

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: P841232

Luminaire Tested: **ARCH4-150-727-U-T4W-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841232
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-150-727-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1230mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16464 lumens
Efficiency: N/A
Efficacy: 109.2 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

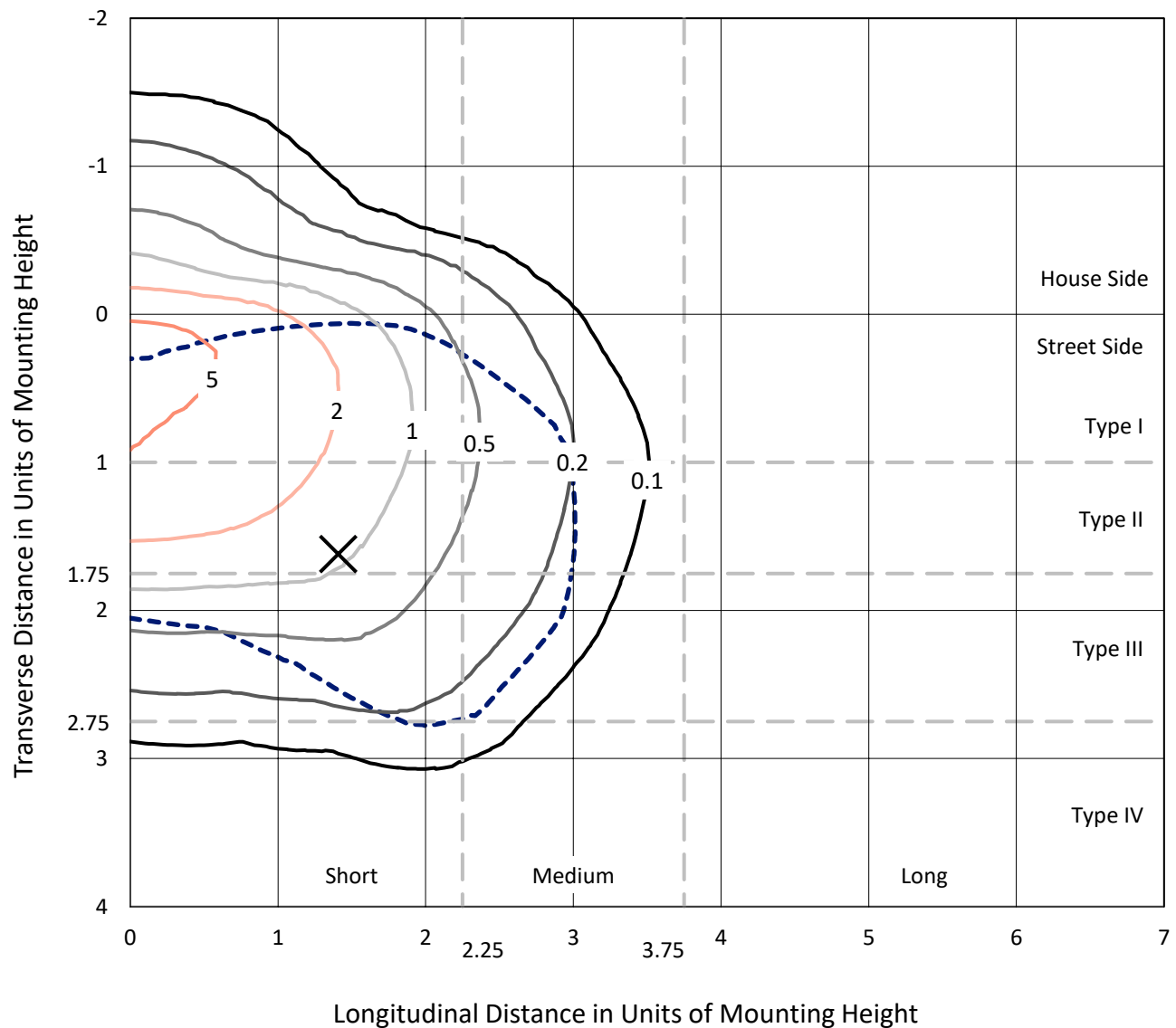
Input Watts (W): 150.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P841232
CATALOG NUMBER: ARCH4-150-727-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

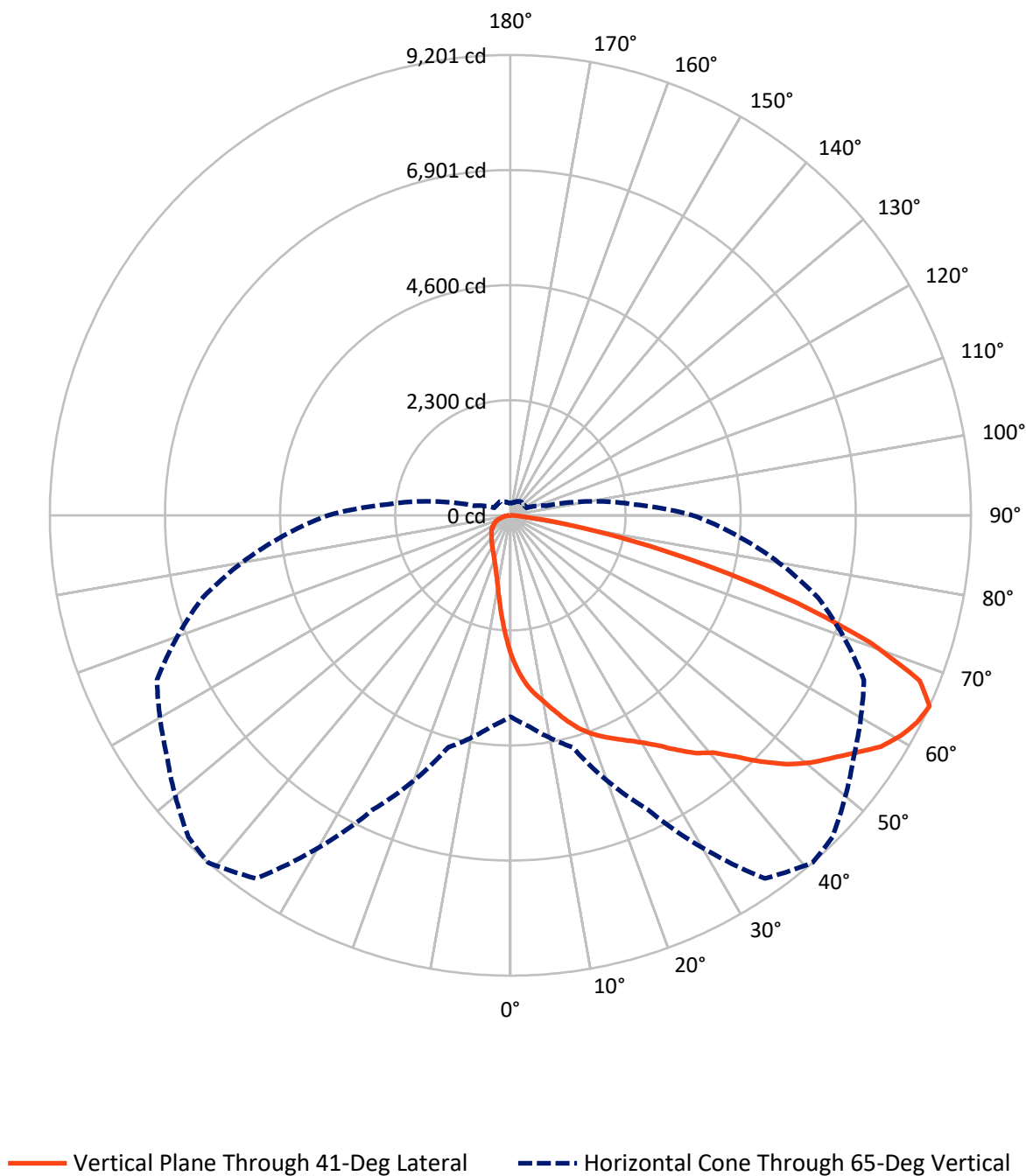
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.5 fc
Type III - Short - N/A

REPORT NUMBER: P841232
CATALOG NUMBER: ARCH4-150-727-U-T4W-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P841232

CATALOG NUMBER: ARCH4-150-727-U-T4W-HSS

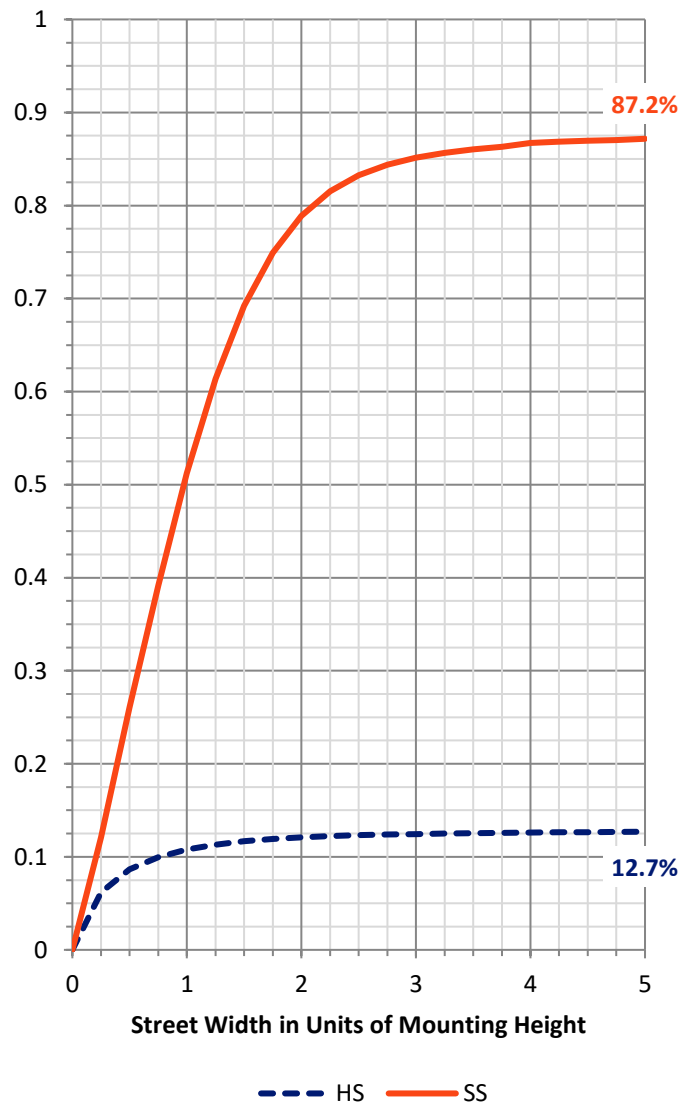
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2113.7	0.0	2113.7
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	14350.3	0.0	14350.3
	% Fixture	87.2	0.0	87.2
Total	Lumens	16464.0	0.0	16464.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	261.4	1.6
10°-20°	783.8	4.8
20°-30°	1348.4	8.2
30°-40°	2045.1	12.4
40°-50°	2996.1	18.2
50°-60°	3783.4	23.0
60°-70°	3547.6	21.5
70°-80°	1581.2	9.6
80°-90°	117.1	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°	16464.0	100.0
0°-180°	16464.0	100.0

Coefficient of Utilization



REPORT NUMBER: P841232

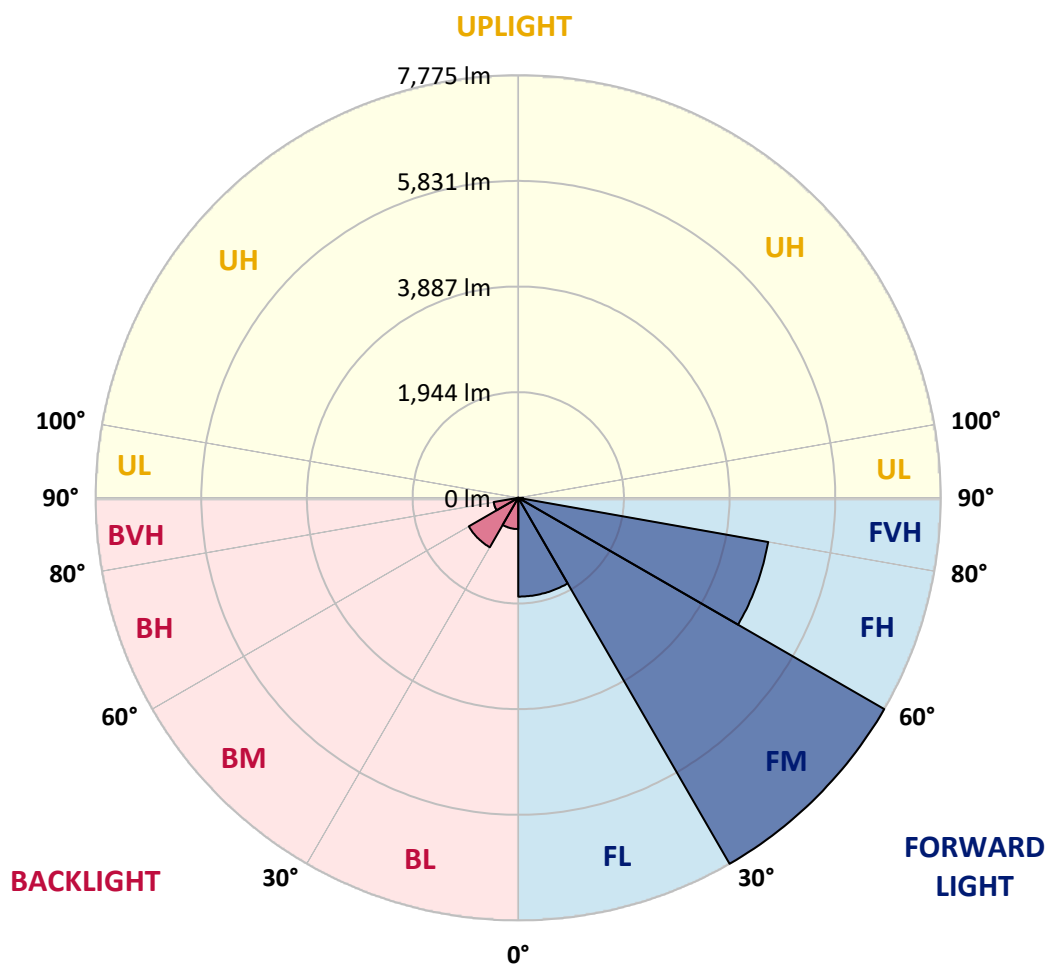
CATALOG NUMBER: ARCH4-150-727-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1818.2	11.0			
FM	(30°-60°)	7774.9	47.2			
FH	(60°-80°)	4669.6	28.4			G2/5000
FVH	(80°-90°)	87.5	0.5			G1/100
BL	(0°-30°)	575.3	3.5	B2/1000		
BM	(30°-60°)	1049.6	6.4	B2/2500		
BH	(60°-80°)	459.2	2.8	B1/500		G1/500
BVH	(80°-90°)	29.7	0.2			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 III Short



REPORT NUMBER: P841232

CATALOG NUMBER: ARCH4-150-727-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	2805.4	2805.4	2805.4	2805.4	2805.4	2805.4	2805.4	2805.4	2805.4	2805.4	2805.4
2.5°	3235.9	3225.5	3218.5	3180.4	3180.4	3128.3	3131.7	3083.1	3024.1	2930.4	2829.7
5°	3541.4	3527.6	3510.2	3472.0	3458.1	3406.0	3399.1	3329.7	3229.0	3065.8	2885.2
7.5°	3808.8	3794.9	3770.6	3715.0	3676.9	3614.4	3597.0	3506.7	3395.6	3194.2	2940.8
10°	4051.8	4041.4	4010.2	3940.7	3888.6	3812.3	3781.0	3659.5	3520.6	3298.4	2985.9
12.5°	4298.3	4284.5	4242.8	4183.8	4121.3	4031.0	3992.8	3836.6	3659.5	3413.0	3051.9
15°	4527.5	4506.7	4475.4	4412.9	4357.4	4270.6	4228.9	4044.9	3829.6	3541.4	3138.7
17.5°	4676.8	4659.4	4631.7	4596.9	4551.8	4485.8	4444.2	4263.6	3999.7	3666.4	3229.0
20°	4767.1	4760.1	4749.7	4728.9	4708.0	4662.9	4631.7	4461.5	4183.8	3788.0	3315.8
22.5°	4836.5	4829.6	4826.1	4826.1	4829.6	4812.2	4791.4	4645.5	4360.8	3916.4	3395.6
25°	4944.1	4940.7	4933.7	4926.8	4951.1	4954.6	4947.6	4846.9	4583.0	4086.5	3496.3
27.5°	5093.4	5083.0	5069.1	5062.2	5086.5	5103.8	5117.7	5048.3	4819.1	4260.1	3610.9
30°	5322.6	5291.3	5256.6	5232.3	5249.7	5277.4	5308.7	5267.0	5062.2	4475.4	3728.9
32.5°	5593.4	5555.2	5475.4	5430.2	5475.4	5496.2	5520.5	5499.7	5315.6	4708.0	3847.0
35°	5923.2	5878.1	5794.8	5728.8	5808.7	5763.5	5753.1	5732.3	5555.2	4937.2	3978.9
37.5°	6471.8	6405.8	6273.9	6128.1	6128.1	6030.9	5992.7	5930.2	5770.5	5142.0	4107.4
40°	7107.2	7020.4	6850.3	6635.0	6437.1	6235.7	6211.4	6166.3	6023.9	5378.1	4253.2
42.5°	7805.1	7638.4	7402.3	7141.9	6822.5	6593.3	6537.8	6409.3	6270.4	5617.7	4399.0
45°	8579.3	8232.1	7888.4	7756.5	7228.7	7020.4	6916.2	6683.6	6527.4	5867.7	4551.8
47.5°	8704.3	8433.5	8204.3	8183.5	7607.2	7433.6	7315.5	6982.2	6805.1	6135.0	4711.5
50°	8634.9	8471.7	8496.0	8412.7	7884.9	7770.3	7680.1	7301.6	7079.4	6392.0	4857.3
52.5°	8343.2	8433.5	8572.4	8419.6	8148.8	8055.1	8009.9	7645.4	7336.3	6628.1	4989.3
55°	7996.0	8058.5	8357.1	8544.6	8454.3	8371.0	8329.3	8044.6	7589.8	6826.0	5110.8
57.5°	7489.1	7461.3	7791.2	8523.8	8773.8	8725.1	8680.0	8437.0	7825.9	6968.3	5187.2
60°	6728.7	6669.7	7086.4	8107.1	8877.9	8954.3	8933.5	8697.4	8006.4	6964.8	5155.9
62.5°	5412.9	5558.7	6135.0	7426.6	8923.1	9117.5	9079.3	8718.2	8065.5	6763.5	4958.0
65°	4024.1	4232.4	4798.3	6489.2	8860.6	9200.8	9096.7	8377.9	7791.2	6364.2	4524.0
67.5°	2899.1	3083.1	3496.3	5339.9	8259.9	8818.9	8697.4	7822.4	7159.3	5798.2	3923.4
70°	1982.5	2114.5	2395.7	3888.6	7051.6	7624.5	7548.1	6992.6	6162.8	5124.7	3187.3
72.5°	1399.2	1454.8	1635.3	2565.8	5357.3	5982.3	5892.0	5753.1	4951.1	4260.1	2479.0
75°	1048.5	1083.3	1180.5	1659.6	3614.4	4145.6	4062.2	4142.1	3697.7	3225.5	1805.4
77.5°	395.8	430.5	670.1	1059.0	2138.8	2545.0	2461.7	2510.3	2055.4	1628.4	899.2
80°	107.6	114.6	222.2	503.4	972.2	1267.3	1152.7	989.5	763.8	750.0	475.7
82.5°	45.1	52.1	100.7	270.8	347.2	347.2	291.6	361.1	291.6	350.7	229.2
85°	17.4	20.8	24.3	69.4	45.1	48.6	52.1	69.4	59.0	72.9	52.1
87.5°	0.0	0.0	0.0	3.5	3.5	6.9	3.5	6.9	10.4	10.4	10.4
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: P841232

CATALOG NUMBER: ARCH4-150-727-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2805.4	2805.4	2805.4	2805.4	2805.4	2805.4	2805.4	2805.4	2805.4	2805.4	2805.4
2.5°	2788.0	2749.8	2694.3	2604.0	2510.3	2458.2	2392.2	2381.8	2312.4	2305.4	2277.6
5°	2805.4	2725.5	2583.2	2409.6	2239.4	2107.5	2010.3	1958.2	1857.5	1857.5	1829.7
7.5°	2819.3	2694.3	2465.1	2208.2	1975.6	1798.5	1666.6	1611.0	1520.7	1513.8	1493.0
10°	2822.7	2656.1	2336.7	2003.3	1718.6	1538.1	1409.6	1347.1	1267.3	1260.3	1246.4
12.5°	2850.5	2635.3	2222.1	1826.3	1534.6	1340.2	1215.2	1163.1	1100.6	1093.7	1079.8
15°	2895.7	2635.3	2124.9	1677.0	1371.4	1190.9	1083.3	1034.7	989.5	982.6	975.6
17.5°	2940.8	2628.3	2027.7	1538.1	1236.0	1072.8	979.1	940.9	906.2	902.7	895.8
20°	2982.5	2624.8	1930.4	1420.0	1131.9	975.6	902.7	868.0	840.2	840.2	836.8
22.5°	3024.1	2617.9	1836.7	1308.9	1041.6	902.7	840.2	802.0	781.2	781.2	777.7
25°	3086.6	2617.9	1749.9	1215.2	968.7	847.2	784.7	756.9	739.5	736.1	736.1
27.5°	3159.5	2638.7	1673.5	1131.9	906.2	791.6	743.0	715.2	694.4	687.5	690.9
30°	3239.4	2656.1	1604.1	1059.0	847.2	750.0	697.9	670.1	649.3	642.3	645.8
32.5°	3319.2	2676.9	1541.6	993.0	788.1	711.8	659.7	628.4	607.6	604.1	604.1
35°	3406.0	2697.7	1479.1	937.4	739.5	673.6	625.0	590.2	576.4	569.4	572.9
37.5°	3492.8	2732.5	1420.0	885.4	704.8	638.8	593.7	559.0	548.6	545.1	545.1
40°	3597.0	2784.5	1395.7	850.6	673.6	607.6	569.4	534.7	524.3	524.3	524.3
42.5°	3683.8	2826.2	1374.9	812.4	649.3	579.8	545.1	517.3	510.4	506.9	510.4
45°	3770.6	2864.4	1347.1	777.7	618.0	552.0	524.3	496.5	489.6	489.6	489.6
47.5°	3857.4	2885.2	1308.9	743.0	590.2	527.7	503.4	479.1	472.2	472.2	472.2
50°	3926.8	2902.6	1253.4	704.8	559.0	506.9	482.6	458.3	451.4	451.4	451.4
52.5°	3996.3	2906.1	1194.4	659.7	527.7	482.6	461.8	437.5	430.5	427.1	427.1
55°	4058.8	2902.6	1124.9	607.6	493.0	454.8	437.5	416.6	402.8	388.9	395.8
57.5°	4103.9	2899.1	1045.1	555.5	458.3	427.1	420.1	392.3	364.6	329.8	336.8
60°	4086.5	2860.9	958.3	489.6	420.1	399.3	399.3	361.1	312.5	295.1	298.6
62.5°	3975.4	2753.3	868.0	420.1	381.9	371.5	368.0	326.4	288.2	270.8	274.3
65°	3642.1	2482.5	736.1	357.6	343.7	340.3	340.3	302.1	267.3	246.5	250.0
67.5°	3135.2	2083.2	600.7	302.1	305.5	312.5	312.5	277.8	243.0	222.2	225.7
70°	2513.7	1628.4	479.1	260.4	263.9	274.3	281.2	250.0	218.7	197.9	197.9
72.5°	1892.2	1236.0	385.4	218.7	236.1	236.1	246.5	222.2	191.0	170.1	173.6
75°	1371.4	885.4	305.5	184.0	204.8	201.4	201.4	187.5	163.2	149.3	149.3
77.5°	649.3	465.2	243.0	131.9	159.7	156.2	159.7	149.3	138.9	125.0	128.5
80°	319.4	229.2	156.2	93.7	111.1	114.6	125.0	118.0	114.6	104.2	104.2
82.5°	152.8	90.3	72.9	66.0	76.4	79.9	86.8	86.8	90.3	83.3	83.3
85°	41.7	24.3	31.2	41.7	48.6	52.1	59.0	62.5	62.5	59.0	62.5
87.5°	10.4	10.4	13.9	20.8	24.3	27.8	31.2	31.2	13.9	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)