

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: P842484

Luminaire Tested: **ARCH4-50-740-U-T4W**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842484
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-50-740-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 435mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9580 lumens
Efficiency: N/A
Efficacy: 180.1 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 53.2
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



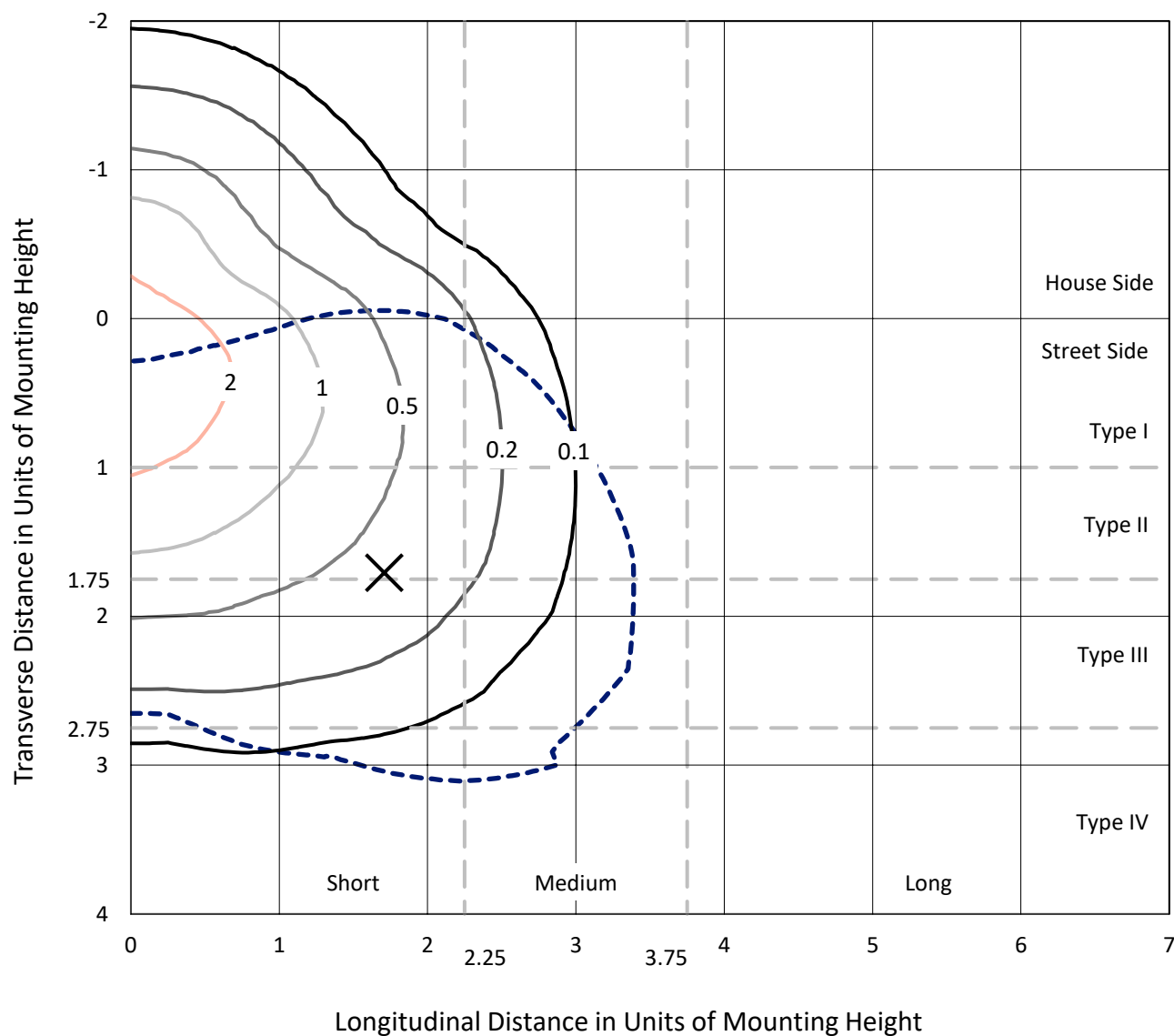
REPORT NUMBER: P842484

CATALOG NUMBER: ARCH4-50-740-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

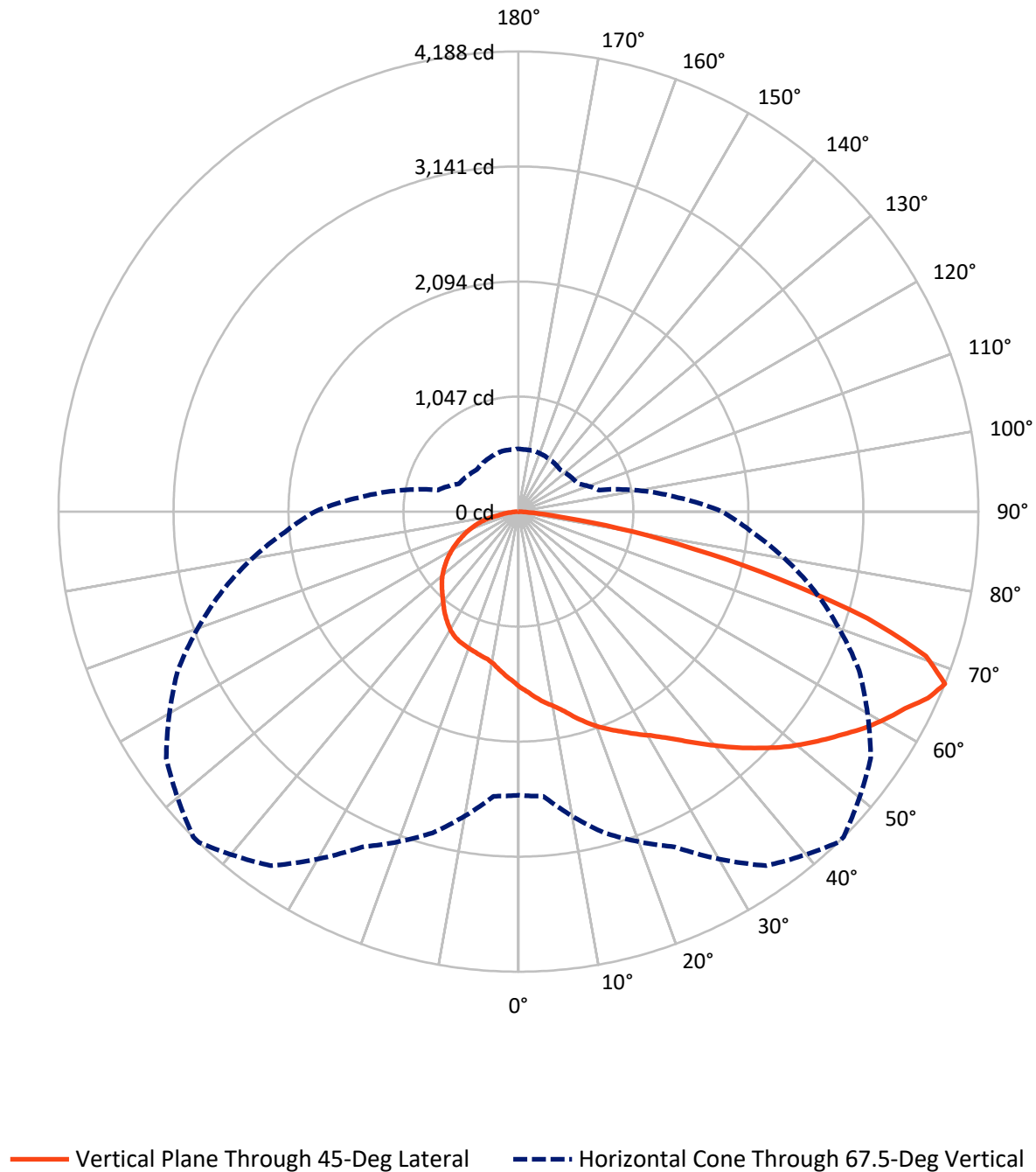


Based on 25 foot mounting height. Maximum calculated value = 3 fc

Type IV - Short - N/A

REPORT NUMBER: P842484
CATALOG NUMBER: ARCH4-50-740-U-T4W

Luminous Intensity Polar Plot



REPORT NUMBER: P842484

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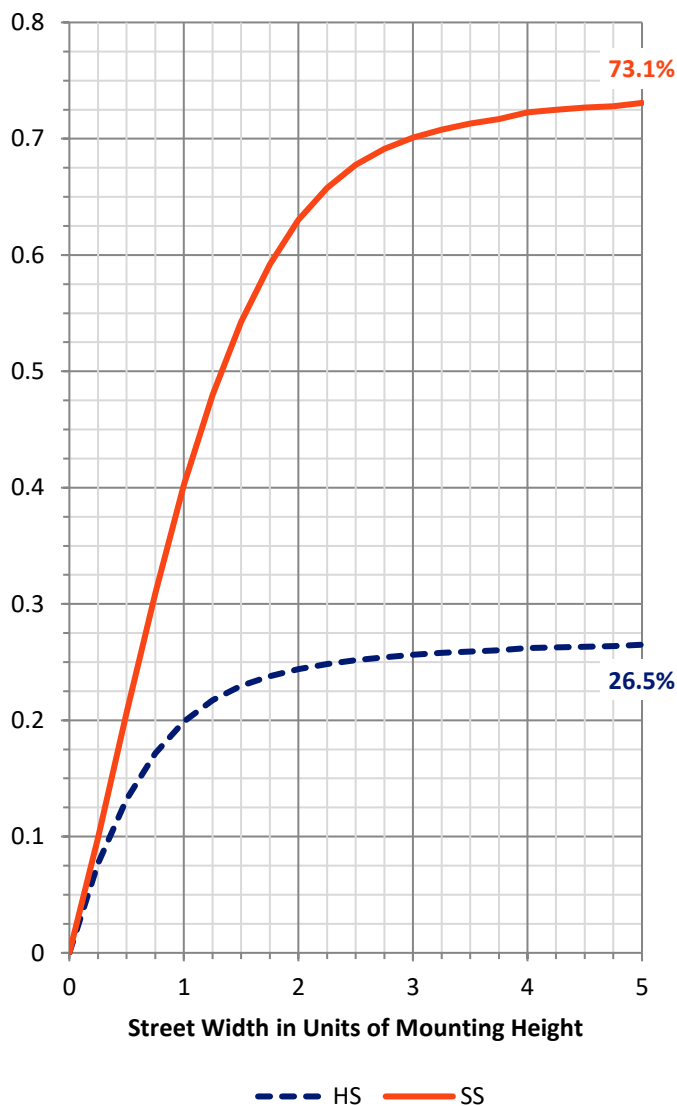
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2559.3	0.0	2559.3
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	7020.7	0.0	7020.7
	% Fixture	73.3	0.0	73.3
Total	Lumens	9580.0	0.0	9580.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.0	1.6
10°-20°	472.6	4.9
20°-30°	815.7	8.5
30°-40°	1202.9	12.6
40°-50°	1629.7	17.0
50°-60°	1991.8	20.8
60°-70°	2054.3	21.4
70°-80°	1125.2	11.7
80°-90°	134.9	1.4
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°	9580.0	100.0
0°-180°	9580.0	100.0

Coefficient of Utilization



REPORT NUMBER: P842484

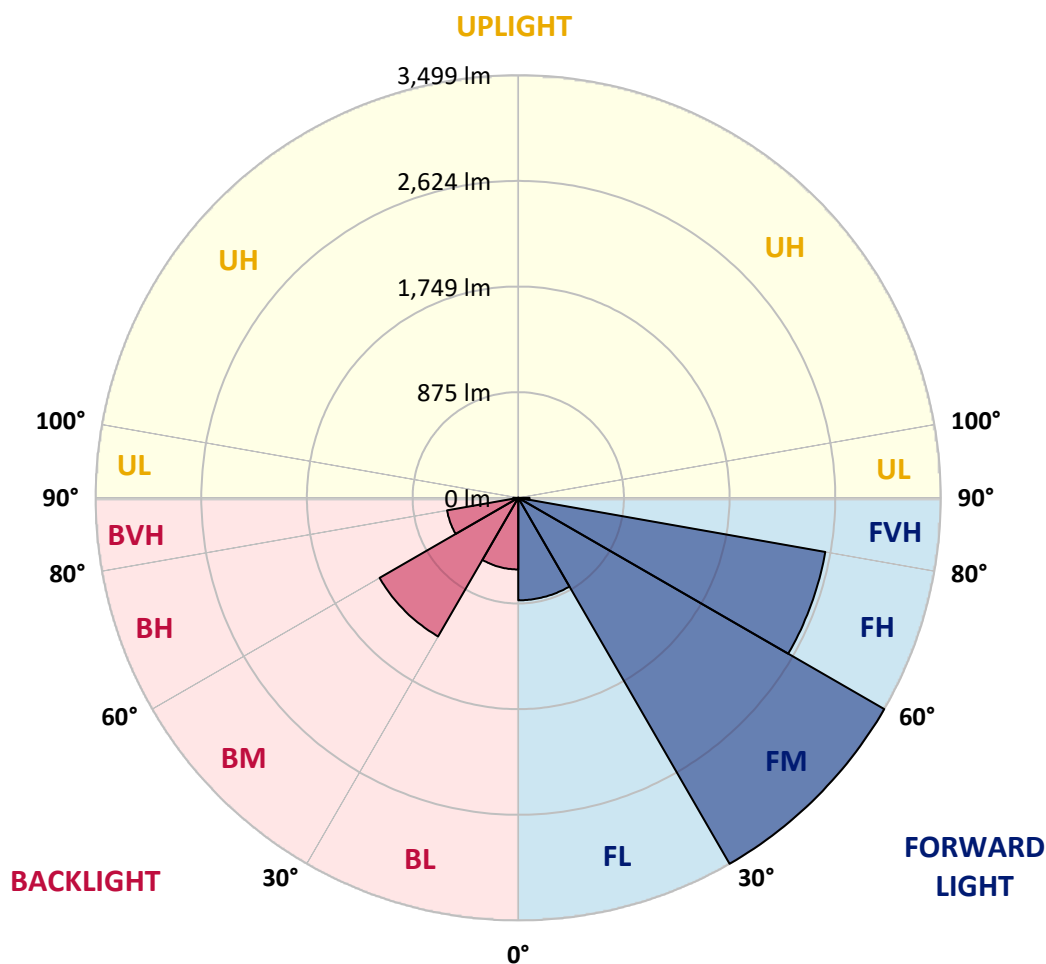
CATALOG NUMBER: ARCH4-50-740-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	848.1	8.9			
FM	(30°-60°)	3498.7	36.5			
FH	(60°-80°)	2581.0	26.9			G2/5000
FVH	(80°-90°)	92.9	1.0			G1/100
BL	(0°-30°)	593.2	6.2	B2/1000		
BM	(30°-60°)	1325.7	13.8	B2/2500		
BH	(60°-80°)	598.5	6.2	B2/1000		G2/1000
BVH	(80°-90°)	42.0	0.4			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 IV Short



REPORT NUMBER: P842484

CATALOG NUMBER: ARCH4-50-740-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1597.8	1597.8	1597.8	1597.8	1597.8	1597.8	1597.8	1597.8	1597.8	1597.8	1597.8
2.5°	1667.7	1666.3	1669.2	1659.0	1645.9	1644.4	1644.4	1635.7	1625.5	1605.1	1589.0
5°	1746.5	1743.5	1745.0	1730.4	1712.9	1704.2	1702.7	1683.8	1660.4	1628.4	1599.2
7.5°	1819.3	1816.4	1815.0	1798.9	1772.7	1758.1	1756.7	1729.0	1701.3	1651.7	1609.4
10°	1887.9	1885.0	1882.0	1860.2	1828.1	1806.2	1803.3	1768.3	1733.3	1672.1	1618.2
12.5°	1975.3	1969.5	1966.6	1940.3	1893.7	1870.4	1866.0	1819.3	1775.6	1701.3	1635.7
15°	2067.2	2062.8	2058.4	2033.6	1981.2	1950.6	1943.3	1885.0	1825.2	1739.2	1661.9
17.5°	2135.7	2131.3	2131.3	2109.5	2061.3	2026.4	2020.5	1950.6	1876.2	1774.2	1682.3
20°	2178.0	2173.6	2178.0	2164.9	2128.4	2099.2	2093.4	2016.2	1927.2	1806.2	1699.8
22.5°	2208.6	2204.2	2211.5	2205.7	2179.4	2161.9	2157.6	2081.8	1979.7	1839.8	1717.3
25°	2262.5	2262.5	2262.5	2252.3	2227.5	2221.7	2221.7	2156.1	2046.8	1883.5	1743.5
27.5°	2370.4	2364.6	2357.3	2328.1	2285.8	2284.4	2293.1	2231.9	2124.0	1940.3	1775.6
30°	2529.3	2526.4	2498.7	2437.5	2366.0	2358.7	2364.6	2313.5	2207.1	2000.1	1812.1
32.5°	2734.9	2724.7	2667.8	2576.0	2473.9	2440.4	2452.0	2398.1	2294.6	2061.3	1847.0
35°	2880.6	2883.6	2842.7	2759.6	2638.6	2549.7	2558.5	2492.9	2389.4	2129.9	1890.8
37.5°	3048.3	3058.5	2997.3	2934.6	2822.3	2670.7	2679.5	2590.5	2484.1	2215.9	1937.4
40°	3280.1	3259.7	3156.2	3081.8	2957.9	2797.5	2804.8	2699.9	2593.4	2297.5	1991.4
42.5°	3474.0	3437.5	3312.1	3217.4	3068.7	2931.7	2938.9	2818.0	2704.2	2387.9	2051.1
45°	3752.4	3651.8	3471.1	3424.4	3182.4	3062.9	3070.2	2943.3	2820.9	2484.1	2115.3
47.5°	3914.2	3753.9	3638.7	3613.9	3307.8	3198.4	3207.2	3076.0	2946.2	2593.4	2182.3
50°	3904.0	3800.5	3767.0	3705.8	3418.6	3325.3	3334.0	3213.0	3073.1	2701.3	2246.5
52.5°	3837.0	3855.9	3838.4	3736.4	3529.4	3447.7	3457.9	3348.6	3202.8	2801.9	2306.3
55°	3940.5	3953.6	3920.1	3785.9	3651.8	3570.2	3581.8	3491.5	3331.1	2890.8	2357.3
57.5°	4064.4	4017.7	3984.2	3873.4	3778.6	3702.8	3716.0	3637.2	3441.9	2962.3	2396.6
60°	4058.5	3960.9	3994.4	3879.2	3864.7	3825.3	3837.0	3756.8	3526.4	3014.8	2412.7
62.5°	3759.7	3707.2	3876.3	3837.0	3934.6	3934.6	3949.2	3829.7	3577.5	3036.6	2403.9
65°	3240.7	3243.6	3541.0	3704.3	4017.7	4084.8	4096.5	3874.9	3548.3	2972.5	2322.3
67.5°	2581.8	2600.7	3027.9	3367.5	3934.6	4186.8	4188.3	3915.7	3422.9	2791.7	2132.8
70°	1889.3	1903.9	2408.3	2820.9	3542.5	3960.9	3937.6	3800.5	3150.3	2476.8	1836.8
72.5°	1277.0	1290.2	1809.1	2166.3	2906.9	3373.4	3322.4	3358.8	2685.3	2035.1	1476.8
75°	858.7	874.7	1287.2	1549.7	2138.6	2561.4	2447.7	2543.9	2077.4	1540.9	1077.3
77.5°	540.8	551.1	817.8	1016.1	1460.7	1743.5	1629.8	1631.3	1196.9	829.5	578.8
80°	344.0	347.0	495.7	586.0	845.5	1048.2	927.2	753.7	539.4	440.3	345.5
82.5°	199.7	195.3	295.9	330.9	402.4	398.0	329.5	312.0	236.2	220.1	176.4
85°	80.2	74.3	129.7	121.0	122.5	129.7	96.2	96.2	77.3	59.8	43.7
87.5°	16.0	16.0	17.5	16.0	16.0	17.5	13.1	13.1	11.7	11.7	11.7
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: P842484

CATALOG NUMBER: ARCH4-50-740-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1597.8	1597.8	1597.8	1597.8	1597.8	1597.8	1597.8	1597.8	1597.8	1597.8	1597.8
2.5°	1586.1	1583.2	1575.9	1556.9	1546.7	1540.9	1532.2	1529.2	1527.8	1529.2	1533.6
5°	1590.5	1580.3	1559.9	1529.2	1508.8	1495.7	1481.1	1475.3	1470.9	1470.9	1475.3
7.5°	1593.4	1577.4	1542.4	1497.2	1468.0	1447.6	1430.1	1422.8	1421.4	1425.7	1427.2
10°	1594.8	1571.5	1522.0	1465.1	1427.2	1401.0	1383.5	1379.1	1383.5	1392.2	1393.7
12.5°	1605.1	1573.0	1510.3	1443.2	1398.0	1371.8	1358.7	1358.7	1370.3	1386.4	1387.8
15°	1622.5	1583.2	1504.5	1425.7	1379.1	1355.8	1351.4	1358.7	1376.2	1401.0	1403.9
17.5°	1635.7	1589.0	1491.3	1402.4	1354.3	1339.7	1347.0	1364.5	1389.3	1422.8	1425.7
20°	1644.4	1589.0	1472.4	1374.7	1329.5	1326.6	1347.0	1374.7	1401.0	1440.3	1444.7
22.5°	1653.2	1586.1	1450.5	1341.2	1301.8	1310.6	1348.5	1383.5	1409.7	1452.0	1459.3
25°	1669.2	1590.5	1428.7	1307.7	1272.7	1297.5	1347.0	1389.3	1417.0	1460.7	1472.4
27.5°	1691.1	1600.7	1412.6	1277.0	1243.5	1277.0	1336.8	1387.8	1417.0	1459.3	1472.4
30°	1714.4	1612.3	1393.7	1243.5	1210.0	1247.9	1314.9	1371.8	1405.3	1444.7	1460.7
32.5°	1739.2	1625.5	1377.6	1207.1	1169.2	1208.5	1282.9	1347.0	1383.5	1419.9	1437.4
35°	1772.7	1648.8	1368.9	1177.9	1132.7	1167.7	1242.1	1314.9	1354.3	1387.8	1408.2
37.5°	1813.5	1677.9	1364.5	1148.8	1093.4	1122.5	1198.3	1275.6	1317.9	1345.6	1364.5
40°	1860.2	1714.4	1363.1	1121.1	1054.0	1075.9	1153.1	1230.4	1271.2	1293.1	1309.1
42.5°	1912.6	1755.2	1360.1	1093.4	1014.6	1032.1	1109.4	1185.2	1220.2	1239.1	1253.7
45°	1968.0	1796.0	1354.3	1059.8	972.4	992.8	1064.2	1131.3	1167.7	1183.7	1199.8
47.5°	2023.4	1836.8	1342.6	1021.9	934.5	953.4	1016.1	1074.4	1103.6	1118.1	1134.2
50°	2077.4	1873.3	1314.9	978.2	895.1	912.6	960.7	1000.1	1021.9	1033.6	1049.6
52.5°	2125.5	1898.1	1275.6	927.2	855.7	864.5	896.6	930.1	947.6	949.0	963.6
55°	2166.3	1911.2	1218.7	874.7	813.5	814.9	832.4	858.7	865.9	860.1	870.3
57.5°	2189.6	1903.9	1156.0	820.7	769.7	763.9	777.0	790.1	791.6	777.0	787.2
60°	2195.5	1870.4	1074.4	766.8	726.0	710.0	714.3	711.4	708.5	702.7	711.4
62.5°	2166.3	1798.9	984.0	714.3	679.3	654.6	653.1	651.6	656.0	657.5	658.9
65°	2059.9	1664.8	876.1	660.4	629.8	596.2	594.8	612.3	618.1	609.4	612.3
67.5°	1854.3	1459.3	758.1	597.7	567.1	537.9	549.6	559.8	570.0	567.1	570.0
70°	1562.8	1198.3	650.2	527.7	498.6	482.5	495.7	504.4	505.9	502.9	505.9
72.5°	1228.9	935.9	549.6	456.3	430.1	422.8	438.8	446.1	459.2	465.0	466.5
75°	887.8	691.0	450.5	379.0	357.2	357.2	371.7	384.9	396.5	389.2	384.9
77.5°	495.7	412.6	323.6	260.9	265.3	285.7	291.6	306.1	317.8	316.3	313.4
80°	300.3	258.0	218.7	169.1	167.6	183.7	221.6	246.4	252.2	239.1	237.6
82.5°	156.0	135.6	116.6	94.8	105.0	122.5	128.3	154.5	170.6	164.7	172.0
85°	39.4	37.9	42.3	43.7	53.9	59.8	65.6	77.3	51.0	24.8	24.8
87.5°	11.7	11.7	14.6	14.6	19.0	23.3	21.9	21.9	11.7	1.5	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)