

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: P842420

Luminaire Tested: **ARCH4-40-750-U-T4W-HSS**

Issue Date: 5/27/2024

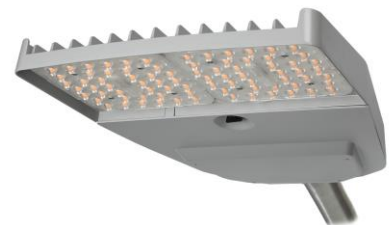
Test Information

Test Method: LM-79-08
Report Number: P842420
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-40-750-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 355mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5543 lumens
Efficiency: N/A
Efficacy: 126.6 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

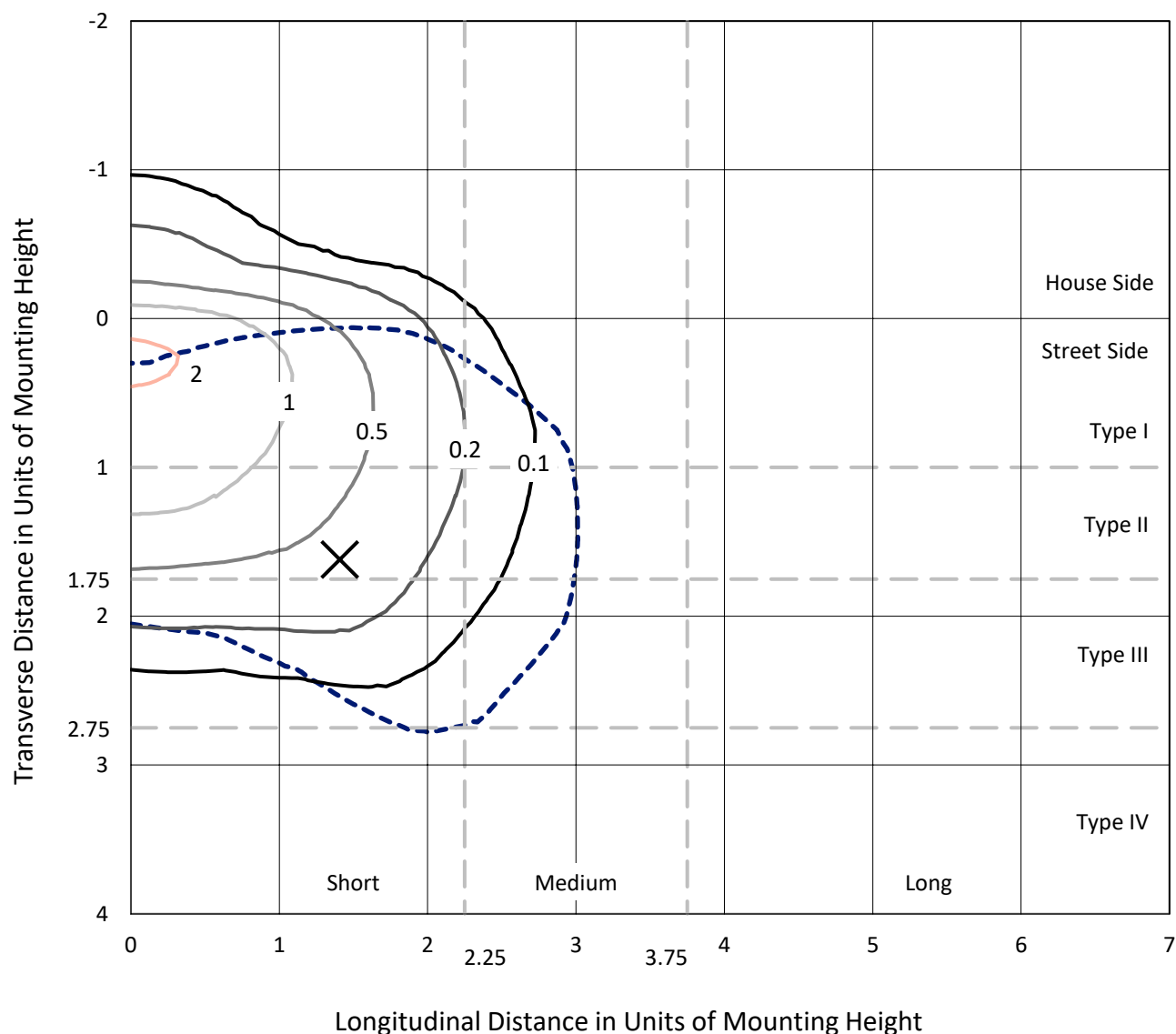
Input Watts (W): 43.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P842420
 CATALOG NUMBER: ARCH4-40-750-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

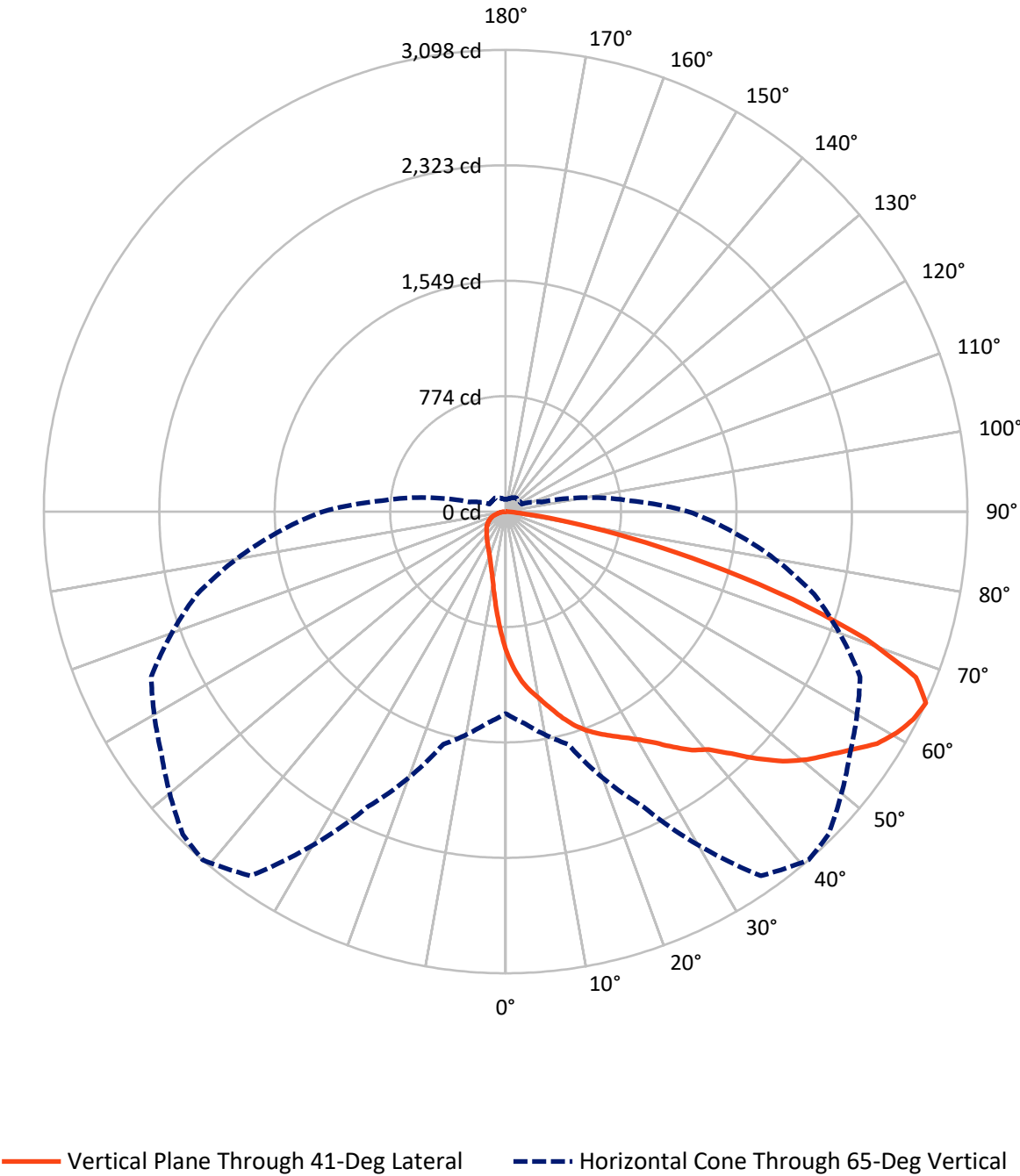
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.2 fc
 Type III - Short - N/A

REPORT NUMBER: P842420
CATALOG NUMBER: ARCH4-40-750-U-T4W-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P842420

CATALOG NUMBER: ARCH4-40-750-U-T4W-HSS

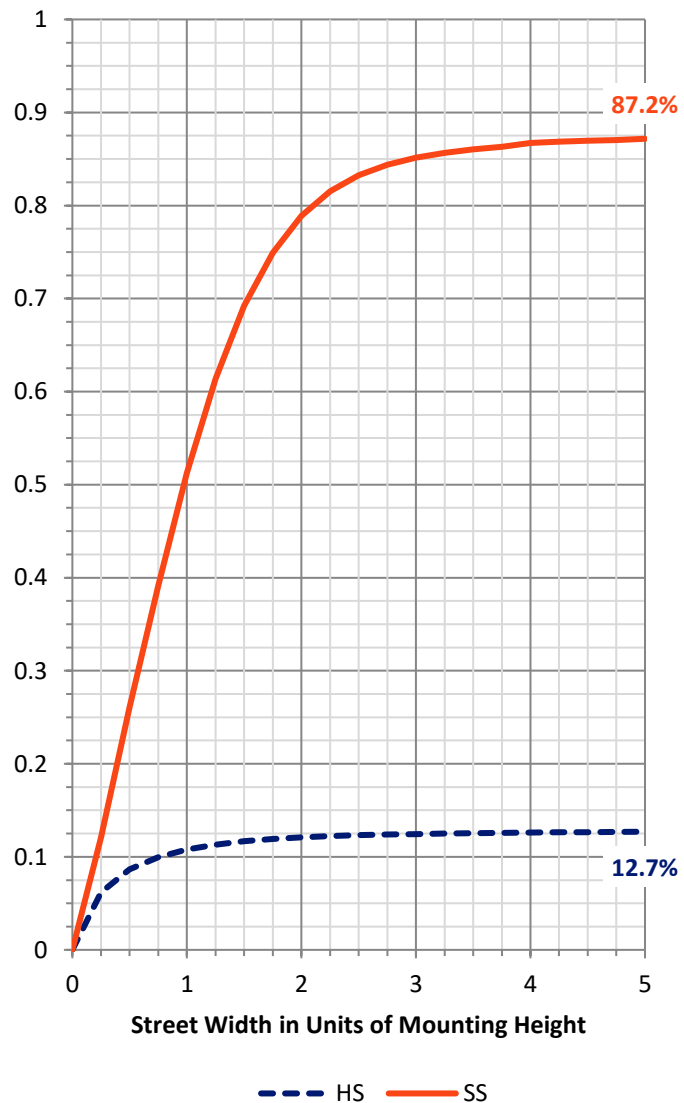
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	711.6	0.0	711.6
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	4831.4	0.0	4831.4
	% Fixture	87.2	0.0	87.2
Total	Lumens	5543.0	0.0	5543.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.0	1.6
10°-20°	263.9	4.8
20°-30°	454.0	8.2
30°-40°	688.5	12.4
40°-50°	1008.7	18.2
50°-60°	1273.8	23.0
60°-70°	1194.4	21.5
70°-80°	532.3	9.6
80°-90°	39.4	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°	5543.0	100.0
0°-180°	5543.0	100.0

Coefficient of Utilization



REPORT NUMBER: P842420

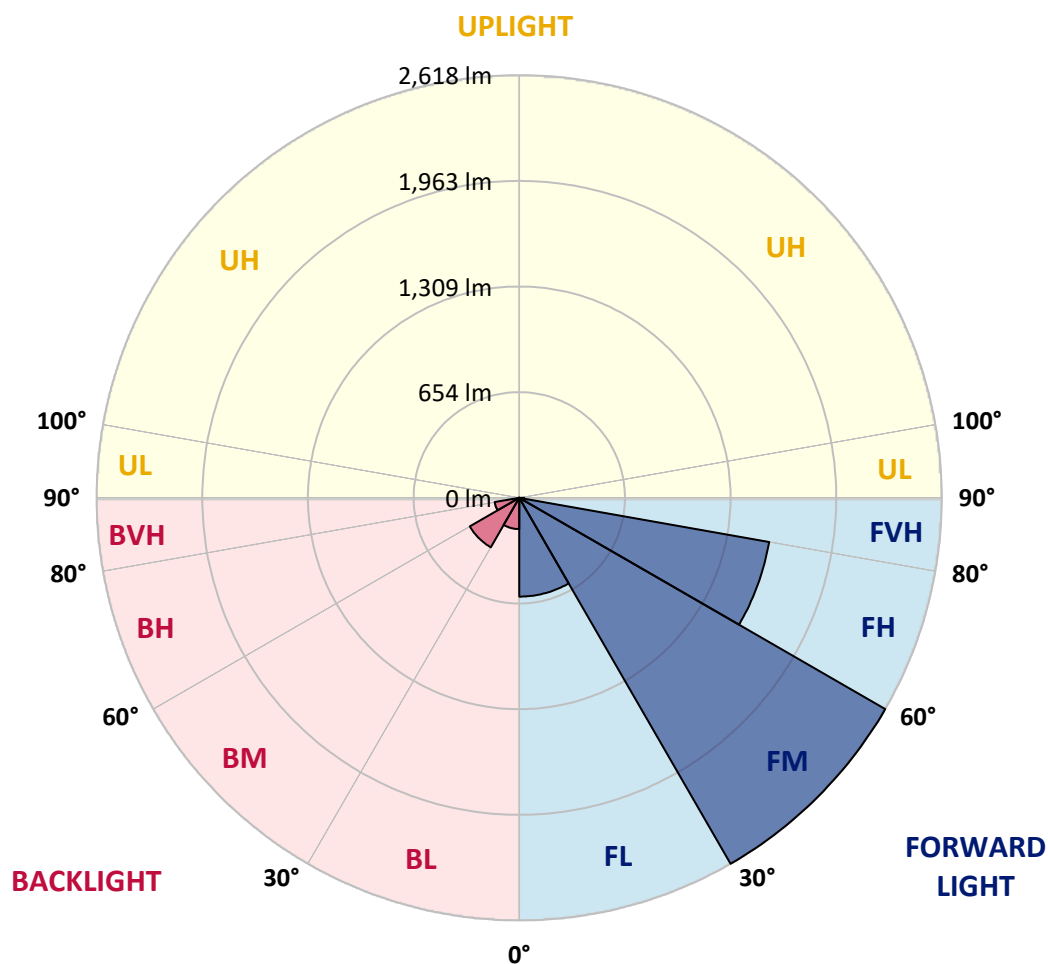
CATALOG NUMBER: ARCH4-40-750-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	612.2	11.0			
FM	(30°-60°)	2617.6	47.2			
FH	(60°-80°)	1572.1	28.4			G1/1800
FVH	(80°-90°)	29.5	0.5			G1/100
BL	(0°-30°)	193.7	3.5	B1/500		
BM	(30°-60°)	353.4	6.4	B1/1000		
BH	(60°-80°)	154.6	2.8	B1/500		G1/500
BVH	(80°-90°)	10.0	0.2			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 III Short



REPORT NUMBER: P842420

CATALOG NUMBER: ARCH4-40-750-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	944.5	944.5	944.5	944.5	944.5	944.5	944.5	944.5	944.5	944.5	944.5
2.5°	1089.4	1085.9	1083.6	1070.7	1070.7	1053.2	1054.4	1038.0	1018.1	986.6	952.7
5°	1192.3	1187.6	1181.8	1168.9	1164.3	1146.7	1144.4	1121.0	1087.1	1032.2	971.4
7.5°	1282.3	1277.6	1269.5	1250.8	1237.9	1216.9	1211.0	1180.6	1143.2	1075.4	990.1
10°	1364.1	1360.6	1350.1	1326.7	1309.2	1283.5	1273.0	1232.1	1185.3	1110.5	1005.3
12.5°	1447.1	1442.5	1428.4	1408.6	1387.5	1357.1	1344.3	1291.7	1232.1	1149.1	1027.5
15°	1524.3	1517.3	1506.8	1485.7	1467.0	1437.8	1423.8	1361.8	1289.3	1192.3	1056.7
17.5°	1574.6	1568.7	1559.4	1547.7	1532.5	1510.3	1496.2	1435.5	1346.6	1234.4	1087.1
20°	1604.9	1602.6	1599.1	1592.1	1585.1	1569.9	1559.4	1502.1	1408.6	1275.3	1116.3
22.5°	1628.3	1626.0	1624.8	1624.8	1626.0	1620.1	1613.1	1564.0	1468.2	1318.6	1143.2
25°	1664.6	1663.4	1661.1	1658.7	1666.9	1668.1	1665.7	1631.8	1543.0	1375.8	1177.1
27.5°	1714.8	1711.3	1706.6	1704.3	1712.5	1718.3	1723.0	1699.6	1622.5	1434.3	1215.7
30°	1792.0	1781.5	1769.8	1761.6	1767.4	1776.8	1787.3	1773.3	1704.3	1506.8	1255.4
32.5°	1883.2	1870.3	1843.4	1828.2	1843.4	1850.4	1858.6	1851.6	1789.6	1585.1	1295.2
35°	1994.2	1979.0	1950.9	1928.7	1955.6	1940.4	1936.9	1929.9	1870.3	1662.2	1339.6
37.5°	2178.9	2156.7	2112.3	2063.2	2063.2	2030.4	2017.6	1996.5	1942.8	1731.2	1382.8
40°	2392.8	2363.6	2306.3	2233.8	2167.2	2099.4	2091.2	2076.0	2028.1	1810.7	1431.9
42.5°	2627.8	2571.7	2492.2	2404.5	2297.0	2219.8	2201.1	2157.9	2111.1	1891.3	1481.0
45°	2888.4	2771.5	2655.8	2611.4	2433.7	2363.6	2328.5	2250.2	2197.6	1975.5	1532.5
47.5°	2930.5	2839.3	2762.2	2755.2	2561.1	2502.7	2462.9	2350.7	2291.1	2065.5	1586.2
50°	2907.1	2852.2	2860.4	2832.3	2654.6	2616.1	2585.7	2458.3	2383.5	2152.0	1635.3
52.5°	2808.9	2839.3	2886.1	2834.7	2743.5	2711.9	2696.7	2574.0	2470.0	2231.5	1679.8
55°	2692.1	2713.1	2813.6	2876.7	2846.4	2818.3	2804.3	2708.4	2555.3	2298.1	1720.7
57.5°	2521.4	2512.0	2623.1	2869.7	2953.9	2937.5	2922.3	2840.5	2634.8	2346.0	1746.4
60°	2265.4	2245.5	2385.8	2729.5	2989.0	3014.7	3007.7	2928.2	2695.6	2344.9	1735.9
62.5°	1822.4	1871.5	2065.5	2500.3	3004.2	3069.6	3056.8	2935.2	2715.4	2277.1	1669.2
65°	1354.8	1424.9	1615.5	2184.7	2983.1	3097.7	3062.6	2820.6	2623.1	2142.7	1523.1
67.5°	976.1	1038.0	1177.1	1797.8	2780.9	2969.1	2928.2	2633.6	2410.3	1952.1	1320.9
70°	667.5	711.9	806.6	1309.2	2374.1	2567.0	2541.3	2354.2	2074.9	1725.3	1073.1
72.5°	471.1	489.8	550.6	863.8	1803.7	2014.1	1983.7	1936.9	1666.9	1434.3	834.6
75°	353.0	364.7	397.4	558.8	1216.9	1395.7	1367.7	1394.5	1244.9	1085.9	607.8
77.5°	133.3	144.9	225.6	356.5	720.1	856.8	828.8	845.1	692.0	548.2	302.8
80°	36.2	38.6	74.8	169.5	327.3	426.7	388.1	333.1	257.2	252.5	160.1
82.5°	15.2	17.5	33.9	91.2	116.9	116.9	98.2	121.6	98.2	118.1	77.1
85°	5.8	7.0	8.2	23.4	15.2	16.4	17.5	23.4	19.9	24.5	17.5
87.5°	0.0	0.0	0.0	1.2	1.2	2.3	1.2	2.3	3.5	3.5	3.5
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: P842420

CATALOG NUMBER: ARCH4-40-750-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	944.5	944.5	944.5	944.5	944.5	944.5	944.5	944.5	944.5	944.5	944.5
2.5°	938.7	925.8	907.1	876.7	845.1	827.6	805.4	801.9	778.5	776.2	766.8
5°	944.5	917.6	869.7	811.2	754.0	709.5	676.8	659.3	625.4	625.4	616.0
7.5°	949.2	907.1	829.9	743.4	665.1	605.5	561.1	542.4	512.0	509.7	502.6
10°	950.3	894.2	786.7	674.5	578.6	517.8	474.6	453.5	426.7	424.3	419.6
12.5°	959.7	887.2	748.1	614.9	516.7	451.2	409.1	391.6	370.6	368.2	363.5
15°	974.9	887.2	715.4	564.6	461.7	400.9	364.7	348.3	333.1	330.8	328.5
17.5°	990.1	884.9	682.7	517.8	416.1	361.2	329.6	316.8	305.1	303.9	301.6
20°	1004.1	883.7	649.9	478.1	381.1	328.5	303.9	292.2	282.9	282.9	281.7
22.5°	1018.1	881.4	618.4	440.7	350.7	303.9	282.9	270.0	263.0	263.0	261.8
25°	1039.2	881.4	589.1	409.1	326.1	285.2	264.2	254.8	249.0	247.8	247.8
27.5°	1063.7	888.4	563.4	381.1	305.1	266.5	250.2	240.8	233.8	231.4	232.6
30°	1090.6	894.2	540.0	356.5	285.2	252.5	235.0	225.6	218.6	216.3	217.4
32.5°	1117.5	901.2	519.0	334.3	265.3	239.6	222.1	211.6	204.6	203.4	203.4
35°	1146.7	908.3	498.0	315.6	249.0	226.8	210.4	198.7	194.0	191.7	192.9
37.5°	1175.9	920.0	478.1	298.1	237.3	215.1	199.9	188.2	184.7	183.5	183.5
40°	1211.0	937.5	469.9	286.4	226.8	204.6	191.7	180.0	176.5	176.5	176.5
42.5°	1240.2	951.5	462.9	273.5	218.6	195.2	183.5	174.2	171.8	170.7	171.8
45°	1269.5	964.4	453.5	261.8	208.1	185.9	176.5	167.2	164.8	164.8	164.8
47.5°	1298.7	971.4	440.7	250.2	198.7	177.7	169.5	161.3	159.0	159.0	159.0
50°	1322.1	977.2	422.0	237.3	188.2	170.7	162.5	154.3	152.0	152.0	152.0
52.5°	1345.4	978.4	402.1	222.1	177.7	162.5	155.5	147.3	144.9	143.8	143.8
55°	1366.5	977.2	378.7	204.6	166.0	153.1	147.3	140.3	135.6	130.9	133.3
57.5°	1381.7	976.1	351.8	187.0	154.3	143.8	141.4	132.1	122.7	111.0	113.4
60°	1375.8	963.2	322.6	164.8	141.4	134.4	134.4	121.6	105.2	99.4	100.5
62.5°	1338.4	927.0	292.2	141.4	128.6	125.1	123.9	109.9	97.0	91.2	92.3
65°	1226.2	835.8	247.8	120.4	115.7	114.6	114.6	101.7	90.0	83.0	84.2
67.5°	1055.5	701.4	202.2	101.7	102.9	105.2	105.2	93.5	81.8	74.8	76.0
70°	846.3	548.2	161.3	87.7	88.8	92.3	94.7	84.2	73.6	66.6	66.6
72.5°	637.1	416.1	129.8	73.6	79.5	79.5	83.0	74.8	64.3	57.3	58.4
75°	461.7	298.1	102.9	62.0	69.0	67.8	67.8	63.1	54.9	50.3	50.3
77.5°	218.6	156.6	81.8	44.4	53.8	52.6	53.8	50.3	46.8	42.1	43.3
80°	107.5	77.1	52.6	31.6	37.4	38.6	42.1	39.7	38.6	35.1	35.1
82.5°	51.4	30.4	24.5	22.2	25.7	26.9	29.2	29.2	30.4	28.1	28.1
85°	14.0	8.2	10.5	14.0	16.4	17.5	19.9	21.0	21.0	19.9	21.0
87.5°	3.5	3.5	4.7	7.0	8.2	9.4	10.5	10.5	4.7	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)