

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: P841339

Luminaire Tested: **ARCH4-160-750-U-T3**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841339
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-160-750-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 1305mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27373 lumens
Efficiency: N/A
Efficacy: 170.3 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - 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

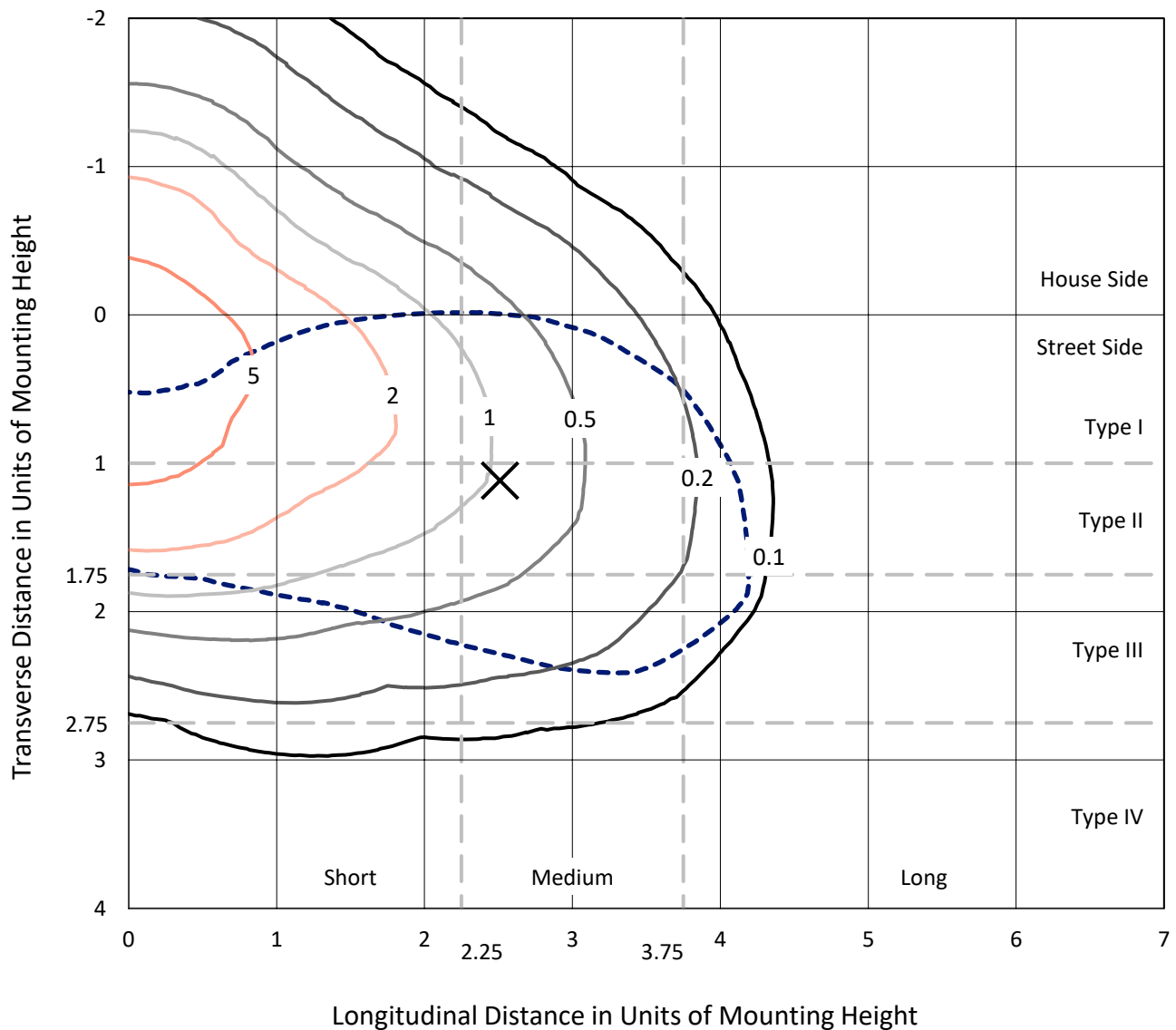


REPORT NUMBER: P841339

CATALOG NUMBER: ARCH4-160-750-U-T3

Iso-Footcandle Lines of Horizontal Illumination

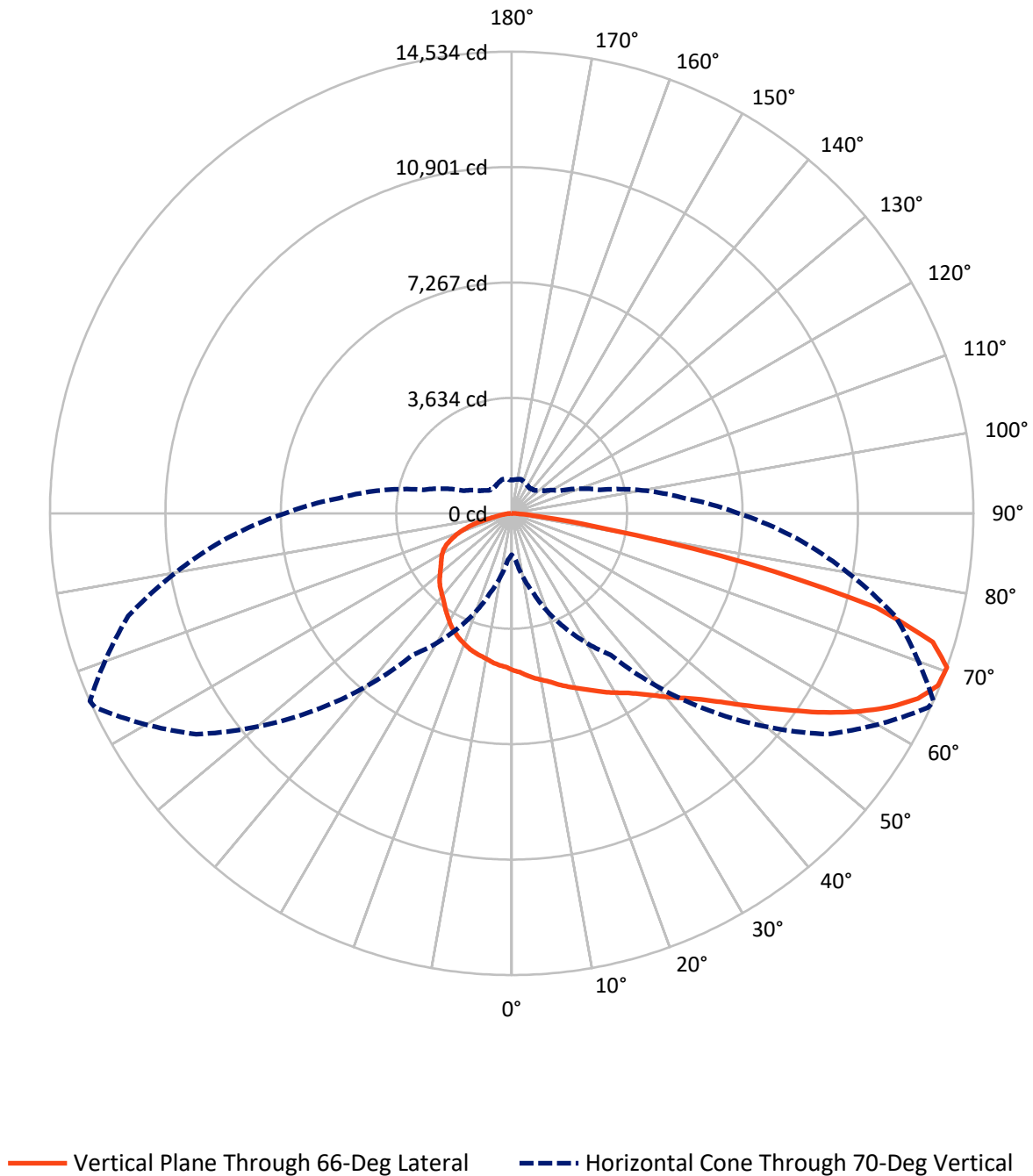
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.6 fc
Type III - Medium - N/A

REPORT NUMBER: P841339
CATALOG NUMBER: ARCH4-160-750-U-T3

Luminous Intensity Polar Plot



REPORT NUMBER: P841339

CATALOG NUMBER: ARCH4-160-750-U-T3

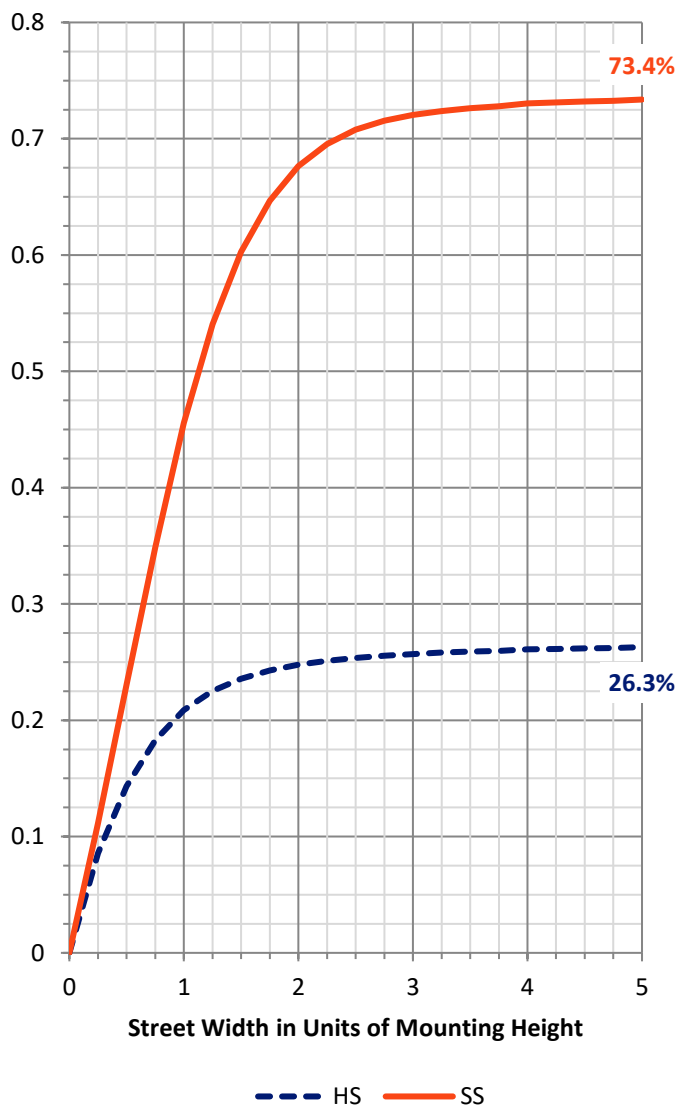
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7253.2	0.0	7253.2
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	20119.8	0.0	20119.8
	% Fixture	73.5	0.0	73.5
Total	Lumens	27373.0	0.0	27373.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	474.7	1.7
10°-20°	1423.9	5.2
20°-30°	2387.0	8.7
30°-40°	3574.1	13.1
40°-50°	4778.6	17.5
50°-60°	5579.2	20.4
60°-70°	5547.6	20.3
70°-80°	3284.3	12.0
80°-90°	323.7	1.2
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°	27373.0	100.0
0°-180°	27373.0	100.0

Coefficient of Utilization



REPORT NUMBER: P841339

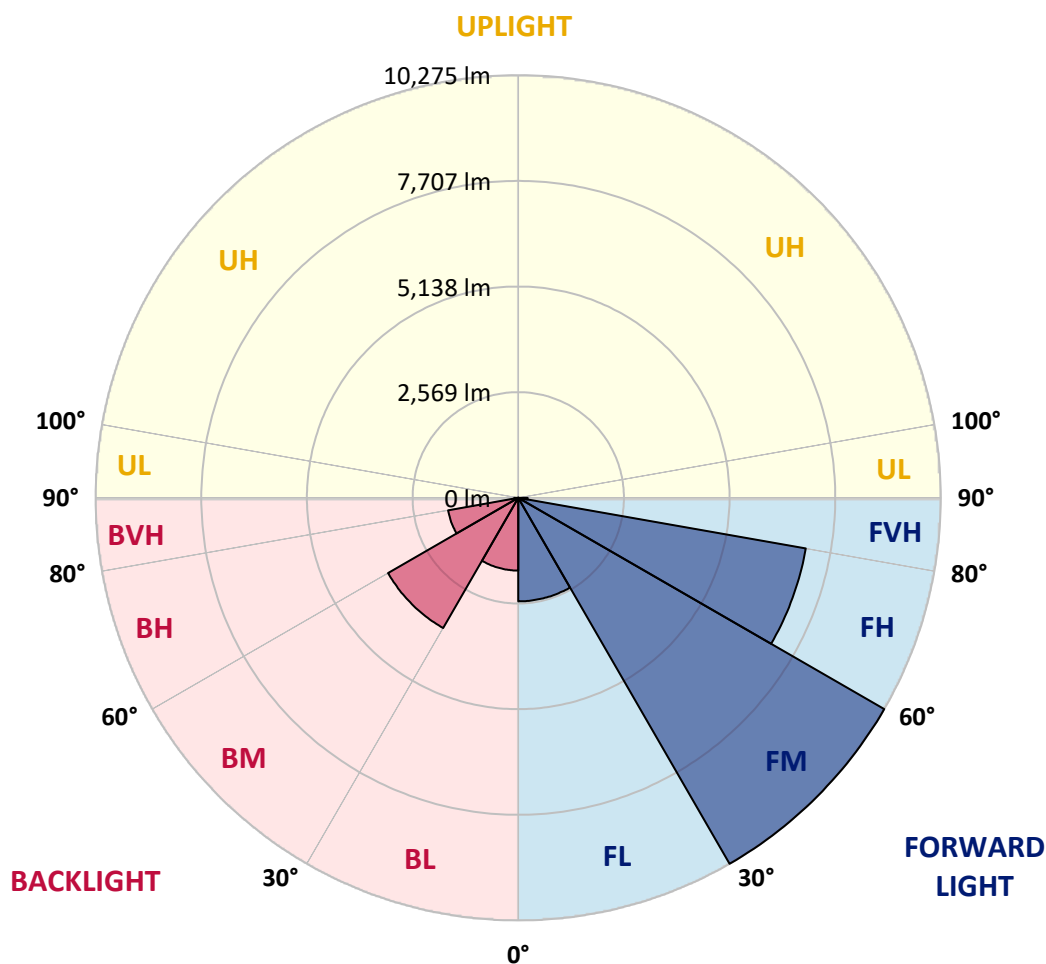
CATALOG NUMBER: ARCH4-160-750-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2517.6	9.2			
FM	(30°-60°)	10275.5	37.5			
FH	(60°-80°)	7099.2	25.9			G3/7500
FVH	(80°-90°)	227.5	0.8			G3/500
BL	(0°-30°)	1768.0	6.5	B3/2500		
BM	(30°-60°)	3656.4	13.4	B3/5000		
BH	(60°-80°)	1732.6	6.3	B3/2500		G3/2500
BVH	(80°-90°)	96.2	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Medium



REPORT NUMBER: P841339

CATALOG NUMBER: ARCH4-160-750-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	4940.2	4940.2	4940.2	4940.2	4940.2	4940.2	4940.2	4940.2	4940.2	4940.2	4940.2
2.5°	5121.8	5113.8	5109.7	5093.6	5057.3	5073.4	5037.1	5012.9	5008.8	4952.3	4920.0
5°	5331.7	5327.7	5319.6	5295.4	5238.9	5246.9	5186.4	5142.0	5129.9	5041.1	4972.5
7.5°	5509.3	5501.2	5497.2	5464.9	5404.4	5400.3	5327.7	5263.1	5242.9	5121.8	5016.9
10°	5646.5	5634.4	5642.5	5610.2	5545.6	5533.5	5440.7	5355.9	5335.7	5182.4	5037.1
12.5°	5763.6	5755.5	5767.6	5739.4	5686.9	5674.8	5581.9	5473.0	5448.8	5271.2	5081.5
15°	5892.7	5864.5	5888.7	5876.6	5840.3	5836.2	5751.5	5630.4	5598.1	5384.2	5150.1
17.5°	5961.3	5945.2	5973.4	5977.5	5961.3	5989.6	5908.9	5763.6	5735.3	5489.1	5210.6
20°	6009.8	5985.6	6017.8	6042.1	6054.2	6110.7	6046.1	5904.8	5872.5	5590.0	5267.1
22.5°	6175.3	6122.8	6126.8	6143.0	6151.0	6231.8	6191.4	6054.2	6021.9	5715.1	5335.7
25°	6591.0	6486.0	6417.4	6369.0	6312.5	6381.1	6356.9	6223.7	6195.4	5864.5	5420.5
27.5°	7236.8	7103.6	6966.3	6825.1	6603.1	6574.8	6534.5	6413.4	6381.1	6013.8	5505.3
30°	7971.3	7838.1	7676.7	7450.7	7034.9	6817.0	6724.2	6591.0	6554.6	6147.0	5586.0
32.5°	8701.9	8584.8	8423.4	8148.9	7555.6	7111.6	6913.9	6776.6	6740.3	6292.3	5682.8
35°	9271.0	9198.3	9093.4	8750.3	8072.2	7458.7	7188.3	7022.8	6982.5	6522.4	5860.4
37.5°	9731.1	9678.6	9589.8	9230.6	8447.6	7805.8	7503.1	7313.4	7269.0	6772.6	6050.1
40°	10409.1	10271.9	10199.3	9678.6	8774.5	8120.7	7858.3	7660.5	7612.1	7039.0	6203.5
42.5°	10986.3	10885.4	10796.6	10078.2	9085.3	8391.1	8193.3	8011.7	7947.1	7301.3	6369.0
45°	11083.2	11123.5	11079.1	10275.9	9577.7	8657.5	8532.3	8415.3	8354.8	7656.5	6619.2
47.5°	11087.2	11087.2	10824.9	10389.0	10187.2	8956.1	8895.6	8936.0	8871.4	8108.6	6917.9
50°	10796.6	10849.1	10711.8	10417.2	10348.6	9254.8	9339.6	9557.5	9492.9	8588.8	7240.8
52.5°	10195.2	10368.8	10364.7	10372.8	10114.5	9509.1	9807.8	10304.2	10195.2	9129.7	7583.9
55°	9133.7	9480.8	9791.6	10058.0	9912.7	9662.5	10380.9	11099.3	10986.3	9735.1	7931.0
57.5°	8225.6	8447.6	8835.1	9589.8	9674.6	9795.6	10917.7	11930.8	11829.8	10405.1	8294.2
60°	7188.3	7495.1	7882.5	8956.1	9384.0	9969.2	11507.0	12742.0	12645.1	11083.2	8645.4
62.5°	5594.1	5989.6	6764.5	7983.4	8960.2	10078.2	11971.1	13456.4	13412.0	11724.9	8960.2
65°	3898.9	4250.0	5335.7	6788.7	8286.1	10029.7	12342.4	14094.1	14053.7	12249.6	9182.2
67.5°	2276.4	2684.0	3911.0	5464.9	7095.5	9694.7	12463.5	14469.5	14469.5	12568.5	9242.7
70°	1299.6	1489.3	2579.1	3983.6	5440.7	8770.5	12124.5	14465.4	14534.0	12495.8	8992.5
72.5°	908.1	992.9	1735.5	2680.0	3689.0	7095.5	11236.5	13767.2	13860.0	11809.7	8136.8
75°	706.3	766.9	1222.9	1828.4	2324.8	4819.1	9295.2	11607.9	11854.1	10066.1	6578.9
77.5°	536.8	581.2	714.4	1142.2	1489.3	2768.8	6134.9	7612.1	7628.3	6163.1	3527.6
80°	391.5	435.9	476.3	698.2	791.1	1295.6	2316.7	3180.5	3091.7	2982.7	1909.1
82.5°	234.1	278.5	290.6	379.4	387.5	552.9	811.3	1025.2	984.8	1311.7	896.0
85°	100.9	141.3	149.3	173.6	165.5	226.0	322.9	270.4	242.2	278.5	193.7
87.5°	24.2	40.4	40.4	44.4	36.3	56.5	60.5	44.4	40.4	48.4	48.4
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: P841339

CATALOG NUMBER: ARCH4-160-750-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4940.2	4940.2	4940.2	4940.2	4940.2	4940.2	4940.2	4940.2	4940.2	4940.2	4940.2
2.5°	4912.0	4899.8	4903.9	4835.3	4815.1	4794.9	4782.8	4774.7	4766.7	4778.8	4790.9
5°	4948.3	4920.0	4887.7	4786.8	4746.5	4702.1	4669.8	4641.5	4629.4	4629.4	4641.5
7.5°	4976.5	4928.1	4859.5	4726.3	4653.6	4593.1	4540.6	4504.3	4484.1	4484.1	4496.2
10°	4980.6	4912.0	4803.0	4641.5	4544.7	4455.9	4395.3	4355.0	4326.7	4326.7	4334.8
12.5°	5004.8	4912.0	4770.7	4577.0	4455.9	4346.9	4274.2	4213.7	4201.6	4201.6	4209.7
15°	5045.1	4932.1	4750.5	4520.4	4375.1	4250.0	4169.3	4104.7	4080.5	4096.7	4100.7
17.5°	5081.5	4944.2	4714.2	4447.8	4274.2	4137.0	4048.2	3991.7	3959.4	3995.8	3995.8
20°	5105.7	4944.2	4661.7	4355.0	4165.3	4011.9	3927.1	3858.5	3834.3	3878.7	3882.7
22.5°	5142.0	4940.2	4605.2	4262.1	4048.2	3886.8	3802.0	3749.5	3737.4	3785.9	3802.0
25°	5182.4	4948.3	4544.7	4157.2	3919.1	3761.7	3697.1	3672.9	3680.9	3741.5	3761.7
27.5°	5226.8	4964.4	4484.1	4040.1	3777.8	3636.5	3600.2	3612.3	3644.6	3721.3	3745.5
30°	5267.1	4968.5	4399.4	3902.9	3616.4	3483.2	3499.3	3551.8	3600.2	3676.9	3705.2
32.5°	5319.6	4972.5	4310.6	3753.6	3442.8	3345.9	3418.6	3503.3	3551.8	3624.4	3656.7
35°	5448.8	5041.1	4242.0	3608.3	3281.4	3228.9	3350.0	3458.9	3487.2	3551.8	3580.0
37.5°	5598.1	5154.1	4205.6	3458.9	3124.0	3111.8	3265.2	3374.2	3382.3	3422.6	3450.9
40°	5690.9	5202.6	4165.3	3333.8	2982.7	2990.8	3148.2	3232.9	3216.8	3245.0	3265.2
42.5°	5783.8	5218.7	4080.5	3228.9	2849.5	2857.6	2978.7	3039.2	3047.3	3107.8	3136.1
45°	5941.2	5263.1	3987.7	3132.0	2728.4	2700.2	2772.8	2853.5	2958.5	3075.5	3107.8
47.5°	6151.0	5355.9	3890.8	3015.0	2611.4	2518.5	2546.8	2688.1	2797.0	2906.0	2926.2
50°	6365.0	5448.8	3802.0	2873.7	2494.3	2324.8	2336.9	2466.1	2554.9	2639.6	2651.7
52.5°	6574.8	5529.5	3725.3	2740.5	2361.1	2094.7	2143.2	2276.4	2336.9	2377.3	2389.4
55°	6784.7	5598.1	3656.7	2627.5	2207.8	1913.1	1957.5	2082.6	2143.2	2163.4	2171.4
57.5°	7002.7	5678.8	3604.2	2530.6	2034.2	1751.7	1779.9	1868.7	1925.2	1949.4	1941.4
60°	7184.3	5747.4	3576.0	2429.7	1860.6	1602.3	1594.3	1675.0	1755.7	1779.9	1771.9
62.5°	7325.5	5791.8	3531.6	2300.6	1707.3	1453.0	1412.6	1517.6	1602.3	1618.5	1630.6
65°	7402.2	5795.9	3422.6	2135.1	1549.9	1291.6	1263.3	1368.2	1420.7	1436.9	1436.9
67.5°	7390.1	5731.3	3208.7	1913.1	1404.6	1146.3	1122.0	1186.6	1263.3	1275.4	1263.3
70°	7139.9	5464.9	2865.6	1679.0	1231.0	1017.1	972.7	1037.3	1109.9	1065.5	1045.4
72.5°	6429.5	4774.7	2361.1	1420.7	1037.3	855.7	835.5	900.1	904.1	912.2	892.0
75°	5073.4	3555.8	1767.8	1105.9	839.5	718.4	714.4	702.3	718.4	750.7	726.5
77.5°	2663.8	1775.9	956.6	678.1	609.5	577.2	548.9	544.9	593.3	613.5	589.3
80°	1444.9	996.9	548.9	407.6	371.3	375.4	411.7	403.6	456.1	468.2	448.0
82.5°	629.6	472.2	270.4	246.2	246.2	242.2	254.3	282.5	339.0	339.0	270.4
85°	137.2	117.0	104.9	121.1	137.2	137.2	137.2	137.2	96.9	52.5	36.3
87.5°	44.4	44.4	44.4	48.4	52.5	52.5	44.4	32.3	20.2	4.0	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)