

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: P842672

Luminaire Tested: **ARCH4-80-727-U-T4W-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842672
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: ARCH4-80-727-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 685mA 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: 9630 lumens
Efficiency: N/A
Efficacy: 115.5 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 83.4
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



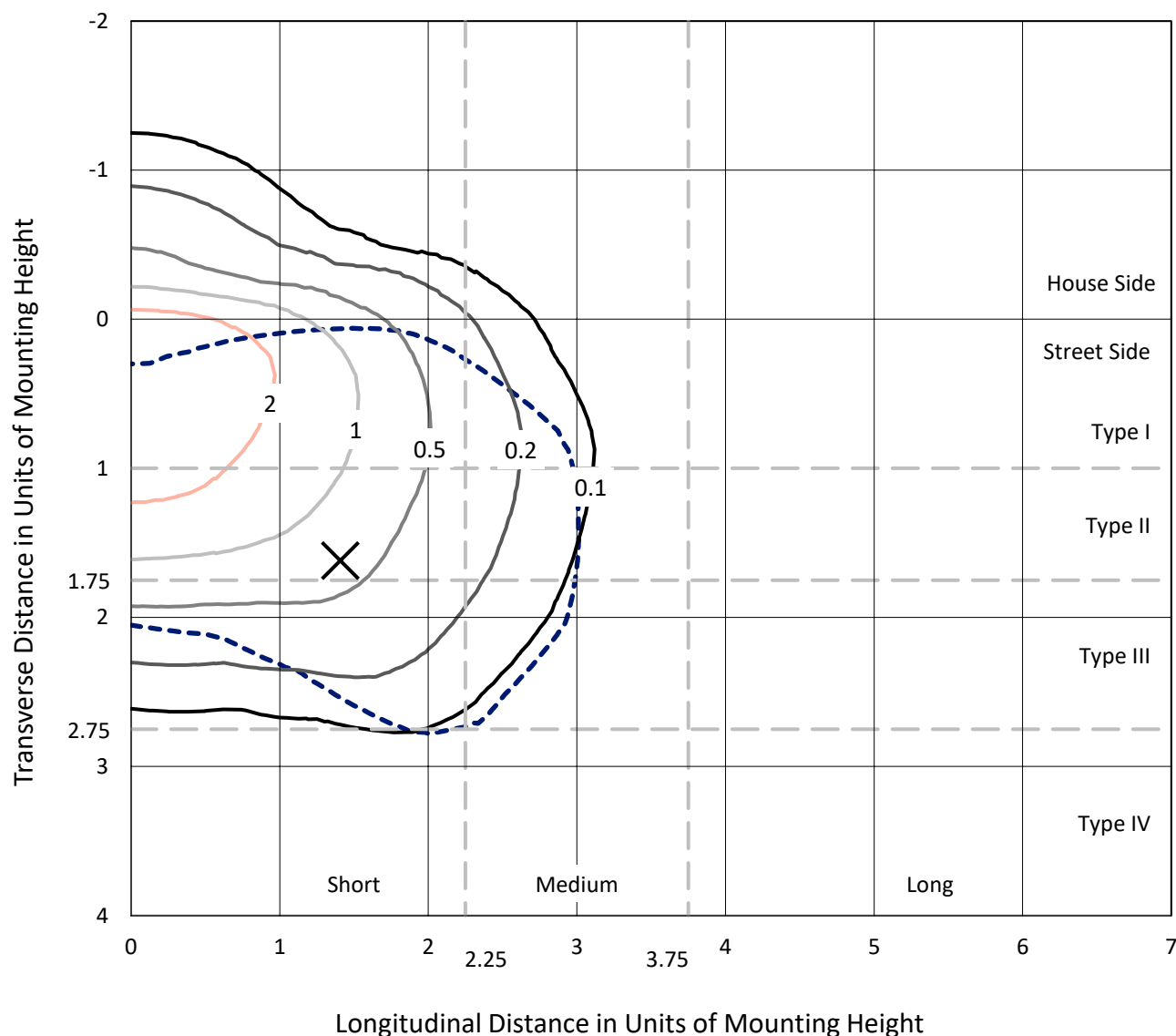
REPORT NUMBER: P842672

CATALOG NUMBER: ARCH4-80-727-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

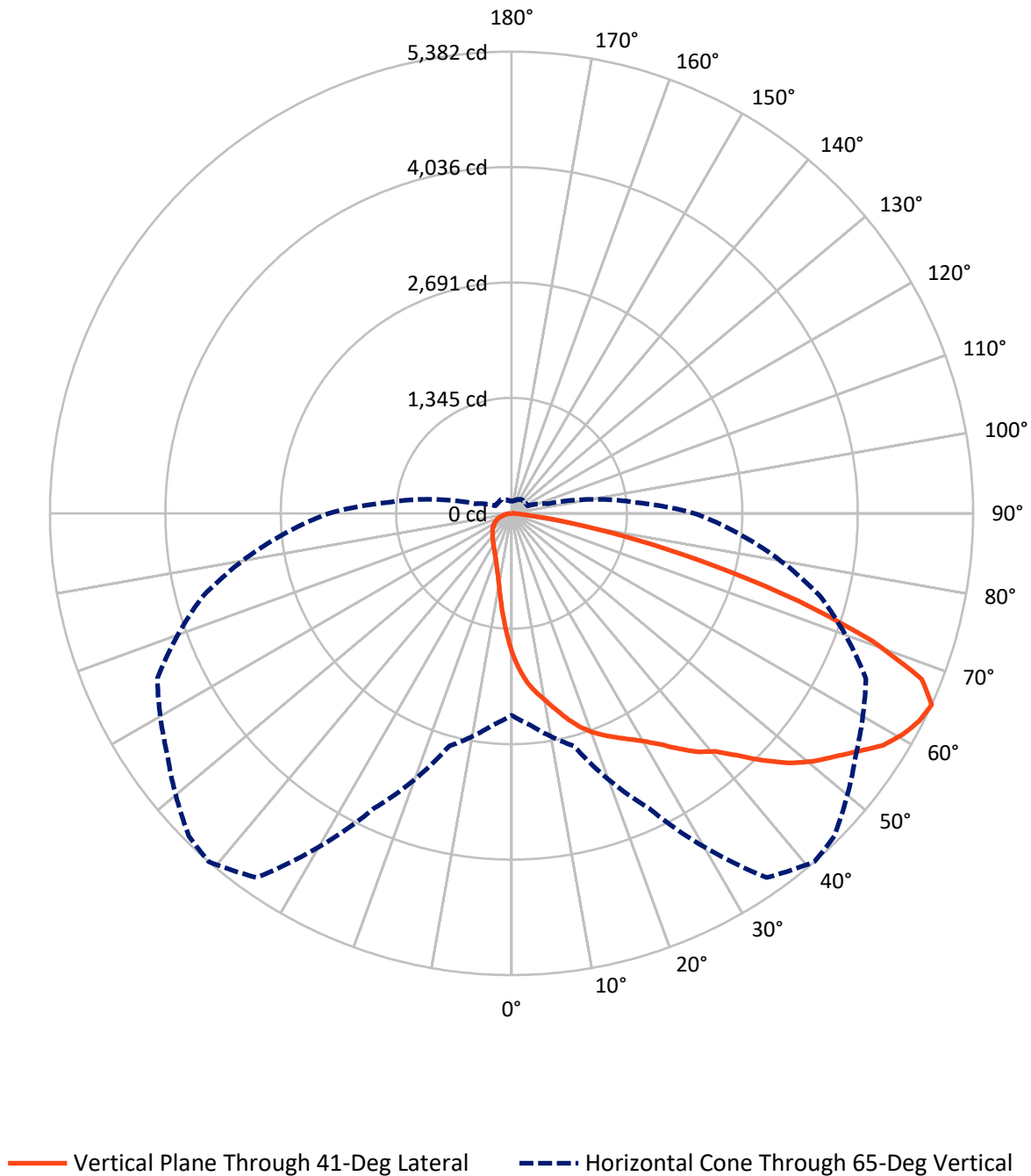


Based on 25 foot mounting height. Maximum calculated value = 3.8 fc

Type III - Short - N/A

REPORT NUMBER: P842672
CATALOG NUMBER: ARCH4-80-727-U-T4W-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P842672

CATALOG NUMBER: ARCH4-80-727-U-T4W-HSS

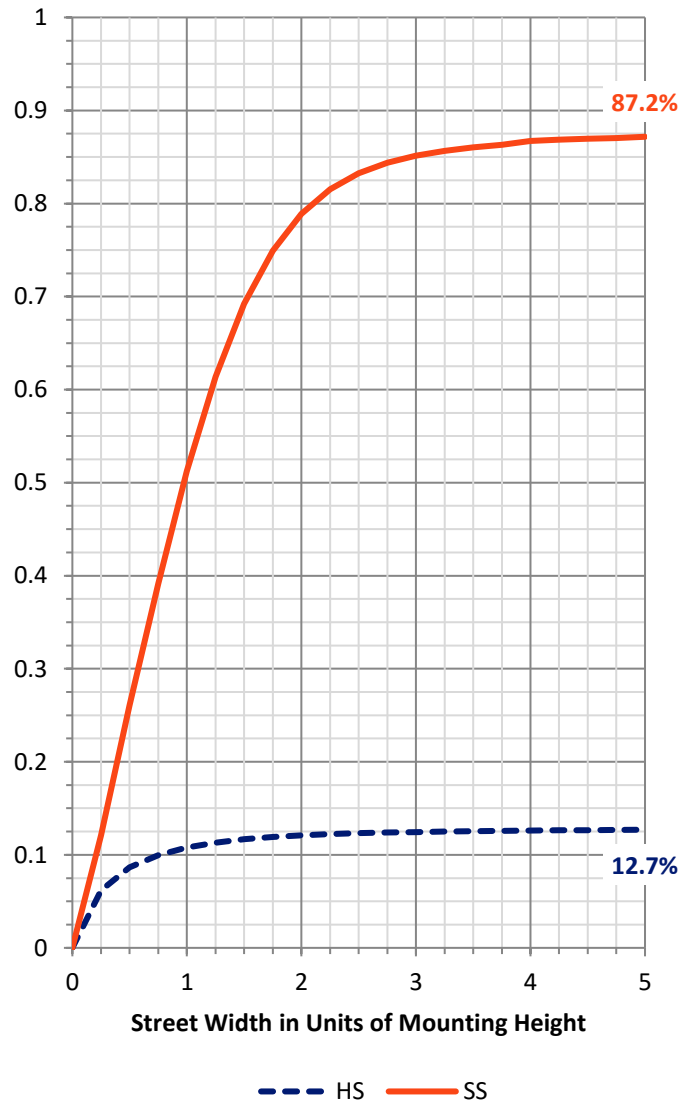
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1236.3	0.0	1236.3
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	8393.7	0.0	8393.7
	% Fixture	87.2	0.0	87.2
Total	Lumens	9630.0	0.0	9630.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.9	1.6
10°-20°	458.4	4.8
20°-30°	788.7	8.2
30°-40°	1196.2	12.4
40°-50°	1752.4	18.2
50°-60°	2213.0	23.0
60°-70°	2075.0	21.5
70°-80°	924.8	9.6
80°-90°	68.5	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°	9630.0	100.0
0°-180°	9630.0	100.0

Coefficient of Utilization



REPORT NUMBER: P842672

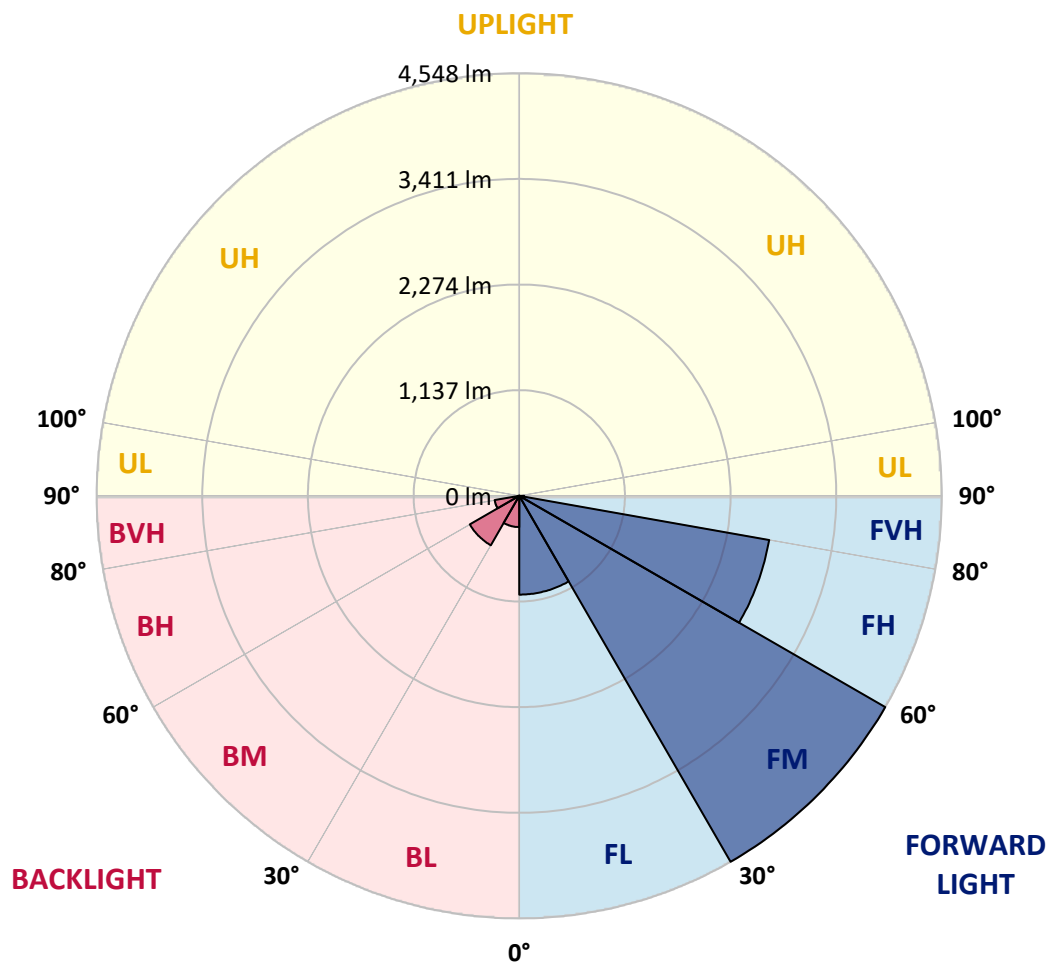
CATALOG NUMBER: ARCH4-80-727-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1063.5	11.0			
FM	(30°-60°)	4547.7	47.2			
FH	(60°-80°)	2731.3	28.4			G2/5000
FVH	(80°-90°)	51.2	0.5			G1/100
BL	(0°-30°)	336.5	3.5	B1/500		
BM	(30°-60°)	613.9	6.4	B1/1000		
BH	(60°-80°)	268.6	2.8	B1/500		G1/500
BVH	(80°-90°)	17.3	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short



REPORT NUMBER: P842672

CATALOG NUMBER: ARCH4-80-727-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	1640.9	1640.9	1640.9	1640.9	1640.9	1640.9	1640.9	1640.9	1640.9	1640.9	1640.9
2.5°	1892.7	1886.6	1882.6	1860.2	1860.2	1829.8	1831.8	1803.4	1768.8	1714.0	1655.1
5°	2071.4	2063.3	2053.2	2030.8	2022.7	1992.2	1988.2	1947.6	1888.7	1793.2	1687.6
7.5°	2227.8	2219.7	2205.5	2173.0	2150.6	2114.1	2103.9	2051.1	1986.1	1868.4	1720.1
10°	2370.0	2363.9	2345.6	2305.0	2274.5	2229.8	2211.6	2140.5	2059.3	1929.3	1746.5
12.5°	2514.2	2506.0	2481.7	2447.1	2410.6	2357.8	2335.4	2244.1	2140.5	1996.3	1785.1
15°	2648.2	2636.0	2617.7	2581.2	2548.7	2497.9	2473.5	2365.9	2240.0	2071.4	1835.9
17.5°	2735.5	2725.4	2709.1	2688.8	2662.4	2623.8	2599.4	2493.8	2339.5	2144.5	1888.7
20°	2788.3	2784.3	2778.2	2766.0	2753.8	2727.4	2709.1	2609.6	2447.1	2215.6	1939.4
22.5°	2828.9	2824.9	2822.8	2822.8	2824.9	2814.7	2802.5	2717.2	2550.7	2290.8	1986.1
25°	2891.9	2889.9	2885.8	2881.7	2895.9	2898.0	2893.9	2835.0	2680.7	2390.3	2045.0
27.5°	2979.2	2973.1	2965.0	2960.9	2975.1	2985.3	2993.4	2952.8	2818.8	2491.8	2112.1
30°	3113.2	3095.0	3074.7	3060.4	3070.6	3086.8	3105.1	3080.8	2960.9	2617.7	2181.1
32.5°	3271.6	3249.3	3202.6	3176.2	3202.6	3214.8	3229.0	3216.8	3109.2	2753.8	2250.1
35°	3464.6	3438.2	3389.4	3350.9	3397.6	3371.2	3365.1	3352.9	3249.3	2887.8	2327.3
37.5°	3785.4	3746.9	3669.7	3584.4	3584.4	3527.5	3505.2	3468.6	3375.2	3007.6	2402.5
40°	4157.1	4106.3	4006.8	3880.9	3765.1	3647.4	3633.1	3606.7	3523.5	3145.7	2487.8
42.5°	4565.3	4467.8	4329.7	4177.4	3990.6	3856.5	3824.0	3748.9	3667.7	3285.9	2573.0
45°	5018.2	4815.1	4614.0	4536.8	4228.2	4106.3	4045.4	3909.3	3817.9	3432.1	2662.4
47.5°	5091.3	4932.9	4798.8	4786.6	4449.5	4348.0	4278.9	4084.0	3980.4	3588.5	2755.8
50°	5050.6	4955.2	4969.4	4920.7	4612.0	4545.0	4492.2	4270.8	4140.8	3738.7	2841.1
52.5°	4880.1	4932.9	5014.1	4924.7	4766.3	4711.5	4685.1	4471.9	4291.1	3876.8	2918.3
55°	4677.0	4713.5	4888.2	4997.8	4945.0	4896.3	4871.9	4705.4	4439.4	3992.6	2989.4
57.5°	4380.5	4364.2	4557.2	4985.7	5131.9	5103.4	5077.0	4934.9	4577.5	4075.9	3034.0
60°	3935.7	3901.2	4144.9	4742.0	5192.8	5237.5	5225.3	5087.2	4683.1	4073.8	3015.8
62.5°	3166.0	3251.3	3588.5	4343.9	5219.2	5332.9	5310.6	5099.4	4717.6	3956.0	2900.0
65°	2353.7	2475.6	2806.6	3795.6	5182.6	5381.7	5320.7	4900.4	4557.2	3722.5	2646.2
67.5°	1695.7	1803.4	2045.0	3123.4	4831.3	5158.3	5087.2	4575.4	4187.5	3391.5	2294.8
70°	1159.6	1236.8	1401.3	2274.5	4124.6	4459.7	4415.0	4090.1	3604.7	2997.5	1864.3
72.5°	818.4	850.9	956.5	1500.8	3133.6	3499.1	3446.3	3365.1	2895.9	2491.8	1450.0
75°	613.3	633.6	690.5	970.7	2114.1	2424.8	2376.1	2422.8	2162.8	1886.6	1056.0
77.5°	231.5	251.8	391.9	619.4	1251.0	1488.6	1439.9	1468.3	1202.2	952.5	526.0
80°	63.0	67.0	130.0	294.5	568.6	741.2	674.2	578.8	446.8	438.7	278.2
82.5°	26.4	30.5	58.9	158.4	203.1	203.1	170.6	211.2	170.6	205.1	134.0
85°	10.2	12.2	14.2	40.6	26.4	28.4	30.5	40.6	34.5	42.6	30.5
87.5°	0.0	0.0	0.0	2.0	2.0	4.1	2.0	4.1	6.1	6.1	6.1
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: P842672

CATALOG NUMBER: ARCH4-80-727-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1640.9	1640.9	1640.9	1640.9	1640.9	1640.9	1640.9	1640.9	1640.9	1640.9	1640.9
2.5°	1630.7	1608.4	1575.9	1523.1	1468.3	1437.8	1399.2	1393.1	1352.5	1348.5	1332.2
5°	1640.9	1594.2	1510.9	1409.4	1309.9	1232.7	1175.8	1145.4	1086.5	1086.5	1070.2
7.5°	1649.0	1575.9	1441.9	1291.6	1155.5	1052.0	974.8	942.3	889.5	885.4	873.3
10°	1651.1	1553.6	1366.7	1171.8	1005.3	899.7	824.5	788.0	741.2	737.2	729.1
12.5°	1667.3	1541.4	1299.7	1068.2	897.6	783.9	710.8	680.3	643.8	639.7	631.6
15°	1693.7	1541.4	1242.9	980.9	802.2	696.6	633.6	605.2	578.8	574.7	570.7
17.5°	1720.1	1537.3	1186.0	899.7	723.0	627.5	572.7	550.4	530.0	528.0	524.0
20°	1744.5	1535.3	1129.1	830.6	662.0	570.7	528.0	507.7	491.5	491.5	489.4
22.5°	1768.8	1531.2	1074.3	765.6	609.2	528.0	491.5	469.1	456.9	456.9	454.9
25°	1805.4	1531.2	1023.5	710.8	566.6	495.5	459.0	442.7	432.6	430.5	430.5
27.5°	1848.0	1543.4	978.9	662.0	530.0	463.0	434.6	418.3	406.2	402.1	404.1
30°	1894.8	1553.6	938.2	619.4	495.5	438.7	408.2	391.9	379.8	375.7	377.7
32.5°	1941.5	1565.8	901.7	580.8	461.0	416.3	385.9	367.6	355.4	353.4	353.4
35°	1992.2	1577.9	865.1	548.3	432.6	394.0	365.5	345.2	337.1	333.1	335.1
37.5°	2043.0	1598.3	830.6	517.9	412.3	373.7	347.3	327.0	320.9	318.8	318.8
40°	2103.9	1628.7	816.4	497.6	394.0	355.4	333.1	312.7	306.7	306.7	306.7
42.5°	2154.7	1653.1	804.2	475.2	379.8	339.1	318.8	302.6	298.5	296.5	298.5
45°	2205.5	1675.4	788.0	454.9	361.5	322.9	306.7	290.4	286.3	286.3	286.3
47.5°	2256.2	1687.6	765.6	434.6	345.2	308.7	294.5	280.3	276.2	276.2	276.2
50°	2296.9	1697.8	733.1	412.3	327.0	296.5	282.3	268.1	264.0	264.0	264.0
52.5°	2337.5	1699.8	698.6	385.9	308.7	282.3	270.1	255.9	251.8	249.8	249.8
55°	2374.0	1697.8	658.0	355.4	288.4	266.0	255.9	243.7	235.6	227.5	231.5
57.5°	2400.4	1695.7	611.3	324.9	268.1	249.8	245.7	229.5	213.2	192.9	197.0
60°	2390.3	1673.4	560.5	286.3	245.7	233.5	233.5	211.2	182.8	172.6	174.7
62.5°	2325.3	1610.4	507.7	245.7	223.4	217.3	215.3	190.9	168.6	158.4	160.4
65°	2130.3	1452.0	430.5	209.2	201.1	199.0	199.0	176.7	156.4	144.2	146.2
67.5°	1833.8	1218.5	351.3	176.7	178.7	182.8	182.8	162.5	142.2	130.0	132.0
70°	1470.3	952.5	280.3	152.3	154.3	160.4	164.5	146.2	127.9	115.8	115.8
72.5°	1106.8	723.0	225.4	127.9	138.1	138.1	144.2	130.0	111.7	99.5	101.5
75°	802.2	517.9	178.7	107.6	119.8	117.8	117.8	109.7	95.4	87.3	87.3
77.5°	379.8	272.1	142.2	77.2	93.4	91.4	93.4	87.3	81.2	73.1	75.1
80°	186.8	134.0	91.4	54.8	65.0	67.0	73.1	69.0	67.0	60.9	60.9
82.5°	89.4	52.8	42.6	38.6	44.7	46.7	50.8	50.8	52.8	48.7	48.7
85°	24.4	14.2	18.3	24.4	28.4	30.5	34.5	36.6	36.6	34.5	36.6
87.5°	6.1	6.1	8.1	12.2	14.2	16.2	18.3	18.3	8.1	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)