

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: P236945

Luminaire Tested: **ARCH-L-AF72-120-D-U-T2R-7030-HSS**

Issue Date: 8/23/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P236945  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 8/23/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-120-D-U-T2R-7030-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 530mA 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: 12803 lumens  
Efficiency: N/A  
Efficacy: 104.1 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

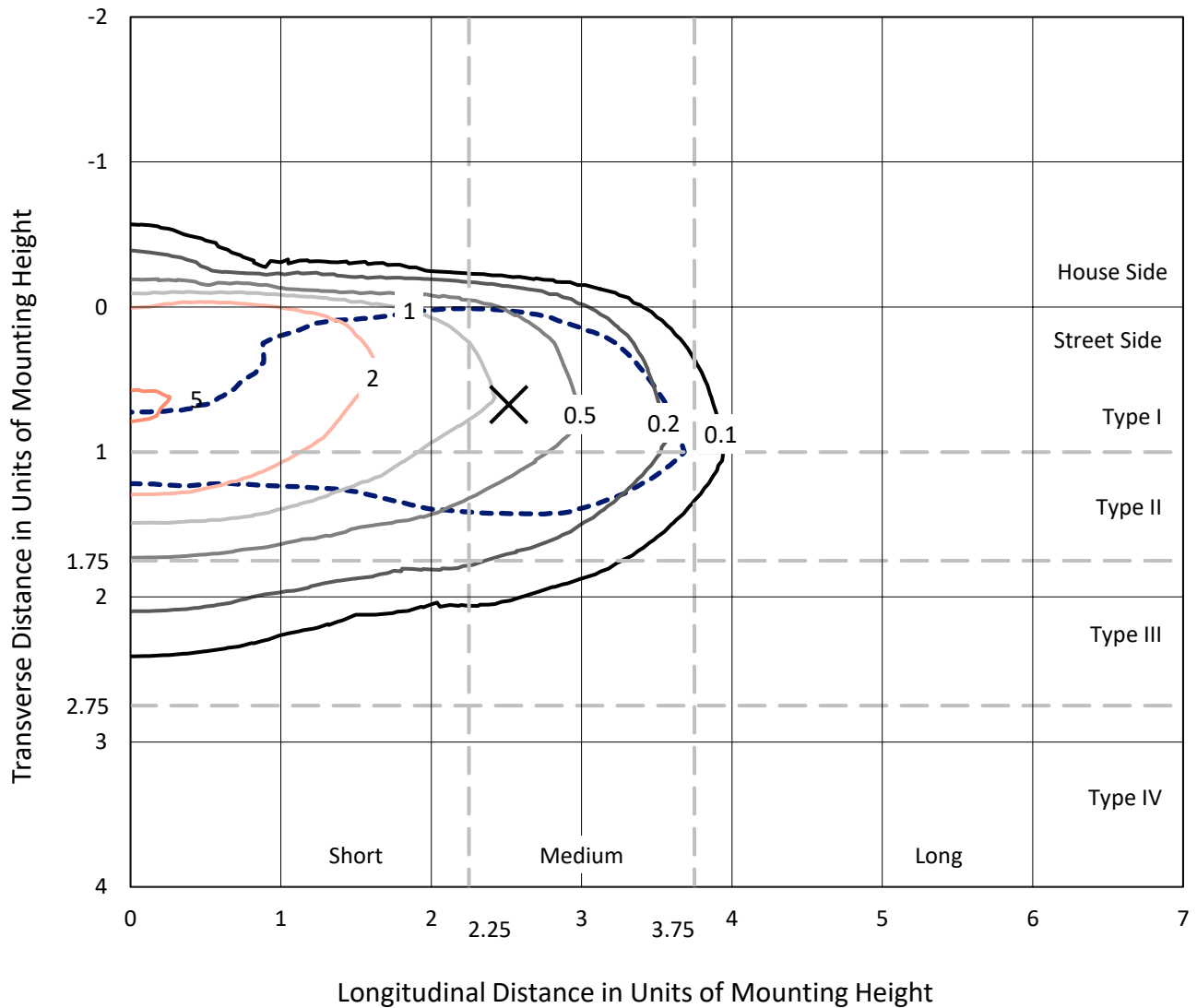
Input Watts (W): 123  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

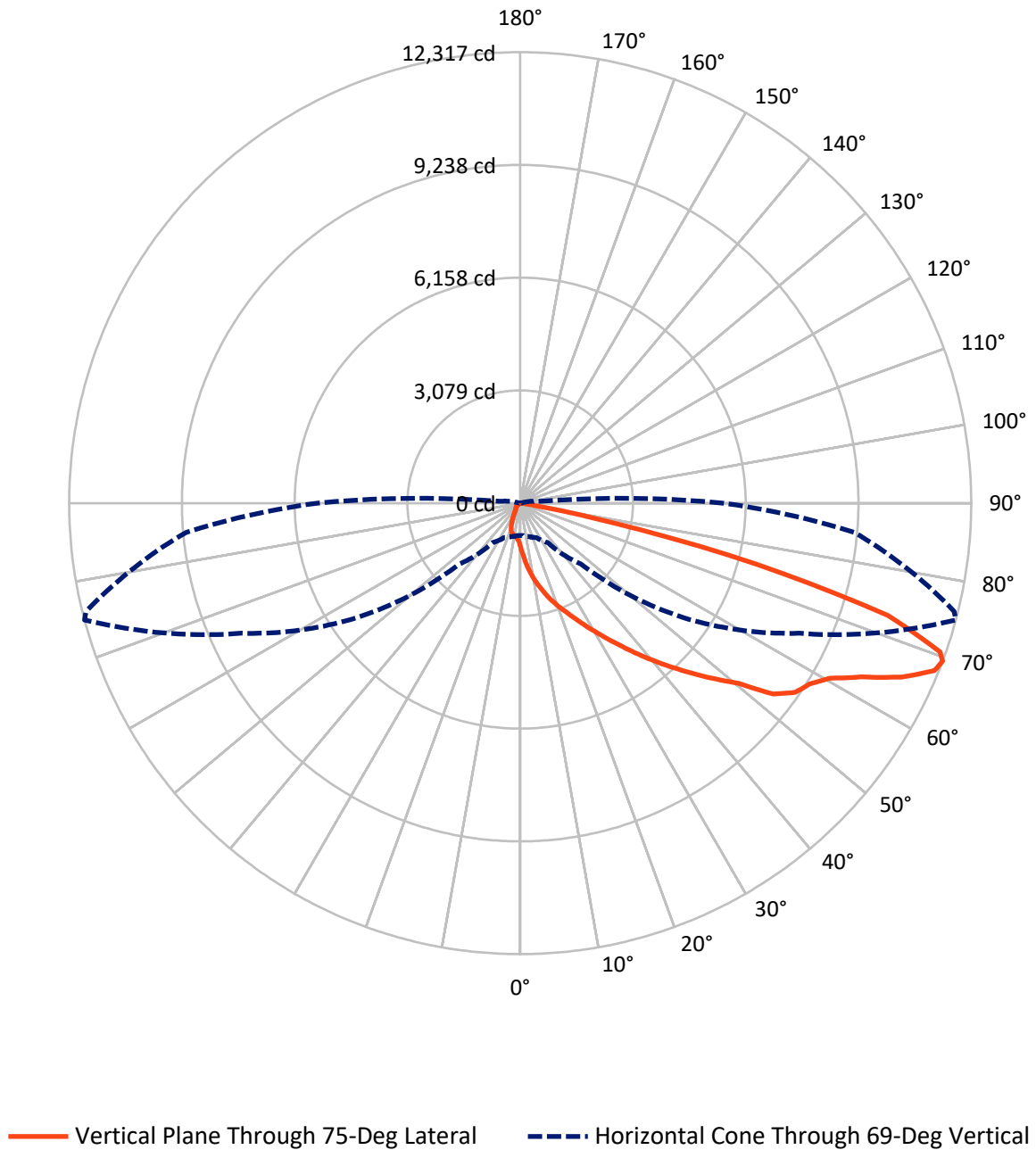
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.2 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



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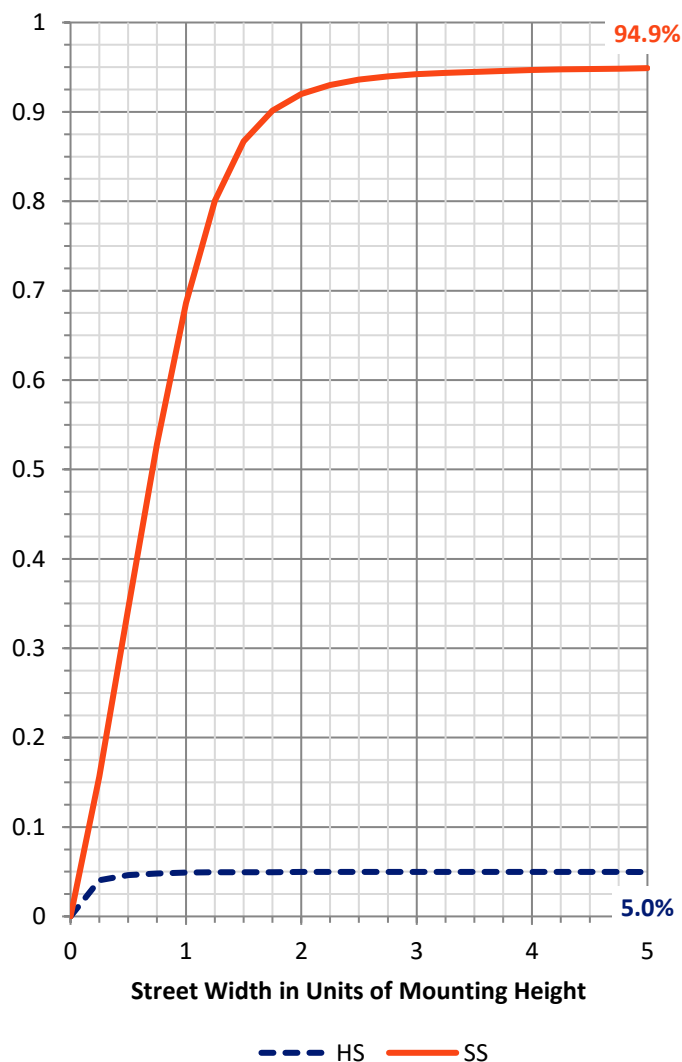
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	638.8	0.0	638.8
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	12164.2	0.0	12164.2
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	12803.0	0.0	12803.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	138.9	1.1
10°-20°	496.6	3.9
20°-30°	948.1	7.4
30°-40°	1700.7	13.3
40°-50°	2605.6	20.4
50°-60°	3028.4	23.7
60°-70°	2681.6	20.9
70°-80°	1156.7	9.0
80°-90°	46.3	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°	12803.0	100.0
0°-180°	12803.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P236945

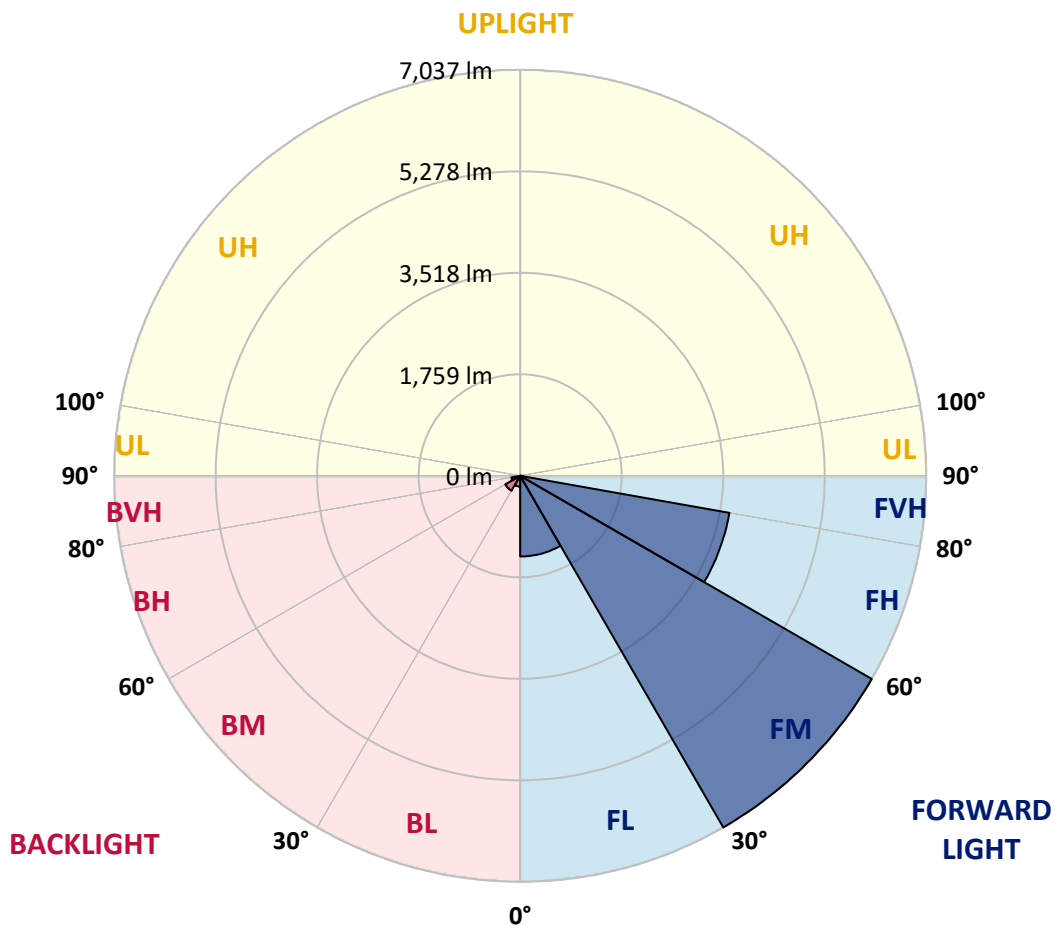
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1398.1	10.9			
FM (30°-60°)	7036.9	55.0			
FH (60°-80°)	3683.6	28.8			G2/5000
FVH (80°-90°)	45.7	0.4			G1/100
BL (0°-30°)	185.5	1.4	B1/500		
BM (30°-60°)	297.8	2.3	B1/1000		
BH (60°-80°)	154.8	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1191.4	1191.4	1191.4	1191.4	1191.4	1191.4	1191.4	1191.4	1191.4	1191.4	1191.4
2.5°	1962.6	1943.1	1923.8	1901.6	1852.0	1766.2	1658.4	1542.3	1398.6	1373.7	1257.7
5°	2382.6	2374.3	2355.0	2324.6	2269.4	2175.4	2053.7	1882.3	1641.8	1600.4	1354.4
7.5°	2678.4	2672.8	2656.3	2620.4	2570.6	2476.6	2349.5	2164.3	1885.0	1838.1	1476.0
10°	2943.8	2940.9	2927.2	2894.0	2844.2	2742.0	2606.5	2413.0	2117.2	2064.8	1616.9
12.5°	3184.3	3187.0	3181.4	3164.9	3128.9	3032.2	2877.5	2667.3	2341.2	2283.1	1785.7
15°	3325.2	3333.5	3355.6	3388.7	3399.8	3322.5	3162.1	2929.9	2570.6	2520.8	1979.1
17.5°	3278.3	3286.5	3355.6	3468.9	3576.7	3587.7	3444.1	3178.7	2797.2	2747.5	2169.8
20°	3164.9	3175.9	3247.7	3402.6	3612.6	3759.2	3701.0	3449.6	3012.9	2952.0	2352.3
22.5°	3292.0	3292.0	3314.2	3408.2	3598.8	3828.2	3905.6	3720.4	3234.0	3159.3	2534.7
25°	3728.7	3720.4	3673.4	3634.7	3695.5	3900.1	4060.4	3996.8	3493.8	3408.2	2728.1
27.5°	4281.6	4320.2	4231.8	4090.7	3952.7	4041.1	4198.7	4270.5	3781.3	3692.8	2927.2
30°	4900.8	4917.3	4812.3	4624.3	4381.1	4295.4	4361.7	4505.5	4093.6	3996.8	3134.4
32.5°	5459.0	5445.3	5356.8	5160.6	4859.2	4674.0	4571.7	4693.3	4433.5	4323.0	3347.2
35°	5953.7	5964.9	5857.1	5630.4	5334.7	5138.4	4895.2	4906.2	4815.0	4687.9	3593.3
37.5°	6398.9	6379.4	6277.2	6050.6	5782.4	5569.6	5312.5	5127.3	5232.4	5099.6	3869.8
40°	6761.0	6741.6	6633.7	6412.7	6161.1	5987.0	5785.2	5423.1	5671.8	5519.9	4165.4
42.5°	7048.5	7026.3	6935.0	6722.1	6479.0	6324.2	6227.4	5788.0	6141.8	5989.7	4497.1
45°	7189.4	7170.0	7114.8	6954.4	6741.6	6606.2	6653.2	6208.1	6644.8	6517.7	4862.0
47.5°	7023.5	7015.2	7078.8	7051.1	6929.6	6857.6	7020.8	6666.9	7172.8	7048.5	5282.1
50°	6520.5	6534.2	6719.5	6948.9	7006.9	7092.6	7322.0	7150.7	7739.4	7606.7	5765.8
52.5°	5279.4	5373.4	5931.6	6484.5	6913.0	7236.4	7675.8	7841.6	8662.6	8532.7	6520.5
55°	3941.5	3980.4	4588.4	5533.7	6534.2	7225.4	7938.4	8248.0	9118.7	8986.0	6719.5
57.5°	3126.1	3140.0	3441.2	4405.9	5754.8	6976.5	8076.7	8394.5	9317.6	9207.2	7015.2
60°	2454.5	2471.1	2689.4	3352.8	4657.5	6304.8	7877.6	8521.6	9707.4	9618.9	7532.2
62.5°	1910.0	1926.6	2059.2	2448.9	3493.8	5271.1	7476.8	8726.2	10448.1	10406.7	8377.9
65°	1478.9	1484.3	1575.5	1758.0	2468.2	4151.7	6987.5	8916.8	11448.7	11412.9	9063.4
67.5°	1091.8	1100.1	1163.7	1277.0	1666.7	2982.4	6186.0	8770.4	12203.3	12098.4	9312.1
69°	881.7	890.0	945.3	1036.6	1315.7	2349.5	5453.4	8408.3	12316.7	12217.2	9154.7
70°	754.6	760.1	815.4	892.7	1122.2	1995.6	4873.1	8096.0	12167.4	12070.8	8795.3
72.5°	483.7	511.4	566.6	616.4	743.5	1321.3	3289.2	6714.0	10497.9	10332.1	6888.0
75°	268.1	276.4	376.0	436.7	494.7	859.7	1829.8	4187.6	6678.0	6561.9	3684.6
77.5°	221.1	226.6	265.4	331.7	331.7	481.0	691.1	1650.2	2540.2	2291.3	997.9
80°	154.8	160.3	201.8	218.4	237.7	270.9	223.9	362.0	392.5	348.3	149.2
82.5°	107.8	113.3	138.2	179.6	190.7	127.2	82.9	107.8	113.3	113.3	58.0
85°	19.3	27.7	102.2	149.2	113.3	38.7	47.0	38.7	35.9	38.7	13.7
87.5°	0.0	0.0	63.6	71.9	60.8	16.6	19.3	13.7	8.3	11.0	5.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CATALOG NUMBER: ARCH-L-AF72-120-D-U-T2R-7030-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1191.4	1191.4	1191.4	1191.4	1191.4	1191.4	1191.4	1191.4	1191.4	1191.4	1191.4
2.5°	1199.5	1141.5	1042.0	970.2	909.4	862.4	843.1	812.7	790.5	801.5	787.8
5°	1232.8	1130.5	970.2	867.9	796.1	735.2	685.5	646.9	616.4	610.9	605.3
7.5°	1285.3	1138.8	928.7	801.5	693.8	599.9	522.4	464.4	420.1	420.1	403.6
10°	1357.1	1160.9	903.9	735.2	574.9	447.8	370.4	315.1	293.1	290.2	284.7
12.5°	1456.7	1202.4	884.5	649.5	447.8	326.1	279.1	259.8	251.6	248.8	246.1
15°	1592.1	1263.1	862.4	544.5	340.1	268.1	248.8	232.1	223.9	221.1	218.4
17.5°	1722.0	1318.4	815.4	436.7	276.4	243.2	221.1	207.3	196.2	193.5	193.5
20°	1843.6	1365.4	735.2	340.1	248.8	218.4	196.2	179.6	168.6	165.8	165.8
22.5°	1970.8	1404.2	635.8	276.4	226.6	193.5	171.3	154.8	143.7	141.0	138.2
25°	2106.2	1431.9	522.4	246.1	204.6	171.3	146.5	132.6	124.3	121.6	118.9
27.5°	2252.7	1442.9	414.6	223.9	179.6	149.2	127.2	113.3	107.8	105.0	105.0
30°	2385.3	1431.9	320.6	199.0	157.6	129.9	110.6	99.5	94.0	91.2	91.2
32.5°	2523.6	1404.2	257.1	176.9	138.2	110.6	94.0	85.7	82.9	80.2	80.2
35°	2670.1	1368.3	221.1	157.6	118.9	96.7	82.9	77.3	74.7	71.9	71.9
37.5°	2841.5	1324.0	201.8	141.0	105.0	85.7	71.9	69.1	66.3	66.3	66.3
40°	3035.0	1268.7	187.9	127.2	94.0	74.7	63.6	60.8	58.0	58.0	58.0
42.5°	3239.5	1205.1	174.2	113.3	82.9	63.6	55.2	55.2	52.6	52.6	49.7
45°	3468.9	1141.5	160.3	99.5	71.9	55.2	47.0	44.2	44.2	41.4	41.4
47.5°	3739.8	1083.6	146.5	88.5	63.6	47.0	41.4	38.7	35.9	33.3	33.3
50°	4121.3	1078.0	129.9	77.3	58.0	38.7	33.3	30.4	27.7	24.9	24.9
52.5°	4500.0	1028.2	110.6	63.6	47.0	33.3	24.9	22.1	19.3	19.3	16.6
55°	4585.6	945.3	96.7	55.2	35.9	24.9	19.3	13.7	13.7	11.0	11.0
57.5°	4773.5	906.7	82.9	44.2	27.7	19.3	11.0	8.3	8.3	8.3	8.3
60°	5143.9	895.6	71.9	38.7	19.3	13.7	8.3	5.6	5.6	2.7	2.7
62.5°	5655.3	884.5	60.8	33.3	13.7	8.3	5.6	2.7	0.0	0.0	0.0
65°	5937.2	809.8	49.7	24.9	11.0	8.3	2.7	0.0	0.0	0.0	0.0
67.5°	5862.7	668.8	44.2	16.6	8.3	5.6	2.7	0.0	0.0	0.0	0.0
69°	5550.3	563.9	35.9	13.7	8.3	5.6	2.7	0.0	0.0	0.0	0.0
70°	5174.3	486.4	33.3	11.0	5.6	2.7	2.7	0.0	0.0	0.0	0.0
72.5°	3673.4	254.2	22.1	8.3	5.6	2.7	0.0	0.0	0.0	0.0	0.0
75°	1716.5	113.3	13.7	5.6	2.7	2.7	0.0	0.0	0.0	0.0	0.0
77.5°	378.7	52.6	8.3	5.6	2.7	0.0	0.0	0.0	0.0	0.0	0.0
80°	71.9	19.3	5.6	2.7	2.7	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	24.9	8.3	2.7	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	8.3	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.7	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)