

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: P299995

Luminaire Tested: **GAA-AF-09-LED-U-SL3-7027-600-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299995  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194479)  
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-SL3-7027-600-HSS  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(9) 70 CRI  
2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III w/Spill  
Control WITH HOUSESIDE SHEILD OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 23636.5 lumens  
Efficiency: N/A  
Efficacy: 81.5 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type III - Short - Non-Cutoff  
BUG Rating: B2 - U0 - G4

Input Watts (W): 290  
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

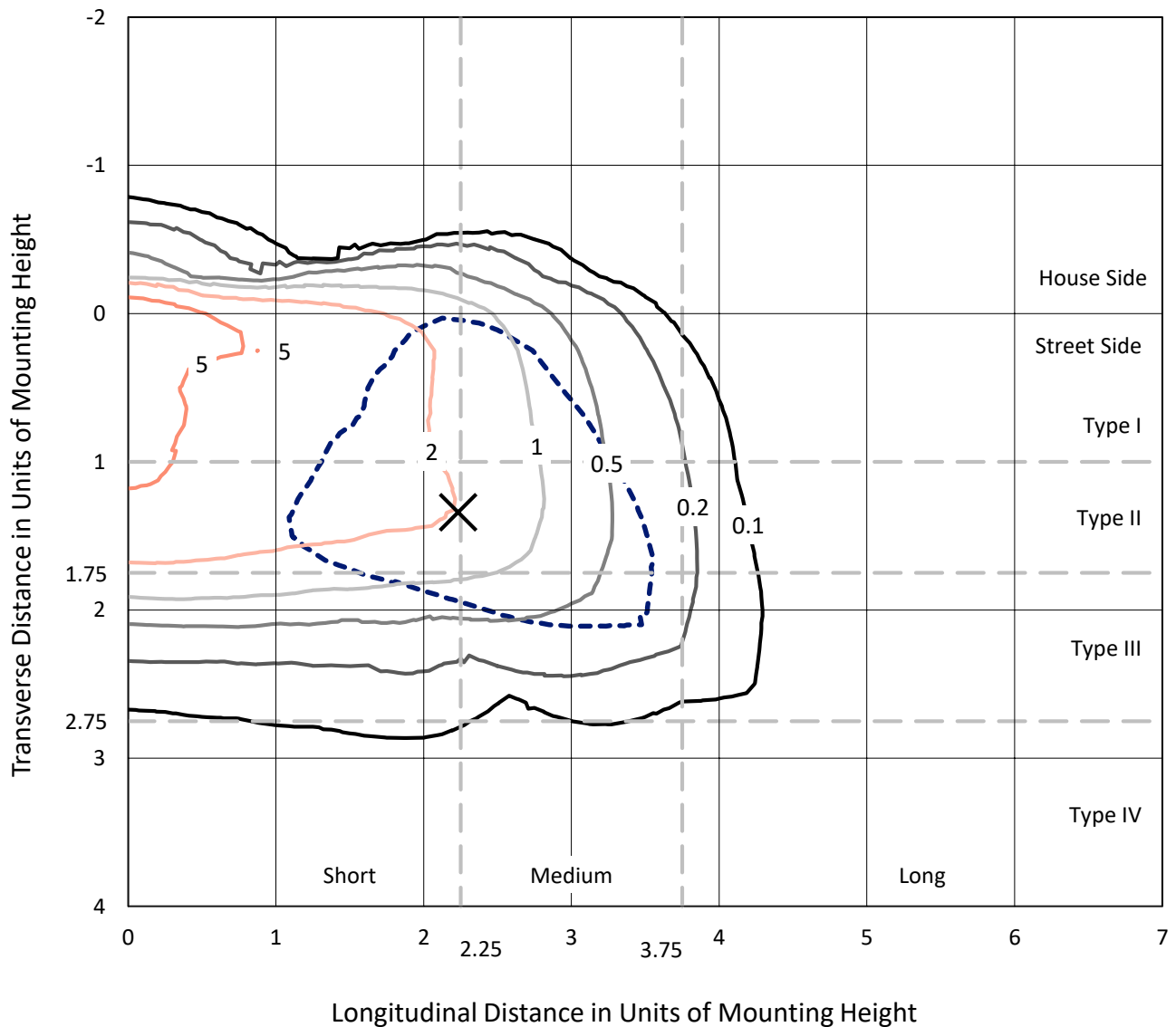


REPORT NUMBER: P299995

CATALOG NUMBER: GAA-AF-09-LED-U-SL3-7027-600-HSS

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

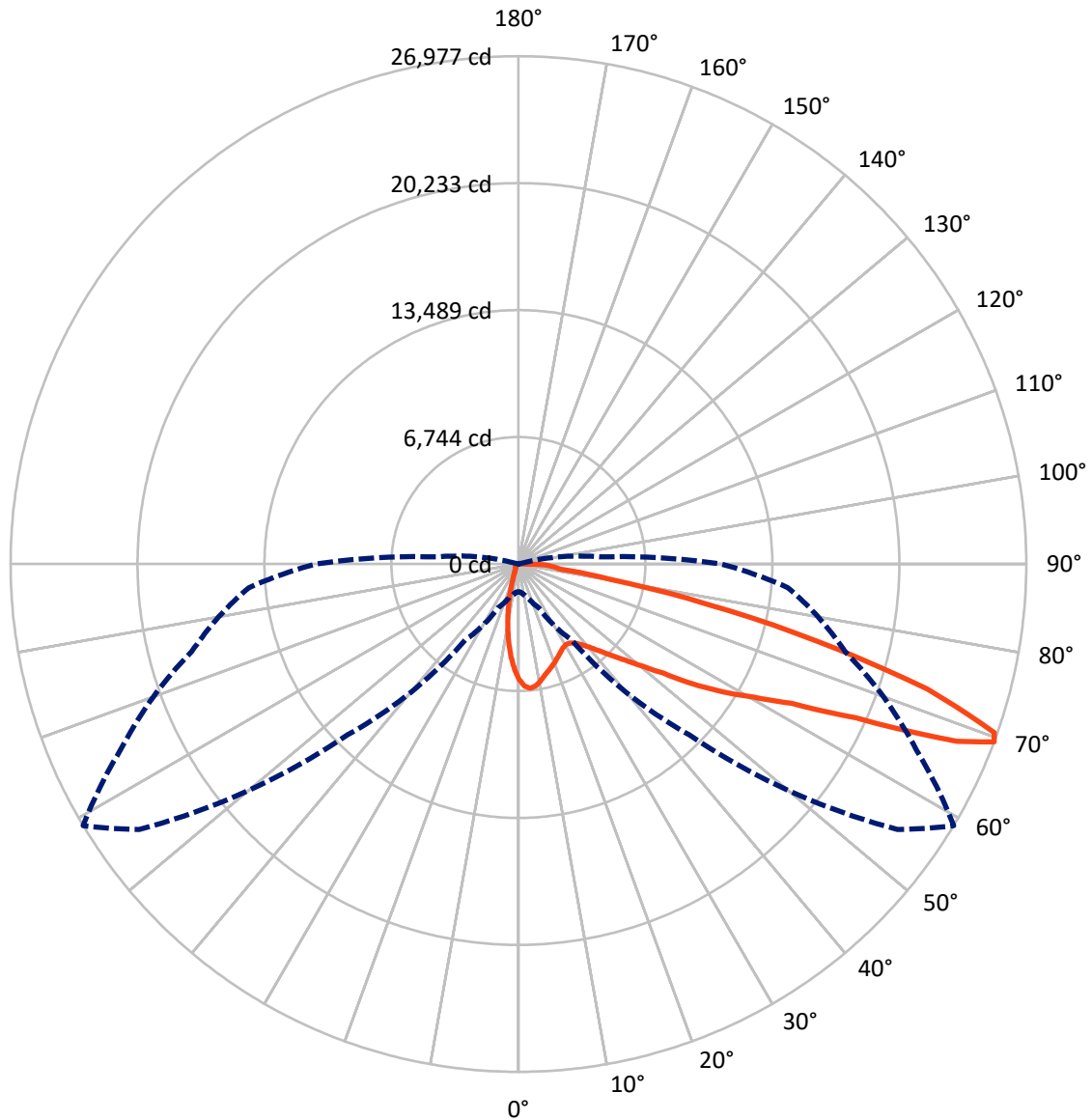


Based on 25 foot mounting height. Maximum calculated value = 9.9 fc  
 Type III - Short - Non-Cutoff

REPORT NUMBER: P299995

CATALOG NUMBER: GAA-AF-09-LED-U-SL3-7027-600-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P299995

CATALOG NUMBER: GAA-AF-09-LED-U-SL3-7027-600-HSS

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1924.9	0.0	1924.9
	% Fixture	8.1	0.0	8.1
<b>Street Side</b>	Lumens	21711.6	0.0	21711.6
	% Fixture	91.9	0.0	91.9
<b>Total</b>	Lumens	23636.5	0.0	23636.5
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	499.4	2.1
10°-20°	1031.9	4.4
20°-30°	1388.5	5.9
30°-40°	2016.0	8.5
40°-50°	3356.8	14.2
50°-60°	5236.6	22.2
60°-70°	6479.8	27.4
70°-80°	3283.9	13.9
80°-90°	343.6	1.5
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°	23636.5	100.0
0°-180°	23636.5	100.0



REPORT NUMBER: P299995

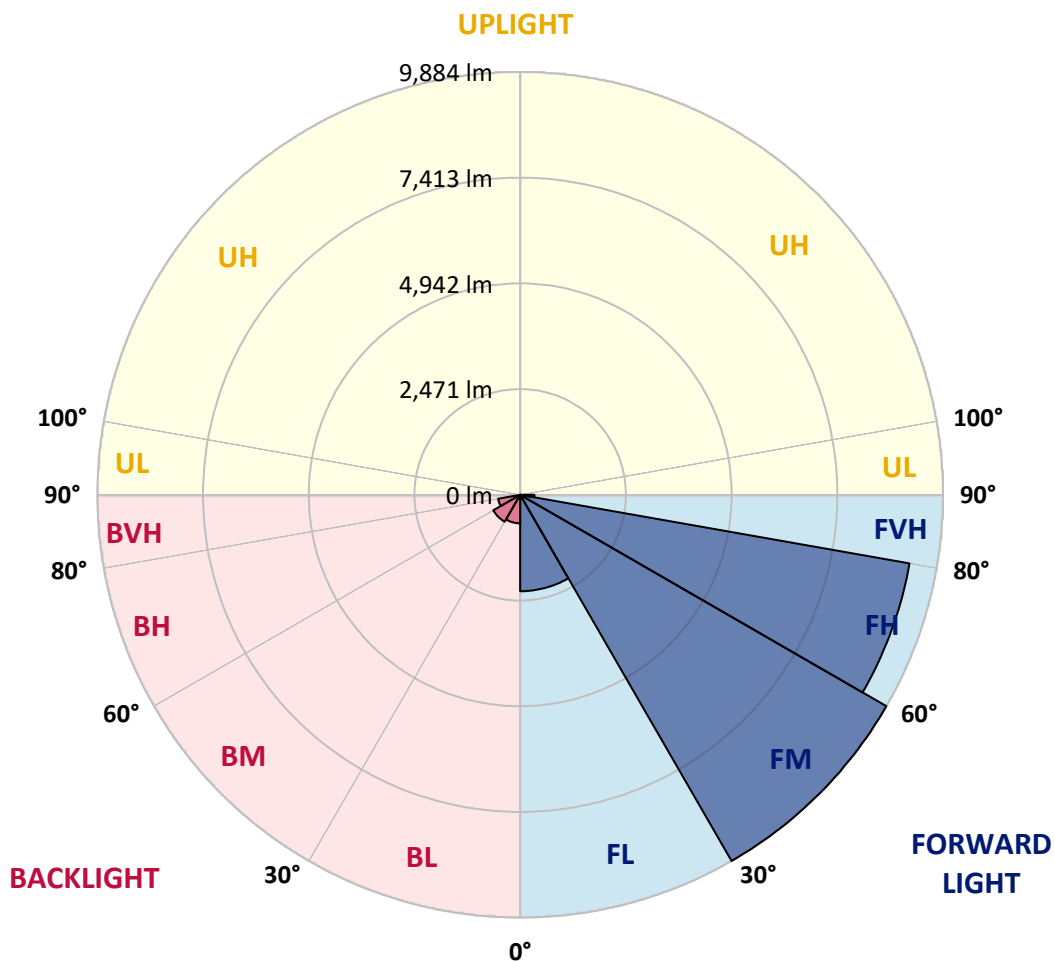
CATALOG NUMBER: GAA-AF-09-LED-U-SL3-7027-600-HSS

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2253.5	9.5			
FM	(30°-60°)	9884.1	41.8			
FH	(60°-80°)	9241.0	39.1			G4/12000
FVH	(80°-90°)	333.0	1.4			G3/500
BL	(0°-30°)	666.3	2.8	B2/1000		
BM	(30°-60°)	725.3	3.1	B1/1000		
BH	(60°-80°)	522.8	2.2	B2/1000		G2/1000
BVH	(80°-90°)	10.6	0.0			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G4**

Type III Short





REPORT NUMBER: P299995

CATALOG NUMBER: GAA-AF-09-LED-U-SL3-7027-600-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	6152.1	6152.1	6152.1	6152.1	6152.1	6152.1	6152.1	6152.1	6152.1	6152.1	6152.1
2.5°	6742.9	6740.5	6711.0	6697.6	6673.3	6622.7	6543.8	6502.6	6435.8	6319.2	6163.0
5°	6681.4	6713.8	6730.8	6732.4	6749.8	6730.8	6660.0	6625.6	6533.3	6345.9	6065.5
7.5°	6264.6	6276.3	6326.1	6368.6	6451.6	6530.5	6556.0	6541.0	6486.4	6286.1	5913.0
10°	5818.3	5830.0	5889.1	5944.9	6057.4	6178.8	6307.1	6334.2	6356.9	6200.3	5766.1
12.5°	5433.0	5445.2	5505.5	5578.7	5709.8	5859.5	6058.6	6102.7	6203.1	6118.9	5648.3
15°	5101.6	5106.9	5165.9	5256.6	5413.2	5605.4	5831.6	5902.4	6056.2	6061.5	5545.5
17.5°	4819.6	4832.9	4869.3	4955.9	5127.1	5365.0	5628.5	5730.0	5910.1	6013.3	5445.2
20°	4647.2	4660.5	4659.3	4707.5	4861.2	5115.0	5425.3	5546.7	5766.1	5963.9	5355.7
22.5°	4614.0	4614.0	4579.2	4572.3	4663.4	4875.8	5214.1	5362.2	5636.2	5942.5	5293.0
25°	4733.0	4727.3	4640.7	4569.9	4573.9	4700.6	5009.3	5185.8	5526.9	5957.1	5259.4
27.5°	4984.3	4977.4	4867.7	4733.0	4624.5	4623.3	4854.4	5044.1	5439.9	6026.7	5272.8
30°	5331.5	5329.0	5210.1	5040.1	4843.8	4663.4	4800.9	4973.3	5383.7	6152.1	5303.5
32.5°	5711.0	5707.0	5617.6	5438.7	5189.8	4843.8	4857.2	5001.7	5399.8	6319.2	5378.4
35°	6113.7	6106.8	6067.9	5911.7	5637.8	5176.5	5041.7	5153.8	5501.4	6569.3	5525.3
37.5°	6549.1	6556.0	6583.9	6434.2	6146.9	5643.0	5350.5	5426.6	5705.8	6908.8	5764.4
40°	7192.1	7190.9	7200.2	7003.5	6727.1	6213.6	5781.8	5806.1	6048.1	7359.2	6128.2
42.5°	8358.7	8277.4	8030.2	7629.1	7351.1	6865.9	6326.1	6300.6	6466.5	7916.5	6637.3
45°	9926.8	9752.8	9111.4	8343.0	7987.3	7601.2	6995.4	6914.1	7019.7	8586.2	7265.8
47.5°	11275.2	11094.7	10187.4	9085.9	8662.2	8298.9	7780.1	7633.2	7668.0	9336.0	8062.1
50°	11733.7	11645.4	10853.1	9733.0	9315.8	9177.0	8690.6	8511.3	8461.9	10203.2	8985.6
52.5°	11574.6	11568.1	11040.1	10152.6	9914.7	10085.9	9835.8	9628.6	9446.9	11117.8	9925.2
55°	11319.3	11352.9	11116.1	10520.1	10512.0	10915.8	11402.2	11229.8	10703.4	12110.8	10735.3
57.5°	10615.2	10758.0	11073.6	11215.3	11543.9	11957.0	12706.9	12808.4	12185.7	12871.2	11407.5
60°	8612.9	8926.9	9958.8	11315.2	12874.0	13903.1	14281.4	14368.0	13401.7	13503.2	12315.2
62.5°	6113.7	6434.2	7742.9	10037.7	12893.8	16459.7	16626.9	16286.1	14741.1	14440.5	13880.4
65°	3245.0	3492.7	4561.8	7245.5	11179.3	17053.4	20728.9	19713.2	17104.0	16283.3	15902.5
67.5°	1659.9	1734.8	2160.1	3546.1	7685.4	15147.4	24405.7	25120.8	21176.5	18112.0	15805.0
69°	1468.9	1513.0	1795.1	2563.5	4921.1	12829.9	24585.0	26977.4	23308.7	17959.4	14362.8
70°	1422.0	1460.8	1717.4	2320.3	3846.7	10759.2	23899.1	26814.3	23853.8	17379.5	13285.5
72.5°	1207.1	1240.3	1529.2	2050.4	3126.4	5340.8	19413.8	22721.9	21405.1	14477.7	9616.4
75°	807.3	917.0	1467.7	1922.2	2908.3	3034.2	12799.1	16419.7	15253.0	9765.0	5009.3
77.5°	193.8	208.4	414.4	1529.2	2659.9	2670.4	6582.7	10207.3	8325.6	3480.5	1184.0
80°	104.4	100.4	116.1	303.5	2476.5	2506.1	2963.4	4954.7	2972.7	577.5	390.1
82.5°	73.6	69.6	74.9	127.1	779.4	2282.7	2143.9	2242.7	1232.2	221.8	175.2
85°	26.7	25.5	41.3	114.9	244.4	1312.3	2202.6	1849.7	998.3	101.6	128.3
87.5°	9.3	8.1	16.2	62.7	74.9	558.8	1359.3	1398.1	392.9	61.5	60.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P299995

CATALOG NUMBER: GAA-AF-09-LED-U-SL3-7027-600-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6152.1	6152.1	6152.1	6152.1	6152.1	6152.1	6152.1	6152.1	6152.1	6152.1	6152.1
2.5°	6097.5	6014.5	5862.4	5705.8	5561.3	5387.7	5300.7	5215.3	5179.3	5165.9	5103.2
5°	5921.1	5780.6	5457.3	5132.4	4832.9	4514.8	4305.2	4136.9	4037.7	3989.6	3913.5
7.5°	5695.2	5465.4	4974.5	4473.6	4007.0	3547.3	3206.6	2944.3	2763.9	2677.3	2598.4
10°	5475.9	5170.0	4472.4	3789.3	3155.6	2546.1	2075.5	1734.8	1517.1	1416.7	1352.8
12.5°	5279.7	4882.7	3987.2	3122.4	2326.8	1613.4	1134.7	863.6	728.4	681.5	658.8
15°	5104.4	4618.0	3528.7	2488.7	1575.8	922.2	620.4	528.1	506.6	506.6	503.8
17.5°	4938.5	4358.6	3086.0	1893.8	989.0	564.1	471.8	459.7	459.7	465.0	465.0
20°	4779.5	4111.4	2658.2	1359.3	622.8	447.6	426.5	423.7	426.5	433.0	433.0
22.5°	4643.1	3886.8	2258.8	932.8	462.5	403.5	392.9	388.9	390.1	394.1	397.0
25°	4541.5	3697.0	1882.1	632.1	398.2	367.4	355.7	348.8	343.6	343.6	346.0
27.5°	4477.6	3536.8	1517.1	459.7	358.1	334.3	315.2	304.7	292.6	286.1	288.5
30°	4430.7	3384.2	1174.7	375.5	320.9	296.6	272.7	255.3	237.9	229.8	232.7
32.5°	4413.3	3261.2	878.1	331.4	287.3	260.6	231.1	208.4	189.8	182.9	184.5
35°	4460.2	3163.7	643.0	299.5	260.6	227.0	193.8	168.3	153.8	149.7	150.9
37.5°	4583.2	3111.5	481.1	272.7	236.7	199.1	161.9	137.6	128.3	128.3	129.5
40°	4815.5	3110.3	386.5	254.1	215.3	172.4	133.5	116.1	110.9	113.7	114.9
42.5°	5155.0	3181.1	336.7	236.7	196.7	146.9	110.9	98.7	97.5	100.4	101.6
45°	5618.8	3310.6	310.0	221.8	176.4	123.0	93.5	85.4	85.4	89.4	91.0
47.5°	6186.9	3500.3	287.3	207.2	156.2	102.8	80.1	74.9	76.1	80.1	81.3
50°	6871.2	3739.9	264.7	191.0	141.6	85.4	69.6	65.6	66.8	72.0	73.6
52.5°	7650.6	4062.0	246.0	176.4	123.0	70.8	58.7	56.2	58.7	64.3	65.6
55°	8318.7	4350.5	223.4	164.3	98.7	58.7	48.2	48.2	51.0	57.5	58.7
57.5°	8961.7	4652.4	203.1	141.6	77.7	46.9	40.1	41.3	45.3	52.2	53.4
60°	9905.4	5164.3	179.3	119.0	58.7	37.2	33.6	34.8	40.1	46.9	48.2
62.5°	11507.8	5943.7	155.0	98.7	45.3	29.5	26.7	29.5	36.0	44.1	45.3
65°	12954.1	6260.6	127.1	83.0	34.8	22.7	22.7	26.7	34.8	42.9	44.1
67.5°	12148.0	5269.9	98.7	65.6	26.7	17.4	18.6	25.5	33.6	42.9	44.1
69°	10743.4	4309.3	84.2	52.2	22.7	16.2	17.4	25.5	33.6	41.3	42.9
70°	9648.8	3638.3	74.9	44.1	20.2	16.2	17.4	23.9	33.6	41.3	42.9
72.5°	6462.5	1964.6	60.3	32.0	18.6	14.6	14.6	23.9	32.0	40.1	41.3
75°	2777.2	542.7	48.2	22.7	16.2	13.4	13.4	22.7	30.8	38.8	41.3
77.5°	507.9	137.6	38.8	20.2	16.2	13.4	12.1	21.4	29.5	37.2	38.8
80°	201.9	68.0	30.8	17.4	14.6	12.1	10.5	20.2	27.9	36.0	37.2
82.5°	121.8	38.8	25.5	16.2	14.6	10.5	9.3	17.4	26.7	34.8	36.0
85°	98.7	26.7	20.2	16.2	13.4	10.5	8.1	16.2	23.9	33.6	34.8
87.5°	48.2	18.6	18.6	14.6	13.4	10.5	8.1	14.6	22.7	32.0	33.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)