

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: P237215

Luminaire Tested: **ARCH-L-AF72-220-D-U-T3-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P237215  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-220-D-U-T3-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 945mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19457.5 lumens  
Efficiency: N/A  
Efficacy: 87.6 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type III - Medium - Semi-Cutoff  
BUG Rating: B2 - U0 - G4

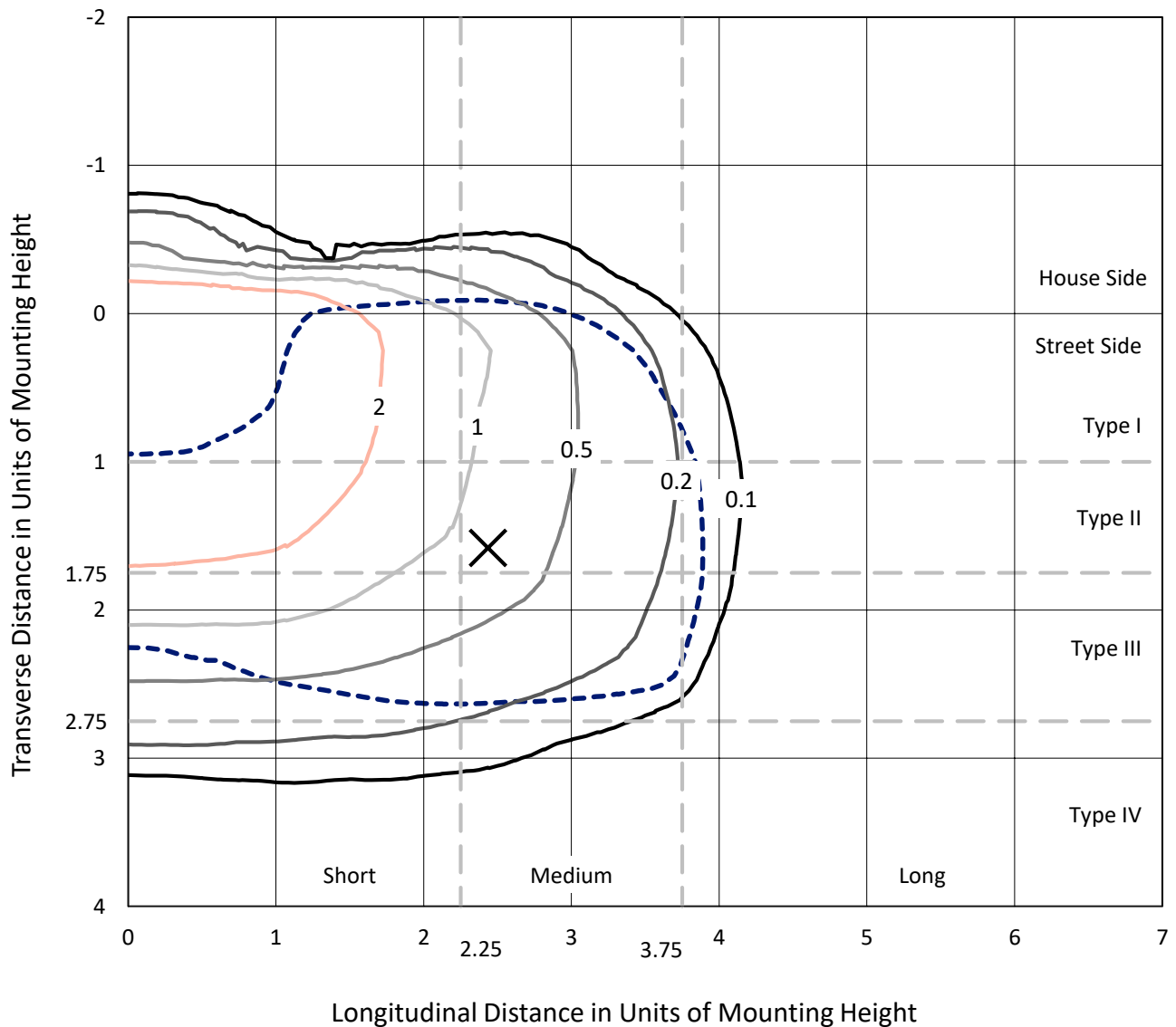
Input Watts (W): 222  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P237215  
 CATALOG NUMBER: ARCH-L-AF72-220-D-U-T3-HSS

### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

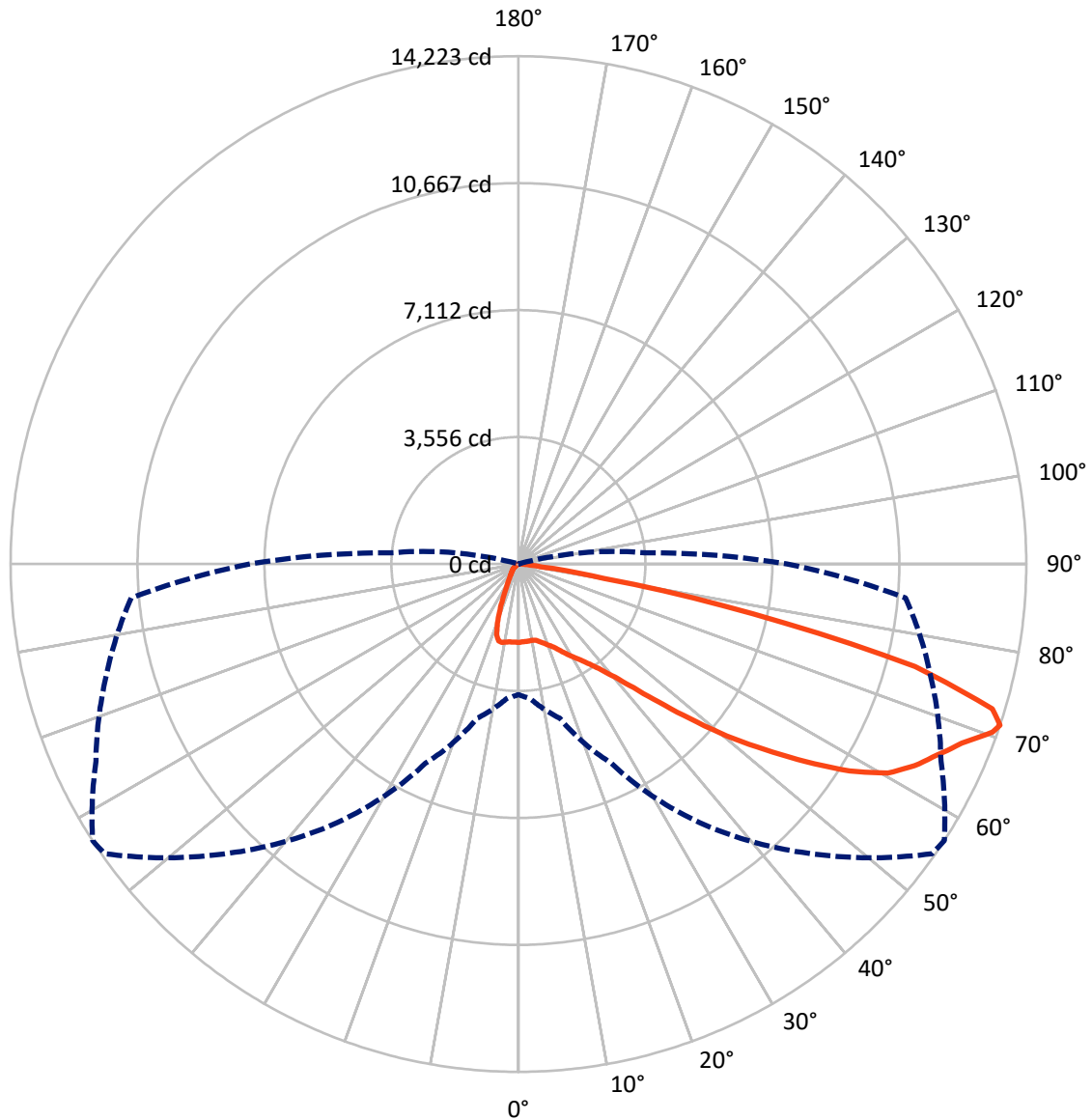


Based on 25 foot mounting height. Maximum calculated value = 4.4 fc  
 Type III - Medium - Semi-Cutoff

REPORT NUMBER: P237215

CATALOG NUMBER: ARCH-L-AF72-220-D-U-T3-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral      - - - Horizontal Cone Through 71-Deg Vertical

REPORT NUMBER: P237215

CATALOG NUMBER: ARCH-L-AF72-220-D-U-T3-HSS

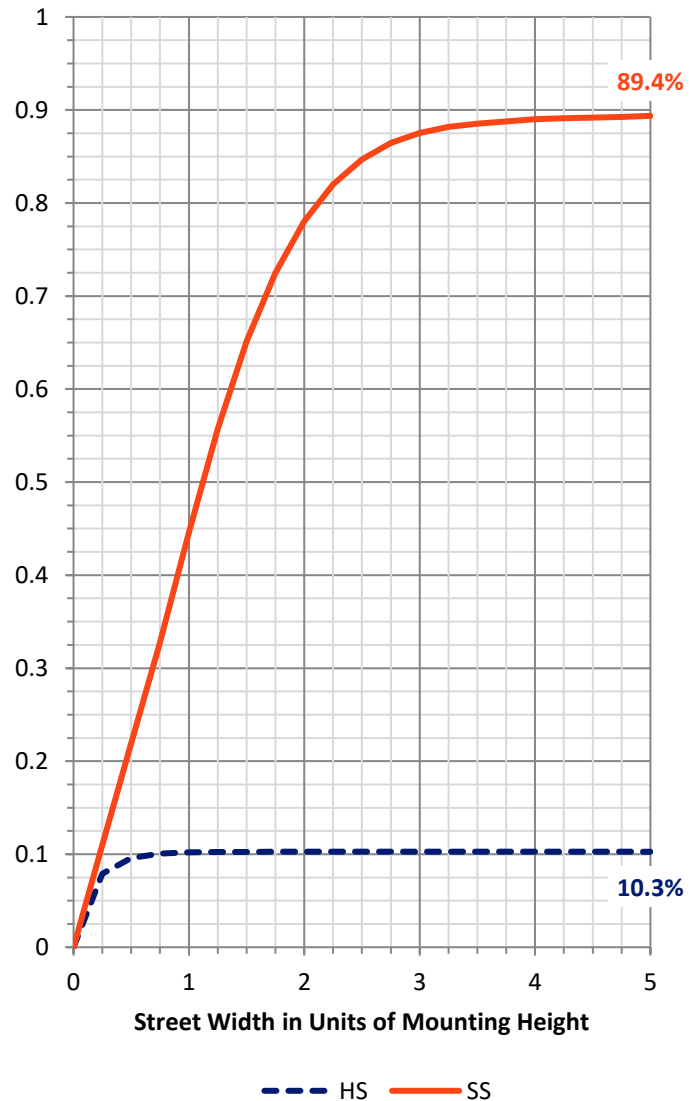
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2016.4	0.0	2016.4
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	17441.1	0.0	17441.1
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	19457.5	0.0	19457.5
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	206.5	1.1
10°-20°	552.2	2.8
20°-30°	861.4	4.4
30°-40°	1455.9	7.5
40°-50°	2827.7	14.5
50°-60°	4748.6	24.4
60°-70°	5667.0	29.1
70°-80°	2986.6	15.3
80°-90°	151.8	0.8
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°	19457.5	100.0
0°-180°	19457.5	100.0



REPORT NUMBER: P237215

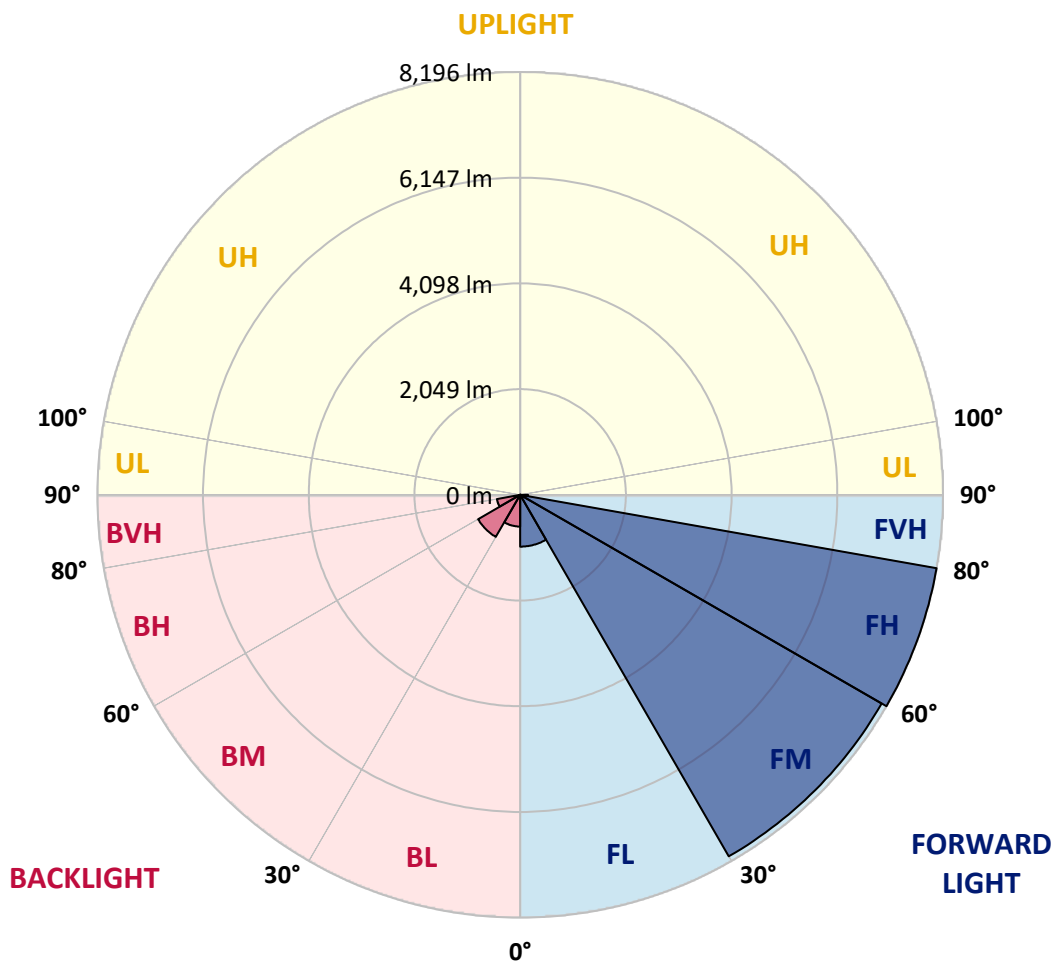
CATALOG NUMBER: ARCH-L-AF72-220-D-U-T3-HSS

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1004.6	5.2			
FM	(30°-60°)	8090.6	41.6			
FH	(60°-80°)	8195.7	42.1			G4/12000
FVH	(80°-90°)	150.3	0.8			G2/225
BL	(0°-30°)	615.5	3.2	B2/1000		
BM	(30°-60°)	941.5	4.8	B1/1000		
BH	(60°-80°)	457.9	2.4	B1/500		G1/500
BVH	(80°-90°)	1.4	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G4**

Type III Medium





REPORT NUMBER: P237215

CATALOG NUMBER: ARCH-L-AF72-220-D-U-T3-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	2199.0	2199.0	2199.0	2199.0	2199.0	2199.0	2199.0	2199.0	2199.0	2199.0	2199.0
2.5°	2167.2	2167.2	2167.2	2171.8	2176.3	2176.3	2185.4	2180.8	2180.8	2180.8	2189.9
5°	2108.3	2112.8	2117.4	2126.4	2144.6	2158.2	2180.8	2180.8	2185.4	2194.4	2199.0
7.5°	2026.7	2031.3	2044.9	2063.0	2099.3	2131.0	2167.2	2176.3	2189.9	2212.6	2221.6
10°	1976.9	1985.9	2004.1	2026.7	2067.5	2108.3	2153.6	2167.2	2208.0	2248.9	2271.6
12.5°	1963.2	1967.7	1985.9	2022.2	2072.1	2121.9	2180.8	2194.4	2253.4	2316.9	2353.2
15°	1985.9	1990.5	1999.5	2040.3	2099.3	2162.7	2239.9	2258.0	2330.5	2403.0	2448.3
17.5°	2026.7	2026.7	2035.8	2072.1	2135.5	2208.0	2307.8	2335.0	2416.6	2498.3	2548.1
20°	2053.9	2053.9	2067.5	2103.8	2176.3	2271.6	2389.4	2425.7	2516.4	2607.1	2652.4
22.5°	2081.1	2085.7	2099.3	2140.0	2221.6	2353.2	2489.1	2525.5	2629.7	2724.9	2770.3
25°	2158.2	2153.6	2158.2	2194.4	2289.7	2452.9	2625.2	2670.5	2779.4	2883.6	2906.3
27.5°	2371.3	2362.2	2303.3	2280.6	2353.2	2557.2	2797.5	2842.8	2969.8	3074.1	3074.1
30°	2861.0	2842.8	2697.7	2511.9	2452.9	2652.4	2960.7	3024.1	3187.4	3278.0	3250.9
32.5°	3482.1	3441.3	3255.4	2938.0	2702.2	2779.4	3133.0	3205.5	3414.1	3491.2	3432.2
35°	4162.2	4157.7	3926.5	3518.4	3182.9	3042.4	3355.2	3441.3	3704.3	3772.3	3677.1
37.5°	4883.2	4901.3	4747.1	4184.9	3790.4	3473.0	3649.9	3749.6	4071.5	4153.2	4062.4
40°	5685.7	5681.2	5622.1	4955.7	4520.4	4085.2	4076.0	4166.8	4556.7	4683.7	4556.7
42.5°	6701.2	6692.2	6479.1	5880.6	5404.6	4883.2	4697.3	4729.0	5164.3	5372.8	5186.9
45°	7735.0	7671.5	7426.7	6909.8	6488.2	5871.5	5517.9	5517.9	5889.6	6175.3	5885.1
47.5°	8310.9	8247.3	8147.6	7862.0	7735.0	7045.9	6524.5	6461.0	6751.2	7041.3	6633.2
50°	9068.0	9068.0	8818.7	8709.8	8927.5	8442.3	7635.3	7571.8	7712.3	7943.6	7408.6
52.5°	9666.5	9557.7	9380.9	9476.1	10097.2	9875.1	8746.1	8623.7	8732.5	8791.4	8084.2
55°	9915.9	9811.6	9798.0	10147.2	11108.3	10800.0	9884.2	9775.3	9766.3	9476.1	8673.6
57.5°	9965.8	9875.1	10047.4	10659.5	12092.2	11557.2	11017.7	10936.1	10682.2	9956.7	9276.6
60°	9544.1	9589.4	10006.6	10940.6	12672.6	12214.6	11974.4	11888.2	11303.3	10364.7	9947.6
62.5°	8678.1	8786.9	9566.7	10967.8	12459.4	12482.1	12504.9	12445.8	11783.9	10736.6	10623.2
65°	7653.4	7685.1	8623.7	10591.4	12087.7	12400.5	12894.7	12890.2	12151.1	11153.6	11384.9
67.5°	6306.8	6361.2	7172.8	9321.9	11344.1	12364.3	13407.1	13393.5	12568.3	11629.7	11838.3
70°	4692.7	4760.7	5418.2	7249.9	9684.7	11910.8	14078.2	14087.2	13008.0	11992.5	11525.5
71°	3659.0	3781.3	4470.5	6157.2	8836.8	11453.0	14141.6	14223.2	13058.0	11942.6	10881.6
72.5°	1795.5	1940.5	2806.6	4334.5	7272.6	10428.3	13724.4	13883.2	12745.1	11321.4	9303.8
75°	467.0	494.2	838.8	1772.8	3899.3	6909.8	11067.5	11471.1	10419.2	8619.2	5685.7
77.5°	294.7	303.8	394.4	689.2	1460.0	2625.2	6501.8	6701.2	5953.2	4366.3	2004.1
80°	208.6	213.1	249.4	444.4	852.4	766.3	2339.6	2425.7	2153.6	1156.1	358.2
82.5°	126.9	126.9	181.4	285.6	525.9	417.2	616.6	657.5	580.3	321.9	117.8
85°	72.5	77.0	113.3	195.0	249.4	204.1	231.2	244.8	249.4	213.1	49.9
87.5°	58.9	63.5	99.7	163.3	136.1	99.7	99.7	104.2	108.8	126.9	22.7
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: P237215

CATALOG NUMBER: ARCH-L-AF72-220-D-U-T3-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2199.0	2199.0	2199.0	2199.0	2199.0	2199.0	2199.0	2199.0	2199.0	2199.0	2199.0
2.5°	2189.9	2189.9	2194.4	2189.9	2189.9	2189.9	2194.4	2194.4	2194.4	2203.5	2208.0
5°	2199.0	2199.0	2199.0	2194.4	2189.9	2189.9	2199.0	2203.5	2203.5	2217.1	2217.1
7.5°	2221.6	2221.6	2212.6	2203.5	2194.4	2180.8	2185.4	2189.9	2185.4	2189.9	2189.9
10°	2271.6	2271.6	2258.0	2239.9	2212.6	2171.8	2117.4	2049.4	1985.9	1963.2	1954.1
12.5°	2353.2	2348.6	2321.4	2289.7	2230.7	2090.2	1886.1	1645.8	1446.4	1391.9	1373.8
15°	2443.8	2434.7	2403.0	2348.6	2189.9	1818.1	1391.9	1083.6	893.2	847.8	838.8
17.5°	2539.1	2525.5	2480.1	2371.3	2004.1	1351.1	897.7	680.1	575.8	566.7	571.3
20°	2638.8	2620.7	2557.2	2326.0	1618.6	902.2	580.3	525.9	516.9	516.9	521.4
22.5°	2752.1	2729.4	2643.3	2162.7	1178.8	598.5	498.8	494.2	489.7	485.2	485.2
25°	2883.6	2856.4	2724.9	1868.0	811.6	489.7	476.1	462.5	453.4	444.4	439.8
27.5°	3042.4	3006.0	2788.5	1505.3	557.7	458.0	448.9	426.2	408.1	389.9	389.9
30°	3201.0	3155.7	2770.3	1133.5	453.4	426.2	408.1	380.8	353.6	335.5	331.0
32.5°	3368.8	3323.5	2652.4	761.7	412.6	389.9	367.2	326.4	294.7	272.0	267.5
35°	3618.2	3581.9	2421.1	503.3	371.7	344.6	312.8	272.0	231.2	208.6	204.1
37.5°	3989.9	3944.6	2135.5	385.3	326.4	285.6	258.4	213.1	172.3	149.7	145.1
40°	4488.7	4352.7	1795.5	340.0	285.6	235.8	199.5	154.2	122.4	108.8	108.8
42.5°	5069.0	4747.1	1428.2	308.3	253.9	195.0	145.1	104.2	86.1	81.6	81.6
45°	5685.7	5114.3	1061.0	285.6	222.2	154.2	104.2	72.5	63.5	58.9	58.9
47.5°	6320.4	5413.7	739.1	258.4	185.9	117.8	72.5	54.4	45.3	40.8	40.8
50°	6914.3	5608.5	521.4	231.2	158.7	86.1	54.4	40.8	31.7	31.7	31.7
52.5°	7327.0	5590.4	376.3	199.5	122.4	58.9	36.3	27.2	27.2	27.2	27.2
55°	7689.7	5522.4	294.7	172.3	95.2	40.8	27.2	22.7	22.7	18.1	18.1
57.5°	7998.0	5413.7	249.4	140.6	68.0	31.7	18.1	18.1	13.6	13.6	13.6
60°	8260.9	5277.6	208.6	117.8	45.3	22.7	13.6	9.1	9.1	4.5	9.1
62.5°	8619.2	5191.5	181.4	90.6	31.7	13.6	9.1	4.5	4.5	0.0	0.0
65°	8882.2	5028.2	154.2	63.5	18.1	9.1	4.5	4.5	0.0	0.0	0.0
67.5°	8891.2	4733.5	113.3	36.3	13.6	9.1	4.5	0.0	0.0	0.0	0.0
70°	8174.8	4035.2	72.5	18.1	9.1	4.5	4.5	0.0	0.0	0.0	0.0
71°	7517.4	3572.8	58.9	13.6	9.1	4.5	0.0	0.0	0.0	0.0	0.0
72.5°	6193.5	2625.2	45.3	13.6	4.5	4.5	0.0	0.0	0.0	0.0	0.0
75°	3414.1	952.2	22.7	9.1	4.5	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	1092.7	290.2	13.6	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	185.9	45.3	9.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	63.5	18.1	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	18.1	9.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.1	4.5	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)