

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: P299377

Luminaire Tested: **GLNA-AF-08-LED-E1-5NQ-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299377
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-08-LED-E1-5NQ-7027
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 42607.1 lumens
Efficiency: N/A
Efficacy: 95.7 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G3

Input Watts (W): 445
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

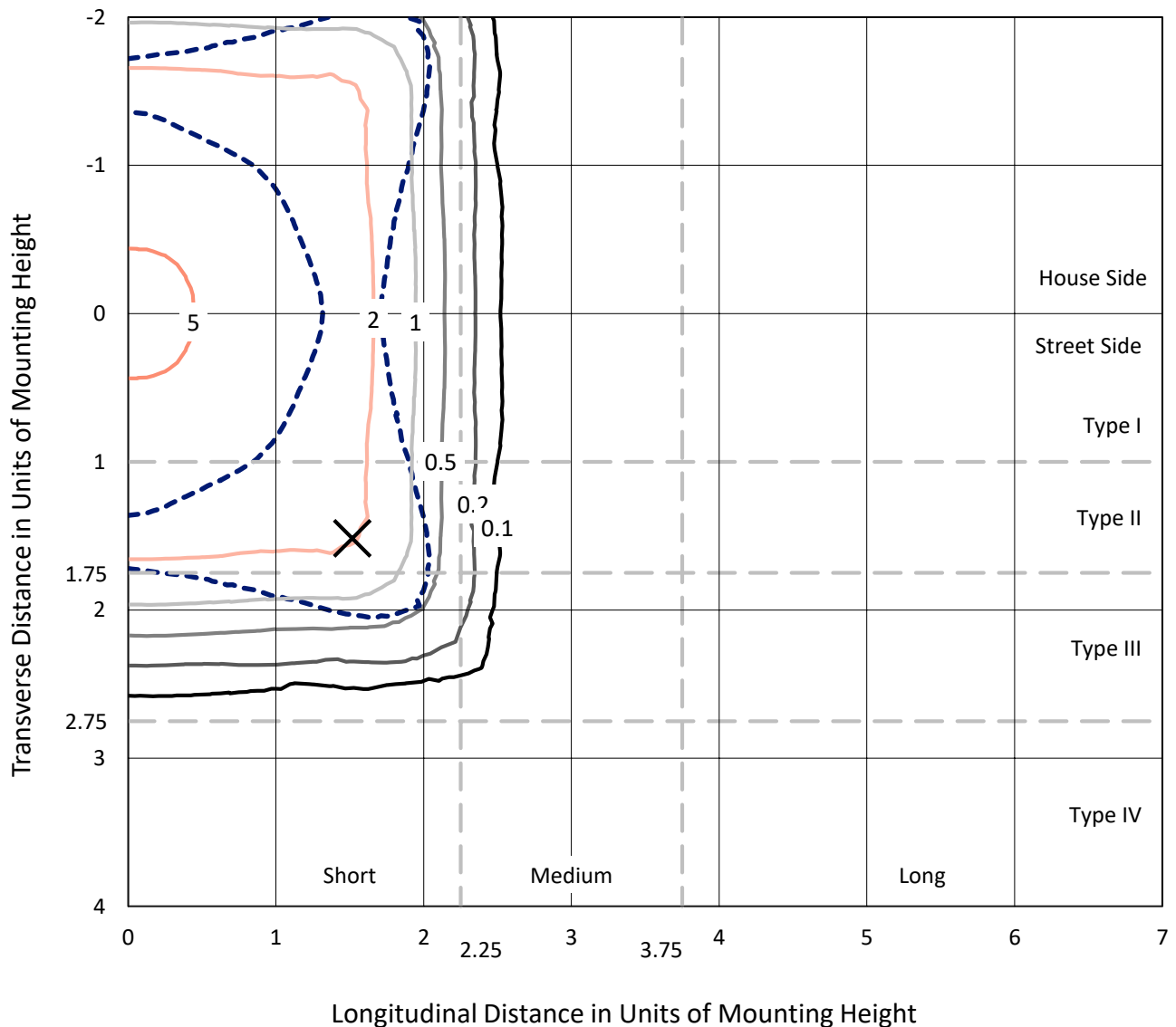


REPORT NUMBER: P299377

CATALOG NUMBER: GLNA-AF-08-LED-E1-5NQ-7027

Iso-Footcandle Lines of Horizontal Illumination

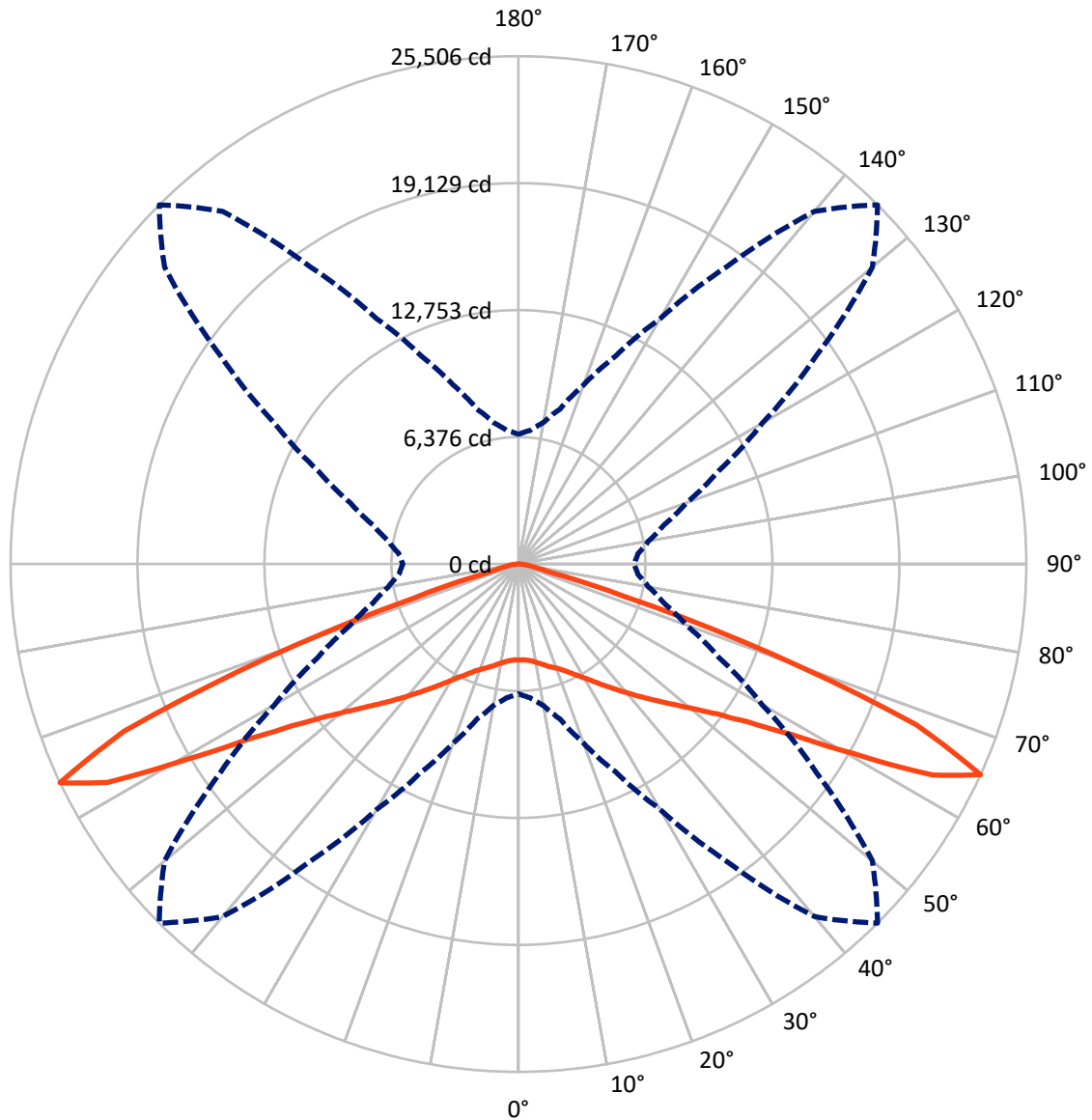
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.4 fc
 Type V - Short - Full Cutoff

REPORT NUMBER: P299377
CATALOG NUMBER: GLNA-AF-08-LED-E1-5NQ-7027

Luminous Intensity Polar Plot



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

REPORT NUMBER: P299377

CATALOG NUMBER: GLNA-AF-08-LED-E1-5NQ-7027

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	21303.5	0.0	21303.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	21303.5	0.0	21303.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	42607.1	0.0	42607.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	469.9	1.1
10°-20°	1507.0	3.5
20°-30°	2817.9	6.6
30°-40°	4765.8	11.2
40°-50°	7792.6	18.3
50°-60°	12391.4	29.1
60°-70°	11201.0	26.3
70°-80°	1417.5	3.3
80°-90°	243.8	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°	42607.1	100.0
0°-180°	42607.1	100.0



REPORT NUMBER: P299377

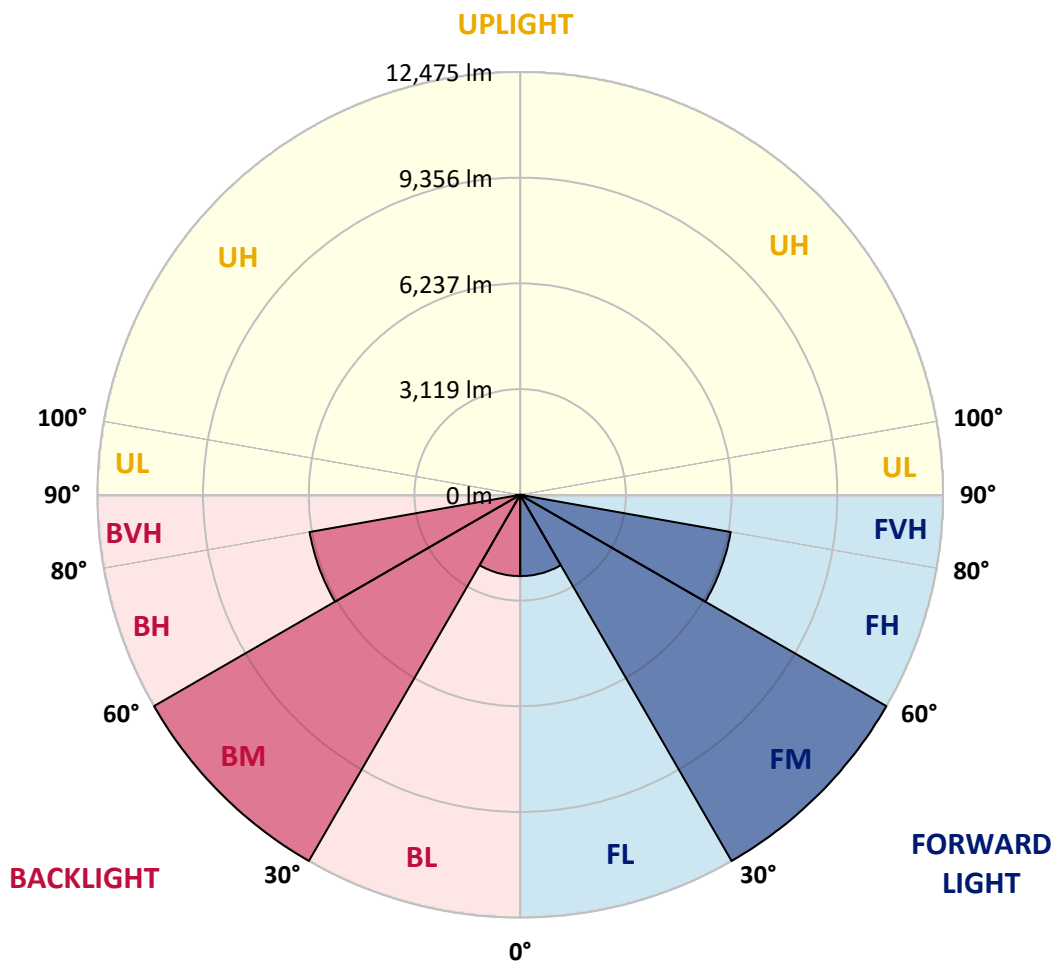
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2397.4	5.6			
FM	(30°-60°)	12474.9	29.3			
FH	(60°-80°)	6309.3	14.8			G3/7500
FVH	(80°-90°)	121.9	0.3			G2/225
BL	(0°-30°)	2397.4	5.6	B3/2500		
BM	(30°-60°)	12474.9	29.3	B5		
BH	(60°-80°)	6309.3	14.8	B5		G3/7500
BVH	(80°-90°)	121.9	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





REPORT NUMBER: P299377

CATALOG NUMBER: GLNA-AF-08-LED-E1-5NQ-7027

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	4821.0	4821.0	4821.0	4821.0	4821.0	4821.0	4821.0	4821.0	4821.0	4821.0	4821.0
2.5°	4825.0	4829.0	4833.0	4829.0	4833.0	4827.0	4823.0	4829.0	4823.0	4817.0	4821.0
5°	4866.9	4868.9	4868.9	4862.9	4868.9	4864.9	4858.9	4866.9	4860.9	4854.9	4858.9
7.5°	4936.7	4944.7	4938.7	4932.8	4936.7	4932.8	4928.8	4930.8	4928.8	4922.8	4924.8
10°	5030.5	5036.5	5032.5	5030.5	5034.5	5032.5	5028.5	5026.5	5028.5	5022.6	5022.6
12.5°	5144.3	5142.3	5140.3	5142.3	5148.3	5148.3	5146.3	5148.3	5152.3	5154.3	5150.3
15°	5256.0	5260.0	5260.0	5260.0	5272.0	5282.0	5287.9	5291.9	5299.9	5301.9	5293.9
17.5°	5395.7	5395.7	5393.7	5395.7	5407.7	5423.6	5429.6	5437.6	5445.6	5451.6	5441.6
20°	5551.3	5555.3	5555.3	5559.3	5575.3	5593.2	5593.2	5597.2	5593.2	5597.2	5591.3
22.5°	5740.9	5752.9	5752.9	5754.9	5770.8	5792.8	5786.8	5792.8	5782.8	5790.8	5782.8
25°	5988.3	6006.3	6002.3	6002.3	6014.3	6028.3	6030.3	6042.2	6040.2	6050.2	6044.2
27.5°	6267.7	6295.6	6303.6	6301.6	6309.6	6323.6	6327.6	6341.5	6333.6	6341.5	6337.6
30°	6602.9	6614.9	6630.9	6636.9	6646.8	6660.8	6660.8	6662.8	6652.8	6664.8	6670.8
32.5°	6950.2	6972.1	6988.1	7024.0	7041.9	7051.9	7049.9	7053.9	7043.9	7059.9	7071.9
35°	7409.1	7425.1	7451.0	7479.0	7502.9	7500.9	7494.9	7496.9	7496.9	7510.9	7522.9
37.5°	7961.9	7965.8	7999.8	8039.7	8051.6	8039.7	8003.8	7995.8	7977.8	7995.8	8015.7
40°	8546.5	8560.5	8628.3	8654.3	8660.3	8638.3	8586.4	8556.5	8516.6	8538.5	8566.5
42.5°	9159.1	9187.1	9248.9	9294.8	9314.8	9300.8	9229.0	9183.1	9131.2	9143.2	9171.1
45°	9837.6	9871.5	9959.3	10003.2	10041.1	10019.2	9949.3	9879.5	9797.7	9803.7	9847.6
47.5°	10595.8	10629.8	10743.5	10817.3	10837.3	10833.3	10755.5	10659.7	10548.0	10544.0	10581.9
50°	11445.9	11479.8	11621.5	11735.2	11793.1	11787.1	11695.3	11559.6	11424.0	11426.0	11473.8
52.5°	12276.0	12317.9	12465.6	12661.1	12774.9	12856.7	12800.8	12673.1	12507.5	12511.5	12555.4
55°	13054.2	13124.1	13293.7	13559.1	13770.6	14000.1	14065.9	14061.9	13962.2	13990.1	14034.0
57.5°	13431.4	13535.1	13796.5	14215.6	14646.6	15113.5	15508.6	15804.0	15929.7	16119.3	16075.4
60°	12717.0	12882.6	13267.8	13884.3	14736.4	15710.2	16753.8	17773.5	18643.5	19300.0	18922.9
62.5°	10412.3	10627.8	11094.7	11884.9	13174.0	14732.4	16729.9	19140.4	21766.4	23350.8	22219.3
65°	6515.1	6738.6	7213.6	8059.6	9568.2	11505.8	14215.6	18210.5	23117.3	25505.9	23203.1
67.5°	2540.2	2661.9	2919.3	3460.1	4593.5	6317.6	9037.4	13571.1	19439.7	21532.9	19078.5
70°	1273.1	1285.1	1333.0	1432.7	1676.2	2177.0	3312.4	6291.7	11148.6	13465.3	10747.5
72.5°	919.9	921.9	945.8	989.7	1067.6	1179.3	1394.8	1925.6	3625.7	5541.4	3398.3
75°	704.4	712.4	726.3	750.3	792.2	848.1	925.9	1109.5	1374.9	1594.4	1340.9
77.5°	542.8	558.7	568.7	590.7	616.6	654.5	676.5	746.3	868.0	913.9	899.9
80°	413.1	427.0	449.0	466.9	484.9	502.9	494.9	526.8	590.7	628.6	608.6
82.5°	263.4	279.4	343.2	359.2	367.2	379.1	365.2	367.2	395.1	419.0	395.1
85°	169.6	179.6	217.5	237.5	239.5	247.4	241.4	227.5	227.5	207.5	233.5
87.5°	77.8	79.8	97.8	115.7	119.7	107.8	105.8	101.8	81.8	77.8	83.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P299377

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	4821.0	4821.0	4821.0	4821.0	4821.0	4821.0	4821.0	4821.0
2.5°	4819.0	4823.0	4825.0	4831.0	4833.0	4833.0	4835.0	4839.0
5°	4856.9	4862.9	4864.9	4872.9	4874.9	4872.9	4876.9	4878.9
7.5°	4924.8	4934.8	4938.7	4946.7	4940.7	4948.7	4950.7	4950.7
10°	5024.5	5034.5	5036.5	5044.5	5040.5	5044.5	5044.5	5040.5
12.5°	5156.2	5158.2	5152.3	5158.2	5150.3	5154.3	5148.3	5144.3
15°	5301.9	5295.9	5282.0	5282.0	5270.0	5272.0	5270.0	5268.0
17.5°	5443.6	5431.6	5421.6	5417.6	5407.7	5405.7	5399.7	5399.7
20°	5599.2	5593.2	5587.3	5579.3	5569.3	5559.3	5557.3	5561.3
22.5°	5786.8	5784.8	5784.8	5780.8	5766.9	5756.9	5750.9	5750.9
25°	6038.2	6020.3	6020.3	6018.3	6012.3	6006.3	5994.3	6000.3
27.5°	6321.6	6311.6	6319.6	6317.6	6311.6	6311.6	6303.6	6303.6
30°	6670.8	6666.8	6678.8	6668.8	6648.8	6646.8	6638.9	6628.9
32.5°	7073.9	7069.9	7087.8	7075.9	7043.9	7026.0	7010.0	7002.0
35°	7522.9	7524.8	7546.8	7538.8	7502.9	7490.9	7463.0	7459.0
37.5°	8013.7	8045.7	8083.6	8091.6	8061.6	8053.6	8023.7	8007.7
40°	8590.4	8632.3	8690.2	8704.2	8672.2	8666.2	8624.3	8602.4
42.5°	9205.0	9276.9	9348.7	9360.7	9328.7	9296.8	9256.9	9240.9
45°	9891.5	9977.3	10071.0	10095.0	10047.1	10009.2	9957.3	9957.3
47.5°	10661.7	10769.4	10875.2	10941.1	10897.2	10857.2	10795.4	10755.5
50°	11571.6	11719.3	11857.0	11924.8	11855.0	11779.1	11671.4	11635.5
52.5°	12713.0	12872.7	12992.4	12956.5	12848.7	12743.0	12625.2	12577.3
55°	14169.7	14223.6	14223.6	14087.9	13872.4	13694.8	13509.2	13447.3
57.5°	15991.5	15784.0	15464.7	15059.7	14550.8	14107.8	13808.5	13666.8
60°	18132.7	17134.9	16007.5	14900.0	13990.1	13239.8	12794.8	12591.3
62.5°	19559.4	16949.4	14690.5	12912.6	11603.5	10699.6	10085.0	9845.6
65°	18280.3	14135.8	11110.7	8983.5	7556.8	6636.9	6028.3	5804.8
67.5°	13389.5	8857.8	5916.5	4240.3	3106.9	2478.4	2228.9	2125.2
70°	6010.3	3118.9	1911.6	1492.6	1287.1	1181.3	1135.4	1119.4
72.5°	1811.9	1311.0	1105.5	997.7	915.9	864.0	826.1	822.1
75°	1093.5	909.9	808.2	744.3	692.4	650.5	630.6	624.6
77.5°	764.3	668.5	620.6	574.7	534.8	502.9	484.9	470.9
80°	536.8	490.9	468.9	443.0	417.0	387.1	361.2	349.2
82.5°	359.2	349.2	349.2	333.2	311.3	283.4	231.5	219.5
85°	231.5	229.5	233.5	227.5	211.5	181.6	149.7	141.7
87.5°	107.8	109.7	121.7	119.7	115.7	95.8	75.8	71.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)