

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: P299431

Luminaire Tested: **GLNA-AF-07-LED-E1-5NQ-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299431
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-07-LED-E1-5NQ-7027-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(7) 70 CRI, 2700K 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: 30379.6 lumens
Efficiency: N/A
Efficacy: 103.0 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G2

Input Watts (W): 295
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

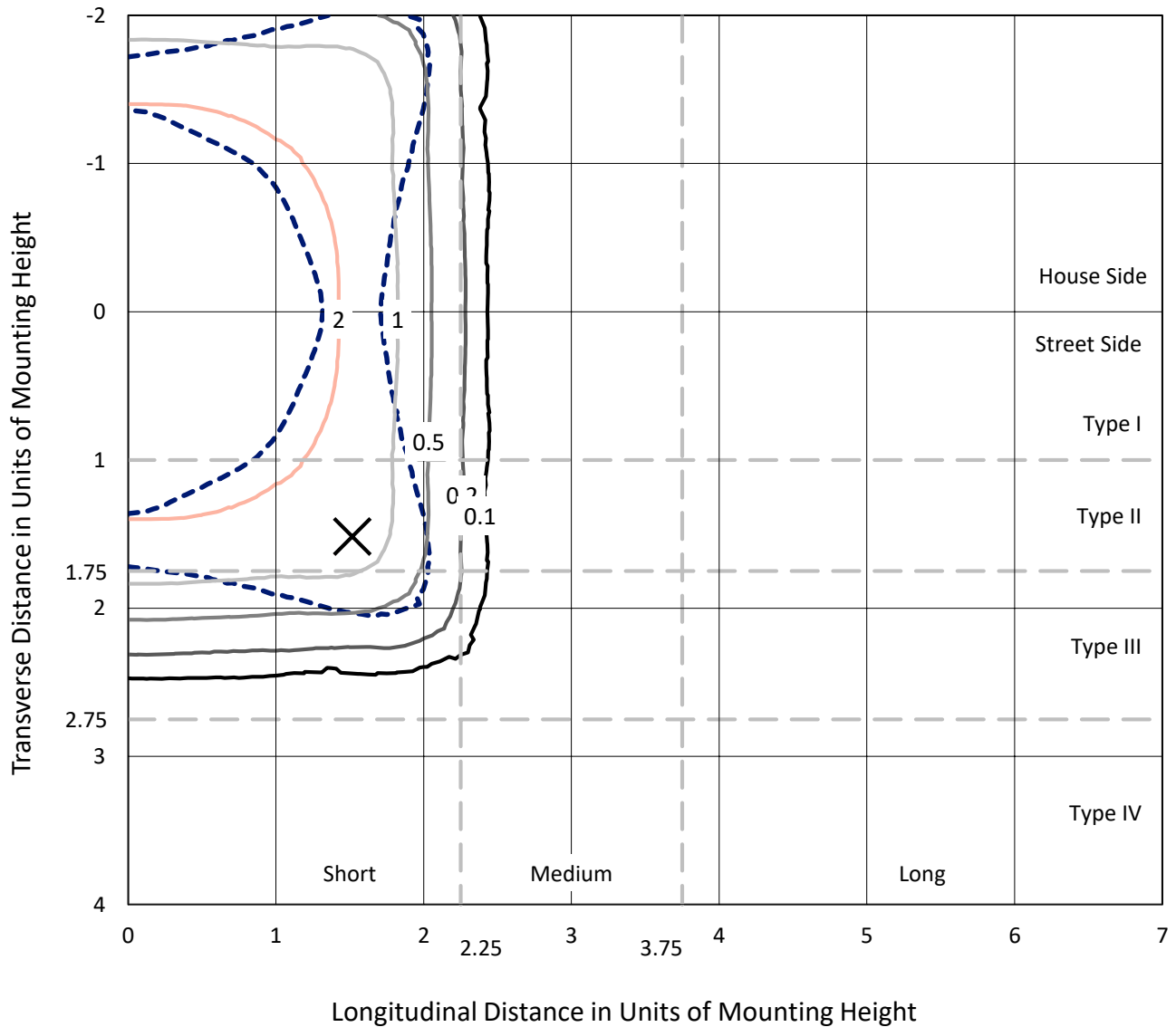


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Iso-Footcandle Lines of Horizontal Illumination

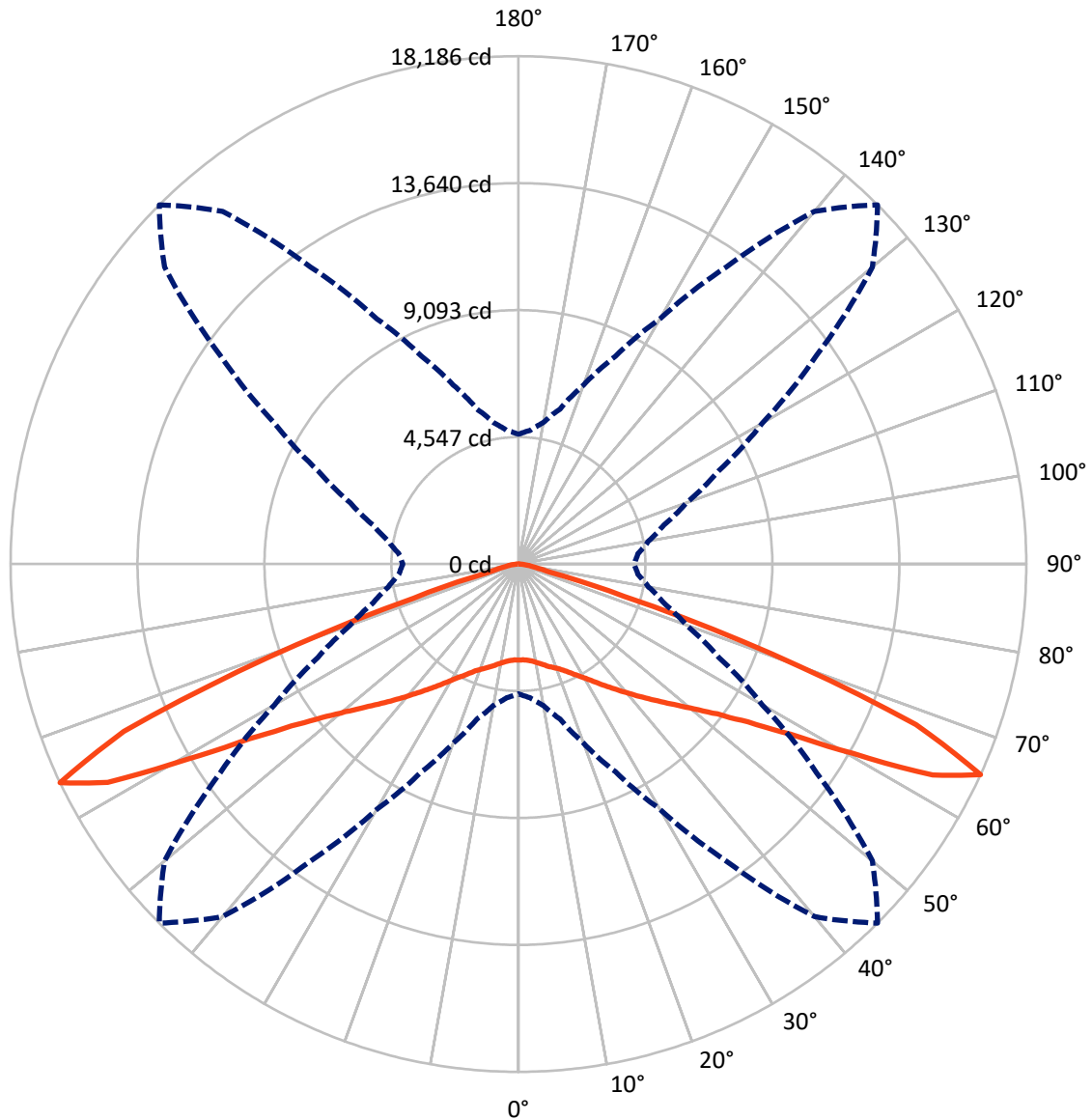
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 3.8 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
House Side	Lumens	15189.8	0.0	15189.8
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	15189.8	0.0	15189.8
	% Fixture	50.0	0.0	50.0
Total	Lumens	30379.6	0.0	30379.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	335.0	1.1
10°-20°	1074.5	3.5
20°-30°	2009.2	6.6
30°-40°	3398.1	11.2
40°-50°	5556.3	18.3
50°-60°	8835.3	29.1
60°-70°	7986.5	26.3
70°-80°	1010.7	3.3
80°-90°	173.9	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°	30379.6	100.0
0°-180°	30379.6	100.0



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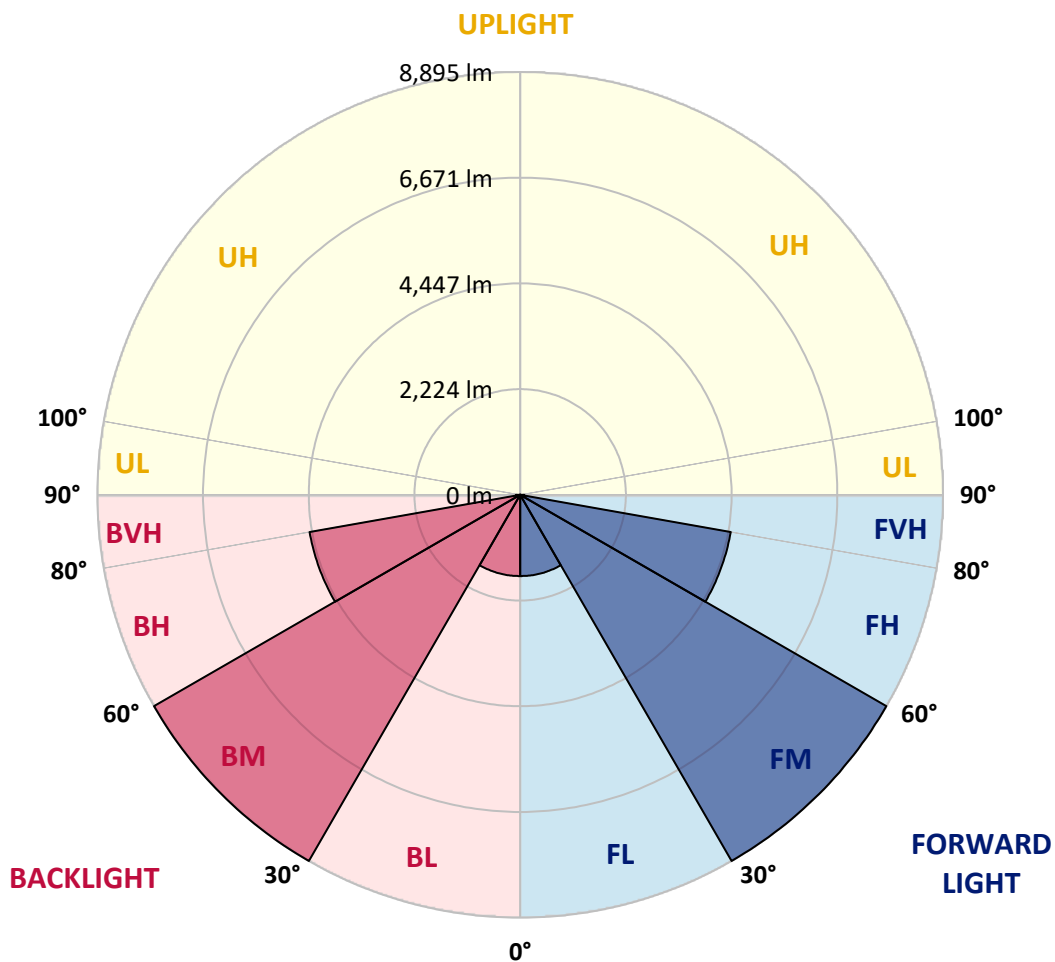
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1709.4	5.6			
FM	(30°-60°)	8894.8	29.3			
FH	(60°-80°)	4498.6	14.8			G2/5000
FVH	(80°-90°)	86.9	0.3			G1/100
BL	(0°-30°)	1709.4	5.6	B3/2500		
BM	(30°-60°)	8894.8	29.3	B5		
BH	(60°-80°)	4498.6	14.8	B4/5000		G2/5000
BVH	(80°-90°)	86.9	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3437.5	3437.5	3437.5	3437.5	3437.5	3437.5	3437.5	3437.5	3437.5	3437.5	3437.5
2.5°	3440.3	3443.2	3446.0	3443.2	3446.0	3441.7	3438.9	3443.2	3438.9	3434.6	3437.5
5°	3470.2	3471.6	3471.6	3467.3	3471.6	3468.8	3464.5	3470.2	3465.9	3461.7	3464.5
7.5°	3520.0	3525.7	3521.4	3517.1	3520.0	3517.1	3514.3	3515.7	3514.3	3510.0	3511.5
10°	3586.9	3591.1	3588.3	3586.9	3589.7	3588.3	3585.4	3584.0	3585.4	3581.2	3581.2
12.5°	3668.0	3666.5	3665.1	3666.5	3670.8	3670.8	3669.4	3670.8	3673.6	3675.1	3672.2
15°	3747.6	3750.5	3750.5	3750.5	3759.0	3766.1	3770.4	3773.2	3778.9	3780.4	3774.7
17.5°	3847.2	3847.2	3845.8	3847.2	3855.8	3867.1	3871.4	3877.1	3882.8	3887.1	3880.0
20°	3958.2	3961.1	3961.1	3963.9	3975.3	3988.1	3988.1	3990.9	3988.1	3990.9	3986.7
22.5°	4093.4	4101.9	4101.9	4103.3	4114.7	4130.4	4126.1	4130.4	4123.3	4128.9	4123.3
25°	4269.8	4282.6	4279.8	4279.8	4288.3	4298.3	4299.7	4308.2	4306.8	4313.9	4309.6
27.5°	4469.0	4488.9	4494.6	4493.2	4498.9	4508.8	4511.7	4521.6	4515.9	4521.6	4518.8
30°	4708.0	4716.6	4727.9	4732.2	4739.3	4749.3	4749.3	4750.7	4743.6	4752.1	4756.4
32.5°	4955.6	4971.2	4982.6	5008.2	5021.0	5028.1	5026.7	5029.6	5022.5	5033.8	5042.4
35°	5282.8	5294.2	5312.7	5332.6	5349.7	5348.3	5344.0	5345.4	5345.4	5355.4	5363.9
37.5°	5676.9	5679.8	5704.0	5732.4	5741.0	5732.4	5706.8	5701.1	5688.3	5701.1	5715.4
40°	6093.8	6103.8	6152.2	6170.7	6174.9	6159.3	6122.3	6100.9	6072.5	6088.1	6108.0
42.5°	6530.6	6550.5	6594.6	6627.4	6641.6	6631.6	6580.4	6547.7	6510.7	6519.2	6539.2
45°	7014.4	7038.6	7101.2	7132.5	7159.5	7143.8	7094.0	7044.2	6985.9	6990.2	7021.5
47.5°	7555.0	7579.2	7660.3	7713.0	7727.2	7724.3	7668.9	7600.6	7520.9	7518.0	7545.1
50°	8161.1	8185.3	8286.3	8367.4	8408.7	8404.4	8339.0	8242.2	8145.5	8146.9	8181.1
52.5°	8753.0	8782.9	8888.2	9027.6	9108.7	9167.1	9127.2	9036.2	8918.1	8920.9	8952.2
55°	9307.9	9357.7	9478.6	9667.9	9818.7	9982.3	10029.3	10026.4	9955.3	9975.2	10006.5
57.5°	9576.8	9650.8	9837.2	10136.0	10443.3	10776.2	11057.9	11268.5	11358.2	11493.3	11462.0
60°	9067.5	9185.5	9460.1	9899.8	10507.3	11201.6	11945.8	12672.8	13293.1	13761.2	13492.3
62.5°	7424.1	7577.8	7910.7	8474.2	9393.3	10504.5	11928.7	13647.4	15519.8	16649.5	15842.8
65°	4645.4	4804.8	5143.4	5746.7	6822.3	8203.8	10136.0	12984.4	16483.0	18186.1	16544.2
67.5°	1811.2	1898.0	2081.5	2467.1	3275.3	4504.6	6443.8	9676.4	13860.8	15353.4	13603.3
70°	907.7	916.3	950.4	1021.6	1195.1	1552.3	2361.8	4486.1	7949.1	9601.0	7663.2
72.5°	655.9	657.3	674.4	705.7	761.2	840.9	994.5	1373.0	2585.2	3951.1	2423.0
75°	502.2	507.9	517.9	535.0	564.8	604.7	660.2	791.1	980.3	1136.8	956.1
77.5°	387.0	398.4	405.5	421.1	439.6	466.7	482.3	532.1	618.9	651.6	641.7
80°	294.5	304.5	320.1	332.9	345.7	358.5	352.9	375.6	421.1	448.2	434.0
82.5°	187.8	199.2	244.7	256.1	261.8	270.3	260.4	261.8	281.7	298.8	281.7
85°	120.9	128.1	155.1	169.3	170.7	176.4	172.2	162.2	162.2	148.0	166.5
87.5°	55.5	56.9	69.7	82.5	85.4	76.8	75.4	72.6	58.3	55.5	59.8
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°	3437.5	3437.5	3437.5	3437.5	3437.5	3437.5	3437.5	3437.5
2.5°	3436.0	3438.9	3440.3	3444.6	3446.0	3446.0	3447.4	3450.3
5°	3463.1	3467.3	3468.8	3474.5	3475.9	3474.5	3477.3	3478.7
7.5°	3511.5	3518.6	3521.4	3527.1	3522.8	3528.5	3529.9	3529.9
10°	3582.6	3589.7	3591.1	3596.8	3594.0	3596.8	3596.8	3594.0
12.5°	3676.5	3677.9	3673.6	3677.9	3672.2	3675.1	3670.8	3668.0
15°	3780.4	3776.1	3766.1	3766.1	3757.6	3759.0	3757.6	3756.2
17.5°	3881.4	3872.8	3865.7	3862.9	3855.8	3854.3	3850.1	3850.1
20°	3992.4	3988.1	3983.8	3978.1	3971.0	3963.9	3962.5	3965.3
22.5°	4126.1	4124.7	4124.7	4121.8	4111.9	4104.8	4100.5	4100.5
25°	4305.4	4292.6	4292.6	4291.1	4286.9	4282.6	4274.1	4278.3
27.5°	4507.4	4500.3	4506.0	4504.6	4500.3	4500.3	4494.6	4494.6
30°	4756.4	4753.5	4762.1	4755.0	4740.7	4739.3	4733.6	4726.5
32.5°	5043.8	5041.0	5053.8	5045.2	5022.5	5009.7	4998.3	4992.6
35°	5363.9	5365.3	5381.0	5375.3	5349.7	5341.2	5321.2	5318.4
37.5°	5713.9	5736.7	5763.7	5769.4	5748.1	5742.4	5721.0	5709.7
40°	6125.1	6155.0	6196.3	6206.2	6183.5	6179.2	6149.3	6133.7
42.5°	6563.3	6614.6	6665.8	6674.3	6651.6	6628.8	6600.3	6589.0
45°	7052.8	7114.0	7180.8	7197.9	7163.8	7136.7	7099.7	7099.7
47.5°	7602.0	7678.8	7754.2	7801.2	7769.9	7741.4	7697.3	7668.9
50°	8250.8	8356.1	8454.2	8502.6	8452.8	8398.7	8321.9	8296.3
52.5°	9064.6	9178.4	9263.8	9238.2	9161.4	9086.0	9002.0	8967.9
55°	10103.2	10141.7	10141.7	10044.9	9891.3	9764.6	9632.3	9588.2
57.5°	11402.3	11254.3	11026.6	10737.8	10375.0	10059.1	9845.7	9744.7
60°	12928.9	12217.5	11413.6	10624.0	9975.2	9440.2	9122.9	8977.8
62.5°	13946.2	12085.2	10474.6	9206.9	8273.5	7629.0	7190.8	7020.1
65°	13034.2	10079.1	7922.1	6405.4	5388.1	4732.2	4298.3	4138.9
67.5°	9546.9	6315.8	4218.6	3023.4	2215.3	1767.1	1589.3	1515.3
70°	4285.5	2223.8	1363.0	1064.2	917.7	842.3	809.6	798.2
72.5°	1291.9	934.8	788.2	711.4	653.1	616.1	589.0	586.2
75°	779.7	648.8	576.2	530.7	493.7	463.8	449.6	445.3
77.5°	544.9	476.6	442.5	409.8	381.3	358.5	345.7	335.8
80°	382.7	350.0	334.4	315.9	297.4	276.0	257.5	249.0
82.5°	256.1	249.0	249.0	237.6	222.0	202.0	165.0	156.5
85°	165.0	163.6	166.5	162.2	150.8	129.5	106.7	101.0
87.5°	76.8	78.3	86.8	85.4	82.5	68.3	54.1	51.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)