

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: P841185

Luminaire Tested: **ARCH4-140-740-U-T3-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841185
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-26)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-140-740-U-T3-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 1155mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16616 lumens
Efficiency: N/A
Efficacy: 117.6 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 141.3
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

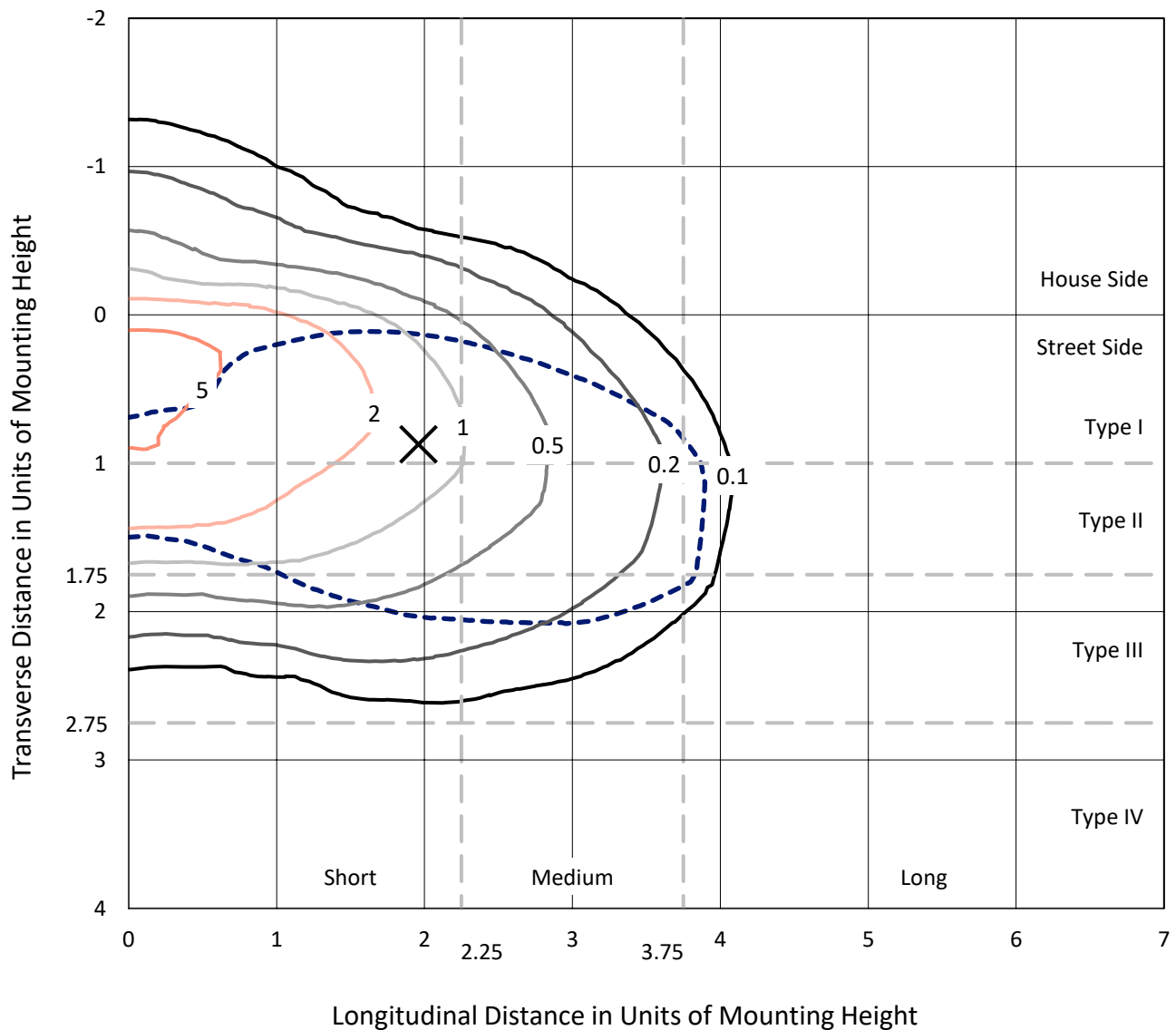


REPORT NUMBER: P841185

CATALOG NUMBER: ARCH4-140-740-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

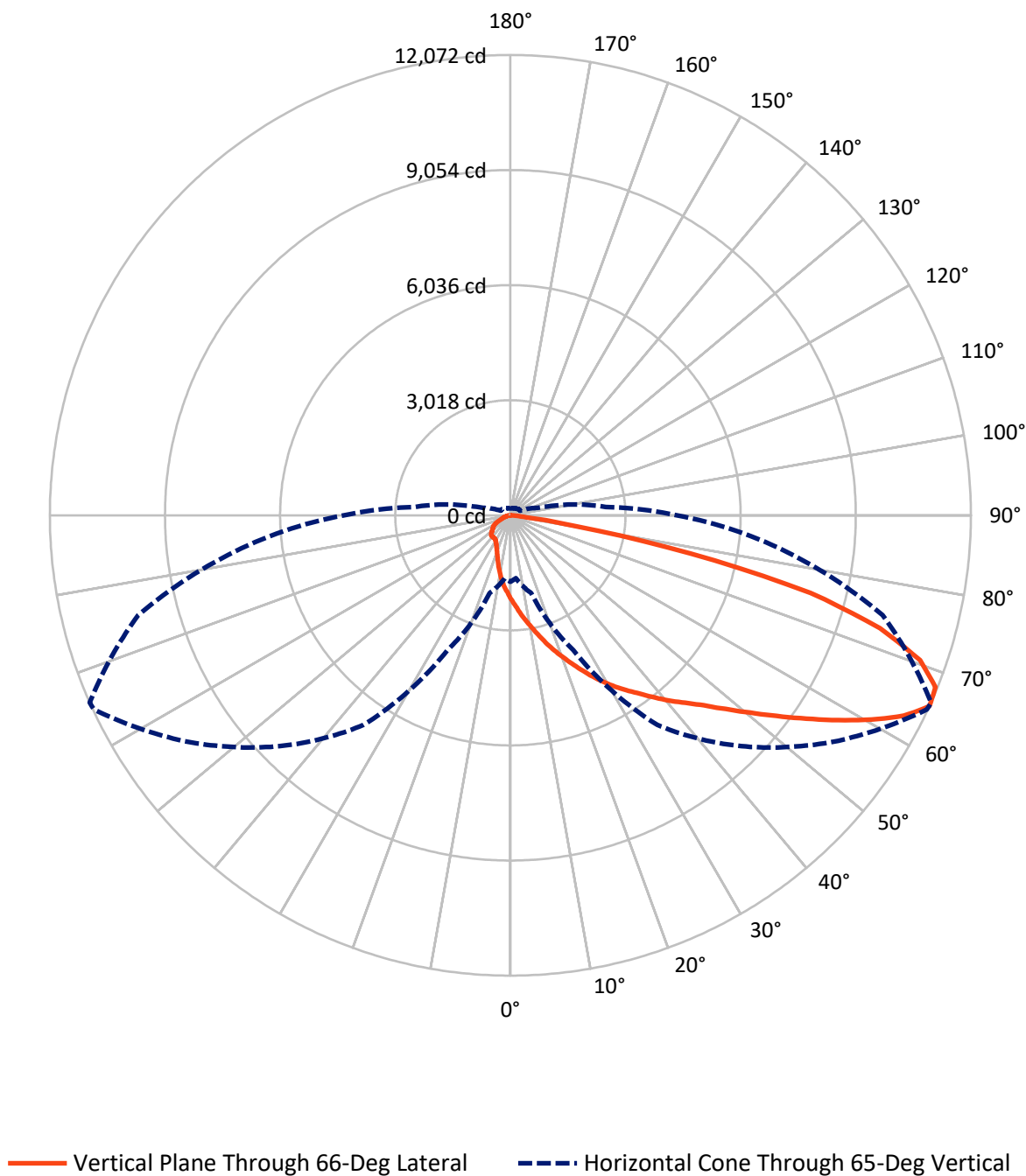
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.4 fc
Type III - Short - N/A

REPORT NUMBER: P841185
CATALOG NUMBER: ARCH4-140-740-U-T3-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P841185

CATALOG NUMBER: ARCH4-140-740-U-T3-HSS

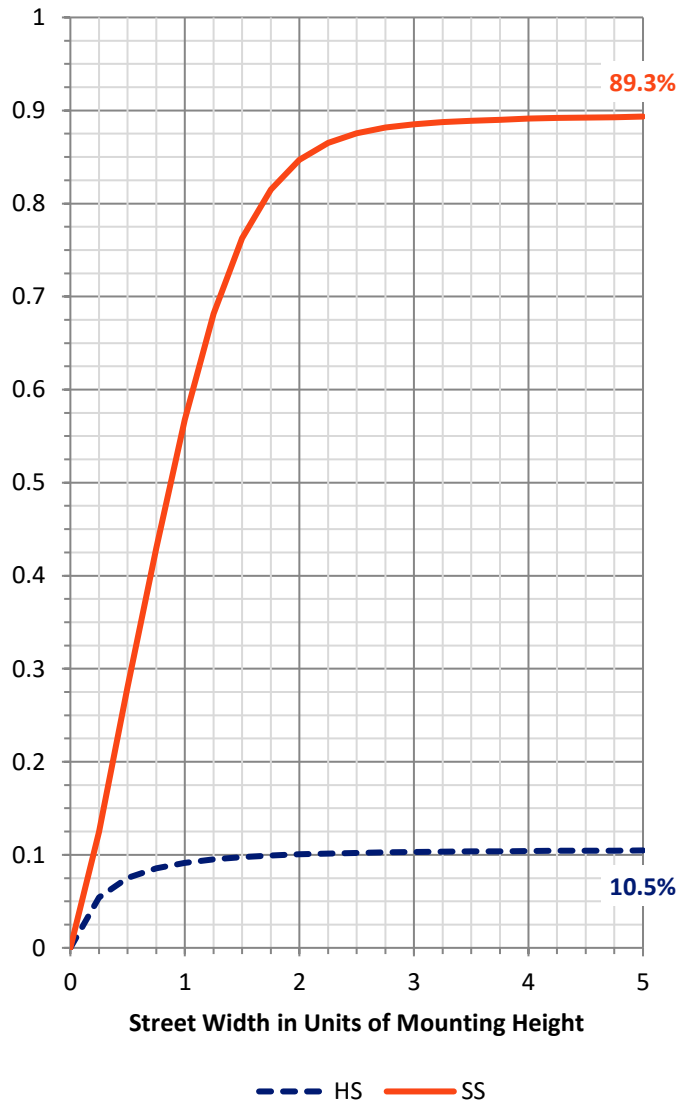
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1757.5	0.0	1757.5
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	14858.5	0.0	14858.5
	% Fixture	89.4	0.0	89.4
Total	Lumens	16616.0	0.0	16616.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	217.0	1.3
10°-20°	707.4	4.3
20°-30°	1279.9	7.7
30°-40°	2001.5	12.0
40°-50°	3036.2	18.3
50°-60°	3857.6	23.2
60°-70°	3604.5	21.7
70°-80°	1791.4	10.8
80°-90°	120.4	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°	16616.0	100.0
0°-180°	16616.0	100.0

Coefficient of Utilization



REPORT NUMBER: P841185

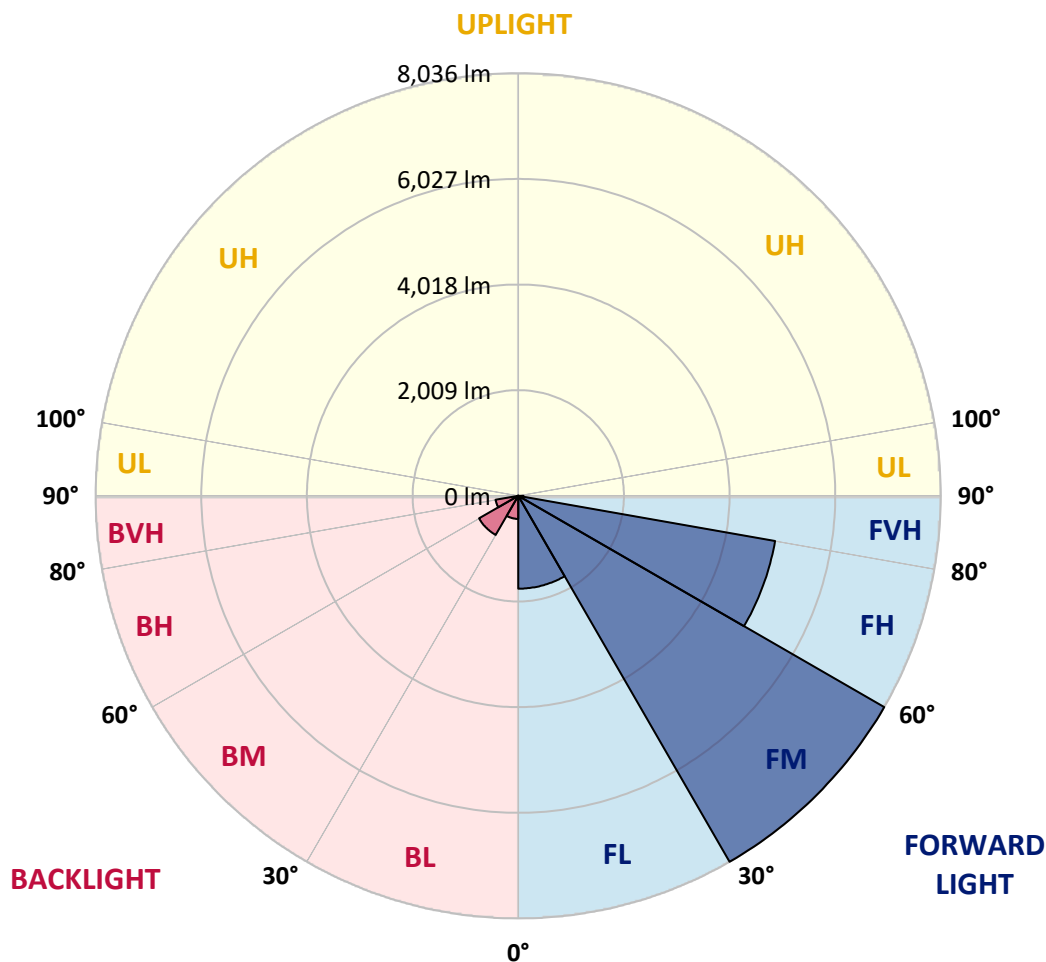
CATALOG NUMBER: ARCH4-140-740-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1765.5	10.6			
FM	(30°-60°)	8035.7	48.4			
FH	(60°-80°)	4958.3	29.8			G2/5000
FVH	(80°-90°)	99.1	0.6			G1/100
BL	(0°-30°)	438.9	2.6	B1/500		
BM	(30°-60°)	859.6	5.2	B1/1000		
BH	(60°-80°)	437.7	2.6	B1/500		G1/500
BVH	(80°-90°)	21.3	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 III Short



REPORT NUMBER: P841185

CATALOG NUMBER: ARCH4-140-740-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2199.0	2199.0	2199.0	2199.0	2199.0	2199.0	2199.0	2199.0	2199.0	2199.0	2199.0
2.5°	2568.4	2589.4	2599.8	2603.3	2523.1	2488.3	2453.4	2373.3	2355.9	2310.6	2251.3
5°	3021.5	3049.4	3042.4	3028.5	2930.9	2819.4	2728.8	2578.9	2554.5	2446.5	2314.0
7.5°	3467.6	3492.0	3485.0	3432.7	3324.7	3167.9	3018.0	2798.5	2763.6	2589.4	2376.8
10°	3840.5	3861.4	3857.9	3805.6	3676.7	3485.0	3303.8	3011.0	2969.2	2721.8	2429.0
12.5°	4147.2	4175.0	4171.5	4136.7	4021.7	3812.6	3607.0	3255.0	3202.7	2882.1	2502.2
15°	4387.6	4422.5	4422.5	4408.5	4328.4	4154.1	3920.6	3523.3	3460.6	3066.8	2592.8
17.5°	4534.0	4561.9	4586.3	4610.7	4554.9	4422.5	4209.9	3791.7	3725.5	3248.0	2686.9
20°	4610.7	4638.5	4656.0	4708.2	4718.7	4652.5	4485.2	4056.5	3986.8	3453.6	2795.0
22.5°	4736.1	4760.5	4764.0	4809.3	4830.2	4847.6	4743.1	4317.9	4262.2	3680.2	2916.9
25°	4945.2	4973.1	4962.6	4983.6	4987.0	5007.9	4997.5	4617.6	4561.9	3938.1	3063.3
27.5°	5213.6	5248.4	5241.4	5220.5	5189.2	5171.7	5217.0	4920.8	4868.5	4195.9	3213.2
30°	5502.8	5544.6	5534.2	5492.4	5408.7	5335.5	5398.3	5206.6	5157.8	4460.8	3380.5
32.5°	5795.6	5844.3	5840.9	5771.2	5628.3	5502.8	5596.9	5474.9	5440.1	4746.6	3561.7
35°	5987.2	6050.0	6043.0	6001.2	5816.5	5708.4	5823.4	5750.3	5725.9	5095.1	3823.0
37.5°	6297.4	6363.6	6304.4	6199.8	5987.2	5931.5	6070.9	6060.4	6043.0	5464.5	4098.4
40°	7050.2	7147.7	6990.9	6562.3	6213.8	6165.0	6363.6	6405.4	6388.0	5830.4	4345.8
42.5°	7837.8	7984.1	7740.2	7147.7	6625.0	6447.3	6684.2	6743.5	6722.6	6144.1	4568.8
45°	8315.2	8377.9	8134.0	7674.0	7353.4	6788.8	7025.8	7123.3	7105.9	6520.4	4854.6
47.5°	8705.5	8681.1	8402.3	8092.2	8151.4	7269.7	7412.6	7604.3	7590.3	6935.2	5168.3
50°	8789.2	8733.4	8621.9	8426.7	8583.6	7757.6	7820.3	8151.4	8137.5	7395.2	5485.4
52.5°	8200.2	8127.0	8430.2	8594.0	8541.7	8113.1	8269.9	8750.8	8743.9	7893.5	5788.6
55°	6729.5	6670.3	7485.8	8332.6	8496.4	8364.0	8768.3	9374.7	9413.0	8423.3	6063.9
57.5°	5293.7	5231.0	6032.5	7677.5	8329.2	8594.0	9350.3	10089.1	10137.9	8998.3	6325.3
60°	4220.3	4126.2	4739.6	6645.9	8015.5	8771.8	9911.3	10873.2	10880.2	9524.5	6485.6
62.5°	2868.2	2763.6	3443.2	5339.0	7489.3	8799.6	10343.5	11549.3	11577.2	9918.3	6513.5
65°	1742.5	1655.4	2115.4	3899.7	6712.1	8562.7	10350.5	12047.7	12072.0	10099.5	6346.2
67.5°	1010.7	975.8	1209.3	2429.0	5422.7	7924.9	9914.8	11971.0	12016.3	10022.9	5966.3
70°	589.0	585.5	672.6	1202.3	3826.5	6659.8	8942.5	11326.3	11392.5	9622.1	5384.3
72.5°	432.1	439.1	474.0	644.7	2216.5	4795.4	7572.9	10029.8	10130.9	8838.0	4554.9
75°	341.5	345.0	376.4	439.1	1164.0	2711.3	5673.6	8050.4	8130.5	7440.5	3558.2
77.5°	254.4	261.4	285.8	310.2	540.2	1244.1	3192.3	4959.2	4826.7	4084.4	1718.1
80°	184.7	202.1	212.6	223.0	285.8	480.9	958.4	1728.6	1714.6	1784.3	812.0
82.5°	118.5	132.4	142.9	149.9	170.8	230.0	285.8	386.8	418.2	693.5	324.1
85°	52.3	59.2	66.2	80.2	73.2	80.2	118.5	76.7	66.2	104.6	59.2
87.5°	0.0	0.0	10.5	17.4	13.9	7.0	20.9	13.9	10.5	10.5	10.5
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: P841185

CATALOG NUMBER: ARCH4-140-740-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2199.0	2199.0	2199.0	2199.0	2199.0	2199.0	2199.0	2199.0	2199.0	2199.0	2199.0
2.5°	2219.9	2181.6	2101.5	2024.8	1979.5	1920.2	1868.0	1819.2	1815.7	1801.7	1777.4
5°	2247.8	2174.6	2024.8	1881.9	1773.9	1658.9	1561.3	1484.6	1456.7	1435.8	1407.9
7.5°	2275.7	2160.7	1937.7	1728.6	1557.8	1397.5	1282.5	1177.9	1146.6	1118.7	1101.3
10°	2286.2	2136.3	1836.6	1557.8	1334.8	1164.0	1042.0	965.3	937.5	923.5	913.1
12.5°	2317.5	2122.4	1742.5	1397.5	1139.6	982.8	895.6	850.3	839.9	829.4	819.0
15°	2359.3	2122.4	1648.4	1240.7	986.3	860.8	808.5	777.2	770.2	766.7	759.7
17.5°	2404.7	2122.4	1557.8	1108.2	874.7	780.6	742.3	724.9	721.4	717.9	714.4
20°	2467.4	2125.9	1460.2	993.2	794.6	721.4	690.0	669.1	665.6	662.2	662.2
22.5°	2530.1	2132.8	1366.1	906.1	742.3	676.1	637.8	616.8	609.9	609.9	609.9
25°	2610.3	2153.7	1279.0	832.9	697.0	634.3	585.5	568.1	564.6	564.6	561.1
27.5°	2704.4	2178.1	1202.3	777.2	651.7	585.5	536.7	519.3	512.3	512.3	508.8
30°	2805.4	2202.5	1139.6	735.3	606.4	536.7	491.4	470.5	463.5	467.0	463.5
32.5°	2916.9	2237.4	1090.8	707.5	564.6	494.9	453.1	428.7	425.2	425.2	421.7
35°	3105.1	2335.0	1083.8	693.5	529.7	463.5	421.7	397.3	393.8	393.8	390.3
37.5°	3307.3	2446.5	1115.2	686.5	501.8	435.6	397.3	372.9	369.4	369.4	369.4
40°	3478.0	2530.1	1150.1	686.5	484.4	411.2	376.4	355.5	355.5	355.5	355.5
42.5°	3593.0	2537.1	1143.1	686.5	470.5	393.8	362.4	341.5	341.5	345.0	341.5
45°	3763.8	2571.9	1115.2	676.1	460.0	379.9	348.5	331.1	327.6	331.1	331.1
47.5°	3965.9	2634.7	1087.3	634.3	456.5	365.9	338.0	317.1	313.7	317.1	313.7
50°	4157.6	2690.4	1073.4	578.5	449.6	352.0	324.1	303.2	299.7	303.2	299.7
52.5°	4317.9	2714.8	1049.0	540.2	432.1	338.0	310.2	289.3	282.3	285.8	285.8
55°	4446.9	2707.8	1014.1	508.8	400.8	324.1	292.7	275.3	264.9	264.9	261.4
57.5°	4565.4	2711.3	982.8	477.4	365.9	303.2	278.8	257.9	244.0	240.5	237.0
60°	4610.7	2693.9	927.0	435.6	331.1	285.8	261.4	237.0	223.0	219.6	216.1
62.5°	4547.9	2631.2	853.8	362.4	299.7	264.9	244.0	219.6	205.6	202.1	198.6
65°	4370.2	2512.7	742.3	285.8	271.8	240.5	223.0	205.6	188.2	181.2	177.7
67.5°	4067.0	2341.9	602.9	230.0	240.5	219.6	209.1	188.2	167.3	160.3	156.8
70°	3634.9	2115.4	453.1	195.2	212.6	195.2	188.2	167.3	149.9	142.9	139.4
72.5°	3028.5	1749.5	317.1	167.3	184.7	170.8	163.8	149.9	132.4	122.0	122.0
75°	2289.6	1254.6	209.1	142.9	153.3	146.4	135.9	125.5	115.0	108.0	104.6
77.5°	986.3	487.9	128.9	108.0	125.5	122.0	108.0	101.1	97.6	90.6	90.6
80°	425.2	198.6	80.2	80.2	90.6	87.1	83.6	76.7	76.7	73.2	69.7
82.5°	156.8	80.2	48.8	59.2	66.2	59.2	59.2	59.2	59.2	55.8	55.8
85°	38.3	24.4	24.4	34.9	38.3	34.9	38.3	34.9	34.9	34.9	31.4
87.5°	10.5	10.5	13.9	13.9	13.9	13.9	13.9	10.5	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)