

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: P842702

Luminaire Tested: **ARCH4-80-750-U-T2R-HSS**

Issue Date: 5/27/2024

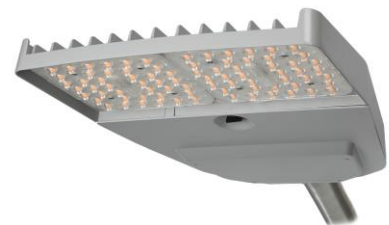
Test Information

Test Method: LM-79-08
Report Number: P842702
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-80-750-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 685mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10540 lumens
Efficiency: N/A
Efficacy: 126.4 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

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

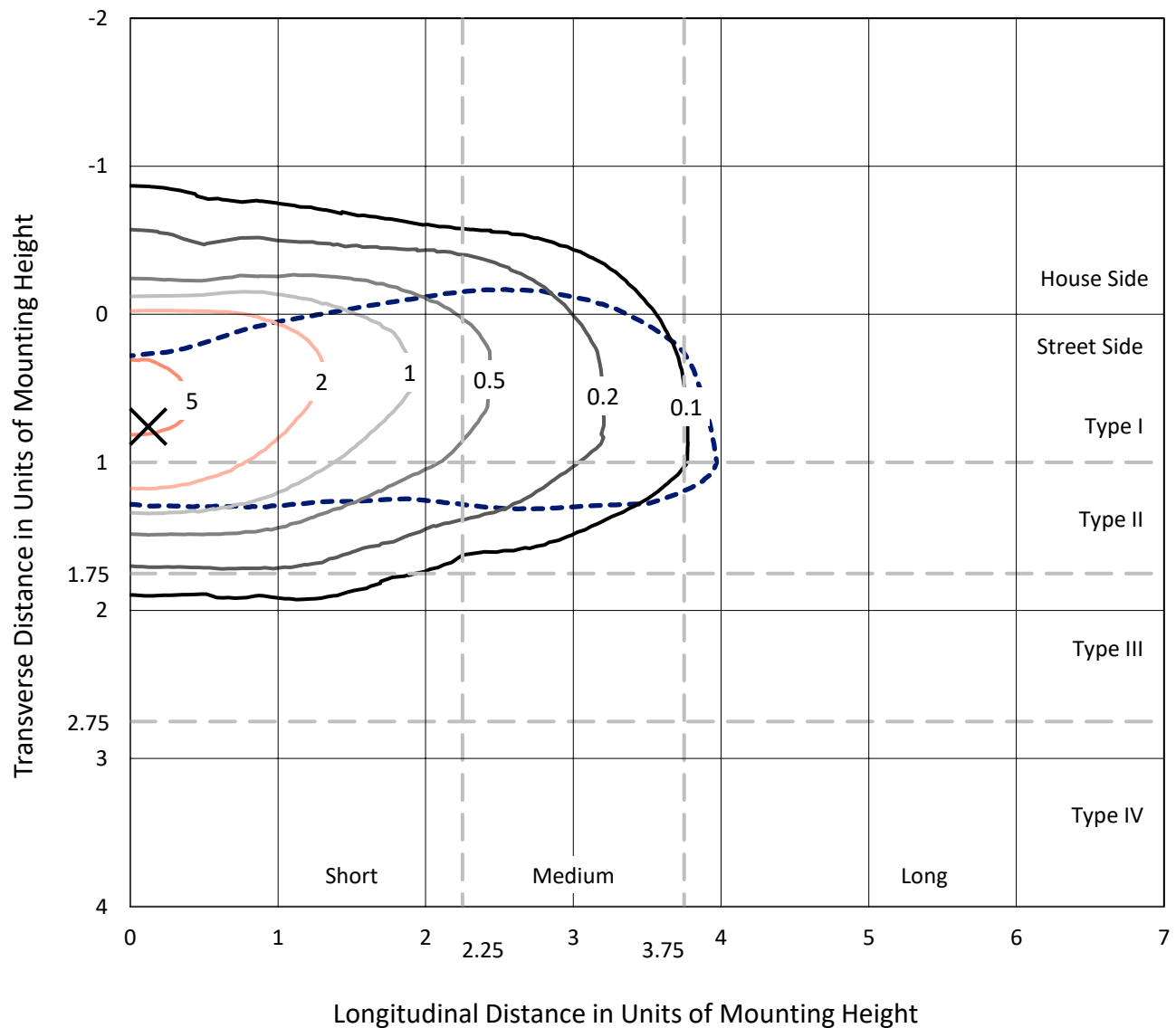


REPORT NUMBER: P842702

CATALOG NUMBER: ARCH4-80-750-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

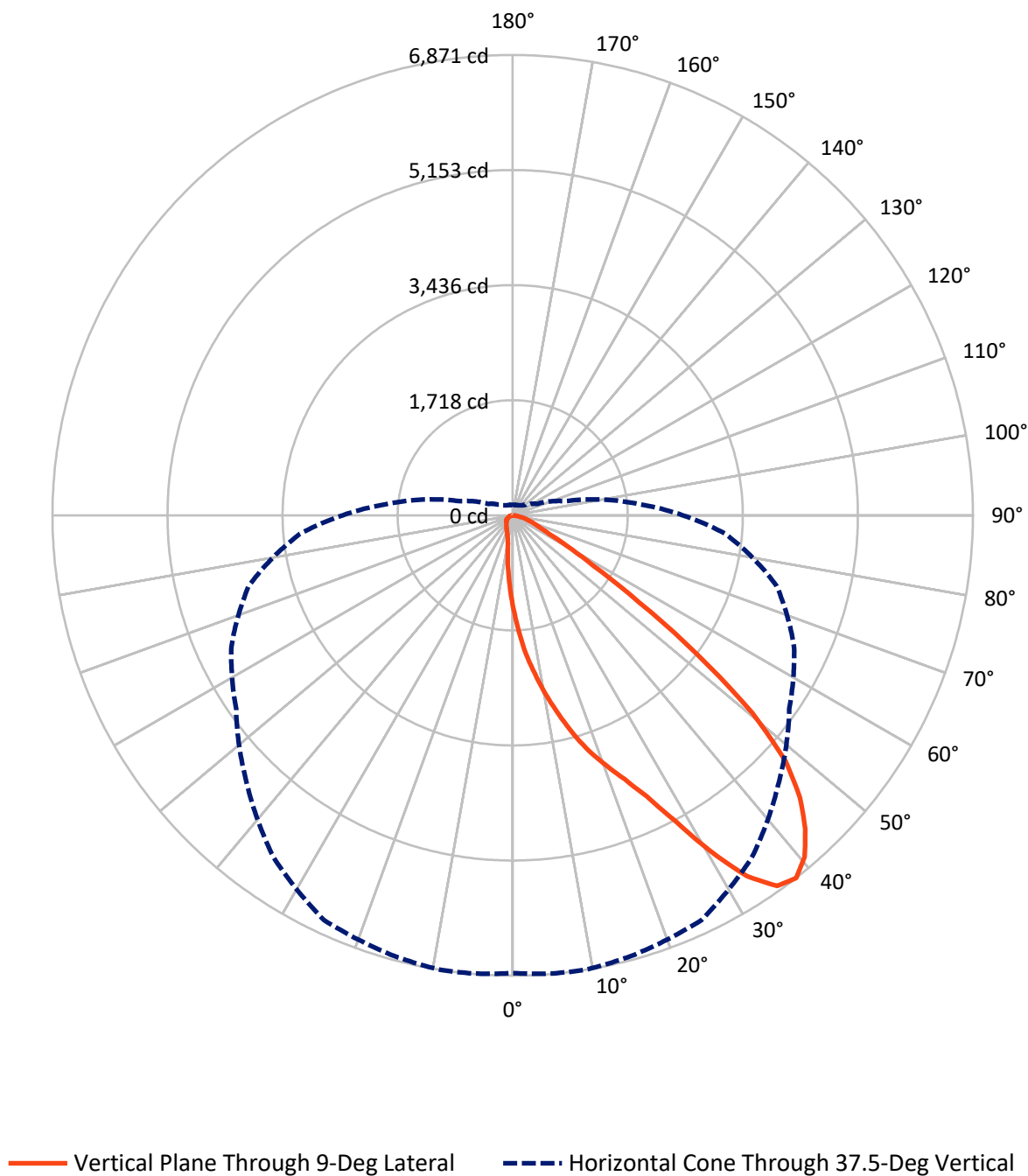
× Max cd
- - - 1/2 Max cd



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

REPORT NUMBER: P842702
CATALOG NUMBER: ARCH4-80-750-U-T2R-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P842702

CATALOG NUMBER: ARCH4-80-750-U-T2R-HSS

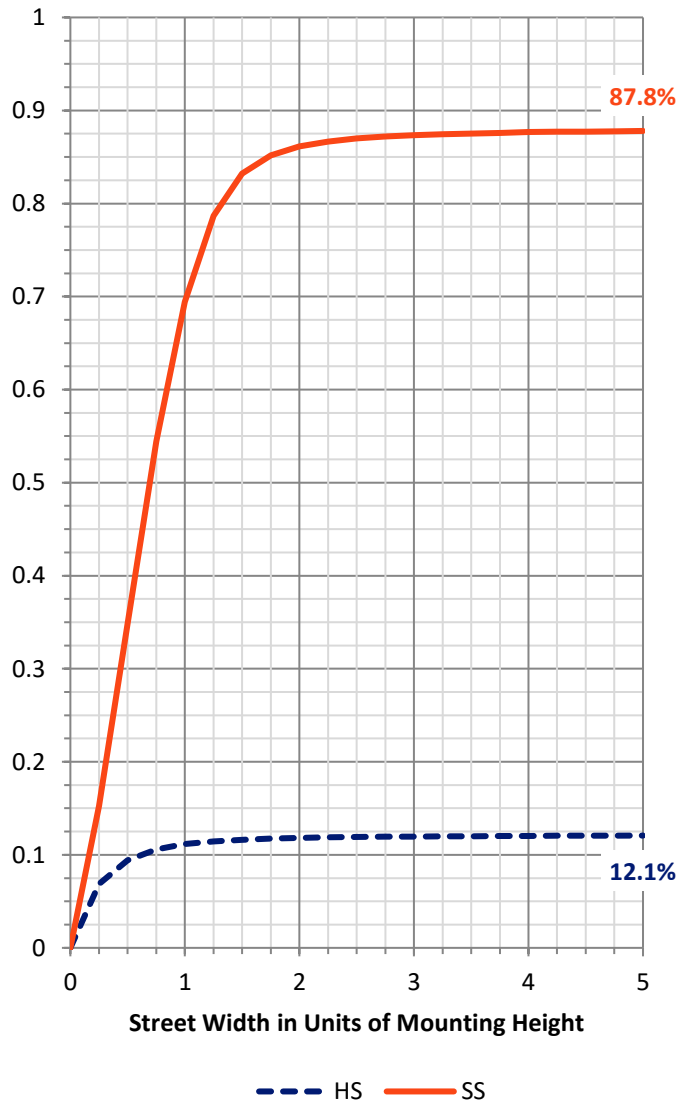
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1281.9	0.0	1281.9
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	9258.1	0.0	9258.1
	% Fixture	87.8	0.0	87.8
Total	Lumens	10540.0	0.0	10540.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.0	1.3
10°-20°	486.7	4.6
20°-30°	1000.2	9.5
30°-40°	1767.8	16.8
40°-50°	2348.4	22.3
50°-60°	2227.3	21.1
60°-70°	1699.3	16.1
70°-80°	823.8	7.8
80°-90°	46.4	0.4
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°	10540.0	100.0
0°-180°	10540.0	100.0

Coefficient of Utilization



REPORT NUMBER: P842702

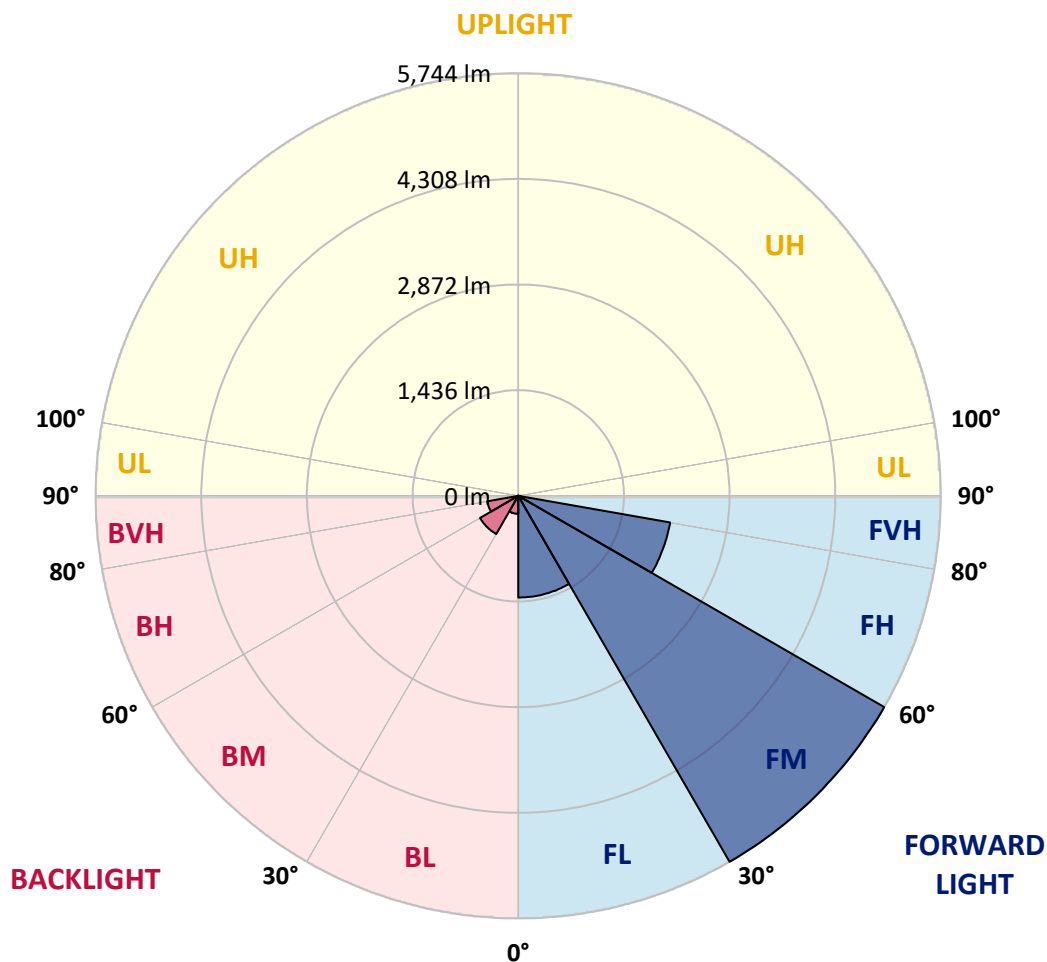
CATALOG NUMBER: ARCH4-80-750-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1382.3	13.1			
FM	(30°-60°)	5743.8	54.5			
FH	(60°-80°)	2095.3	19.9			G2/5000
FVH	(80°-90°)	36.7	0.3			G1/100
BL	(0°-30°)	244.6	2.3	B1/500		
BM	(30°-60°)	599.8	5.7	B1/1000		
BH	(60°-80°)	427.7	4.1	B1/500		G1/500
BVH	(80°-90°)	9.7	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Short



REPORT NUMBER: P842702

CATALOG NUMBER: ARCH4-80-750-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1393.3	1393.3	1393.3	1393.3	1393.3	1393.3	1393.3	1393.3	1393.3	1393.3	1393.3
2.5°	1726.4	1696.1	1730.8	1726.4	1696.1	1676.7	1616.1	1596.6	1525.2	1473.3	1427.9
5°	2081.2	2050.9	2081.2	2072.6	2029.3	1981.7	1882.2	1817.3	1689.7	1577.2	1475.5
7.5°	2375.5	2375.5	2388.4	2390.6	2338.7	2265.1	2141.8	2044.5	1864.9	1691.8	1529.6
10°	2693.5	2695.7	2723.8	2704.3	2635.1	2535.6	2379.8	2256.5	2040.1	1813.0	1581.5
12.5°	3033.2	3035.3	3044.0	3035.3	2953.1	2825.5	2637.2	2475.0	2226.2	1951.4	1652.9
15°	3372.8	3375.0	3385.8	3370.7	3279.8	3130.5	2916.3	2717.3	2423.1	2107.2	1739.4
17.5°	3690.8	3695.2	3703.8	3684.4	3589.2	3411.8	3193.2	2953.1	2632.9	2273.8	1836.8
20°	3976.4	3980.7	3987.2	3961.3	3866.1	3688.7	3452.9	3201.9	2847.1	2444.7	1942.8
22.5°	4264.2	4268.5	4279.3	4244.7	4138.7	3935.3	3703.8	3444.2	3074.3	2632.9	2066.1
25°	4631.9	4636.3	4644.9	4595.2	4450.2	4212.2	3967.8	3701.7	3320.9	2844.9	2217.5
27.5°	5170.6	5166.3	5166.3	5075.4	4826.7	4517.3	4233.9	3963.4	3587.0	3072.1	2384.1
30°	5837.0	5826.2	5819.7	5696.4	5341.6	4861.3	4506.5	4207.9	3842.3	3312.2	2563.7
32.5°	6434.1	6434.1	6421.1	6291.3	5914.9	5324.2	4796.4	4445.9	4088.9	3554.5	2749.7
35°	6786.7	6801.9	6795.4	6698.0	6423.3	5821.8	5187.9	4731.5	4348.5	3807.7	2972.6
37.5°	6834.3	6864.6	6871.1	6812.7	6667.7	6228.6	5622.8	5040.8	4634.1	4080.3	3188.9
40°	6641.8	6706.7	6706.7	6698.0	6646.1	6421.1	5988.4	5400.0	4928.3	4363.7	3407.4
42.5°	6345.4	6412.5	6403.8	6436.3	6423.3	6375.7	6194.0	5735.3	5222.6	4655.7	3606.5
45°	5958.1	6027.4	6010.1	6068.5	6094.4	6146.4	6172.3	5969.0	5512.5	4973.8	3829.3
47.5°	5337.2	5454.1	5480.0	5583.9	5692.0	5854.3	5977.6	6053.3	5782.9	5315.6	4071.6
50°	4419.9	4584.3	4636.3	4854.8	5151.2	5486.5	5685.5	5949.5	5973.3	5666.1	4333.4
52.5°	3165.1	3355.5	3435.6	3794.7	4404.8	4988.9	5348.0	5720.2	6046.8	6001.4	4616.8
55°	2046.6	2208.9	2286.8	2624.3	3435.6	4352.9	4950.0	5423.8	6005.7	6308.6	4941.3
57.5°	1261.3	1354.3	1406.2	1696.1	2442.5	3537.2	4428.6	5151.2	5880.3	6574.7	5278.8
60°	850.2	904.3	930.3	1066.6	1659.4	2643.7	3712.5	4865.6	5715.8	6754.3	5586.0
62.5°	564.7	582.0	607.9	692.3	1094.7	1856.2	2851.4	4355.0	5592.5	6765.1	5813.2
65°	437.0	445.7	456.5	493.3	675.0	1298.1	2005.5	3528.6	5408.6	6535.8	5884.6
67.5°	344.0	352.6	365.6	385.1	488.9	880.5	1365.1	2585.3	5032.2	6176.6	5767.8
70°	270.4	276.9	285.6	302.9	380.8	638.2	902.2	1717.8	4272.8	5834.8	5400.0
72.5°	214.2	220.7	229.3	246.6	309.4	467.3	618.7	1070.9	3294.9	5417.3	4692.5
75°	168.7	173.1	179.6	196.9	248.8	363.5	419.7	640.4	2239.2	4653.6	3656.2
77.5°	84.4	103.8	119.0	136.3	181.7	251.0	279.1	354.8	945.4	2388.4	1743.7
80°	49.8	60.6	64.9	75.7	119.0	151.4	151.4	142.8	298.6	917.3	711.8
82.5°	28.1	38.9	41.1	43.3	71.4	86.5	69.2	51.9	60.6	307.2	207.7
85°	8.7	13.0	15.1	17.3	23.8	26.0	23.8	21.6	17.3	30.3	19.5
87.5°	0.0	0.0	0.0	0.0	2.2	4.3	4.3	4.3	6.5	6.5	6.5
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: P842702

CATALOG NUMBER: ARCH4-80-750-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1393.3	1393.3	1393.3	1393.3	1393.3	1393.3	1393.3	1393.3	1393.3	1393.3	1393.3
2.5°	1401.9	1373.8	1319.7	1269.9	1222.3	1187.7	1155.3	1125.0	1103.4	1086.1	1083.9
5°	1421.4	1365.1	1261.3	1163.9	1075.2	1001.7	938.9	889.2	852.4	826.4	824.3
7.5°	1447.3	1360.8	1202.9	1057.9	926.0	819.9	729.1	662.0	614.4	594.9	579.8
10°	1469.0	1356.5	1144.5	951.9	778.8	644.7	536.5	469.5	434.9	421.9	415.4
12.5°	1505.8	1360.8	1094.7	854.6	651.2	493.3	411.1	374.3	359.1	348.3	346.2
15°	1559.8	1380.3	1047.1	759.4	521.4	398.1	350.5	326.7	311.5	309.4	307.2
17.5°	1613.9	1397.6	1003.8	662.0	432.7	346.2	313.7	294.2	283.4	281.2	281.2
20°	1676.7	1419.2	956.2	569.0	369.9	311.5	285.6	270.4	257.5	255.3	255.3
22.5°	1750.2	1449.5	910.8	486.8	328.8	285.6	263.9	246.6	235.8	233.7	233.7
25°	1849.7	1494.9	874.0	426.2	300.7	263.9	244.5	229.3	220.7	216.3	216.3
27.5°	1960.1	1557.7	848.1	389.4	281.2	246.6	227.2	214.2	205.5	201.2	201.2
30°	2083.4	1626.9	830.8	374.3	270.4	231.5	214.2	201.2	190.4	188.2	188.2
32.5°	2219.7	1707.0	819.9	376.4	268.3	220.7	201.2	188.2	179.6	175.2	175.2
35°	2371.1	1795.7	813.5	389.4	272.6	212.0	190.4	177.4	168.7	164.4	164.4
37.5°	2539.9	1899.5	813.5	402.4	283.4	209.9	179.6	166.6	160.1	155.8	155.8
40°	2697.8	2009.8	822.1	417.5	294.2	209.9	170.9	160.1	151.4	147.1	147.1
42.5°	2821.1	2072.6	828.6	432.7	300.7	207.7	162.3	151.4	145.0	140.6	140.6
45°	2961.8	2139.7	815.6	439.2	300.7	203.4	155.8	145.0	138.5	134.1	134.1
47.5°	3117.5	2221.9	813.5	443.5	294.2	194.7	149.3	138.5	134.1	129.8	129.8
50°	3275.5	2312.7	817.8	441.3	285.6	181.7	140.6	134.1	127.6	123.3	123.3
52.5°	3455.0	2407.9	826.4	437.0	266.1	166.6	134.1	127.6	121.2	116.8	114.7
55°	3654.1	2511.8	843.7	428.4	240.1	151.4	127.6	121.2	112.5	108.2	106.0
57.5°	3883.4	2639.4	863.2	411.1	212.0	138.5	121.2	112.5	99.5	93.0	90.9
60°	4101.9	2784.4	884.9	369.9	183.9	125.5	114.7	101.7	88.7	84.4	82.2
62.5°	4307.4	2927.1	895.7	296.4	155.8	114.7	108.2	93.0	80.0	75.7	73.6
65°	4439.4	3082.9	871.9	201.2	127.6	106.0	99.5	86.5	73.6	67.1	67.1
67.5°	4448.0	3156.5	789.7	132.0	103.8	95.2	90.9	77.9	64.9	60.6	58.4
70°	4229.5	3046.1	603.6	103.8	86.5	82.2	82.2	69.2	56.2	51.9	49.8
72.5°	3727.6	2697.8	385.1	84.4	73.6	69.2	69.2	58.4	49.8	43.3	41.1
75°	2942.3	2081.2	205.5	69.2	60.6	58.4	54.1	47.6	41.1	36.8	34.6
77.5°	1352.2	917.3	95.2	49.8	45.4	45.4	41.1	34.6	32.5	28.1	28.1
80°	534.4	311.5	47.6	32.5	30.3	30.3	30.3	23.8	23.8	19.5	17.3
82.5°	147.1	64.9	23.8	19.5	19.5	19.5	17.3	15.1	15.1	13.0	13.0
85°	15.1	10.8	10.8	10.8	10.8	8.7	8.7	6.5	4.3	4.3	4.3
87.5°	6.5	6.5	6.5	6.5	6.5	4.3	2.2	0.0	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)