.9	214.1	193.0	187.7	185.1	179.8	175.8	175.8
42.5°	5522.8	3551.9	352.9	228.7	195.6	177.1	173.2	169.2	159.9	156.0	154.7
45°	6181.1	3727.7	298.7	208.9	177.1	161.3	158.6	152.0	140.1	136.2	136.2
47.5°	6655.7	3768.7	263.1	190.4	159.9	144.1	142.8	130.9	120.3	117.6	116.3
50°	6951.8	3688.0	234.0	171.8	144.1	128.2	124.3	109.7	103.1	100.5	99.1
52.5°	7151.4	3544.0	210.2	156.0	129.5	113.7	104.4	93.9	88.6	85.9	85.9
55°	7311.3	3340.4	186.4	141.4	117.6	101.8	88.6	80.6	75.3	72.7	72.7
57.5°	7356.3	3064.1	162.6	129.5	105.8	89.9	75.3	70.1	63.5	62.1	62.1
60°	7029.8	2565.8	144.1	115.0	95.2	78.0	66.1	59.5	52.9	51.6	50.2
62.5°	6169.2	1985.5	126.9	101.8	83.3	67.4	56.8	48.9	43.6	43.6	43.6
65°	4705.9	1331.1	111.0	88.6	72.7	56.8	48.9	39.7	37.0	37.0	38.3
67.5°	2816.9	724.4	95.2	75.3	62.1	47.6	41.0	34.4	33.0	34.4	34.4
69°	1651.0	425.6	85.9	67.4	54.2	42.3	35.7	30.4	33.0	34.4	34.4
70°	1019.2	286.8	79.3	60.8	48.9	38.3	33.0	29.1	31.7	33.0	33.0
72.5°	284.2	148.1	63.5	47.6	39.7	31.7	26.4	26.4	30.4	31.7	31.7
75°	185.1	109.7	48.9	35.7	30.4	25.1	22.5	25.1	29.1	30.4	30.4
77.5°	153.3	89.9	39.7	29.1	25.1	23.8	21.2	22.5	26.4	27.8	27.8
80°	140.1	63.5	31.7	26.4	22.5	21.2	19.8	18.5	23.8	25.1	25.1
82.5°	133.5	50.2	27.8	23.8	21.2	18.5	17.2	18.5	21.2	22.5	23.8
85°	83.3	33.0	25.1	22.5	18.5	17.2	17.2	17.2	19.8	21.2	21.2
87.5°	30.4	26.4	22.5	18.5	15.9	15.9	15.9	15.9	17.2	19.8	19.8
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)