

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: P257980

Luminaire Tested: **ARCH-L-AF72-240-D-U-T2U-7050**

Issue Date: 8/21/2018

Test Information

Test Method: LM-79-08
Report Number: P257980
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-1)
Test Lab: INNOVATIONS CENTER(G2)
Issue Date: 8/21/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-240-D-U-T2U-7050
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 1030mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27521 lumens
Efficiency: N/A
Efficacy: 113.7 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G4

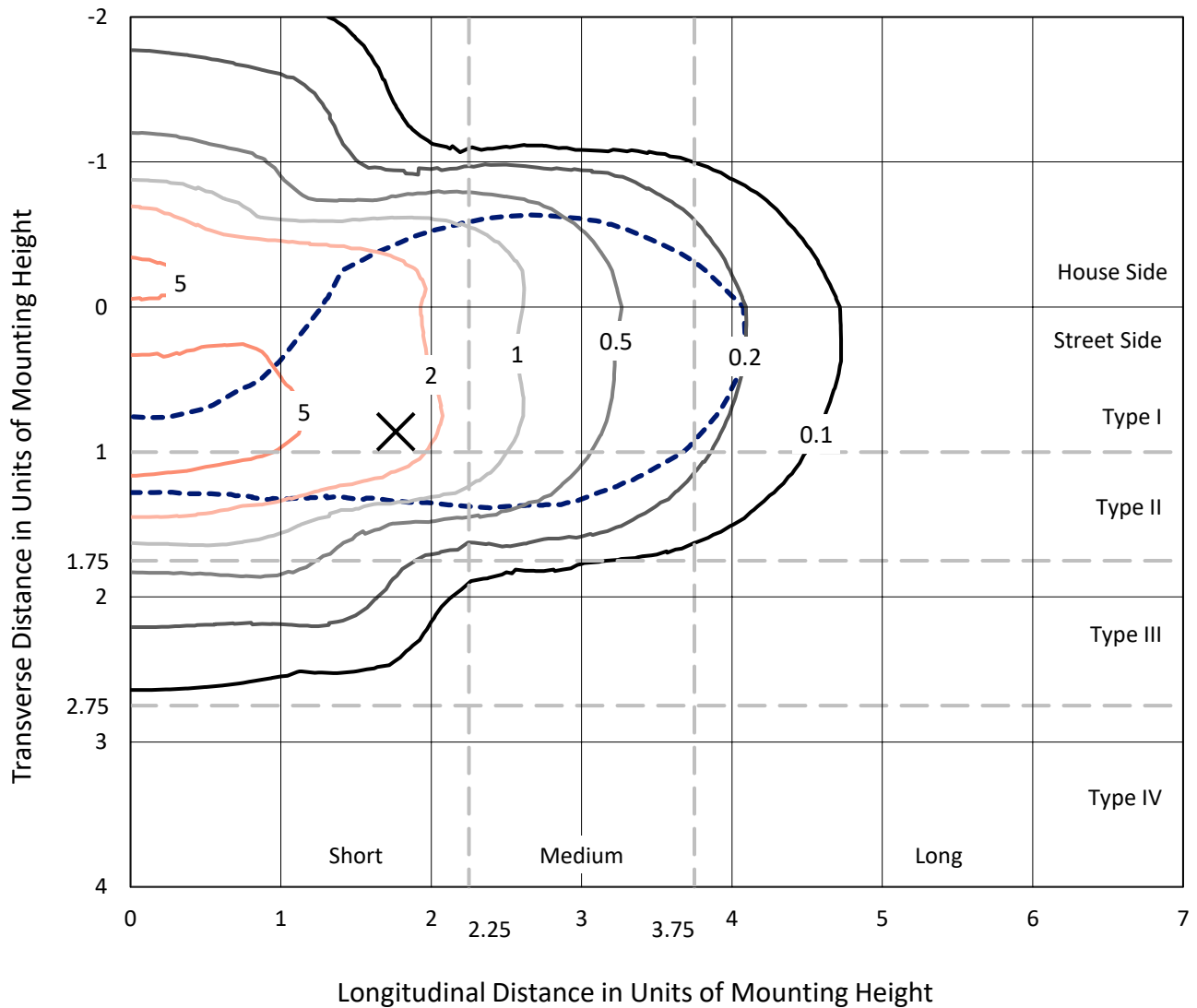
Input Watts (W): 242
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P257980
 CATALOG NUMBER: ARCH-L-AF72-240-D-U-T2U-7050

Iso-Footcandle Lines of Horizontal Illumination

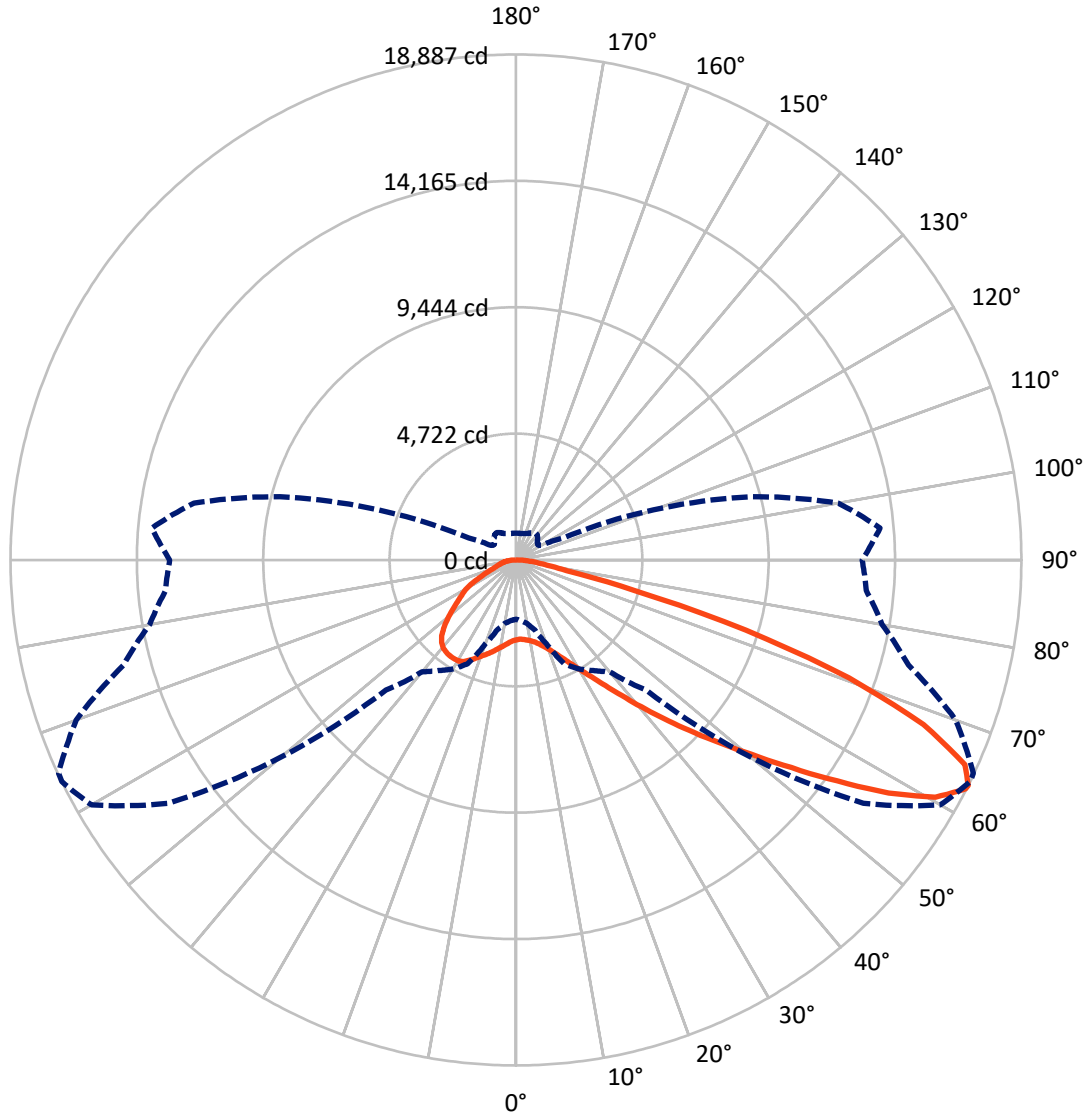
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.7 fc
 Type II - Short - N/A

REPORT NUMBER: P257980
CATALOG NUMBER: ARCH-L-AF72-240-D-U-T2U-7050

Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 63-Deg Vertical

REPORT NUMBER: P257980
 CATALOG NUMBER: ARCH-L-AF72-240-D-U-T2U-7050

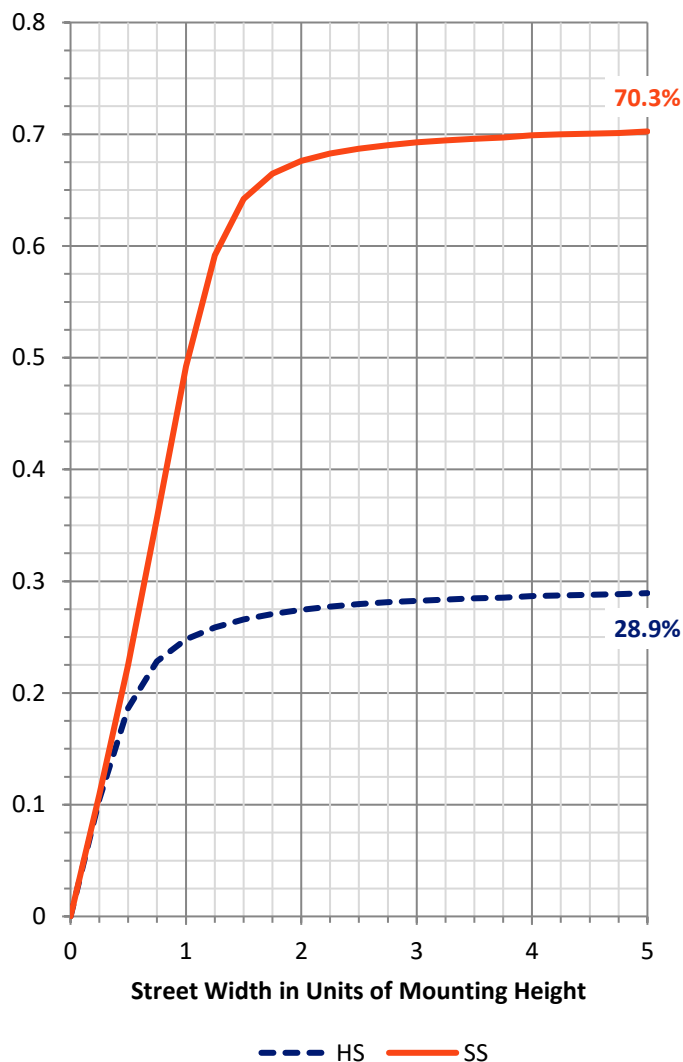
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8090.2	0.0	8090.2
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	19430.8	0.0	19430.8
	% Fixture	70.6	0.0	70.6
Total	Lumens	27521.0	0.0	27521.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	297.6	1.1
10°-20°	991.2	3.6
20°-30°	1860.5	6.8
30°-40°	3118.5	11.3
40°-50°	5232.1	19.0
50°-60°	6632.7	24.1
60°-70°	5851.1	21.3
70°-80°	3020.4	11.0
80°-90°	516.8	1.9
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°	27521.0	100.0
0°-180°	27521.0	100.0

Coefficient of Utilization



REPORT NUMBER: P257980

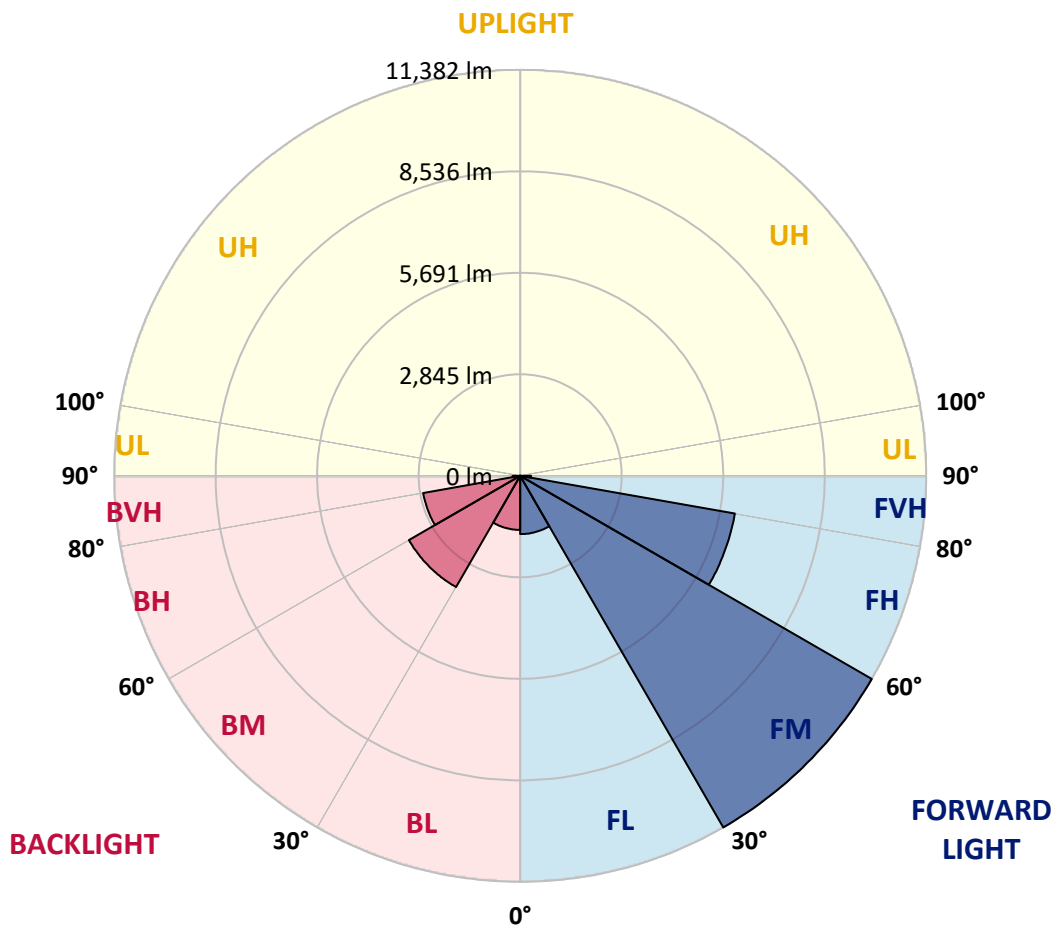
CATALOG NUMBER: ARCH-L-AF72-240-D-U-T2U-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1633.5	5.9			
FM (30°-60°)	11382.0	41.4			
FH (60°-80°)	6111.2	22.2			G3/7500
FVH (80°-90°)	304.2	1.1			G3/500
BL (0°-30°)	1515.8	5.5	B3/2500		
BM (30°-60°)	3601.4	13.1	B3/5000		
BH (60°-80°)	2760.3	10.0	B4/5000		G4/5000
BVH (80°-90°)	212.7	0.8			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 II Short





REPORT NUMBER: P257980

CATALOG NUMBER: ARCH-L-AF72-240-D-U-T2U-7050

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2980.5	2980.5	2980.5	2980.5	2980.5	2980.5	2980.5	2980.5	2980.5	2980.5	2980.5
2.5°	2962.1	2957.5	2957.5	2957.5	2957.5	2952.9	2957.5	2966.7	2962.1	2957.5	2966.7
5°	2971.3	2966.7	2966.7	2966.7	2971.3	2966.7	2971.3	2985.1	2975.9	2975.9	2985.1
7.5°	2994.3	2989.7	2994.3	2989.7	2989.7	2989.7	2994.3	3008.2	3003.5	3008.2	3022.0
10°	3022.0	3022.0	3022.0	3022.0	3022.0	3022.0	3031.2	3040.4	3045.0	3049.6	3068.0
12.5°	3104.9	3104.9	3104.9	3100.3	3100.3	3086.5	3104.9	3114.1	3123.3	3132.5	3146.4
15°	3279.9	3279.9	3275.3	3256.9	3256.9	3229.3	3233.9	3238.5	3238.5	3247.7	3256.9
17.5°	3510.3	3505.7	3496.5	3482.6	3464.2	3432.0	3422.8	3413.5	3399.7	3395.1	3395.1
20°	3832.7	3828.1	3809.7	3772.9	3749.8	3699.2	3662.3	3625.4	3611.6	3588.6	3584.0
22.5°	4293.4	4293.4	4256.6	4201.3	4182.9	4076.9	3970.9	3892.6	3865.0	3832.7	3832.7
25°	4850.8	4846.2	4795.5	4731.0	4652.7	4542.2	4413.2	4307.2	4238.1	4164.4	4136.8
27.5°	5518.8	5505.0	5435.9	5357.6	5210.1	5071.9	4919.9	4809.4	4689.6	4597.5	4514.5
30°	6301.9	6288.1	6168.3	6020.9	5868.9	5730.7	5509.6	5376.0	5187.1	5076.5	4984.4
32.5°	7209.4	7195.6	6979.1	6836.3	6675.1	6504.6	6242.0	6030.1	5790.6	5634.0	5505.0
35°	8365.7	8310.4	8001.8	7803.7	7550.3	7379.9	7103.5	6817.9	6536.9	6315.7	6126.9
37.5°	9614.1	9549.6	9277.8	8983.0	8734.2	8526.9	8135.4	7776.1	7444.4	7140.3	6905.4
40°	10917.8	10747.4	10457.1	10240.6	10070.2	9872.1	9462.1	9084.3	8563.8	8222.9	7868.2
42.5°	11820.7	11654.9	11452.2	11309.4	11226.4	11074.4	10844.1	10517.0	10051.7	10061.0	9125.8
45°	12415.0	12170.8	12032.6	12041.8	12074.1	12074.1	12032.6	11981.9	11779.2	11917.4	11134.3
47.5°	12203.1	12041.8	11954.3	12138.6	12368.9	12599.2	12866.4	13156.6	13488.3	13879.9	12917.1
50°	10959.3	11019.1	11060.6	11452.2	11945.1	12470.2	13082.9	13875.3	14801.2	14980.9	14515.6
52.5°	8973.8	9102.8	9241.0	9839.8	10489.4	11396.9	12470.2	13778.5	15022.3	15754.8	15708.7
55°	6969.9	7131.1	7425.9	7872.8	8388.7	9245.6	10572.3	12590.0	14529.4	15694.9	16404.3
57.5°	4961.4	5196.3	5583.3	6205.2	6661.2	7144.9	8126.2	10365.0	12488.7	14658.4	16289.2
60°	3298.4	3408.9	3662.3	4436.2	5205.5	5712.3	6407.9	7218.6	8955.4	11945.1	15100.7
62.5°	2340.2	2413.9	2570.5	2920.6	3616.2	4533.0	4952.2	5325.3	5882.7	7683.9	12124.7
63°	2211.2	2275.7	2404.7	2699.5	3326.0	4275.0	4703.4	5044.3	5449.7	6873.1	11470.6
65°	1833.5	1861.1	1930.2	2073.0	2409.3	3197.0	3897.2	4104.5	4173.6	4417.8	7186.4
67.5°	1547.8	1566.3	1589.3	1630.8	1764.4	2128.3	2906.8	3169.4	3091.1	2925.2	3551.7
70°	1345.1	1359.0	1395.8	1446.5	1492.6	1584.7	1999.3	2390.9	2303.3	2077.6	2174.3
72.5°	1073.4	1096.4	1137.8	1225.4	1317.5	1437.3	1538.6	1782.8	1727.5	1511.0	1534.0
75°	847.6	861.4	898.3	962.8	1050.3	1188.5	1386.6	1469.5	1317.5	1114.8	1114.8
77.5°	672.6	686.4	718.6	769.3	824.6	921.3	1059.5	1276.0	1183.9	838.4	833.8
80°	506.7	520.6	552.8	598.9	654.1	723.2	806.2	902.9	1087.2	783.1	626.5
82.5°	373.1	377.7	433.0	465.3	483.7	539.0	608.1	663.4	746.3	723.2	557.4
85°	281.0	276.4	313.3	336.3	340.9	354.7	396.2	451.5	488.3	469.9	433.0
87.5°	156.6	138.2	161.2	184.3	184.3	188.9	198.1	230.3	262.6	253.4	230.3
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: P257980

CATALOG NUMBER: ARCH-L-AF72-240-D-U-T2U-7050

CANDELA DISTRIBUTION (continued):

	55°	60°	64°	65°	70°	75°	80°	85°	90°	95°	100°
0°	2980.5	2980.5	2980.5	2980.5	2980.5	2980.5	2980.5	2980.5	2980.5	2980.5	2980.5
2.5°	2966.7	2966.7	2962.1	2962.1	2966.7	2966.7	2962.1	2975.9	2985.1	2985.1	2989.7
5°	2980.5	2985.1	2980.5	2980.5	2985.1	2985.1	2989.7	3003.5	3017.4	3026.6	3040.4
7.5°	3022.0	3026.6	3022.0	3022.0	3026.6	3031.2	3040.4	3058.8	3068.0	3086.5	3109.5
10°	3068.0	3072.6	3068.0	3072.6	3077.3	3081.9	3095.7	3109.5	3123.3	3141.7	3178.6
12.5°	3151.0	3155.6	3146.4	3151.0	3164.8	3164.8	3174.0	3183.2	3206.2	3229.3	3266.1
15°	3266.1	3266.1	3256.9	3261.5	3275.3	3275.3	3279.9	3289.2	3316.8	3344.4	3381.3
17.5°	3399.7	3408.9	3404.3	3408.9	3418.1	3422.8	3422.8	3432.0	3450.4	3468.8	3505.7
20°	3579.4	3584.0	3574.8	3584.0	3593.2	3584.0	3574.8	3570.2	3579.4	3588.6	3630.1
22.5°	3823.5	3818.9	3795.9	3795.9	3795.9	3777.5	3754.4	3726.8	3726.8	3713.0	3745.2
25°	4113.8	4099.9	4067.7	4072.3	4040.0	4012.4	3970.9	3929.5	3892.6	3878.8	3883.4
27.5°	4454.6	4427.0	4394.8	4385.5	4353.3	4302.6	4233.5	4155.2	4095.3	4049.3	4040.0
30°	4883.1	4823.2	4767.9	4758.7	4708.0	4625.1	4514.5	4408.6	4307.2	4228.9	4201.3
32.5°	5389.8	5297.7	5210.1	5200.9	5118.0	5007.4	4873.9	4726.4	4579.0	4454.6	4394.8
35°	5984.1	5845.9	5762.9	5739.9	5620.1	5481.9	5334.5	5145.6	4938.3	4763.3	4652.7
37.5°	6707.3	6564.5	6421.7	6426.3	6260.5	6099.2	5901.1	5670.8	5408.2	5164.1	5007.4
40°	7601.0	7398.3	7214.0	7172.6	7029.8	6804.0	6587.5	6320.3	5997.9	5675.4	5449.7
42.5°	8683.6	8351.9	8098.5	8061.7	7872.8	7596.4	7333.8	6979.1	6652.0	6260.5	5988.7
45°	9913.5	9383.8	9079.7	9024.5	8720.4	8439.4	8121.6	7743.8	7343.0	6900.8	6578.3
47.5°	11443.0	10687.5	10171.5	10079.4	9660.2	9291.6	8960.0	8540.8	8061.7	7568.8	7214.0
50°	13225.7	12110.9	11415.3	11272.5	10710.5	10277.5	9853.7	9328.5	8817.2	8301.2	7891.2
52.5°	15013.1	13815.4	12889.5	12714.4	11885.2	11304.8	10747.4	10222.2	9618.7	9107.4	8642.1
55°	16450.4	15653.5	14580.1	14335.9	13147.4	12359.7	11627.2	11028.4	10429.5	10024.1	9475.9
57.5°	17316.5	17275.0	16427.4	16091.1	14464.9	13299.4	12484.1	11802.3	11221.8	11051.4	10323.5
60°	17293.4	18366.8	18002.8	17749.5	15796.3	14262.2	13202.7	12465.6	11986.5	12180.0	11175.8
62.5°	16238.5	18412.8	18850.5	18781.4	17215.1	15036.2	13792.4	13032.3	12778.9	13354.7	12060.3
63°	15856.1	18306.9	18887.3	18859.7	17486.9	15183.6	13893.7	13142.8	12935.5	13654.2	12221.5
65°	13400.8	17381.0	18440.5	18564.9	18071.9	15690.3	14128.6	13423.8	13400.8	14322.1	12603.8
67.5°	8167.6	14686.1	16427.4	16666.9	17247.4	15851.5	13995.1	13327.1	13658.8	14418.9	12488.7
70°	3491.9	9692.4	13202.7	13589.7	15008.5	15050.0	13612.7	12930.9	13598.9	13663.4	11668.7
72.5°	2068.4	4569.8	8987.6	9830.6	11876.0	12949.3	12737.4	12239.9	12811.1	12000.4	9936.6
75°	1464.9	2137.5	4565.2	5463.5	8269.0	9885.9	10701.3	10931.6	10908.6	9517.4	7458.2
77.5°	1050.3	1372.8	1925.6	2271.1	4615.9	6348.0	7343.0	8015.6	7799.1	6371.0	4597.5
80°	732.5	949.0	1179.3	1253.0	2142.1	3261.5	3869.6	4164.4	4035.4	3183.2	2059.2
82.5°	529.8	621.9	760.1	806.2	1078.0	1506.4	1792.0	1580.1	1515.6	1174.7	889.1
85°	410.0	400.8	474.5	492.9	631.1	787.7	806.2	626.5	548.2	488.3	497.5
87.5°	290.2	248.8	253.4	262.6	327.1	419.2	410.0	258.0	221.1	234.9	267.2
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: P257980

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CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	2980.5	2980.5	2980.5	2980.5	2980.5	2980.5	2980.5	2980.5	2980.5	2980.5	2980.5
2.5°	2998.9	3003.5	3012.8	3017.4	3026.6	3026.6	3035.8	3040.4	3049.6	3058.8	3063.4
5°	3054.2	3068.0	3086.5	3095.7	3114.1	3127.9	3146.4	3155.6	3174.0	3187.8	3206.2
7.5°	3137.1	3160.2	3183.2	3210.8	3238.5	3261.5	3279.9	3303.0	3335.2	3358.3	3372.1
10°	3215.5	3247.7	3289.2	3321.4	3362.9	3395.1	3422.8	3464.2	3501.1	3533.3	3551.7
12.5°	3316.8	3358.3	3399.7	3450.4	3505.7	3547.1	3588.6	3643.9	3694.5	3731.4	3749.8
15°	3436.6	3487.2	3533.3	3593.2	3657.7	3713.0	3772.9	3832.7	3869.6	3869.6	3860.4
17.5°	3561.0	3602.4	3657.7	3726.8	3814.3	3883.4	3915.7	3924.9	3911.1	3878.8	3855.8
20°	3685.3	3722.2	3782.1	3865.0	3957.1	3970.9	3938.7	3897.2	3855.8	3800.5	3763.6
22.5°	3786.7	3837.4	3929.5	4026.2	4030.8	3952.5	3865.0	3795.9	3731.4	3666.9	3597.8
25°	3906.5	3975.6	4099.9	4136.8	4017.0	3869.6	3745.2	3643.9	3537.9	3432.0	3353.7
27.5°	4053.9	4155.2	4279.6	4173.6	3938.7	3731.4	3561.0	3408.9	3270.7	3123.3	3035.8
30°	4210.5	4367.1	4394.8	4118.4	3805.1	3537.9	3307.6	3077.3	2902.2	2768.6	2717.9
32.5°	4399.4	4602.1	4436.2	4021.6	3625.4	3275.3	2966.7	2690.3	2542.9	2460.0	2436.9
35°	4685.0	4850.8	4459.3	3920.3	3418.1	2962.1	2575.1	2354.0	2261.9	2206.6	2179.0
37.5°	5095.0	5090.4	4454.6	3795.9	3178.6	2621.2	2261.9	2105.2	2031.5	1985.5	1934.8
40°	5574.1	5274.6	4427.0	3616.2	2856.1	2294.1	2045.4	1897.9	1828.8	1773.6	1713.7
42.5°	6048.6	5399.0	4348.7	3349.0	2455.4	2059.2	1888.7	1755.1	1681.4	1621.5	1538.6
45°	6458.5	5449.7	4196.7	2980.5	2096.0	1874.9	1787.4	1672.2	1584.7	1492.6	1428.1
47.5°	6781.0	5440.5	3952.5	2547.5	1856.5	1745.9	1704.5	1626.2	1520.2	1405.0	1322.1
50°	7052.8	5371.4	3620.8	2165.1	1695.3	1630.8	1616.9	1593.9	1423.5	1326.7	1276.0
52.5°	7301.6	5270.0	3266.1	1907.2	1557.1	1501.8	1529.4	1506.4	1386.6	1303.7	1253.0
55°	7642.5	5200.9	2916.0	1709.1	1395.8	1382.0	1405.0	1437.3	1363.6	1285.3	1230.0
57.5°	8043.2	5237.8	2648.8	1488.0	1243.8	1253.0	1331.3	1377.4	1340.5	1257.6	1202.3
60°	8503.9	5348.3	2413.9	1276.0	1119.4	1142.5	1257.6	1322.1	1317.5	1220.8	1156.3
62.5°	9019.9	5463.5	2040.8	1114.8	1013.5	1050.3	1170.1	1253.0	1266.8	1183.9	1105.6
63°	9121.2	5472.7	1944.0	1082.6	995.0	1036.5	1147.1	1234.6	1253.0	1174.7	1096.4
65°	9370.0	5389.8	1566.3	995.0	921.3	967.4	1078.0	1156.3	1193.1	1124.0	1059.5
67.5°	9162.7	4712.6	1179.3	889.1	861.4	893.7	990.4	1064.1	1096.4	1064.1	999.6
70°	8379.5	3427.4	921.3	792.3	797.0	820.0	893.7	962.8	999.6	990.4	930.5
72.5°	6748.8	1944.0	769.3	709.4	723.2	750.9	801.6	866.1	898.3	893.7	852.2
75°	4445.4	995.0	649.5	635.7	644.9	668.0	704.8	755.5	792.3	787.7	769.3
77.5°	2202.0	691.0	557.4	562.0	566.6	585.0	612.7	658.8	681.8	686.4	681.8
80°	907.5	539.0	479.1	483.7	488.3	502.1	520.6	562.0	575.8	585.0	589.7
82.5°	543.6	410.0	382.4	391.6	396.2	410.0	423.8	460.7	474.5	488.3	488.3
85°	359.3	285.6	276.4	285.6	294.8	304.0	308.6	331.7	354.7	373.1	382.4
87.5°	193.5	170.4	165.8	170.4	170.4	179.7	188.9	211.9	239.5	258.0	267.2
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: P257980

CATALOG NUMBER: ARCH-L-AF72-240-D-U-T2U-7050

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	2980.5	2980.5	2980.5	2980.5	2980.5
2.5°	3054.2	3058.8	3054.2	3058.8	3063.4
5°	3206.2	3215.5	3210.8	3210.8	3229.3
7.5°	3381.3	3399.7	3399.7	3408.9	3418.1
10°	3570.2	3588.6	3602.4	3602.4	3616.2
12.5°	3759.0	3768.3	3782.1	3782.1	3782.1
15°	3855.8	3851.2	3846.6	3842.0	3842.0
17.5°	3842.0	3823.5	3814.3	3805.1	3809.7
20°	3740.6	3708.4	3699.2	3685.3	3694.5
22.5°	3565.6	3519.5	3501.1	3478.0	3487.2
25°	3303.0	3247.7	3238.5	3210.8	3224.7
27.5°	2998.9	2971.3	2966.7	2962.1	2985.1
30°	2713.3	2722.5	2727.1	2736.4	2759.4
32.5°	2450.7	2469.2	2473.8	2478.4	2510.6
35°	2192.8	2169.7	2192.8	2183.6	2211.2
37.5°	1911.8	1893.3	1874.9	1851.9	1870.3
40°	1676.8	1644.6	1589.3	1561.7	1566.3
42.5°	1492.6	1451.1	1405.0	1377.4	1377.4
45°	1372.8	1322.1	1280.7	1262.2	1262.2
47.5°	1280.7	1257.6	1234.6	1220.8	1220.8
50°	1243.8	1216.2	1202.3	1193.1	1193.1
52.5°	1216.2	1188.5	1174.7	1165.5	1156.3
55°	1193.1	1151.7	1137.8	1133.2	1133.2
57.5°	1160.9	1124.0	1105.6	1101.0	1101.0
60°	1110.2	1082.6	1064.1	1059.5	1059.5
62.5°	1059.5	1031.9	1013.5	1013.5	1013.5
63°	1050.3	1018.1	1004.3	1004.3	1004.3
65°	1008.9	976.6	962.8	962.8	958.2
67.5°	953.6	921.3	912.1	912.1	902.9
70°	889.1	861.4	852.2	856.8	838.4
72.5°	824.6	797.0	783.1	783.1	764.7
75°	750.9	723.2	704.8	700.2	681.8
77.5°	668.0	644.9	626.5	608.1	598.9
80°	580.4	562.0	539.0	525.2	511.3
82.5°	488.3	469.9	456.1	474.5	405.4
85°	382.4	363.9	345.5	373.1	290.2
87.5°	281.0	271.8	253.4	221.1	193.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)