

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: P299629

Luminaire Tested: **GAA-AF-10-LED-U-5MQ-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299629
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24142)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAA-AF-10-LED-U-5MQ-7027
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(10) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 53591.4 lumens
Efficiency: N/A
Efficacy: 96.0 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 - G5

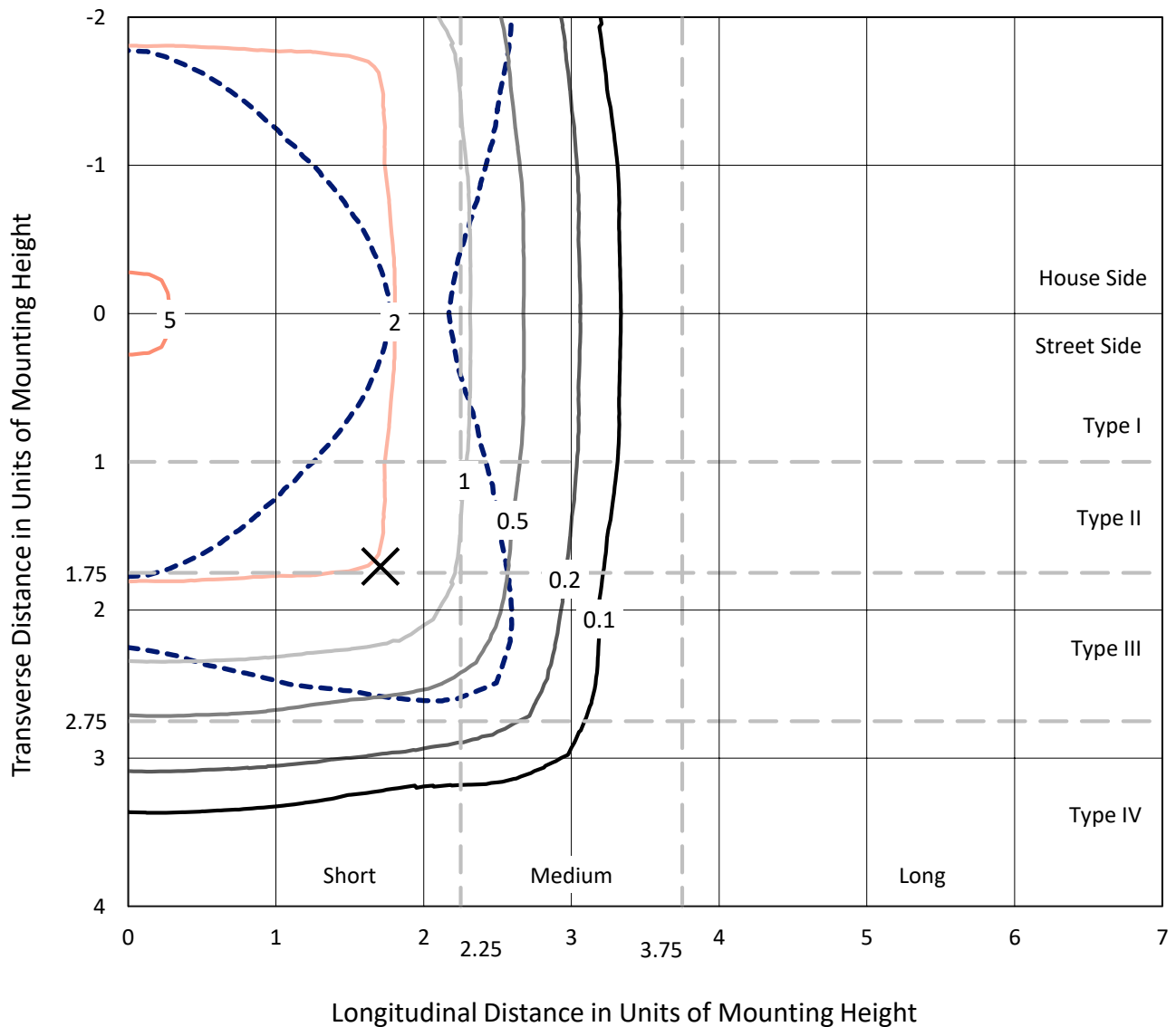
Input Watts (W): 558
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

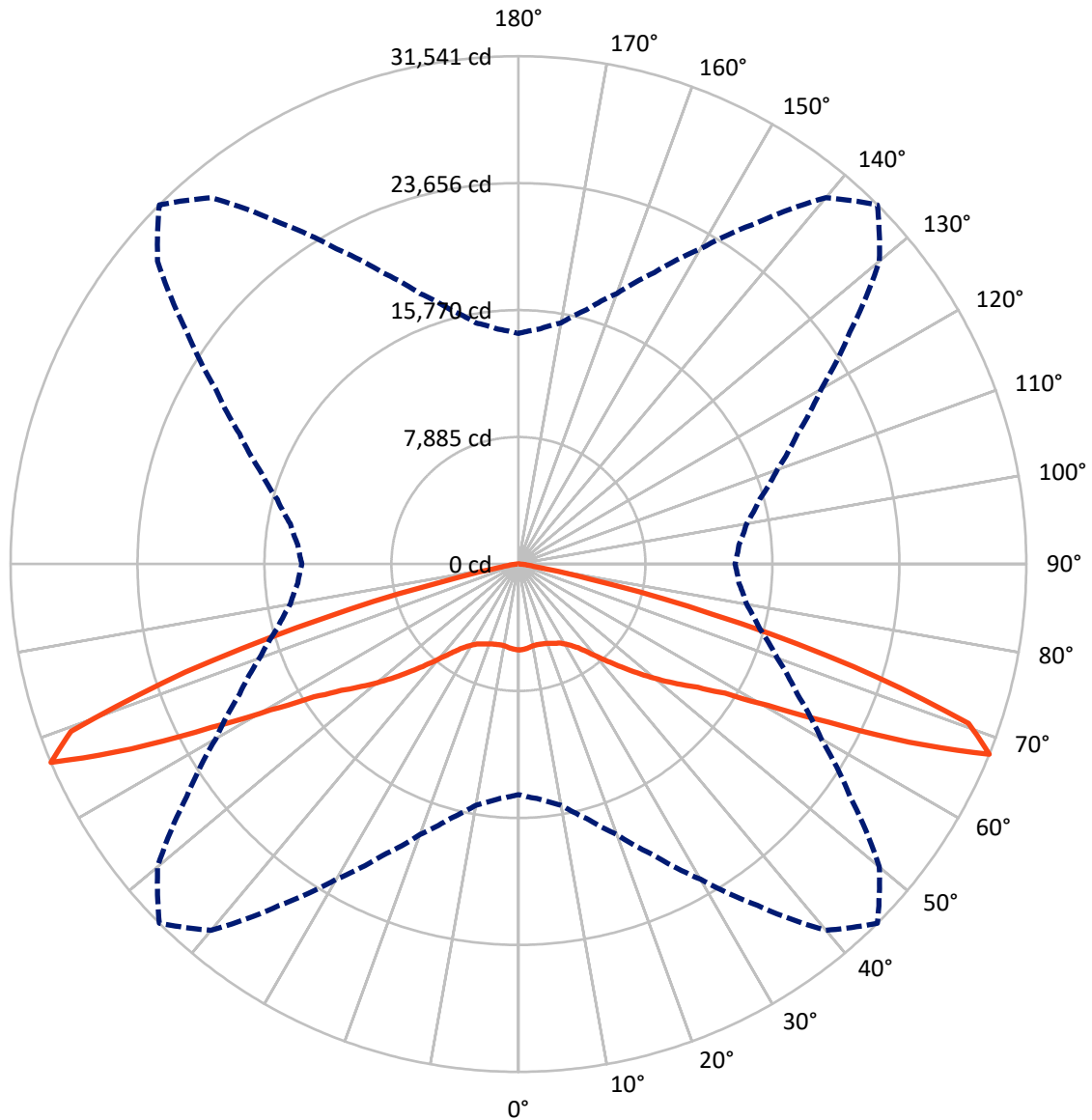
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.9 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	26795.7	0.0	26795.7
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	26795.7	0.0	26795.7
	% Fixture	50.0	0.0	50.0
Total	Lumens	53591.4	0.0	53591.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	499.9	0.9
10°-20°	1450.5	2.7
20°-30°	2465.8	4.6
30°-40°	4030.8	7.5
40°-50°	7195.8	13.4
50°-60°	12132.2	22.6
60°-70°	18827.4	35.1
70°-80°	6615.1	12.3
80°-90°	373.8	0.7
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°	53591.4	100.0
0°-180°	53591.4	100.0



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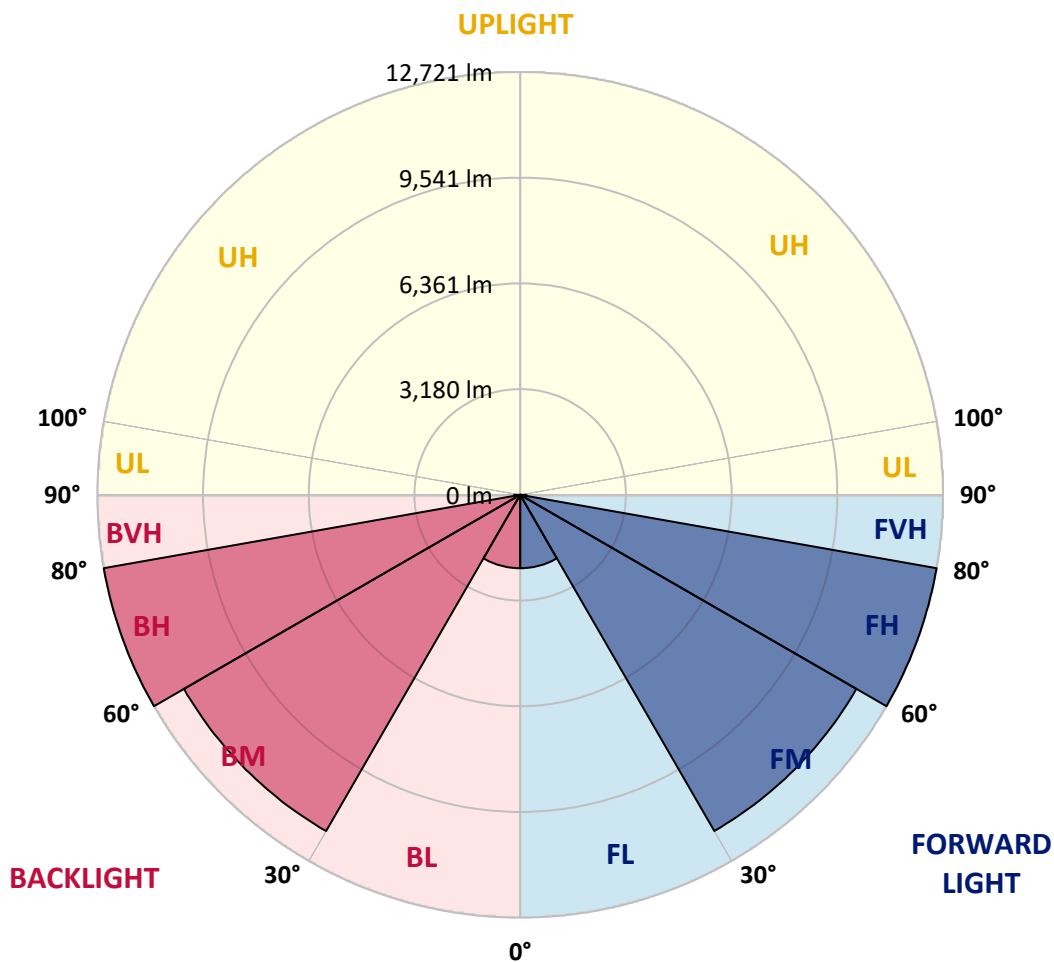
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2208.1	4.1			
FM (30°-60°)	11679.4	21.8			
FH (60°-80°)	12721.3	23.7			G5
FVH (80°-90°)	186.9	0.3			G2/225
BL (0°-30°)	2208.1	4.1	B3/2500		
BM (30°-60°)	11679.4	21.8	B5		
BH (60°-80°)	12721.3	23.7	B5		G5
BVH (80°-90°)	186.9	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-G5

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	5340.6	5340.6	5340.6	5340.6	5340.6	5340.6	5340.6	5340.6	5340.6	5340.6	5340.6
2.5°	5320.9	5325.8	5325.8	5325.8	5323.4	5323.4	5318.4	5323.4	5320.9	5313.5	5316.0
5°	5276.5	5281.5	5281.5	5279.0	5286.4	5283.9	5276.5	5281.5	5279.0	5274.1	5276.5
7.5°	5212.5	5219.8	5219.8	5217.4	5224.8	5222.3	5217.4	5219.8	5219.8	5212.5	5212.5
10°	5141.0	5145.9	5145.9	5143.4	5155.8	5155.8	5153.3	5160.7	5163.2	5155.8	5150.8
12.5°	5074.4	5081.8	5081.8	5091.7	5104.0	5108.9	5121.3	5131.1	5141.0	5138.5	5128.7
15°	5035.0	5039.9	5049.8	5062.1	5081.8	5099.1	5118.8	5141.0	5160.7	5165.6	5150.8
17.5°	5010.4	5017.8	5032.5	5049.8	5076.9	5106.5	5136.1	5165.6	5192.7	5202.6	5185.3
20°	5003.0	5007.9	5022.7	5052.3	5089.2	5133.6	5175.5	5210.0	5247.0	5259.3	5247.0
22.5°	5017.8	5027.6	5044.9	5079.4	5128.7	5185.3	5234.6	5281.5	5328.3	5350.5	5333.2
25°	5084.3	5094.2	5116.3	5160.7	5214.9	5274.1	5330.8	5385.0	5426.9	5449.0	5436.7
27.5°	5207.5	5219.8	5247.0	5291.3	5350.5	5414.5	5476.2	5520.5	5555.0	5562.4	5547.6
30°	5392.4	5419.5	5451.5	5500.8	5569.8	5624.0	5685.6	5725.1	5767.0	5767.0	5754.6
32.5°	5680.7	5707.8	5742.3	5789.2	5843.4	5902.5	5956.7	5991.2	6035.6	6038.1	6008.5
35°	6112.0	6124.3	6153.9	6183.5	6232.8	6284.5	6331.3	6353.5	6390.5	6393.0	6365.8
37.5°	6681.3	6683.8	6703.5	6713.3	6757.7	6814.4	6858.8	6873.5	6908.0	6903.1	6876.0
40°	7344.3	7356.6	7364.0	7378.8	7425.6	7479.8	7526.6	7534.0	7571.0	7563.6	7529.1
42.5°	8110.7	8115.7	8157.6	8179.7	8224.1	8251.2	8310.4	8317.7	8362.1	8342.4	8303.0
45°	8970.8	9015.2	9054.6	9099.0	9145.8	9177.9	9224.7	9214.8	9244.4	9214.8	9192.6
47.5°	9875.3	9907.4	9996.1	10065.1	10141.5	10168.6	10235.1	10205.6	10235.1	10193.2	10185.9
50°	10871.0	10927.7	11004.1	11082.9	11164.3	11208.6	11294.9	11257.9	11297.3	11257.9	11235.7
52.5°	11851.9	11866.7	12034.2	12150.1	12263.4	12315.2	12366.9	12349.7	12352.2	12349.7	12327.5
55°	12783.5	12818.0	12985.5	13143.3	13340.4	13485.8	13574.6	13564.7	13542.5	13520.3	13483.4
57.5°	13833.3	13867.8	14060.1	14254.8	14479.0	14686.1	14866.0	15050.8	15122.3	15142.0	15060.7
60°	15252.9	15250.4	15506.7	15743.3	16063.7	16371.8	16766.1	17167.8	17628.7	17843.1	17559.7
62.5°	16697.1	16756.3	17125.9	17544.9	18205.4	18848.6	19575.7	20290.4	21019.9	21613.8	20982.9
65°	16524.6	16751.3	17300.9	18249.8	19469.7	20918.8	22486.3	24144.9	25643.3	26673.5	25517.6
67.5°	14321.3	14644.2	15203.6	16357.0	17882.5	19972.4	22604.6	25884.8	29697.4	31540.9	29256.3
70°	10380.5	10745.3	11331.9	12458.1	13968.9	15955.3	18814.1	22752.4	27799.8	29658.0	27141.7
72.5°	5165.6	5362.8	5725.1	6442.2	7585.8	9197.6	11790.3	15575.7	20041.5	21746.9	19447.5
75°	1754.7	1845.9	1907.5	2141.7	2503.9	3137.3	4426.3	6809.5	10387.9	12453.2	10240.1
77.5°	1012.9	1015.4	1057.3	1099.2	1160.8	1229.8	1402.3	1841.0	3184.2	4522.4	3295.1
80°	655.6	653.1	687.6	719.6	761.5	796.0	805.9	852.7	983.3	1165.7	1042.5
82.5°	340.1	382.0	458.4	500.3	579.2	593.9	574.2	557.0	589.0	611.2	626.0
85°	187.3	162.7	244.0	315.5	350.0	354.9	354.9	335.2	347.5	340.1	369.7
87.5°	86.3	78.9	96.1	155.3	165.1	140.5	147.9	130.6	93.7	91.2	103.5
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°	5340.6	5340.6	5340.6	5340.6	5340.6	5340.6	5340.6	5340.6
2.5°	5316.0	5318.4	5318.4	5325.8	5328.3	5333.2	5338.1	5340.6
5°	5274.1	5281.5	5276.5	5283.9	5283.9	5288.9	5288.9	5291.3
7.5°	5212.5	5219.8	5219.8	5219.8	5217.4	5224.8	5224.8	5224.8
10°	5148.4	5153.3	5150.8	5145.9	5141.0	5148.4	5145.9	5143.4
12.5°	5128.7	5116.3	5106.5	5101.6	5091.7	5094.2	5086.8	5086.8
15°	5141.0	5118.8	5101.6	5094.2	5084.3	5079.4	5074.4	5076.9
17.5°	5173.0	5145.9	5123.7	5111.4	5099.1	5091.7	5081.8	5084.3
20°	5229.7	5197.7	5165.6	5141.0	5118.8	5106.5	5099.1	5096.6
22.5°	5313.5	5266.7	5219.8	5182.9	5153.3	5136.1	5128.7	5123.7
25°	5409.6	5357.9	5303.6	5261.7	5232.2	5210.0	5195.2	5195.2
27.5°	5530.4	5488.5	5439.2	5389.9	5362.8	5340.6	5330.8	5325.8
30°	5732.5	5693.0	5653.6	5606.8	5572.3	5550.1	5532.8	5518.1
32.5°	5991.2	5959.2	5927.2	5892.7	5860.6	5831.0	5803.9	5791.6
35°	6356.0	6331.3	6309.2	6269.7	6257.4	6240.2	6225.4	6213.0
37.5°	6858.8	6848.9	6848.9	6807.0	6797.1	6789.7	6775.0	6777.4
40°	7519.2	7529.1	7516.8	7502.0	7494.6	7474.9	7474.9	7492.1
42.5°	8300.5	8307.9	8335.0	8310.4	8337.5	8312.8	8298.0	8310.4
45°	9207.4	9234.5	9288.8	9264.1	9281.4	9239.5	9187.7	9190.2
47.5°	10225.3	10249.9	10272.1	10254.9	10257.3	10188.3	10119.3	10102.1
50°	11282.6	11292.4	11304.7	11280.1	11285.0	11208.6	11129.8	11132.2
52.5°	12327.5	12374.3	12423.6	12357.1	12342.3	12256.0	12145.1	12100.8
55°	13522.8	13589.3	13532.7	13416.8	13301.0	13185.2	13039.8	13015.1
57.5°	14996.6	14883.2	14705.8	14486.4	14326.2	14163.6	14015.7	13954.1
60°	17047.1	16620.7	16300.3	15975.0	15770.4	15570.8	15376.1	15346.5
62.5°	19945.3	19208.4	18570.1	17897.3	17347.7	16918.9	16576.3	16480.2
65°	23578.0	21835.6	20324.9	18915.2	17690.3	16766.1	16184.5	15928.2
67.5°	25140.5	21700.1	19109.9	17108.7	15506.7	14387.9	13759.4	13446.4
70°	22091.9	17995.9	15179.0	13175.3	11716.3	10523.5	9954.2	9619.0
72.5°	15198.7	11447.7	9052.2	7388.6	6222.9	5224.8	4830.5	4800.9
75°	6824.2	4519.9	3115.1	2400.4	2020.9	1757.2	1675.9	1614.3
77.5°	1910.0	1412.2	1259.4	1178.0	1099.2	1008.0	973.5	980.9
80°	929.1	877.4	842.9	791.1	719.6	643.2	608.7	623.5
82.5°	616.1	608.7	630.9	593.9	490.4	416.5	350.0	320.4
85°	374.6	379.5	386.9	389.4	330.2	231.7	157.7	177.4
87.5°	147.9	170.1	184.8	192.2	179.9	110.9	88.7	91.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)