

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: P836132

Luminaire Tested: **ARCH3-140-740-U-T4W-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836132
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: ARCH3-140-740-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 1110mA 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: 14645 lumens
Efficiency: N/A
Efficacy: 102.8 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

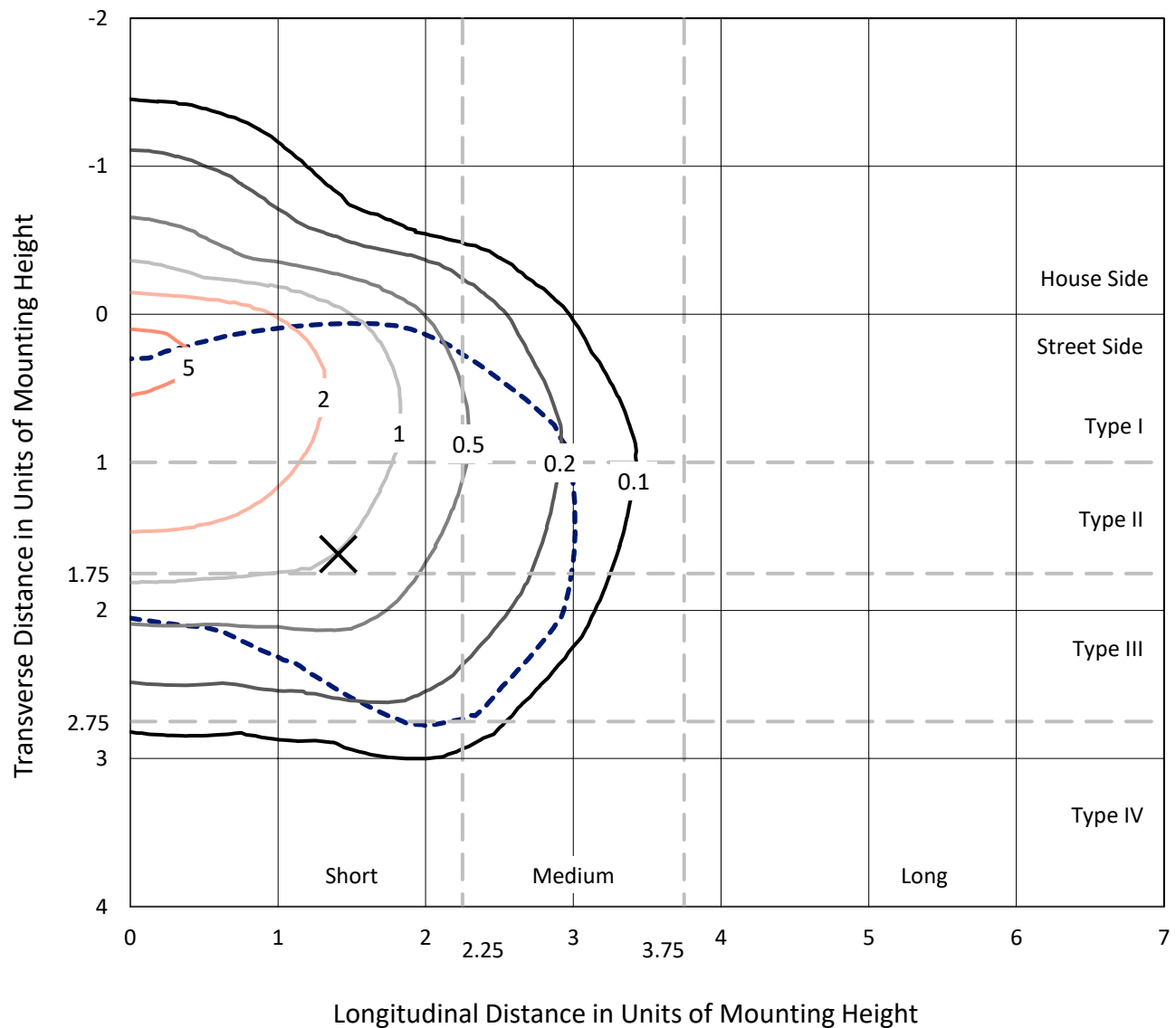
Input Watts (W): 142.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P836132
CATALOG NUMBER: ARCH3-140-740-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

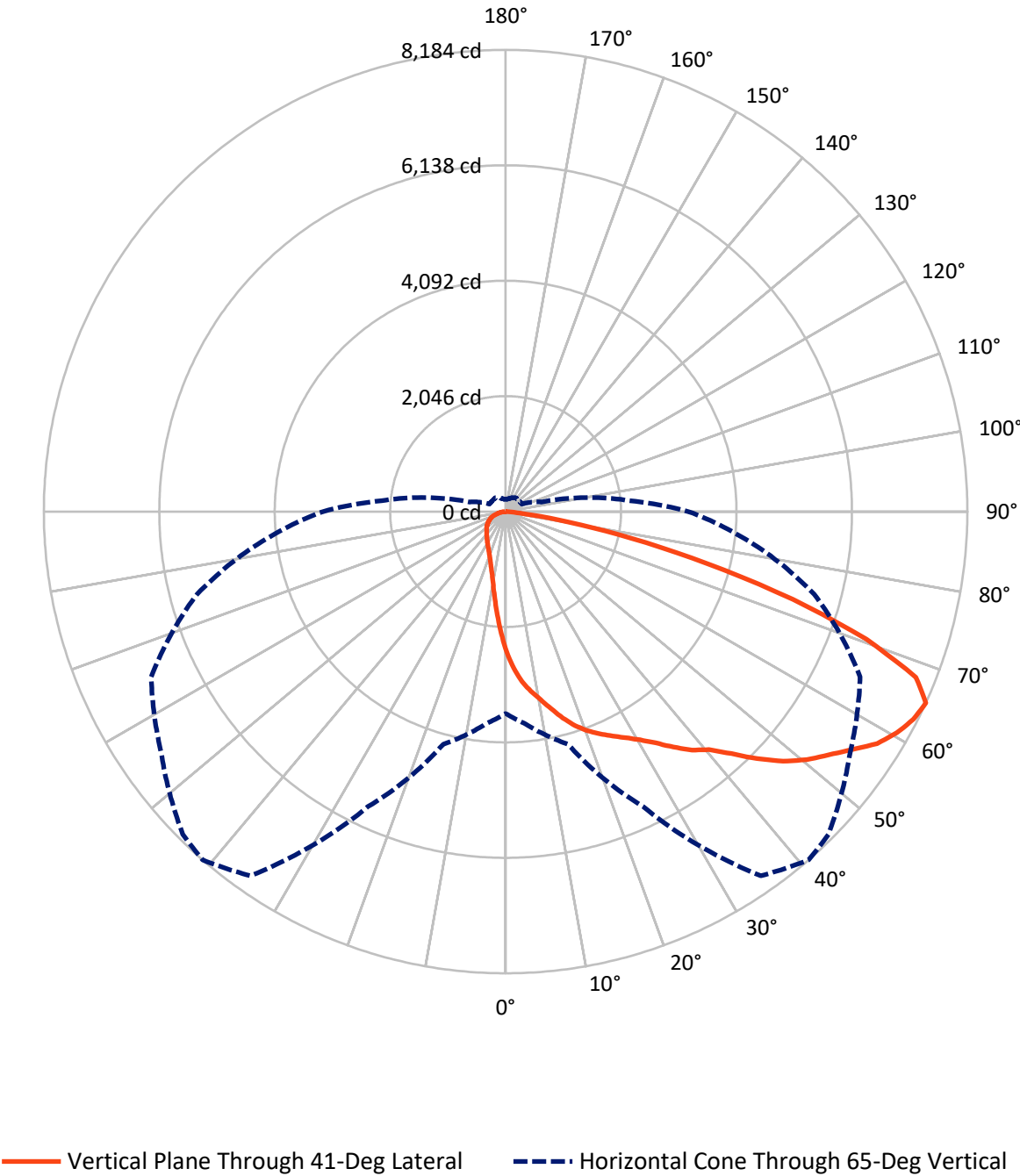
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.8 fc
Type III - Short - N/A

REPORT NUMBER: P836132
CATALOG NUMBER: ARCH3-140-740-U-T4W-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P836132

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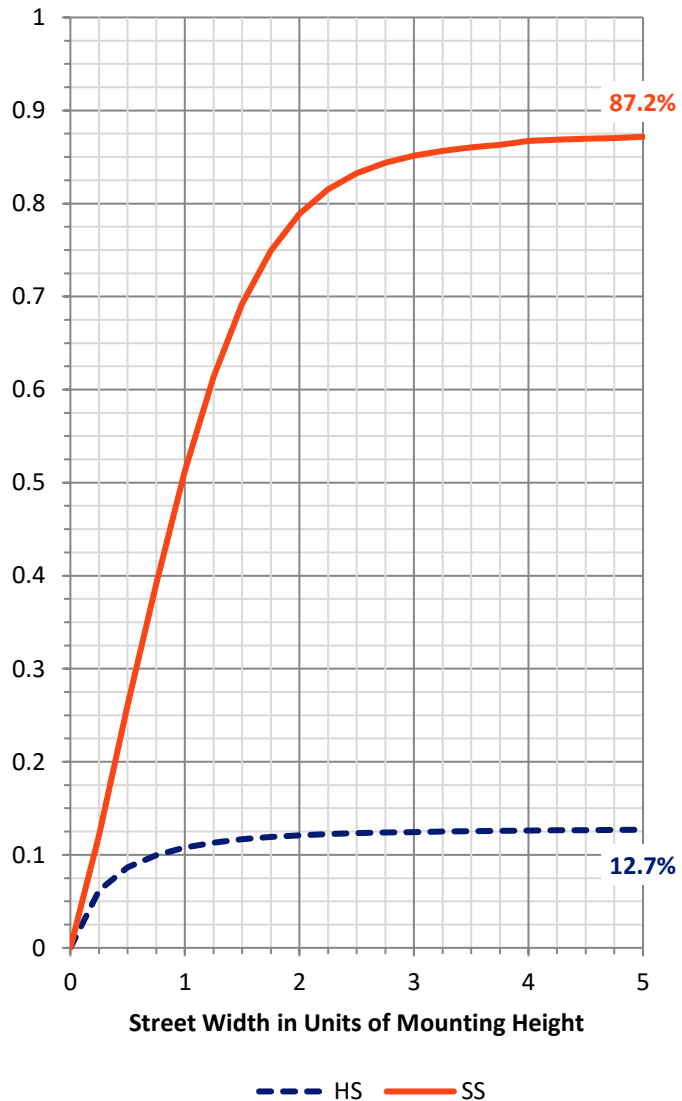
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1880.2	0.0	1880.2
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	12764.8	0.0	12764.8
	% Fixture	87.2	0.0	87.2
Total	Lumens	14645.0	0.0	14645.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	232.5	1.6
10°-20°	697.2	4.8
20°-30°	1199.4	8.2
30°-40°	1819.1	12.4
40°-50°	2665.1	18.2
50°-60°	3365.4	23.0
60°-70°	3155.7	21.5
70°-80°	1406.5	9.6
80°-90°	104.2	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°	14645.0	100.0
0°-180°	14645.0	100.0

Coefficient of Utilization



REPORT NUMBER: P836132

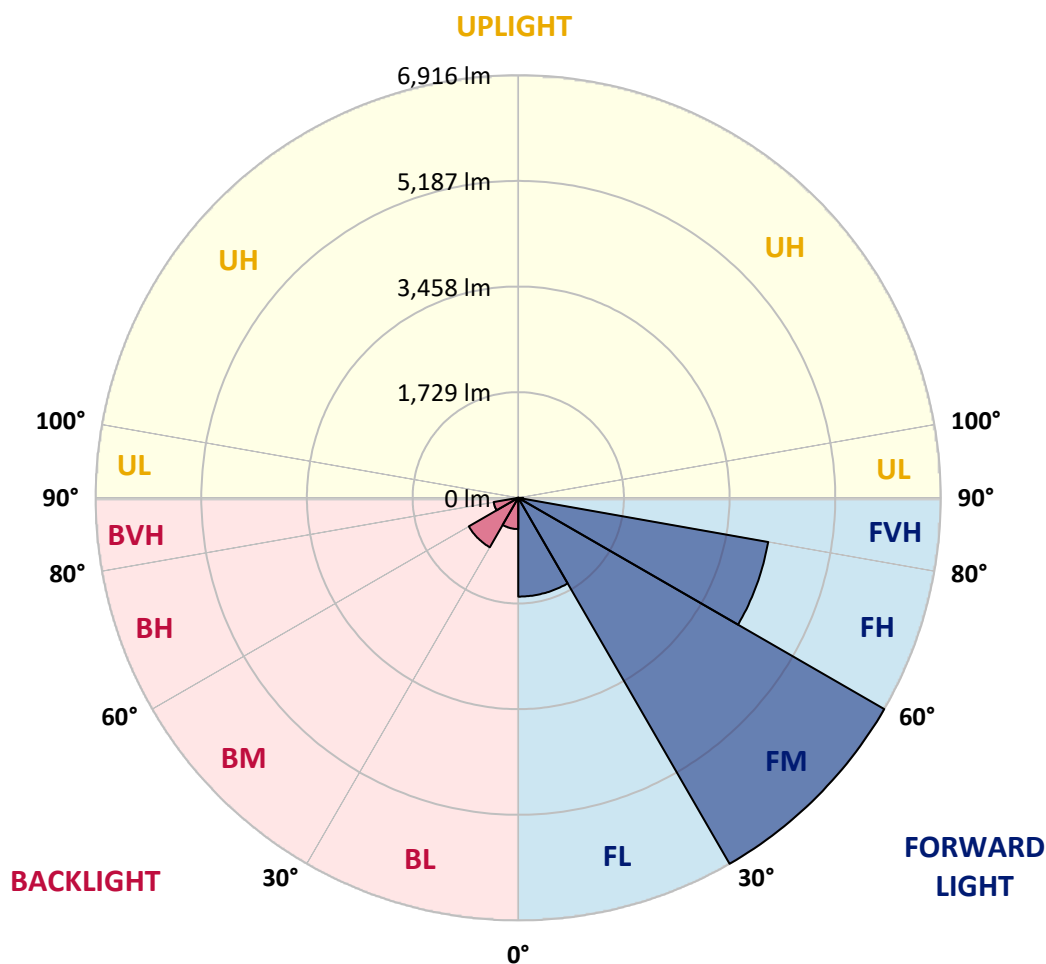
CATALOG NUMBER: ARCH3-140-740-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1617.4	11.0			
FM	(30°-60°)	6915.9	47.2			
FH	(60°-80°)	4153.7	28.4			G2/5000
FVH	(80°-90°)	77.8	0.5			G1/100
BL	(0°-30°)	511.8	3.5	B2/1000		
BM	(30°-60°)	933.6	6.4	B1/1000		
BH	(60°-80°)	408.4	2.8	B1/500		G1/500
BVH	(80°-90°)	26.4	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type III Short



REPORT NUMBER: P836132

CATALOG NUMBER: ARCH3-140-740-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	2495.4	2495.4	2495.4	2495.4	2495.4	2495.4	2495.4	2495.4	2495.4	2495.4	2495.4
2.5°	2878.4	2869.1	2863.0	2829.0	2829.0	2782.7	2785.7	2742.5	2690.0	2606.6	2517.1
5°	3150.2	3137.8	3122.4	3088.4	3076.1	3029.7	3023.5	2961.8	2872.2	2727.1	2566.5
7.5°	3388.0	3375.6	3354.0	3304.6	3270.6	3215.0	3199.6	3119.3	3020.5	2841.3	2615.9
10°	3604.2	3594.9	3567.1	3505.3	3459.0	3391.1	3363.3	3255.2	3131.6	2934.0	2656.0
12.5°	3823.4	3811.1	3774.0	3721.5	3665.9	3585.6	3551.7	3412.7	3255.2	3035.9	2714.7
15°	4027.3	4008.8	3981.0	3925.4	3875.9	3798.7	3761.7	3598.0	3406.5	3150.2	2791.9
17.5°	4160.1	4144.6	4119.9	4089.0	4048.9	3990.2	3953.2	3792.6	3557.8	3261.4	2872.2
20°	4240.4	4234.2	4224.9	4206.4	4187.9	4147.7	4119.9	3968.6	3721.5	3369.5	2949.4
22.5°	4302.1	4296.0	4292.9	4292.9	4296.0	4280.5	4262.0	4132.3	3879.0	3483.7	3020.5
25°	4397.9	4394.8	4388.6	4382.4	4404.1	4407.2	4401.0	4311.4	4076.7	3635.1	3110.0
27.5°	4530.7	4521.4	4509.1	4502.9	4524.5	4540.0	4552.3	4490.5	4286.7	3789.5	3211.9
30°	4734.5	4706.7	4675.8	4654.2	4669.7	4694.4	4722.2	4685.1	4502.9	3981.0	3316.9
32.5°	4975.4	4941.4	4870.4	4830.3	4870.4	4888.9	4910.6	4892.0	4728.3	4187.9	3422.0
35°	5268.8	5228.7	5154.5	5095.9	5166.9	5126.8	5117.5	5099.0	4941.4	4391.7	3539.3
37.5°	5756.8	5698.1	5580.7	5451.0	5451.0	5364.6	5330.6	5275.0	5132.9	4573.9	3653.6
40°	6322.0	6244.8	6093.4	5901.9	5725.9	5546.8	5525.2	5485.0	5358.4	4783.9	3783.3
42.5°	6942.7	6794.5	6584.5	6352.8	6068.7	5864.9	5815.5	5701.2	5577.7	4997.0	3913.0
45°	7631.4	7322.6	7016.9	6899.5	6430.1	6244.8	6152.1	5945.2	5806.2	5219.4	4048.9
47.5°	7742.6	7501.7	7297.9	7279.4	6766.7	6612.3	6507.3	6210.8	6053.3	5457.2	4191.0
50°	7680.9	7535.7	7557.3	7483.2	7013.8	6911.9	6831.6	6494.9	6297.3	5685.8	4320.7
52.5°	7421.4	7501.7	7625.3	7489.4	7248.5	7165.1	7125.0	6800.7	6525.8	5895.8	4438.0
55°	7112.6	7168.2	7433.8	7600.6	7520.3	7446.1	7409.1	7155.8	6751.3	6071.8	4546.1
57.5°	6661.7	6637.0	6930.4	7582.0	7804.4	7761.2	7721.0	7504.8	6961.3	6198.4	4614.1
60°	5985.3	5932.8	6303.4	7211.4	7897.1	7965.0	7946.5	7736.5	7121.9	6195.3	4586.3
62.5°	4814.8	4944.5	5457.2	6606.1	7937.2	8110.2	8076.2	7755.0	7174.4	6016.2	4410.2
65°	3579.5	3764.8	4268.2	5772.2	7881.6	8184.3	8091.6	7452.3	6930.4	5661.0	4024.2
67.5°	2578.8	2742.5	3110.0	4750.0	7347.3	7844.5	7736.5	6958.2	6368.3	5157.6	3489.9
70°	1763.5	1880.8	2131.0	3459.0	6272.6	6782.1	6714.2	6220.0	5481.9	4558.5	2835.2
72.5°	1244.6	1294.0	1454.6	2282.3	4765.4	5321.3	5241.0	5117.5	4404.1	3789.5	2205.1
75°	932.7	963.6	1050.1	1476.3	3215.0	3687.6	3613.4	3684.5	3289.2	2869.1	1606.0
77.5°	352.1	383.0	596.1	942.0	1902.5	2263.8	2189.7	2232.9	1828.3	1448.5	799.9
80°	95.7	101.9	197.7	447.8	864.8	1127.3	1025.4	880.2	679.4	667.1	423.1
82.5°	40.1	46.3	89.6	240.9	308.8	308.8	259.4	321.2	259.4	311.9	203.8
85°	15.4	18.5	21.6	61.8	40.1	43.2	46.3	61.8	52.5	64.9	46.3
87.5°	0.0	0.0	0.0	3.1	3.1	6.2	3.1	6.2	9.3	9.3	9.3
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: P836132

CATALOG NUMBER: ARCH3-140-740-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2495.4	2495.4	2495.4	2495.4	2495.4	2495.4	2495.4	2495.4	2495.4	2495.4	2495.4
2.5°	2480.0	2446.0	2396.6	2316.3	2232.9	2186.6	2127.9	2118.6	2056.9	2050.7	2026.0
5°	2495.4	2424.4	2297.8	2143.4	1992.0	1874.7	1788.2	1741.9	1652.3	1652.3	1627.6
7.5°	2507.8	2396.6	2192.8	1964.2	1757.3	1599.8	1482.4	1433.0	1352.7	1346.5	1328.0
10°	2510.9	2362.6	2078.5	1782.0	1528.8	1368.2	1253.9	1198.3	1127.3	1121.1	1108.7
12.5°	2535.6	2344.1	1976.6	1624.5	1365.1	1192.1	1080.9	1034.6	979.0	972.8	960.5
15°	2575.7	2344.1	1890.1	1491.7	1219.9	1059.3	963.6	920.3	880.2	874.0	867.8
17.5°	2615.9	2337.9	1803.6	1368.2	1099.5	954.3	870.9	837.0	806.1	803.0	796.8
20°	2652.9	2334.8	1717.2	1263.2	1006.8	867.8	803.0	772.1	747.4	747.4	744.3
22.5°	2690.0	2328.7	1633.8	1164.3	926.5	803.0	747.4	713.4	694.9	694.9	691.8
25°	2745.6	2328.7	1556.6	1080.9	861.7	753.6	698.0	673.3	657.8	654.7	654.7
27.5°	2810.4	2347.2	1488.6	1006.8	806.1	704.2	660.9	636.2	617.7	611.5	614.6
30°	2881.5	2362.6	1426.8	942.0	753.6	667.1	620.8	596.1	577.5	571.4	574.4
32.5°	2952.5	2381.2	1371.3	883.3	701.1	633.1	586.8	559.0	540.5	537.4	537.4
35°	3029.7	2399.7	1315.7	833.9	657.8	599.2	555.9	525.0	512.7	506.5	509.6
37.5°	3106.9	2430.6	1263.2	787.5	626.9	568.3	528.1	497.2	488.0	484.9	484.9
40°	3199.6	2476.9	1241.5	756.7	599.2	540.5	506.5	475.6	466.3	466.3	466.3
42.5°	3276.8	2514.0	1223.0	722.7	577.5	515.8	484.9	460.2	454.0	450.9	454.0
45°	3354.0	2547.9	1198.3	691.8	549.7	491.1	466.3	441.6	435.5	435.5	435.5
47.5°	3431.2	2566.5	1164.3	660.9	525.0	469.4	447.8	426.2	420.0	420.0	420.0
50°	3493.0	2581.9	1114.9	626.9	497.2	450.9	429.3	407.7	401.5	401.5	401.5
52.5°	3554.8	2585.0	1062.4	586.8	469.4	429.3	410.8	389.1	383.0	379.9	379.9
55°	3610.3	2581.9	1000.6	540.5	438.6	404.6	389.1	370.6	358.3	345.9	352.1
57.5°	3650.5	2578.8	929.6	494.1	407.7	379.9	373.7	349.0	324.3	293.4	299.6
60°	3635.1	2544.8	852.4	435.5	373.7	355.2	355.2	321.2	278.0	262.5	265.6
62.5°	3536.2	2449.1	772.1	373.7	339.7	330.5	327.4	290.3	256.3	240.9	244.0
65°	3239.7	2208.2	654.7	318.1	305.8	302.7	302.7	268.7	237.8	219.3	222.4
67.5°	2788.8	1853.0	534.3	268.7	271.8	278.0	278.0	247.1	216.2	197.7	200.7
70°	2236.0	1448.5	426.2	231.6	234.7	244.0	250.2	222.4	194.6	176.0	176.0
72.5°	1683.2	1099.5	342.8	194.6	210.0	210.0	219.3	197.7	169.9	151.3	154.4
75°	1219.9	787.5	271.8	163.7	182.2	179.1	179.1	166.8	145.2	132.8	132.8
77.5°	577.5	413.8	216.2	117.4	142.1	139.0	142.1	132.8	123.5	111.2	114.3
80°	284.1	203.8	139.0	83.4	98.8	101.9	111.2	105.0	101.9	92.7	92.7
82.5°	135.9	80.3	64.9	58.7	67.9	71.0	77.2	77.2	80.3	74.1	74.1
85°	37.1	21.6	27.8	37.1	43.2	46.3	52.5	55.6	55.6	52.5	55.6
87.5°	9.3	9.3	12.4	18.5	21.6	24.7	27.8	27.8	12.4	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)