

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: P836643

Luminaire Tested: **ARCH3-50-750-U-T3-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836643
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: ARCH3-50-750-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 425mA LIGHTSQUARE WITH 40 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6423 lumens
Efficiency: N/A
Efficacy: 119.8 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): 53.6
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

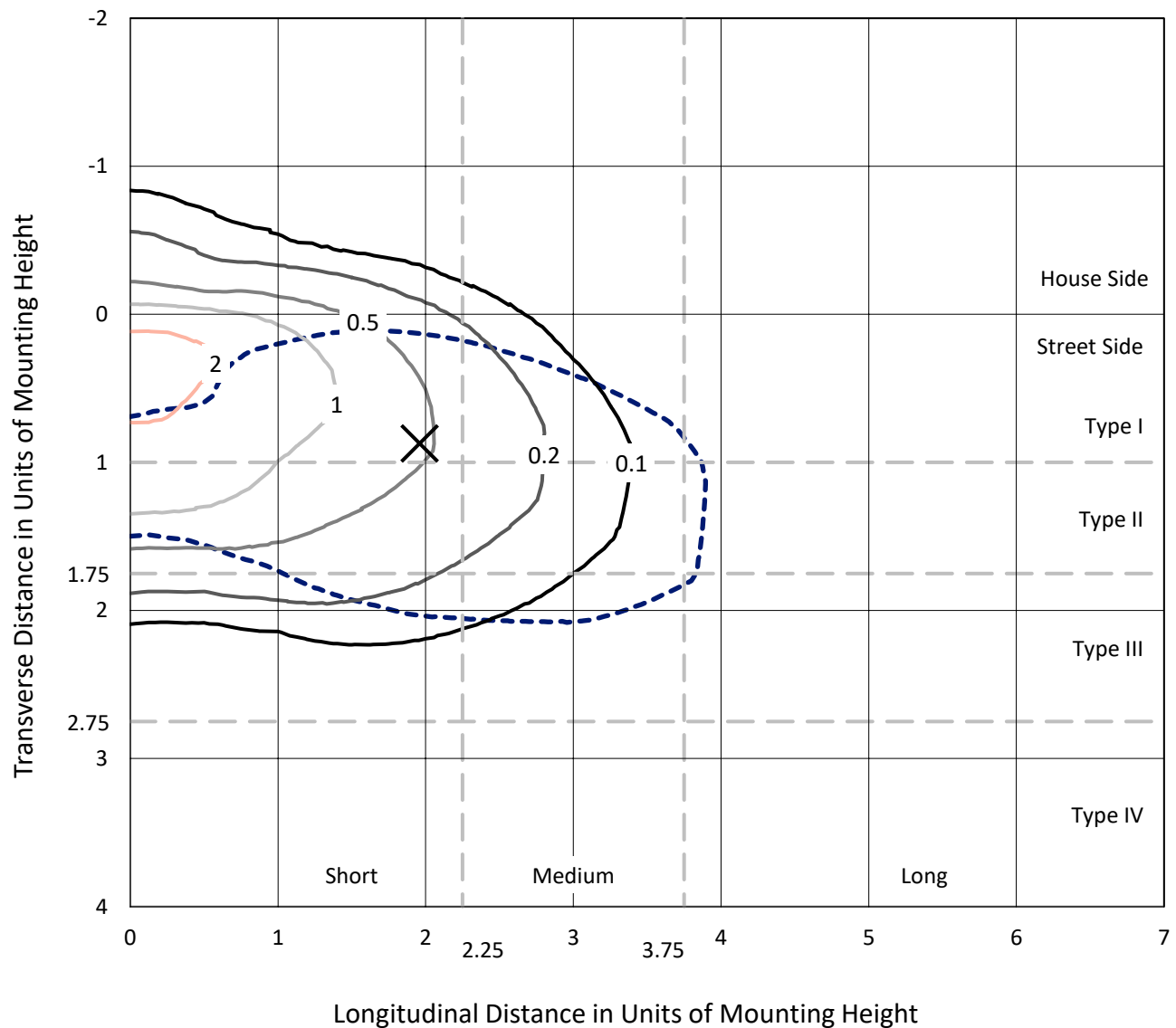


REPORT NUMBER: P836643

CATALOG NUMBER: ARCH3-50-750-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

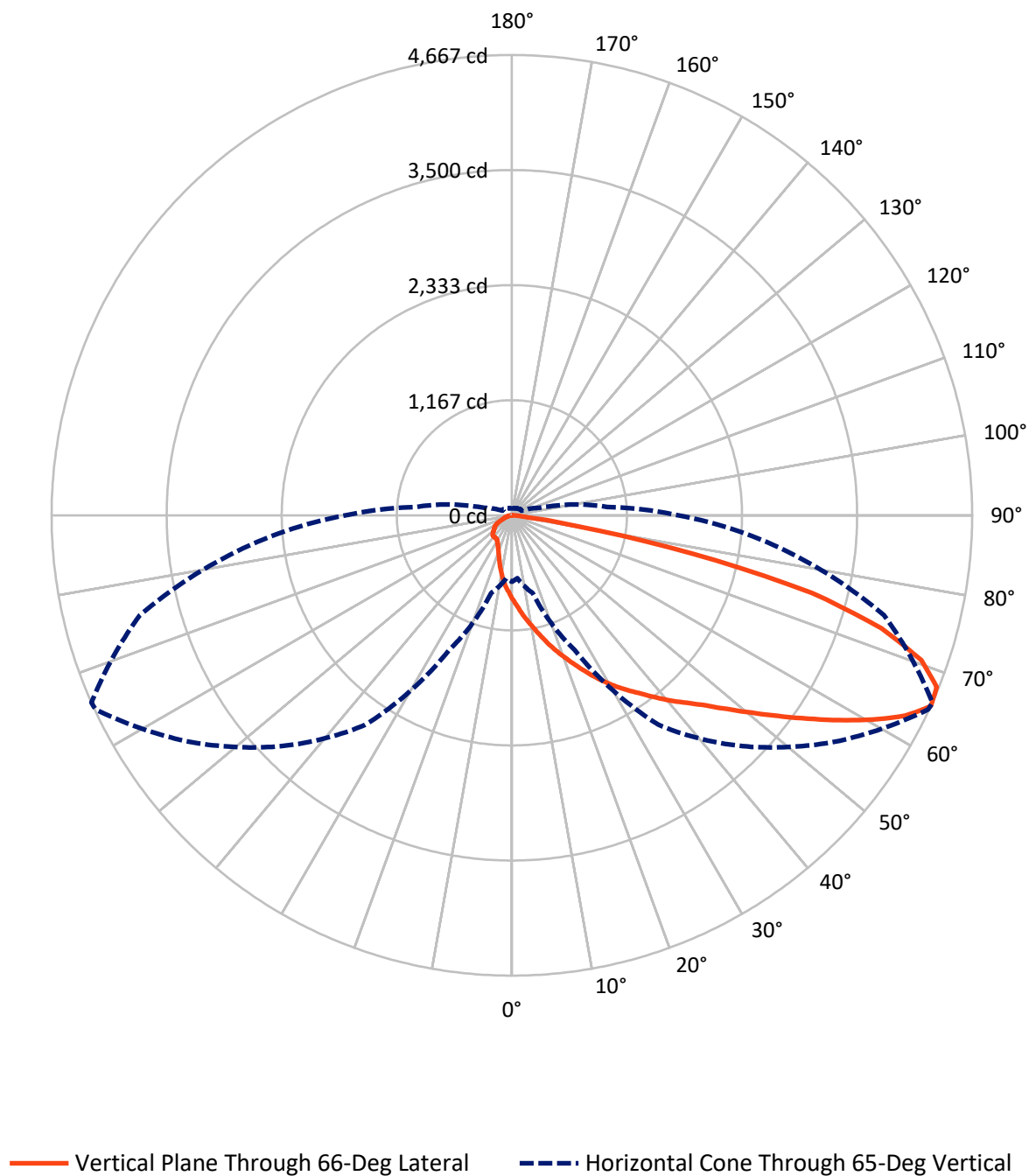


Based on 25 foot mounting height. Maximum calculated value = 2.5 fc
Type III - Short - N/A

REPORT NUMBER: P836643

CATALOG NUMBER: ARCH3-50-750-U-T3-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P836643

CATALOG NUMBER: ARCH3-50-750-U-T3-HSS

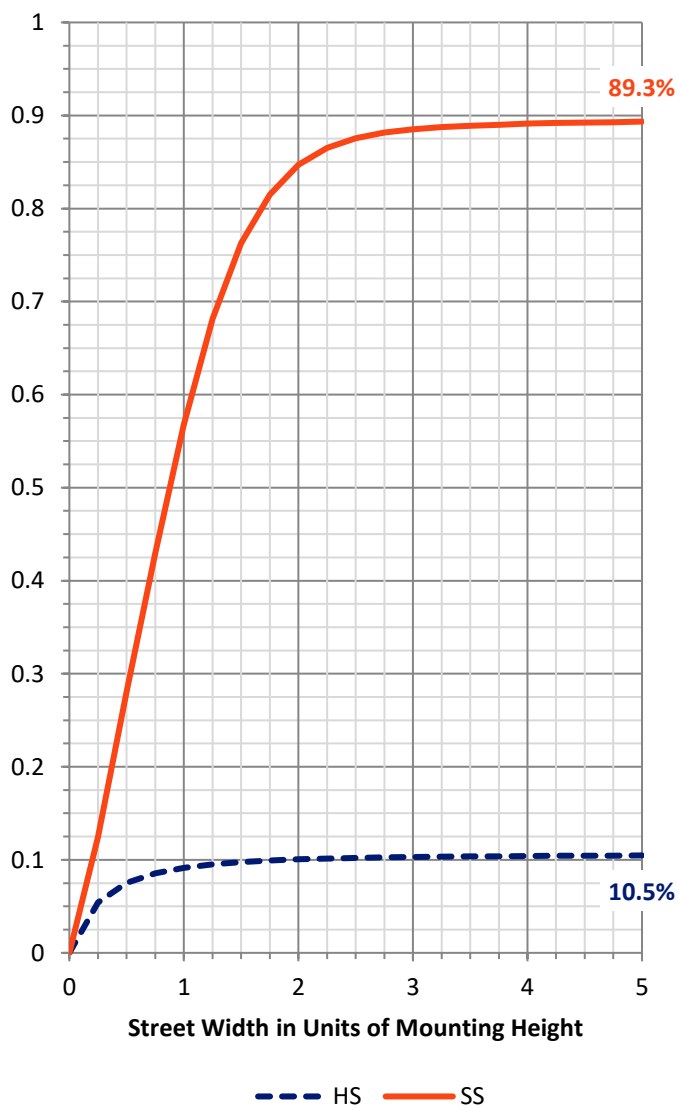
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	679.4	0.0	679.4
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	5743.6	0.0	5743.6
	% Fixture	89.4	0.0	89.4
Total	Lumens	6423.0	0.0	6423.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.9	1.3
10°-20°	273.5	4.3
20°-30°	494.8	7.7
30°-40°	773.7	12.0
40°-50°	1173.7	18.3
50°-60°	1491.2	23.2
60°-70°	1393.4	21.7
70°-80°	692.5	10.8
80°-90°	46.5	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°	6423.0	100.0
0°-180°	6423.0	100.0

Coefficient of Utilization



REPORT NUMBER: P836643

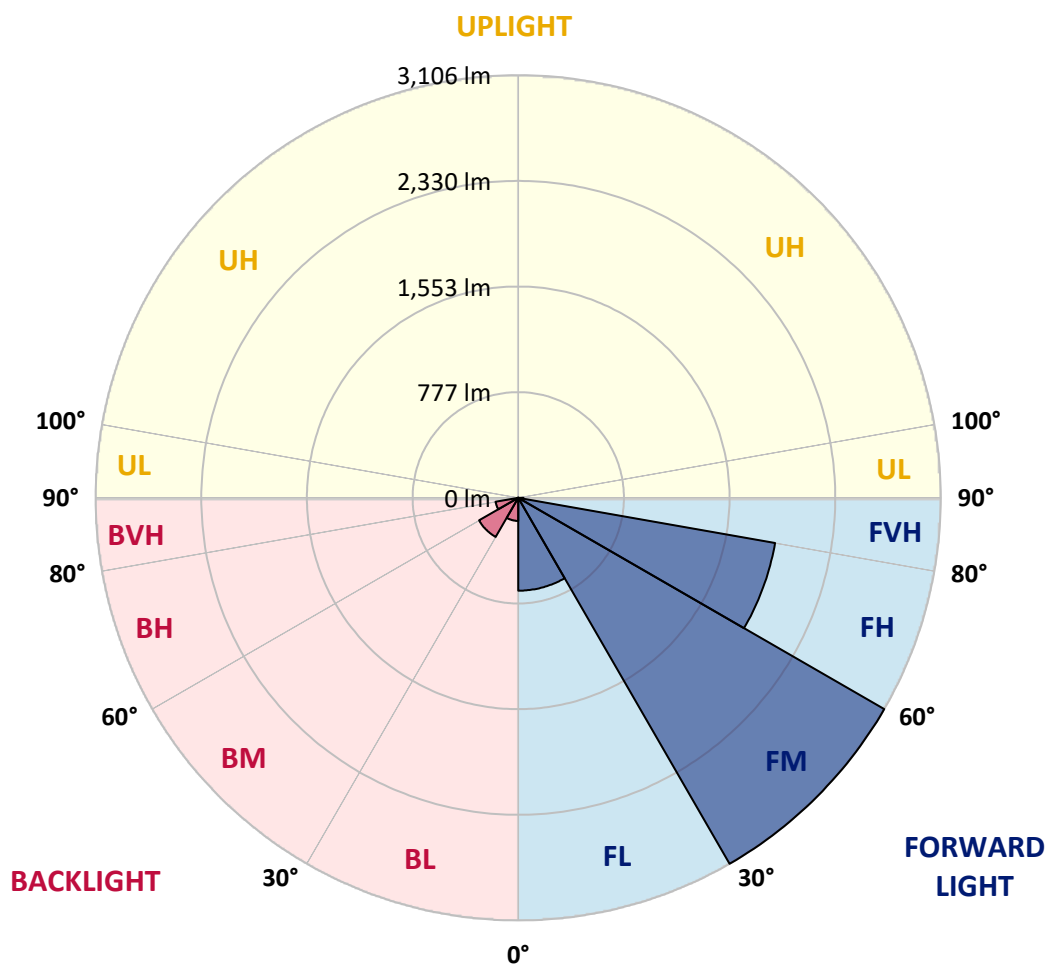
CATALOG NUMBER: ARCH3-50-750-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	682.4	10.6			
FM	(30°-60°)	3106.2	48.4			
FH	(60°-80°)	1916.6	29.8			G2/5000
FVH	(80°-90°)	38.3	0.6			G1/100
BL	(0°-30°)	169.7	2.6	B1/500		
BM	(30°-60°)	332.3	5.2	B1/1000		
BH	(60°-80°)	169.2	2.6	B1/500		G1/500
BVH	(80°-90°)	8.2	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 III Short



REPORT NUMBER: P836643

CATALOG NUMBER: ARCH3-50-750-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	850.0	850.0	850.0	850.0	850.0	850.0	850.0	850.0	850.0	850.0	850.0
2.5°	992.8	1000.9	1005.0	1006.3	975.3	961.9	948.4	917.4	910.7	893.2	870.3
5°	1168.0	1178.8	1176.1	1170.7	1132.9	1089.8	1054.8	996.9	987.5	945.7	894.5
7.5°	1340.4	1349.8	1347.1	1326.9	1285.2	1224.6	1166.6	1081.8	1068.3	1000.9	918.8
10°	1484.6	1492.6	1491.3	1471.1	1421.2	1347.1	1277.1	1163.9	1147.8	1052.1	939.0
12.5°	1603.1	1613.9	1612.5	1599.1	1554.6	1473.8	1394.3	1258.2	1238.0	1114.1	967.3
15°	1696.1	1709.5	1709.5	1704.1	1673.2	1605.8	1515.5	1362.0	1337.7	1185.5	1002.3
17.5°	1752.6	1763.4	1772.8	1782.3	1760.7	1709.5	1627.4	1465.7	1440.1	1255.5	1038.6
20°	1782.3	1793.1	1799.8	1820.0	1824.0	1798.4	1733.8	1568.1	1541.1	1335.0	1080.4
22.5°	1830.8	1840.2	1841.5	1859.1	1867.1	1873.9	1833.5	1669.1	1647.6	1422.6	1127.6
25°	1911.6	1922.4	1918.3	1926.4	1927.8	1935.8	1931.8	1785.0	1763.4	1522.3	1184.1
27.5°	2015.3	2028.8	2026.1	2018.0	2005.9	1999.2	2016.7	1902.2	1882.0	1622.0	1242.1
30°	2127.1	2143.3	2139.3	2123.1	2090.8	2062.5	2086.7	2012.6	1993.8	1724.3	1306.7
32.5°	2240.3	2259.2	2257.8	2230.9	2175.6	2127.1	2163.5	2116.4	2102.9	1834.8	1376.8
35°	2314.4	2338.6	2336.0	2319.8	2248.4	2206.6	2251.1	2222.8	2213.4	1969.5	1477.8
37.5°	2434.3	2459.9	2437.0	2396.6	2314.4	2292.8	2346.7	2342.7	2336.0	2112.3	1584.2
40°	2725.3	2763.0	2702.4	2536.7	2402.0	2383.1	2459.9	2476.1	2469.3	2253.8	1679.9
42.5°	3029.7	3086.3	2992.0	2763.0	2560.9	2492.2	2583.8	2606.7	2598.6	2375.0	1766.1
45°	3214.3	3238.5	3144.2	2966.4	2842.5	2624.2	2715.8	2753.6	2746.8	2520.5	1876.6
47.5°	3365.2	3355.7	3248.0	3128.1	3151.0	2810.1	2865.4	2939.5	2934.1	2680.8	1997.8
50°	3397.5	3375.9	3332.8	3257.4	3318.0	2998.7	3023.0	3151.0	3145.6	2858.6	2120.4
52.5°	3169.8	3141.5	3258.7	3322.1	3301.9	3136.2	3196.8	3382.7	3380.0	3051.3	2237.6
55°	2601.3	2578.4	2893.7	3221.0	3284.3	3233.1	3389.4	3623.8	3638.6	3256.1	2344.0
57.5°	2046.3	2022.1	2331.9	2967.8	3219.7	3322.1	3614.4	3900.0	3918.8	3478.3	2445.1
60°	1631.4	1595.0	1832.1	2569.0	3098.4	3390.8	3831.3	4203.1	4205.8	3681.7	2507.0
62.5°	1108.7	1068.3	1331.0	2063.8	2895.0	3401.5	3998.3	4464.4	4475.2	3834.0	2517.8
65°	673.6	639.9	817.7	1507.5	2594.6	3309.9	4001.0	4657.1	4666.5	3904.0	2453.2
67.5°	390.7	377.2	467.5	939.0	2096.2	3063.4	3832.6	4627.4	4645.0	3874.4	2306.3
70°	227.7	226.3	260.0	464.8	1479.2	2574.4	3456.8	4378.2	4403.8	3719.5	2081.3
72.5°	167.0	169.7	183.2	249.2	856.8	1853.7	2927.3	3877.1	3916.2	3416.4	1760.7
75°	132.0	133.4	145.5	169.7	449.9	1048.1	2193.2	3111.9	3142.9	2876.2	1375.4
77.5°	98.3	101.0	110.5	119.9	208.8	480.9	1234.0	1917.0	1865.8	1578.9	664.1
80°	71.4	78.1	82.2	86.2	110.5	185.9	370.5	668.2	662.8	689.7	313.9
82.5°	45.8	51.2	55.2	57.9	66.0	88.9	110.5	149.5	161.7	268.1	125.3
85°	20.2	22.9	25.6	31.0	28.3	31.0	45.8	29.6	25.6	40.4	22.9
87.5°	0.0	0.0	4.0	6.7	5.4	2.7	8.1	5.4	4.0	4.0	4.0
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: P836643

CATALOG NUMBER: ARCH3-50-750-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	850.0	850.0	850.0	850.0	850.0	850.0	850.0	850.0	850.0	850.0	850.0
2.5°	858.1	843.3	812.3	782.7	765.2	742.3	722.1	703.2	701.9	696.5	687.0
5°	868.9	840.6	782.7	727.5	685.7	641.2	603.5	573.9	563.1	555.0	544.2
7.5°	879.7	835.2	749.0	668.2	602.2	540.2	495.7	455.3	443.2	432.4	425.7
10°	883.7	825.8	709.9	602.2	516.0	449.9	402.8	373.2	362.4	357.0	353.0
12.5°	895.9	820.4	673.6	540.2	440.5	379.9	346.2	328.7	324.7	320.6	316.6
15°	912.0	820.4	637.2	479.6	381.2	332.7	312.5	300.4	297.7	296.4	293.7
17.5°	929.5	820.4	602.2	428.4	338.1	301.8	286.9	280.2	278.9	277.5	276.2
20°	953.8	821.8	564.5	383.9	307.1	278.9	266.7	258.7	257.3	256.0	256.0
22.5°	978.0	824.5	528.1	350.3	286.9	261.3	246.5	238.4	235.8	235.8	235.8
25°	1009.0	832.5	494.4	322.0	269.4	245.2	226.3	219.6	218.2	218.2	216.9
27.5°	1045.4	842.0	464.8	300.4	251.9	226.3	207.5	200.7	198.0	198.0	196.7
30°	1084.5	851.4	440.5	284.2	234.4	207.5	189.9	181.9	179.2	180.5	179.2
32.5°	1127.6	864.9	421.7	273.5	218.2	191.3	175.1	165.7	164.4	164.4	163.0
35°	1200.3	902.6	419.0	268.1	204.8	179.2	163.0	153.6	152.2	152.2	150.9
37.5°	1278.4	945.7	431.1	265.4	194.0	168.4	153.6	144.1	142.8	142.8	142.8
40°	1344.5	978.0	444.6	265.4	187.3	159.0	145.5	137.4	137.4	137.4	137.4
42.5°	1388.9	980.7	441.9	265.4	181.9	152.2	140.1	132.0	132.0	133.4	132.0
45°	1454.9	994.2	431.1	261.3	177.8	146.8	134.7	128.0	126.6	128.0	128.0
47.5°	1533.1	1018.4	420.3	245.2	176.5	141.5	130.7	122.6	121.2	122.6	121.2
50°	1607.1	1040.0	414.9	223.6	173.8	136.1	125.3	117.2	115.9	117.2	115.9
52.5°	1669.1	1049.4	405.5	208.8	167.0	130.7	119.9	111.8	109.1	110.5	110.5
55°	1719.0	1046.7	392.0	196.7	154.9	125.3	113.2	106.4	102.4	102.4	101.0
57.5°	1764.8	1048.1	379.9	184.6	141.5	117.2	107.8	99.7	94.3	93.0	91.6
60°	1782.3	1041.3	358.3	168.4	128.0	110.5	101.0	91.6	86.2	84.9	83.5
62.5°	1758.0	1017.1	330.1	140.1	115.9	102.4	94.3	84.9	79.5	78.1	76.8
65°	1689.3	971.3	286.9	110.5	105.1	93.0	86.2	79.5	72.7	70.1	68.7
67.5°	1572.1	905.3	233.1	88.9	93.0	84.9	80.8	72.7	64.7	62.0	60.6
70°	1405.1	817.7	175.1	75.4	82.2	75.4	72.7	64.7	57.9	55.2	53.9
72.5°	1170.7	676.3	122.6	64.7	71.4	66.0	63.3	57.9	51.2	47.2	47.2
75°	885.1	485.0	80.8	55.2	59.3	56.6	52.5	48.5	44.5	41.8	40.4
77.5°	381.2	188.6	49.8	41.8	48.5	47.2	41.8	39.1	37.7	35.0	35.0
80°	164.4	76.8	31.0	31.0	35.0	33.7	32.3	29.6	29.6	28.3	26.9
82.5°	60.6	31.0	18.9	22.9	25.6	22.9	22.9	22.9	22.9	21.6	21.6
85°	14.8	9.4	9.4	13.5	14.8	13.5	14.8	13.5	13.5	13.5	12.1
87.5°	4.0	4.0	5.4	5.4	5.4	5.4	5.4	4.0	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)