

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: P836392

Luminaire Tested: **ARCH3-180-727-U-T3**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836392
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-180-727-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1375mA LIGHTSQUARE WITH 40 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23127 lumens
Efficiency: N/A
Efficacy: 128.1 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G3

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



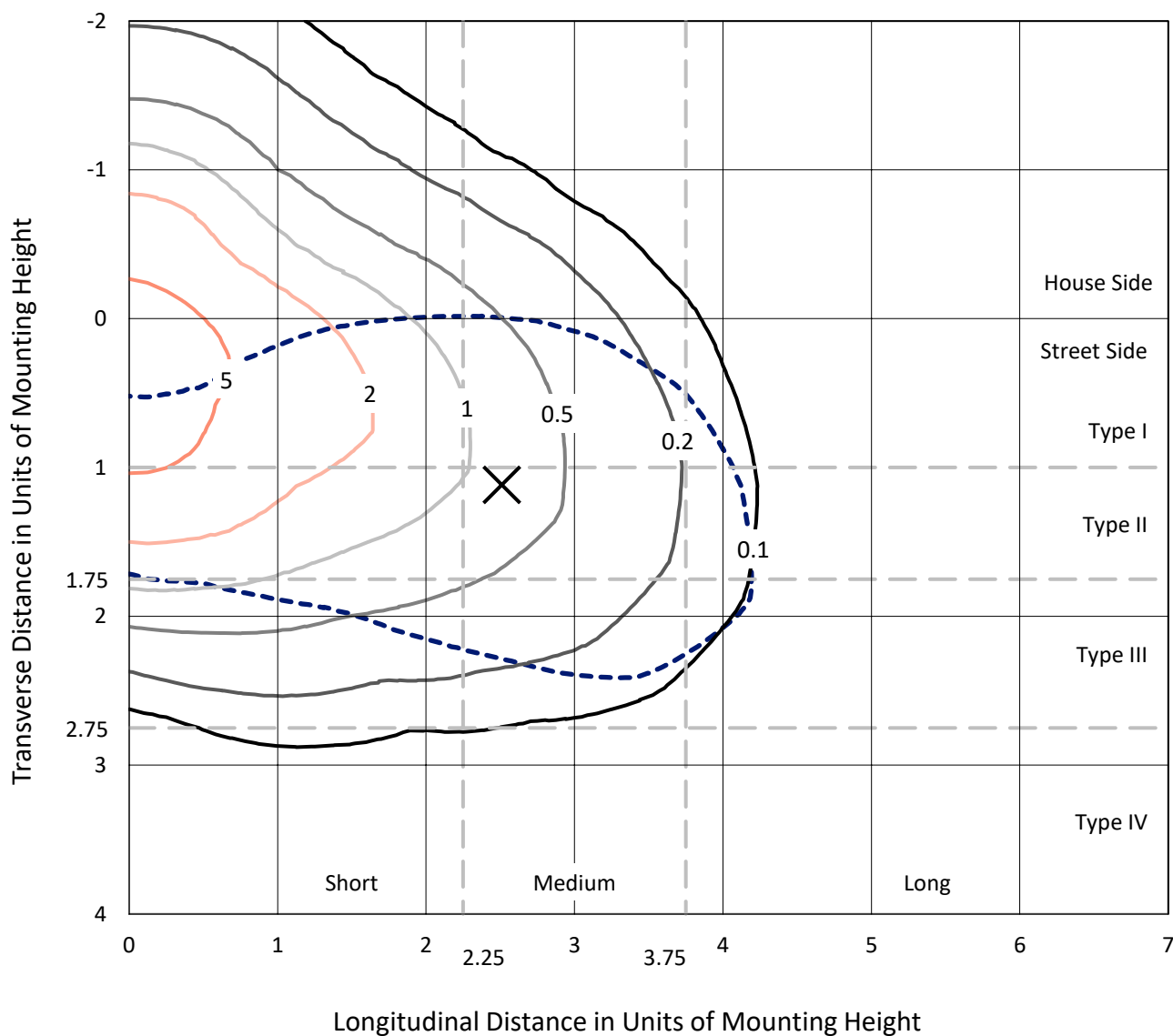
REPORT NUMBER: P836392

CATALOG NUMBER: ARCH3-180-727-U-T3

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

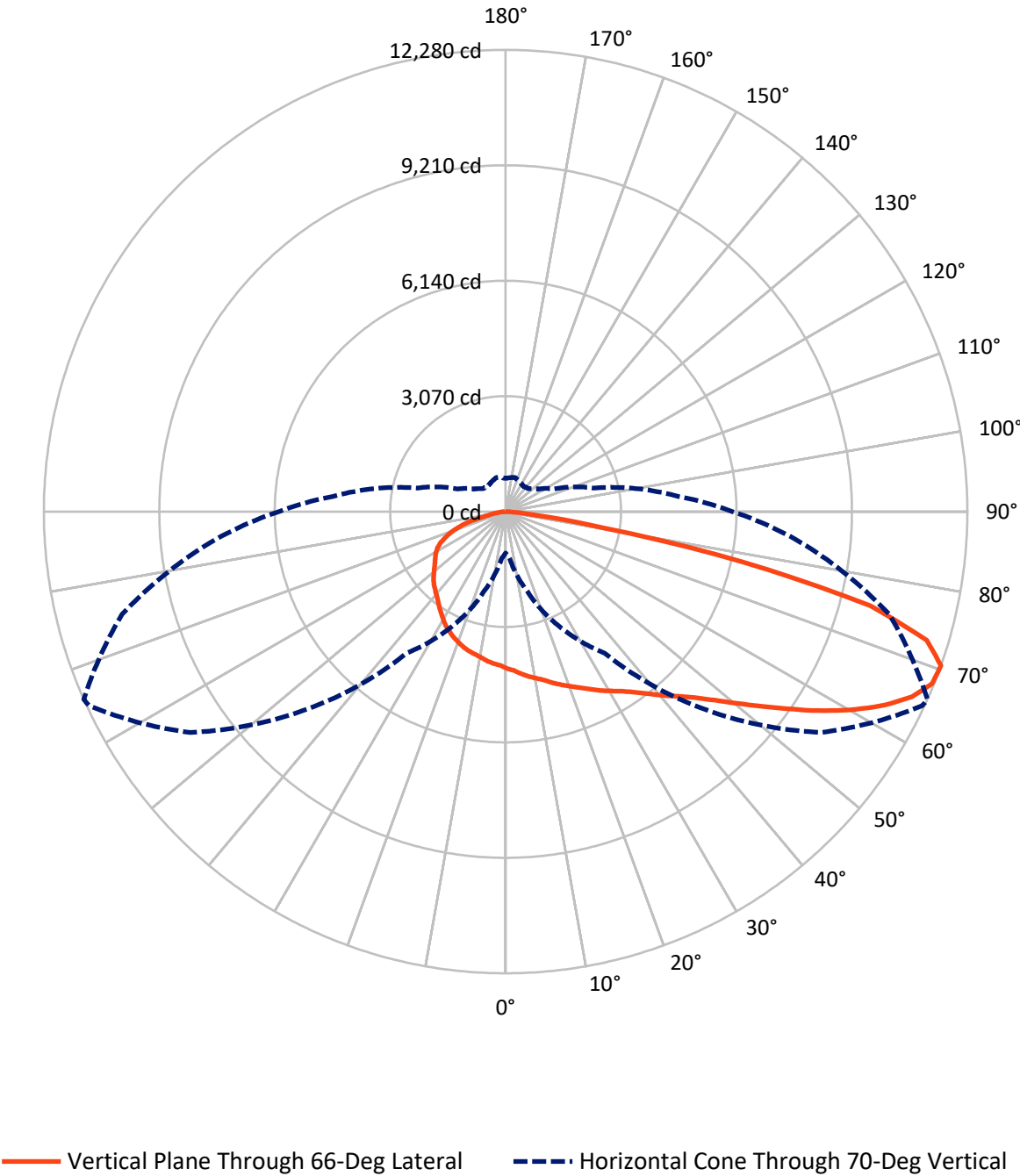


Based on 25 foot mounting height. Maximum calculated value = 7.2 fc

Type III - Medium - N/A

REPORT NUMBER: P836392
CATALOG NUMBER: ARCH3-180-727-U-T3

Luminous Intensity Polar Plot



REPORT NUMBER: P836392

CATALOG NUMBER: ARCH3-180-727-U-T3

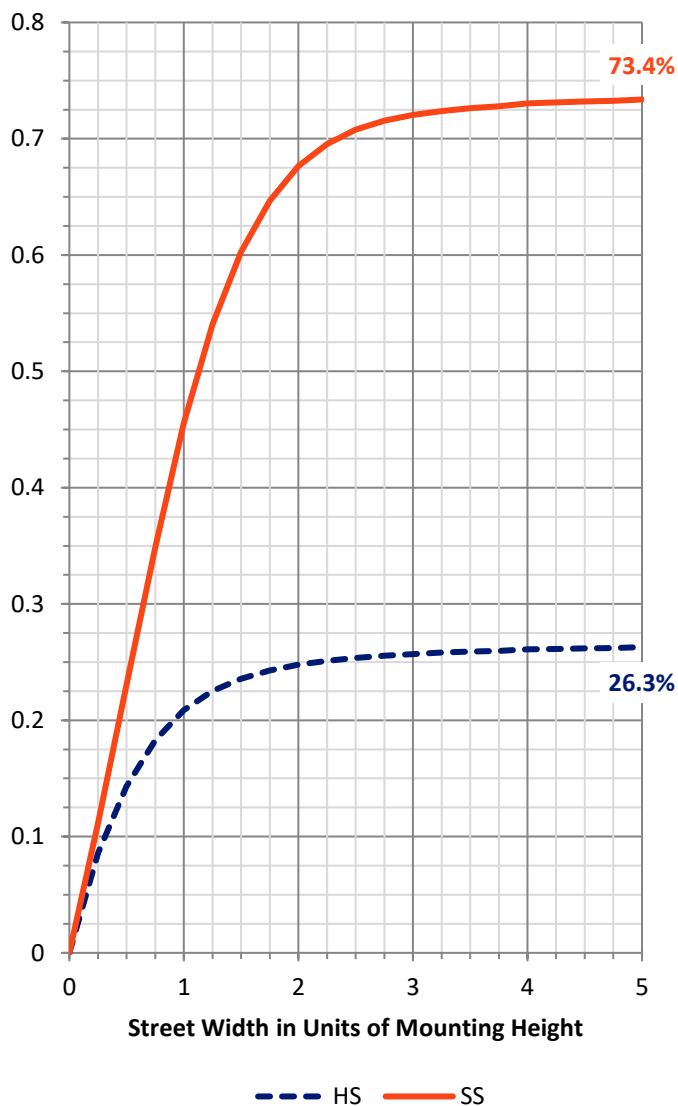
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6128.1	0.0	6128.1
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	16998.9	0.0	16998.9
	% Fixture	73.5	0.0	73.5
Total	Lumens	23127.0	0.0	23127.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	401.1	1.7
10°-20°	1203.1	5.2
20°-30°	2016.7	8.7
30°-40°	3019.7	13.1
40°-50°	4037.3	17.5
50°-60°	4713.7	20.4
60°-70°	4687.1	20.3
70°-80°	2774.8	12.0
80°-90°	273.5	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°	23127.0	100.0
0°-180°	23127.0	100.0

Coefficient of Utilization



REPORT NUMBER: P836392

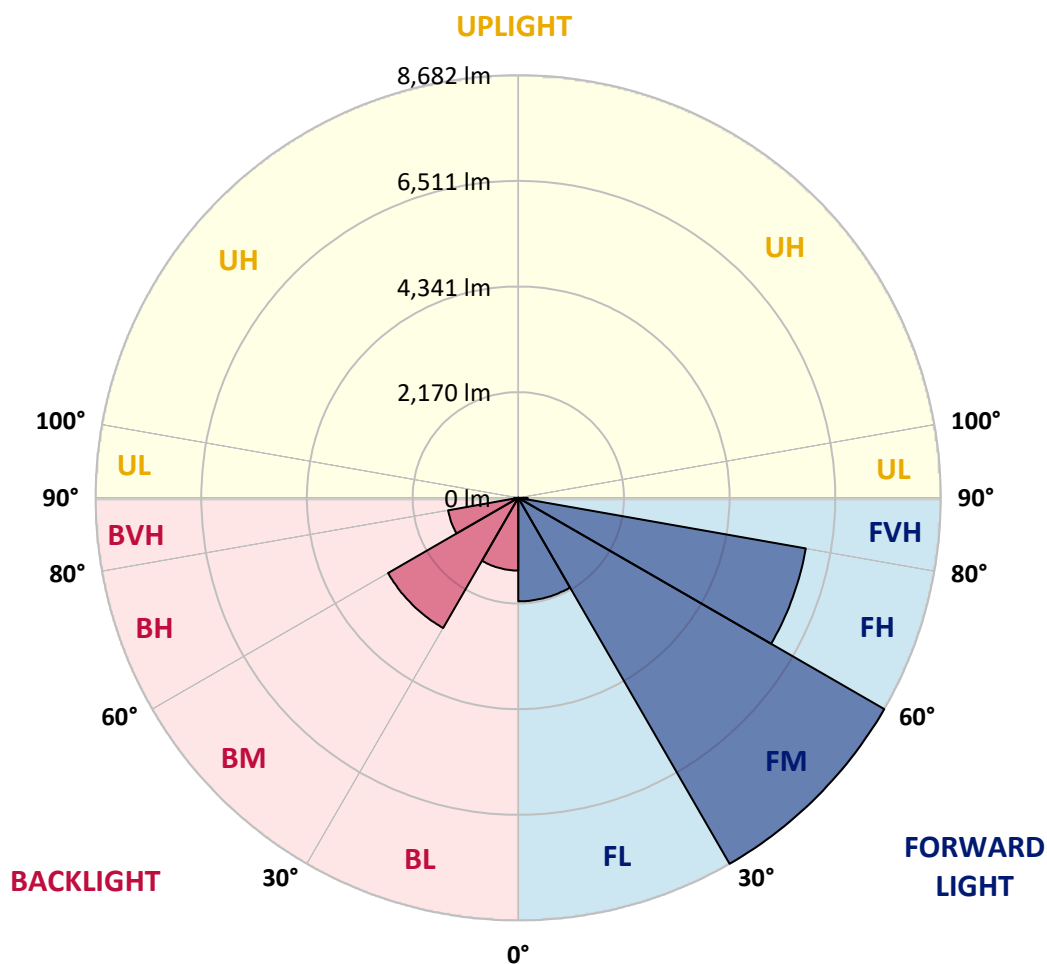
CATALOG NUMBER: ARCH3-180-727-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2127.1	9.2			
FM	(30°-60°)	8681.6	37.5			
FH	(60°-80°)	5998.0	25.9			G3/7500
FVH	(80°-90°)	192.2	0.8			G2/225
BL	(0°-30°)	1493.8	6.5	B3/2500		
BM	(30°-60°)	3089.2	13.4	B3/5000		
BH	(60°-80°)	1463.9	6.3	B3/2500		G3/2500
BVH	(80°-90°)	81.3	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Medium



REPORT NUMBER: P836392

CATALOG NUMBER: ARCH3-180-727-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	4173.9	4173.9	4173.9	4173.9	4173.9	4173.9	4173.9	4173.9	4173.9	4173.9	4173.9
2.5°	4327.3	4320.5	4317.1	4303.5	4272.8	4286.4	4255.7	4235.3	4231.9	4184.1	4156.8
5°	4504.7	4501.3	4494.4	4474.0	4426.2	4433.1	4381.9	4344.4	4334.2	4259.1	4201.2
7.5°	4654.7	4647.9	4644.5	4617.2	4566.1	4562.6	4501.3	4446.7	4429.7	4327.3	4238.7
10°	4770.7	4760.4	4767.2	4740.0	4685.4	4675.2	4596.7	4525.1	4508.1	4378.5	4255.7
12.5°	4869.5	4862.7	4873.0	4849.1	4804.8	4794.5	4716.1	4624.0	4603.6	4453.5	4293.2
15°	4978.7	4954.8	4975.3	4965.0	4934.3	4930.9	4859.3	4757.0	4729.7	4549.0	4351.2
17.5°	5036.6	5023.0	5046.9	5050.3	5036.6	5060.5	4992.3	4869.5	4845.7	4637.7	4402.4
20°	5077.6	5057.1	5084.4	5104.8	5115.1	5162.8	5108.2	4988.9	4961.6	4722.9	4450.1
22.5°	5217.4	5173.0	5176.5	5190.1	5196.9	5265.1	5231.0	5115.1	5087.8	4828.6	4508.1
25°	5568.6	5479.9	5422.0	5381.1	5333.3	5391.3	5370.8	5258.3	5234.4	4954.8	4579.7
27.5°	6114.2	6001.7	5885.7	5766.4	5578.8	5555.0	5520.9	5418.6	5391.3	5081.0	4651.3
30°	6734.8	6622.3	6485.9	6294.9	5943.7	5759.6	5681.1	5568.6	5537.9	5193.5	4719.5
32.5°	7352.1	7253.2	7116.8	6884.9	6383.6	6008.5	5841.4	5725.5	5694.8	5316.3	4801.3
35°	7832.9	7771.5	7682.8	7393.0	6820.1	6301.8	6073.3	5933.5	5899.4	5510.6	4951.4
37.5°	8221.6	8177.3	8102.3	7798.8	7137.2	6595.0	6339.3	6179.0	6141.5	5722.1	5111.7
40°	8794.5	8678.6	8617.2	8177.3	7413.4	6861.0	6639.4	6472.3	6431.3	5947.1	5241.2
42.5°	9282.1	9196.9	9121.9	8514.9	7676.0	7089.5	6922.4	6768.9	6714.4	6168.8	5381.1
45°	9364.0	9398.1	9360.6	8682.0	8092.0	7314.5	7208.8	7109.9	7058.8	6468.9	5592.5
47.5°	9367.4	9367.4	9145.7	8777.5	8607.0	7566.9	7515.7	7549.8	7495.3	6850.8	5844.8
50°	9121.9	9166.2	9050.3	8801.3	8743.4	7819.2	7890.8	8075.0	8020.4	7256.6	6117.6
52.5°	8613.8	8760.4	8757.0	8763.8	8545.6	8034.1	8286.4	8705.8	8613.8	7713.5	6407.5
55°	7716.9	8010.2	8272.8	8497.8	8375.1	8163.7	8770.6	9377.6	9282.1	8225.0	6700.7
57.5°	6949.7	7137.2	7464.6	8102.3	8173.9	8276.2	9224.2	10080.1	9994.8	8791.1	7007.6
60°	6073.3	6332.5	6659.8	7566.9	7928.4	8422.8	9722.0	10765.5	10683.7	9364.0	7304.3
62.5°	4726.3	5060.5	5715.2	6745.1	7570.3	8514.9	10114.2	11369.1	11331.6	9906.2	7570.3
65°	3294.1	3590.8	4508.1	5735.7	7000.8	8474.0	10427.9	11907.9	11873.8	10349.5	7757.9
67.5°	1923.3	2267.7	3304.3	4617.2	5994.9	8190.9	10530.2	12225.0	12225.0	10618.9	7809.0
70°	1098.0	1258.3	2179.0	3365.7	4596.7	7410.0	10243.8	12221.6	12279.6	10557.5	7597.6
72.5°	767.3	838.9	1466.3	2264.3	3116.8	5994.9	9493.6	11631.7	11710.1	9977.8	6874.7
75°	596.8	647.9	1033.2	1544.8	1964.2	4071.6	7853.3	9807.3	10015.3	8504.7	5558.4
77.5°	453.5	491.0	603.6	965.0	1258.3	2339.3	5183.3	6431.3	6445.0	5207.1	2980.4
80°	330.8	368.3	402.4	589.9	668.4	1094.6	1957.4	2687.1	2612.1	2520.0	1613.0
82.5°	197.8	235.3	245.5	320.5	327.4	467.2	685.4	866.2	832.1	1108.3	757.0
85°	85.3	119.4	126.2	146.6	139.8	191.0	272.8	228.5	204.6	235.3	163.7
87.5°	20.5	34.1	34.1	37.5	30.7	47.7	51.2	37.5	34.1	40.9	40.9
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: P836392

CATALOG NUMBER: ARCH3-180-727-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4173.9	4173.9	4173.9	4173.9	4173.9	4173.9	4173.9	4173.9	4173.9	4173.9	4173.9
2.5°	4150.0	4139.8	4143.2	4085.2	4068.2	4051.1	4040.9	4034.1	4027.3	4037.5	4047.7
5°	4180.7	4156.8	4129.6	4044.3	4010.2	3972.7	3945.4	3921.6	3911.3	3911.3	3921.6
7.5°	4204.6	4163.7	4105.7	3993.2	3931.8	3880.6	3836.3	3805.6	3788.6	3788.6	3798.8
10°	4208.0	4150.0	4058.0	3921.6	3839.7	3764.7	3713.5	3679.4	3655.6	3655.6	3662.4
12.5°	4228.5	4150.0	4030.7	3867.0	3764.7	3672.6	3611.2	3560.1	3549.9	3549.9	3556.7
15°	4262.6	4167.1	4013.6	3819.3	3696.5	3590.8	3522.6	3468.0	3447.6	3461.2	3464.6
17.5°	4293.2	4177.3	3982.9	3757.9	3611.2	3495.3	3420.3	3372.5	3345.3	3375.9	3375.9
20°	4313.7	4177.3	3938.6	3679.4	3519.2	3389.6	3318.0	3260.0	3239.5	3277.1	3280.5
22.5°	4344.4	4173.9	3890.9	3601.0	3420.3	3283.9	3212.3	3167.9	3157.7	3198.6	3212.3
25°	4378.5	4180.7	3839.7	3512.3	3311.2	3178.2	3123.6	3103.1	3110.0	3161.1	3178.2
27.5°	4416.0	4194.4	3788.6	3413.5	3191.8	3072.5	3041.8	3052.0	3079.3	3144.1	3164.5
30°	4450.1	4197.8	3717.0	3297.5	3055.4	2942.9	2956.5	3000.8	3041.8	3106.6	3130.4
32.5°	4494.4	4201.2	3641.9	3171.3	2908.8	2826.9	2888.3	2959.9	3000.8	3062.2	3089.5
35°	4603.6	4259.1	3584.0	3048.6	2772.4	2728.0	2830.3	2922.4	2946.3	3000.8	3024.7
37.5°	4729.7	4354.6	3553.3	2922.4	2639.4	2629.1	2758.7	2850.8	2857.6	2891.7	2915.6
40°	4808.2	4395.5	3519.2	2816.7	2520.0	2526.8	2659.8	2731.4	2717.8	2741.7	2758.7
42.5°	4886.6	4409.2	3447.6	2728.0	2407.5	2414.3	2516.6	2567.8	2574.6	2625.7	2649.6
45°	5019.6	4446.7	3369.1	2646.2	2305.2	2281.3	2342.7	2410.9	2499.6	2598.5	2625.7
47.5°	5196.9	4525.1	3287.3	2547.3	2206.3	2127.9	2151.7	2271.1	2363.2	2455.2	2472.3
50°	5377.6	4603.6	3212.3	2428.0	2107.4	1964.2	1974.4	2083.5	2158.6	2230.2	2240.4
52.5°	5555.0	4671.8	3147.5	2315.4	1994.9	1769.8	1810.7	1923.3	1974.4	2008.5	2018.7
55°	5732.3	4729.7	3089.5	2219.9	1865.3	1616.4	1653.9	1759.6	1810.7	1827.8	1834.6
57.5°	5916.4	4797.9	3045.2	2138.1	1718.7	1480.0	1503.8	1578.9	1626.6	1647.1	1640.2
60°	6069.9	4855.9	3021.3	2052.8	1572.0	1353.8	1347.0	1415.2	1483.4	1503.8	1497.0
62.5°	6189.2	4893.4	2983.8	1943.7	1442.4	1227.6	1193.5	1282.2	1353.8	1367.4	1377.7
65°	6254.0	4896.8	2891.7	1803.9	1309.5	1091.2	1067.3	1156.0	1200.3	1214.0	1214.0
67.5°	6243.8	4842.3	2711.0	1616.4	1186.7	968.5	948.0	1002.6	1067.3	1077.6	1067.3
70°	6032.4	4617.2	2421.1	1418.6	1040.1	859.3	821.8	876.4	937.8	900.3	883.2
72.5°	5432.2	4034.1	1994.9	1200.3	876.4	722.9	705.9	760.4	763.9	770.7	753.6
75°	4286.4	3004.3	1493.6	934.4	709.3	607.0	603.6	593.3	607.0	634.3	613.8
77.5°	2250.6	1500.4	808.2	572.9	514.9	487.6	463.8	460.4	501.3	518.3	497.9
80°	1220.8	842.3	463.8	344.4	313.7	317.1	347.8	341.0	385.3	395.6	378.5
82.5°	532.0	399.0	228.5	208.0	208.0	204.6	214.8	238.7	286.4	286.4	228.5
85°	115.9	98.9	88.7	102.3	115.9	115.9	115.9	115.9	81.8	44.3	30.7
87.5°	37.5	37.5	37.5	40.9	44.3	44.3	37.5	27.3	17.1	3.4	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)