

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: P299920

Luminaire Tested: **GAA-AF-08-LED-U-5WQ-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299920
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-08-LED-U-5WQ-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 4000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 40452.5 lumens
Efficiency: N/A
Efficacy: 121.1 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B5 - U0 - G4

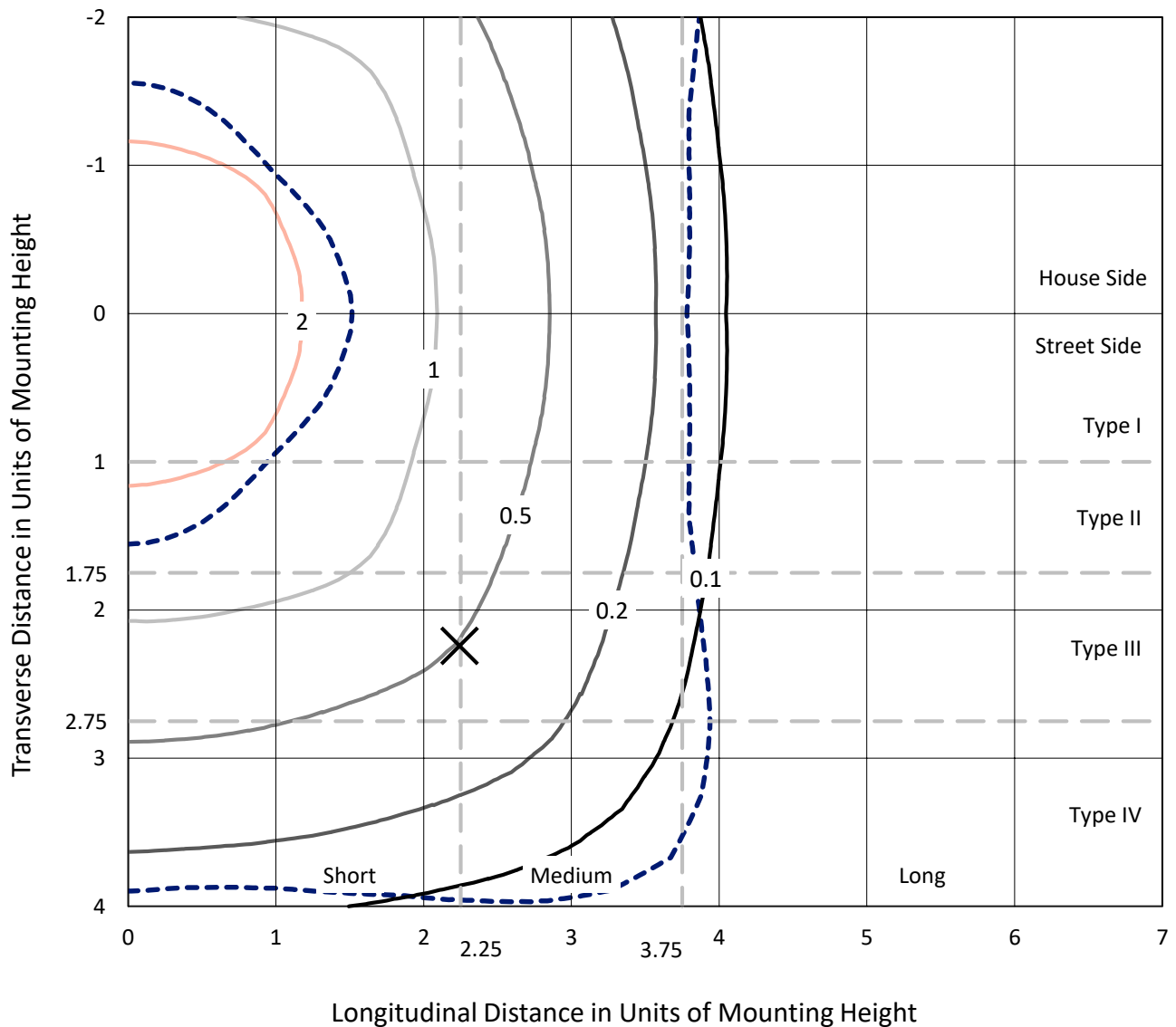
Input Watts (W): 334
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

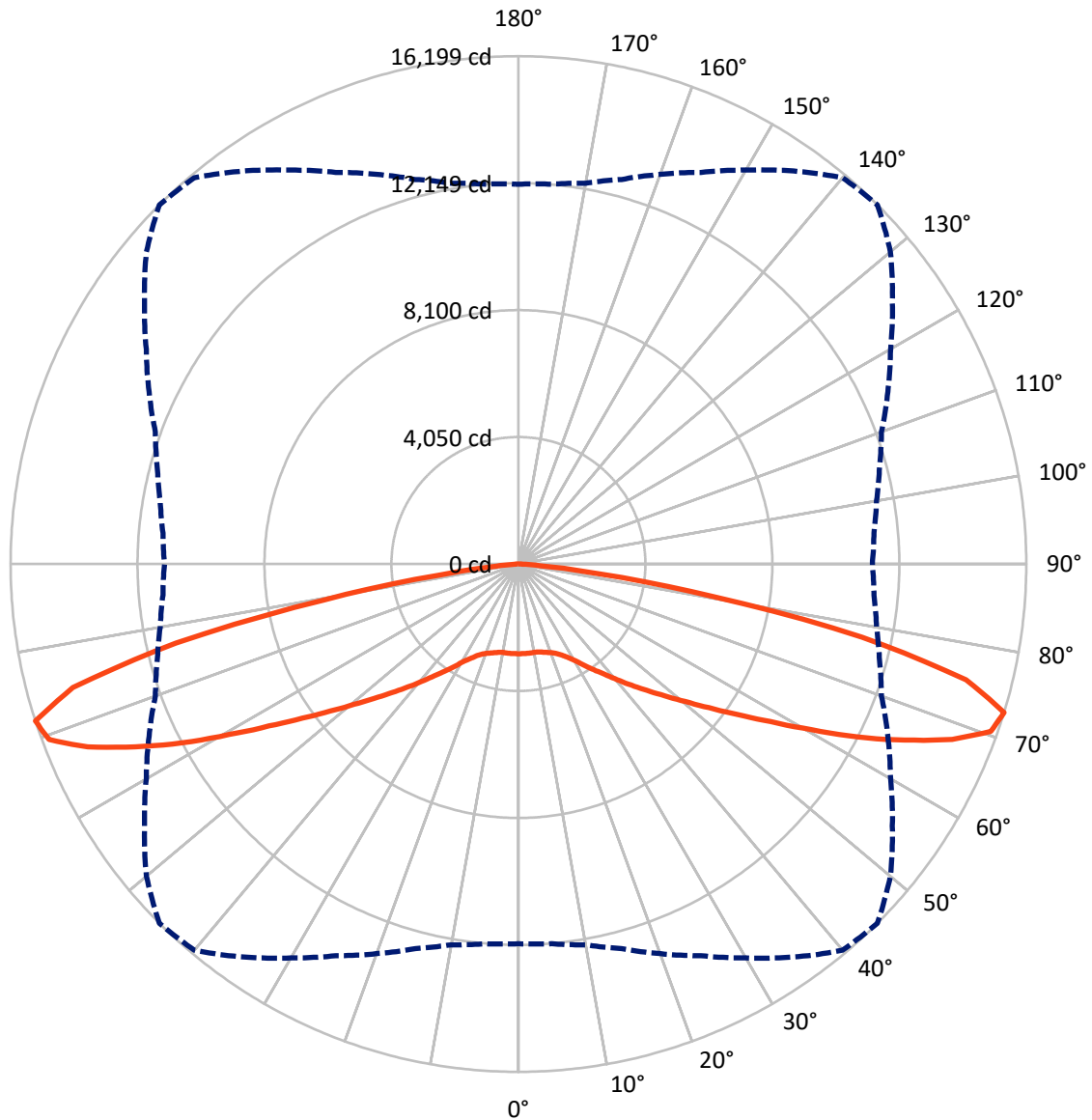
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 3.2 fc
 Type V - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	20226.2	0.0	20226.2
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	20226.2	0.0	20226.2
	% Fixture	50.0	0.0	50.0
Total	Lumens	40452.5	0.0	40452.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	273.5	0.7
10°-20°	830.8	2.1
20°-30°	1518.2	3.8
30°-40°	2617.6	6.5
40°-50°	4474.7	11.1
50°-60°	7253.0	17.9
60°-70°	12032.4	29.7
70°-80°	10597.8	26.2
80°-90°	854.5	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°	40452.5	100.0
0°-180°	40452.5	100.0



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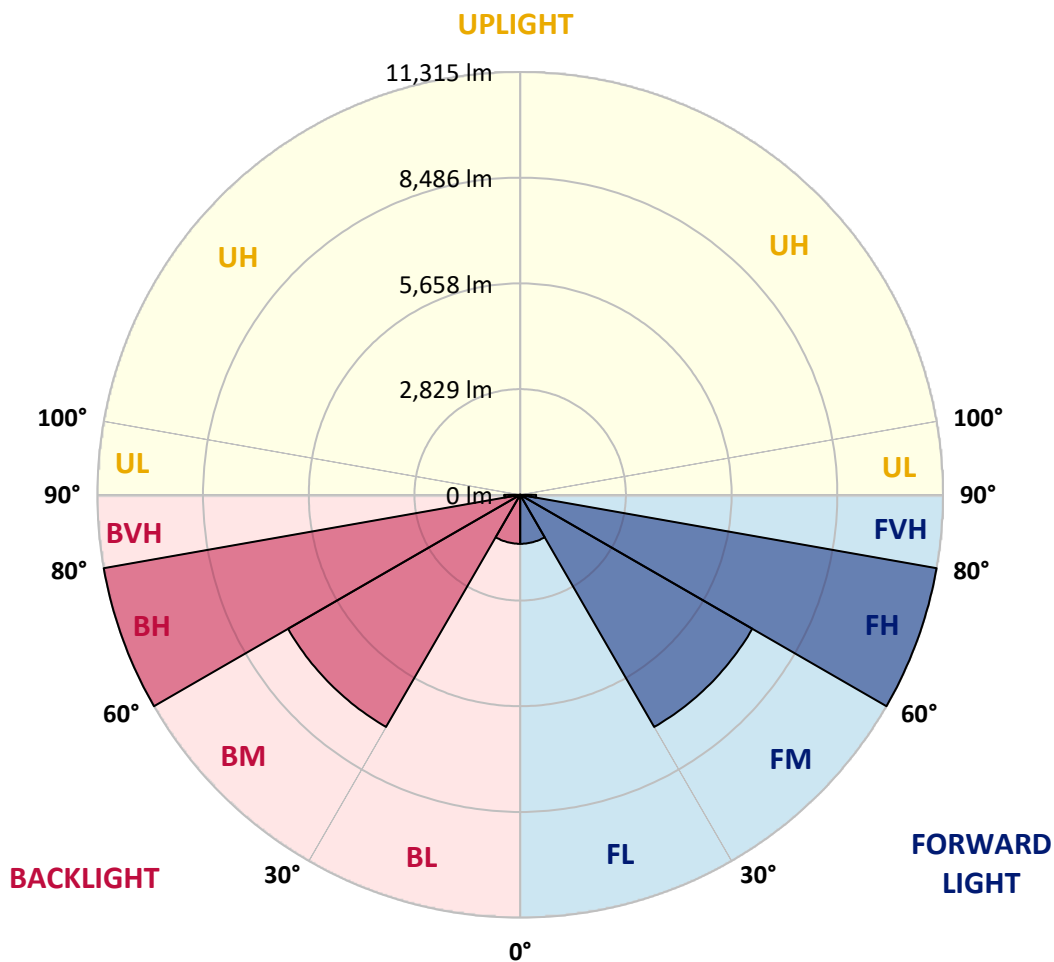
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1311.2	3.2			
FM	(30°-60°)	7172.7	17.7			
FH	(60°-80°)	11315.1	28.0			G4/12000
FVH	(80°-90°)	427.2	1.1			G3/500
BL	(0°-30°)	1311.2	3.2	B3/2500		
BM	(30°-60°)	7172.7	17.7	B4/8500		
BH	(60°-80°)	11315.1	28.0	B5		G4/12000
BVH	(80°-90°)	427.2	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2864.7	2864.7	2864.7	2864.7	2864.7	2864.7	2864.7	2864.7	2864.7	2864.7	2864.7
2.5°	2864.7	2866.5	2868.4	2866.5	2866.5	2864.7	2862.8	2864.7	2862.8	2859.1	2861.0
5°	2873.9	2877.7	2877.7	2873.9	2875.8	2873.9	2870.2	2872.1	2868.4	2862.8	2862.8
7.5°	2885.1	2886.9	2886.9	2883.2	2885.1	2881.4	2877.7	2875.8	2872.1	2864.7	2859.1
10°	2901.8	2903.6	2901.8	2898.1	2898.1	2892.5	2883.2	2879.5	2872.1	2861.0	2855.4
12.5°	2920.3	2922.2	2920.3	2916.6	2914.8	2905.5	2898.1	2892.5	2886.9	2877.7	2868.4
15°	2946.3	2950.0	2946.3	2938.9	2933.3	2925.9	2922.2	2924.0	2925.9	2918.5	2909.2
17.5°	2994.5	2996.4	2990.8	2974.1	2966.7	2959.3	2959.3	2963.0	2968.6	2964.9	2955.6
20°	3083.6	3078.0	3065.0	3044.6	3035.4	3022.4	3020.5	3022.4	3022.4	3020.5	3013.1
22.5°	3194.9	3191.2	3174.5	3148.5	3135.5	3128.1	3117.0	3107.7	3105.9	3100.3	3092.9
25°	3328.5	3326.6	3306.2	3284.0	3274.7	3265.4	3256.1	3243.2	3232.0	3219.0	3211.6
27.5°	3499.2	3491.8	3462.1	3451.0	3438.0	3432.4	3419.4	3404.6	3395.3	3378.6	3369.3
30°	3686.6	3686.6	3662.5	3658.8	3658.8	3645.8	3630.9	3604.9	3588.3	3571.6	3566.0
32.5°	3874.0	3875.8	3851.7	3859.1	3864.7	3874.0	3877.7	3868.4	3857.3	3855.4	3844.3
35°	4144.9	4137.4	4113.3	4118.9	4117.0	4115.2	4115.2	4135.6	4139.3	4143.0	4120.7
37.5°	4480.7	4480.7	4456.6	4456.6	4445.4	4434.3	4419.4	4432.4	4452.8	4458.4	4443.6
40°	4864.7	4877.7	4848.0	4846.2	4849.9	4814.6	4797.9	4818.4	4831.3	4853.6	4836.9
42.5°	5317.4	5308.2	5278.5	5274.8	5254.4	5243.2	5228.4	5245.1	5265.5	5280.3	5285.9
45°	5751.6	5744.2	5710.8	5710.8	5690.4	5681.1	5688.5	5716.3	5725.6	5746.0	5766.4
47.5°	6180.2	6170.9	6148.6	6157.9	6159.8	6176.5	6200.6	6226.6	6252.5	6280.4	6289.6
50°	6618.0	6619.9	6595.8	6618.0	6645.9	6692.3	6757.2	6799.9	6853.7	6888.9	6900.1
52.5°	7016.9	7024.4	7050.3	7102.3	7157.9	7248.9	7360.2	7464.1	7553.1	7612.5	7608.8
55°	7495.6	7506.8	7569.8	7658.9	7749.8	7887.1	8052.2	8235.9	8384.3	8469.7	8415.9
57.5°	8107.9	8132.0	8202.5	8323.1	8458.6	8636.7	8863.0	9139.5	9369.5	9484.6	9397.4
60°	8948.4	8963.2	9048.6	9182.1	9345.4	9566.2	9868.6	10239.7	10564.4	10716.5	10616.3
62.5°	10056.0	10083.8	10152.5	10287.9	10454.9	10705.4	11074.6	11538.4	11942.9	12154.4	11928.1
65°	11378.9	11467.9	11525.4	11662.7	11818.6	12083.9	12469.8	12967.1	13401.2	13540.4	13278.8
67.5°	12688.8	12766.7	12866.9	13024.6	13182.3	13481.0	13839.1	14321.5	14798.3	14924.5	14518.1
70°	13262.1	13306.6	13462.4	13677.7	13980.1	14332.6	14746.3	15288.1	15878.1	15982.0	15466.2
72.5°	12113.6	12158.1	12332.5	12698.0	13225.0	13785.3	14507.0	15302.9	16082.2	16199.1	15488.5
75°	9161.7	9089.4	9347.3	9831.5	10542.1	11323.2	12332.5	13473.6	14599.8	14746.3	13898.4
77.5°	4734.9	4725.6	4920.4	5521.5	6369.4	7258.1	8369.5	9659.0	10761.0	11206.3	10516.1
80°	1334.0	1348.8	1441.6	1740.3	2235.7	2877.7	3746.0	4953.8	5855.5	6315.6	5929.7
82.5°	523.2	564.0	599.3	654.9	719.9	814.5	1087.2	1617.9	2170.8	2593.8	2124.4
85°	187.4	200.4	283.9	335.8	341.4	359.9	410.0	478.7	577.0	688.3	565.9
87.5°	70.5	77.9	90.9	150.3	148.4	135.4	165.1	172.5	129.9	118.7	146.6
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°	2864.7	2864.7	2864.7	2864.7	2864.7	2864.7	2864.7	2864.7
2.5°	2857.2	2859.1	2859.1	2861.0	2862.8	2862.8	2866.5	2866.5
5°	2859.1	2859.1	2855.4	2857.2	2855.4	2855.4	2857.2	2857.2
7.5°	2855.4	2853.5	2849.8	2848.0	2844.3	2844.3	2844.3	2844.3
10°	2849.8	2848.0	2844.3	2842.4	2840.5	2840.5	2840.5	2840.5
12.5°	2864.7	2859.1	2855.4	2853.5	2853.5	2853.5	2853.5	2853.5
15°	2903.6	2890.6	2881.4	2881.4	2883.2	2886.9	2886.9	2890.6
17.5°	2951.9	2937.0	2927.7	2920.3	2924.0	2929.6	2933.3	2937.0
20°	3009.4	3002.0	2989.0	2981.6	2981.6	2989.0	2992.7	2994.5
22.5°	3089.2	3083.6	3078.0	3068.8	3068.8	3072.5	3079.9	3079.9
25°	3207.9	3204.2	3200.5	3193.1	3191.2	3191.2	3194.9	3198.6
27.5°	3356.3	3358.2	3354.5	3352.6	3347.1	3345.2	3350.8	3348.9
30°	3554.9	3564.1	3573.4	3566.0	3556.7	3551.1	3545.6	3538.2
32.5°	3823.9	3812.7	3805.3	3792.3	3775.6	3760.8	3749.7	3736.7
35°	4078.1	4059.5	4052.1	4063.2	4061.4	4052.1	4039.1	4028.0
37.5°	4389.8	4386.1	4389.8	4410.2	4406.5	4415.7	4389.8	4387.9
40°	4783.1	4786.8	4812.8	4836.9	4849.9	4862.9	4848.0	4833.2
42.5°	5239.5	5237.7	5246.9	5280.3	5302.6	5317.4	5285.9	5282.2
45°	5721.9	5708.9	5716.3	5744.2	5766.4	5783.1	5747.9	5747.9
47.5°	6252.5	6230.3	6206.2	6237.7	6250.7	6261.8	6234.0	6224.7
50°	6844.4	6798.0	6746.1	6759.0	6759.0	6755.3	6720.1	6718.2
52.5°	7523.5	7438.1	7343.5	7308.2	7287.8	7265.6	7204.3	7174.6
55°	8304.6	8176.5	8028.1	7937.2	7889.0	7827.7	7725.7	7697.9
57.5°	9217.4	9017.0	8761.0	8649.7	8542.0	8441.9	8328.7	8297.1
60°	10299.1	10004.1	9664.5	9458.6	9341.7	9245.2	9128.3	9122.8
62.5°	11505.0	11039.3	10655.3	10469.8	10384.4	10299.1	10187.7	10202.6
65°	12731.4	12245.3	11885.4	11735.1	11655.3	11584.8	11473.5	11490.2
67.5°	13941.1	13494.0	13098.8	12944.8	12855.7	12766.7	12666.5	12683.2
70°	14809.4	14254.7	13809.4	13468.0	13254.6	13013.4	12857.6	12818.6
72.5°	14560.8	13705.5	12998.6	12321.4	11924.4	11601.5	11382.6	11288.0
75°	12601.6	11432.7	10523.6	9692.4	9224.8	8844.5	8568.0	8395.5
77.5°	9358.4	8044.8	6970.6	6013.2	5256.2	4747.8	4389.8	4157.8
80°	5122.6	3896.2	2848.0	2001.9	1471.3	1222.7	1079.8	1011.2
82.5°	1595.6	1029.7	758.8	654.9	608.6	582.6	539.9	471.3
85°	508.4	445.3	413.7	395.2	376.6	328.4	226.4	205.9
87.5°	196.7	202.2	200.4	189.2	193.0	139.2	111.3	98.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)