

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: P842489

Luminaire Tested: **ARCH4-50-750-U-T2U**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842489
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-50-750-U-T2U
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 435mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9842 lumens
Efficiency: N/A
Efficacy: 185.0 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

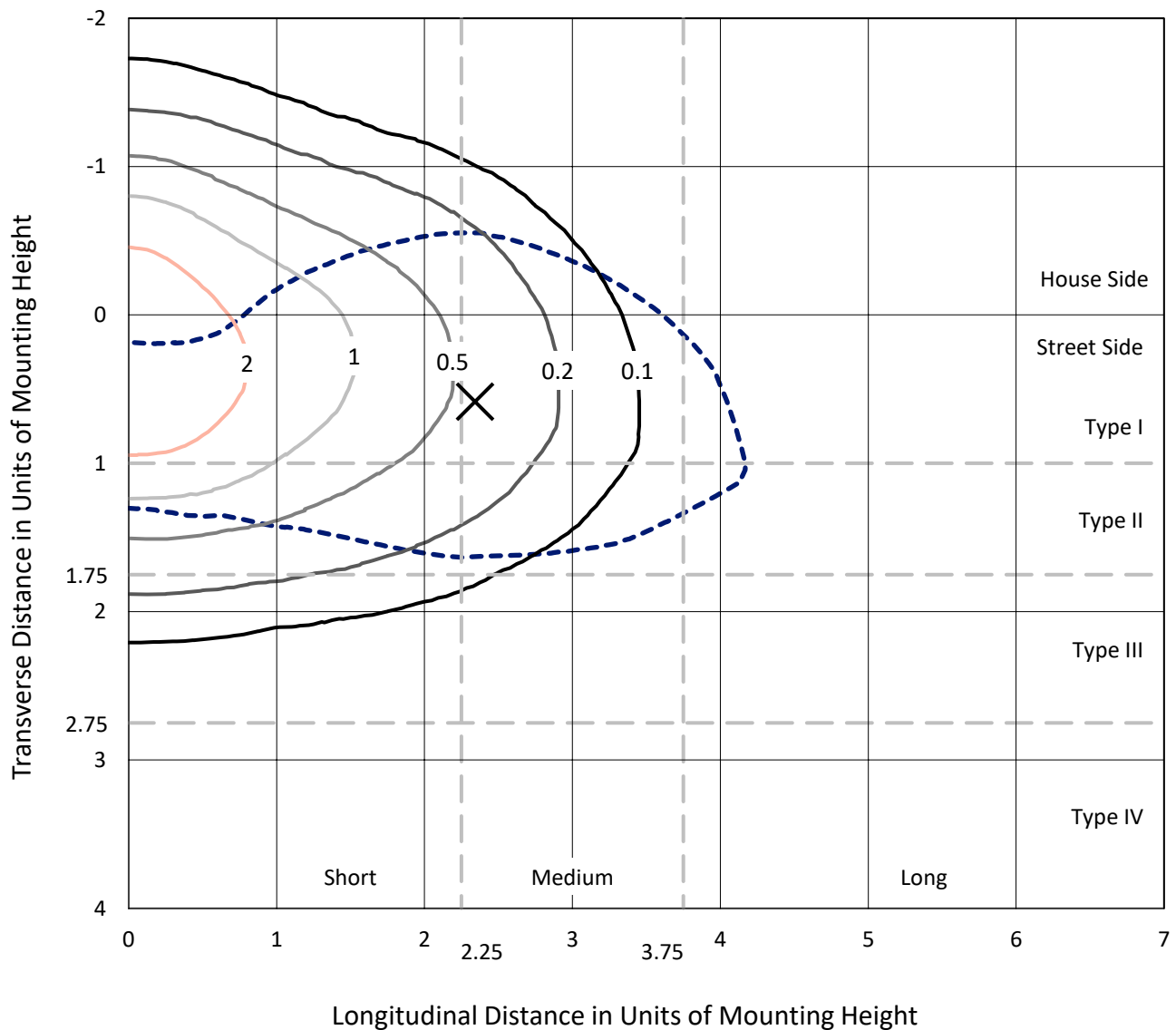
Input Watts (W): 53.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P842489
CATALOG NUMBER: ARCH4-50-750-U-T2U

Iso-Footcandle Lines of Horizontal Illumination

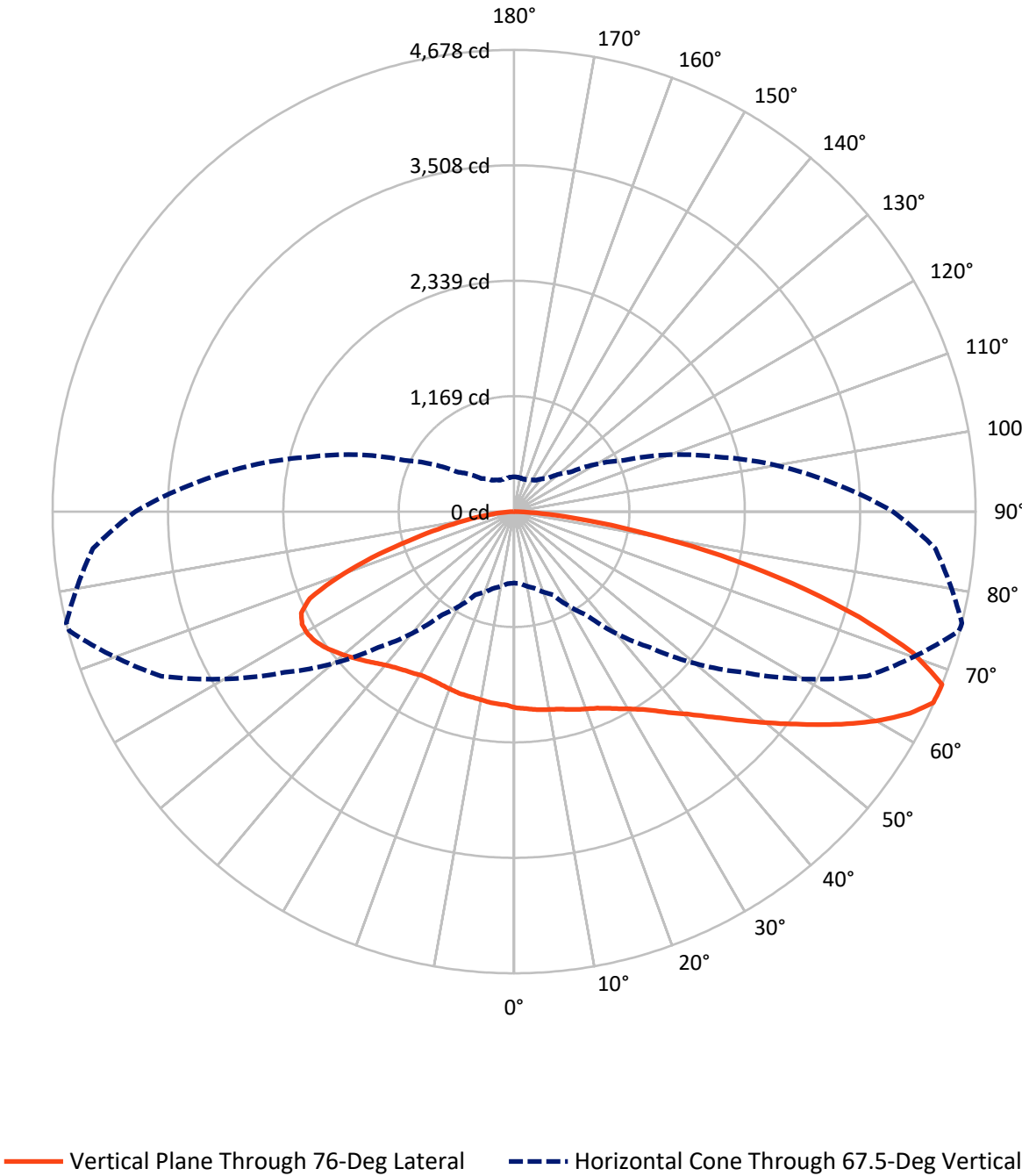
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 fc
Type II - Medium - N/A

REPORT NUMBER: P842489
CATALOG NUMBER: ARCH4-50-750-U-T2U

Luminous Intensity Polar Plot



REPORT NUMBER: P842489

CATALOG NUMBER: ARCH4-50-750-U-T2U

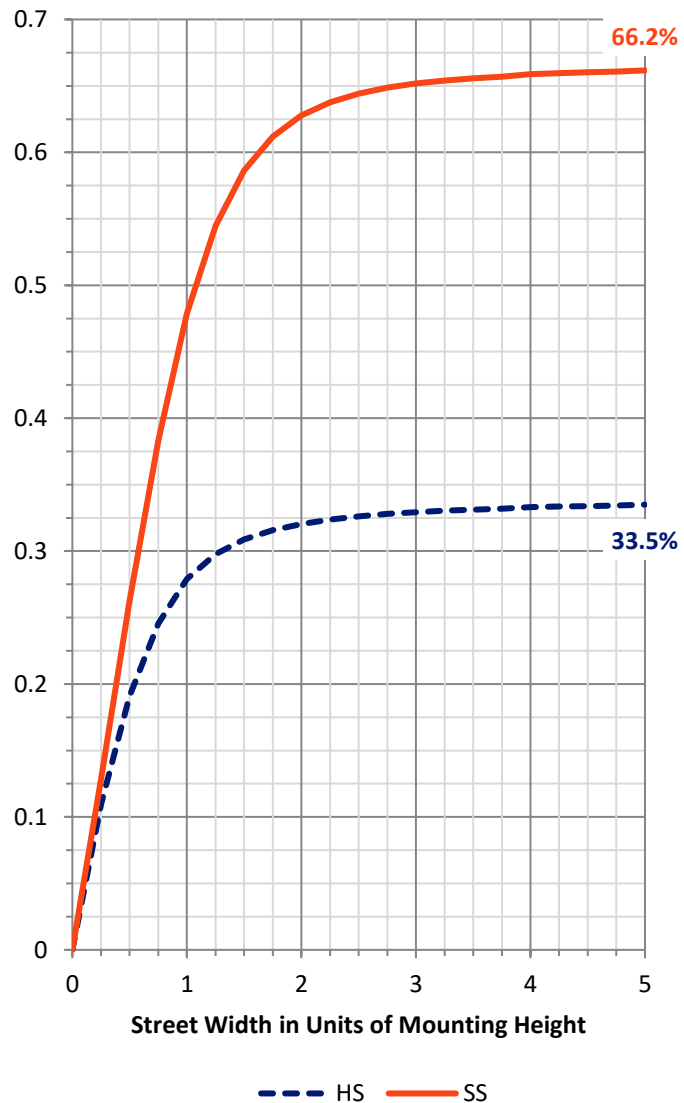
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3325.7	0.0	3325.7
	% Fixture	33.8	0.0	33.8
Street Side	Lumens	6516.3	0.0	6516.3
	% Fixture	66.2	0.0	66.2
Total	Lumens	9842.0	0.0	9842.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	191.7	1.9
10°-20°	586.1	6.0
20°-30°	995.8	10.1
30°-40°	1416.8	14.4
40°-50°	1789.4	18.2
50°-60°	1937.4	19.7
60°-70°	1802.0	18.3
70°-80°	967.8	9.8
80°-90°	155.1	1.6
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°	9842.0	100.0
0°-180°	9842.0	100.0

Coefficient of Utilization



REPORT NUMBER: P842489

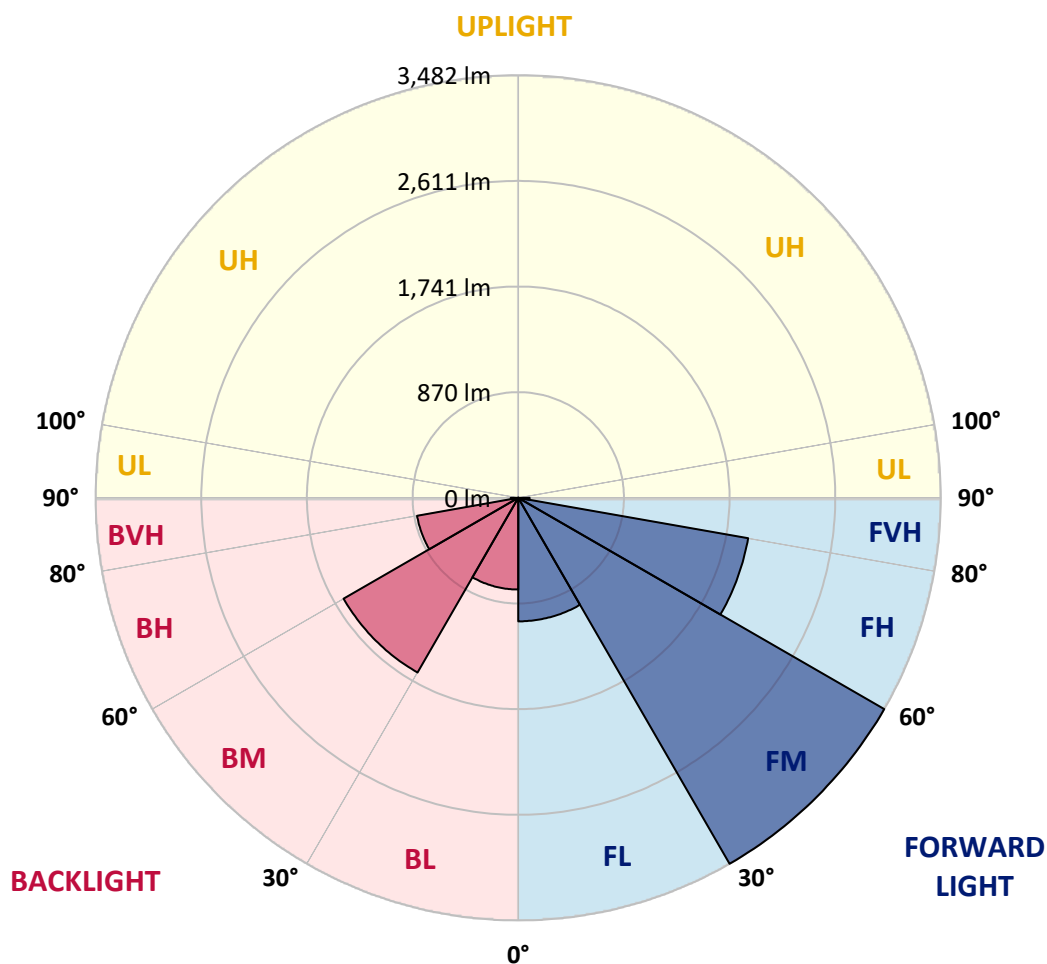
CATALOG NUMBER: ARCH4-50-750-U-T2U

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1017.8	10.3			
FM	(30°-60°)	3481.7	35.4			
FH	(60°-80°)	1923.0	19.5			G2/5000
FVH	(80°-90°)	93.8	1.0			G1/100
BL	(0°-30°)	755.8	7.7	B2/1000		
BM	(30°-60°)	1661.9	16.9	B2/2500		
BH	(60°-80°)	846.7	8.6	B2/1000		G2/1000
BVH	(80°-90°)	61.3	0.6			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 Medium



REPORT NUMBER: P842489

CATALOG NUMBER: ARCH4-50-750-U-T2U

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1988.1	1988.1	1988.1	1988.1	1988.1	1988.1	1988.1	1988.1	1988.1	1988.1	1988.1
2.5°	2048.4	2044.7	2030.1	2031.9	2031.9	2030.1	2008.2	1999.0	1999.0	1997.2	1977.1
5°	2121.5	2116.0	2099.5	2095.9	2088.6	2079.4	2044.7	2024.6	2015.5	2013.6	1986.2
7.5°	2207.3	2200.0	2179.9	2169.0	2150.7	2126.9	2083.1	2052.0	2030.1	2028.3	1989.9
10°	2293.2	2285.9	2262.2	2242.1	2216.5	2178.1	2121.5	2075.8	2041.1	2037.4	1991.7
12.5°	2395.5	2388.2	2359.0	2333.4	2295.0	2243.9	2169.0	2106.8	2059.3	2053.8	1997.2
15°	2503.4	2492.4	2463.2	2433.9	2386.4	2320.6	2231.1	2148.9	2088.6	2079.4	2013.6
17.5°	2592.9	2578.3	2554.5	2525.3	2472.3	2395.5	2293.2	2190.9	2116.0	2108.7	2030.1
20°	2669.6	2658.7	2633.1	2605.7	2549.0	2465.0	2351.7	2232.9	2141.6	2132.4	2042.9
22.5°	2742.7	2728.1	2713.5	2693.4	2631.3	2538.1	2419.3	2284.1	2174.4	2163.5	2059.3
25°	2826.8	2810.3	2804.8	2793.9	2720.8	2625.8	2501.5	2348.0	2220.1	2207.3	2088.6
27.5°	2930.9	2912.7	2901.7	2901.7	2814.0	2715.3	2589.2	2423.0	2273.1	2262.2	2125.1
30°	3040.6	3018.6	3002.2	3002.2	2903.5	2804.8	2675.1	2497.9	2333.4	2320.6	2172.6
32.5°	3137.4	3115.5	3097.2	3095.4	2993.1	2894.4	2764.6	2580.1	2406.5	2390.1	2231.1
35°	3212.3	3192.2	3175.8	3179.4	3082.6	2985.7	2865.1	2689.7	2497.9	2479.6	2307.8
37.5°	3258.0	3250.7	3241.6	3254.4	3164.8	3073.5	2969.3	2795.7	2602.0	2585.6	2402.9
40°	3281.8	3276.3	3312.8	3329.3	3234.3	3152.0	3073.5	2905.3	2715.3	2697.0	2512.5
42.5°	3316.5	3362.2	3376.8	3373.1	3285.4	3212.3	3168.5	3024.1	2848.7	2832.3	2644.0
45°	3192.2	3181.3	3261.7	3305.5	3289.1	3250.7	3258.0	3166.6	3004.0	2987.6	2795.7
47.5°	3025.9	3011.3	3057.0	3164.8	3228.8	3265.3	3338.4	3314.7	3183.1	3168.5	2973.0
50°	2675.1	2695.2	2865.1	3009.5	3135.6	3261.7	3406.0	3473.6	3380.4	3365.8	3163.0
52.5°	2285.9	2306.0	2483.3	2815.8	3022.3	3234.3	3455.4	3632.6	3594.2	3577.8	3365.8
55°	2002.7	2046.5	2247.5	2488.7	2861.5	3148.4	3484.6	3795.2	3824.5	3809.8	3586.9
57.5°	1721.3	1754.2	1905.8	2119.6	2642.2	2998.5	3482.8	3946.9	4065.7	4051.0	3811.7
60°	1390.5	1432.6	1553.2	1783.4	2349.9	2819.5	3431.6	4065.7	4297.7	4286.8	4029.1
62.5°	1164.0	1176.8	1262.6	1461.8	1973.4	2592.9	3316.5	4129.6	4507.9	4500.5	4224.6
65°	937.4	939.2	1017.8	1184.1	1609.8	2311.5	3121.0	4105.9	4666.8	4670.5	4365.3
67.5°	723.6	732.7	804.0	930.1	1279.1	1946.0	2841.4	3945.1	4668.7	4677.8	4284.9
70°	500.7	508.0	615.8	738.2	988.5	1551.3	2463.2	3519.3	4284.9	4292.2	3840.9
72.5°	352.7	356.3	471.4	590.2	772.9	1169.4	1858.3	2910.8	3652.7	3658.2	3230.6
75°	263.1	266.8	332.6	447.7	592.0	809.5	1269.9	2229.3	2918.1	2918.1	2550.9
77.5°	186.4	188.2	215.6	308.8	394.7	546.4	763.8	1460.0	2141.6	2145.2	1858.3
80°	126.1	127.9	140.7	208.3	246.7	296.0	414.8	765.6	1350.3	1355.8	1180.4
82.5°	65.8	69.4	78.6	106.0	124.3	164.5	213.8	389.2	747.4	762.0	709.0
85°	25.6	25.6	29.2	34.7	45.7	64.0	98.7	148.0	338.0	349.0	312.5
87.5°	9.1	9.1	11.0	11.0	12.8	14.6	16.4	21.9	38.4	38.4	36.5
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: P842489

CATALOG NUMBER: ARCH4-50-750-U-T2U

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1988.1	1988.1	1988.1	1988.1	1988.1	1988.1	1988.1	1988.1	1988.1	1988.1	1988.1
2.5°	1969.8	1969.8	1960.7	1964.3	1962.5	1958.8	1955.2	1960.7	1955.2	1942.4	1940.6
5°	1973.4	1969.8	1955.2	1953.3	1947.9	1940.6	1931.4	1935.1	1925.9	1915.0	1913.1
7.5°	1975.3	1968.0	1947.9	1940.6	1929.6	1915.0	1900.4	1900.4	1887.6	1876.6	1874.8
10°	1971.6	1962.5	1935.1	1920.5	1900.4	1878.4	1858.3	1852.8	1838.2	1825.4	1825.4
12.5°	1973.4	1960.7	1925.9	1902.2	1874.8	1847.4	1821.8	1814.5	1801.7	1788.9	1787.1
15°	1984.4	1966.1	1922.3	1891.2	1851.0	1820.0	1792.5	1787.1	1776.1	1767.0	1767.0
17.5°	1995.4	1971.6	1916.8	1872.9	1823.6	1788.9	1763.3	1763.3	1756.0	1750.5	1750.5
20°	2000.9	1973.4	1905.8	1847.4	1790.7	1754.2	1730.4	1734.1	1732.2	1730.4	1730.4
22.5°	2013.6	1977.1	1896.7	1823.6	1756.0	1717.6	1695.7	1701.2	1699.4	1699.4	1701.2
25°	2033.7	1986.2	1889.4	1801.7	1723.1	1681.1	1657.3	1661.0	1661.0	1661.0	1661.0
27.5°	2061.2	2004.5	1887.6	1781.6	1690.2	1642.7	1613.5	1613.5	1606.2	1608.0	1609.8
30°	2103.2	2039.2	1891.2	1763.3	1655.5	1595.2	1560.5	1555.0	1553.2	1556.8	1558.7
32.5°	2154.3	2086.7	1913.1	1750.5	1619.0	1542.2	1498.4	1496.5	1491.0	1491.0	1491.0
35°	2218.3	2132.4	1933.2	1748.7	1582.4	1485.6	1438.1	1432.6	1419.8	1414.3	1414.3
37.5°	2300.5	2203.7	1957.0	1735.9	1551.3	1430.7	1374.1	1355.8	1341.2	1339.4	1339.4
40°	2401.0	2284.1	1991.7	1721.3	1518.5	1374.1	1299.2	1268.1	1269.9	1277.3	1277.3
42.5°	2519.8	2382.8	2035.6	1714.0	1470.9	1315.6	1211.5	1174.9	1187.7	1195.0	1196.9
45°	2658.7	2499.7	2084.9	1704.8	1427.1	1249.8	1118.3	1072.6	1078.1	1079.9	1081.7
47.5°	2819.5	2629.4	2136.1	1697.5	1377.8	1167.6	1016.0	955.7	953.8	942.9	946.5
50°	2987.6	2766.5	2189.1	1684.7	1317.5	1070.8	908.1	836.9	822.3	805.8	807.7
52.5°	3166.6	2907.2	2238.4	1664.6	1242.5	972.1	805.8	729.1	699.8	681.6	685.2
55°	3364.0	3051.5	2285.9	1633.6	1164.0	873.4	714.5	635.9	599.3	584.7	586.6
57.5°	3544.9	3190.4	2320.6	1595.2	1078.1	783.9	634.1	557.3	533.6	531.7	533.6
60°	3720.3	3307.3	2335.2	1542.2	990.4	701.7	559.1	500.7	484.2	493.4	495.2
62.5°	3868.3	3382.3	2327.9	1470.9	900.8	623.1	498.8	456.8	445.9	464.1	466.0
65°	3954.2	3406.0	2276.8	1368.6	804.0	546.4	442.2	396.5	391.0	402.0	407.5
67.5°	3840.9	3258.0	2137.9	1227.9	696.2	475.1	387.4	350.8	341.7	350.8	350.8
70°	3404.2	2823.1	1809.0	1005.0	577.4	405.7	336.2	310.6	303.3	310.6	308.8
72.5°	2835.9	2348.0	1425.3	783.9	455.0	341.7	292.4	268.6	261.3	254.0	250.3
75°	2200.0	1783.4	1034.2	575.6	343.5	274.1	244.9	222.9	204.7	212.0	208.3
77.5°	1611.6	1251.7	732.7	398.3	246.7	212.0	191.9	175.4	162.6	177.2	175.4
80°	1037.9	809.5	489.7	266.8	169.9	148.0	140.7	131.6	144.4	188.2	191.9
82.5°	634.1	513.5	292.4	173.6	111.5	98.7	91.4	91.4	148.0	162.6	164.5
85°	283.2	272.3	159.0	89.5	62.1	56.6	51.2	65.8	60.3	43.9	45.7
87.5°	45.7	47.5	34.7	31.1	23.8	23.8	18.3	12.8	9.1	5.5	5.5
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)