

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: P836393

Luminaire Tested: **ARCH3-180-727-U-T4W-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836393
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-180-727-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1375mA LIGHTSQUARE WITH 40 LEDS AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15754 lumens
Efficiency: N/A
Efficacy: 87.3 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 180.5
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



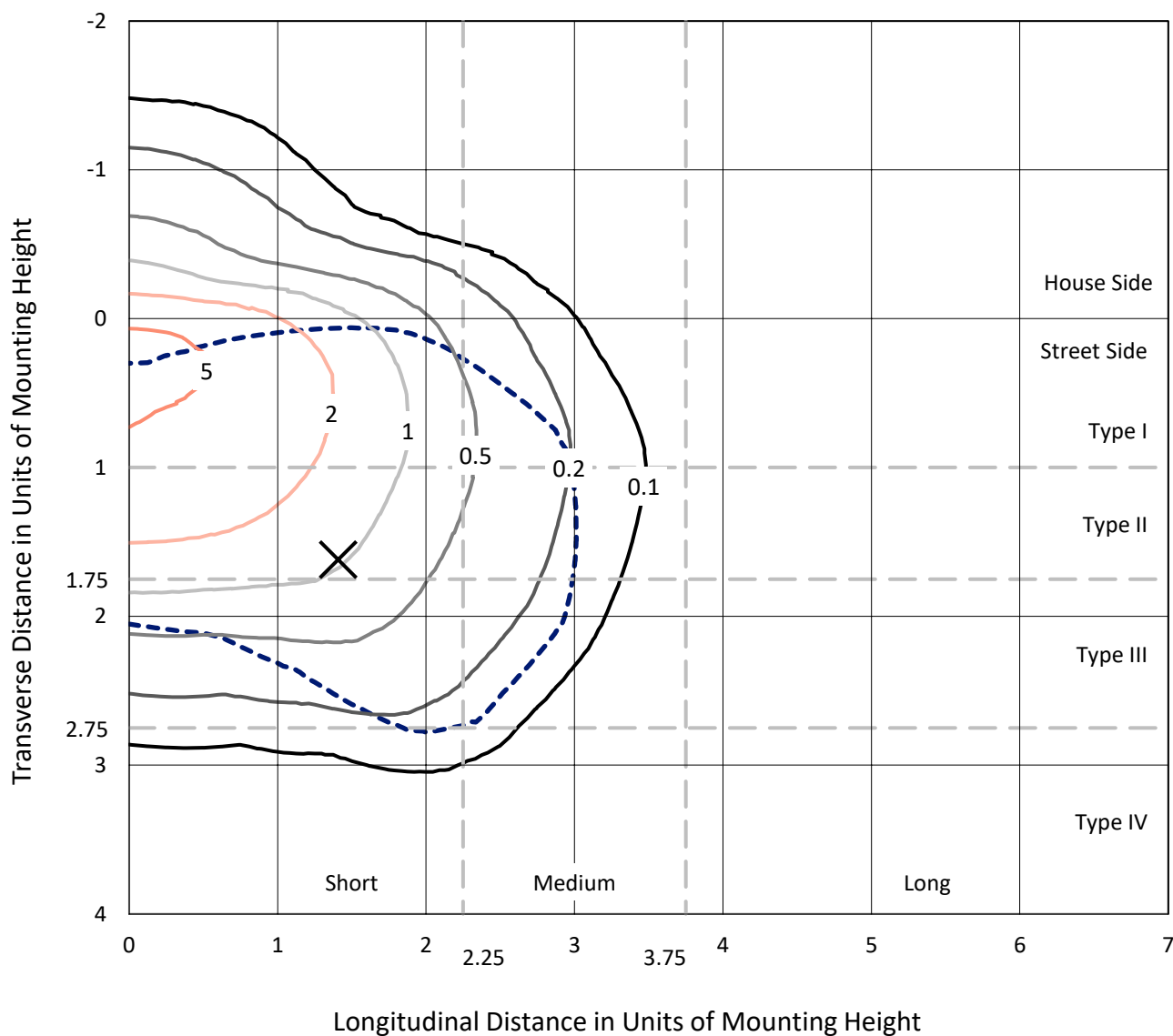
REPORT NUMBER: P836393

CATALOG NUMBER: ARCH3-180-727-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

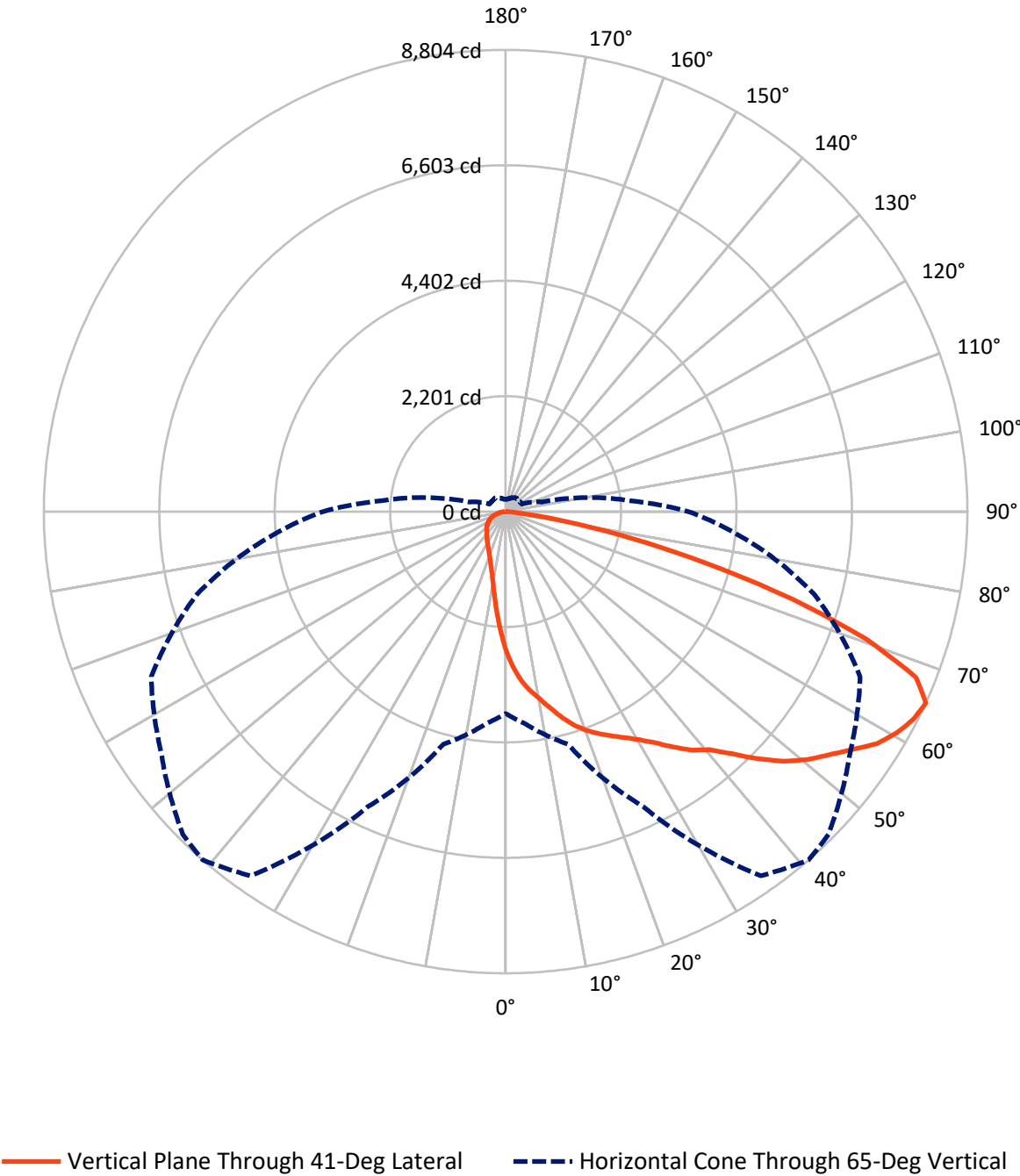


Based on 25 foot mounting height. Maximum calculated value = 6.2 fc

Type III - Short - N/A

REPORT NUMBER: P836393
CATALOG NUMBER: ARCH3-180-727-U-T4W-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P836393

CATALOG NUMBER: ARCH3-180-727-U-T4W-HSS

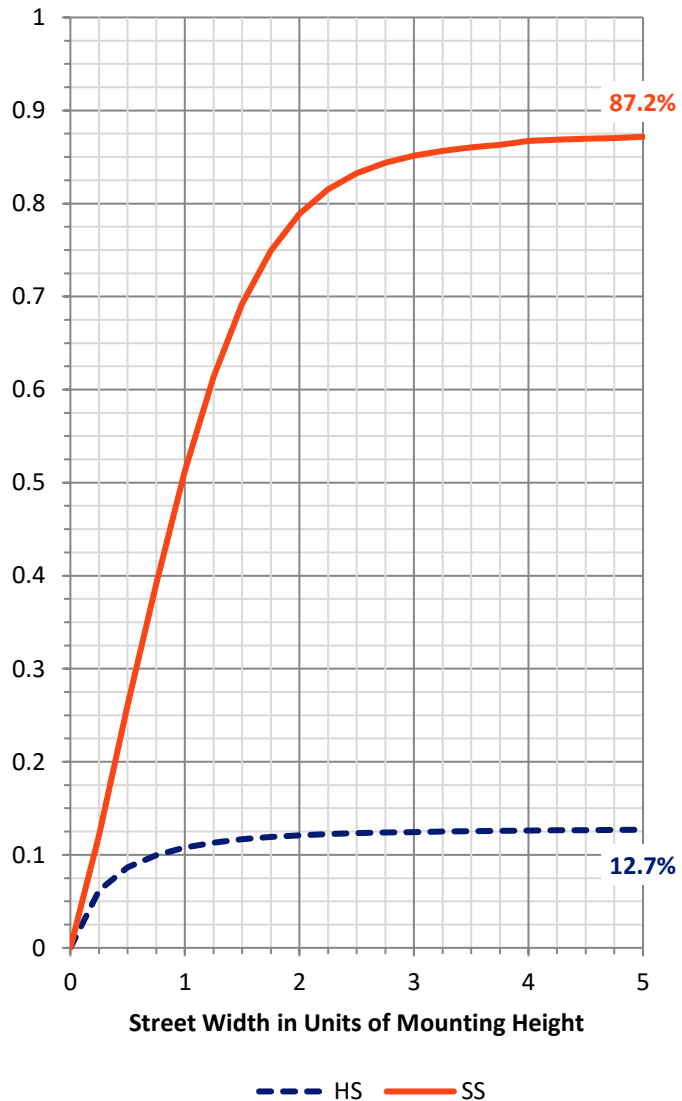
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2022.6	0.0	2022.6
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	13731.4	0.0	13731.4
	% Fixture	87.2	0.0	87.2
Total	Lumens	15754.0	0.0	15754.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	250.1	1.6
10°-20°	750.0	4.8
20°-30°	1290.2	8.2
30°-40°	1956.9	12.4
40°-50°	2866.9	18.2
50°-60°	3620.2	23.0
60°-70°	3394.6	21.5
70°-80°	1513.0	9.6
80°-90°	112.1	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°	15754.0	100.0
0°-180°	15754.0	100.0

Coefficient of Utilization



REPORT NUMBER: P836393

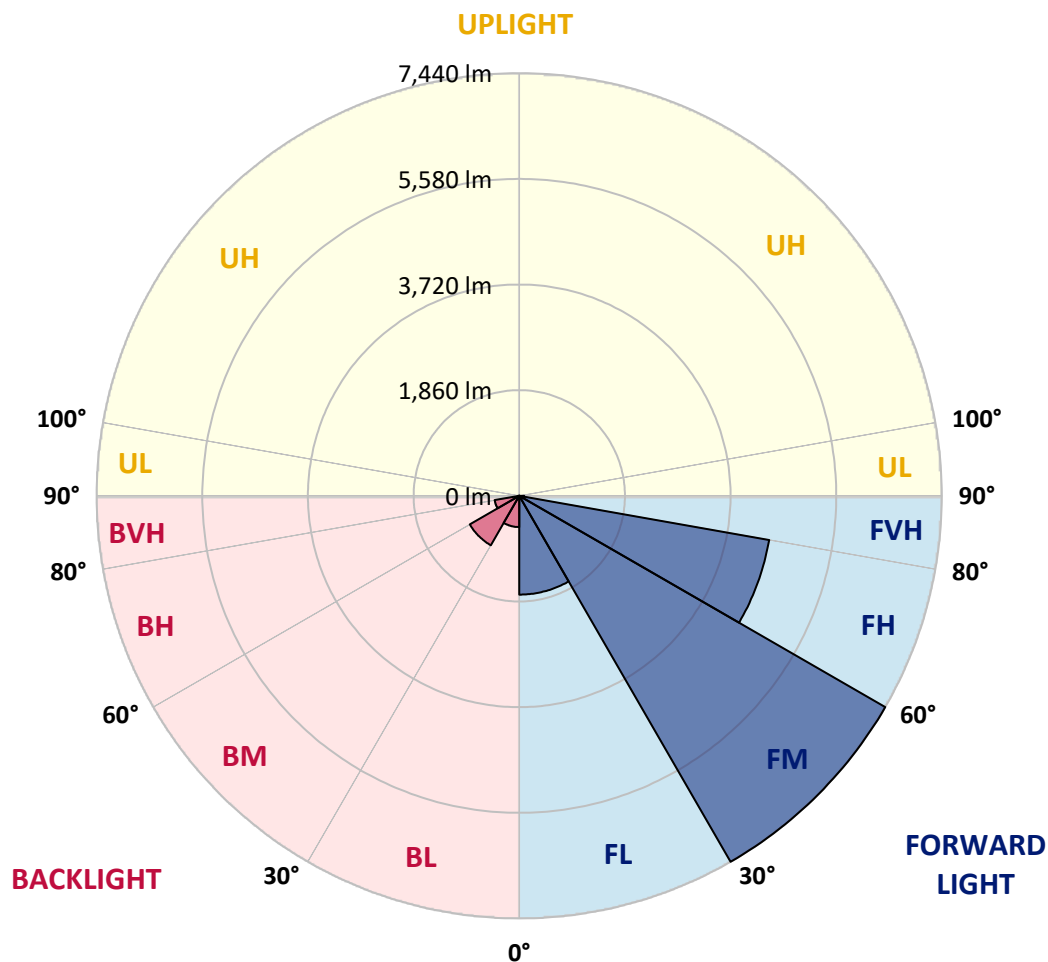
CATALOG NUMBER: ARCH3-180-727-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1739.8	11.0			
FM	(30°-60°)	7439.7	47.2			
FH	(60°-80°)	4468.2	28.4			G2/5000
FVH	(80°-90°)	83.7	0.5			G1/100
BL	(0°-30°)	550.5	3.5	B2/1000		
BM	(30°-60°)	1004.3	6.4	B2/2500		
BH	(60°-80°)	439.4	2.8	B1/500		G1/500
BVH	(80°-90°)	28.4	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: P836393

CATALOG NUMBER: ARCH3-180-727-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	2684.4	2684.4	2684.4	2684.4	2684.4	2684.4	2684.4	2684.4	2684.4	2684.4	2684.4
2.5°	3096.4	3086.4	3079.8	3043.2	3043.2	2993.4	2996.7	2950.2	2893.7	2804.0	2707.7
5°	3388.7	3375.4	3358.8	3322.3	3309.0	3259.2	3252.5	3186.1	3089.7	2933.6	2760.8
7.5°	3644.5	3631.2	3608.0	3554.8	3518.3	3458.5	3441.9	3355.5	3249.2	3056.5	2814.0
10°	3877.1	3867.1	3837.2	3770.8	3720.9	3647.9	3618.0	3501.7	3368.8	3156.2	2857.2
12.5°	4113.0	4099.7	4059.8	4003.3	3943.5	3857.2	3820.6	3671.1	3501.7	3265.8	2920.3
15°	4332.2	4312.3	4282.4	4222.6	4169.5	4086.4	4046.5	3870.5	3664.5	3388.7	3003.3
17.5°	4475.1	4458.5	4431.9	4398.7	4355.5	4292.4	4252.5	4079.8	3827.3	3508.3	3089.7
20°	4561.5	4554.8	4544.9	4524.9	4505.0	4461.8	4431.9	4269.1	4003.3	3624.6	3172.8
22.5°	4627.9	4621.3	4618.0	4618.0	4621.3	4604.7	4584.7	4445.2	4172.8	3747.5	3249.2
25°	4730.9	4727.6	4721.0	4714.3	4737.6	4740.9	4734.2	4637.9	4385.4	3910.3	3345.5
27.5°	4873.8	4863.8	4850.5	4843.9	4867.1	4883.7	4897.0	4830.6	4611.3	4076.4	3455.2
30°	5093.0	5063.1	5029.9	5006.7	5023.3	5049.9	5079.8	5039.9	4843.9	4282.4	3568.1
32.5°	5352.2	5315.6	5239.2	5196.0	5239.2	5259.2	5282.4	5262.5	5086.4	4505.0	3681.1
35°	5667.8	5624.6	5544.9	5481.8	5558.2	5515.0	5505.0	5485.1	5315.6	4724.3	3807.3
37.5°	6192.7	6129.6	6003.4	5863.8	5863.8	5770.8	5734.2	5674.4	5521.6	4920.3	3930.3
40°	6800.7	6717.6	6554.9	6348.9	6159.5	5966.8	5943.6	5900.4	5764.1	5146.2	4069.8
42.5°	7468.5	7309.0	7083.1	6833.9	6528.3	6309.0	6255.8	6132.9	6000.0	5375.4	4209.3
45°	8209.3	7877.1	7548.2	7422.0	6917.0	6717.6	6618.0	6395.4	6245.9	5614.6	4355.5
47.5°	8328.9	8069.8	7850.5	7830.6	7279.1	7113.0	7000.0	6681.1	6511.7	5870.5	4508.3
50°	8262.5	8106.4	8129.6	8049.9	7544.9	7435.3	7348.9	6986.7	6774.1	6116.3	4647.9
52.5°	7983.4	8069.8	8202.7	8056.5	7797.4	7707.7	7664.5	7315.7	7020.0	6342.2	4774.1
55°	7651.2	7711.0	7996.7	8176.1	8089.7	8010.0	7970.1	7697.7	7262.5	6531.6	4890.4
57.5°	7166.1	7139.6	7455.2	8156.2	8395.4	8348.9	8305.7	8073.1	7488.4	6667.8	4963.5
60°	6438.6	6382.1	6780.8	7757.5	8495.1	8568.2	8548.2	8322.3	7661.2	6664.5	4933.6
62.5°	5179.4	5319.0	5870.5	7106.3	8538.3	8724.3	8687.8	8342.2	7717.6	6471.8	4744.2
65°	3850.5	4049.9	4591.4	6209.3	8478.4	8804.0	8704.4	8016.7	7455.2	6089.7	4328.9
67.5°	2774.1	2950.2	3345.5	5109.7	7903.7	8438.6	8322.3	7485.1	6850.5	5548.2	3754.2
70°	1897.0	2023.3	2292.4	3720.9	6747.5	7295.7	7222.6	6691.1	5897.0	4903.7	3049.8
72.5°	1338.9	1392.0	1564.8	2455.2	5126.3	5724.3	5637.9	5505.0	4737.6	4076.4	2372.1
75°	1003.3	1036.6	1129.6	1588.0	3458.5	3966.8	3887.1	3963.5	3538.2	3086.4	1727.6
77.5°	378.7	412.0	641.2	1013.3	2046.5	2435.2	2355.5	2402.0	1966.8	1558.1	860.5
80°	103.0	109.6	212.6	481.7	930.2	1212.6	1103.0	946.8	730.9	717.6	455.2
82.5°	43.2	49.8	96.3	259.1	332.2	332.2	279.1	345.5	279.1	335.5	219.3
85°	16.6	19.9	23.3	66.4	43.2	46.5	49.8	66.4	56.5	69.8	49.8
87.5°	0.0	0.0	0.0	3.3	3.3	6.6	3.3	6.6	10.0	10.0	10.0
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: P836393

CATALOG NUMBER: ARCH3-180-727-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2684.4	2684.4	2684.4	2684.4	2684.4	2684.4	2684.4	2684.4	2684.4	2684.4	2684.4
2.5°	2667.8	2631.2	2578.1	2491.7	2402.0	2352.2	2289.0	2279.1	2212.6	2206.0	2179.4
5°	2684.4	2608.0	2471.8	2305.7	2142.9	2016.6	1923.6	1873.8	1777.4	1777.4	1750.8
7.5°	2697.7	2578.1	2358.8	2113.0	1890.4	1720.9	1594.7	1541.5	1455.2	1448.5	1428.6
10°	2701.0	2541.5	2235.9	1917.0	1644.5	1471.8	1348.8	1289.0	1212.6	1206.0	1192.7
12.5°	2727.6	2521.6	2126.3	1747.5	1468.4	1282.4	1162.8	1113.0	1053.2	1046.5	1033.2
15°	2770.8	2521.6	2033.2	1604.7	1312.3	1139.5	1036.6	990.0	946.8	940.2	933.6
17.5°	2814.0	2515.0	1940.2	1471.8	1182.7	1026.6	936.9	900.3	867.1	863.8	857.1
20°	2853.8	2511.6	1847.2	1358.8	1083.1	933.6	863.8	830.6	804.0	804.0	800.7
22.5°	2893.7	2505.0	1757.5	1252.5	996.7	863.8	804.0	767.4	747.5	747.5	744.2
25°	2953.5	2505.0	1674.4	1162.8	926.9	810.6	750.8	724.3	707.6	704.3	704.3
27.5°	3023.3	2524.9	1601.3	1083.1	867.1	757.5	711.0	684.4	664.5	657.8	661.1
30°	3099.7	2541.5	1534.9	1013.3	810.6	717.6	667.8	641.2	621.3	614.6	617.9
32.5°	3176.1	2561.5	1475.1	950.2	754.2	681.1	631.2	601.3	581.4	578.1	578.1
35°	3259.2	2581.4	1415.3	897.0	707.6	644.5	598.0	564.8	551.5	544.9	548.2
37.5°	3342.2	2614.6	1358.8	847.2	674.4	611.3	568.1	534.9	524.9	521.6	521.6
40°	3441.9	2664.5	1335.6	814.0	644.5	581.4	544.9	511.6	501.7	501.7	501.7
42.5°	3524.9	2704.3	1315.6	777.4	621.3	554.8	521.6	495.0	488.4	485.1	488.4
45°	3608.0	2740.9	1289.0	744.2	591.4	528.2	501.7	475.1	468.4	468.4	468.4
47.5°	3691.0	2760.8	1252.5	711.0	564.8	505.0	481.7	458.5	451.8	451.8	451.8
50°	3757.5	2777.4	1199.3	674.4	534.9	485.1	461.8	438.5	431.9	431.9	431.9
52.5°	3823.9	2780.7	1142.9	631.2	505.0	461.8	441.9	418.6	412.0	408.6	408.6
55°	3883.7	2777.4	1076.4	581.4	471.8	435.2	418.6	398.7	385.4	372.1	378.7
57.5°	3926.9	2774.1	1000.0	531.6	438.5	408.6	402.0	375.4	348.8	315.6	322.3
60°	3910.3	2737.6	916.9	468.4	402.0	382.1	382.1	345.5	299.0	282.4	285.7
62.5°	3804.0	2634.6	830.6	402.0	365.5	355.5	352.2	312.3	275.7	259.1	262.5
65°	3485.1	2375.4	704.3	342.2	328.9	325.6	325.6	289.0	255.8	235.9	239.2
67.5°	3000.0	1993.4	574.8	289.0	292.4	299.0	299.0	265.8	232.6	212.6	215.9
70°	2405.3	1558.1	458.5	249.2	252.5	262.5	269.1	239.2	209.3	189.4	189.4
72.5°	1810.6	1182.7	368.8	209.3	225.9	225.9	235.9	212.6	182.7	162.8	166.1
75°	1312.3	847.2	292.4	176.1	196.0	192.7	192.7	179.4	156.1	142.9	142.9
77.5°	621.3	445.2	232.6	126.2	152.8	149.5	152.8	142.9	132.9	119.6	122.9
80°	305.6	219.3	149.5	89.7	106.3	109.6	119.6	113.0	109.6	99.7	99.7
82.5°	146.2	86.4	69.8	63.1	73.1	76.4	83.1	83.1	86.4	79.7	79.7
85°	39.9	23.3	29.9	39.9	46.5	49.8	56.5	59.8	59.8	56.5	59.8
87.5°	10.0	10.0	13.3	19.9	23.3	26.6	29.9	29.9	13.3	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)