

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: P299369

Luminaire Tested: **GLNA-AF-06-LED-E1-5NQ-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299369  
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-7050  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(6) 70 CRI, 5000K 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: 36597.6 lumens  
Efficiency: N/A  
Efficacy: 109.9 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 - G3

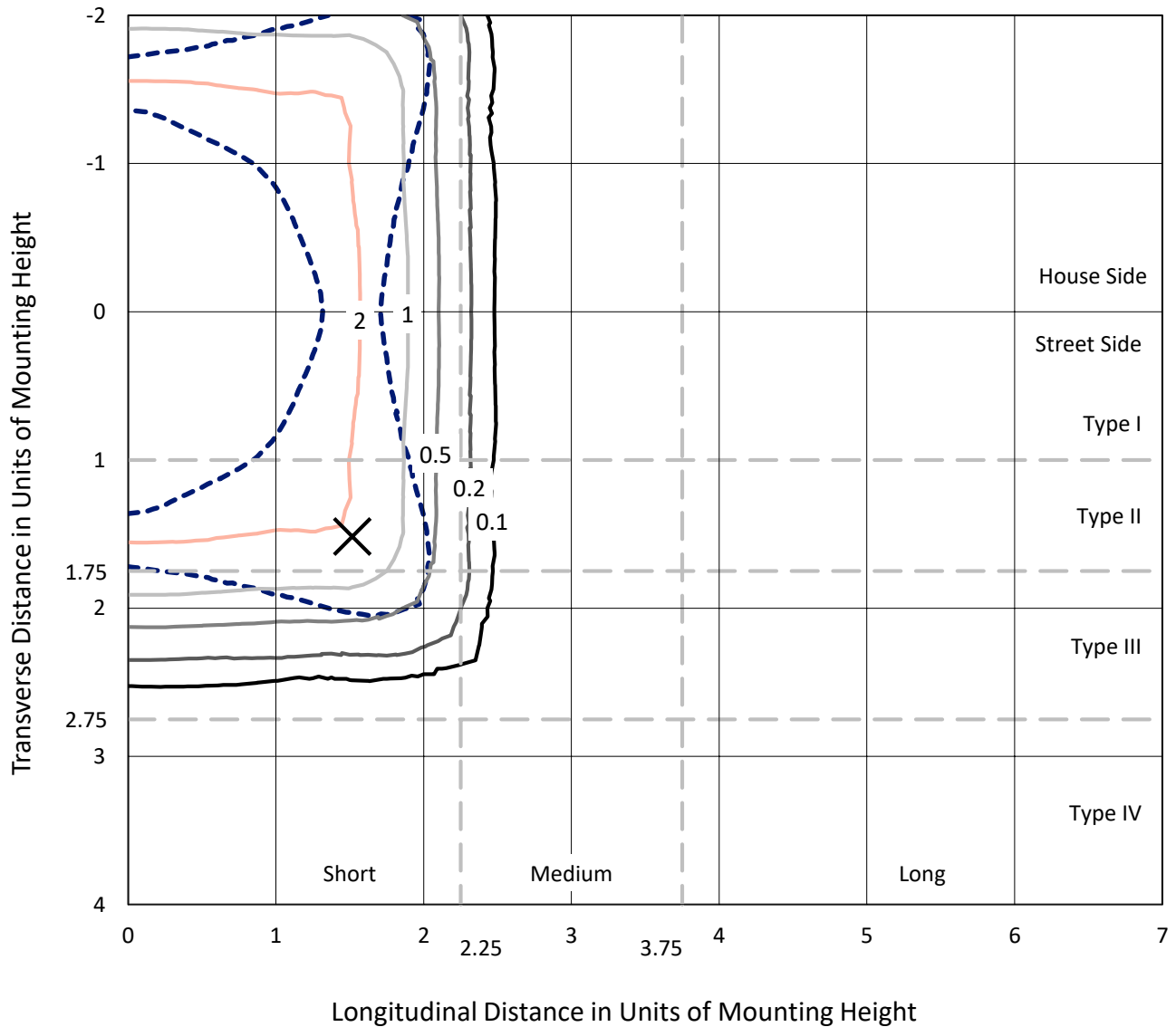
Input Watts (W): 333  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

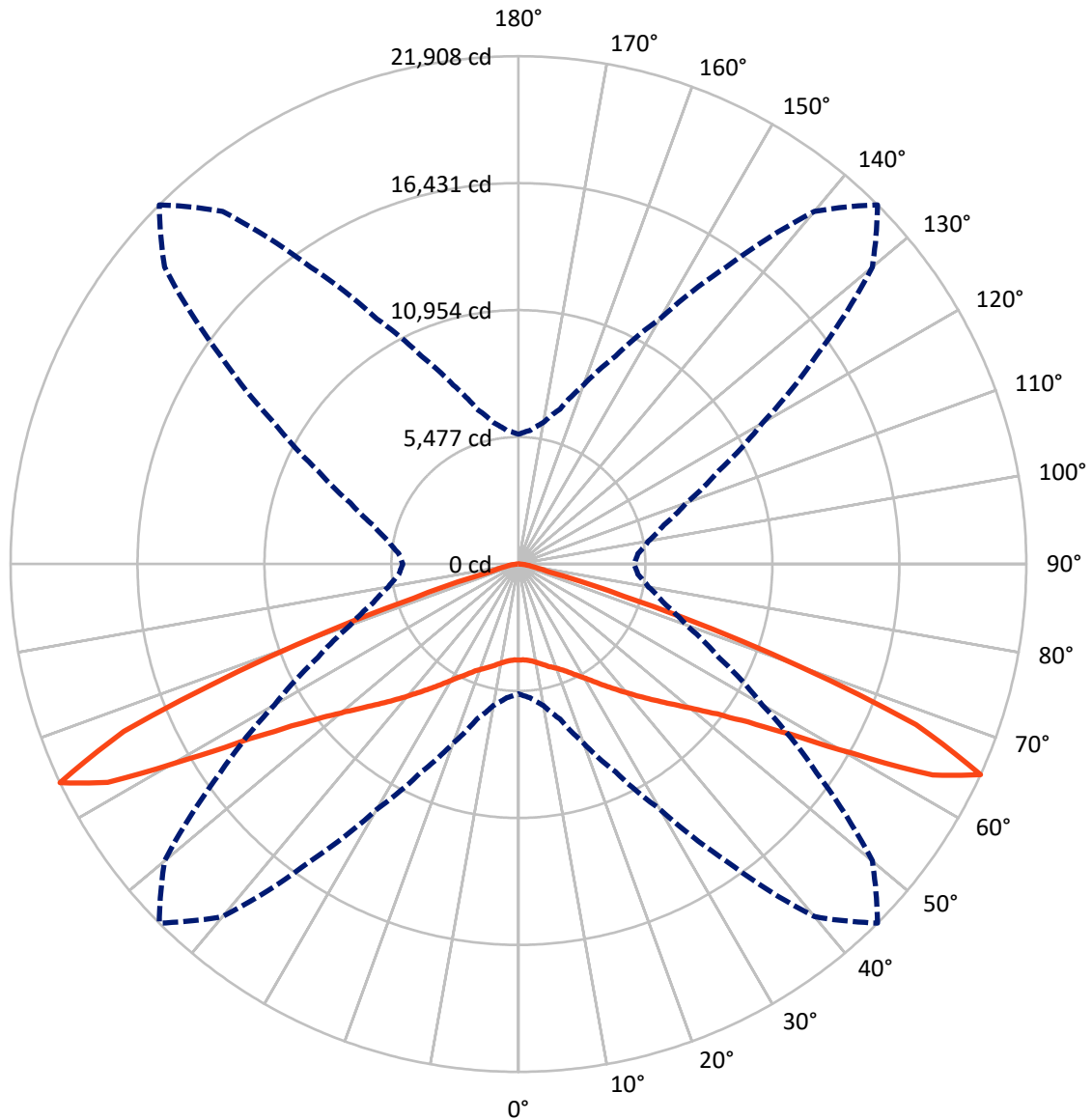
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.6 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	18298.8	0.0	18298.8
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	18298.8	0.0	18298.8
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	36597.6	0.0	36597.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	403.6	1.1
10°-20°	1294.5	3.5
20°-30°	2420.4	6.6
30°-40°	4093.6	11.2
40°-50°	6693.5	18.3
50°-60°	10643.7	29.1
60°-70°	9621.2	26.3
70°-80°	1217.6	3.3
80°-90°	209.5	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°	36597.6	100.0
0°-180°	36597.6	100.0



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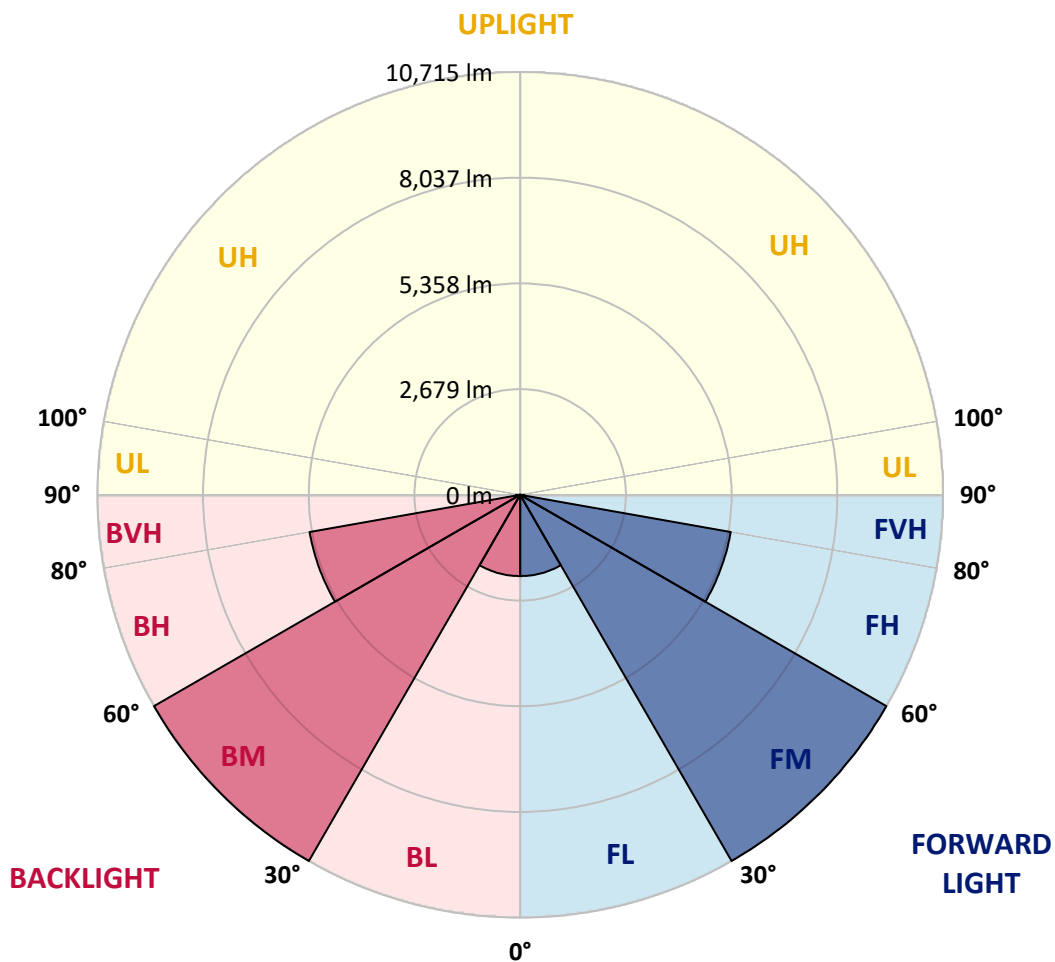
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2059.3	5.6			
FM	(30°-60°)	10715.4	29.3			
FH	(60°-80°)	5419.4	14.8			G3/7500
FVH	(80°-90°)	104.7	0.3			G2/225
BL	(0°-30°)	2059.3	5.6	B3/2500		
BM	(30°-60°)	10715.4	29.3	B5		
BH	(60°-80°)	5419.4	14.8	B5		G3/7500
BVH	(80°-90°)	104.7	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	4141.0	4141.0	4141.0	4141.0	4141.0	4141.0	4141.0	4141.0	4141.0	4141.0	4141.0
2.5°	4144.5	4147.9	4151.3	4147.9	4151.3	4146.2	4142.7	4147.9	4142.7	4137.6	4141.0
5°	4180.5	4182.2	4182.2	4177.0	4182.2	4178.7	4173.6	4180.5	4175.3	4170.2	4173.6
7.5°	4240.4	4247.3	4242.2	4237.0	4240.4	4237.0	4233.6	4235.3	4233.6	4228.4	4230.2
10°	4321.0	4326.1	4322.7	4321.0	4324.4	4322.7	4319.3	4317.6	4319.3	4314.1	4314.1
12.5°	4418.7	4417.0	4415.3	4417.0	4422.1	4422.1	4420.4	4422.1	4425.6	4427.3	4423.8
15°	4514.7	4518.1	4518.1	4518.1	4528.4	4537.0	4542.1	4545.5	4552.4	4554.1	4547.3
17.5°	4634.7	4634.7	4633.0	4634.7	4645.0	4658.7	4663.8	4670.7	4677.5	4682.7	4674.1
20°	4768.4	4771.8	4771.8	4775.2	4788.9	4804.4	4804.4	4807.8	4804.4	4807.8	4802.6
22.5°	4931.2	4941.5	4941.5	4943.2	4956.9	4975.8	4970.6	4975.8	4967.2	4974.0	4967.2
25°	5143.7	5159.2	5155.7	5155.7	5166.0	5178.0	5179.7	5190.0	5188.3	5196.9	5191.7
27.5°	5383.7	5407.7	5414.5	5412.8	5419.7	5431.7	5435.1	5447.1	5440.2	5447.1	5443.7
30°	5671.6	5681.9	5695.6	5700.8	5709.3	5721.3	5721.3	5723.1	5714.5	5724.8	5729.9
32.5°	5969.9	5988.7	6002.4	6033.3	6048.7	6057.3	6055.6	6059.0	6050.4	6064.1	6074.4
35°	6364.1	6377.8	6400.1	6424.1	6444.7	6442.9	6437.8	6439.5	6439.5	6451.5	6461.8
37.5°	6838.9	6842.3	6871.4	6905.7	6916.0	6905.7	6874.9	6868.0	6852.6	6868.0	6885.2
40°	7341.1	7353.1	7411.4	7433.6	7438.8	7419.9	7375.4	7349.6	7315.4	7334.2	7358.2
42.5°	7867.3	7891.3	7944.4	7983.8	8001.0	7989.0	7927.3	7887.8	7843.3	7853.6	7877.6
45°	8450.0	8479.2	8554.6	8592.3	8624.9	8606.0	8546.0	8486.0	8415.8	8420.9	8458.6
47.5°	9101.4	9130.5	9228.2	9291.6	9308.8	9305.3	9238.5	9156.2	9060.2	9056.8	9089.4
50°	9831.5	9860.7	9982.4	10080.1	10129.8	10124.6	10045.8	9929.2	9812.7	9814.4	9855.5
52.5°	10544.6	10580.5	10707.4	10875.4	10973.1	11043.3	10995.3	10885.6	10743.4	10746.8	10784.5
55°	11213.0	11273.0	11418.7	11646.7	11828.3	12025.5	12082.0	12078.6	11992.9	12016.9	12054.6
57.5°	11537.0	11626.1	11850.6	12210.6	12580.8	12981.9	13321.2	13574.9	13682.9	13845.7	13808.0
60°	10923.3	11065.6	11396.4	11926.0	12657.9	13494.4	14390.8	15266.6	16013.9	16577.8	16253.9
62.5°	8943.7	9128.8	9529.9	10208.6	11315.9	12654.5	14370.2	16440.7	18696.4	20057.3	19085.4
65°	5596.2	5788.2	6196.1	6922.9	8218.6	9882.9	12210.6	15642.0	19856.7	21908.4	19930.4
67.5°	2181.9	2286.5	2507.6	2972.1	3945.6	5426.5	7762.7	11656.9	16697.8	18495.8	16387.6
70°	1093.5	1103.8	1145.0	1230.7	1439.8	1870.0	2845.2	5404.3	9576.1	11566.1	9231.6
72.5°	790.2	791.9	812.4	850.1	917.0	1013.0	1198.1	1654.0	3114.3	4759.8	2918.9
75°	605.0	611.9	623.9	644.5	680.5	728.5	795.3	953.0	1180.9	1369.5	1151.8
77.5°	466.2	479.9	488.5	507.3	529.6	562.2	581.0	641.0	745.6	785.0	773.0
80°	354.8	366.8	385.7	401.1	416.5	431.9	425.1	452.5	507.3	539.9	522.8
82.5°	226.2	240.0	294.8	308.5	315.4	325.7	313.7	315.4	339.4	359.9	339.4
85°	145.7	154.3	186.8	204.0	205.7	212.5	207.4	195.4	195.4	178.3	200.5
87.5°	66.8	68.6	84.0	99.4	102.8	92.6	90.8	87.4	70.3	66.8	72.0
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°	4141.0	4141.0	4141.0	4141.0	4141.0	4141.0	4141.0	4141.0
2.5°	4139.3	4142.7	4144.5	4149.6	4151.3	4151.3	4153.0	4156.5
5°	4171.9	4177.0	4178.7	4185.6	4187.3	4185.6	4189.0	4190.7
7.5°	4230.2	4238.7	4242.2	4249.0	4243.9	4250.7	4252.4	4252.4
10°	4315.9	4324.4	4326.1	4333.0	4329.6	4333.0	4333.0	4329.6
12.5°	4429.0	4430.7	4425.6	4430.7	4423.8	4427.3	4422.1	4418.7
15°	4554.1	4549.0	4537.0	4537.0	4526.7	4528.4	4526.7	4525.0
17.5°	4675.8	4665.5	4656.9	4653.5	4645.0	4643.2	4638.1	4638.1
20°	4809.5	4804.4	4799.2	4792.4	4783.8	4775.2	4773.5	4776.9
22.5°	4970.6	4968.9	4968.9	4965.5	4953.5	4944.9	4939.8	4939.8
25°	5186.6	5171.1	5171.1	5169.4	5164.3	5159.2	5148.9	5154.0
27.5°	5430.0	5421.4	5428.2	5426.5	5421.4	5421.4	5414.5	5414.5
30°	5729.9	5726.5	5736.8	5728.2	5711.1	5709.3	5702.5	5693.9
32.5°	6076.1	6072.7	6088.1	6077.9	6050.4	6035.0	6021.3	6014.4
35°	6461.8	6463.5	6482.4	6475.5	6444.7	6434.4	6410.4	6406.9
37.5°	6883.4	6910.9	6943.4	6950.3	6924.6	6917.7	6892.0	6878.3
40°	7378.8	7414.8	7464.5	7476.5	7449.1	7443.9	7407.9	7389.1
42.5°	7906.7	7968.4	8030.1	8040.4	8013.0	7985.5	7951.3	7937.6
45°	8496.3	8570.0	8650.6	8671.1	8630.0	8597.4	8552.9	8552.9
47.5°	9157.9	9250.5	9341.3	9397.9	9360.2	9325.9	9272.8	9238.5
50°	9939.5	10066.3	10184.6	10242.9	10182.9	10117.8	10025.2	9994.4
52.5°	10919.9	11057.0	11159.9	11129.0	11036.5	10945.6	10844.5	10803.4
55°	12171.1	12217.4	12217.4	12100.9	11915.8	11763.2	11603.8	11550.7
57.5°	13736.0	13557.8	13283.5	12935.6	12498.5	12118.0	11860.9	11739.2
60°	15575.2	14718.2	13749.7	12798.5	12016.9	11372.4	10990.2	10815.4
62.5°	16800.7	14558.7	12618.5	11091.3	9966.9	9190.5	8662.6	8456.9
65°	15702.0	12142.0	9543.6	7716.4	6490.9	5700.8	5178.0	4986.0
67.5°	11501.0	7608.5	5082.0	3642.3	2668.7	2128.8	1914.5	1825.4
70°	5162.6	2679.0	1642.0	1282.1	1105.5	1014.7	975.3	961.6
72.5°	1556.3	1126.1	949.6	857.0	786.7	742.2	709.6	706.2
75°	939.3	781.6	694.2	639.3	594.8	558.8	541.6	536.5
77.5°	656.5	574.2	533.1	493.6	459.4	431.9	416.5	404.5
80°	461.1	421.6	402.8	380.5	358.2	332.5	310.2	300.0
82.5°	308.5	300.0	300.0	286.2	267.4	243.4	198.8	188.5
85°	198.8	197.1	200.5	195.4	181.7	156.0	128.6	121.7
87.5°	92.6	94.3	104.6	102.8	99.4	82.3	65.1	61.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)