

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: P299694

Luminaire Tested: **GLNA-AF-10-LED-E1-SL2-7060-800-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299694  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24287)  
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-SL2-7060-800-HSS  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(10) 70 CRI, 5700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II  
w/Spill Control WITH HOUSESIDE SHEILD OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 35811.9 lumens  
Efficiency: N/A  
Efficacy: 85.5 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B3 - 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

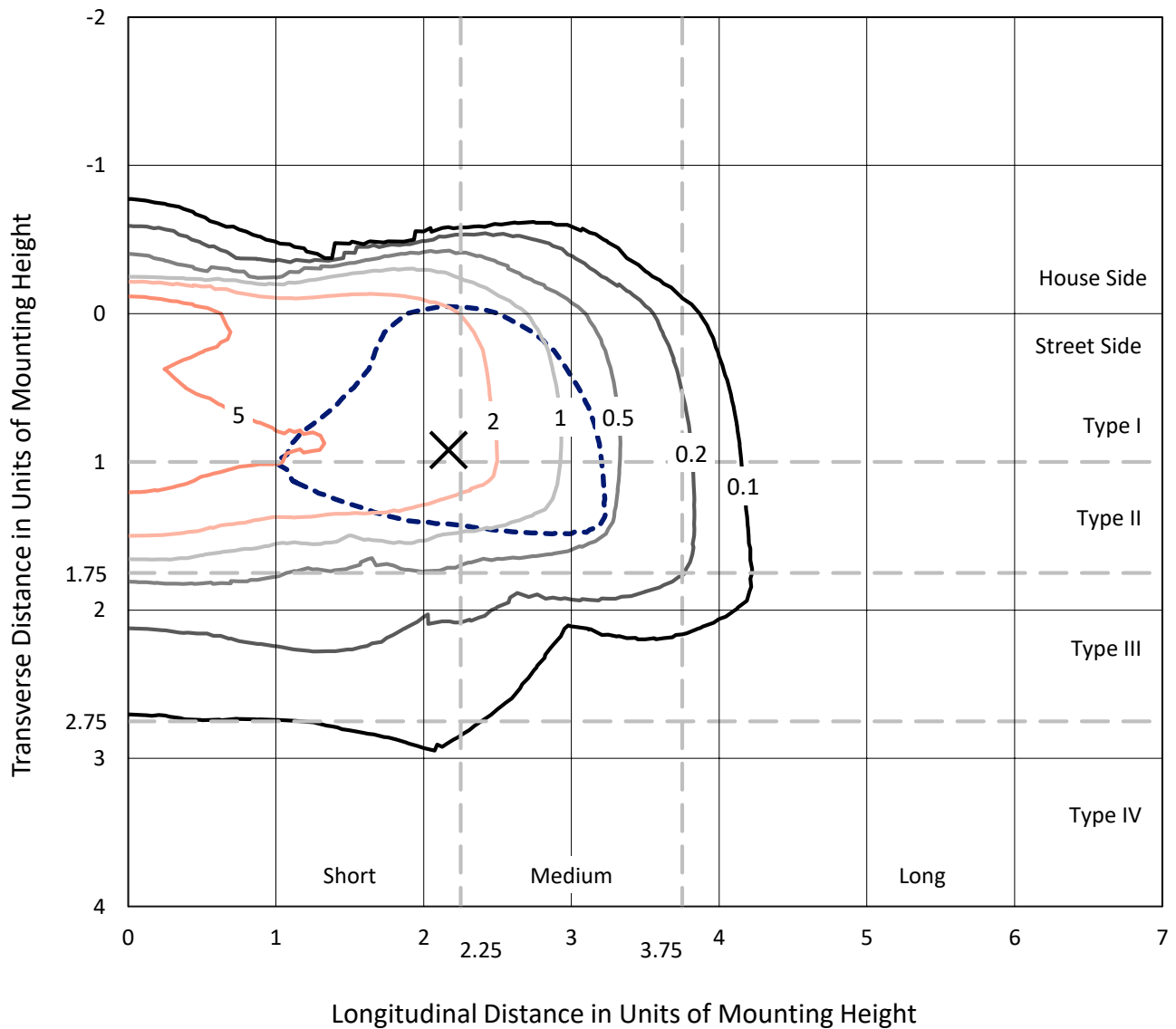


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

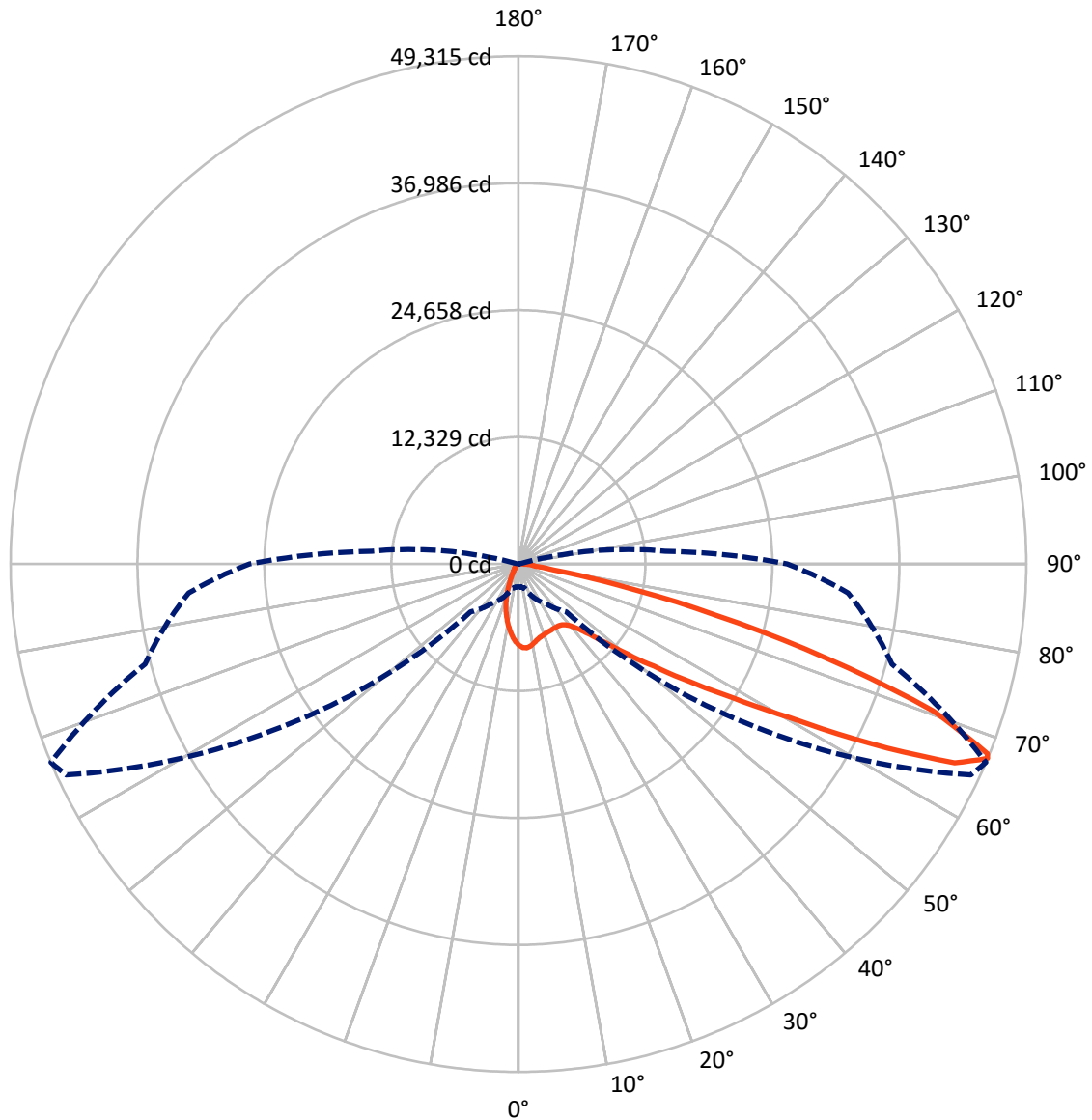


Based on 30 foot mounting height. Maximum calculated value = 8.8 fc  
 Type II - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral      - - - Horizontal Cone Through 67-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3718.3	0.0	3718.3
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	32093.6	0.0	32093.6
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	35811.9	0.0	35811.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	642.6	1.8
10°-20°	1367.8	3.8
20°-30°	1988.6	5.6
30°-40°	3102.3	8.7
40°-50°	5495.6	15.3
50°-60°	8696.3	24.3
60°-70°	9960.4	27.8
70°-80°	4131.5	11.5
80°-90°	426.8	1.2
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°	35811.9	100.0
0°-180°	35811.9	100.0



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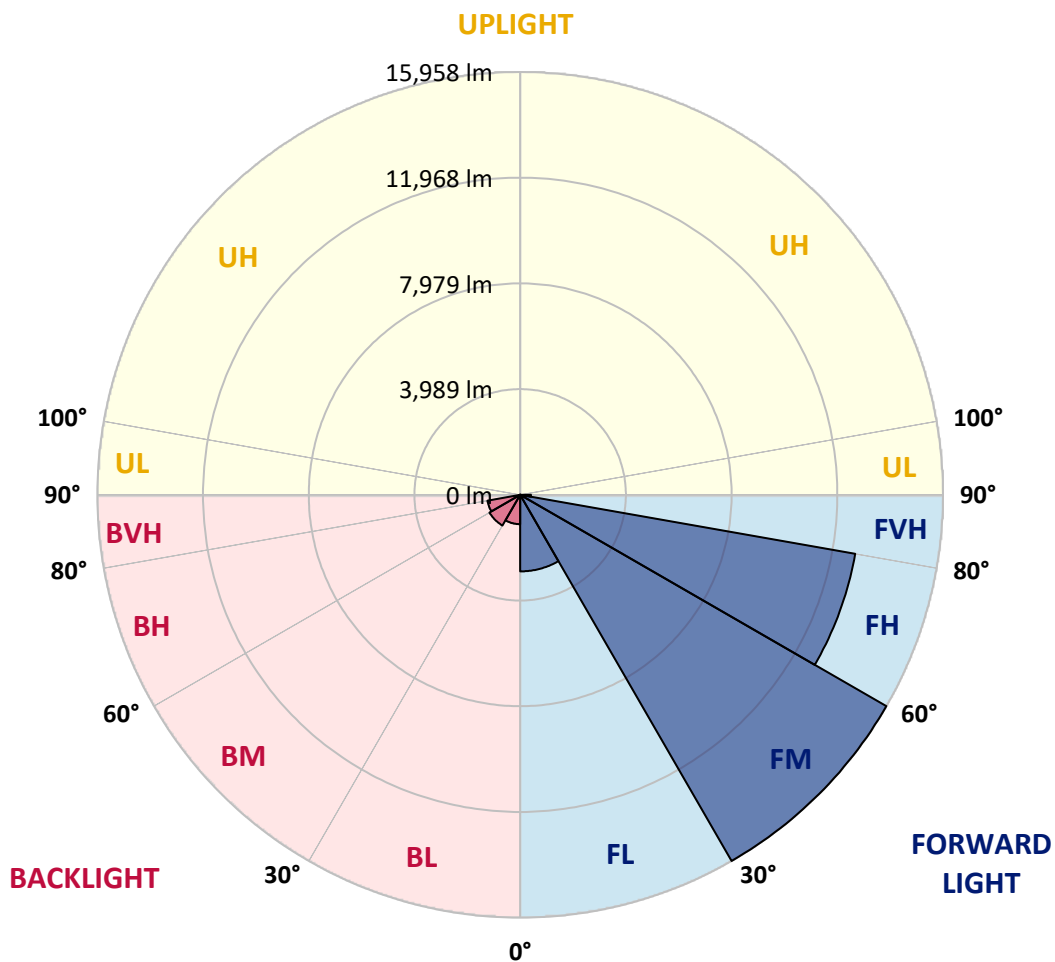
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2889.5	8.1			
FM (30°-60°)	15957.9	44.6			
FH (60°-80°)	12838.7	35.9			G5
FVH (80°-90°)	407.5	1.1			G3/500
BL (0°-30°)	1109.6	3.1	B3/2500		
BM (30°-60°)	1336.3	3.7	B2/2500		
BH (60°-80°)	1253.2	3.5	B3/2500		G3/2500
BVH (80°-90°)	19.2	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G5**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	7897.8	7897.8	7897.8	7897.8	7897.8	7897.8	7897.8	7897.8	7897.8	7897.8	7897.8
2.5°	8165.2	8181.9	8179.8	8192.4	8221.6	8223.7	8194.5	8138.1	8125.5	8052.4	7925.0
5°	7530.2	7578.3	7607.5	7726.6	7860.2	8021.1	8142.2	8186.1	8179.8	8127.6	7935.4
7.5°	6805.4	6853.4	6886.9	7026.8	7204.4	7480.1	7795.5	8054.5	8077.5	8133.9	7927.1
10°	6322.9	6331.2	6377.2	6510.9	6696.8	6978.8	7354.7	7808.0	7877.0	8083.7	7906.2
12.5°	5926.0	5932.3	5992.8	6137.0	6335.4	6619.5	7014.3	7538.6	7645.1	8021.1	7902.0
15°	5644.0	5667.0	5721.3	5871.7	6082.7	6364.6	6769.9	7340.1	7467.5	7998.1	7939.6
17.5°	5550.0	5575.1	5591.8	5700.4	5892.6	6168.3	6584.0	7210.6	7354.7	8010.6	8012.7
20°	5648.2	5667.0	5629.4	5656.5	5775.6	6022.1	6427.3	7099.9	7271.2	8025.3	8106.7
22.5°	6013.7	6022.1	5919.7	5800.7	5779.8	5915.5	6304.1	7012.2	7196.0	8064.9	8217.4
25°	6640.4	6625.7	6458.6	6201.7	5959.4	5896.7	6231.0	6957.9	7158.4	8106.7	8332.3
27.5°	7396.5	7417.4	7187.6	6813.7	6352.1	6022.1	6220.5	6934.9	7141.7	8136.0	8432.6
30°	8315.6	8344.9	8081.7	7611.7	6949.5	6331.2	6316.6	6930.7	7131.2	8117.2	8440.9
32.5°	9253.5	9289.0	9082.2	8597.6	7747.4	6849.3	6533.8	6976.7	7152.1	8052.4	8392.9
35°	10235.2	10285.4	10147.5	9731.8	8829.5	7597.1	6916.1	7116.6	7250.3	8046.1	8344.9
37.5°	11590.9	11636.8	11377.8	10937.1	10139.2	8599.7	7530.2	7379.8	7482.2	8146.4	8357.4
40°	13615.0	13608.7	12940.3	12265.6	11578.4	9873.9	8392.9	7856.1	7908.3	8449.3	8512.0
42.5°	15820.8	15810.3	14822.3	13796.7	13176.3	11442.6	9527.1	8679.1	8643.6	9007.0	8913.0
45°	17521.1	17519.0	16712.7	15557.6	15100.1	13243.1	10993.5	9823.7	9769.4	9913.6	9652.5
47.5°	18245.9	18258.4	17853.2	17040.6	17232.8	15678.7	12842.1	11482.3	11400.8	11342.3	10945.4
50°	17681.9	17707.0	17740.4	17581.6	18797.3	18951.9	15321.5	13819.7	13780.0	13518.9	12898.5
52.5°	15839.6	15967.0	16359.7	16863.1	19340.4	22093.5	19208.8	16723.1	16510.1	16232.3	15549.2
55°	12735.6	12875.5	13621.2	14843.2	18532.0	24157.2	24656.5	20466.3	20111.2	19281.9	18296.0
57.5°	8428.4	8645.6	9727.7	11281.7	16184.2	24489.4	30091.6	25661.2	24424.6	22154.1	21042.8
60°	4643.5	4852.3	6026.3	7434.1	11689.1	22847.6	33747.0	32424.8	30239.9	25364.6	24378.7
62.5°	2859.6	2972.4	3839.3	5149.0	7010.1	18032.8	34503.2	40924.2	38394.7	29498.4	28408.0
65°	2276.8	2324.9	2748.9	4209.0	5025.7	10726.1	32061.4	47403.8	46559.9	34503.2	32015.4
67°	2210.0	2228.8	2429.3	3613.7	4737.5	6575.6	26860.2	48458.6	49315.0	37532.0	32128.2
67.5°	2224.6	2245.5	2435.6	3448.6	4729.1	6043.0	25068.0	48043.0	49125.0	37772.2	31629.0
70°	2145.2	2210.0	2788.6	3446.6	4497.2	5021.5	15012.4	41626.1	42752.0	35096.4	26837.2
72.5°	760.3	764.5	1205.3	2788.6	4889.9	5075.8	7538.6	30515.6	31349.1	26847.7	19348.8
75°	451.2	384.3	401.1	793.8	4672.7	4929.6	4348.9	19499.2	19810.4	15384.2	9798.7
77.5°	311.2	271.5	279.9	350.9	1779.7	4860.7	3454.9	10168.4	9836.3	5395.4	2086.7
80°	177.6	156.7	167.1	307.1	647.5	4534.8	3258.6	4123.3	3515.5	914.9	576.5
82.5°	94.0	79.4	96.1	252.7	451.2	2826.2	3264.8	1992.7	1579.2	309.1	392.7
85°	33.4	27.2	46.0	173.4	300.8	866.9	3026.7	1675.2	1316.0	150.4	298.7
87.5°	6.3	6.3	18.8	71.0	121.2	265.3	1790.1	994.3	666.3	89.8	204.7
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°	7897.8	7897.8	7897.8	7897.8	7897.8	7897.8	7897.8	7897.8	7897.8	7897.8	7897.8
2.5°	7872.8	7783.0	7661.8	7513.5	7338.0	7183.5	7068.6	6949.5	6924.5	6882.7	6876.4
5°	7820.6	7666.0	7365.2	7020.5	6652.9	6320.8	6051.3	5811.1	5704.6	5612.7	5602.2
7.5°	7743.3	7511.4	6999.6	6444.0	5869.6	5347.4	4904.6	4591.2	4303.0	4165.1	4144.2
10°	7653.5	7321.3	6588.2	5817.4	5023.6	4286.3	3628.3	3076.8	2742.6	2544.2	2519.1
12.5°	7569.9	7135.4	6168.3	5167.8	4112.9	3127.0	2281.0	1754.6	1403.7	1261.6	1244.9
15°	7530.2	6985.0	5775.6	4503.5	3160.4	1990.6	1247.0	965.0	850.2	816.7	814.6
17.5°	7526.0	6857.6	5391.3	3816.3	2214.2	1157.2	812.6	741.5	718.6	710.2	710.2
20°	7523.9	6736.5	5006.9	3104.0	1405.8	770.8	676.8	660.1	643.4	632.9	632.9
22.5°	7546.9	6627.8	4605.9	2377.1	885.7	624.6	595.3	578.6	557.7	543.1	541.0
25°	7569.9	6544.3	4196.4	1691.9	641.3	543.1	513.9	490.9	461.6	442.8	440.7
27.5°	7574.1	6439.8	3757.8	1132.1	536.8	474.2	436.6	401.1	367.6	348.8	346.7
30°	7511.4	6264.4	3271.1	764.5	474.2	411.5	361.4	323.8	292.4	277.8	277.8
32.5°	7388.2	6047.1	2736.4	576.5	421.9	353.0	298.7	263.2	242.3	236.0	233.9
35°	7277.5	5813.2	2187.0	488.8	378.1	298.7	244.4	221.4	208.9	206.8	204.7
37.5°	7212.7	5625.2	1671.1	442.8	336.3	250.7	206.8	190.1	183.8	179.6	181.7
40°	7262.8	5468.5	1234.5	405.2	294.5	208.9	175.5	167.1	160.8	158.8	158.8
42.5°	7482.2	5441.4	917.0	371.8	254.8	173.4	152.5	146.2	142.0	140.0	142.0
45°	8058.7	5608.5	712.3	340.5	215.1	146.2	129.5	127.4	125.3	125.3	125.3
47.5°	8925.5	5953.1	593.2	305.0	179.6	125.3	112.8	110.7	108.6	110.7	110.7
50°	10394.0	6584.0	530.6	269.5	148.3	106.5	96.1	96.1	96.1	96.1	98.2
52.5°	12626.9	7824.7	488.8	233.9	121.2	89.8	81.5	81.5	83.6	83.6	85.6
55°	15114.7	9470.7	451.2	198.4	102.4	75.2	66.8	68.9	71.0	73.1	73.1
57.5°	17813.5	11294.3	419.9	162.9	87.7	60.6	56.4	58.5	60.6	64.8	64.8
60°	21070.0	13268.2	373.9	127.4	73.1	48.0	43.9	48.0	54.3	58.5	60.6
62.5°	24646.0	15177.4	315.4	100.3	60.6	37.6	35.5	43.9	52.2	56.4	58.5
65°	27090.0	15776.9	242.3	81.5	46.0	27.2	29.2	39.7	50.1	56.4	56.4
67°	26099.9	14304.3	198.4	68.9	37.6	20.9	27.2	39.7	50.1	54.3	56.4
67.5°	25412.6	13727.8	190.1	66.8	35.5	20.9	27.2	39.7	50.1	56.4	56.4
70°	20677.3	10312.5	158.8	50.1	29.2	18.8	23.0	37.6	48.0	54.3	54.3
72.5°	14366.9	6358.4	142.0	35.5	25.1	16.7	20.9	35.5	46.0	52.2	54.3
75°	6830.5	2301.9	121.2	27.2	23.0	14.6	18.8	35.5	46.0	52.2	52.2
77.5°	1393.2	534.7	98.2	23.0	18.8	14.6	16.7	33.4	43.9	50.1	50.1
80°	457.5	206.8	73.1	20.9	18.8	14.6	16.7	31.3	43.9	48.0	50.1
82.5°	330.0	104.4	48.0	20.9	18.8	14.6	14.6	31.3	41.8	48.0	48.0
85°	252.7	73.1	31.3	20.9	18.8	14.6	14.6	29.2	39.7	46.0	46.0
87.5°	167.1	29.2	25.1	20.9	18.8	14.6	14.6	29.2	37.6	43.9	46.0
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)