

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: P299684

Luminaire Tested: **GAA-AF-09-LED-U-5MQ-7030-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299684
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-09-LED-U-5MQ-7030-800
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 43535.6 lumens
Efficiency: N/A
Efficacy: 116.4 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 - G4

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

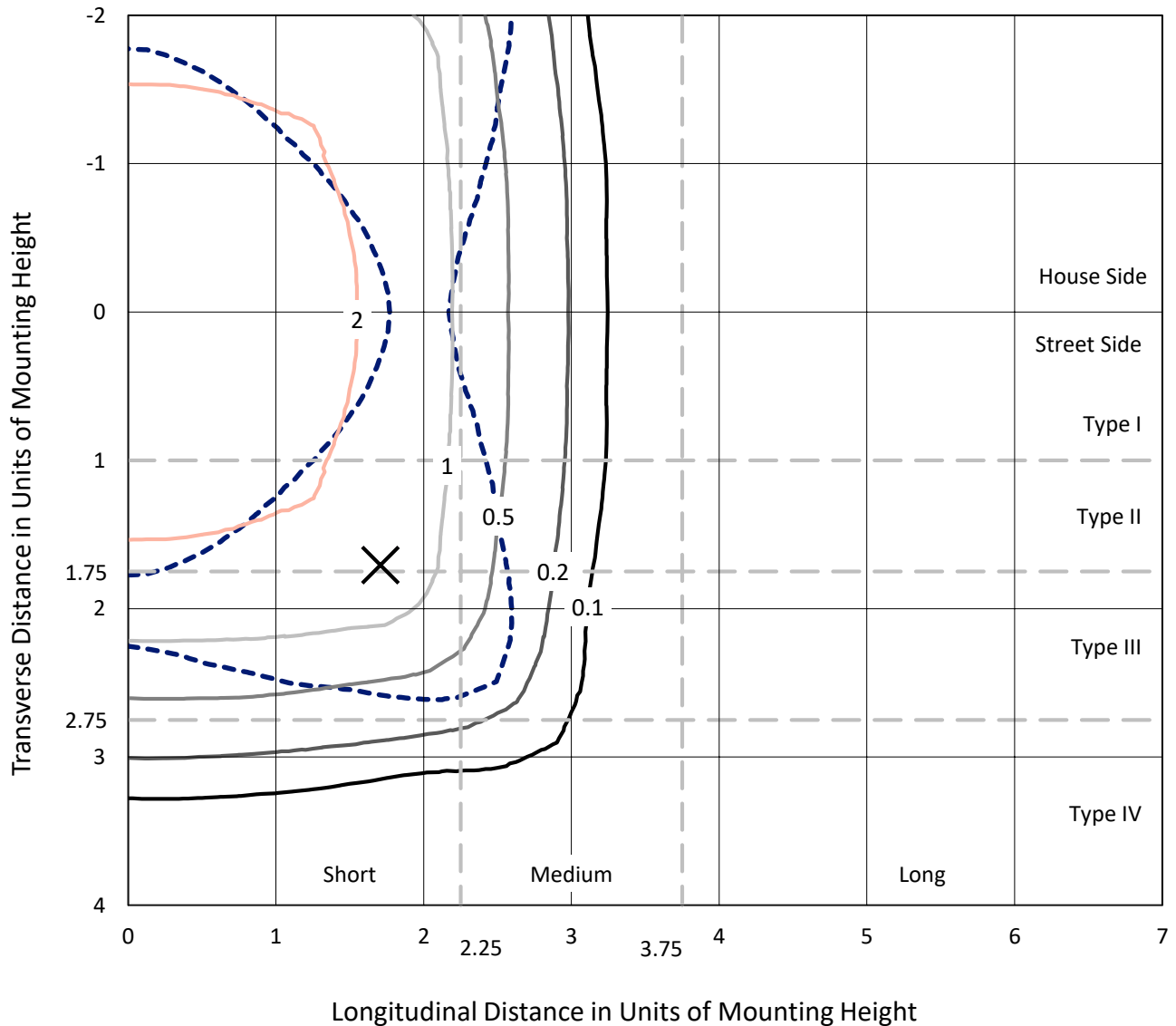


REPORT NUMBER: P299684

CATALOG NUMBER: GAA-AF-09-LED-U-5MQ-7030-800

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

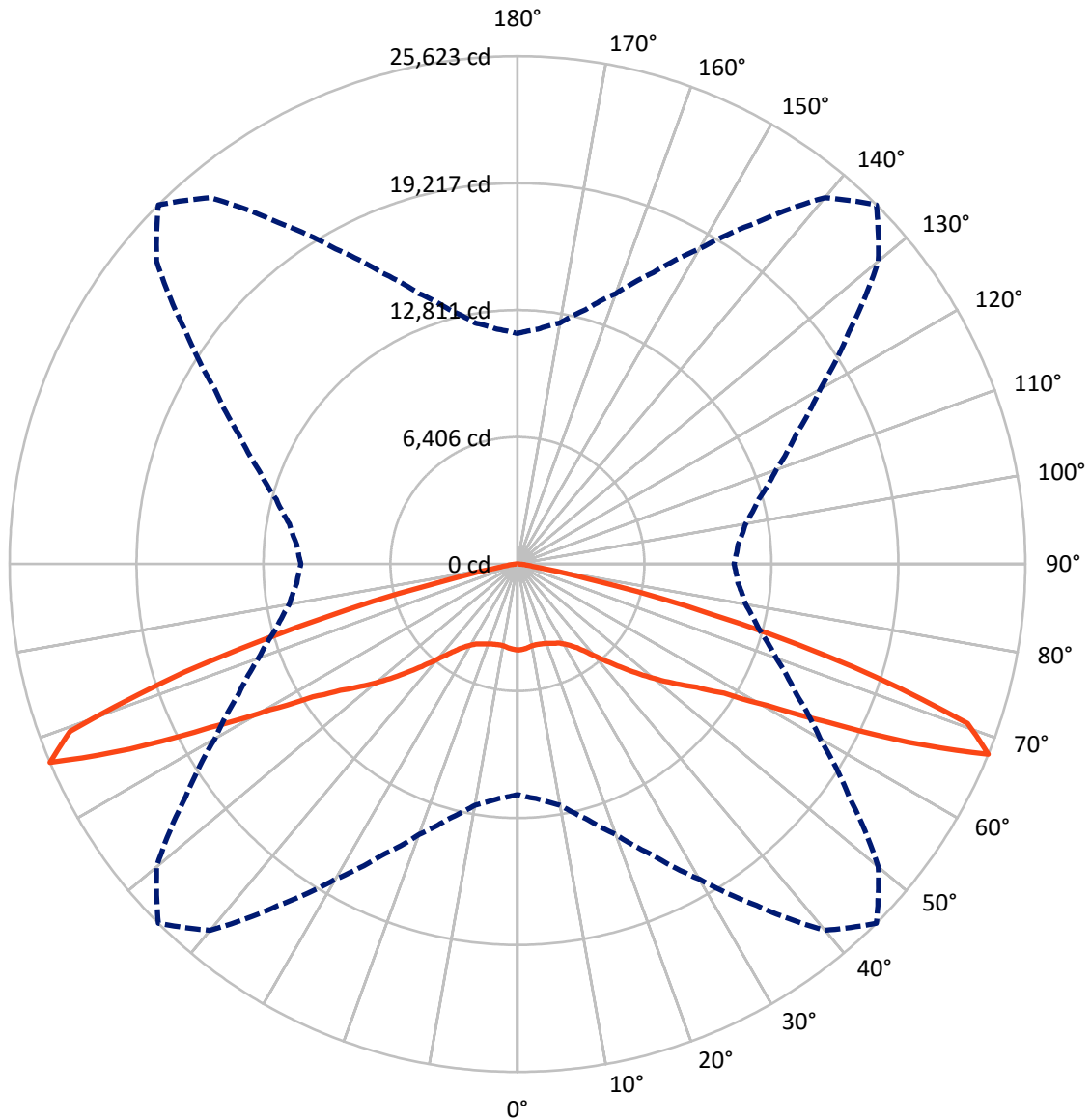


Based on 30 foot mounting height. Maximum calculated value = 4.8 fc
 Type V - Short - Full Cutoff

REPORT NUMBER: P299684

CATALOG NUMBER: GAA-AF-09-LED-U-5MQ-7030-800

Luminous Intensity Polar Plot



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

REPORT NUMBER: P299684

CATALOG NUMBER: GAA-AF-09-LED-U-5MQ-7030-800

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	21767.8	0.0	21767.8
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	21767.8	0.0	21767.8
	% Fixture	50.0	0.0	50.0
Total	Lumens	43535.6	0.0	43535.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	406.1	0.9
10°-20°	1178.3	2.7
20°-30°	2003.1	4.6
30°-40°	3274.5	7.5
40°-50°	5845.6	13.4
50°-60°	9855.8	22.6
60°-70°	15294.7	35.1
70°-80°	5373.9	12.3
80°-90°	303.7	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°	43535.6	100.0
0°-180°	43535.6	100.0



REPORT NUMBER: P299684

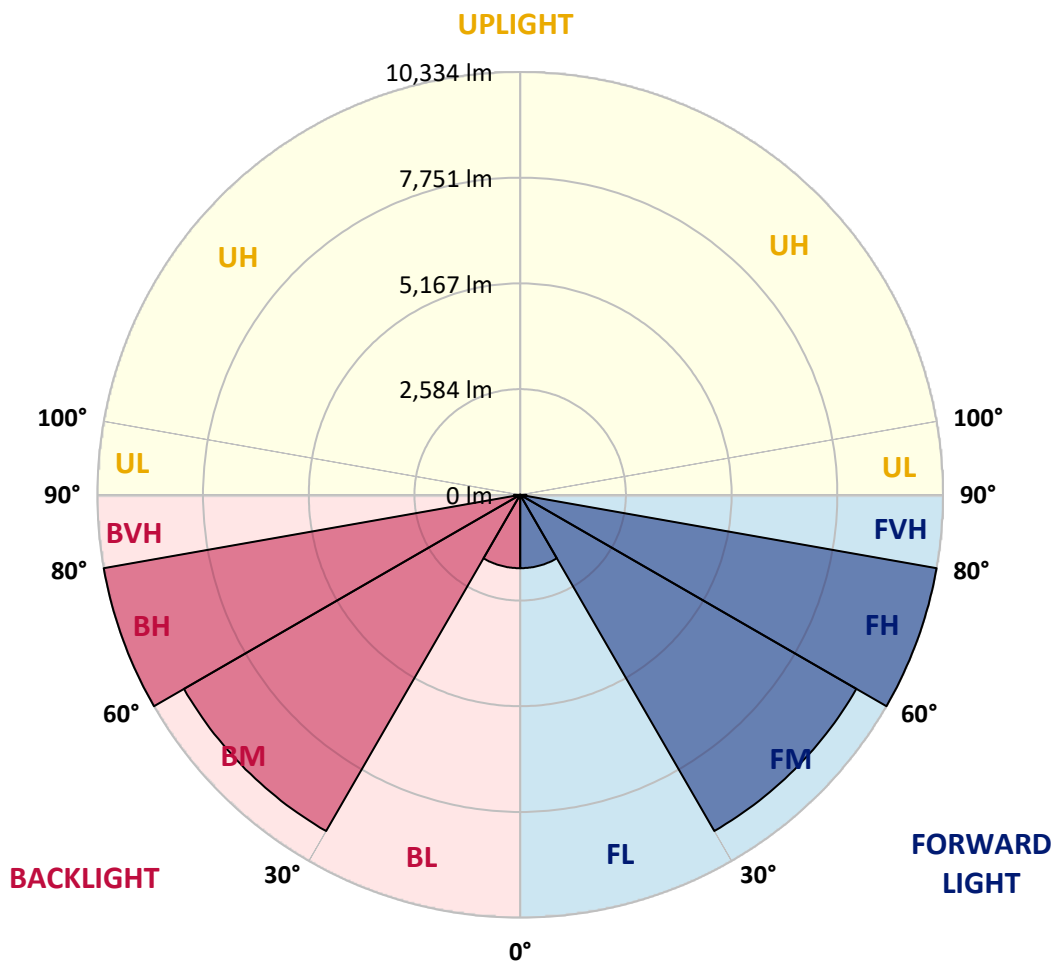
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1793.8	4.1			
FM	(30°-60°)	9487.9	21.8			
FH	(60°-80°)	10334.3	23.7			G4/12000
FVH	(80°-90°)	151.8	0.3			G2/225
BL	(0°-30°)	1793.8	4.1	B3/2500		
BM	(30°-60°)	9487.9	21.8	B5		
BH	(60°-80°)	10334.3	23.7	B5		G4/12000
BVH	(80°-90°)	151.8	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-G4

Type V Short





REPORT NUMBER: P299684

CATALOG NUMBER: GAA-AF-09-LED-U-5MQ-7030-800

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	4338.5	4338.5	4338.5	4338.5	4338.5	4338.5	4338.5	4338.5	4338.5	4338.5	4338.5
2.5°	4322.5	4326.5	4326.5	4326.5	4324.5	4324.5	4320.5	4324.5	4322.5	4316.5	4318.5
5°	4286.5	4290.5	4290.5	4288.5	4294.5	4292.5	4286.5	4290.5	4288.5	4284.5	4286.5
7.5°	4234.4	4240.4	4240.4	4238.4	4244.4	4242.4	4238.4	4240.4	4240.4	4234.4	4234.4
10°	4176.3	4180.3	4180.3	4178.3	4188.4	4188.4	4186.4	4192.4	4194.4	4188.4	4184.3
12.5°	4122.3	4128.3	4128.3	4136.3	4146.3	4150.3	4160.3	4168.3	4176.3	4174.3	4166.3
15°	4090.3	4094.3	4102.3	4112.3	4128.3	4142.3	4158.3	4176.3	4192.4	4196.4	4184.3
17.5°	4070.2	4076.2	4088.2	4102.3	4124.3	4148.3	4172.3	4196.4	4218.4	4226.4	4212.4
20°	4064.2	4068.2	4080.2	4104.3	4134.3	4170.3	4204.4	4232.4	4262.4	4272.4	4262.4
22.5°	4076.2	4084.2	4098.3	4126.3	4166.3	4212.4	4252.4	4290.5	4328.5	4346.5	4332.5
25°	4130.3	4138.3	4156.3	4192.4	4236.4	4284.5	4330.5	4374.5	4408.6	4426.6	4416.6
27.5°	4230.4	4240.4	4262.4	4298.5	4346.5	4398.6	4448.6	4484.7	4512.7	4518.7	4506.7
30°	4380.6	4402.6	4428.6	4468.6	4524.7	4568.7	4618.8	4650.8	4684.9	4684.9	4674.9
32.5°	4614.8	4636.8	4664.8	4702.9	4746.9	4795.0	4839.0	4867.1	4903.1	4905.1	4881.1
35°	4965.2	4975.2	4999.2	5023.2	5063.3	5105.3	5143.3	5161.4	5191.4	5193.4	5171.4
37.5°	5427.6	5429.6	5445.7	5453.7	5489.7	5535.8	5571.8	5583.8	5611.8	5607.8	5585.8
40°	5966.2	5976.2	5982.2	5994.2	6032.3	6076.3	6114.4	6120.4	6150.4	6144.4	6116.4
42.5°	6588.8	6592.9	6626.9	6644.9	6680.9	6703.0	6751.0	6757.0	6793.1	6777.0	6745.0
45°	7287.6	7323.6	7355.6	7391.7	7429.7	7455.7	7493.8	7485.8	7509.8	7485.8	7467.8
47.5°	8022.3	8048.4	8120.4	8176.5	8238.6	8260.6	8314.6	8290.6	8314.6	8280.6	8274.6
50°	8831.2	8877.2	8939.3	9003.4	9069.4	9105.5	9175.5	9145.5	9177.5	9145.5	9127.5
52.5°	9628.0	9640.0	9776.2	9870.3	9962.4	10004.4	10046.4	10032.4	10034.4	10032.4	10014.4
55°	10384.8	10412.8	10549.0	10677.1	10837.3	10955.4	11027.5	11019.5	11001.4	10983.4	10953.4
57.5°	11237.7	11265.7	11421.9	11580.0	11762.2	11930.4	12076.6	12226.7	12284.8	12300.8	12234.7
60°	12390.9	12388.9	12597.1	12789.3	13049.6	13299.8	13620.2	13946.5	14320.9	14495.1	14264.8
62.5°	13564.1	13612.1	13912.5	14252.8	14789.4	15311.9	15902.5	16483.1	17075.7	17558.2	17045.7
65°	13424.0	13608.1	14054.6	14825.4	15816.4	16993.7	18267.0	19614.4	20831.7	21668.5	20729.5
67.5°	11634.1	11896.4	12350.8	13287.8	14527.1	16224.9	18363.1	21027.9	24125.1	25622.6	23766.7
70°	8432.8	8729.1	9205.6	10120.5	11347.8	12961.5	15283.9	18483.2	22583.5	24093.0	22048.9
72.5°	4196.4	4356.5	4650.8	5233.4	6162.4	7471.8	9578.0	12653.2	16280.9	17666.4	15798.4
75°	1425.5	1499.6	1549.6	1739.8	2034.1	2548.6	3595.7	5531.7	8438.8	10116.5	8318.6
77.5°	822.9	824.9	858.9	892.9	943.0	999.0	1139.2	1495.6	2586.7	3673.8	2676.8
80°	532.6	530.6	558.6	584.6	618.6	646.7	654.7	692.7	798.8	947.0	846.9
82.5°	276.3	310.3	372.4	406.4	470.5	482.5	466.5	452.5	478.5	496.5	508.5
85°	152.2	132.1	198.2	256.3	284.3	288.3	288.3	272.3	282.3	276.3	300.3
87.5°	70.1	64.1	78.1	126.1	134.1	114.1	120.1	106.1	76.1	74.1	84.1
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°	4338.5	4338.5	4338.5	4338.5	4338.5	4338.5	4338.5	4338.5
2.5°	4318.5	4320.5	4320.5	4326.5	4328.5	4332.5	4336.5	4338.5
5°	4284.5	4290.5	4286.5	4292.5	4292.5	4296.5	4296.5	4298.5
7.5°	4234.4	4240.4	4240.4	4240.4	4238.4	4244.4	4244.4	4244.4
10°	4182.3	4186.4	4184.3	4180.3	4176.3	4182.3	4180.3	4178.3
12.5°	4166.3	4156.3	4148.3	4144.3	4136.3	4138.3	4132.3	4132.3
15°	4176.3	4158.3	4144.3	4138.3	4130.3	4126.3	4122.3	4124.3
17.5°	4202.4	4180.3	4162.3	4152.3	4142.3	4136.3	4128.3	4130.3
20°	4248.4	4222.4	4196.4	4176.3	4158.3	4148.3	4142.3	4140.3
22.5°	4316.5	4278.4	4240.4	4210.4	4186.4	4172.3	4166.3	4162.3
25°	4394.6	4352.5	4308.5	4274.4	4250.4	4232.4	4220.4	4220.4
27.5°	4492.7	4458.6	4418.6	4378.6	4356.5	4338.5	4330.5	4326.5
30°	4656.8	4624.8	4592.8	4554.7	4526.7	4508.7	4494.7	4482.7
32.5°	4867.1	4841.0	4815.0	4787.0	4760.9	4736.9	4714.9	4704.9
35°	5163.4	5143.3	5125.3	5093.3	5083.3	5069.3	5057.3	5047.2
37.5°	5571.8	5563.8	5563.8	5529.7	5521.7	5515.7	5503.7	5505.7
40°	6108.3	6116.4	6106.3	6094.3	6088.3	6072.3	6072.3	6086.3
42.5°	6743.0	6749.0	6771.0	6751.0	6773.0	6753.0	6741.0	6751.0
45°	7479.8	7501.8	7545.8	7525.8	7539.8	7505.8	7463.8	7465.8
47.5°	8306.6	8326.7	8344.7	8330.7	8332.7	8276.6	8220.5	8206.5
50°	9165.5	9173.5	9183.5	9163.5	9167.5	9105.5	9041.4	9043.4
52.5°	10014.4	10052.4	10092.5	10038.4	10026.4	9956.3	9866.3	9830.2
55°	10985.4	11039.5	10993.4	10899.3	10805.2	10711.1	10593.0	10573.0
57.5°	12182.7	12090.6	11946.4	11768.2	11638.1	11506.0	11385.8	11335.8
60°	13848.4	13502.0	13241.8	12977.5	12811.3	12649.1	12491.0	12467.0
62.5°	16202.8	15604.2	15085.7	14539.1	14092.6	13744.3	13466.0	13387.9
65°	19153.9	17738.4	16511.2	15366.0	14370.9	13620.2	13147.7	12939.4
67.5°	20423.2	17628.3	15524.1	13898.4	12597.1	11688.1	11177.6	10923.4
70°	17946.7	14619.2	12330.8	10703.1	9517.9	8548.9	8086.4	7814.1
72.5°	12346.8	9299.7	7353.6	6002.2	5055.3	4244.4	3924.1	3900.1
75°	5543.8	3671.8	2530.6	1950.0	1641.7	1427.5	1361.4	1311.4
77.5°	1551.6	1147.2	1023.1	957.0	892.9	818.9	790.8	796.8
80°	754.8	712.7	684.7	642.7	584.6	522.5	494.5	506.5
82.5°	500.5	494.5	512.5	482.5	398.4	338.4	284.3	260.3
85°	304.3	308.3	314.3	316.3	268.3	188.2	128.1	144.1
87.5°	120.1	138.1	150.2	156.2	146.2	90.1	72.1	74.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)