

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: P841808

Luminaire Tested: **ARCH4-230-727-U-T4W-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841808
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-230-727-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 905mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23122 lumens
Efficiency: N/A
Efficacy: 100.0 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

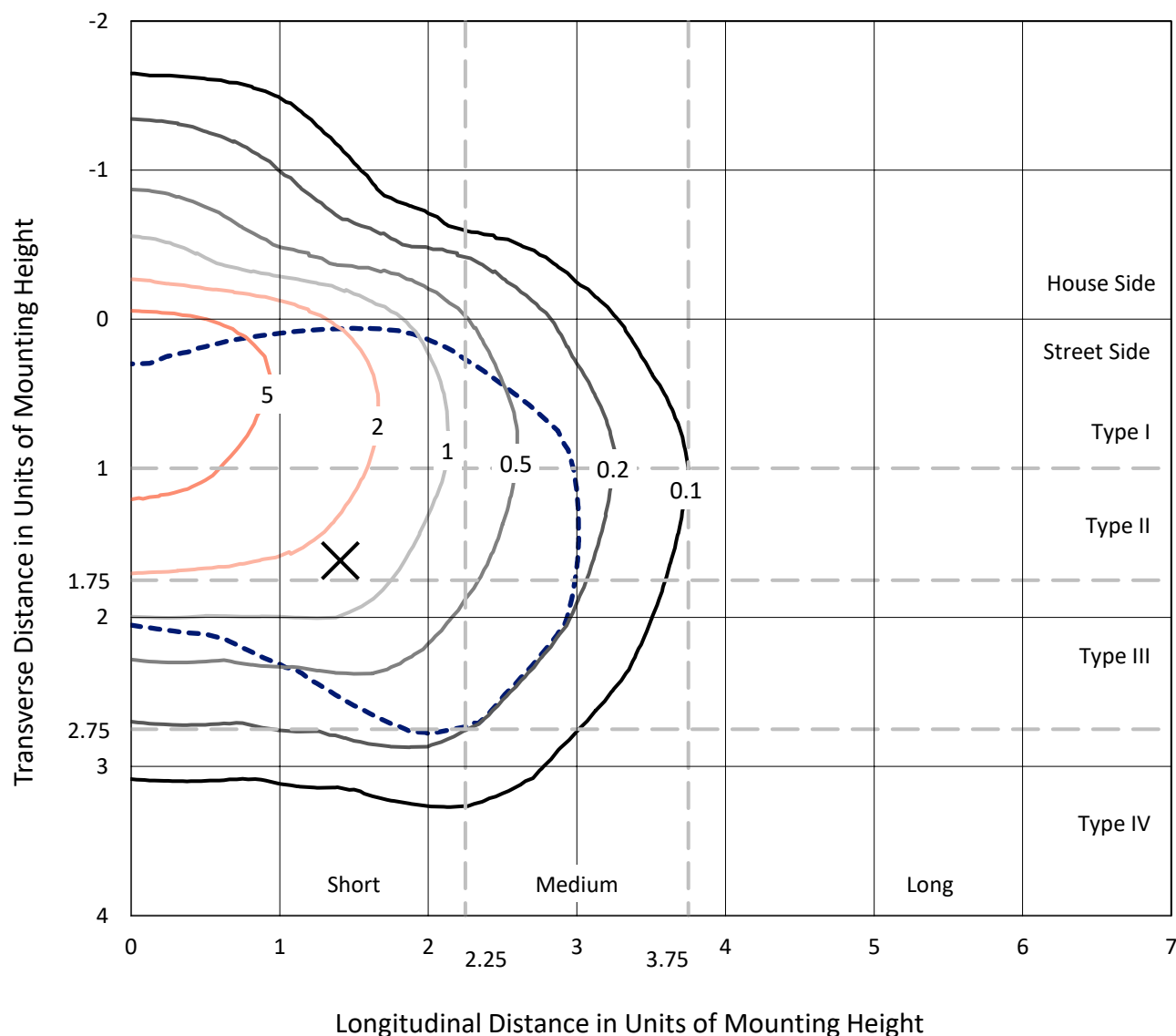
Input Watts (W): 231.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P841808
 CATALOG NUMBER: ARCH4-230-727-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

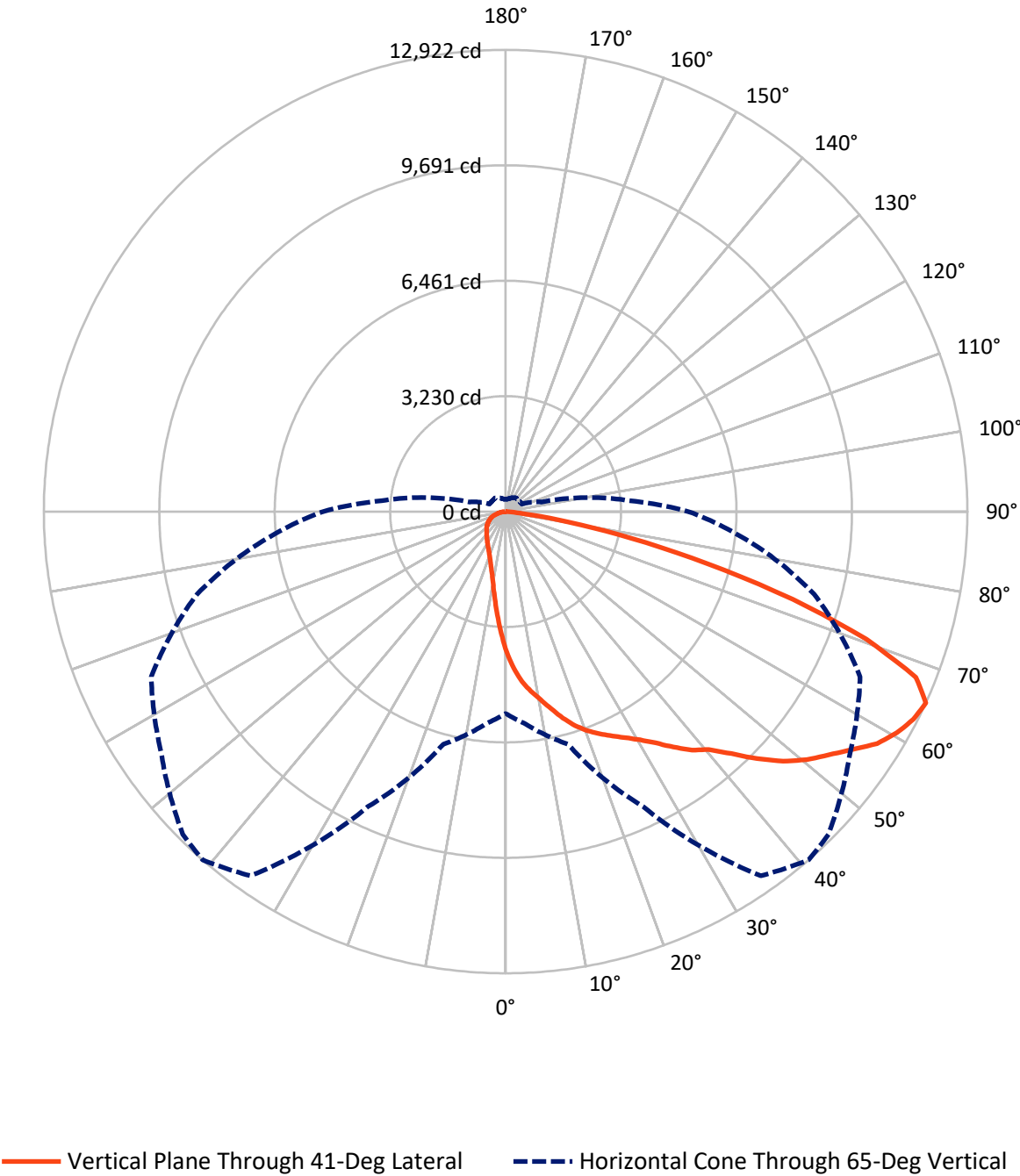
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.1 fc
 Type III - Short - N/A

REPORT NUMBER: P841808
CATALOG NUMBER: ARCH4-230-727-U-T4W-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P841808

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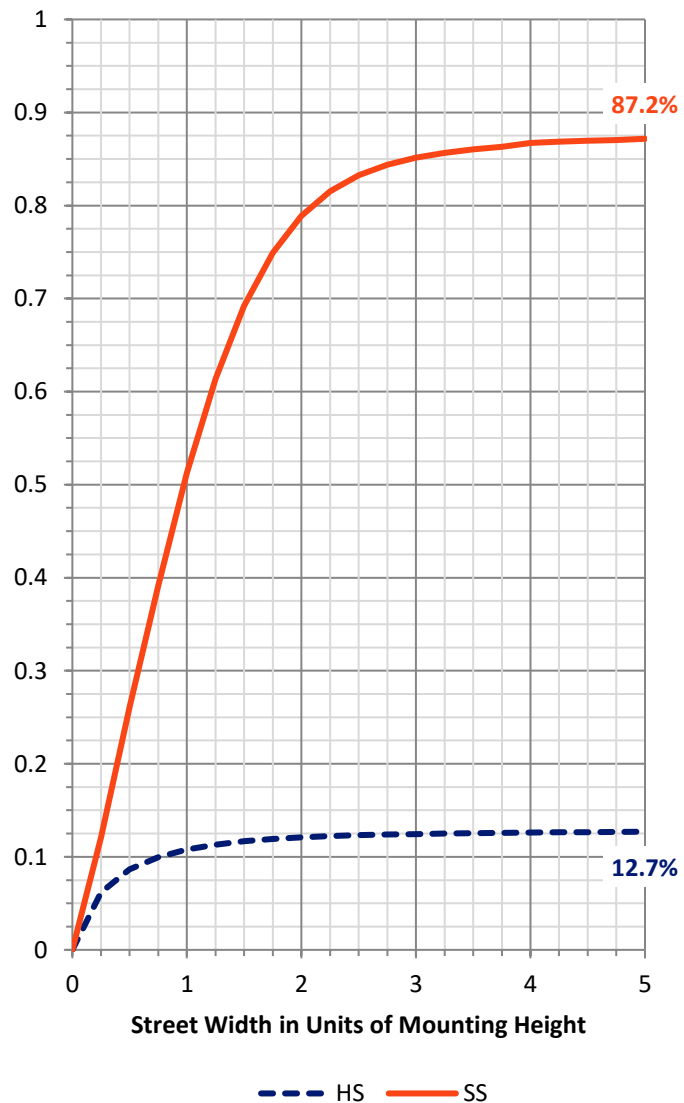
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2968.5	0.0	2968.5
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	20153.5	0.0	20153.5
	% Fixture	87.2	0.0	87.2
Total	Lumens	23122.0	0.0	23122.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	367.1	1.6
10°-20°	1100.8	4.8
20°-30°	1893.7	8.2
30°-40°	2872.1	12.4
40°-50°	4207.7	18.2
50°-60°	5313.4	23.0
60°-70°	4982.3	21.5
70°-80°	2220.6	9.6
80°-90°	164.5	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°	23122.0	100.0
0°-180°	23122.0	100.0

Coefficient of Utilization



REPORT NUMBER: P841808

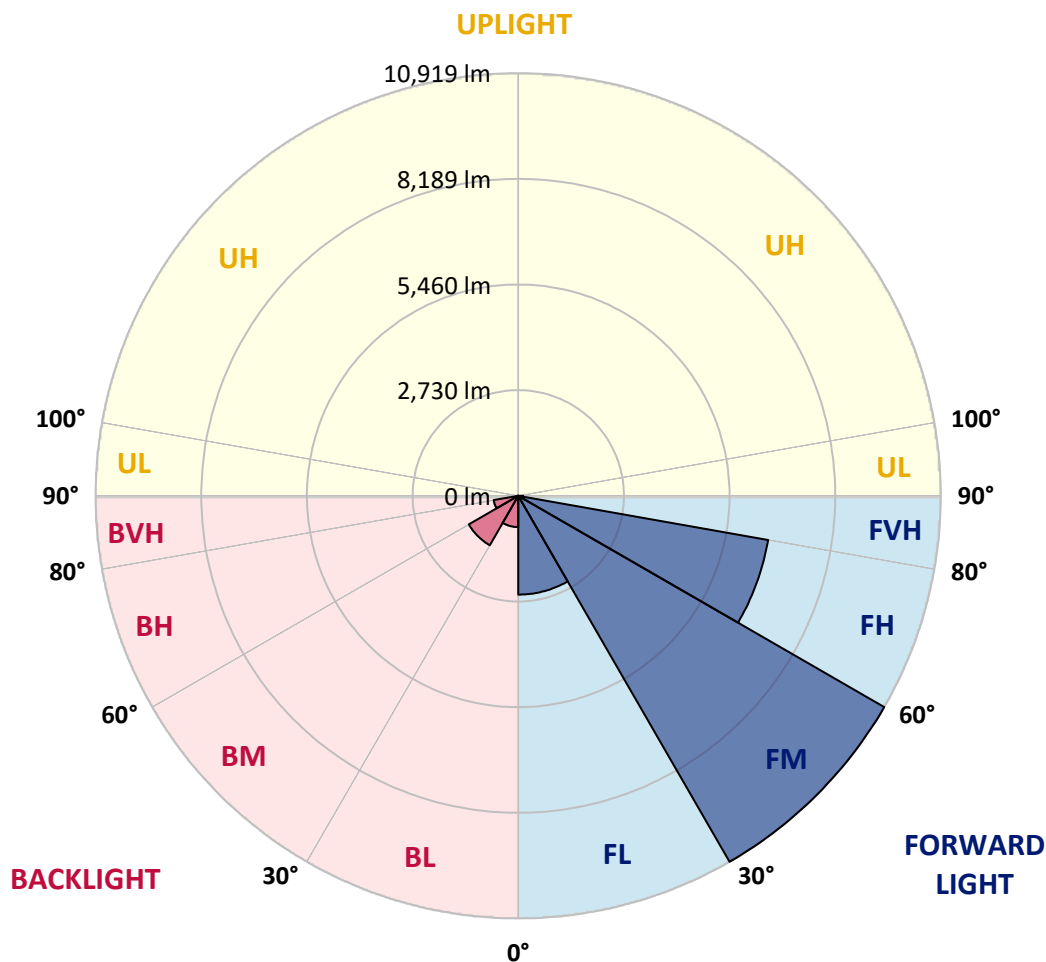
CATALOG NUMBER: ARCH4-230-727-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2553.5	11.0			
FM	(30°-60°)	10919.1	47.2			
FH	(60°-80°)	6558.0	28.4			G3/7500
FVH	(80°-90°)	122.9	0.5			G2/225
BL	(0°-30°)	808.0	3.5	B2/1000		
BM	(30°-60°)	1474.0	6.4	B2/2500		
BH	(60°-80°)	644.8	2.8	B2/1000		G2/1000
BVH	(80°-90°)	41.6	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-G3

Type III Short



REPORT NUMBER: P841808

CATALOG NUMBER: ARCH4-230-727-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	3939.9	3939.9	3939.9	3939.9	3939.9	3939.9	3939.9	3939.9	3939.9	3939.9	3939.9
2.5°	4544.5	4529.9	4520.1	4466.5	4466.5	4393.3	4398.2	4330.0	4247.1	4115.4	3974.0
5°	4973.6	4954.1	4929.7	4876.1	4856.6	4783.4	4773.7	4676.2	4534.7	4305.6	4052.0
7.5°	5349.1	5329.5	5295.4	5217.4	5163.8	5076.0	5051.6	4924.8	4768.8	4486.0	4130.0
10°	5690.4	5675.8	5631.9	5534.3	5461.2	5353.9	5310.0	5139.4	4944.3	4632.3	4193.4
12.5°	6036.6	6017.1	5958.6	5875.7	5787.9	5661.1	5607.5	5388.1	5139.4	4793.2	4286.1
15°	6358.4	6329.1	6285.3	6197.5	6119.5	5997.6	5939.1	5680.6	5378.3	4973.6	4408.0
17.5°	6568.1	6543.7	6504.7	6455.9	6392.5	6299.9	6241.4	5987.8	5617.2	5149.1	4534.7
20°	6694.8	6685.1	6670.5	6641.2	6612.0	6548.6	6504.7	6265.8	5875.7	5319.8	4656.7
22.5°	6792.4	6782.6	6777.7	6777.7	6782.6	6758.2	6729.0	6524.2	6124.3	5500.2	4768.8
25°	6943.5	6938.7	6928.9	6919.1	6953.3	6958.2	6948.4	6807.0	6436.4	5739.1	4910.2
27.5°	7153.2	7138.6	7119.1	7109.3	7143.4	7167.8	7187.3	7089.8	6768.0	5982.9	5071.1
30°	7475.0	7431.1	7382.4	7348.2	7372.6	7411.6	7455.5	7397.0	7109.3	6285.3	5236.9
32.5°	7855.4	7801.7	7689.6	7626.2	7689.6	7718.8	7753.0	7723.7	7465.3	6612.0	5402.7
35°	8318.6	8255.2	8138.2	8045.5	8157.7	8094.3	8079.7	8050.4	7801.7	6933.8	5588.0
37.5°	9089.0	8996.4	8811.1	8606.3	8606.3	8469.7	8416.1	8328.3	8104.0	7221.5	5768.4
40°	9981.3	9859.4	9620.5	9318.2	9040.2	8757.4	8723.3	8659.9	8460.0	7553.0	5973.2
42.5°	10961.4	10727.4	10395.8	10030.1	9581.5	9259.7	9181.6	9001.2	8806.2	7889.5	6178.0
45°	12048.8	11561.2	11078.4	10893.1	10152.0	9859.4	9713.1	9386.4	9167.0	8240.6	6392.5
47.5°	12224.3	11844.0	11522.2	11492.9	10683.5	10439.7	10273.9	9805.8	9557.1	8616.0	6616.8
50°	12126.8	11897.6	11931.8	11814.7	11073.6	10912.7	10785.9	10254.4	9942.3	8976.9	6821.6
52.5°	11717.2	11844.0	12039.0	11824.5	11444.1	11312.5	11249.1	10737.1	10303.1	9308.4	7006.9
55°	11229.6	11317.4	11736.7	12000.0	11873.2	11756.2	11697.7	11297.9	10659.1	9586.4	7177.6
57.5°	10517.7	10478.7	10941.9	11970.8	12321.8	12253.6	12190.2	11848.9	10990.7	9786.3	7284.9
60°	9449.8	9366.9	9952.1	11385.6	12468.1	12575.4	12546.1	12214.6	11244.2	9781.4	7241.0
62.5°	7601.8	7806.6	8616.0	10429.9	12531.5	12804.6	12750.9	12243.8	11327.1	9498.6	6963.0
65°	5651.4	5943.9	6738.7	9113.4	12443.7	12921.6	12775.3	11766.0	10941.9	8937.8	6353.5
67.5°	4071.5	4330.0	4910.2	7499.4	11600.2	12385.2	12214.6	10985.8	10054.5	8143.0	5510.0
70°	2784.2	2969.5	3364.5	5461.2	9903.3	10707.9	10600.6	9820.4	8655.0	7197.1	4476.2
72.5°	1965.1	2043.1	2296.6	3603.4	7523.8	8401.5	8274.7	8079.7	6953.3	5982.9	3481.5
75°	1472.6	1521.3	1657.9	2330.8	5076.0	5822.0	5705.0	5817.2	5193.0	4529.9	2535.6
77.5°	555.9	604.6	941.1	1487.2	3003.7	3574.2	3457.1	3525.4	2886.6	2286.9	1262.9
80°	151.2	160.9	312.1	707.0	1365.3	1779.8	1618.9	1389.7	1072.7	1053.2	668.0
82.5°	63.4	73.1	141.4	380.3	487.6	487.6	409.6	507.1	409.6	492.5	321.8
85°	24.4	29.3	34.1	97.5	63.4	68.3	73.1	97.5	82.9	102.4	73.1
87.5°	0.0	0.0	0.0	4.9	4.9	9.8	4.9	9.8	14.6	14.6	14.6
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: P841808

CATALOG NUMBER: ARCH4-230-727-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3939.9	3939.9	3939.9	3939.9	3939.9	3939.9	3939.9	3939.9	3939.9	3939.9	3939.9
2.5°	3915.5	3861.9	3783.8	3657.1	3525.4	3452.3	3359.6	3345.0	3247.5	3237.7	3198.7
5°	3939.9	3827.7	3627.8	3384.0	3145.1	2959.8	2823.2	2750.1	2608.7	2608.7	2569.7
7.5°	3959.4	3783.8	3462.0	3101.2	2774.5	2525.8	2340.5	2262.5	2135.7	2126.0	2096.7
10°	3964.2	3730.2	3281.6	2813.5	2413.7	2160.1	1979.7	1891.9	1779.8	1770.0	1750.5
12.5°	4003.3	3700.9	3120.7	2564.8	2155.2	1882.2	1706.6	1633.5	1545.7	1536.0	1516.5
15°	4066.6	3700.9	2984.2	2355.1	1926.0	1672.5	1521.3	1453.1	1389.7	1379.9	1370.2
17.5°	4130.0	3691.2	2847.6	2160.1	1735.9	1506.7	1375.1	1321.4	1272.7	1267.8	1258.0
20°	4188.5	3686.3	2711.1	1994.3	1589.6	1370.2	1267.8	1219.0	1180.0	1180.0	1175.1
22.5°	4247.1	3676.6	2579.4	1838.3	1462.8	1267.8	1180.0	1126.4	1097.1	1097.1	1092.2
25°	4334.8	3676.6	2457.5	1706.6	1360.4	1189.8	1102.0	1063.0	1038.6	1033.7	1033.7
27.5°	4437.2	3705.8	2350.3	1589.6	1272.7	1111.7	1043.5	1004.5	975.2	965.5	970.3
30°	4549.4	3730.2	2252.7	1487.2	1189.8	1053.2	980.1	941.1	911.8	902.1	906.9
32.5°	4661.5	3759.5	2165.0	1394.6	1106.9	999.6	926.5	882.6	853.3	848.4	848.4
35°	4783.4	3788.7	2077.2	1316.5	1038.6	946.0	877.7	828.9	809.4	799.7	804.6
37.5°	4905.3	3837.5	1994.3	1243.4	989.8	897.2	833.8	785.0	770.4	765.5	765.5
40°	5051.6	3910.6	1960.2	1194.6	946.0	853.3	799.7	750.9	736.3	736.3	736.3
42.5°	5173.5	3969.1	1930.9	1141.0	911.8	814.3	765.5	726.5	716.8	711.9	716.8
45°	5295.4	4022.8	1891.9	1092.2	867.9	775.3	736.3	697.3	687.5	687.5	687.5
47.5°	5417.3	4052.0	1838.3	1043.5	828.9	741.2	707.0	672.9	663.1	663.1	663.1
50°	5514.8	4076.4	1760.3	989.8	785.0	711.9	677.8	643.6	633.9	633.9	633.9
52.5°	5612.4	4081.3	1677.4	926.5	741.2	677.8	648.5	614.4	604.6	599.8	599.8
55°	5700.1	4076.4	1579.8	853.3	692.4	638.8	614.4	585.1	565.6	546.1	555.9
57.5°	5763.5	4071.5	1467.7	780.2	643.6	599.8	590.0	551.0	512.0	463.2	473.0
60°	5739.1	4017.9	1345.8	687.5	590.0	560.7	560.7	507.1	438.8	414.5	419.3
62.5°	5583.1	3866.7	1219.0	590.0	536.4	521.7	516.9	458.4	404.7	380.3	385.2
65°	5115.0	3486.4	1033.7	502.2	482.7	477.9	477.9	424.2	375.5	346.2	351.1
67.5°	4403.1	2925.6	843.6	424.2	429.1	438.8	438.8	390.1	341.3	312.1	316.9
70°	3530.3	2286.9	672.9	365.7	370.6	385.2	395.0	351.1	307.2	277.9	277.9
72.5°	2657.5	1735.9	541.2	307.2	331.6	331.6	346.2	312.1	268.2	238.9	243.8
75°	1926.0	1243.4	429.1	258.4	287.7	282.8	282.8	263.3	229.2	209.7	209.7
77.5°	911.8	653.4	341.3	185.3	224.3	219.4	224.3	209.7	195.0	175.5	180.4
80°	448.6	321.8	219.4	131.7	156.0	160.9	175.5	165.8	160.9	146.3	146.3
82.5°	214.5	126.8	102.4	92.6	107.3	112.1	121.9	121.9	126.8	117.0	117.0
85°	58.5	34.1	43.9	58.5	68.3	73.1	82.9	87.8	87.8	82.9	87.8
87.5°	14.6	14.6	19.5	29.3	34.1	39.0	43.9	43.9	19.5	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)