

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: P237001

Luminaire Tested: **ARCH-L-AF72-280-D-U-T2R-7050-HSS**

Issue Date: 2/14/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P237001  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 2/14/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-280-D-U-T2R-7050-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 1180mA 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: 24055 lumens  
Efficiency: N/A  
Efficacy: 86.2 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G3

Input Watts (W): 279  
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

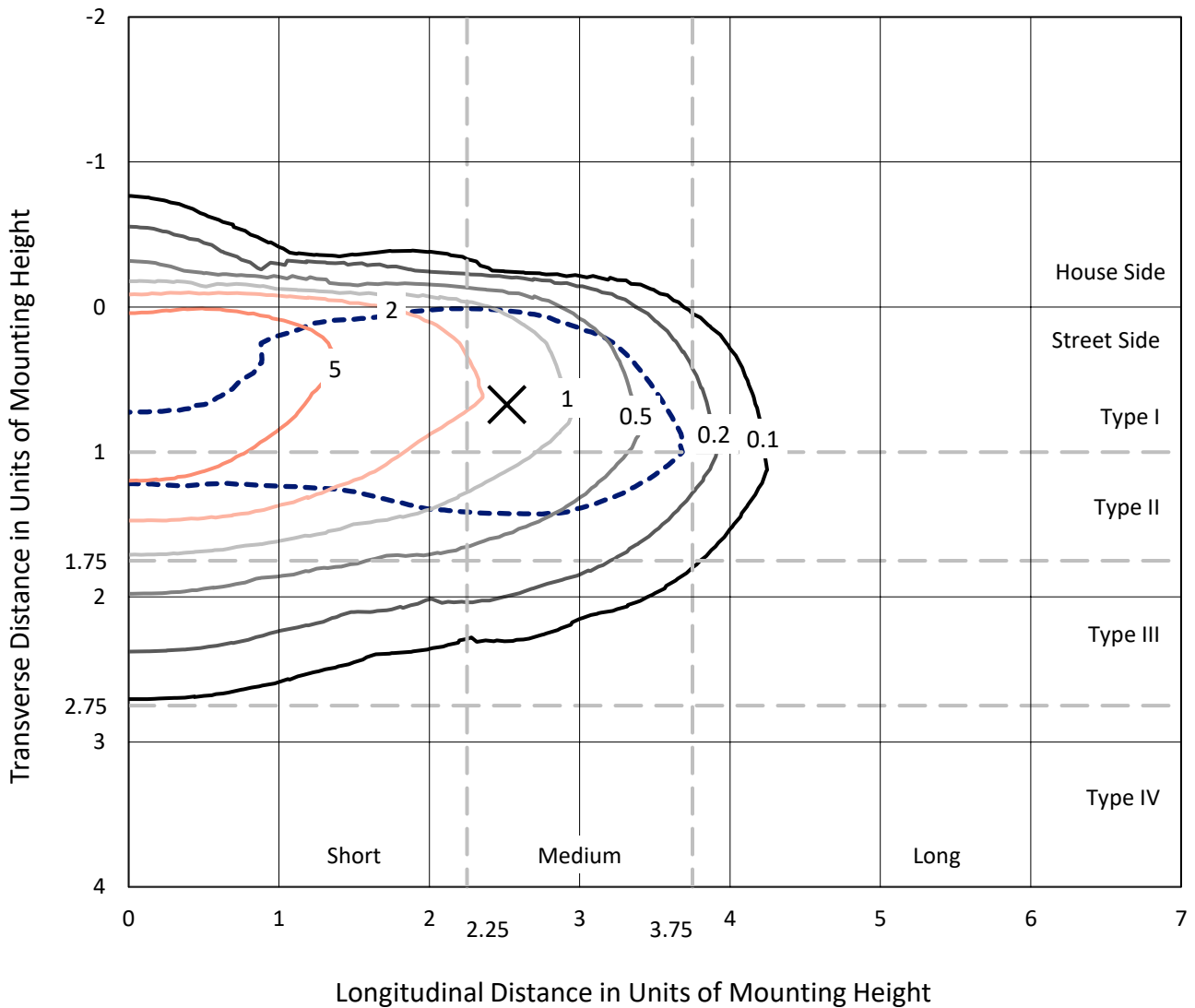


REPORT NUMBER: P237001

CATALOG NUMBER: ARCH-L-AF72-280-D-U-T2R-7050-HSS

### Iso-Footcandle Lines of Horizontal Illumination

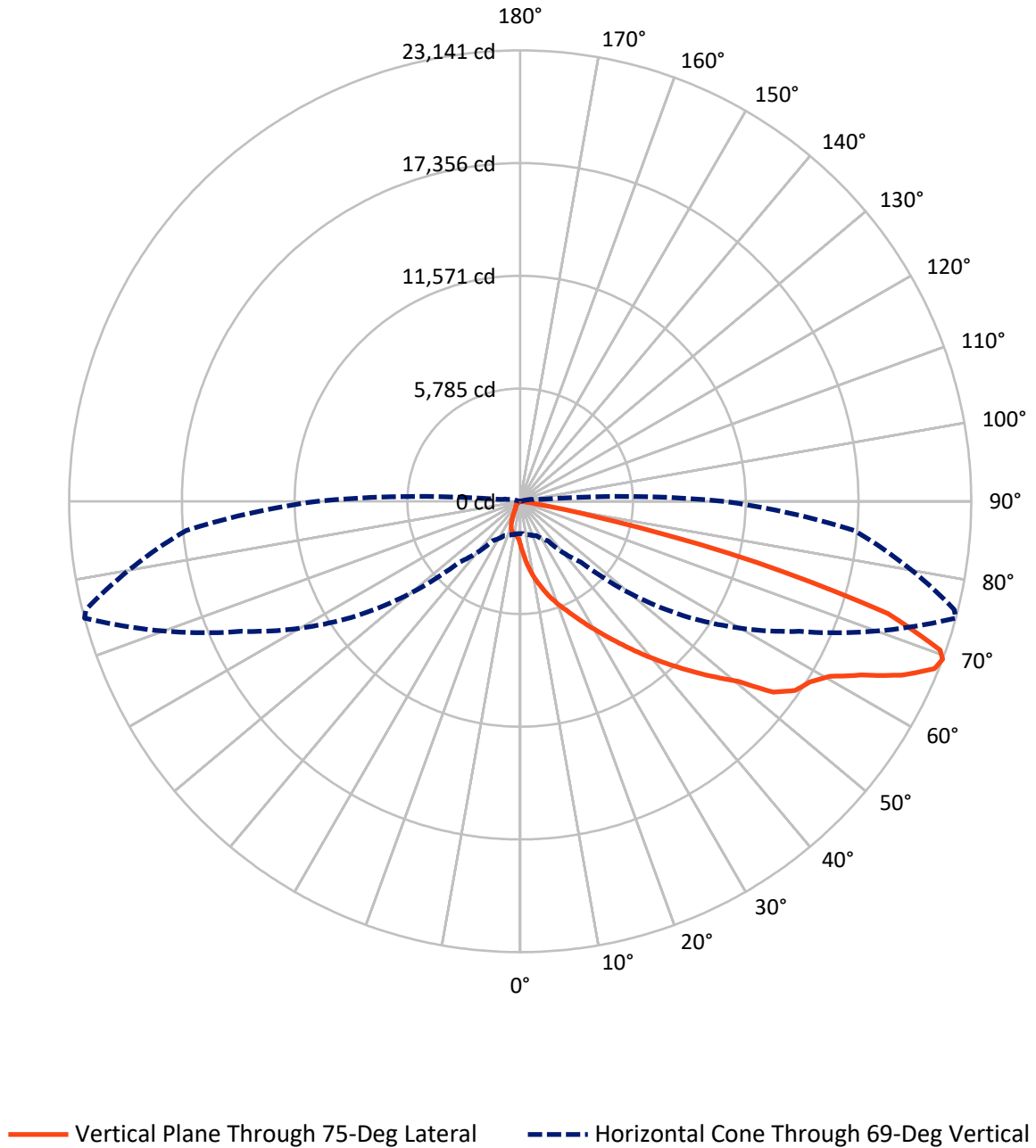
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.8 fc  
 Type II - Medium - N/A

REPORT NUMBER: P237001  
CATALOG NUMBER: ARCH-L-AF72-280-D-U-T2R-7050-HSS

### Luminous Intensity Polar Plot



REPORT NUMBER: P237001

CATALOG NUMBER: ARCH-L-AF72-280-D-U-T2R-7050-HSS

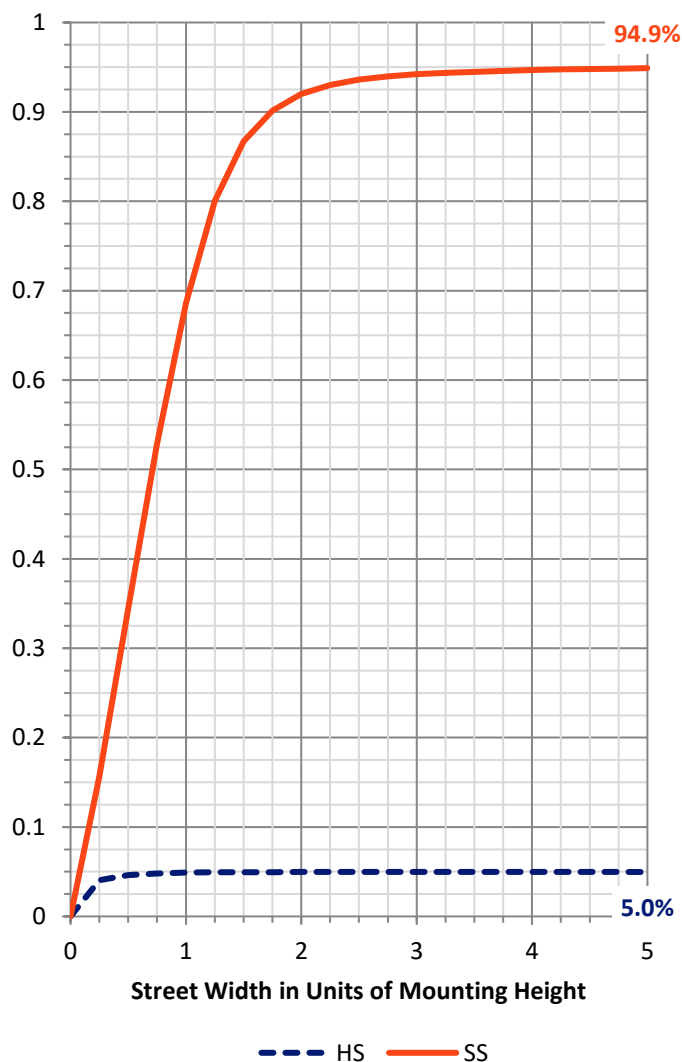
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1200.2	0.0	1200.2
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	22854.8	0.0	22854.8
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	24055.0	0.0	24055.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	261.0	1.1
10°-20°	933.1	3.9
20°-30°	1781.3	7.4
30°-40°	3195.4	13.3
40°-50°	4895.6	20.4
50°-60°	5689.9	23.7
60°-70°	5038.5	20.9
70°-80°	2173.3	9.0
80°-90°	87.1	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°	24055.0	100.0
0°-180°	24055.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P237001

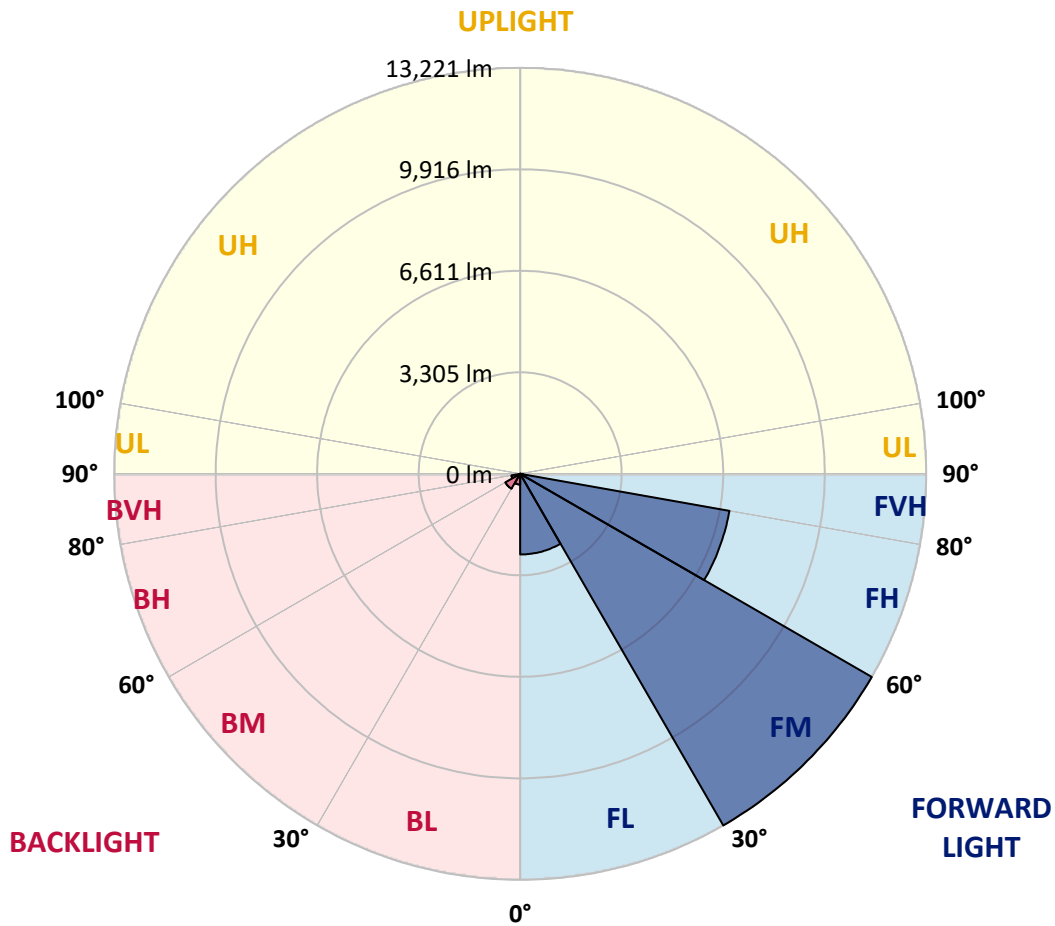
CATALOG NUMBER: ARCH-L-AF72-280-D-U-T2R-7050-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2626.8	10.9			
FM (30°-60°)	13221.2	55.0			
FH (60°-80°)	6920.9	28.8			G3/7500
FVH (80°-90°)	85.8	0.4			G1/100
BL (0°-30°)	348.6	1.4	B1/500		
BM (30°-60°)	559.6	2.3	B1/1000		
BH (60°-80°)	290.8	1.2	B1/500		G1/500
BVH (80°-90°)	1.3	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-G3**

Type II Medium





REPORT NUMBER: P237001

CATALOG NUMBER: ARCH-L-AF72-280-D-U-T2R-7050-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2238.3	2238.3	2238.3	2238.3	2238.3	2238.3	2238.3	2238.3	2238.3	2238.3	2238.3
2.5°	3687.2	3650.9	3614.5	3573.0	3479.5	3318.5	3116.0	2897.9	2627.8	2581.1	2362.9
5°	4476.6	4461.0	4424.7	4367.6	4263.7	4087.1	3858.6	3536.6	3084.8	3006.9	2544.7
7.5°	5032.3	5021.9	4990.8	4923.2	4829.8	4653.2	4414.3	4066.3	3541.8	3453.5	2773.2
10°	5530.9	5525.7	5499.7	5437.4	5343.9	5151.7	4897.3	4533.7	3978.1	3879.4	3038.1
12.5°	5982.7	5987.9	5977.5	5946.3	5878.8	5697.0	5406.2	5011.5	4398.7	4289.7	3354.9
15°	6247.5	6263.1	6304.7	6367.0	6387.7	6242.3	5941.1	5504.9	4829.8	4736.3	3718.4
17.5°	6159.2	6174.8	6304.7	6517.6	6720.1	6740.9	6470.8	5972.3	5255.6	5162.1	4076.7
20°	5946.3	5967.1	6102.1	6392.9	6787.6	7062.9	6953.8	6481.2	5660.7	5546.4	4419.5
22.5°	6185.2	6185.2	6226.8	6403.3	6761.7	7192.7	7338.1	6990.2	6076.2	5935.9	4762.2
25°	7005.8	6990.2	6901.9	6829.2	6943.4	7327.7	7628.9	7509.5	6564.3	6403.3	5125.8
27.5°	8044.4	8117.1	7950.9	7686.1	7426.4	7592.6	7888.6	8023.6	7104.4	6938.2	5499.7
30°	9207.7	9238.9	9041.5	8688.4	8231.4	8070.4	8195.0	8465.1	7691.3	7509.5	5889.2
32.5°	10256.8	10230.8	10064.6	9695.9	9129.8	8781.9	8589.7	8818.2	8330.0	8122.3	6289.1
35°	11186.4	11207.1	11004.6	10578.7	10023.1	9654.3	9197.3	9218.1	9046.7	8807.8	6751.3
37.5°	12022.5	11986.1	11794.0	11368.1	10864.4	10464.5	9981.5	9633.6	9830.9	9581.6	7270.6
40°	12702.8	12666.4	12463.9	12048.4	11575.8	11248.7	10869.6	10189.2	10656.6	10371.0	7826.3
42.5°	13242.9	13201.3	13030.0	12630.1	12173.1	11882.3	11700.5	10874.8	11539.5	11253.9	8449.5
45°	13507.8	13471.4	13367.5	13066.3	12666.4	12412.0	12500.3	11664.1	12484.7	12245.8	9135.0
47.5°	13196.2	13180.6	13300.0	13248.1	13019.6	12884.6	13191.0	12526.2	13476.6	13242.9	9924.4
50°	12251.0	12276.9	12624.9	13055.9	13165.0	13326.0	13757.0	13435.0	14541.2	14291.9	10833.2
52.5°	9919.2	10095.8	11144.8	12183.5	12988.4	13596.0	14421.8	14733.4	16275.8	16031.7	12251.0
55°	7405.6	7478.3	8620.9	10397.0	12276.9	13575.3	14915.1	15496.8	17132.7	16883.4	12624.9
57.5°	5873.6	5899.6	6465.6	8278.1	10812.4	13107.9	15174.8	15772.0	17506.6	17298.9	13180.6
60°	4611.6	4642.8	5053.1	6299.5	8750.7	11845.9	14800.9	16010.9	18238.8	18072.7	14151.7
62.5°	3588.6	3619.7	3869.0	4601.3	6564.3	9903.6	14047.9	16395.2	19630.6	19552.7	15740.9
65°	2778.4	2788.8	2960.2	3302.9	4637.6	7800.3	13128.6	16753.6	21510.6	21443.1	17028.8
67.5°	2051.4	2066.9	2186.4	2399.3	3131.6	5603.6	11622.6	16478.3	22928.4	22731.0	17496.2
69°	1656.7	1672.2	1776.1	1947.5	2472.0	4414.3	10246.4	15798.0	23141.3	22954.3	17200.2
70°	1417.8	1428.2	1532.0	1677.4	2108.5	3749.6	9155.8	15211.2	22860.9	22679.1	16525.1
72.5°	908.8	960.8	1064.6	1158.1	1397.0	2482.4	6180.0	12614.5	19724.1	19412.5	12941.7
75°	503.7	519.3	706.3	820.5	929.6	1615.1	3438.0	7867.8	12547.0	12328.9	6922.7
77.5°	415.5	425.8	498.6	623.2	623.2	903.6	1298.3	3100.4	4772.6	4305.2	1874.8
80°	290.8	301.2	379.1	410.3	446.6	508.9	420.7	680.3	737.4	654.4	280.4
82.5°	202.5	212.9	259.7	337.6	358.3	238.9	155.8	202.5	212.9	212.9	109.1
85°	36.4	51.9	192.2	280.4	212.9	72.7	88.3	72.7	67.5	72.7	26.0
87.5°	0.0	0.0	119.4	135.0	114.3	31.2	36.4	26.0	15.6	20.8	10.4
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: P237001

CATALOG NUMBER: ARCH-L-AF72-280-D-U-T2R-7050-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2238.3	2238.3	2238.3	2238.3	2238.3	2238.3	2238.3	2238.3	2238.3	2238.3	2238.3
2.5°	2253.9	2144.8	1957.9	1822.8	1708.6	1620.3	1584.0	1526.8	1485.3	1506.1	1480.1
5°	2316.2	2124.1	1822.8	1630.7	1495.7	1381.4	1287.9	1215.2	1158.1	1147.7	1137.3
7.5°	2414.9	2139.6	1744.9	1506.1	1303.5	1126.9	981.5	872.5	789.4	789.4	758.2
10°	2549.9	2181.2	1698.2	1381.4	1080.2	841.3	695.9	592.0	550.5	545.3	534.9
12.5°	2736.9	2259.1	1661.9	1220.4	841.3	612.8	524.5	488.2	472.6	467.4	462.2
15°	2991.3	2373.3	1620.3	1023.1	638.8	503.7	467.4	436.2	420.7	415.5	410.3
17.5°	3235.4	2477.2	1532.0	820.5	519.3	457.0	415.5	389.5	368.7	363.5	363.5
20°	3463.9	2565.5	1381.4	638.8	467.4	410.3	368.7	337.6	316.8	311.6	311.6
22.5°	3702.8	2638.2	1194.5	519.3	425.8	363.5	322.0	290.8	270.1	264.9	259.7
25°	3957.3	2690.1	981.5	462.2	384.3	322.0	275.2	249.3	233.7	228.5	223.3
27.5°	4232.5	2710.9	779.0	420.7	337.6	280.4	238.9	212.9	202.5	197.3	197.3
30°	4481.8	2690.1	602.4	373.9	296.0	244.1	207.7	187.0	176.6	171.4	171.4
32.5°	4741.5	2638.2	483.0	332.4	259.7	207.7	176.6	161.0	155.8	150.6	150.6
35°	5016.7	2570.7	415.5	296.0	223.3	181.8	155.8	145.4	140.2	135.0	135.0
37.5°	5338.7	2487.6	379.1	264.9	197.3	161.0	135.0	129.8	124.6	124.6	124.6
40°	5702.2	2383.7	353.1	238.9	176.6	140.2	119.4	114.3	109.1	109.1	109.1
42.5°	6086.5	2264.3	327.2	212.9	155.8	119.4	103.9	103.9	98.7	98.7	93.5
45°	6517.6	2144.8	301.2	187.0	135.0	103.9	88.3	83.1	83.1	77.9	77.9
47.5°	7026.5	2035.8	275.2	166.2	119.4	88.3	77.9	72.7	67.5	62.3	62.3
50°	7743.2	2025.4	244.1	145.4	109.1	72.7	62.3	57.1	51.9	46.7	46.7
52.5°	8454.7	1931.9	207.7	119.4	88.3	62.3	46.7	41.5	36.4	36.4	31.2
55°	8615.7	1776.1	181.8	103.9	67.5	46.7	36.4	26.0	26.0	20.8	20.8
57.5°	8968.8	1703.4	155.8	83.1	51.9	36.4	20.8	15.6	15.6	15.6	15.6
60°	9664.7	1682.6	135.0	72.7	36.4	26.0	15.6	10.4	10.4	5.2	5.2
62.5°	10625.5	1661.9	114.3	62.3	26.0	15.6	10.4	5.2	0.0	0.0	0.0
65°	11155.2	1521.6	93.5	46.7	20.8	15.6	5.2	0.0	0.0	0.0	0.0
67.5°	11015.0	1256.8	83.1	31.2	15.6	10.4	5.2	0.0	0.0	0.0	0.0
69°	10428.1	1059.4	67.5	26.0	15.6	10.4	5.2	0.0	0.0	0.0	0.0
70°	9721.8	914.0	62.3	20.8	10.4	5.2	5.2	0.0	0.0	0.0	0.0
72.5°	6901.9	477.8	41.5	15.6	10.4	5.2	0.0	0.0	0.0	0.0	0.0
75°	3225.0	212.9	26.0	10.4	5.2	5.2	0.0	0.0	0.0	0.0	0.0
77.5°	711.5	98.7	15.6	10.4	5.2	0.0	0.0	0.0	0.0	0.0	0.0
80°	135.0	36.4	10.4	5.2	5.2	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	46.7	15.6	5.2	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	15.6	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.2	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)