

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: P300948

Luminaire Tested: **GLNA-AF-09-LED-E1-SL4-7027-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300948  
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-09-LED-E1-SL4-7027-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(9) 70 CRI, 2700K 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: 35368.5 lumens  
Efficiency: N/A  
Efficacy: 94.6 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

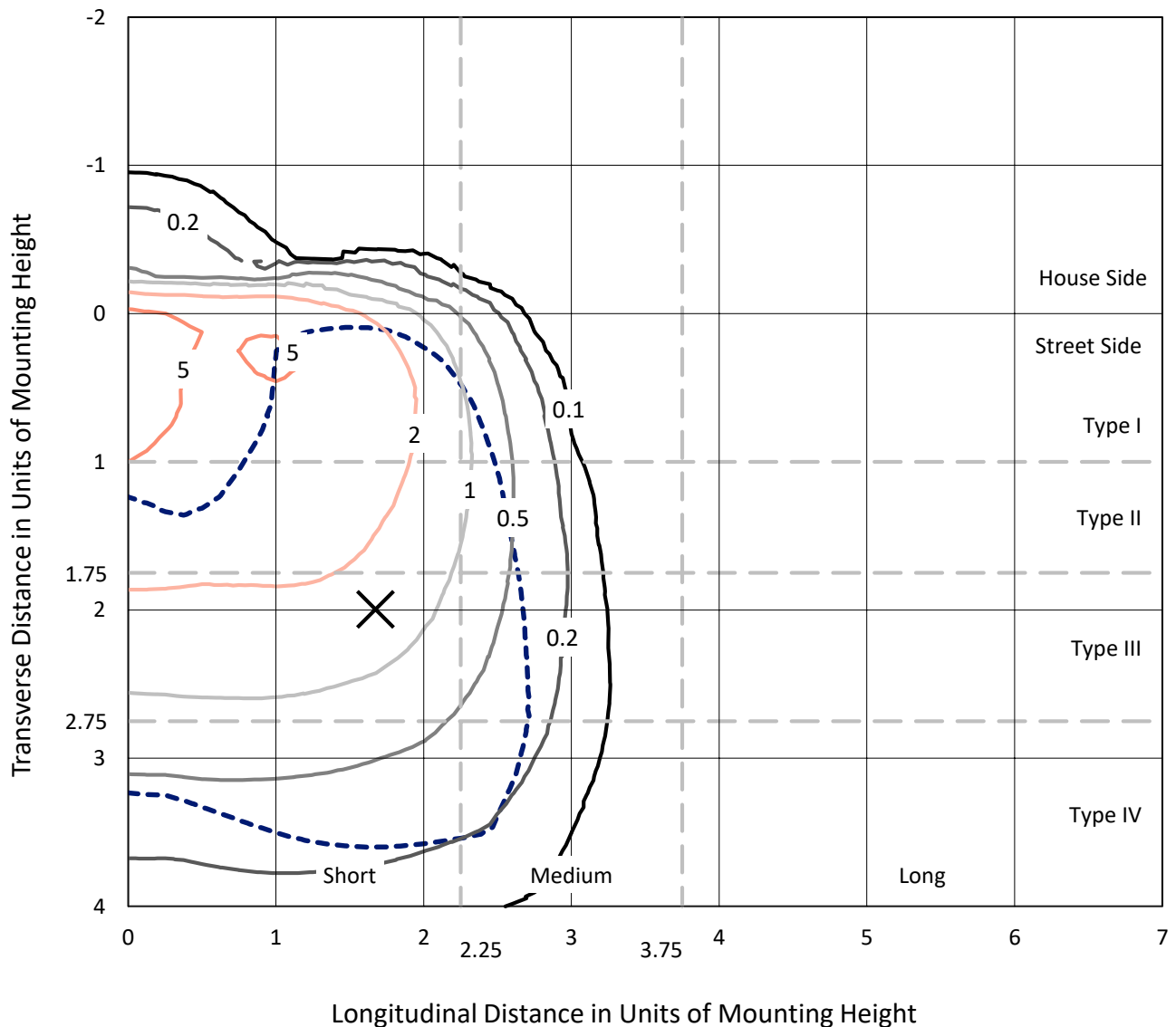
Input Watts (W): 374  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P300948  
 CATALOG NUMBER: GLNA-AF-09-LED-E1-SL4-7027-800

### Iso-Footcandle Lines of Horizontal Illumination

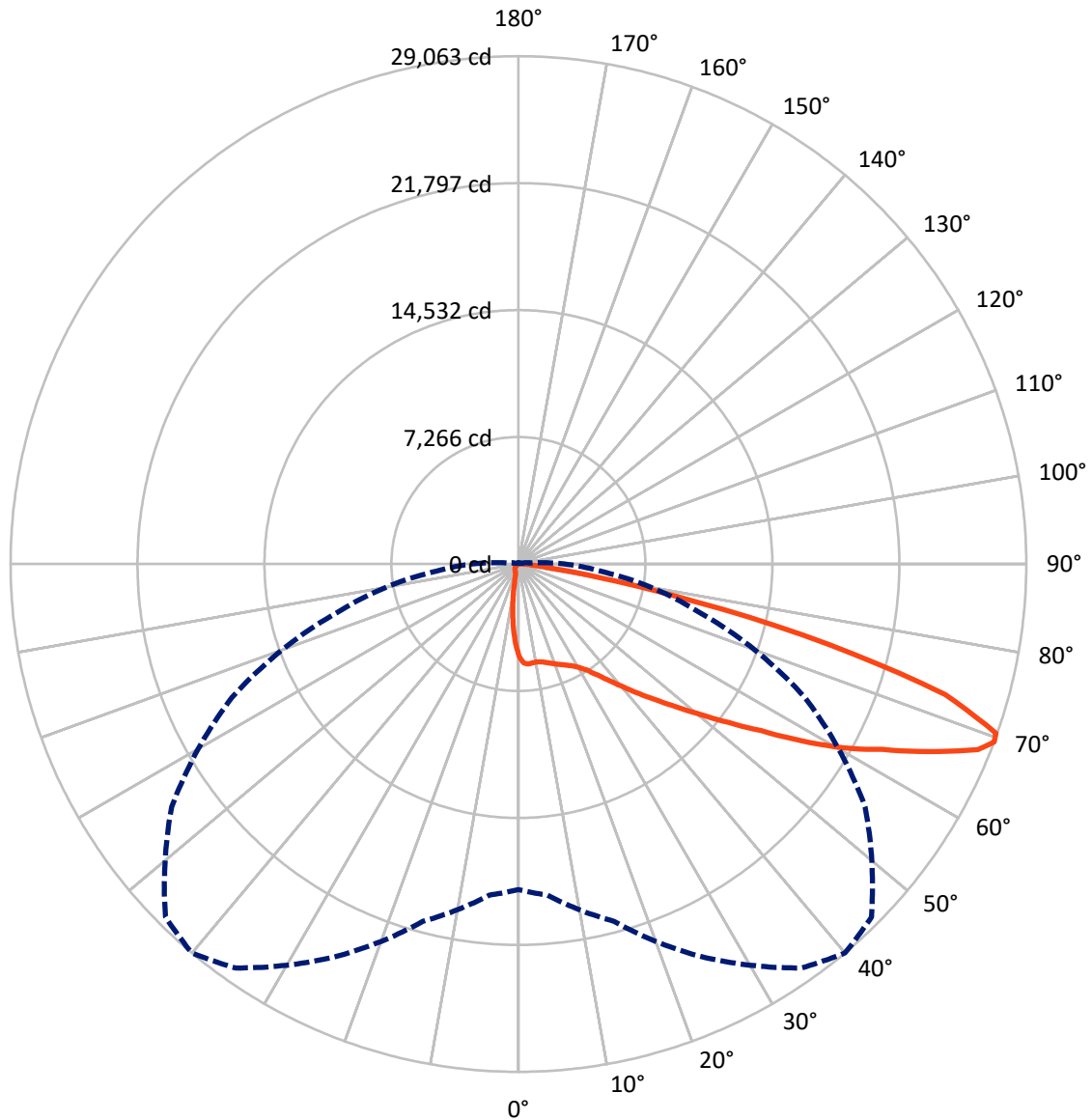
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.4 fc  
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P300948  
CATALOG NUMBER: GLNA-AF-09-LED-E1-SL4-7027-800

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P300948

CATALOG NUMBER: GLNA-AF-09-LED-E1-SL4-7027-800

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2069.3	0.0	2069.3
	% Fixture	5.9	0.0	5.9
<b>Street Side</b>	Lumens	33299.3	0.0	33299.3
	% Fixture	94.1	0.0	94.1
<b>Total</b>	Lumens	35368.5	0.0	35368.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	428.4	1.2
10°-20°	1053.6	3.0
20°-30°	1774.7	5.0
30°-40°	2905.2	8.2
40°-50°	5030.3	14.2
50°-60°	7923.2	22.4
60°-70°	10347.3	29.3
70°-80°	5329.3	15.1
80°-90°	576.5	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°	35368.5	100.0
0°-180°	35368.5	100.0

**Coefficient of Utilization**



REPORT NUMBER: P300948

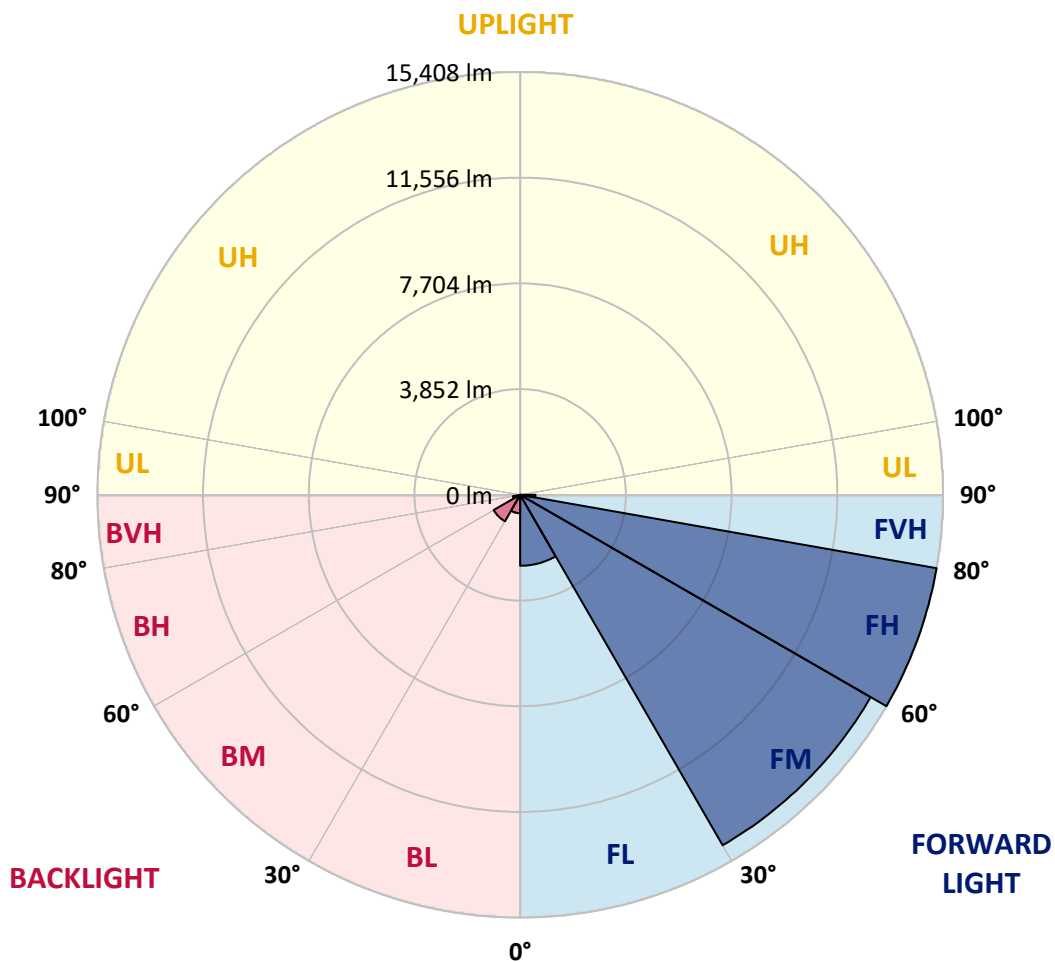
CATALOG NUMBER: GLNA-AF-09-LED-E1-SL4-7027-800

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2586.5	7.3			
FM	(30°-60°)	14746.5	41.7			
FH	(60°-80°)	15408.0	43.6			G5
FVH	(80°-90°)	558.4	1.6			G4/750
BL	(0°-30°)	670.3	1.9	B2/1000		
BM	(30°-60°)	1112.2	3.1	B2/2500		
BH	(60°-80°)	268.7	0.8	B1/500		G1/500
BVH	(80°-90°)	18.1	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





REPORT NUMBER: P300948

CATALOG NUMBER: GLNA-AF-09-LED-E1-SL4-7027-800

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	5284.2	5284.2	5284.2	5284.2	5284.2	5284.2	5284.2	5284.2	5284.2	5284.2	5284.2
2.5°	5802.1	5770.6	5751.6	5726.3	5694.8	5667.4	5656.9	5579.0	5505.3	5404.2	5288.5
5°	5909.5	5899.0	5865.3	5831.6	5793.7	5751.6	5728.5	5635.8	5530.6	5383.2	5181.1
7.5°	5920.0	5907.4	5865.3	5819.0	5766.3	5715.8	5675.8	5583.2	5486.3	5336.9	5090.6
10°	5903.2	5888.5	5856.9	5806.3	5741.1	5692.7	5652.7	5564.2	5482.1	5347.4	5073.7
12.5°	5884.2	5869.5	5854.8	5829.5	5772.7	5739.0	5705.3	5621.1	5547.4	5433.7	5134.8
15°	5903.2	5894.8	5911.6	5901.1	5869.5	5840.0	5806.3	5730.6	5663.2	5568.5	5246.3
17.5°	5983.2	5983.2	6035.8	6042.1	6012.7	5970.6	5922.1	5846.3	5789.5	5709.5	5379.0
20°	6170.6	6164.2	6231.6	6244.2	6172.7	6107.4	6035.8	5943.2	5899.0	5848.5	5509.5
22.5°	6492.7	6463.2	6503.2	6490.6	6349.5	6248.5	6160.0	6046.4	6023.2	6000.0	5654.8
25°	6911.6	6894.8	6922.1	6797.9	6549.5	6412.7	6307.4	6179.0	6179.0	6202.1	5819.0
27.5°	7520.0	7456.9	7364.3	7145.3	6772.7	6597.9	6484.2	6347.4	6383.2	6469.5	6035.8
30°	8143.2	8073.7	7861.1	7524.3	7044.3	6861.1	6728.5	6585.3	6669.5	6827.4	6326.4
32.5°	8757.9	8680.0	8379.0	7953.7	7433.7	7250.6	7122.1	6964.3	7105.3	7370.6	6751.6
35°	9353.7	9284.3	8936.9	8435.8	7951.6	7800.0	7682.1	7545.3	7726.4	8096.9	7351.6
37.5°	10023.2	9947.4	9524.3	8981.1	8581.1	8471.6	8385.3	8248.5	8564.3	9107.4	8187.4
40°	10846.4	10718.0	10147.4	9606.4	9309.5	9256.9	9197.9	9179.0	9669.5	10421.1	9301.1
42.5°	11789.5	11579.0	10800.1	10265.3	10109.5	10147.4	10132.7	10216.9	11052.7	12054.8	10656.9
45°	12732.7	12461.1	11526.4	10968.5	10989.5	11122.2	11204.3	11541.1	12785.3	13928.5	12115.9
47.5°	13532.7	13265.3	12223.2	11728.5	11981.1	12242.2	12465.3	13103.2	14566.4	15772.7	13250.6
50°	14216.9	13964.3	12962.2	12564.3	13132.7	13553.8	13915.9	14861.1	16482.2	17176.9	14046.4
52.5°	14776.9	14608.5	13728.5	13522.2	14448.5	15065.3	15595.9	16728.5	18179.1	18318.0	14665.3
55°	15322.2	15202.2	14551.7	14661.1	15993.8	16833.8	17505.4	18709.6	19640.1	19269.6	15259.0
57.5°	15949.6	15840.1	15490.6	16105.4	18025.4	19082.2	19814.9	20465.4	20926.4	20242.2	15819.0
60°	16589.6	16526.4	16534.8	17709.6	20358.0	21372.8	21777.0	21945.4	22189.6	21158.0	15850.6
62.5°	17200.1	17320.1	17728.5	19494.8	22591.7	23370.7	23574.9	23741.2	23454.9	21303.3	14644.3
65°	18233.8	18429.6	19404.3	21884.3	25048.6	25882.3	26092.8	25522.3	23654.9	19425.4	11911.6
67.5°	18739.1	19097.0	20835.9	24111.7	27431.7	28358.1	28280.2	25638.0	21227.5	14812.7	7644.3
69°	18633.8	19014.8	21166.4	24793.8	28223.3	29063.3	28568.6	24221.2	18084.3	10730.6	4692.7
70°	18216.9	18602.2	20995.9	24768.6	28324.4	28989.6	28033.8	22471.7	15290.6	7846.4	2934.8
72.5°	15212.7	15545.4	18640.1	22387.5	26092.8	25551.7	23452.8	15568.5	7450.6	2136.9	661.1
75°	9364.3	9549.5	13374.8	16865.4	19707.5	18318.0	15625.4	7745.3	2221.1	604.2	366.3
77.5°	4947.4	5031.6	7322.1	9941.1	12492.7	10336.9	8008.5	3021.1	1023.2	378.9	265.3
80°	2924.2	2987.4	3943.2	4545.3	5406.3	4515.8	3202.1	1854.7	732.6	237.9	235.8
82.5°	1673.7	1713.7	2859.0	2526.3	2130.5	1819.0	1593.7	1757.9	440.0	160.0	244.2
85°	614.7	623.2	1608.4	1922.1	1267.4	753.7	791.6	1456.9	117.9	101.1	191.6
87.5°	286.3	280.0	827.4	1176.8	741.1	477.9	616.8	320.0	46.3	65.3	52.6
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: P300948

CATALOG NUMBER: GLNA-AF-09-LED-E1-SL4-7027-800

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5284.2	5284.2	5284.2	5284.2	5284.2	5284.2	5284.2	5284.2	5284.2	5284.2	5284.2
2.5°	5221.1	5143.2	5002.1	4856.9	4709.5	4595.8	4484.2	4395.8	4366.3	4311.6	4315.8
5°	5061.1	4917.9	4623.2	4324.2	4012.7	3755.8	3513.7	3317.9	3223.2	3126.3	3126.3
7.5°	4922.1	4713.7	4252.7	3766.3	3263.2	2840.0	2459.0	2172.6	2014.7	1888.4	1886.3
10°	4869.5	4587.4	3943.2	3246.3	2545.3	1968.4	1515.8	1225.3	1075.8	979.0	974.7
12.5°	4892.7	4543.2	3705.3	2766.3	1886.3	1265.3	877.9	690.5	627.4	597.9	597.9
15°	4960.0	4530.6	3467.4	2296.9	1332.6	791.6	583.2	532.6	528.4	528.4	528.4
17.5°	5042.1	4534.8	3223.2	1840.0	907.4	566.3	503.2	496.8	501.1	501.1	501.1
20°	5126.3	4536.9	2960.0	1416.9	640.0	492.6	473.7	471.6	475.8	475.8	477.9
22.5°	5229.5	4547.4	2696.9	1059.0	528.4	465.3	450.5	450.5	452.6	452.6	450.5
25°	5347.4	4568.4	2423.2	785.3	482.1	446.3	433.7	431.6	433.7	431.6	429.5
27.5°	5494.8	4597.9	2117.9	614.7	461.1	427.4	416.8	416.8	414.7	412.6	410.5
30°	5680.0	4631.6	1774.7	522.1	440.0	410.5	400.0	397.9	395.8	391.6	391.6
32.5°	5962.1	4705.3	1435.8	473.7	416.8	387.4	378.9	378.9	374.7	370.5	368.4
35°	6395.8	4850.6	1132.6	444.2	391.6	362.1	351.6	351.6	347.4	345.3	343.2
37.5°	6995.8	5071.6	880.0	416.8	366.3	334.7	324.2	322.1	317.9	313.7	311.6
40°	7793.7	5345.3	692.6	391.6	341.1	307.4	298.9	294.7	286.3	280.0	280.0
42.5°	8795.8	5656.9	562.1	364.2	311.6	282.1	275.8	269.5	254.7	248.4	246.3
45°	9844.3	5936.9	475.8	332.6	282.1	256.8	252.6	242.1	223.2	216.8	216.8
47.5°	10600.1	6002.1	418.9	303.2	254.7	229.5	227.4	208.4	191.6	187.4	185.3
50°	11071.6	5873.7	372.6	273.7	229.5	204.2	197.9	174.7	164.2	160.0	157.9
52.5°	11389.5	5644.2	334.7	248.4	206.3	181.1	166.3	149.5	141.1	136.8	136.8
55°	11644.3	5320.0	296.8	225.3	187.4	162.1	141.1	128.4	120.0	115.8	115.8
57.5°	11715.9	4880.0	258.9	206.3	168.4	143.2	120.0	111.6	101.1	98.9	98.9
60°	11195.9	4086.3	229.5	183.2	151.6	124.2	105.3	94.7	84.2	82.1	80.0
62.5°	9825.3	3162.1	202.1	162.1	132.6	107.4	90.5	77.9	69.5	69.5	69.5
65°	7494.8	2120.0	176.8	141.1	115.8	90.5	77.9	63.2	58.9	58.9	61.1
67.5°	4486.3	1153.7	151.6	120.0	98.9	75.8	65.3	54.7	52.6	54.7	54.7
69°	2629.5	677.9	136.8	107.4	86.3	67.4	56.8	48.4	52.6	54.7	54.7
70°	1623.2	456.8	126.3	96.8	77.9	61.1	52.6	46.3	50.5	52.6	52.6
72.5°	452.6	235.8	101.1	75.8	63.2	50.5	42.1	42.1	48.4	50.5	50.5
75°	294.7	174.7	77.9	56.8	48.4	40.0	35.8	40.0	46.3	48.4	48.4
77.5°	244.2	143.2	63.2	46.3	40.0	37.9	33.7	35.8	42.1	44.2	44.2
80°	223.2	101.1	50.5	42.1	35.8	33.7	31.6	29.5	37.9	40.0	40.0
82.5°	212.6	80.0	44.2	37.9	33.7	29.5	27.4	29.5	33.7	35.8	37.9
85°	132.6	52.6	40.0	35.8	29.5	27.4	27.4	27.4	31.6	33.7	33.7
87.5°	48.4	42.1	35.8	29.5	25.3	25.3	25.3	25.3	27.4	31.6	31.6
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)