

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: P836398

Luminaire Tested: **ARCH3-180-730-U-T2U-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836398
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-25)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-180-730-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 1375mA LIGHTSQUARE WITH 40 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16476 lumens
Efficiency: N/A
Efficacy: 91.3 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 180.5
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



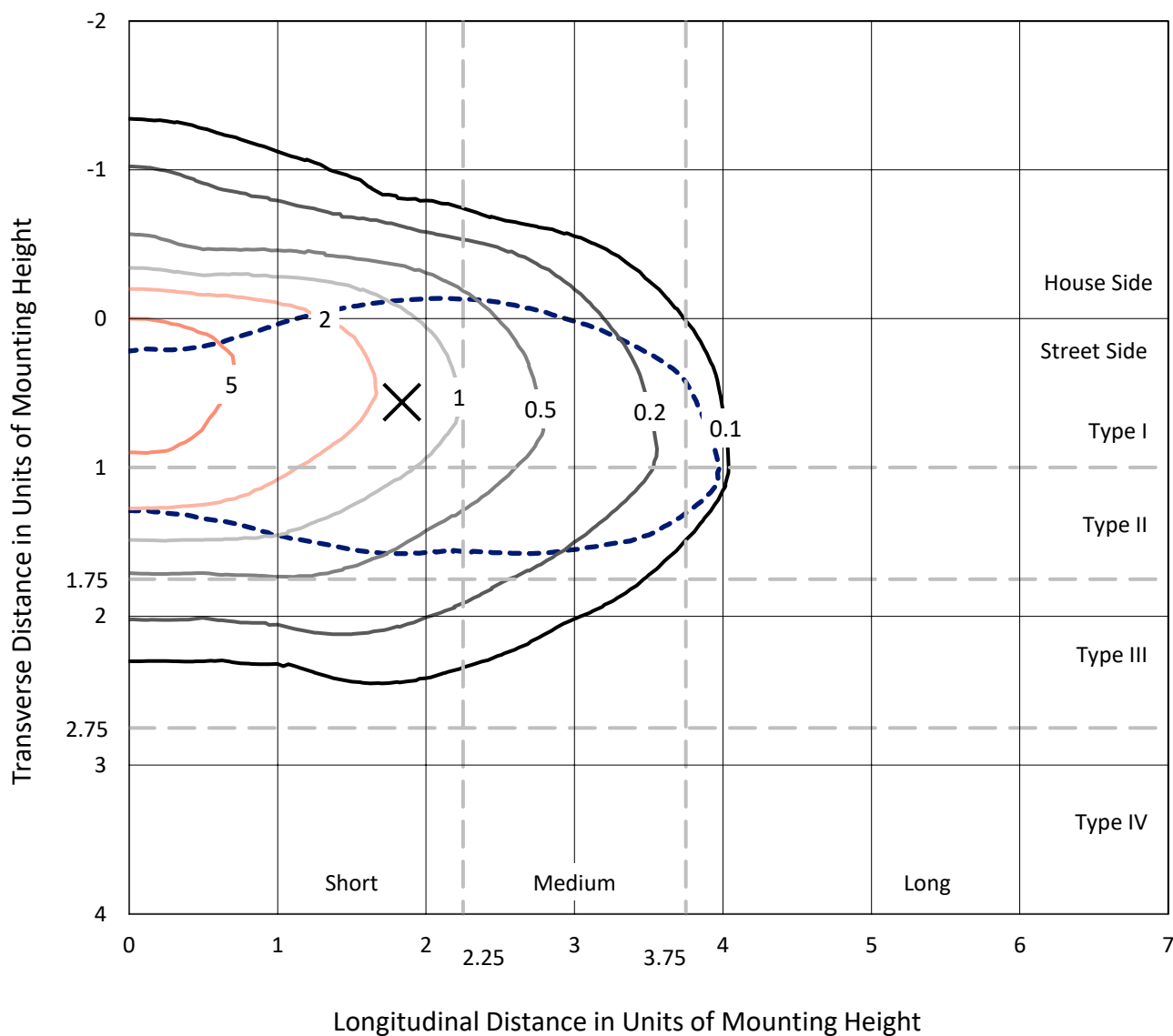
REPORT NUMBER: P836398

CATALOG NUMBER: ARCH3-180-730-U-T2U-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

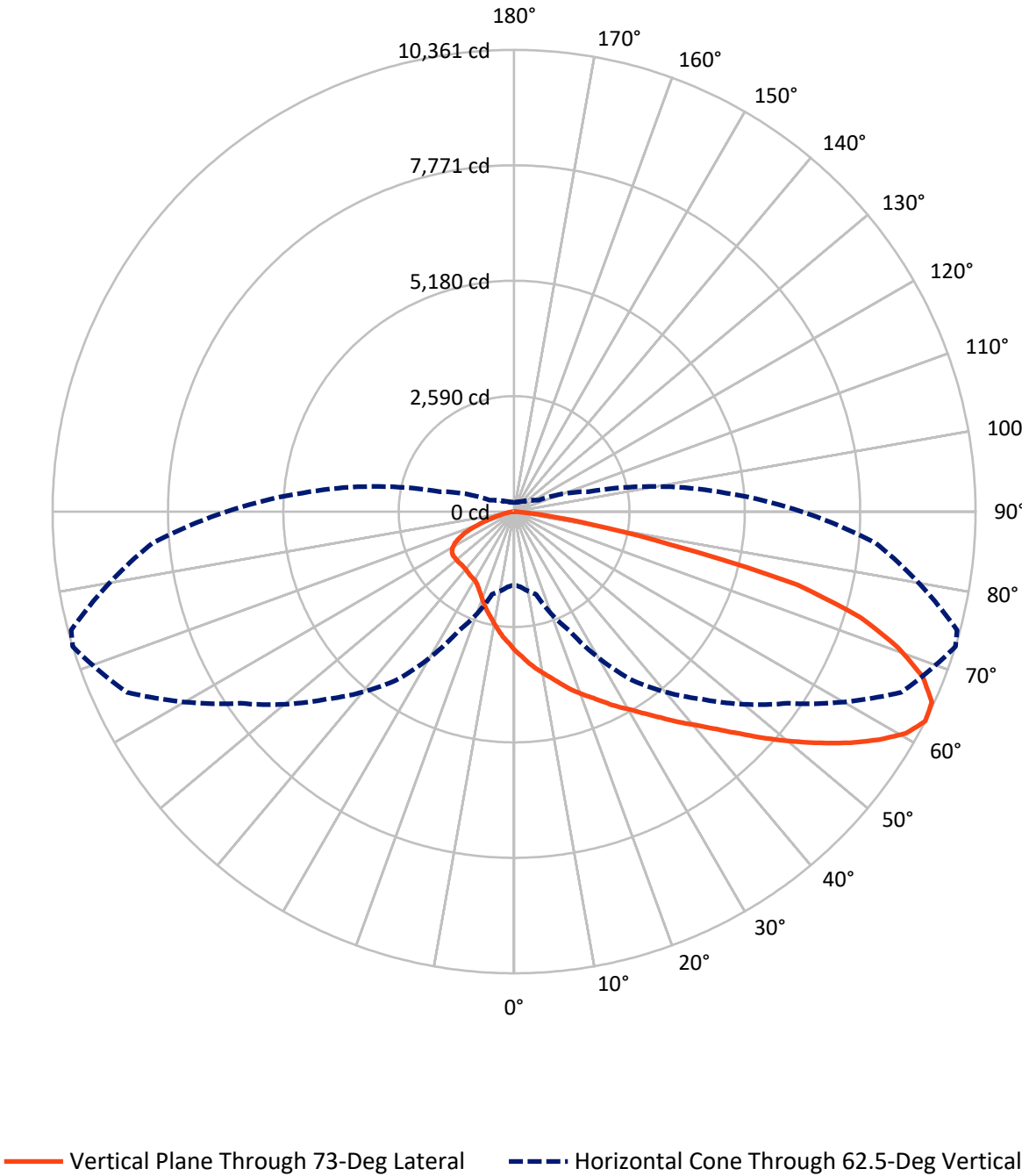


Based on 25 foot mounting height. Maximum calculated value = 7.8 fc

Type II - Short - N/A

REPORT NUMBER: P836398
CATALOG NUMBER: ARCH3-180-730-U-T2U-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P836398

CATALOG NUMBER: ARCH3-180-730-U-T2U-HSS

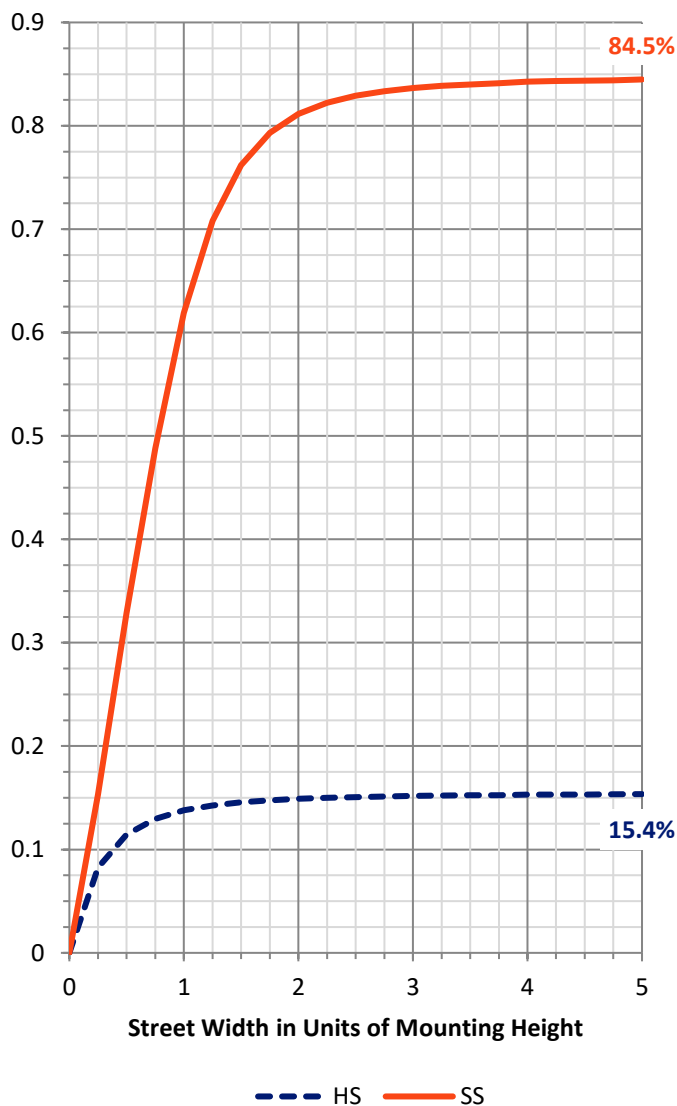
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2554.0	0.0	2554.0
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	13922.0	0.0	13922.0
	% Fixture	84.5	0.0	84.5
Total	Lumens	16476.0	0.0	16476.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	301.4	1.8
10°-20°	909.5	5.5
20°-30°	1513.8	9.2
30°-40°	2284.1	13.9
40°-50°	3192.6	19.4
50°-60°	3526.4	21.4
60°-70°	3072.0	18.6
70°-80°	1551.8	9.4
80°-90°	124.6	0.8
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°	16476.0	100.0
0°-180°	16476.0	100.0

Coefficient of Utilization



REPORT NUMBER: P836398

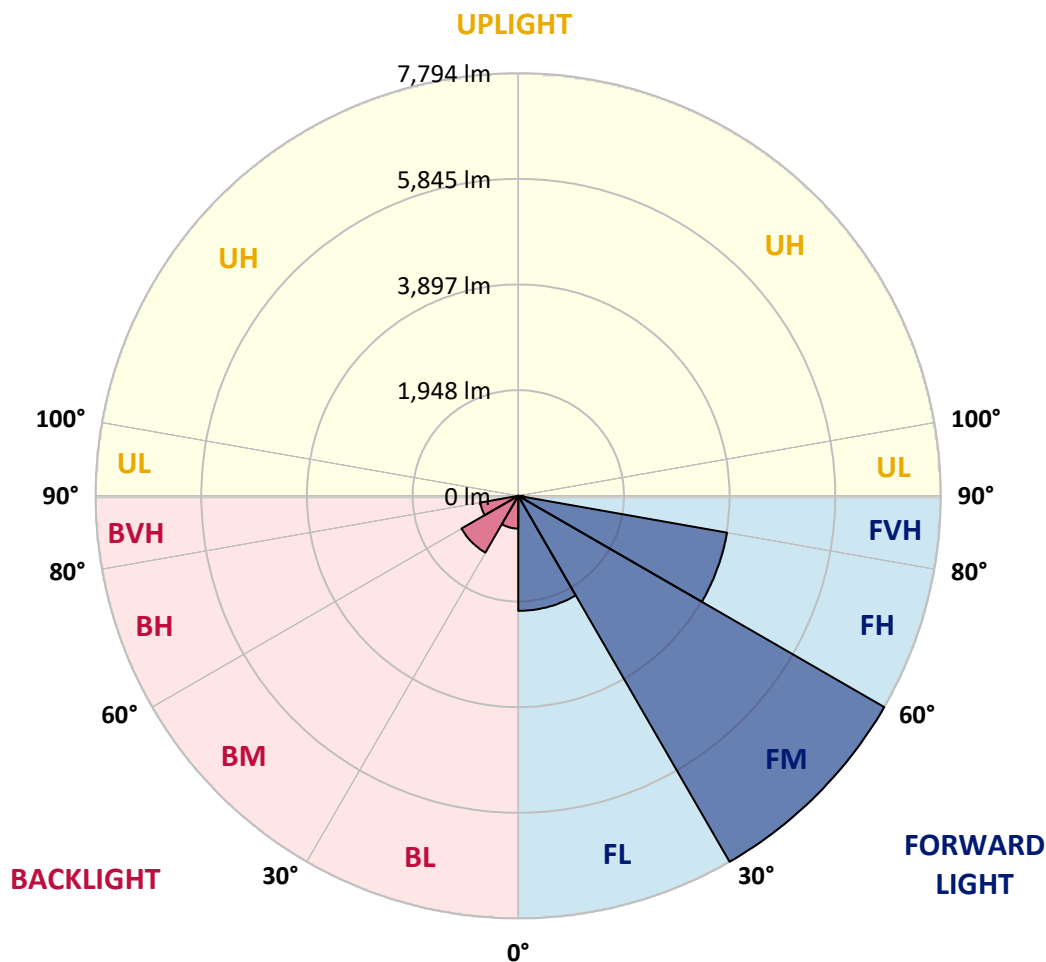
CATALOG NUMBER: ARCH3-180-730-U-T2U-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2121.0	12.9			
FM	(30°-60°)	7793.8	47.3			
FH	(60°-80°)	3910.9	23.7			G2/5000
FVH	(80°-90°)	96.4	0.6			G1/100
BL	(0°-30°)	603.7	3.7	B2/1000		
BM	(30°-60°)	1209.3	7.3	B2/2500		
BH	(60°-80°)	712.9	4.3	B2/1000		G2/1000
BVH	(80°-90°)	28.2	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-G2

Type II Short



REPORT NUMBER: P836398

CATALOG NUMBER: ARCH3-180-730-U-T2U-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	3119.8	3119.8	3119.8	3119.8	3119.8	3119.8	3119.8	3119.8	3119.8	3119.8	3119.8
2.5°	3550.6	3590.1	3568.5	3582.9	3511.1	3464.4	3410.6	3306.4	3249.0	3241.8	3173.6
5°	4071.1	4114.2	4078.3	4067.5	3941.9	3834.2	3712.1	3529.0	3407.0	3385.4	3234.6
7.5°	4591.7	4631.2	4588.1	4555.8	4387.1	4196.8	4017.3	3748.0	3557.8	3521.9	3284.9
10°	4957.9	4993.8	4961.5	4929.2	4753.2	4559.4	4304.5	3952.7	3694.2	3636.7	3317.2
12.5°	5234.3	5255.9	5241.5	5212.8	5047.6	4839.4	4595.3	4182.4	3848.5	3776.7	3367.5
15°	5460.5	5496.4	5478.4	5456.9	5298.9	5090.7	4857.4	4423.0	4028.1	3938.3	3442.9
17.5°	5611.3	5636.4	5640.0	5640.0	5500.0	5295.3	5069.2	4642.0	4207.6	4092.7	3514.7
20°	5679.5	5708.2	5726.2	5754.9	5640.0	5464.1	5234.3	4828.6	4376.3	4247.0	3582.9
22.5°	5711.8	5736.9	5783.6	5848.2	5754.9	5607.7	5395.9	5001.0	4545.0	4408.6	3661.9
25°	5736.9	5769.2	5837.4	5959.5	5894.9	5769.2	5586.1	5198.4	4746.1	4606.1	3776.7
27.5°	5805.1	5844.6	5909.2	6056.4	5977.5	5916.4	5787.2	5410.2	4957.9	4814.3	3916.8
30°	6042.1	6074.4	6070.8	6164.1	6067.2	6049.3	5959.5	5614.9	5162.5	5018.9	4081.9
32.5°	6472.9	6505.2	6426.2	6390.3	6178.5	6182.1	6146.2	5833.9	5406.6	5259.4	4272.2
35°	6936.0	6971.9	6867.8	6806.8	6451.3	6347.2	6365.2	6106.7	5679.5	5532.3	4509.1
37.5°	7348.9	7391.9	7302.2	7212.4	6853.4	6612.9	6609.3	6411.9	5991.8	5841.0	4771.2
40°	7575.0	7625.3	7679.1	7628.9	7251.9	6986.3	6871.4	6724.2	6300.6	6146.2	5054.8
42.5°	7682.7	7822.7	7919.7	7887.4	7578.6	7309.4	7172.9	7050.9	6677.5	6526.7	5392.3
45°	7381.2	7384.8	7589.4	7765.3	7707.9	7528.4	7503.2	7417.1	7108.3	6964.7	5772.8
47.5°	7004.2	6975.5	7119.1	7431.4	7593.0	7639.7	7786.8	7822.7	7600.2	7456.6	6160.5
50°	6099.5	6117.5	6584.2	7032.9	7348.9	7650.4	7987.9	8239.2	8106.4	7969.9	6569.8
52.5°	4961.5	5004.5	5539.5	6526.7	7025.8	7542.7	8106.4	8655.6	8623.3	8494.1	6979.1
55°	3977.8	4046.0	4613.2	5683.1	6612.9	7302.2	8156.6	9036.2	9158.3	9039.8	7381.2
57.5°	3040.8	3112.6	3590.1	4688.6	6085.2	6910.9	8120.7	9370.1	9657.3	9581.9	7750.9
60°	2290.5	2362.3	2667.4	3801.9	5424.6	6472.9	7941.2	9589.1	10106.0	10027.0	8020.2
62.5°	1640.7	1698.1	1924.3	2958.2	4620.4	5952.3	7499.6	9592.7	10360.9	10296.3	8149.4
65°	1181.1	1181.1	1364.2	2111.0	3866.5	5327.7	6831.9	9151.1	10307.1	10289.1	8059.7
67.5°	850.8	858.0	1005.2	1475.5	3083.9	4570.2	5966.7	8364.8	9890.6	9980.4	7736.6
70°	603.1	621.1	689.3	1030.3	2330.0	3608.0	5040.4	7334.5	9140.3	9298.3	7111.9
72.5°	466.7	477.5	524.1	718.0	1701.7	2681.8	4017.3	6185.7	8138.7	8318.2	6261.1
75°	359.0	369.8	405.7	527.7	1220.6	1881.2	2854.1	4799.9	6562.6	6882.2	5029.7
77.5°	262.1	276.4	301.6	384.1	710.8	1195.5	1730.4	2699.7	3622.4	3773.2	2635.1
80°	122.1	140.0	175.9	247.7	384.1	563.6	613.9	1041.1	1741.2	1820.2	1428.8
82.5°	68.2	86.2	100.5	150.8	193.9	201.0	208.2	262.1	657.0	725.2	599.5
85°	32.3	43.1	46.7	64.6	64.6	57.4	68.2	50.3	107.7	129.2	125.7
87.5°	0.0	3.6	7.2	18.0	14.4	10.8	10.8	10.8	10.8	14.4	10.8
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: P836398

CATALOG NUMBER: ARCH3-180-730-U-T2U-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3119.8	3119.8	3119.8	3119.8	3119.8	3119.8	3119.8	3119.8	3119.8	3119.8	3119.8
2.5°	3141.3	3094.6	2986.9	2893.6	2832.6	2778.7	2706.9	2674.6	2617.2	2627.9	2595.6
5°	3159.3	3073.1	2882.8	2706.9	2577.7	2462.8	2337.1	2265.3	2186.3	2179.2	2154.0
7.5°	3170.0	3037.2	2764.3	2516.6	2319.2	2143.3	1974.5	1881.2	1784.3	1762.7	1741.2
10°	3159.3	2983.3	2642.3	2319.2	2057.1	1838.1	1647.8	1529.4	1428.8	1403.7	1382.2
12.5°	3170.0	2954.6	2527.4	2136.1	1823.8	1576.0	1360.6	1238.6	1145.2	1120.1	1105.7
15°	3195.2	2936.7	2430.5	1970.9	1615.5	1339.1	1127.3	1023.2	947.8	922.6	915.5
17.5°	3216.7	2918.7	2326.4	1809.4	1407.3	1130.9	947.8	861.6	797.0	771.9	764.7
20°	3245.4	2893.6	2222.2	1655.0	1224.2	965.7	804.2	728.8	678.5	660.6	657.0
22.5°	3270.5	2875.6	2125.3	1500.6	1055.5	832.9	696.5	635.4	599.5	581.6	581.6
25°	3335.2	2882.8	2042.7	1357.0	929.8	728.8	613.9	567.2	538.5	527.7	527.7
27.5°	3410.6	2911.5	1978.1	1235.0	822.1	649.8	556.5	517.0	502.6	488.2	491.8
30°	3518.3	2969.0	1935.0	1134.5	743.1	588.8	509.8	481.1	466.7	463.1	463.1
32.5°	3654.7	3062.3	1931.5	1069.8	685.7	542.1	477.5	452.3	445.2	441.6	441.6
35°	3816.2	3144.9	1909.9	1041.1	649.8	509.8	452.3	434.4	430.8	430.8	430.8
37.5°	4010.1	3281.3	1895.6	1001.6	631.9	491.8	434.4	420.0	420.0	420.0	420.0
40°	4211.1	3392.6	1874.0	965.7	624.7	481.1	423.6	405.7	405.7	405.7	405.7
42.5°	4451.7	3554.2	1866.8	947.8	613.9	473.9	409.3	387.7	391.3	391.3	394.9
45°	4742.5	3737.3	1863.2	929.8	610.3	466.7	394.9	369.8	373.4	369.8	369.8
47.5°	5036.9	3949.1	1874.0	919.1	606.7	459.5	384.1	351.8	351.8	348.2	348.2
50°	5345.6	4142.9	1881.2	908.3	599.5	445.2	366.2	337.5	330.3	323.1	326.7
52.5°	5636.4	4322.4	1884.8	890.3	578.0	423.6	351.8	319.5	308.7	298.0	301.6
55°	5927.2	4494.8	1892.0	868.8	549.3	402.1	333.9	301.6	287.2	272.8	272.8
57.5°	6189.3	4645.5	1874.0	814.9	517.0	380.5	315.9	280.0	258.5	244.1	244.1
60°	6368.8	4753.2	1820.2	736.0	473.9	355.4	298.0	258.5	233.4	222.6	222.6
62.5°	6454.9	4771.2	1723.2	606.7	420.0	330.3	276.4	236.9	215.4	208.2	208.2
65°	6372.4	4692.2	1572.4	455.9	362.6	301.6	254.9	219.0	197.5	179.5	179.5
67.5°	6085.2	4469.6	1364.2	344.6	308.7	272.8	233.4	201.0	175.9	161.6	161.6
70°	5507.2	4006.5	1055.5	276.4	262.1	236.9	211.8	179.5	158.0	140.0	140.0
72.5°	4749.7	3396.2	743.1	222.6	222.6	201.0	179.5	158.0	136.4	122.1	122.1
75°	3643.9	2513.0	499.0	179.5	183.1	168.7	147.2	129.2	114.9	104.1	104.1
77.5°	1988.9	1242.2	305.2	132.8	136.4	129.2	114.9	104.1	96.9	86.2	86.2
80°	965.7	545.7	175.9	93.3	96.9	93.3	86.2	75.4	75.4	68.2	68.2
82.5°	405.7	204.6	93.3	64.6	64.6	57.4	53.9	53.9	53.9	50.3	50.3
85°	100.5	39.5	39.5	35.9	35.9	35.9	32.3	32.3	32.3	25.1	28.7
87.5°	14.4	14.4	14.4	14.4	14.4	14.4	10.8	3.6	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)