

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: P842235

Luminaire Tested: **ARCH4-290-727-U-T2R**

Issue Date: 5/27/2024

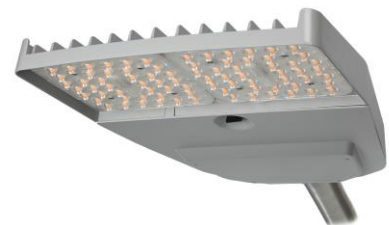
Test Information

Test Method: LM-79-08
Report Number: P842235
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-290-727-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1120mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 39631 lumens
Efficiency: N/A
Efficacy: 136.8 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B4 - U0 - G4

Input Watts (W): 289.7
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



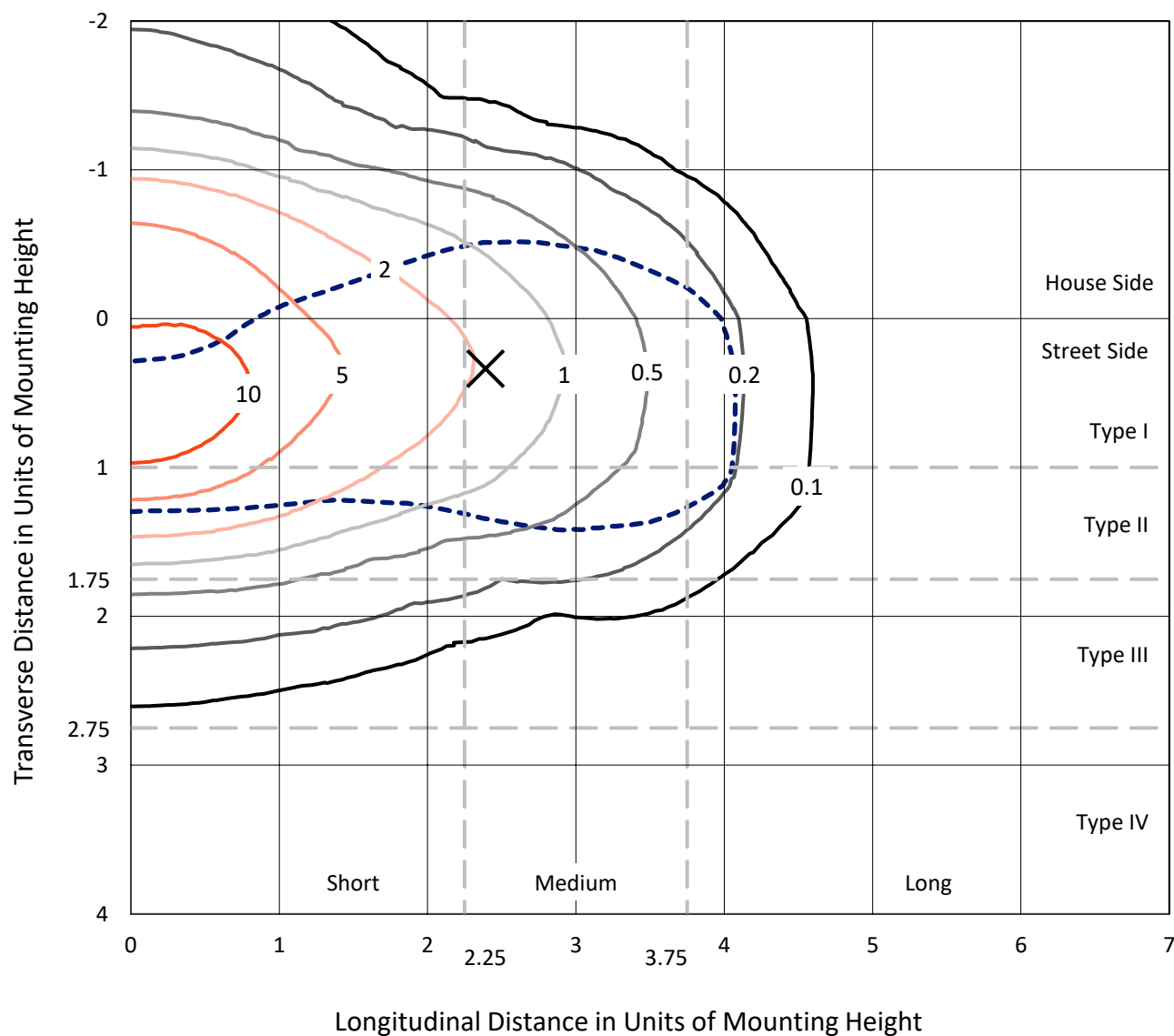
REPORT NUMBER: P842235

CATALOG NUMBER: ARCH4-290-727-U-T2R

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

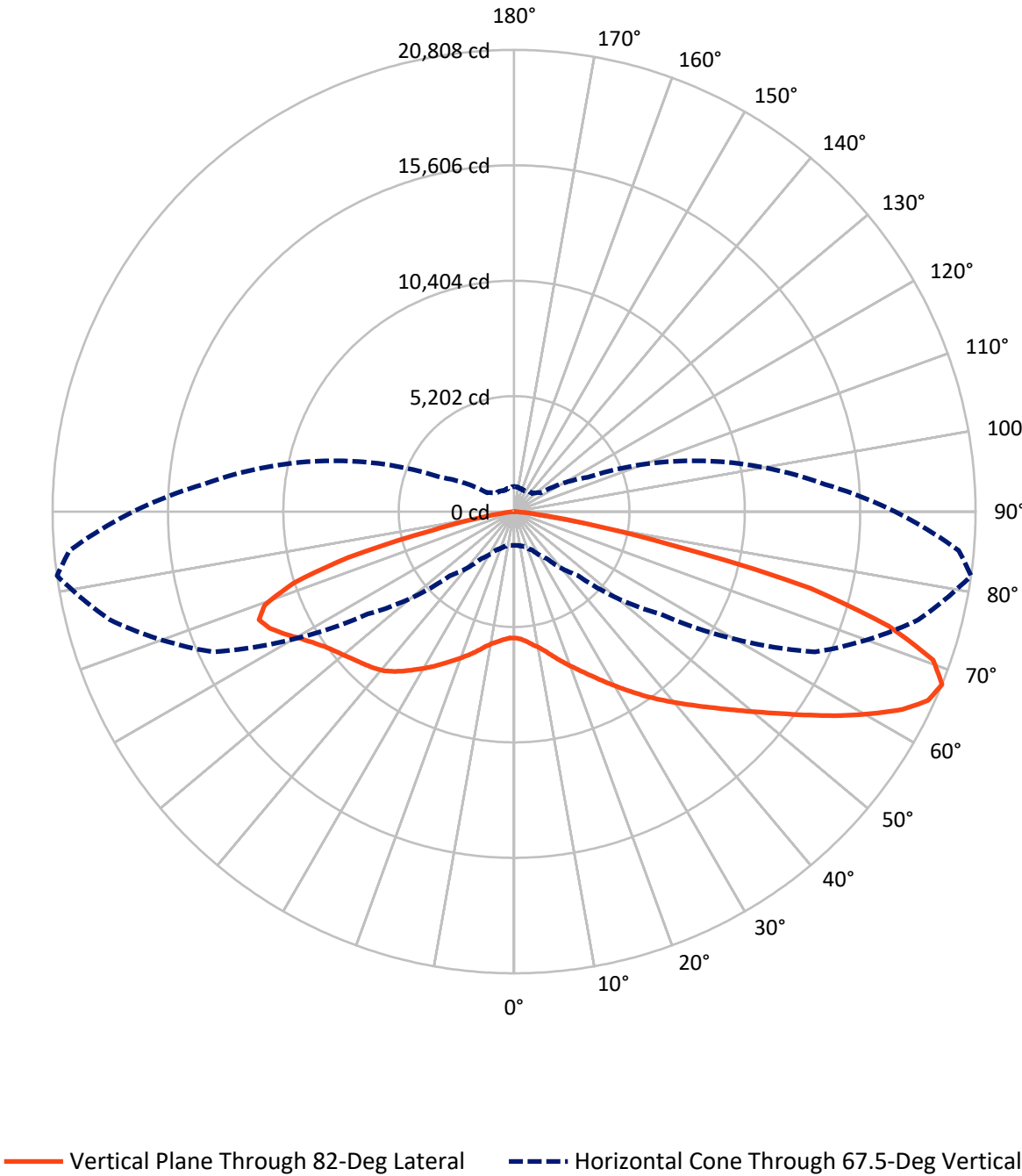
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 17.5 fc
Type II - Medium - N/A

REPORT NUMBER: P842235
CATALOG NUMBER: ARCH4-290-727-U-T2R

Luminous Intensity Polar Plot



REPORT NUMBER: P842235

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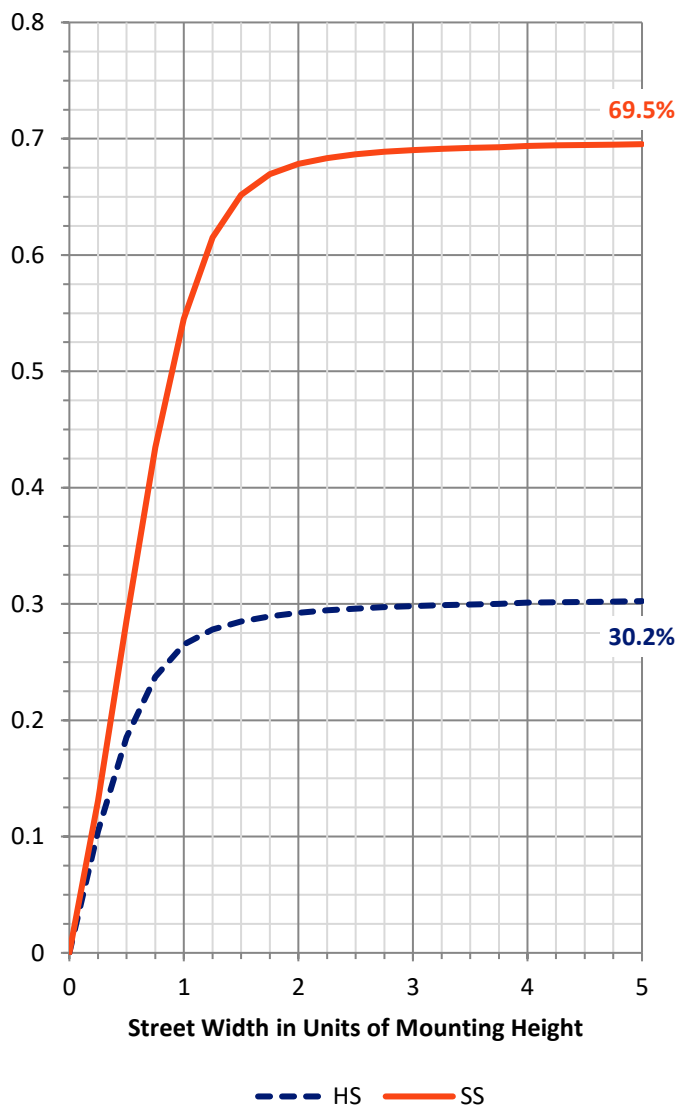
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12069.2	0.0	12069.2
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	27561.8	0.0	27561.8
	% Fixture	69.5	0.0	69.5
Total	Lumens	39631.0	0.0	39631.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	588.8	1.5
10°-20°	2120.7	5.4
20°-30°	4262.1	10.8
30°-40°	6695.2	16.9
40°-50°	8156.1	20.6
50°-60°	7706.5	19.4
60°-70°	6363.8	16.1
70°-80°	3465.4	8.7
80°-90°	272.5	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°	39631.0	100.0
0°-180°	39631.0	100.0

Coefficient of Utilization



REPORT NUMBER: P842235

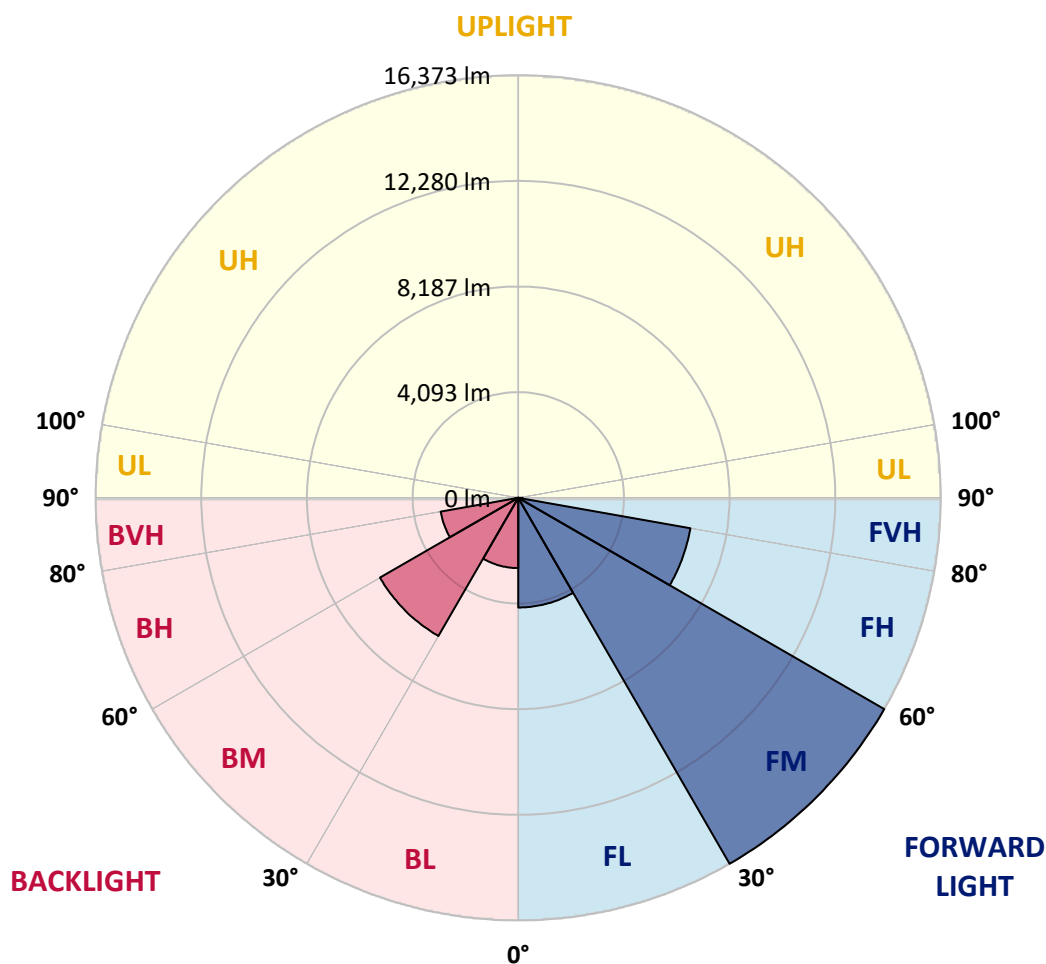
CATALOG NUMBER: ARCH4-290-727-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4249.9	10.7			
FM	(30°-60°)	16373.3	41.3			
FH	(60°-80°)	6774.4	17.1			G3/7500
FVH	(80°-90°)	164.2	0.4			G2/225
BL	(0°-30°)	2721.7	6.9	B4/5000		
BM	(30°-60°)	6184.5	15.6	B4/8500		
BH	(60°-80°)	3054.8	7.7	B4/5000		G4/5000
BVH	(80°-90°)	108.2	0.3			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Medium



REPORT NUMBER: P842235

CATALOG NUMBER: ARCH4-290-727-U-T2R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	5696.9	5696.9	5696.9	5696.9	5696.9	5696.9	5696.9	5696.9	5696.9	5696.9	5696.9
2.5°	5955.9	5955.9	6001.9	6001.9	5961.6	5898.3	5881.1	5812.0	5748.7	5748.7	5754.5
5°	6525.6	6519.8	6554.4	6508.3	6410.5	6283.9	6197.6	6048.0	5921.4	5881.1	5875.3
7.5°	7221.9	7216.1	7233.4	7158.6	6974.4	6767.3	6594.6	6352.9	6145.8	6059.5	6036.5
10°	7998.7	7993.0	7975.7	7849.1	7601.7	7279.4	7020.5	6686.7	6376.0	6237.9	6209.1
12.5°	8890.7	8879.2	8838.9	8654.7	8315.2	7900.9	7526.9	7095.3	6681.0	6491.1	6427.8
15°	9886.2	9868.9	9794.1	9569.7	9115.1	8591.4	8108.1	7555.6	7049.2	6801.8	6715.5
17.5°	10933.5	10933.5	10818.4	10484.7	9978.3	9328.0	8729.5	8027.5	7434.8	7129.8	7026.2
20°	11998.1	11992.3	11848.5	11445.7	10847.2	10099.1	9339.5	8568.4	7831.8	7463.6	7337.0
22.5°	13120.2	13108.7	12930.3	12470.0	11756.4	10910.5	10024.3	9103.6	8269.2	7826.1	7665.0
25°	14409.2	14392.0	14173.3	13609.3	12763.4	11808.2	10795.4	9730.8	8769.8	8228.9	8039.0
27.5°	15778.8	15755.8	15496.8	14840.8	13914.3	12763.4	11647.1	10455.9	9322.3	8677.8	8464.8
30°	16998.7	16981.5	16699.5	16026.2	14961.6	13712.9	12458.5	11181.0	9903.5	9155.4	8890.7
32.5°	17919.5	17919.5	17666.3	17004.5	15899.6	14622.1	13275.6	11865.7	10507.7	9667.5	9356.8
35°	18477.6	18494.9	18276.2	17746.8	16705.3	15479.6	14121.5	12671.4	11152.2	10214.2	9880.4
37.5°	18558.2	18615.7	18489.1	18132.4	17263.4	16193.1	14950.1	13448.2	11819.7	10766.6	10392.6
40°	18184.2	18224.4	18230.2	18092.1	17493.6	16705.3	15681.0	14271.1	12527.5	11347.8	10916.2
42.5°	17436.1	17464.8	17516.6	17556.9	17326.7	16929.7	16239.1	15036.5	13281.3	11940.5	11434.2
45°	16469.3	16463.6	16549.9	16722.5	16711.0	16803.1	16549.9	15732.7	14064.0	12613.8	12009.6
47.5°	15024.9	14996.2	15301.2	15692.5	15888.1	16319.7	16555.6	16279.4	14915.6	13356.1	12665.6
50°	12763.4	12734.7	13402.2	14322.9	14898.4	15554.4	16239.1	16607.4	15807.6	14190.5	13379.2
52.5°	10012.8	9984.0	10829.9	12441.2	13695.7	14650.9	15600.4	16682.2	16653.5	15122.8	14184.8
55°	7446.3	7423.3	8246.2	9989.8	12021.1	13603.6	14817.8	16486.6	17447.6	16193.1	15163.1
57.5°	5248.1	5236.6	5950.1	7394.5	9868.9	12326.1	14064.0	16106.8	18178.4	17355.5	16267.9
60°	3682.9	3665.6	4183.5	5299.9	7463.6	10398.3	13315.9	15600.4	18725.1	18500.7	17441.8
62.5°	2480.2	2468.7	2837.0	3769.2	5299.9	8004.5	12182.2	15260.9	19035.8	19651.6	18627.3
65°	1881.7	1876.0	2042.8	2555.0	3751.9	5748.7	10381.1	15220.6	19076.1	20514.7	19634.3
67.5°	1519.2	1524.9	1617.0	1910.5	2595.3	4085.7	8050.5	14967.4	18863.2	20808.2	20123.4
70°	1243.0	1243.0	1283.2	1478.9	1916.2	2756.4	5622.1	13816.5	18270.5	20042.9	19542.2
72.5°	949.5	955.2	1081.8	1196.9	1444.4	1933.5	3602.3	11434.2	16872.1	17672.0	17292.2
75°	753.8	748.1	822.9	984.0	1122.1	1381.1	2209.7	8200.1	14357.4	13810.8	13569.1
77.5°	540.9	535.2	592.7	730.8	851.7	978.3	1317.8	4137.5	7808.8	7175.8	6997.4
80°	368.3	356.8	408.6	506.4	563.9	575.4	644.5	1588.2	3406.7	3211.0	3170.7
82.5°	189.9	189.9	218.7	287.7	293.5	299.2	287.7	512.1	1127.9	1053.1	1007.0
85°	74.8	74.8	80.6	97.8	97.8	103.6	103.6	132.4	120.8	115.1	109.3
87.5°	5.8	5.8	11.5	11.5	17.3	17.3	17.3	23.0	28.8	28.8	28.8
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: P842235

CATALOG NUMBER: ARCH4-290-727-U-T2R

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5696.9	5696.9	5696.9	5696.9	5696.9	5696.9	5696.9	5696.9	5696.9	5696.9	5696.9
2.5°	5743.0	5720.0	5645.1	5627.9	5616.4	5599.1	5604.9	5564.6	5547.3	5553.1	5530.1
5°	5846.6	5806.3	5714.2	5673.9	5662.4	5645.1	5662.4	5633.6	5604.9	5616.4	5604.9
7.5°	5990.4	5932.9	5817.8	5777.5	5771.7	5754.5	5777.5	5754.5	5731.5	5743.0	5720.0
10°	6140.0	6065.2	5938.6	5898.3	5898.3	5892.6	5915.6	5881.1	5858.1	5863.8	5852.3
12.5°	6358.7	6260.9	6122.8	6088.2	6071.0	6088.2	6094.0	6048.0	6007.7	6013.4	5996.2
15°	6623.4	6514.1	6364.5	6312.7	6301.2	6295.4	6272.4	6214.8	6163.0	6157.3	6140.0
17.5°	6911.1	6773.0	6594.6	6542.8	6491.1	6473.8	6416.2	6341.4	6260.9	6260.9	6237.9
20°	7187.3	7032.0	6819.1	6744.3	6669.4	6600.4	6502.6	6381.7	6278.1	6260.9	6237.9
22.5°	7486.6	7302.4	7055.0	6945.7	6813.3	6675.2	6508.3	6347.2	6214.8	6186.1	6168.8
25°	7820.3	7590.2	7296.7	7135.6	6922.6	6709.7	6462.3	6255.1	6099.7	6053.7	6042.2
27.5°	8188.6	7912.4	7555.6	7319.7	7009.0	6675.2	6358.7	6111.3	5921.4	5863.8	5846.6
30°	8562.7	8234.7	7791.6	7446.3	7009.0	6565.9	6168.8	5881.1	5662.4	5581.8	5570.3
32.5°	8936.7	8568.4	8004.5	7515.4	6939.9	6381.7	5921.4	5581.8	5334.4	5236.6	5259.6
35°	9385.6	8936.7	8200.1	7544.1	6824.8	6157.3	5639.4	5242.3	4989.1	4902.8	4920.1
37.5°	9851.7	9305.0	8355.5	7521.1	6663.7	5904.1	5322.9	4937.3	4620.8	4471.2	4488.5
40°	10254.5	9638.8	8464.8	7440.5	6456.5	5616.4	5012.2	4505.8	4068.4	3924.6	3907.3
42.5°	10634.3	9886.2	8522.4	7319.7	6220.6	5282.6	4569.1	3918.8	3481.5	3303.1	3308.8
45°	11031.3	10127.9	8499.4	7158.6	5927.1	4891.3	3999.4	3343.4	2957.8	2796.7	2802.4
47.5°	11485.9	10386.8	8476.3	6985.9	5570.3	4384.9	3452.7	2837.0	2503.2	2388.1	2376.6
50°	11969.3	10674.6	8447.6	6773.0	5173.3	3821.0	2911.8	2365.1	2083.1	2008.3	1991.1
52.5°	12516.0	10985.3	8430.3	6519.8	4695.7	3222.5	2428.4	1950.8	1760.9	1709.1	1703.3
55°	13172.0	11347.8	8453.3	6214.8	4120.2	2658.6	2019.8	1680.3	1553.7	1524.9	1519.2
57.5°	13971.9	11813.9	8522.4	5858.1	3516.0	2169.4	1720.6	1513.4	1432.9	1409.8	1409.8
60°	14840.8	12343.4	8649.0	5455.2	2911.8	1789.6	1524.9	1381.1	1346.5	1375.3	1375.3
62.5°	15778.8	12964.8	8873.4	4966.1	2347.8	1513.4	1369.6	1271.7	1248.7	1306.3	1312.0
65°	16647.7	13569.1	9017.3	4379.2	1864.5	1312.0	1248.7	1162.4	1173.9	1231.5	1225.7
67.5°	17182.9	14069.7	8815.9	3642.6	1478.9	1162.4	1122.1	1047.3	1076.1	1122.1	1127.9
70°	16854.9	13787.7	7820.3	2750.6	1156.7	1012.8	984.0	938.0	961.0	1018.5	1041.6
72.5°	15249.4	12349.1	6082.5	1858.7	932.2	851.7	863.2	840.2	868.9	920.7	972.5
75°	12377.9	9333.8	4079.9	1191.2	736.6	725.1	742.3	725.1	736.6	788.4	817.1
77.5°	6462.3	4551.8	2031.3	742.3	546.7	563.9	592.7	598.5	633.0	644.5	656.0
80°	3015.3	2048.6	845.9	414.3	362.5	397.1	454.6	460.4	471.9	489.1	494.9
82.5°	984.0	615.7	391.3	224.4	207.2	224.4	293.5	351.0	356.8	391.3	391.3
85°	103.6	63.3	86.3	92.1	80.6	97.8	132.4	126.6	57.5	34.5	34.5
87.5°	28.8	23.0	28.8	28.8	23.0	23.0	17.3	5.8	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)