

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: P840875

Luminaire Tested: **ARCH4-100-730-U-T2R-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P840875
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: ARCH4-100-730-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 845mA 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: 12215 lumens
Efficiency: N/A
Efficacy: 118.5 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

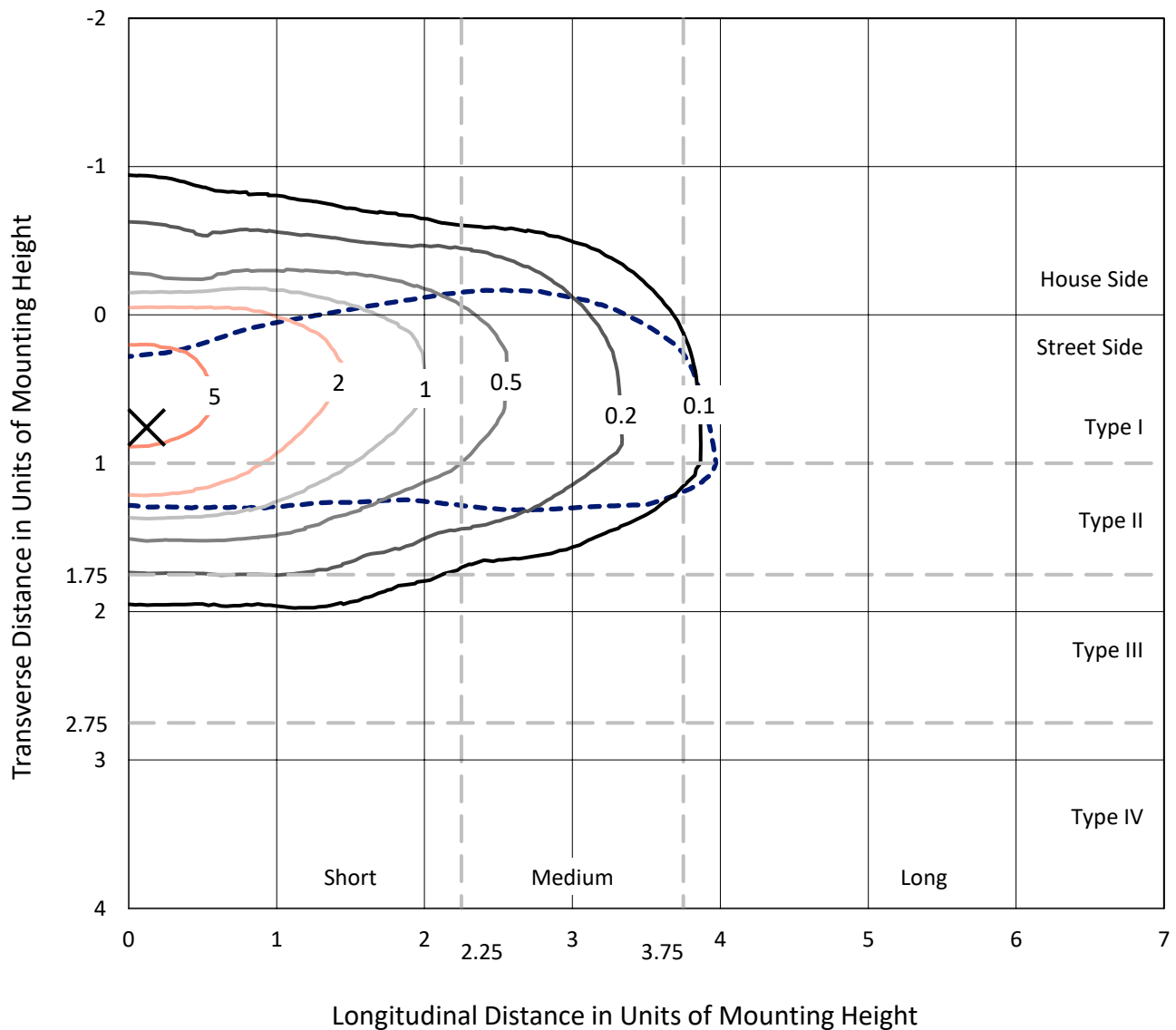
Input Watts (W): 103.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P840875
CATALOG NUMBER: ARCH4-100-730-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

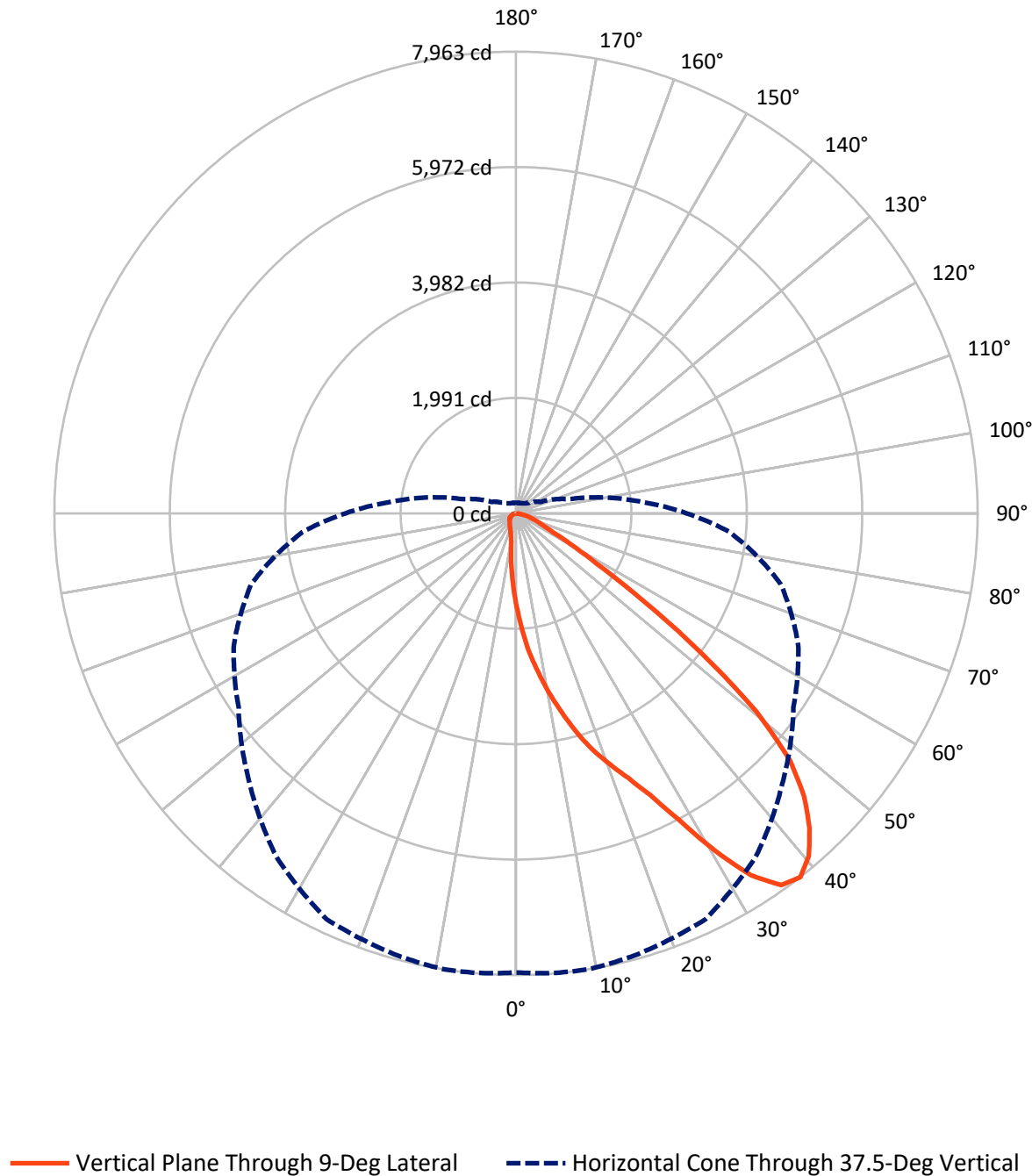
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 fc
Type II - Short - N/A

REPORT NUMBER: P840875
CATALOG NUMBER: ARCH4-100-730-U-T2R-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P840875

CATALOG NUMBER: ARCH4-100-730-U-T2R-HSS

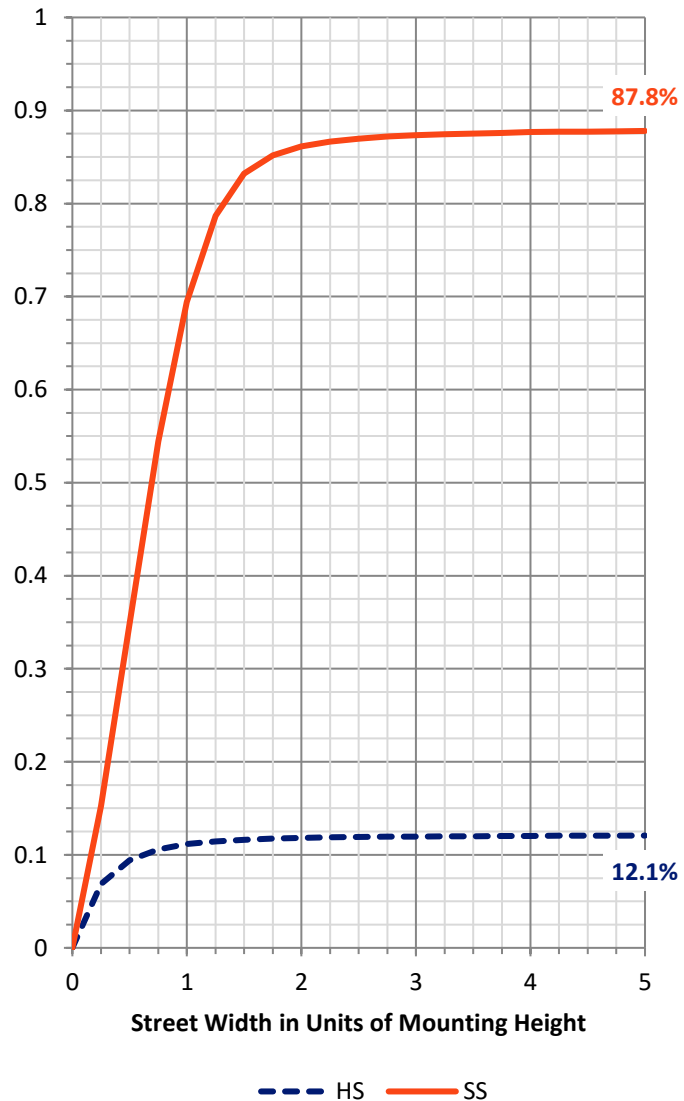
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1485.6	0.0	1485.6
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	10729.4	0.0	10729.4
	% Fixture	87.8	0.0	87.8
Total	Lumens	12215.0	0.0	12215.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.3	1.3
10°-20°	564.1	4.6
20°-30°	1159.1	9.5
30°-40°	2048.8	16.8
40°-50°	2721.6	22.3
50°-60°	2581.3	21.1
60°-70°	1969.3	16.1
70°-80°	954.7	7.8
80°-90°	53.7	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°	12215.0	100.0
0°-180°	12215.0	100.0

Coefficient of Utilization



REPORT NUMBER: P840875

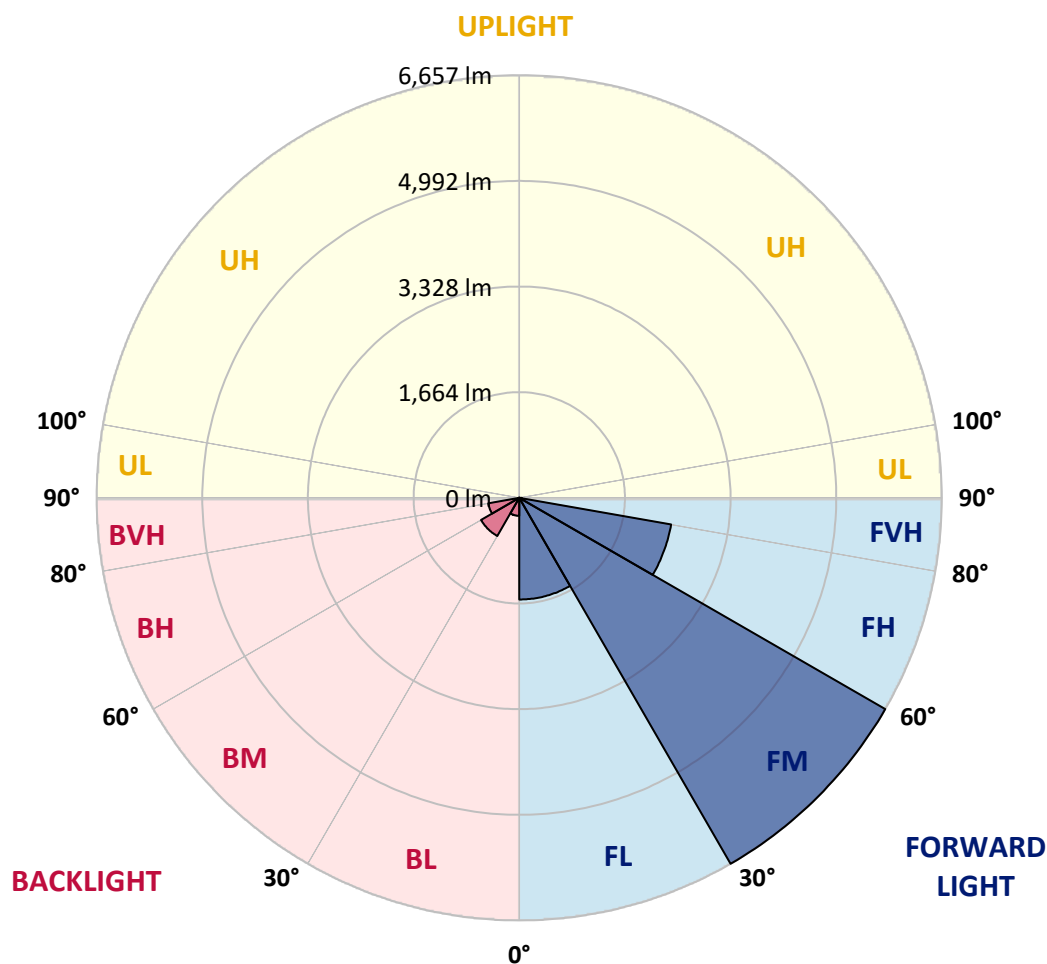
CATALOG NUMBER: ARCH4-100-730-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1602.0	13.1			
FM	(30°-60°)	6656.6	54.5			
FH	(60°-80°)	2428.3	19.9			G2/5000
FVH	(80°-90°)	42.5	0.3			G1/100
BL	(0°-30°)	283.5	2.3	B1/500		
BM	(30°-60°)	695.2	5.7	B1/1000		
BH	(60°-80°)	495.7	4.1	B1/500		G1/500
BVH	(80°-90°)	11.2	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 II Short



REPORT NUMBER: P840875

CATALOG NUMBER: ARCH4-100-730-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1614.7	1614.7	1614.7	1614.7	1614.7	1614.7	1614.7	1614.7	1614.7	1614.7	1614.7
2.5°	2000.8	1965.7	2005.8	2000.8	1965.7	1943.1	1872.9	1850.4	1767.6	1707.4	1654.8
5°	2412.0	2376.9	2412.0	2402.0	2351.8	2296.6	2181.3	2106.1	1958.2	1827.8	1710.0
7.5°	2753.0	2753.0	2768.0	2770.5	2710.3	2625.1	2482.2	2369.4	2161.3	1960.7	1772.6
10°	3121.5	3124.0	3156.6	3134.1	3053.8	2938.5	2758.0	2615.1	2364.3	2101.1	1832.8
12.5°	3515.2	3517.7	3527.7	3517.7	3422.4	3274.5	3056.3	2868.3	2580.0	2261.5	1915.5
15°	3908.8	3911.3	3923.9	3906.3	3801.0	3628.0	3379.8	3149.1	2808.1	2442.1	2015.8
17.5°	4277.4	4282.4	4292.4	4269.9	4159.5	3953.9	3700.7	3422.4	3051.3	2635.1	2128.7
20°	4608.3	4613.4	4620.9	4590.8	4480.5	4274.9	4001.6	3710.7	3299.6	2833.2	2251.5
22.5°	4941.8	4946.8	4959.4	4919.2	4796.4	4560.7	4292.4	3991.6	3562.8	3051.3	2394.4
25°	5368.0	5373.1	5383.1	5325.4	5157.4	4881.6	4598.3	4289.9	3848.6	3297.0	2569.9
27.5°	5992.4	5987.3	5987.3	5882.0	5593.7	5235.2	4906.7	4593.3	4157.0	3560.3	2763.0
30°	6764.6	6752.1	6744.5	6601.6	6190.4	5633.8	5222.6	4876.6	4452.9	3838.6	2971.1
32.5°	7456.6	7456.6	7441.5	7291.1	6854.8	6170.4	5558.6	5152.4	4738.7	4119.4	3186.7
35°	7865.3	7882.8	7875.3	7762.5	7444.1	6747.0	6012.4	5483.4	5039.6	4412.8	3445.0
37.5°	7920.4	7955.5	7963.1	7895.4	7727.4	7218.4	6516.4	5841.9	5370.6	4728.7	3695.7
40°	7697.3	7772.5	7772.5	7762.5	7702.3	7441.5	6940.1	6258.1	5711.5	5057.1	3948.9
42.5°	7353.8	7431.5	7421.5	7459.1	7444.1	7388.9	7178.3	6646.7	6052.5	5395.6	4179.6
45°	6905.0	6985.2	6965.2	7032.9	7063.0	7123.1	7153.2	6917.5	6388.5	5764.2	4437.8
47.5°	6185.4	6320.8	6350.9	6471.2	6596.6	6784.6	6927.6	7015.3	6701.9	6160.3	4718.7
50°	5122.3	5312.9	5373.1	5626.3	5969.8	6358.4	6589.1	6895.0	6922.5	6566.5	5022.0
52.5°	3668.1	3888.8	3981.5	4397.7	5104.8	5781.7	6197.9	6629.2	7007.8	6955.1	5350.5
55°	2371.9	2559.9	2650.2	3041.3	3981.5	5044.6	5736.6	6285.7	6960.2	7311.2	5726.6
57.5°	1461.7	1569.5	1629.7	1965.7	2830.7	4099.4	5132.4	5969.8	6814.7	7619.6	6117.7
60°	985.4	1048.0	1078.1	1236.1	1923.1	3063.9	4302.5	5638.8	6624.2	7827.7	6473.7
62.5°	654.4	674.5	704.5	802.3	1268.7	2151.2	3304.6	5047.1	6481.3	7840.2	6737.0
65°	506.5	516.5	529.0	571.7	782.3	1504.4	2324.2	4089.3	6268.1	7574.4	6819.7
67.5°	398.7	408.7	423.7	446.3	566.6	1020.5	1582.1	2996.2	5831.9	7158.2	6684.4
70°	313.4	320.9	331.0	351.0	441.3	739.6	1045.5	1990.8	4951.8	6762.1	6258.1
72.5°	248.2	255.7	265.8	285.8	358.5	541.6	717.1	1241.1	3818.6	6278.2	5438.2
75°	195.6	200.6	208.1	228.2	288.3	421.2	486.4	742.1	2595.0	5393.1	4237.3
77.5°	97.8	120.3	137.9	158.0	210.6	290.8	323.4	411.2	1095.7	2768.0	2020.9
80°	57.7	70.2	75.2	87.8	137.9	175.5	175.5	165.5	346.0	1063.1	824.9
82.5°	32.6	45.1	47.6	50.1	82.7	100.3	80.2	60.2	70.2	356.0	240.7
85°	10.0	15.0	17.6	20.1	27.6	30.1	27.6	25.1	20.1	35.1	22.6
87.5°	0.0	0.0	0.0	0.0	2.5	5.0	5.0	5.0	7.5	7.5	7.5
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: P840875

CATALOG NUMBER: ARCH4-100-730-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1614.7	1614.7	1614.7	1614.7	1614.7	1614.7	1614.7	1614.7	1614.7	1614.7	1614.7
2.5°	1624.7	1592.1	1529.4	1471.8	1416.6	1376.5	1338.9	1303.8	1278.7	1258.6	1256.1
5°	1647.3	1582.1	1461.7	1348.9	1246.1	1160.9	1088.2	1030.5	987.9	957.8	955.3
7.5°	1677.4	1577.1	1394.0	1226.0	1073.1	950.3	844.9	767.2	712.1	689.5	671.9
10°	1702.4	1572.1	1326.3	1103.2	902.6	747.2	621.8	544.1	504.0	488.9	481.4
12.5°	1745.1	1577.1	1268.7	990.4	754.7	571.7	476.4	433.8	416.2	403.7	401.2
15°	1807.7	1599.6	1213.5	880.0	604.2	461.3	406.2	378.6	361.0	358.5	356.0
17.5°	1870.4	1619.7	1163.4	767.2	501.5	401.2	363.6	341.0	328.5	325.9	325.9
20°	1943.1	1644.8	1108.2	659.4	428.7	361.0	331.0	313.4	298.4	295.9	295.9
22.5°	2028.4	1679.9	1055.6	564.1	381.1	331.0	305.9	285.8	273.3	270.8	270.8
25°	2143.7	1732.5	1012.9	493.9	348.5	305.9	283.3	265.8	255.7	250.7	250.7
27.5°	2271.6	1805.2	982.8	451.3	325.9	285.8	263.3	248.2	238.2	233.2	233.2
30°	2414.5	1885.5	962.8	433.8	313.4	268.3	248.2	233.2	220.6	218.1	218.1
32.5°	2572.4	1978.2	950.3	436.3	310.9	255.7	233.2	218.1	208.1	203.1	203.1
35°	2748.0	2081.0	942.7	451.3	315.9	245.7	220.6	205.6	195.6	190.6	190.6
37.5°	2943.5	2201.4	942.7	466.4	328.5	243.2	208.1	193.1	185.5	180.5	180.5
40°	3126.6	2329.2	952.8	483.9	341.0	243.2	198.1	185.5	175.5	170.5	170.5
42.5°	3269.5	2402.0	960.3	501.5	348.5	240.7	188.0	175.5	168.0	163.0	163.0
45°	3432.4	2479.7	945.2	509.0	348.5	235.7	180.5	168.0	160.5	155.5	155.5
47.5°	3613.0	2575.0	942.7	514.0	341.0	225.7	173.0	160.5	155.5	150.4	150.4
50°	3796.0	2680.3	947.7	511.5	331.0	210.6	163.0	155.5	147.9	142.9	142.9
52.5°	4004.1	2790.6	957.8	506.5	308.4	193.1	155.5	147.9	140.4	135.4	132.9
55°	4234.8	2910.9	977.8	496.4	278.3	175.5	147.9	140.4	130.4	125.4	122.9
57.5°	4500.5	3058.9	1000.4	476.4	245.7	160.5	140.4	130.4	115.3	107.8	105.3
60°	4753.8	3226.8	1025.5	428.7	213.1	145.4	132.9	117.8	102.8	97.8	95.3
62.5°	4992.0	3392.3	1038.0	343.5	180.5	132.9	125.4	107.8	92.8	87.8	85.2
65°	5144.9	3572.8	1010.4	233.2	147.9	122.9	115.3	100.3	85.2	77.7	77.7
67.5°	5154.9	3658.1	915.1	152.9	120.3	110.3	105.3	90.3	75.2	70.2	67.7
70°	4901.7	3530.2	699.5	120.3	100.3	95.3	95.3	80.2	65.2	60.2	57.7
72.5°	4320.0	3126.6	446.3	97.8	85.2	80.2	80.2	67.7	57.7	50.1	47.6
75°	3409.9	2412.0	238.2	80.2	70.2	67.7	62.7	55.2	47.6	42.6	40.1
77.5°	1567.0	1063.1	110.3	57.7	52.7	52.7	47.6	40.1	37.6	32.6	32.6
80°	619.3	361.0	55.2	37.6	35.1	35.1	35.1	27.6	27.6	22.6	20.1
82.5°	170.5	75.2	27.6	22.6	22.6	22.6	20.1	17.6	17.6	15.0	15.0
85°	17.6	12.5	12.5	12.5	12.5	10.0	10.0	7.5	5.0	5.0	5.0
87.5°	7.5	7.5	7.5	7.5	7.5	5.0	2.5	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)