

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: P836603

Luminaire Tested: **ARCH3-50-727-U-T2R-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836603
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-50-727-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 425mA LIGHTSQUARE WITH 40 LEDS AND TYPE II ROADWAY
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6027 lumens
Efficiency: N/A
Efficacy: 112.4 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

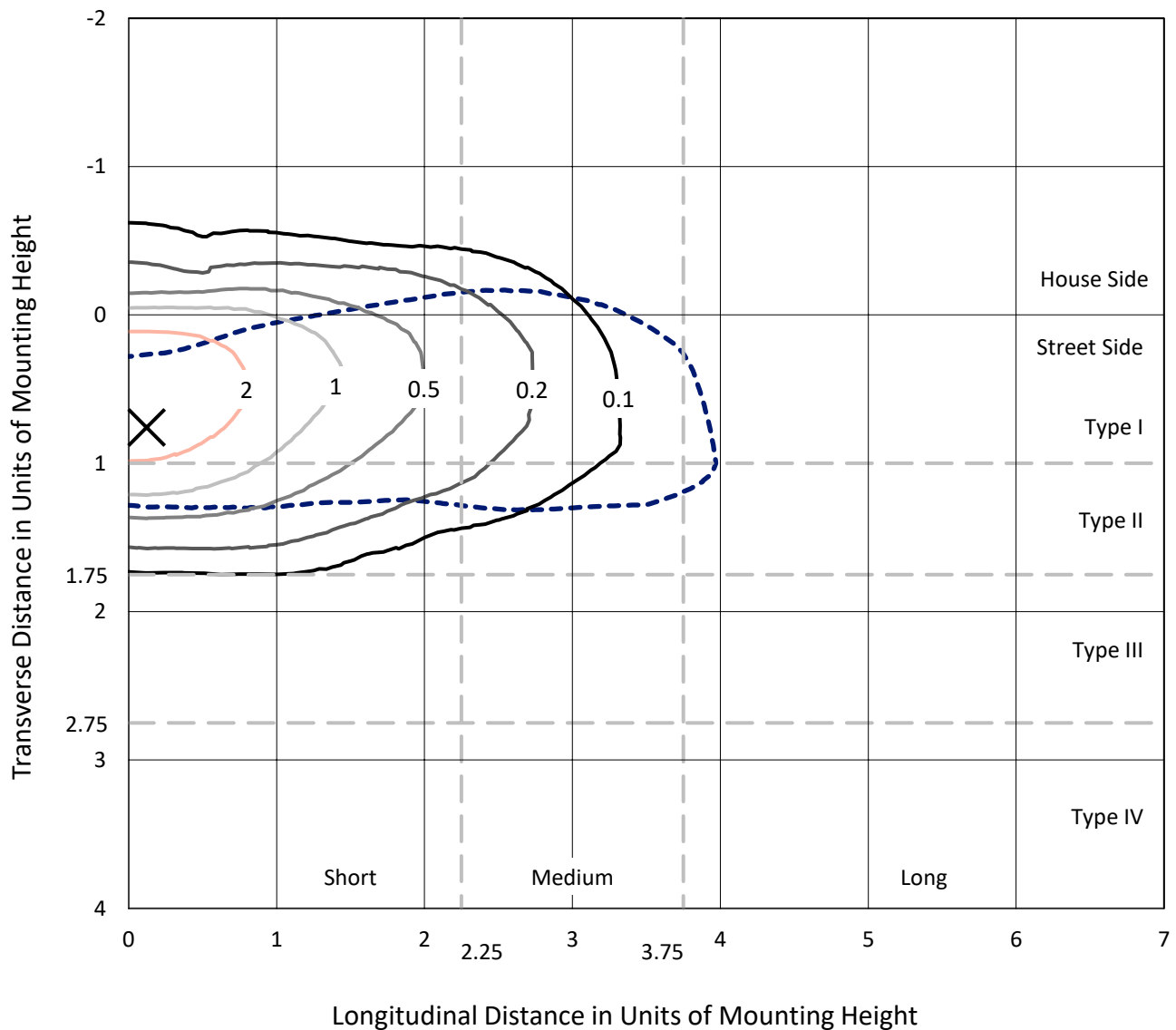
Input Watts (W): 53.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P836603
CATALOG NUMBER: ARCH3-50-727-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

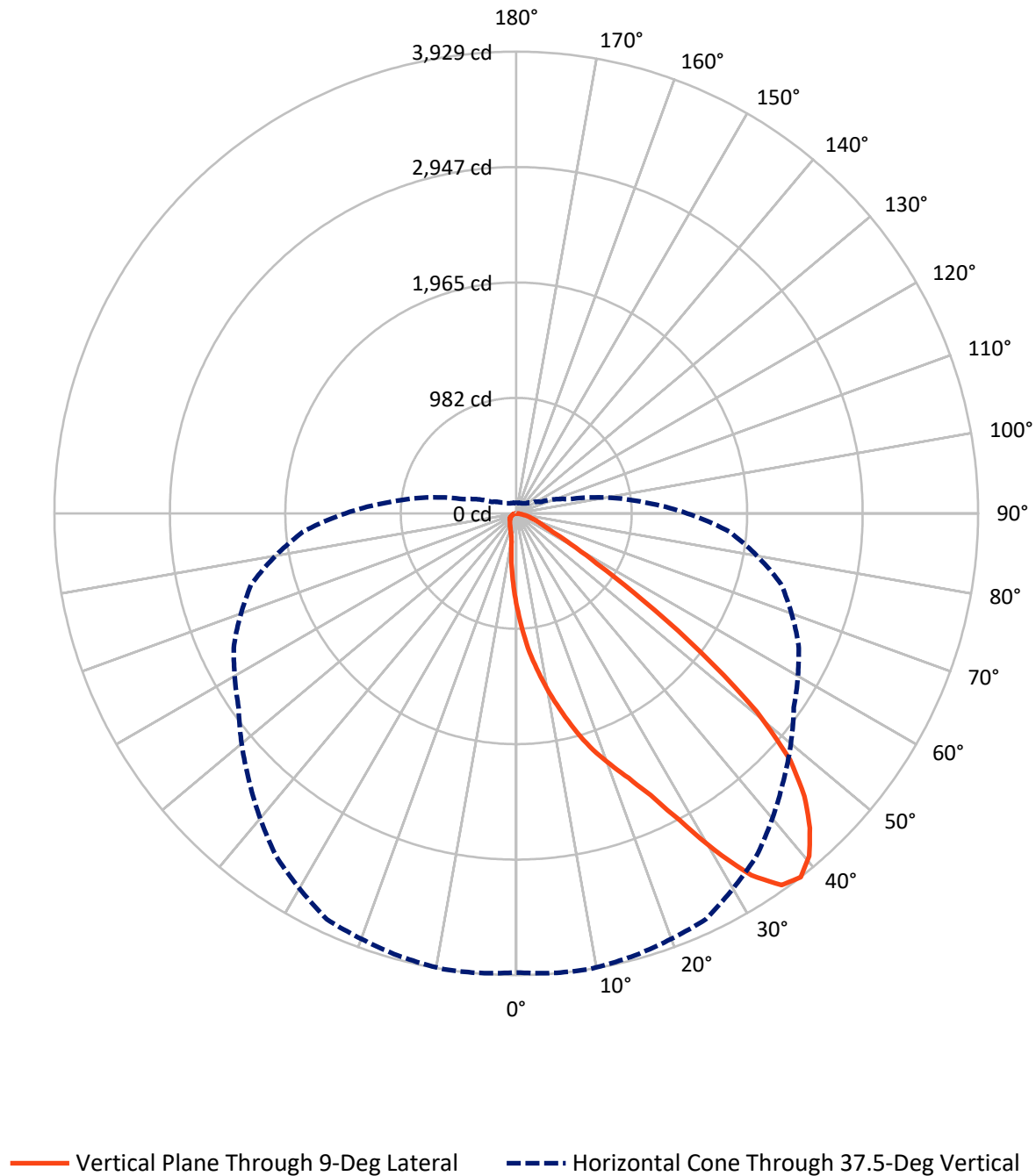
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
Type II - Short - N/A

REPORT NUMBER: P836603
CATALOG NUMBER: ARCH3-50-727-U-T2R-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P836603

CATALOG NUMBER: ARCH3-50-727-U-T2R-HSS

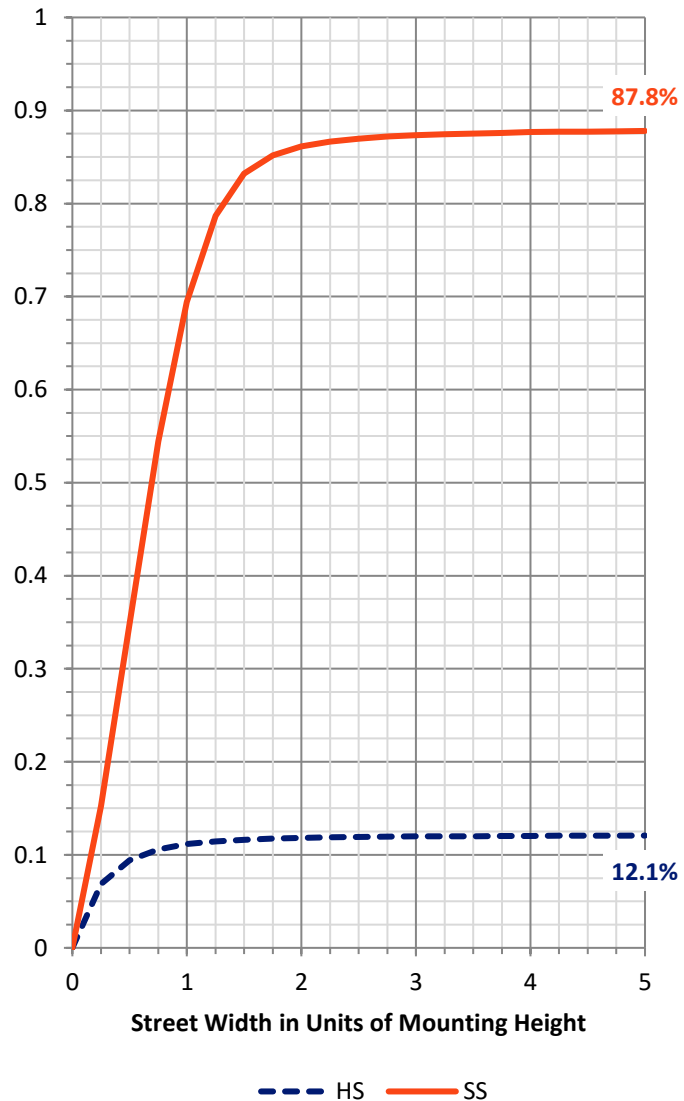
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	733.0	0.0	733.0
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	5294.0	0.0	5294.0
	% Fixture	87.8	0.0	87.8
Total	Lumens	6027.0	0.0	6027.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.1	1.3
10°-20°	278.3	4.6
20°-30°	571.9	9.5
30°-40°	1010.9	16.8
40°-50°	1342.9	22.3
50°-60°	1273.6	21.1
60°-70°	971.7	16.1
70°-80°	471.1	7.8
80°-90°	26.5	0.4
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°	6027.0	100.0
0°-180°	6027.0	100.0

Coefficient of Utilization



REPORT NUMBER: P836603

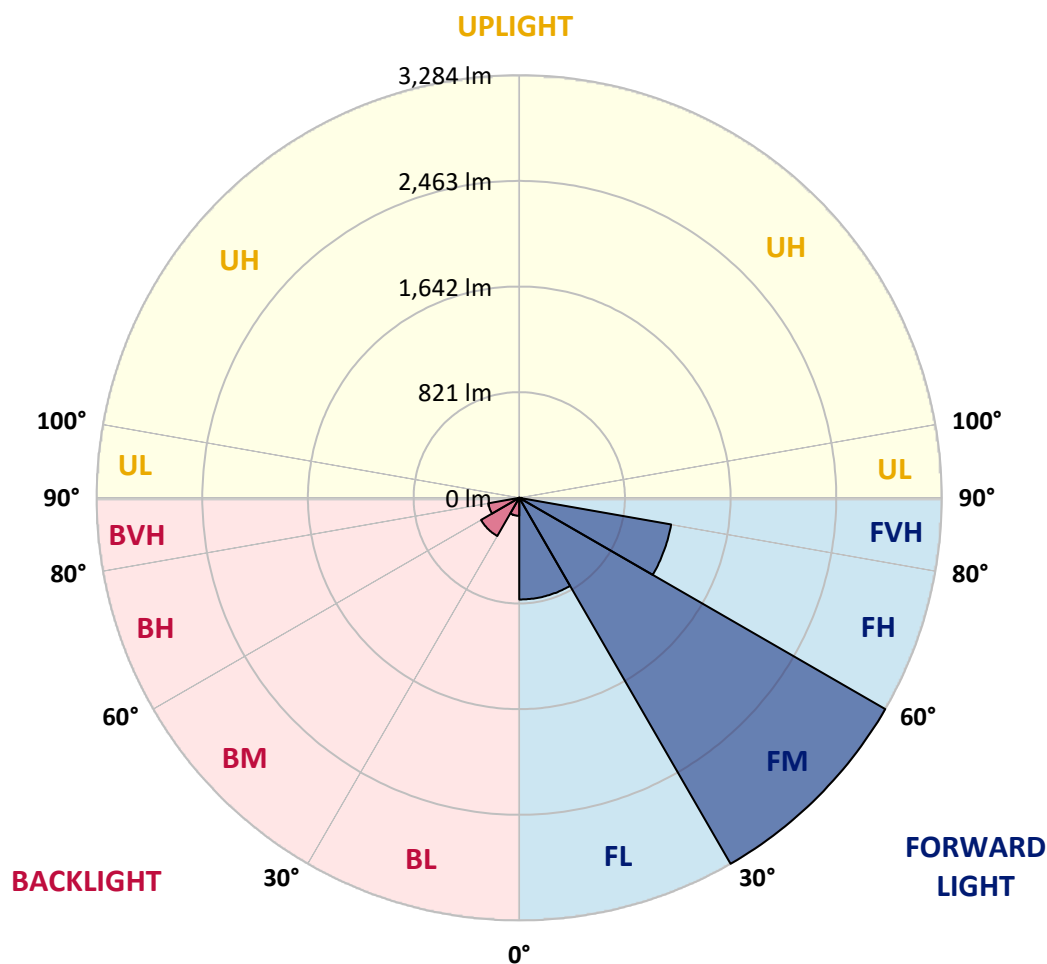
CATALOG NUMBER: ARCH3-50-727-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	790.4	13.1			
FM	(30°-60°)	3284.4	54.5			
FH	(60°-80°)	1198.1	19.9			G1/1800
FVH	(80°-90°)	21.0	0.3			G1/100
BL	(0°-30°)	139.9	2.3	B1/500		
BM	(30°-60°)	343.0	5.7	B1/1000		
BH	(60°-80°)	244.6	4.1	B1/500		G1/500
BVH	(80°-90°)	5.5	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short



REPORT NUMBER: P836603

CATALOG NUMBER: ARCH3-50-727-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	796.7	796.7	796.7	796.7	796.7	796.7	796.7	796.7	796.7	796.7	796.7
2.5°	987.2	969.9	989.7	987.2	969.9	958.8	924.1	913.0	872.2	842.5	816.5
5°	1190.1	1172.8	1190.1	1185.1	1160.4	1133.2	1076.3	1039.2	966.2	901.9	843.7
7.5°	1358.3	1358.3	1365.8	1367.0	1337.3	1295.3	1224.7	1169.1	1066.4	967.4	874.6
10°	1540.2	1541.4	1557.5	1546.4	1506.8	1449.9	1360.8	1290.3	1166.6	1036.7	904.3
12.5°	1734.4	1735.7	1740.6	1735.7	1688.7	1615.7	1508.0	1415.2	1273.0	1115.9	945.1
15°	1928.6	1929.9	1936.1	1927.4	1875.5	1790.1	1667.6	1553.8	1385.6	1204.9	994.6
17.5°	2110.5	2113.0	2117.9	2106.8	2052.4	1950.9	1826.0	1688.7	1505.6	1300.2	1050.3
20°	2273.8	2276.3	2280.0	2265.1	2210.7	2109.3	1974.4	1830.9	1628.0	1397.9	1110.9
22.5°	2438.3	2440.8	2447.0	2427.2	2366.6	2250.3	2117.9	1969.5	1757.9	1505.6	1181.4
25°	2648.6	2651.1	2656.1	2627.6	2544.7	2408.6	2268.9	2116.7	1899.0	1626.8	1268.0
27.5°	2956.7	2954.2	2954.2	2902.3	2760.0	2583.1	2421.0	2266.4	2051.1	1756.7	1363.3
30°	3337.7	3331.5	3327.8	3257.3	3054.4	2779.8	2576.9	2406.2	2197.1	1894.0	1466.0
32.5°	3679.2	3679.2	3671.7	3597.5	3382.2	3044.5	2742.7	2542.3	2338.1	2032.6	1572.4
35°	3880.8	3889.5	3885.8	3830.1	3673.0	3329.1	2966.6	2705.6	2486.6	2177.3	1699.8
37.5°	3908.0	3925.3	3929.0	3895.6	3812.8	3561.6	3215.2	2882.5	2649.9	2333.2	1823.5
40°	3797.9	3835.0	3835.0	3830.1	3800.4	3671.7	3424.3	3087.8	2818.1	2495.2	1948.4
42.5°	3628.4	3666.8	3661.8	3680.4	3673.0	3645.8	3541.8	3279.6	2986.4	2662.3	2062.3
45°	3407.0	3446.6	3436.7	3470.1	3484.9	3514.6	3529.5	3413.2	3152.1	2844.1	2189.7
47.5°	3051.9	3118.7	3133.6	3193.0	3254.8	3347.6	3418.1	3461.4	3306.8	3039.6	2328.2
50°	2527.4	2621.4	2651.1	2776.1	2945.6	3137.3	3251.1	3402.0	3415.7	3240.0	2477.9
52.5°	1809.9	1918.8	1964.5	2169.9	2518.7	2852.8	3058.1	3270.9	3457.7	3431.7	2640.0
55°	1170.3	1263.1	1307.6	1500.6	1964.5	2489.1	2830.5	3101.4	3434.2	3607.4	2825.6
57.5°	721.2	774.4	804.1	969.9	1396.7	2022.7	2532.4	2945.6	3362.5	3759.6	3018.5
60°	486.2	517.1	532.0	609.9	948.9	1511.7	2122.9	2782.3	3268.4	3862.2	3194.2
62.5°	322.9	332.8	347.6	395.9	626.0	1061.4	1630.5	2490.3	3197.9	3868.4	3324.1
65°	249.9	254.8	261.0	282.1	386.0	742.3	1146.8	2017.7	3092.8	3737.3	3364.9
67.5°	196.7	201.6	209.1	220.2	279.6	503.5	780.6	1478.3	2877.5	3531.9	3298.1
70°	154.6	158.3	163.3	173.2	217.7	364.9	515.9	982.3	2443.3	3336.5	3087.8
72.5°	122.5	126.2	131.1	141.0	176.9	267.2	353.8	612.4	1884.1	3097.7	2683.3
75°	96.5	99.0	102.7	112.6	142.3	207.8	240.0	366.2	1280.4	2661.0	2090.7
77.5°	48.2	59.4	68.0	77.9	103.9	143.5	159.6	202.9	540.6	1365.8	997.1
80°	28.5	34.6	37.1	43.3	68.0	86.6	86.6	81.6	170.7	524.5	407.0
82.5°	16.1	22.3	23.5	24.7	40.8	49.5	39.6	29.7	34.6	175.7	118.8
85°	4.9	7.4	8.7	9.9	13.6	14.8	13.6	12.4	9.9	17.3	11.1
87.5°	0.0	0.0	0.0	0.0	1.2	2.5	2.5	2.5	3.7	3.7	3.7
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: P836603

CATALOG NUMBER: ARCH3-50-727-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	796.7	796.7	796.7	796.7	796.7	796.7	796.7	796.7	796.7	796.7	796.7
2.5°	801.6	785.6	754.6	726.2	699.0	679.2	660.6	643.3	630.9	621.0	619.8
5°	812.8	780.6	721.2	665.6	614.8	572.8	536.9	508.5	487.4	472.6	471.3
7.5°	827.6	778.1	687.8	604.9	529.5	468.9	416.9	378.6	351.3	340.2	331.5
10°	840.0	775.7	654.4	544.3	445.4	368.7	306.8	268.5	248.7	241.2	237.5
12.5°	861.0	778.1	626.0	488.7	372.4	282.1	235.1	214.0	205.4	199.2	197.9
15°	892.0	789.3	598.8	434.2	298.1	227.6	200.4	186.8	178.1	176.9	175.7
17.5°	922.9	799.2	574.0	378.6	247.4	197.9	179.4	168.2	162.1	160.8	160.8
20°	958.8	811.5	546.8	325.4	211.5	178.1	163.3	154.6	147.2	146.0	146.0
22.5°	1000.8	828.9	520.8	278.3	188.0	163.3	150.9	141.0	134.8	133.6	133.6
25°	1057.7	854.8	499.8	243.7	172.0	150.9	139.8	131.1	126.2	123.7	123.7
27.5°	1120.8	890.7	484.9	222.7	160.8	141.0	129.9	122.5	117.5	115.1	115.1
30°	1191.3	930.3	475.0	214.0	154.6	132.4	122.5	115.1	108.9	107.6	107.6
32.5°	1269.3	976.1	468.9	215.3	153.4	126.2	115.1	107.6	102.7	100.2	100.2
35°	1355.9	1026.8	465.2	222.7	155.9	121.2	108.9	101.4	96.5	94.0	94.0
37.5°	1452.4	1086.2	465.2	230.1	162.1	120.0	102.7	95.3	91.5	89.1	89.1
40°	1542.7	1149.3	470.1	238.8	168.2	120.0	97.7	91.5	86.6	84.1	84.1
42.5°	1613.2	1185.1	473.8	247.4	172.0	118.8	92.8	86.6	82.9	80.4	80.4
45°	1693.6	1223.5	466.4	251.1	172.0	116.3	89.1	82.9	79.2	76.7	76.7
47.5°	1782.7	1270.5	465.2	253.6	168.2	111.3	85.4	79.2	76.7	74.2	74.2
50°	1873.0	1322.5	467.6	252.4	163.3	103.9	80.4	76.7	73.0	70.5	70.5
52.5°	1975.7	1376.9	472.6	249.9	152.2	95.3	76.7	73.0	69.3	66.8	65.6
55°	2089.5	1436.3	482.5	244.9	137.3	86.6	73.0	69.3	64.3	61.9	60.6
57.5°	2220.6	1509.3	493.6	235.1	121.2	79.2	69.3	64.3	56.9	53.2	52.0
60°	2345.6	1592.2	506.0	211.5	105.2	71.8	65.6	58.1	50.7	48.2	47.0
62.5°	2463.1	1673.8	512.2	169.5	89.1	65.6	61.9	53.2	45.8	43.3	42.1
65°	2538.5	1762.9	498.6	115.1	73.0	60.6	56.9	49.5	42.1	38.4	38.4
67.5°	2543.5	1804.9	451.5	75.5	59.4	54.4	52.0	44.5	37.1	34.6	33.4
70°	2418.5	1741.8	345.2	59.4	49.5	47.0	47.0	39.6	32.2	29.7	28.5
72.5°	2131.5	1542.7	220.2	48.2	42.1	39.6	39.6	33.4	28.5	24.7	23.5
75°	1682.5	1190.1	117.5	39.6	34.6	33.4	30.9	27.2	23.5	21.0	19.8
77.5°	773.2	524.5	54.4	28.5	26.0	26.0	23.5	19.8	18.6	16.1	16.1
80°	305.6	178.1	27.2	18.6	17.3	17.3	17.3	13.6	13.6	11.1	9.9
82.5°	84.1	37.1	13.6	11.1	11.1	11.1	9.9	8.7	8.7	7.4	7.4
85°	8.7	6.2	6.2	6.2	6.2	4.9	4.9	3.7	2.5	2.5	2.5
87.5°	3.7	3.7	3.7	3.7	3.7	2.5	1.2	0.0	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)