

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: P299360

Luminaire Tested: **GLNA-AF-05-LED-E1-5NQ-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299360  
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-05-LED-E1-5NQ-7030  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 3000K 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: 29582 lumens  
Efficiency: N/A  
Efficacy: 106.0 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B5 - U0 - G2

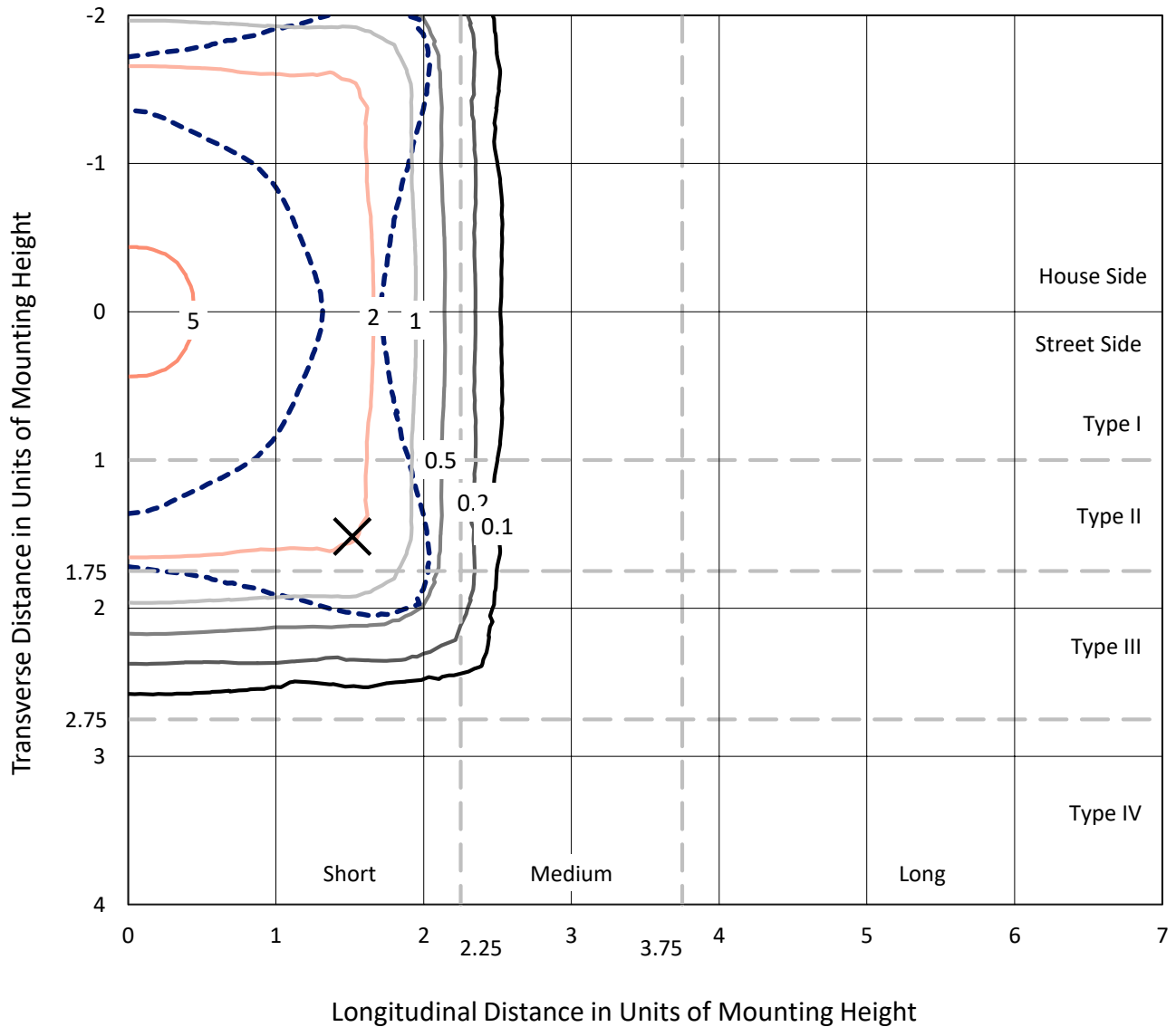
Input Watts (W): 279  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

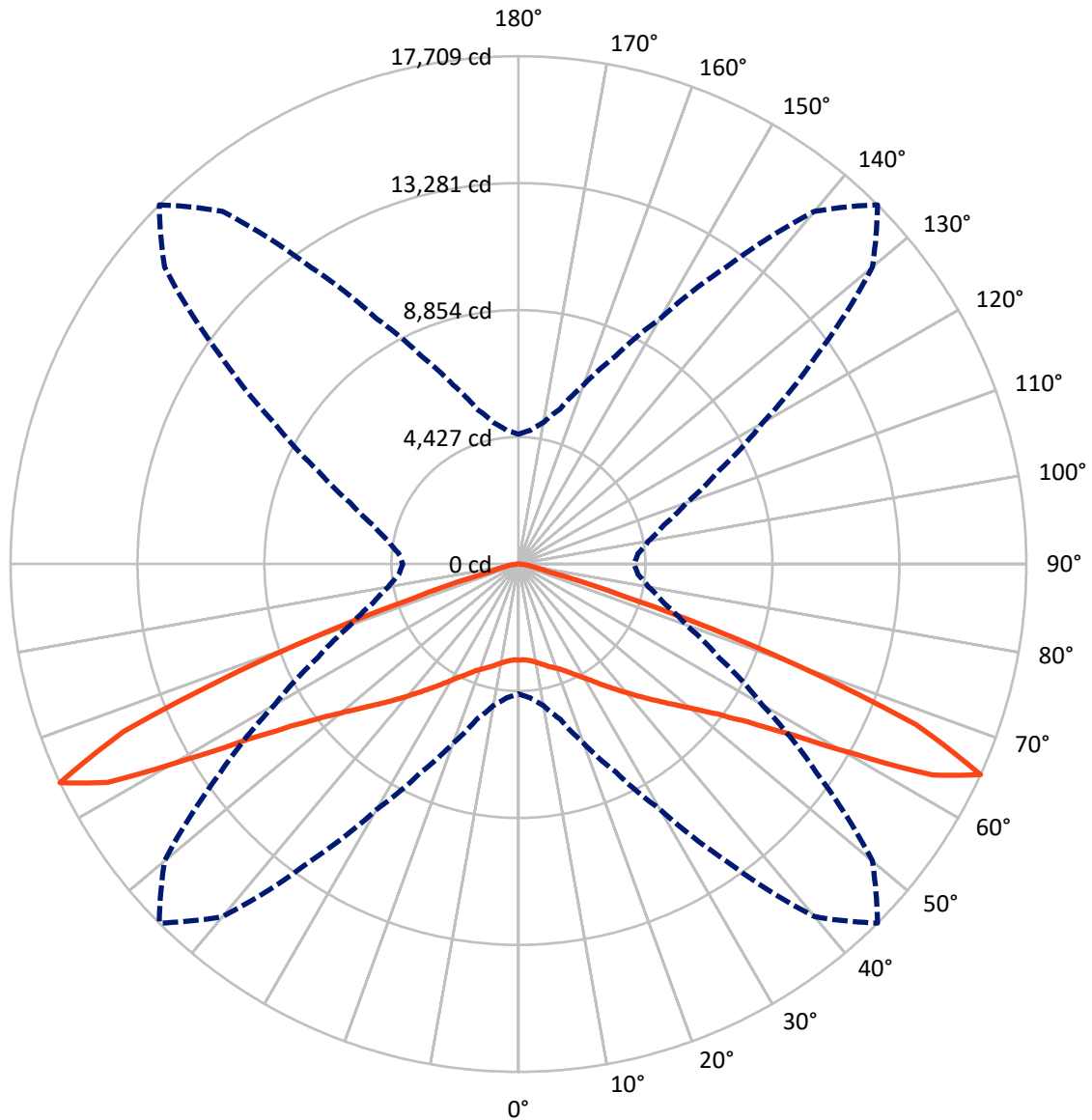
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.4 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	14791.0	0.0	14791.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	14791.0	0.0	14791.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	29582.0	0.0	29582.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	326.2	1.1
10°-20°	1046.3	3.5
20°-30°	1956.4	6.6
30°-40°	3308.9	11.2
40°-50°	5410.4	18.3
50°-60°	8603.3	29.1
60°-70°	7776.9	26.3
70°-80°	984.2	3.3
80°-90°	169.3	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°	29582.0	100.0
0°-180°	29582.0	100.0

**Coefficient of Utilization**



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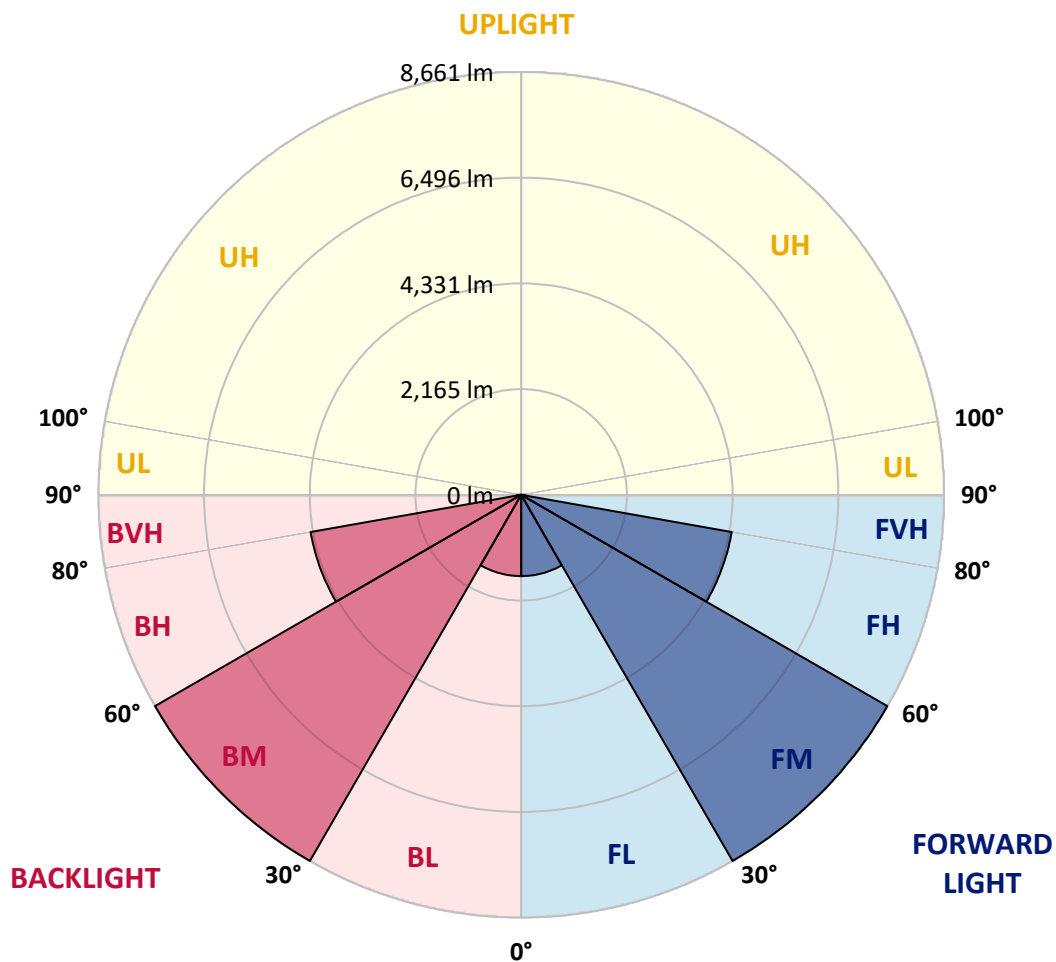
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1664.5	5.6			
FM	(30°-60°)	8661.3	29.3			
FH	(60°-80°)	4380.5	14.8			G2/5000
FVH	(80°-90°)	84.7	0.3			G1/100
BL	(0°-30°)	1664.5	5.6	B3/2500		
BM	(30°-60°)	8661.3	29.3	B5		
BH	(60°-80°)	4380.5	14.8	B4/5000		G2/5000
BVH	(80°-90°)	84.7	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°	3347.2	3347.2	3347.2	3347.2	3347.2	3347.2	3347.2	3347.2	3347.2	3347.2	3347.2
2.5°	3350.0	3352.8	3355.5	3352.8	3355.5	3351.4	3348.6	3352.8	3348.6	3344.4	3347.2
5°	3379.1	3380.5	3380.5	3376.3	3380.5	3377.7	3373.5	3379.1	3374.9	3370.8	3373.5
7.5°	3427.6	3433.1	3429.0	3424.8	3427.6	3424.8	3422.0	3423.4	3422.0	3417.9	3419.3
10°	3492.7	3496.8	3494.1	3492.7	3495.5	3494.1	3491.3	3489.9	3491.3	3487.1	3487.1
12.5°	3571.7	3570.3	3568.9	3570.3	3574.4	3574.4	3573.0	3574.4	3577.2	3578.6	3575.8
15°	3649.2	3652.0	3652.0	3652.0	3660.3	3667.2	3671.4	3674.2	3679.7	3681.1	3675.6
17.5°	3746.2	3746.2	3744.8	3746.2	3754.5	3765.6	3769.8	3775.3	3780.9	3785.0	3778.1
20°	3854.3	3857.1	3857.1	3859.8	3870.9	3883.4	3883.4	3886.1	3883.4	3886.1	3882.0
22.5°	3985.9	3994.2	3994.2	3995.6	4006.7	4021.9	4017.8	4021.9	4015.0	4020.5	4015.0
25°	4157.7	4170.2	4167.4	4167.4	4175.7	4185.4	4186.8	4195.1	4193.7	4200.6	4196.5
27.5°	4351.7	4371.1	4376.6	4375.2	4380.7	4390.4	4393.2	4402.9	4397.4	4402.9	4400.1
30°	4584.4	4592.7	4603.8	4608.0	4614.9	4624.6	4624.6	4626.0	4619.0	4627.4	4631.5
32.5°	4825.5	4840.7	4851.8	4876.7	4889.2	4896.1	4894.7	4897.5	4890.6	4901.7	4910.0
35°	5144.1	5155.2	5173.2	5192.6	5209.2	5207.9	5203.7	5205.1	5205.1	5214.8	5223.1
37.5°	5527.9	5530.7	5554.2	5581.9	5590.2	5581.9	5557.0	5551.4	5539.0	5551.4	5565.3
40°	5933.8	5943.5	5990.6	6008.6	6012.8	5997.6	5961.5	5940.8	5913.0	5928.3	5947.7
42.5°	6359.2	6378.5	6421.5	6453.4	6467.2	6457.5	6407.6	6375.8	6339.8	6348.1	6367.5
45°	6830.2	6853.8	6914.7	6945.2	6971.5	6956.3	6907.8	6859.3	6802.5	6806.6	6837.1
47.5°	7356.7	7380.2	7459.2	7510.4	7524.3	7521.5	7467.5	7401.0	7323.4	7320.6	7347.0
50°	7946.9	7970.4	8068.8	8147.8	8187.9	8183.8	8120.0	8025.8	7931.6	7933.0	7966.3
52.5°	8523.2	8552.3	8654.8	8790.6	8869.6	8926.4	8887.6	8798.9	8683.9	8686.7	8717.2
55°	9063.5	9112.0	9229.8	9414.0	9560.9	9720.2	9765.9	9763.2	9693.9	9713.3	9743.8
57.5°	9325.4	9397.4	9578.9	9869.8	10169.1	10493.3	10767.6	10972.7	11059.9	11191.6	11161.1
60°	8829.4	8944.4	9211.8	9639.9	10231.4	10907.5	11632.1	12340.1	12944.1	13399.9	13138.1
62.5°	7229.2	7378.8	7703.0	8251.7	9146.6	10228.7	11615.5	13289.1	15112.3	16212.4	15426.8
65°	4523.4	4678.6	5008.4	5595.8	6643.2	7988.4	9869.8	12643.5	16050.3	17708.6	16109.9
67.5°	1763.7	1848.2	2026.9	2402.3	3189.3	4386.3	6274.6	9422.4	13496.9	14950.2	13246.2
70°	883.9	892.2	925.5	994.7	1163.8	1511.5	2299.8	4368.3	7740.4	9348.9	7462.0
72.5°	638.7	640.1	656.7	687.2	741.2	818.8	968.4	1336.9	2517.3	3847.4	2359.4
75°	489.1	494.6	504.3	520.9	550.0	588.8	642.8	770.3	954.6	1107.0	931.0
77.5°	376.8	387.9	394.8	410.1	428.1	454.4	469.7	518.2	602.7	634.5	624.8
80°	286.8	296.5	311.7	324.2	336.7	349.1	343.6	365.8	410.1	436.4	422.6
82.5°	182.9	194.0	238.3	249.4	254.9	263.2	253.5	254.9	274.3	290.9	274.3
85°	117.8	124.7	151.0	164.9	166.3	171.8	167.6	157.9	157.9	144.1	162.1
87.5°	54.0	55.4	67.9	80.4	83.1	74.8	73.4	70.7	56.8	54.0	58.2
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°	3347.2	3347.2	3347.2	3347.2	3347.2	3347.2	3347.2	3347.2
2.5°	3345.8	3348.6	3350.0	3354.1	3355.5	3355.5	3356.9	3359.7
5°	3372.2	3376.3	3377.7	3383.2	3384.6	3383.2	3386.0	3387.4
7.5°	3419.3	3426.2	3429.0	3434.5	3430.3	3435.9	3437.3	3437.3
10°	3488.5	3495.5	3496.8	3502.4	3499.6	3502.4	3502.4	3499.6
12.5°	3580.0	3581.4	3577.2	3581.4	3575.8	3578.6	3574.4	3571.7
15°	3681.1	3676.9	3667.2	3667.2	3658.9	3660.3	3658.9	3657.6
17.5°	3779.5	3771.2	3764.2	3761.5	3754.5	3753.1	3749.0	3749.0
20°	3887.5	3883.4	3879.2	3873.7	3866.8	3859.8	3858.4	3861.2
22.5°	4017.8	4016.4	4016.4	4013.6	4003.9	3997.0	3992.8	3992.8
25°	4192.3	4179.9	4179.9	4178.5	4174.3	4170.2	4161.9	4166.0
27.5°	4389.1	4382.1	4387.7	4386.3	4382.1	4382.1	4376.6	4376.6
30°	4631.5	4628.7	4637.1	4630.1	4616.3	4614.9	4609.3	4602.4
32.5°	4911.4	4908.6	4921.1	4912.8	4890.6	4878.1	4867.0	4861.5
35°	5223.1	5224.5	5239.7	5234.2	5209.2	5200.9	5181.5	5178.8
37.5°	5563.9	5586.1	5612.4	5617.9	5597.2	5591.6	5570.8	5559.8
40°	5964.3	5993.4	6033.6	6043.3	6021.1	6016.9	5987.9	5972.6
42.5°	6391.0	6440.9	6490.8	6499.1	6476.9	6454.7	6427.0	6416.0
45°	6867.6	6927.2	6992.3	7008.9	6975.7	6949.3	6913.3	6913.3
47.5°	7402.4	7477.2	7550.6	7596.3	7565.9	7538.2	7495.2	7467.5
50°	8034.1	8136.7	8232.3	8279.4	8230.9	8178.2	8103.4	8078.5
52.5°	8826.6	8937.4	9020.6	8995.6	8920.8	8847.4	8765.7	8732.4
55°	9838.0	9875.4	9875.4	9781.2	9631.6	9508.2	9379.4	9336.5
57.5°	11102.9	10958.8	10737.1	10455.9	10102.6	9795.0	9587.2	9488.9
60°	12589.5	11896.7	11114.0	10345.1	9713.3	9192.4	8883.4	8742.1
62.5°	13580.0	11767.9	10199.6	8965.2	8056.3	7428.7	7002.0	6835.7
65°	12692.0	9814.4	7714.1	6237.2	5246.6	4608.0	4185.4	4030.2
67.5°	9296.3	6150.0	4107.8	2944.1	2157.1	1720.7	1547.5	1475.5
70°	4172.9	2165.4	1327.2	1036.3	893.6	820.2	788.3	777.2
72.5°	1258.0	910.2	767.5	692.7	635.9	599.9	573.6	570.8
75°	759.2	631.8	561.1	516.8	480.7	451.7	437.8	433.6
77.5°	530.6	464.1	430.9	399.0	371.3	349.1	336.7	327.0
80°	372.7	340.8	325.6	307.6	289.6	268.8	250.8	242.5
82.5°	249.4	242.5	242.5	231.4	216.1	196.7	160.7	152.4
85°	160.7	159.3	162.1	157.9	146.9	126.1	103.9	98.4
87.5°	74.8	76.2	84.5	83.1	80.4	66.5	52.6	49.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)