

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: STREETWORKS

Report Number: P299445

Luminaire Tested: **GAA-AF-09-LED-U-5NQ-8030-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299445  
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: STREETWORKS  
Catalog Number: GAA-AF-09-LED-U-5NQ-8030-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(9) 80 CRI, 3000K 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: 36065 lumens  
Efficiency: N/A  
Efficacy: 96.4 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B5 - U0 - G3  
  
Input Watts (W): 374  
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: 28.75 FT

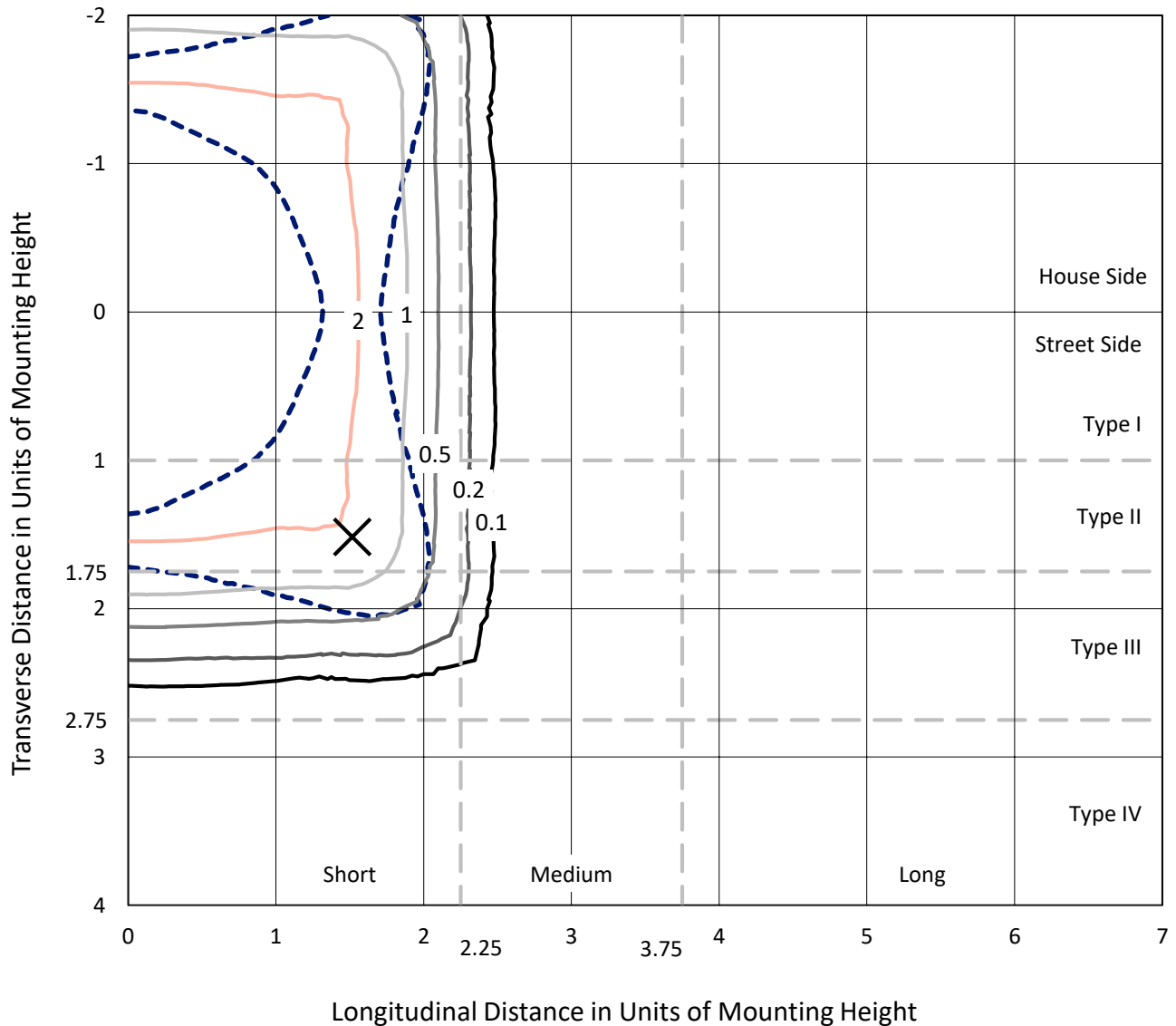


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

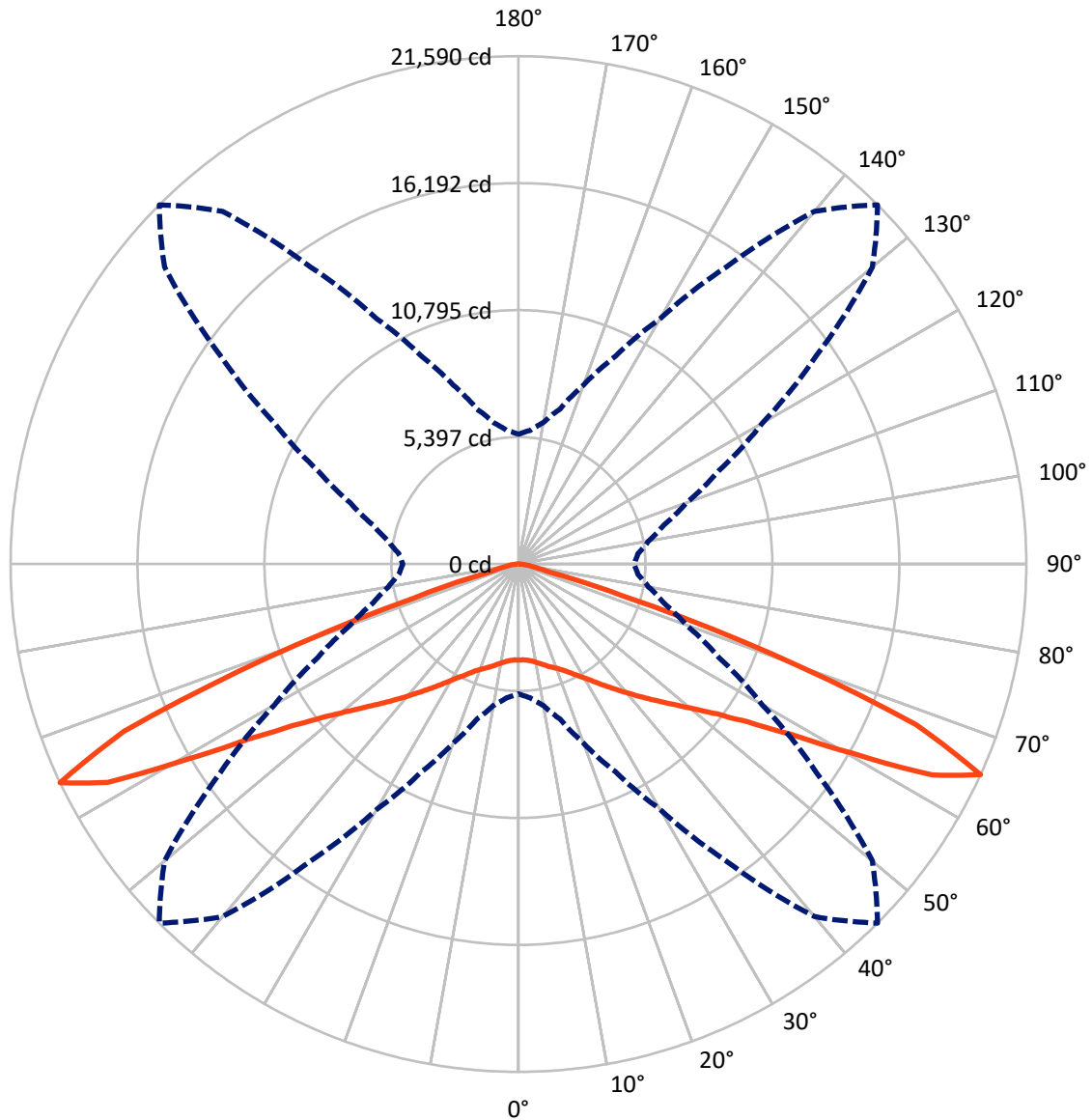


Based on 30 foot mounting height. Maximum calculated value = 4.5 fc  
 Type V - Short - Full Cutoff

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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	18032.5	0.0	18032.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	18032.5	0.0	18032.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	36065.0	0.0	36065.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	397.7	1.1
10°-20°	1275.6	3.5
20°-30°	2385.2	6.6
30°-40°	4034.0	11.2
40°-50°	6596.1	18.3
50°-60°	10488.8	29.1
60°-70°	9481.2	26.3
70°-80°	1199.9	3.3
80°-90°	206.4	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°	36065.0	100.0
0°-180°	36065.0	100.0



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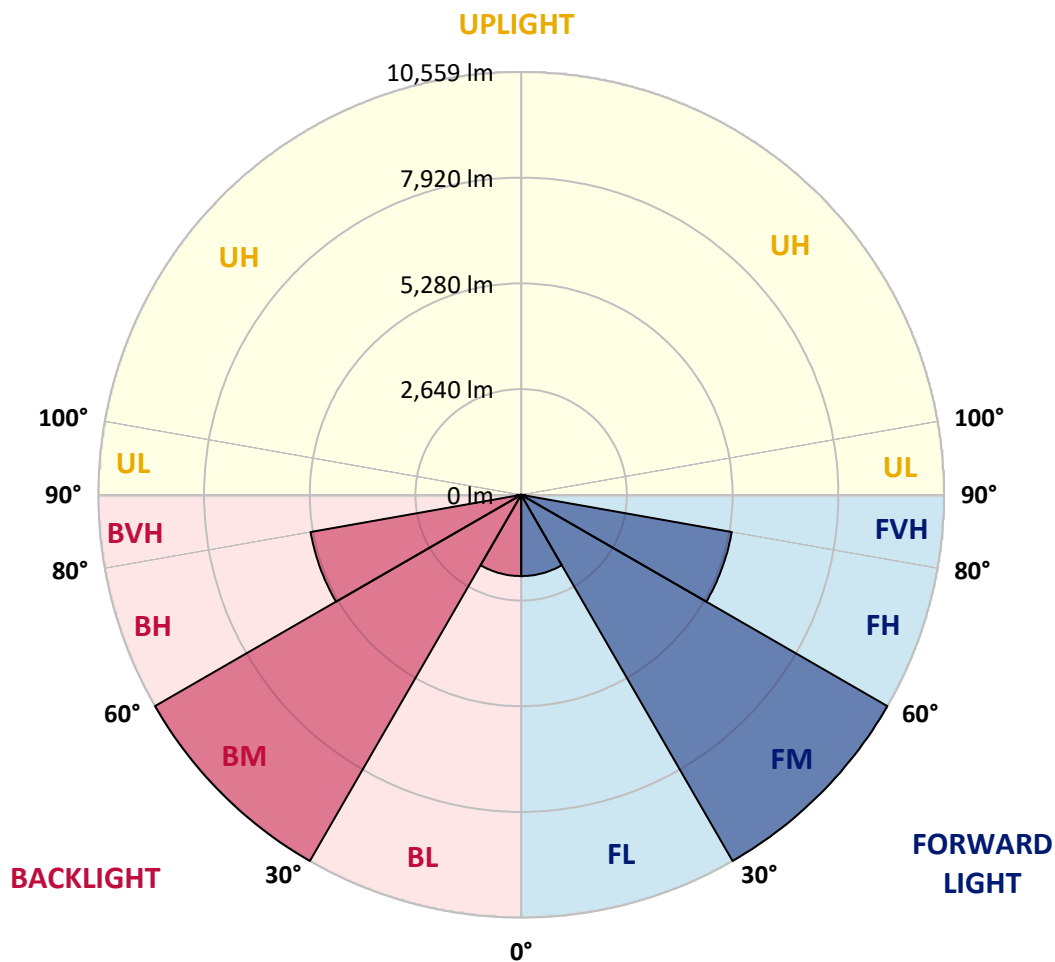
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2029.3	5.6			
FM	(30°-60°)	10559.5	29.3			
FH	(60°-80°)	5340.5	14.8			G3/7500
FVH	(80°-90°)	103.2	0.3			G2/225
BL	(0°-30°)	2029.3	5.6	B3/2500		
BM	(30°-60°)	10559.5	29.3	B5		
BH	(60°-80°)	5340.5	14.8	B5		G3/7500
BVH	(80°-90°)	103.2	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°	4080.8	4080.8	4080.8	4080.8	4080.8	4080.8	4080.8	4080.8	4080.8	4080.8	4080.8
2.5°	4084.1	4087.5	4090.9	4087.5	4090.9	4085.8	4082.5	4087.5	4082.5	4077.4	4080.8
5°	4119.6	4121.3	4121.3	4116.2	4121.3	4117.9	4112.9	4119.6	4114.5	4109.5	4112.9
7.5°	4178.7	4185.5	4180.4	4175.4	4178.7	4175.4	4172.0	4173.7	4172.0	4166.9	4168.6
10°	4258.1	4263.2	4259.8	4258.1	4261.5	4259.8	4256.4	4254.7	4256.4	4251.4	4251.4
12.5°	4354.4	4352.7	4351.0	4352.7	4357.8	4357.8	4356.1	4357.8	4361.2	4362.8	4359.5
15°	4449.0	4452.4	4452.4	4452.4	4462.5	4470.9	4476.0	4479.4	4486.1	4487.8	4481.1
17.5°	4567.2	4567.2	4565.5	4567.2	4577.4	4590.9	4595.9	4602.7	4609.4	4614.5	4606.1
20°	4699.0	4702.3	4702.3	4705.7	4719.2	4734.4	4734.4	4737.8	4734.4	4737.8	4732.7
22.5°	4859.4	4869.6	4869.6	4871.2	4884.8	4903.3	4898.3	4903.3	4894.9	4901.7	4894.9
25°	5068.9	5084.1	5080.7	5080.7	5090.8	5102.6	5104.3	5114.5	5112.8	5121.2	5116.2
27.5°	5305.3	5329.0	5335.7	5334.1	5340.8	5352.6	5356.0	5367.8	5361.1	5367.8	5364.5
30°	5589.1	5599.2	5612.7	5617.8	5626.3	5638.1	5638.1	5639.8	5631.3	5641.5	5646.5
32.5°	5883.0	5901.6	5915.1	5945.5	5960.7	5969.1	5967.4	5970.8	5962.4	5975.9	5986.0
35°	6271.5	6285.0	6306.9	6330.6	6350.9	6349.2	6344.1	6345.8	6345.8	6357.6	6367.8
37.5°	6739.3	6742.7	6771.4	6805.2	6815.4	6805.2	6774.8	6768.1	6752.9	6768.1	6785.0
40°	7234.2	7246.1	7303.5	7325.5	7330.5	7311.9	7268.0	7242.7	7208.9	7227.5	7251.1
42.5°	7752.8	7776.4	7828.8	7867.6	7884.5	7872.7	7811.9	7773.1	7729.1	7739.3	7762.9
45°	8327.1	8355.8	8430.1	8467.3	8499.3	8480.8	8421.7	8362.5	8293.3	8298.4	8335.5
47.5°	8968.9	8997.6	9093.9	9156.4	9173.3	9169.9	9104.0	9023.0	8928.4	8925.0	8957.1
50°	9688.4	9717.2	9837.1	9933.4	9982.3	9977.3	9899.6	9784.7	9669.9	9671.6	9712.1
52.5°	10391.1	10426.6	10551.6	10717.1	10813.4	10882.6	10835.3	10727.2	10587.0	10590.4	10627.6
55°	11049.8	11108.9	11252.5	11477.2	11656.2	11850.4	11906.2	11902.8	11818.4	11842.0	11879.2
57.5°	11369.1	11456.9	11678.2	12032.9	12397.7	12792.9	13127.4	13377.4	13483.8	13644.2	13607.1
60°	10764.4	10904.6	11230.6	11752.5	12473.7	13298.0	14181.3	15044.5	15780.9	16336.6	16017.4
62.5°	8813.5	8995.9	9391.2	10060.0	11151.2	12470.3	14161.1	16201.5	18424.3	19765.4	18807.7
65°	5514.8	5704.0	6106.0	6822.1	8099.0	9739.1	12032.9	15414.4	19567.8	21589.6	19640.4
67.5°	2150.2	2253.2	2471.1	2928.8	3888.2	5347.6	7649.8	11487.3	16454.8	18226.6	16149.1
70°	1077.6	1087.8	1128.3	1212.7	1418.8	1842.8	2803.8	5325.6	9436.8	11397.8	9097.3
72.5°	778.7	780.3	800.6	837.8	903.6	998.2	1180.7	1629.9	3069.0	4690.5	2876.5
75°	596.2	603.0	614.8	635.1	670.6	717.9	783.7	939.1	1163.8	1349.6	1135.0
77.5°	459.4	472.9	481.4	500.0	521.9	554.0	572.6	631.7	734.7	773.6	761.8
80°	349.6	361.5	380.0	395.2	410.4	425.6	418.9	445.9	500.0	532.1	515.2
82.5°	223.0	236.5	290.5	304.0	310.8	320.9	309.1	310.8	334.4	354.7	334.4
85°	143.6	152.0	184.1	201.0	202.7	209.4	204.4	192.6	192.6	175.7	197.6
87.5°	65.9	67.6	82.8	98.0	101.3	91.2	89.5	86.1	69.3	65.9	70.9
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°	4080.8	4080.8	4080.8	4080.8	4080.8	4080.8	4080.8	4080.8
2.5°	4079.1	4082.5	4084.1	4089.2	4090.9	4090.9	4092.6	4096.0
5°	4111.2	4116.2	4117.9	4124.7	4126.4	4124.7	4128.1	4129.8
7.5°	4168.6	4177.0	4180.4	4187.2	4182.1	4188.9	4190.6	4190.6
10°	4253.1	4261.5	4263.2	4269.9	4266.6	4269.9	4269.9	4266.6
12.5°	4364.5	4366.2	4361.2	4366.2	4359.5	4362.8	4357.8	4354.4
15°	4487.8	4482.8	4470.9	4470.9	4460.8	4462.5	4460.8	4459.1
17.5°	4607.8	4597.6	4589.2	4585.8	4577.4	4575.7	4570.6	4570.6
20°	4739.5	4734.4	4729.4	4722.6	4714.2	4705.7	4704.0	4707.4
22.5°	4898.3	4896.6	4896.6	4893.2	4881.4	4872.9	4867.9	4867.9
25°	5111.1	5095.9	5095.9	5094.2	5089.1	5084.1	5073.9	5079.0
27.5°	5350.9	5342.5	5349.3	5347.6	5342.5	5342.5	5335.7	5335.7
30°	5646.5	5643.1	5653.3	5644.8	5627.9	5626.3	5619.5	5611.1
32.5°	5987.7	5984.3	5999.5	5989.4	5962.4	5947.2	5933.7	5926.9
35°	6367.8	6369.4	6388.0	6381.3	6350.9	6340.7	6317.1	6313.7
37.5°	6783.3	6810.3	6842.4	6849.1	6823.8	6817.0	6791.7	6778.2
40°	7271.4	7306.9	7355.9	7367.7	7340.7	7335.6	7300.1	7281.5
42.5°	7791.6	7852.4	7913.2	7923.4	7896.4	7869.3	7835.5	7822.0
45°	8372.7	8445.3	8524.7	8545.0	8504.4	8472.3	8428.4	8428.4
47.5°	9024.6	9115.9	9205.4	9261.1	9224.0	9190.2	9137.8	9104.0
50°	9794.9	9919.8	10036.4	10093.8	10034.7	9970.5	9879.3	9848.9
52.5°	10761.0	10896.1	10997.5	10967.1	10875.9	10786.3	10686.7	10646.1
55°	11994.0	12039.6	12039.6	11924.8	11742.3	11592.0	11434.9	11382.6
57.5°	13536.1	13360.5	13090.2	12747.3	12316.6	11941.7	11688.3	11568.4
60°	15348.5	14504.0	13549.6	12612.2	11842.0	11206.9	10830.3	10658.0
62.5°	16556.2	14346.9	12434.9	10929.9	9821.9	9056.7	8536.5	8333.8
65°	15473.5	11965.3	9404.7	7604.1	6396.5	5617.8	5102.6	4913.5
67.5°	11333.6	7497.7	5008.1	3589.3	2629.9	2097.8	1886.7	1798.8
70°	5087.4	2640.0	1618.1	1263.4	1089.4	999.9	961.1	947.6
72.5°	1533.7	1109.7	935.7	844.5	775.3	731.4	699.3	695.9
75°	925.6	770.2	684.1	630.0	586.1	550.6	533.7	528.7
77.5°	646.9	565.8	525.3	486.4	452.7	425.6	410.4	398.6
80°	454.4	415.5	396.9	375.0	353.0	327.7	305.7	295.6
82.5°	304.0	295.6	295.6	282.1	263.5	239.8	195.9	185.8
85°	195.9	194.2	197.6	192.6	179.0	153.7	126.7	119.9
87.5°	91.2	92.9	103.0	101.3	98.0	81.1	64.2	60.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)