

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: P299630

Luminaire Tested: **GLNA-AF-10-LED-E1-5MQ-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299630  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24142)  
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-E1-5MQ-7030  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(10) 70 CRI, 3000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III  
w/Spill Control OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 59663.4 lumens  
Efficiency: N/A  
Efficacy: 106.9 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B5 - U0 - G5

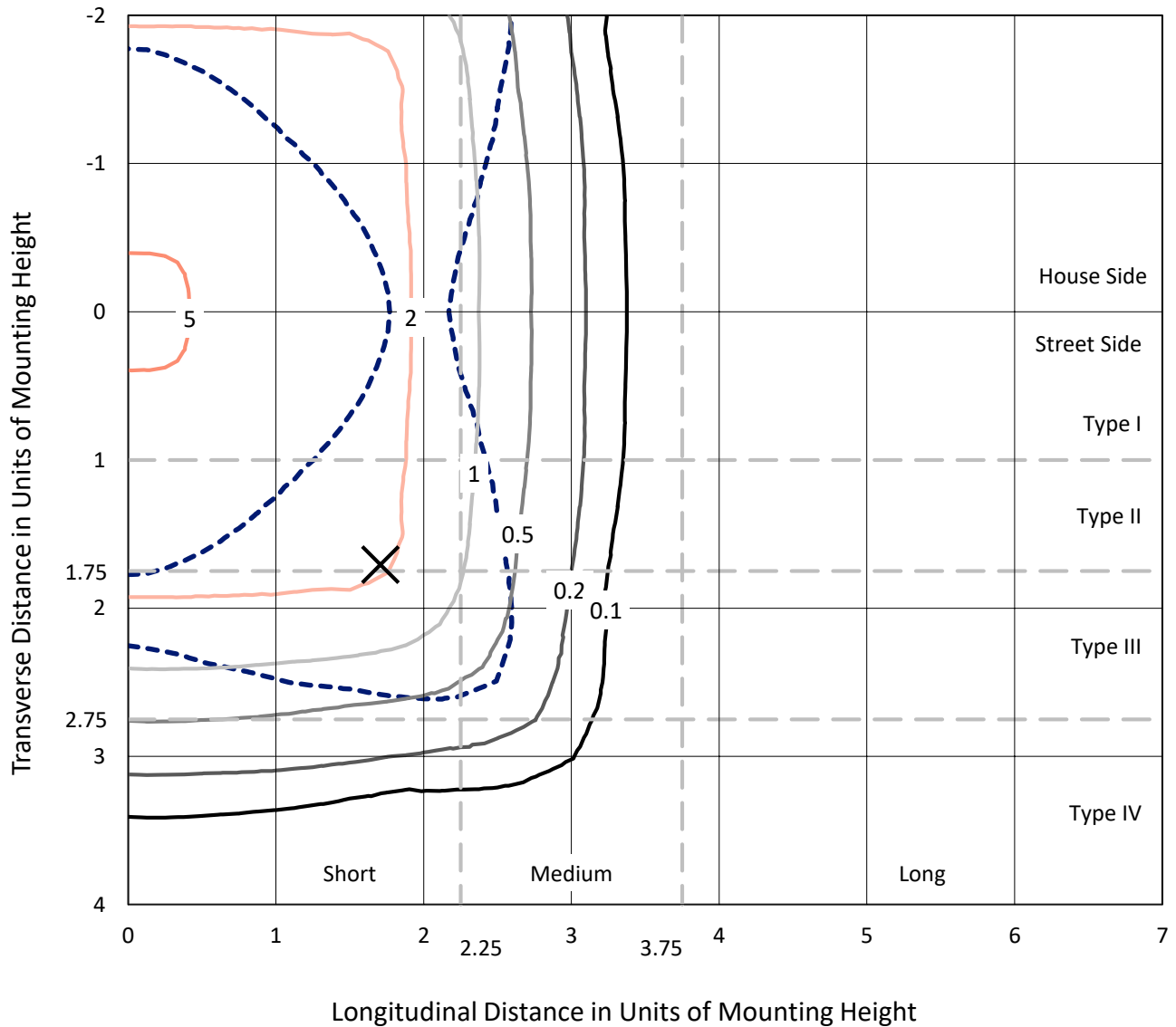
Input Watts (W): 558  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

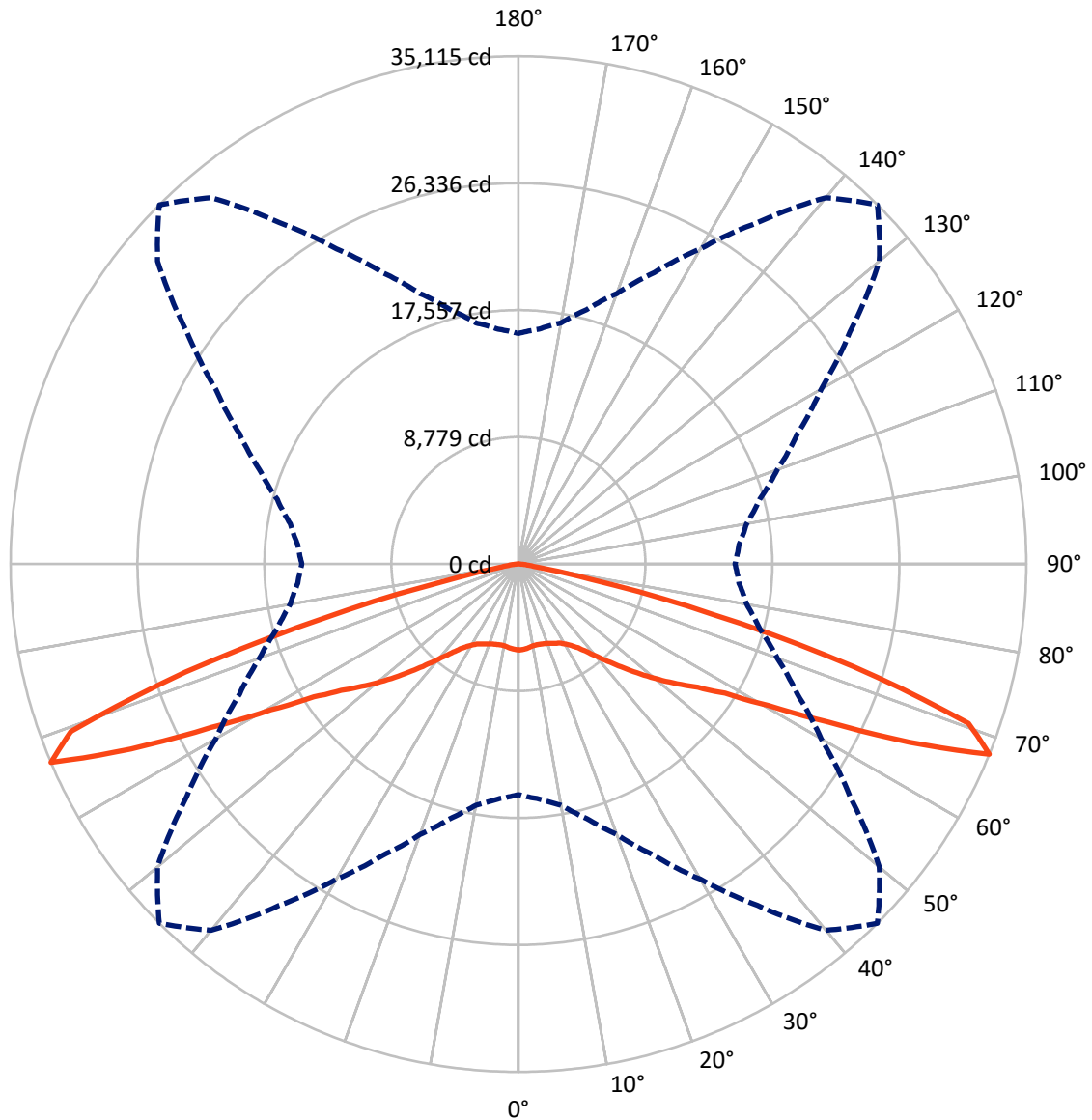
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.6 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	29831.7	0.0	29831.7
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	29831.7	0.0	29831.7
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	59663.4	0.0	59663.4
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	556.5	0.9
10°-20°	1614.8	2.7
20°-30°	2745.2	4.6
30°-40°	4487.5	7.5
40°-50°	8011.1	13.4
50°-60°	13506.8	22.6
60°-70°	20960.6	35.1
70°-80°	7364.6	12.3
80°-90°	416.2	0.7
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°	59663.4	100.0
0°-180°	59663.4	100.0



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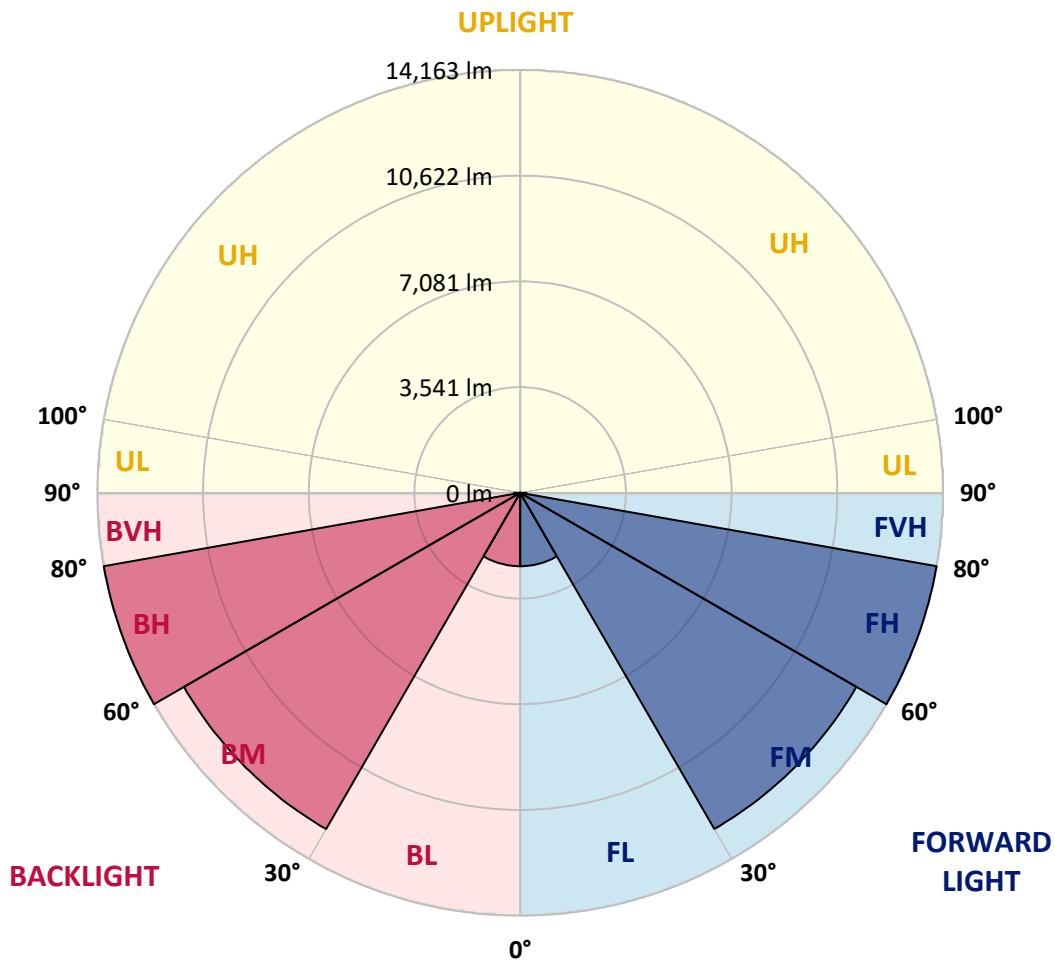
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2458.3	4.1			
FM	(30°-60°)	13002.7	21.8			
FH	(60°-80°)	14162.6	23.7			G5
FVH	(80°-90°)	208.1	0.3			G2/225
BL	(0°-30°)	2458.3	4.1	B3/2500		
BM	(30°-60°)	13002.7	21.8	B5		
BH	(60°-80°)	14162.6	23.7	B5		G5
BVH	(80°-90°)	208.1	0.3			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

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

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	5945.7	5945.7	5945.7	5945.7	5945.7	5945.7	5945.7	5945.7	5945.7	5945.7	5945.7
2.5°	5923.8	5929.2	5929.2	5929.2	5926.5	5926.5	5921.0	5926.5	5923.8	5915.5	5918.3
5°	5874.4	5879.9	5879.9	5877.1	5885.3	5882.6	5874.4	5879.9	5877.1	5871.6	5874.4
7.5°	5803.0	5811.3	5811.3	5808.5	5816.8	5814.0	5808.5	5811.3	5811.3	5803.0	5803.0
10°	5723.5	5729.0	5729.0	5726.2	5739.9	5739.9	5737.2	5745.4	5748.2	5739.9	5734.4
12.5°	5649.4	5657.6	5657.6	5668.6	5682.3	5687.8	5701.5	5712.5	5723.5	5720.7	5709.7
15°	5605.5	5611.0	5621.9	5635.7	5657.6	5676.8	5698.8	5723.5	5745.4	5750.9	5734.4
17.5°	5578.0	5586.3	5602.7	5621.9	5652.1	5685.1	5718.0	5750.9	5781.1	5792.1	5772.9
20°	5569.8	5575.3	5591.8	5624.7	5665.8	5715.2	5761.9	5800.3	5841.4	5855.2	5841.4
22.5°	5586.3	5597.3	5616.5	5654.9	5709.7	5772.9	5827.7	5879.9	5932.0	5956.7	5937.5
25°	5660.4	5671.3	5696.0	5745.4	5805.8	5871.6	5934.7	5995.1	6041.7	6066.4	6052.7
27.5°	5797.5	5811.3	5841.4	5890.8	5956.7	6028.0	6096.6	6146.0	6184.4	6192.6	6176.2
30°	6003.3	6033.5	6069.2	6124.1	6200.9	6261.2	6329.8	6373.7	6420.4	6420.4	6406.7
32.5°	6324.3	6354.5	6392.9	6445.1	6505.4	6571.3	6631.6	6670.1	6719.4	6722.2	6689.3
35°	6804.5	6818.2	6851.1	6884.1	6938.9	6996.6	7048.7	7073.4	7114.5	7117.3	7087.1
37.5°	7438.3	7441.1	7463.0	7474.0	7523.4	7586.5	7635.9	7652.3	7690.7	7685.2	7655.1
40°	8176.4	8190.1	8198.3	8214.8	8266.9	8327.3	8379.4	8387.6	8428.8	8420.6	8382.2
42.5°	9029.7	9035.2	9081.8	9106.5	9155.9	9186.1	9251.9	9260.2	9309.5	9287.6	9243.7
45°	9987.3	10036.6	10080.5	10129.9	10182.1	10217.7	10269.9	10258.9	10291.8	10258.9	10234.2
47.5°	10994.2	11029.9	11128.7	11205.5	11290.5	11320.7	11394.8	11361.9	11394.8	11348.2	11339.9
50°	12102.7	12165.8	12250.8	12338.6	12429.2	12478.6	12574.6	12533.5	12577.4	12533.5	12508.8
52.5°	13194.7	13211.2	13397.7	13526.7	13652.9	13710.5	13768.1	13748.9	13751.7	13748.9	13724.2
55°	14231.8	14270.2	14456.8	14632.4	14851.9	15013.8	15112.6	15101.6	15076.9	15052.2	15011.1
57.5°	15400.7	15439.1	15653.1	15869.9	16119.5	16350.0	16550.3	16756.1	16835.7	16857.6	16767.1
60°	16981.1	16978.3	17263.7	17527.1	17883.8	18226.7	18665.7	19113.0	19626.0	19864.8	19549.2
62.5°	18588.9	18654.8	19066.3	19532.8	20268.1	20984.2	21793.6	22589.3	23401.4	24062.7	23360.3
65°	18396.8	18649.3	19261.1	20317.5	21675.6	23289.0	25034.0	26880.5	28548.7	29695.6	28408.8
67.5°	15943.9	16303.4	16926.2	18210.3	19908.7	22235.4	25165.7	28817.6	33062.2	35114.5	32571.1
70°	11556.7	11962.8	12615.8	13869.7	15551.6	17763.0	20945.8	25330.3	30949.5	33018.3	30216.9
72.5°	5750.9	5970.4	6373.7	7172.2	8445.3	10239.7	13126.1	17340.5	22312.2	24210.9	21650.9
75°	1953.6	2055.1	2123.7	2384.3	2787.7	3492.8	4927.8	7581.0	11564.9	13864.2	11400.3
77.5°	1127.7	1130.4	1177.1	1223.7	1292.3	1369.1	1561.2	2049.6	3544.9	5034.8	3668.4
80°	729.8	727.1	765.5	801.2	847.8	886.2	897.2	949.3	1094.8	1297.8	1160.6
82.5°	378.6	425.3	510.3	557.0	644.8	661.2	639.3	620.1	655.8	680.5	696.9
85°	208.5	181.1	271.6	351.2	389.6	395.1	395.1	373.2	386.9	378.6	411.6
87.5°	96.0	87.8	107.0	172.9	183.8	156.4	164.6	145.4	104.3	101.5	115.2
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):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	5945.7	5945.7	5945.7	5945.7	5945.7	5945.7	5945.7	5945.7
2.5°	5918.3	5921.0	5921.0	5929.2	5932.0	5937.5	5943.0	5945.7
5°	5871.6	5879.9	5874.4	5882.6	5882.6	5888.1	5888.1	5890.8
7.5°	5803.0	5811.3	5811.3	5811.3	5808.5	5816.8	5816.8	5816.8
10°	5731.7	5737.2	5734.4	5729.0	5723.5	5731.7	5729.0	5726.2
12.5°	5709.7	5696.0	5685.1	5679.6	5668.6	5671.3	5663.1	5663.1
15°	5723.5	5698.8	5679.6	5671.3	5660.4	5654.9	5649.4	5652.1
17.5°	5759.1	5729.0	5704.3	5690.5	5676.8	5668.6	5657.6	5660.4
20°	5822.2	5786.6	5750.9	5723.5	5698.8	5685.1	5676.8	5674.1
22.5°	5915.5	5863.4	5811.3	5770.1	5737.2	5718.0	5709.7	5704.3
25°	6022.5	5964.9	5904.6	5857.9	5825.0	5800.3	5783.8	5783.8
27.5°	6157.0	6110.3	6055.5	6000.6	5970.4	5945.7	5934.7	5929.2
30°	6382.0	6338.1	6294.2	6242.0	6203.6	6178.9	6159.7	6143.3
32.5°	6670.1	6634.4	6598.7	6560.3	6524.6	6491.7	6461.5	6447.8
35°	7076.1	7048.7	7024.0	6980.1	6966.4	6947.2	6930.7	6917.0
37.5°	7635.9	7624.9	7624.9	7578.2	7567.3	7559.0	7542.6	7545.3
40°	8371.2	8382.2	8368.4	8352.0	8343.7	8321.8	8321.8	8341.0
42.5°	9241.0	9249.2	9279.4	9251.9	9282.1	9254.7	9238.2	9251.9
45°	10250.7	10280.8	10341.2	10313.8	10333.0	10286.3	10228.7	10231.4
47.5°	11383.8	11411.3	11436.0	11416.7	11419.5	11342.7	11265.8	11246.6
50°	12560.9	12571.9	12585.6	12558.1	12563.6	12478.6	12390.8	12393.5
52.5°	13724.2	13776.4	13831.2	13757.2	13740.7	13644.7	13521.2	13471.8
55°	15055.0	15129.0	15065.9	14937.0	14808.0	14679.1	14517.2	14489.7
57.5°	16695.7	16569.5	16372.0	16127.8	15949.4	15768.3	15603.7	15535.1
60°	18978.5	18503.9	18147.2	17785.0	17557.3	17335.0	17118.3	17085.3
62.5°	22205.2	21384.8	20674.2	19925.1	19313.3	18835.8	18454.5	18347.5
65°	26249.5	24309.6	22627.7	21058.3	19694.6	18665.7	18018.2	17732.9
67.5°	27989.0	24158.7	21275.0	19047.1	17263.7	16018.0	15318.4	14969.9
70°	24595.0	20034.9	16898.8	14668.1	13043.8	11715.8	11082.0	10708.9
72.5°	16920.7	12744.7	10077.8	8225.8	6928.0	5816.8	5377.8	5344.8
75°	7597.4	5032.0	3468.1	2672.4	2249.9	1956.3	1865.8	1797.2
77.5°	2126.4	1572.2	1402.1	1311.5	1223.7	1122.2	1083.8	1092.0
80°	1034.4	976.8	938.4	880.7	801.2	716.1	677.7	694.2
82.5°	685.9	677.7	702.4	661.2	546.0	463.7	389.6	356.7
85°	417.1	422.5	430.8	433.5	367.7	257.9	175.6	197.6
87.5°	164.6	189.3	205.8	214.0	200.3	123.5	98.8	101.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)