

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: P841950

Luminaire Tested: **ARCH4-250-727-U-T3-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841950
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-26)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-250-727-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 975mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24046 lumens
Efficiency: N/A
Efficacy: 96.4 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): 249.5
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

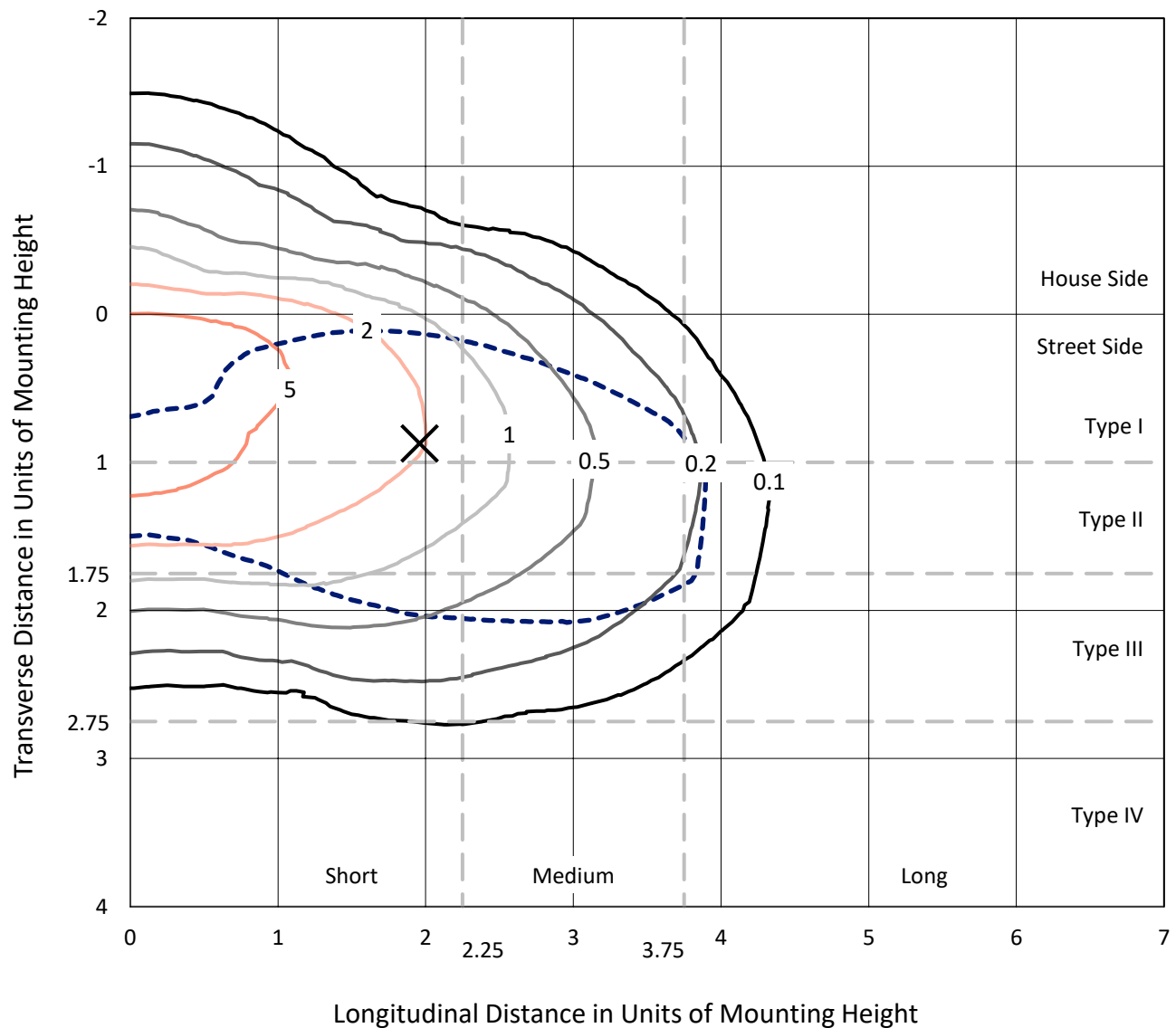


REPORT NUMBER: P841950

CATALOG NUMBER: ARCH4-250-727-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

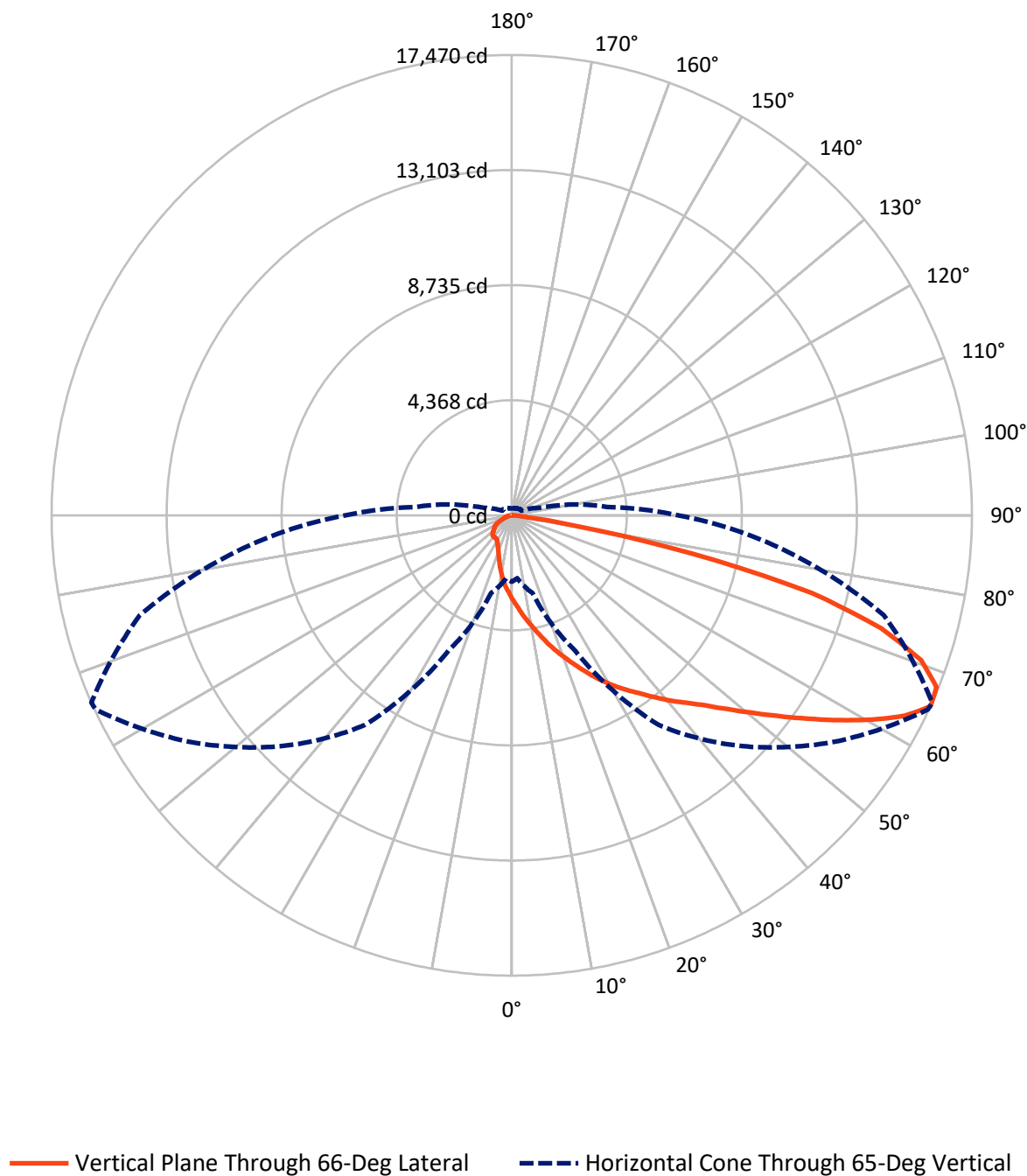
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.2 fc
Type III - Short - N/A

REPORT NUMBER: P841950
CATALOG NUMBER: ARCH4-250-727-U-T3-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P841950

CATALOG NUMBER: ARCH4-250-727-U-T3-HSS

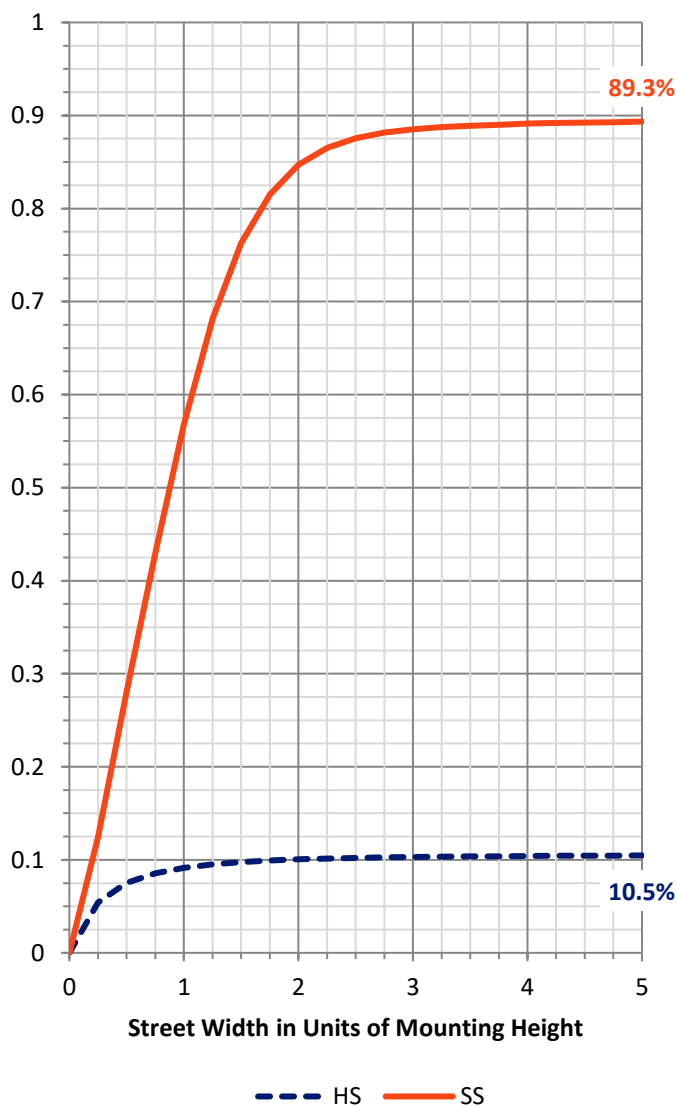
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2543.4	0.0	2543.4
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	21502.6	0.0	21502.6
	% Fixture	89.4	0.0	89.4
Total	Lumens	24046.0	0.0	24046.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	314.1	1.3
10°-20°	1023.7	4.3
20°-30°	1852.3	7.7
30°-40°	2896.4	12.0
40°-50°	4393.9	18.3
50°-60°	5582.6	23.2
60°-70°	5216.3	21.7
70°-80°	2592.5	10.8
80°-90°	174.2	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°	24046.0	100.0
0°-180°	24046.0	100.0

Coefficient of Utilization



REPORT NUMBER: P841950

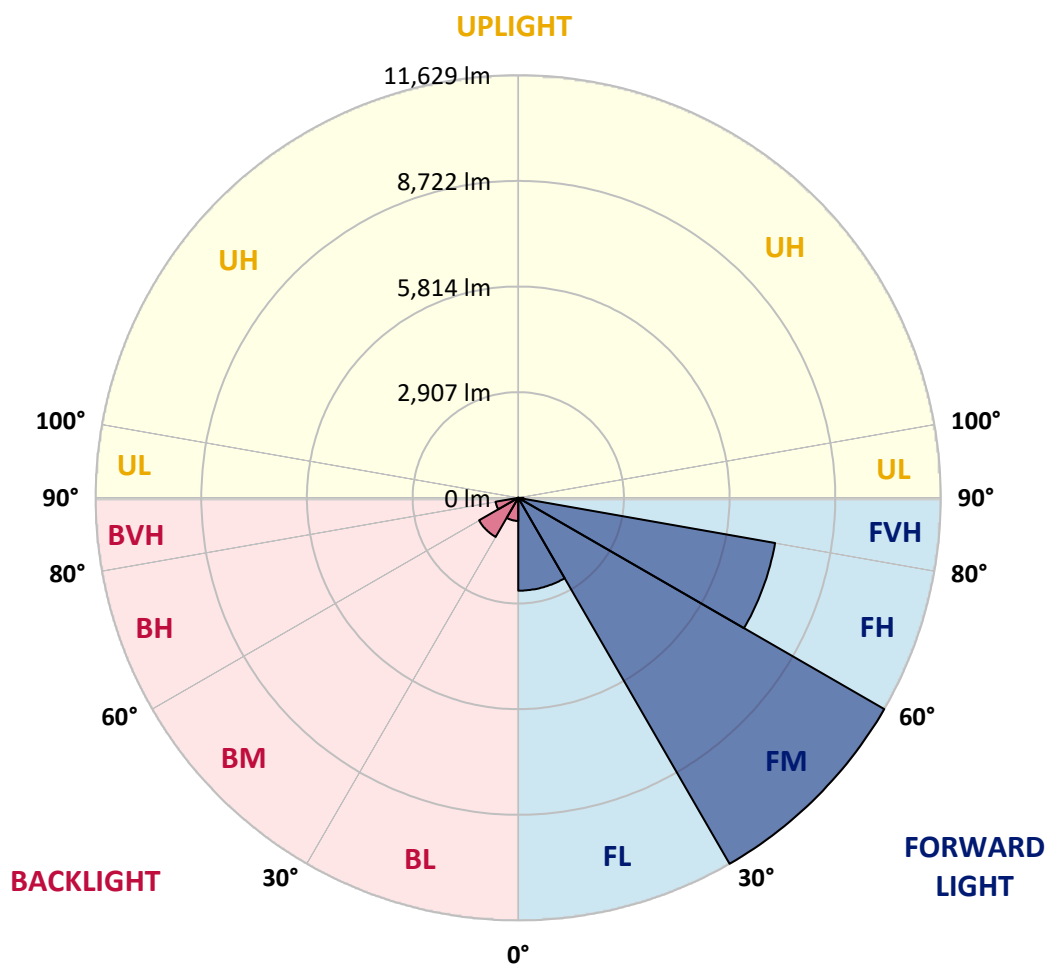
CATALOG NUMBER: ARCH4-250-727-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2554.9	10.6			
FM	(30°-60°)	11628.9	48.4			
FH	(60°-80°)	7175.4	29.8			G3/7500
FVH	(80°-90°)	143.3	0.6			G2/225
BL	(0°-30°)	635.2	2.6	B2/1000		
BM	(30°-60°)	1244.0	5.2	B2/2500		
BH	(60°-80°)	633.4	2.6	B2/1000		G2/1000
BVH	(80°-90°)	30.8	0.1			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: P841950

CATALOG NUMBER: ARCH4-250-727-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	3182.4	3182.4	3182.4	3182.4	3182.4	3182.4	3182.4	3182.4	3182.4	3182.4	3182.4
2.5°	3717.0	3747.2	3762.3	3767.4	3651.4	3601.0	3550.5	3434.5	3409.3	3343.7	3258.0
5°	4372.6	4412.9	4402.8	4382.7	4241.5	4080.1	3948.9	3732.1	3696.8	3540.4	3348.8
7.5°	5018.1	5053.4	5043.4	4967.7	4811.4	4584.4	4367.5	4049.8	3999.4	3747.2	3439.6
10°	5557.8	5588.0	5583.0	5507.3	5320.7	5043.4	4781.1	4357.5	4296.9	3938.9	3515.2
12.5°	6001.6	6041.9	6036.9	5986.5	5820.0	5517.4	5219.9	4710.5	4634.8	4170.9	3621.1
15°	6349.6	6400.0	6400.0	6379.8	6263.8	6011.7	5673.8	5098.8	5008.1	4438.2	3752.3
17.5°	6561.4	6601.7	6637.1	6672.4	6591.7	6400.0	6092.4	5487.2	5391.3	4700.4	3888.4
20°	6672.4	6712.7	6737.9	6813.6	6828.7	6732.9	6490.8	5870.5	5769.6	4998.0	4044.8
22.5°	6853.9	6889.2	6894.3	6959.8	6990.1	7015.3	6864.0	6248.7	6168.0	5325.8	4221.3
25°	7156.5	7196.9	7181.7	7212.0	7217.0	7247.3	7232.2	6682.4	6601.7	5699.0	4433.1
27.5°	7544.9	7595.3	7585.2	7554.9	7509.6	7484.3	7549.9	7121.2	7045.6	6072.2	4650.0
30°	7963.5	8024.0	8008.8	7948.3	7827.3	7721.4	7812.2	7534.8	7464.2	6455.5	4892.1
32.5°	8387.1	8457.7	8452.7	8351.8	8145.0	7963.5	8099.6	7923.1	7872.7	6869.0	5154.3
35°	8664.5	8755.3	8745.2	8684.7	8417.4	8261.0	8427.4	8321.5	8286.2	7373.4	5532.6
37.5°	9113.3	9209.2	9123.4	8972.1	8664.5	8583.8	8785.5	8770.4	8745.2	7908.0	5931.0
40°	10202.7	10343.9	10117.0	9496.6	8992.3	8921.7	9209.2	9269.7	9244.5	8437.5	6289.1
42.5°	11342.5	11554.3	11201.3	10343.9	9587.4	9330.2	9673.2	9758.9	9728.6	8891.4	6611.8
45°	12033.4	12124.2	11771.2	11105.5	10641.5	9824.5	10167.4	10308.6	10283.4	9436.1	7025.4
47.5°	12598.3	12563.0	12159.5	11710.7	11796.4	10520.4	10727.2	11004.6	10984.4	10036.3	7479.3
50°	12719.3	12638.6	12477.3	12194.8	12421.8	11226.5	11317.3	11796.4	11776.2	10702.0	7938.2
52.5°	11867.0	11761.1	12199.9	12436.9	12361.3	11740.9	11967.9	12663.9	12653.8	11423.2	8377.0
55°	9738.7	9653.0	10833.1	12058.7	12295.7	12104.0	12689.1	13566.6	13622.1	12189.8	8775.4
57.5°	7660.9	7570.1	8730.0	11110.5	12053.6	12436.9	13531.3	14600.5	14671.1	13021.9	9153.7
60°	6107.5	5971.3	6859.0	9617.7	11599.7	12694.1	14343.3	15735.3	15745.4	13783.5	9385.7
62.5°	4150.7	3999.4	4982.8	7726.4	10838.2	12734.5	14968.7	16713.7	16754.0	14353.4	9426.0
65°	2521.7	2395.6	3061.3	5643.5	9713.5	12391.5	14978.8	17434.9	17470.2	14615.6	9183.9
67.5°	1462.6	1412.1	1750.0	3515.2	7847.5	11468.6	14348.3	17323.9	17389.5	14504.7	8634.2
70°	852.3	847.3	973.4	1740.0	5537.6	9637.8	12941.2	16390.9	16486.7	13924.7	7792.0
72.5°	625.4	635.5	685.9	933.0	3207.6	6939.7	10959.2	14514.8	14661.0	12789.9	6591.7
75°	494.2	499.3	544.7	635.5	1684.5	3923.7	8210.6	11650.1	11766.1	10767.6	5149.3
77.5°	368.2	378.3	413.6	448.9	781.7	1800.5	4619.7	7176.7	6985.0	5910.8	2486.4
80°	267.3	292.5	307.6	322.8	413.6	696.0	1386.9	2501.5	2481.3	2582.2	1175.1
82.5°	171.5	191.6	206.8	216.9	247.1	332.9	413.6	559.8	605.2	1003.6	469.0
85°	75.7	85.7	95.8	116.0	105.9	116.0	171.5	111.0	95.8	151.3	85.7
87.5°	0.0	0.0	15.1	25.2	20.2	10.1	30.3	20.2	15.1	15.1	15.1
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: P841950

CATALOG NUMBER: ARCH4-250-727-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3182.4	3182.4	3182.4	3182.4	3182.4	3182.4	3182.4	3182.4	3182.4	3182.4	3182.4
2.5°	3212.6	3157.1	3041.1	2930.2	2864.6	2778.9	2703.2	2632.6	2627.6	2607.4	2572.1
5°	3253.0	3147.1	2930.2	2723.4	2567.1	2400.6	2259.4	2148.5	2108.1	2077.9	2037.5
7.5°	3293.3	3126.9	2804.1	2501.5	2254.4	2022.4	1856.0	1704.7	1659.3	1618.9	1593.7
10°	3308.4	3091.6	2657.8	2254.4	1931.6	1684.5	1508.0	1397.0	1356.7	1336.5	1321.4
12.5°	3353.8	3071.4	2521.7	2022.4	1649.2	1422.2	1296.1	1230.6	1215.4	1200.3	1185.2
15°	3414.4	3071.4	2385.5	1795.4	1427.3	1245.7	1170.1	1124.7	1114.6	1109.5	1099.5
17.5°	3479.9	3071.4	2254.4	1603.8	1265.9	1129.7	1074.2	1049.0	1044.0	1038.9	1033.9
20°	3570.7	3076.4	2113.2	1437.4	1149.9	1044.0	998.6	968.3	963.3	958.2	958.2
22.5°	3661.5	3086.5	1977.0	1311.3	1074.2	978.4	922.9	892.7	882.6	882.6	882.6
25°	3777.5	3116.8	1850.9	1205.4	1008.7	917.9	847.3	822.1	817.0	817.0	812.0
27.5°	3913.6	3152.1	1740.0	1124.7	943.1	847.3	776.7	751.5	741.4	741.4	736.3
30°	4059.9	3187.4	1649.2	1064.1	877.5	776.7	711.1	680.9	670.8	675.8	670.8
32.5°	4221.3	3237.8	1578.6	1023.8	817.0	716.2	655.6	620.3	615.3	615.3	610.2
35°	4493.6	3379.0	1568.5	1003.6	766.6	670.8	610.2	574.9	569.9	569.9	564.9
37.5°	4786.1	3540.4	1613.9	993.5	726.2	630.4	574.9	539.6	534.6	534.6	534.6
40°	5033.3	3661.5	1664.3	993.5	701.0	595.1	544.7	514.4	514.4	514.4	514.4
42.5°	5199.7	3671.6	1654.2	993.5	680.9	569.9	524.5	494.2	494.2	499.3	494.2
45°	5446.8	3722.0	1613.9	978.4	665.7	549.7	504.3	479.1	474.1	479.1	479.1
47.5°	5739.3	3812.8	1573.5	917.9	660.7	529.6	489.2	458.9	453.9	458.9	453.9
50°	6016.7	3893.5	1553.4	837.2	650.6	509.4	469.0	438.8	433.7	438.8	433.7
52.5°	6248.7	3928.8	1518.0	781.7	625.4	489.2	448.9	418.6	408.5	413.6	413.6
55°	6435.3	3918.7	1467.6	736.3	580.0	469.0	423.6	398.4	383.3	383.3	378.3
57.5°	6606.8	3923.7	1422.2	690.9	529.6	438.8	403.5	373.2	353.0	348.0	342.9
60°	6672.4	3898.5	1341.5	630.4	479.1	413.6	378.3	342.9	322.8	317.7	312.7
62.5°	6581.6	3807.7	1235.6	524.5	433.7	383.3	353.0	317.7	297.6	292.5	287.5
65°	6324.4	3636.3	1074.2	413.6	393.4	348.0	322.8	297.6	272.3	262.3	257.2
67.5°	5885.6	3389.1	872.5	332.9	348.0	317.7	302.6	272.3	242.1	232.0	227.0
70°	5260.2	3061.3	655.6	282.4	307.6	282.4	272.3	242.1	216.9	206.8	201.7
72.5°	4382.7	2531.8	458.9	242.1	267.3	247.1	237.0	216.9	191.6	176.5	176.5
75°	3313.5	1815.6	302.6	206.8	221.9	211.8	196.7	181.6	166.4	156.3	151.3
77.5°	1427.3	706.1	186.6	156.3	181.6	176.5	156.3	146.3	141.2	131.1	131.1
80°	615.3	287.5	116.0	116.0	131.1	126.1	121.0	111.0	111.0	105.9	100.9
82.5°	227.0	116.0	70.6	85.7	95.8	85.7	85.7	85.7	85.7	80.7	80.7
85°	55.5	35.3	35.3	50.4	55.5	50.4	55.5	50.4	50.4	50.4	45.4
87.5°	15.1	15.1	20.2	20.2	20.2	20.2	20.2	15.1	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)