

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: P299450

Luminaire Tested: **GLNA-AF-10-LED-E1-5NQ-7030-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299450  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24141)  
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-E1-5NQ-7030-800  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(10) 70 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II  
w/Spill Control OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

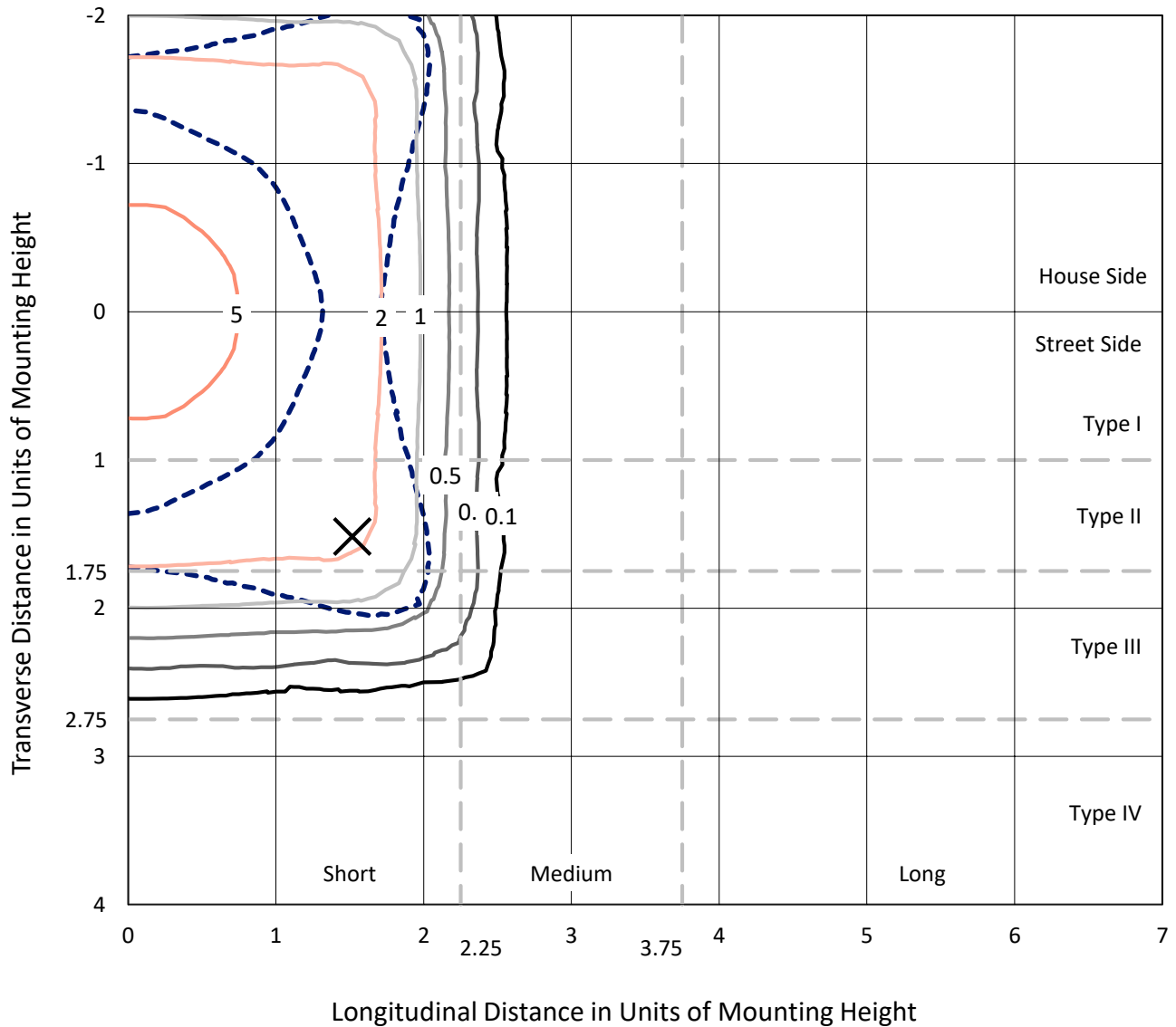
Lumens per Lamp: N/A  
Luminaire Lumens: 47328.3 lumens  
Efficiency: N/A  
Efficacy: 113.0 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B5 - U0 - G3  
  
Input Watts (W): 419  
Input Voltage (V): NR  
Input Current (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

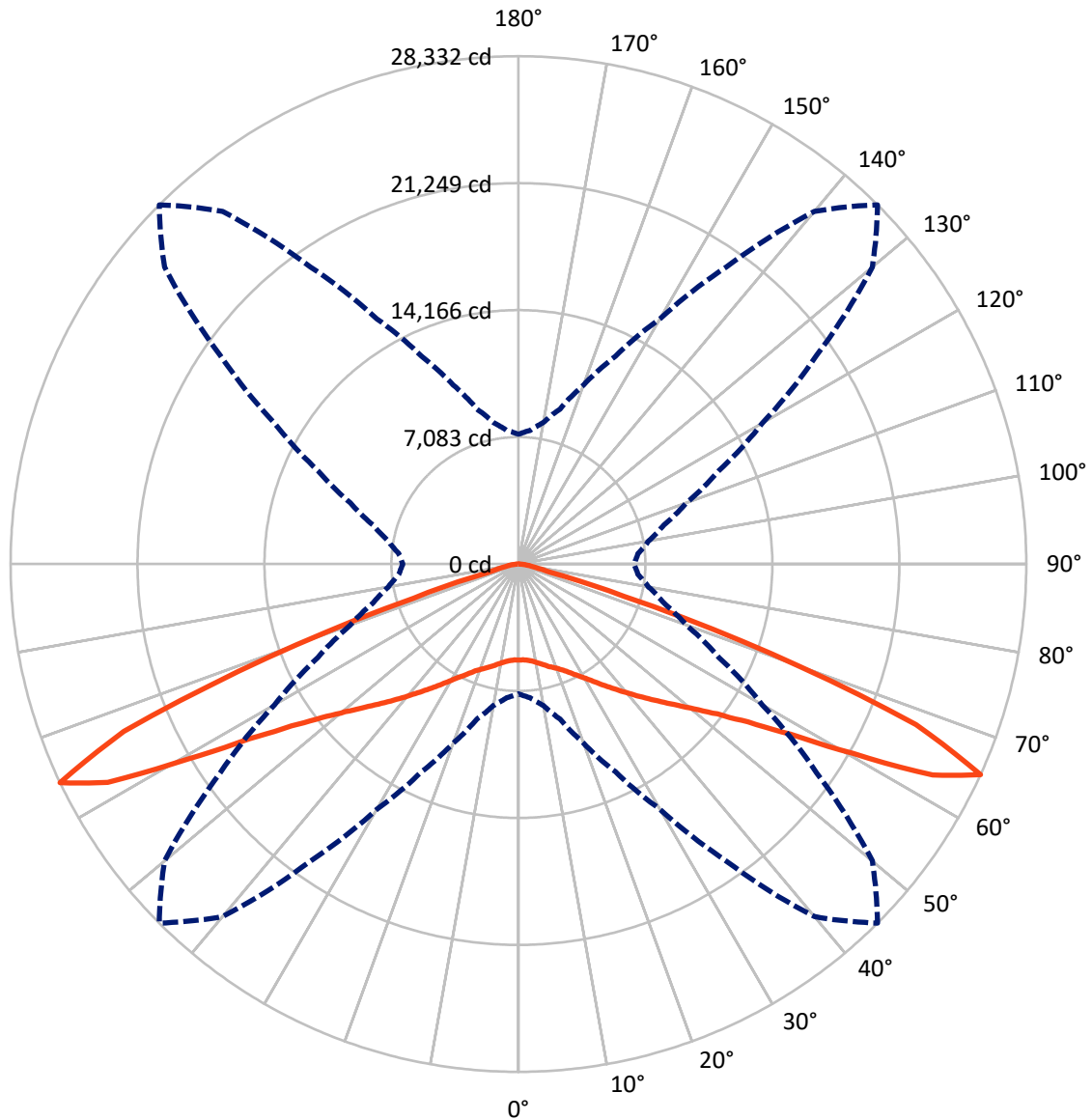
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	23664.2	0.0	23664.2
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	23664.2	0.0	23664.2
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	47328.3	0.0	47328.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	522.0	1.1
10°-20°	1674.0	3.5
20°-30°	3130.1	6.6
30°-40°	5293.9	11.2
40°-50°	8656.1	18.3
50°-60°	13764.5	29.1
60°-70°	12442.2	26.3
70°-80°	1574.6	3.3
80°-90°	270.9	0.6
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°	47328.3	100.0
0°-180°	47328.3	100.0



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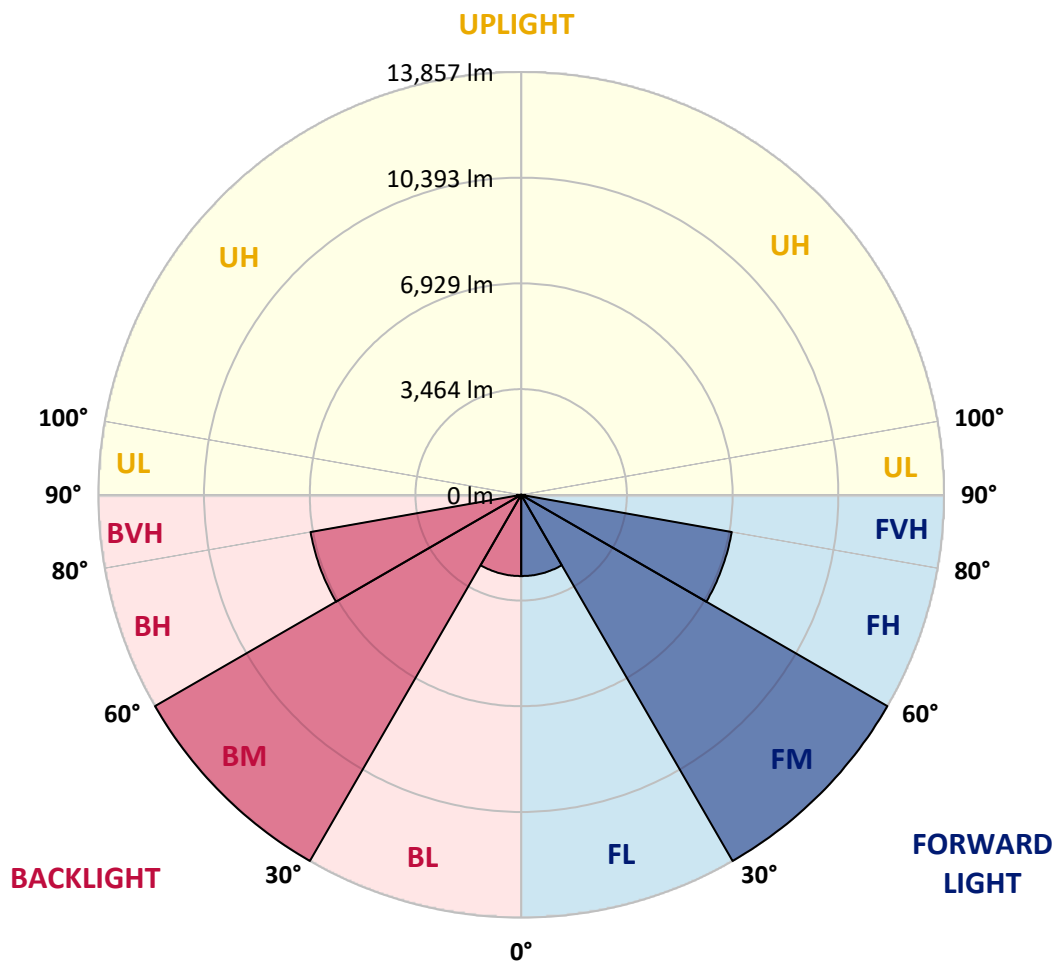
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2663.1	5.6			
FM	(30°-60°)	13857.3	29.3			
FH	(60°-80°)	7008.4	14.8			G3/7500
FVH	(80°-90°)	135.4	0.3			G2/225
BL	(0°-30°)	2663.1	5.6	B4/5000		
BM	(30°-60°)	13857.3	29.3	B5		
BH	(60°-80°)	7008.4	14.8	B5		G3/7500
BVH	(80°-90°)	135.4	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-G3**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	5355.2	5355.2	5355.2	5355.2	5355.2	5355.2	5355.2	5355.2	5355.2	5355.2	5355.2
2.5°	5359.7	5364.1	5368.5	5364.1	5368.5	5361.9	5357.4	5364.1	5357.4	5350.8	5355.2
5°	5406.2	5408.4	5408.4	5401.8	5408.4	5404.0	5397.3	5406.2	5399.6	5392.9	5397.3
7.5°	5483.8	5492.7	5486.0	5479.4	5483.8	5479.4	5474.9	5477.1	5474.9	5468.3	5470.5
10°	5588.0	5594.6	5590.2	5588.0	5592.4	5590.2	5585.8	5583.5	5585.8	5579.1	5579.1
12.5°	5714.3	5712.1	5709.9	5712.1	5718.7	5718.7	5716.5	5718.7	5723.2	5725.4	5721.0
15°	5838.4	5842.9	5842.9	5842.9	5856.2	5867.3	5873.9	5878.3	5887.2	5889.4	5880.6
17.5°	5993.6	5993.6	5991.4	5993.6	6006.9	6024.6	6031.3	6040.1	6049.0	6055.7	6044.6
20°	6166.5	6170.9	6170.9	6175.4	6193.1	6213.0	6213.0	6217.5	6213.0	6217.5	6210.8
22.5°	6377.1	6390.4	6390.4	6392.6	6410.3	6434.7	6428.0	6434.7	6423.6	6432.5	6423.6
25°	6651.9	6671.9	6667.4	6667.4	6680.7	6696.3	6698.5	6711.8	6709.6	6720.6	6714.0
27.5°	6962.2	6993.3	7002.1	6999.9	7008.8	7024.3	7028.7	7044.3	7035.4	7044.3	7039.8
30°	7334.6	7347.9	7365.7	7372.3	7383.4	7398.9	7398.9	7401.1	7390.0	7403.3	7410.0
32.5°	7720.3	7744.7	7762.4	7802.3	7822.3	7833.4	7831.1	7835.6	7824.5	7842.2	7855.5
35°	8230.1	8247.8	8276.7	8307.7	8334.3	8332.1	8325.4	8327.6	8327.6	8343.2	8356.5
37.5°	8844.1	8848.5	8886.2	8930.6	8943.9	8930.6	8890.7	8881.8	8861.8	8881.8	8904.0
40°	9493.6	9509.1	9584.4	9613.3	9619.9	9595.5	9537.9	9504.6	9460.3	9484.7	9515.7
42.5°	10174.0	10205.1	10273.8	10324.8	10346.9	10331.4	10251.6	10200.6	10143.0	10156.3	10187.3
45°	10927.7	10965.4	11062.9	11111.7	11153.8	11129.4	11051.8	10974.2	10883.3	10890.0	10938.8
47.5°	11770.0	11807.7	11934.0	12016.0	12038.2	12033.7	11947.3	11840.9	11716.8	11712.3	11754.5
50°	12714.2	12751.9	12909.3	13035.6	13099.9	13093.3	12991.3	12840.6	12689.8	12692.1	12745.3
52.5°	13636.3	13682.9	13846.9	14064.1	14190.5	14281.3	14219.3	14077.4	13893.4	13897.9	13946.6
55°	14500.8	14578.4	14766.8	15061.6	15296.5	15551.4	15624.6	15620.2	15509.3	15540.4	15589.1
57.5°	14919.7	15035.0	15325.3	15790.8	16269.6	16788.3	17227.2	17555.2	17694.9	17905.4	17856.7
60°	14126.2	14310.2	14738.0	15422.9	16369.4	17451.0	18610.3	19743.0	20709.4	21438.6	21019.7
62.5°	11566.0	11805.4	12324.1	13201.9	14633.8	16364.9	18583.7	21261.3	24178.3	25938.3	24681.5
65°	7237.1	7485.3	8012.9	8952.7	10628.4	12780.7	15790.8	20228.4	25678.9	28332.2	25774.2
67.5°	2821.7	2956.9	3242.8	3843.5	5102.5	7017.7	10038.8	15074.9	21593.8	23919.0	21192.6
70°	1414.2	1427.5	1480.7	1591.5	1861.9	2418.3	3679.5	6988.8	12384.0	14957.4	11938.4
72.5°	1021.8	1024.1	1050.7	1099.4	1185.9	1310.0	1549.4	2139.0	4027.5	6155.4	3774.8
75°	782.4	791.3	806.8	833.4	880.0	942.0	1028.5	1232.4	1527.2	1771.0	1489.5
77.5°	602.9	620.6	631.7	656.1	684.9	727.0	751.4	829.0	964.2	1015.2	999.7
80°	458.8	474.3	498.7	518.7	538.6	558.6	549.7	585.2	656.1	698.2	676.1
82.5°	292.6	310.3	381.2	399.0	407.8	421.1	405.6	407.8	438.9	465.5	438.9
85°	188.4	199.5	241.6	263.8	266.0	274.9	268.2	252.7	252.7	230.5	259.3
87.5°	86.4	88.7	108.6	128.6	133.0	119.7	117.5	113.0	90.9	86.4	93.1
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°	5355.2	5355.2	5355.2	5355.2	5355.2	5355.2	5355.2	5355.2
2.5°	5353.0	5357.4	5359.7	5366.3	5368.5	5368.5	5370.7	5375.2
5°	5395.1	5401.8	5404.0	5412.9	5415.1	5412.9	5417.3	5419.5
7.5°	5470.5	5481.6	5486.0	5494.9	5488.2	5497.1	5499.3	5499.3
10°	5581.3	5592.4	5594.6	5603.5	5599.0	5603.5	5603.5	5599.0
12.5°	5727.6	5729.8	5723.2	5729.8	5721.0	5725.4	5718.7	5714.3
15°	5889.4	5882.8	5867.3	5867.3	5854.0	5856.2	5854.0	5851.7
17.5°	6046.8	6033.5	6022.4	6018.0	6006.9	6004.7	5998.0	5998.0
20°	6219.7	6213.0	6206.4	6197.5	6186.4	6175.4	6173.1	6177.6
22.5°	6428.0	6425.8	6425.8	6421.4	6405.9	6394.8	6388.1	6388.1
25°	6707.3	6687.4	6687.4	6685.2	6678.5	6671.9	6658.6	6665.2
27.5°	7022.1	7011.0	7019.9	7017.7	7011.0	7011.0	7002.1	7002.1
30°	7410.0	7405.6	7418.9	7407.8	7385.6	7383.4	7374.5	7363.4
32.5°	7857.7	7853.3	7873.2	7859.9	7824.5	7804.5	7786.8	7777.9
35°	8356.5	8358.7	8383.1	8374.2	8334.3	8321.0	8290.0	8285.5
37.5°	8901.7	8937.2	8979.3	8988.2	8954.9	8946.1	8912.8	8895.1
40°	9542.3	9588.9	9653.2	9668.7	9633.2	9626.6	9580.0	9555.6
42.5°	10225.0	10304.8	10384.6	10397.9	10362.5	10327.0	10282.7	10264.9
45°	10987.5	11082.8	11187.0	11213.6	11160.4	11118.3	11060.7	11060.7
47.5°	11843.1	11962.8	12080.3	12153.4	12104.7	12060.3	11991.6	11947.3
50°	12853.9	13017.9	13170.8	13246.2	13168.6	13084.4	12964.7	12924.8
52.5°	14121.8	14299.1	14432.1	14392.2	14272.5	14155.0	14024.2	13971.0
55°	15739.8	15799.7	15799.7	15649.0	15409.6	15212.3	15006.2	14937.4
57.5°	17763.6	17533.0	17178.4	16728.4	16163.2	15671.1	15338.6	15181.3
60°	20142.0	19033.7	17781.3	16551.1	15540.4	14706.9	14212.6	13986.5
62.5°	21726.8	18827.5	16318.4	14343.4	12889.3	11885.2	11202.5	10936.5
65°	20306.0	15702.2	12341.8	9979.0	8394.1	7372.3	6696.3	6448.0
67.5°	14873.2	9839.3	6572.1	4710.2	3451.2	2753.0	2475.9	2360.6
70°	6676.3	3464.5	2123.5	1658.0	1429.7	1312.2	1261.2	1243.5
72.5°	2012.6	1456.3	1228.0	1108.3	1017.4	959.8	917.7	913.2
75°	1214.7	1010.8	897.7	826.8	769.1	722.6	700.4	693.8
77.5°	848.9	742.6	689.4	638.4	594.0	558.6	538.6	523.1
80°	596.3	545.3	520.9	492.1	463.3	430.0	401.2	387.9
82.5°	399.0	387.9	387.9	370.2	345.8	314.8	257.1	243.8
85°	257.1	254.9	259.3	252.7	235.0	201.7	166.2	157.4
87.5°	119.7	121.9	135.2	133.0	128.6	106.4	84.2	79.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)