

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: P299995

Luminaire Tested: **GLNA-AF-06-LED-E1-SL3-7060-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299995
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194479)
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-SL3-7060-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(6) 70 CRI, 5700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
w/Spill Control WITH HOUSESIDE SHEILD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27628.3 lumens
Efficiency: N/A
Efficacy: 83.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B2 - U0 - G4

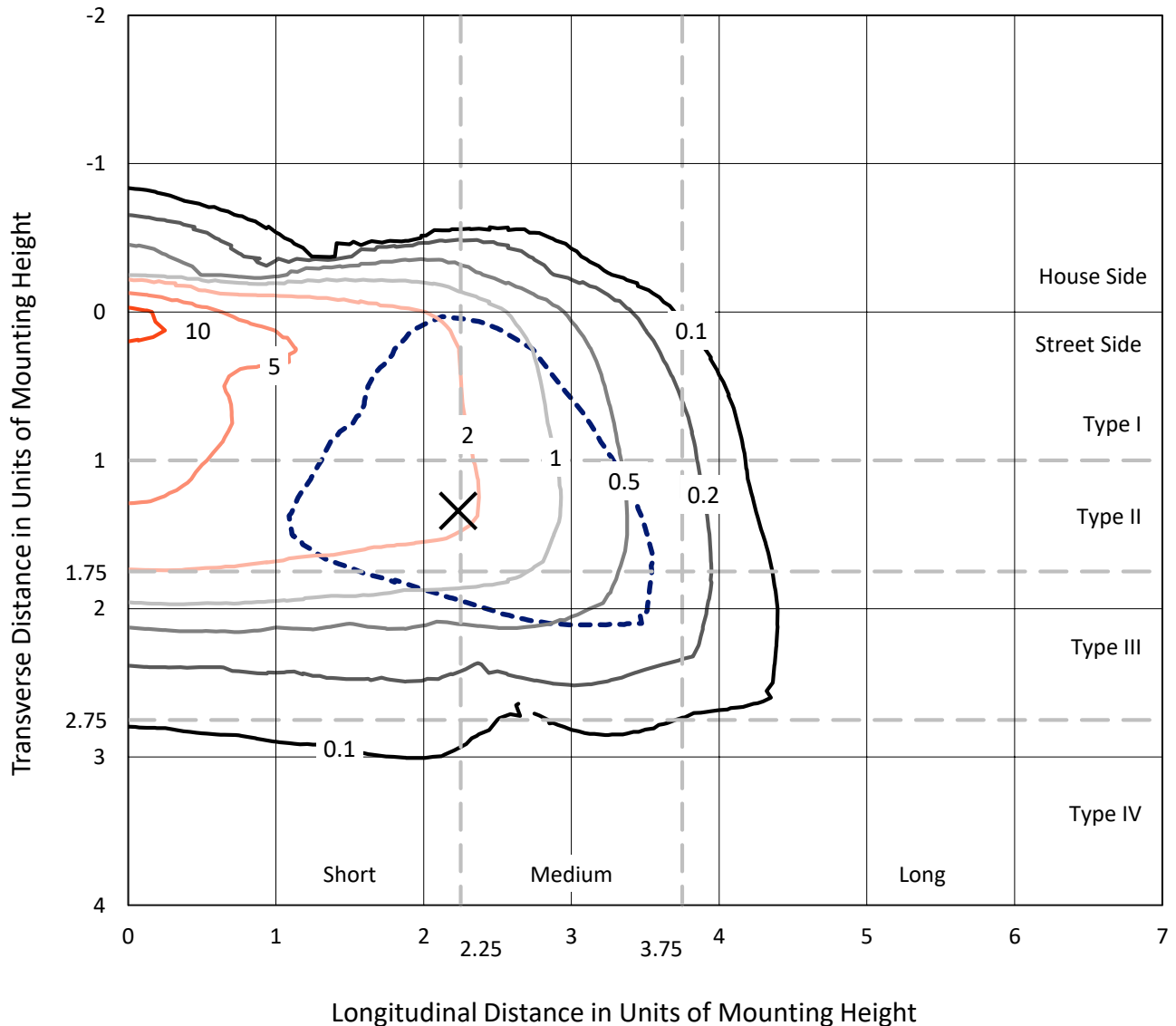
Input Watts (W): 333
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P299995
 CATALOG NUMBER: GLNA-AF-06-LED-E1-SL3-7060-HSS

Iso-Footcandle Lines of Horizontal Illumination

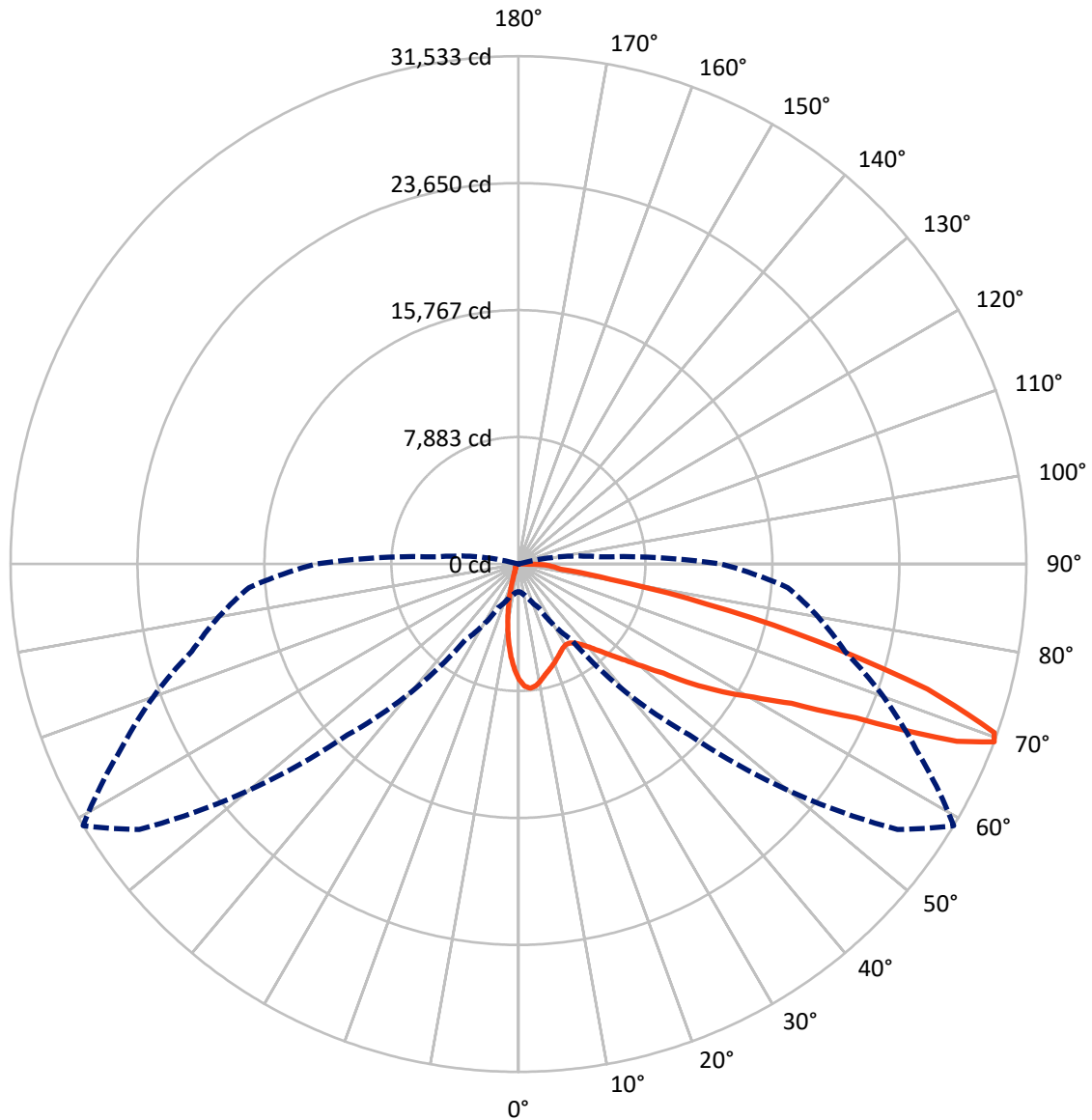
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.6 fc
 Type III - Short - Non-Cutoff

REPORT NUMBER: P299995
CATALOG NUMBER: GLNA-AF-06-LED-E1-SL3-7060-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2249.9	0.0	2249.9
	% Fixture	8.1	0.0	8.1
Street Side	Lumens	25378.3	0.0	25378.3
	% Fixture	91.9	0.0	91.9
Total	Lumens	27628.3	0.0	27628.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	583.7	2.1
10°-20°	1206.1	4.4
20°-30°	1623.0	5.9
30°-40°	2356.5	8.5
40°-50°	3923.7	14.2
50°-60°	6120.9	22.2
60°-70°	7574.2	27.4
70°-80°	3838.5	13.9
80°-90°	401.6	1.5
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°	27628.3	100.0
0°-180°	27628.3	100.0



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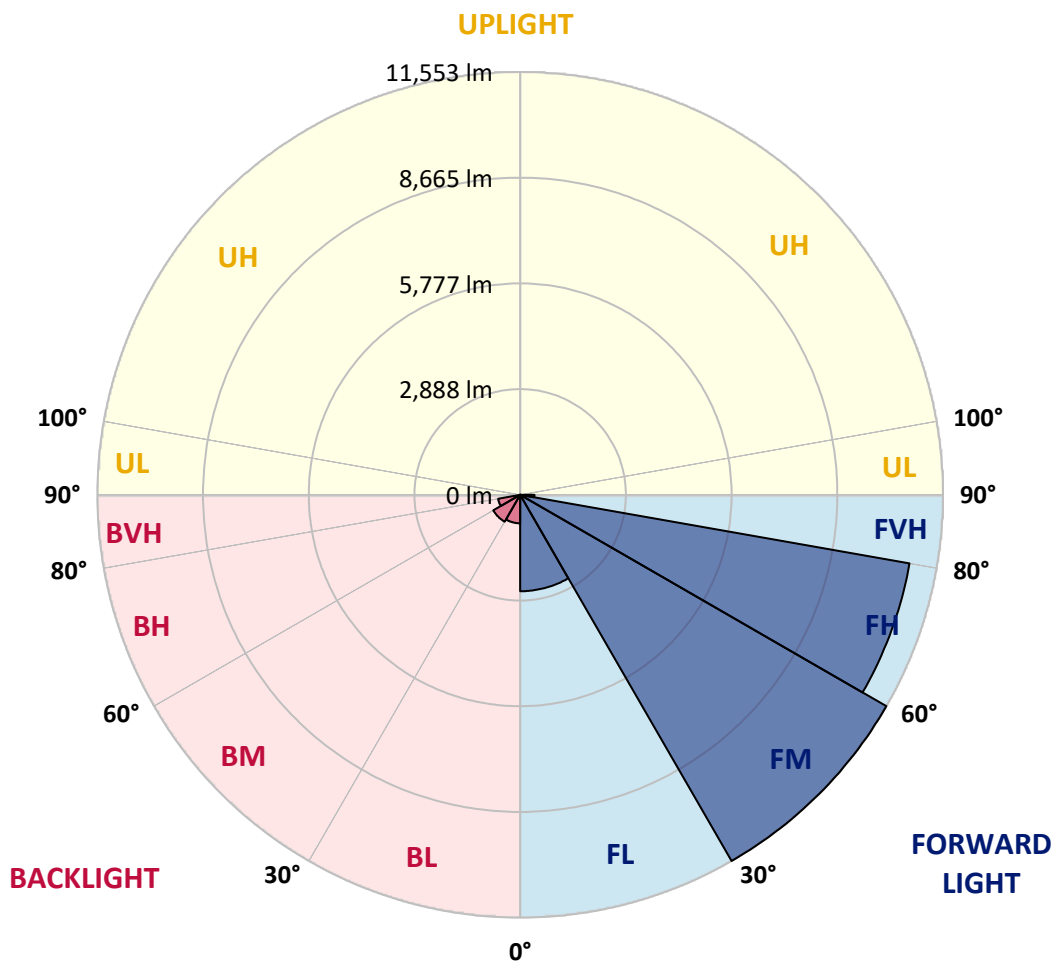
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2634.1	9.5			
FM	(30°-60°)	11553.3	41.8			
FH	(60°-80°)	10801.7	39.1			G4/12000
FVH	(80°-90°)	389.3	1.4			G3/500
BL	(0°-30°)	778.8	2.8	B2/1000		
BM	(30°-60°)	847.8	3.1	B1/1000		
BH	(60°-80°)	611.0	2.2	B2/1000		G2/1000
BVH	(80°-90°)	12.4	0.0			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type III Short





REPORT NUMBER: P299995

CATALOG NUMBER: GLNA-AF-06-LED-E1-SL3-7060-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	7191.1	7191.1	7191.1	7191.1	7191.1	7191.1	7191.1	7191.1	7191.1	7191.1	7191.1
2.5°	7881.7	7878.9	7844.3	7828.7	7800.3	7741.2	7649.0	7600.7	7522.7	7386.5	7203.9
5°	7809.8	7847.6	7867.5	7869.4	7889.7	7867.5	7784.7	7744.5	7636.7	7417.7	7089.9
7.5°	7322.6	7336.3	7394.5	7444.2	7541.1	7633.4	7663.2	7645.7	7581.8	7347.7	6911.6
10°	6800.9	6814.6	6883.7	6948.9	7080.4	7222.3	7372.3	7404.0	7430.4	7247.4	6739.9
12.5°	6350.6	6364.8	6435.2	6520.9	6674.1	6849.1	7081.8	7133.4	7250.7	7152.3	6602.2
15°	5963.2	5969.3	6038.4	6144.3	6327.4	6552.1	6816.5	6899.3	7079.0	7085.2	6482.1
17.5°	5633.5	5649.1	5691.7	5792.9	5993.0	6271.1	6579.0	6697.8	6908.3	7028.9	6364.8
20°	5432.0	5447.6	5446.2	5502.5	5682.2	5978.8	6341.6	6483.5	6739.9	6971.2	6260.2
22.5°	5393.2	5393.2	5352.5	5344.5	5450.9	5699.2	6094.7	6267.8	6588.0	6946.1	6186.9
25°	5532.3	5525.7	5424.4	5341.7	5346.4	5494.4	5855.3	6061.6	6460.3	6963.1	6147.7
27.5°	5826.0	5818.0	5689.8	5532.3	5405.5	5404.1	5674.2	5896.0	6358.6	7044.5	6163.3
30°	6231.9	6229.0	6090.0	5891.3	5661.9	5450.9	5611.7	5813.2	6292.9	7191.1	6199.2
32.5°	6675.5	6670.8	6566.3	6357.2	6066.3	5661.9	5677.5	5846.4	6311.8	7386.5	6286.7
35°	7146.2	7138.1	7092.7	6910.1	6589.9	6050.7	5893.2	6024.2	6430.5	7678.8	6458.4
37.5°	7655.1	7663.2	7695.8	7520.8	7185.0	6596.1	6254.1	6343.0	6669.4	8075.6	6738.0
40°	8406.7	8405.3	8416.2	8186.3	7863.2	7263.0	6758.3	6786.7	7069.5	8602.1	7163.2
42.5°	9770.4	9675.3	9386.3	8917.6	8592.6	8025.5	7394.5	7364.7	7558.6	9253.4	7758.2
45°	11603.3	11399.9	10650.2	9752.0	9336.2	8884.9	8176.9	8081.8	8205.2	10036.2	8492.8
47.5°	13179.4	12968.4	11907.9	10620.4	10125.2	9700.4	9094.0	8922.3	8963.0	10912.7	9423.7
50°	13715.3	13612.2	12686.0	11376.7	10889.1	10726.8	10158.3	9948.7	9891.0	11926.4	10503.1
52.5°	13529.4	13521.8	12904.5	11867.2	11589.1	11789.2	11496.9	11254.7	11042.3	12995.4	11601.4
55°	13230.9	13270.2	12993.5	12296.7	12287.3	12759.3	13327.9	13126.4	12511.0	14156.1	12548.4
57.5°	12407.9	12574.9	12943.8	13109.4	13493.4	13976.4	14852.9	14971.6	14243.6	15044.9	13334.0
60°	10067.5	10434.5	11640.7	13226.2	15048.2	16251.1	16693.3	16794.5	15665.0	15783.7	14395.0
62.5°	7146.2	7520.8	9050.5	11732.9	15071.4	19239.5	19434.9	19036.6	17230.7	16879.2	16224.6
65°	3793.0	4082.5	5332.2	8469.2	13067.3	19933.4	24229.7	23042.5	19992.5	19033.3	18588.2
67.5°	1940.3	2027.8	2524.9	4145.0	8983.3	17705.6	28527.5	29363.3	24752.9	21170.8	18474.2
69°	1717.0	1768.6	2098.3	2996.5	5752.2	14996.7	28737.0	31533.4	27245.1	20992.5	16788.4
70°	1662.1	1707.6	2007.4	2712.2	4496.4	12576.3	27935.3	31342.8	27882.3	20314.7	15529.3
72.5°	1411.0	1449.8	1787.5	2396.7	3654.4	6242.7	22692.5	26559.3	25020.1	16922.7	11240.5
75°	943.6	1071.8	1715.6	2246.8	3399.5	3546.6	14960.7	19192.7	17829.0	11414.1	5855.3
77.5°	226.6	243.6	484.4	1787.5	3109.1	3121.4	7694.4	11931.1	9731.6	4068.3	1384.0
80°	122.0	117.3	135.8	354.8	2894.8	2929.3	3463.8	5791.5	3474.7	675.0	456.0
82.5°	86.1	81.4	87.5	148.5	911.0	2668.2	2506.0	2621.4	1440.3	259.2	204.8
85°	31.2	29.8	48.2	134.3	285.7	1534.0	2574.6	2162.1	1166.9	118.7	149.9
87.5°	10.9	9.5	18.9	73.3	87.5	653.2	1588.8	1634.2	459.3	71.9	70.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P299995

CATALOG NUMBER: GLNA-AF-06-LED-E1-SL3-7060-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7191.1	7191.1	7191.1	7191.1	7191.1	7191.1	7191.1	7191.1	7191.1	7191.1	7191.1
2.5°	7127.3	7030.3	6852.4	6669.4	6500.5	6297.6	6195.9	6096.1	6054.0	6038.4	5965.1
5°	6921.0	6756.9	6379.0	5999.1	5649.1	5277.3	5032.3	4835.5	4719.7	4663.4	4574.4
7.5°	6657.1	6388.4	5814.7	5229.1	4683.7	4146.4	3748.1	3441.6	3230.6	3129.4	3037.2
10°	6400.7	6043.1	5227.7	4429.2	3688.5	2976.2	2426.0	2027.8	1773.3	1656.0	1581.3
12.5°	6171.3	5707.3	4660.5	3649.7	2719.8	1885.9	1326.3	1009.4	851.4	796.5	770.1
15°	5966.5	5397.9	4124.6	2909.0	1841.9	1078.0	725.1	617.3	592.2	592.2	588.9
17.5°	5772.6	5094.7	3607.1	2213.7	1156.0	659.4	551.5	537.3	537.3	543.5	543.5
20°	5586.7	4805.7	3107.2	1588.8	728.0	523.1	498.5	495.2	498.5	506.1	506.1
22.5°	5427.3	4543.2	2640.3	1090.3	540.6	471.6	459.3	454.6	456.0	460.7	464.0
25°	5308.5	4321.4	2200.0	738.8	465.4	429.5	415.8	407.7	401.6	401.6	404.4
27.5°	5233.8	4134.1	1773.3	537.3	418.6	390.7	368.5	356.2	342.0	334.4	337.3
30°	5178.9	3955.7	1373.1	438.9	375.1	346.7	318.8	298.5	278.1	268.7	272.0
32.5°	5158.6	3812.0	1026.4	387.4	335.8	304.6	270.1	243.6	221.8	213.8	215.7
35°	5213.5	3698.0	751.6	350.0	304.6	265.4	226.6	196.8	179.7	175.0	176.4
37.5°	5357.3	3636.9	562.4	318.8	276.7	232.7	189.2	160.8	149.9	149.9	151.4
40°	5628.8	3635.5	451.7	297.0	251.6	201.5	156.1	135.8	129.6	132.9	134.3
42.5°	6025.6	3718.3	393.5	276.7	229.9	171.7	129.6	115.4	114.0	117.3	118.7
45°	6567.7	3869.7	362.3	259.2	206.2	143.8	109.3	99.8	99.8	104.5	106.4
47.5°	7231.8	4091.5	335.8	242.2	182.6	120.1	93.7	87.5	88.9	93.7	95.1
50°	8031.6	4371.5	309.3	223.3	165.6	99.8	81.4	76.6	78.0	84.2	86.1
52.5°	8942.6	4748.0	287.6	206.2	143.8	82.8	68.6	65.7	68.6	75.2	76.6
55°	9723.6	5085.3	261.1	192.0	115.4	68.6	56.3	56.3	59.6	67.2	68.6
57.5°	10475.2	5438.1	237.4	165.6	90.8	54.9	46.8	48.2	53.0	61.0	62.4
60°	11578.2	6036.5	209.5	139.1	68.6	43.5	39.3	40.7	46.8	54.9	56.3
62.5°	13451.3	6947.5	181.2	115.4	53.0	34.5	31.2	34.5	42.1	51.6	53.0
65°	15141.9	7317.9	148.5	97.0	40.7	26.5	26.5	31.2	40.7	50.1	51.6
67.5°	14199.6	6160.0	115.4	76.6	31.2	20.3	21.8	29.8	39.3	50.1	51.6
69°	12557.8	5037.0	98.4	61.0	26.5	18.9	20.3	29.8	39.3	48.2	50.1
70°	11278.4	4252.8	87.5	51.6	23.7	18.9	20.3	27.9	39.3	48.2	50.1
72.5°	7553.9	2296.4	70.5	37.4	21.8	17.0	17.0	27.9	37.4	46.8	48.2
75°	3246.2	634.3	56.3	26.5	18.9	15.6	15.6	26.5	35.9	45.4	48.2
77.5°	593.6	160.8	45.4	23.7	18.9	15.6	14.2	25.1	34.5	43.5	45.4
80°	236.0	79.5	35.9	20.3	17.0	14.2	12.3	23.7	32.6	42.1	43.5
82.5°	142.4	45.4	29.8	18.9	17.0	12.3	10.9	20.3	31.2	40.7	42.1
85°	115.4	31.2	23.7	18.9	15.6	12.3	9.5	18.9	27.9	39.3	40.7
87.5°	56.3	21.8	21.8	17.0	15.6	12.3	9.5	17.0	26.5	37.4	39.3
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)