

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: P841772

Luminaire Tested: **ARCH4-220-750-U-T4W-HSS**

Issue Date: 5/27/2024

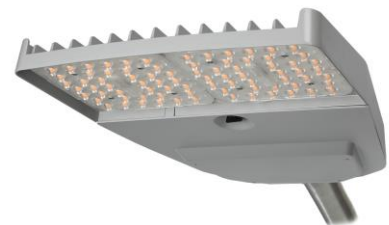
Test Information

Test Method: LM-79-08
Report Number: P841772
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: ARCH4-220-750-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 870mA 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: 24349 lumens
Efficiency: N/A
Efficacy: 109.8 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

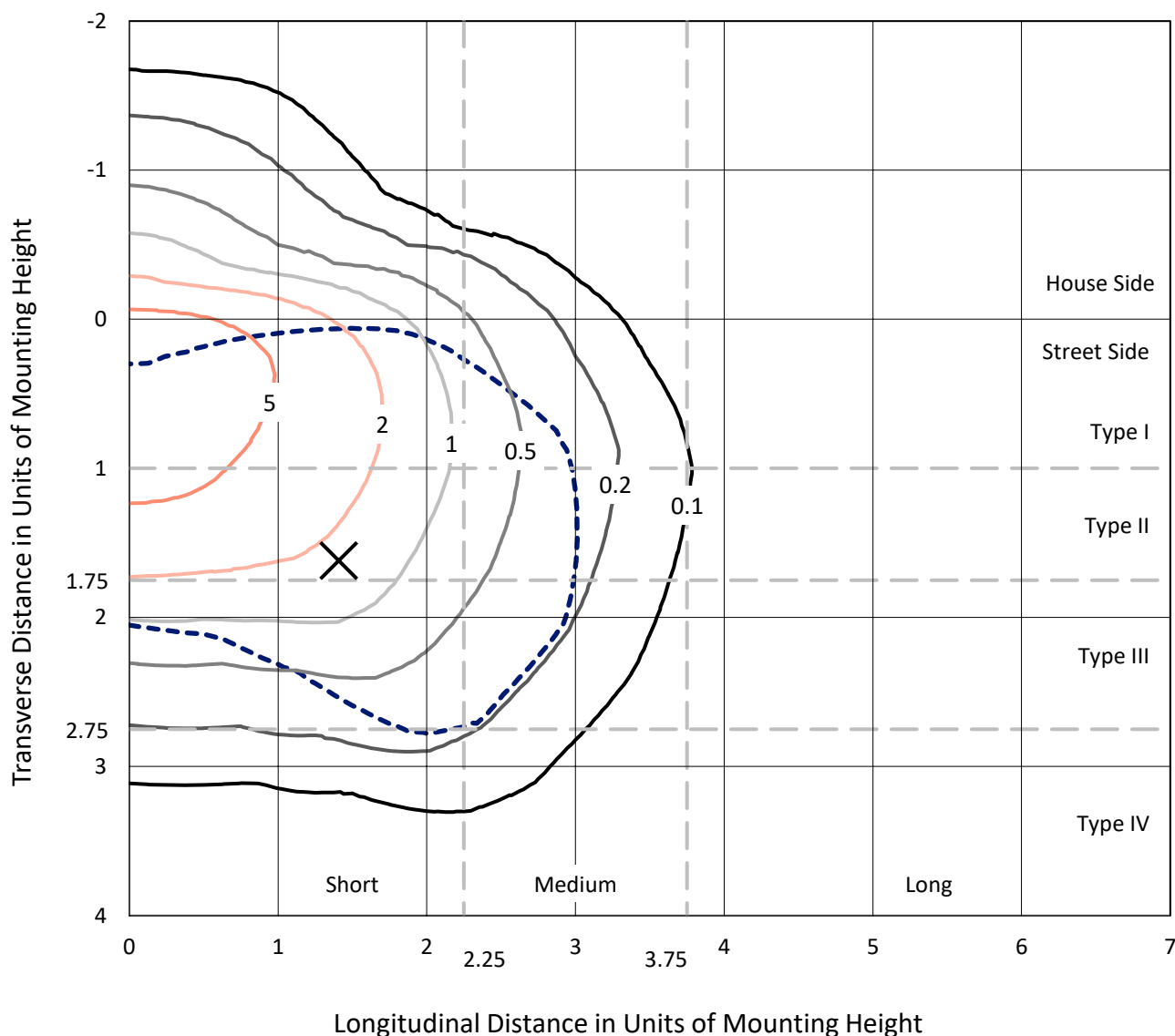
Input Watts (W): 221.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P841772
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Iso-Footcandle Lines of Horizontal Illumination

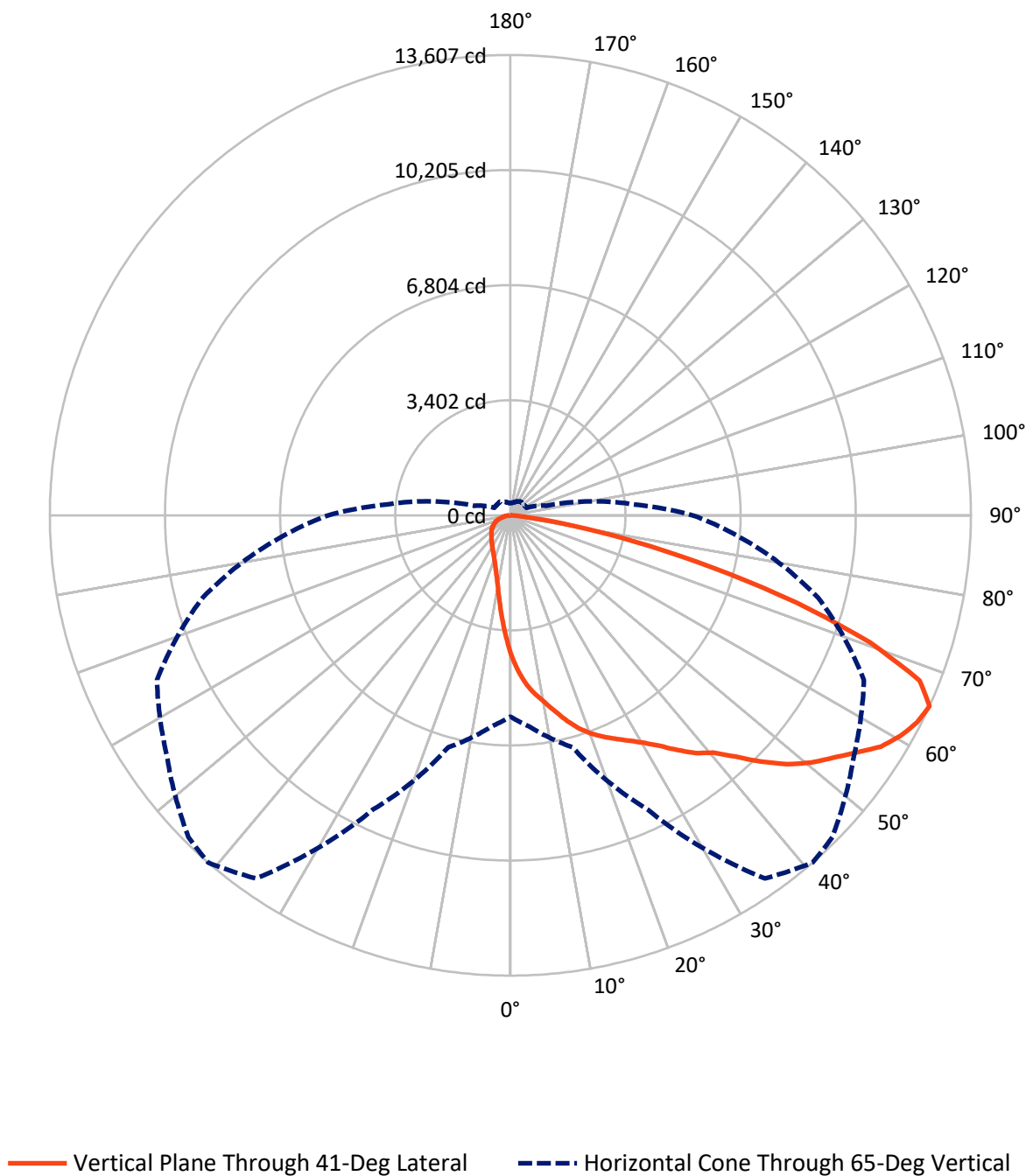
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.6 fc
 Type III - Short - N/A

REPORT NUMBER: P841772
CATALOG NUMBER: ARCH4-220-750-U-T4W-HSS

Luminous Intensity Polar Plot



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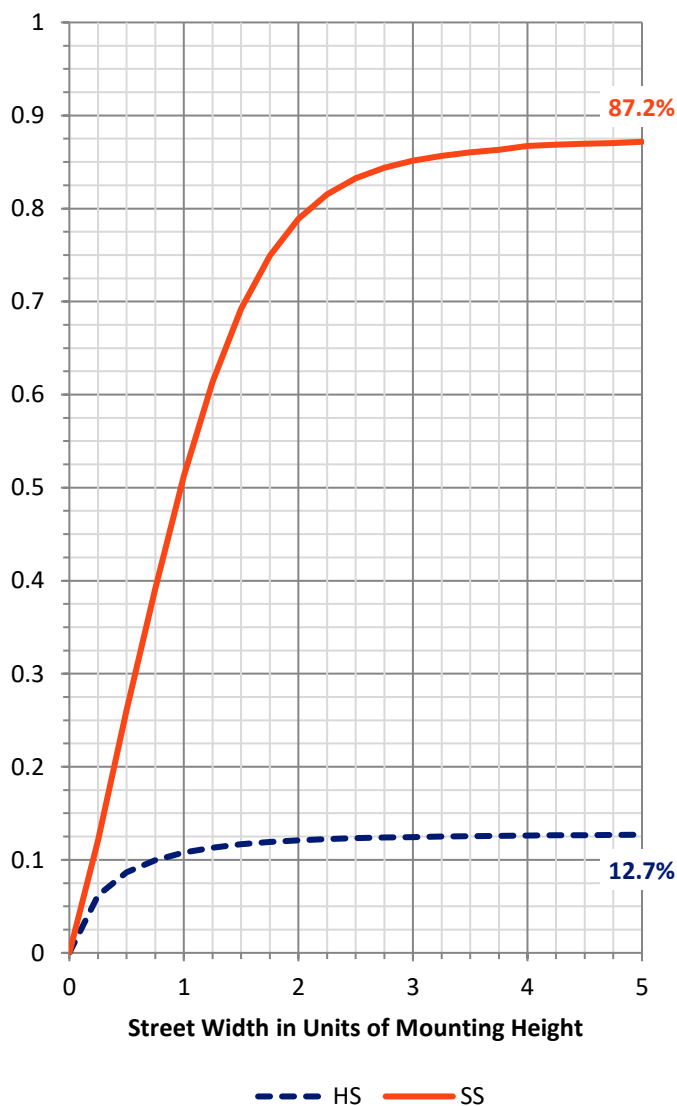
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3126.0	0.0	3126.0
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	21223.0	0.0	21223.0
	% Fixture	87.2	0.0	87.2
Total	Lumens	24349.0	0.0	24349.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	386.6	1.6
10°-20°	1159.2	4.8
20°-30°	1994.2	8.2
30°-40°	3024.5	12.4
40°-50°	4431.0	18.2
50°-60°	5595.3	23.0
60°-70°	5246.7	21.5
70°-80°	2338.4	9.6
80°-90°	173.2	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°	24349.0	100.0
0°-180°	24349.0	100.0

Coefficient of Utilization



REPORT NUMBER: P841772

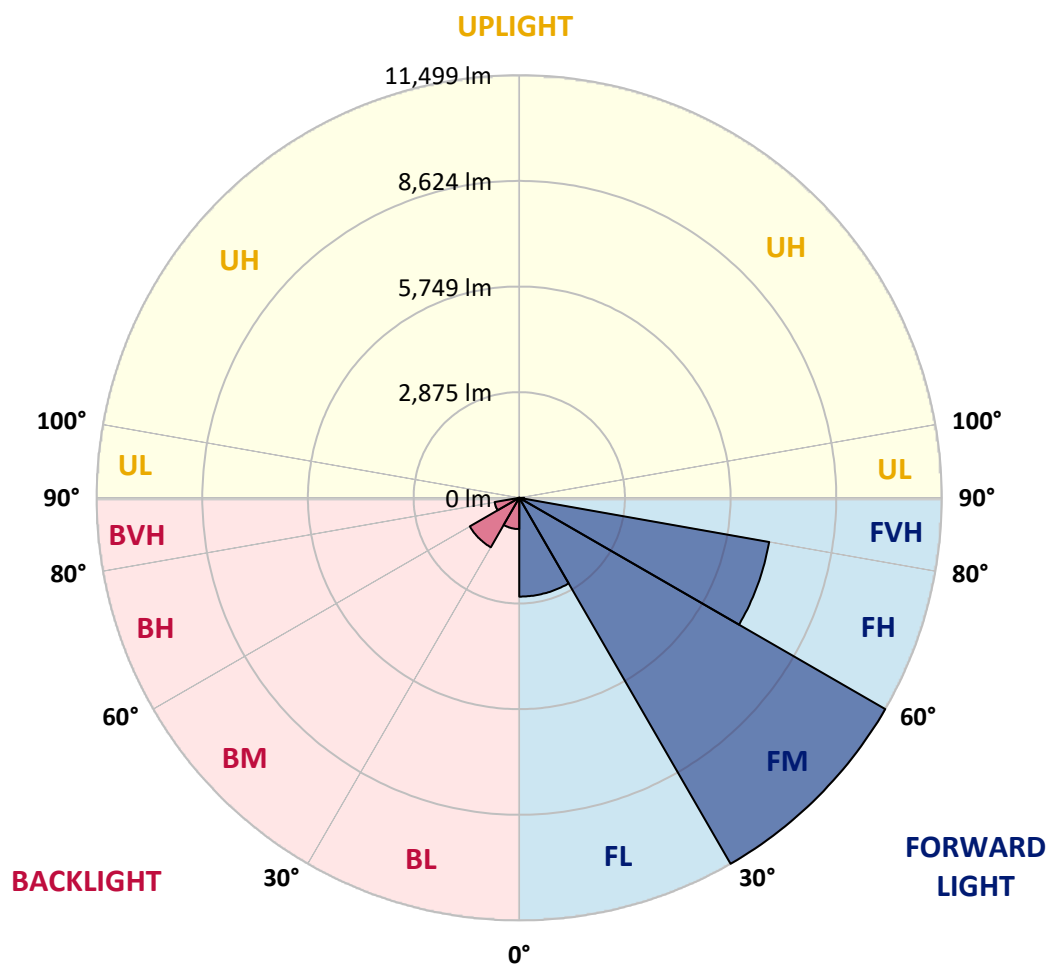
CATALOG NUMBER: ARCH4-220-750-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2689.0	11.0			
FM	(30°-60°)	11498.5	47.2			
FH	(60°-80°)	6906.0	28.4			G3/7500
FVH	(80°-90°)	129.4	0.5			G2/225
BL	(0°-30°)	850.9	3.5	B2/1000		
BM	(30°-60°)	1552.2	6.4	B2/2500		
BH	(60°-80°)	679.1	2.8	B2/1000		G2/1000
BVH	(80°-90°)	43.9	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	4148.9	4148.9	4148.9	4148.9	4148.9	4148.9	4148.9	4148.9	4148.9	4148.9	4148.9
2.5°	4785.7	4770.3	4760.0	4703.5	4703.5	4626.5	4631.6	4559.7	4472.4	4333.8	4184.9
5°	5237.5	5217.0	5191.3	5134.8	5114.3	5037.3	5027.0	4924.3	4775.4	4534.1	4267.0
7.5°	5632.9	5612.4	5576.4	5494.3	5437.8	5345.4	5319.7	5186.2	5021.9	4724.0	4349.2
10°	5992.3	5976.9	5930.7	5828.0	5751.0	5638.0	5591.8	5412.1	5206.7	4878.1	4416.0
12.5°	6356.9	6336.4	6274.8	6187.5	6095.0	5961.5	5905.1	5674.0	5412.1	5047.5	4513.5
15°	6695.8	6665.0	6618.8	6526.4	6444.2	6315.8	6254.2	5982.1	5663.7	5237.5	4641.9
17.5°	6916.6	6890.9	6849.9	6798.5	6731.8	6634.2	6572.6	6305.6	5915.3	5422.4	4775.4
20°	7050.1	7039.9	7024.4	6993.6	6962.8	6896.1	6849.9	6598.3	6187.5	5602.1	4903.8
22.5°	7152.8	7142.5	7137.4	7137.4	7142.5	7116.9	7086.1	6870.4	6449.3	5792.1	5021.9
25°	7312.0	7306.9	7296.6	7286.3	7322.3	7327.4	7317.1	7168.2	6778.0	6043.7	5170.8
27.5°	7532.8	7517.4	7496.9	7486.6	7522.5	7548.2	7568.7	7466.0	7127.1	6300.4	5340.2
30°	7871.7	7825.5	7774.1	7738.2	7763.9	7804.9	7851.2	7789.5	7486.6	6618.8	5514.8
32.5°	8272.2	8215.7	8097.6	8030.9	8097.6	8128.4	8164.4	8133.6	7861.4	6962.8	5689.4
35°	8760.0	8693.3	8570.0	8472.5	8590.6	8523.8	8508.4	8477.6	8215.7	7301.7	5884.5
37.5°	9571.3	9473.8	9278.6	9063.0	9063.0	8919.2	8862.7	8770.3	8534.1	7604.7	6074.5
40°	10511.0	10382.6	10131.0	9812.7	9520.0	9222.2	9186.2	9119.5	8908.9	7953.9	6290.2
42.5°	11543.1	11296.6	10947.5	10562.3	10089.9	9751.0	9668.9	9478.9	9273.5	8308.2	6505.8
45°	12688.2	12174.7	11666.3	11471.2	10690.7	10382.6	10228.6	9884.5	9653.5	8677.9	6731.8
47.5°	12873.0	12472.5	12133.6	12102.8	11250.4	10993.7	10819.1	10326.1	10064.3	9073.2	6968.0
50°	12770.3	12529.0	12564.9	12441.7	11661.2	11491.7	11358.2	10798.5	10469.9	9453.2	7183.6
52.5°	12339.0	12472.5	12677.9	12452.0	12051.4	11912.8	11846.1	11306.9	10849.9	9802.4	7378.8
55°	11825.5	11917.9	12359.5	12636.8	12503.3	12380.1	12318.5	11897.4	11224.7	10095.1	7558.5
57.5°	11075.8	11034.7	11522.6	12606.0	12975.7	12903.8	12837.1	12477.6	11573.9	10305.6	7671.4
60°	9951.3	9864.0	10480.2	11989.8	13129.8	13242.7	13211.9	12862.7	11840.9	10300.5	7625.2
62.5°	8005.2	8220.9	9073.2	10983.4	13196.5	13484.1	13427.6	12893.6	11928.2	10002.6	7332.5
65°	5951.3	6259.4	7096.3	9597.0	13104.1	13607.3	13453.3	12390.3	11522.6	9412.1	6690.7
67.5°	4287.6	4559.7	5170.8	7897.4	12215.8	13042.5	12862.7	11568.8	10588.0	8575.2	5802.4
70°	2932.0	3127.1	3543.0	5751.0	10428.8	11276.1	11163.1	10341.5	9114.3	7579.0	4713.8
72.5°	2069.3	2151.5	2418.5	3794.6	7923.0	8847.3	8713.8	8508.4	7322.3	6300.4	3666.3
75°	1550.7	1602.1	1745.8	2454.4	5345.4	6131.0	6007.8	6125.9	5468.6	4770.3	2670.1
77.5°	585.4	636.7	991.0	1566.1	3163.1	3763.8	3640.6	3712.5	3039.8	2408.2	1329.9
80°	159.2	169.4	328.6	744.6	1437.8	1874.2	1704.8	1463.4	1129.7	1109.1	703.5
82.5°	66.8	77.0	148.9	400.5	513.5	513.5	431.3	534.0	431.3	518.6	338.9
85°	25.7	30.8	35.9	102.7	66.8	71.9	77.0	102.7	87.3	107.8	77.0
87.5°	0.0	0.0	0.0	5.1	5.1	10.3	5.1	10.3	15.4	15.4	15.4
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: P841772

CATALOG NUMBER: ARCH4-220-750-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4148.9	4148.9	4148.9	4148.9	4148.9	4148.9	4148.9	4148.9	4148.9	4148.9	4148.9
2.5°	4123.3	4066.8	3984.6	3851.1	3712.5	3635.5	3537.9	3522.5	3419.8	3409.5	3368.4
5°	4148.9	4030.8	3820.3	3563.6	3312.0	3116.8	2973.1	2896.0	2747.1	2747.1	2706.1
7.5°	4169.5	3984.6	3645.7	3265.8	2921.7	2659.8	2464.7	2382.6	2249.1	2238.8	2208.0
10°	4174.6	3928.1	3455.7	2962.8	2541.7	2274.7	2084.7	1992.3	1874.2	1863.9	1843.4
12.5°	4215.7	3897.3	3286.3	2700.9	2269.6	1982.0	1797.2	1720.2	1627.7	1617.5	1596.9
15°	4282.4	3897.3	3142.5	2480.1	2028.3	1761.2	1602.1	1530.2	1463.4	1453.2	1442.9
17.5°	4349.2	3887.1	2998.7	2274.7	1828.0	1586.7	1448.0	1391.5	1340.2	1335.1	1324.8
20°	4410.8	3881.9	2855.0	2100.1	1674.0	1442.9	1335.1	1283.7	1242.6	1242.6	1237.5
22.5°	4472.4	3871.7	2716.3	1935.8	1540.4	1335.1	1242.6	1186.1	1155.3	1155.3	1150.2
25°	4564.9	3871.7	2588.0	1797.2	1432.6	1252.9	1160.5	1119.4	1093.7	1088.6	1088.6
27.5°	4672.7	3902.5	2475.0	1674.0	1340.2	1170.7	1098.9	1057.8	1027.0	1016.7	1021.8
30°	4790.8	3928.1	2372.3	1566.1	1252.9	1109.1	1032.1	991.0	960.2	949.9	955.1
32.5°	4908.9	3959.0	2279.9	1468.6	1165.6	1052.6	975.6	929.4	898.6	893.5	893.5
35°	5037.3	3989.8	2187.4	1386.4	1093.7	996.2	924.3	872.9	852.4	842.1	847.2
37.5°	5165.6	4041.1	2100.1	1309.4	1042.4	944.8	878.1	826.7	811.3	806.2	806.2
40°	5319.7	4118.1	2064.2	1258.0	996.2	898.6	842.1	790.8	775.4	775.4	775.4
42.5°	5448.1	4179.8	2033.4	1201.6	960.2	857.5	806.2	765.1	754.8	749.7	754.8
45°	5576.4	4236.2	1992.3	1150.2	914.0	816.4	775.4	734.3	724.0	724.0	724.0
47.5°	5704.8	4267.0	1935.8	1098.9	872.9	780.5	744.6	708.6	698.3	698.3	698.3
50°	5807.5	4292.7	1853.7	1042.4	826.7	749.7	713.7	677.8	667.5	667.5	667.5
52.5°	5910.2	4297.9	1766.4	975.6	780.5	713.7	682.9	647.0	636.7	631.6	631.6
55°	6002.6	4292.7	1663.7	898.6	729.1	672.7	647.0	616.2	595.6	575.1	585.4
57.5°	6069.4	4287.6	1545.6	821.6	677.8	631.6	621.3	580.2	539.2	487.8	498.1
60°	6043.7	4231.1	1417.2	724.0	621.3	590.5	590.5	534.0	462.1	436.5	441.6
62.5°	5879.4	4071.9	1283.7	621.3	564.8	549.4	544.3	482.7	426.2	400.5	405.7
65°	5386.4	3671.4	1088.6	528.9	508.3	503.2	503.2	446.7	395.4	364.6	369.7
67.5°	4636.8	3080.9	888.3	446.7	451.9	462.1	462.1	410.8	359.4	328.6	333.8
70°	3717.6	2408.2	708.6	385.1	390.2	405.7	415.9	369.7	323.5	292.7	292.7
72.5°	2798.5	1828.0	570.0	323.5	349.2	349.2	364.6	328.6	282.4	251.6	256.7
75°	2028.3	1309.4	451.9	272.1	303.0	297.8	297.8	277.3	241.3	220.8	220.8
77.5°	960.2	688.1	359.4	195.1	236.2	231.1	236.2	220.8	205.4	184.9	190.0
80°	472.4	338.9	231.1	138.6	164.3	169.4	184.9	174.6	169.4	154.0	154.0
82.5°	225.9	133.5	107.8	97.6	113.0	118.1	128.4	128.4	133.5	123.2	123.2
85°	61.6	35.9	46.2	61.6	71.9	77.0	87.3	92.4	92.4	87.3	92.4
87.5°	15.4	15.4	20.5	30.8	35.9	41.1	46.2	46.2	20.5	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)