

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: P835826

Luminaire Tested: **ARCH3-100-730-U-T4W-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P835826
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-100-730-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 805mA LIGHTSQUARE WITH 40 LEDS AND TYPE IV WIDE OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10779 lumens
Efficiency: N/A
Efficacy: 105.1 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

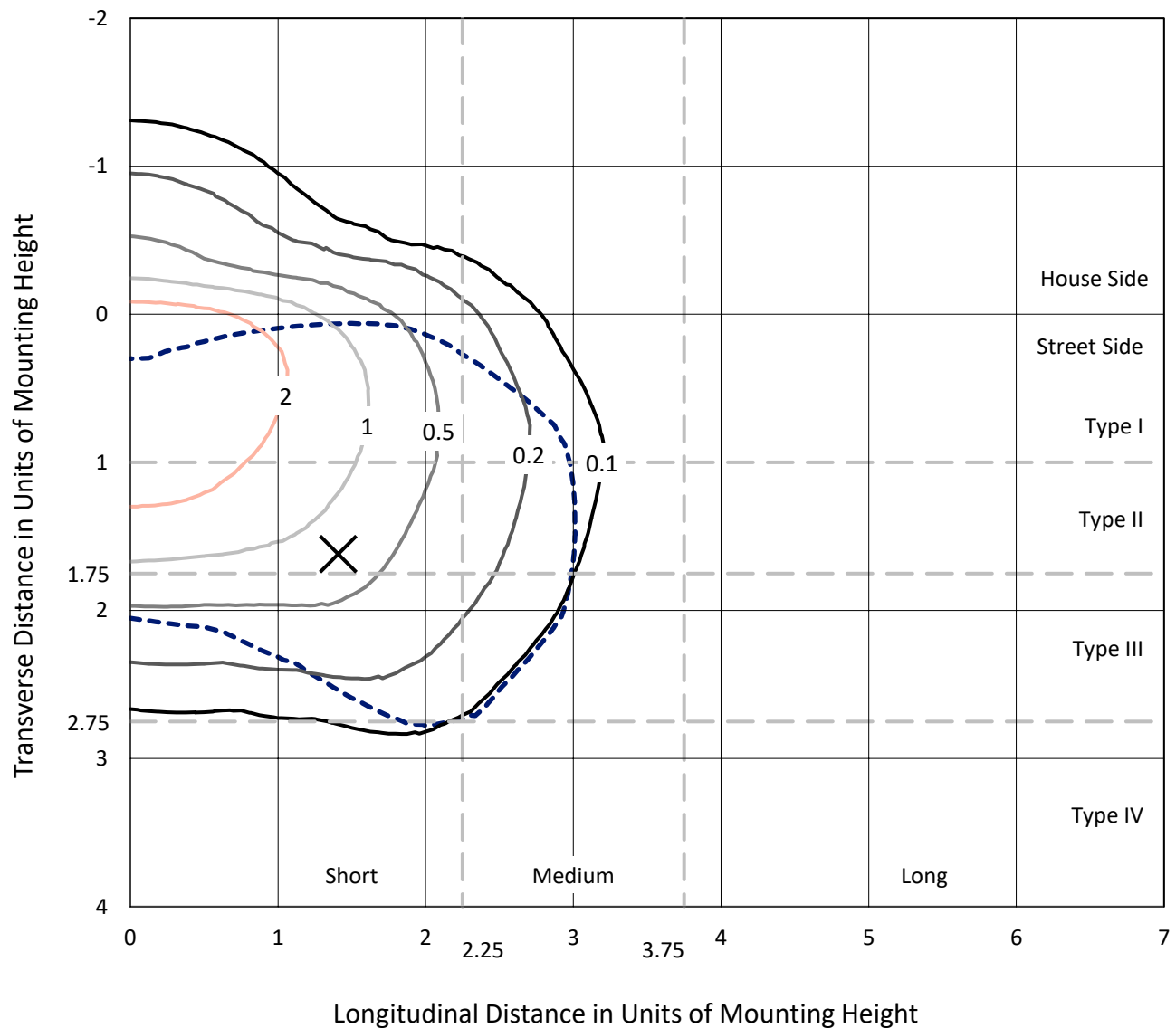
Input Watts (W): 102.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P835826
CATALOG NUMBER: ARCH3-100-730-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

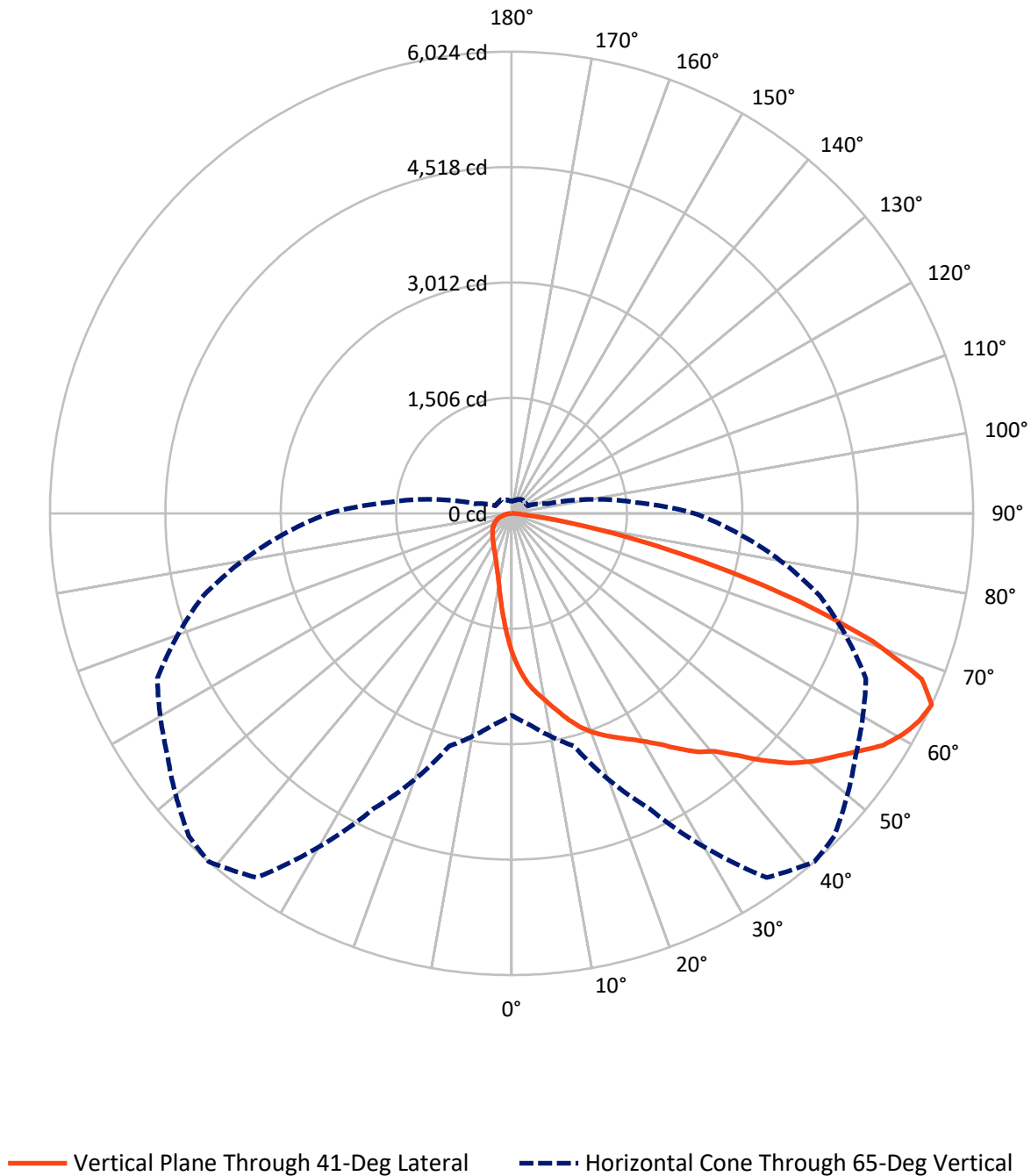
✕ Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 fc
Type III - Short - N/A

REPORT NUMBER: P835826
CATALOG NUMBER: ARCH3-100-730-U-T4W-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P835826

CATALOG NUMBER: ARCH3-100-730-U-T4W-HSS

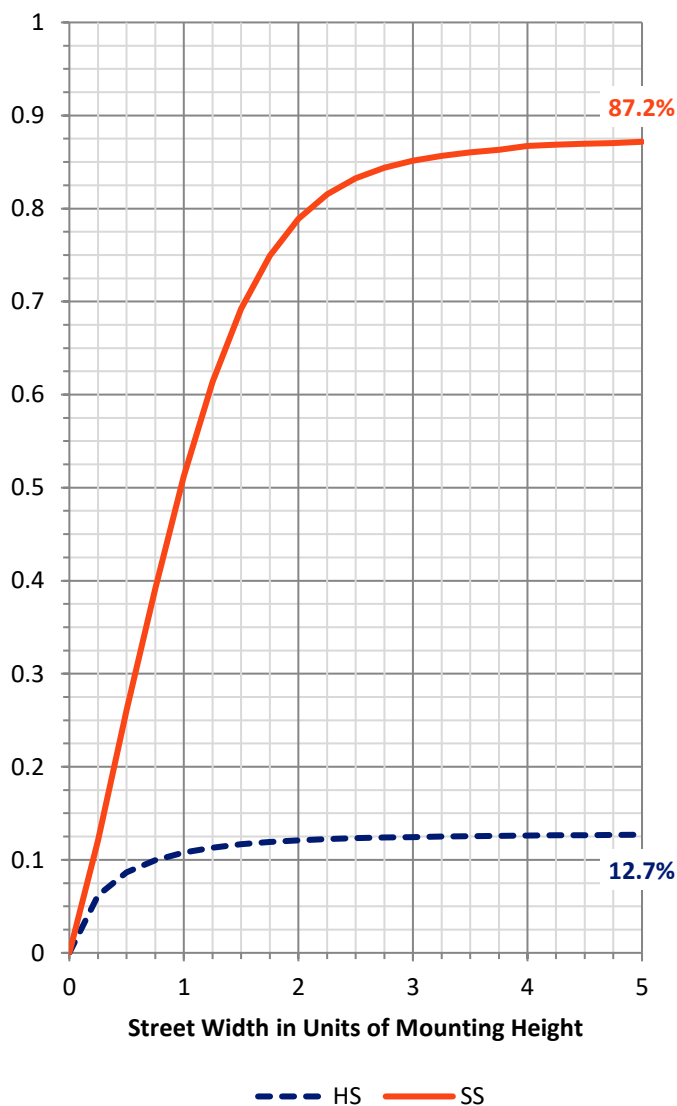
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1383.9	0.0	1383.9
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	9395.1	0.0	9395.1
	% Fixture	87.2	0.0	87.2
Total	Lumens	10779.0	0.0	10779.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.1	1.6
10°-20°	513.1	4.8
20°-30°	882.8	8.2
30°-40°	1338.9	12.4
40°-50°	1961.5	18.2
50°-60°	2477.0	23.0
60°-70°	2322.6	21.5
70°-80°	1035.2	9.6
80°-90°	76.7	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°	10779.0	100.0
0°-180°	10779.0	100.0

Coefficient of Utilization



REPORT NUMBER: P835826

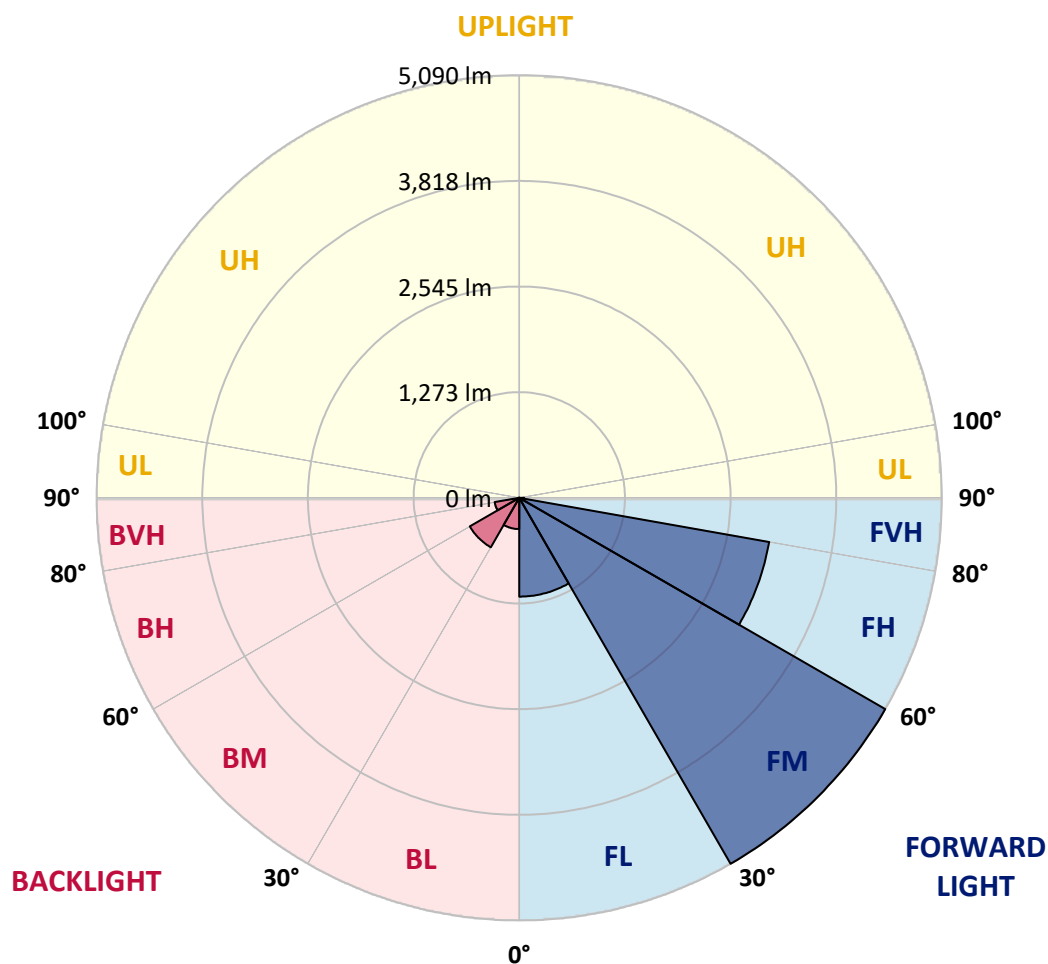
CATALOG NUMBER: ARCH3-100-730-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1190.4	11.0			
FM	(30°-60°)	5090.3	47.2			
FH	(60°-80°)	3057.2	28.4			G2/5000
FVH	(80°-90°)	57.3	0.5			G1/100
BL	(0°-30°)	376.7	3.5	B1/500		
BM	(30°-60°)	687.2	6.4	B1/1000		
BH	(60°-80°)	300.6	2.8	B1/500		G1/500
BVH	(80°-90°)	19.4	0.2			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: P835826

CATALOG NUMBER: ARCH3-100-730-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	1836.7	1836.7	1836.7	1836.7	1836.7	1836.7	1836.7	1836.7	1836.7	1836.7	1836.7
2.5°	2118.6	2111.7	2107.2	2082.2	2082.2	2048.1	2050.4	2018.5	1979.9	1918.5	1852.6
5°	2318.6	2309.5	2298.1	2273.1	2264.0	2229.9	2225.4	2179.9	2114.0	2007.2	1889.0
7.5°	2493.6	2484.5	2468.6	2432.2	2407.2	2366.3	2355.0	2295.9	2223.1	2091.3	1925.3
10°	2652.7	2645.9	2625.5	2580.0	2545.9	2495.9	2475.4	2395.9	2304.9	2159.5	1954.9
12.5°	2814.1	2805.0	2777.8	2739.1	2698.2	2639.1	2614.1	2511.8	2395.9	2234.5	1998.1
15°	2964.2	2950.5	2930.1	2889.1	2852.8	2795.9	2768.7	2648.2	2507.3	2318.6	2054.9
17.5°	3061.9	3050.5	3032.3	3009.6	2980.1	2936.9	2909.6	2791.4	2618.6	2400.4	2114.0
20°	3121.0	3116.5	3109.6	3096.0	3082.4	3052.8	3032.3	2921.0	2739.1	2480.0	2170.8
22.5°	3166.5	3161.9	3159.6	3159.6	3161.9	3150.6	3136.9	3041.4	2855.0	2564.1	2223.1
25°	3236.9	3234.7	3230.1	3225.6	3241.5	3243.7	3239.2	3173.3	3000.5	2675.5	2289.0
27.5°	3334.7	3327.9	3318.8	3314.2	3330.1	3341.5	3350.6	3305.1	3155.1	2789.1	2364.1
30°	3484.7	3464.2	3441.5	3425.6	3437.0	3455.2	3475.6	3448.3	3314.2	2930.1	2441.3
32.5°	3662.0	3637.0	3584.7	3555.2	3584.7	3598.4	3614.3	3600.6	3480.2	3082.4	2518.6
35°	3878.0	3848.4	3793.8	3750.7	3802.9	3773.4	3766.6	3752.9	3637.0	3232.4	2605.0
37.5°	4237.1	4193.9	4107.5	4012.1	4012.1	3948.4	3923.4	3882.5	3777.9	3366.5	2689.1
40°	4653.1	4596.3	4484.9	4343.9	4214.4	4082.5	4066.6	4037.1	3943.9	3521.1	2784.6
42.5°	5110.0	5000.9	4846.3	4675.8	4466.7	4316.7	4280.3	4196.2	4105.3	3677.9	2880.0
45°	5616.9	5389.6	5164.5	5078.2	4732.6	4596.3	4528.1	4375.8	4273.5	3841.6	2980.1
47.5°	5698.7	5521.4	5371.4	5357.8	4980.4	4866.8	4789.5	4571.3	4455.3	4016.6	3084.6
50°	5653.3	5546.4	5562.3	5507.8	5162.3	5087.3	5028.2	4780.4	4634.9	4184.8	3180.1
52.5°	5462.3	5521.4	5612.3	5512.3	5335.0	5273.7	5244.1	5005.4	4803.1	4339.4	3266.5
55°	5235.0	5275.9	5471.4	5594.2	5535.1	5480.5	5453.2	5266.8	4969.1	4469.0	3346.0
57.5°	4903.1	4884.9	5100.9	5580.5	5744.2	5712.4	5682.8	5523.7	5123.6	4562.2	3396.0
60°	4405.3	4366.7	4639.4	5307.7	5812.4	5862.4	5848.8	5694.2	5241.8	4559.9	3375.6
62.5°	3543.8	3639.3	4016.6	4862.2	5841.9	5969.2	5944.2	5707.8	5280.5	4428.0	3246.0
65°	2634.6	2770.9	3141.5	4248.5	5801.0	6023.8	5955.6	5485.1	5100.9	4166.6	2961.9
67.5°	1898.1	2018.5	2289.0	3496.1	5407.8	5773.7	5694.2	5121.4	4687.2	3796.1	2568.6
70°	1298.0	1384.3	1568.5	2545.9	4616.7	4991.8	4941.8	4578.1	4034.8	3355.1	2086.7
72.5°	916.1	952.4	1070.6	1679.8	3507.4	3916.6	3857.5	3766.6	3241.5	2789.1	1623.0
75°	686.5	709.2	772.9	1086.6	2366.3	2714.1	2659.6	2711.8	2420.9	2111.7	1182.0
77.5°	259.1	281.9	438.7	693.3	1400.2	1666.2	1611.6	1643.5	1345.7	1066.1	588.7
80°	70.5	75.0	145.5	329.6	636.5	829.7	754.7	647.8	500.1	491.0	311.4
82.5°	29.6	34.1	65.9	177.3	227.3	227.3	190.9	236.4	190.9	229.6	150.0
85°	11.4	13.6	15.9	45.5	29.6	31.8	34.1	45.5	38.6	47.7	34.1
87.5°	0.0	0.0	0.0	2.3	2.3	4.5	2.3	4.5	6.8	6.8	6.8
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: P835826

CATALOG NUMBER: ARCH3-100-730-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1836.7	1836.7	1836.7	1836.7	1836.7	1836.7	1836.7	1836.7	1836.7	1836.7	1836.7
2.5°	1825.3	1800.3	1763.9	1704.8	1643.5	1609.4	1566.2	1559.4	1513.9	1509.4	1491.2
5°	1836.7	1784.4	1691.2	1577.5	1466.2	1379.8	1316.1	1282.0	1216.1	1216.1	1197.9
7.5°	1845.8	1763.9	1613.9	1445.7	1293.4	1177.5	1091.1	1054.7	995.6	991.1	977.4
10°	1848.1	1738.9	1529.8	1311.6	1125.2	1007.0	922.9	882.0	829.7	825.1	816.1
12.5°	1866.2	1725.3	1454.8	1195.7	1004.7	877.4	795.6	761.5	720.6	716.0	706.9
15°	1895.8	1725.3	1391.2	1097.9	897.9	779.7	709.2	677.4	647.8	643.3	638.7
17.5°	1925.3	1720.8	1327.5	1007.0	809.2	702.4	641.0	616.0	593.3	591.0	586.5
20°	1952.6	1718.5	1263.9	929.7	741.0	638.7	591.0	568.3	550.1	550.1	547.8
22.5°	1979.9	1713.9	1202.5	857.0	681.9	591.0	550.1	525.1	511.5	511.5	509.2
25°	2020.8	1713.9	1145.7	795.6	634.2	554.6	513.7	495.5	484.2	481.9	481.9
27.5°	2068.5	1727.6	1095.6	741.0	593.3	518.3	486.4	468.3	454.6	450.1	452.4
30°	2120.8	1738.9	1050.2	693.3	554.6	491.0	456.9	438.7	425.1	420.5	422.8
32.5°	2173.1	1752.6	1009.3	650.1	516.0	466.0	431.9	411.4	397.8	395.5	395.5
35°	2229.9	1766.2	968.4	613.7	484.2	441.0	409.2	386.4	377.3	372.8	375.1
37.5°	2286.8	1788.9	929.7	579.6	461.4	418.3	388.7	366.0	359.2	356.9	356.9
40°	2355.0	1823.0	913.8	556.9	441.0	397.8	372.8	350.1	343.2	343.2	343.2
42.5°	2411.8	1850.3	900.2	531.9	425.1	379.6	356.9	338.7	334.1	331.9	334.1
45°	2468.6	1875.3	882.0	509.2	404.6	361.4	343.2	325.1	320.5	320.5	320.5
47.5°	2525.4	1889.0	857.0	486.4	386.4	345.5	329.6	313.7	309.1	309.1	309.1
50°	2570.9	1900.3	820.6	461.4	366.0	331.9	316.0	300.1	295.5	295.5	295.5
52.5°	2616.4	1902.6	782.0	431.9	345.5	316.0	302.3	286.4	281.9	279.6	279.6
55°	2657.3	1900.3	736.5	397.8	322.8	297.8	286.4	272.8	263.7	254.6	259.1
57.5°	2686.8	1898.1	684.2	363.7	300.1	279.6	275.0	256.9	238.7	215.9	220.5
60°	2675.5	1873.1	627.4	320.5	275.0	261.4	261.4	236.4	204.6	193.2	195.5
62.5°	2602.7	1802.6	568.3	275.0	250.0	243.2	241.0	213.7	188.7	177.3	179.6
65°	2384.5	1625.3	481.9	234.1	225.0	222.8	222.8	197.8	175.0	161.4	163.7
67.5°	2052.6	1363.9	393.3	197.8	200.0	204.6	204.6	181.9	159.1	145.5	147.8
70°	1645.7	1066.1	313.7	170.5	172.8	179.6	184.1	163.7	143.2	129.6	129.6
72.5°	1238.9	809.2	252.3	143.2	154.6	154.6	161.4	145.5	125.0	111.4	113.7
75°	897.9	579.6	200.0	120.5	134.1	131.8	131.8	122.7	106.8	97.7	97.7
77.5°	425.1	304.6	159.1	86.4	104.6	102.3	104.6	97.7	90.9	81.8	84.1
80°	209.1	150.0	102.3	61.4	72.7	75.0	81.8	77.3	75.0	68.2	68.2
82.5°	100.0	59.1	47.7	43.2	50.0	52.3	56.8	56.8	59.1	54.6	54.6
85°	27.3	15.9	20.5	27.3	31.8	34.1	38.6	40.9	40.9	38.6	40.9
87.5°	6.8	6.8	9.1	13.6	15.9	18.2	20.5	20.5	9.1	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)