

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: P836922

Luminaire Tested: **ARCH3-90-740-U-T3-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836922
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-26)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-90-740-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 735mA LIGHTSQUARE WITH 40 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10567 lumens
Efficiency: N/A
Efficacy: 113.5 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 93.1
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

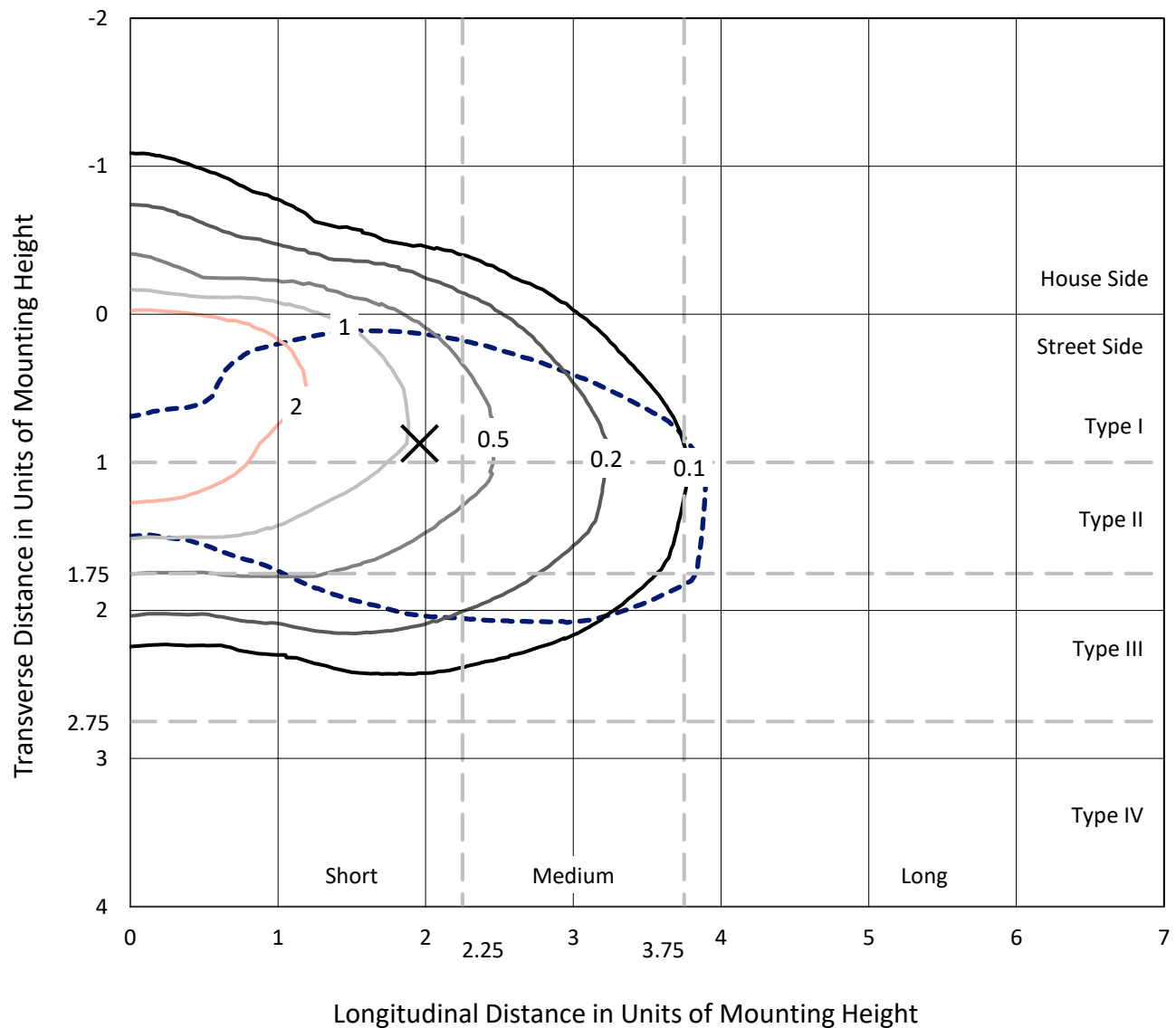


REPORT NUMBER: P836922

CATALOG NUMBER: ARCH3-90-740-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

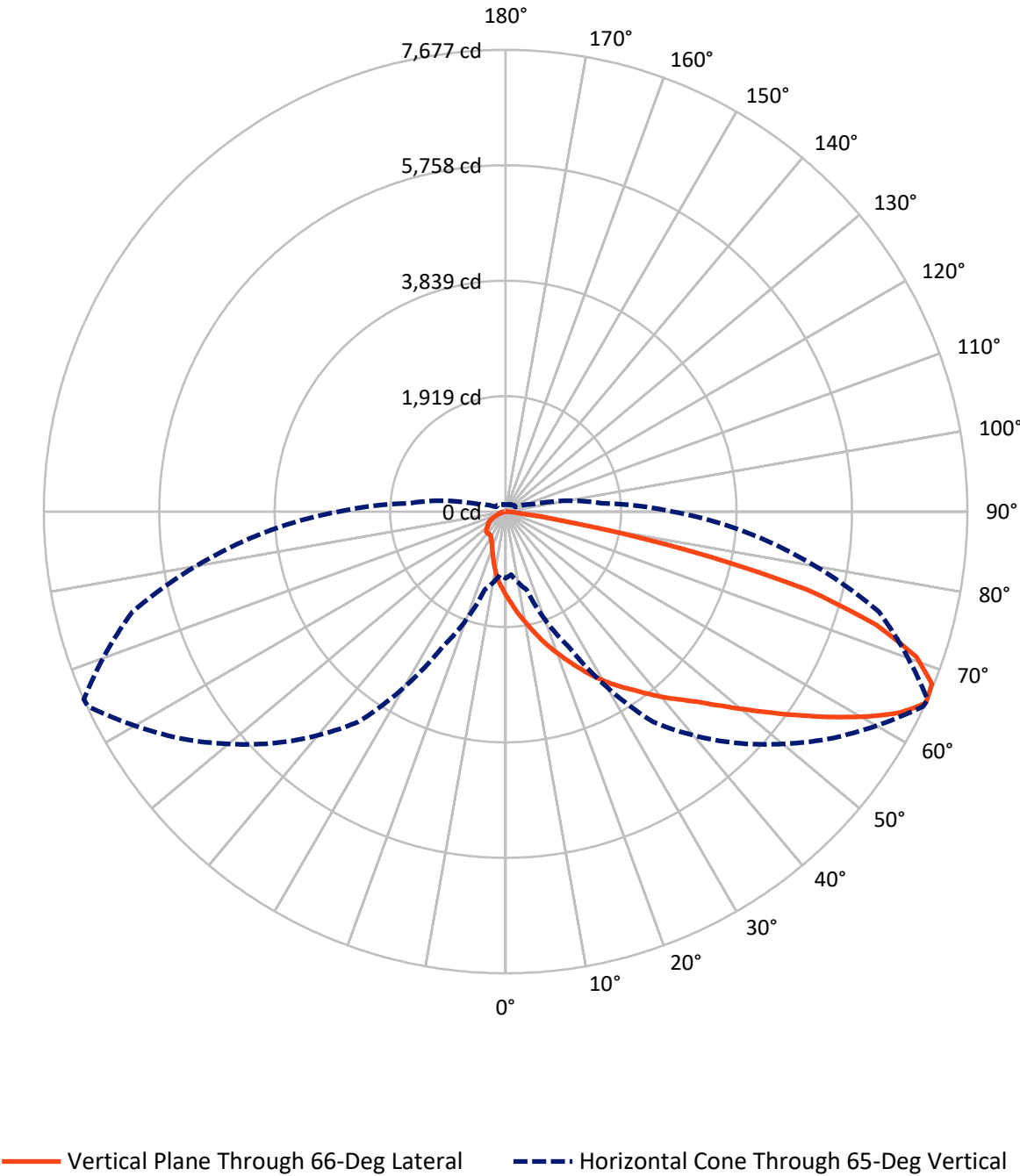
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4 fc
Type III - Short - N/A

REPORT NUMBER: P836922
CATALOG NUMBER: ARCH3-90-740-U-T3-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P836922

CATALOG NUMBER: ARCH3-90-740-U-T3-HSS

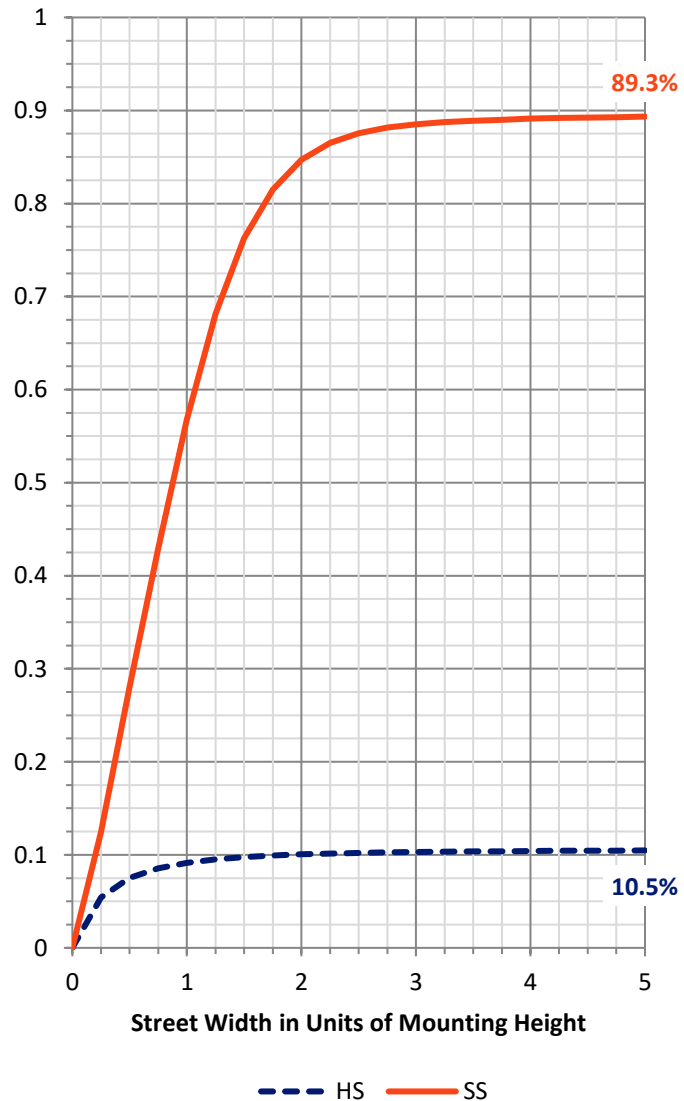
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1117.7	0.0	1117.7
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	9449.3	0.0	9449.3
	% Fixture	89.4	0.0	89.4
Total	Lumens	10567.0	0.0	10567.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.0	1.3
10°-20°	449.9	4.3
20°-30°	814.0	7.7
30°-40°	1272.8	12.0
40°-50°	1930.9	18.3
50°-60°	2453.3	23.2
60°-70°	2292.3	21.7
70°-80°	1139.3	10.8
80°-90°	76.5	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°	10567.0	100.0
0°-180°	10567.0	100.0

Coefficient of Utilization



REPORT NUMBER: P836922

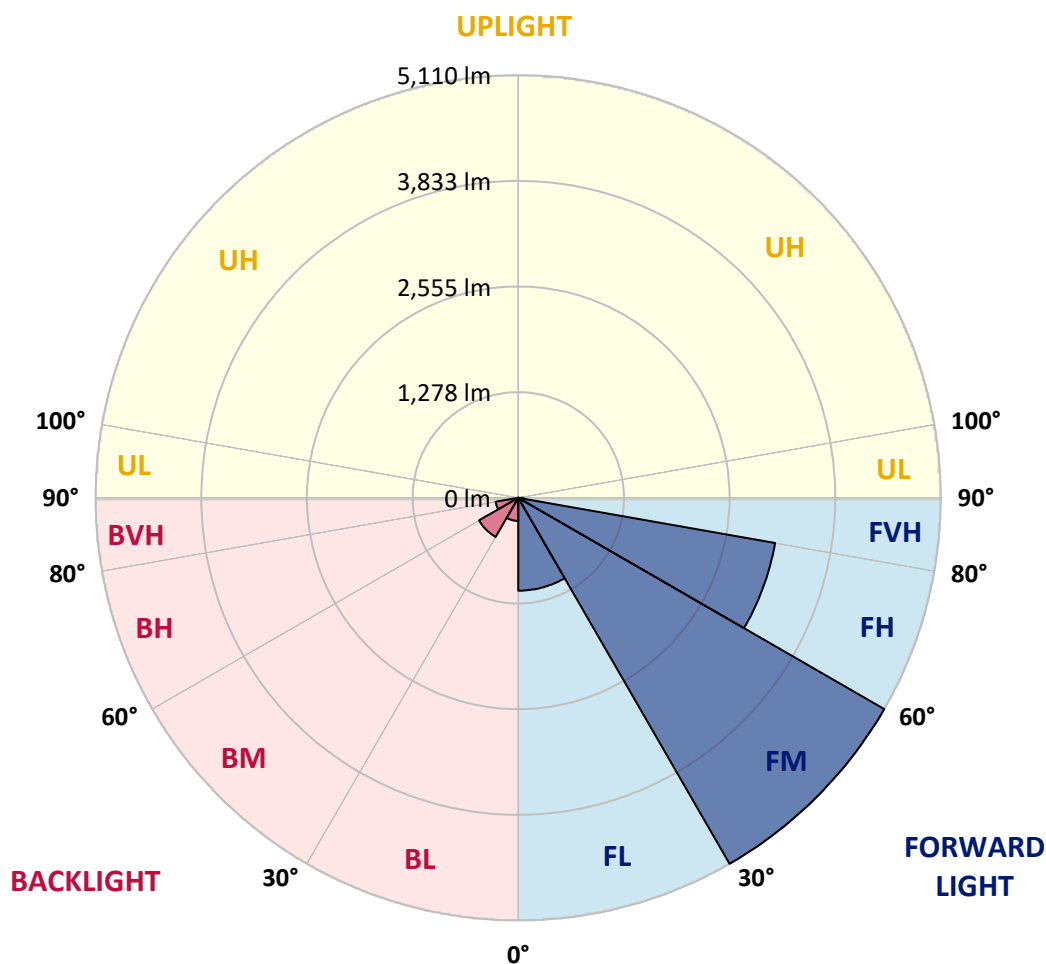
CATALOG NUMBER: ARCH3-90-740-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1122.7	10.6			
FM	(30°-60°)	5110.3	48.4			
FH	(60°-80°)	3153.2	29.8			G2/5000
FVH	(80°-90°)	63.0	0.6			G1/100
BL	(0°-30°)	279.1	2.6	B1/500		
BM	(30°-60°)	546.7	5.2	B1/1000		
BH	(60°-80°)	278.3	2.6	B1/500		G1/500
BVH	(80°-90°)	13.6	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short



REPORT NUMBER: P836922

CATALOG NUMBER: ARCH3-90-740-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1398.5	1398.5	1398.5	1398.5	1398.5	1398.5	1398.5	1398.5	1398.5	1398.5	1398.5
2.5°	1633.4	1646.7	1653.4	1655.6	1604.6	1582.4	1560.3	1509.3	1498.2	1469.4	1431.7
5°	1921.5	1939.3	1934.8	1926.0	1863.9	1793.0	1735.4	1640.1	1624.5	1555.8	1471.6
7.5°	2205.2	2220.7	2216.3	2183.1	2114.3	2014.6	1919.3	1779.7	1757.5	1646.7	1511.5
10°	2442.4	2455.7	2453.4	2420.2	2338.2	2216.3	2101.1	1914.9	1888.3	1730.9	1544.8
12.5°	2637.4	2655.1	2652.9	2630.7	2557.6	2424.6	2293.9	2070.0	2036.8	1832.9	1591.3
15°	2790.3	2812.5	2812.5	2803.6	2752.6	2641.8	2493.3	2240.7	2200.8	1950.3	1648.9
17.5°	2883.4	2901.1	2916.6	2932.2	2896.7	2812.5	2677.3	2411.3	2369.2	2065.6	1708.8
20°	2932.2	2949.9	2961.0	2994.2	3000.9	2958.8	2852.4	2579.8	2535.4	2196.4	1777.5
22.5°	3011.9	3027.5	3029.7	3058.5	3071.8	3082.9	3016.4	2746.0	2710.5	2340.4	1855.0
25°	3144.9	3162.7	3156.0	3169.3	3171.5	3184.8	3178.2	2936.6	2901.1	2504.4	1948.1
27.5°	3315.6	3337.7	3333.3	3320.0	3300.1	3289.0	3317.8	3129.4	3096.2	2668.4	2043.4
30°	3499.5	3526.1	3519.5	3492.9	3439.7	3393.2	3433.0	3311.2	3280.1	2836.9	2149.8
32.5°	3685.7	3716.7	3714.5	3670.2	3579.3	3499.5	3559.4	3481.8	3459.6	3018.6	2265.1
35°	3807.6	3847.5	3843.1	3816.5	3699.0	3630.3	3703.4	3656.9	3641.4	3240.2	2431.3
37.5°	4004.9	4047.0	4009.3	3942.8	3807.6	3772.1	3860.8	3854.1	3843.1	3475.2	2606.4
40°	4483.6	4545.6	4445.9	4173.3	3951.7	3920.6	4047.0	4073.6	4062.5	3707.9	2763.7
42.5°	4984.5	5077.5	4922.4	4545.6	4213.2	4100.2	4250.9	4288.5	4275.2	3907.3	2905.6
45°	5288.1	5328.0	5172.8	4880.3	4676.4	4317.3	4468.1	4530.1	4519.0	4146.7	3087.3
47.5°	5536.3	5520.8	5343.5	5146.2	5183.9	4623.2	4714.1	4836.0	4827.1	4410.4	3286.8
50°	5589.5	5554.0	5483.1	5359.0	5458.7	4933.5	4973.4	5183.9	5175.1	4703.0	3488.5
52.5°	5215.0	5168.4	5361.2	5465.4	5432.1	5159.5	5259.3	5565.1	5560.7	5019.9	3681.3
55°	4279.7	4242.0	4760.6	5299.2	5403.3	5319.1	5576.2	5961.8	5986.2	5356.8	3856.4
57.5°	3366.6	3326.7	3836.4	4882.5	5297.0	5465.4	5946.3	6416.2	6447.2	5722.5	4022.6
60°	2683.9	2624.1	3014.2	4226.5	5097.5	5578.4	6303.2	6914.9	6919.3	6057.1	4124.5
62.5°	1824.0	1757.5	2189.7	3395.4	4762.8	5596.2	6578.0	7344.8	7362.5	6307.6	4142.3
65°	1108.1	1052.7	1345.3	2480.0	4268.6	5445.4	6582.4	7661.7	7677.3	6422.8	4035.9
67.5°	642.7	620.6	769.1	1544.8	3448.6	5039.9	6305.4	7613.0	7641.8	6374.1	3794.3
70°	374.6	372.3	427.7	764.6	2433.5	4235.3	5687.0	7203.0	7245.1	6119.2	3424.2
72.5°	274.8	279.3	301.4	410.0	1409.6	3049.6	4816.0	6378.5	6442.8	5620.5	2896.7
75°	217.2	219.4	239.4	279.3	740.2	1724.3	3608.1	5119.6	5170.6	4731.8	2262.8
77.5°	161.8	166.2	181.7	197.3	343.5	791.2	2030.1	3153.8	3069.6	2597.5	1092.6
80°	117.5	128.5	135.2	141.8	181.7	305.8	609.5	1099.3	1090.4	1134.7	516.4
82.5°	75.4	84.2	90.9	95.3	108.6	146.3	181.7	246.0	266.0	441.0	206.1
85°	33.2	37.7	42.1	51.0	46.5	51.0	75.4	48.8	42.1	66.5	37.7
87.5°	0.0	0.0	6.6	11.1	8.9	4.4	13.3	8.9	6.6	6.6	6.6
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: P836922

CATALOG NUMBER: ARCH3-90-740-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1398.5	1398.5	1398.5	1398.5	1398.5	1398.5	1398.5	1398.5	1398.5	1398.5	1398.5
2.5°	1411.8	1387.4	1336.4	1287.7	1258.9	1221.2	1187.9	1156.9	1154.7	1145.8	1130.3
5°	1429.5	1383.0	1287.7	1196.8	1128.1	1055.0	992.9	944.1	926.4	913.1	895.4
7.5°	1447.2	1374.1	1232.3	1099.3	990.7	888.7	815.6	749.1	729.2	711.4	700.4
10°	1453.9	1358.6	1168.0	990.7	848.8	740.2	662.7	613.9	596.2	587.3	580.7
12.5°	1473.8	1349.7	1108.1	888.7	724.7	625.0	569.6	540.8	534.1	527.5	520.8
15°	1500.4	1349.7	1048.3	789.0	627.2	547.4	514.2	494.2	489.8	487.6	483.2
17.5°	1529.2	1349.7	990.7	704.8	556.3	496.5	472.1	461.0	458.8	456.6	454.3
20°	1569.1	1351.9	928.6	631.6	505.3	458.8	438.8	425.5	423.3	421.1	421.1
22.5°	1609.0	1356.4	868.8	576.2	472.1	430.0	405.6	392.3	387.9	387.9	387.9
25°	1660.0	1369.7	813.4	529.7	443.3	403.4	372.3	361.3	359.0	359.0	356.8
27.5°	1719.8	1385.2	764.6	494.2	414.4	372.3	341.3	330.2	325.8	325.8	323.6
30°	1784.1	1400.7	724.7	467.6	385.6	341.3	312.5	299.2	294.8	297.0	294.8
32.5°	1855.0	1422.9	693.7	449.9	359.0	314.7	288.1	272.6	270.4	270.4	268.2
35°	1974.7	1484.9	689.3	441.0	336.9	294.8	268.2	252.7	250.4	250.4	248.2
37.5°	2103.3	1555.8	709.2	436.6	319.1	277.0	252.7	237.1	234.9	234.9	234.9
40°	2211.9	1609.0	731.4	436.6	308.1	261.5	239.4	226.1	226.1	226.1	226.1
42.5°	2285.0	1613.5	726.9	436.6	299.2	250.4	230.5	217.2	217.2	219.4	217.2
45°	2393.6	1635.6	709.2	430.0	292.6	241.6	221.6	210.5	208.3	210.5	210.5
47.5°	2522.1	1675.5	691.5	403.4	290.3	232.7	215.0	201.7	199.5	201.7	199.5
50°	2644.0	1711.0	682.6	367.9	285.9	223.8	206.1	192.8	190.6	192.8	190.6
52.5°	2746.0	1726.5	667.1	343.5	274.8	215.0	197.3	184.0	179.5	181.7	181.7
55°	2828.0	1722.1	644.9	323.6	254.9	206.1	186.2	175.1	168.4	168.4	166.2
57.5°	2903.4	1724.3	625.0	303.6	232.7	192.8	177.3	164.0	155.1	152.9	150.7
60°	2932.2	1713.2	589.5	277.0	210.5	181.7	166.2	150.7	141.8	139.6	137.4
62.5°	2892.3	1673.3	543.0	230.5	190.6	168.4	155.1	139.6	130.8	128.5	126.3
65°	2779.2	1598.0	472.1	181.7	172.9	152.9	141.8	130.8	119.7	115.2	113.0
67.5°	2586.4	1489.4	383.4	146.3	152.9	139.6	133.0	119.7	106.4	101.9	99.7
70°	2311.6	1345.3	288.1	124.1	135.2	124.1	119.7	106.4	95.3	90.9	88.7
72.5°	1926.0	1112.6	201.7	106.4	117.5	108.6	104.2	95.3	84.2	77.6	77.6
75°	1456.1	797.9	133.0	90.9	97.5	93.1	86.4	79.8	73.1	68.7	66.5
77.5°	627.2	310.3	82.0	68.7	79.8	77.6	68.7	64.3	62.1	57.6	57.6
80°	270.4	126.3	51.0	51.0	57.6	55.4	53.2	48.8	48.8	46.5	44.3
82.5°	99.7	51.0	31.0	37.7	42.1	37.7	37.7	37.7	37.7	35.5	35.5
85°	24.4	15.5	15.5	22.2	24.4	22.2	24.4	22.2	22.2	22.2	19.9
87.5°	6.6	6.6	8.9	8.9	8.9	8.9	8.9	6.6	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)