

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: P265627

Luminaire Tested: **ARCH-L-AF72-150-D-U-T2R-7027-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265627  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-150-D-U-T2R-7027-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 665mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13893.9 lumens  
Efficiency: N/A  
Efficacy: 90.8 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium - Full Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 153  
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

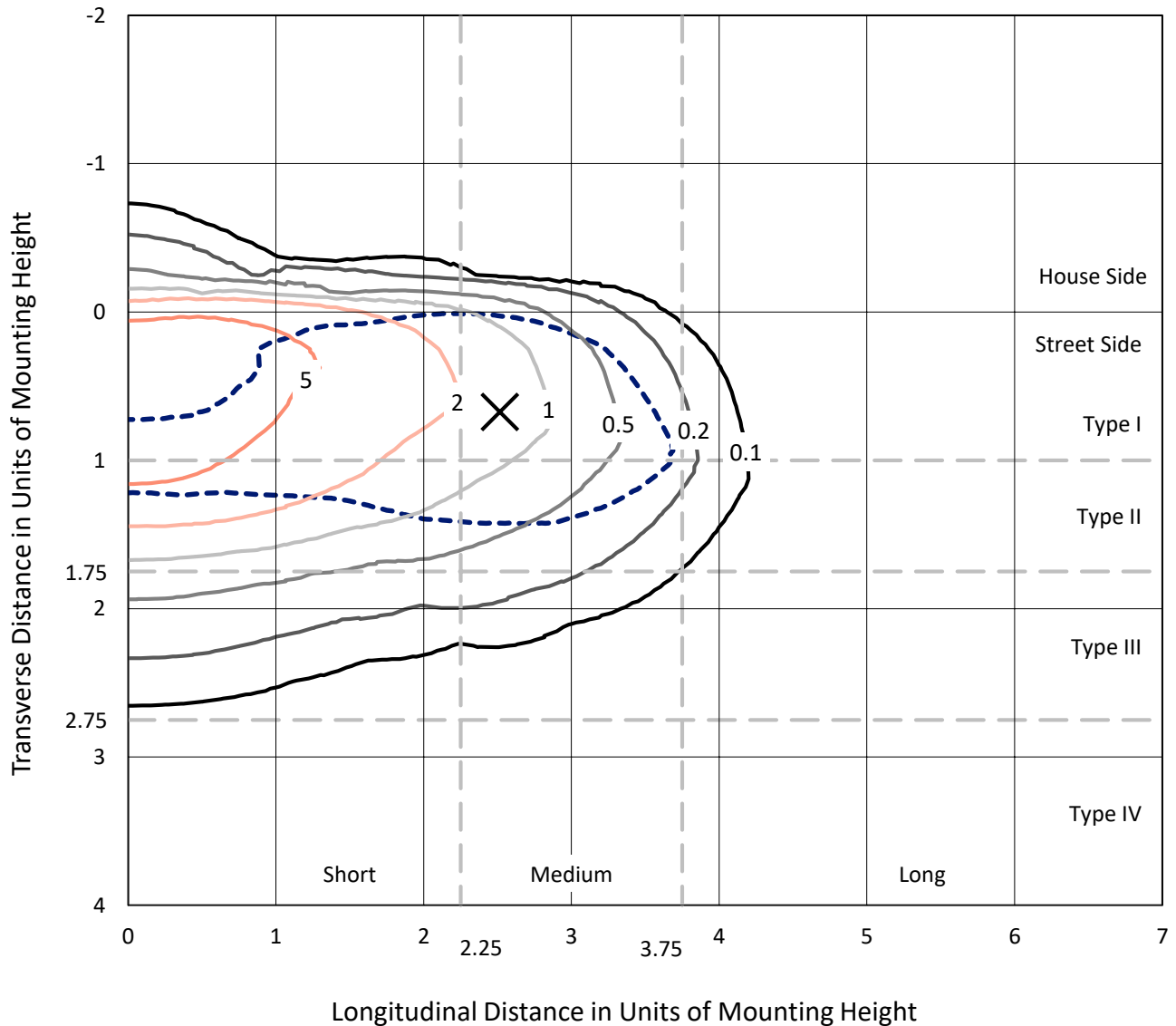


REPORT NUMBER: P265627

CATALOG NUMBER: ARCH-L-AF72-150-D-U-T2R-7027-HSS

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

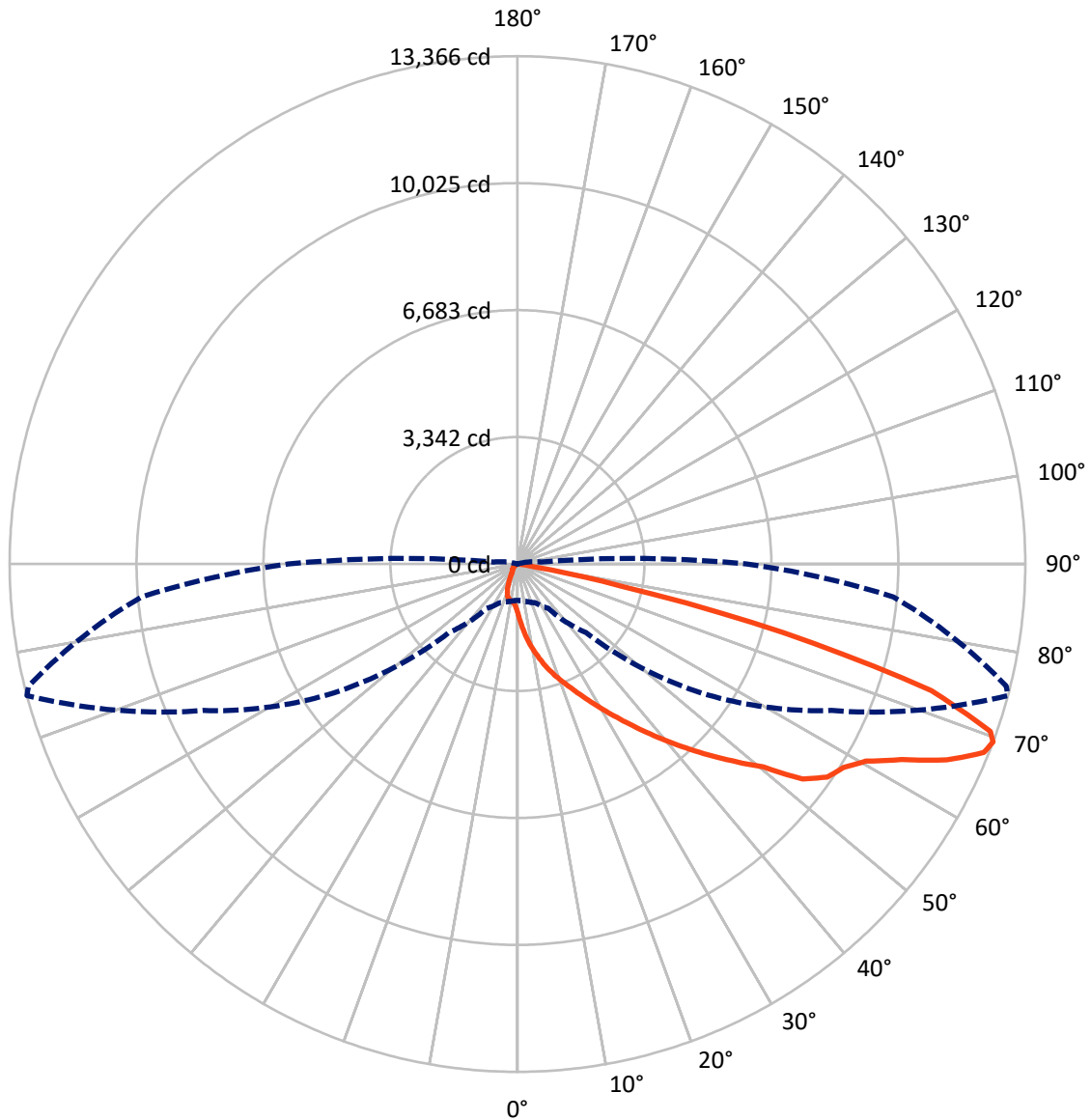


Based on 20 foot mounting height. Maximum calculated value = 8.8 fc  
 Type II - Medium - Full Cutoff

REPORT NUMBER: P265627

CATALOG NUMBER: ARCH-L-AF72-150-D-U-T2R-7027-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P265627

CATALOG NUMBER: ARCH-L-AF72-150-D-U-T2R-7027-HSS

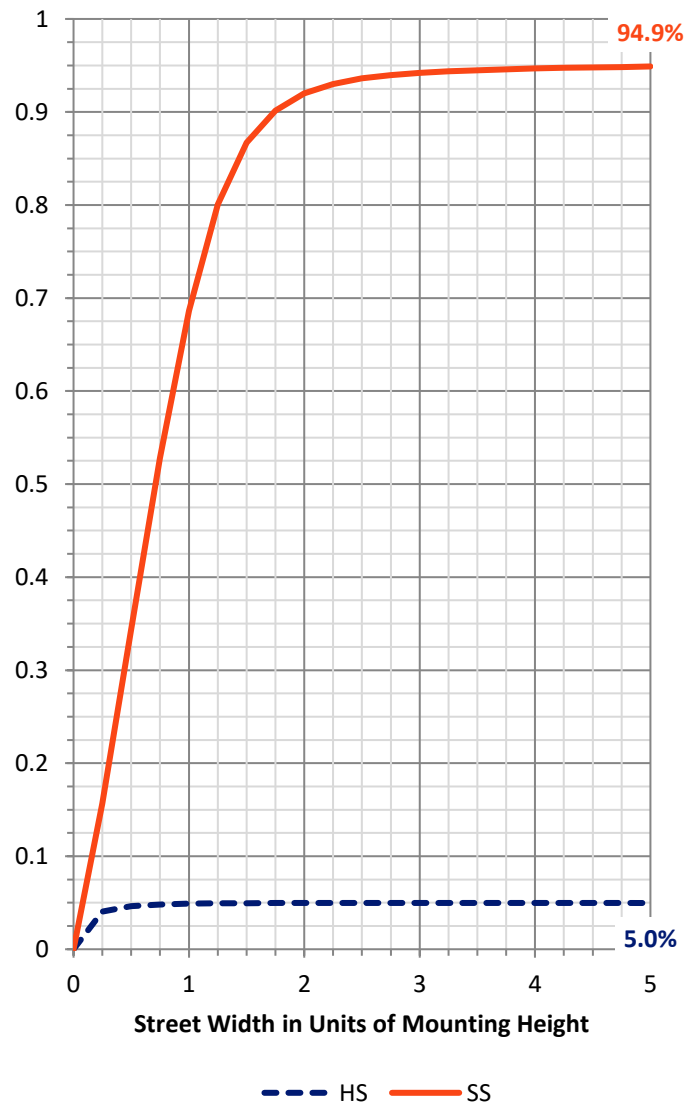
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	693.2	0.0	693.2
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	13200.6	0.0	13200.6
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	13893.9	0.0	13893.9
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	150.7	1.1
10°-20°	538.9	3.9
20°-30°	1028.9	7.4
30°-40°	1845.6	13.3
40°-50°	2827.6	20.4
50°-60°	3286.4	23.7
60°-70°	2910.1	20.9
70°-80°	1255.3	9.0
80°-90°	50.3	0.4
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°	13893.9	100.0
0°-180°	13893.9	100.0

**Coefficient of Utilization**



REPORT NUMBER: P265627

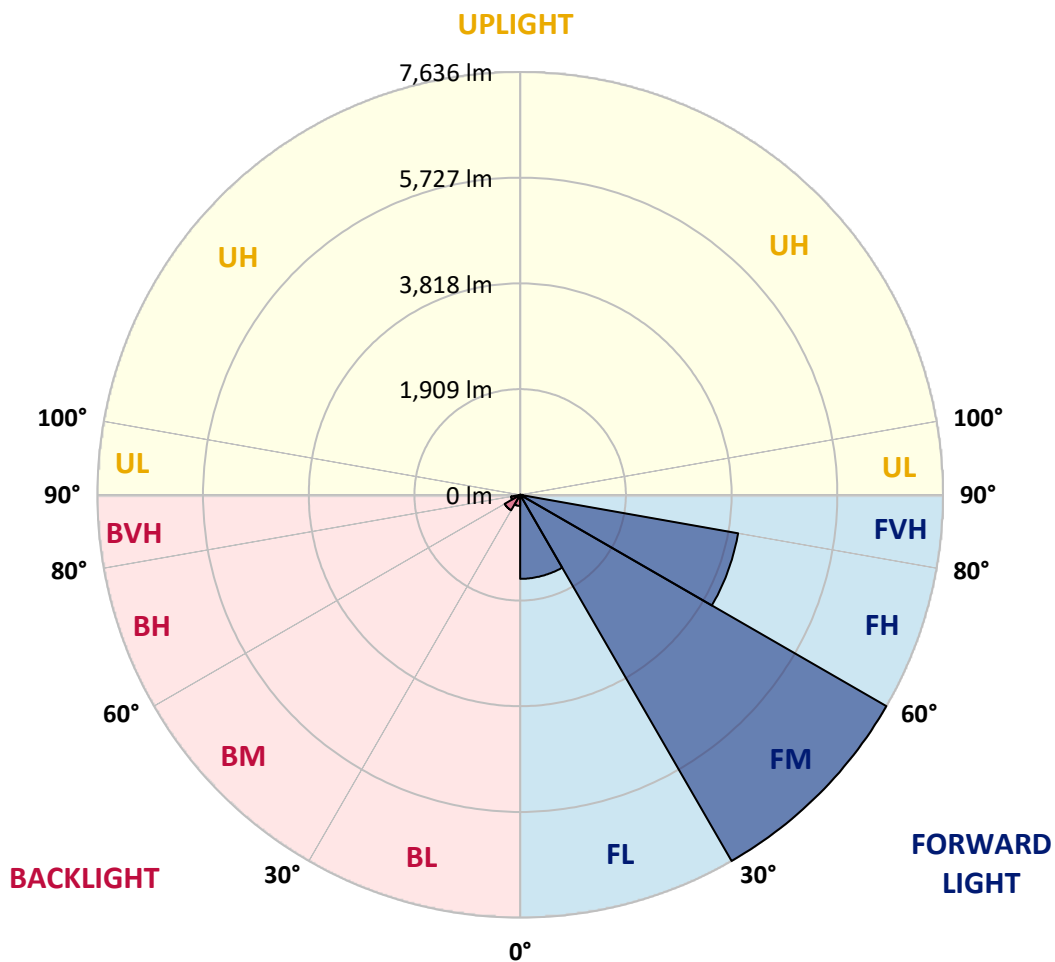
CATALOG NUMBER: ARCH-L-AF72-150-D-U-T2R-7027-HSS

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1517.2	10.9			
FM	(30°-60°)	7636.4	55.0			
FH	(60°-80°)	3997.4	28.8			G2/5000
FVH	(80°-90°)	49.6	0.4			G1/100
BL	(0°-30°)	201.3	1.4	B1/500		
BM	(30°-60°)	323.2	2.3	B1/1000		
BH	(60°-80°)	168.0	1.2	B1/500		G1/500
BVH	(80°-90°)	0.7	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-G2**

Type II Medium





REPORT NUMBER: P265627

CATALOG NUMBER: ARCH-L-AF72-150-D-U-T2R-7027-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1292.8	1292.8	1292.8	1292.8	1292.8	1292.8	1292.8	1292.8	1292.8	1292.8	1292.8
2.5°	2129.7	2108.7	2087.8	2063.6	2009.7	1916.8	1799.8	1673.7	1517.7	1490.7	1364.9
5°	2585.6	2576.7	2555.7	2522.6	2462.7	2360.7	2228.7	2042.7	1781.8	1736.8	1469.7
7.5°	2906.6	2900.5	2882.7	2843.7	2789.5	2687.5	2549.6	2348.7	2045.7	1994.7	1601.8
10°	3194.6	3191.6	3176.5	3140.6	3086.5	2975.5	2828.7	2618.6	2297.7	2240.7	1754.7
12.5°	3455.5	3458.6	3452.5	3434.5	3395.6	3290.5	3122.6	2894.6	2540.6	2477.6	1937.7
15°	3608.5	3617.5	3641.5	3677.5	3689.5	3605.4	3431.5	3179.6	2789.5	2735.6	2147.7
17.5°	3557.5	3566.5	3641.5	3764.4	3881.4	3893.4	3737.5	3449.5	3035.6	2981.6	2354.6
20°	3434.5	3446.4	3524.5	3692.5	3920.5	4079.5	4016.4	3743.4	3269.6	3203.5	2552.7
22.5°	3572.5	3572.5	3596.5	3698.5	3905.4	4154.4	4238.5	4037.4	3509.5	3428.6	2750.6
25°	4046.4	4037.4	3986.5	3944.5	4010.5	4232.5	4406.4	4337.3	3791.4	3698.5	2960.5
27.5°	4646.4	4688.3	4592.3	4439.3	4289.3	4385.3	4556.4	4634.4	4103.4	4007.3	3176.5
30°	5318.2	5336.2	5222.2	5018.3	4754.3	4661.3	4733.3	4889.4	4442.4	4337.3	3401.5
32.5°	5924.1	5909.2	5813.2	5600.3	5273.3	5072.3	4961.2	5093.3	4811.3	4691.4	3632.4
35°	6461.1	6473.0	6356.0	6110.1	5789.1	5576.1	5312.2	5324.3	5225.4	5087.3	3899.5
37.5°	6944.0	6923.0	6812.0	6566.2	6275.1	6044.2	5765.2	5564.2	5678.1	5534.2	4199.3
40°	7336.9	7315.9	7198.9	6959.0	6686.1	6497.1	6278.2	5885.2	6155.1	5990.2	4520.5
42.5°	7648.9	7625.0	7525.9	7295.0	7031.0	6863.1	6758.0	6281.0	6665.1	6500.0	4880.3
45°	7801.9	7780.8	7720.9	7546.9	7315.9	7169.1	7219.9	6737.1	7211.0	7073.1	5276.3
47.5°	7621.8	7613.0	7681.9	7651.9	7519.9	7442.0	7619.0	7234.9	7784.0	7648.9	5732.2
50°	7075.9	7091.0	7292.0	7540.9	7604.0	7696.9	7945.9	7759.9	8398.9	8254.9	6257.1
52.5°	5729.2	5831.2	6437.1	7037.1	7501.9	7853.0	8329.9	8509.9	9400.7	9259.6	7075.9
55°	4277.4	4319.4	4979.2	6005.2	7091.0	7840.9	8614.7	8950.7	9895.5	9751.6	7292.0
57.5°	3392.4	3407.5	3734.4	4781.3	6245.1	7570.9	8764.8	9109.7	10111.6	9991.6	7613.0
60°	2663.7	2681.6	2918.7	3638.4	5054.4	6842.0	8548.8	9247.7	10534.6	10438.6	8173.9
62.5°	2072.7	2090.7	2234.7	2657.6	3791.4	5720.1	8113.9	9469.7	11338.3	11293.4	9091.7
65°	1604.8	1610.8	1709.7	1907.7	2678.7	4505.4	7583.0	9676.6	12424.3	12385.2	9835.6
67.5°	1184.9	1193.8	1262.7	1385.8	1808.7	3236.6	6713.0	9517.6	13243.2	13129.2	10105.6
69°	956.9	965.9	1025.9	1124.9	1427.8	2549.6	5918.2	9124.8	13366.2	13258.2	9934.5
70°	818.9	824.9	884.9	968.8	1217.8	2165.8	5288.2	8785.8	13204.1	13099.2	9544.6
72.5°	524.9	555.0	614.9	668.9	806.9	1433.9	3569.4	7286.0	11392.3	11212.5	7474.9
75°	291.0	299.9	407.9	473.9	536.9	932.9	1985.8	4544.3	7246.9	7121.0	3998.4
77.5°	239.9	246.0	287.9	360.0	360.0	521.9	749.8	1790.7	2756.5	2486.7	1082.8
80°	168.0	174.0	218.9	237.0	258.0	293.9	243.0	393.0	425.9	377.9	162.0
82.5°	117.0	123.0	149.9	195.0	207.0	138.0	90.0	117.0	123.0	123.0	63.1
85°	21.0	30.1	111.0	162.0	123.0	42.0	51.1	42.0	38.9	42.0	15.0
87.5°	0.0	0.0	69.0	78.1	65.9	18.0	21.0	15.0	9.1	11.9	6.0
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: P265627

CATALOG NUMBER: ARCH-L-AF72-150-D-U-T2R-7027-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1292.8	1292.8	1292.8	1292.8	1292.8	1292.8	1292.8	1292.8	1292.8	1292.8	1292.8
2.5°	1301.9	1238.9	1130.8	1052.9	986.9	935.9	914.8	881.9	857.9	869.9	854.8
5°	1337.8	1226.8	1052.9	941.9	863.9	797.9	743.8	701.8	668.9	662.9	656.9
7.5°	1394.8	1235.8	1007.9	869.9	752.9	650.9	566.9	503.9	455.9	455.9	438.0
10°	1472.9	1259.9	980.9	797.9	624.0	486.0	401.9	342.0	318.0	314.9	308.9
12.5°	1580.7	1304.8	959.8	704.9	486.0	353.9	303.0	282.0	272.9	270.0	266.9
15°	1727.8	1370.9	935.9	590.9	368.9	291.0	270.0	252.0	243.0	239.9	237.0
17.5°	1868.7	1430.8	884.9	473.9	299.9	263.9	239.9	224.9	213.0	209.9	209.9
20°	2000.7	1481.8	797.9	368.9	270.0	237.0	213.0	195.0	183.0	180.0	180.0
22.5°	2138.8	1523.7	689.9	299.9	246.0	209.9	185.9	168.0	155.9	153.0	149.9
25°	2285.6	1553.8	566.9	266.9	222.1	185.9	159.0	144.0	134.9	132.1	128.9
27.5°	2444.6	1565.7	450.0	243.0	195.0	162.0	138.0	123.0	117.0	113.9	113.9
30°	2588.6	1553.8	348.0	216.0	170.9	140.9	120.0	107.9	102.0	99.1	99.1
32.5°	2738.7	1523.7	279.0	192.0	149.9	120.0	102.0	93.0	90.0	87.0	87.0
35°	2897.7	1484.8	239.9	170.9	128.9	105.0	90.0	84.0	80.9	78.1	78.1
37.5°	3083.5	1436.7	218.9	153.0	113.9	93.0	78.1	75.0	72.0	72.0	72.0
40°	3293.5	1376.8	203.9	138.0	102.0	80.9	69.0	65.9	63.1	63.1	63.1
42.5°	3515.4	1307.8	189.0	123.0	90.0	69.0	59.9	59.9	57.0	57.0	54.0
45°	3764.4	1238.9	174.0	107.9	78.1	59.9	51.1	48.0	48.0	44.9	44.9
47.5°	4058.5	1175.8	159.0	95.9	69.0	51.1	44.9	42.0	38.9	36.0	36.0
50°	4472.4	1169.9	140.9	84.0	63.1	42.0	36.0	33.0	30.1	26.9	26.9
52.5°	4883.2	1115.9	120.0	69.0	51.1	36.0	26.9	24.0	21.0	21.0	18.0
55°	4976.3	1025.9	105.0	59.9	38.9	26.9	21.0	15.0	15.0	11.9	11.9
57.5°	5180.3	983.9	90.0	48.0	30.1	21.0	11.9	9.1	9.1	9.1	9.1
60°	5582.2	971.8	78.1	42.0	21.0	15.0	9.1	6.0	6.0	3.1	3.1
62.5°	6137.1	959.8	65.9	36.0	15.0	9.1	6.0	3.1	0.0	0.0	0.0
65°	6443.2	878.9	54.0	26.9	11.9	9.1	3.1	0.0	0.0	0.0	0.0
67.5°	6362.1	725.9	48.0	18.0	9.1	6.0	3.1	0.0	0.0	0.0	0.0
69°	6023.1	611.9	38.9	15.0	9.1	6.0	3.1	0.0	0.0	0.0	0.0
70°	5615.2	527.9	36.0	11.9	6.0	3.1	3.1	0.0	0.0	0.0	0.0
72.5°	3986.5	276.0	24.0	9.1	6.0	3.1	0.0	0.0	0.0	0.0	0.0
75°	1862.7	123.0	15.0	6.0	3.1	3.1	0.0	0.0	0.0	0.0	0.0
77.5°	411.0	57.0	9.1	6.0	3.1	0.0	0.0	0.0	0.0	0.0	0.0
80°	78.1	21.0	6.0	3.1	3.1	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	26.9	9.1	3.1	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	9.1	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.1	0.0	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)