

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: P265686

Luminaire Tested: **ARCH-L-AF72-210-D-U-T4W-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265686  
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-AF72-210-D-U-T4W-7027  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 900mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21775.1 lumens  
Efficiency: N/A  
Efficacy: 103.2 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): 211  
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

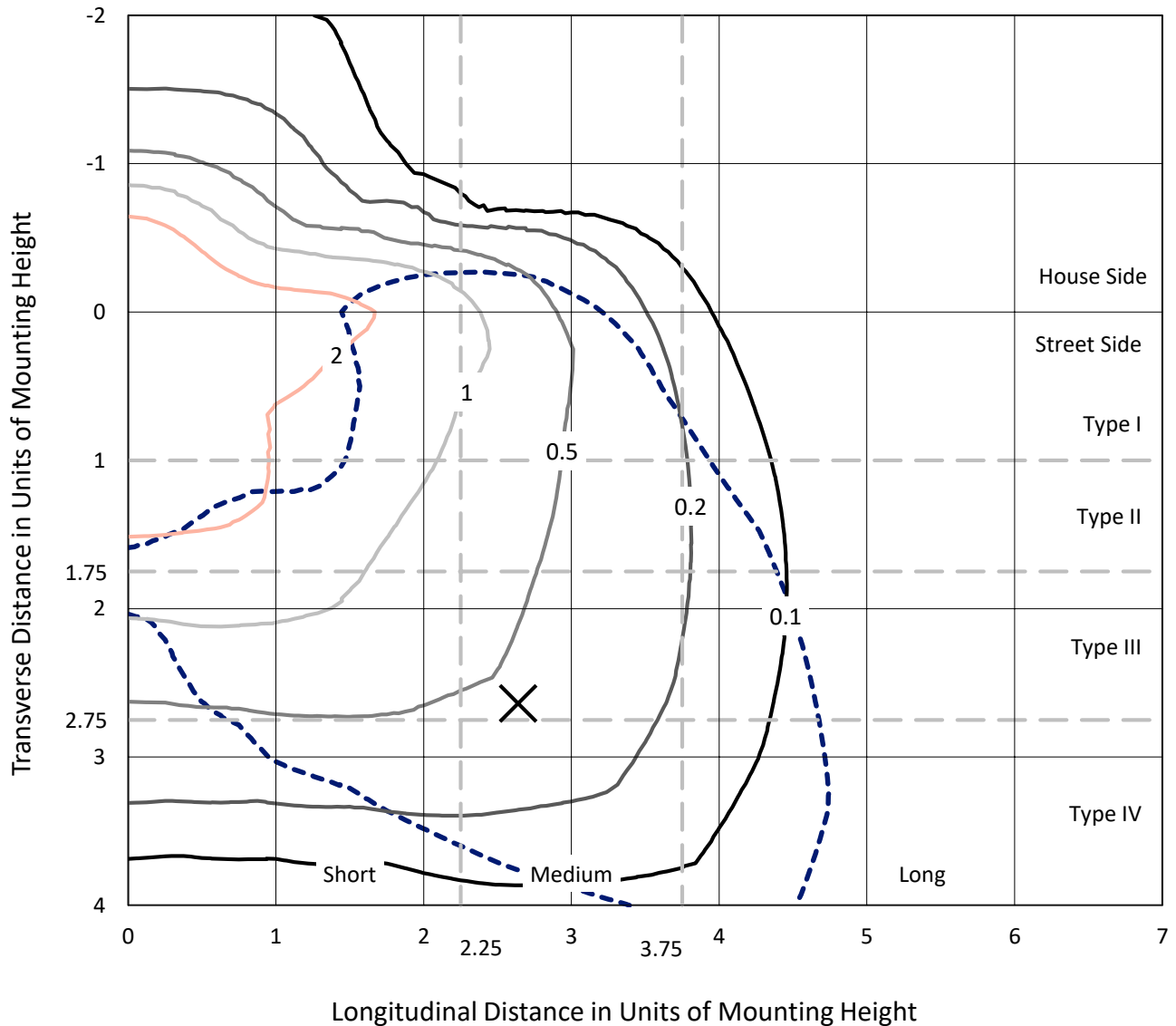


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

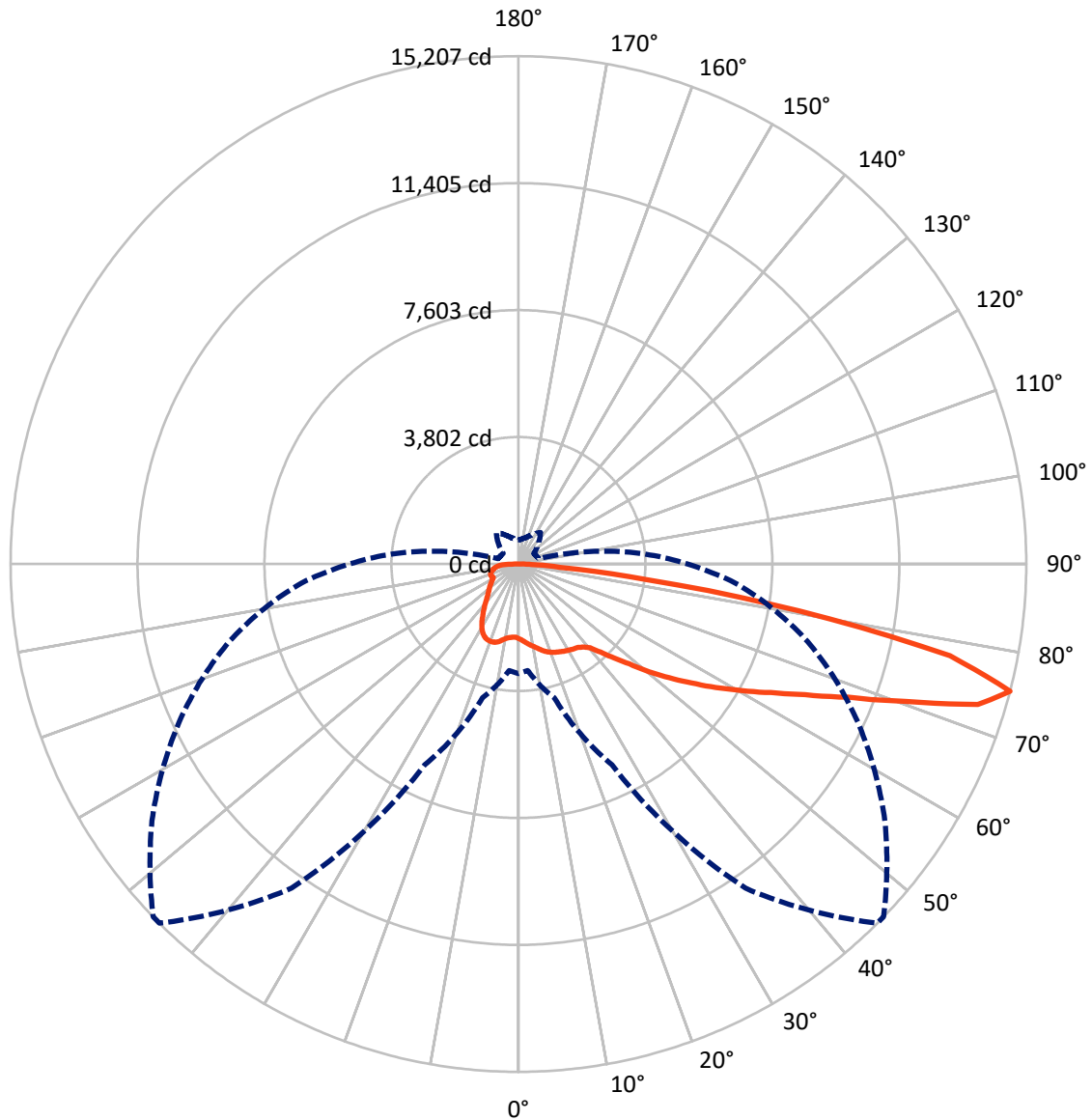


Based on 25 foot mounting height. Maximum calculated value = 4.2 fc  
 Type IV - Medium - Non-Cutoff

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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
<b>House Side</b>	Lumens	5044.4	0.0	5044.4
	% Fixture	23.2	0.0	23.2
<b>Street Side</b>	Lumens	16730.7	0.0	16730.7
	% Fixture	76.8	0.0	76.8
<b>Total</b>	Lumens	21775.1	0.0	21775.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	221.2	1.0
10°-20°	716.9	3.3
20°-30°	1230.2	5.6
30°-40°	1720.5	7.9
40°-50°	2523.8	11.6
50°-60°	3931.4	18.1
60°-70°	5657.0	26.0
70°-80°	4927.9	22.6
80°-90°	846.3	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°	21775.1	100.0
0°-180°	21775.1	100.0

**Coefficient of Utilization**



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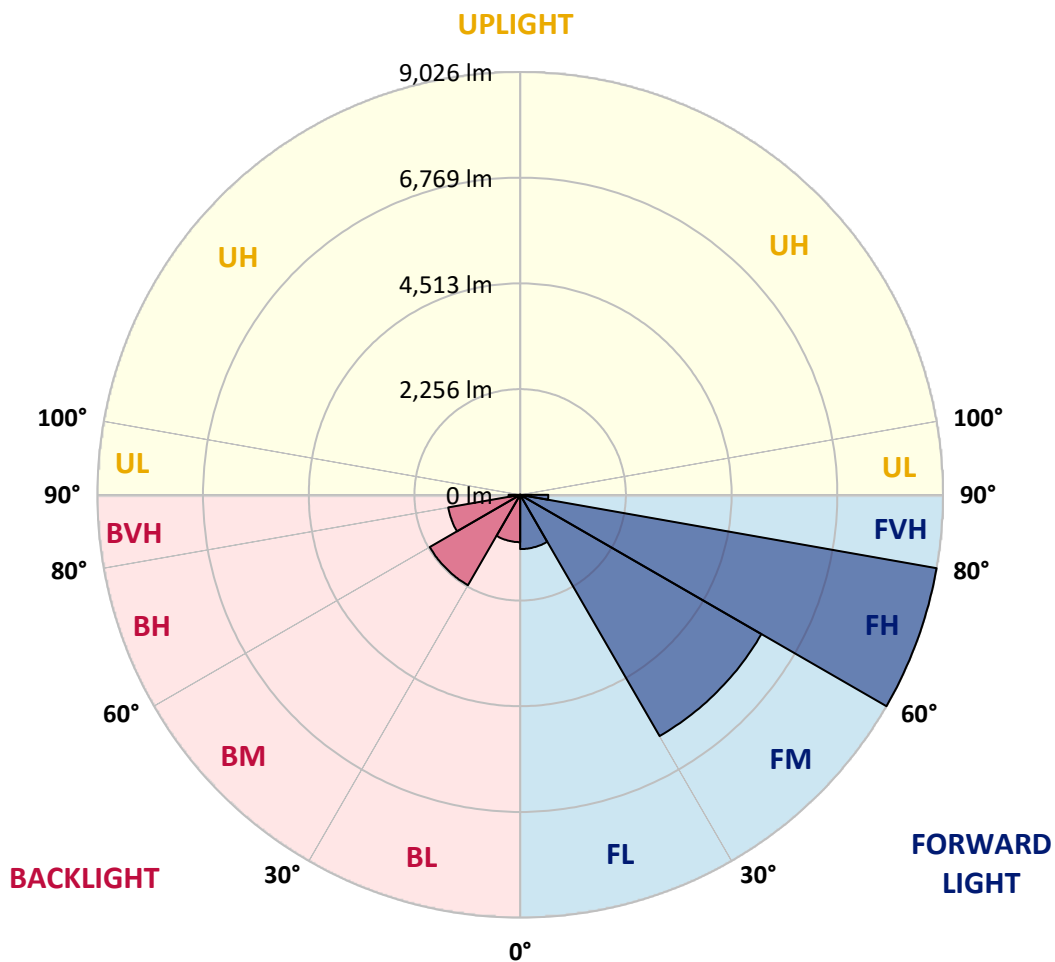
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1157.9	5.3			
FM	(30°-60°)	5946.4	27.3			
FH	(60°-80°)	9026.0	41.5			G4/12000
FVH	(80°-90°)	600.5	2.8			G4/750
BL	(0°-30°)	1010.3	4.6	B3/2500		
BM	(30°-60°)	2229.4	10.2	B2/2500		
BH	(60°-80°)	1558.9	7.2	B3/2500		G3/2500
BVH	(80°-90°)	245.9	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2232.3	2232.3	2232.3	2232.3	2232.3	2232.3	2232.3	2232.3	2232.3	2232.3	2232.3
2.5°	2342.4	2325.4	2325.4	2312.7	2312.7	2291.5	2283.1	2278.9	2257.7	2245.0	2232.3
5°	2478.0	2456.8	2452.6	2422.9	2410.2	2363.6	2359.4	2329.7	2291.5	2253.5	2223.8
7.5°	2600.8	2588.0	2566.8	2537.3	2499.2	2439.7	2435.6	2389.0	2325.4	2274.6	2232.3
10°	2689.7	2681.3	2651.5	2613.4	2571.0	2511.8	2507.6	2456.8	2380.5	2321.2	2261.9
12.5°	2795.6	2782.9	2744.9	2693.9	2647.3	2592.2	2588.0	2545.6	2460.9	2384.7	2308.6
15°	2897.3	2880.3	2833.8	2782.9	2732.0	2685.6	2685.6	2639.0	2550.0	2460.9	2372.1
17.5°	2948.1	2939.7	2893.0	2837.9	2795.6	2761.7	2757.4	2715.1	2626.1	2533.0	2435.6
20°	2965.0	2969.3	2926.9	2867.6	2837.9	2821.0	2816.7	2787.1	2689.7	2600.8	2507.6
22.5°	2960.9	2973.5	2939.7	2876.2	2867.6	2867.6	2867.6	2833.8	2757.4	2668.5	2575.4
25°	2977.7	2994.7	2969.3	2893.0	2893.0	2910.0	2910.0	2893.0	2825.3	2749.1	2655.8
27.5°	3037.1	3049.7	3028.5	2922.6	2926.9	2952.4	2948.1	2952.4	2910.0	2837.9	2744.9
30°	3109.0	3126.0	3100.6	2969.3	2965.0	2990.5	2990.5	3011.7	2982.1	2905.7	2829.5
32.5°	3304.0	3299.7	3219.2	3020.1	3007.4	3032.8	3032.8	3054.0	3037.1	2977.7	2905.7
35°	3884.2	3820.8	3642.7	3185.3	3058.2	3070.9	3070.9	3109.0	3117.6	3070.9	3007.4
37.5°	4477.2	4456.0	4320.5	3625.7	3244.6	3151.4	3147.2	3202.3	3240.4	3202.3	3159.9
40°	5074.4	5057.5	5027.9	4214.6	3634.4	3295.4	3282.8	3329.3	3397.1	3371.7	3346.2
42.5°	5629.4	5620.9	5650.6	4795.0	4129.9	3604.7	3566.5	3511.5	3608.9	3600.4	3600.4
45°	6065.6	6086.8	6103.8	5337.1	4667.9	4002.8	3956.2	3769.8	3901.2	3935.0	3960.4
47.5°	6311.3	6328.3	6387.6	5866.7	5205.8	4464.5	4430.6	4125.6	4299.3	4400.9	4473.0
50°	6662.9	6616.2	6667.1	6383.4	5853.9	5066.0	4972.7	4604.4	4824.5	5002.5	5171.9
52.5°	7001.7	6925.6	6967.9	6980.5	6590.9	5654.8	5557.4	5167.7	5443.0	5722.6	6023.2
55°	7306.8	7302.5	7344.8	7560.9	7302.5	6285.9	6175.8	5790.4	6188.6	6489.3	6997.5
57.5°	7552.4	7594.8	7781.2	8234.4	8124.2	6972.1	6849.2	6514.7	6984.9	7285.6	8128.5
60°	7840.4	7908.1	8217.4	8806.3	8873.9	7692.1	7565.2	7323.7	7802.3	8107.4	9437.4
62.5°	7937.9	8035.2	8670.7	9407.7	9657.6	8480.1	8365.6	8204.7	8662.1	8937.5	10741.9
65°	7289.7	7476.1	8920.6	9716.8	10500.5	9428.9	9331.5	9191.6	9517.8	9700.0	11627.2
67.5°	7111.9	7196.6	8433.5	10161.6	11292.7	10648.8	10551.3	10309.8	10318.4	10242.1	11915.3
70°	6862.1	6955.1	7933.7	10496.2	12427.8	12317.6	12199.1	11487.4	11051.2	10589.5	11347.7
72.5°	5845.5	5815.7	6836.6	9594.1	12974.2	14384.7	14245.0	12754.0	11593.3	10288.7	9577.1
75°	3282.8	3198.1	4146.8	6637.4	11847.4	15206.5	15202.2	13393.5	11212.1	8962.8	6518.9
77.5°	953.0	927.6	1368.2	2782.9	7976.1	13211.5	13372.3	12080.4	9356.8	6438.4	3579.2
80°	449.1	457.4	588.7	919.1	3405.6	8526.6	8988.4	7954.9	5591.2	2969.3	1478.3
82.5°	283.9	288.0	402.4	593.1	1440.2	3871.5	4252.8	3579.2	2215.3	1283.5	652.3
85°	178.0	178.0	266.8	389.7	859.9	1236.8	1342.7	1219.9	948.8	698.9	355.8
87.5°	97.5	97.5	160.9	224.4	470.2	398.2	410.9	487.2	593.1	427.9	178.0
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°	2232.3	2232.3	2232.3	2232.3	2232.3	2232.3	2232.3	2232.3	2232.3	2232.3	2232.3
2.5°	2228.1	2219.5	2206.9	2202.6	2198.4	2194.1	2198.4	2206.9	2198.4	2198.4	2202.6
5°	2215.3	2206.9	2189.9	2189.9	2194.1	2198.4	2219.5	2232.3	2236.5	2236.5	2236.5
7.5°	2215.3	2202.6	2189.9	2194.1	2202.6	2219.5	2253.5	2274.6	2291.5	2295.8	2295.8
10°	2236.5	2219.5	2211.1	2219.5	2245.0	2257.7	2291.5	2325.4	2346.6	2355.0	2355.0
12.5°	2274.6	2257.7	2257.7	2274.6	2308.6	2325.4	2355.0	2380.5	2405.9	2418.6	2418.6
15°	2338.2	2317.0	2321.2	2350.9	2389.0	2405.9	2427.1	2435.6	2456.8	2473.8	2473.8
17.5°	2397.4	2376.2	2384.7	2418.6	2444.1	2452.6	2465.2	2460.9	2469.5	2482.1	2486.4
20°	2465.2	2444.1	2448.3	2469.5	2473.8	2465.2	2465.2	2452.6	2448.3	2469.5	2478.0
22.5°	2533.0	2511.8	2507.6	2495.0	2473.8	2452.6	2439.7	2427.1	2418.6	2439.7	2448.3
25°	2613.4	2583.9	2562.7	2507.6	2452.6	2414.5	2397.4	2389.0	2384.7	2405.9	2414.5
27.5°	2702.5	2672.7	2609.2	2490.6	2401.7	2338.2	2325.4	2325.4	2333.9	2346.6	2355.0
30°	2787.1	2757.4	2643.2	2452.6	2312.7	2219.5	2206.9	2219.5	2240.7	2253.5	2266.2
32.5°	2871.9	2842.1	2664.4	2393.3	2181.4	2062.9	2054.3	2075.5	2109.4	2117.9	2126.4
35°	2986.2	2956.6	2689.7	2308.6	2016.2	1889.1	1880.7	1893.4	1923.0	1935.8	1948.5
37.5°	3147.2	3130.2	2727.9	2215.3	1863.8	1723.9	1698.5	1690.2	1707.0	1702.7	1719.7
40°	3359.0	3371.7	2795.6	2092.5	1715.6	1571.5	1516.3	1490.9	1474.1	1440.2	1457.1
42.5°	3668.1	3676.7	2871.9	1952.6	1588.5	1427.4	1355.5	1308.9	1275.0	1219.9	1228.4
45°	4121.5	4049.4	2960.9	1804.4	1474.1	1313.1	1228.4	1173.4	1126.7	1080.1	1084.3
47.5°	4722.8	4502.7	3058.2	1681.5	1359.7	1219.9	1143.6	1080.1	1025.1	987.0	991.2
50°	5464.2	5066.0	3155.7	1567.3	1245.3	1147.9	1080.1	1012.4	957.4	919.1	915.0
52.5°	6442.6	5743.8	3219.2	1440.2	1131.0	1084.3	1025.1	961.5	893.8	847.1	842.9
55°	7459.3	6531.5	3274.2	1287.7	1020.8	1012.4	982.7	910.7	830.3	770.9	762.4
57.5°	8577.5	7374.5	3316.6	1139.4	936.2	953.0	944.6	859.9	770.9	715.9	711.5
60°	9594.1	8247.1	3181.1	1008.1	859.9	893.8	902.2	830.3	783.6	796.3	800.6
62.5°	10619.1	8920.6	2664.4	910.7	809.1	855.6	927.6	923.4	902.2	923.4	927.6
65°	10987.7	9060.3	1889.1	830.3	758.2	872.6	1008.1	999.6	902.2	864.1	855.6
67.5°	10780.1	8645.3	1270.7	766.7	720.1	893.8	1092.9	999.6	868.3	817.5	800.6
70°	9793.1	7624.5	931.9	703.2	686.1	889.5	1139.4	995.4	851.5	796.3	775.1
72.5°	7810.9	5883.4	749.7	643.8	635.5	868.3	1164.8	987.0	834.4	775.1	749.7
75°	5057.5	3659.8	631.1	584.5	559.1	834.4	1152.2	961.5	813.2	737.0	720.1
77.5°	2346.6	1575.6	537.9	516.7	487.2	783.6	1114.0	910.7	766.7	694.7	673.5
80°	1092.9	745.6	453.3	449.1	436.2	741.2	1063.1	851.5	711.5	652.3	618.5
82.5°	584.5	449.1	368.6	368.6	381.2	690.4	999.6	779.4	639.7	609.9	520.9
85°	309.1	258.4	266.8	288.0	326.2	609.9	915.0	703.2	559.1	466.0	453.3
87.5°	156.8	165.2	165.2	194.8	249.9	495.5	753.9	580.3	474.5	381.2	372.7
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)