

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: P841226

Luminaire Tested: **ARCH4-150-727-U-T2R-HSS**

Issue Date: 5/27/2024

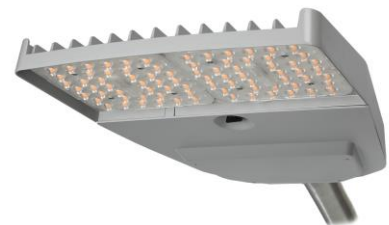
Test Information

Test Method: LM-79-08
Report Number: P841226
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-150-727-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1230mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16562 lumens
Efficiency: N/A
Efficacy: 109.8 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

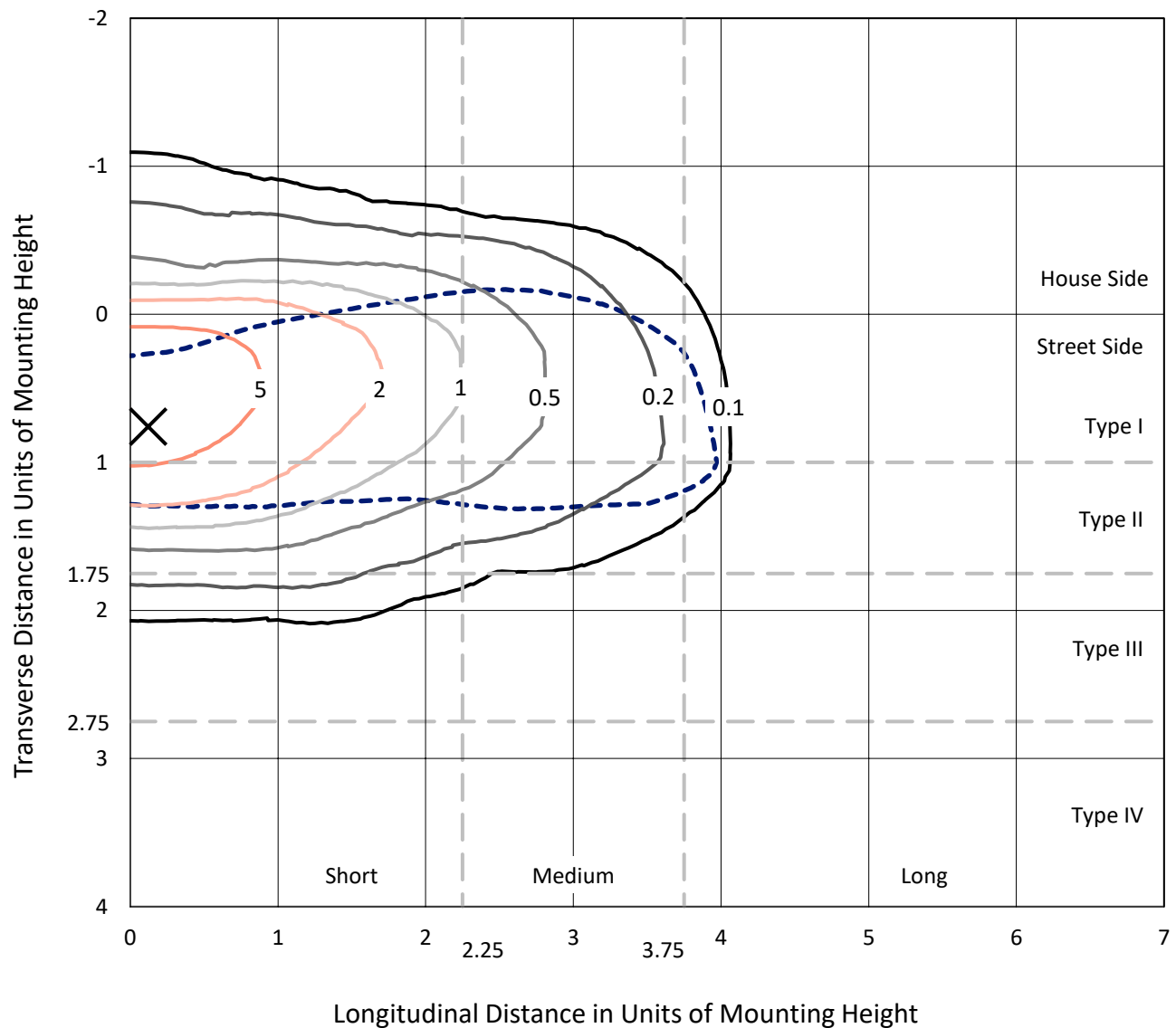
Input Watts (W): 150.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P841226
 CATALOG NUMBER: ARCH4-150-727-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

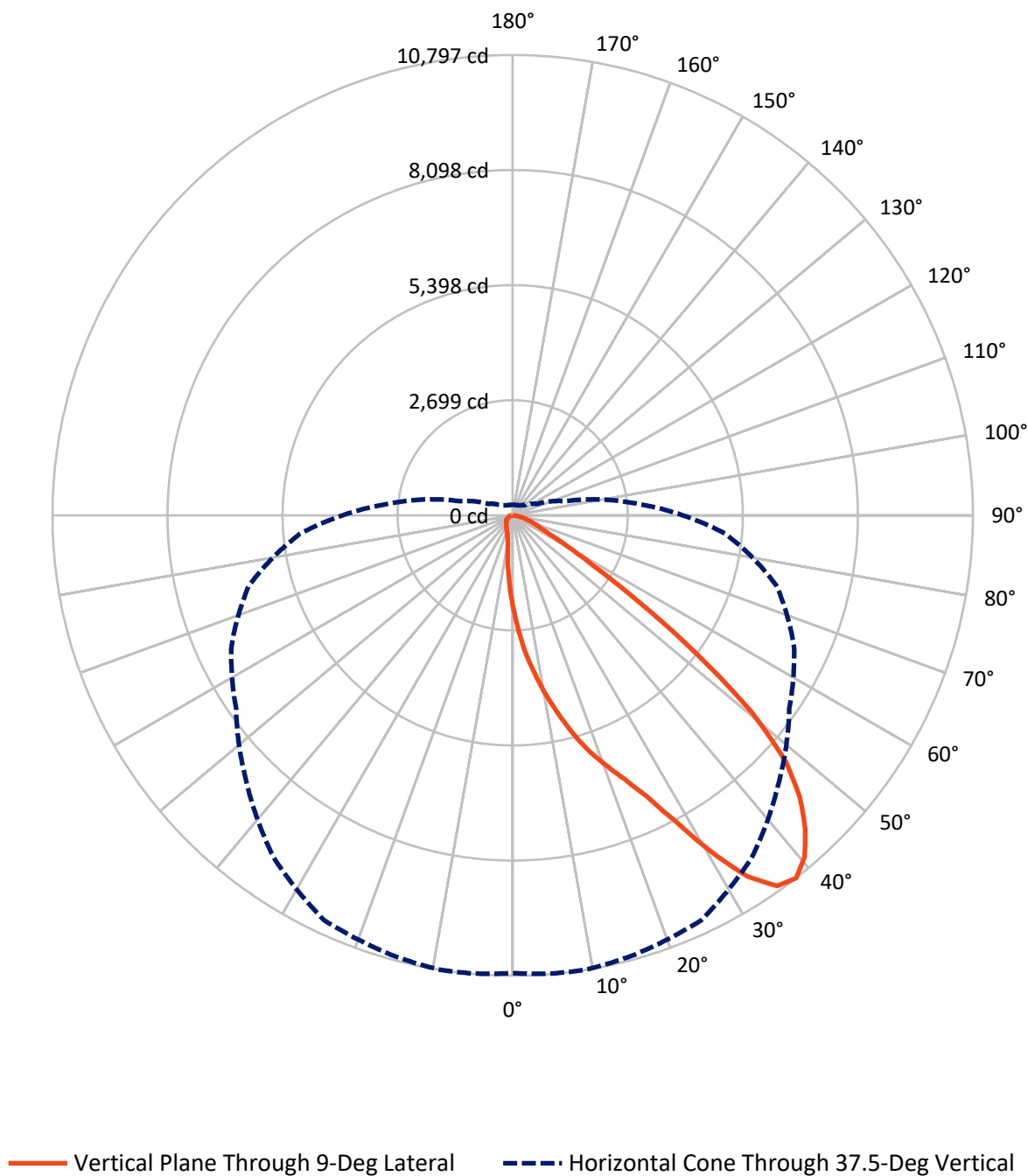
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.7 fc
 Type II - Short - N/A

REPORT NUMBER: P841226
CATALOG NUMBER: ARCH4-150-727-U-T2R-HSS

Luminous Intensity Polar Plot



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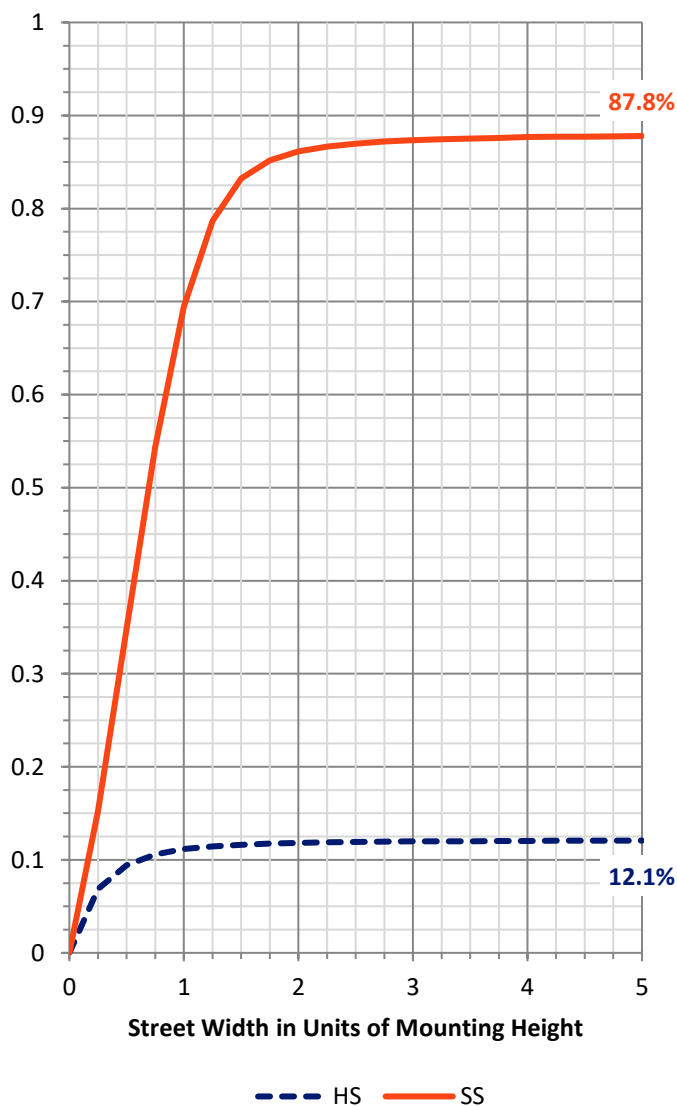
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2014.3	0.0	2014.3
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	14547.8	0.0	14547.8
	% Fixture	87.8	0.0	87.8
Total	Lumens	16562.0	0.0	16562.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	220.1	1.3
10°-20°	764.8	4.6
20°-30°	1571.6	9.5
30°-40°	2777.9	16.8
40°-50°	3690.2	22.3
50°-60°	3499.9	21.1
60°-70°	2670.1	16.1
70°-80°	1294.5	7.8
80°-90°	72.9	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°	16562.0	100.0
0°-180°	16562.0	100.0

Coefficient of Utilization



REPORT NUMBER: P841226

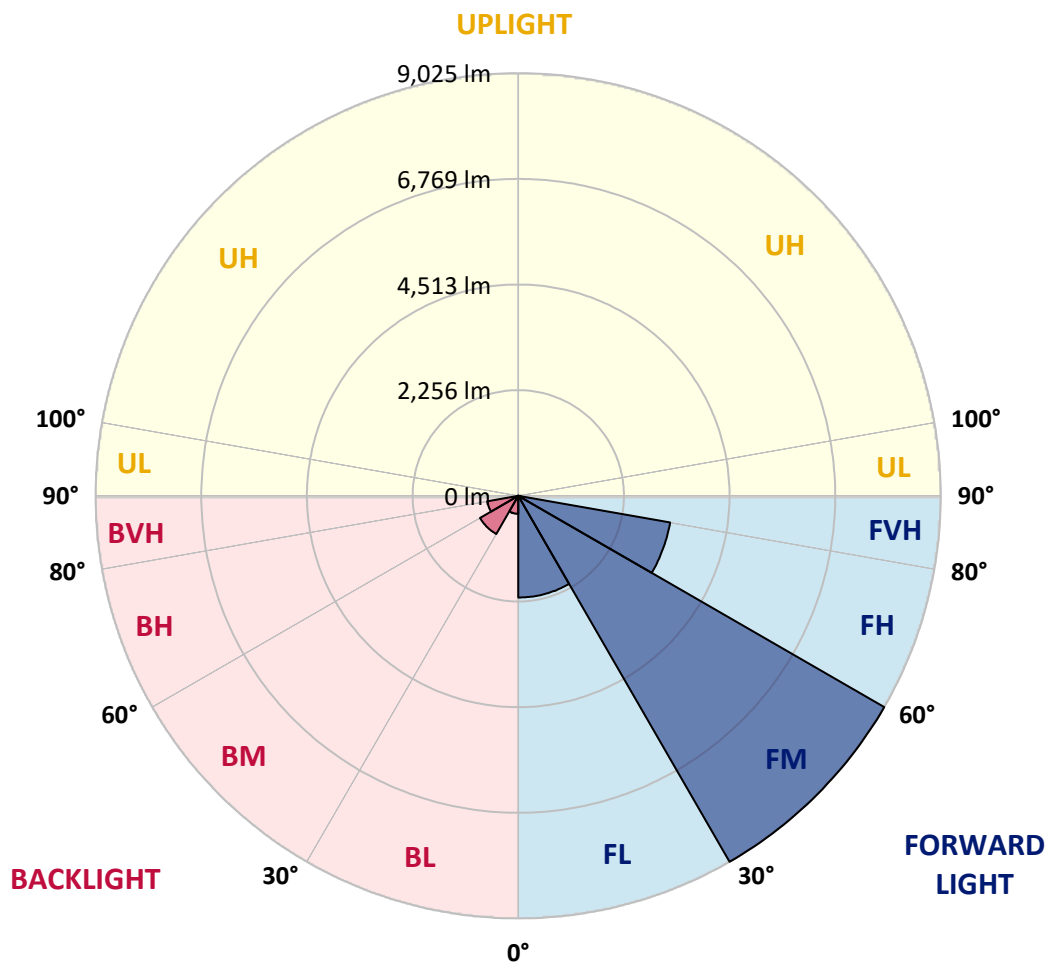
CATALOG NUMBER: ARCH4-150-727-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2172.1	13.1			
FM	(30°-60°)	9025.5	54.5			
FH	(60°-80°)	3292.5	19.9			G2/5000
FVH	(80°-90°)	57.7	0.3			G1/100
BL	(0°-30°)	384.4	2.3	B1/500		
BM	(30°-60°)	942.5	5.7	B1/1000		
BH	(60°-80°)	672.2	4.1	B2/1000		G2/1000
BVH	(80°-90°)	15.2	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short



REPORT NUMBER: P841226

CATALOG NUMBER: ARCH4-150-727-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	2189.3	2189.3	2189.3	2189.3	2189.3	2189.3	2189.3	2189.3	2189.3	2189.3	2189.3
2.5°	2712.8	2665.2	2719.6	2712.8	2665.2	2634.6	2539.4	2508.9	2396.7	2315.1	2243.7
5°	3270.3	3222.8	3270.3	3256.7	3188.8	3114.0	2957.6	2855.6	2655.0	2478.3	2318.5
7.5°	3732.7	3732.7	3753.1	3756.5	3674.9	3559.3	3365.5	3212.6	2930.4	2658.4	2403.5
10°	4232.4	4235.8	4280.0	4249.4	4140.6	3984.2	3739.5	3545.7	3205.8	2848.8	2485.1
12.5°	4766.1	4769.5	4783.1	4769.5	4640.4	4439.8	4144.0	3889.1	3498.1	3066.4	2597.2
15°	5299.9	5303.3	5320.3	5296.5	5153.7	4919.1	4582.6	4269.8	3807.5	3311.1	2733.2
17.5°	5799.6	5806.4	5820.0	5789.4	5639.8	5361.1	5017.7	4640.4	4137.2	3572.9	2886.2
20°	6248.3	6255.1	6265.3	6224.5	6075.0	5796.2	5425.6	5031.3	4473.8	3841.5	3052.8
22.5°	6700.5	6707.3	6724.3	6669.9	6503.3	6183.7	5820.0	5412.0	4830.7	4137.2	3246.5
25°	7278.4	7285.2	7298.8	7220.6	6992.8	6618.9	6234.7	5816.6	5218.3	4470.4	3484.5
27.5°	8124.9	8118.1	8118.1	7975.3	7584.3	7098.2	6652.9	6227.9	5636.4	4827.3	3746.3
30°	9171.9	9154.9	9144.7	8951.0	8393.4	7638.7	7081.2	6612.1	6037.6	5204.7	4028.4
32.5°	10110.2	10110.2	10089.8	9885.8	9294.3	8366.2	7536.8	6986.0	6425.1	5585.4	4320.8
35°	10664.3	10688.1	10677.9	10524.9	10093.2	9148.1	8152.1	7434.8	6833.1	5983.2	4671.0
37.5°	10739.1	10786.7	10796.9	10705.1	10477.3	9787.2	8835.4	7920.9	7281.8	6411.5	5010.9
40°	10436.6	10538.5	10538.5	10524.9	10443.3	10089.8	9409.9	8485.2	7744.1	6856.8	5354.3
42.5°	9970.8	10076.2	10062.6	10113.6	10093.2	10018.4	9732.8	9012.1	8206.5	7315.8	5667.0
45°	9362.3	9471.1	9443.9	9535.7	9576.5	9658.1	9698.9	9379.3	8662.0	7815.5	6017.2
47.5°	8386.6	8570.2	8611.0	8774.2	8944.2	9199.1	9392.9	9511.9	9086.9	8352.6	6397.9
50°	6945.2	7203.6	7285.2	7628.5	8094.3	8621.2	8934.0	9348.7	9386.1	8903.4	6809.3
52.5°	4973.5	5272.7	5398.5	5962.8	6921.4	7839.3	8403.6	8988.4	9501.7	9430.3	7254.6
55°	3216.0	3470.9	3593.3	4123.6	5398.5	6839.9	7778.1	8522.6	9437.1	9913.0	7764.5
57.5°	1981.9	2128.1	2209.7	2665.2	3838.1	5558.2	6958.8	8094.3	9239.9	10331.2	8294.8
60°	1336.0	1421.0	1461.8	1676.0	2607.4	4154.2	5833.6	7645.5	8981.6	10613.3	8777.6
62.5°	887.3	914.5	955.3	1087.8	1720.2	2916.8	4480.6	6843.2	8787.8	10630.3	9134.5
65°	686.7	700.3	717.3	775.1	1060.7	2039.7	3151.4	5544.6	8498.8	10270.0	9246.7
67.5°	540.5	554.1	574.5	605.1	768.3	1383.6	2145.1	4062.4	7907.3	9705.7	9063.1
70°	424.9	435.1	448.7	475.9	598.3	1002.9	1417.6	2699.2	6714.1	9168.5	8485.2
72.5°	336.6	346.8	360.3	387.5	486.1	734.3	972.3	1682.8	5177.5	8512.4	7373.6
75°	265.2	272.0	282.2	309.4	390.9	571.1	659.5	1006.3	3518.5	7312.4	5745.2
77.5°	132.6	163.2	187.0	214.2	285.6	394.3	438.5	557.5	1485.6	3753.1	2740.0
80°	78.2	95.2	102.0	119.0	187.0	238.0	238.0	224.4	469.1	1441.4	1118.4
82.5°	44.2	61.2	64.6	68.0	112.2	136.0	108.8	81.6	95.2	482.7	326.4
85°	13.6	20.4	23.8	27.2	37.4	40.8	37.4	34.0	27.2	47.6	30.6
87.5°	0.0	0.0	0.0	0.0	3.4	6.8	6.8	6.8	10.2	10.2	10.2
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: P841226

CATALOG NUMBER: ARCH4-150-727-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2189.3	2189.3	2189.3	2189.3	2189.3	2189.3	2189.3	2189.3	2189.3	2189.3	2189.3
2.5°	2202.9	2158.7	2073.7	1995.5	1920.7	1866.3	1815.3	1767.8	1733.8	1706.6	1703.2
5°	2233.5	2145.1	1981.9	1828.9	1689.6	1574.0	1475.4	1397.2	1339.4	1298.6	1295.2
7.5°	2274.3	2138.3	1890.1	1662.4	1455.0	1288.4	1145.6	1040.3	965.5	934.9	911.1
10°	2308.3	2131.5	1798.4	1495.8	1223.8	1013.1	843.1	737.7	683.3	662.9	652.7
12.5°	2366.1	2138.3	1720.2	1342.8	1023.3	775.1	645.9	588.1	564.3	547.3	543.9
15°	2451.1	2168.9	1645.4	1193.2	819.3	625.5	550.7	513.3	489.5	486.1	482.7
17.5°	2536.0	2196.1	1577.4	1040.3	679.9	543.9	492.9	462.3	445.3	441.9	441.9
20°	2634.6	2230.1	1502.6	894.1	581.3	489.5	448.7	424.9	404.5	401.1	401.1
22.5°	2750.2	2277.7	1431.2	764.9	516.7	448.7	414.7	387.5	370.5	367.1	367.1
25°	2906.6	2349.1	1373.4	669.7	472.5	414.7	384.1	360.3	346.8	340.0	340.0
27.5°	3080.0	2447.7	1332.6	611.9	441.9	387.5	357.0	336.6	323.0	316.2	316.2
30°	3273.7	2556.4	1305.4	588.1	424.9	363.7	336.6	316.2	299.2	295.8	295.8
32.5°	3487.9	2682.2	1288.4	591.5	421.5	346.8	316.2	295.8	282.2	275.4	275.4
35°	3725.9	2821.6	1278.2	611.9	428.3	333.2	299.2	278.8	265.2	258.4	258.4
37.5°	3991.0	2984.8	1278.2	632.3	445.3	329.8	282.2	261.8	251.6	244.8	244.8
40°	4239.2	3158.2	1291.8	656.1	462.3	329.8	268.6	251.6	238.0	231.2	231.2
42.5°	4433.0	3256.7	1302.0	679.9	472.5	326.4	255.0	238.0	227.8	221.0	221.0
45°	4654.0	3362.1	1281.6	690.1	472.5	319.6	244.8	227.8	217.6	210.8	210.8
47.5°	4898.7	3491.3	1278.2	696.9	462.3	306.0	234.6	217.6	210.8	204.0	204.0
50°	5146.9	3634.1	1285.0	693.5	448.7	285.6	221.0	210.8	200.6	193.8	193.8
52.5°	5429.0	3783.7	1298.6	686.7	418.1	261.8	210.8	200.6	190.4	183.6	180.2
55°	5741.8	3946.9	1325.8	673.1	377.3	238.0	200.6	190.4	176.8	170.0	166.6
57.5°	6102.2	4147.4	1356.4	645.9	333.2	217.6	190.4	176.8	156.4	146.2	142.8
60°	6445.5	4375.2	1390.4	581.3	289.0	197.2	180.2	159.8	139.4	132.6	129.2
62.5°	6768.5	4599.6	1407.4	465.7	244.8	180.2	170.0	146.2	125.8	119.0	115.6
65°	6975.8	4844.3	1370.0	316.2	200.6	166.6	156.4	136.0	115.6	105.4	105.4
67.5°	6989.4	4959.9	1240.8	207.4	163.2	149.6	142.8	122.4	102.0	95.2	91.8
70°	6646.1	4786.5	948.5	163.2	136.0	129.2	129.2	108.8	88.4	81.6	78.2
72.5°	5857.4	4239.2	605.1	132.6	115.6	108.8	108.8	91.8	78.2	68.0	64.6
75°	4623.4	3270.3	323.0	108.8	95.2	91.8	85.0	74.8	64.6	57.8	54.4
77.5°	2124.7	1441.4	149.6	78.2	71.4	71.4	64.6	54.4	51.0	44.2	44.2
80°	839.7	489.5	74.8	51.0	47.6	47.6	47.6	37.4	37.4	30.6	27.2
82.5°	231.2	102.0	37.4	30.6	30.6	30.6	27.2	23.8	23.8	20.4	20.4
85°	23.8	17.0	17.0	17.0	17.0	13.6	13.6	10.2	6.8	6.8	6.8
87.5°	10.2	10.2	10.2	10.2	10.2	6.8	3.4	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)