

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: P237340

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P237340  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-270-D-U-T4W  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 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: 30257.9 lumens  
Efficiency: N/A  
Efficacy: 110.8 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium - Non-Cutoff  
BUG Rating: B3 - U0 - G5

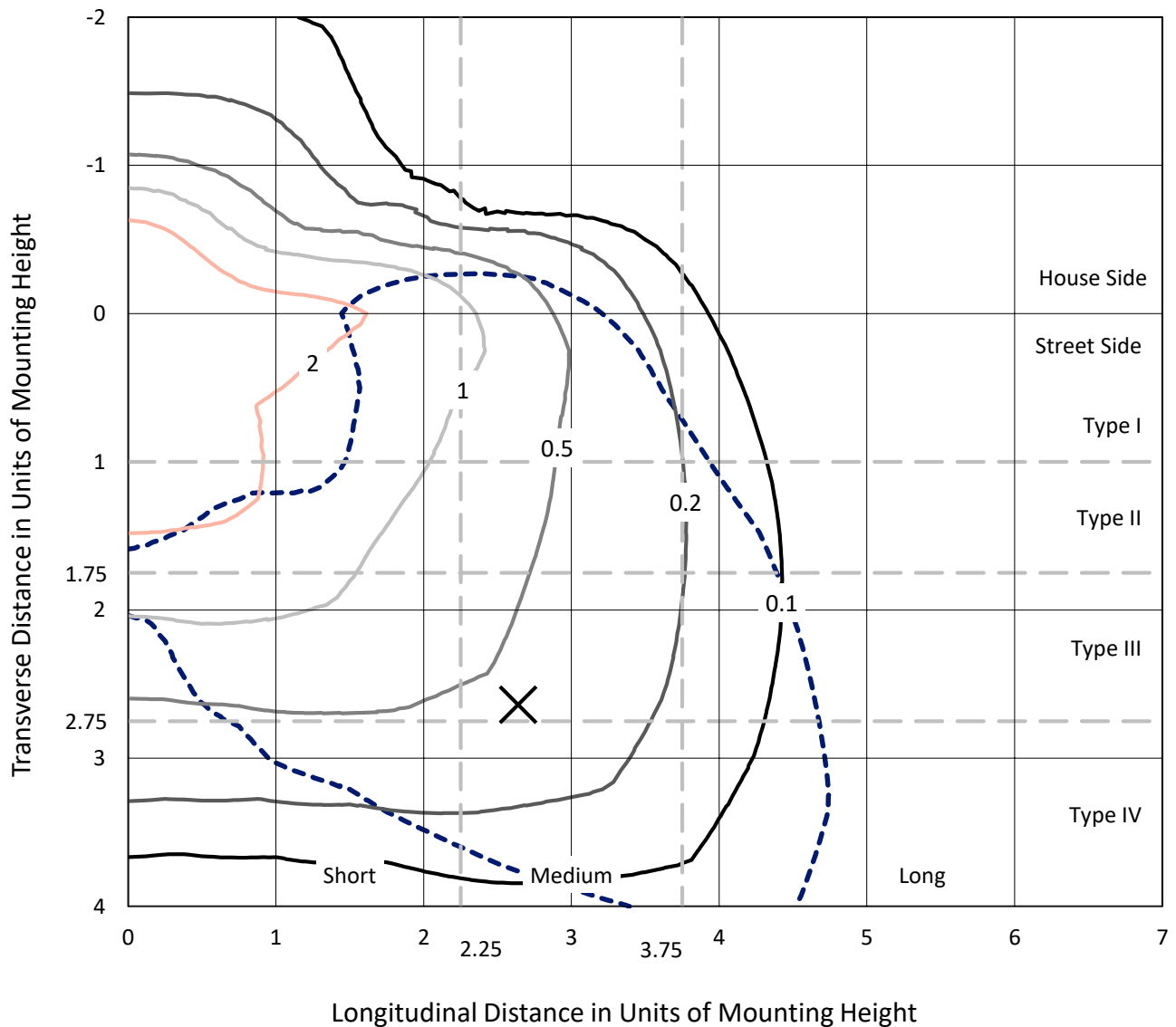
Input Watts (W): 273  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

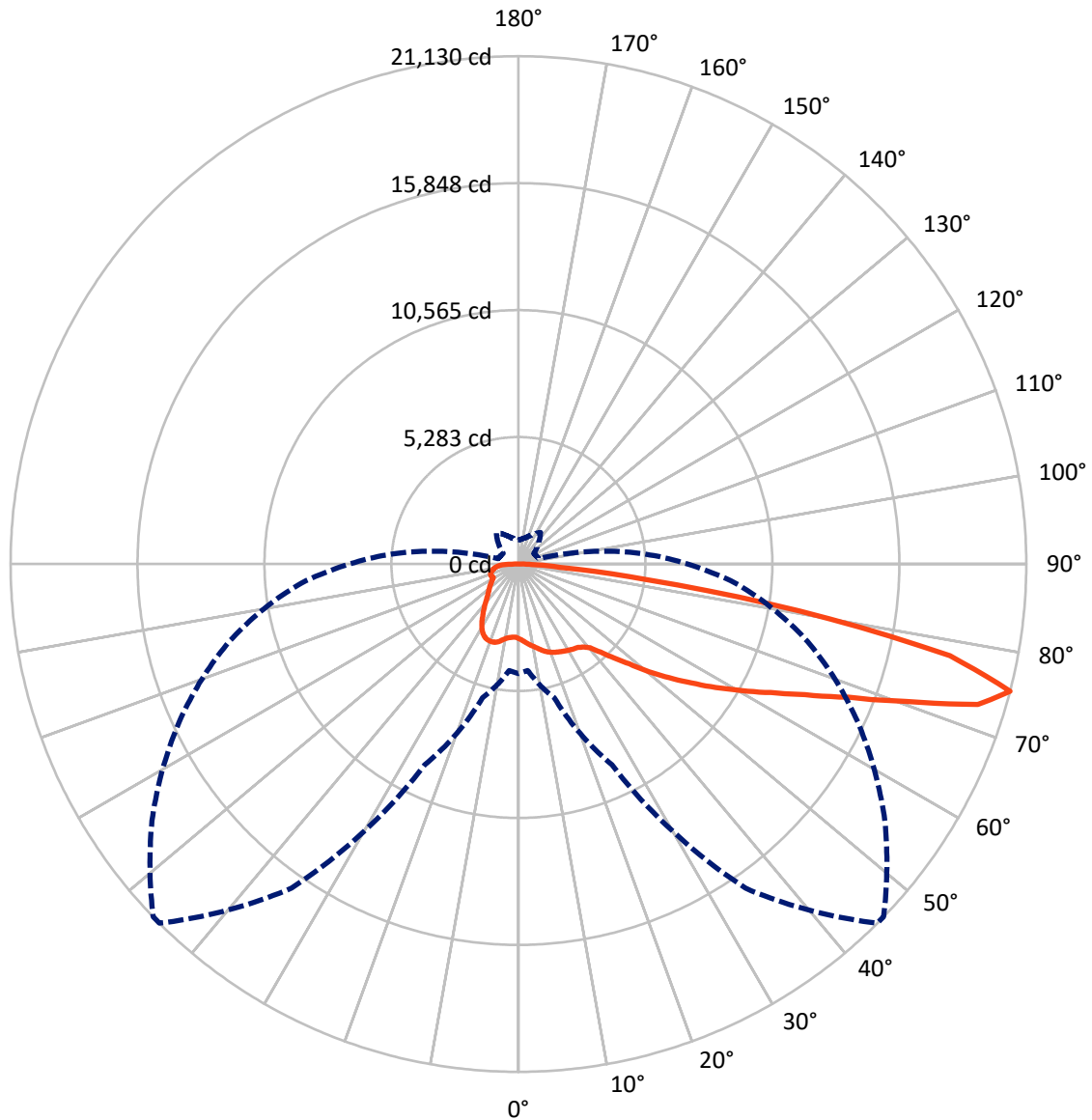
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4 fc  
 Type IV - Medium - Non-Cutoff

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CATALOG NUMBER: ARCH-L-AF72-270-D-U-T4W

### 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
<b>House Side</b>	Lumens	7009.5	0.0	7009.5
	% Fixture	23.2	0.0	23.2
<b>Street Side</b>	Lumens	23248.4	0.0	23248.4
	% Fixture	76.8	0.0	76.8
<b>Total</b>	Lumens	30257.9	0.0	30257.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	307.4	1.0
10°-20°	996.1	3.3
20°-30°	1709.4	5.6
30°-40°	2390.7	7.9
40°-50°	3507.0	11.6
50°-60°	5463.0	18.1
60°-70°	7860.8	26.0
70°-80°	6847.6	22.6
80°-90°	1176.0	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°	30257.9	100.0
0°-180°	30257.9	100.0



REPORT NUMBER: P237340

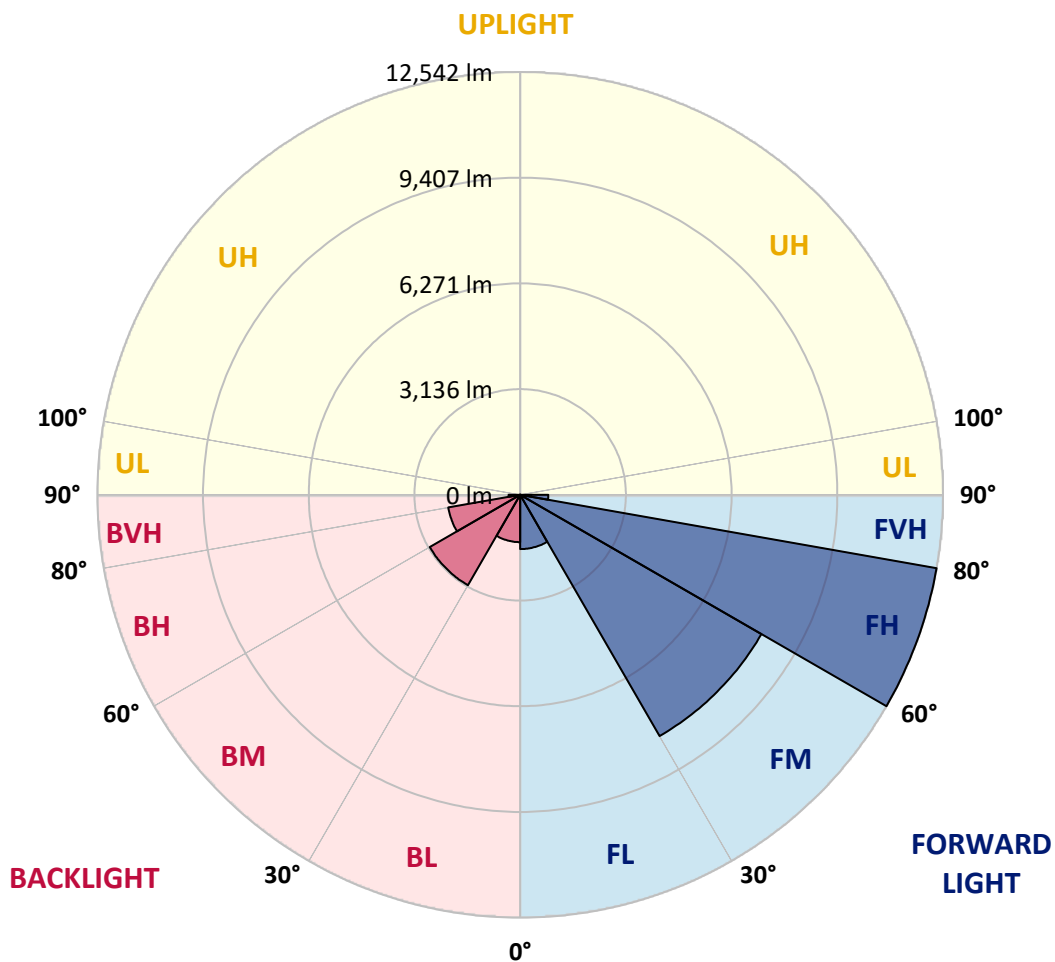
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1609.0	5.3			
FM	(30°-60°)	8262.8	27.3			
FH	(60°-80°)	12542.2	41.5			G5
FVH	(80°-90°)	834.4	2.8			G5
BL	(0°-30°)	1403.9	4.6	B3/2500		
BM	(30°-60°)	3097.8	10.2	B3/5000		
BH	(60°-80°)	2166.2	7.2	B3/2500		G3/2500
BVH	(80°-90°)	341.6	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





REPORT NUMBER: P237340

CATALOG NUMBER: ARCH-L-AF72-270-D-U-T4W

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	3101.9	3101.9	3101.9	3101.9	3101.9	3101.9	3101.9	3101.9	3101.9	3101.9	3101.9
2.5°	3254.9	3231.4	3231.4	3213.7	3213.7	3184.2	3172.5	3166.6	3137.2	3119.5	3101.9
5°	3443.3	3413.8	3408.0	3366.7	3349.0	3284.3	3278.5	3237.2	3184.2	3131.3	3090.1
7.5°	3614.0	3596.3	3566.8	3525.6	3472.7	3390.3	3384.4	3319.7	3231.4	3160.7	3101.9
10°	3737.6	3725.8	3684.6	3631.6	3572.8	3490.3	3484.5	3413.8	3307.9	3225.5	3143.0
12.5°	3884.7	3867.1	3814.1	3743.4	3678.6	3602.1	3596.3	3537.5	3419.7	3313.7	3207.8
15°	4025.9	4002.4	3937.6	3867.1	3796.4	3731.6	3731.6	3666.9	3543.3	3419.7	3296.0
17.5°	4096.6	4084.8	4020.1	3943.6	3884.7	3837.6	3831.7	3772.8	3649.3	3519.8	3384.4
20°	4120.1	4126.0	4067.2	3984.7	3943.6	3919.9	3914.1	3872.9	3737.6	3614.0	3484.5
22.5°	4114.2	4131.9	4084.8	3996.5	3984.7	3984.7	3984.7	3937.6	3831.7	3708.1	3578.6
25°	4137.7	4161.4	4126.0	4020.1	4020.1	4043.6	4043.6	4020.1	3925.9	3819.9	3690.4
27.5°	4220.2	4237.9	4208.4	4061.2	4067.2	4102.4	4096.6	4102.4	4043.6	3943.6	3814.1
30°	4320.2	4343.8	4308.5	4126.0	4120.1	4155.4	4155.4	4184.9	4143.7	4037.7	3931.8
32.5°	4591.0	4585.1	4473.3	4196.7	4179.0	4214.3	4214.3	4243.7	4220.2	4137.7	4037.7
35°	5397.4	5309.1	5061.9	4426.2	4249.6	4267.2	4267.2	4320.2	4332.0	4267.2	4179.0
37.5°	6221.4	6191.9	6003.6	5038.3	4508.6	4379.0	4373.2	4449.7	4502.7	4449.7	4390.9
40°	7051.3	7027.8	6986.5	5856.5	5050.1	4579.2	4561.5	4626.3	4720.5	4685.1	4649.8
42.5°	7822.3	7810.5	7851.8	6662.8	5738.8	5008.9	4955.9	4879.4	5014.8	5003.0	5003.0
45°	8428.6	8458.1	8481.6	7416.2	6486.2	5562.2	5497.4	5238.4	5420.9	5468.0	5503.3
47.5°	8770.0	8793.5	8875.9	8152.0	7233.8	6203.7	6156.6	5732.8	5974.1	6115.4	6215.4
50°	9258.5	9193.8	9264.4	8870.0	8134.3	7039.5	6910.0	6397.9	6704.0	6951.3	7186.6
52.5°	9729.4	9623.4	9682.2	9699.9	9158.5	7857.7	7722.3	7180.8	7563.4	7951.8	8369.7
55°	10153.2	10147.3	10206.1	10506.3	10147.3	8734.7	8581.6	8046.0	8599.2	9017.2	9723.5
57.5°	10494.6	10553.4	10812.4	11442.1	11289.1	9688.2	9517.4	9052.5	9705.9	10123.7	11295.0
60°	10894.7	10988.9	11418.6	12236.7	12331.0	10688.8	10512.1	10176.7	10841.8	11265.6	13113.7
62.5°	11030.2	11165.5	12048.4	13072.6	13419.8	11783.6	11624.6	11401.0	12036.7	12419.2	14926.6
65°	10129.6	10388.6	12395.7	13502.2	14591.1	13102.0	12966.6	12772.4	13225.6	13478.7	16156.8
67.5°	9882.4	10000.2	11718.8	14120.2	15691.8	14797.1	14661.7	14326.2	14338.0	14232.1	16557.0
70°	9535.1	9664.6	11024.2	14585.2	17269.1	17116.1	16951.3	15962.5	15356.2	14714.7	15768.3
72.5°	8122.5	8081.3	9499.8	13331.5	18028.5	19988.5	19794.2	17722.4	16109.6	14296.8	13308.0
75°	4561.5	4443.8	5762.3	9223.1	16462.9	21130.3	21124.4	18611.2	15580.0	12454.5	9058.3
77.5°	1324.3	1289.0	1901.2	3867.1	11083.2	18358.1	18581.7	16786.5	13001.9	8946.5	4973.6
80°	623.9	635.7	818.2	1277.3	4732.3	11848.3	12489.8	11053.7	7769.4	4126.0	2054.2
82.5°	394.3	400.3	559.1	824.0	2001.2	5379.7	5909.4	4973.6	3078.4	1783.4	906.4
85°	247.2	247.2	370.8	541.6	1194.8	1718.7	1865.9	1695.1	1318.5	971.2	494.4
87.5°	135.3	135.3	223.6	312.0	653.4	553.3	570.9	676.9	824.0	594.4	247.2
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: P237340

CATALOG NUMBER: ARCH-L-AF72-270-D-U-T4W

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3101.9	3101.9	3101.9	3101.9	3101.9	3101.9	3101.9	3101.9	3101.9	3101.9	3101.9
2.5°	3096.0	3084.2	3066.5	3060.7	3054.7	3048.9	3054.7	3066.5	3054.7	3054.7	3060.7
5°	3078.4	3066.5	3043.0	3043.0	3048.9	3054.7	3084.2	3101.9	3107.7	3107.7	3107.7
7.5°	3078.4	3060.7	3043.0	3048.9	3060.7	3084.2	3131.3	3160.7	3184.2	3190.2	3190.2
10°	3107.7	3084.2	3072.4	3084.2	3119.5	3137.2	3184.2	3231.4	3260.8	3272.5	3272.5
12.5°	3160.7	3137.2	3137.2	3160.7	3207.8	3231.4	3272.5	3307.9	3343.2	3360.8	3360.8
15°	3249.0	3219.5	3225.5	3266.7	3319.7	3343.2	3372.6	3384.4	3413.8	3437.3	3437.3
17.5°	3331.4	3302.0	3313.7	3360.8	3396.2	3408.0	3425.6	3419.7	3431.5	3449.1	3455.0
20°	3425.6	3396.2	3402.0	3431.5	3437.3	3425.6	3425.6	3408.0	3402.0	3431.5	3443.3
22.5°	3519.8	3490.3	3484.5	3466.8	3437.3	3408.0	3390.3	3372.6	3360.8	3390.3	3402.0
25°	3631.6	3590.4	3561.0	3484.5	3408.0	3355.0	3331.4	3319.7	3313.7	3343.2	3355.0
27.5°	3755.2	3714.0	3625.7	3460.9	3337.3	3249.0	3231.4	3231.4	3243.2	3260.8	3272.5
30°	3872.9	3831.7	3672.8	3408.0	3213.7	3084.2	3066.5	3084.2	3113.7	3131.3	3148.9
32.5°	3990.6	3949.4	3702.3	3325.5	3031.2	2866.4	2854.6	2884.1	2931.2	2942.9	2954.7
35°	4149.5	4108.4	3737.6	3207.8	2801.7	2625.1	2613.3	2631.0	2672.2	2689.8	2707.5
37.5°	4373.2	4349.7	3790.5	3078.4	2589.8	2395.5	2360.3	2348.5	2372.0	2366.1	2389.7
40°	4667.5	4685.1	3884.7	2907.6	2383.8	2183.7	2107.2	2071.8	2048.3	2001.2	2024.7
42.5°	5097.2	5108.9	3990.6	2713.4	2207.2	1983.5	1883.5	1818.7	1771.6	1695.1	1706.9
45°	5727.0	5626.9	4114.2	2507.4	2048.3	1824.6	1706.9	1630.4	1565.6	1500.9	1506.8
47.5°	6562.7	6256.7	4249.6	2336.7	1889.4	1695.1	1589.2	1500.9	1424.4	1371.4	1377.3
50°	7592.8	7039.5	4385.0	2177.8	1730.4	1595.1	1500.9	1406.8	1330.2	1277.3	1271.3
52.5°	8952.5	7981.3	4473.3	2001.2	1571.6	1506.8	1424.4	1336.1	1242.0	1177.2	1171.3
55°	10365.0	9076.0	4549.8	1789.3	1418.5	1406.8	1365.5	1265.5	1153.7	1071.2	1059.5
57.5°	11918.9	10247.3	4608.6	1583.3	1300.8	1324.3	1312.5	1194.8	1071.2	994.7	988.8
60°	13331.5	11459.8	4420.3	1400.8	1194.8	1242.0	1253.7	1153.7	1088.9	1106.5	1112.5
62.5°	14755.9	12395.7	3702.3	1265.5	1124.2	1189.0	1289.0	1283.1	1253.7	1283.1	1289.0
65°	15268.0	12589.9	2625.1	1153.7	1053.5	1212.5	1400.8	1389.1	1253.7	1200.7	1189.0
67.5°	14979.6	12013.1	1765.7	1065.3	1000.7	1242.0	1518.6	1389.1	1206.6	1136.0	1112.5
70°	13608.1	10594.6	1294.9	977.0	953.5	1236.0	1583.3	1383.1	1183.0	1106.5	1077.2
72.5°	10853.6	8175.5	1041.8	894.7	882.9	1206.6	1618.6	1371.4	1159.5	1077.2	1041.8
75°	7027.8	5085.4	877.0	812.2	776.9	1159.5	1600.9	1336.1	1130.1	1024.2	1000.7
77.5°	3260.8	2189.5	747.5	718.1	676.9	1088.9	1548.0	1265.5	1065.3	965.3	935.9
80°	1518.6	1035.9	629.8	623.9	606.2	1030.0	1477.3	1183.0	988.8	906.4	859.4
82.5°	812.2	623.9	512.1	512.1	529.7	959.4	1389.1	1083.0	888.7	847.6	723.9
85°	429.6	359.1	370.8	400.3	453.2	847.6	1271.3	977.0	776.9	647.4	629.8
87.5°	217.8	229.6	229.6	270.8	347.3	688.7	1047.7	806.4	659.2	529.7	517.9
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)