

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: P842667

Luminaire Tested: **ARCH4-80-727-U-T2R**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842667
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-80-727-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 685mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13975 lumens
Efficiency: N/A
Efficacy: 167.6 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

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



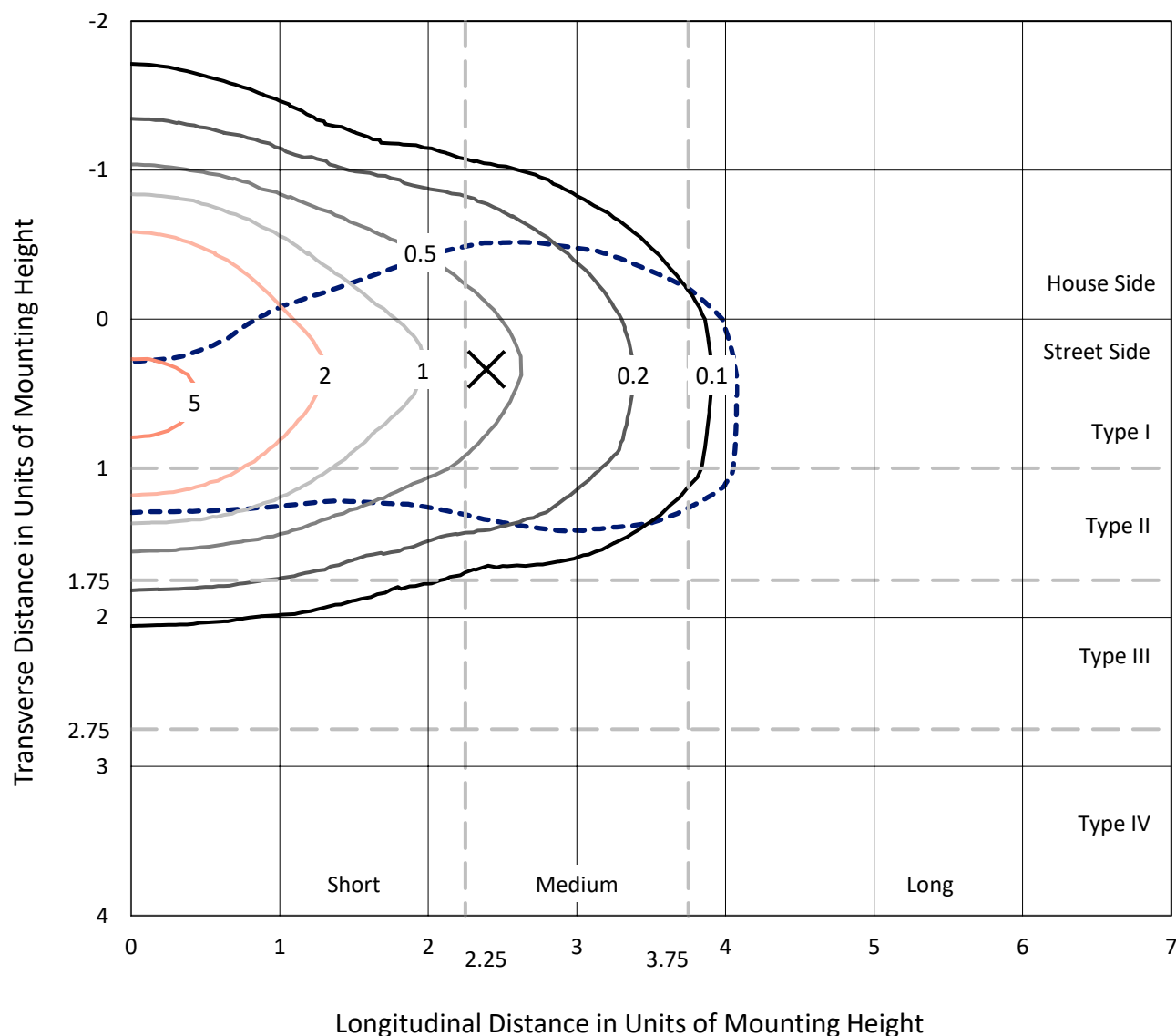
REPORT NUMBER: P842667

CATALOG NUMBER: ARCH4-80-727-U-T2R

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

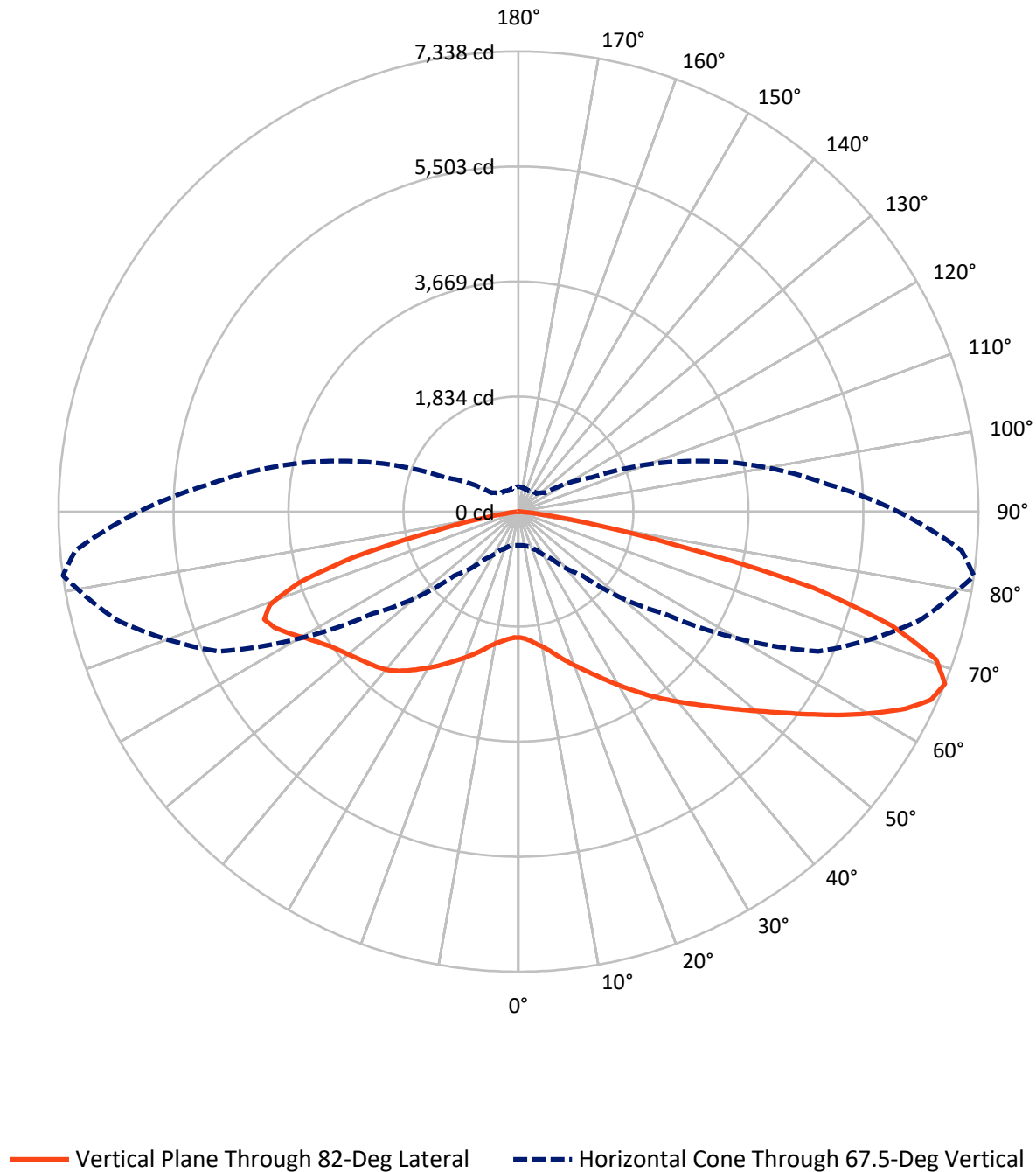
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 fc
Type II - Medium - N/A

REPORT NUMBER: P842667
CATALOG NUMBER: ARCH4-80-727-U-T2R

Luminous Intensity Polar Plot



REPORT NUMBER: P842667

CATALOG NUMBER: ARCH4-80-727-U-T2R

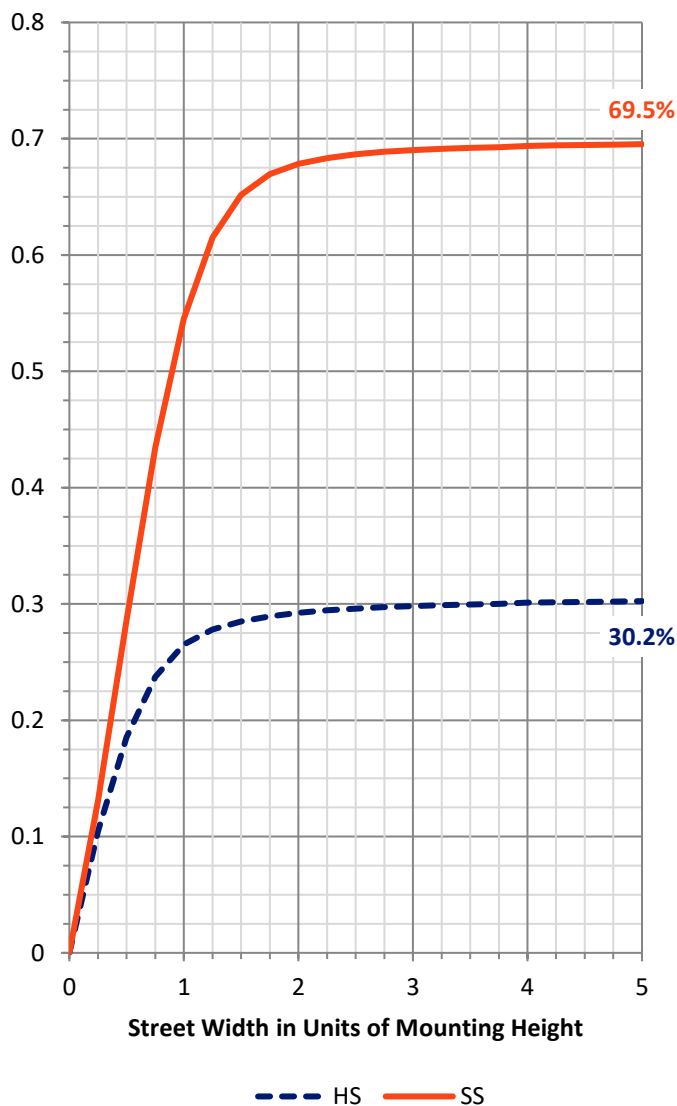
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4256.0	0.0	4256.0
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	9719.0	0.0	9719.0
	% Fixture	69.5	0.0	69.5
Total	Lumens	13975.0	0.0	13975.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	207.6	1.5
10°-20°	747.8	5.4
20°-30°	1502.9	10.8
30°-40°	2360.9	16.9
40°-50°	2876.1	20.6
50°-60°	2717.5	19.4
60°-70°	2244.1	16.1
70°-80°	1222.0	8.7
80°-90°	96.1	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°	13975.0	100.0
0°-180°	13975.0	100.0

Coefficient of Utilization



REPORT NUMBER: P842667

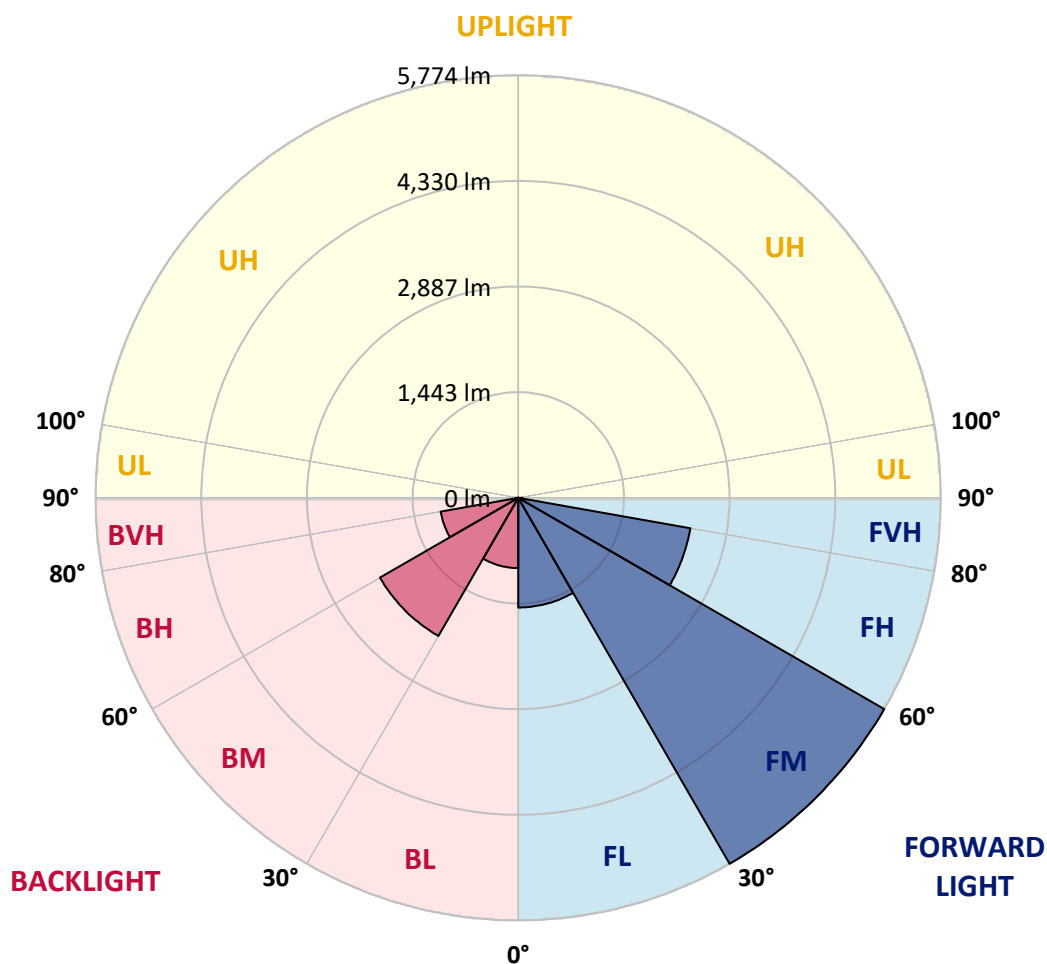
CATALOG NUMBER: ARCH4-80-727-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1498.6	10.7			
FM	(30°-60°)	5773.7	41.3			
FH	(60°-80°)	2388.8	17.1			G2/5000
FVH	(80°-90°)	57.9	0.4			G1/100
BL	(0°-30°)	959.7	6.9	B2/1000		
BM	(30°-60°)	2180.8	15.6	B2/2500		
BH	(60°-80°)	1077.2	7.7	B3/2500		G3/2500
BVH	(80°-90°)	38.2	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



REPORT NUMBER: P842667

CATALOG NUMBER: ARCH4-80-727-U-T2R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	2008.9	2008.9	2008.9	2008.9	2008.9	2008.9	2008.9	2008.9	2008.9	2008.9	2008.9
2.5°	2100.2	2100.2	2116.4	2116.4	2102.2	2079.9	2073.8	2049.5	2027.2	2027.2	2029.2
5°	2301.1	2299.1	2311.2	2295.0	2260.5	2215.9	2185.4	2132.7	2088.0	2073.8	2071.8
7.5°	2546.6	2544.6	2550.7	2524.3	2459.4	2386.3	2325.5	2240.2	2167.2	2136.7	2128.6
10°	2820.6	2818.5	2812.5	2767.8	2680.6	2566.9	2475.6	2357.9	2248.3	2199.6	2189.5
12.5°	3135.1	3131.0	3116.8	3051.9	2932.2	2786.1	2654.2	2502.0	2355.9	2288.9	2266.6
15°	3486.2	3480.1	3453.7	3374.5	3214.2	3029.6	2859.1	2664.3	2485.8	2398.5	2368.1
17.5°	3855.5	3855.5	3814.9	3697.2	3518.6	3289.3	3078.3	2830.7	2621.7	2514.2	2477.6
20°	4230.9	4228.8	4178.1	4036.1	3825.0	3561.2	3293.4	3021.5	2761.7	2631.9	2587.2
22.5°	4626.6	4622.5	4559.6	4397.3	4145.6	3847.3	3534.9	3210.2	2915.9	2759.7	2702.9
25°	5081.1	5075.0	4997.9	4799.0	4500.7	4163.9	3806.8	3431.4	3092.5	2901.7	2834.8
27.5°	5564.0	5555.9	5464.6	5233.3	4906.6	4500.7	4107.1	3687.0	3287.3	3060.0	2984.9
30°	5994.2	5988.1	5888.7	5651.3	5275.9	4835.6	4393.2	3942.7	3492.2	3228.4	3135.1
32.5°	6318.9	6318.9	6229.6	5996.3	5606.7	5156.2	4681.3	4184.2	3705.3	3409.0	3299.5
35°	6515.7	6521.8	6444.7	6258.0	5890.7	5458.5	4979.6	4468.3	3932.6	3601.8	3484.1
37.5°	6544.1	6564.4	6519.8	6394.0	6087.6	5710.1	5271.8	4742.2	4168.0	3796.6	3664.7
40°	6412.2	6426.4	6428.5	6379.8	6168.7	5890.7	5529.5	5032.4	4417.5	4001.6	3849.4
42.5°	6148.4	6158.6	6176.9	6191.1	6109.9	5969.9	5726.4	5302.3	4683.4	4210.6	4032.0
45°	5807.5	5805.5	5836.0	5896.8	5892.8	5925.2	5836.0	5547.8	4959.3	4448.0	4234.9
47.5°	5298.2	5288.1	5395.6	5533.6	5602.6	5754.8	5838.0	5740.6	5259.7	4709.8	4466.2
50°	4500.7	4490.6	4726.0	5050.7	5253.6	5484.9	5726.4	5856.2	5574.2	5004.0	4717.9
52.5°	3530.8	3520.6	3818.9	4387.1	4829.5	5166.3	5501.1	5882.6	5872.5	5332.7	5002.0
55°	2625.8	2617.7	2907.8	3522.7	4239.0	4797.0	5225.2	5813.6	6152.5	5710.1	5346.9
57.5°	1850.6	1846.6	2098.2	2607.5	3480.1	4346.5	4959.3	5679.7	6410.2	6120.0	5736.5
60°	1298.7	1292.6	1475.2	1868.9	2631.9	3666.7	4695.5	5501.1	6603.0	6523.8	6150.5
62.5°	874.6	870.5	1000.4	1329.1	1868.9	2822.6	4295.8	5381.4	6712.6	6929.7	6568.5
65°	663.5	661.5	720.4	901.0	1323.0	2027.2	3660.7	5367.2	6726.8	7234.1	6923.6
67.5°	535.7	537.7	570.2	673.7	915.2	1440.7	2838.8	5277.9	6651.7	7337.6	7096.1
70°	438.3	438.3	452.5	521.5	675.7	972.0	1982.5	4872.1	6442.7	7067.7	6891.1
72.5°	334.8	336.8	381.5	422.1	509.3	681.8	1270.3	4032.0	5949.6	6231.6	6097.7
75°	265.8	263.8	290.2	347.0	395.7	487.0	779.2	2891.6	5062.8	4870.1	4784.8
77.5°	190.7	188.7	209.0	257.7	300.3	345.0	464.7	1459.0	2753.6	2530.4	2467.5
80°	129.9	125.8	144.1	178.6	198.9	202.9	227.3	560.1	1201.3	1132.3	1118.1
82.5°	67.0	67.0	77.1	101.5	103.5	105.5	101.5	180.6	397.7	371.3	355.1
85°	26.4	26.4	28.4	34.5	34.5	36.5	36.5	46.7	42.6	40.6	38.6
87.5°	2.0	2.0	4.1	4.1	6.1	6.1	6.1	8.1	10.1	10.1	10.1
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: P842667

CATALOG NUMBER: ARCH4-80-727-U-T2R

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2008.9	2008.9	2008.9	2008.9	2008.9	2008.9	2008.9	2008.9	2008.9	2008.9	2008.9
2.5°	2025.1	2017.0	1990.6	1984.5	1980.5	1974.4	1976.4	1962.2	1956.1	1958.2	1950.1
5°	2061.7	2047.5	2015.0	2000.8	1996.7	1990.6	1996.7	1986.6	1976.4	1980.5	1976.4
7.5°	2112.4	2092.1	2051.5	2037.3	2035.3	2029.2	2037.3	2029.2	2021.1	2025.1	2017.0
10°	2165.1	2138.8	2094.1	2079.9	2079.9	2077.9	2086.0	2073.8	2065.7	2067.7	2063.7
12.5°	2242.3	2207.8	2159.1	2146.9	2140.8	2146.9	2148.9	2132.7	2118.5	2120.5	2114.4
15°	2335.6	2297.0	2244.3	2226.0	2222.0	2219.9	2211.8	2191.5	2173.3	2171.2	2165.1
17.5°	2437.1	2388.4	2325.5	2307.2	2288.9	2282.8	2262.5	2236.2	2207.8	2207.8	2199.6
20°	2534.5	2479.7	2404.6	2378.2	2351.8	2327.5	2293.0	2250.4	2213.8	2207.8	2199.6
22.5°	2640.0	2575.0	2487.8	2449.2	2402.6	2353.9	2295.0	2238.2	2191.5	2181.4	2175.3
25°	2757.7	2676.5	2573.0	2516.2	2441.1	2366.0	2278.8	2205.7	2150.9	2134.7	2130.7
27.5°	2887.5	2790.1	2664.3	2581.1	2471.6	2353.9	2242.3	2155.0	2088.0	2067.7	2061.7
30°	3019.4	2903.8	2747.5	2625.8	2471.6	2315.3	2175.3	2073.8	1996.7	1968.3	1964.3
32.5°	3151.3	3021.5	2822.6	2650.1	2447.2	2250.4	2088.0	1968.3	1881.1	1846.6	1854.7
35°	3309.6	3151.3	2891.6	2660.3	2406.6	2171.2	1988.6	1848.6	1759.3	1728.9	1735.0
37.5°	3474.0	3281.2	2946.4	2652.2	2349.8	2081.9	1877.0	1741.0	1629.4	1576.7	1582.8
40°	3616.0	3398.9	2984.9	2623.7	2276.8	1980.5	1767.4	1588.9	1434.6	1383.9	1377.8
42.5°	3749.9	3486.2	3005.2	2581.1	2193.6	1862.8	1611.2	1381.9	1227.7	1164.8	1166.8
45°	3890.0	3571.4	2997.1	2524.3	2090.1	1724.8	1410.3	1179.0	1043.0	986.2	988.2
47.5°	4050.3	3662.7	2989.0	2463.4	1964.3	1546.2	1217.5	1000.4	882.7	842.1	838.1
50°	4220.7	3764.1	2978.9	2388.4	1824.2	1347.4	1026.8	834.0	734.6	708.2	702.1
52.5°	4413.5	3873.7	2972.8	2299.1	1655.8	1136.3	856.3	687.9	620.9	602.7	600.6
55°	4644.8	4001.6	2980.9	2191.5	1452.9	937.5	712.2	592.5	547.9	537.7	535.7
57.5°	4926.9	4165.9	3005.2	2065.7	1239.8	765.0	606.7	533.7	505.3	497.2	497.2
60°	5233.3	4352.6	3049.9	1923.7	1026.8	631.1	537.7	487.0	474.8	485.0	485.0
62.5°	5564.0	4571.8	3129.0	1751.2	827.9	533.7	482.9	448.5	440.3	460.6	462.7
65°	5870.4	4784.8	3179.7	1544.2	657.5	462.7	440.3	409.9	414.0	434.2	432.2
67.5°	6059.2	4961.4	3108.7	1284.5	521.5	409.9	395.7	369.3	379.5	395.7	397.7
70°	5943.5	4861.9	2757.7	970.0	407.9	357.1	347.0	330.8	338.9	359.2	367.3
72.5°	5377.4	4354.6	2144.9	655.4	328.7	300.3	304.4	296.3	306.4	324.7	342.9
75°	4364.8	3291.3	1438.7	420.0	259.7	255.7	261.8	255.7	259.7	278.0	288.1
77.5°	2278.8	1605.1	716.3	261.8	192.8	198.9	209.0	211.0	223.2	227.3	231.3
80°	1063.3	722.4	298.3	146.1	127.8	140.0	160.3	162.3	166.4	172.5	174.5
82.5°	347.0	217.1	138.0	79.1	73.1	79.1	103.5	123.8	125.8	138.0	138.0
85°	36.5	22.3	30.4	32.5	28.4	34.5	46.7	44.6	20.3	12.2	12.2
87.5°	10.1	8.1	10.1	10.1	8.1	8.1	6.1	2.0	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)