

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: P300589

Luminaire Tested: **GLNA-AF-10-LED-E1-RW-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300589
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24166)
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-RW-7027
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(10) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND
Rectangular Wide Type I OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 52147.1 lumens
Efficiency: N/A
Efficacy: 93.5 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type II - Medium - 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

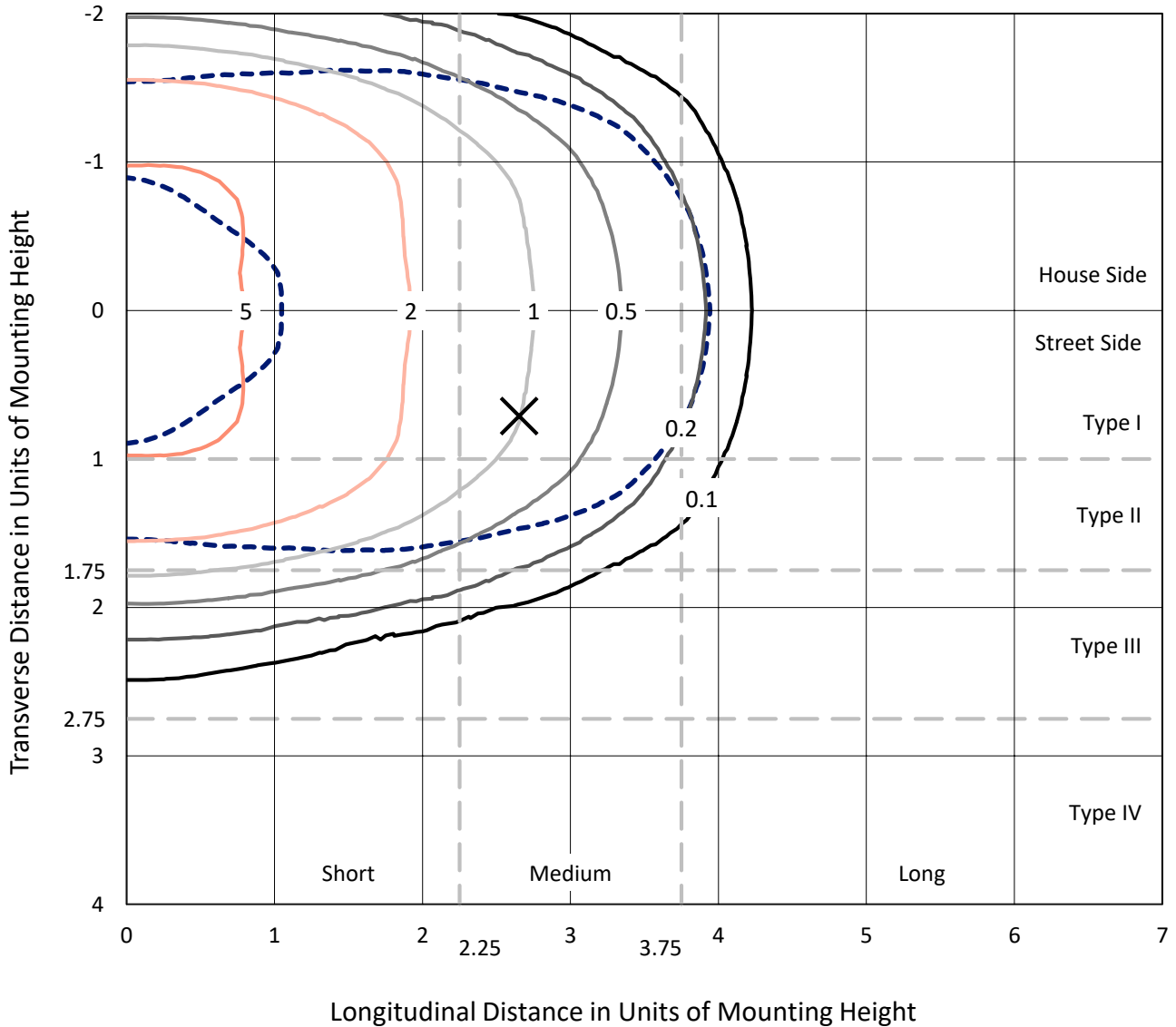


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Iso-Footcandle Lines of Horizontal Illumination

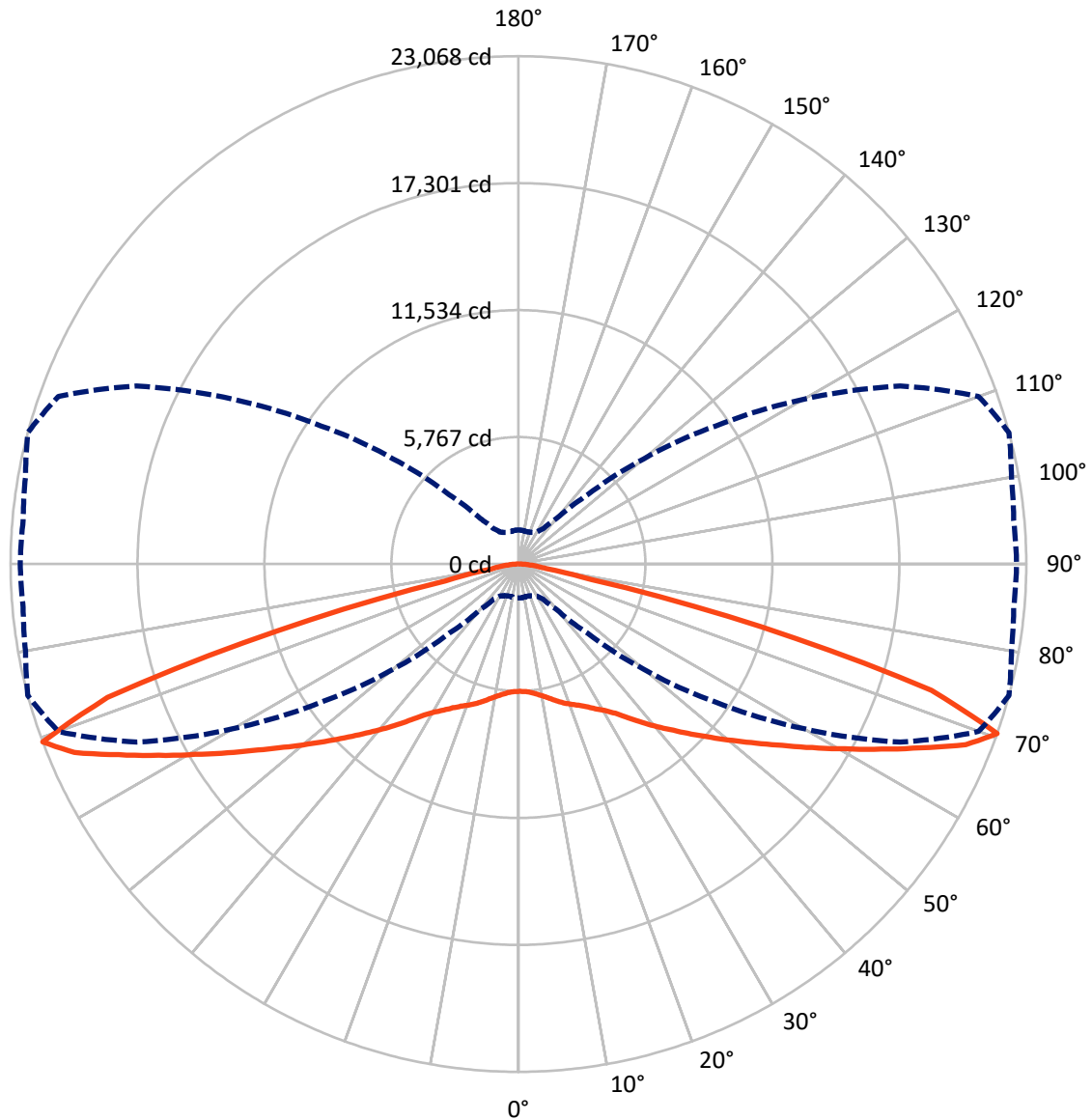
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.5 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	26073.6	0.0	26073.6
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	26073.6	0.0	26073.6
	% Fixture	50.0	0.0	50.0
Total	Lumens	52147.1	0.0	52147.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	554.8	1.1
10°-20°	1723.7	3.3
20°-30°	3244.3	6.2
30°-40°	5745.1	11.0
40°-50°	9607.6	18.4
50°-60°	13388.2	25.7
60°-70°	12415.4	23.8
70°-80°	4947.9	9.5
80°-90°	520.1	1.0
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°	52147.1	100.0
0°-180°	52147.1	100.0



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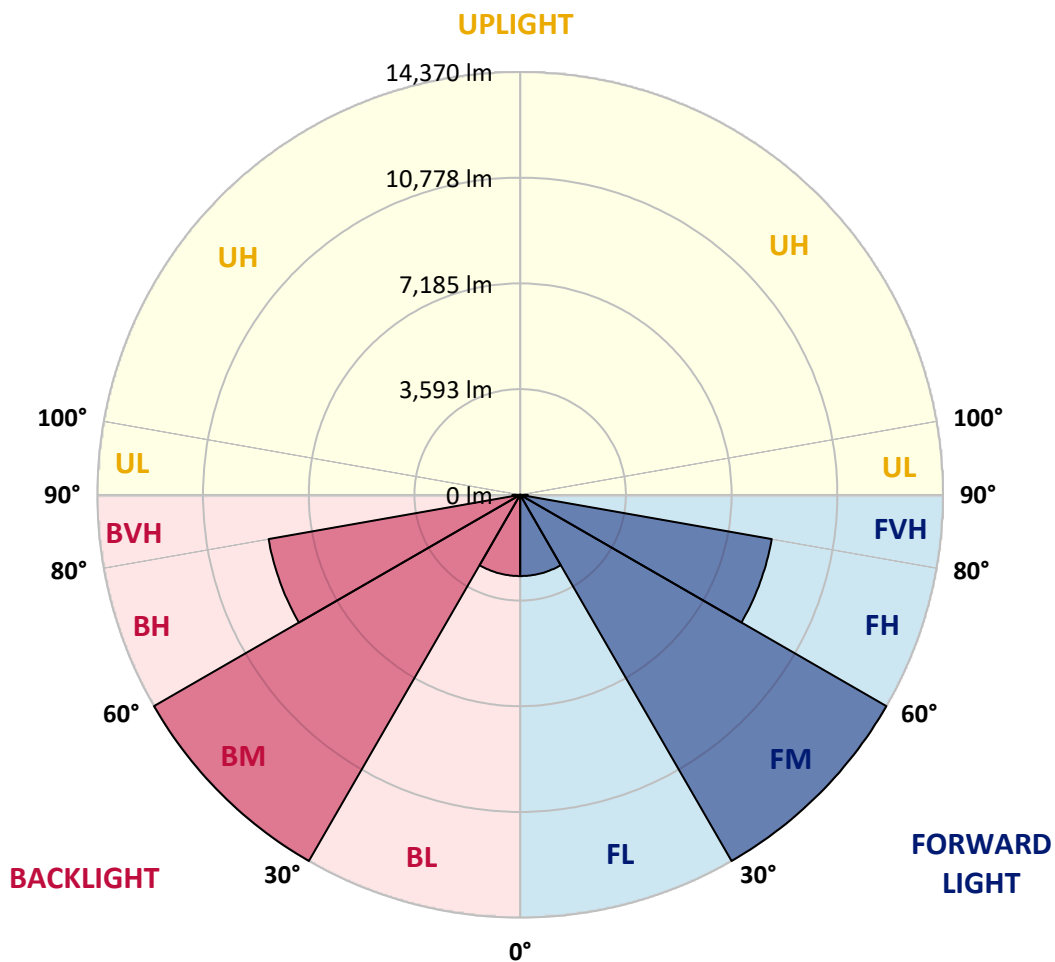
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2761.4	5.3			
FM	(30°-60°)	14370.4	27.6			
FH	(60°-80°)	8681.7	16.6			G4/12000
FVH	(80°-90°)	260.0	0.5			G3/500
BL	(0°-30°)	2761.4	5.3	B4/5000		
BM	(30°-60°)	14370.4	27.6	B5		
BH	(60°-80°)	8681.7	16.6	B5		G5
BVH	(80°-90°)	260.0	0.5			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	5784.3	5784.3	5784.3	5784.3	5784.3	5784.3	5784.3	5784.3	5784.3	5784.3	5784.3
2.5°	5774.5	5769.5	5774.5	5772.0	5776.9	5776.9	5781.9	5791.7	5791.7	5799.1	5796.7
5°	5717.8	5715.3	5722.7	5730.1	5737.5	5752.3	5767.1	5789.3	5806.5	5818.8	5831.2
7.5°	5606.9	5606.9	5616.7	5634.0	5651.2	5683.3	5717.8	5762.2	5806.5	5843.5	5875.5
10°	5515.7	5520.6	5532.9	5562.5	5592.1	5641.4	5688.2	5752.3	5813.9	5875.5	5924.8
12.5°	5461.5	5468.9	5491.0	5535.4	5584.7	5651.2	5722.7	5804.0	5873.1	5947.0	5996.3
15°	5478.7	5483.7	5515.7	5569.9	5634.0	5717.8	5813.9	5910.0	5991.4	6070.2	6136.8
17.5°	5574.8	5582.2	5619.2	5680.8	5747.4	5845.9	5949.5	6057.9	6158.9	6247.7	6329.0
20°	5747.4	5754.8	5801.6	5868.1	5947.0	6048.0	6151.6	6264.9	6378.3	6471.9	6563.1
22.5°	5991.4	6003.7	6048.0	6114.6	6203.3	6311.7	6435.0	6555.7	6664.2	6750.4	6831.8
25°	6311.7	6338.9	6380.8	6454.7	6548.3	6646.9	6780.0	6903.2	7006.8	7088.1	7147.2
27.5°	6765.2	6802.2	6834.2	6905.7	6996.9	7090.6	7223.6	7332.1	7430.7	7509.5	7553.9
30°	7366.6	7403.5	7435.6	7504.6	7588.4	7677.1	7802.8	7898.9	7960.5	8022.2	8019.7
32.5°	8096.1	8135.5	8147.8	8221.8	8308.0	8404.2	8517.5	8571.8	8621.0	8628.4	8584.1
35°	8911.9	8931.6	8980.9	9079.5	9178.0	9256.9	9365.3	9392.5	9392.5	9355.5	9256.9
37.5°	9806.5	9818.8	9887.8	9998.7	10099.8	10181.1	10255.1	10309.3	10282.2	10203.3	10038.2
40°	10787.4	10809.6	10908.2	11006.7	11120.1	11196.5	11275.4	11285.2	11258.1	11142.3	10918.0
42.5°	11723.9	11743.6	11842.2	11997.5	12145.4	12251.3	12325.3	12340.1	12253.8	12147.8	11869.3
45°	12529.8	12581.6	12709.8	12892.1	13106.6	13256.9	13357.9	13399.8	13323.4	13185.4	12862.6
47.5°	13168.2	13219.9	13402.3	13619.2	13885.4	14129.3	14296.9	14385.7	14365.9	14262.4	13910.0
50°	13636.4	13685.7	13882.9	14149.1	14459.6	14762.7	15048.6	15260.6	15334.5	15287.7	14964.8
52.5°	13690.7	13772.0	14003.7	14361.0	14765.2	15179.2	15585.9	15945.7	16189.7	16226.7	15987.6
55°	12934.0	13015.4	13335.8	13865.6	14467.0	15142.3	15792.9	16399.2	16879.8	17126.3	17000.6
57.5°	11149.7	11295.1	11632.7	12253.8	13138.6	14149.1	15186.6	16263.7	17242.1	17895.2	18020.9
60°	8544.6	8717.2	9057.3	9717.8	10703.6	11908.8	13293.9	14886.0	16613.6	18082.5	18959.9
62.5°	5481.2	5643.9	6001.2	6575.5	7378.9	8685.1	10171.3	12061.6	14383.2	16702.3	18792.3
65°	2817.0	2905.7	3093.0	3440.5	4066.5	5042.5	6375.8	8261.2	10915.6	13776.9	16798.5
67.5°	1784.3	1801.6	1843.5	1892.8	2053.0	2390.6	3011.7	4187.3	6370.9	9355.5	12892.1
70°	1542.8	1542.8	1523.1	1515.7	1535.4	1582.3	1678.4	1951.9	2688.8	4441.1	7435.6
72.5°	1412.2	1397.4	1362.9	1335.8	1330.9	1330.9	1350.6	1392.5	1510.8	1809.0	2910.6
75°	1301.3	1259.4	1212.6	1180.5	1168.2	1155.9	1153.4	1160.8	1185.5	1232.3	1390.0
77.5°	1165.7	1111.5	1057.3	1025.3	1010.5	993.2	978.4	961.2	948.9	963.6	1032.7
80°	1003.1	941.5	899.6	879.8	865.1	840.4	808.4	778.8	751.7	746.8	788.7
82.5°	808.4	736.9	739.4	746.8	719.7	685.1	650.6	618.6	571.8	547.1	571.8
85°	653.1	616.1	598.9	645.7	606.3	554.5	500.3	443.6	369.7	310.5	337.6
87.5°	253.9	253.9	379.5	584.1	525.0	428.8	367.2	313.0	194.7	150.3	152.8
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°	5784.3	5784.3	5784.3	5784.3	5784.3	5784.3	5784.3	5784.3
2.5°	5794.2	5799.1	5796.7	5794.2	5794.2	5791.7	5794.2	5794.2
5°	5838.6	5850.9	5850.9	5855.8	5855.8	5858.3	5860.7	5858.3
7.5°	5905.1	5927.3	5942.1	5959.3	5961.8	5964.2	5969.2	5964.2
10°	5971.6	6016.0	6048.0	6080.1	6094.9	6099.8	6104.7	6104.7
12.5°	6055.4	6117.0	6173.7	6230.4	6257.5	6272.3	6272.3	6282.2
15°	6193.4	6255.1	6321.6	6398.0	6444.8	6469.5	6476.9	6476.9
17.5°	6388.1	6442.4	6499.1	6573.0	6632.1	6664.2	6671.6	6669.1
20°	6614.9	6666.6	6698.7	6745.5	6797.3	6834.2	6844.1	6844.1
22.5°	6873.7	6903.2	6908.2	6923.0	6964.9	7014.1	7036.3	7041.3
25°	7159.6	7167.0	7147.2	7147.2	7174.3	7221.2	7243.4	7245.8
27.5°	7529.2	7492.3	7443.0	7425.7	7443.0	7497.2	7524.3	7534.2
30°	7990.1	7901.4	7788.0	7726.4	7716.5	7788.0	7837.3	7844.7
32.5°	8517.5	8389.4	8239.0	8113.3	8081.3	8125.7	8184.8	8182.4
35°	9143.5	8990.7	8808.4	8648.2	8574.2	8618.6	8702.4	8712.2
37.5°	9865.6	9666.0	9456.5	9254.4	9138.6	9150.9	9239.6	9269.2
40°	10671.6	10412.8	10149.1	9878.0	9712.8	9680.8	9789.2	9806.5
42.5°	11534.2	11201.4	10868.7	10533.5	10321.6	10272.3	10398.0	10390.6
45°	12453.4	12029.5	11640.1	11270.5	11019.1	10945.1	11048.6	11048.6
47.5°	13441.7	12919.2	12455.9	12036.9	11763.4	11657.4	11756.0	11763.4
50°	14489.2	13934.6	13390.0	12924.2	12596.4	12460.8	12589.0	12608.7
52.5°	15531.7	14991.9	14442.3	13910.0	13513.2	13348.1	13496.0	13560.0
55°	16589.0	16059.1	15534.1	15014.1	14543.4	14348.7	14506.4	14587.8
57.5°	17705.4	17215.0	16714.7	16189.7	15736.2	15433.1	15600.7	15709.1
60°	19014.1	18595.1	18075.1	17495.9	17037.5	16729.5	16825.6	16921.7
62.5°	20049.2	20211.9	19770.7	19100.4	18511.3	18117.0	18210.7	18311.7
65°	19548.9	21217.4	21609.3	20931.5	20115.8	19502.1	19462.7	19514.4
67.5°	16340.1	19581.0	21944.5	22590.2	21907.5	21054.8	20897.0	20973.4
70°	10930.3	14967.3	19137.3	22242.7	23068.3	22738.1	22582.8	22629.6
72.5°	5249.5	8717.2	12983.3	17111.5	19625.3	20778.7	21148.4	21328.3
75°	1919.9	3460.2	6257.5	9429.4	11383.8	13178.0	14348.7	14826.8
77.5°	1158.3	1397.4	1998.8	3009.2	3408.5	3815.1	3657.4	3736.3
80°	857.7	968.6	1096.7	1232.3	1276.6	1276.6	1227.4	1187.9
82.5°	601.4	672.8	734.4	808.4	828.1	791.1	650.6	517.6
85°	386.9	419.0	446.1	492.9	480.6	458.4	308.1	273.6
87.5°	177.4	202.1	212.0	234.1	224.3	214.4	152.8	128.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)