

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: P299196

Luminaire Tested: **GLNA-AF-07-LED-E1-SL2-7060-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299196  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24286)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-07-LED-E1-SL2-7060-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(7) 70 CRI, 5700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V  
Narrow OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 33206.3 lumens  
Efficiency: N/A  
Efficacy: 112.6 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B3 - U0 - G4

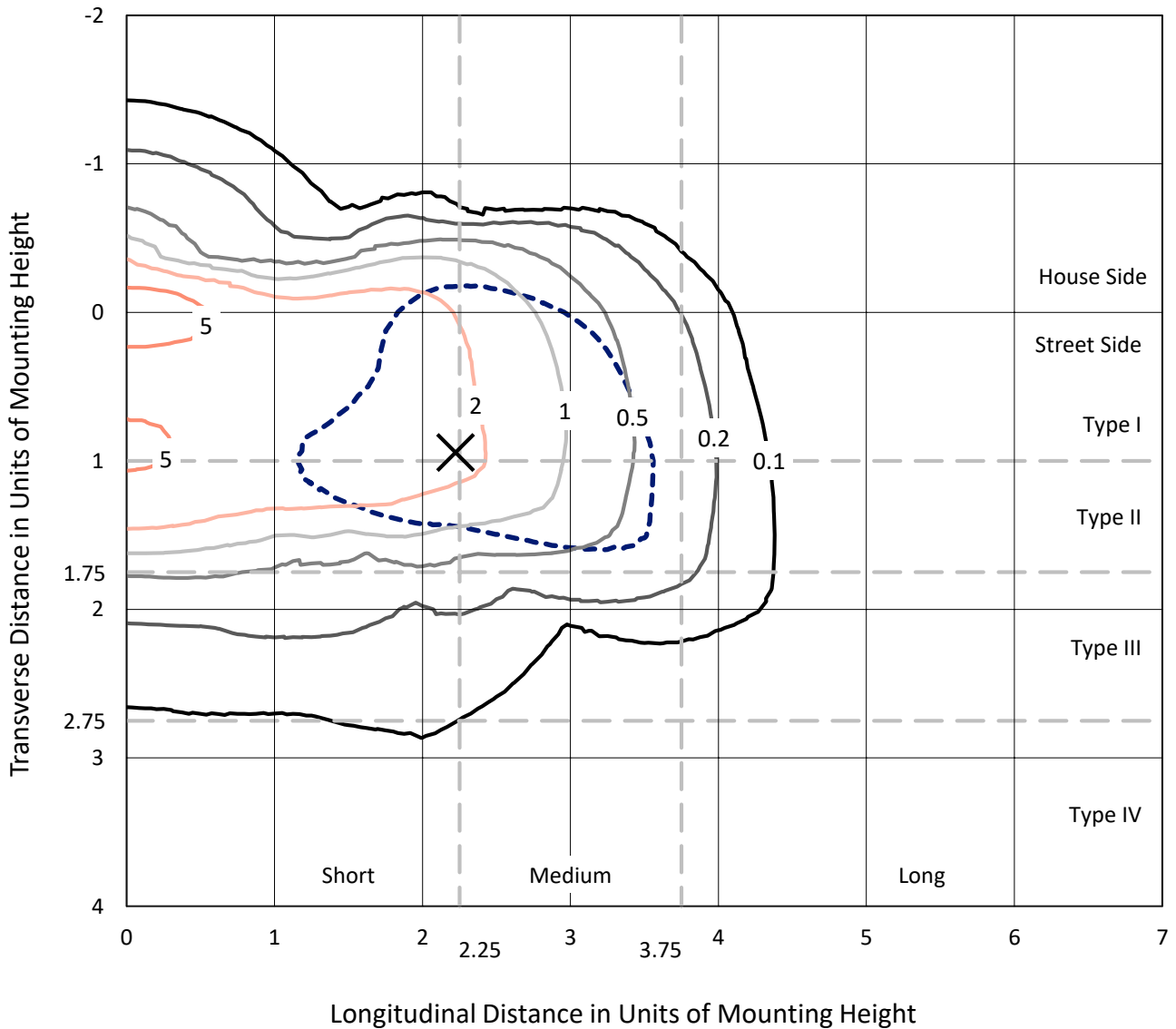
Input Watts (W): 295  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

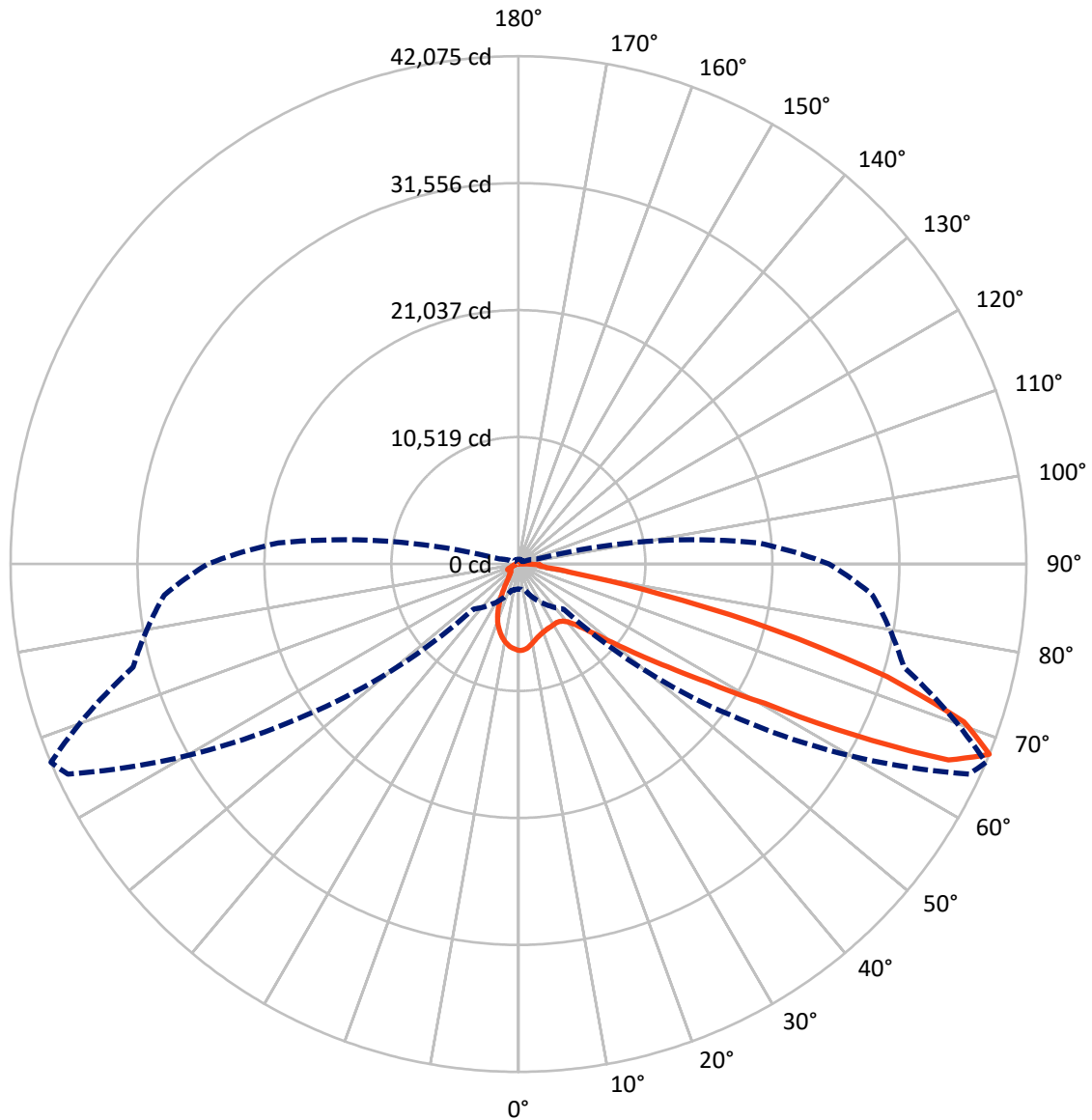
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8 fc  
 Type II - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5501.9	0.0	5501.9
	% Fixture	16.6	0.0	16.6
<b>Street Side</b>	Lumens	27704.4	0.0	27704.4
	% Fixture	83.4	0.0	83.4
<b>Total</b>	Lumens	33206.3	0.0	33206.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	611.1	1.8
10°-20°	1413.9	4.3
20°-30°	1916.6	5.8
30°-40°	2724.6	8.2
40°-50°	4558.4	13.7
50°-60°	7211.4	21.7
60°-70°	9186.6	27.7
70°-80°	4811.9	14.5
80°-90°	771.7	2.3
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°	33206.3	100.0
0°-180°	33206.3	100.0



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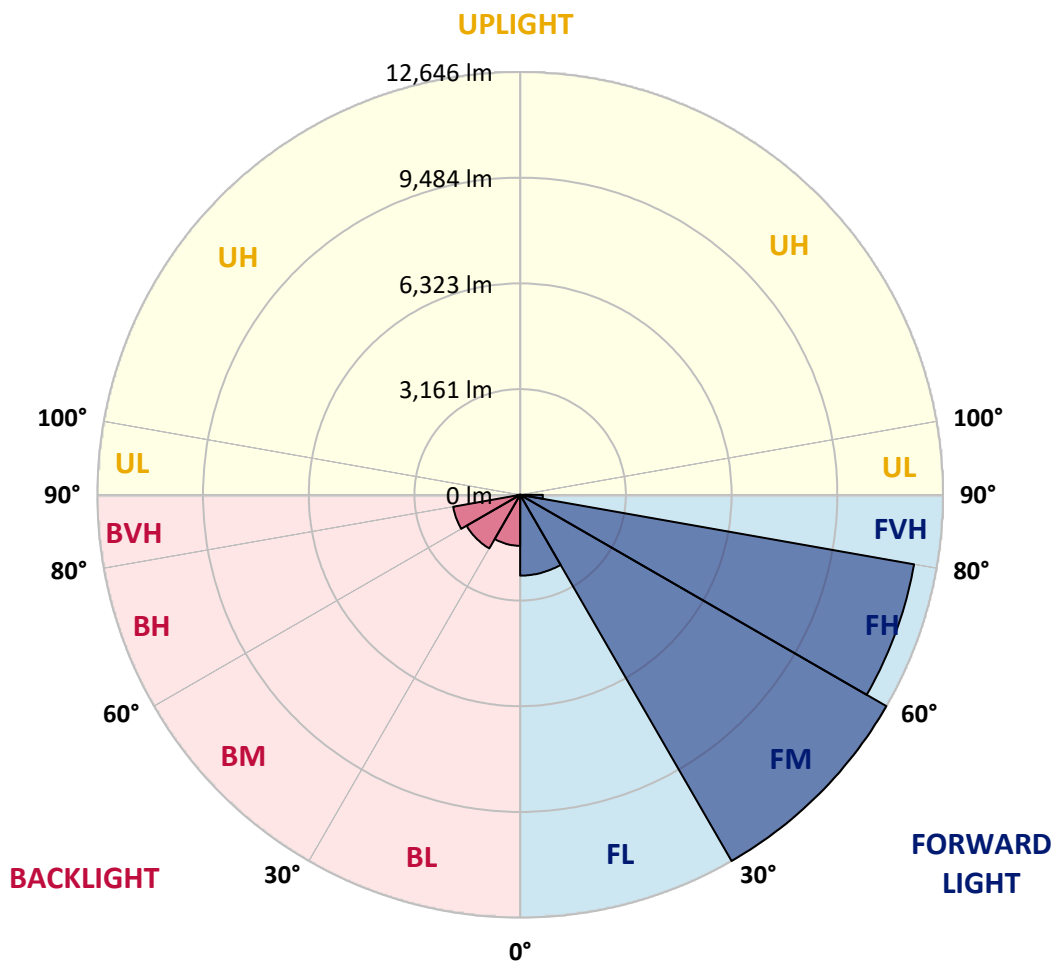
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2416.6	7.3			
FM (30°-60°)	12645.6	38.1			
FH (60°-80°)	11963.5	36.0			G4/12000
FVH (80°-90°)	678.6	2.0			G4/750
BL (0°-30°)	1525.0	4.6	B3/2500		
BM (30°-60°)	1848.8	5.6	B2/2500		
BH (60°-80°)	2035.0	6.1	B3/2500		G3/2500
BVH (80°-90°)	93.1	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	7162.5	7162.5	7162.5	7162.5	7162.5	7162.5	7162.5	7162.5	7162.5	7162.5	7162.5
2.5°	6867.8	6879.2	6915.3	6938.2	7041.3	7085.6	7116.7	7147.8	7152.7	7167.4	7152.7
5°	6147.3	6171.8	6239.0	6314.3	6514.1	6671.3	6836.7	7008.6	7039.7	7151.1	7182.2
7.5°	5588.9	5582.3	5638.0	5728.0	5932.7	6150.5	6440.4	6782.6	6849.8	7100.3	7221.5
10°	5181.1	5176.2	5235.2	5328.5	5523.4	5729.7	6057.2	6525.5	6620.5	7020.1	7259.1
12.5°	4879.8	4881.5	4940.4	5043.6	5241.7	5449.7	5782.1	6276.6	6397.8	6926.7	7298.4
15°	4680.0	4693.1	4740.6	4850.3	5043.6	5251.5	5577.4	6089.9	6225.9	6853.0	7342.6
17.5°	4612.9	4634.2	4650.6	4730.8	4896.2	5104.2	5423.5	5952.4	6096.5	6802.3	7381.9
20°	4675.1	4699.7	4668.6	4696.4	4801.2	4984.6	5302.3	5844.3	5991.7	6744.9	7386.9
22.5°	4942.0	4965.0	4873.3	4793.0	4786.5	4897.8	5202.4	5759.2	5911.5	6702.4	7388.5
25°	5412.0	5426.7	5272.8	5086.1	4904.4	4866.7	5132.0	5700.2	5862.3	6664.7	7357.4
27.5°	5988.4	5999.9	5823.0	5547.9	5182.8	4940.4	5107.4	5665.8	5834.5	6632.0	7305.0
30°	6689.3	6743.3	6505.9	6158.7	5626.5	5158.2	5156.6	5647.8	5803.4	6576.3	7201.8
32.5°	7406.5	7429.4	7265.7	6913.6	6224.2	5541.4	5294.1	5660.9	5795.2	6509.1	7070.8
35°	8133.6	8163.0	8056.6	7773.3	7041.3	6103.0	5562.7	5737.9	5846.0	6486.2	6979.1
37.5°	9075.1	9114.4	8967.1	8639.6	8035.3	6864.5	6009.7	5931.1	6001.5	6551.7	6951.3
40°	10563.6	10545.6	10115.0	9627.0	9122.6	7838.8	6648.3	6258.6	6299.5	6763.0	7036.4
42.5°	12296.1	12251.9	11510.1	10743.8	10318.0	9017.8	7493.3	6826.8	6818.6	7178.9	7336.1
45°	13678.2	13642.2	12974.1	12029.2	11688.6	10360.6	8585.5	7673.4	7612.8	7838.8	7889.6
47.5°	14426.6	14428.2	14043.4	13272.1	13263.9	12066.9	9988.9	8898.3	8793.5	8899.9	8845.9
50°	14164.6	14198.9	14158.0	13912.4	14701.7	14303.7	11821.3	10606.2	10395.0	10499.8	10291.8
52.5°	12897.1	12941.3	13183.7	13560.3	15305.9	17007.3	14513.3	12728.5	12482.8	12445.2	12214.3
55°	10650.4	10704.5	11199.0	12222.5	14803.2	18823.3	18761.1	15433.6	15042.3	14686.9	14588.7
57.5°	7341.0	7431.1	8226.9	9746.5	13177.1	19371.9	23819.4	19290.0	18494.2	17252.9	17275.8
60°	4138.0	4242.8	5181.1	6561.5	9895.5	18775.8	27667.6	25131.0	23450.9	20257.8	20428.1
62.5°	2631.5	2744.5	3456.8	4558.9	5937.7	15566.3	29244.5	33251.5	31117.8	23961.8	24128.9
65°	2130.4	2179.5	2515.2	3763.0	4311.6	9378.1	28047.5	39940.8	39144.9	28663.2	27883.7
67.5°	2079.7	2096.0	2269.6	3158.8	4134.7	5271.2	22371.8	41191.8	42074.5	33053.4	29447.5
70°	2055.1	2112.4	2557.8	3014.7	3959.5	4445.9	13444.0	37762.9	39156.4	34201.3	27366.3
72.5°	997.3	994.0	1287.1	2726.5	4460.6	4611.3	6907.1	30554.5	31952.9	29630.9	22488.1
75°	804.0	735.2	702.5	998.9	4288.7	4761.9	4401.7	21024.1	22036.1	19866.4	13824.0
77.5°	763.1	681.2	623.9	625.5	1812.7	5050.1	3728.6	11636.2	11931.0	8973.6	3787.6
80°	632.1	556.8	515.8	581.3	877.7	4809.4	4031.6	5266.3	4832.3	2204.1	1260.9
82.5°	438.9	399.6	388.1	488.0	702.5	3427.3	4688.2	2829.6	2372.8	1103.7	777.8
85°	280.0	239.1	265.3	355.3	546.9	1581.8	4829.0	2205.7	1753.8	700.9	438.9
87.5°	129.4	104.8	131.0	196.5	357.0	545.3	4594.9	2477.6	1806.2	370.1	276.7
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°	7162.5	7162.5	7162.5	7162.5	7162.5	7162.5	7162.5	7162.5	7162.5	7162.5	7162.5
2.5°	7165.8	7134.7	7110.1	7064.3	7013.5	6964.4	6920.2	6864.5	6848.1	6833.4	6856.3
5°	7188.7	7157.6	7067.5	6926.7	6771.1	6625.4	6479.7	6355.2	6278.3	6235.7	6260.2
7.5°	7223.1	7178.9	6992.2	6733.5	6453.5	6198.0	5934.4	5723.1	5567.6	5493.9	5515.2
10°	7254.2	7169.1	6864.5	6476.4	6067.0	5687.1	5271.2	4927.3	4671.8	4537.6	4570.3
12.5°	7267.3	7131.4	6686.0	6155.4	5593.8	5037.0	4424.6	3910.4	3543.6	3409.3	3381.5
15°	7280.4	7088.8	6489.5	5790.3	5022.3	4234.6	3376.6	2760.9	2456.3	2389.1	2374.4
17.5°	7283.7	7015.1	6266.8	5394.0	4352.5	3280.0	2308.9	1917.5	1919.2	2027.3	2040.4
20°	7249.3	6905.4	5996.6	4901.1	3550.1	2268.0	1585.1	1518.0	1765.2	2035.4	2068.2
22.5°	7170.7	6759.7	5690.4	4326.3	2631.5	1493.4	1226.5	1300.2	1619.5	1950.3	1988.0
25°	7070.8	6582.8	5328.5	3659.9	1742.3	1067.7	1028.4	1118.4	1334.6	1555.6	1576.9
27.5°	6934.9	6373.2	4922.4	2896.8	1131.5	879.3	905.5	966.1	1054.6	1152.8	1162.6
30°	6759.7	6122.7	4488.4	2112.4	854.8	790.9	828.6	861.3	899.0	954.7	959.6
32.5°	6558.3	5882.0	4043.0	1459.0	758.2	745.1	774.5	790.9	820.4	854.8	858.1
35°	6389.6	5652.7	3581.3	1031.6	717.2	710.7	730.3	736.9	764.7	802.4	805.7
37.5°	6293.0	5466.0	3104.7	831.9	689.4	679.6	691.0	691.0	730.3	786.0	794.2
40°	6299.5	5362.9	2628.2	751.6	666.5	653.4	655.0	655.0	705.8	766.4	771.3
42.5°	6478.0	5389.1	2205.7	720.5	648.5	633.7	625.5	630.4	673.0	712.3	715.6
45°	6897.2	5574.1	1809.5	700.9	630.4	625.5	607.5	605.9	622.3	640.3	640.3
47.5°	7585.0	5939.3	1540.9	687.8	615.7	614.1	592.8	571.5	569.9	576.4	576.4
50°	8703.4	6568.1	1360.8	673.0	605.9	592.8	568.2	535.5	524.0	528.9	528.9
52.5°	10380.2	7689.8	1292.0	653.4	584.6	563.3	535.5	502.7	492.9	494.5	494.5
55°	12579.4	9412.5	1282.2	630.4	561.7	527.3	504.4	479.8	468.3	471.6	471.6
57.5°	15266.6	11795.1	1457.4	594.4	530.6	491.3	478.2	461.8	453.6	458.5	456.9
60°	18533.5	14912.9	2161.5	556.8	499.4	458.5	458.5	445.4	438.9	443.8	442.1
62.5°	22296.5	18494.2	3039.2	528.9	466.7	432.3	438.9	432.3	425.8	429.0	427.4
65°	25633.8	20827.6	2846.0	507.6	433.9	407.7	419.2	415.9	411.0	414.3	412.7
67.5°	25730.4	19963.0	1598.2	484.7	402.8	383.2	399.6	397.9	394.6	397.9	396.3
70°	22963.0	16856.6	900.6	442.1	370.1	353.7	376.6	375.0	371.7	378.3	376.6
72.5°	18397.5	12232.3	658.3	389.7	337.3	322.6	348.8	347.2	347.2	357.0	352.1
75°	10586.6	6294.6	525.6	334.1	302.9	291.5	314.4	316.0	319.3	332.4	322.6
77.5°	3018.0	1961.8	429.0	283.3	260.4	255.5	278.4	281.7	283.3	298.0	284.9
80°	1121.7	903.9	353.7	237.4	212.9	214.5	235.8	240.7	242.4	257.1	240.7
82.5°	715.6	596.1	286.6	183.4	167.0	165.4	191.6	198.1	198.1	199.8	190.0
85°	417.6	357.0	216.2	132.6	117.9	113.0	142.5	153.9	149.0	145.7	139.2
87.5°	280.0	245.6	132.6	73.7	63.9	60.6	83.5	91.7	88.4	83.5	78.6
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)