

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: P265677

Luminaire Tested: **ARCH-L-AF72-200-D-U-T4W-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265677  
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-AF72-200-D-U-T4W-7027  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 860mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21128.4 lumens  
Efficiency: N/A  
Efficacy: 105.1 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 - G4

Input Watts (W): 201  
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

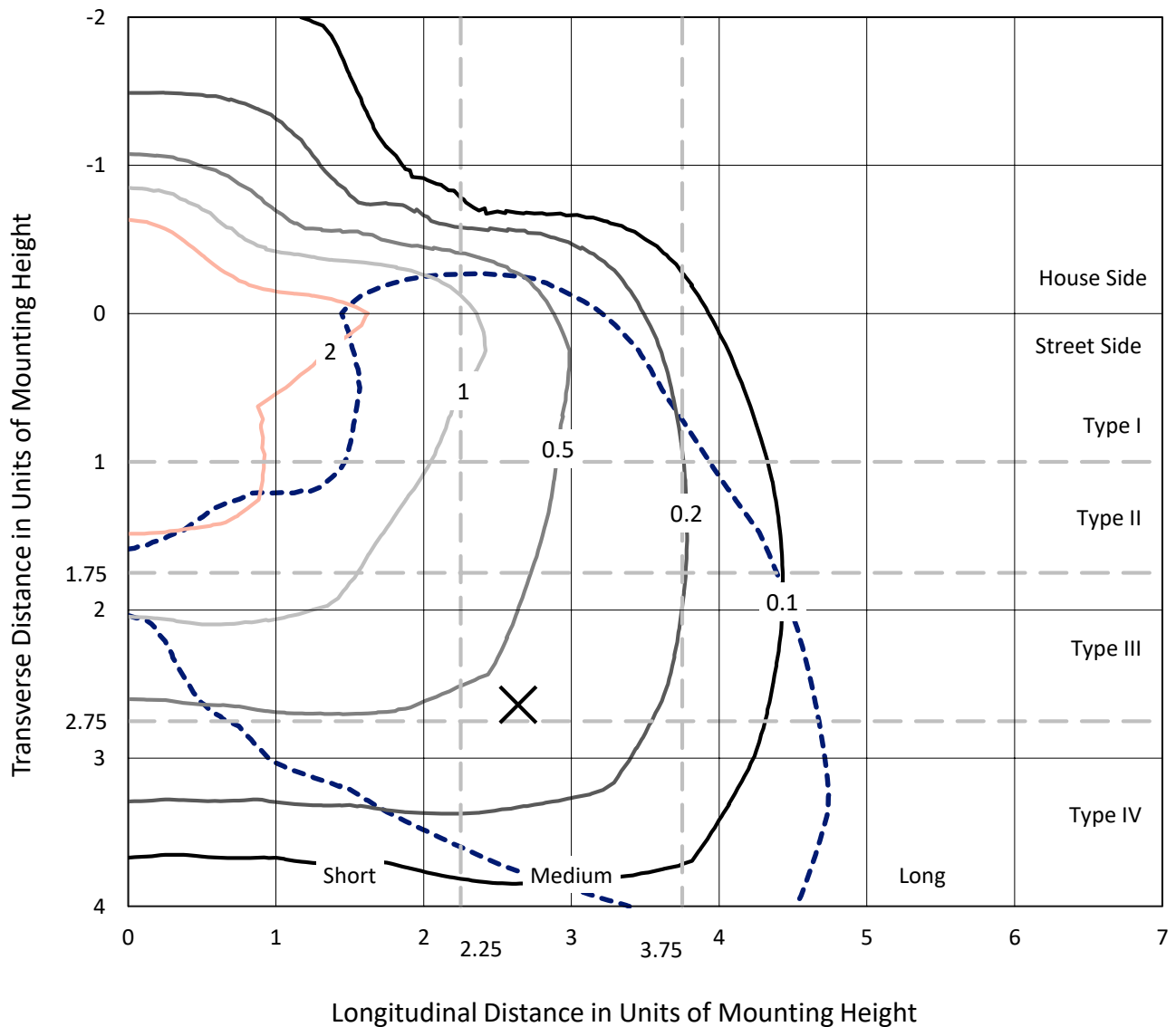


REPORT NUMBER: P265677

CATALOG NUMBER: ARCH-L-AF72-200-D-U-T4W-7027

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

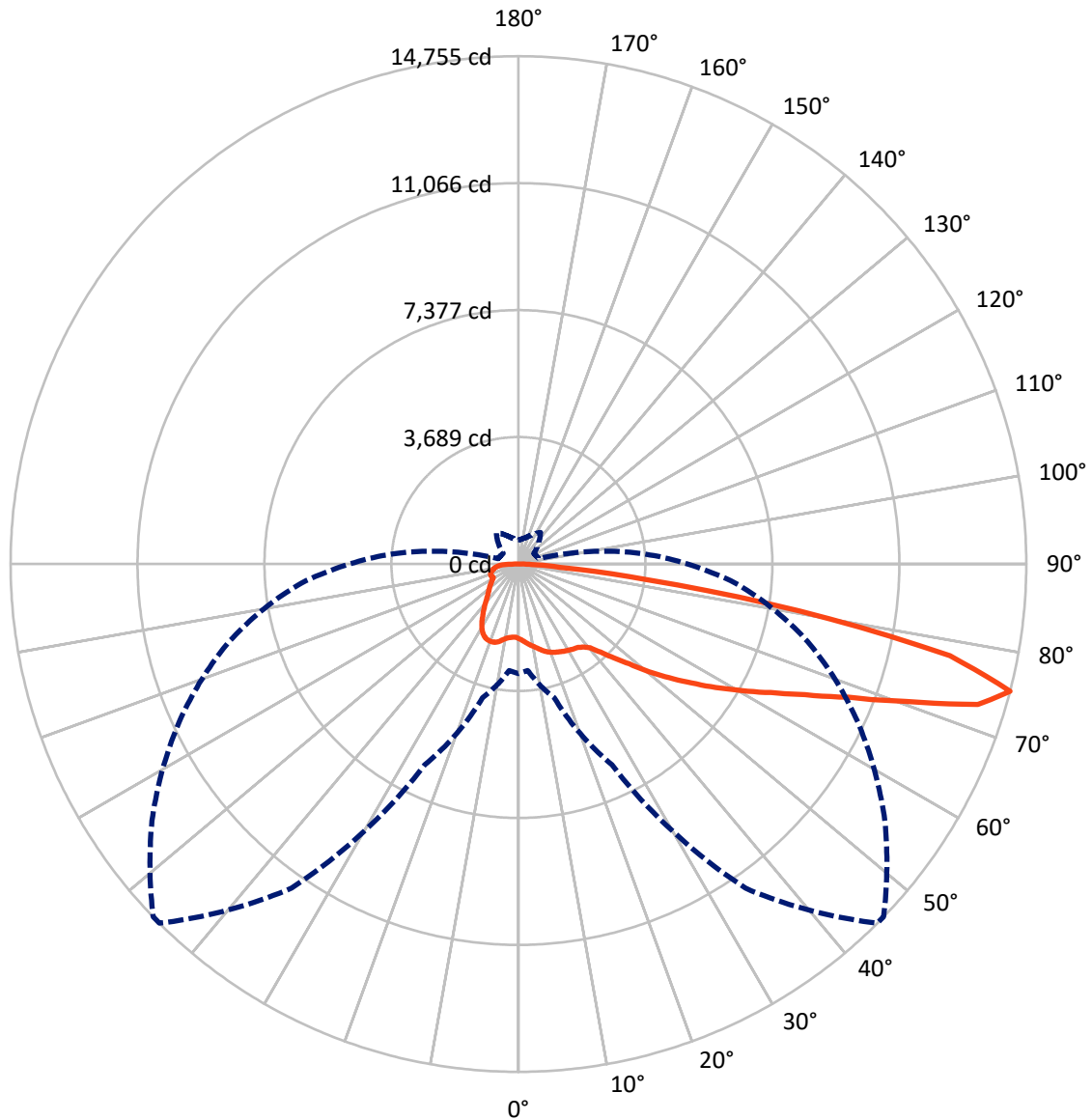


Based on 25 foot mounting height. Maximum calculated value = 4.1 fc  
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P265677

CATALOG NUMBER: ARCH-L-AF72-200-D-U-T4W-7027

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P265677

CATALOG NUMBER: ARCH-L-AF72-200-D-U-T4W-7027

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4894.6	0.0	4894.6
	% Fixture	23.2	0.0	23.2
<b>Street Side</b>	Lumens	16233.8	0.0	16233.8
	% Fixture	76.8	0.0	76.8
<b>Total</b>	Lumens	21128.4	0.0	21128.4
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	214.6	1.0
10°-20°	695.6	3.3
20°-30°	1193.6	5.6
30°-40°	1669.4	7.9
40°-50°	2448.8	11.6
50°-60°	3814.7	18.1
60°-70°	5489.0	26.0
70°-80°	4781.5	22.6
80°-90°	821.2	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°	21128.4	100.0
0°-180°	21128.4	100.0

**Coefficient of Utilization**



REPORT NUMBER: P265677

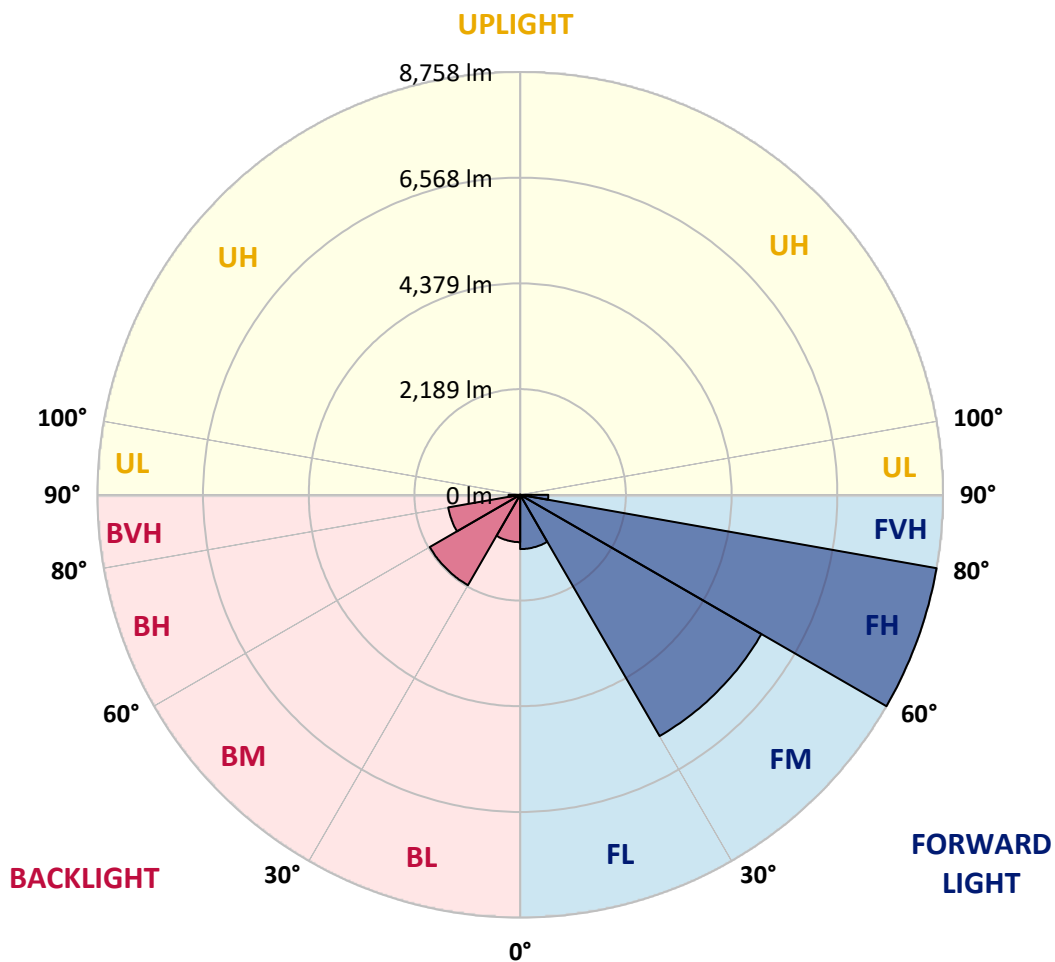
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1123.5	5.3			
FM	(30°-60°)	5769.8	27.3			
FH	(60°-80°)	8757.9	41.5			G4/12000
FVH	(80°-90°)	582.6	2.8			G4/750
BL	(0°-30°)	980.3	4.6	B2/1000		
BM	(30°-60°)	2163.1	10.2	B2/2500		
BH	(60°-80°)	1512.6	7.2	B3/2500		G3/2500
BVH	(80°-90°)	238.6	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-G4**

Type IV Medium





REPORT NUMBER: P265677

CATALOG NUMBER: ARCH-L-AF72-200-D-U-T4W-7027

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2166.0	2166.0	2166.0	2166.0	2166.0	2166.0	2166.0	2166.0	2166.0	2166.0	2166.0
2.5°	2272.8	2256.4	2256.4	2244.1	2244.1	2223.5	2215.3	2211.2	2190.5	2178.3	2166.0
5°	2404.4	2383.8	2379.7	2351.0	2338.6	2293.4	2289.2	2260.4	2223.5	2186.6	2157.6
7.5°	2523.5	2511.2	2490.6	2461.8	2424.9	2367.4	2363.3	2318.0	2256.4	2207.0	2166.0
10°	2609.8	2601.6	2572.8	2535.8	2494.8	2437.2	2433.1	2383.8	2309.8	2252.3	2194.6
12.5°	2712.6	2700.2	2663.3	2614.0	2568.8	2515.3	2511.2	2470.1	2387.9	2313.9	2240.0
15°	2811.2	2794.7	2749.6	2700.2	2651.0	2605.8	2605.8	2560.4	2474.2	2387.9	2301.5
17.5°	2860.6	2852.3	2807.2	2753.7	2712.6	2679.7	2675.6	2634.5	2548.2	2457.8	2363.3
20°	2877.0	2881.1	2840.0	2782.5	2753.7	2737.2	2733.2	2704.3	2609.8	2523.5	2433.1
22.5°	2872.9	2885.1	2852.3	2790.7	2782.5	2782.5	2782.5	2749.6	2675.6	2589.3	2498.8
25°	2889.3	2905.7	2881.1	2807.2	2807.2	2823.6	2823.6	2807.2	2741.4	2667.3	2577.0
27.5°	2946.9	2959.1	2938.6	2835.9	2840.0	2864.7	2860.6	2864.7	2823.6	2753.7	2663.3
30°	3016.7	3033.1	3008.6	2881.1	2877.0	2901.6	2901.6	2922.1	2893.4	2819.4	2745.5
32.5°	3205.8	3201.6	3123.5	2930.5	2918.1	2942.8	2942.8	2963.2	2946.9	2889.3	2819.4
35°	3768.8	3707.1	3534.7	3090.7	2967.5	2979.8	2979.8	3016.7	3025.0	2979.8	2918.1
37.5°	4344.3	4323.7	4192.2	3518.1	3148.2	3057.8	3053.7	3107.1	3144.2	3107.1	3066.1
40°	4923.7	4907.4	4878.5	4089.4	3526.3	3197.5	3185.2	3230.5	3296.2	3271.5	3246.8
42.5°	5462.1	5453.9	5482.7	4652.5	4007.2	3497.6	3460.6	3407.2	3501.8	3493.5	3493.5
45°	5885.4	5906.0	5922.4	5178.5	4529.2	3883.9	3838.6	3657.9	3785.3	3818.2	3842.8
47.5°	6123.8	6140.4	6197.9	5692.3	5051.2	4331.8	4299.0	4003.0	4171.5	4270.3	4340.2
50°	6465.0	6419.7	6469.1	6193.8	5680.1	4915.5	4825.1	4467.5	4681.2	4853.9	5018.3
52.5°	6793.8	6719.9	6761.0	6773.2	6395.2	5486.8	5392.3	5014.2	5281.3	5552.6	5844.5
55°	7089.8	7085.7	7126.8	7336.3	7085.7	6099.2	5992.4	5618.3	6004.7	6296.5	6789.7
57.5°	7328.1	7369.2	7550.1	7989.7	7882.9	6765.0	6645.8	6321.2	6777.4	7069.1	7887.1
60°	7607.6	7673.3	7973.4	8544.7	8610.4	7463.7	7340.4	7106.1	7570.6	7866.5	9157.1
62.5°	7702.1	7796.6	8413.2	9128.2	9370.7	8228.1	8117.3	7961.0	8404.9	8672.1	10422.9
65°	7073.3	7254.2	8655.6	9428.3	10188.7	9148.8	9054.2	8918.6	9235.1	9411.8	11281.9
67.5°	6900.6	6982.9	8183.0	9859.8	10957.2	10332.5	10238.0	10003.6	10011.9	9937.9	11561.4
70°	6658.1	6748.5	7697.9	10184.5	12058.7	11951.8	11836.7	11146.3	10722.9	10275.0	11010.6
72.5°	5671.8	5643.1	6633.5	9309.0	12588.8	13957.4	13821.9	12375.1	11248.9	9983.1	9292.6
75°	3185.2	3103.0	4023.7	6440.3	11495.6	14754.8	14750.7	12995.7	10879.2	8696.8	6325.2
77.5°	924.7	900.1	1327.5	2700.2	7739.1	12819.1	12975.2	11721.7	9078.9	6247.2	3472.9
80°	435.7	443.9	571.3	891.8	3304.4	8273.4	8721.4	7718.5	5425.1	2881.1	1434.4
82.5°	275.4	279.6	390.5	575.5	1397.5	3756.5	4126.5	3472.9	2149.6	1245.3	632.9
85°	172.7	172.7	258.9	378.1	834.3	1200.1	1302.8	1183.6	920.7	678.1	345.3
87.5°	94.5	94.5	156.1	217.7	456.2	386.4	398.7	472.7	575.5	415.0	172.7
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: P265677

CATALOG NUMBER: ARCH-L-AF72-200-D-U-T4W-7027

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2166.0	2166.0	2166.0	2166.0	2166.0	2166.0	2166.0	2166.0	2166.0	2166.0	2166.0
2.5°	2161.9	2153.6	2141.3	2137.2	2133.0	2129.0	2133.0	2141.3	2133.0	2133.0	2137.2
5°	2149.6	2141.3	2124.9	2124.9	2129.0	2133.0	2153.6	2166.0	2170.0	2170.0	2170.0
7.5°	2149.6	2137.2	2124.9	2129.0	2137.2	2153.6	2186.6	2207.0	2223.5	2227.5	2227.5
10°	2170.0	2153.6	2145.4	2153.6	2178.3	2190.5	2223.5	2256.4	2276.9	2285.2	2285.2
12.5°	2207.0	2190.5	2190.5	2207.0	2240.0	2256.4	2285.2	2309.8	2334.4	2346.8	2346.8
15°	2268.7	2248.2	2252.3	2281.1	2318.0	2334.4	2354.9	2363.3	2383.8	2400.2	2400.2
17.5°	2326.3	2305.7	2313.9	2346.8	2371.4	2379.7	2391.9	2387.9	2396.0	2408.4	2412.6
20°	2391.9	2371.4	2375.6	2396.0	2400.2	2391.9	2391.9	2379.7	2375.6	2396.0	2404.4
22.5°	2457.8	2437.2	2433.1	2420.8	2400.2	2379.7	2367.4	2354.9	2346.8	2367.4	2375.6
25°	2535.8	2507.1	2486.5	2433.1	2379.7	2342.7	2326.3	2318.0	2313.9	2334.4	2342.7
27.5°	2622.2	2593.3	2531.8	2416.7	2330.4	2268.7	2256.4	2256.4	2264.5	2276.9	2285.2
30°	2704.3	2675.6	2564.7	2379.7	2244.1	2153.6	2141.3	2153.6	2174.2	2186.6	2198.8
32.5°	2786.5	2757.7	2585.1	2322.1	2116.6	2001.6	1993.2	2013.9	2046.8	2055.1	2063.1
35°	2897.6	2868.7	2609.8	2240.0	1956.4	1833.0	1824.8	1837.2	1865.9	1878.3	1890.7
37.5°	3053.7	3037.3	2646.9	2149.6	1808.4	1672.7	1648.1	1639.9	1656.4	1652.3	1668.6
40°	3259.2	3271.5	2712.6	2030.3	1664.5	1524.9	1471.3	1446.7	1430.3	1397.5	1413.8
42.5°	3559.3	3567.4	2786.5	1894.6	1541.2	1385.0	1315.2	1269.9	1237.1	1183.6	1192.0
45°	3999.1	3929.1	2872.9	1750.8	1430.3	1274.1	1192.0	1138.4	1093.2	1048.1	1052.2
47.5°	4582.7	4368.8	2967.5	1631.6	1319.3	1183.6	1109.6	1048.1	994.7	957.7	961.7
50°	5301.8	4915.5	3062.0	1520.7	1208.3	1113.8	1048.1	982.2	928.8	891.8	887.7
52.5°	6251.2	5573.2	3123.5	1397.5	1097.4	1052.2	994.7	933.0	867.3	821.9	817.8
55°	7237.6	6337.6	3177.0	1249.5	990.6	982.2	953.6	883.7	805.6	748.0	739.8
57.5°	8322.6	7155.4	3218.1	1105.5	908.2	924.7	916.5	834.3	748.0	694.6	690.4
60°	9309.0	8002.1	3086.5	978.2	834.3	867.3	875.4	805.6	760.3	772.7	776.8
62.5°	10303.6	8655.6	2585.1	883.7	784.9	830.3	900.1	896.0	875.4	896.0	900.1
65°	10661.3	8791.3	1833.0	805.6	735.7	846.7	978.2	970.0	875.4	838.5	830.3
67.5°	10459.9	8388.5	1233.1	743.8	698.7	867.3	1060.4	970.0	842.5	793.3	776.8
70°	9502.2	7397.9	904.2	682.3	665.9	863.1	1105.5	965.9	826.1	772.7	752.2
72.5°	7578.8	5708.8	727.4	624.7	616.4	842.5	1130.2	957.7	809.6	752.2	727.4
75°	4907.4	3551.0	612.4	567.2	542.5	809.6	1117.9	933.0	789.2	715.1	698.7
77.5°	2276.9	1528.9	521.9	501.4	472.7	760.3	1080.9	883.7	743.8	674.1	653.4
80°	1060.4	723.3	439.8	435.7	423.3	719.3	1031.7	826.1	690.4	632.9	600.1
82.5°	567.2	435.7	357.5	357.5	369.9	670.0	970.0	756.3	620.5	591.9	505.6
85°	300.0	250.6	258.9	279.6	316.5	591.9	887.7	682.3	542.5	452.0	439.8
87.5°	152.1	160.3	160.3	189.1	242.5	480.9	731.6	563.1	460.3	369.9	361.7
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)