

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: P841735

Luminaire Tested: **ARCH4-220-727-U-T3**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841735
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-220-727-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 870mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32438 lumens
Efficiency: N/A
Efficacy: 146.2 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G4

Input Watts (W): 221.8
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



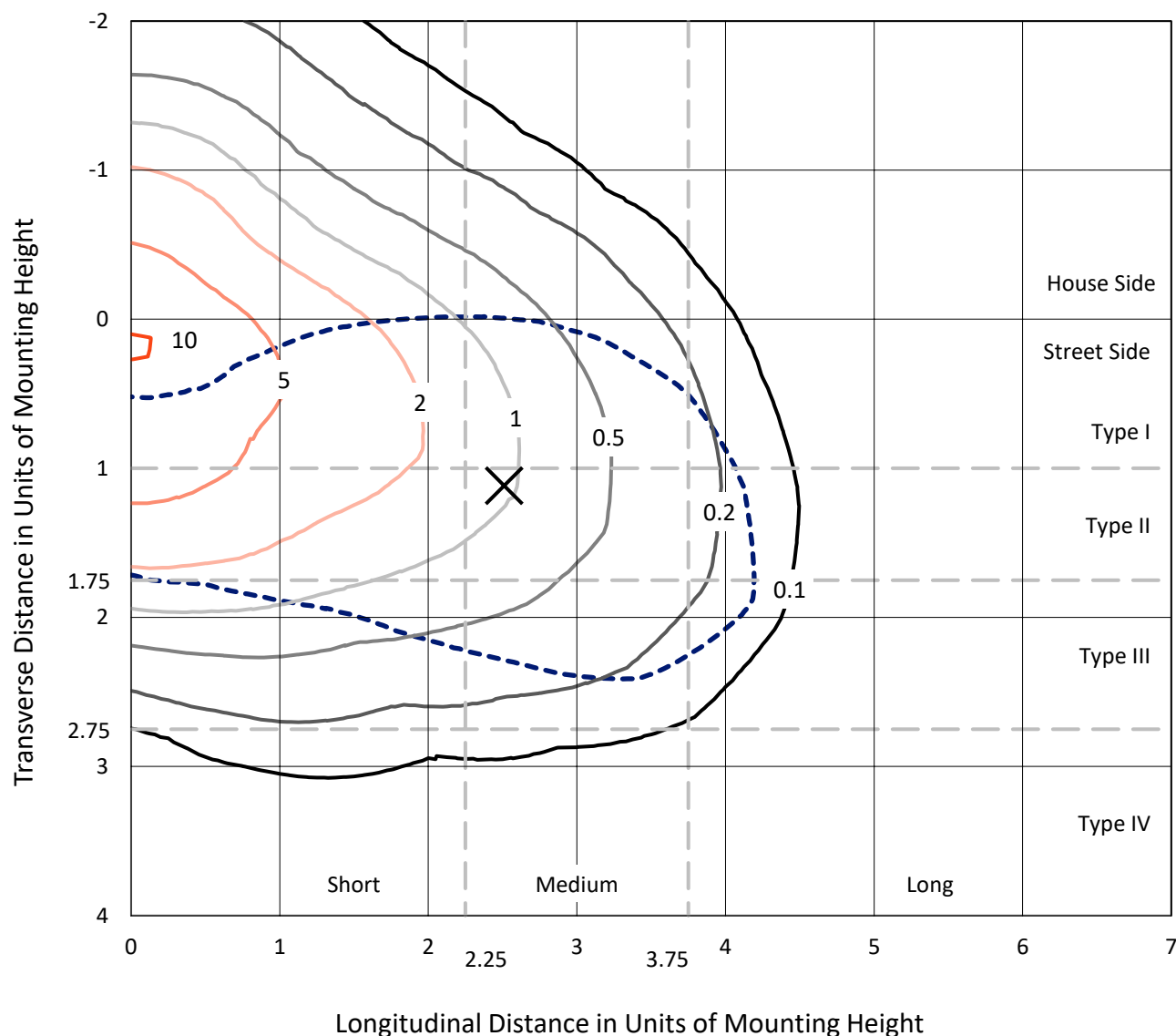
REPORT NUMBER: P841735

CATALOG NUMBER: ARCH4-220-727-U-T3

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

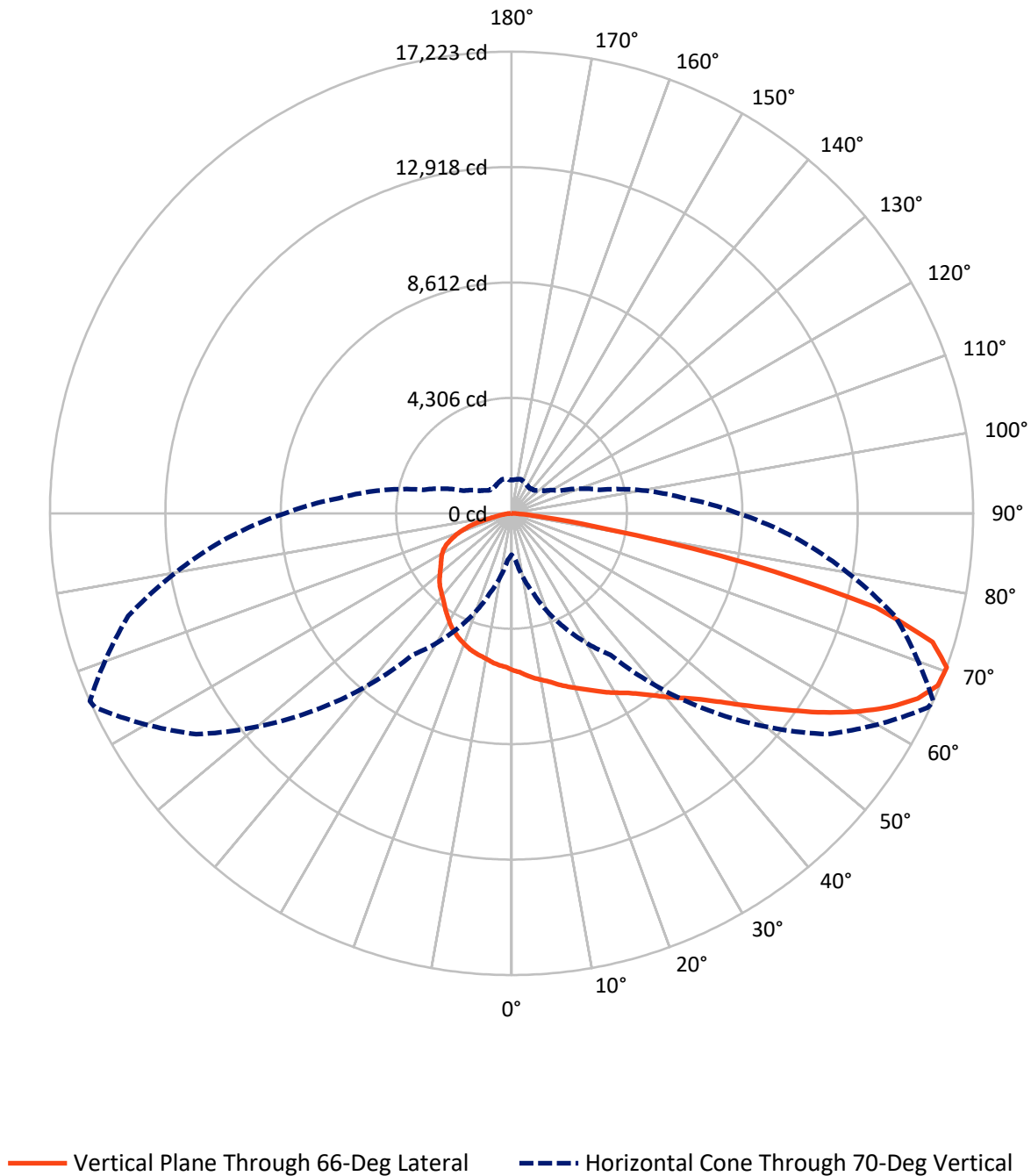
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.2 fc
 Type III - Medium - N/A

REPORT NUMBER: P841735
CATALOG NUMBER: ARCH4-220-727-U-T3

Luminous Intensity Polar Plot



REPORT NUMBER: P841735

CATALOG NUMBER: ARCH4-220-727-U-T3

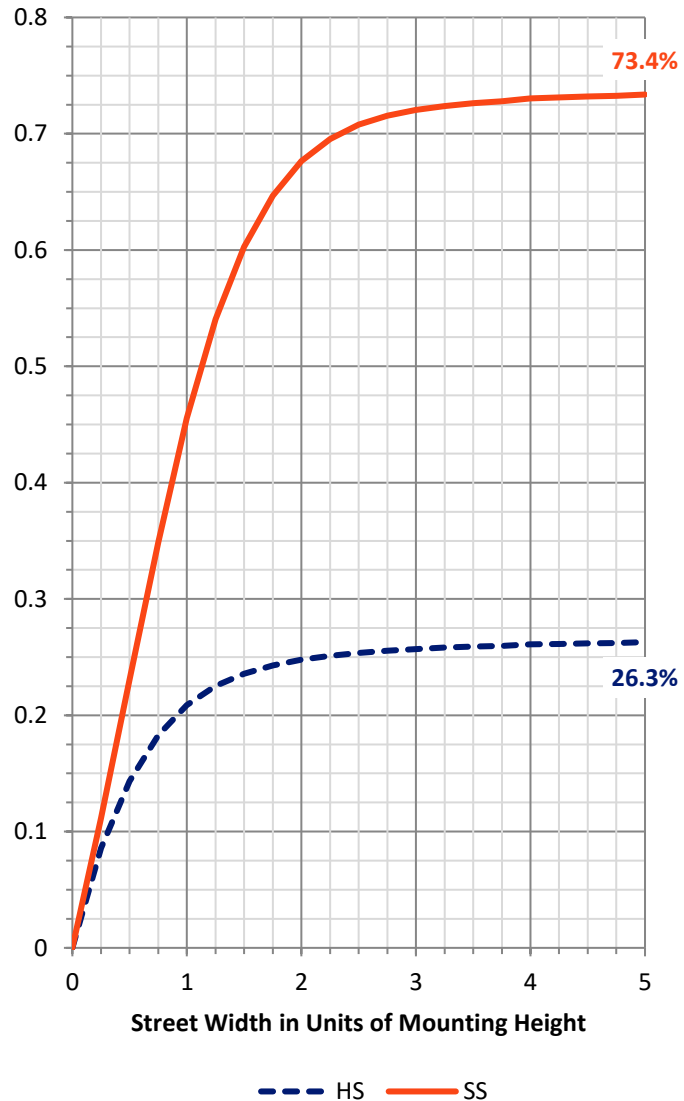
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8595.3	0.0	8595.3
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	23842.7	0.0	23842.7
	% Fixture	73.5	0.0	73.5
Total	Lumens	32438.0	0.0	32438.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	562.5	1.7
10°-20°	1687.4	5.2
20°-30°	2828.7	8.7
30°-40°	4235.4	13.1
40°-50°	5662.8	17.5
50°-60°	6611.5	20.4
60°-70°	6574.1	20.3
70°-80°	3892.0	12.0
80°-90°	383.6	1.2
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°	32438.0	100.0
0°-180°	32438.0	100.0

Coefficient of Utilization



REPORT NUMBER: P841735

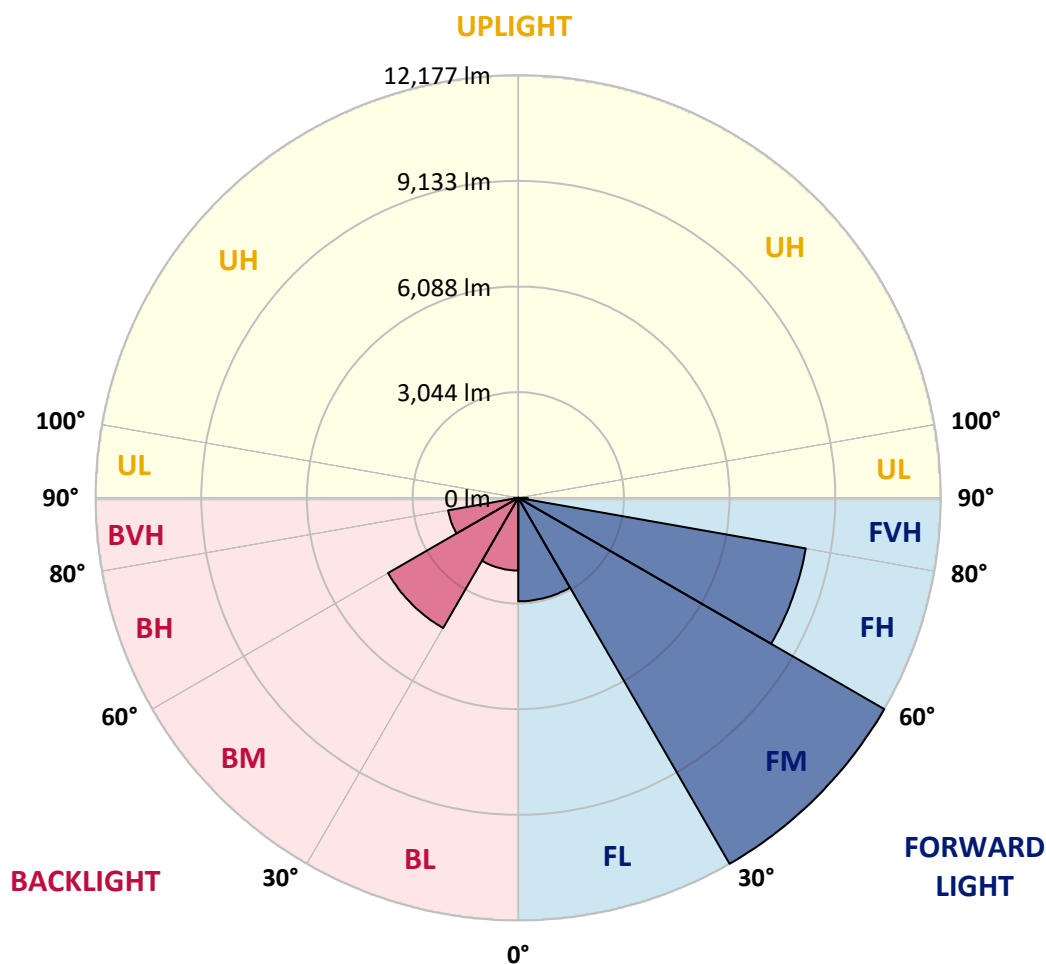
CATALOG NUMBER: ARCH4-220-727-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2983.4	9.2			
FM	(30°-60°)	12176.8	37.5			
FH	(60°-80°)	8412.9	25.9			G4/12000
FVH	(80°-90°)	269.6	0.8			G3/500
BL	(0°-30°)	2095.2	6.5	B3/2500		
BM	(30°-60°)	4332.9	13.4	B3/5000		
BH	(60°-80°)	2053.2	6.3	B3/2500		G3/2500
BVH	(80°-90°)	114.0	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Medium



REPORT NUMBER: P841735

CATALOG NUMBER: ARCH4-220-727-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	5854.3	5854.3	5854.3	5854.3	5854.3	5854.3	5854.3	5854.3	5854.3	5854.3	5854.3
2.5°	6069.6	6060.0	6055.2	6036.1	5993.0	6012.2	5969.1	5940.4	5935.6	5868.7	5830.4
5°	6318.3	6313.5	6303.9	6275.2	6208.3	6217.8	6146.1	6093.5	6079.1	5973.9	5892.6
7.5°	6528.7	6519.1	6514.4	6476.1	6404.4	6399.6	6313.5	6237.0	6213.0	6069.6	5945.2
10°	6691.3	6677.0	6686.6	6648.3	6571.8	6557.4	6447.4	6347.0	6323.0	6141.3	5969.1
12.5°	6830.0	6820.5	6834.8	6801.3	6739.2	6724.8	6614.8	6485.7	6457.0	6246.5	6021.7
15°	6983.1	6949.6	6978.3	6964.0	6920.9	6916.1	6815.7	6672.2	6633.9	6380.4	6103.0
17.5°	7064.4	7045.3	7078.8	7083.5	7064.4	7097.9	7002.2	6830.0	6796.6	6504.8	6174.8
20°	7121.8	7093.1	7131.4	7160.1	7174.4	7241.4	7164.8	6997.4	6959.2	6624.4	6241.7
22.5°	7317.9	7255.7	7260.5	7279.6	7289.2	7384.9	7337.0	7174.4	7136.1	6772.6	6323.0
25°	7810.5	7686.2	7604.9	7547.5	7480.5	7561.8	7533.1	7375.3	7341.8	6949.6	6423.5
27.5°	8575.8	8418.0	8255.4	8088.0	7824.9	7791.4	7743.6	7600.1	7561.8	7126.6	6523.9
30°	9446.3	9288.5	9097.2	8829.3	8336.7	8078.4	7968.4	7810.5	7767.5	7284.4	6619.6
32.5°	10312.0	10173.3	9982.0	9656.8	8953.7	8427.5	8193.2	8030.6	7987.5	7456.6	6734.4
35°	10986.4	10900.3	10776.0	10369.4	9565.9	8838.9	8518.4	8322.3	8274.5	7729.2	6944.8
37.5°	11531.7	11469.5	11364.3	10938.6	10010.7	9250.2	8891.5	8666.7	8614.1	8025.8	7169.6
40°	12335.2	12172.6	12086.5	11469.5	10398.1	9623.3	9312.4	9078.0	9020.6	8341.4	7351.4
42.5°	13019.2	12899.6	12794.4	11943.0	10766.4	9943.7	9709.4	9494.1	9417.6	8652.3	7547.5
45°	13134.0	13181.8	13129.2	12177.4	11349.9	10259.4	10111.1	9972.4	9900.7	9073.2	7844.0
47.5°	13138.7	13138.7	12827.8	12311.3	12072.1	10613.3	10541.6	10589.4	10512.9	9608.9	8198.0
50°	12794.4	12856.5	12693.9	12344.8	12263.5	10967.3	11067.7	11326.0	11249.5	10178.1	8580.6
52.5°	12081.7	12287.4	12282.6	12292.2	11986.1	11268.6	11622.5	12210.8	12081.7	10819.0	8987.1
55°	10823.8	11235.1	11603.4	11919.1	11746.9	11450.4	12301.7	13153.1	13019.2	11536.5	9398.5
57.5°	9747.6	10010.7	10469.9	11364.3	11464.7	11608.2	12937.9	14138.4	14018.8	12330.4	9828.9
60°	8518.4	8881.9	9341.1	10613.3	11120.3	11813.9	13636.2	15099.7	14985.0	13134.0	10245.1
62.5°	6629.2	7097.9	8016.2	9460.7	10618.1	11943.0	14186.2	15946.3	15893.7	13894.4	10618.1
65°	4620.3	5036.4	6323.0	8044.9	9819.4	11885.6	14626.2	16702.0	16654.2	14516.2	10881.2
67.5°	2697.6	3180.7	4634.7	6476.1	8408.4	11488.6	14769.7	17146.8	17146.8	14894.1	10952.9
70°	1540.1	1764.9	3056.3	4720.8	6447.4	10393.3	14368.0	17142.1	17223.4	14808.0	10656.4
72.5°	1076.2	1176.6	2056.7	3175.9	4371.6	8408.4	13315.7	16314.6	16424.6	13994.9	9642.4
75°	837.0	908.8	1449.2	2166.7	2755.0	5710.8	11015.1	13755.7	14047.5	11928.7	7796.2
77.5°	636.1	688.7	846.6	1353.6	1764.9	3281.1	7270.1	9020.6	9039.8	7303.6	4180.3
80°	463.9	516.6	564.4	827.4	937.5	1535.3	2745.4	3769.0	3663.7	3534.6	2262.3
82.5°	277.4	330.0	344.4	449.6	459.2	655.3	961.4	1214.9	1167.0	1554.5	1061.8
85°	119.6	167.4	177.0	205.7	196.1	267.8	382.6	320.5	287.0	330.0	229.6
87.5°	28.7	47.8	47.8	52.6	43.0	67.0	71.7	52.6	47.8	57.4	57.4
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: P841735

CATALOG NUMBER: ARCH4-220-727-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5854.3	5854.3	5854.3	5854.3	5854.3	5854.3	5854.3	5854.3	5854.3	5854.3	5854.3
2.5°	5820.8	5806.5	5811.3	5730.0	5706.0	5682.1	5667.8	5658.2	5648.7	5663.0	5677.4
5°	5863.9	5830.4	5792.1	5672.6	5624.7	5572.1	5533.9	5500.4	5486.0	5486.0	5500.4
7.5°	5897.4	5840.0	5758.7	5600.8	5514.7	5443.0	5380.8	5337.8	5313.8	5313.8	5328.2
10°	5902.1	5820.8	5691.7	5500.4	5385.6	5280.4	5208.6	5160.8	5127.3	5127.3	5136.9
12.5°	5930.8	5820.8	5653.4	5423.9	5280.4	5151.2	5065.1	4993.4	4979.0	4979.0	4988.6
15°	5978.7	5844.8	5629.5	5356.9	5184.7	5036.4	4940.8	4864.3	4835.6	4854.7	4859.5
17.5°	6021.7	5859.1	5586.5	5270.8	5065.1	4902.5	4797.3	4730.3	4692.1	4735.1	4735.1
20°	6050.4	5859.1	5524.3	5160.8	4936.0	4754.2	4653.8	4572.5	4543.8	4596.4	4601.2
22.5°	6093.5	5854.3	5457.3	5050.8	4797.3	4606.0	4505.5	4443.4	4429.0	4486.4	4505.5
25°	6141.3	5863.9	5385.6	4926.4	4644.2	4457.7	4381.2	4352.5	4362.0	4433.8	4457.7
27.5°	6193.9	5883.0	5313.8	4787.7	4476.8	4309.4	4266.4	4280.7	4319.0	4409.9	4438.6
30°	6241.7	5887.8	5213.4	4625.1	4285.5	4127.7	4146.8	4209.0	4266.4	4357.3	4390.7
32.5°	6303.9	5892.6	5108.2	4448.1	4079.8	3965.1	4051.2	4151.6	4209.0	4295.1	4333.3
35°	6457.0	5973.9	5026.9	4275.9	3888.5	3826.4	3969.8	4099.0	4132.5	4209.0	4242.5
37.5°	6633.9	6107.8	4983.8	4099.0	3702.0	3687.6	3869.4	3998.5	4008.1	4055.9	4089.4
40°	6743.9	6165.2	4936.0	3950.7	3534.6	3544.2	3730.7	3831.1	3812.0	3845.5	3869.4
42.5°	6854.0	6184.3	4835.6	3826.4	3376.8	3386.3	3529.8	3601.6	3611.1	3682.9	3716.3
45°	7040.5	6237.0	4725.5	3711.6	3233.3	3199.8	3285.9	3381.5	3505.9	3644.6	3682.9
47.5°	7289.2	6347.0	4610.8	3572.9	3094.6	2984.6	3018.0	3185.4	3314.6	3443.7	3467.6
50°	7542.7	6457.0	4505.5	3405.5	2955.9	2755.0	2769.3	2922.4	3027.6	3128.0	3142.4
52.5°	7791.4	6552.6	4414.7	3247.6	2798.0	2482.3	2539.7	2697.6	2769.3	2817.2	2831.5
55°	8040.1	6633.9	4333.3	3113.7	2616.3	2267.1	2319.7	2468.0	2539.7	2563.7	2573.2
57.5°	8298.4	6729.6	4271.2	2998.9	2410.6	2075.8	2109.3	2214.5	2281.5	2310.2	2300.6
60°	8513.6	6810.9	4237.7	2879.3	2204.9	1898.8	1889.3	1984.9	2080.6	2109.3	2099.7
62.5°	8681.0	6863.5	4185.1	2726.3	2023.2	1721.9	1674.0	1798.4	1898.8	1918.0	1932.3
65°	8771.9	6868.3	4055.9	2530.2	1836.6	1530.5	1497.1	1621.4	1683.6	1702.7	1702.7
67.5°	8757.6	6791.8	3802.4	2267.1	1664.5	1358.4	1329.7	1406.2	1497.1	1511.4	1497.1
70°	8461.0	6476.1	3395.9	1989.7	1458.8	1205.3	1152.7	1229.2	1315.3	1262.7	1238.8
72.5°	7619.2	5658.2	2798.0	1683.6	1229.2	1014.0	990.1	1066.6	1071.4	1080.9	1057.0
75°	6012.2	4213.8	2094.9	1310.5	994.9	851.4	846.6	832.2	851.4	889.6	860.9
77.5°	3156.7	2104.5	1133.6	803.5	722.2	684.0	650.5	645.7	703.1	727.0	698.3
80°	1712.3	1181.4	650.5	483.1	440.0	444.8	487.9	478.3	540.5	554.8	530.9
82.5°	746.1	559.6	320.5	291.8	291.8	287.0	301.3	334.8	401.8	401.8	320.5
85°	162.6	138.7	124.4	143.5	162.6	162.6	162.6	162.6	114.8	62.2	43.0
87.5°	52.6	52.6	52.6	57.4	62.2	62.2	52.6	38.3	23.9	4.8	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)