

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: P299743

Luminaire Tested: **GAA-AF-09-LED-U-5MQ-7027-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299743  
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-7027-600  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(9) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III  
w/Spill Control OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 31887.1 lumens  
Efficiency: N/A  
Efficacy: 110.0 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 - 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

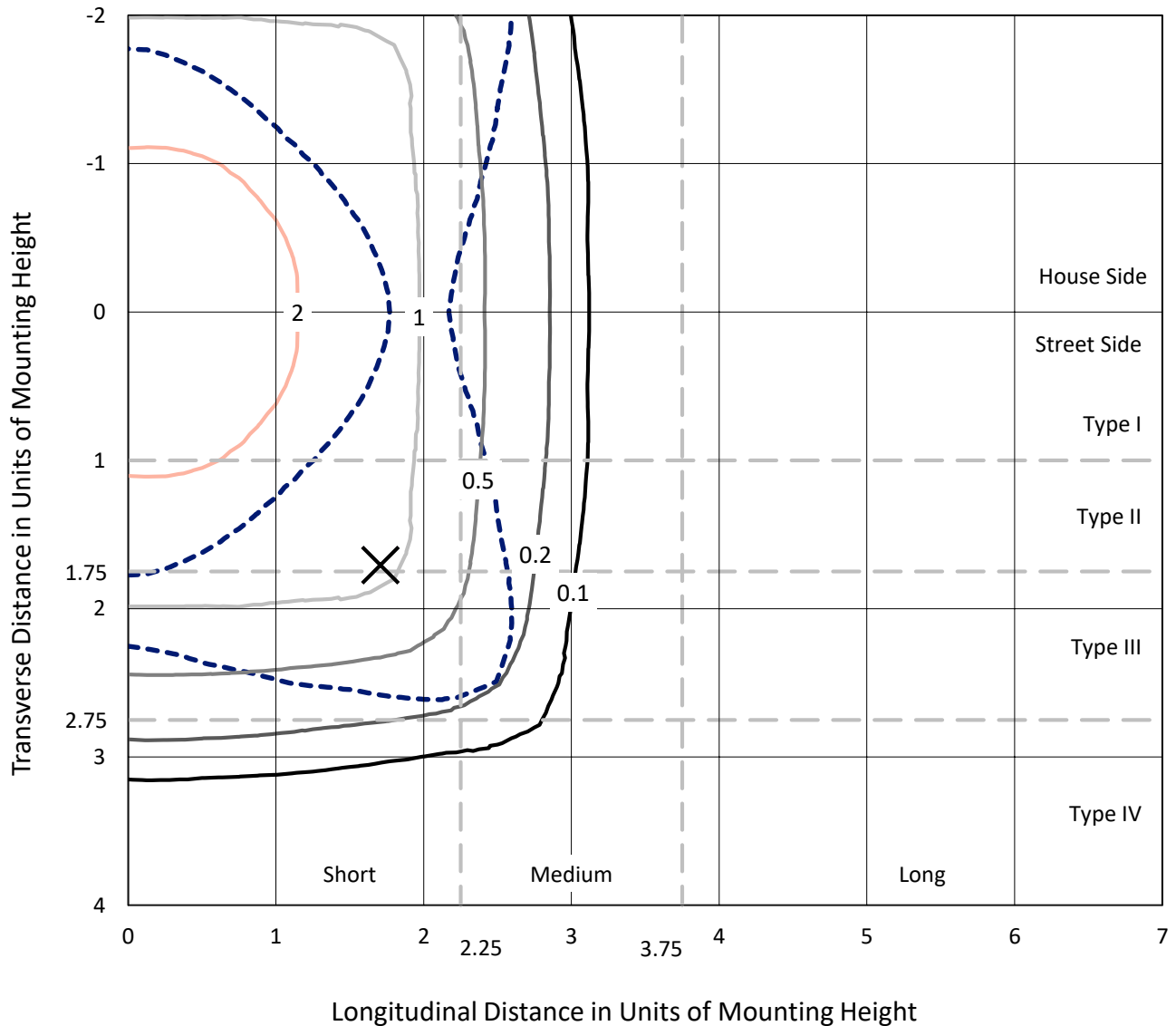


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

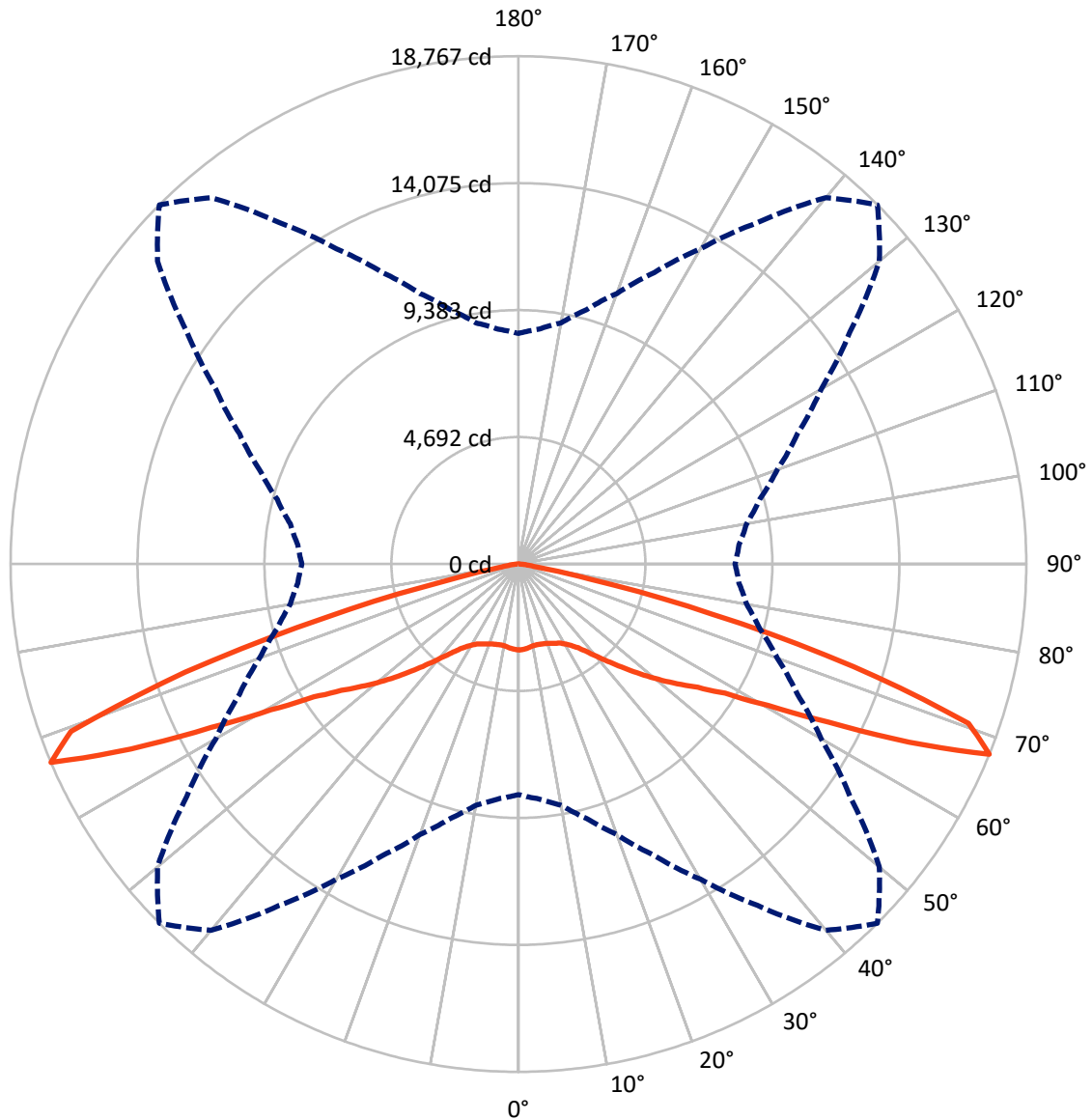


Based on 30 foot mounting height. Maximum calculated value = 3.5 fc  
 Type V - Short - Full Cutoff

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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
<b>House Side</b>	Lumens	15943.5	0.0	15943.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	15943.5	0.0	15943.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	31887.1	0.0	31887.1
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	297.4	0.9
10°-20°	863.0	2.7
20°-30°	1467.2	4.6
30°-40°	2398.4	7.5
40°-50°	4281.5	13.4
50°-60°	7218.7	22.6
60°-70°	11202.4	35.1
70°-80°	3936.0	12.3
80°-90°	222.4	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°	31887.1	100.0
0°-180°	31887.1	100.0



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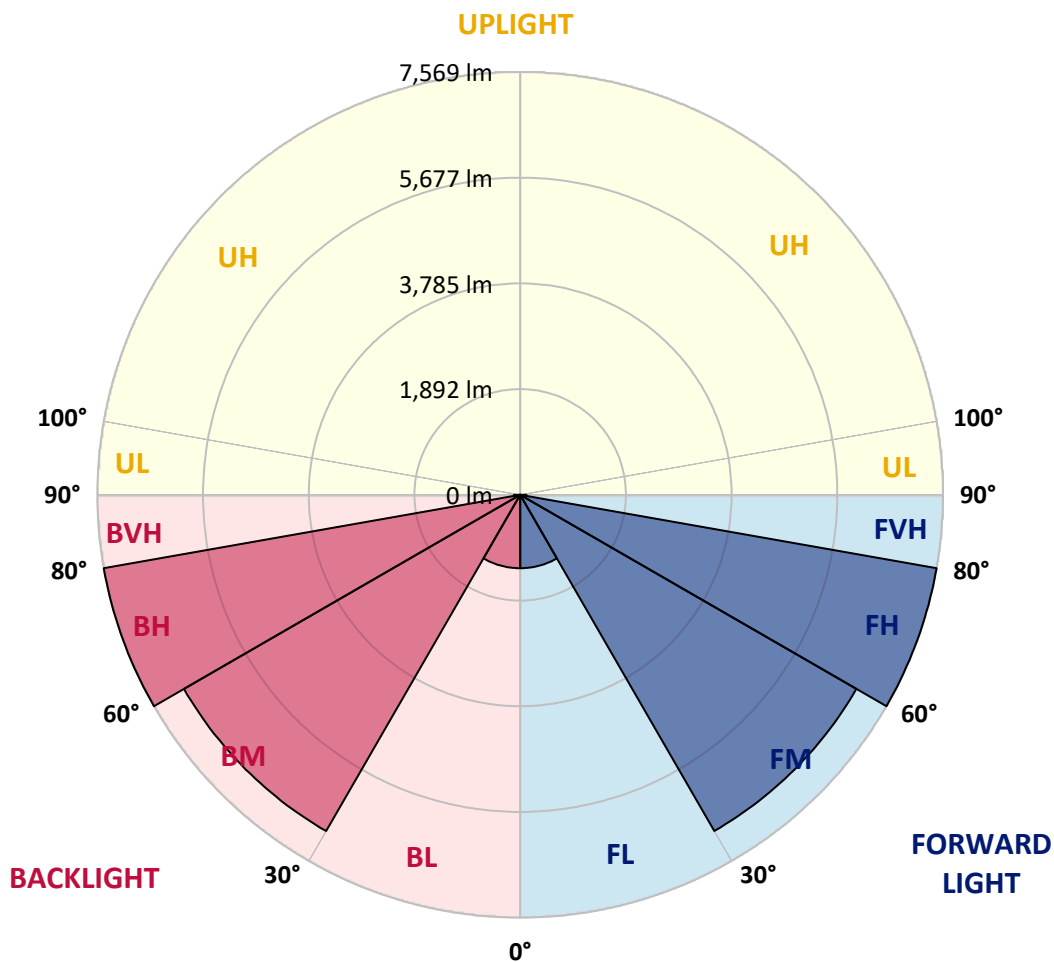
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1313.8	4.1			
FM	(30°-60°)	6949.3	21.8			
FH	(60°-80°)	7569.2	23.7			G4/12000
FVH	(80°-90°)	111.2	0.3			G2/225
BL	(0°-30°)	1313.8	4.1	B3/2500		
BM	(30°-60°)	6949.3	21.8	B4/8500		
BH	(60°-80°)	7569.2	23.7	B5		G4/12000
BVH	(80°-90°)	111.2	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-G4**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3177.7	3177.7	3177.7	3177.7	3177.7	3177.7	3177.7	3177.7	3177.7	3177.7	3177.7
2.5°	3165.9	3168.9	3168.9	3168.9	3167.4	3167.4	3164.5	3167.4	3165.9	3161.6	3163.0
5°	3139.6	3142.5	3142.5	3141.0	3145.4	3144.0	3139.6	3142.5	3141.0	3138.1	3139.6
7.5°	3101.4	3105.8	3105.8	3104.4	3108.8	3107.3	3104.4	3105.8	3105.8	3101.4	3101.4
10°	3058.9	3061.8	3061.8	3060.4	3067.7	3067.7	3066.2	3070.6	3072.1	3067.7	3064.8
12.5°	3019.3	3023.7	3023.7	3029.6	3036.9	3039.8	3047.2	3053.0	3058.9	3057.4	3051.6
15°	2995.8	2998.8	3004.6	3012.0	3023.7	3034.0	3045.7	3058.9	3070.6	3073.6	3064.8
17.5°	2981.2	2985.6	2994.4	3004.6	3020.8	3038.4	3056.0	3073.6	3089.7	3095.6	3085.3
20°	2976.8	2979.7	2988.5	3006.1	3028.1	3054.5	3079.4	3100.0	3122.0	3129.3	3122.0
22.5°	2985.6	2991.4	3001.7	3022.2	3051.6	3085.3	3114.6	3142.5	3170.3	3183.5	3173.3
25°	3025.2	3031.0	3044.2	3070.6	3102.9	3138.1	3171.8	3204.1	3229.0	3242.2	3234.9
27.5°	3098.5	3105.8	3122.0	3148.4	3183.5	3221.7	3258.3	3284.7	3305.3	3309.7	3300.9
30°	3208.5	3224.6	3243.7	3273.0	3314.1	3346.3	3383.0	3406.4	3431.4	3431.4	3424.0
32.5°	3380.0	3396.2	3416.7	3444.6	3476.8	3512.0	3544.3	3564.8	3591.2	3592.7	3575.1
35°	3636.7	3644.0	3661.6	3679.2	3708.5	3739.3	3767.2	3780.4	3802.4	3803.8	3787.7
37.5°	3975.4	3976.9	3988.6	3994.5	4020.9	4054.6	4081.0	4089.8	4110.3	4107.4	4091.2
40°	4369.9	4377.2	4381.6	4390.4	4418.3	4450.5	4478.4	4482.8	4504.8	4500.4	4479.8
42.5°	4825.9	4828.8	4853.8	4867.0	4893.4	4909.5	4944.7	4949.1	4975.5	4963.8	4940.3
45°	5337.7	5364.1	5387.5	5413.9	5441.8	5460.9	5488.7	5482.9	5500.5	5482.9	5469.7
47.5°	5875.8	5894.9	5947.7	5988.8	6034.2	6050.4	6089.9	6072.3	6089.9	6065.0	6060.6
50°	6468.3	6502.0	6547.5	6594.4	6642.8	6669.2	6720.5	6698.5	6722.0	6698.5	6685.3
52.5°	7051.9	7060.7	7160.4	7229.3	7296.8	7327.6	7358.4	7348.1	7349.6	7348.1	7334.9
55°	7606.2	7626.7	7726.4	7820.3	7937.6	8024.1	8076.9	8071.0	8057.8	8044.6	8022.7
57.5°	8230.9	8251.4	8365.8	8481.6	8615.1	8738.3	8845.3	8955.3	8997.8	9009.5	8961.1
60°	9075.5	9074.1	9226.6	9367.3	9558.0	9741.3	9975.9	10214.9	10489.1	10616.7	10448.1
62.5°	9934.8	9970.0	10190.0	10439.3	10832.3	11215.0	11647.6	12072.8	12506.9	12860.3	12484.9
65°	9832.2	9967.1	10294.1	10858.7	11584.5	12446.8	13379.4	14366.3	15257.9	15870.8	15183.1
67.5°	8521.2	8713.3	9046.2	9732.5	10640.2	11883.7	13449.8	15401.6	17670.1	18766.9	17407.6
70°	6176.5	6393.5	6742.5	7412.6	8311.5	9493.4	11194.5	13537.8	16540.9	17646.6	16149.4
72.5°	3073.6	3190.9	3406.4	3833.2	4513.6	5472.6	7015.2	9267.6	11924.7	12939.5	11571.3
75°	1044.1	1098.3	1135.0	1274.3	1489.9	1866.7	2633.6	4051.7	6180.9	7409.7	6092.9
77.5°	602.7	604.2	629.1	654.0	690.7	731.7	834.4	1095.4	1894.6	2690.8	1960.6
80°	390.1	388.6	409.1	428.2	453.1	473.6	479.5	507.4	585.1	693.6	620.3
82.5°	202.4	227.3	272.7	297.7	344.6	353.4	341.7	331.4	350.5	363.7	372.5
85°	111.4	96.8	145.2	187.7	208.2	211.2	211.2	199.4	206.8	202.4	220.0
87.5°	51.3	46.9	57.2	92.4	98.2	83.6	88.0	77.7	55.7	54.3	61.6
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°	3177.7	3177.7	3177.7	3177.7	3177.7	3177.7	3177.7	3177.7
2.5°	3163.0	3164.5	3164.5	3168.9	3170.3	3173.3	3176.2	3177.7
5°	3138.1	3142.5	3139.6	3144.0	3144.0	3146.9	3146.9	3148.4
7.5°	3101.4	3105.8	3105.8	3105.8	3104.4	3108.8	3108.8	3108.8
10°	3063.3	3066.2	3064.8	3061.8	3058.9	3063.3	3061.8	3060.4
12.5°	3051.6	3044.2	3038.4	3035.4	3029.6	3031.0	3026.6	3026.6
15°	3058.9	3045.7	3035.4	3031.0	3025.2	3022.2	3019.3	3020.8
17.5°	3078.0	3061.8	3048.6	3041.3	3034.0	3029.6	3023.7	3025.2
20°	3111.7	3092.6	3073.6	3058.9	3045.7	3038.4	3034.0	3032.5
22.5°	3161.6	3133.7	3105.8	3083.8	3066.2	3056.0	3051.6	3048.6
25°	3218.7	3187.9	3155.7	3130.8	3113.2	3100.0	3091.2	3091.2
27.5°	3290.6	3265.7	3236.3	3207.0	3190.9	3177.7	3171.8	3168.9
30°	3410.8	3387.4	3363.9	3336.1	3315.5	3302.3	3292.1	3283.3
32.5°	3564.8	3545.7	3526.7	3506.2	3487.1	3469.5	3453.4	3446.0
35°	3781.8	3767.2	3754.0	3730.5	3723.2	3712.9	3704.1	3696.8
37.5°	4081.0	4075.1	4075.1	4050.2	4044.3	4039.9	4031.1	4032.6
40°	4474.0	4479.8	4472.5	4463.7	4459.3	4447.6	4447.6	4457.8
42.5°	4938.8	4943.2	4959.4	4944.7	4960.8	4946.2	4937.4	4944.7
45°	5478.5	5494.6	5526.8	5512.2	5522.4	5497.5	5466.7	5468.2
47.5°	6084.1	6098.7	6111.9	6101.7	6103.1	6062.1	6021.0	6010.8
50°	6713.2	6719.0	6726.4	6711.7	6714.6	6669.2	6622.2	6623.7
52.5°	7334.9	7362.8	7392.1	7352.5	7343.7	7292.4	7226.4	7200.0
55°	8046.1	8085.7	8052.0	7983.1	7914.1	7845.2	7758.7	7744.0
57.5°	8923.0	8855.6	8750.0	8619.5	8524.2	8427.4	8339.4	8302.7
60°	10143.1	9889.4	9698.7	9505.2	9383.5	9264.7	9148.8	9131.2
62.5°	11867.5	11429.1	11049.3	10649.0	10322.0	10066.8	9863.0	9805.8
65°	14029.0	12992.3	12093.4	11254.6	10525.8	9975.9	9629.8	9477.3
67.5°	14958.7	12911.6	11370.4	10179.7	9226.6	8560.8	8186.9	8000.7
70°	13144.8	10707.6	9031.5	7839.4	6971.2	6261.5	5922.8	5723.3
72.5°	9043.3	6811.4	5386.1	4396.3	3702.7	3108.8	2874.1	2856.5
75°	4060.5	2689.4	1853.5	1428.3	1202.4	1045.5	997.1	960.5
77.5°	1136.5	840.2	749.3	700.9	654.0	599.8	579.2	583.6
80°	552.8	522.0	501.5	470.7	428.2	382.7	362.2	371.0
82.5°	366.6	362.2	375.4	353.4	291.8	247.8	208.2	190.6
85°	222.9	225.8	230.2	231.7	196.5	137.8	93.8	105.6
87.5°	88.0	101.2	110.0	114.4	107.0	66.0	52.8	54.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)