

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: P299365

Luminaire Tested: **GLNA-AF-06-LED-E1-5NQ-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299365  
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-06-LED-E1-5NQ-7027  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(6) 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: 31797.4 lumens  
Efficiency: N/A  
Efficacy: 95.5 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

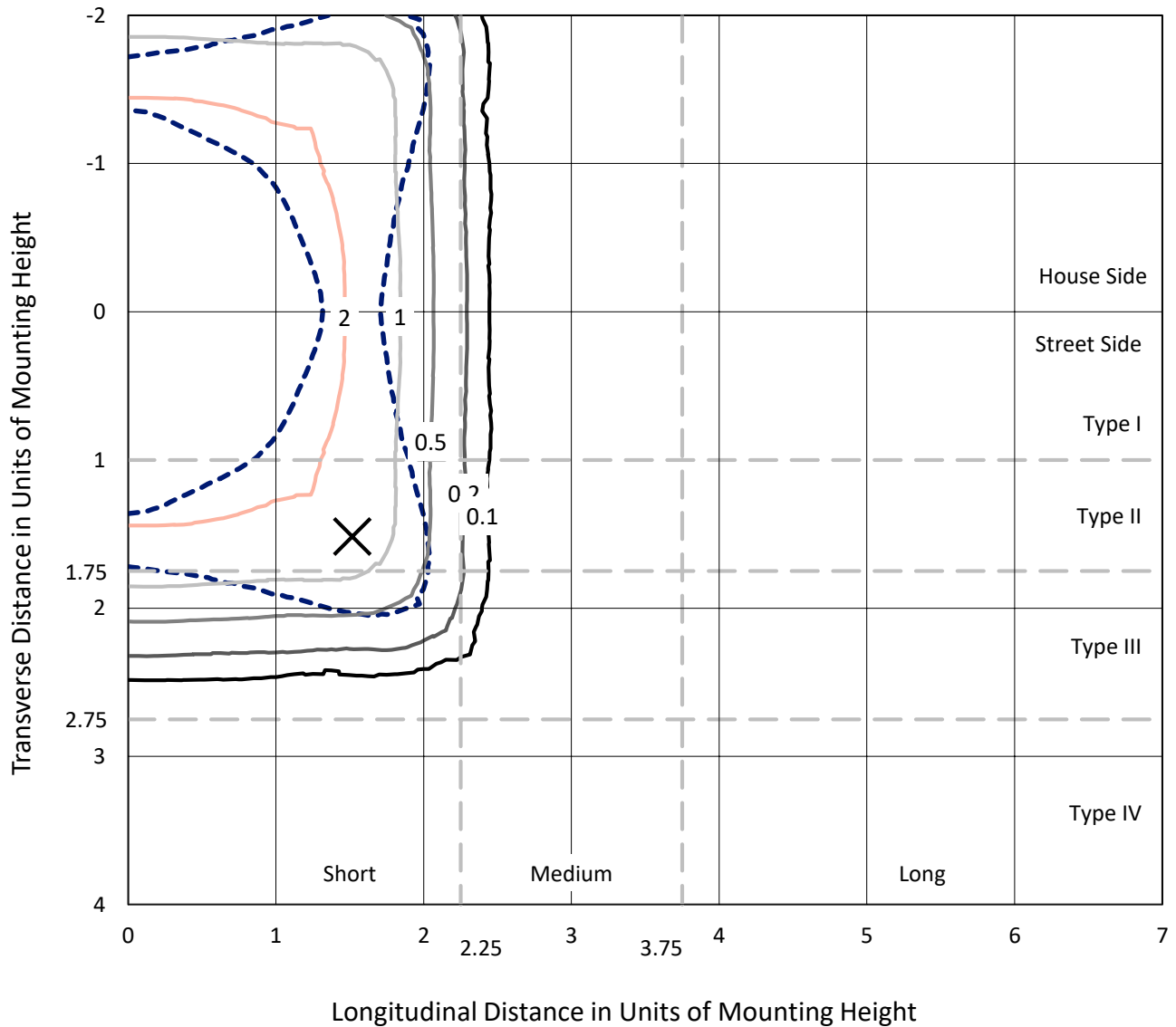
Input Watts (W): 333  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

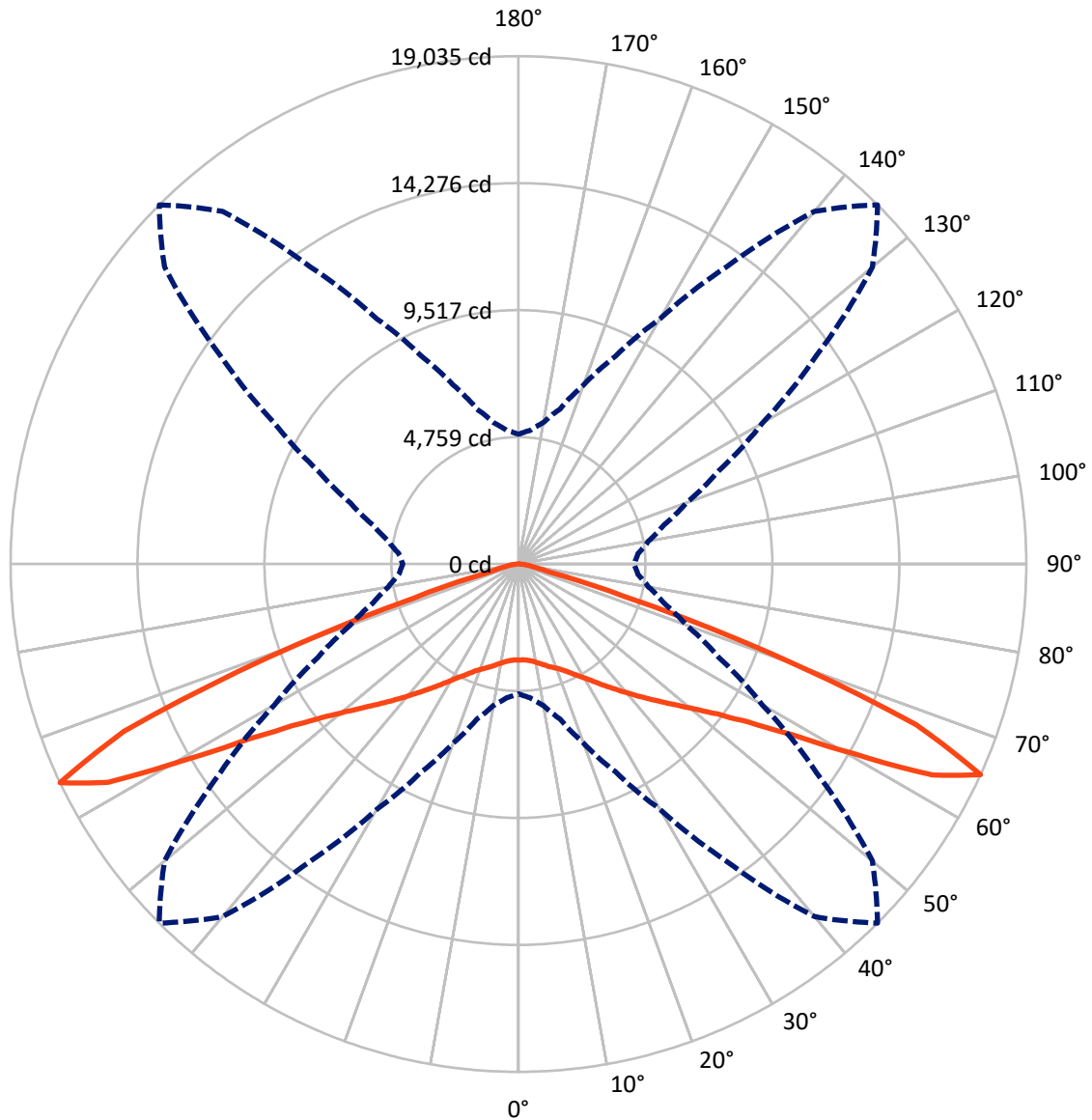
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 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	15898.7	0.0	15898.7
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	15898.7	0.0	15898.7
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	31797.4	0.0	31797.4
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	350.7	1.1
10°-20°	1124.7	3.5
20°-30°	2103.0	6.6
30°-40°	3556.7	11.2
40°-50°	5815.6	18.3
50°-60°	9247.6	29.1
60°-70°	8359.3	26.3
70°-80°	1057.9	3.3
80°-90°	182.0	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°	31797.4	100.0
0°-180°	31797.4	100.0

**Coefficient of Utilization**



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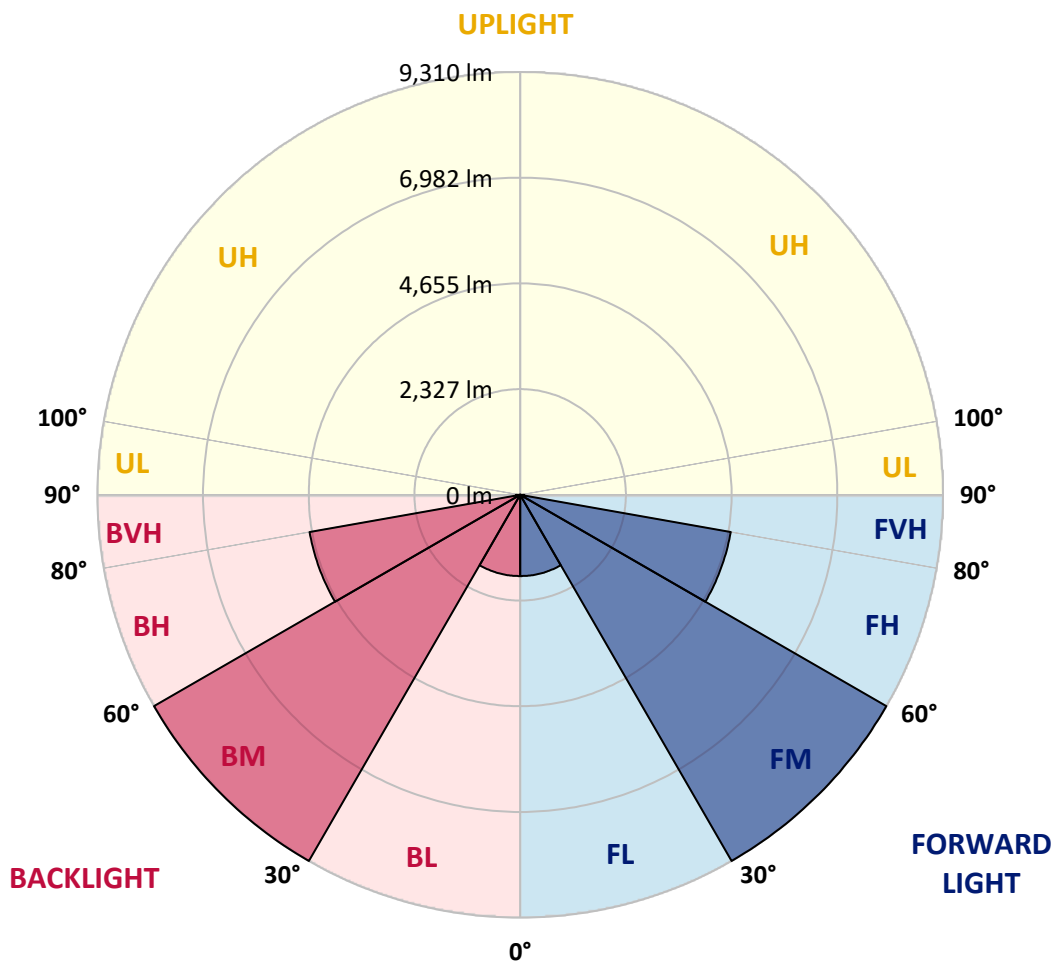
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1789.2	5.6			
FM	(30°-60°)	9309.9	29.3			
FH	(60°-80°)	4708.6	14.8			G2/5000
FVH	(80°-90°)	91.0	0.3			G1/100
BL	(0°-30°)	1789.2	5.6	B3/2500		
BM	(30°-60°)	9309.9	29.3	B5		
BH	(60°-80°)	4708.6	14.8	B4/5000		G2/5000
BVH	(80°-90°)	91.0	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°	3597.9	3597.9	3597.9	3597.9	3597.9	3597.9	3597.9	3597.9	3597.9	3597.9	3597.9
2.5°	3600.9	3603.8	3606.8	3603.8	3606.8	3602.4	3599.4	3603.8	3599.4	3594.9	3597.9
5°	3632.1	3633.6	3633.6	3629.2	3633.6	3630.7	3626.2	3632.1	3627.7	3623.2	3626.2
7.5°	3684.3	3690.2	3685.8	3681.3	3684.3	3681.3	3678.3	3679.8	3678.3	3673.8	3675.3
10°	3754.3	3758.7	3755.7	3754.3	3757.2	3755.7	3752.8	3751.3	3752.8	3748.3	3748.3
12.5°	3839.1	3837.7	3836.2	3837.7	3842.1	3842.1	3840.6	3842.1	3845.1	3846.6	3843.6
15°	3922.5	3925.5	3925.5	3925.5	3934.4	3941.9	3946.4	3949.3	3955.3	3956.8	3950.8
17.5°	4026.8	4026.8	4025.3	4026.8	4035.7	4047.6	4052.1	4058.1	4064.0	4068.5	4061.0
20°	4142.9	4145.9	4145.9	4148.9	4160.8	4174.2	4174.2	4177.2	4174.2	4177.2	4172.7
22.5°	4284.4	4293.3	4293.3	4294.8	4306.7	4323.1	4318.7	4323.1	4315.7	4321.6	4315.7
25°	4469.1	4482.5	4479.5	4479.5	4488.4	4498.9	4500.3	4509.3	4507.8	4515.2	4510.8
27.5°	4677.6	4698.4	4704.4	4702.9	4708.8	4719.3	4722.2	4732.7	4726.7	4732.7	4729.7
30°	4927.7	4936.7	4948.6	4953.1	4960.5	4970.9	4970.9	4972.4	4965.0	4973.9	4978.4
32.5°	5186.9	5203.2	5215.2	5242.0	5255.4	5262.8	5261.3	5264.3	5256.9	5268.8	5277.7
35°	5529.4	5541.3	5560.6	5581.5	5599.4	5597.9	5593.4	5594.9	5594.9	5605.3	5614.3
37.5°	5941.9	5944.9	5970.2	6000.0	6008.9	6000.0	5973.2	5967.2	5953.8	5967.2	5982.1
40°	6378.2	6388.6	6439.3	6458.6	6463.1	6446.7	6408.0	6385.7	6355.9	6372.3	6393.1
42.5°	6835.4	6856.2	6902.4	6936.7	6951.6	6941.1	6887.5	6853.3	6814.5	6823.5	6844.3
45°	7341.7	7367.0	7432.6	7465.3	7493.6	7477.2	7425.1	7373.0	7311.9	7316.4	7349.2
47.5°	7907.6	7932.9	8017.8	8072.9	8087.8	8084.8	8026.7	7955.3	7871.9	7868.9	7897.2
50°	8542.0	8567.3	8673.1	8757.9	8801.1	8796.7	8728.2	8626.9	8525.6	8527.1	8562.9
52.5°	9161.5	9192.8	9303.0	9448.9	9533.8	9594.9	9553.2	9457.9	9334.3	9337.2	9370.0
55°	9742.3	9794.4	9921.0	10119.1	10276.9	10448.2	10497.3	10494.3	10419.9	10440.7	10473.5
57.5°	10023.8	10101.2	10296.3	10609.0	10930.7	11279.1	11574.0	11794.4	11888.2	12029.7	11996.9
60°	9490.6	9614.2	9901.6	10361.8	10997.7	11724.4	12503.3	13264.2	13913.5	14403.5	14122.0
62.5°	7770.6	7931.4	8279.9	8869.6	9831.7	10994.7	12485.4	14284.3	16244.1	17426.5	16582.2
65°	4862.2	5029.0	5383.4	6014.9	7140.7	8586.7	10609.0	13590.4	17252.3	19034.9	17316.3
67.5°	1895.7	1986.6	2178.7	2582.3	3428.1	4714.8	6744.6	10128.0	14507.7	16069.9	14238.2
70°	950.1	959.0	994.8	1069.2	1250.9	1624.7	2472.1	4695.4	8320.1	10049.1	8020.8
72.5°	686.5	688.0	705.9	738.6	796.7	880.1	1040.9	1437.1	2705.9	4135.5	2536.1
75°	525.7	531.6	542.1	559.9	591.2	632.9	691.0	828.0	1026.1	1189.9	1000.7
77.5°	405.1	417.0	424.4	440.8	460.2	488.5	504.8	557.0	647.8	682.1	671.6
80°	308.3	318.7	335.1	348.5	361.9	375.3	369.3	393.1	440.8	469.1	454.2
82.5°	196.6	208.5	256.1	268.1	274.0	282.9	272.5	274.0	294.9	312.7	294.9
85°	126.6	134.0	162.3	177.2	178.7	184.7	180.2	169.8	169.8	154.9	174.2
87.5°	58.1	59.6	73.0	86.4	89.4	80.4	78.9	75.9	61.1	58.1	62.5
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°	3597.9	3597.9	3597.9	3597.9	3597.9	3597.9	3597.9	3597.9
2.5°	3596.4	3599.4	3600.9	3605.3	3606.8	3606.8	3608.3	3611.3
5°	3624.7	3629.2	3630.7	3636.6	3638.1	3636.6	3639.6	3641.1
7.5°	3675.3	3682.8	3685.8	3691.7	3687.2	3693.2	3694.7	3694.7
10°	3749.8	3757.2	3758.7	3764.7	3761.7	3764.7	3764.7	3761.7
12.5°	3848.1	3849.6	3845.1	3849.6	3843.6	3846.6	3842.1	3839.1
15°	3956.8	3952.3	3941.9	3941.9	3933.0	3934.4	3933.0	3931.5
17.5°	4062.5	4053.6	4046.1	4043.2	4035.7	4034.2	4029.8	4029.8
20°	4178.7	4174.2	4169.7	4163.8	4156.3	4148.9	4147.4	4150.4
22.5°	4318.7	4317.2	4317.2	4314.2	4303.8	4296.3	4291.9	4291.9
25°	4506.3	4492.9	4492.9	4491.4	4486.9	4482.5	4473.5	4478.0
27.5°	4717.8	4710.3	4716.3	4714.8	4710.3	4710.3	4704.4	4704.4
30°	4978.4	4975.4	4984.3	4976.9	4962.0	4960.5	4954.5	4947.1
32.5°	5279.2	5276.2	5289.6	5280.7	5256.9	5243.4	5231.5	5225.6
35°	5614.3	5615.7	5632.1	5626.2	5599.4	5590.4	5569.6	5566.6
37.5°	5980.6	6004.4	6032.7	6038.7	6016.3	6010.4	5988.0	5976.1
40°	6411.0	6442.2	6485.4	6495.9	6472.0	6467.6	6436.3	6419.9
42.5°	6869.6	6923.3	6976.9	6985.8	6962.0	6938.1	6908.4	6896.5
45°	7381.9	7446.0	7516.0	7533.8	7498.1	7469.8	7431.1	7431.1
47.5°	7956.8	8037.2	8116.1	8165.2	8132.5	8102.7	8056.5	8026.7
50°	8635.8	8746.0	8848.8	8899.4	8847.3	8790.7	8710.3	8683.5
52.5°	9487.6	9606.8	9696.1	9669.3	9588.9	9510.0	9422.1	9386.4
55°	10574.8	10615.0	10615.0	10513.7	10352.9	10220.3	10081.8	10035.7
57.5°	11934.4	11779.5	11541.2	11238.9	10859.2	10528.6	10305.2	10199.5
60°	13532.3	12787.7	11946.3	11119.8	10440.7	9880.8	9548.7	9396.8
62.5°	14597.1	12649.2	10963.4	9636.6	8659.7	7985.1	7526.4	7347.7
65°	13642.5	10549.4	8291.8	6704.3	5639.6	4953.1	4498.9	4332.1
67.5°	9992.5	6610.5	4415.5	3164.5	2318.7	1849.6	1663.4	1586.0
70°	4485.4	2327.6	1426.6	1113.9	960.5	881.6	847.4	835.4
72.5°	1352.2	978.4	825.0	744.6	683.5	644.8	616.5	613.5
75°	816.1	679.1	603.1	555.5	516.7	485.5	470.6	466.1
77.5°	570.4	498.9	463.1	428.9	399.1	375.3	361.9	351.4
80°	400.6	366.3	350.0	330.6	311.2	288.9	269.5	260.6
82.5°	268.1	260.6	260.6	248.7	232.3	211.5	172.7	163.8
85°	172.7	171.3	174.2	169.8	157.9	135.5	111.7	105.7
87.5°	80.4	81.9	90.8	89.4	86.4	71.5	56.6	53.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)