

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: P841372

Luminaire Tested: **ARCH4-170-727-U-T2U-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841372
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: ARCH4-170-727-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1380mA 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: 18401 lumens
Efficiency: N/A
Efficacy: 108.4 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

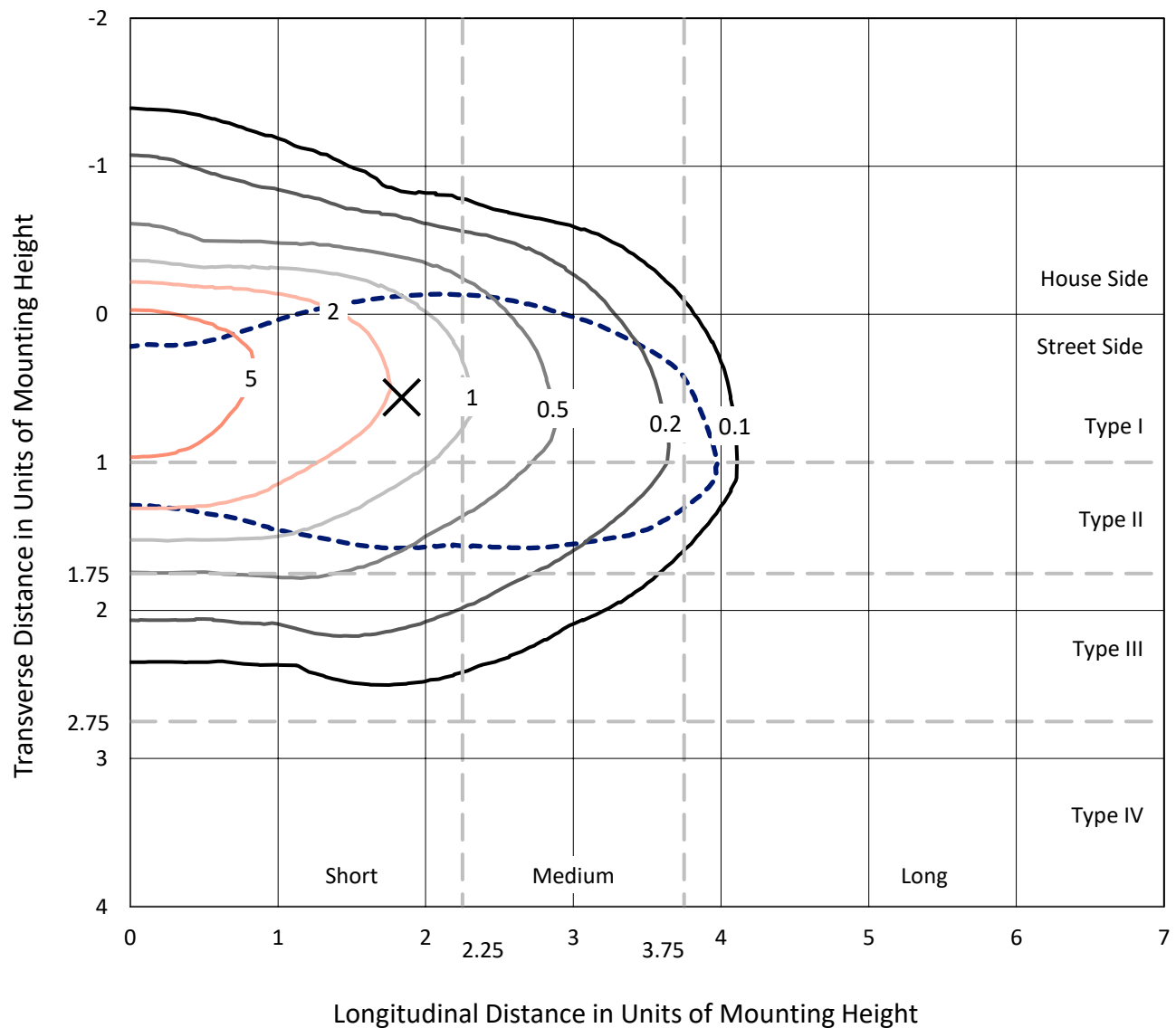
Input Watts (W): 169.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P841372
CATALOG NUMBER: ARCH4-170-727-U-T2U-HSS

Iso-Footcandle Lines of Horizontal Illumination

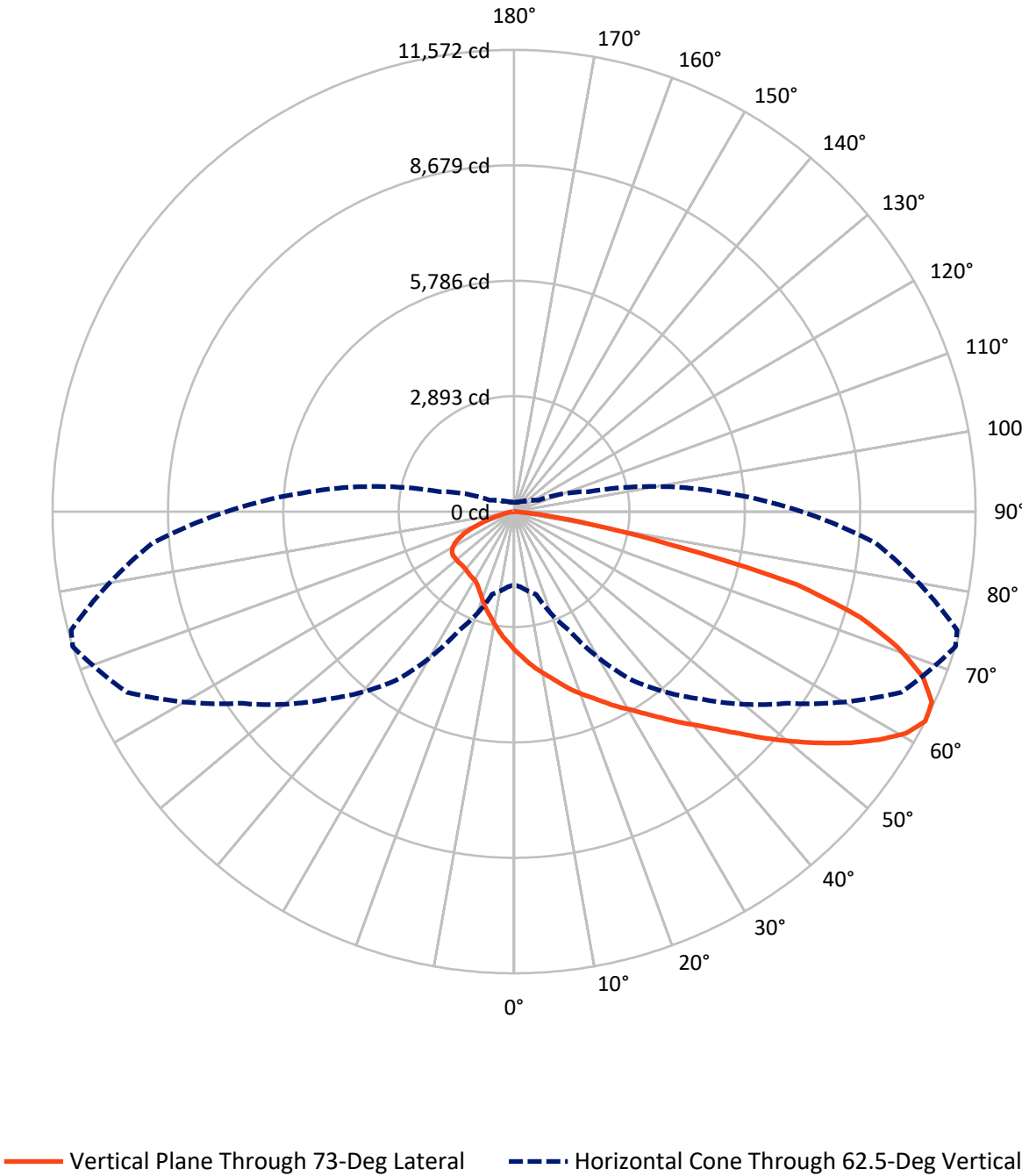
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.8 fc
Type II - Short - N/A

REPORT NUMBER: P841372
CATALOG NUMBER: ARCH4-170-727-U-T2U-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P841372

CATALOG NUMBER: ARCH4-170-727-U-T2U-HSS

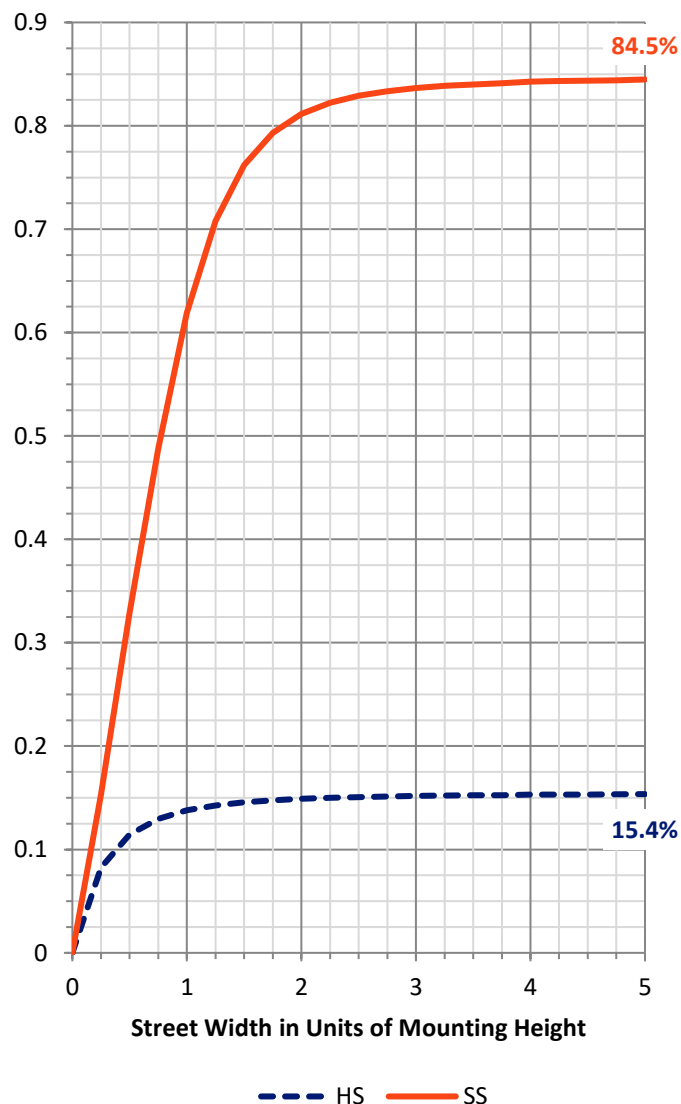
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2852.4	0.0	2852.4
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	15548.6	0.0	15548.6
	% Fixture	84.5	0.0	84.5
Total	Lumens	18401.0	0.0	18401.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	336.6	1.8
10°-20°	1015.7	5.5
20°-30°	1690.7	9.2
30°-40°	2551.0	13.9
40°-50°	3565.6	19.4
50°-60°	3938.4	21.4
60°-70°	3430.9	18.6
70°-80°	1733.1	9.4
80°-90°	139.1	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°	18401.0	100.0
0°-180°	18401.0	100.0

Coefficient of Utilization



REPORT NUMBER: P841372

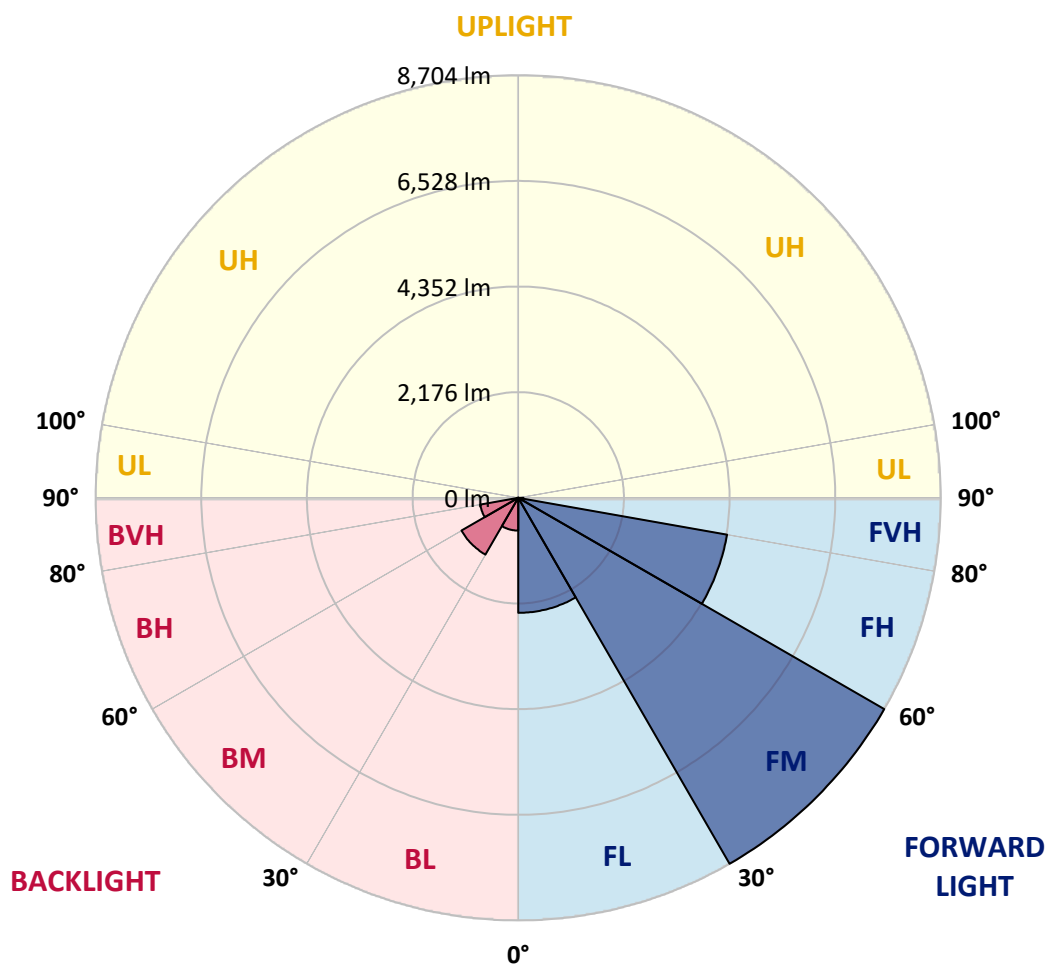
CATALOG NUMBER: ARCH4-170-727-U-T2U-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2368.8	12.9			
FM	(30°-60°)	8704.4	47.3			
FH	(60°-80°)	4367.8	23.7			G2/5000
FVH	(80°-90°)	107.6	0.6			G2/225
BL	(0°-30°)	674.2	3.7	B2/1000		
BM	(30°-60°)	1350.6	7.3	B2/2500		
BH	(60°-80°)	796.2	4.3	B2/1000		G2/1000
BVH	(80°-90°)	31.4	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: P841372

CATALOG NUMBER: ARCH4-170-727-U-T2U-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	3484.3	3484.3	3484.3	3484.3	3484.3	3484.3	3484.3	3484.3	3484.3	3484.3	3484.3
2.5°	3965.4	4009.5	3985.5	4001.5	3921.3	3869.2	3809.0	3692.8	3628.6	3620.6	3544.4
5°	4546.8	4594.9	4554.8	4542.8	4402.4	4282.2	4145.8	3941.4	3805.0	3781.0	3612.6
7.5°	5128.2	5172.3	5124.2	5088.1	4899.6	4687.1	4486.6	4185.9	3973.4	3933.3	3668.7
10°	5537.1	5577.2	5541.1	5505.1	5308.6	5092.1	4807.4	4414.5	4125.8	4061.6	3704.8
12.5°	5845.9	5869.9	5853.9	5821.8	5637.4	5404.8	5132.2	4671.1	4298.2	4218.0	3760.9
15°	6098.5	6138.6	6118.5	6094.5	5918.0	5685.5	5424.9	4939.7	4498.7	4398.4	3845.1
17.5°	6266.9	6294.9	6298.9	6298.9	6142.6	5914.0	5661.4	5184.3	4699.2	4570.8	3925.3
20°	6343.1	6375.1	6395.2	6427.3	6298.9	6102.5	5845.9	5392.8	4887.6	4743.3	4001.5
22.5°	6379.1	6407.2	6459.3	6531.5	6427.3	6262.9	6026.3	5585.3	5076.0	4923.7	4089.7
25°	6407.2	6443.3	6519.5	6655.8	6583.6	6443.3	6238.8	5805.8	5300.6	5144.2	4218.0
27.5°	6483.4	6527.5	6599.7	6764.1	6675.8	6607.7	6463.3	6042.3	5537.1	5376.8	4374.4
30°	6748.0	6784.1	6780.1	6884.3	6776.1	6756.0	6655.8	6270.9	5765.7	5605.3	4558.8
32.5°	7229.2	7265.2	7177.0	7136.9	6900.4	6904.4	6864.3	6515.5	6038.3	5873.9	4771.3
35°	7746.4	7786.5	7670.2	7602.0	7205.1	7088.8	7108.9	6820.2	6343.1	6178.7	5036.0
37.5°	8207.5	8255.6	8155.4	8055.1	7654.2	7385.5	7381.5	7161.0	6691.9	6523.5	5328.6
40°	8460.1	8516.2	8576.4	8520.2	8099.2	7802.5	7674.2	7509.8	7036.7	6864.3	5645.4
42.5°	8580.4	8736.7	8845.0	8808.9	8464.1	8163.4	8011.0	7874.7	7457.7	7289.3	6022.3
45°	8243.6	8247.6	8476.1	8672.6	8608.4	8408.0	8379.9	8283.7	7938.8	7778.5	6447.3
47.5°	7822.6	7790.5	7950.9	8299.7	8480.1	8532.2	8696.6	8736.7	8488.1	8327.8	6880.3
50°	6812.2	6832.2	7353.5	7854.6	8207.5	8544.3	8921.2	9201.8	9053.5	8901.1	7337.4
52.5°	5541.1	5589.3	6186.7	7289.3	7846.6	8424.0	9053.5	9666.9	9630.9	9486.5	7794.5
55°	4442.5	4518.7	5152.2	6347.1	7385.5	8155.4	9109.6	10091.9	10228.3	10096.0	8243.6
57.5°	3396.1	3476.2	4009.5	5236.4	6796.1	7718.3	9069.5	10464.8	10785.6	10701.4	8656.5
60°	2558.1	2638.3	2979.1	4246.1	6058.4	7229.2	8869.0	10709.4	11286.8	11198.6	8957.3
62.5°	1832.3	1896.5	2149.1	3303.8	5160.2	6647.8	8375.9	10713.4	11571.5	11499.3	9101.6
65°	1319.1	1319.1	1523.6	2357.6	4318.2	5950.1	7630.1	10220.3	11511.3	11491.3	9001.4
67.5°	950.3	958.3	1122.7	1647.9	3444.2	5104.1	6663.8	9342.2	11046.2	11146.5	8640.5
70°	673.6	693.6	769.8	1150.7	2602.2	4029.6	5629.4	8191.4	10208.2	10384.6	7942.8
72.5°	521.2	533.3	585.4	801.9	1900.5	2995.1	4486.6	6908.4	9089.6	9290.0	6992.6
75°	401.0	413.0	453.1	589.4	1363.2	2101.0	3187.6	5360.7	7329.4	7686.2	5617.3
77.5°	292.7	308.7	336.8	429.0	793.9	1335.2	1932.6	3015.2	4045.6	4214.0	2943.0
80°	136.3	156.4	196.5	276.7	429.0	629.5	685.6	1162.8	1944.6	2032.8	1595.8
82.5°	76.2	96.2	112.3	168.4	216.5	224.5	232.6	292.7	733.7	809.9	669.6
85°	36.1	48.1	52.1	72.2	72.2	64.2	76.2	56.1	120.3	144.3	140.3
87.5°	0.0	4.0	8.0	20.0	16.0	12.0	12.0	12.0	12.0	16.0	12.0
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: P841372

CATALOG NUMBER: ARCH4-170-727-U-T2U-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3484.3	3484.3	3484.3	3484.3	3484.3	3484.3	3484.3	3484.3	3484.3	3484.3	3484.3
2.5°	3508.3	3456.2	3335.9	3231.7	3163.5	3103.4	3023.2	2987.1	2922.9	2935.0	2898.9
5°	3528.4	3432.1	3219.6	3023.2	2878.8	2750.5	2610.2	2530.0	2441.8	2433.8	2405.7
7.5°	3540.4	3392.0	3087.3	2810.7	2590.1	2393.7	2205.2	2101.0	1992.7	1968.7	1944.6
10°	3528.4	3331.9	2951.0	2590.1	2297.5	2052.9	1840.4	1708.1	1595.8	1567.7	1543.7
12.5°	3540.4	3299.8	2822.7	2385.7	2036.8	1760.2	1519.6	1383.3	1279.0	1251.0	1234.9
15°	3568.5	3279.8	2714.4	2201.2	1804.3	1495.5	1259.0	1142.7	1058.5	1030.4	1022.4
17.5°	3592.5	3259.7	2598.2	2020.8	1571.7	1263.0	1058.5	962.3	890.1	862.0	854.0
20°	3624.6	3231.7	2481.9	1848.4	1367.2	1078.6	898.1	813.9	757.8	737.8	733.7
22.5°	3652.7	3211.6	2373.6	1676.0	1178.8	930.2	777.8	709.7	669.6	649.5	649.5
25°	3724.8	3219.6	2281.4	1515.6	1038.5	813.9	685.6	633.5	601.4	589.4	589.4
27.5°	3809.0	3251.7	2209.2	1379.3	918.2	725.7	621.5	577.4	561.3	545.3	549.3
30°	3929.3	3315.9	2161.1	1267.0	830.0	657.6	569.4	537.3	521.2	517.2	517.2
32.5°	4081.7	3420.1	2157.1	1194.8	765.8	605.4	533.3	505.2	497.2	493.2	493.2
35°	4262.1	3512.3	2133.1	1162.8	725.7	569.4	505.2	485.2	481.1	481.1	481.1
37.5°	4478.6	3664.7	2117.0	1118.7	705.7	549.3	485.2	469.1	469.1	469.1	469.1
40°	4703.2	3789.0	2093.0	1078.6	697.7	537.3	473.1	453.1	453.1	453.1	453.1
42.5°	4971.8	3969.4	2084.9	1058.5	685.6	529.3	457.1	433.0	437.0	437.0	441.0
45°	5296.6	4173.9	2080.9	1038.5	681.6	521.2	441.0	413.0	417.0	413.0	413.0
47.5°	5625.3	4410.5	2093.0	1026.4	677.6	513.2	429.0	392.9	392.9	388.9	388.9
50°	5970.2	4627.0	2101.0	1014.4	669.6	497.2	409.0	376.9	368.9	360.9	364.9
52.5°	6294.9	4827.5	2105.0	994.4	645.5	473.1	392.9	356.8	344.8	332.8	336.8
55°	6619.7	5019.9	2113.0	970.3	613.5	449.1	372.9	336.8	320.8	304.7	304.7
57.5°	6912.4	5188.3	2093.0	910.2	577.4	425.0	352.8	312.7	288.7	272.6	272.6
60°	7112.9	5308.6	2032.8	822.0	529.3	396.9	332.8	288.7	260.6	248.6	248.6
62.5°	7209.1	5328.6	1924.6	677.6	469.1	368.9	308.7	264.6	240.6	232.6	232.6
65°	7116.9	5240.4	1756.2	509.2	405.0	336.8	284.7	244.6	220.5	200.5	200.5
67.5°	6796.1	4991.8	1523.6	384.9	344.8	304.7	260.6	224.5	196.5	180.4	180.4
70°	6150.6	4474.6	1178.8	308.7	292.7	264.6	236.6	200.5	176.4	156.4	156.4
72.5°	5304.6	3793.0	830.0	248.6	248.6	224.5	200.5	176.4	152.4	136.3	136.3
75°	4069.7	2806.7	557.3	200.5	204.5	188.4	164.4	144.3	128.3	116.3	116.3
77.5°	2221.3	1387.3	340.8	148.4	152.4	144.3	128.3	116.3	108.3	96.2	96.2
80°	1078.6	609.4	196.5	104.2	108.3	104.2	96.2	84.2	84.2	76.2	76.2
82.5°	453.1	228.5	104.2	72.2	72.2	64.2	60.1	60.1	60.1	56.1	56.1
85°	112.3	44.1	44.1	40.1	40.1	40.1	36.1	36.1	36.1	28.1	32.1
87.5°	16.0	16.0	16.0	16.0	16.0	16.0	12.0	4.0	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)