

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: P836609

Luminaire Tested: **ARCH3-50-727-U-T4W-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836609
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-50-727-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 425mA LIGHTSQUARE WITH 40 LEDS AND TYPE IV WIDE OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5841 lumens
Efficiency: N/A
Efficacy: 109.0 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type III - 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



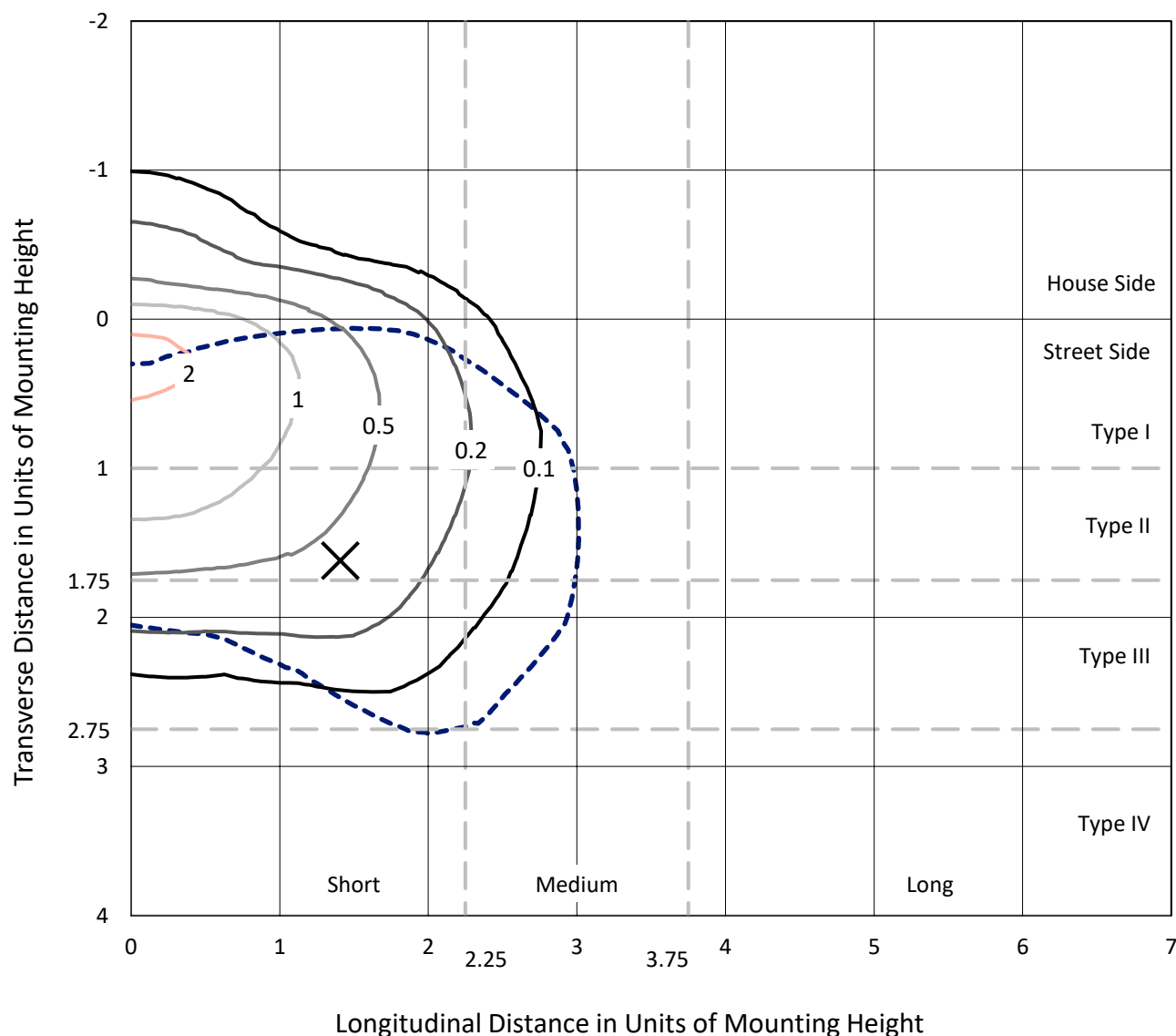
REPORT NUMBER: P836609

CATALOG NUMBER: ARCH3-50-727-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

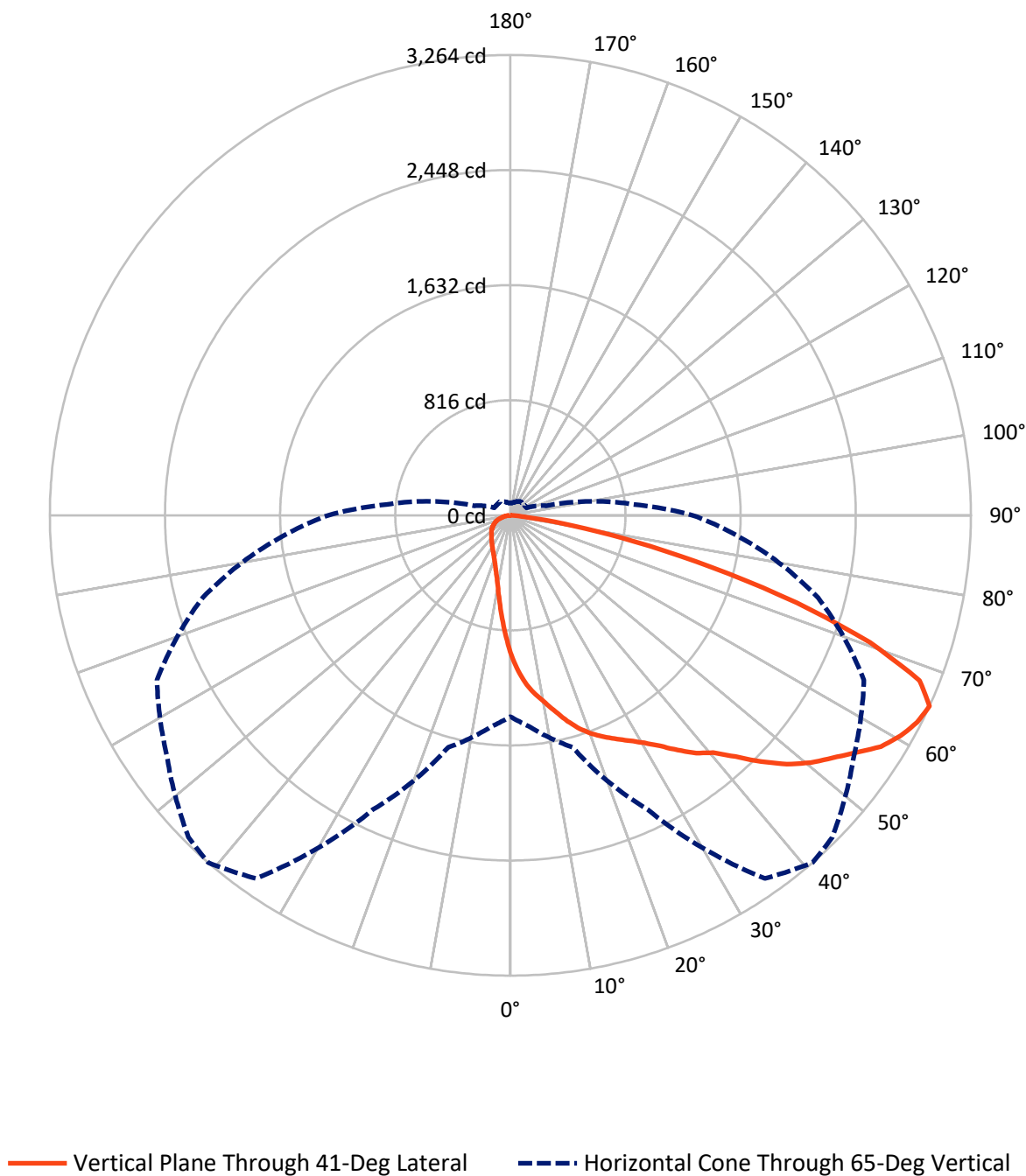


Based on 25 foot mounting height. Maximum calculated value = 2.3 fc

Type III - Short - N/A

REPORT NUMBER: P836609
CATALOG NUMBER: ARCH3-50-727-U-T4W-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P836609

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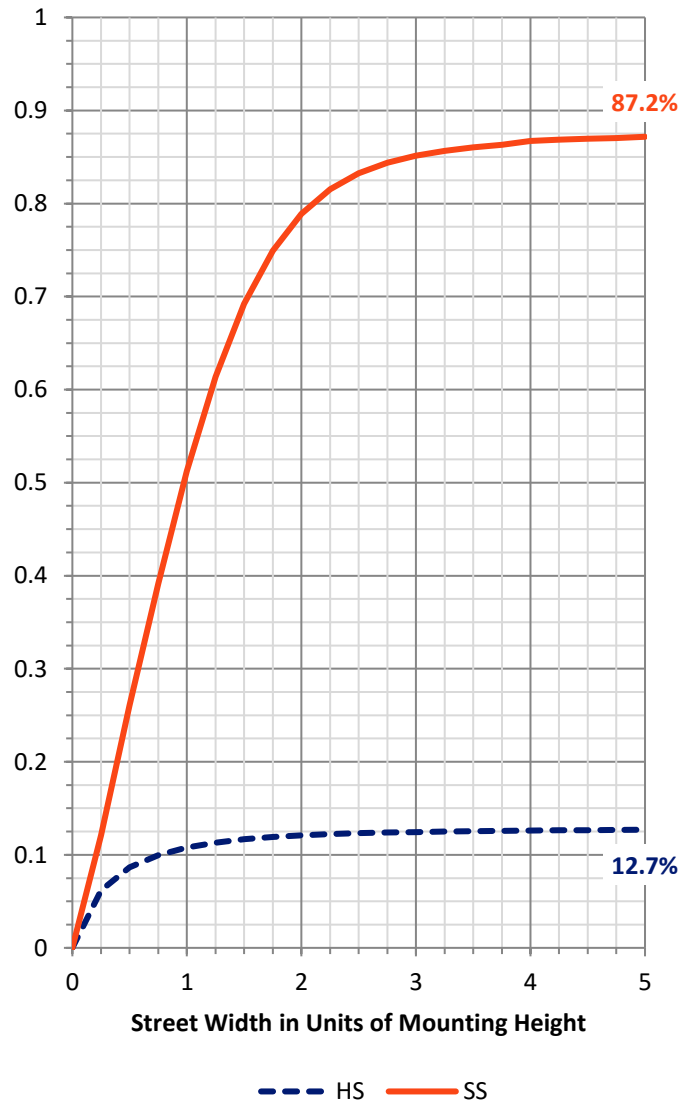
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	749.9	0.0	749.9
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	5091.1	0.0	5091.1
	% Fixture	87.2	0.0	87.2
Total	Lumens	5841.0	0.0	5841.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.7	1.6
10°-20°	278.1	4.8
20°-30°	478.4	8.2
30°-40°	725.5	12.4
40°-50°	1062.9	18.2
50°-60°	1342.2	23.0
60°-70°	1258.6	21.5
70°-80°	561.0	9.6
80°-90°	41.6	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°	5841.0	100.0
0°-180°	5841.0	100.0

Coefficient of Utilization



REPORT NUMBER: P836609

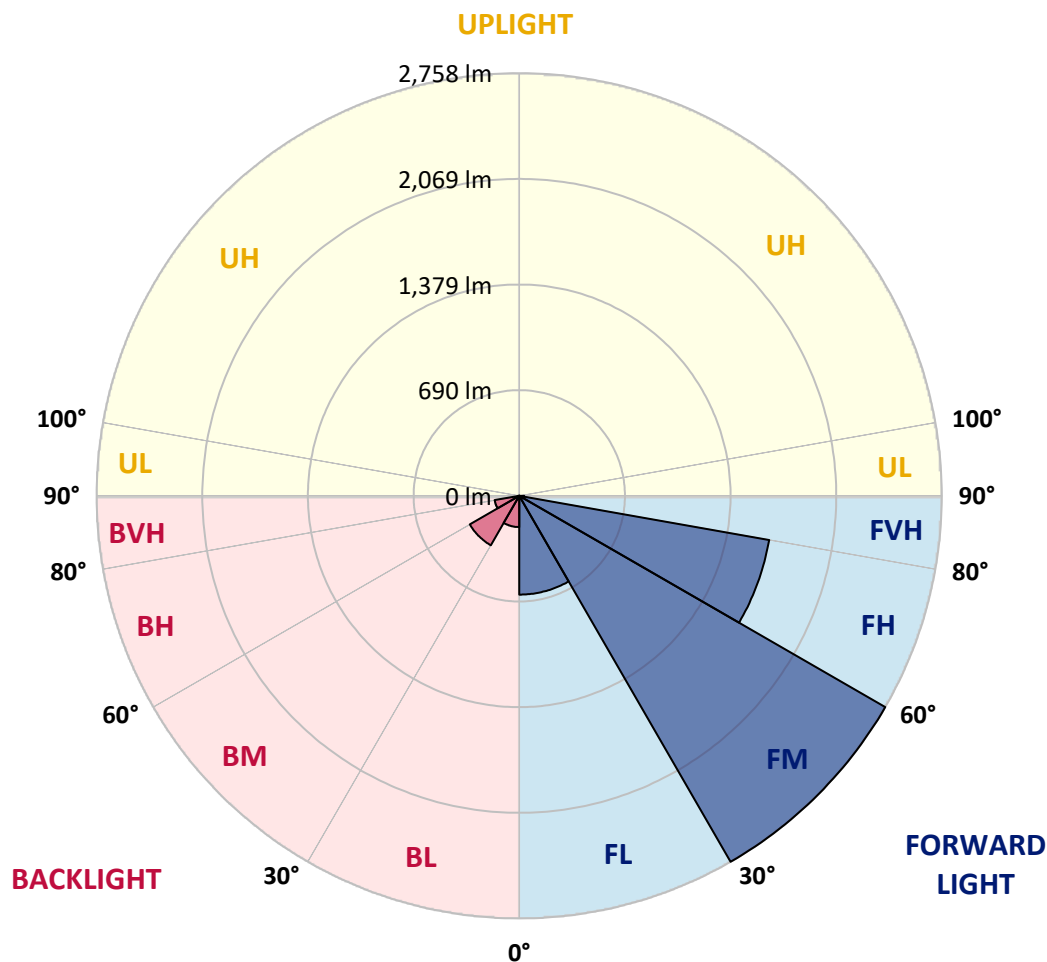
CATALOG NUMBER: ARCH3-50-727-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	645.1	11.0			
FM	(30°-60°)	2758.4	47.2			
FH	(60°-80°)	1656.7	28.4			G1/1800
FVH	(80°-90°)	31.0	0.5			G1/100
BL	(0°-30°)	204.1	3.5	B1/500		
BM	(30°-60°)	372.4	6.4	B1/1000		
BH	(60°-80°)	162.9	2.8	B1/500		G1/500
BVH	(80°-90°)	10.5	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-G1

Type III Short



REPORT NUMBER: P836609

CATALOG NUMBER: ARCH3-50-727-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	995.3	995.3	995.3	995.3	995.3	995.3	995.3	995.3	995.3	995.3	995.3
2.5°	1148.0	1144.3	1141.9	1128.3	1128.3	1109.8	1111.1	1093.8	1072.9	1039.6	1003.9
5°	1256.4	1251.5	1245.3	1231.8	1226.8	1208.4	1205.9	1181.3	1145.6	1087.7	1023.6
7.5°	1351.3	1346.3	1337.7	1318.0	1304.5	1282.3	1276.1	1244.1	1204.7	1133.2	1043.3
10°	1437.5	1433.8	1422.7	1398.1	1379.6	1352.5	1341.4	1298.3	1249.0	1170.2	1059.3
12.5°	1524.9	1520.0	1505.2	1484.3	1462.1	1430.1	1416.5	1361.1	1298.3	1210.8	1082.7
15°	1606.2	1598.8	1587.8	1565.6	1545.9	1515.1	1500.3	1435.0	1358.7	1256.4	1113.5
17.5°	1659.2	1653.0	1643.2	1630.9	1614.9	1591.5	1576.7	1512.6	1419.0	1300.8	1145.6
20°	1691.2	1688.8	1685.1	1677.7	1670.3	1654.3	1643.2	1582.8	1484.3	1343.9	1176.3
22.5°	1715.9	1713.4	1712.2	1712.2	1713.4	1707.2	1699.9	1648.1	1547.1	1389.4	1204.7
25°	1754.1	1752.8	1750.4	1747.9	1756.5	1757.7	1755.3	1719.6	1625.9	1449.8	1240.4
27.5°	1807.0	1803.3	1798.4	1795.9	1804.6	1810.7	1815.6	1791.0	1709.7	1511.4	1281.0
30°	1888.3	1877.2	1864.9	1856.3	1862.4	1872.3	1883.4	1868.6	1795.9	1587.8	1322.9
32.5°	1984.4	1970.8	1942.5	1926.5	1942.5	1949.9	1958.5	1951.1	1885.9	1670.3	1364.8
35°	2101.4	2085.4	2055.8	2032.4	2060.8	2044.7	2041.1	2033.7	1970.8	1751.6	1411.6
37.5°	2296.0	2272.6	2225.8	2174.1	2174.1	2139.6	2126.0	2103.9	2047.2	1824.3	1457.2
40°	2521.4	2490.7	2430.3	2353.9	2283.7	2212.3	2203.6	2187.6	2137.1	1908.0	1508.9
42.5°	2769.0	2709.9	2626.1	2533.8	2420.4	2339.1	2319.4	2273.9	2224.6	1993.0	1560.7
45°	3043.7	2920.5	2798.6	2751.8	2564.6	2490.7	2453.7	2371.2	2315.7	2081.7	1614.9
47.5°	3088.1	2992.0	2910.7	2903.3	2698.8	2637.2	2595.4	2477.1	2414.3	2176.6	1671.5
50°	3063.4	3005.5	3014.2	2984.6	2797.4	2756.7	2724.7	2590.4	2511.6	2267.7	1723.3
52.5°	2960.0	2992.0	3041.3	2987.1	2891.0	2857.7	2841.7	2712.4	2602.7	2351.5	1770.1
55°	2836.8	2859.0	2964.9	3031.4	2999.4	2969.8	2955.0	2854.0	2692.7	2421.7	1813.2
57.5°	2656.9	2647.1	2764.1	3024.0	3112.7	3095.5	3079.4	2993.2	2776.4	2472.2	1840.3
60°	2387.2	2366.2	2514.1	2876.2	3149.7	3176.8	3169.4	3085.6	2840.5	2470.9	1829.2
62.5°	1920.3	1972.1	2176.6	2634.8	3165.7	3234.6	3221.1	3093.0	2861.4	2399.5	1759.0
65°	1427.6	1501.5	1702.3	2302.2	3143.5	3264.2	3227.3	2972.3	2764.1	2257.8	1605.0
67.5°	1028.5	1093.8	1240.4	1894.5	2930.4	3128.7	3085.6	2775.2	2539.9	2057.1	1391.9
70°	703.3	750.2	849.9	1379.6	2501.7	2705.0	2677.9	2480.8	2186.4	1818.1	1130.8
72.5°	496.4	516.1	580.2	910.3	1900.6	2122.4	2090.3	2041.1	1756.5	1511.4	879.5
75°	372.0	384.3	418.8	588.8	1282.3	1470.7	1441.2	1469.5	1311.8	1144.3	640.5
77.5°	140.4	152.7	237.7	375.7	758.8	902.9	873.3	890.6	729.2	577.7	319.0
80°	38.2	40.6	78.8	178.6	344.9	449.6	408.9	351.1	271.0	266.1	168.8
82.5°	16.0	18.5	35.7	96.1	123.2	123.2	103.5	128.1	103.5	124.4	81.3
85°	6.2	7.4	8.6	24.6	16.0	17.2	18.5	24.6	20.9	25.9	18.5
87.5°	0.0	0.0	0.0	1.2	1.2	2.5	1.2	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: P836609

CATALOG NUMBER: ARCH3-50-727-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	995.3	995.3	995.3	995.3	995.3	995.3	995.3	995.3	995.3	995.3	995.3
2.5°	989.1	975.6	955.9	923.8	890.6	872.1	848.7	845.0	820.4	817.9	808.0
5°	995.3	966.9	916.4	854.9	794.5	747.7	713.2	694.7	659.0	659.0	649.1
7.5°	1000.2	955.9	874.6	783.4	700.9	638.1	591.3	571.5	539.5	537.1	529.7
10°	1001.4	942.3	829.0	710.7	609.7	545.7	500.1	477.9	449.6	447.1	442.2
12.5°	1011.3	934.9	788.3	647.9	544.4	475.5	431.1	412.6	390.5	388.0	383.1
15°	1027.3	934.9	753.8	594.9	486.6	422.5	384.3	367.1	351.1	348.6	346.1
17.5°	1043.3	932.5	719.4	545.7	438.5	380.6	347.4	333.8	321.5	320.3	317.8
20°	1058.1	931.2	684.9	503.8	401.6	346.1	320.3	307.9	298.1	298.1	296.9
22.5°	1072.9	928.8	651.6	464.4	369.5	320.3	298.1	284.5	277.1	277.1	275.9
25°	1095.0	928.8	620.8	431.1	343.7	300.6	278.4	268.5	262.4	261.1	261.1
27.5°	1120.9	936.2	593.7	401.6	321.5	280.8	263.6	253.7	246.4	243.9	245.1
30°	1149.2	942.3	569.1	375.7	300.6	266.1	247.6	237.7	230.3	227.9	229.1
32.5°	1177.6	949.7	546.9	352.3	279.6	252.5	234.0	223.0	215.6	214.3	214.3
35°	1208.4	957.1	524.7	332.6	262.4	239.0	221.7	209.4	204.5	202.0	203.2
37.5°	1239.2	969.4	503.8	314.1	250.1	226.6	210.6	198.3	194.6	193.4	193.4
40°	1276.1	987.9	495.2	301.8	239.0	215.6	202.0	189.7	186.0	186.0	186.0
42.5°	1306.9	1002.7	487.8	288.2	230.3	205.7	193.4	183.5	181.1	179.8	181.1
45°	1337.7	1016.2	477.9	275.9	219.3	195.9	186.0	176.1	173.7	173.7	173.7
47.5°	1368.5	1023.6	464.4	263.6	209.4	187.2	178.6	170.0	167.5	167.5	167.5
50°	1393.1	1029.8	444.7	250.1	198.3	179.8	171.2	162.6	160.1	160.1	160.1
52.5°	1417.8	1031.0	423.7	234.0	187.2	171.2	163.8	155.2	152.7	151.5	151.5
55°	1439.9	1029.8	399.1	215.6	174.9	161.4	155.2	147.8	142.9	138.0	140.4
57.5°	1456.0	1028.5	370.8	197.1	162.6	151.5	149.0	139.2	129.3	117.0	119.5
60°	1449.8	1015.0	340.0	173.7	149.0	141.7	141.7	128.1	110.9	104.7	105.9
62.5°	1410.4	976.8	307.9	149.0	135.5	131.8	130.6	115.8	102.2	96.1	97.3
65°	1292.1	880.7	261.1	126.9	121.9	120.7	120.7	107.2	94.8	87.5	88.7
67.5°	1112.3	739.1	213.1	107.2	108.4	110.9	110.9	98.5	86.2	78.8	80.1
70°	891.8	577.7	170.0	92.4	93.6	97.3	99.8	88.7	77.6	70.2	70.2
72.5°	671.3	438.5	136.7	77.6	83.8	83.8	87.5	78.8	67.7	60.4	61.6
75°	486.6	314.1	108.4	65.3	72.7	71.4	71.4	66.5	57.9	53.0	53.0
77.5°	230.3	165.1	86.2	46.8	56.7	55.4	56.7	53.0	49.3	44.3	45.6
80°	113.3	81.3	55.4	33.3	39.4	40.6	44.3	41.9	40.6	37.0	37.0
82.5°	54.2	32.0	25.9	23.4	27.1	28.3	30.8	30.8	32.0	29.6	29.6
85°	14.8	8.6	11.1	14.8	17.2	18.5	20.9	22.2	22.2	20.9	22.2
87.5°	3.7	3.7	4.9	7.4	8.6	9.9	11.1	11.1	4.9	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)