

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: P299989

Luminaire Tested: **GAA-AF-10-LED-U-5WQ-7027-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299989  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24143)  
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-5WQ-7027-600  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(10) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV  
w/Spill Control OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 35395.4 lumens  
Efficiency: N/A  
Efficacy: 109.6 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type V - Short - Semi-Cutoff  
BUG Rating: B5 - U0 - G4  
  
Input Watts (W): 323  
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

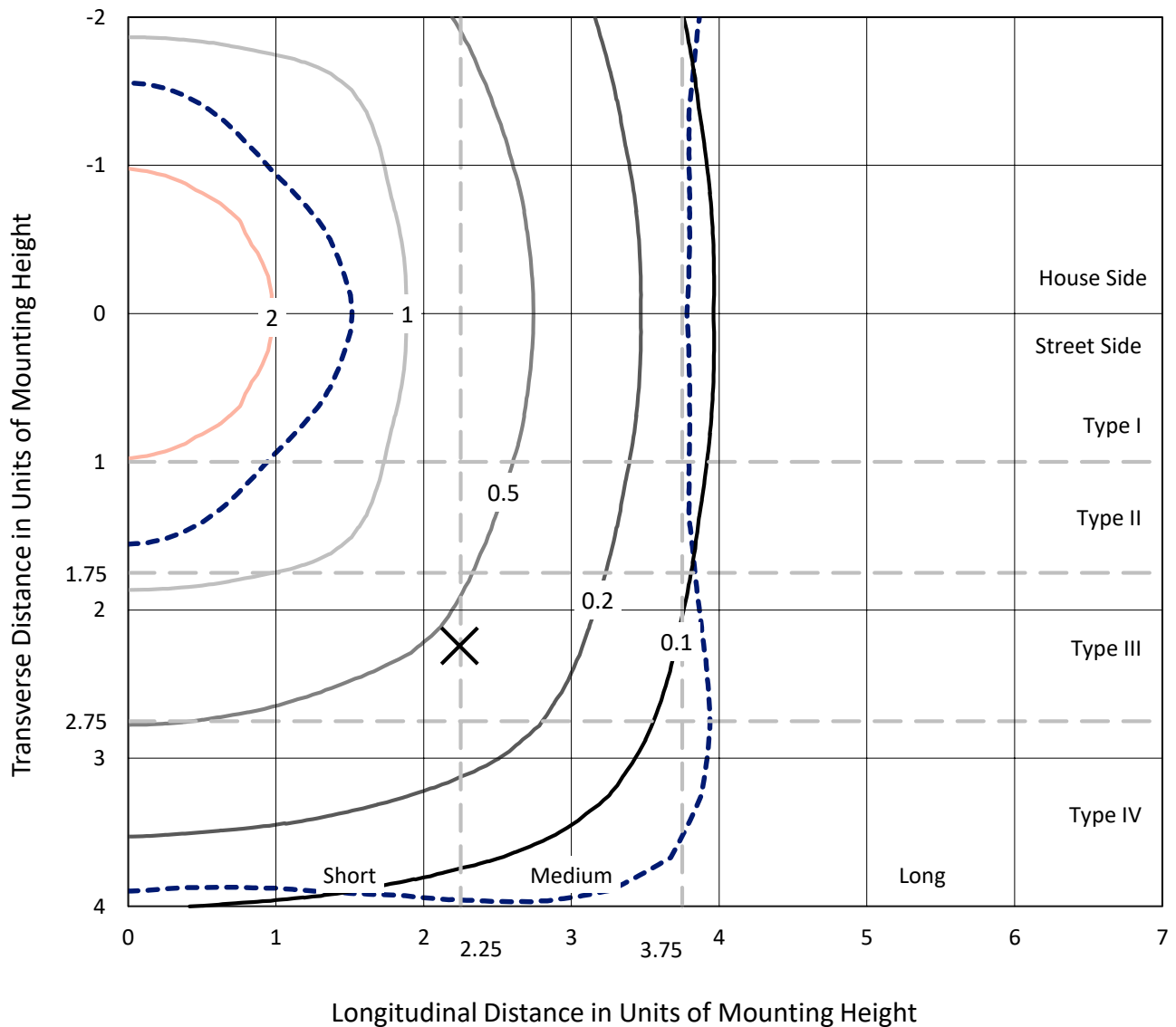


REPORT NUMBER: P299989

CATALOG NUMBER: GAA-AF-10-LED-U-5WQ-7027-600

### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

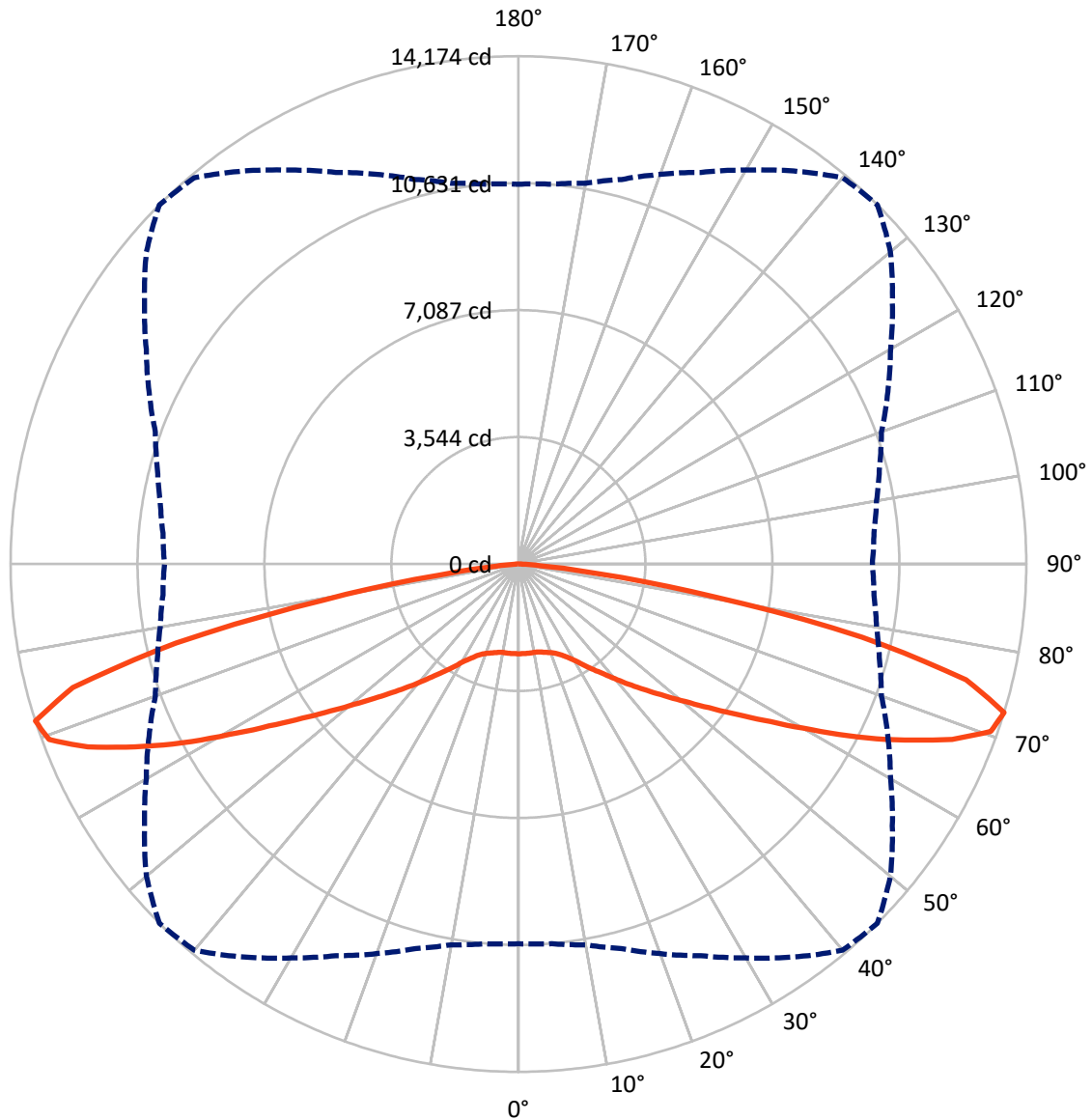


Based on 30 foot mounting height. Maximum calculated value = 2.8 fc  
 Type V - Short - Semi-Cutoff

REPORT NUMBER: P299989

CATALOG NUMBER: GAA-AF-10-LED-U-5WQ-7027-600

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

REPORT NUMBER: P299989

CATALOG NUMBER: GAA-AF-10-LED-U-5WQ-7027-600

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	17697.7	0.0	17697.7
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	17697.7	0.0	17697.7
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	35395.4	0.0	35395.4
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	239.3	0.7
10°-20°	726.9	2.1
20°-30°	1328.4	3.8
30°-40°	2290.4	6.5
40°-50°	3915.3	11.1
50°-60°	6346.3	17.9
60°-70°	10528.2	29.7
70°-80°	9272.9	26.2
80°-90°	747.7	2.1
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°	35395.4	100.0
0°-180°	35395.4	100.0



REPORT NUMBER: P299989

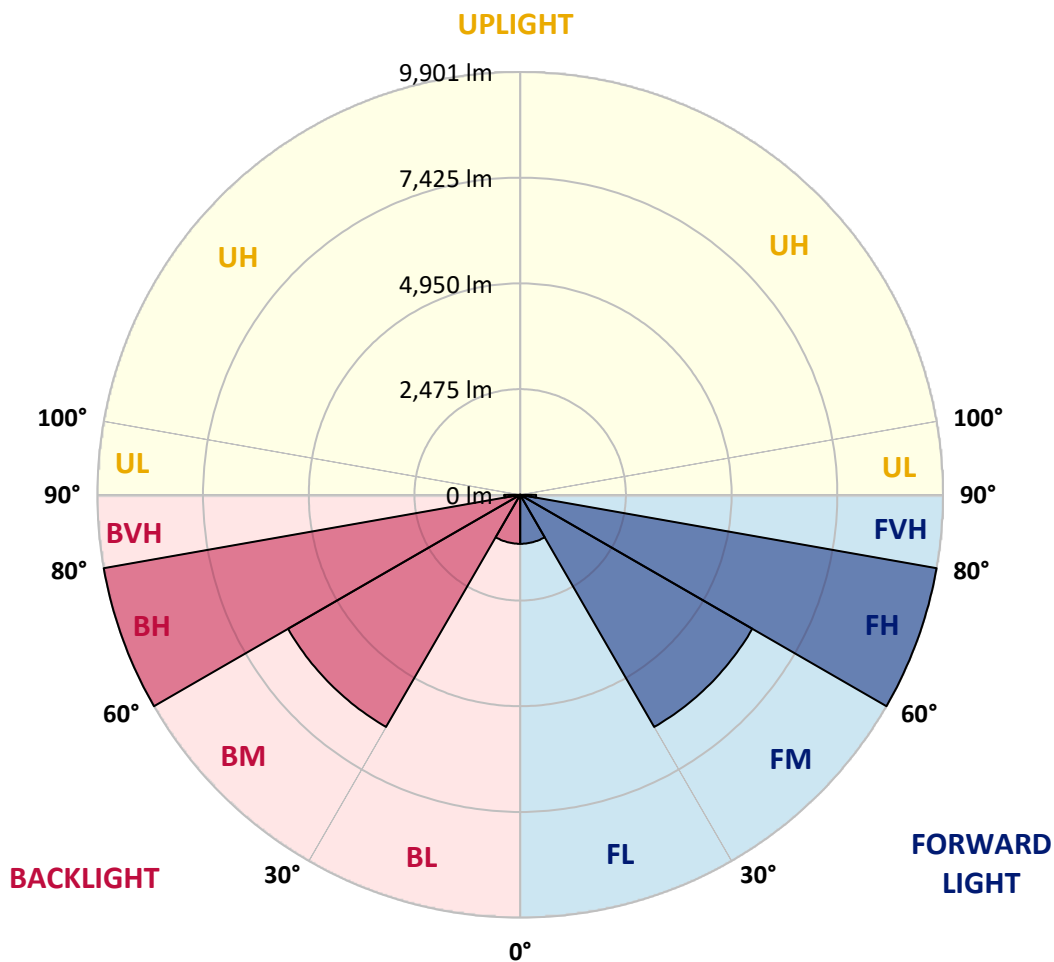
CATALOG NUMBER: GAA-AF-10-LED-U-5WQ-7027-600

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1147.3	3.2			
FM	(30°-60°)	6276.0	17.7			
FH	(60°-80°)	9900.6	28.0			G4/12000
FVH	(80°-90°)	373.8	1.1			G3/500
BL	(0°-30°)	1147.3	3.2	B3/2500		
BM	(30°-60°)	6276.0	17.7	B4/8500		
BH	(60°-80°)	9900.6	28.0	B5		G4/12000
BVH	(80°-90°)	373.8	1.1			G3/500
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: P299989

CATALOG NUMBER: GAA-AF-10-LED-U-5WQ-7027-600

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2506.5	2506.5	2506.5	2506.5	2506.5	2506.5	2506.5	2506.5	2506.5	2506.5	2506.5
2.5°	2506.5	2508.2	2509.8	2508.2	2508.2	2506.5	2504.9	2506.5	2504.9	2501.7	2503.3
5°	2514.7	2517.9	2517.9	2514.7	2516.3	2514.7	2511.4	2513.0	2509.8	2504.9	2504.9
7.5°	2524.4	2526.0	2526.0	2522.8	2524.4	2521.2	2517.9	2516.3	2513.0	2506.5	2501.7
10°	2539.0	2540.6	2539.0	2535.8	2535.8	2530.9	2522.8	2519.5	2513.0	2503.3	2498.4
12.5°	2555.2	2556.9	2555.2	2552.0	2550.4	2542.3	2535.8	2530.9	2526.0	2517.9	2509.8
15°	2578.0	2581.2	2578.0	2571.5	2566.6	2560.1	2556.9	2558.5	2560.1	2553.6	2545.5
17.5°	2620.2	2621.8	2616.9	2602.3	2595.8	2589.3	2589.3	2592.6	2597.5	2594.2	2586.1
20°	2698.1	2693.2	2681.9	2664.0	2655.9	2644.5	2642.9	2644.5	2644.5	2642.9	2636.4
22.5°	2795.5	2792.3	2777.7	2754.9	2743.6	2737.1	2727.3	2719.2	2717.6	2712.7	2706.2
25°	2912.4	2910.8	2892.9	2873.4	2865.3	2857.2	2849.1	2837.7	2828.0	2816.6	2810.1
27.5°	3061.7	3055.3	3029.3	3019.5	3008.2	3003.3	2991.9	2979.0	2970.8	2956.2	2948.1
30°	3225.7	3225.7	3204.6	3201.4	3201.4	3190.0	3177.0	3154.3	3139.7	3125.1	3120.2
32.5°	3389.7	3391.3	3370.2	3376.7	3381.6	3389.7	3392.9	3384.8	3375.1	3373.4	3363.7
35°	3626.7	3620.2	3599.1	3604.0	3602.3	3600.7	3600.7	3618.6	3621.8	3625.1	3605.6
37.5°	3920.5	3920.5	3899.4	3899.4	3889.7	3879.9	3867.0	3878.3	3896.2	3901.1	3888.1
40°	4256.6	4267.9	4242.0	4240.3	4243.6	4212.7	4198.1	4216.0	4227.4	4246.8	4232.2
42.5°	4652.7	4644.6	4618.6	4615.4	4597.5	4587.8	4574.8	4589.4	4607.2	4620.2	4625.1
45°	5032.6	5026.1	4996.9	4996.9	4979.0	4970.9	4977.4	5001.7	5009.8	5027.7	5045.6
47.5°	5407.6	5399.5	5380.0	5388.1	5389.7	5404.3	5425.4	5448.2	5470.9	5495.2	5503.4
50°	5790.7	5792.3	5771.2	5790.7	5815.0	5855.6	5912.5	5949.8	5996.9	6027.7	6037.5
52.5°	6139.7	6146.2	6169.0	6214.4	6263.1	6342.7	6440.1	6531.0	6608.9	6660.8	6657.6
55°	6558.6	6568.3	6623.5	6701.4	6781.0	6901.1	7045.6	7206.3	7336.2	7410.9	7363.8
57.5°	7094.3	7115.4	7177.1	7282.6	7401.1	7557.0	7755.0	7996.9	8198.2	8298.9	8222.6
60°	7829.7	7842.7	7917.4	8034.2	8177.1	8370.3	8634.9	8959.6	9243.7	9376.8	9289.1
62.5°	8798.9	8823.2	8883.3	9001.8	9147.9	9367.1	9690.1	10096.0	10449.9	10634.9	10436.9
65°	9956.4	10034.3	10084.6	10204.7	10341.1	10573.3	10910.9	11346.0	11725.9	11847.6	11618.7
67.5°	11102.5	11170.7	11258.3	11396.3	11534.3	11795.7	12109.0	12531.1	12948.3	13058.7	12703.2
70°	11604.1	11643.1	11779.5	11967.8	12232.4	12540.8	12902.9	13376.9	13893.1	13984.0	13532.7
72.5°	10599.2	10638.2	10790.8	11110.6	11571.7	12061.9	12693.4	13389.9	14071.7	14174.0	13552.2
75°	8016.4	7953.1	8178.7	8602.4	9224.2	9907.7	10790.8	11789.2	12774.6	12902.9	12161.0
77.5°	4142.9	4134.8	4305.3	4831.3	5573.2	6350.8	7323.2	8451.5	9415.8	9805.4	9201.5
80°	1167.2	1180.2	1261.4	1522.8	1956.2	2517.9	3277.7	4334.5	5123.5	5526.1	5188.4
82.5°	457.8	493.5	524.4	573.1	629.9	712.7	951.3	1415.6	1899.4	2269.5	1858.8
85°	164.0	175.3	248.4	293.8	298.7	314.9	358.8	418.8	504.9	602.3	495.1
87.5°	61.7	68.2	79.5	131.5	129.9	118.5	144.5	151.0	113.6	103.9	128.2
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: P299989

CATALOG NUMBER: GAA-AF-10-LED-U-5WQ-7027-600

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2506.5	2506.5	2506.5	2506.5	2506.5	2506.5	2506.5	2506.5
2.5°	2500.0	2501.7	2501.7	2503.3	2504.9	2504.9	2508.2	2508.2
5°	2501.7	2501.7	2498.4	2500.0	2498.4	2498.4	2500.0	2500.0
7.5°	2498.4	2496.8	2493.6	2491.9	2488.7	2488.7	2488.7	2488.7
10°	2493.6	2491.9	2488.7	2487.1	2485.4	2485.4	2485.4	2485.4
12.5°	2506.5	2501.7	2498.4	2496.8	2496.8	2496.8	2496.8	2496.8
15°	2540.6	2529.3	2521.2	2521.2	2522.8	2526.0	2526.0	2529.3
17.5°	2582.8	2569.9	2561.7	2555.2	2558.5	2563.4	2566.6	2569.9
20°	2633.2	2626.7	2615.3	2608.8	2608.8	2615.3	2618.6	2620.2
22.5°	2703.0	2698.1	2693.2	2685.1	2685.1	2688.4	2694.9	2694.9
25°	2806.9	2803.6	2800.4	2793.9	2792.3	2792.3	2795.5	2798.8
27.5°	2936.7	2938.4	2935.1	2933.5	2928.6	2927.0	2931.9	2930.3
30°	3110.5	3118.6	3126.7	3120.2	3112.1	3107.2	3102.3	3095.8
32.5°	3345.8	3336.1	3329.6	3318.2	3303.6	3290.6	3280.9	3269.5
35°	3568.3	3552.0	3545.5	3555.3	3553.6	3545.5	3534.2	3524.4
37.5°	3841.0	3837.7	3841.0	3858.8	3855.6	3863.7	3841.0	3839.4
40°	4185.1	4188.4	4211.1	4232.2	4243.6	4255.0	4242.0	4229.0
42.5°	4584.5	4582.9	4591.0	4620.2	4639.7	4652.7	4625.1	4621.8
45°	5006.6	4995.2	5001.7	5026.1	5045.6	5060.2	5029.3	5029.3
47.5°	5470.9	5451.4	5430.3	5457.9	5469.3	5479.0	5454.7	5446.5
50°	5988.8	5948.2	5902.7	5914.1	5914.1	5910.8	5880.0	5878.4
52.5°	6582.9	6508.2	6425.5	6394.6	6376.7	6357.3	6303.7	6277.7
55°	7266.4	7154.4	7024.5	6944.9	6902.7	6849.2	6759.9	6735.5
57.5°	8065.1	7889.8	7665.7	7568.3	7474.2	7386.5	7287.5	7259.9
60°	9011.5	8753.4	8456.3	8276.1	8173.9	8089.4	7987.2	7982.3
62.5°	10066.8	9659.3	9323.2	9160.9	9086.2	9011.5	8914.1	8927.1
65°	11139.8	10714.5	10399.6	10268.1	10198.3	10136.6	10039.2	10053.8
67.5°	12198.3	11807.1	11461.3	11326.5	11248.6	11170.7	11083.0	11097.6
70°	12958.0	12472.6	12083.0	11784.3	11597.6	11386.6	11250.2	11216.1
72.5°	12740.5	11992.1	11373.6	10781.1	10433.6	10151.2	9959.6	9876.8
75°	11026.2	10003.4	9208.0	8480.7	8071.6	7738.8	7496.9	7345.9
77.5°	8188.5	7039.1	6099.1	5261.5	4599.1	4154.3	3841.0	3638.1
80°	4482.2	3409.2	2491.9	1751.7	1287.4	1069.8	944.8	884.8
82.5°	1396.1	901.0	664.0	573.1	532.5	509.8	472.4	412.3
85°	444.8	389.6	362.0	345.8	329.6	287.3	198.1	180.2
87.5°	172.1	177.0	175.3	165.6	168.8	121.8	97.4	86.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)