

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: P842311

Luminaire Tested: **ARCH4-300-727-U-T3**

Issue Date: 5/27/2024

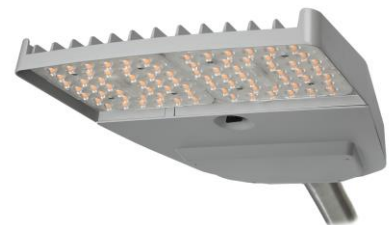
Test Information

Test Method: LM-79-08
Report Number: P842311
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: ARCH4-300-727-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1155mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 40466 lumens
Efficiency: N/A
Efficacy: 135.2 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B4 - U0 - G4

Input Watts (W): 299.2
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

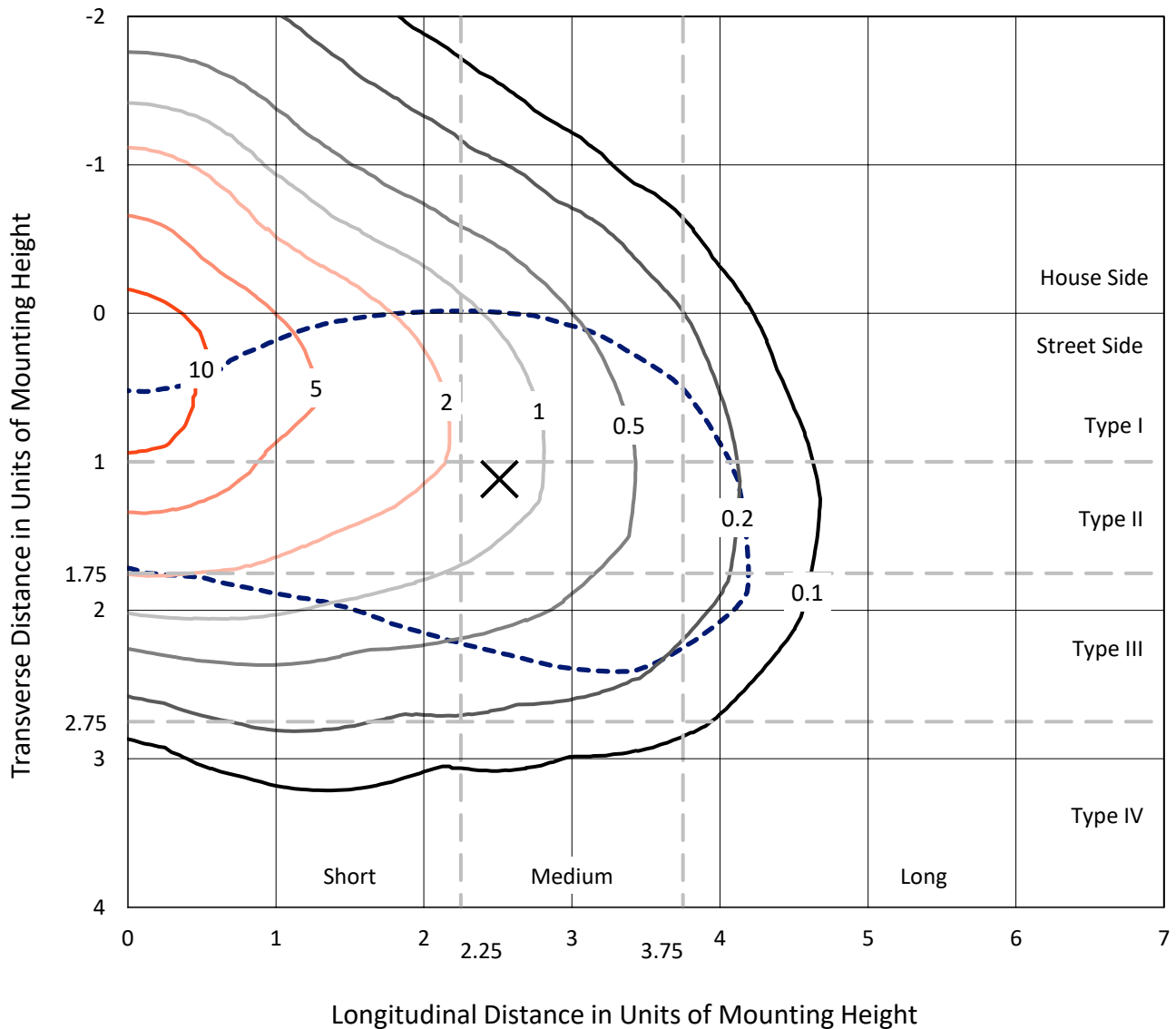


REPORT NUMBER: P842311

CATALOG NUMBER: ARCH4-300-727-U-T3

Iso-Footcandle Lines of Horizontal Illumination

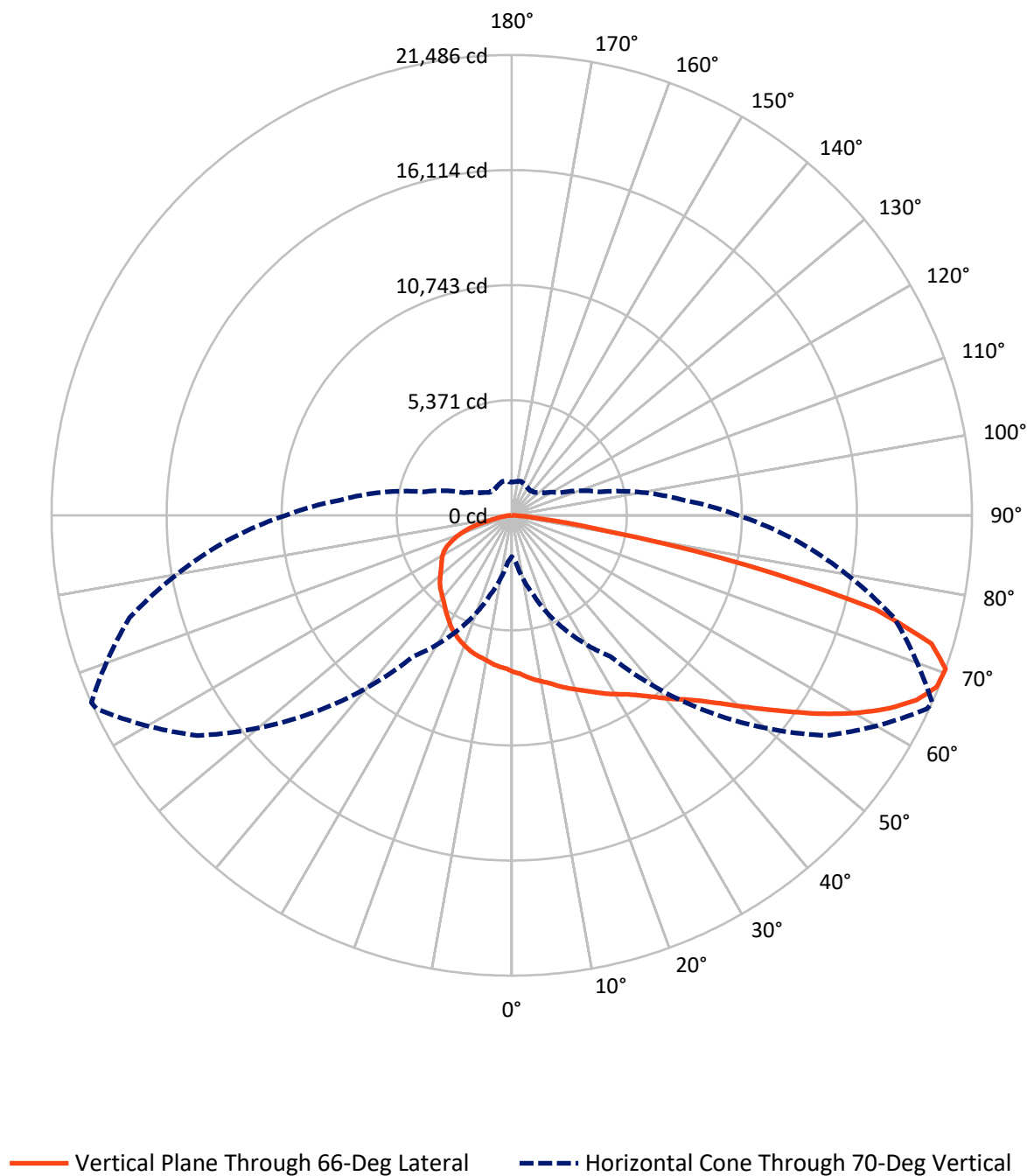
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.7 fc
Type III - Medium - N/A

REPORT NUMBER: P842311
CATALOG NUMBER: ARCH4-300-727-U-T3

Luminous Intensity Polar Plot



REPORT NUMBER: P842311

CATALOG NUMBER: ARCH4-300-727-U-T3

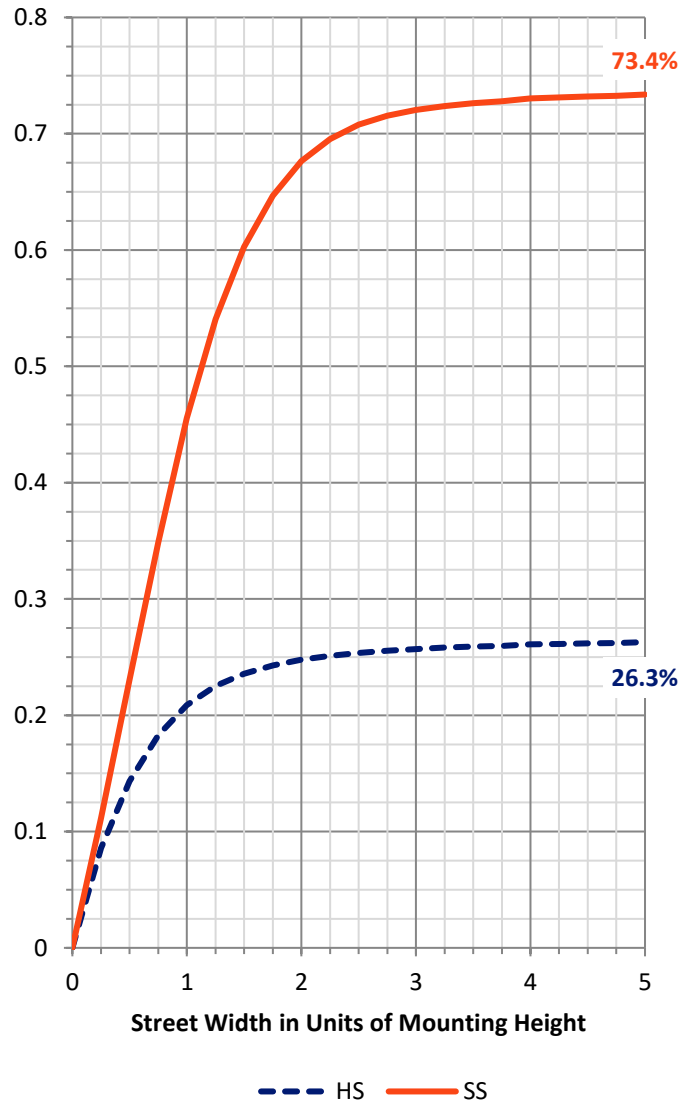
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10722.6	0.0	10722.6
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	29743.4	0.0	29743.4
	% Fixture	73.5	0.0	73.5
Total	Lumens	40466.0	0.0	40466.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	701.8	1.7
10°-20°	2105.0	5.2
20°-30°	3528.7	8.7
30°-40°	5283.7	13.1
40°-50°	7064.3	17.5
50°-60°	8247.8	20.4
60°-70°	8201.1	20.3
70°-80°	4855.2	12.0
80°-90°	478.5	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°	40466.0	100.0
0°-180°	40466.0	100.0

Coefficient of Utilization



REPORT NUMBER: P842311

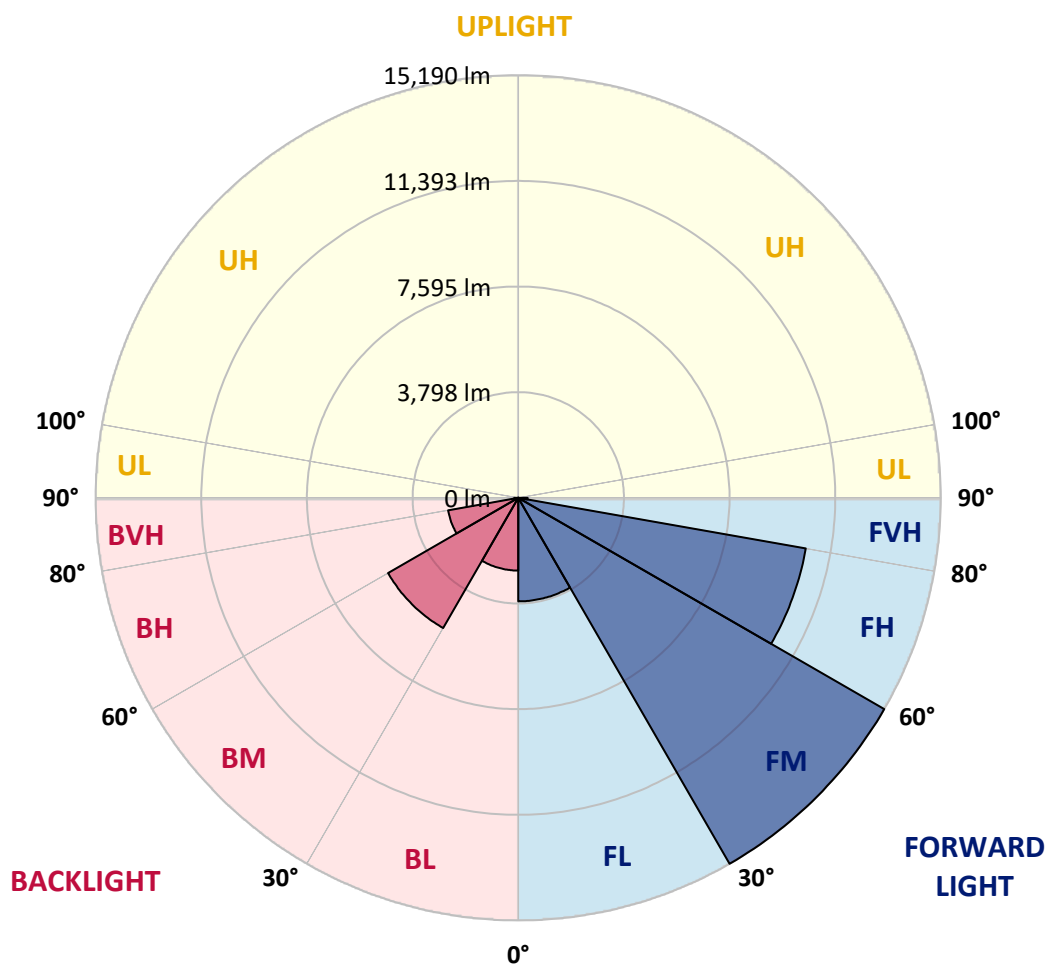
CATALOG NUMBER: ARCH4-300-727-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3721.8	9.2			
FM	(30°-60°)	15190.4	37.5			
FH	(60°-80°)	10494.9	25.9			G4/12000
FVH	(80°-90°)	336.3	0.8			G3/500
BL	(0°-30°)	2613.7	6.5	B4/5000		
BM	(30°-60°)	5405.3	13.4	B4/8500		
BH	(60°-80°)	2561.4	6.3	B4/5000		G4/5000
BVH	(80°-90°)	142.2	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type III Medium



REPORT NUMBER: P842311

CATALOG NUMBER: ARCH4-300-727-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	7303.2	7303.2	7303.2	7303.2	7303.2	7303.2	7303.2	7303.2	7303.2	7303.2	7303.2
2.5°	7571.7	7559.8	7553.8	7529.9	7476.2	7500.1	7446.4	7410.6	7404.6	7321.1	7273.4
5°	7882.0	7876.0	7864.1	7828.3	7744.7	7756.7	7667.2	7601.5	7583.6	7452.4	7350.9
7.5°	8144.5	8132.6	8126.6	8078.9	7989.4	7983.4	7876.0	7780.5	7750.7	7571.7	7416.6
10°	8347.4	8329.5	8341.4	8293.7	8198.2	8180.3	8043.1	7917.8	7887.9	7661.2	7446.4
12.5°	8520.4	8508.5	8526.4	8484.6	8407.0	8389.1	8251.9	8090.8	8055.0	7792.5	7512.0
15°	8711.3	8669.6	8705.4	8687.5	8633.8	8627.8	8502.5	8323.5	8275.8	7959.5	7613.5
17.5°	8812.8	8788.9	8830.7	8836.6	8812.8	8854.5	8735.2	8520.4	8478.6	8114.7	7703.0
20°	8884.4	8848.6	8896.3	8932.1	8950.0	9033.5	8938.1	8729.2	8681.5	8263.8	7786.5
22.5°	9129.0	9051.4	9057.4	9081.3	9093.2	9212.5	9152.9	8950.0	8902.3	8448.8	7887.9
25°	9743.6	9588.4	9487.0	9415.4	9331.9	9433.3	9397.5	9200.6	9158.8	8669.6	8013.2
27.5°	10698.2	10501.3	10298.5	10089.6	9761.5	9719.7	9660.0	9481.0	9433.3	8890.3	8138.5
30°	11784.2	11587.3	11348.6	11014.5	10399.9	10077.7	9940.5	9743.6	9689.9	9087.2	8257.9
32.5°	12864.1	12691.1	12452.4	12046.7	11169.6	10513.3	10220.9	10018.0	9964.3	9302.0	8401.1
35°	13705.4	13598.0	13442.9	12935.7	11933.3	11026.4	10626.6	10382.0	10322.3	9642.1	8663.6
37.5°	14385.6	14308.0	14176.8	13645.8	12488.2	11539.5	11092.0	10811.6	10746.0	10012.1	8944.0
40°	15388.0	15185.1	15077.7	14308.0	12971.5	12004.9	11617.1	11324.7	11253.1	10405.9	9170.8
42.5°	16241.2	16092.1	15960.8	14898.7	13431.0	12404.7	12112.3	11843.8	11748.4	10793.7	9415.4
45°	16384.4	16444.1	16378.5	15191.1	14158.9	12798.5	12613.5	12440.5	12351.0	11318.8	9785.3
47.5°	16390.4	16390.4	16002.6	15358.2	15059.8	13240.0	13150.5	13210.2	13114.7	11987.0	10226.9
50°	15960.8	16038.4	15835.5	15399.9	15298.5	13681.6	13806.9	14129.1	14033.6	12697.1	10704.2
52.5°	15071.8	15328.3	15322.4	15334.3	14952.4	14057.5	14499.0	15232.9	15071.8	13496.6	11211.4
55°	13502.6	14015.7	14475.1	14868.9	14654.1	14284.2	15346.2	16408.3	16241.2	14391.6	11724.5
57.5°	12160.1	12488.2	13061.0	14176.8	14302.1	14481.1	16139.8	17637.4	17488.3	15382.0	12261.5
60°	10626.6	11080.1	11652.9	13240.0	13872.5	14737.6	17010.9	18836.7	18693.5	16384.4	12780.6
62.5°	8269.8	8854.5	10000.1	11802.1	13246.0	14898.7	17697.1	19892.8	19827.2	17333.1	13246.0
65°	5763.8	6282.9	7887.9	10035.9	12249.6	14827.1	18246.0	20835.6	20775.9	18108.8	13574.2
67.5°	3365.2	3967.8	5781.7	8078.9	10489.4	14331.9	18425.0	21390.5	21390.5	18580.2	13663.7
70°	1921.3	2201.7	3812.7	5889.1	8043.1	12965.6	17923.8	21384.5	21485.9	18472.8	13293.7
72.5°	1342.5	1467.8	2565.7	3961.9	5453.5	10489.4	16611.2	20352.3	20489.5	17458.4	12028.8
75°	1044.2	1133.7	1807.9	2702.9	3436.8	7124.2	13741.2	17160.1	17524.1	14880.8	9725.7
77.5°	793.6	859.2	1056.1	1688.6	2201.7	4093.1	9069.3	11253.1	11277.0	9111.1	5214.9
80°	578.8	644.4	704.1	1032.2	1169.5	1915.3	3424.9	4701.7	4570.5	4409.4	2822.2
82.5°	346.1	411.7	429.6	560.9	572.8	817.4	1199.3	1515.5	1455.9	1939.2	1324.6
85°	149.2	208.8	220.8	256.6	244.6	334.1	477.3	399.8	358.0	411.7	286.4
87.5°	35.8	59.7	59.7	65.6	53.7	83.5	89.5	65.6	59.7	71.6	71.6
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: P842311

CATALOG NUMBER: ARCH4-300-727-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7303.2	7303.2	7303.2	7303.2	7303.2	7303.2	7303.2	7303.2	7303.2	7303.2	7303.2
2.5°	7261.4	7243.5	7249.5	7148.1	7118.2	7088.4	7070.5	7058.6	7046.6	7064.5	7082.4
5°	7315.1	7273.4	7225.6	7076.5	7016.8	6951.2	6903.4	6861.7	6843.8	6843.8	6861.7
7.5°	7356.9	7285.3	7183.9	6987.0	6879.6	6790.1	6712.5	6658.8	6629.0	6629.0	6646.9
10°	7362.9	7261.4	7100.3	6861.7	6718.5	6587.2	6497.7	6438.0	6396.3	6396.3	6408.2
12.5°	7398.7	7261.4	7052.6	6766.2	6587.2	6426.1	6318.7	6229.2	6211.3	6211.3	6223.2
15°	7458.3	7291.3	7022.8	6682.7	6467.9	6282.9	6163.6	6068.1	6032.3	6056.2	6062.1
17.5°	7512.0	7309.2	6969.1	6575.3	6318.7	6115.8	5984.6	5901.0	5853.3	5907.0	5907.0
20°	7547.8	7309.2	6891.5	6438.0	6157.6	5930.9	5805.6	5704.1	5668.3	5734.0	5739.9
22.5°	7601.5	7303.2	6808.0	6300.8	5984.6	5745.9	5620.6	5543.0	5525.1	5596.7	5620.6
25°	7661.2	7315.1	6718.5	6145.7	5793.6	5560.9	5465.5	5429.7	5441.6	5531.1	5560.9
27.5°	7726.8	7339.0	6629.0	5972.6	5584.8	5376.0	5322.3	5340.2	5387.9	5501.3	5537.1
30°	7786.5	7345.0	6503.7	5769.8	5346.1	5149.2	5173.1	5250.7	5322.3	5435.6	5477.4
32.5°	7864.1	7350.9	6372.4	5549.0	5089.6	4946.4	5053.8	5179.1	5250.7	5358.1	5405.8
35°	8055.0	7452.4	6271.0	5334.2	4850.9	4773.3	4952.3	5113.4	5155.2	5250.7	5292.4
37.5°	8275.8	7619.4	6217.3	5113.4	4618.2	4600.3	4827.0	4988.1	5000.1	5059.7	5101.5
40°	8413.0	7691.0	6157.6	4928.5	4409.4	4421.3	4654.0	4779.3	4755.4	4797.2	4827.0
42.5°	8550.2	7714.9	6032.3	4773.3	4212.5	4224.4	4403.4	4492.9	4504.8	4594.3	4636.1
45°	8782.9	7780.5	5895.1	4630.1	4033.5	3991.7	4099.1	4218.4	4373.6	4546.6	4594.3
47.5°	9093.2	7917.8	5751.9	4457.1	3860.4	3723.2	3765.0	3973.8	4134.9	4296.0	4325.8
50°	9409.4	8055.0	5620.6	4248.3	3687.4	3436.8	3454.7	3645.6	3776.9	3902.2	3920.1
52.5°	9719.7	8174.3	5507.2	4051.4	3490.5	3096.7	3168.3	3365.2	3454.7	3514.4	3532.3
55°	10030.0	8275.8	5405.8	3884.3	3263.8	2828.2	2893.8	3078.8	3168.3	3198.1	3210.1
57.5°	10352.2	8395.1	5328.2	3741.1	3007.2	2589.5	2631.3	2762.6	2846.1	2881.9	2870.0
60°	10620.7	8496.5	5286.5	3591.9	2750.6	2368.8	2356.8	2476.2	2595.5	2631.3	2619.4
62.5°	10829.5	8562.2	5220.8	3401.0	2523.9	2148.0	2088.3	2243.5	2368.8	2392.6	2410.5
65°	10942.9	8568.1	5059.7	3156.4	2291.2	1909.3	1867.6	2022.7	2100.3	2124.1	2124.1
67.5°	10925.0	8472.7	4743.5	2828.2	2076.4	1694.5	1658.7	1754.2	1867.6	1885.5	1867.6
70°	10555.0	8078.9	4236.3	2482.1	1819.8	1503.6	1438.0	1533.4	1640.8	1575.2	1545.4
72.5°	9504.9	7058.6	3490.5	2100.3	1533.4	1264.9	1235.1	1330.6	1336.5	1348.5	1318.6
75°	7500.1	5256.6	2613.4	1634.9	1241.1	1062.1	1056.1	1038.2	1062.1	1109.8	1074.0
77.5°	3938.0	2625.3	1414.1	1002.4	901.0	853.2	811.5	805.5	877.1	906.9	871.1
80°	2136.1	1473.8	811.5	602.6	548.9	554.9	608.6	596.7	674.2	692.1	662.3
82.5°	930.8	698.1	399.8	364.0	364.0	358.0	375.9	417.7	501.2	501.2	399.8
85°	202.9	173.0	155.1	179.0	202.9	202.9	202.9	202.9	143.2	77.6	53.7
87.5°	65.6	65.6	65.6	71.6	77.6	77.6	65.6	47.7	29.8	6.0	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)