

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: P841443

Luminaire Tested: **ARCH4-180-727-U-T2R**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841443
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-180-727-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1455mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27627 lumens
Efficiency: N/A
Efficacy: 153.5 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

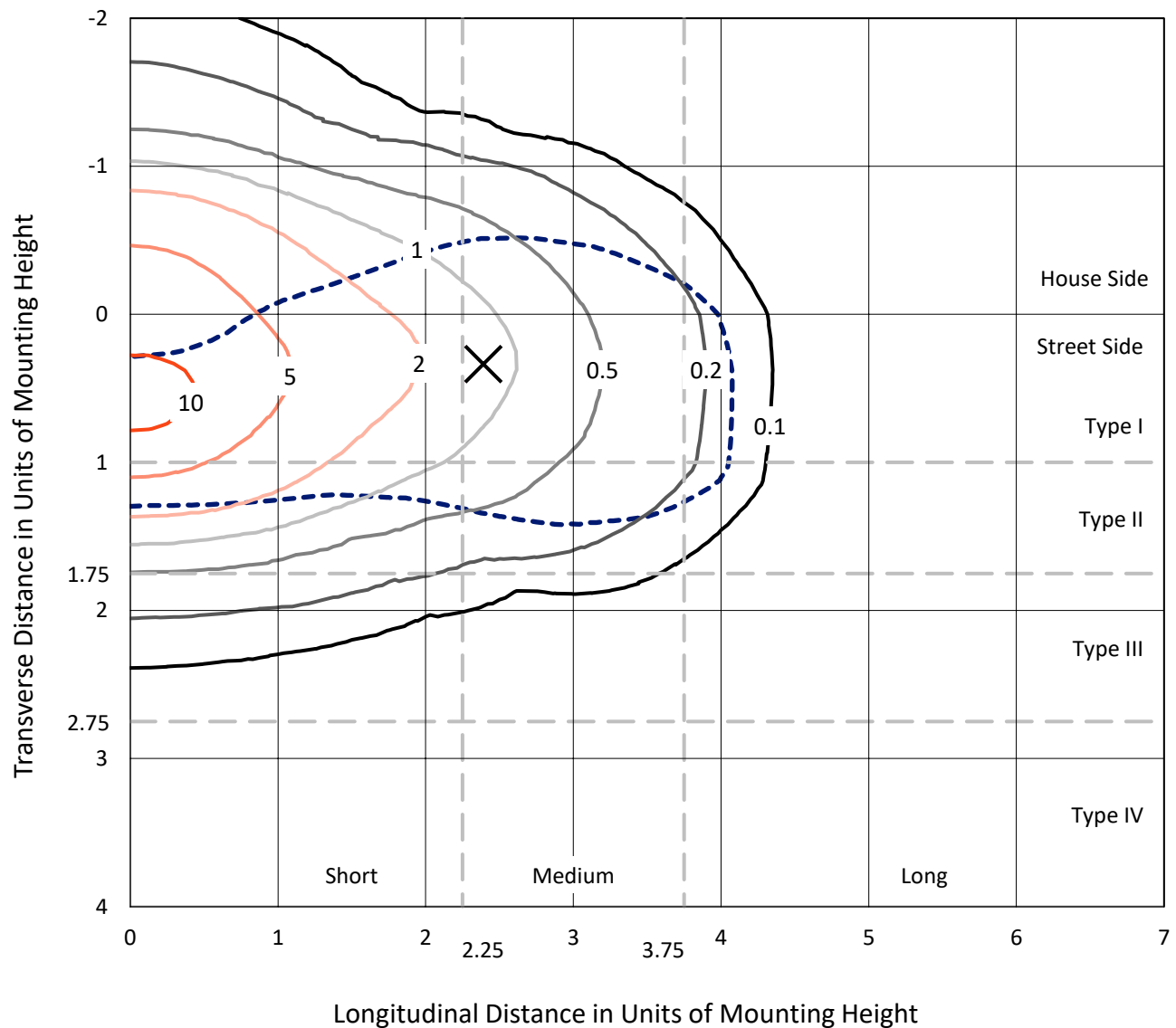
Input Watts (W): 180
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P841443
CATALOG NUMBER: ARCH4-180-727-U-T2R

Iso-Footcandle Lines of Horizontal Illumination

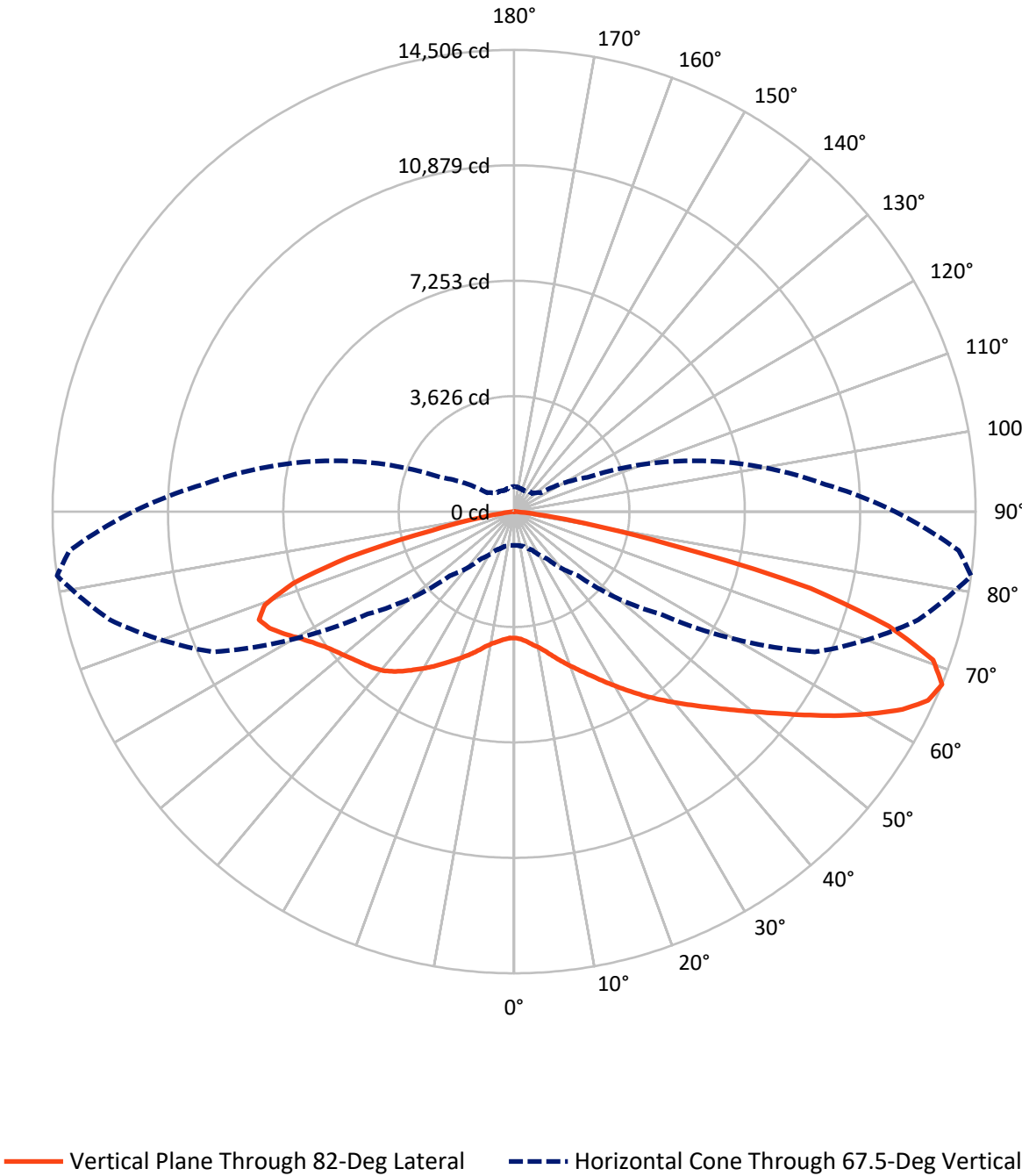
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.2 fc
Type II - Medium - N/A

REPORT NUMBER: P841443
CATALOG NUMBER: ARCH4-180-727-U-T2R

Luminous Intensity Polar Plot



REPORT NUMBER: P841443

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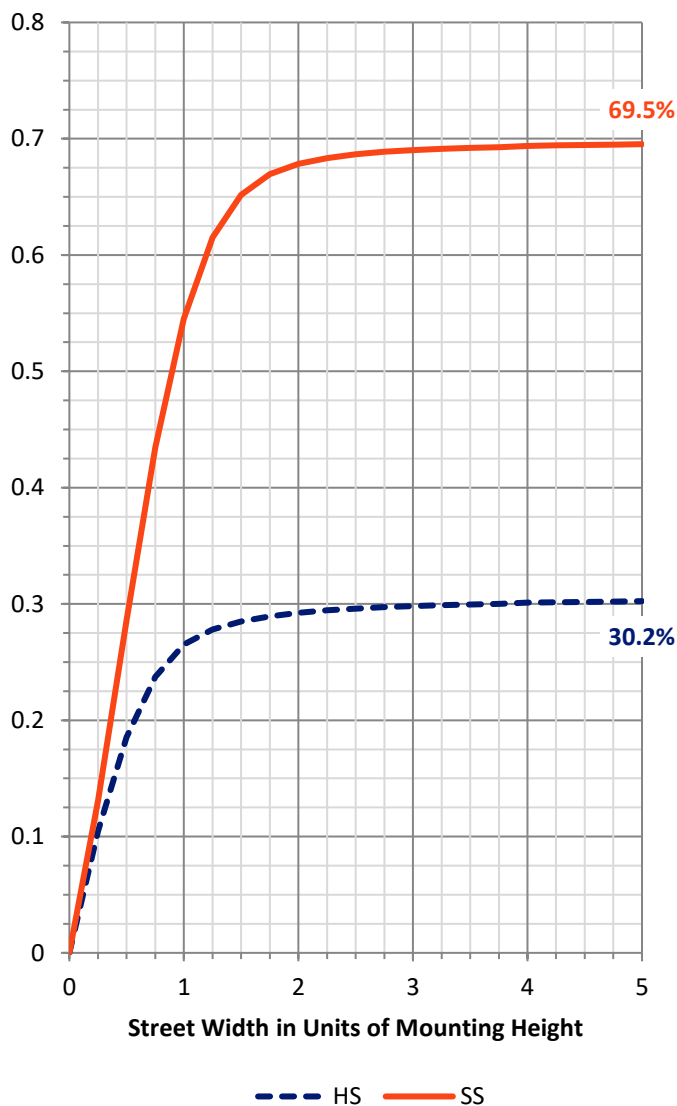
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8413.5	0.0	8413.5
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	19213.5	0.0	19213.5
	% Fixture	69.5	0.0	69.5
Total	Lumens	27627.0	0.0	27627.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	410.4	1.5
10°-20°	1478.4	5.4
20°-30°	2971.2	10.8
30°-40°	4667.3	16.9
40°-50°	5685.7	20.6
50°-60°	5372.2	19.4
60°-70°	4436.2	16.1
70°-80°	2415.7	8.7
80°-90°	189.9	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°	27627.0	100.0
0°-180°	27627.0	100.0

Coefficient of Utilization



REPORT NUMBER: P841443

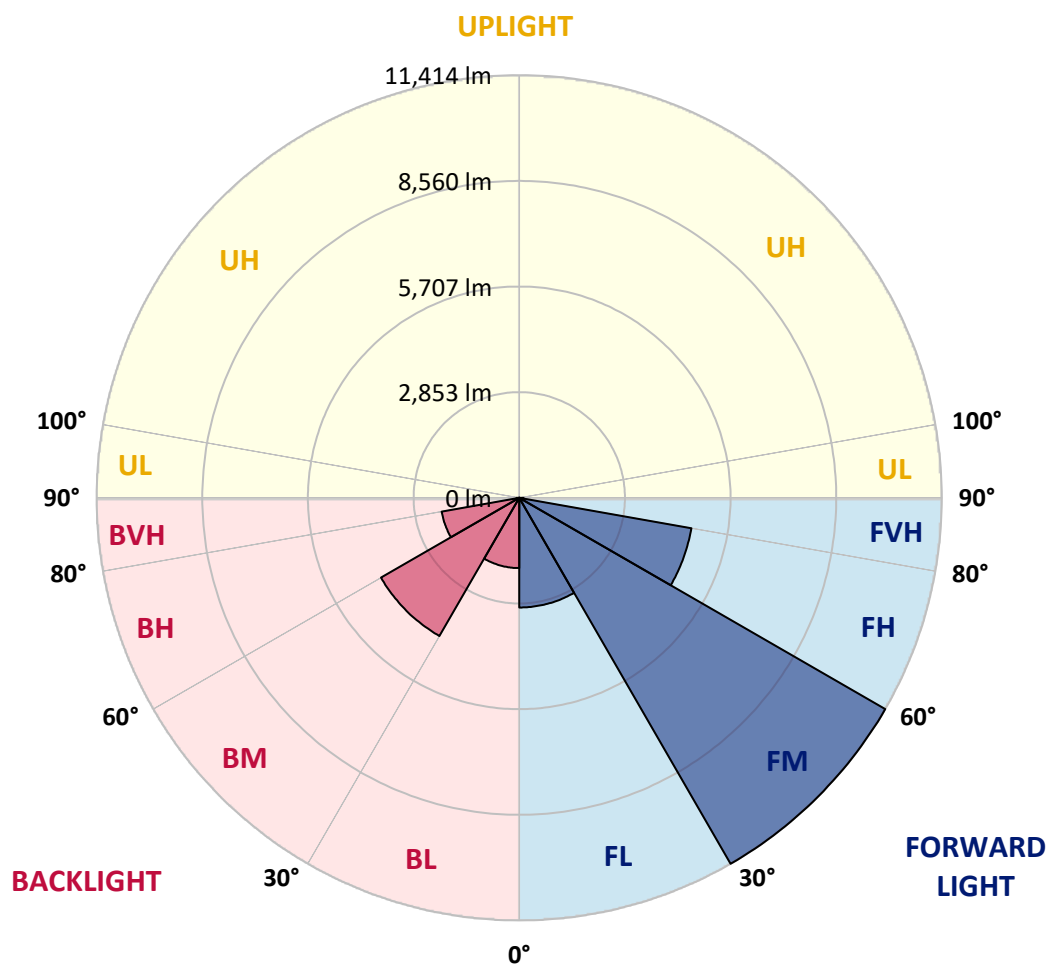
CATALOG NUMBER: ARCH4-180-727-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2962.6	10.7			
FM	(30°-60°)	11413.9	41.3			
FH	(60°-80°)	4722.5	17.1			G2/5000
FVH	(80°-90°)	114.5	0.4			G2/225
BL	(0°-30°)	1897.3	6.9	B3/2500		
BM	(30°-60°)	4311.3	15.6	B3/5000		
BH	(60°-80°)	2129.5	7.7	B3/2500		G3/2500
BVH	(80°-90°)	75.4	0.3			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 II Medium



REPORT NUMBER: P841443

CATALOG NUMBER: ARCH4-180-727-U-T2R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3971.4	3971.4	3971.4	3971.4	3971.4	3971.4	3971.4	3971.4	3971.4	3971.4	3971.4
2.5°	4151.9	4151.9	4184.0	4184.0	4155.9	4111.8	4099.7	4051.6	4007.5	4007.5	4011.5
5°	4549.0	4545.0	4569.1	4537.0	4468.8	4380.5	4320.4	4216.1	4127.8	4099.7	4095.7
7.5°	5034.4	5030.4	5042.4	4990.3	4861.9	4717.5	4597.2	4428.7	4284.3	4224.1	4208.0
10°	5576.0	5571.9	5559.9	5471.7	5299.2	5074.5	4894.0	4661.3	4444.7	4348.4	4328.4
12.5°	6197.7	6189.7	6161.6	6033.3	5796.6	5507.8	5247.0	4946.2	4657.3	4525.0	4480.8
15°	6891.7	6879.7	6827.5	6671.1	6354.2	5989.1	5652.2	5267.1	4914.1	4741.6	4681.4
17.5°	7621.8	7621.8	7541.6	7308.9	6955.9	6502.6	6085.4	5596.0	5182.8	4970.2	4898.0
20°	8363.9	8359.9	8259.6	7978.8	7561.6	7040.2	6510.6	5973.1	5459.6	5202.9	5114.6
22.5°	9146.2	9138.2	9013.8	8692.9	8195.5	7605.8	6988.0	6346.2	5764.5	5455.6	5343.3
25°	10044.8	10032.7	9880.3	9487.2	8897.5	8231.6	7525.5	6783.4	6113.5	5736.4	5604.0
27.5°	10999.5	10983.4	10802.9	10345.6	9699.8	8897.5	8119.2	7288.9	6498.6	6049.3	5900.9
30°	11849.9	11837.9	11641.3	11172.0	10429.9	9559.4	8684.9	7794.3	6903.8	6382.3	6197.7
32.5°	12491.8	12491.8	12315.2	11853.9	11083.7	10193.2	9254.5	8271.7	7325.0	6739.3	6522.7
35°	12880.9	12892.9	12740.5	12371.4	11645.3	10790.9	9844.2	8833.3	7774.3	7120.4	6887.7
37.5°	12937.0	12977.1	12888.9	12640.2	12034.4	11288.3	10421.8	9374.8	8239.6	7505.5	7244.7
40°	12676.3	12704.4	12708.4	12612.1	12194.9	11645.3	10931.3	9948.5	8733.0	7910.6	7609.8
42.5°	12154.8	12174.8	12211.0	12239.0	12078.6	11801.8	11320.4	10482.0	9258.5	8323.8	7970.8
45°	11480.9	11476.8	11537.0	11657.4	11649.3	11713.5	11537.0	10967.4	9804.1	8793.2	8372.0
47.5°	10474.0	10453.9	10666.5	10939.3	11075.7	11376.6	11541.0	11348.5	10397.8	9310.6	8829.3
50°	8897.5	8877.4	9342.7	9984.6	10385.7	10843.0	11320.4	11577.1	11019.5	9892.3	9326.7
52.5°	6980.0	6959.9	7549.6	8672.8	9547.3	10213.2	10875.1	11629.3	11609.2	10542.2	9888.3
55°	5190.9	5174.8	5748.5	6963.9	8380.0	9483.1	10329.6	11492.9	12162.8	11288.3	10570.3
57.5°	3658.5	3650.4	4147.9	5154.8	6879.7	8592.6	9804.1	11228.1	12672.3	12098.6	11340.5
60°	2567.3	2555.3	2916.3	3694.6	5202.9	7248.7	9282.6	10875.1	13053.4	12896.9	12158.8
62.5°	1728.9	1720.9	1977.7	2627.5	3694.6	5580.0	8492.3	10638.4	13270.0	13699.2	12985.2
65°	1311.8	1307.7	1424.1	1781.1	2615.5	4007.5	7236.7	10610.4	13298.1	14300.9	13687.2
67.5°	1059.0	1063.0	1127.2	1331.8	1809.2	2848.2	5612.1	10433.9	13149.6	14505.5	14028.2
70°	866.5	866.5	894.6	1031.0	1335.8	1921.5	3919.2	9631.6	12736.5	13972.0	13623.0
72.5°	661.9	665.9	754.2	834.4	1006.9	1347.9	2511.2	7970.8	11761.7	12319.3	12054.5
75°	525.5	521.5	573.6	686.0	782.2	962.8	1540.4	5716.4	10008.6	9627.6	9459.1
77.5°	377.1	373.1	413.2	509.5	593.7	682.0	918.6	2884.3	5443.6	5002.3	4878.0
80°	256.7	248.7	284.8	353.0	393.1	401.1	449.3	1107.2	2374.8	2238.4	2210.3
82.5°	132.4	132.4	152.4	200.6	204.6	208.6	200.6	357.0	786.3	734.1	702.0
85°	52.1	52.1	56.2	68.2	68.2	72.2	72.2	92.3	84.2	80.2	76.2
87.5°	4.0	4.0	8.0	8.0	12.0	12.0	12.0	16.0	20.1	20.1	20.1
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: P841443

CATALOG NUMBER: ARCH4-180-727-U-T2R

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3971.4	3971.4	3971.4	3971.4	3971.4	3971.4	3971.4	3971.4	3971.4	3971.4	3971.4
2.5°	4003.5	3987.4	3935.3	3923.2	3915.2	3903.2	3907.2	3879.1	3867.1	3871.1	3855.0
5°	4075.7	4047.6	3983.4	3955.3	3947.3	3935.3	3947.3	3927.2	3907.2	3915.2	3907.2
7.5°	4176.0	4135.8	4055.6	4027.5	4023.5	4011.5	4027.5	4011.5	3995.4	4003.5	3987.4
10°	4280.3	4228.1	4139.8	4111.8	4111.8	4107.8	4123.8	4099.7	4083.7	4087.7	4079.7
12.5°	4432.7	4364.5	4268.2	4244.1	4232.1	4244.1	4248.2	4216.1	4188.0	4192.0	4180.0
15°	4617.2	4541.0	4436.7	4400.6	4392.6	4388.6	4372.5	4332.4	4296.3	4292.3	4280.3
17.5°	4817.8	4721.5	4597.2	4561.1	4525.0	4512.9	4472.8	4420.7	4364.5	4364.5	4348.4
20°	5010.3	4902.0	4753.6	4701.5	4649.3	4601.2	4533.0	4448.7	4376.5	4364.5	4348.4
22.5°	5218.9	5090.6	4918.1	4841.9	4749.6	4653.3	4537.0	4424.7	4332.4	4312.3	4300.3
25°	5451.6	5291.1	5086.6	4974.2	4825.8	4677.4	4504.9	4360.5	4252.2	4220.1	4212.1
27.5°	5708.3	5515.8	5267.1	5102.6	4886.0	4653.3	4432.7	4260.2	4127.8	4087.7	4075.7
30°	5969.1	5740.4	5431.5	5190.9	4886.0	4577.1	4300.3	4099.7	3947.3	3891.1	3883.1
32.5°	6229.8	5973.1	5580.0	5239.0	4837.8	4448.7	4127.8	3891.1	3718.6	3650.4	3666.5
35°	6542.7	6229.8	5716.4	5259.1	4757.6	4292.3	3931.3	3654.5	3478.0	3417.8	3429.8
37.5°	6867.7	6486.6	5824.7	5243.0	4645.3	4115.8	3710.6	3441.9	3221.2	3116.9	3129.0
40°	7148.5	6719.2	5900.9	5186.8	4500.9	3915.2	3494.0	3141.0	2836.1	2735.8	2723.8
42.5°	7413.2	6891.7	5941.0	5102.6	4336.4	3682.5	3185.1	2731.8	2426.9	2302.6	2306.6
45°	7690.0	7060.2	5925.0	4990.3	4131.8	3409.8	2788.0	2330.7	2061.9	1949.6	1953.6
47.5°	8006.9	7240.7	5908.9	4869.9	3883.1	3056.7	2406.9	1977.7	1745.0	1664.8	1656.7
50°	8343.9	7441.3	5888.9	4721.5	3606.3	2663.6	2029.8	1648.7	1452.2	1400.0	1388.0
52.5°	8725.0	7657.9	5876.8	4545.0	3273.4	2246.4	1692.8	1359.9	1227.5	1191.4	1187.4
55°	9182.3	7910.6	5892.9	4332.4	2872.2	1853.3	1408.0	1171.4	1083.1	1063.0	1059.0
57.5°	9739.9	8235.6	5941.0	4083.7	2451.0	1512.3	1199.4	1055.0	998.9	982.8	982.8
60°	10345.6	8604.6	6029.3	3802.9	2029.8	1247.6	1063.0	962.8	938.7	958.7	958.7
62.5°	10999.5	9037.9	6185.7	3461.9	1636.7	1055.0	954.7	886.5	870.5	910.6	914.6
65°	11605.2	9459.1	6286.0	3052.7	1299.7	914.6	870.5	810.3	818.3	858.5	854.4
67.5°	11978.3	9808.1	6145.6	2539.3	1031.0	810.3	782.2	730.1	750.1	782.2	786.3
70°	11749.6	9611.5	5451.6	1917.5	806.3	706.0	686.0	653.9	669.9	710.0	726.1
72.5°	10630.4	8608.6	4240.1	1295.7	649.9	593.7	601.7	585.7	605.7	641.8	677.9
75°	8628.7	6506.6	2844.1	830.4	513.5	505.4	517.5	505.4	513.5	549.6	569.6
77.5°	4504.9	3173.1	1416.1	517.5	381.1	393.1	413.2	417.2	441.3	449.3	457.3
80°	2102.0	1428.1	589.7	288.8	252.7	276.8	316.9	320.9	328.9	341.0	345.0
82.5°	686.0	429.2	272.8	156.4	144.4	156.4	204.6	244.7	248.7	272.8	272.8
85°	72.2	44.1	60.2	64.2	56.2	68.2	92.3	88.3	40.1	24.1	24.1
87.5°	20.1	16.0	20.1	20.1	16.0	16.0	12.0	4.0	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)