

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: P840868

Luminaire Tested: **ARCH4-100-727-U-T2U-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P840868
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-25)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-100-727-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 845mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11853 lumens
Efficiency: N/A
Efficacy: 115.0 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 103.1
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



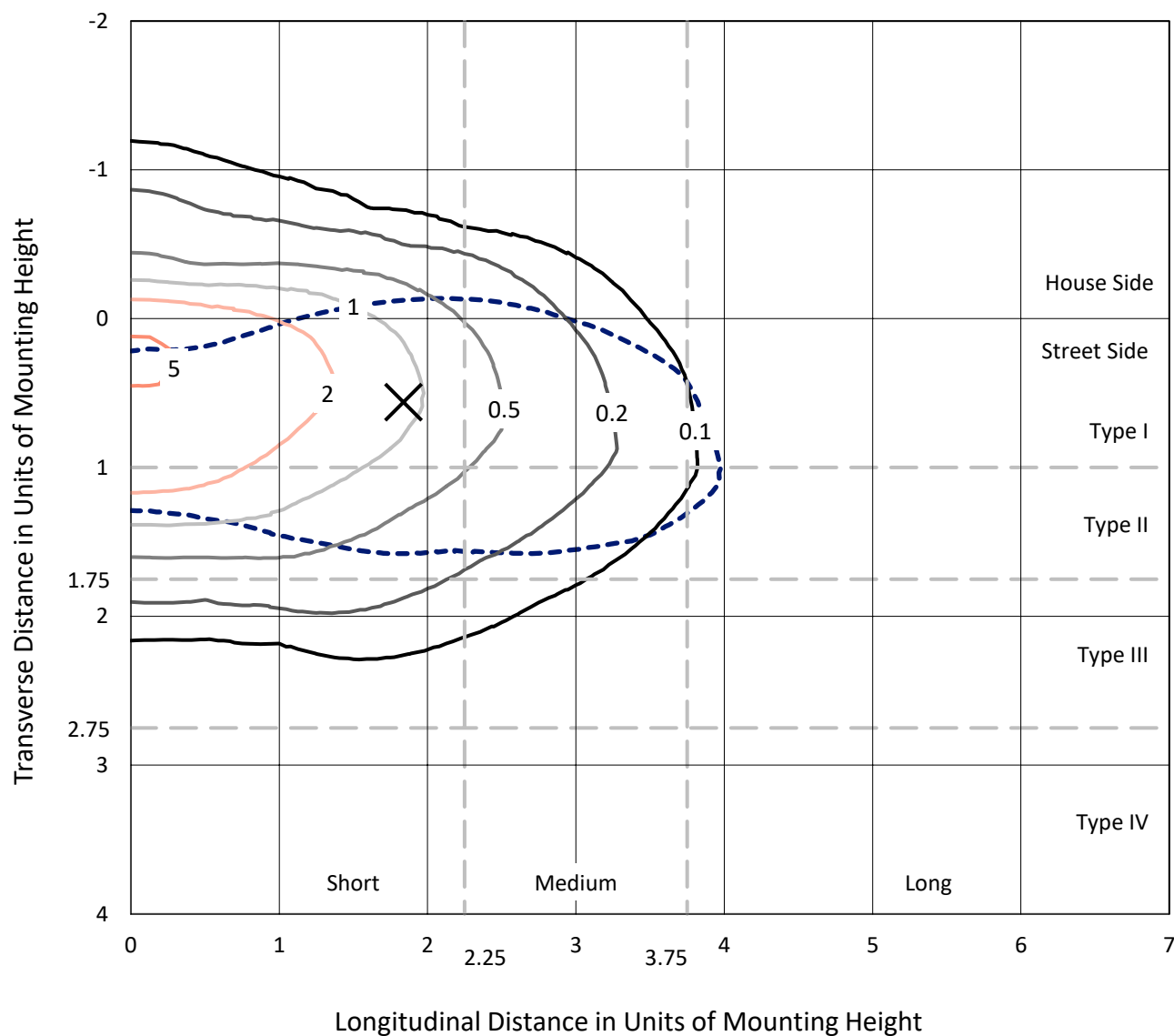
REPORT NUMBER: P840868

CATALOG NUMBER: ARCH4-100-727-U-T2U-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

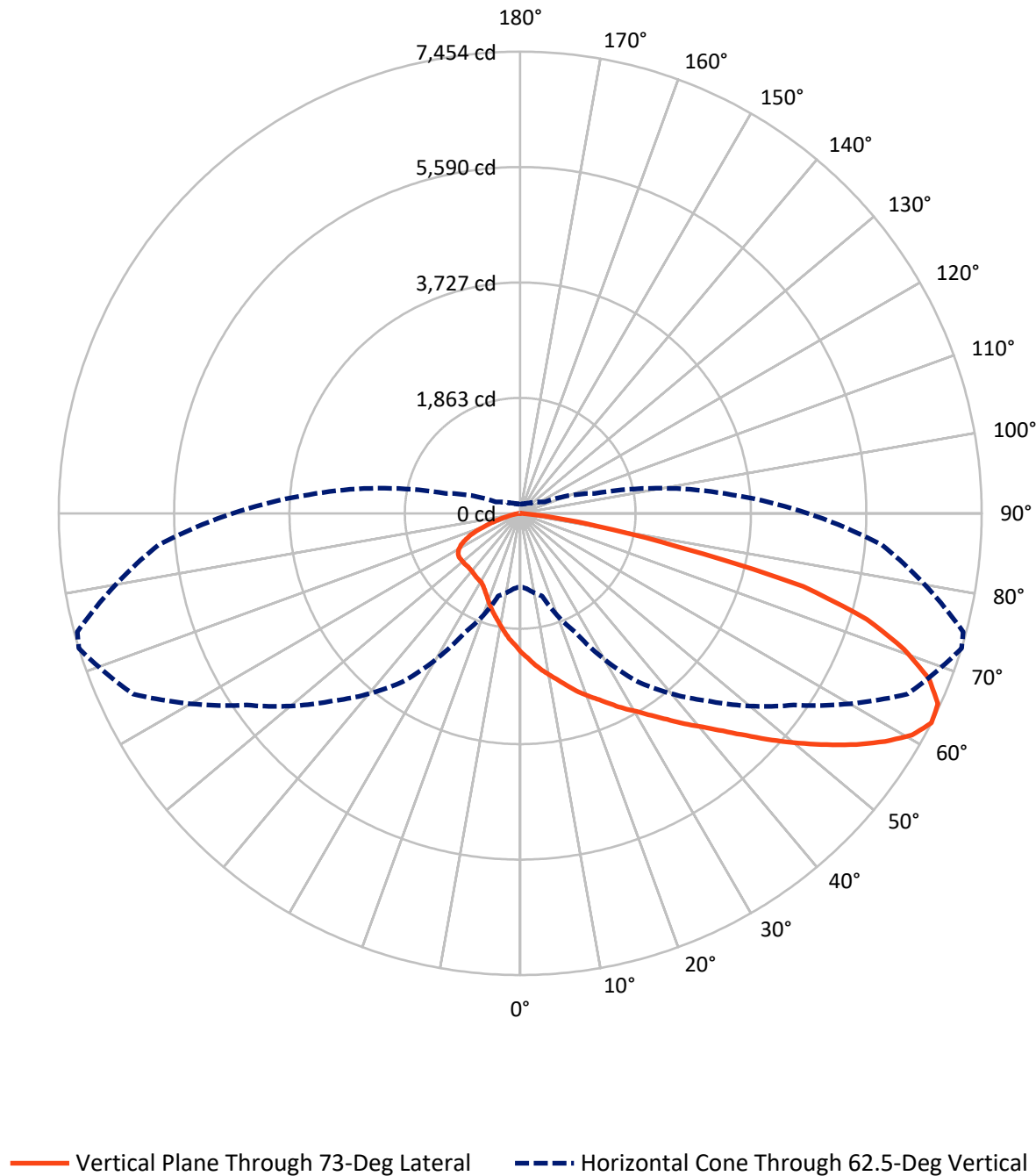


Based on 25 foot mounting height. Maximum calculated value = 5.6 fc

Type II - Short - N/A

REPORT NUMBER: P840868
CATALOG NUMBER: ARCH4-100-727-U-T2U-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P840868

CATALOG NUMBER: ARCH4-100-727-U-T2U-HSS

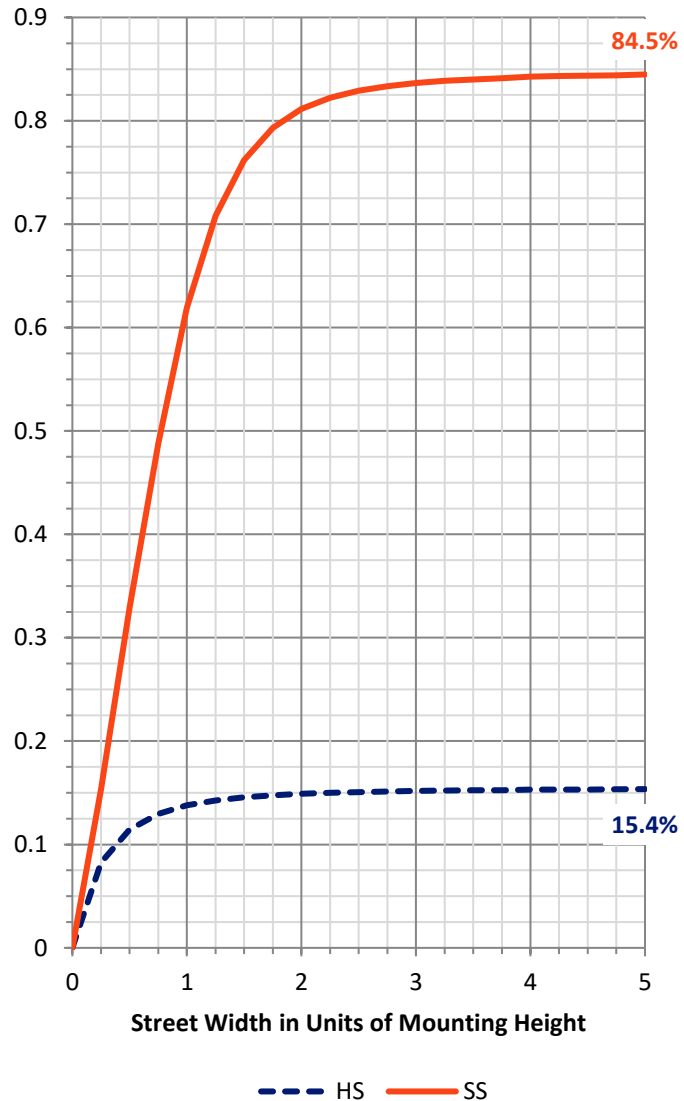
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1837.4	0.0	1837.4
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	10015.6	0.0	10015.6
	% Fixture	84.5	0.0	84.5
Total	Lumens	11853.0	0.0	11853.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	216.8	1.8
10°-20°	654.3	5.5
20°-30°	1089.0	9.2
30°-40°	1643.2	13.9
40°-50°	2296.8	19.4
50°-60°	2536.9	21.4
60°-70°	2210.0	18.6
70°-80°	1116.4	9.4
80°-90°	89.6	0.8
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°	11853.0	100.0
0°-180°	11853.0	100.0

Coefficient of Utilization



REPORT NUMBER: P840868

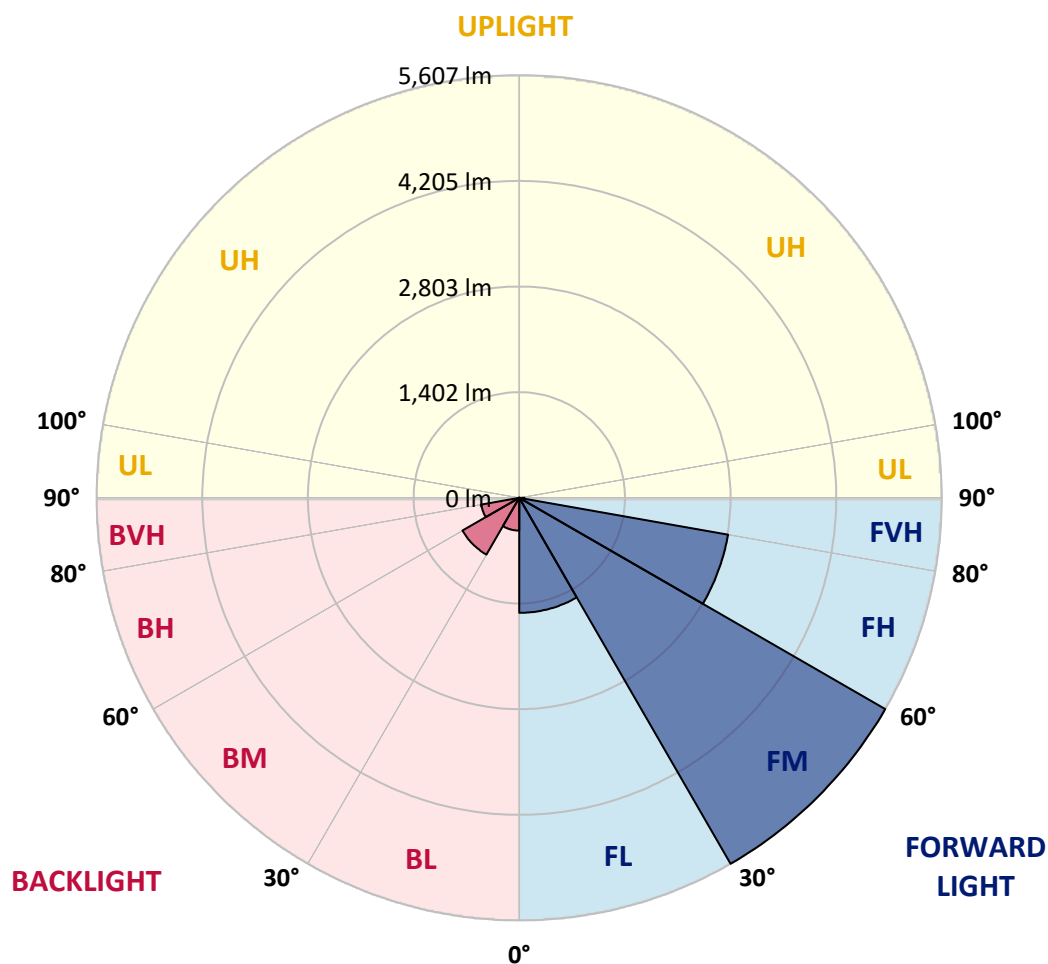
CATALOG NUMBER: ARCH4-100-727-U-T2U-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1525.8	12.9			
FM	(30°-60°)	5606.9	47.3			
FH	(60°-80°)	2813.5	23.7			G2/5000
FVH	(80°-90°)	69.3	0.6			G1/100
BL	(0°-30°)	434.3	3.7	B1/500		
BM	(30°-60°)	870.0	7.3	B1/1000		
BH	(60°-80°)	512.8	4.3	B2/1000		G2/1000
BVH	(80°-90°)	20.3	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-G2

Type II Short



REPORT NUMBER: P840868

CATALOG NUMBER: ARCH4-100-727-U-T2U-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	2244.4	2244.4	2244.4	2244.4	2244.4	2244.4	2244.4	2244.4	2244.4	2244.4	2244.4
2.5°	2554.3	2582.7	2567.2	2577.6	2525.9	2492.3	2453.6	2378.7	2337.4	2332.2	2283.1
5°	2928.8	2959.8	2934.0	2926.2	2835.8	2758.4	2670.5	2538.8	2451.0	2435.5	2327.0
7.5°	3303.3	3331.7	3300.7	3277.5	3156.1	3019.2	2890.1	2696.4	2559.5	2533.7	2363.2
10°	3566.7	3592.6	3569.3	3546.1	3419.5	3280.1	3096.7	2843.6	2657.6	2616.3	2386.4
12.5°	3765.6	3781.1	3770.8	3750.1	3631.3	3481.5	3305.9	3008.9	2768.7	2717.0	2422.6
15°	3928.3	3954.2	3941.2	3925.7	3812.1	3662.3	3494.4	3181.9	2897.8	2833.3	2476.8
17.5°	4036.8	4054.9	4057.5	4057.5	3956.7	3809.5	3646.8	3339.5	3027.0	2944.3	2528.5
20°	4085.9	4106.5	4119.5	4140.1	4057.5	3930.9	3765.6	3473.8	3148.3	3055.4	2577.6
22.5°	4109.1	4127.2	4160.8	4207.3	4140.1	4034.2	3881.8	3597.7	3269.7	3171.6	2634.4
25°	4127.2	4150.4	4199.5	4287.3	4240.8	4150.4	4018.7	3739.8	3414.4	3313.6	2717.0
27.5°	4176.3	4204.7	4251.2	4357.1	4300.2	4256.3	4163.4	3892.2	3566.7	3463.4	2817.8
30°	4346.7	4370.0	4367.4	4434.5	4364.8	4351.9	4287.3	4039.4	3714.0	3610.7	2936.6
32.5°	4656.7	4679.9	4623.1	4597.3	4444.9	4447.5	4421.6	4196.9	3889.6	3783.7	3073.4
35°	4989.8	5015.7	4940.8	4896.9	4641.2	4566.3	4579.2	4393.2	4085.9	3980.0	3243.9
37.5°	5286.8	5317.8	5253.3	5188.7	4930.4	4757.4	4754.8	4612.8	4310.6	4202.1	3432.4
40°	5449.6	5485.7	5524.5	5488.3	5217.1	5026.0	4943.3	4837.4	4532.7	4421.6	3636.5
42.5°	5527.0	5627.8	5697.5	5674.3	5452.1	5258.4	5160.3	5072.5	4803.9	4695.4	3879.3
45°	5310.1	5312.7	5459.9	5586.4	5545.1	5416.0	5397.9	5335.9	5113.8	5010.5	4153.0
47.5°	5038.9	5018.2	5121.5	5346.2	5462.5	5496.0	5601.9	5627.8	5467.6	5364.3	4432.0
50°	4388.1	4401.0	4736.7	5059.6	5286.8	5503.8	5746.6	5927.4	5831.8	5733.7	4726.4
52.5°	3569.3	3600.3	3985.1	4695.4	5054.4	5426.3	5831.8	6227.0	6203.7	6110.7	5020.8
55°	2861.7	2910.7	3318.8	4088.5	4757.4	5253.3	5868.0	6500.7	6588.5	6503.3	5310.1
57.5°	2187.6	2239.2	2582.7	3373.0	4377.7	4971.8	5842.1	6740.9	6947.5	6893.3	5576.1
60°	1647.8	1699.4	1919.0	2735.1	3902.5	4656.7	5713.0	6898.5	7270.4	7213.6	5769.8
62.5°	1180.3	1221.6	1384.3	2128.2	3324.0	4282.2	5395.3	6901.0	7453.8	7407.3	5862.8
65°	849.7	849.7	981.4	1518.6	2781.6	3832.8	4914.9	6583.4	7415.0	7402.1	5798.2
67.5°	612.1	617.3	723.2	1061.5	2218.6	3287.8	4292.5	6017.8	7115.4	7180.0	5565.8
70°	433.9	446.8	495.9	741.2	1676.2	2595.6	3626.2	5276.5	6575.6	6689.3	5116.4
72.5°	335.8	343.5	377.1	516.5	1224.2	1929.3	2890.1	4450.0	5855.0	5984.2	4504.3
75°	258.3	266.0	291.8	379.7	878.1	1353.3	2053.3	3453.1	4721.2	4951.1	3618.4
77.5°	188.5	198.9	216.9	276.4	511.4	860.0	1244.9	1942.2	2606.0	2714.4	1895.7
80°	87.8	100.7	126.6	178.2	276.4	405.5	441.6	749.0	1252.6	1309.4	1027.9
82.5°	49.1	62.0	72.3	108.5	139.5	144.6	149.8	188.5	472.6	521.7	431.3
85°	23.2	31.0	33.6	46.5	46.5	41.3	49.1	36.2	77.5	93.0	90.4
87.5°	0.0	2.6	5.2	12.9	10.3	7.7	7.7	7.7	7.7	10.3	7.7
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: P840868

CATALOG NUMBER: ARCH4-100-727-U-T2U-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2244.4	2244.4	2244.4	2244.4	2244.4	2244.4	2244.4	2244.4	2244.4	2244.4	2244.4
2.5°	2259.9	2226.3	2148.8	2081.7	2037.8	1999.0	1947.4	1924.1	1882.8	1890.6	1867.3
5°	2272.8	2210.8	2073.9	1947.4	1854.4	1771.8	1681.4	1629.7	1572.9	1567.7	1549.6
7.5°	2280.5	2185.0	1988.7	1810.5	1668.4	1541.9	1420.5	1353.3	1283.6	1268.1	1252.6
10°	2272.8	2146.2	1900.9	1668.4	1479.9	1322.4	1185.5	1100.2	1027.9	1009.8	994.4
12.5°	2280.5	2125.6	1818.2	1536.7	1312.0	1133.8	978.9	891.0	823.9	805.8	795.5
15°	2298.6	2112.7	1748.5	1417.9	1162.2	963.4	811.0	736.1	681.8	663.8	658.6
17.5°	2314.1	2099.8	1673.6	1301.7	1012.4	813.6	681.8	619.9	573.4	555.3	550.1
20°	2334.8	2081.7	1598.7	1190.6	880.7	694.8	578.5	524.3	488.1	475.2	472.6
22.5°	2352.9	2068.8	1529.0	1079.6	759.3	599.2	501.0	457.1	431.3	418.4	418.4
25°	2399.4	2073.9	1469.6	976.3	668.9	524.3	441.6	408.1	387.4	379.7	379.7
27.5°	2453.6	2094.6	1423.1	888.5	591.4	467.5	400.3	371.9	361.6	351.3	353.8
30°	2531.1	2135.9	1392.1	816.1	534.6	423.6	366.7	346.1	335.8	333.2	333.2
32.5°	2629.2	2203.1	1389.5	769.7	493.3	390.0	343.5	325.4	320.3	317.7	317.7
35°	2745.4	2262.5	1374.0	749.0	467.5	366.7	325.4	312.5	309.9	309.9	309.9
37.5°	2884.9	2360.6	1363.7	720.6	454.6	353.8	312.5	302.2	302.2	302.2	302.2
40°	3029.5	2440.7	1348.2	694.8	449.4	346.1	304.8	291.8	291.8	291.8	291.8
42.5°	3202.6	2556.9	1343.0	681.8	441.6	340.9	294.4	278.9	281.5	281.5	284.1
45°	3411.8	2688.6	1340.4	668.9	439.1	335.8	284.1	266.0	268.6	266.0	266.0
47.5°	3623.6	2841.0	1348.2	661.2	436.5	330.6	276.4	253.1	253.1	250.5	250.5
50°	3845.7	2980.5	1353.3	653.4	431.3	320.3	263.4	242.8	237.6	232.4	235.0
52.5°	4054.9	3109.6	1355.9	640.5	415.8	304.8	253.1	229.9	222.1	214.4	216.9
55°	4264.1	3233.6	1361.1	625.0	395.2	289.3	240.2	216.9	206.6	196.3	196.3
57.5°	4452.6	3342.1	1348.2	586.3	371.9	273.8	227.3	201.5	186.0	175.6	175.6
60°	4581.8	3419.5	1309.4	529.5	340.9	255.7	214.4	186.0	167.9	160.1	160.1
62.5°	4643.7	3432.4	1239.7	436.5	302.2	237.6	198.9	170.5	155.0	149.8	149.8
65°	4584.3	3375.6	1131.2	328.0	260.9	216.9	183.4	157.5	142.1	129.1	129.1
67.5°	4377.7	3215.5	981.4	247.9	222.1	196.3	167.9	144.6	126.6	116.2	116.2
70°	3961.9	2882.3	759.3	198.9	188.5	170.5	152.4	129.1	113.6	100.7	100.7
72.5°	3416.9	2443.3	534.6	160.1	160.1	144.6	129.1	113.6	98.1	87.8	87.8
75°	2621.5	1807.9	359.0	129.1	131.7	121.4	105.9	93.0	82.6	74.9	74.9
77.5°	1430.8	893.6	219.5	95.6	98.1	93.0	82.6	74.9	69.7	62.0	62.0
80°	694.8	392.6	126.6	67.2	69.7	67.2	62.0	54.2	54.2	49.1	49.1
82.5°	291.8	147.2	67.2	46.5	46.5	41.3	38.7	38.7	38.7	36.2	36.2
85°	72.3	28.4	28.4	25.8	25.8	25.8	23.2	23.2	23.2	18.1	20.7
87.5°	10.3	10.3	10.3	10.3	10.3	10.3	7.7	2.6	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)