

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: P265663

Luminaire Tested: **ARCH-L-AF72-190-D-U-T2R-7027-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265663  
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-AF72-190-D-U-T2R-7027-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 810mA 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: 16148.3 lumens  
Efficiency: N/A  
Efficacy: 85.4 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): 189  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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

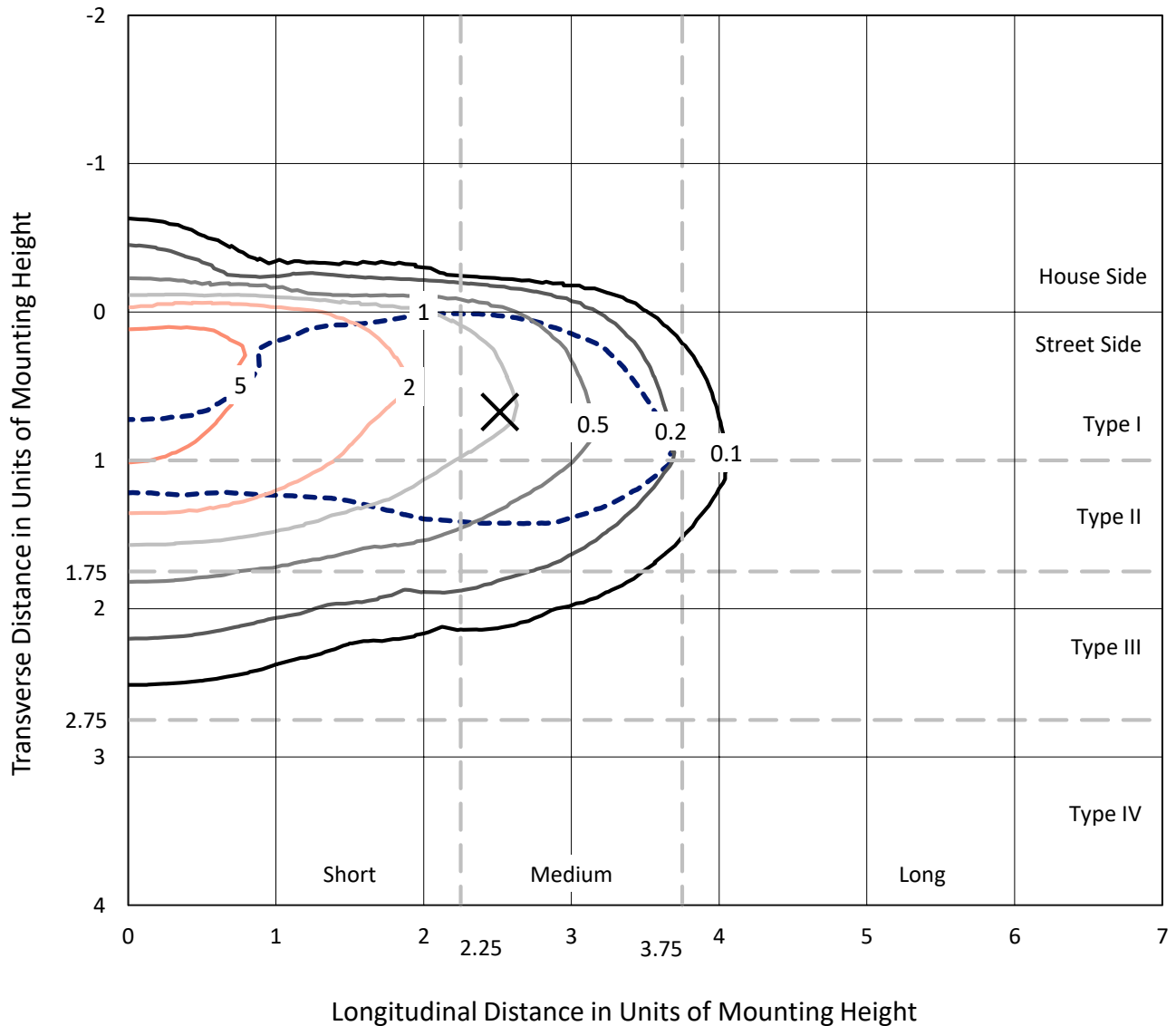


REPORT NUMBER: P265663

CATALOG NUMBER: ARCH-L-AF72-190-D-U-T2R-7027-HSS

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

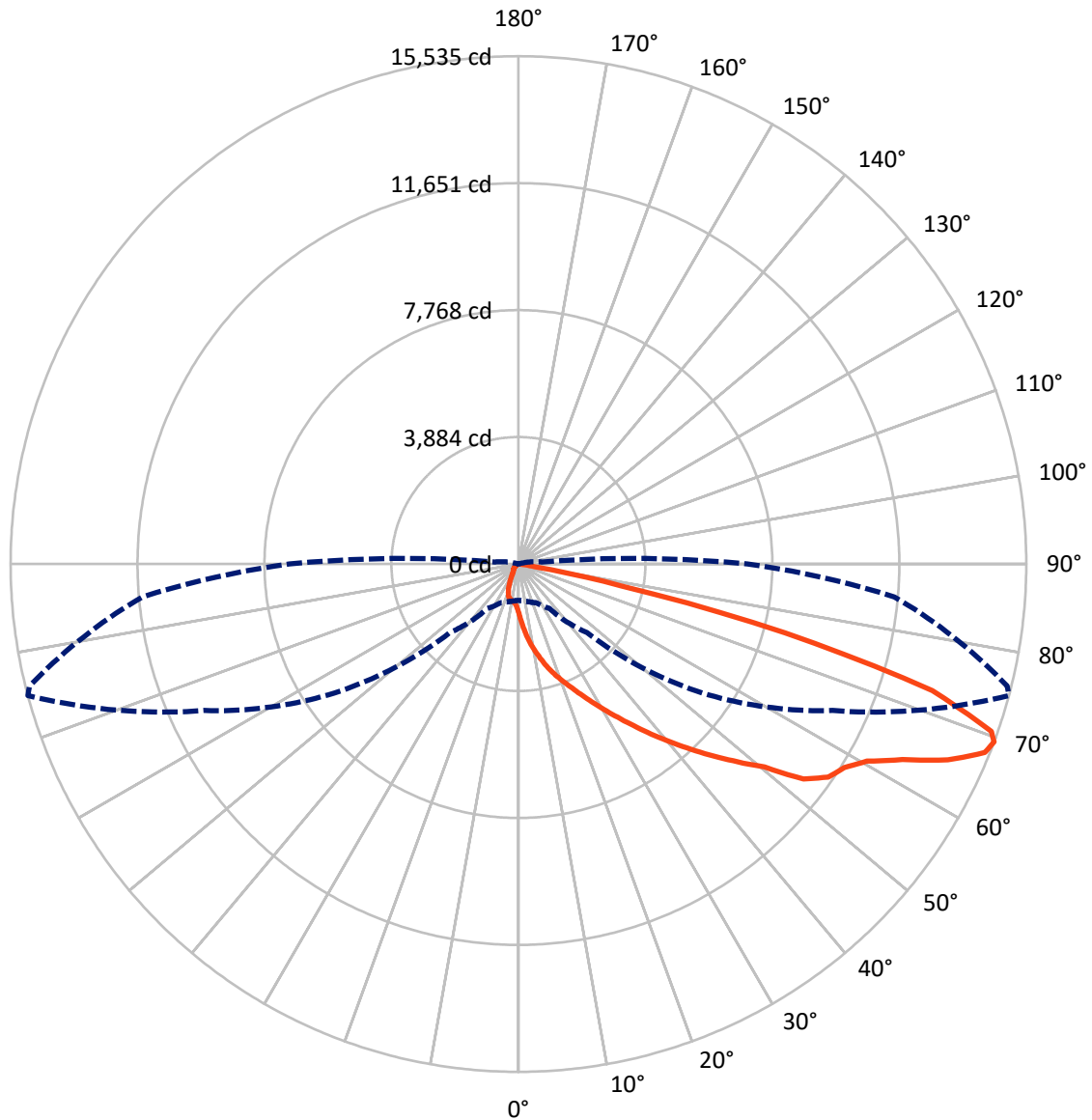


Based on 25 foot mounting height. Maximum calculated value = 6.6 fc  
 Type II - Medium - Full Cutoff

REPORT NUMBER: P265663

CATALOG NUMBER: ARCH-L-AF72-190-D-U-T2R-7027-HSS

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P265663

CATALOG NUMBER: ARCH-L-AF72-190-D-U-T2R-7027-HSS

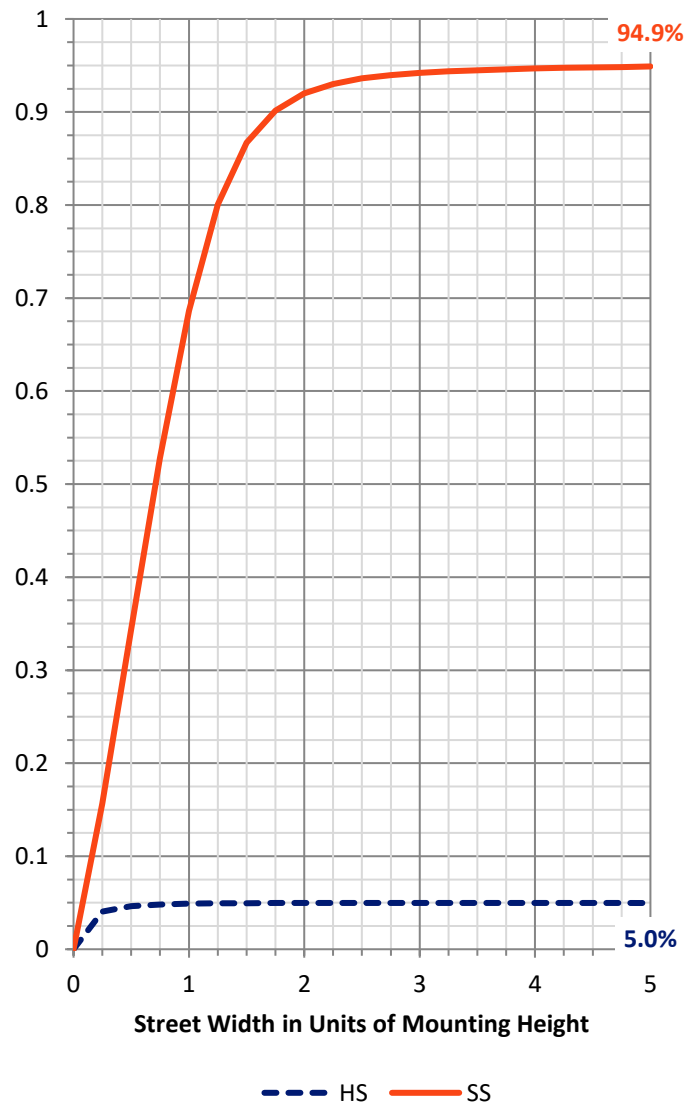
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	805.7	0.0	805.7
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	15342.6	0.0	15342.6
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	16148.3	0.0	16148.3
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	175.2	1.1
10°-20°	626.4	3.9
20°-30°	1195.8	7.4
30°-40°	2145.1	13.3
40°-50°	3286.4	20.4
50°-60°	3819.7	23.7
60°-70°	3382.4	20.9
70°-80°	1458.9	9.0
80°-90°	58.5	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°	16148.3	100.0
0°-180°	16148.3	100.0

**Coefficient of Utilization**



REPORT NUMBER: P265663

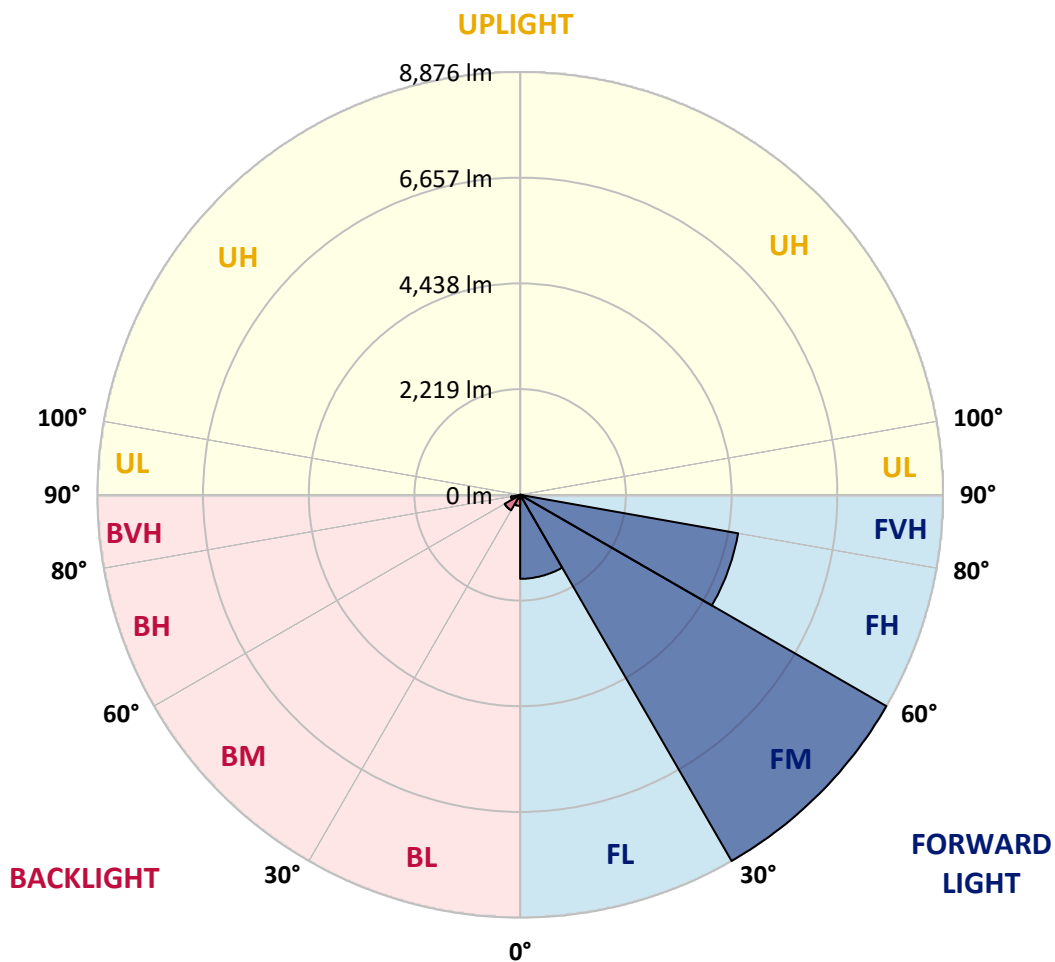
CATALOG NUMBER: ARCH-L-AF72-190-D-U-T2R-7027-HSS

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1763.4	10.9			
FM	(30°-60°)	8875.5	55.0			
FH	(60°-80°)	4646.1	28.8			G2/5000
FVH	(80°-90°)	57.6	0.4			G1/100
BL	(0°-30°)	234.0	1.4	B1/500		
BM	(30°-60°)	375.6	2.3	B1/1000		
BH	(60°-80°)	195.2	1.2	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-G2**

Type II Medium





REPORT NUMBER: P265663

CATALOG NUMBER: ARCH-L-AF72-190-D-U-T2R-7027-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1502.5	1502.5	1502.5	1502.5	1502.5	1502.5	1502.5	1502.5	1502.5	1502.5	1502.5
2.5°	2475.3	2450.8	2426.4	2398.6	2335.9	2227.7	2091.8	1945.4	1764.1	1732.7	1586.2
5°	3005.2	2994.7	2970.3	2932.0	2862.3	2743.8	2590.4	2374.2	2070.9	2018.6	1708.2
7.5°	3378.3	3371.2	3350.3	3305.0	3242.3	3123.8	2963.4	2729.8	2377.6	2318.3	1861.6
10°	3713.0	3709.5	3692.0	3650.2	3587.4	3458.5	3287.5	3043.5	2670.5	2604.2	2039.5
12.5°	4016.2	4019.6	4012.6	3991.8	3946.6	3824.4	3629.2	3364.3	2952.9	2879.6	2252.1
15°	4193.9	4204.4	4232.4	4274.1	4288.1	4190.6	3988.4	3695.4	3242.3	3179.6	2496.2
17.5°	4134.8	4145.1	4232.4	4375.4	4511.3	4525.2	4343.9	4009.2	3528.2	3465.4	2736.7
20°	3991.8	4005.7	4096.5	4291.7	4556.7	4741.3	4668.1	4350.9	3800.1	3723.4	2966.8
22.5°	4152.1	4152.1	4180.1	4298.6	4539.1	4828.5	4926.1	4692.6	4078.9	3984.8	3197.0
25°	4703.0	4692.6	4633.3	4584.5	4661.1	4919.2	5121.3	5041.2	4406.6	4298.6	3441.0
27.5°	5400.3	5449.1	5337.5	5159.8	4985.5	5097.0	5295.7	5386.3	4769.2	4657.7	3692.0
30°	6181.1	6202.1	6069.7	5832.5	5525.7	5417.7	5501.4	5682.7	5163.2	5041.2	3953.5
32.5°	6885.5	6868.0	6756.4	6508.8	6129.0	5895.3	5766.3	5919.7	5591.9	5452.5	4221.9
35°	7509.6	7523.5	7387.5	7101.6	6728.6	6481.0	6174.2	6188.2	6073.1	5912.7	4532.2
37.5°	8070.8	8046.4	7917.4	7631.6	7293.2	7024.8	6700.6	6467.1	6599.6	6432.3	4880.9
40°	8527.5	8503.0	8367.2	8088.2	7771.0	7551.3	7296.8	6840.1	7153.9	6962.1	5253.8
42.5°	8890.0	8862.1	8747.2	8478.7	8171.9	7976.7	7854.6	7300.3	7746.5	7554.8	5672.2
45°	9067.9	9043.4	8973.7	8771.5	8503.0	8332.3	8391.5	7830.3	8381.0	8220.7	6132.4
47.5°	8858.6	8848.2	8928.4	8893.6	8740.1	8649.5	8855.2	8408.9	9046.9	8890.0	6662.3
50°	8224.3	8241.6	8475.1	8764.6	8837.7	8945.9	9235.3	9019.1	9761.6	9594.3	7272.4
52.5°	6658.9	6777.4	7481.7	8178.9	8719.2	9127.0	9681.5	9890.6	10926.1	10762.2	8224.3
55°	4971.5	5020.3	5787.2	6979.7	8241.6	9113.1	10012.7	10403.1	11501.3	11333.9	8475.1
57.5°	3943.0	3960.4	4340.4	5557.2	7258.5	8799.3	10187.0	10588.0	11752.3	11612.8	8848.2
60°	3095.7	3116.8	3392.2	4229.0	5874.5	7952.2	9936.0	10748.3	12243.9	12132.2	9500.1
62.5°	2409.1	2429.9	2597.3	3088.8	4406.6	6648.4	9430.4	11006.3	13178.2	13125.9	10566.9
65°	1865.2	1872.2	1987.2	2217.2	3113.3	5236.4	8813.5	11246.8	14440.3	14394.9	11431.7
67.5°	1377.1	1387.5	1467.7	1610.8	2102.3	3761.7	7802.4	11062.0	15392.0	15259.5	11745.2
69°	1112.1	1122.6	1192.3	1307.4	1659.4	2963.4	6878.4	10605.3	15535.0	15409.4	11546.6
70°	951.8	958.8	1028.5	1126.0	1415.4	2517.1	6146.4	10211.4	15346.6	15224.7	11093.3
72.5°	610.0	645.0	714.7	777.5	937.8	1666.4	4148.7	8468.2	13240.9	13031.8	8687.9
75°	338.2	348.6	474.1	550.8	624.1	1084.3	2307.9	5281.8	8422.9	8276.4	4647.2
77.5°	279.0	285.9	334.7	418.3	418.3	606.6	871.5	2081.4	3204.0	2890.1	1258.5
80°	195.2	202.2	254.5	275.4	299.9	341.6	282.3	456.7	495.1	439.4	188.3
82.5°	136.0	142.9	174.4	226.6	240.6	160.3	104.7	136.0	142.9	142.9	73.2
85°	24.4	34.9	128.9	188.3	142.9	48.8	59.3	48.8	45.4	48.8	17.4
87.5°	0.0	0.0	80.2	90.6	76.6	20.9	24.4	17.4	10.5	14.0	6.9
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: P265663

CATALOG NUMBER: ARCH-L-AF72-190-D-U-T2R-7027-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1502.5	1502.5	1502.5	1502.5	1502.5	1502.5	1502.5	1502.5	1502.5	1502.5	1502.5
2.5°	1513.0	1439.9	1314.3	1223.8	1147.0	1087.7	1063.4	1025.0	997.1	1011.0	993.5
5°	1554.8	1425.9	1223.8	1094.8	1004.0	927.4	864.6	815.8	777.5	770.4	763.5
7.5°	1621.1	1436.4	1171.4	1011.0	875.0	756.6	658.8	585.6	529.9	529.9	509.0
10°	1711.8	1464.2	1139.9	927.4	725.1	564.8	467.2	397.4	369.6	366.1	359.1
12.5°	1837.3	1516.6	1115.7	819.3	564.8	411.3	352.1	327.7	317.2	313.8	310.3
15°	2008.2	1593.2	1087.7	686.8	428.9	338.2	313.8	292.8	282.3	279.0	275.4
17.5°	2171.9	1662.9	1028.5	550.8	348.6	306.9	279.0	261.4	247.6	244.0	244.0
20°	2325.4	1722.2	927.4	428.9	313.8	275.4	247.6	226.6	212.7	209.1	209.1
22.5°	2485.7	1771.1	801.8	348.6	285.9	244.0	216.1	195.2	181.3	177.9	174.4
25°	2656.6	1806.0	658.8	310.3	258.1	216.1	184.8	167.4	156.8	153.4	149.8
27.5°	2841.2	1819.8	523.0	282.3	226.6	188.3	160.3	142.9	136.0	132.5	132.5
30°	3008.7	1806.0	404.3	250.9	198.7	163.9	139.4	125.6	118.5	115.1	115.1
32.5°	3183.0	1771.1	324.2	223.0	174.4	139.4	118.5	108.1	104.7	101.1	101.1
35°	3367.7	1725.7	279.0	198.7	149.8	122.0	104.7	97.6	94.1	90.6	90.6
37.5°	3583.9	1669.9	254.5	177.9	132.5	108.1	90.6	87.1	83.6	83.6	83.6
40°	3827.9	1600.2	237.1	160.3	118.5	94.1	80.2	76.6	73.2	73.2	73.2
42.5°	4085.9	1520.0	219.6	142.9	104.7	80.2	69.7	69.7	66.3	66.3	62.7
45°	4375.4	1439.9	202.2	125.6	90.6	69.7	59.3	55.8	55.8	52.3	52.3
47.5°	4717.0	1366.6	184.8	111.6	80.2	59.3	52.3	48.8	45.4	41.9	41.9
50°	5198.0	1359.7	163.9	97.6	73.2	48.8	41.9	38.4	34.9	31.4	31.4
52.5°	5675.8	1297.0	139.4	80.2	59.3	41.9	31.4	27.8	24.4	24.4	20.9
55°	5783.7	1192.3	122.0	69.7	45.4	31.4	24.4	17.4	17.4	14.0	14.0
57.5°	6020.8	1143.5	104.7	55.8	34.9	24.4	14.0	10.5	10.5	10.5	10.5
60°	6488.0	1129.6	90.6	48.8	24.4	17.4	10.5	6.9	6.9	3.6	3.6
62.5°	7133.0	1115.7	76.6	41.9	17.4	10.5	6.9	3.6	0.0	0.0	0.0
65°	7488.6	1021.6	62.7	31.4	14.0	10.5	3.6	0.0	0.0	0.0	0.0
67.5°	7394.5	843.7	55.8	20.9	10.5	6.9	3.6	0.0	0.0	0.0	0.0
69°	7000.5	711.2	45.4	17.4	10.5	6.9	3.6	0.0	0.0	0.0	0.0
70°	6526.4	613.6	41.9	14.0	6.9	3.6	3.6	0.0	0.0	0.0	0.0
72.5°	4633.3	320.8	27.8	10.5	6.9	3.6	0.0	0.0	0.0	0.0	0.0
75°	2164.9	142.9	17.4	6.9	3.6	3.6	0.0	0.0	0.0	0.0	0.0
77.5°	477.5	66.3	10.5	6.9	3.6	0.0	0.0	0.0	0.0	0.0	0.0
80°	90.6	24.4	6.9	3.6	3.6	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	31.4	10.5	3.6	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	10.5	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.6	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)