

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: P237357

Luminaire Tested: **ARCH-L-AF72-240-D-U-T4W-7050**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P237357
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-240-D-U-T4W-7050
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 1030mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27491 lumens
Efficiency: N/A
Efficacy: 113.6 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G5

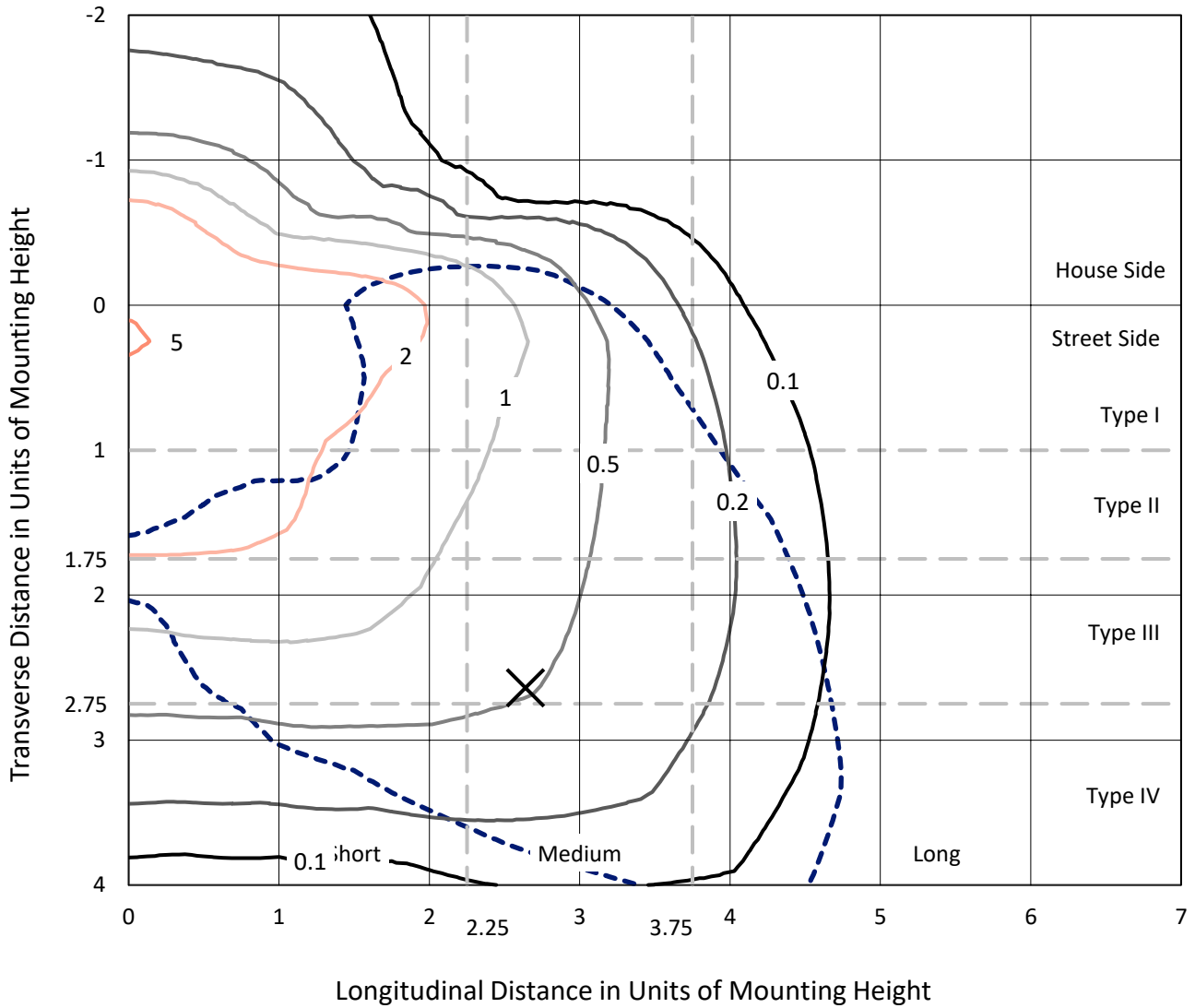
Input Watts (W): 242
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

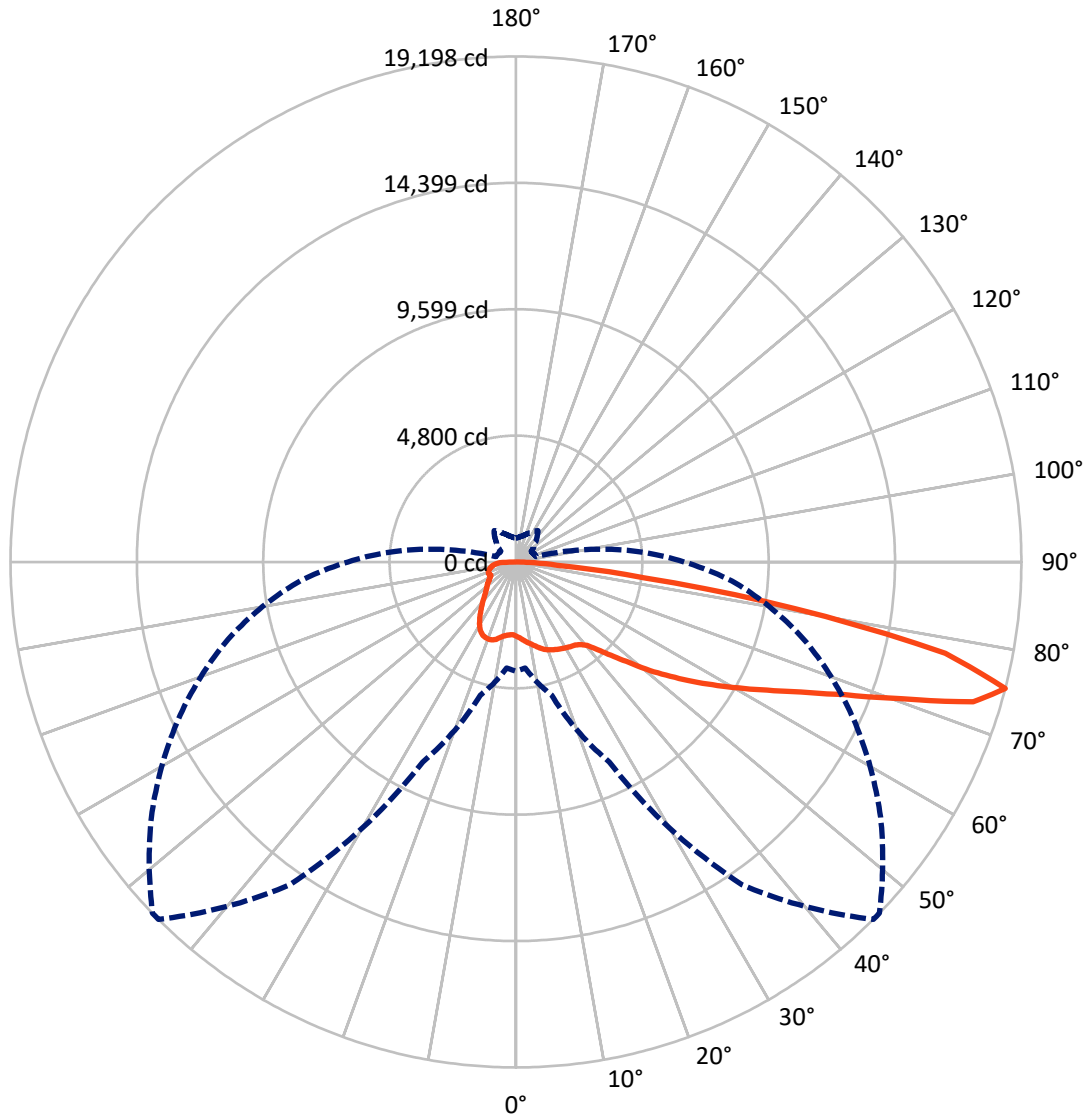
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.3 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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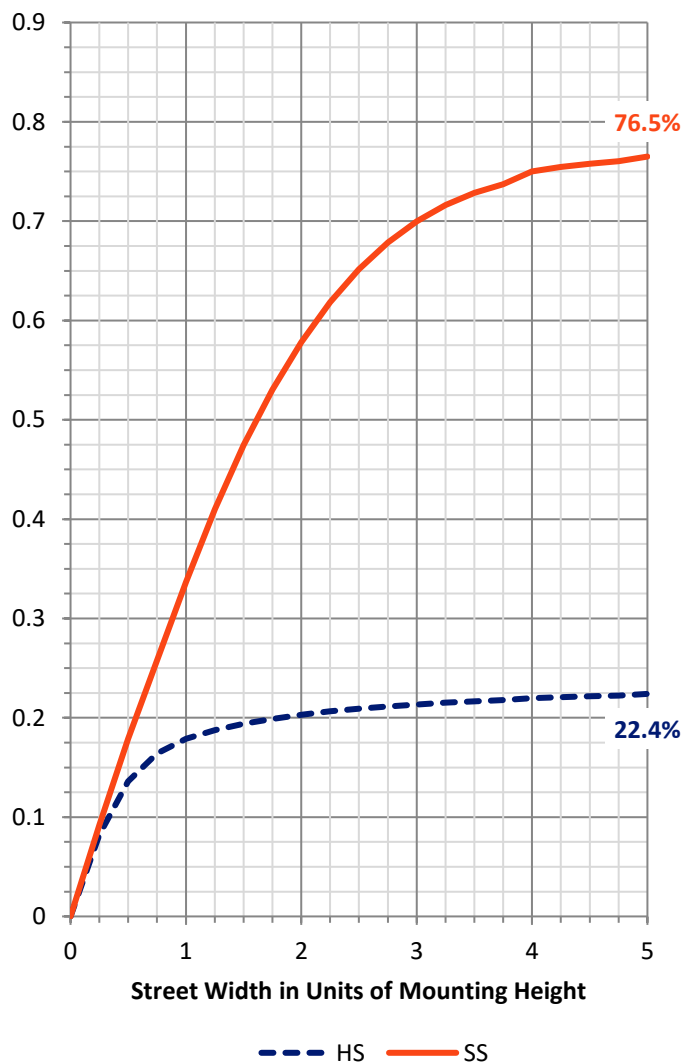
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6368.5	0.0	6368.5
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	21122.5	0.0	21122.5
	% Fixture	76.8	0.0	76.8
Total	Lumens	27491.0	0.0	27491.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	279.3	1.0
10°-20°	905.0	3.3
20°-30°	1553.1	5.6
30°-40°	2172.1	7.9
40°-50°	3186.3	11.6
50°-60°	4963.4	18.1
60°-70°	7141.9	26.0
70°-80°	6221.4	22.6
80°-90°	1068.5	3.9
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°	27491.0	100.0
0°-180°	27491.0	100.0

Coefficient of Utilization



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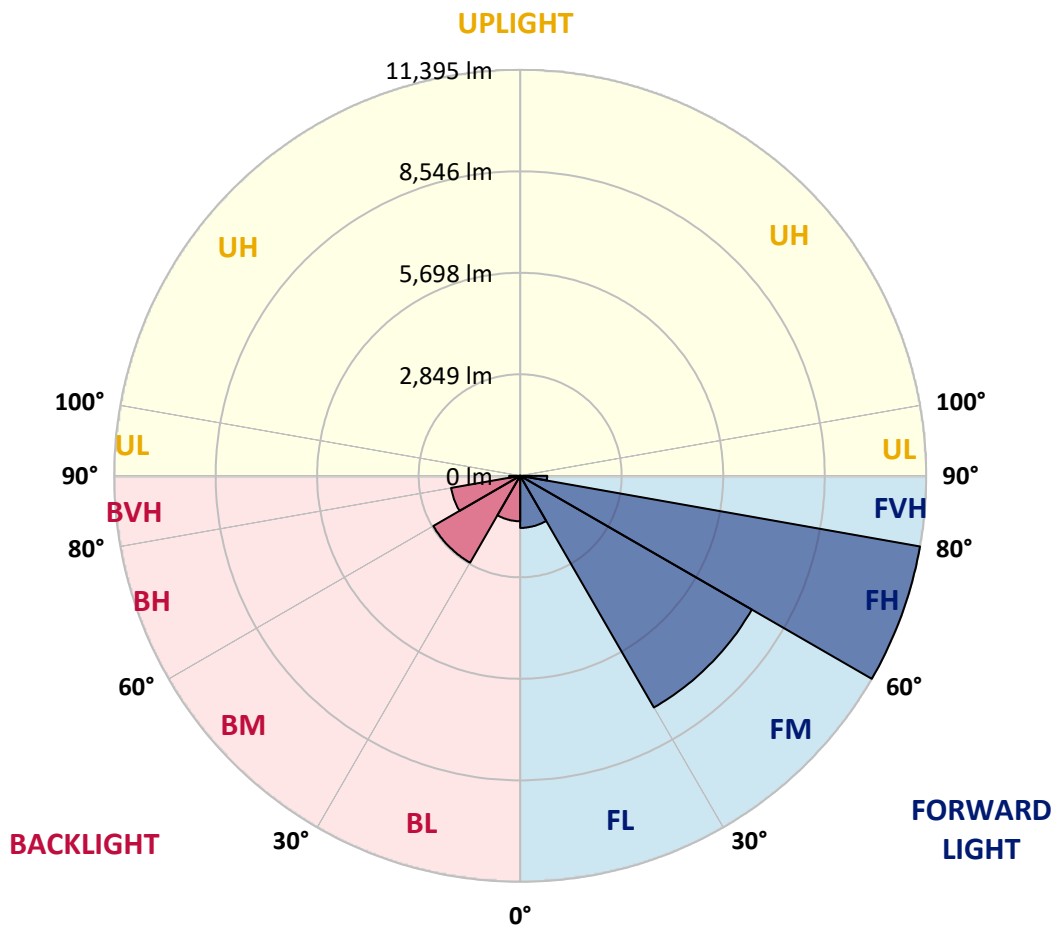
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1461.9	5.3			
FM (30°-60°)	7507.3	27.3			
FH (60°-80°)	11395.3	41.5			G4/12000
FVH (80°-90°)	758.1	2.8			G5
BL (0°-30°)	1275.5	4.6	B3/2500		
BM (30°-60°)	2814.5	10.2	B3/5000		
BH (60°-80°)	1968.1	7.2	B3/2500		G3/2500
BVH (80°-90°)	310.4	1.1			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2818.2	2818.2	2818.2	2818.2	2818.2	2818.2	2818.2	2818.2	2818.2	2818.2	2818.2
2.5°	2957.3	2935.9	2935.9	2919.8	2919.8	2893.1	2882.4	2877.0	2850.3	2834.3	2818.2
5°	3128.4	3101.6	3096.3	3058.9	3042.8	2984.0	2978.6	2941.2	2893.1	2845.0	2807.5
7.5°	3283.5	3267.4	3240.7	3203.2	3155.1	3080.3	3074.9	3016.1	2935.9	2871.7	2818.2
10°	3395.8	3385.1	3347.6	3299.5	3246.0	3171.2	3165.8	3101.6	3005.4	2930.5	2855.7
12.5°	3529.5	3513.4	3465.3	3401.1	3342.3	3272.8	3267.4	3213.9	3107.0	3010.7	2914.5
15°	3657.8	3636.4	3577.6	3513.4	3449.2	3390.4	3390.4	3331.6	3219.3	3107.0	2994.7
17.5°	3722.0	3711.3	3652.5	3582.9	3529.5	3486.7	3481.3	3427.9	3315.6	3197.9	3074.9
20°	3743.4	3748.7	3695.2	3620.4	3582.9	3561.5	3556.2	3518.8	3395.8	3283.5	3165.8
22.5°	3738.0	3754.1	3711.3	3631.1	3620.4	3620.4	3620.4	3577.6	3481.3	3369.0	3251.4
25°	3759.4	3780.8	3748.7	3652.5	3652.5	3673.8	3673.8	3652.5	3566.9	3470.6	3353.0
27.5°	3834.3	3850.3	3823.6	3689.9	3695.2	3727.3	3722.0	3727.3	3673.8	3582.9	3465.3
30°	3925.2	3946.6	3914.5	3748.7	3743.4	3775.4	3775.4	3802.2	3764.8	3668.5	3572.2
32.5°	4171.2	4165.8	4064.2	3812.9	3796.8	3828.9	3828.9	3855.7	3834.3	3759.4	3668.5
35°	4903.8	4823.6	4599.0	4021.4	3861.0	3877.1	3877.1	3925.2	3935.9	3877.1	3796.8
37.5°	5652.5	5625.7	5454.6	4577.6	4096.3	3978.7	3973.3	4042.8	4091.0	4042.8	3989.4
40°	6406.5	6385.1	6347.7	5320.9	4588.3	4160.5	4144.4	4203.3	4288.8	4256.7	4224.7
42.5°	7107.0	7096.3	7133.8	6053.6	5214.0	4550.9	4502.7	4433.2	4556.2	4545.5	4545.5
45°	7657.9	7684.6	7706.0	6738.1	5893.1	5053.5	4994.7	4759.4	4925.2	4968.0	5000.1
47.5°	7968.0	7989.4	8064.3	7406.5	6572.3	5636.4	5593.7	5208.6	5427.9	5556.2	5647.1
50°	8411.9	8353.0	8417.2	8058.9	7390.5	6395.8	6278.2	5812.9	6091.0	6315.6	6529.5
52.5°	8839.7	8743.4	8796.9	8812.9	8321.0	7139.1	7016.1	6524.1	6871.7	7224.7	7604.4
55°	9224.7	9219.4	9272.8	9545.6	9219.4	7935.9	7796.9	7310.3	7812.9	8192.6	8834.3
57.5°	9534.9	9588.4	9823.7	10395.9	10256.8	8802.3	8647.2	8224.7	8818.3	9198.0	10262.2
60°	9898.5	9984.1	10374.5	11117.8	11203.4	9711.4	9550.9	9246.1	9850.4	10235.4	11914.6
62.5°	10021.5	10144.5	10946.7	11877.2	12192.7	10706.0	10561.6	10358.4	10936.0	11283.6	13561.7
65°	9203.3	9438.6	11262.2	12267.5	13256.9	11903.9	11780.9	11604.4	12016.2	12246.1	14679.3
67.5°	8978.7	9085.7	10647.2	12829.0	14256.9	13444.0	13321.0	13016.2	13026.9	12930.6	15043.0
70°	8663.2	8780.9	10016.2	13251.5	15690.0	15551.0	15401.3	14502.9	13952.0	13369.2	14326.4
72.5°	7379.8	7342.3	8631.1	12112.5	16379.9	18160.7	17984.2	16101.8	14636.5	12989.5	12091.1
75°	4144.4	4037.5	5235.4	8379.8	14957.4	19198.1	19192.8	16909.3	14155.3	11315.7	8230.1
77.5°	1203.2	1171.1	1727.3	3513.4	10069.6	16679.4	16882.6	15251.5	11813.0	8128.4	4518.8
80°	566.9	577.5	743.3	1160.4	4299.5	10764.8	11347.7	10042.9	7058.9	3748.7	1866.3
82.5°	358.3	363.6	508.0	748.7	1818.2	4887.8	5369.1	4518.8	2796.8	1620.3	823.5
85°	224.6	224.6	336.9	492.0	1085.6	1561.5	1695.2	1540.1	1197.9	882.4	449.2
87.5°	123.0	123.0	203.2	283.4	593.6	502.7	518.7	615.0	748.7	540.1	224.6
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2818.2	2818.2	2818.2	2818.2	2818.2	2818.2	2818.2	2818.2	2818.2	2818.2	2818.2
2.5°	2812.9	2802.2	2786.1	2780.8	2775.4	2770.1	2775.4	2786.1	2775.4	2775.4	2780.8
5°	2796.8	2786.1	2764.7	2764.7	2770.1	2775.4	2802.2	2818.2	2823.6	2823.6	2823.6
7.5°	2796.8	2780.8	2764.7	2770.1	2780.8	2802.2	2845.0	2871.7	2893.1	2898.4	2898.4
10°	2823.6	2802.2	2791.5	2802.2	2834.3	2850.3	2893.1	2935.9	2962.6	2973.3	2973.3
12.5°	2871.7	2850.3	2850.3	2871.7	2914.5	2935.9	2973.3	3005.4	3037.5	3053.5	3053.5
15°	2951.9	2925.2	2930.5	2968.0	3016.1	3037.5	3064.2	3074.9	3101.6	3123.0	3123.0
17.5°	3026.8	3000.0	3010.7	3053.5	3085.6	3096.3	3112.3	3107.0	3117.7	3133.7	3139.1
20°	3112.3	3085.6	3090.9	3117.7	3123.0	3112.3	3112.3	3096.3	3090.9	3117.7	3128.4
22.5°	3197.9	3171.2	3165.8	3149.8	3123.0	3096.3	3080.3	3064.2	3053.5	3080.3	3090.9
25°	3299.5	3262.1	3235.3	3165.8	3096.3	3048.2	3026.8	3016.1	3010.7	3037.5	3048.2
27.5°	3411.8	3374.4	3294.2	3144.4	3032.1	2951.9	2935.9	2935.9	2946.6	2962.6	2973.3
30°	3518.8	3481.3	3336.9	3096.3	2919.8	2802.2	2786.1	2802.2	2828.9	2845.0	2861.0
32.5°	3625.7	3588.3	3363.7	3021.4	2754.0	2604.3	2593.6	2620.4	2663.1	2673.8	2684.5
35°	3770.1	3732.7	3395.8	2914.5	2545.5	2385.1	2374.4	2390.4	2427.8	2443.9	2459.9
37.5°	3973.3	3951.9	3443.9	2796.8	2353.0	2176.5	2144.4	2133.7	2155.1	2149.8	2171.2
40°	4240.7	4256.7	3529.5	2641.7	2165.8	1984.0	1914.5	1882.4	1861.0	1818.2	1839.6
42.5°	4631.1	4641.8	3625.7	2465.3	2005.4	1802.2	1711.3	1652.4	1609.6	1540.1	1550.8
45°	5203.3	5112.4	3738.0	2278.1	1861.0	1657.8	1550.8	1481.3	1422.5	1363.7	1369.0
47.5°	5962.6	5684.6	3861.0	2123.0	1716.6	1540.1	1443.9	1363.7	1294.1	1246.0	1251.4
50°	6898.5	6395.8	3984.0	1978.6	1572.2	1449.2	1363.7	1278.1	1208.6	1160.4	1155.1
52.5°	8133.8	7251.4	4064.2	1818.2	1427.8	1369.0	1294.1	1213.9	1128.4	1069.5	1064.2
55°	9417.2	8246.1	4133.7	1625.7	1288.8	1278.1	1240.7	1149.7	1048.1	973.3	962.6
57.5°	10829.0	9310.3	4187.2	1438.5	1181.8	1203.2	1192.5	1085.6	973.3	903.8	898.4
60°	12112.5	10411.9	4016.1	1272.7	1085.6	1128.4	1139.1	1048.1	989.3	1005.4	1010.7
62.5°	13406.6	11262.2	3363.7	1149.7	1021.4	1080.2	1171.1	1165.8	1139.1	1165.8	1171.1
65°	13871.8	11438.6	2385.1	1048.1	957.2	1101.6	1272.7	1262.0	1139.1	1090.9	1080.2
67.5°	13609.8	10914.6	1604.3	967.9	909.1	1128.4	1379.7	1262.0	1096.3	1032.1	1010.7
70°	12363.8	9625.8	1176.5	887.7	866.3	1123.0	1438.5	1256.7	1074.9	1005.4	978.6
72.5°	9861.1	7427.9	946.5	812.8	802.1	1096.3	1470.6	1246.0	1053.5	978.6	946.5
75°	6385.1	4620.4	796.8	738.0	705.9	1053.5	1454.6	1213.9	1026.8	930.5	909.1
77.5°	2962.6	1989.3	679.2	652.4	615.0	989.3	1406.4	1149.7	967.9	877.0	850.3
80°	1379.7	941.2	572.2	566.9	550.8	935.8	1342.3	1074.9	898.4	823.5	780.8
82.5°	738.0	566.9	465.2	465.2	481.3	871.7	1262.0	984.0	807.5	770.1	657.8
85°	390.4	326.2	336.9	363.6	411.8	770.1	1155.1	887.7	705.9	588.2	572.2
87.5°	197.9	208.6	208.6	246.0	315.5	625.7	951.9	732.6	598.9	481.3	470.6
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)