

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: P841374

Luminaire Tested: **ARCH4-170-727-U-T3-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841374
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-26)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-170-727-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1380mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17833 lumens
Efficiency: N/A
Efficacy: 105.0 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G3

Input Watts (W): 169.8
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



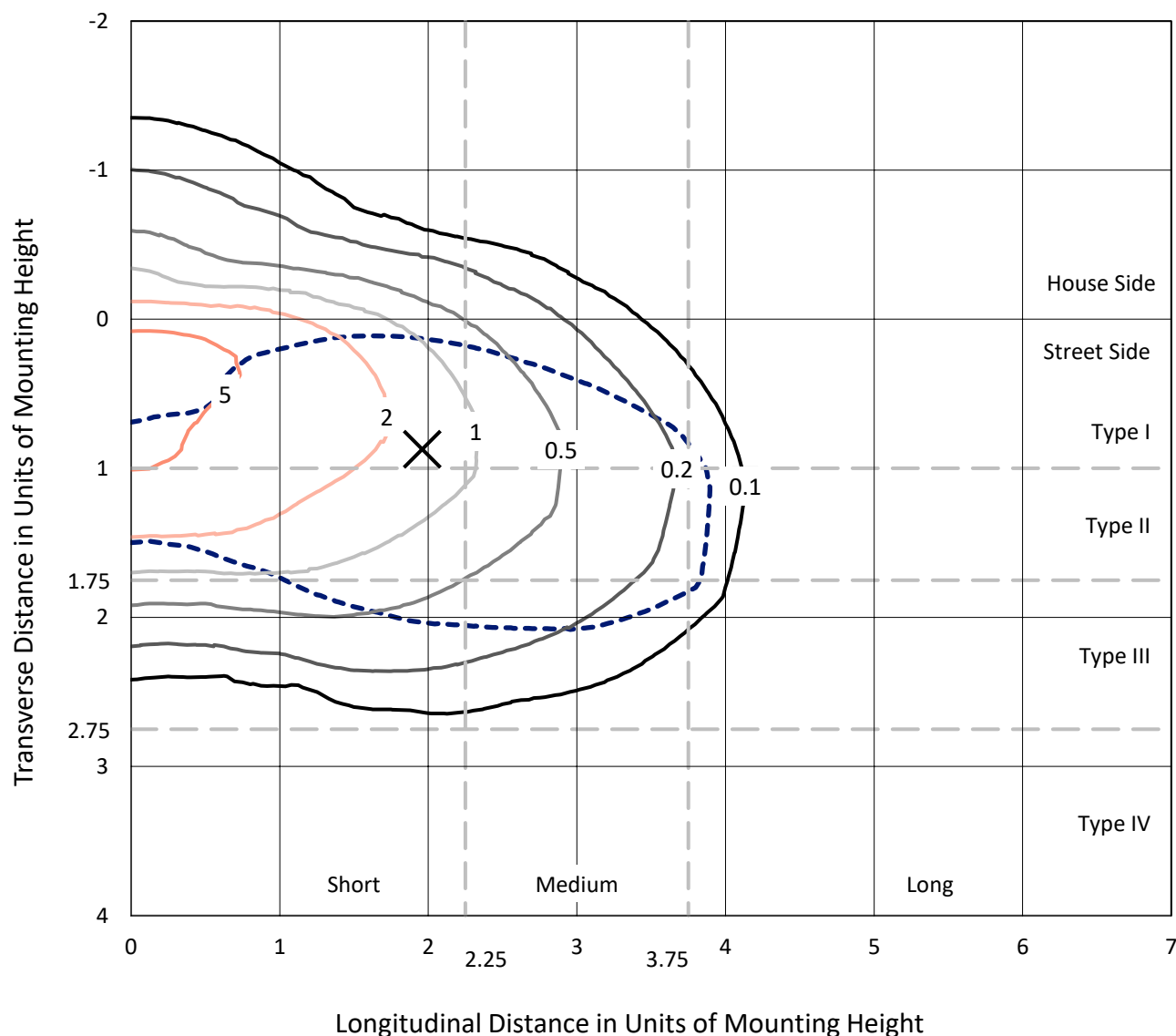
REPORT NUMBER: P841374

CATALOG NUMBER: ARCH4-170-727-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

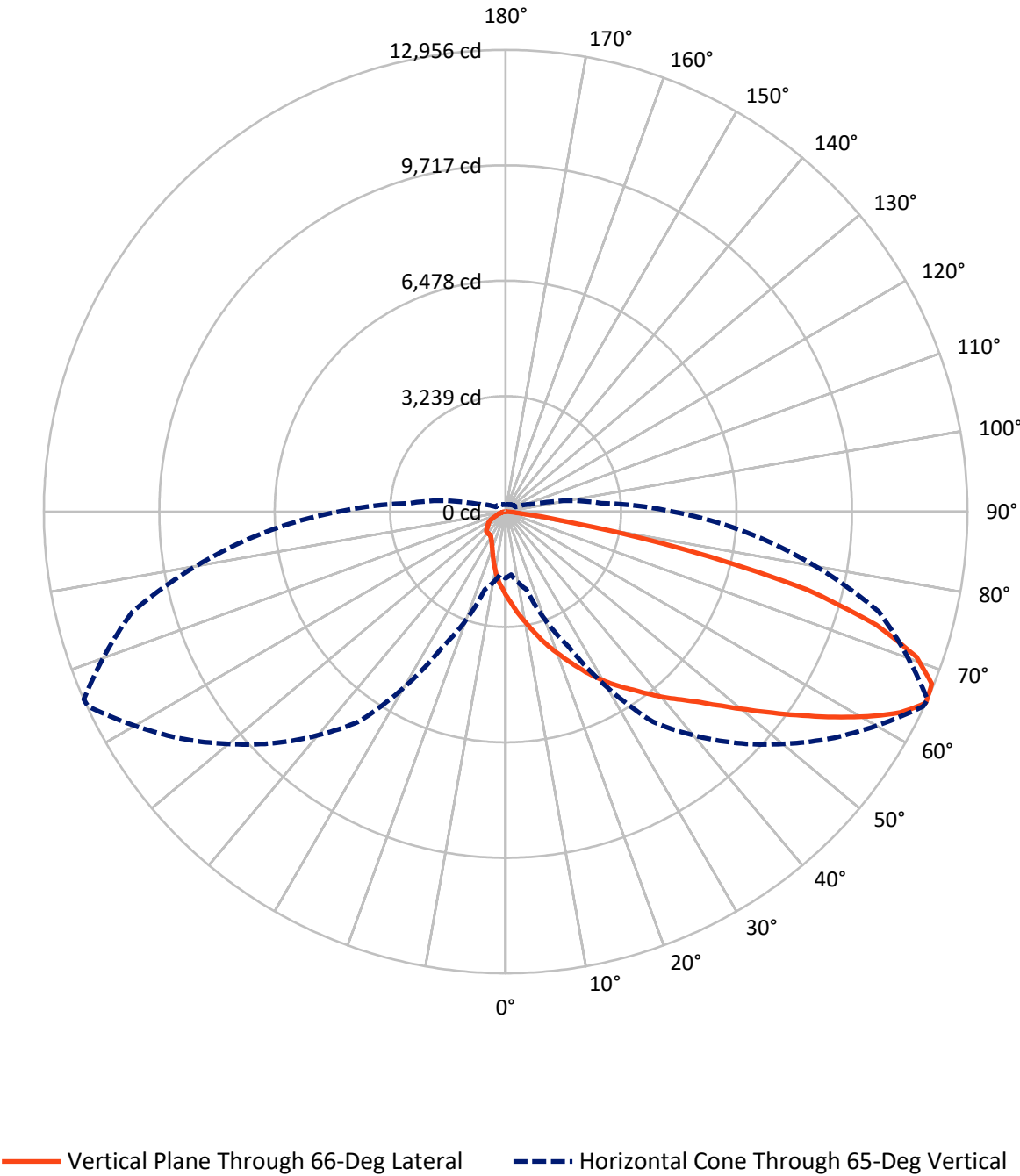


Based on 25 foot mounting height. Maximum calculated value = 6.8 fc

Type III - Short - N/A

REPORT NUMBER: P841374
CATALOG NUMBER: ARCH4-170-727-U-T3-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P841374

CATALOG NUMBER: ARCH4-170-727-U-T3-HSS

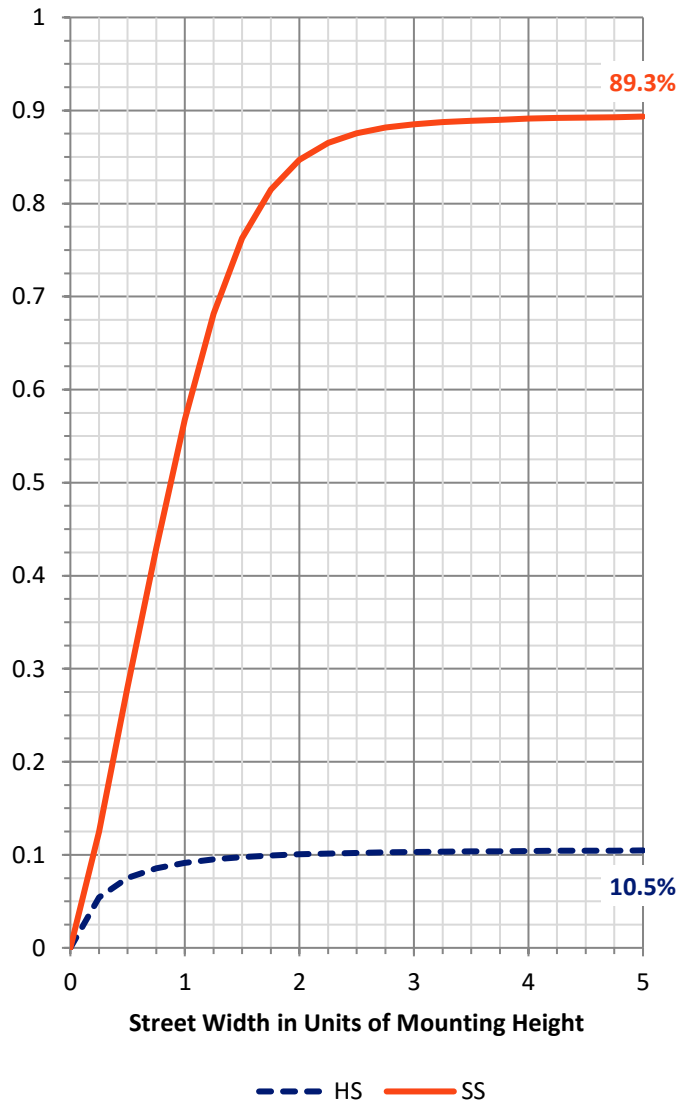
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1886.3	0.0	1886.3
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	15946.8	0.0	15946.8
	% Fixture	89.4	0.0	89.4
Total	Lumens	17833.0	0.0	17833.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	232.9	1.3
10°-20°	759.2	4.3
20°-30°	1373.7	7.7
30°-40°	2148.1	12.0
40°-50°	3258.6	18.3
50°-60°	4140.2	23.2
60°-70°	3868.5	21.7
70°-80°	1922.6	10.8
80°-90°	129.2	0.7
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°	17833.0	100.0
0°-180°	17833.0	100.0

Coefficient of Utilization



REPORT NUMBER: P841374

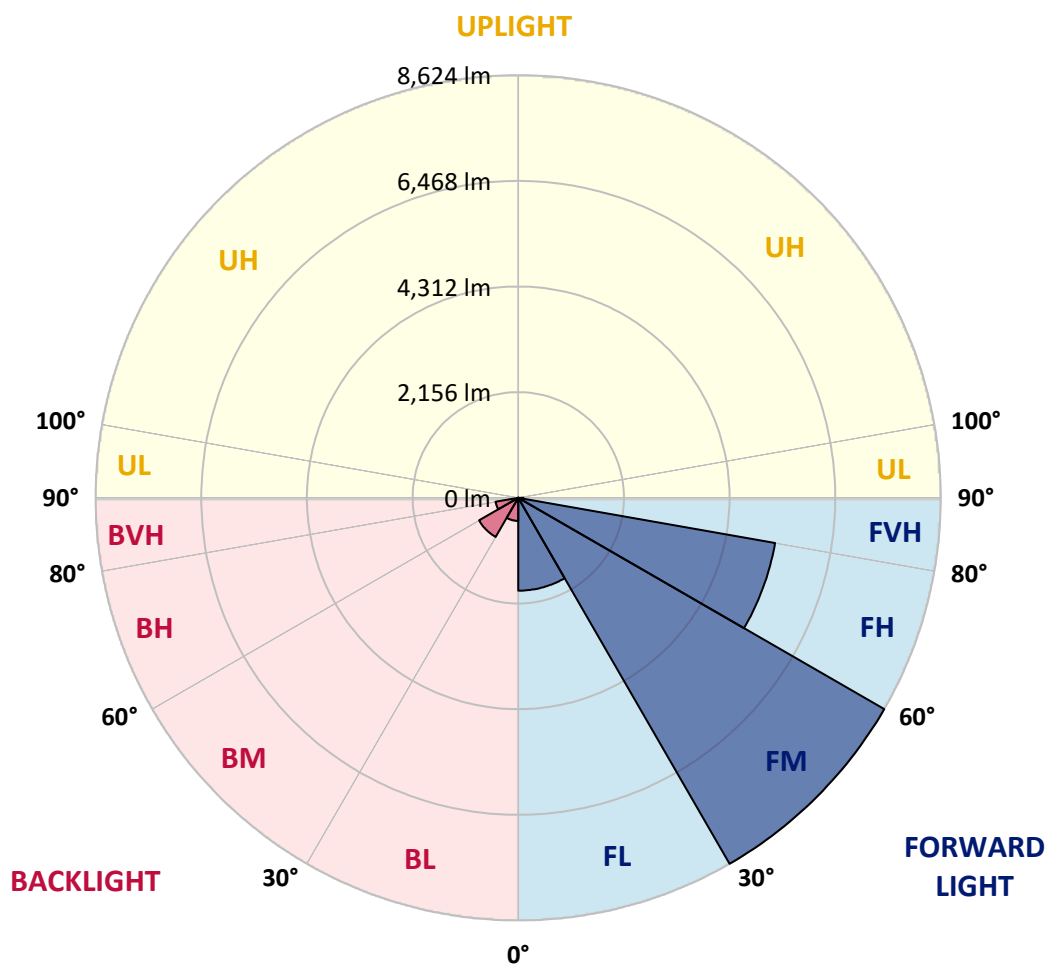
CATALOG NUMBER: ARCH4-170-727-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1894.8	10.6			
FM	(30°-60°)	8624.2	48.4			
FH	(60°-80°)	5321.4	29.8			G3/7500
FVH	(80°-90°)	106.3	0.6			G2/225
BL	(0°-30°)	471.1	2.6	B1/500		
BM	(30°-60°)	922.6	5.2	B1/1000		
BH	(60°-80°)	469.7	2.6	B1/500		G1/500
BVH	(80°-90°)	22.9	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type III Short



REPORT NUMBER: P841374

CATALOG NUMBER: ARCH4-170-727-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2360.1	2360.1	2360.1	2360.1	2360.1	2360.1	2360.1	2360.1	2360.1	2360.1	2360.1
2.5°	2756.6	2779.0	2790.2	2794.0	2707.9	2670.5	2633.1	2547.1	2528.4	2479.8	2416.2
5°	3242.8	3272.7	3265.2	3250.3	3145.6	3025.9	2928.6	2767.8	2741.6	2625.7	2483.5
7.5°	3721.6	3747.7	3740.3	3684.1	3568.2	3399.9	3239.1	3003.4	2966.0	2779.0	2550.9
10°	4121.8	4144.2	4140.5	4084.4	3946.0	3740.3	3545.8	3231.6	3186.7	2921.1	2607.0
12.5°	4450.9	4480.8	4477.1	4439.7	4316.3	4091.8	3871.2	3493.4	3437.3	3093.2	2685.5
15°	4709.0	4746.4	4746.4	4731.4	4645.4	4458.4	4207.8	3781.4	3714.1	3291.4	2782.7
17.5°	4866.1	4896.0	4922.2	4948.4	4888.5	4746.4	4518.2	4069.4	3998.3	3485.9	2883.7
20°	4948.4	4978.3	4997.0	5053.1	5064.3	4993.2	4813.7	4353.7	4278.8	3706.6	2999.7
22.5°	5083.0	5109.2	5112.9	5161.5	5184.0	5202.7	5090.5	4634.2	4574.3	3949.7	3130.6
25°	5307.4	5337.3	5326.1	5348.6	5352.3	5374.7	5363.5	4955.8	4896.0	4226.5	3287.7
27.5°	5595.4	5632.8	5625.3	5602.9	5569.2	5550.5	5599.2	5281.2	5225.1	4503.3	3448.5
30°	5905.9	5950.7	5939.5	5894.6	5804.9	5726.3	5793.7	5587.9	5535.6	4787.5	3628.0
32.5°	6220.0	6272.4	6268.7	6193.9	6040.5	5905.9	6006.8	5875.9	5838.5	5094.2	3822.5
35°	6425.8	6493.1	6485.6	6440.7	6242.5	6126.5	6250.0	6171.4	6145.2	5468.3	4103.1
37.5°	6758.6	6829.7	6766.1	6653.9	6425.8	6365.9	6515.5	6504.3	6485.6	5864.7	4398.5
40°	7566.5	7671.3	7502.9	7042.9	6668.9	6616.5	6829.7	6874.6	6855.9	6257.4	4664.1
42.5°	8411.8	8568.9	8307.1	7671.3	7110.2	6919.5	7173.8	7237.4	7214.9	6594.1	4903.5
45°	8924.2	8991.6	8729.8	8236.0	7891.9	7286.0	7540.4	7645.1	7626.4	6998.0	5210.2
47.5°	9343.2	9317.0	9017.8	8684.9	8748.5	7802.2	7955.5	8161.2	8146.3	7443.1	5546.8
50°	9432.9	9373.1	9253.4	9043.9	9212.2	8325.8	8393.1	8748.5	8733.5	7936.8	5887.2
52.5°	8800.8	8722.3	9047.7	9223.5	9167.4	8707.3	8875.6	9391.8	9384.3	8471.7	6212.6
55°	7222.4	7158.8	8034.1	8942.9	9118.7	8976.6	9410.5	10061.3	10102.4	9040.2	6508.0
57.5°	5681.4	5614.1	6474.4	8239.8	8939.2	9223.5	10035.1	10828.0	10880.4	9657.3	6788.6
60°	4529.4	4428.5	5086.7	7132.7	8602.6	9414.2	10637.3	11669.6	11677.1	10222.1	6960.6
62.5°	3078.2	2966.0	3695.4	5730.1	8037.8	9444.1	11101.1	12395.2	12425.1	10644.8	6990.5
65°	1870.1	1776.6	2270.3	4185.3	7203.7	9189.8	11108.6	12930.1	12956.2	10839.3	6811.0
67.5°	1084.7	1047.3	1297.9	2607.0	5819.8	8505.3	10641.0	12847.8	12896.4	10757.0	6403.3
70°	632.1	628.4	721.9	1290.4	4106.8	7147.6	9597.5	12155.8	12226.9	10326.8	5778.7
72.5°	463.8	471.3	508.7	691.9	2378.8	5146.6	8127.6	10764.4	10872.9	9485.3	4888.5
75°	366.5	370.3	403.9	471.3	1249.2	2909.9	6089.1	8640.0	8726.0	7985.4	3818.8
77.5°	273.0	280.5	306.7	332.9	579.7	1335.3	3426.1	5322.4	5180.3	4383.6	1843.9
80°	198.2	216.9	228.2	239.4	306.7	516.2	1028.6	1855.2	1840.2	1915.0	871.5
82.5°	127.2	142.1	153.4	160.8	183.3	246.9	306.7	415.2	448.8	744.3	347.8
85°	56.1	63.6	71.1	86.0	78.5	86.0	127.2	82.3	71.1	112.2	63.6
87.5°	0.0	0.0	11.2	18.7	15.0	7.5	22.4	15.0	11.2	11.2	11.2
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: P841374

CATALOG NUMBER: ARCH4-170-727-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2360.1	2360.1	2360.1	2360.1	2360.1	2360.1	2360.1	2360.1	2360.1	2360.1	2360.1
2.5°	2382.5	2341.4	2255.4	2173.1	2124.5	2060.9	2004.8	1952.4	1948.7	1933.7	1907.5
5°	2412.5	2333.9	2173.1	2019.7	1903.8	1780.4	1675.6	1593.3	1563.4	1541.0	1511.1
7.5°	2442.4	2319.0	2079.6	1855.2	1671.9	1499.8	1376.4	1264.2	1230.5	1200.6	1181.9
10°	2453.6	2292.8	1971.1	1671.9	1432.5	1249.2	1118.3	1036.1	1006.1	991.2	979.9
12.5°	2487.3	2277.8	1870.1	1499.8	1223.1	1054.8	961.2	912.6	901.4	890.2	879.0
15°	2532.2	2277.8	1769.1	1331.5	1058.5	923.8	867.7	834.1	826.6	822.9	815.4
17.5°	2580.8	2277.8	1671.9	1189.4	938.8	837.8	796.7	778.0	774.2	770.5	766.8
20°	2648.1	2281.6	1567.2	1066.0	852.8	774.2	740.6	718.1	714.4	710.6	710.6
22.5°	2715.4	2289.0	1466.2	972.5	796.7	725.6	684.5	662.0	654.5	654.5	654.5
25°	2801.4	2311.5	1372.7	893.9	748.1	680.7	628.4	609.7	605.9	605.9	602.2
27.5°	2902.4	2337.7	1290.4	834.1	699.4	628.4	576.0	557.3	549.8	549.8	546.1
30°	3010.9	2363.8	1223.1	789.2	650.8	576.0	527.4	504.9	497.5	501.2	497.5
32.5°	3130.6	2401.2	1170.7	759.3	605.9	531.1	486.2	460.1	456.3	456.3	452.6
35°	3332.6	2506.0	1163.2	744.3	568.5	497.5	452.6	426.4	422.6	422.6	418.9
37.5°	3549.5	2625.7	1196.9	736.8	538.6	467.5	426.4	400.2	396.5	396.5	396.5
40°	3732.8	2715.4	1234.3	736.8	519.9	441.3	403.9	381.5	381.5	381.5	381.5
42.5°	3856.2	2722.9	1226.8	736.8	504.9	422.6	389.0	366.5	366.5	370.3	366.5
45°	4039.5	2760.3	1196.9	725.6	493.7	407.7	374.0	355.3	351.6	355.3	355.3
47.5°	4256.4	2827.6	1167.0	680.7	490.0	392.7	362.8	340.4	336.6	340.4	336.6
50°	4462.1	2887.5	1152.0	620.9	482.5	377.8	347.8	325.4	321.7	325.4	321.7
52.5°	4634.2	2913.7	1125.8	579.7	463.8	362.8	332.9	310.4	303.0	306.7	306.7
55°	4772.6	2906.2	1088.4	546.1	430.1	347.8	314.2	295.5	284.3	284.3	280.5
57.5°	4899.7	2909.9	1054.8	512.4	392.7	325.4	299.2	276.8	261.8	258.1	254.3
60°	4948.4	2891.2	994.9	467.5	355.3	306.7	280.5	254.3	239.4	235.6	231.9
62.5°	4881.0	2823.9	916.4	389.0	321.7	284.3	261.8	235.6	220.7	216.9	213.2
65°	4690.3	2696.7	796.7	306.7	291.7	258.1	239.4	220.7	202.0	194.5	190.8
67.5°	4364.9	2513.5	647.1	246.9	258.1	235.6	224.4	202.0	179.5	172.1	168.3
70°	3901.1	2270.3	486.2	209.5	228.2	209.5	202.0	179.5	160.8	153.4	149.6
72.5°	3250.3	1877.6	340.4	179.5	198.2	183.3	175.8	160.8	142.1	130.9	130.9
75°	2457.3	1346.5	224.4	153.4	164.6	157.1	145.9	134.6	123.4	115.9	112.2
77.5°	1058.5	523.6	138.4	115.9	134.6	130.9	115.9	108.5	104.7	97.2	97.2
80°	456.3	213.2	86.0	86.0	97.2	93.5	89.8	82.3	82.3	78.5	74.8
82.5°	168.3	86.0	52.4	63.6	71.1	63.6	63.6	63.6	63.6	59.8	59.8
85°	41.1	26.2	26.2	37.4	41.1	37.4	41.1	37.4	37.4	37.4	33.7
87.5°	11.2	11.2	15.0	15.0	15.0	15.0	15.0	11.2	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)