

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: P237320

Luminaire Tested: **ARCH-L-AF72-270-D-U-T4W-7030**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P237320
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)
Test Lab: INNOVATION CENTER-P2
Issue Date: 8/23/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-270-D-U-T4W-7030
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 1155mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28607.4 lumens
Efficiency: N/A
Efficacy: 104.8 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

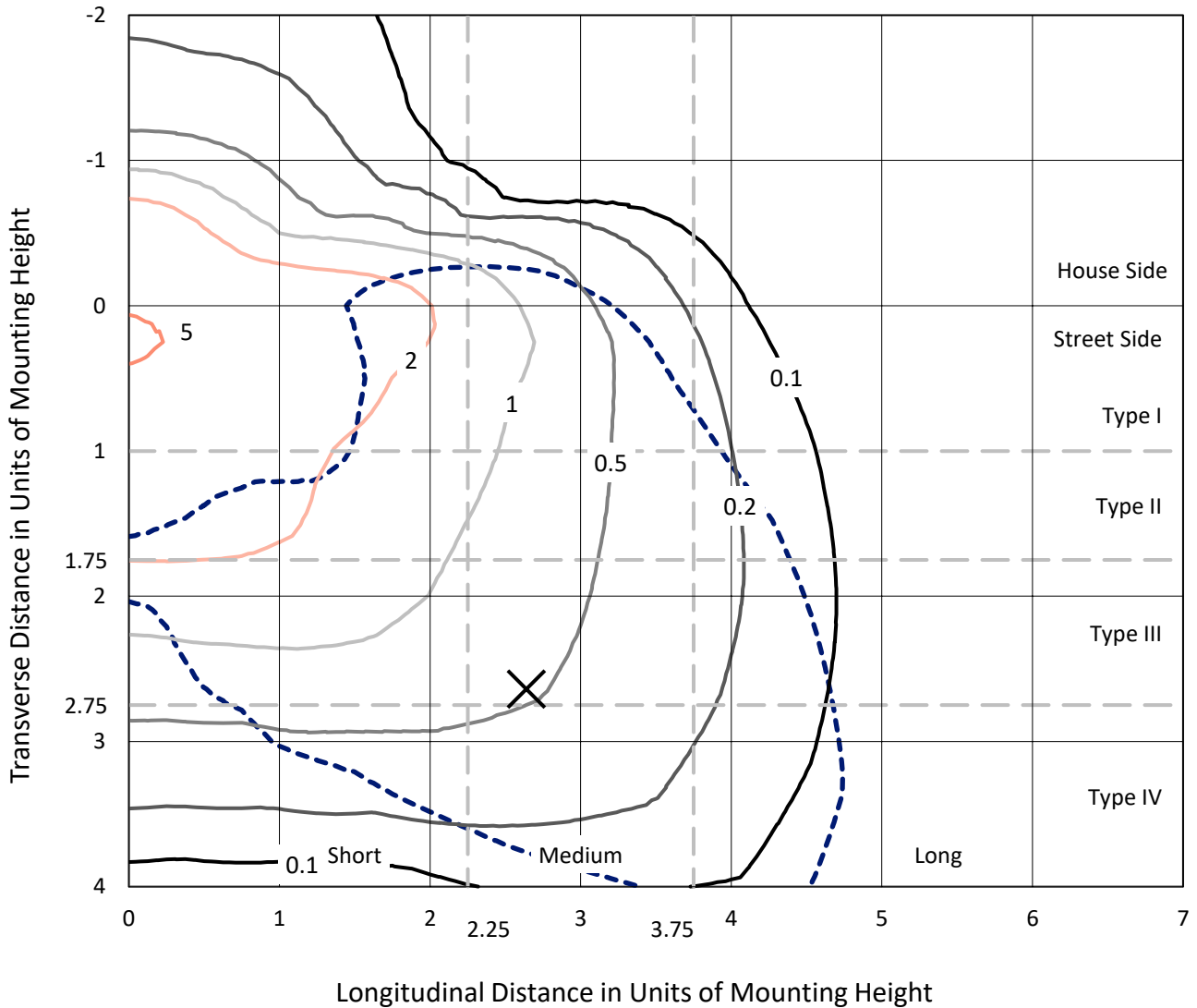
Input Watts (W): 273
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

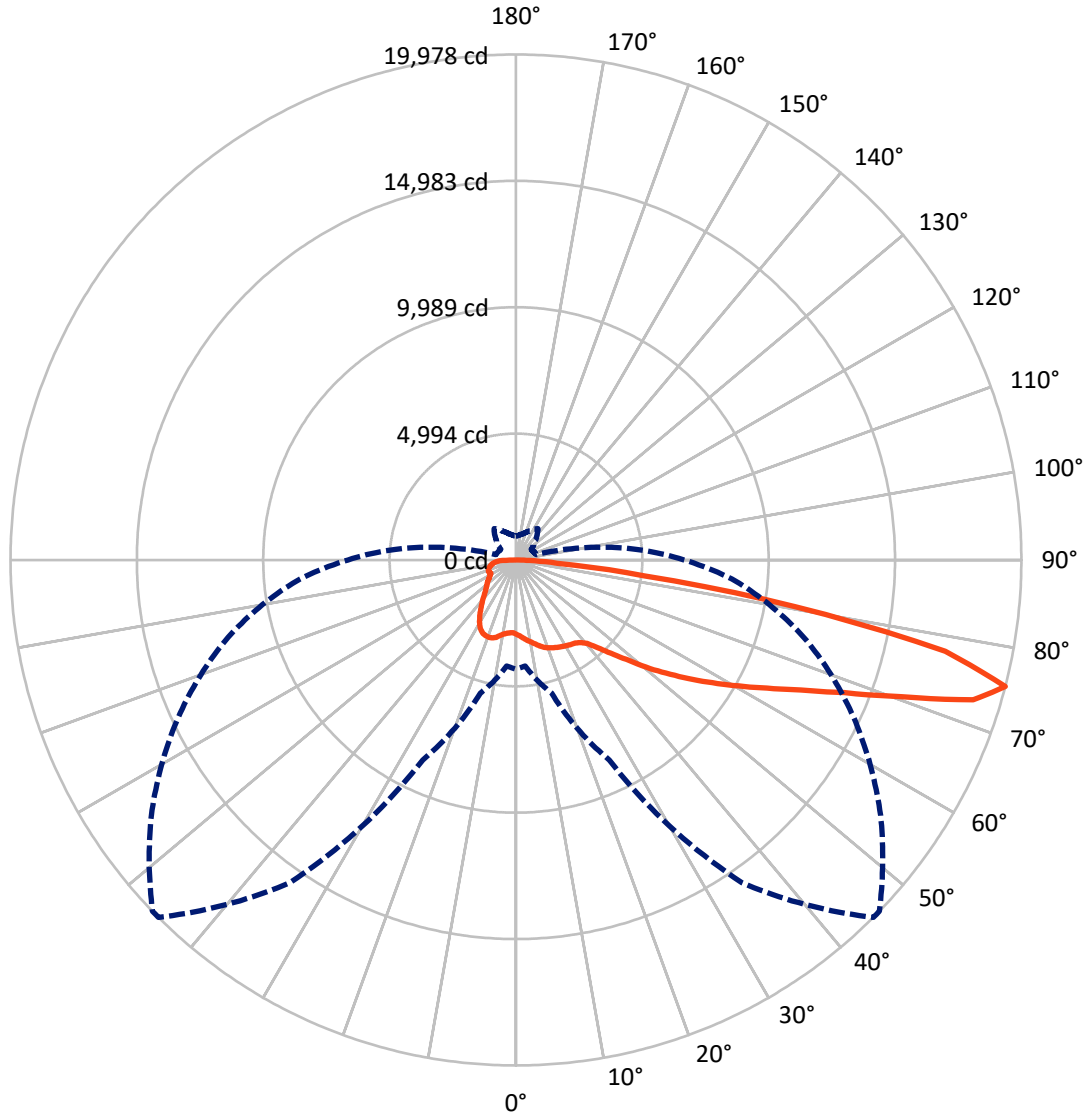
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.5 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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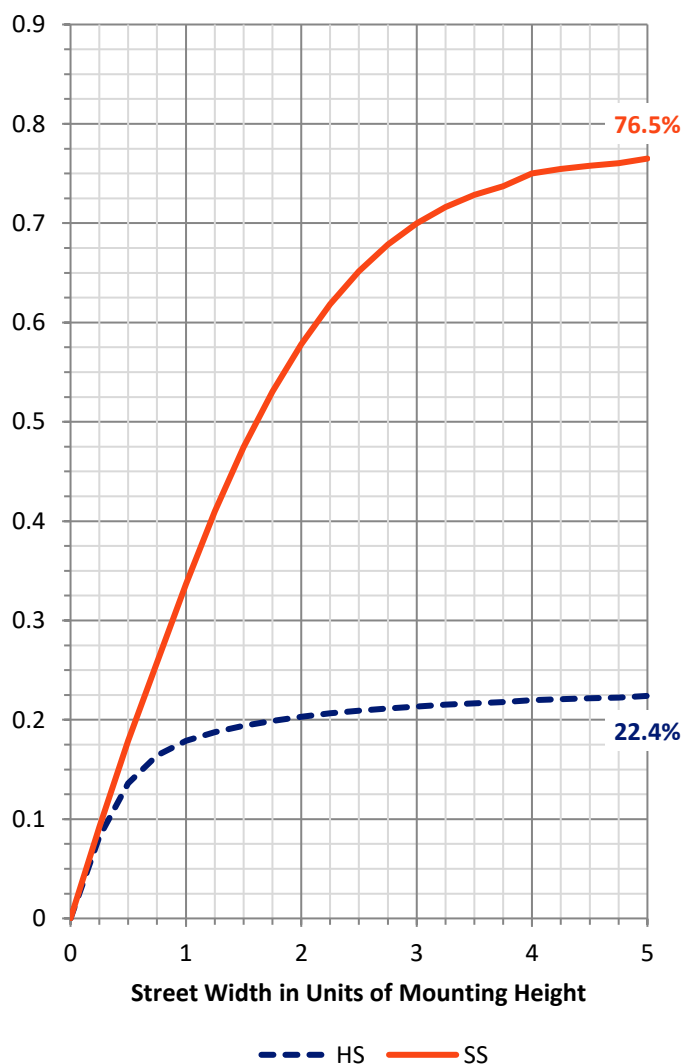
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6627.1	0.0	6627.1
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	21980.2	0.0	21980.2
	% Fixture	76.8	0.0	76.8
Total	Lumens	28607.4	0.0	28607.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	290.6	1.0
10°-20°	941.8	3.3
20°-30°	1616.1	5.6
30°-40°	2260.3	7.9
40°-50°	3315.7	11.6
50°-60°	5165.0	18.1
60°-70°	7432.0	26.0
70°-80°	6474.0	22.6
80°-90°	1111.8	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°	28607.4	100.0
0°-180°	28607.4	100.0

Coefficient of Utilization



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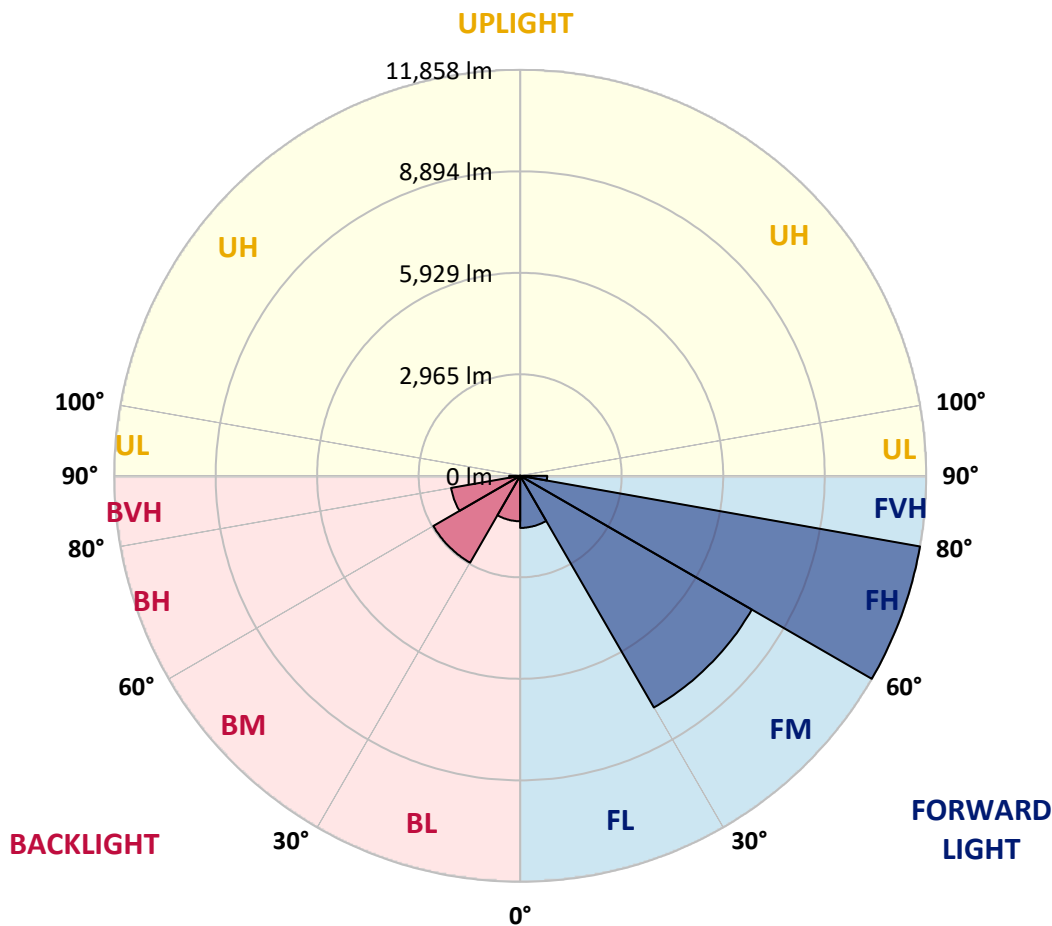
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1521.2	5.3			
FM (30°-60°)	7812.1	27.3			
FH (60°-80°)	11858.0	41.5			G4/12000
FVH (80°-90°)	788.9	2.8			G5
BL (0°-30°)	1327.3	4.6	B3/2500		
BM (30°-60°)	2928.8	10.2	B3/5000		
BH (60°-80°)	2048.0	7.2	B3/2500		G3/2500
BVH (80°-90°)	323.0	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°	2932.6	2932.6	2932.6	2932.6	2932.6	2932.6	2932.6	2932.6	2932.6	2932.6	2932.6
2.5°	3077.4	3055.1	3055.1	3038.4	3038.4	3010.5	2999.3	2993.9	2966.1	2949.4	2932.6
5°	3255.4	3227.6	3222.0	3183.0	3166.4	3105.1	3099.5	3060.7	3010.5	2960.5	2921.5
7.5°	3416.7	3400.1	3372.3	3333.3	3283.2	3205.3	3199.7	3138.6	3055.1	2988.3	2932.6
10°	3533.7	3522.5	3483.6	3433.5	3377.9	3299.9	3294.3	3227.6	3127.4	3049.5	2971.7
12.5°	3672.7	3656.1	3606.0	3539.2	3478.0	3405.7	3400.1	3344.4	3233.2	3133.0	3032.8
15°	3806.4	3784.0	3722.9	3656.1	3589.2	3528.1	3528.1	3466.9	3350.0	3233.2	3116.3
17.5°	3873.1	3862.0	3800.8	3728.5	3672.7	3628.3	3622.7	3567.1	3450.2	3327.7	3199.7
20°	3895.4	3900.9	3845.3	3767.4	3728.5	3706.2	3700.6	3661.6	3533.7	3416.7	3294.3
22.5°	3889.8	3906.4	3862.0	3778.5	3767.4	3767.4	3767.4	3722.9	3622.7	3505.8	3383.4
25°	3912.0	3934.3	3900.9	3800.8	3800.8	3823.0	3823.0	3800.8	3711.7	3611.6	3489.2
27.5°	3989.9	4006.6	3978.9	3839.7	3845.3	3878.7	3873.1	3878.7	3823.0	3728.5	3606.0
30°	4084.5	4106.8	4073.4	3900.9	3895.4	3928.8	3928.8	3956.6	3917.6	3817.5	3717.3
32.5°	4340.6	4335.0	4229.3	3967.7	3951.1	3984.3	3984.3	4012.2	3989.9	3912.0	3817.5
35°	5103.0	5019.5	4785.8	4184.7	4017.8	4034.5	4034.5	4084.5	4095.7	4034.5	3951.1
37.5°	5882.0	5854.2	5676.1	4763.4	4262.6	4140.3	4134.7	4207.0	4257.1	4207.0	4151.3
40°	6666.7	6644.4	6605.5	5537.0	4774.6	4329.4	4312.7	4373.9	4463.0	4429.6	4396.1
42.5°	7395.6	7384.5	7423.5	6299.4	5425.7	4735.7	4685.6	4613.3	4741.2	4730.1	4730.1
45°	7968.9	7996.6	8018.9	7011.7	6132.4	5258.7	5197.6	4952.7	5125.3	5169.7	5203.2
47.5°	8291.5	8313.9	8391.7	7707.2	6839.2	5865.4	5820.8	5420.2	5648.2	5781.9	5876.4
50°	8753.5	8692.2	8759.0	8386.2	7690.5	6655.5	6533.0	6048.9	6338.3	6572.1	6794.7
52.5°	9198.6	9098.4	9154.2	9170.7	8658.9	7429.1	7301.0	6789.1	7150.8	7518.0	7913.2
55°	9599.3	9593.7	9649.4	9933.2	9593.7	8258.2	8113.5	7607.0	8130.2	8525.3	9193.1
57.5°	9922.1	9977.8	10222.7	10818.0	10673.3	9159.6	8998.3	8558.8	9176.3	9571.4	10678.9
60°	10300.5	10389.5	10795.8	11569.3	11658.3	10105.7	9938.8	9621.6	10250.3	10651.0	12398.4
62.5°	10428.5	10556.4	11391.2	12359.5	12687.8	11140.7	10990.5	10779.1	11380.0	11741.8	14112.4
65°	9577.0	9821.9	11719.4	12765.8	13795.2	12387.3	12259.3	12075.7	12504.1	12743.5	15275.4
67.5°	9343.3	9454.6	11079.6	13350.0	14835.8	13990.0	13861.9	13544.8	13555.9	13455.8	15653.8
70°	9015.0	9137.5	10422.9	13789.6	16327.1	16182.5	16026.7	15091.8	14518.6	13912.1	14908.1
72.5°	7679.4	7640.5	8981.6	12604.3	17045.0	18898.1	18714.5	16755.7	15231.0	13516.9	12582.1
75°	4312.7	4201.4	5448.0	8720.1	15564.7	19977.7	19972.1	17595.9	14730.2	11775.2	8564.3
77.5°	1252.1	1218.7	1797.5	3656.1	10478.5	17356.7	17568.2	15870.9	12292.6	8458.6	4702.3
80°	589.9	601.0	773.5	1207.6	4474.1	11202.1	11808.5	10450.7	7345.6	3900.9	1942.1
82.5°	372.8	378.4	528.7	779.1	1892.1	5086.2	5587.1	4702.3	2910.4	1686.1	857.0
85°	233.7	233.7	350.6	512.0	1129.6	1624.9	1764.1	1602.7	1246.5	918.3	467.4
87.5°	128.0	128.0	211.4	294.9	617.7	523.2	539.7	639.9	779.1	562.0	233.7
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°	2932.6	2932.6	2932.6	2932.6	2932.6	2932.6	2932.6	2932.6	2932.6	2932.6	2932.6
2.5°	2927.0	2915.9	2899.3	2893.7	2888.2	2882.6	2888.2	2899.3	2888.2	2888.2	2893.7
5°	2910.4	2899.3	2877.1	2877.1	2882.6	2888.2	2915.9	2932.6	2938.2	2938.2	2938.2
7.5°	2910.4	2893.7	2877.1	2882.6	2893.7	2915.9	2960.5	2988.3	3010.5	3016.1	3016.1
10°	2938.2	2915.9	2904.8	2915.9	2949.4	2966.1	3010.5	3055.1	3082.9	3094.0	3094.0
12.5°	2988.3	2966.1	2966.1	2988.3	3032.8	3055.1	3094.0	3127.4	3160.9	3177.5	3177.5
15°	3071.9	3044.0	3049.5	3088.4	3138.6	3160.9	3188.6	3199.7	3227.6	3249.8	3249.8
17.5°	3149.7	3121.9	3133.0	3177.5	3210.9	3222.0	3238.8	3233.2	3244.2	3261.0	3266.6
20°	3238.8	3210.9	3216.5	3244.2	3249.8	3238.8	3238.8	3222.0	3216.5	3244.2	3255.4
22.5°	3327.7	3299.9	3294.3	3277.7	3249.8	3222.0	3205.3	3188.6	3177.5	3205.3	3216.5
25°	3433.5	3394.5	3366.8	3294.3	3222.0	3171.9	3149.7	3138.6	3133.0	3160.9	3171.9
27.5°	3550.4	3511.4	3427.9	3272.1	3155.3	3071.9	3055.1	3055.1	3066.3	3082.9	3094.0
30°	3661.6	3622.7	3472.5	3222.0	3038.4	2915.9	2899.3	2915.9	2943.8	2960.5	2977.2
32.5°	3772.9	3734.1	3500.2	3144.2	2865.9	2710.0	2698.9	2726.8	2771.3	2782.4	2793.5
35°	3923.2	3884.2	3533.7	3032.8	2648.9	2482.0	2470.8	2487.5	2526.4	2543.1	2559.8
37.5°	4134.7	4112.4	3583.7	2910.4	2448.5	2264.8	2231.5	2220.3	2242.6	2237.1	2259.3
40°	4412.9	4429.6	3672.7	2749.1	2253.8	2064.6	1992.3	1958.8	1936.5	1892.1	1914.3
42.5°	4819.1	4830.3	3772.9	2565.4	2086.9	1875.3	1780.7	1719.5	1675.1	1602.7	1613.8
45°	5414.6	5320.0	3889.8	2370.6	1936.5	1725.1	1613.8	1541.4	1480.3	1419.1	1424.6
47.5°	6204.8	5915.4	4017.8	2209.2	1786.3	1602.7	1502.6	1419.1	1346.7	1296.6	1302.2
50°	7178.7	6655.5	4145.9	2059.0	1636.0	1508.1	1419.1	1330.0	1257.7	1207.6	1202.0
52.5°	8464.1	7545.9	4229.3	1892.1	1485.8	1424.6	1346.7	1263.2	1174.2	1113.0	1107.5
55°	9799.7	8581.0	4301.6	1691.7	1341.1	1330.0	1291.0	1196.4	1090.7	1012.9	1001.7
57.5°	11268.8	9688.3	4357.3	1497.0	1229.8	1252.1	1240.9	1129.6	1012.9	940.5	934.9
60°	12604.3	10834.7	4179.1	1324.4	1129.6	1174.2	1185.4	1090.7	1029.4	1046.1	1051.7
62.5°	13951.0	11719.4	3500.2	1196.4	1062.9	1124.1	1218.7	1213.1	1185.4	1213.1	1218.7
65°	14435.2	11903.1	2482.0	1090.7	996.1	1146.3	1324.4	1313.3	1185.4	1135.2	1124.1
67.5°	14162.5	11357.8	1669.5	1007.3	945.9	1174.2	1435.7	1313.3	1140.7	1074.0	1051.7
70°	12865.9	10016.7	1224.2	923.8	901.5	1168.6	1497.0	1307.8	1118.5	1046.1	1018.4
72.5°	10261.5	7729.5	985.0	845.8	834.7	1140.7	1530.2	1296.6	1096.3	1018.4	985.0
75°	6644.4	4808.0	829.2	768.0	734.6	1096.3	1513.7	1263.2	1068.4	968.2	945.9
77.5°	3082.9	2070.1	706.7	678.9	639.9	1029.4	1463.5	1196.4	1007.3	912.7	884.8
80°	1435.7	979.4	595.5	589.9	573.2	973.8	1396.8	1118.5	934.9	857.0	812.5
82.5°	768.0	589.9	484.1	484.1	500.9	907.1	1313.3	1024.0	840.3	801.3	684.5
85°	406.2	339.5	350.6	378.4	428.6	801.3	1202.0	923.8	734.6	612.2	595.5
87.5°	205.9	217.0	217.0	256.0	328.4	651.0	990.6	762.4	623.3	500.9	489.7
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)