

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: P233974

Luminaire Tested: **CTN-8-6-D-E1-T1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P233974  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1707-171-24)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: CTN-8-6-D-E1-T1  
Description: CELESTEON HIGH MAST LUMINAIRE  
(8) 70 CRI, 4000K LEDS AND TYPE I OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 67077 lumens  
Efficiency: N/A  
Efficacy: 140.6 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type I - Short - Semi-Cutoff  
BUG Rating: B5 - U0 - G5

Input Watts (W): 477  
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



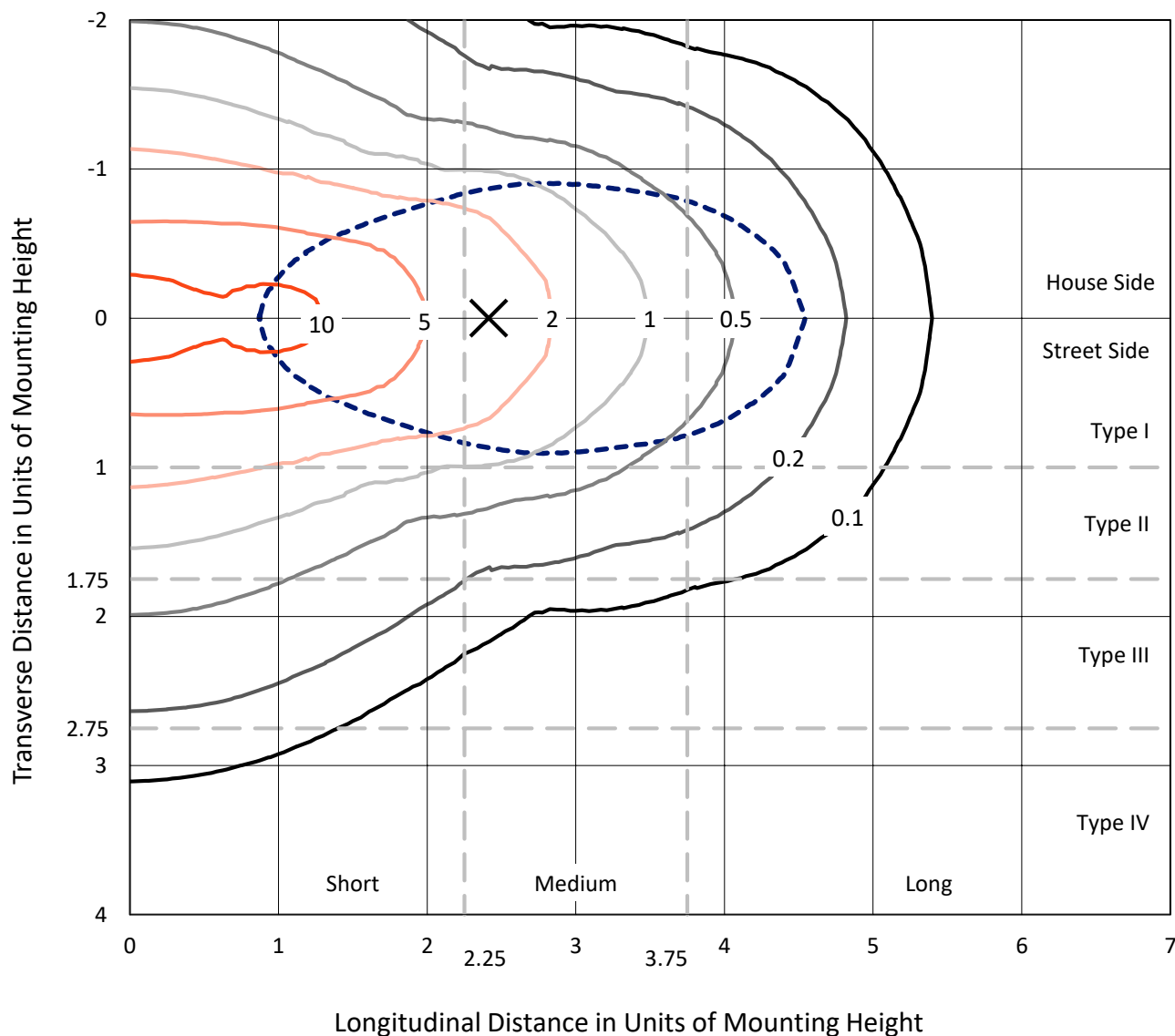
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

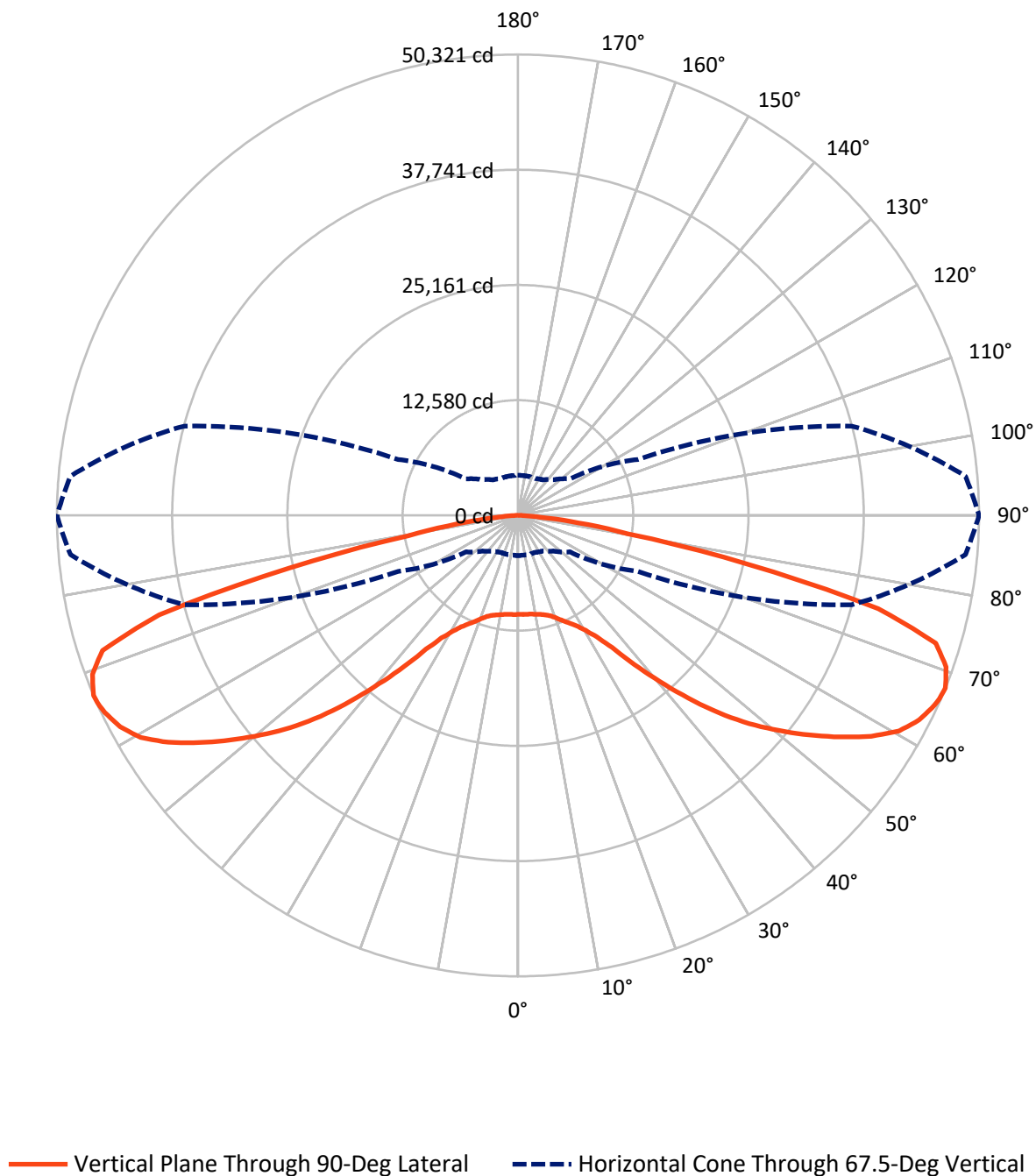


Based on 30 foot mounting height. Maximum calculated value = 12.1 fc  
 Type I - Short - Semi-Cutoff

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## Luminous Intensity Polar Plot



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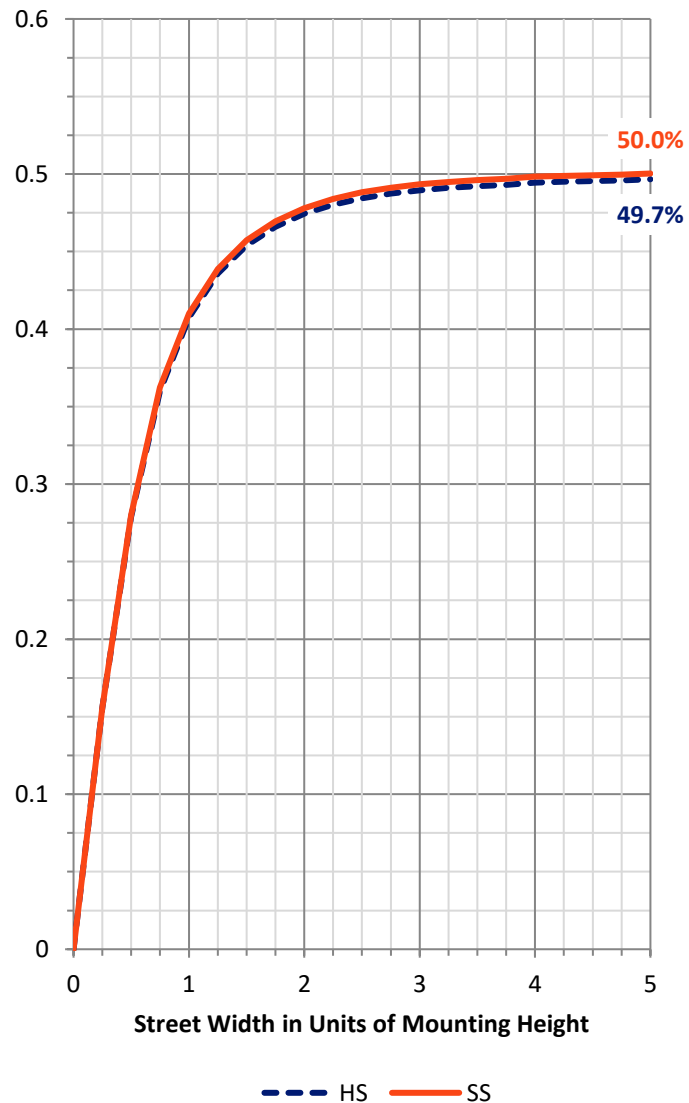
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	33538.5	0.0	33538.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	33538.5	0.0	33538.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	67077.0	0.0	67077.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1026.7	1.5
10°-20°	3054.6	4.6
20°-30°	5054.3	7.5
30°-40°	7405.4	11.0
40°-50°	10894.8	16.2
50°-60°	14127.9	21.1
60°-70°	15015.0	22.4
70°-80°	9268.8	13.8
80°-90°	1229.4	1.8
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°	67077.0	100.0
0°-180°	67077.0	100.0

**Coefficient of Utilization**



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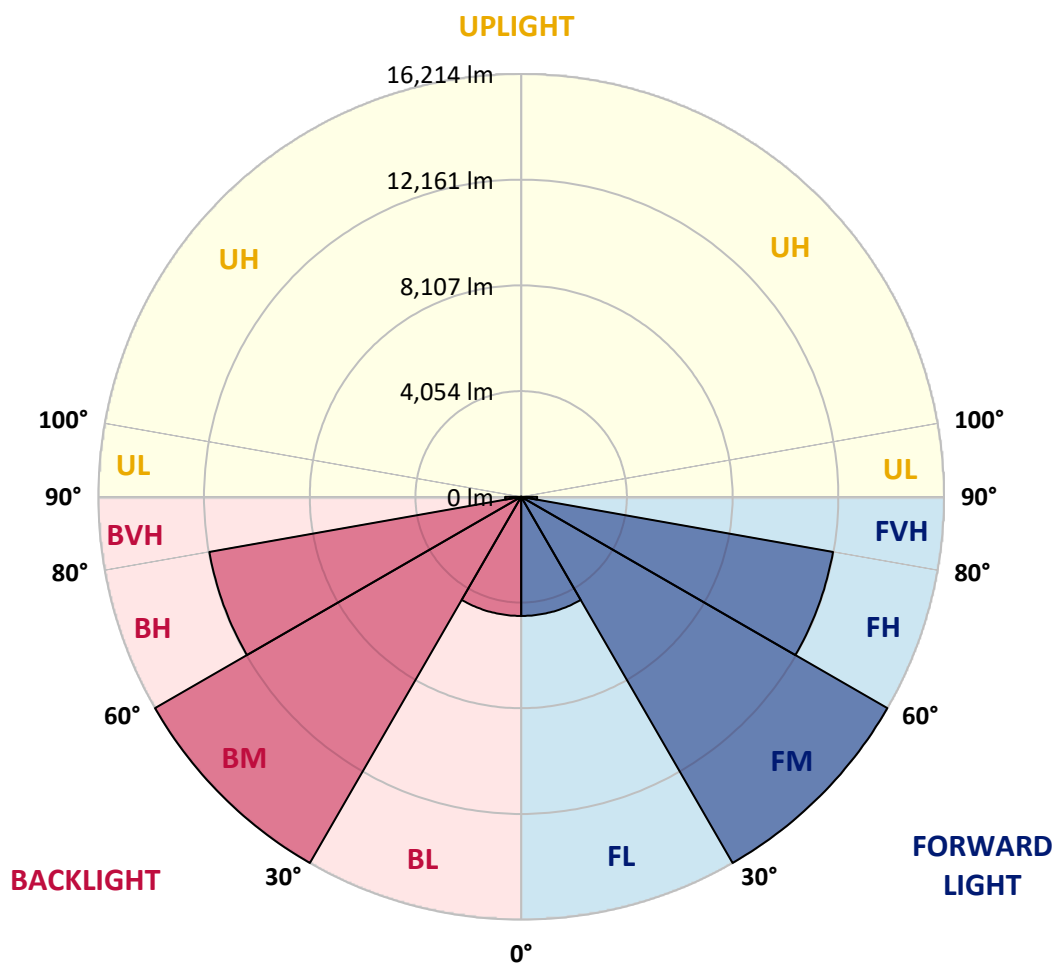
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4567.8	6.8			
FM	(30°-60°)	16214.1	24.2			
FH	(60°-80°)	12141.9	18.1			G5
FVH	(80°-90°)	614.7	0.9			G4/750
BL	(0°-30°)	4567.8	6.8	B4/5000		
BM	(30°-60°)	16214.1	24.2	B5		
BH	(60°-80°)	12141.9	18.1	B5		G5
BVH	(80°-90°)	614.7	0.9			G4/750
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B5-U0-G5**

Type I Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	10802.3	10802.3	10802.3	10802.3	10802.3	10802.3	10802.3	10802.3	10802.3	10802.3	10802.3
2.5°	10832.4	10798.2	10812.3	10862.5	10679.7	10770.1	10737.9	10818.3	10776.1	10812.3	10830.4
5°	10756.0	10713.8	10733.9	10828.4	10661.6	10754.0	10729.9	10820.3	10766.1	10816.3	10836.4
7.5°	10689.7	10645.5	10681.7	10760.0	10633.4	10735.9	10715.8	10838.4	10794.2	10858.5	10878.6
10°	10647.5	10599.3	10633.4	10719.9	10585.2	10746.0	10727.9	10890.7	10868.6	10957.0	10981.1
12.5°	10543.0	10492.8	10516.9	10631.4	10571.1	10737.9	10782.2	10969.1	10963.0	11069.5	11095.7
15°	10356.1	10305.9	10338.0	10490.7	10512.9	10744.0	10880.6	11101.7	11137.9	11244.4	11266.5
17.5°	10121.0	10084.8	10133.0	10336.0	10474.7	10826.4	11023.3	11304.7	11393.1	11501.6	11531.8
20°	9799.4	9779.3	9865.7	10143.1	10408.3	10886.7	11194.1	11590.1	11750.8	11927.7	11949.8
22.5°	9361.3	9337.2	9518.0	9907.9	10289.8	10900.7	11361.0	11885.5	12182.9	12410.0	12468.3
25°	8868.9	8860.9	9108.1	9620.5	10129.0	10890.7	11523.7	12201.0	12655.2	12954.7	13019.0
27.5°	8384.6	8408.7	8708.1	9313.0	9996.4	10912.8	11710.6	12605.0	13246.1	13619.9	13648.0
30°	7972.6	7992.7	8316.2	9009.6	9869.7	10938.9	11941.8	13087.3	13981.6	14486.1	14568.5
32.5°	7584.7	7630.9	7960.5	8680.0	9729.1	10989.2	12241.2	13716.3	14884.0	15679.8	15782.3
35°	7265.1	7305.3	7626.9	8344.4	9506.0	11029.4	12637.1	14512.2	16228.5	17552.9	17711.7
37.5°	6981.8	7030.0	7307.3	8034.9	9240.7	11043.4	13031.0	15492.9	18049.3	20157.5	20651.9
40°	6776.8	6815.0	7054.1	7725.4	8955.3	10979.1	13481.2	16590.3	20095.2	23266.5	23809.2
42.5°	6608.0	6640.1	6837.1	7421.9	8633.8	10852.5	13901.2	17683.5	22257.7	26560.5	27267.9
45°	6437.1	6445.2	6634.1	7160.6	8308.2	10651.5	14216.8	18730.6	24534.7	29920.7	30748.7
47.5°	6284.4	6274.4	6423.1	6903.4	7958.5	10313.9	14339.4	19598.8	26747.4	33070.0	33974.3
50°	6141.7	6099.5	6228.1	6658.2	7618.9	9829.5	14184.6	20199.7	29074.6	36112.7	36914.6
52.5°	5928.7	5908.6	6031.2	6417.0	7279.2	9250.7	13674.1	20517.2	31556.6	38994.6	39832.7
55°	5737.8	5723.7	5850.3	6171.9	6945.6	8661.9	12793.9	20430.8	34002.5	41774.1	42702.6
57.5°	5526.7	5516.7	5635.3	5904.6	6577.8	8115.3	11704.6	19872.1	36187.0	44173.7	45486.0
60°	5319.7	5325.8	5402.1	5633.2	6204.0	7512.3	10462.6	18899.4	37929.5	46346.2	47779.1
62.5°	5078.6	5072.5	5128.8	5321.7	5775.9	6861.2	9238.7	17550.9	38950.4	48243.4	49159.8
65°	4753.0	4730.9	4795.2	4917.8	5257.4	6194.0	8032.9	15919.0	38976.5	49185.9	49965.7
66°	4614.3	4590.2	4648.5	4734.9	5054.4	5924.7	7588.7	15227.7	38576.6	49214.1	50182.7
67.5°	4399.3	4371.1	4409.3	4449.5	4736.9	5494.6	6937.6	14443.9	37700.4	49037.2	50321.4
70°	3864.7	3868.7	3908.9	3894.8	4041.5	4538.0	5729.7	12988.8	33473.9	48321.7	49577.8
72.5°	3008.6	2974.4	2916.1	2859.8	2930.2	3366.3	4339.0	10900.7	27410.6	45236.8	47678.6
75°	1941.4	1935.4	1933.4	2001.7	2011.7	2307.2	3352.2	8794.5	21367.4	37123.6	40638.6
77.5°	1213.9	1203.8	1290.2	1457.0	1483.2	1491.2	2198.6	6684.3	15446.7	23754.9	25597.8
80°	870.2	870.2	876.2	898.3	1039.0	1061.1	1519.3	4196.3	8784.5	11580.0	12166.9
82.5°	659.2	649.1	651.1	661.2	673.3	723.5	914.4	1863.0	3509.0	5868.4	6640.1
85°	476.3	490.4	514.5	496.4	448.2	454.2	518.5	641.1	1348.5	2273.0	2457.9
87.5°	172.8	199.0	205.0	213.0	205.0	207.0	213.0	201.0	273.3	560.7	647.1
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)