

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: P842095

Luminaire Tested: **ARCH4-270-727-U-T3**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842095
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-270-727-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1045mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III
OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 37171 lumens
Efficiency: N/A
Efficacy: 138.2 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G4

Input Watts (W): 269
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



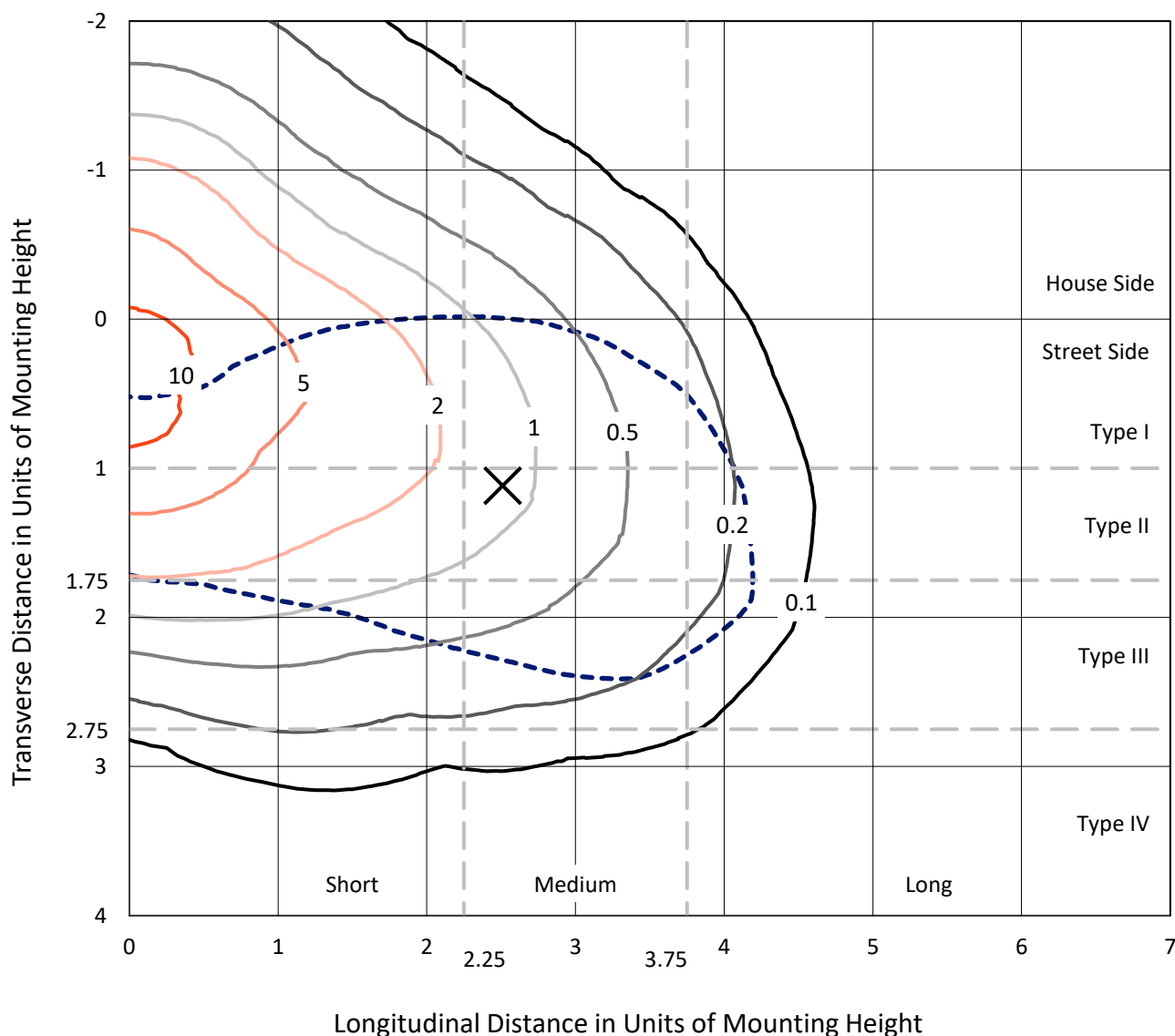
REPORT NUMBER: P842095

CATALOG NUMBER: ARCH4-270-727-U-T3

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

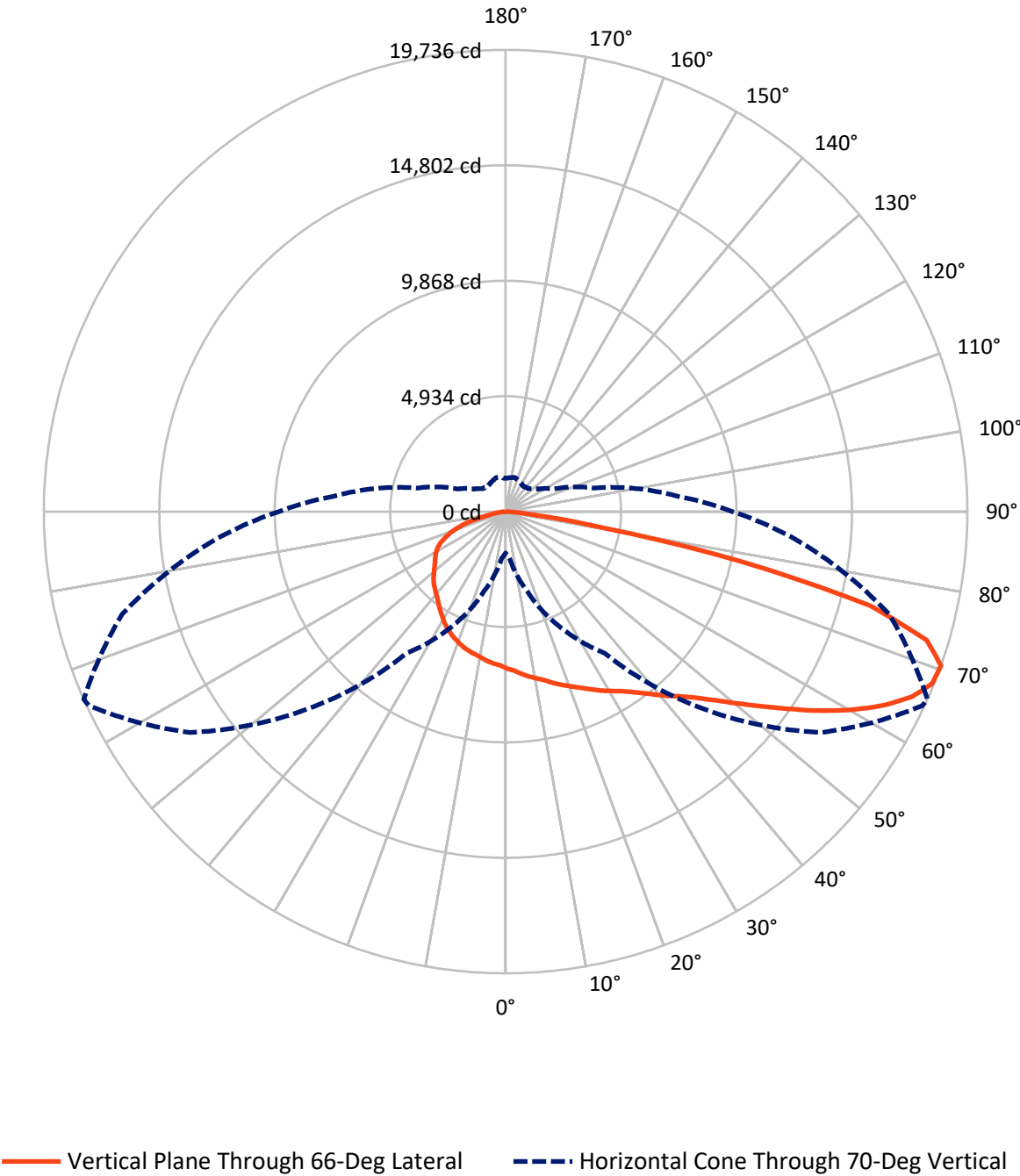
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.6 fc
Type III - Medium - N/A

REPORT NUMBER: P842095
CATALOG NUMBER: ARCH4-270-727-U-T3

Luminous Intensity Polar Plot



REPORT NUMBER: P842095

CATALOG NUMBER: ARCH4-270-727-U-T3

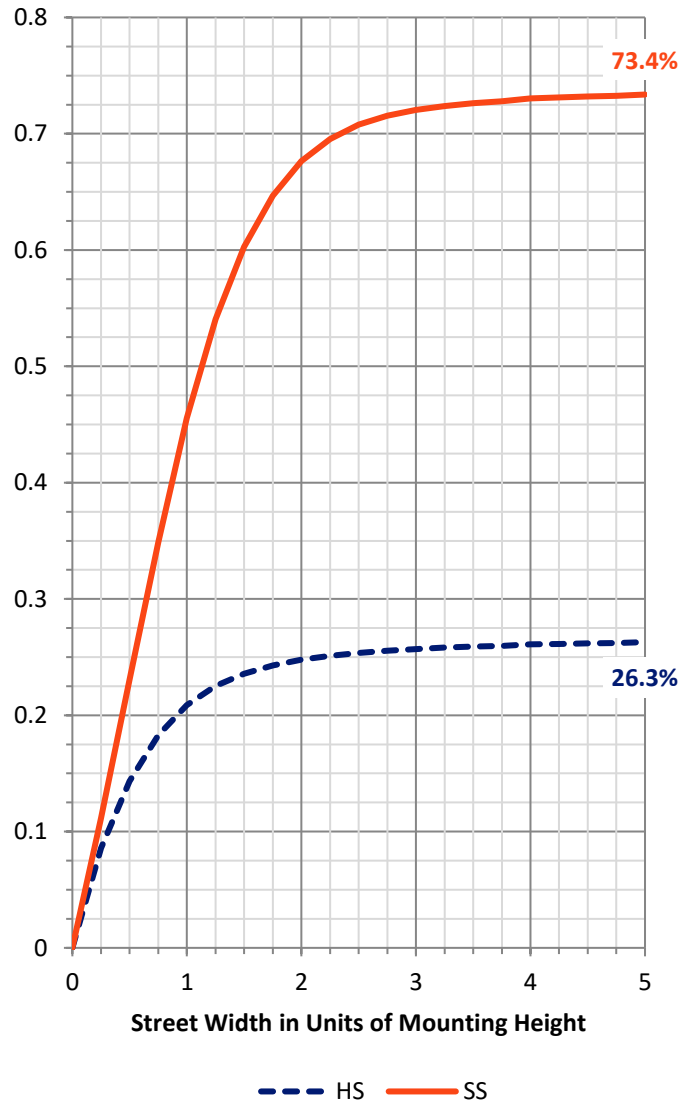
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9849.5	0.0	9849.5
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	27321.5	0.0	27321.5
	% Fixture	73.5	0.0	73.5
Total	Lumens	37171.0	0.0	37171.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	644.6	1.7
10°-20°	1933.6	5.2
20°-30°	3241.4	8.7
30°-40°	4853.4	13.1
40°-50°	6489.0	17.5
50°-60°	7576.2	20.4
60°-70°	7533.3	20.3
70°-80°	4459.8	12.0
80°-90°	439.6	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°	37171.0	100.0
0°-180°	37171.0	100.0

Coefficient of Utilization



REPORT NUMBER: P842095

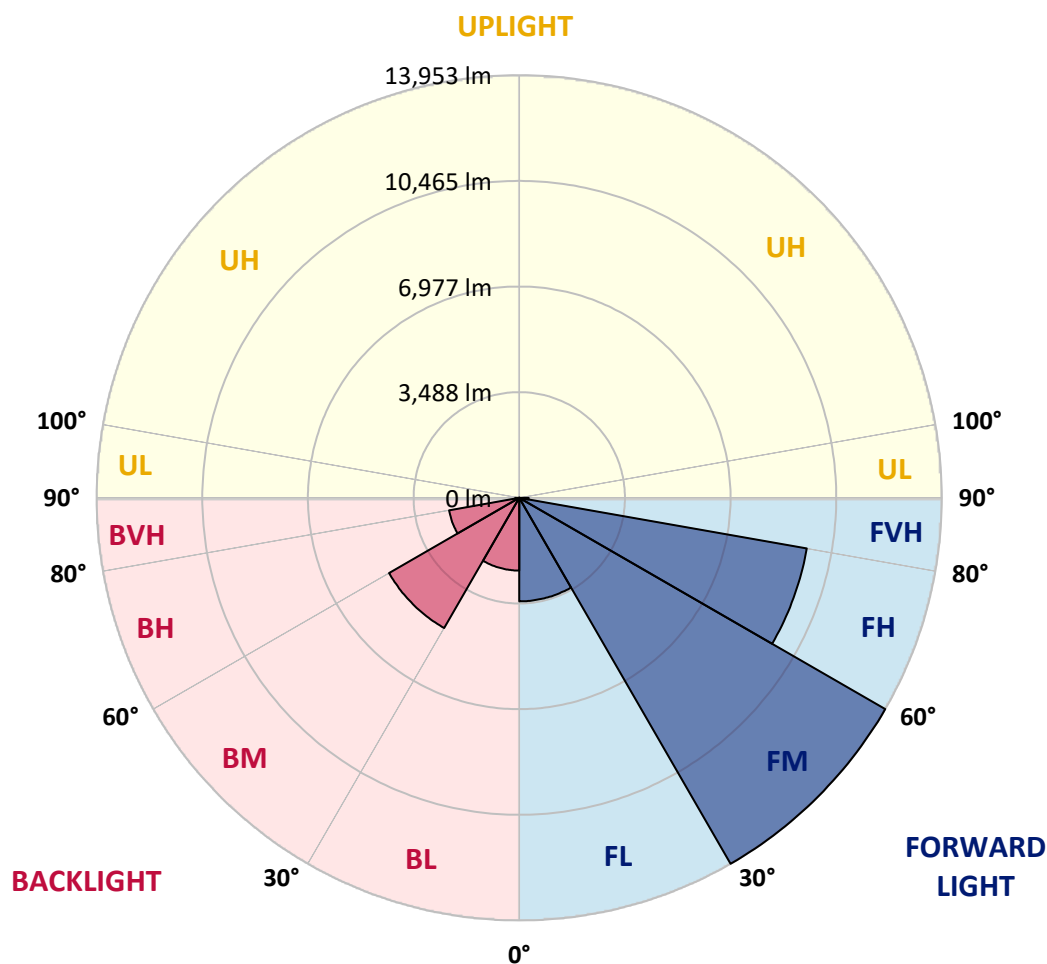
CATALOG NUMBER: ARCH4-270-727-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3418.8	9.2			
FM	(30°-60°)	13953.5	37.5			
FH	(60°-80°)	9640.4	25.9			G4/12000
FVH	(80°-90°)	308.9	0.8			G3/500
BL	(0°-30°)	2400.9	6.5	B3/2500		
BM	(30°-60°)	4965.1	13.4	B3/5000		
BH	(60°-80°)	2352.8	6.3	B3/2500		G3/2500
BVH	(80°-90°)	130.6	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Medium



REPORT NUMBER: P842095

CATALOG NUMBER: ARCH4-270-727-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	6708.5	6708.5	6708.5	6708.5	6708.5	6708.5	6708.5	6708.5	6708.5	6708.5	6708.5
2.5°	6955.2	6944.2	6938.7	6916.8	6867.5	6889.4	6840.1	6807.2	6801.7	6725.0	6681.1
5°	7240.2	7234.7	7223.7	7190.8	7114.1	7125.1	7042.8	6982.6	6966.1	6845.5	6752.4
7.5°	7481.3	7470.4	7464.9	7421.0	7338.8	7333.3	7234.7	7147.0	7119.6	6955.2	6812.7
10°	7667.7	7651.2	7662.2	7618.3	7530.6	7514.2	7388.1	7273.0	7245.6	7037.4	6840.1
12.5°	7826.6	7815.6	7832.1	7793.7	7722.5	7706.0	7580.0	7432.0	7399.1	7157.9	6900.3
15°	8002.0	7963.6	7996.5	7980.1	7930.7	7925.3	7810.2	7645.7	7601.9	7311.4	6993.5
17.5°	8095.2	8073.2	8111.6	8117.1	8095.2	8133.5	8023.9	7826.6	7788.2	7453.9	7075.7
20°	8160.9	8128.1	8171.9	8204.8	8221.2	8298.0	8210.3	8018.4	7974.6	7590.9	7152.5
22.5°	8385.6	8314.4	8319.9	8341.8	8352.8	8462.4	8407.6	8221.2	8177.4	7760.8	7245.6
25°	8950.2	8807.7	8714.5	8648.7	8572.0	8665.2	8632.3	8451.4	8413.1	7963.6	7360.7
27.5°	9827.1	9646.2	9459.9	9268.1	8966.6	8928.2	8873.4	8709.0	8665.2	8166.4	7475.8
30°	10824.6	10643.7	10424.5	10117.6	9553.1	9257.1	9131.0	8950.2	8900.8	8347.3	7585.4
32.5°	11816.6	11657.7	11438.5	11065.8	10260.1	9657.2	9388.6	9202.3	9153.0	8544.6	7717.0
35°	12589.4	12490.8	12348.3	11882.4	10961.6	10128.5	9761.3	9536.6	9481.8	8857.0	7958.1
37.5°	13214.2	13143.0	13022.4	12534.6	11471.3	10599.9	10188.8	9931.2	9870.9	9196.8	8215.7
40°	14135.0	13948.7	13850.0	13143.0	11915.3	11027.4	10671.1	10402.6	10336.8	9558.5	8424.0
42.5°	14918.8	14781.8	14661.2	13685.6	12337.3	11394.6	11126.1	10879.4	10791.7	9914.8	8648.7
45°	15050.3	15105.1	15044.8	13954.2	13006.0	11756.4	11586.4	11427.5	11345.3	10397.1	8988.5
47.5°	15055.8	15055.8	14699.5	14107.6	13833.6	12161.9	12079.7	12134.5	12046.8	11011.0	9394.1
50°	14661.2	14732.4	14546.1	14146.0	14052.8	12567.5	12682.6	12978.6	12890.9	11663.2	9832.6
52.5°	13844.5	14080.2	14074.7	14085.7	13734.9	12912.8	13318.4	13992.5	13844.5	12397.6	10298.5
55°	12403.1	12874.4	13296.5	13658.2	13460.9	13121.1	14096.7	15072.2	14918.8	13219.7	10769.8
57.5°	11169.9	11471.3	11997.5	13022.4	13137.5	13301.9	14825.6	16201.3	16064.3	14129.5	11263.1
60°	9761.3	10177.9	10704.0	12161.9	12742.9	13537.6	15625.8	17302.9	17171.4	15050.3	11739.9
62.5°	7596.4	8133.5	9185.8	10841.1	12167.4	13685.6	16256.1	18273.0	18212.8	15921.8	12167.4
65°	5294.5	5771.3	7245.6	9218.7	11252.1	13619.8	16760.3	19139.0	19084.2	16634.3	12468.9
67.5°	3091.2	3644.7	5310.9	7421.0	9635.3	13164.9	16924.8	19648.7	19648.7	17067.3	12551.1
70°	1764.8	2022.4	3502.2	5409.6	7388.1	11909.8	16464.4	19643.2	19736.4	16968.6	12211.3
72.5°	1233.2	1348.3	2356.8	3639.3	5009.5	9635.3	15258.6	18695.1	18821.1	16036.9	11049.3
75°	959.1	1041.4	1660.7	2482.8	3157.0	6544.1	12622.3	15762.8	16097.2	13669.2	8933.7
77.5°	728.9	789.2	970.1	1551.1	2022.4	3759.8	8330.8	10336.8	10358.7	8369.2	4790.2
80°	531.6	591.9	646.7	948.2	1074.2	1759.3	3146.0	4318.9	4198.3	4050.3	2592.4
82.5°	317.9	378.2	394.6	515.2	526.2	750.9	1101.6	1392.1	1337.3	1781.3	1216.7
85°	137.0	191.8	202.8	235.7	224.7	306.9	438.5	367.2	328.8	378.2	263.1
87.5°	32.9	54.8	54.8	60.3	49.3	76.7	82.2	60.3	54.8	65.8	65.8
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: P842095

CATALOG NUMBER: ARCH4-270-727-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6708.5	6708.5	6708.5	6708.5	6708.5	6708.5	6708.5	6708.5	6708.5	6708.5	6708.5
2.5°	6670.2	6653.7	6659.2	6566.0	6538.6	6511.2	6494.8	6483.8	6472.8	6489.3	6505.7
5°	6719.5	6681.1	6637.3	6500.2	6445.4	6385.2	6341.3	6302.9	6286.5	6286.5	6302.9
7.5°	6757.8	6692.1	6598.9	6418.0	6319.4	6237.2	6165.9	6116.6	6089.2	6089.2	6105.6
10°	6763.3	6670.2	6522.2	6302.9	6171.4	6050.8	5968.6	5913.8	5875.4	5875.4	5886.4
12.5°	6796.2	6670.2	6478.3	6215.2	6050.8	5902.8	5804.2	5722.0	5705.5	5705.5	5716.5
15°	6851.0	6697.6	6450.9	6138.5	5941.2	5771.3	5661.7	5574.0	5541.1	5563.0	5568.5
17.5°	6900.3	6714.0	6401.6	6039.9	5804.2	5617.8	5497.3	5420.5	5376.7	5426.0	5426.0
20°	6933.2	6714.0	6330.3	5913.8	5656.2	5447.9	5332.8	5239.7	5206.8	5267.1	5272.5
22.5°	6982.6	6708.5	6253.6	5787.7	5497.3	5278.0	5162.9	5091.7	5075.2	5141.0	5162.9
25°	7037.4	6719.5	6171.4	5645.2	5321.9	5108.1	5020.4	4987.5	4998.5	5080.7	5108.1
27.5°	7097.7	6741.4	6089.2	5486.3	5130.0	4938.2	4888.9	4905.3	4949.2	5053.3	5086.2
30°	7152.5	6746.9	5974.1	5299.9	4910.8	4729.9	4751.9	4823.1	4888.9	4993.0	5031.4
32.5°	7223.7	6752.4	5853.5	5097.2	4675.1	4543.6	4642.3	4757.3	4823.1	4921.8	4965.6
35°	7399.1	6845.5	5760.3	4899.8	4455.9	4384.7	4549.1	4697.1	4735.4	4823.1	4861.5
37.5°	7601.9	6999.0	5711.0	4697.1	4242.2	4225.7	4434.0	4582.0	4592.9	4647.7	4686.1
40°	7728.0	7064.8	5656.2	4527.2	4050.3	4061.3	4275.0	4390.1	4368.2	4406.6	4434.0
42.5°	7854.0	7086.7	5541.1	4384.7	3869.5	3880.4	4044.8	4127.1	4138.0	4220.2	4258.6
45°	8067.8	7147.0	5415.0	4253.1	3705.0	3666.7	3765.3	3874.9	4017.4	4176.4	4220.2
47.5°	8352.8	7273.0	5283.5	4094.2	3546.1	3420.0	3458.4	3650.2	3798.2	3946.2	3973.6
50°	8643.2	7399.1	5162.9	3902.3	3387.1	3157.0	3173.4	3348.8	3469.4	3584.5	3600.9
52.5°	8928.2	7508.7	5058.8	3721.5	3206.3	2844.5	2910.3	3091.2	3173.4	3228.2	3244.6
55°	9213.3	7601.9	4965.6	3568.0	2998.0	2597.9	2658.2	2828.1	2910.3	2937.7	2948.7
57.5°	9509.2	7711.5	4894.4	3436.5	2762.3	2378.7	2417.0	2537.6	2614.3	2647.2	2636.3
60°	9755.9	7804.7	4856.0	3299.5	2526.7	2175.9	2164.9	2274.5	2384.2	2417.0	2406.1
62.5°	9947.7	7865.0	4795.7	3124.1	2318.4	1973.1	1918.3	2060.8	2175.9	2197.8	2214.2
65°	10051.8	7870.5	4647.7	2899.4	2104.6	1753.9	1715.5	1858.0	1929.2	1951.2	1951.2
67.5°	10035.4	7782.8	4357.2	2597.9	1907.3	1556.6	1523.7	1611.4	1715.5	1731.9	1715.5
70°	9695.6	7421.0	3891.4	2280.0	1671.6	1381.2	1320.9	1408.6	1507.2	1446.9	1419.5
72.5°	8730.9	6483.8	3206.3	1929.2	1408.6	1161.9	1134.5	1222.2	1227.7	1238.7	1211.3
75°	6889.4	4828.6	2400.6	1501.7	1140.0	975.6	970.1	953.7	975.6	1019.4	986.5
77.5°	3617.3	2411.6	1299.0	920.8	827.6	783.8	745.4	739.9	805.7	833.1	800.2
80°	1962.1	1353.8	745.4	553.6	504.2	509.7	559.0	548.1	619.3	635.8	608.4
82.5°	855.0	641.3	367.2	334.3	334.3	328.8	345.3	383.7	460.4	460.4	367.2
85°	186.3	158.9	142.5	164.4	186.3	186.3	186.3	186.3	131.5	71.3	49.3
87.5°	60.3	60.3	60.3	65.8	71.3	71.3	60.3	43.8	27.4	5.5	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)