

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: P842277

Luminaire Tested: **ARCH4-290-750-U-T4W**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842277
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-290-750-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 1120mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 41991 lumens
Efficiency: N/A
Efficacy: 144.9 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
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

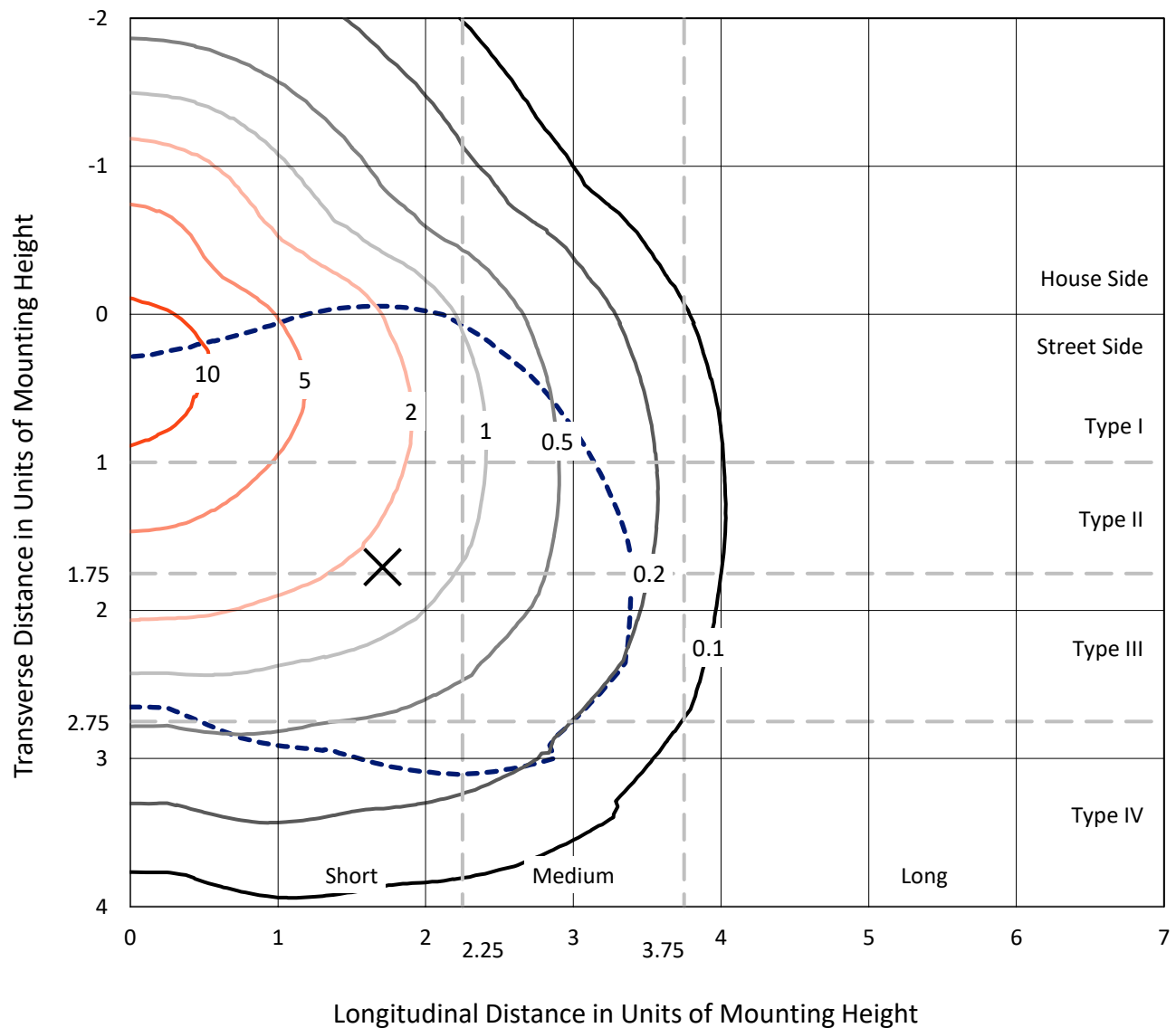


REPORT NUMBER: P842277

CATALOG NUMBER: ARCH4-290-750-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

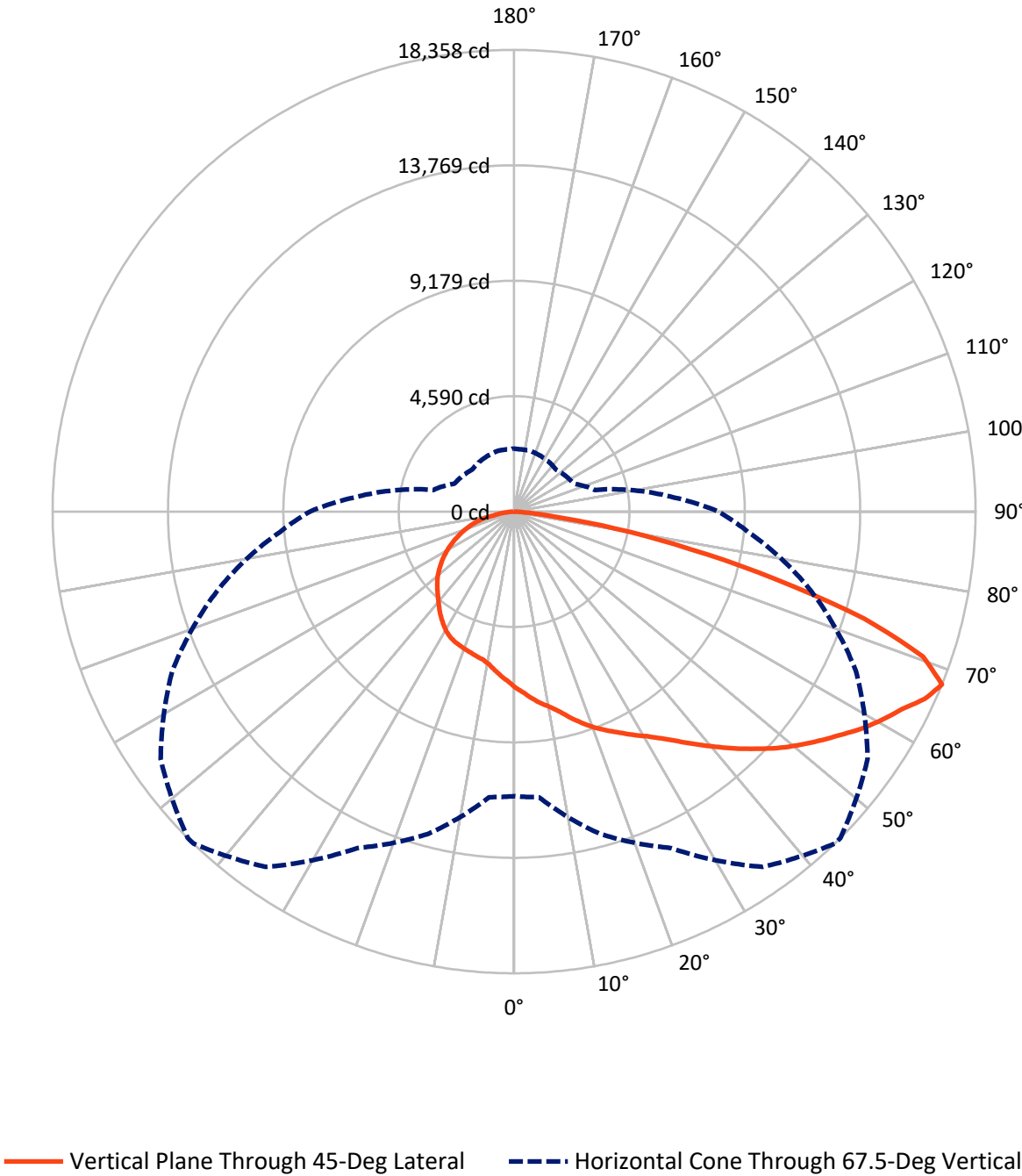
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13 fc
Type IV - Short - N/A

REPORT NUMBER: P842277
CATALOG NUMBER: ARCH4-290-750-U-T4W

Luminous Intensity Polar Plot



REPORT NUMBER: P842277

CATALOG NUMBER: ARCH4-290-750-U-T4W

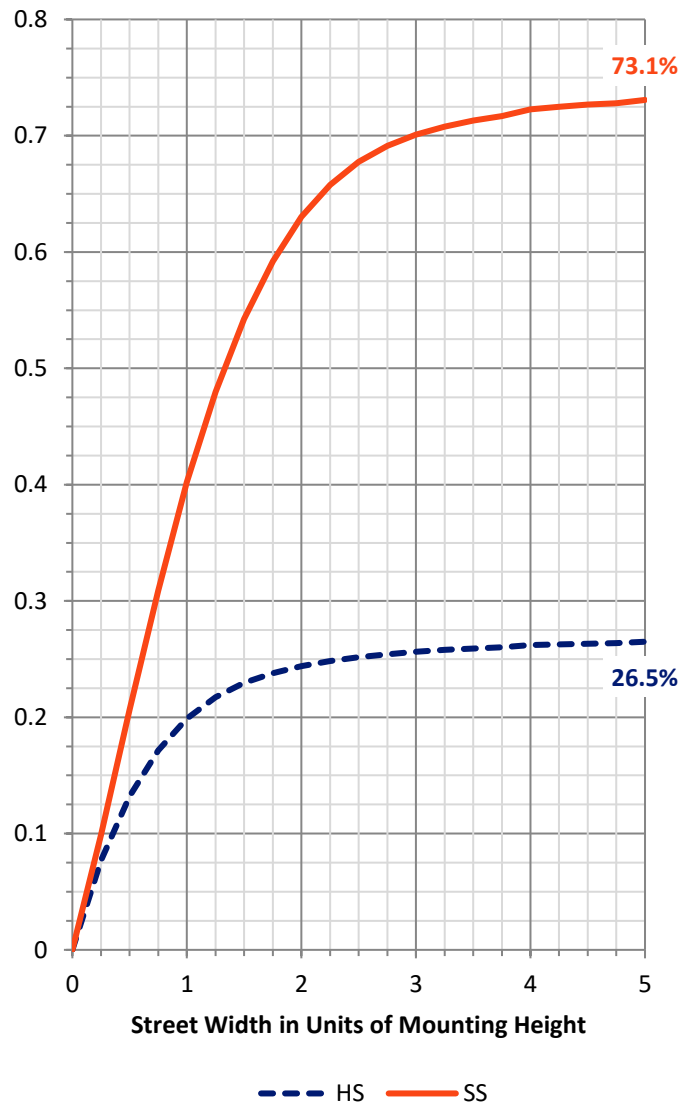
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11217.9	0.0	11217.9
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	30773.1	0.0	30773.1
	% Fixture	73.3	0.0	73.3
Total	Lumens	41991.0	0.0	41991.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	670.5	1.6
10°-20°	2071.3	4.9
20°-30°	3575.4	8.5
30°-40°	5272.5	12.6
40°-50°	7143.2	17.0
50°-60°	8730.6	20.8
60°-70°	9004.4	21.4
70°-80°	4932.0	11.7
80°-90°	591.1	1.4
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°	41991.0	100.0
0°-180°	41991.0	100.0

Coefficient of Utilization



REPORT NUMBER: P842277

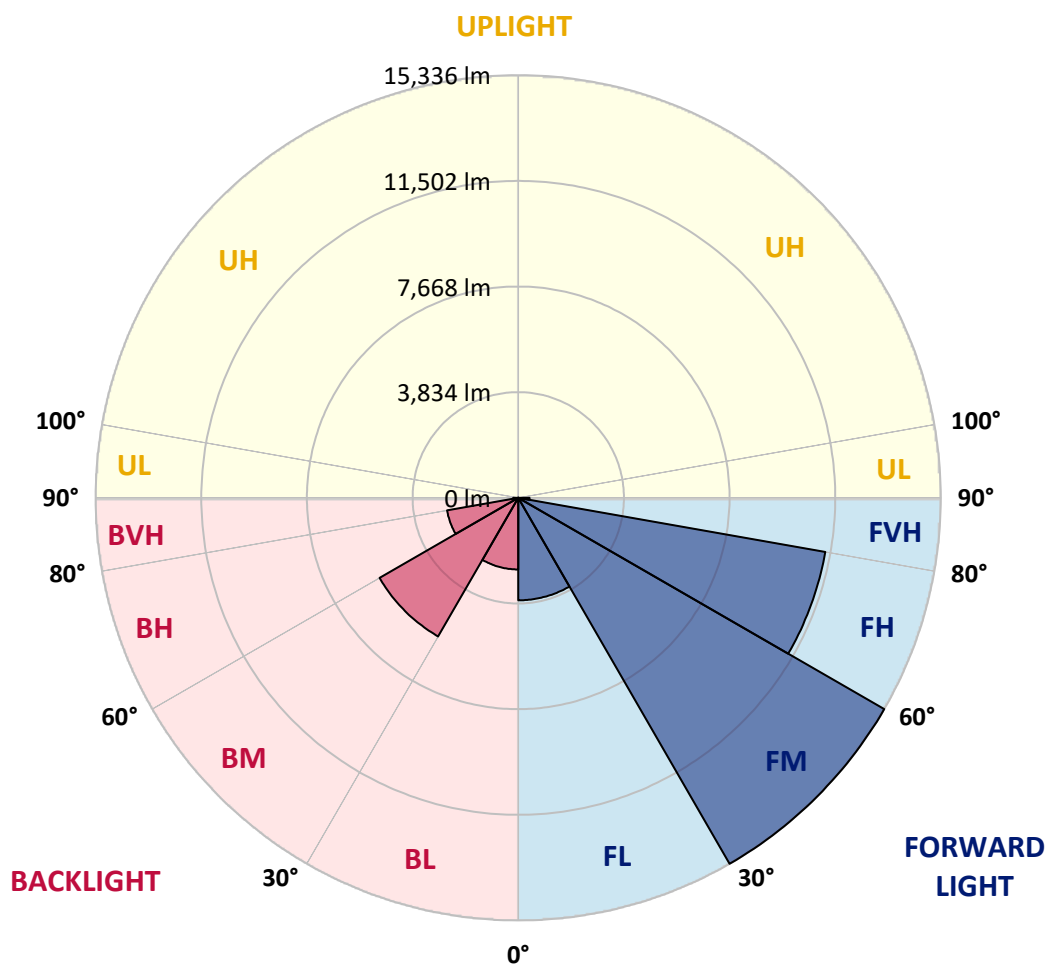
CATALOG NUMBER: ARCH4-290-750-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3717.3	8.9			
FM	(30°-60°)	15335.5	36.5			
FH	(60°-80°)	11313.0	26.9			G4/12000
FVH	(80°-90°)	407.2	1.0			G3/500
BL	(0°-30°)	2599.9	6.2	B4/5000		
BM	(30°-60°)	5810.7	13.8	B4/8500		
BH	(60°-80°)	2623.4	6.2	B4/5000		G4/5000
BVH	(80°-90°)	183.9	0.4			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 IV Short



REPORT NUMBER: P842277

CATALOG NUMBER: ARCH4-290-750-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	7003.3	7003.3	7003.3	7003.3	7003.3	7003.3	7003.3	7003.3	7003.3	7003.3	7003.3
2.5°	7310.0	7303.6	7316.4	7271.7	7214.2	7207.8	7207.8	7169.4	7124.7	7035.3	6965.0
5°	7655.1	7642.3	7648.7	7584.8	7508.1	7469.8	7463.4	7380.3	7278.1	7137.5	7009.7
7.5°	7974.6	7961.8	7955.4	7885.1	7770.1	7706.2	7699.8	7578.4	7457.0	7239.7	7054.4
10°	8274.9	8262.1	8249.3	8153.5	8012.9	7917.1	7904.3	7750.9	7597.6	7329.2	7092.8
12.5°	8658.3	8632.7	8619.9	8504.9	8300.4	8198.2	8179.0	7974.6	7782.9	7457.0	7169.4
15°	9060.8	9041.7	9022.5	8913.9	8683.8	8549.7	8517.7	8262.1	8000.1	7623.1	7284.5
17.5°	9361.2	9342.0	9342.0	9246.1	9035.3	8881.9	8856.4	8549.7	8223.8	7776.5	7373.9
20°	9546.5	9527.3	9546.5	9489.0	9329.2	9201.4	9175.9	8837.2	8447.4	7917.1	7450.6
22.5°	9680.7	9661.5	9693.4	9667.9	9552.9	9476.2	9457.0	9124.7	8677.4	8064.0	7527.3
25°	9917.1	9917.1	9917.1	9872.4	9763.7	9738.2	9738.2	9450.6	8971.4	8255.7	7642.3
27.5°	10389.9	10364.4	10332.4	10204.6	10019.3	10012.9	10051.3	9782.9	9310.0	8504.9	7782.9
30°	11086.4	11073.7	10952.2	10683.9	10370.8	10338.8	10364.4	10140.7	9674.3	8766.9	7942.6
32.5°	11987.4	11942.7	11693.5	11290.9	10843.6	10696.6	10747.8	10511.3	10057.7	9035.3	8096.0
35°	12626.4	12639.2	12460.3	12096.0	11565.7	11175.9	11214.2	10926.7	10473.0	9335.6	8287.7
37.5°	13361.2	13406.0	13137.6	12862.8	12370.8	11706.2	11744.6	11354.8	10888.3	9712.6	8492.1
40°	14377.2	14287.8	13834.1	13508.2	12965.1	12262.2	12294.1	11834.0	11367.6	10070.4	8728.6
42.5°	15227.1	15067.3	14517.8	14102.5	13450.7	12850.0	12882.0	12351.6	11853.2	10466.6	8990.6
45°	16447.5	16006.6	15214.3	15009.8	13949.1	13425.1	13457.1	12901.2	12364.4	10888.3	9271.7
47.5°	17156.8	16453.9	15949.1	15840.5	14498.6	14019.4	14057.7	13482.6	12913.9	11367.6	9565.6
50°	17112.1	16658.4	16511.4	16243.1	14984.3	14575.3	14613.6	14083.3	13469.9	11840.4	9846.8
52.5°	16818.1	16901.2	16824.5	16377.2	15469.9	15112.1	15156.8	14677.5	14038.6	12281.3	10108.8
55°	17271.8	17329.3	17182.4	16594.5	16006.6	15648.8	15699.9	15303.7	14600.9	12671.1	10332.4
57.5°	17815.0	17610.5	17463.5	16977.9	16562.6	16230.3	16287.8	15942.7	15086.5	12984.2	10505.0
60°	17789.4	17361.3	17508.3	17003.5	16939.6	16767.0	16818.1	16466.7	15457.1	13214.3	10575.2
62.5°	16479.5	16249.5	16990.7	16818.1	17246.3	17246.3	17310.2	16786.2	15680.8	13310.1	10536.9
65°	14204.7	14217.5	15521.0	16236.7	17610.5	17904.4	17955.5	16984.3	15553.0	13029.0	10179.1
67.5°	11316.5	11399.5	13271.8	14760.6	17246.3	18351.7	18358.1	17163.2	15003.4	12236.6	9348.4
70°	8281.3	8345.2	10556.1	12364.4	15527.4	17361.3	17259.1	16658.4	13808.5	10856.4	8051.2
72.5°	5597.5	5655.0	7929.8	9495.4	12741.4	14786.2	14562.5	14722.3	11770.1	8920.3	6472.9
75°	3763.6	3833.9	5642.3	6792.4	9373.9	11227.0	10728.6	11150.3	9105.6	6754.1	4722.1
77.5°	2370.6	2415.4	3584.7	4453.7	6402.7	7642.3	7143.9	7150.3	5246.1	3635.8	2536.8
80°	1508.0	1520.8	2172.6	2568.7	3706.1	4594.3	4064.0	3303.6	2364.3	1929.7	1514.4
82.5°	875.4	856.2	1297.1	1450.5	1763.6	1744.4	1444.1	1367.4	1035.2	964.9	773.2
85°	351.4	325.9	568.7	530.4	536.7	568.7	421.7	421.7	338.7	262.0	191.7
87.5°	70.3	70.3	76.7	70.3	70.3	76.7	57.5	57.5	51.1	51.1	51.1
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: P842277

CATALOG NUMBER: ARCH4-290-750-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7003.3	7003.3	7003.3	7003.3	7003.3	7003.3	7003.3	7003.3	7003.3	7003.3	7003.3
2.5°	6952.2	6939.4	6907.5	6824.4	6779.7	6754.1	6715.8	6703.0	6696.6	6703.0	6722.1
5°	6971.4	6926.6	6837.2	6703.0	6613.5	6556.0	6492.1	6466.6	6447.4	6447.4	6466.6
7.5°	6984.1	6913.8	6760.5	6562.4	6434.6	6345.1	6268.5	6236.5	6230.1	6249.3	6255.7
10°	6990.5	6888.3	6671.0	6421.8	6255.7	6140.7	6064.0	6044.8	6064.0	6102.3	6108.7
12.5°	7035.3	6894.7	6619.9	6326.0	6127.9	6012.9	5955.4	5955.4	6006.5	6076.8	6083.2
15°	7111.9	6939.4	6594.4	6249.3	6044.8	5942.6	5923.4	5955.4	6032.0	6140.7	6153.4
17.5°	7169.4	6965.0	6536.8	6147.1	5936.2	5872.3	5904.2	5980.9	6089.6	6236.5	6249.3
20°	7207.8	6965.0	6453.8	6025.7	5827.6	5814.8	5904.2	6025.7	6140.7	6313.2	6332.4
22.5°	7246.1	6952.2	6357.9	5878.7	5706.2	5744.5	5910.6	6064.0	6179.0	6364.3	6396.3
25°	7316.4	6971.4	6262.1	5731.7	5578.4	5687.0	5904.2	6089.6	6211.0	6402.7	6453.8
27.5°	7412.3	7016.1	6191.8	5597.5	5450.6	5597.5	5859.5	6083.2	6211.0	6396.3	6453.8
30°	7514.5	7067.2	6108.7	5450.6	5303.6	5469.7	5763.7	6012.9	6159.8	6332.4	6402.7
32.5°	7623.1	7124.7	6038.4	5290.8	5124.7	5297.2	5623.1	5904.2	6064.0	6223.7	6300.4
35°	7770.1	7226.9	6000.1	5163.0	4964.9	5118.3	5444.2	5763.7	5936.2	6083.2	6172.6
37.5°	7949.0	7354.7	5980.9	5035.2	4792.4	4920.2	5252.5	5591.1	5776.4	5897.9	5980.9
40°	8153.5	7514.5	5974.5	4913.8	4619.9	4715.7	5054.4	5393.1	5572.0	5667.8	5738.1
42.5°	8383.5	7693.4	5961.8	4792.4	4447.4	4524.0	4862.7	5195.0	5348.3	5431.4	5495.3
45°	8626.3	7872.3	5936.2	4645.4	4262.0	4351.5	4664.6	4958.5	5118.3	5188.6	5258.9
47.5°	8869.1	8051.2	5885.1	4479.3	4095.9	4179.0	4453.7	4709.3	4837.1	4901.0	4971.3
50°	9105.6	8211.0	5763.7	4287.6	3923.4	4000.1	4210.9	4383.5	4479.3	4530.4	4600.7
52.5°	9316.4	8319.6	5591.1	4064.0	3750.9	3789.2	3929.8	4076.7	4153.4	4159.8	4223.7
55°	9495.4	8377.1	5341.9	3833.9	3565.5	3571.9	3648.6	3763.6	3795.6	3770.0	3814.8
57.5°	9597.6	8345.2	5067.2	3597.5	3373.9	3348.3	3405.8	3463.3	3469.7	3405.8	3450.5
60°	9623.2	8198.2	4709.3	3361.1	3182.2	3111.9	3131.0	3118.3	3105.5	3079.9	3118.3
62.5°	9495.4	7885.1	4313.2	3131.0	2977.7	2869.1	2862.7	2856.3	2875.4	2881.8	2888.2
65°	9028.9	7297.2	3840.3	2894.6	2760.4	2613.5	2607.1	2683.7	2709.3	2671.0	2683.7
67.5°	8127.9	6396.3	3322.7	2619.8	2485.7	2357.9	2409.0	2453.7	2498.4	2485.7	2498.4
70°	6849.9	5252.5	2849.9	2313.1	2185.3	2115.0	2172.6	2210.9	2217.3	2204.5	2217.3
72.5°	5386.7	4102.3	2409.0	2000.0	1885.0	1853.1	1923.4	1955.3	2012.8	2038.4	2044.8
75°	3891.4	3028.8	1974.5	1661.4	1565.5	1565.5	1629.4	1686.9	1738.0	1706.1	1686.9
77.5°	2172.6	1808.3	1418.6	1143.8	1163.0	1252.4	1278.0	1341.9	1393.0	1386.6	1373.8
80°	1316.3	1131.0	958.5	741.2	734.8	805.1	971.3	1079.9	1105.4	1047.9	1041.5
82.5°	683.7	594.3	511.2	415.3	460.1	536.7	562.3	677.3	747.6	722.1	754.0
85°	172.5	166.1	185.3	191.7	236.4	262.0	287.5	338.7	223.6	108.6	108.6
87.5°	51.1	51.1	63.9	63.9	83.1	102.2	95.8	95.8	51.1	6.4	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)