

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: P841331

Luminaire Tested: **ARCH4-160-740-U-T4W-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841331
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-160-740-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 1305mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18884 lumens
Efficiency: N/A
Efficacy: 117.5 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

Input Watts (W): 160.7
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



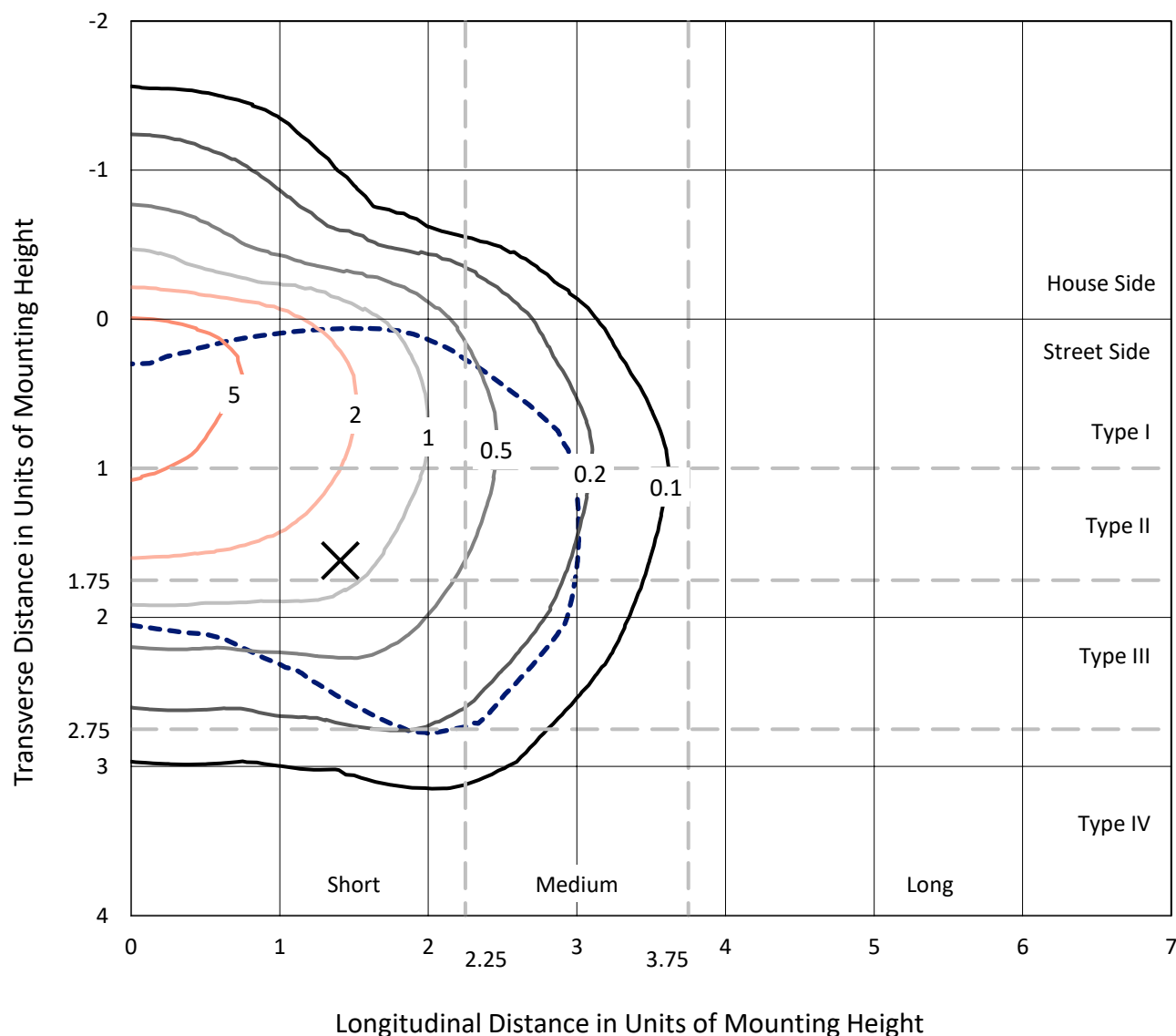
REPORT NUMBER: P841331

CATALOG NUMBER: ARCH4-160-740-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

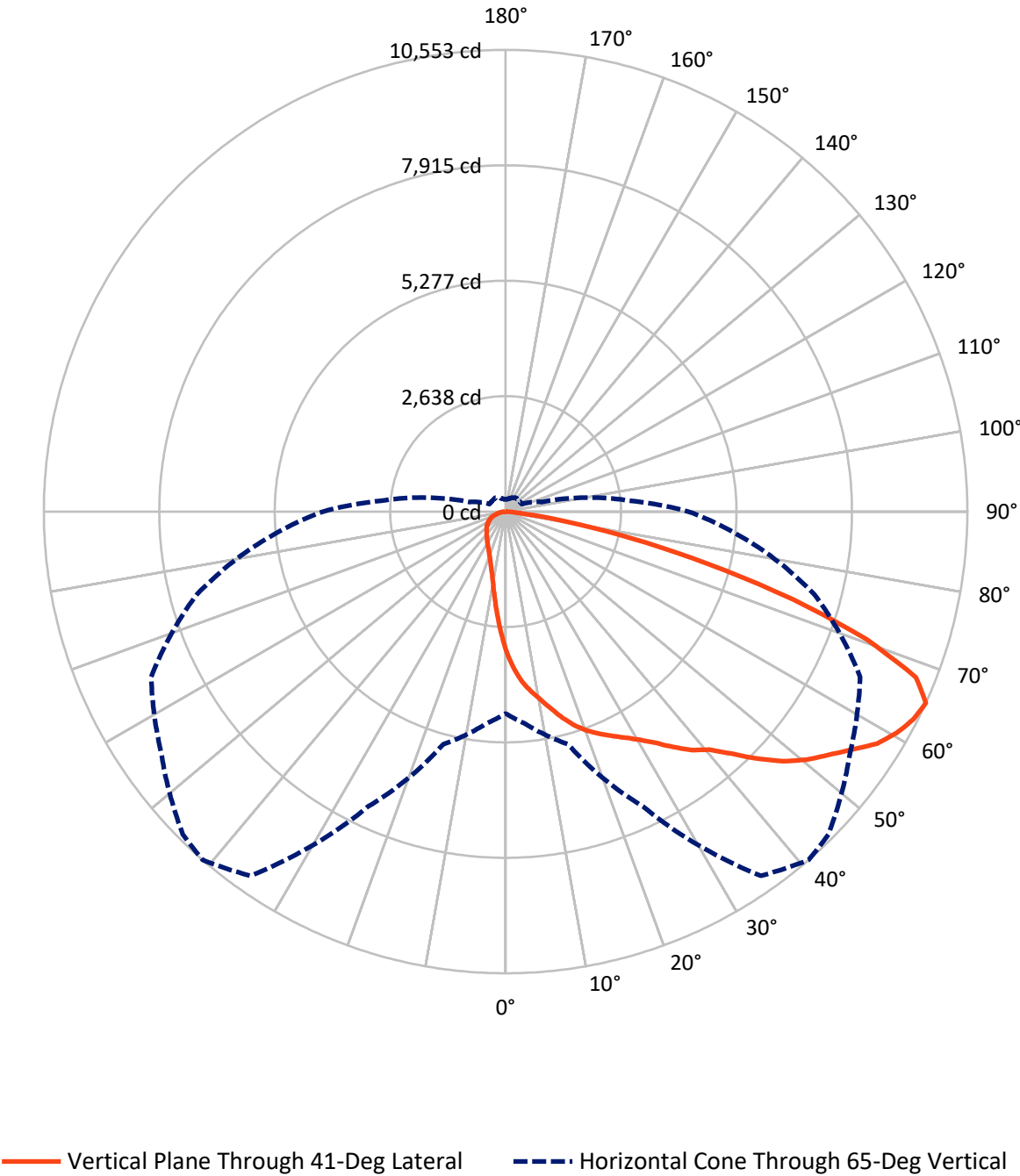


Based on 25 foot mounting height. Maximum calculated value = 7.4 fc

Type III - Short - N/A

REPORT NUMBER: P841331
CATALOG NUMBER: ARCH4-160-740-U-T4W-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P841331

CATALOG NUMBER: ARCH4-160-740-U-T4W-HSS

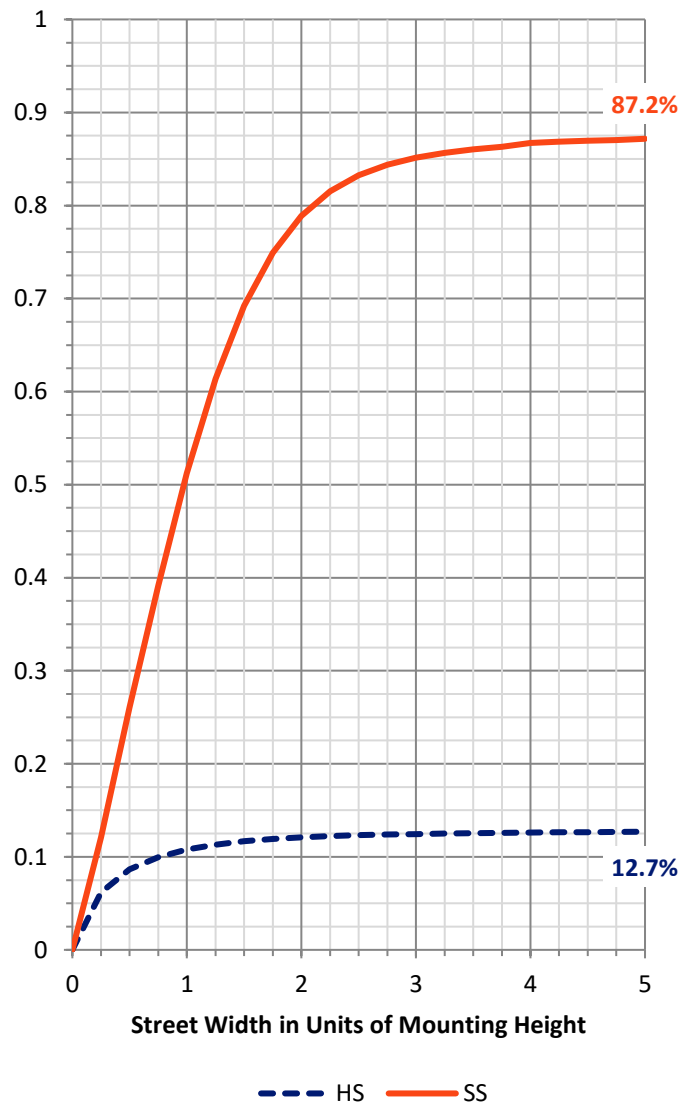
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2424.4	0.0	2424.4
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	16459.6	0.0	16459.6
	% Fixture	87.2	0.0	87.2
Total	Lumens	18884.0	0.0	18884.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	299.8	1.6
10°-20°	899.0	4.8
20°-30°	1546.6	8.2
30°-40°	2345.7	12.4
40°-50°	3436.5	18.2
50°-60°	4339.5	23.0
60°-70°	4069.1	21.5
70°-80°	1813.6	9.6
80°-90°	134.3	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°	18884.0	100.0
0°-180°	18884.0	100.0

Coefficient of Utilization



REPORT NUMBER: P841331

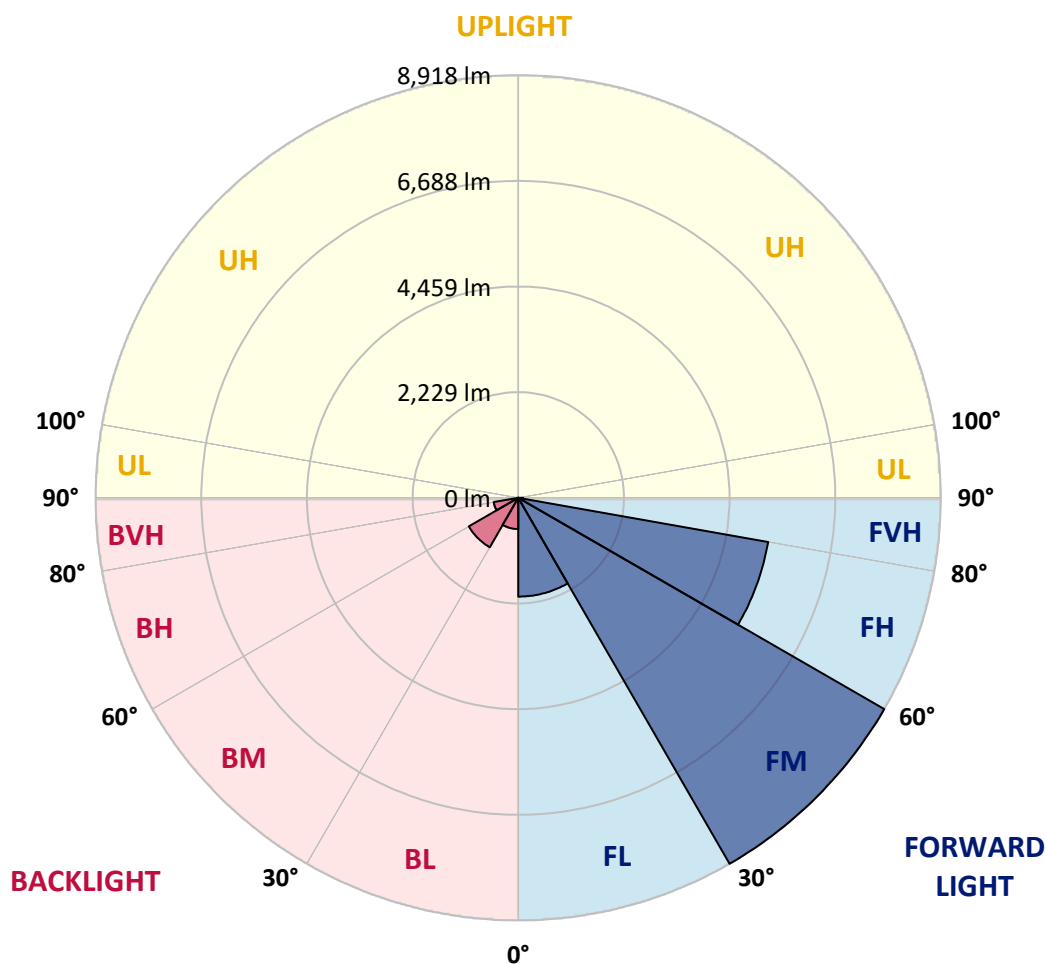
CATALOG NUMBER: ARCH4-160-740-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2085.5	11.0			
FM	(30°-60°)	8917.8	47.2			
FH	(60°-80°)	5356.0	28.4			G3/7500
FVH	(80°-90°)	100.3	0.5			G2/225
BL	(0°-30°)	659.9	3.5	B2/1000		
BM	(30°-60°)	1203.8	6.4	B2/2500		
BH	(60°-80°)	526.7	2.8	B2/1000		G2/1000
BVH	(80°-90°)	34.0	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-G3

Type III Short



REPORT NUMBER: P841331

CATALOG NUMBER: ARCH4-160-740-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	3217.7	3217.7	3217.7	3217.7	3217.7	3217.7	3217.7	3217.7	3217.7	3217.7	3217.7
2.5°	3711.5	3699.6	3691.6	3647.8	3647.8	3588.1	3592.1	3536.3	3468.6	3361.1	3245.6
5°	4062.0	4046.1	4026.2	3982.3	3966.4	3906.7	3898.7	3819.1	3703.6	3516.4	3309.3
7.5°	4368.6	4352.7	4324.8	4261.1	4217.3	4145.6	4125.7	4022.2	3894.7	3663.8	3373.0
10°	4647.4	4635.4	4599.6	4520.0	4460.2	4372.6	4336.8	4197.4	4038.1	3783.2	3424.8
12.5°	4930.1	4914.2	4866.4	4798.7	4727.0	4623.5	4579.7	4400.5	4197.4	3914.6	3500.5
15°	5193.0	5169.1	5133.2	5061.6	4997.8	4898.3	4850.5	4639.4	4392.5	4062.0	3600.0
17.5°	5364.2	5344.3	5312.4	5272.6	5220.9	5145.2	5097.4	4890.3	4587.7	4205.4	3703.6
20°	5467.8	5459.8	5447.8	5424.0	5400.1	5348.3	5312.4	5117.3	4798.7	4344.7	3803.1
22.5°	5547.4	5539.4	5535.5	5535.5	5539.4	5519.5	5495.6	5328.4	5001.8	4492.1	3894.7
25°	5670.9	5666.9	5658.9	5650.9	5678.8	5682.8	5674.8	5559.4	5256.7	4687.2	4010.2
27.5°	5842.1	5830.2	5814.2	5806.3	5834.1	5854.0	5870.0	5790.3	5527.5	4886.3	4141.6
30°	6104.9	6069.1	6029.3	6001.4	6021.3	6053.2	6089.0	6041.2	5806.3	5133.2	4277.0
32.5°	6415.6	6371.8	6280.2	6228.4	6280.2	6304.1	6331.9	6308.0	6097.0	5400.1	4412.4
35°	6793.9	6742.1	6646.5	6570.9	6662.5	6610.7	6598.7	6574.9	6371.8	5662.9	4563.8
37.5°	7423.1	7347.4	7196.1	7028.8	7028.8	6917.3	6873.5	6801.8	6618.7	5897.9	4711.1
40°	8151.9	8052.3	7857.2	7610.3	7383.3	7152.3	7124.4	7072.6	6909.4	6168.7	4878.4
42.5°	8952.3	8761.2	8490.4	8191.7	7825.3	7562.5	7498.8	7351.4	7192.1	6443.4	5045.6
45°	9840.4	9442.1	9047.9	8896.6	8291.2	8052.3	7932.8	7666.0	7486.8	6730.2	5220.9
47.5°	9983.7	9673.1	9410.3	9386.4	8725.3	8526.2	8390.8	8008.5	7805.4	7036.8	5404.0
50°	9904.1	9716.9	9744.8	9649.2	9043.9	8912.5	8808.9	8374.9	8120.0	7331.5	5571.3
52.5°	9569.6	9673.1	9832.4	9657.2	9346.6	9239.0	9187.3	8769.1	8414.7	7602.3	5722.6
55°	9171.3	9243.0	9585.5	9800.6	9697.0	9601.4	9553.6	9227.1	8705.4	7829.3	5862.0
57.5°	8589.9	8558.1	8936.4	9776.7	10063.4	10007.6	9955.9	9677.1	8976.2	7992.6	5949.6
60°	7717.8	7650.1	8128.0	9298.8	10182.9	10270.5	10246.6	9975.8	9183.3	7988.6	5913.8
62.5°	6208.5	6375.7	7036.8	8518.2	10234.6	10457.6	10413.8	9999.7	9251.0	7757.6	5686.8
65°	4615.5	4854.5	5503.6	7443.0	10162.9	10553.2	10433.7	9609.4	8936.4	7299.6	5189.0
67.5°	3325.3	3536.3	4010.2	6124.8	9474.0	10115.2	9975.8	8972.2	8211.6	6650.5	4500.1
70°	2273.9	2425.2	2747.8	4460.2	8088.1	8745.2	8657.6	8020.4	7068.7	5877.9	3655.8
72.5°	1604.9	1668.6	1875.7	2943.0	6144.8	6861.6	6758.0	6598.7	5678.8	4886.3	2843.4
75°	1202.7	1242.5	1354.0	1903.6	4145.6	4754.9	4659.3	4750.9	4241.2	3699.6	2070.8
77.5°	454.0	493.8	768.6	1214.6	2453.1	2919.1	2823.5	2879.2	2357.5	1867.7	1031.4
80°	123.5	131.4	254.9	577.4	1115.1	1453.6	1322.1	1135.0	876.1	860.2	545.6
82.5°	51.8	59.7	115.5	310.6	398.2	398.2	334.5	414.2	334.5	402.2	262.8
85°	19.9	23.9	27.9	79.6	51.8	55.8	59.7	79.6	67.7	83.6	59.7
87.5°	0.0	0.0	0.0	4.0	4.0	8.0	4.0	8.0	11.9	11.9	11.9
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: P841331

CATALOG NUMBER: ARCH4-160-740-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3217.7	3217.7	3217.7	3217.7	3217.7	3217.7	3217.7	3217.7	3217.7	3217.7	3217.7
2.5°	3197.8	3154.0	3090.3	2986.8	2879.2	2819.5	2743.8	2731.9	2652.2	2644.3	2612.4
5°	3217.7	3126.1	2962.9	2763.7	2568.6	2417.3	2305.8	2246.0	2130.6	2130.6	2098.7
7.5°	3233.7	3090.3	2827.5	2532.8	2266.0	2062.9	1911.5	1847.8	1744.3	1736.3	1712.4
10°	3237.6	3046.5	2680.1	2297.8	1971.3	1764.2	1616.8	1545.1	1453.6	1445.6	1429.7
12.5°	3269.5	3022.6	2548.7	2094.7	1760.2	1537.2	1393.8	1334.1	1262.4	1254.4	1238.5
15°	3321.3	3022.6	2437.2	1923.5	1573.0	1365.9	1242.5	1186.7	1135.0	1127.0	1119.0
17.5°	3373.0	3014.6	2325.7	1764.2	1417.7	1230.5	1123.0	1079.2	1039.4	1035.4	1027.4
20°	3420.8	3010.7	2214.2	1628.8	1298.2	1119.0	1035.4	995.6	963.7	963.7	959.7
22.5°	3468.6	3002.7	2106.7	1501.3	1194.7	1035.4	963.7	919.9	896.0	896.0	892.0
25°	3540.3	3002.7	2007.1	1393.8	1111.1	971.7	900.0	868.2	848.2	844.3	844.3
27.5°	3623.9	3026.6	1919.5	1298.2	1039.4	908.0	852.2	820.4	796.5	788.5	792.5
30°	3715.5	3046.5	1839.8	1214.6	971.7	860.2	800.5	768.6	744.7	736.7	740.7
32.5°	3807.1	3070.4	1768.2	1139.0	904.0	816.4	756.6	720.8	696.9	692.9	692.9
35°	3906.7	3094.3	1696.5	1075.2	848.2	772.6	716.8	677.0	661.1	653.1	657.1
37.5°	4006.2	3134.1	1628.8	1015.5	808.4	732.8	681.0	641.2	629.2	625.2	625.2
40°	4125.7	3193.8	1600.9	975.7	772.6	696.9	653.1	613.3	601.3	601.3	601.3
42.5°	4225.3	3241.6	1577.0	931.9	744.7	665.1	625.2	593.4	585.4	581.4	585.4
45°	4324.8	3285.4	1545.1	892.0	708.9	633.2	601.3	569.5	561.5	561.5	561.5
47.5°	4424.4	3309.3	1501.3	852.2	677.0	605.3	577.4	549.6	541.6	541.6	541.6
50°	4504.0	3329.2	1437.6	808.4	641.2	581.4	553.5	525.7	517.7	517.7	517.7
52.5°	4583.7	3333.2	1369.9	756.6	605.3	553.5	529.7	501.8	493.8	489.8	489.8
55°	4655.4	3329.2	1290.3	696.9	565.5	521.7	501.8	477.9	462.0	446.0	454.0
57.5°	4707.1	3325.3	1198.7	637.2	525.7	489.8	481.9	450.0	418.1	378.3	386.3
60°	4687.2	3281.5	1099.1	561.5	481.9	458.0	458.0	414.2	358.4	338.5	342.5
62.5°	4559.8	3158.0	995.6	481.9	438.1	426.1	422.1	374.3	330.5	310.6	314.6
65°	4177.5	2847.4	844.3	410.2	394.3	390.3	390.3	346.5	306.6	282.7	286.7
67.5°	3596.1	2389.4	688.9	346.5	350.4	358.4	358.4	318.6	278.8	254.9	258.9
70°	2883.2	1867.7	549.6	298.7	302.7	314.6	322.6	286.7	250.9	227.0	227.0
72.5°	2170.4	1417.7	442.0	250.9	270.8	270.8	282.7	254.9	219.0	195.1	199.1
75°	1573.0	1015.5	350.4	211.1	235.0	231.0	231.0	215.0	187.2	171.2	171.2
77.5°	744.7	533.6	278.8	151.3	183.2	179.2	183.2	171.2	159.3	143.4	147.3
80°	366.4	262.8	179.2	107.5	127.4	131.4	143.4	135.4	131.4	119.5	119.5
82.5°	175.2	103.5	83.6	75.7	87.6	91.6	99.6	99.6	103.5	95.6	95.6
85°	47.8	27.9	35.8	47.8	55.8	59.7	67.7	71.7	71.7	67.7	71.7
87.5°	11.9	11.9	15.9	23.9	27.9	31.9	35.8	35.8	15.9	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)