

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: P300958

Luminaire Tested: **GLNA-AF-10-LED-E1-SL4-7050-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300958  
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-10-LED-E1-SL4-7050-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(10) 70 CRI, 5000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V  
Square Wide OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 45070.1 lumens  
Efficiency: N/A  
Efficacy: 107.6 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G5  
  
Input Watts (W): 419  
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

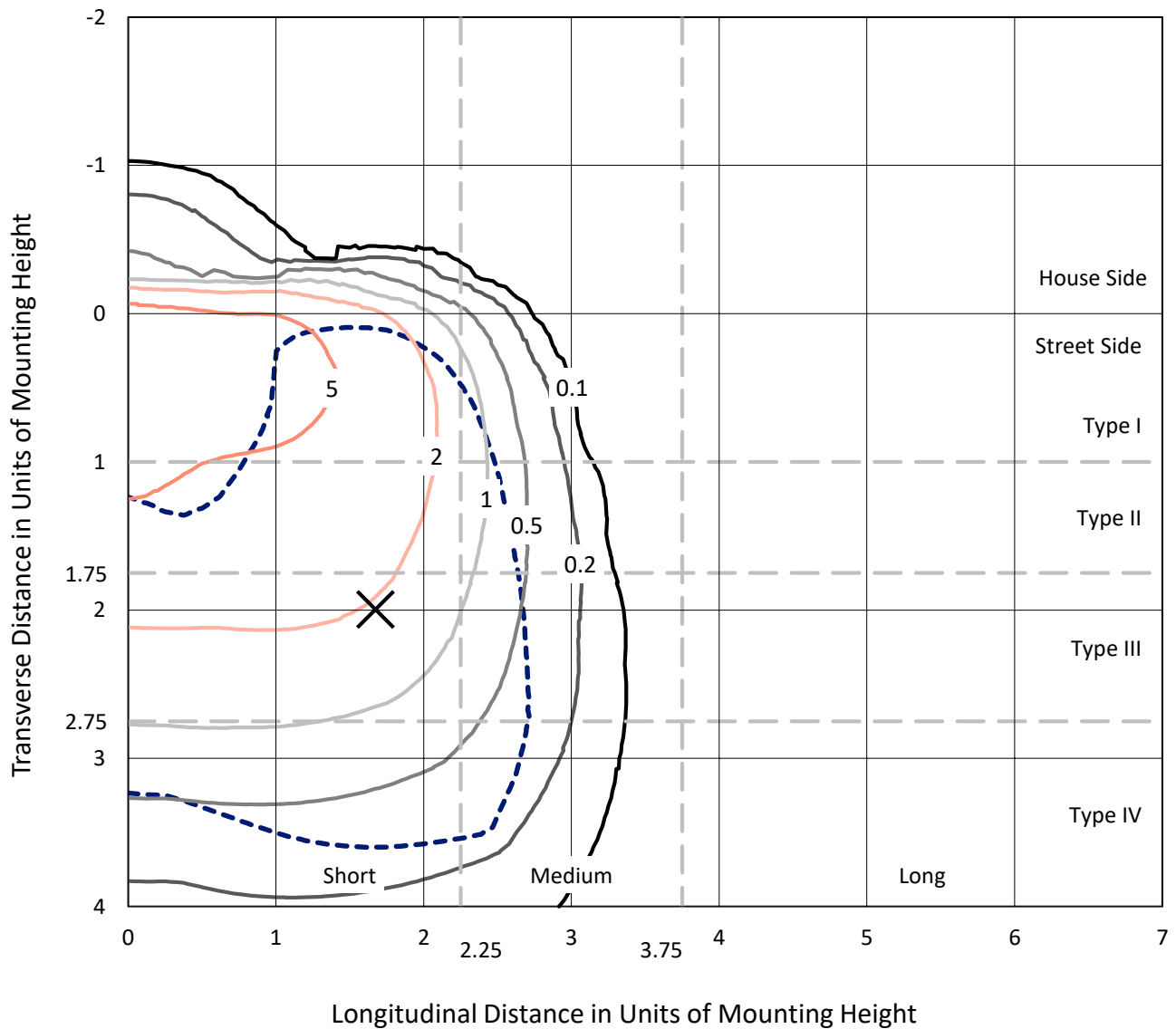


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### Iso-Footcandle Lines of Horizontal Illumination

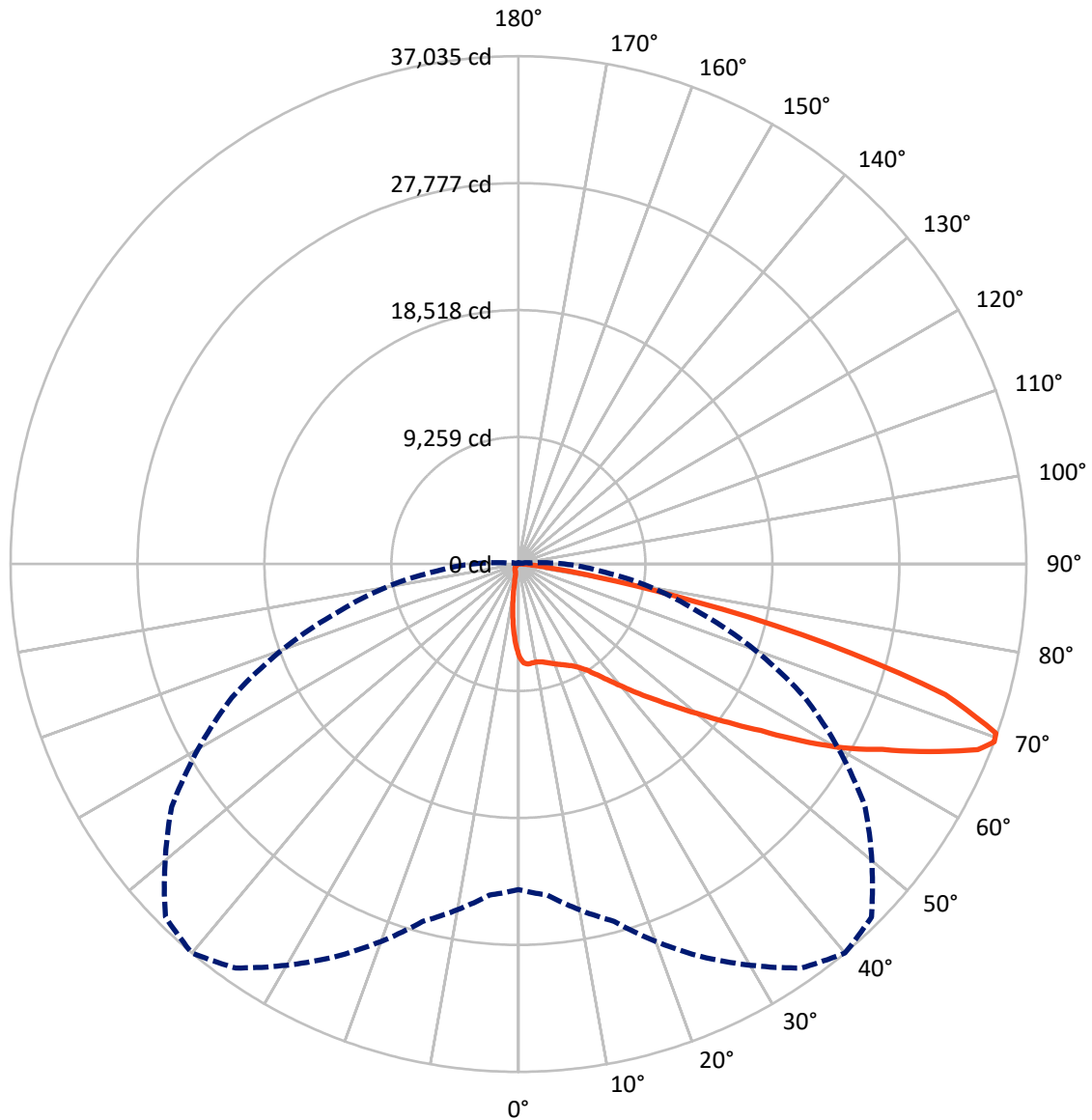
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.2 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
<b>House Side</b>	Lumens	2636.9	0.0	2636.9
	% Fixture	5.9	0.0	5.9
<b>Street Side</b>	Lumens	42433.2	0.0	42433.2
	% Fixture	94.1	0.0	94.1
<b>Total</b>	Lumens	45070.1	0.0	45070.1
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	546.0	1.2
10°-20°	1342.6	3.0
20°-30°	2261.5	5.0
30°-40°	3702.1	8.2
40°-50°	6410.1	14.2
50°-60°	10096.5	22.4
60°-70°	13185.6	29.3
70°-80°	6791.2	15.1
80°-90°	734.6	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°	45070.1	100.0
0°-180°	45070.1	100.0



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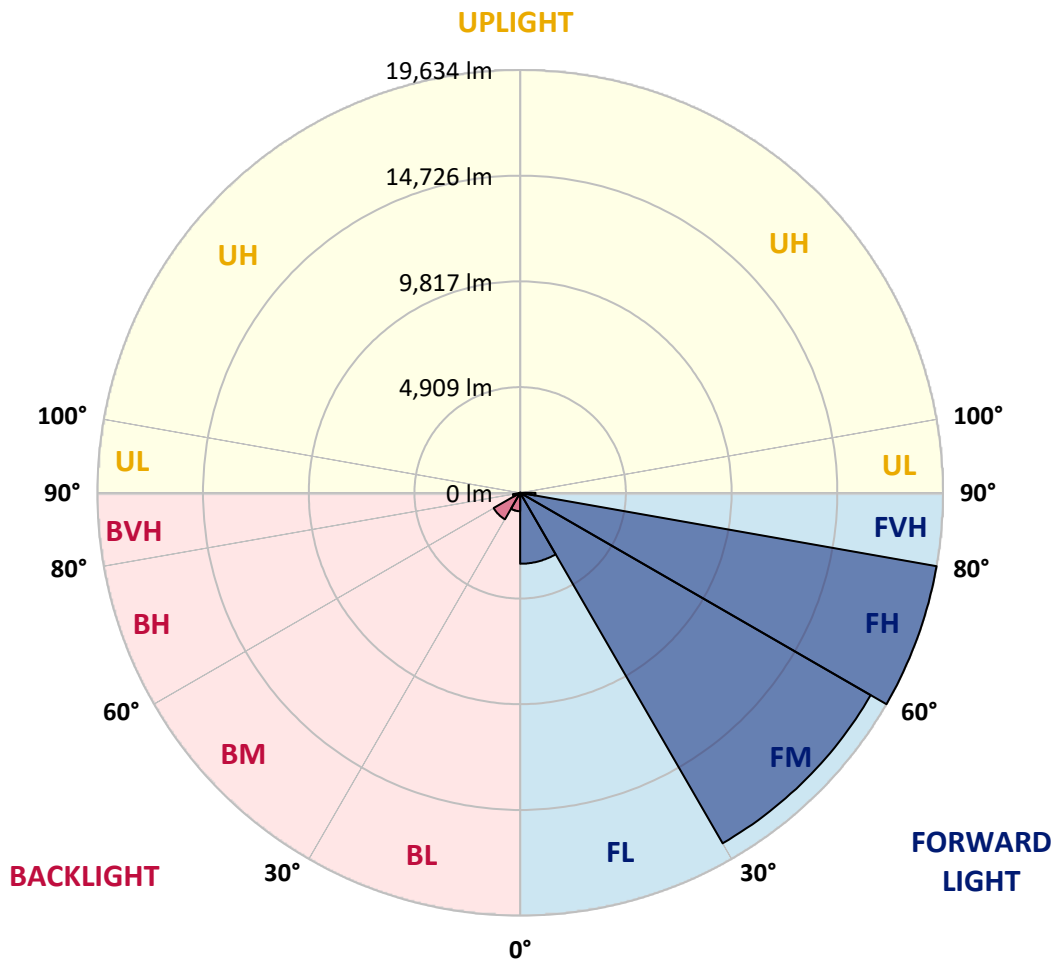
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3295.9	7.3			
FM (30°-60°)	18791.4	41.7			
FH (60°-80°)	19634.4	43.6			G5
FVH (80°-90°)	711.5	1.6			G4/750
BL (0°-30°)	854.2	1.9	B2/1000		
BM (30°-60°)	1417.2	3.1	B2/2500		
BH (60°-80°)	342.4	0.8	B1/500		G1/500
BVH (80°-90°)	23.1	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G5**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	6733.7	6733.7	6733.7	6733.7	6733.7	6733.7	6733.7	6733.7	6733.7	6733.7	6733.7
2.5°	7393.7	7353.4	7329.3	7297.1	7256.8	7222.0	7208.5	7109.3	7015.4	6886.6	6739.1
5°	7530.5	7517.1	7474.1	7431.2	7382.9	7329.3	7299.8	7181.7	7047.6	6859.8	6602.2
7.5°	7543.9	7527.8	7474.1	7415.1	7348.1	7283.7	7232.7	7114.7	6991.2	6800.8	6486.9
10°	7522.4	7503.6	7463.4	7399.0	7315.9	7254.2	7203.2	7090.5	6985.9	6814.2	6465.4
12.5°	7498.3	7479.5	7460.7	7428.5	7356.1	7313.2	7270.3	7162.9	7069.0	6924.2	6543.2
15°	7522.4	7511.7	7533.2	7519.7	7479.5	7441.9	7399.0	7302.4	7216.6	7095.9	6685.4
17.5°	7624.4	7624.4	7691.4	7699.5	7661.9	7608.3	7546.6	7450.0	7377.6	7275.6	6854.4
20°	7863.1	7855.1	7940.9	7957.0	7865.8	7782.7	7691.4	7573.4	7517.1	7452.7	7020.8
22.5°	8273.6	8236.0	8287.0	8270.9	8091.2	7962.4	7849.7	7704.9	7675.3	7645.8	7205.9
25°	8807.5	8786.0	8820.9	8662.6	8346.0	8171.7	8037.5	7873.9	7873.9	7903.4	7415.1
27.5°	9582.8	9502.3	9384.3	9105.3	8630.4	8407.7	8262.9	8088.5	8134.1	8244.1	7691.4
30°	10376.9	10288.3	10017.4	9588.1	8976.5	8743.1	8574.1	8391.6	8498.9	8700.2	8061.7
32.5°	11160.2	11061.0	10677.3	10135.4	9472.8	9239.4	9075.7	8874.5	9054.3	9392.3	8603.6
35°	11919.5	11830.9	11388.3	10749.8	10132.7	9939.6	9789.4	9615.0	9845.7	10317.9	9368.2
37.5°	12772.6	12676.0	12136.8	11444.6	10934.9	10795.4	10685.4	10511.0	10913.4	11605.6	10433.2
40°	13821.5	13657.9	12930.9	12241.4	11863.1	11796.0	11720.9	11696.8	12321.9	13279.6	11852.4
42.5°	15023.4	14755.1	13762.5	13081.1	12882.6	12930.9	12912.1	13019.4	14084.4	15361.4	13580.1
45°	16225.3	15879.2	14688.1	13977.1	14004.0	14173.0	14277.6	14706.8	16292.3	17749.1	15439.2
47.5°	17244.7	16904.0	15576.0	14945.6	15267.5	15600.2	15884.6	16697.4	18561.9	20099.2	16885.2
50°	18116.6	17794.7	16517.7	16010.6	16735.0	17271.5	17733.0	18937.5	21003.2	21888.6	17899.3
52.5°	18830.2	18615.6	17494.2	17231.3	18411.7	19197.8	19873.8	21317.1	23165.5	23342.6	18688.0
55°	19525.0	19372.1	18543.2	18682.7	20380.8	21451.3	22307.1	23841.6	25027.4	24555.2	19444.6
57.5°	20324.5	20185.0	19739.7	20523.0	22969.7	24316.4	25250.0	26079.0	26666.5	25794.6	20158.2
60°	21140.1	21059.6	21070.3	22567.3	25942.2	27235.3	27750.4	27965.0	28276.2	26961.6	20198.4
62.5°	21918.1	22071.0	22591.4	24842.3	28788.6	29781.2	30041.4	30253.4	29888.5	27146.7	18661.2
65°	23235.3	23484.8	24726.9	27887.2	31919.3	32981.7	33250.0	32523.0	30143.4	24753.7	15179.0
67.5°	23879.2	24335.2	26551.2	30725.5	34956.2	36136.6	36037.4	32670.5	27050.2	18875.8	9741.1
69°	23745.0	24230.6	26972.4	31594.7	35964.9	37035.4	36404.9	30865.0	23044.8	13674.0	5979.8
70°	23213.8	23704.8	26755.1	31562.5	36093.7	36941.5	35723.5	28635.7	19484.8	9998.6	3739.8
72.5°	19385.5	19809.4	23753.1	28528.4	33250.0	32560.5	29885.8	19838.9	9494.2	2723.0	842.4
75°	11932.9	12169.0	17043.5	21491.5	25113.2	23342.6	19911.4	9869.8	2830.3	769.9	466.8
77.5°	6304.5	6411.8	9330.6	12667.9	15919.4	13172.3	10205.2	3849.7	1303.8	482.9	338.0
80°	3726.3	3806.8	5024.8	5792.1	6889.3	5754.5	4080.5	2363.5	933.6	303.2	300.5
82.5°	2132.8	2183.8	3643.2	3219.3	2714.9	2317.9	2030.8	2240.1	560.7	203.9	311.2
85°	783.4	794.1	2049.6	2449.4	1615.0	960.4	1008.7	1856.5	150.2	128.8	244.1
87.5°	364.9	356.8	1054.3	1499.7	944.3	609.0	786.0	407.8	59.0	83.2	67.1
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°	6733.7	6733.7	6733.7	6733.7	6733.7	6733.7	6733.7	6733.7	6733.7	6733.7	6733.7
2.5°	6653.2	6554.0	6374.2	6189.1	6001.3	5856.4	5714.3	5601.6	5564.0	5494.3	5499.6
5°	6449.3	6266.9	5891.3	5510.4	5113.3	4786.0	4477.5	4228.0	4107.3	3983.9	3983.9
7.5°	6272.3	6006.7	5419.2	4799.4	4158.3	3619.0	3133.5	2768.6	2567.4	2406.4	2403.7
10°	6205.2	5845.7	5024.8	4136.8	3243.4	2508.4	1931.6	1561.4	1370.9	1247.5	1242.1
12.5°	6234.7	5789.4	4721.6	3525.1	2403.7	1612.3	1118.7	879.9	799.5	761.9	761.9
15°	6320.6	5773.3	4418.5	2926.9	1698.2	1008.7	743.1	678.7	673.4	673.4	673.4
17.5°	6425.2	5778.6	4107.3	2344.7	1156.3	721.7	641.2	633.1	638.5	638.5	638.5
20°	6532.5	5781.3	3771.9	1805.5	815.6	627.8	603.6	600.9	606.3	606.3	609.0
22.5°	6663.9	5794.7	3436.6	1349.4	673.4	592.9	574.1	574.1	576.8	576.8	574.1
25°	6814.2	5821.6	3087.8	1000.7	614.3	568.7	552.6	550.0	552.6	550.0	547.3
27.5°	7002.0	5859.1	2698.8	783.4	587.5	544.6	531.2	531.2	528.5	525.8	523.1
30°	7238.1	5902.0	2261.6	665.3	560.7	523.1	509.7	507.0	504.4	499.0	499.0
32.5°	7597.5	5995.9	1829.6	603.6	531.2	493.6	482.9	482.9	477.5	472.2	469.5
35°	8150.2	6181.1	1443.3	566.1	499.0	461.4	448.0	448.0	442.7	440.0	437.3
37.5°	8914.8	6462.7	1121.4	531.2	466.8	426.6	413.1	410.5	405.1	399.7	397.0
40°	9931.5	6811.5	882.6	499.0	434.6	391.7	381.0	375.6	364.9	356.8	356.8
42.5°	11208.5	7208.5	716.3	464.1	397.0	359.5	351.4	343.4	324.6	316.6	313.9
45°	12544.5	7565.4	606.3	423.9	359.5	327.3	321.9	308.5	284.4	276.3	276.3
47.5°	13507.6	7648.5	533.9	386.3	324.6	292.4	289.7	265.6	244.1	238.8	236.1
50°	14108.6	7484.9	474.8	348.8	292.4	260.2	252.2	222.7	209.3	203.9	201.2
52.5°	14513.7	7192.5	426.6	316.6	262.9	230.7	211.9	190.5	179.7	174.4	174.4
55°	14838.3	6779.3	378.3	287.1	238.8	206.6	179.7	163.6	152.9	147.6	147.6
57.5°	14929.5	6218.6	330.0	262.9	214.6	182.4	152.9	142.2	128.8	126.1	126.1
60°	14266.9	5207.2	292.4	233.4	193.2	158.3	134.1	120.7	107.3	104.6	101.9
62.5°	12520.4	4029.5	257.5	206.6	169.0	136.8	115.4	99.3	88.5	88.5	88.5
65°	9550.6	2701.5	225.4	179.7	147.6	115.4	99.3	80.5	75.1	75.1	77.8
67.5°	5716.9	1470.1	193.2	152.9	126.1	96.6	83.2	69.8	67.1	69.8	69.8
69°	3350.8	863.8	174.4	136.8	110.0	85.8	72.4	61.7	67.1	69.8	69.8
70°	2068.4	582.2	161.0	123.4	99.3	77.8	67.1	59.0	64.4	67.1	67.1
72.5°	576.8	300.5	128.8	96.6	80.5	64.4	53.7	53.7	61.7	64.4	64.4
75°	375.6	222.7	99.3	72.4	61.7	51.0	45.6	51.0	59.0	61.7	61.7
77.5°	311.2	182.4	80.5	59.0	51.0	48.3	42.9	45.6	53.7	56.3	56.3
80°	284.4	128.8	64.4	53.7	45.6	42.9	40.2	37.6	48.3	51.0	51.0
82.5°	271.0	101.9	56.3	48.3	42.9	37.6	34.9	37.6	42.9	45.6	48.3
85°	169.0	67.1	51.0	45.6	37.6	34.9	34.9	34.9	40.2	42.9	42.9
87.5°	61.7	53.7	45.6	37.6	32.2	32.2	32.2	32.2	34.9	40.2	40.2
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)