

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: P237475

Luminaire Tested: **ARCH-L-AF72-220-D-U-T4W-7050-HSS**

Issue Date: 2/14/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P237475  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 2/14/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-220-D-U-T4W-7050-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 945mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18779 lumens  
Efficiency: N/A  
Efficacy: 84.6 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B1 - U0 - G4

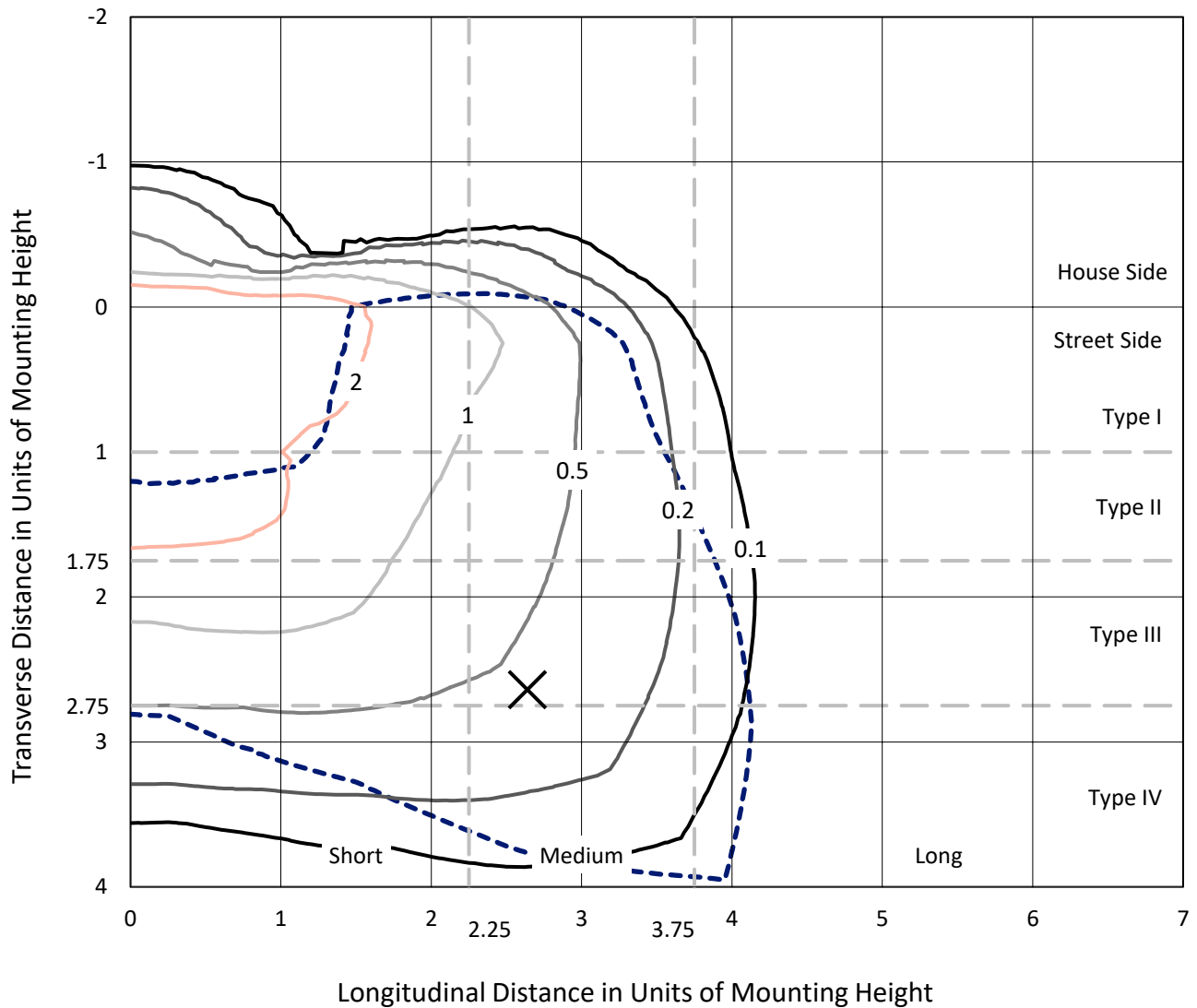
Input Watts (W): 222  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

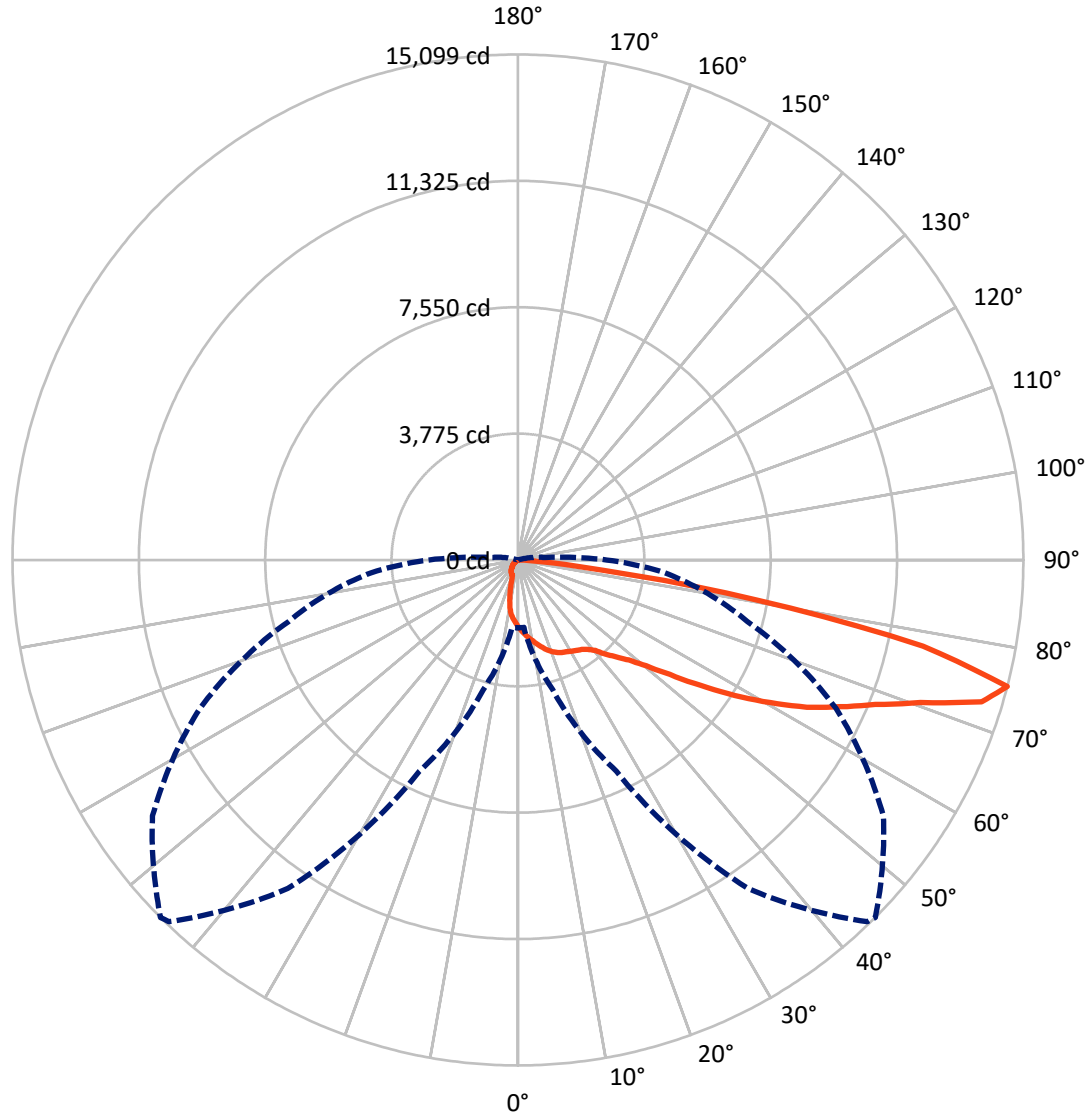
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.3 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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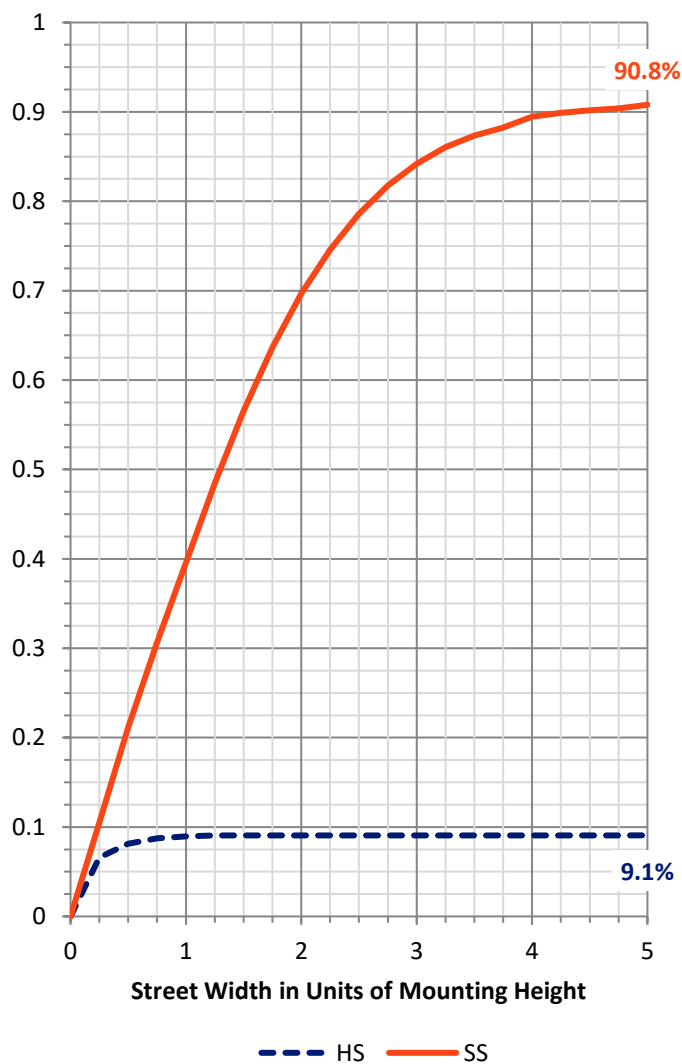
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1717.7	0.0	1717.7
	% Fixture	9.1	0.0	9.1
<b>Street Side</b>	Lumens	17061.3	0.0	17061.3
	% Fixture	90.9	0.0	90.9
<b>Total</b>	Lumens	18779.0	0.0	18779.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	189.6	1.0
10°-20°	537.0	2.9
20°-30°	889.4	4.7
30°-40°	1287.2	6.9
40°-50°	2107.7	11.2
50°-60°	3755.4	20.0
60°-70°	5520.9	29.4
70°-80°	4165.1	22.2
80°-90°	326.8	1.7
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°	18779.0	100.0
0°-180°	18779.0	100.0

**Coefficient of Utilization**



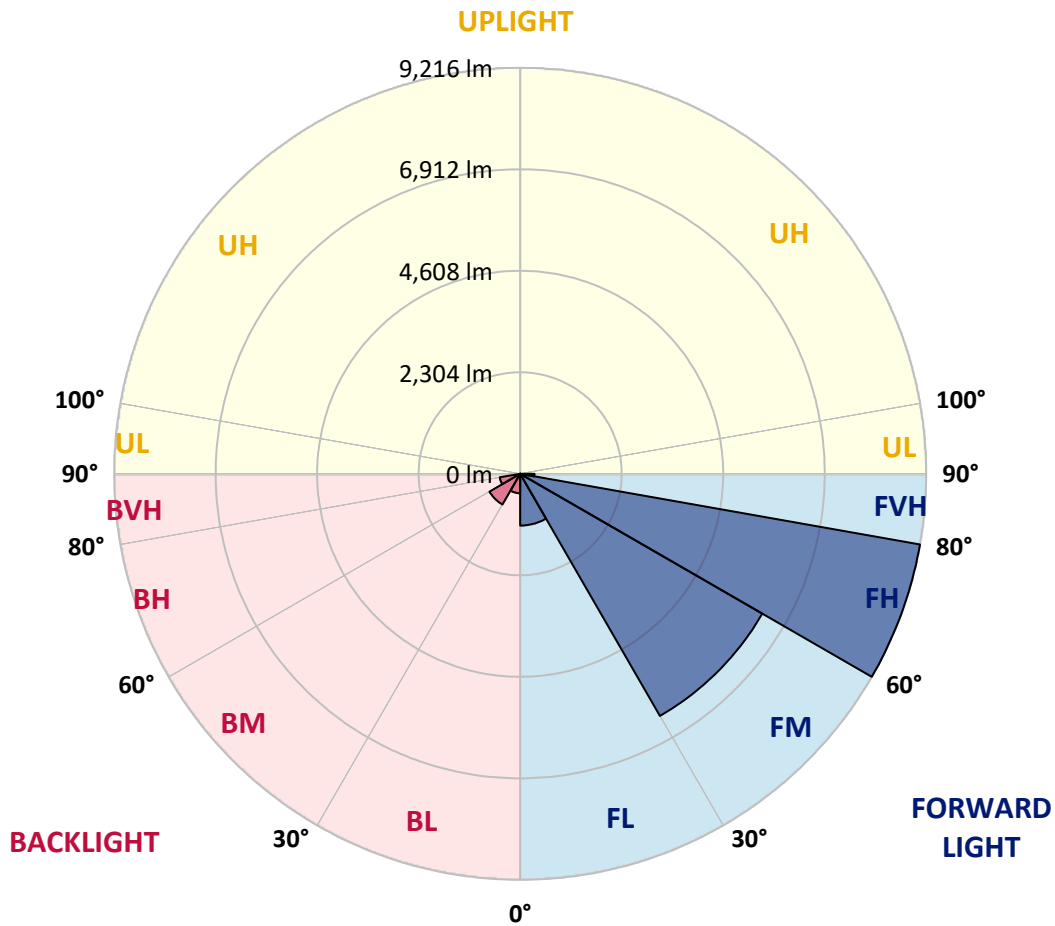
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 CATALOG NUMBER: ARCH-L-AF72-220-D-U-T4W-7050-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1174.6	6.3			
FM (30°-60°)	6345.3	33.8			
FH (60°-80°)	9215.5	49.1			G4/12000
FVH (80°-90°)	325.9	1.7			G3/500
BL (0°-30°)	441.4	2.4	B1/500		
BM (30°-60°)	804.9	4.3	B1/1000		
BH (60°-80°)	470.5	2.5	B1/500		G1/500
BVH (80°-90°)	0.9	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G4**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	2008.5	2008.5	2008.5	2008.5	2008.5	2008.5	2008.5	2008.5	2008.5	2008.5	2008.5
2.5°	2181.8	2181.8	2177.4	2172.9	2150.7	2128.5	2124.0	2110.7	2070.7	2044.1	2017.4
5°	2364.0	2368.4	2359.6	2337.3	2288.5	2239.6	2235.1	2199.6	2124.0	2070.7	2013.0
7.5°	2537.3	2546.2	2524.0	2484.0	2426.2	2355.1	2350.7	2284.0	2186.3	2110.7	2026.3
10°	2683.9	2683.9	2652.8	2604.0	2541.8	2466.2	2457.3	2381.8	2270.7	2177.4	2066.3
12.5°	2843.9	2839.5	2795.0	2728.4	2657.3	2586.2	2581.7	2488.4	2381.8	2261.8	2124.0
15°	2990.6	2981.7	2923.9	2861.7	2786.1	2710.6	2706.2	2612.8	2501.8	2359.6	2208.5
17.5°	3070.5	3066.1	3012.8	2950.6	2888.4	2830.6	2826.1	2728.4	2608.4	2461.8	2292.9
20°	3083.9	3088.3	3043.9	2990.6	2955.0	2923.9	2923.9	2835.0	2706.2	2550.6	2381.8
22.5°	3088.3	3101.6	3070.5	2999.4	2990.6	2995.0	3003.9	2932.8	2799.5	2652.8	2475.1
25°	3119.4	3137.2	3115.0	3030.5	3021.7	3052.8	3061.7	3030.5	2910.6	2763.9	2581.7
27.5°	3181.6	3199.4	3181.6	3075.0	3061.7	3092.8	3101.6	3119.4	3030.5	2870.6	2692.8
30°	3306.1	3310.5	3270.5	3137.2	3110.5	3150.5	3163.9	3212.7	3141.6	2972.8	2799.5
32.5°	3523.8	3479.4	3359.4	3181.6	3159.4	3203.8	3217.2	3270.5	3243.8	3070.5	2910.6
35°	3968.2	3737.1	3461.6	3243.8	3221.6	3266.1	3283.8	3359.4	3372.7	3208.3	3048.3
37.5°	3963.7	3754.9	3701.5	3363.8	3332.7	3363.8	3386.0	3479.4	3532.7	3390.5	3248.3
40°	4243.7	4154.8	4154.8	3590.4	3488.2	3532.7	3554.9	3648.2	3741.5	3630.4	3483.8
42.5°	5123.5	5065.7	5003.5	4025.9	3706.0	3830.4	3843.7	3901.5	4012.6	3977.0	3803.7
45°	6105.5	6052.2	5812.3	4763.6	4079.2	4101.5	4132.6	4225.9	4385.9	4452.5	4248.1
47.5°	6874.3	6821.0	6616.5	5652.3	4661.4	4465.8	4465.8	4648.0	4896.9	5065.7	4870.2
50°	7491.9	7429.7	7305.3	6598.8	5616.7	4990.2	4963.5	5176.8	5545.6	5807.8	5674.5
52.5°	8091.8	7909.6	7834.1	7576.4	6696.5	5750.0	5678.9	5830.0	6341.0	6665.4	6554.3
55°	8491.8	8465.1	8385.1	8474.0	7829.7	6674.3	6612.1	6643.2	7283.1	7500.8	7363.1
57.5°	8865.0	8860.6	9038.3	9451.6	9065.0	7731.9	7634.1	7585.3	8194.0	8140.7	8260.7
60°	9327.2	9247.2	9660.4	10251.4	10198.1	8762.8	8651.7	8554.0	8891.7	8740.6	9336.0
62.5°	9349.4	9327.2	10167.0	11015.7	11322.3	9811.5	9682.6	9331.6	9500.5	9327.2	10362.5
65°	8500.6	8611.7	10380.3	11420.1	12264.4	10731.3	10575.8	10029.2	10042.6	9927.0	11571.2
67.5°	8309.6	8367.3	9793.7	11855.6	12944.3	11660.1	11513.4	10833.5	10673.6	10682.5	12286.6
70°	7834.1	7923.0	9065.0	11824.5	13481.9	12899.8	12753.2	12015.5	11629.0	11197.9	11735.6
72.5°	5985.6	6136.6	7638.6	10367.0	13335.3	14521.7	14481.8	13513.0	12011.1	10282.5	8878.4
75°	2026.3	2021.8	4012.6	6963.2	11980.0	15019.4	15099.4	13326.4	10478.1	7092.0	4408.1
77.5°	435.5	439.9	826.5	2821.7	7958.5	12060.0	12366.6	10051.5	6758.7	3159.4	1008.7
80°	213.3	217.7	342.2	746.5	3181.6	6763.2	7243.1	5167.9	2497.3	631.0	168.9
82.5°	106.6	111.1	177.7	395.5	1177.6	2404.0	2568.4	1901.9	715.4	355.5	84.4
85°	40.0	40.0	88.9	235.5	537.7	564.3	693.2	551.0	431.0	288.8	22.2
87.5°	8.9	8.9	48.9	115.5	240.0	177.7	177.7	168.9	262.2	195.5	8.9
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°	2008.5	2008.5	2008.5	2008.5	2008.5	2008.5	2008.5	2008.5	2008.5	2008.5	2008.5
2.5°	2004.1	1986.3	1955.2	1924.1	1901.9	1875.2	1861.9	1848.5	1844.1	1839.7	1848.5
5°	1981.9	1955.2	1897.4	1848.5	1804.1	1768.6	1741.9	1715.2	1701.9	1693.0	1697.5
7.5°	1981.9	1941.9	1857.4	1781.9	1710.8	1635.3	1559.7	1501.9	1457.5	1430.8	1435.3
10°	2004.1	1950.7	1839.7	1737.5	1604.1	1444.2	1279.8	1155.3	1070.9	1022.0	1022.0
12.5°	2053.0	1981.9	1844.1	1684.1	1457.5	1177.6	928.7	777.6	715.4	679.9	684.3
15°	2119.6	2035.2	1866.3	1613.0	1253.1	875.4	648.8	551.0	551.0	559.9	564.3
17.5°	2195.1	2101.8	1884.1	1506.4	990.9	626.6	511.0	502.1	515.5	537.7	537.7
20°	2270.7	2168.5	1893.0	1337.5	742.1	497.7	484.4	484.4	493.2	515.5	519.9
22.5°	2364.0	2252.9	1884.1	1128.7	555.5	471.0	466.6	466.6	466.6	493.2	493.2
25°	2461.8	2350.7	1848.5	906.5	471.0	453.2	448.8	444.4	444.4	466.6	471.0
27.5°	2572.9	2452.9	1764.1	693.2	444.4	435.5	431.0	422.1	422.1	439.9	439.9
30°	2683.9	2568.4	1635.3	524.3	422.1	417.7	408.8	399.9	391.0	408.8	408.8
32.5°	2803.9	2688.4	1466.4	417.7	391.0	391.0	386.6	373.3	364.4	373.3	377.7
35°	2963.9	2826.1	1275.3	364.4	351.0	351.0	351.0	346.6	328.8	337.7	337.7
37.5°	3177.2	3017.2	1053.1	337.7	319.9	311.1	311.1	311.1	297.7	302.2	302.2
40°	3448.2	3239.4	839.8	315.5	297.7	275.5	266.6	271.1	262.2	262.2	257.7
42.5°	3817.1	3479.4	631.0	297.7	279.9	248.8	231.1	226.6	217.7	213.3	213.3
45°	4345.9	3772.6	453.2	279.9	266.6	217.7	200.0	186.6	164.4	151.1	151.1
47.5°	5030.2	4105.9	337.7	262.2	253.3	191.1	168.9	142.2	111.1	102.2	102.2
50°	5865.6	4479.2	284.4	235.5	231.1	168.9	133.3	93.3	62.2	53.3	57.8
52.5°	6678.8	4830.2	253.3	208.9	204.4	146.6	97.8	48.9	26.7	26.7	26.7
55°	7363.1	5079.1	231.1	186.6	177.7	115.5	53.3	22.2	13.3	13.3	13.3
57.5°	7980.7	5221.3	208.9	164.4	142.2	80.0	22.2	8.9	8.9	4.4	4.4
60°	8545.1	5305.7	182.2	142.2	111.1	44.4	8.9	4.4	4.4	0.0	0.0
62.5°	9100.5	5367.9	155.5	115.5	84.4	17.8	4.4	4.4	0.0	0.0	0.0
65°	9522.7	5345.7	124.4	93.3	53.3	8.9	4.4	0.0	0.0	0.0	0.0
67.5°	9509.3	5043.5	93.3	71.1	26.7	4.4	0.0	0.0	0.0	0.0	0.0
70°	8505.1	4248.1	62.2	44.4	8.9	4.4	0.0	0.0	0.0	0.0	0.0
72.5°	6034.4	2723.9	40.0	26.7	4.4	0.0	0.0	0.0	0.0	0.0	0.0
75°	2657.3	826.5	22.2	13.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	519.9	191.1	13.3	8.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	124.4	22.2	4.4	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	53.3	8.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.3	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.9	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)