

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: P236987

Luminaire Tested: **ARCH-L-AF72-140-D-U-T2R-7050-HSS**

Issue Date: 2/14/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P236987  
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-AF72-140-D-U-T2R-7050-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 620mA 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: 15095 lumens  
Efficiency: N/A  
Efficacy: 105.6 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G2

Input Watts (W): 143  
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

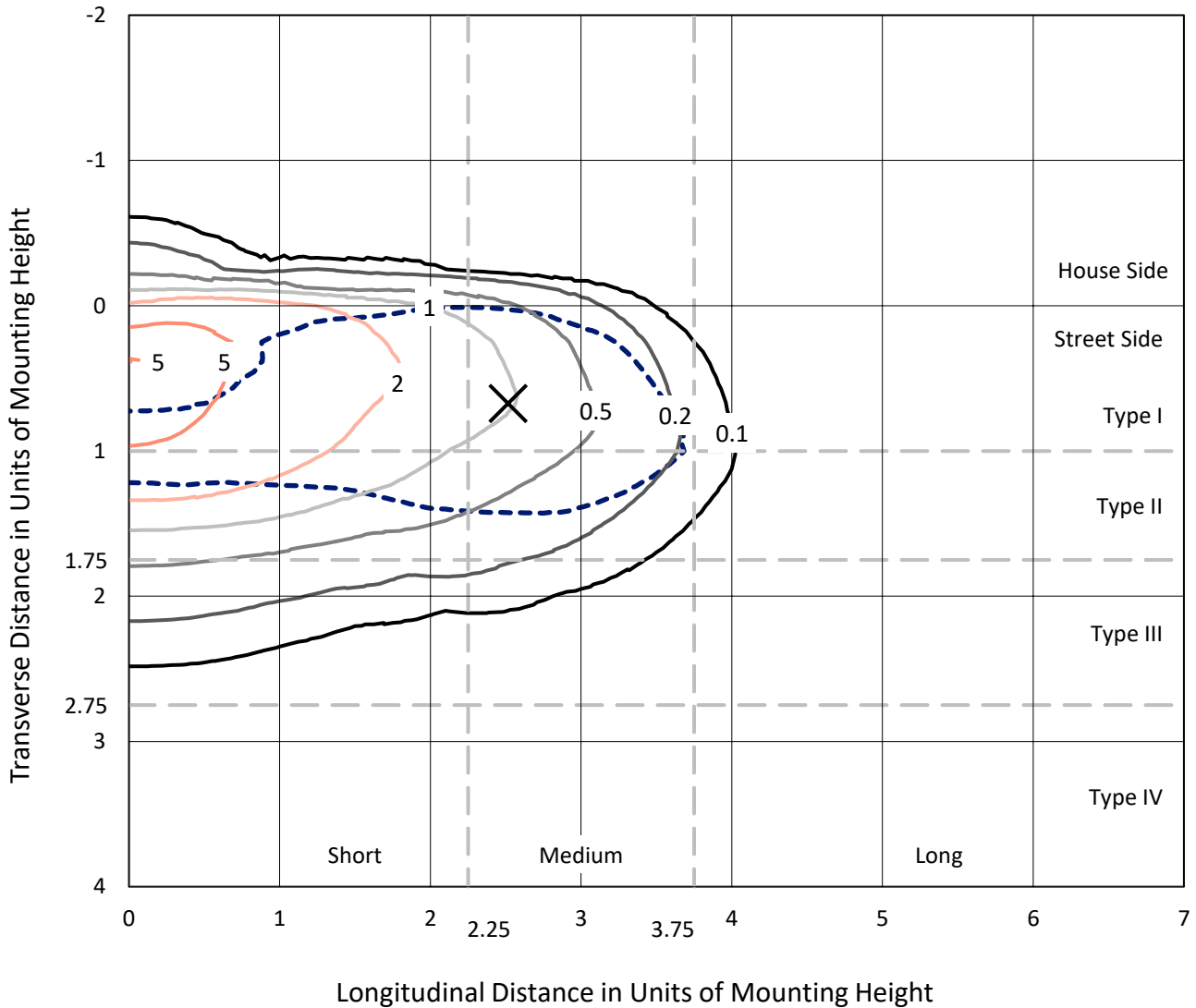


REPORT NUMBER: P236987

CATALOG NUMBER: ARCH-L-AF72-140-D-U-T2R-7050-HSS

### Iso-Footcandle Lines of Horizontal Illumination

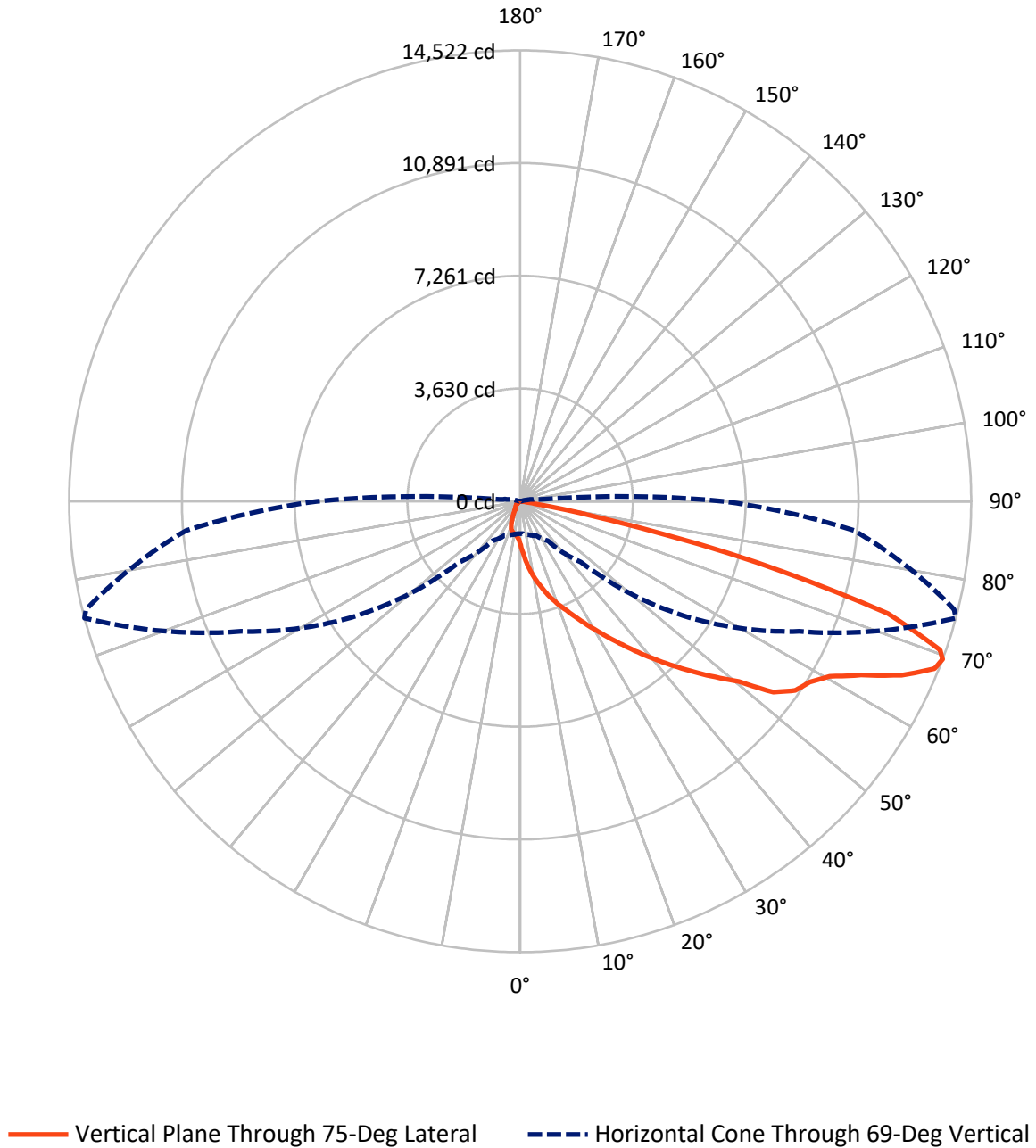
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 fc  
 Type II - Medium - N/A

REPORT NUMBER: P236987  
CATALOG NUMBER: ARCH-L-AF72-140-D-U-T2R-7050-HSS

### Luminous Intensity Polar Plot



REPORT NUMBER: P236987  
 CATALOG NUMBER: ARCH-L-AF72-140-D-U-T2R-7050-HSS

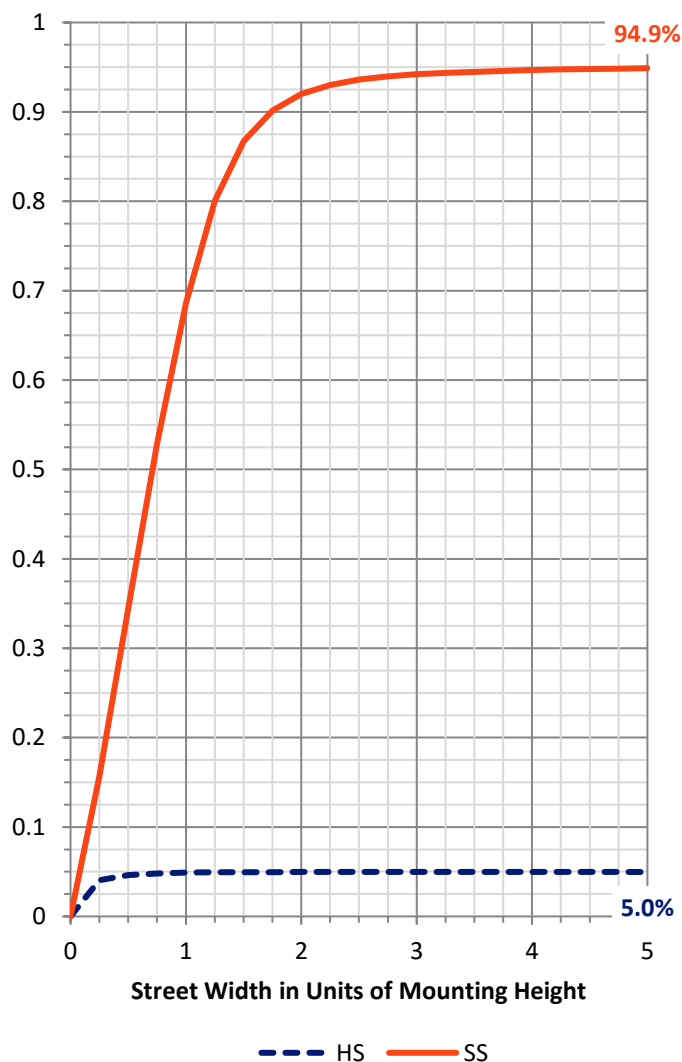
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	753.1	0.0	753.1
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	14341.9	0.0	14341.9
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	15095.0	0.0	15095.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	163.8	1.1
10°-20°	585.5	3.9
20°-30°	1117.8	7.4
30°-40°	2005.2	13.3
40°-50°	3072.1	20.4
50°-60°	3570.5	23.7
60°-70°	3161.7	20.9
70°-80°	1363.8	9.0
80°-90°	54.6	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°	15095.0	100.0
0°-180°	15095.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P236987

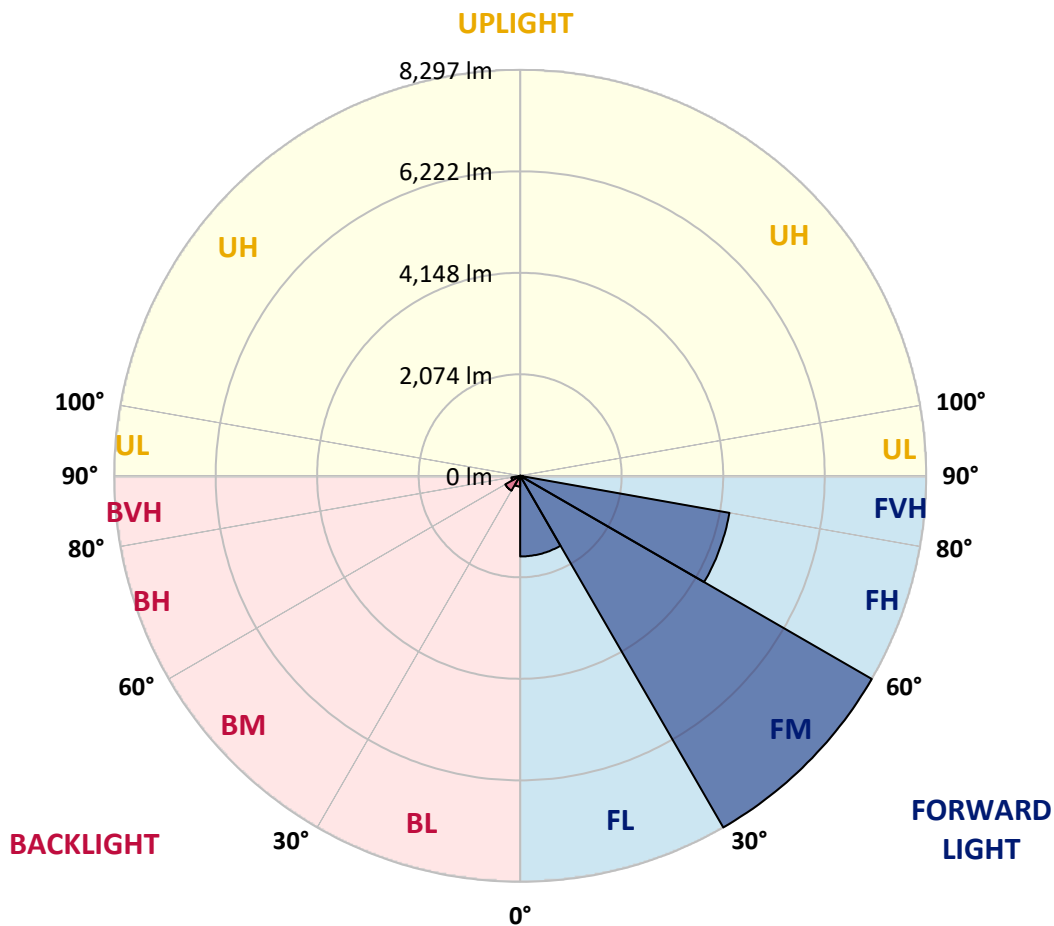
CATALOG NUMBER: ARCH-L-AF72-140-D-U-T2R-7050-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1648.4	10.9			
FM (30°-60°)	8296.6	55.0			
FH (60°-80°)	4343.0	28.8			G2/5000
FVH (80°-90°)	53.8	0.4			G1/100
BL (0°-30°)	218.7	1.4	B1/500		
BM (30°-60°)	351.1	2.3	B1/1000		
BH (60°-80°)	182.5	1.2	B1/500		G1/500
BVH (80°-90°)	0.8	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: P236987

CATALOG NUMBER: ARCH-L-AF72-140-D-U-T2R-7050-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1404.6	1404.6	1404.6	1404.6	1404.6	1404.6	1404.6	1404.6	1404.6	1404.6	1404.6
2.5°	2313.8	2291.0	2268.2	2242.1	2183.5	2082.4	1955.3	1818.5	1649.0	1619.7	1482.8
5°	2809.2	2799.4	2776.6	2740.7	2675.6	2564.8	2421.4	2219.3	1935.8	1886.9	1596.9
7.5°	3157.9	3151.4	3131.8	3089.4	3030.8	2920.0	2770.1	2551.7	2222.6	2167.2	1740.3
10°	3470.7	3467.5	3451.2	3412.1	3353.4	3232.8	3073.1	2845.0	2496.3	2434.4	1906.5
12.5°	3754.2	3757.5	3751.0	3731.4	3689.1	3575.0	3392.5	3144.8	2760.3	2691.8	2105.2
15°	3920.5	3930.2	3956.3	3995.4	4008.4	3917.2	3728.2	3454.4	3030.8	2972.1	2333.4
17.5°	3865.1	3874.8	3956.3	4089.9	4217.0	4230.0	4060.6	3747.7	3298.0	3239.3	2558.2
20°	3731.4	3744.5	3829.2	4011.7	4259.4	4432.1	4363.7	4067.1	3552.2	3480.5	2773.3
22.5°	3881.3	3881.3	3907.4	4018.2	4243.1	4513.6	4604.8	4386.5	3812.9	3724.9	2988.4
25°	4396.3	4386.5	4331.1	4285.4	4357.1	4598.3	4787.3	4712.4	4119.2	4018.2	3216.5
27.5°	5048.0	5093.7	4989.4	4823.2	4660.2	4764.5	4950.3	5035.0	4458.2	4353.9	3451.2
30°	5778.0	5797.6	5673.7	5452.1	5165.3	5064.3	5142.5	5312.0	4826.4	4712.4	3695.6
32.5°	6436.3	6420.0	6315.7	6084.4	5729.1	5510.8	5390.2	5533.6	5227.3	5096.9	3946.5
35°	7019.7	7032.7	6905.6	6638.4	6289.7	6058.3	5771.5	5784.5	5677.0	5527.1	4236.6
37.5°	7544.3	7521.5	7401.0	7133.7	6817.6	6566.7	6263.6	6045.3	6169.1	6012.7	4562.5
40°	7971.3	7948.4	7821.4	7560.6	7264.1	7058.8	6820.9	6394.0	6687.3	6508.0	4911.2
42.5°	8310.2	8284.1	8176.6	7925.6	7638.9	7456.4	7342.3	6824.1	7241.3	7062.0	5302.2
45°	8476.4	8453.6	8388.4	8199.4	7948.4	7788.8	7844.2	7319.5	7834.4	7684.5	5732.4
47.5°	8280.9	8271.1	8346.0	8313.4	8170.1	8085.3	8277.6	7860.5	8456.8	8310.2	6227.8
50°	7687.7	7704.0	7922.4	8192.9	8261.3	8362.3	8632.8	8430.8	9124.9	8968.5	6798.1
52.5°	6224.5	6335.3	6993.6	7645.4	8150.5	8531.8	9050.0	9245.5	10213.4	10060.2	7687.7
55°	4647.2	4692.8	5409.8	6524.3	7704.0	8518.8	9359.5	9724.5	10751.1	10594.7	7922.4
57.5°	3685.8	3702.1	4057.3	5194.7	6785.0	8225.5	9522.5	9897.3	10985.7	10855.4	8271.1
60°	2893.9	2913.5	3170.9	3953.0	5491.2	7433.5	9287.9	10047.2	11445.2	11341.0	8880.5
62.5°	2251.9	2271.5	2427.9	2887.4	4119.2	6214.7	8815.3	10288.3	12318.6	12269.7	9877.7
65°	1743.5	1750.0	1857.6	2072.7	2910.2	4894.9	8238.5	10513.2	13498.3	13456.0	10685.9
67.5°	1287.3	1297.0	1372.0	1505.6	1965.1	3516.3	7293.4	10340.5	14388.0	14264.2	10979.2
69°	1039.6	1049.4	1114.5	1222.1	1551.2	2770.1	6429.8	9913.6	14521.6	14404.3	10793.5
70°	889.7	896.2	961.4	1052.6	1323.1	2352.9	5745.4	9545.3	14345.7	14231.6	10369.8
72.5°	570.3	602.9	668.1	726.7	876.6	1557.8	3878.1	7915.9	12377.3	12181.8	8121.2
75°	316.1	325.9	443.2	514.9	583.3	1013.5	2157.4	4937.2	7873.5	7736.6	4344.1
77.5°	260.7	267.2	312.9	391.1	391.1	567.0	814.7	1945.6	2994.9	2701.6	1176.5
80°	182.5	189.0	237.9	257.5	280.3	319.4	264.0	426.9	462.8	410.6	176.0
82.5°	127.1	133.6	162.9	211.8	224.9	149.9	97.8	127.1	133.6	133.6	68.4
85°	22.8	32.6	120.6	176.0	133.6	45.6	55.4	45.6	42.4	45.6	16.3
87.5°	0.0	0.0	75.0	84.7	71.7	19.6	22.8	16.3	9.8	13.0	6.5
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: P236987

CATALOG NUMBER: ARCH-L-AF72-140-D-U-T2R-7050-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1404.6	1404.6	1404.6	1404.6	1404.6	1404.6	1404.6	1404.6	1404.6	1404.6	1404.6
2.5°	1414.4	1345.9	1228.6	1143.9	1072.2	1016.8	994.0	958.1	932.0	945.1	928.8
5°	1453.5	1332.9	1143.9	1023.3	938.6	866.9	808.2	762.6	726.7	720.2	713.7
7.5°	1515.4	1342.7	1095.0	945.1	818.0	707.2	615.9	547.5	495.4	495.4	475.8
10°	1600.1	1368.7	1065.7	866.9	677.9	527.9	436.7	371.5	345.4	342.2	335.7
12.5°	1717.4	1417.6	1042.8	765.8	527.9	384.5	329.1	306.3	296.6	293.3	290.0
15°	1877.1	1489.3	1016.8	642.0	400.8	316.1	293.3	273.7	264.0	260.7	257.5
17.5°	2030.3	1554.5	961.4	514.9	325.9	286.8	260.7	244.4	231.4	228.1	228.1
20°	2173.7	1609.9	866.9	400.8	293.3	257.5	231.4	211.8	198.8	195.5	195.5
22.5°	2323.6	1655.5	749.5	325.9	267.2	228.1	202.1	182.5	169.5	166.2	162.9
25°	2483.3	1688.1	615.9	290.0	241.2	202.1	172.7	156.4	146.7	143.4	140.1
27.5°	2656.0	1701.1	488.8	264.0	211.8	176.0	149.9	133.6	127.1	123.8	123.8
30°	2812.4	1688.1	378.0	234.6	185.8	153.2	130.4	117.3	110.8	107.5	107.5
32.5°	2975.4	1655.5	303.1	208.6	162.9	130.4	110.8	101.0	97.8	94.5	94.5
35°	3148.1	1613.2	260.7	185.8	140.1	114.1	97.8	91.2	88.0	84.7	84.7
37.5°	3350.1	1561.0	237.9	166.2	123.8	101.0	84.7	81.5	78.2	78.2	78.2
40°	3578.3	1495.8	221.6	149.9	110.8	88.0	75.0	71.7	68.4	68.4	68.4
42.5°	3819.4	1420.9	205.3	133.6	97.8	75.0	65.2	65.2	61.9	61.9	58.7
45°	4089.9	1345.9	189.0	117.3	84.7	65.2	55.4	52.1	52.1	48.9	48.9
47.5°	4409.3	1277.5	172.7	104.3	75.0	55.4	48.9	45.6	42.4	39.1	39.1
50°	4859.0	1271.0	153.2	91.2	68.4	45.6	39.1	35.8	32.6	29.3	29.3
52.5°	5305.5	1212.3	130.4	75.0	55.4	39.1	29.3	26.1	22.8	22.8	19.6
55°	5406.5	1114.5	114.1	65.2	42.4	29.3	22.8	16.3	16.3	13.0	13.0
57.5°	5628.1	1068.9	97.8	52.1	32.6	22.8	13.0	9.8	9.8	9.8	9.8
60°	6064.8	1055.9	84.7	45.6	22.8	16.3	9.8	6.5	6.5	3.3	3.3
62.5°	6667.7	1042.8	71.7	39.1	16.3	9.8	6.5	3.3	0.0	0.0	0.0
65°	7000.1	954.9	58.7	29.3	13.0	9.8	3.3	0.0	0.0	0.0	0.0
67.5°	6912.1	788.7	52.1	19.6	9.8	6.5	3.3	0.0	0.0	0.0	0.0
69°	6543.9	664.8	42.4	16.3	9.8	6.5	3.3	0.0	0.0	0.0	0.0
70°	6100.7	573.6	39.1	13.0	6.5	3.3	3.3	0.0	0.0	0.0	0.0
72.5°	4331.1	299.8	26.1	9.8	6.5	3.3	0.0	0.0	0.0	0.0	0.0
75°	2023.8	133.6	16.3	6.5	3.3	3.3	0.0	0.0	0.0	0.0	0.0
77.5°	446.5	61.9	9.8	6.5	3.3	0.0	0.0	0.0	0.0	0.0	0.0
80°	84.7	22.8	6.5	3.3	3.3	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	29.3	9.8	3.3	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	9.8	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.3	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)