

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: P257964

Luminaire Tested: **ARCH-L-AF72-280-D-U-T2U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P257964
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-1)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-280-D-U-T2U
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 1180mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30740.7 lumens
Efficiency: N/A
Efficacy: 110.2 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B4 - U0 - G4

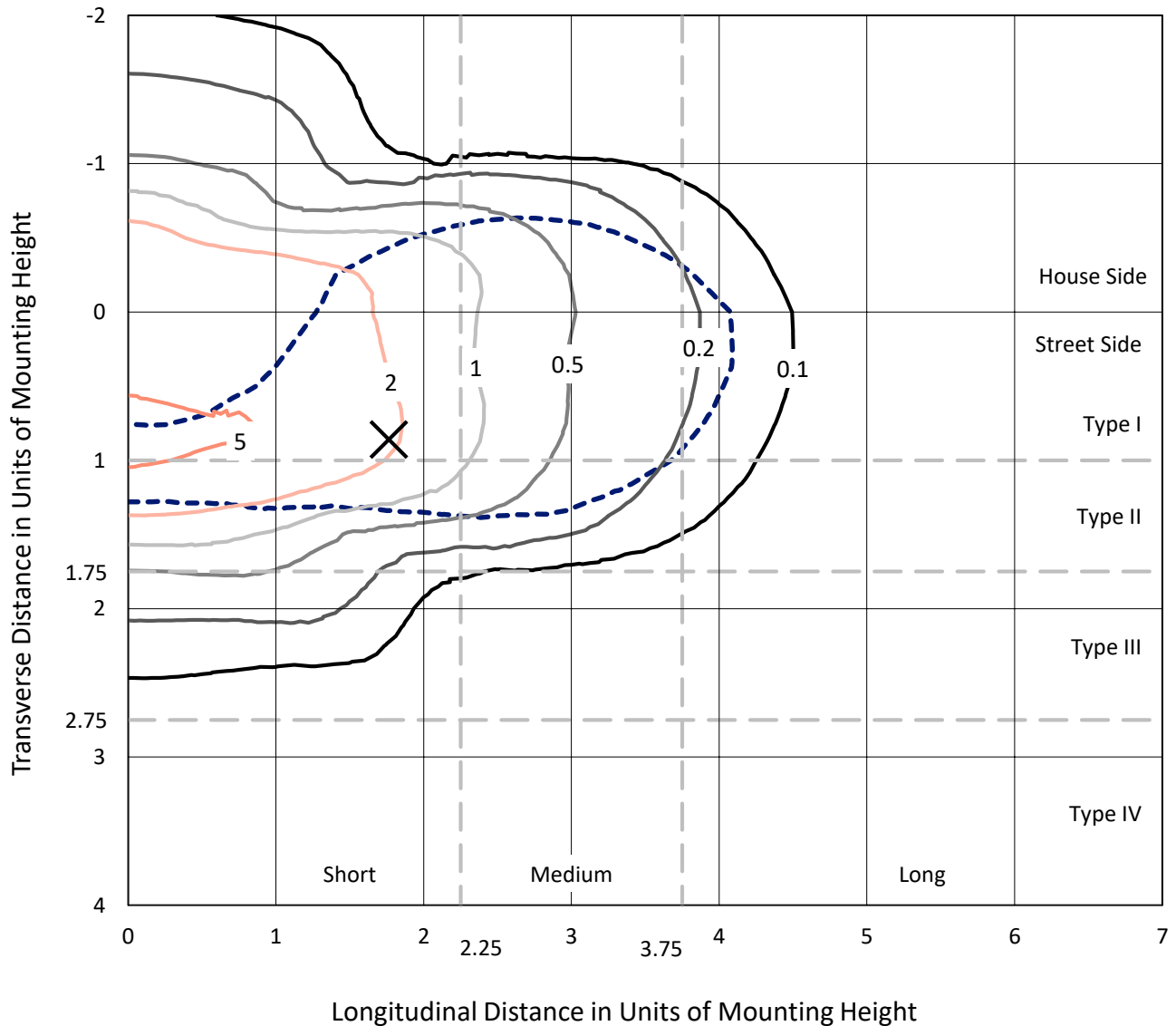
Input Watts (W): 279
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P257964
 CATALOG NUMBER: ARCH-L-AF72-280-D-U-T2U

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

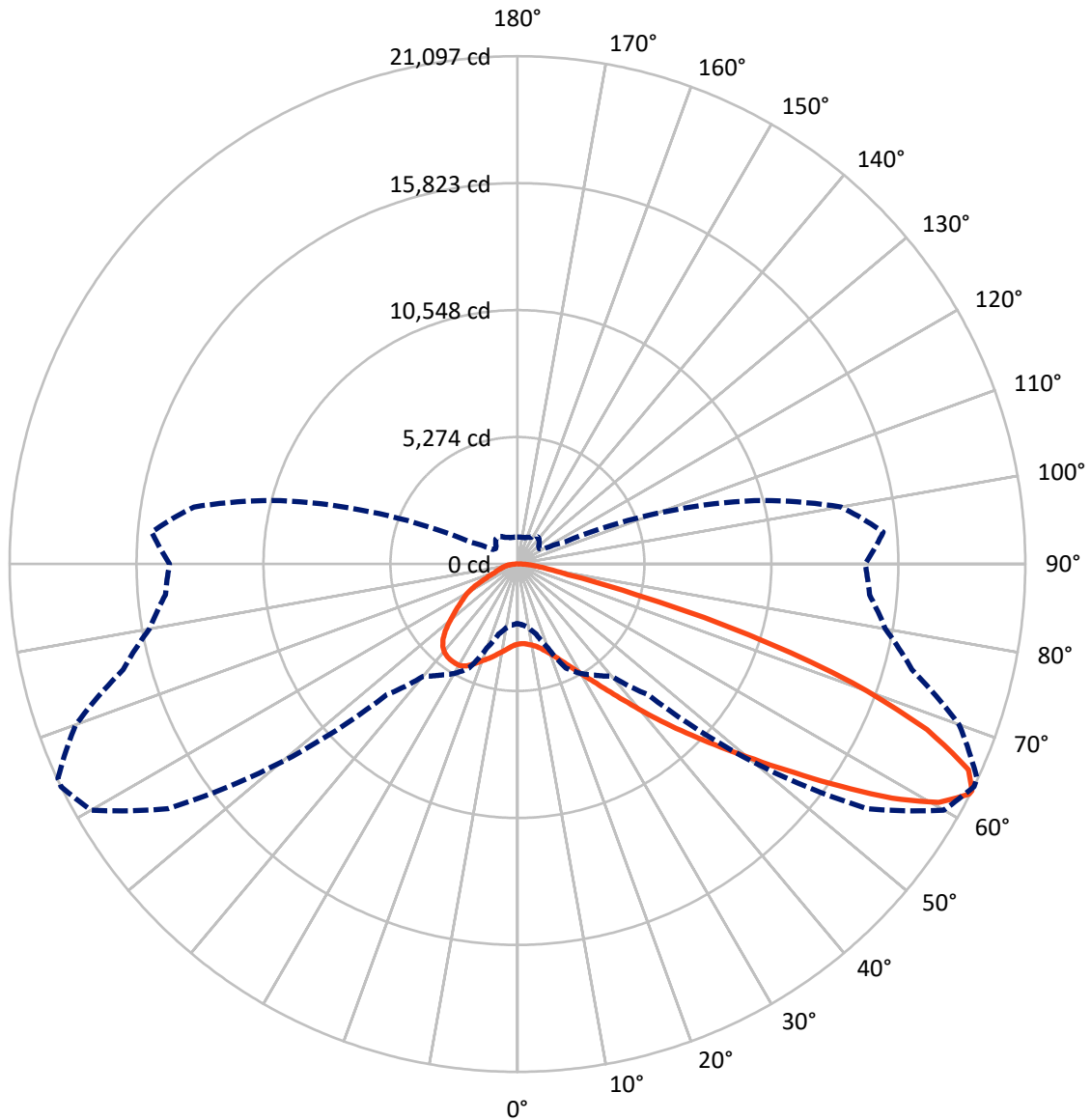


Based on 30 foot mounting height. Maximum calculated value = 6 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P257964

CATALOG NUMBER: ARCH-L-AF72-280-D-U-T2U

Luminous Intensity Polar Plot



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



REPORT NUMBER: P257964

CATALOG NUMBER: ARCH-L-AF72-280-D-U-T2U

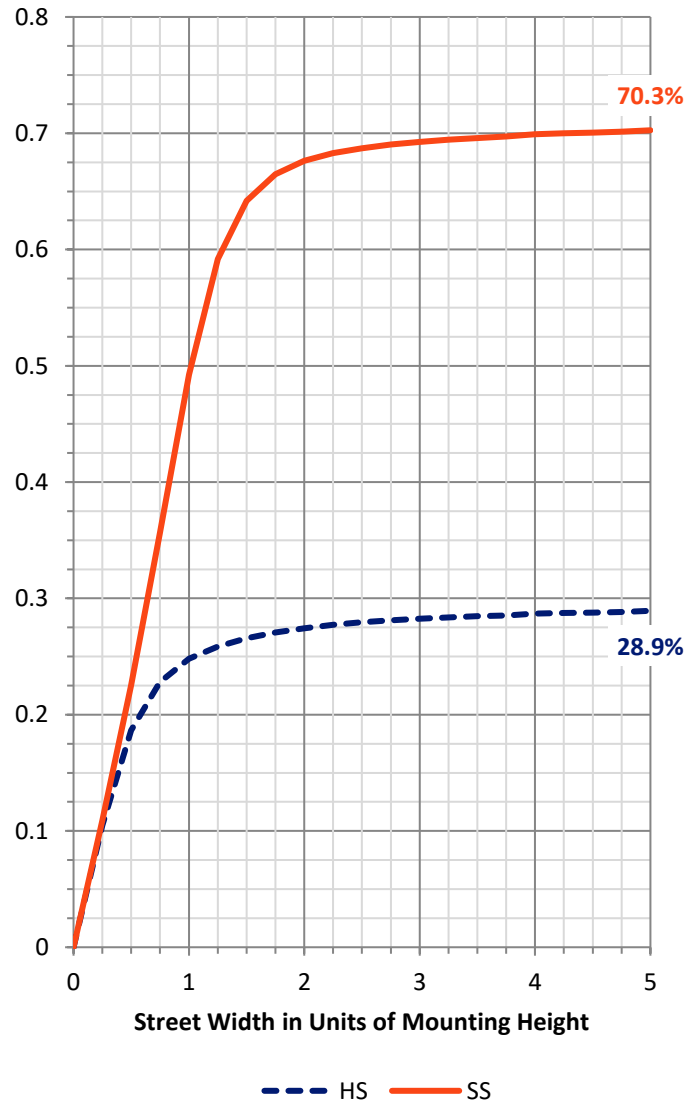
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9036.7	0.0	9036.7
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	21704.0	0.0	21704.0
	% Fixture	70.6	0.0	70.6
Total	Lumens	30740.7	0.0	30740.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	332.4	1.1
10°-20°	1107.1	3.6
20°-30°	2078.2	6.8
30°-40°	3483.3	11.3
40°-50°	5844.2	19.0
50°-60°	7408.7	24.1
60°-70°	6535.6	21.3
70°-80°	3373.8	11.0
80°-90°	577.3	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°	30740.7	100.0
0°-180°	30740.7	100.0



REPORT NUMBER: P257964

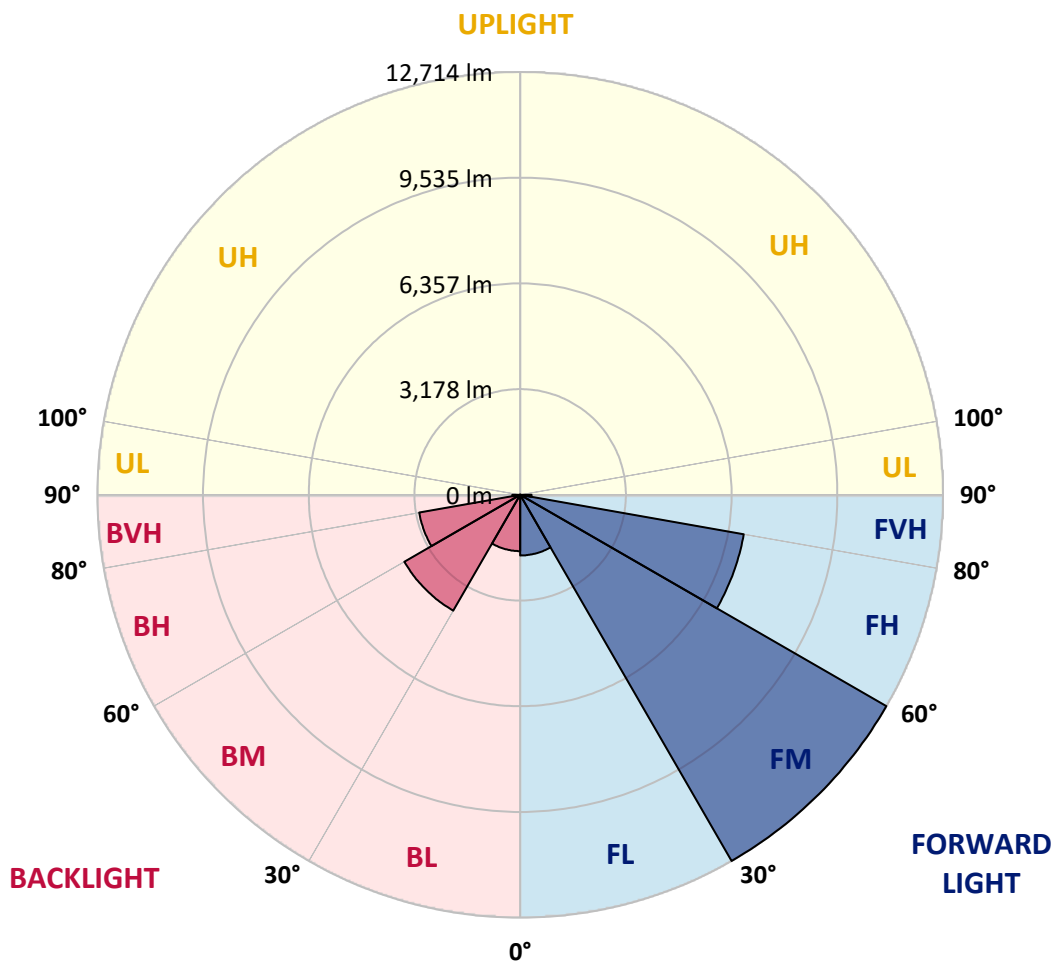
CATALOG NUMBER: ARCH-L-AF72-280-D-U-T2U

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1824.6	5.9			
FM	(30°-60°)	12713.6	41.4			
FH	(60°-80°)	6826.2	22.2			G3/7500
FVH	(80°-90°)	339.7	1.1			G3/500
BL	(0°-30°)	1693.2	5.5	B3/2500		
BM	(30°-60°)	4022.7	13.1	B3/5000		
BH	(60°-80°)	3083.2	10.0	B4/5000		G4/5000
BVH	(80°-90°)	237.6	0.8			G3/500
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: P257964

CATALOG NUMBER: ARCH-L-AF72-280-D-U-T2U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3329.2	3329.2	3329.2	3329.2	3329.2	3329.2	3329.2	3329.2	3329.2	3329.2	3329.2
2.5°	3308.6	3303.5	3303.5	3303.5	3303.5	3298.3	3303.5	3313.7	3308.6	3303.5	3313.7
5°	3319.0	3313.7	3313.7	3313.7	3319.0	3313.7	3319.0	3334.3	3324.1	3324.1	3334.3
7.5°	3344.6	3339.5	3344.6	3339.5	3339.5	3339.5	3344.6	3360.1	3355.0	3360.1	3375.5
10°	3375.5	3375.5	3375.5	3375.5	3375.5	3375.5	3385.8	3396.1	3401.2	3406.4	3427.0
12.5°	3468.1	3468.1	3468.1	3463.0	3463.0	3447.5	3468.1	3478.4	3488.7	3499.0	3514.4
15°	3663.7	3663.7	3658.5	3637.9	3637.9	3607.0	3612.2	3617.4	3617.4	3627.7	3637.9
17.5°	3921.0	3915.8	3905.5	3890.1	3869.5	3833.5	3823.2	3812.8	3797.5	3792.3	3792.3
20°	4281.2	4276.0	4255.4	4214.3	4188.5	4131.9	4090.8	4049.6	4034.1	4008.4	4003.3
22.5°	4795.7	4795.7	4754.6	4692.8	4672.2	4553.9	4435.5	4348.1	4317.2	4281.2	4281.2
25°	5418.4	5413.1	5356.6	5284.6	5197.1	5073.5	4929.5	4811.1	4733.9	4651.7	4620.8
27.5°	6164.4	6149.0	6071.8	5984.4	5819.7	5665.3	5495.5	5372.0	5238.2	5135.3	5042.7
30°	7039.2	7023.8	6890.0	6725.3	6555.5	6401.1	6154.2	6004.9	5794.0	5670.4	5567.5
32.5°	8052.9	8037.4	7795.6	7636.1	7456.0	7265.6	6972.3	6735.6	6468.0	6293.1	6149.0
35°	9344.5	9282.7	8937.9	8716.7	8433.6	8243.2	7934.5	7615.5	7301.6	7054.6	6843.6
37.5°	10738.8	10666.8	10363.2	10033.9	9756.1	9524.5	9087.2	8685.8	8315.3	7975.6	7713.3
40°	12195.1	12004.7	11680.6	11438.6	11248.3	11027.0	10569.0	10147.2	9565.7	9184.9	8788.7
42.5°	13203.6	13018.4	12792.0	12632.4	12539.8	12370.0	12112.8	11747.4	11227.7	11238.0	10193.4
45°	13867.4	13594.7	13440.3	13450.6	13486.6	13486.6	13440.3	13383.7	13157.3	13311.7	12436.9
47.5°	13630.7	13450.6	13352.9	13558.7	13816.0	14073.2	14371.6	14695.8	15066.3	15503.7	14428.3
50°	12241.3	12308.2	12354.6	12792.0	13342.6	13929.1	14613.5	15498.5	16532.8	16733.5	16213.8
52.5°	10023.6	10167.7	10322.1	10991.0	11716.6	12730.2	13929.1	15390.5	16779.8	17597.9	17546.5
55°	7785.3	7965.4	8294.7	8793.8	9370.1	10327.2	11809.1	14062.9	16229.2	17531.0	18323.5
57.5°	5541.8	5804.2	6236.4	6931.1	7440.5	7980.9	9076.8	11577.7	13949.8	16373.4	18194.8
60°	3684.3	3807.7	4090.8	4955.2	5814.6	6380.6	7157.5	8063.2	10003.0	13342.6	16867.3
62.5°	2613.9	2696.3	2871.2	3262.3	4039.3	5063.3	5531.5	5948.4	6570.9	8582.9	13543.3
63°	2469.9	2541.9	2686.0	3015.4	3715.2	4775.1	5253.7	5634.4	6087.3	7677.2	12812.6
65°	2047.9	2078.8	2156.0	2315.6	2691.2	3571.0	4353.2	4584.8	4661.9	4934.6	8027.1
67.5°	1728.9	1749.6	1775.2	1821.6	1970.7	2377.2	3246.8	3540.1	3452.7	3267.4	3967.3
70°	1502.5	1518.0	1559.1	1615.8	1667.2	1770.1	2233.2	2670.6	2572.8	2320.7	2428.7
72.5°	1198.9	1224.7	1270.9	1368.7	1471.6	1605.4	1718.7	1991.4	1929.6	1687.8	1713.4
75°	946.7	962.2	1003.4	1075.4	1173.2	1327.6	1548.8	1641.4	1471.6	1245.2	1245.2
77.5°	751.3	766.7	802.7	859.3	921.1	1029.1	1183.5	1425.4	1322.5	936.5	931.4
80°	566.0	581.4	617.5	668.9	730.7	807.8	900.5	1008.5	1214.3	874.7	699.8
82.5°	416.8	422.0	483.7	519.7	540.3	602.0	679.2	740.9	833.6	807.8	622.6
85°	313.8	308.7	350.0	375.6	380.7	396.2	442.5	504.3	545.4	524.9	483.7
87.5°	174.9	154.4	180.1	205.8	205.8	210.9	221.3	257.3	293.3	283.1	257.3
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: P257964

CATALOG NUMBER: ARCH-L-AF72-280-D-U-T2U

CANDELA DISTRIBUTION (continued):

	55°	60°	64°	65°	70°	75°	80°	85°	90°	95°	100°
0°	3329.2	3329.2	3329.2	3329.2	3329.2	3329.2	3329.2	3329.2	3329.2	3329.2	3329.2
2.5°	3313.7	3313.7	3308.6	3308.6	3313.7	3313.7	3308.6	3324.1	3334.3	3334.3	3339.5
5°	3329.2	3334.3	3329.2	3329.2	3334.3	3334.3	3339.5	3355.0	3370.4	3380.6	3396.1
7.5°	3375.5	3380.6	3375.5	3375.5	3380.6	3385.8	3396.1	3416.7	3427.0	3447.5	3473.3
10°	3427.0	3432.1	3427.0	3432.1	3437.2	3442.4	3457.9	3473.3	3488.7	3509.3	3550.5
12.5°	3519.6	3524.8	3514.4	3519.6	3535.0	3535.0	3545.3	3555.6	3581.4	3607.0	3648.3
15°	3648.3	3648.3	3637.9	3643.1	3658.5	3658.5	3663.7	3673.9	3704.8	3735.7	3776.8
17.5°	3797.5	3807.7	3802.6	3807.7	3818.1	3823.2	3823.2	3833.5	3854.1	3874.6	3915.8
20°	3998.1	4003.3	3993.0	4003.3	4013.5	4003.3	3993.0	3987.9	3998.1	4008.4	4054.8
22.5°	4270.8	4265.7	4239.9	4239.9	4239.9	4219.4	4193.7	4162.8	4162.8	4147.3	4183.4
25°	4595.0	4579.5	4543.5	4548.8	4512.6	4481.9	4435.5	4389.2	4348.1	4332.6	4337.7
27.5°	4975.8	4944.9	4908.9	4898.6	4862.6	4806.0	4728.8	4641.3	4574.4	4523.0	4512.6
30°	5454.4	5387.5	5325.7	5315.5	5258.8	5166.2	5042.7	4924.4	4811.1	4723.7	4692.8
32.5°	6020.4	5917.5	5819.7	5809.3	5716.8	5593.3	5444.0	5279.3	5114.8	4975.8	4908.9
35°	6684.2	6529.8	6437.1	6411.4	6277.6	6123.3	5958.6	5747.7	5516.1	5320.6	5197.1
37.5°	7492.0	7332.5	7172.9	7178.1	6992.9	6812.8	6591.5	6334.2	6040.9	5768.2	5593.3
40°	8490.3	8263.8	8058.0	8011.8	7852.2	7600.0	7358.2	7059.8	6699.6	6339.4	6087.3
42.5°	9699.4	9329.0	9046.0	9004.8	8793.8	8485.1	8191.8	7795.6	7430.2	6992.9	6689.3
45°	11073.3	10481.6	10141.9	10080.3	9740.6	9426.7	9071.7	8649.8	8202.1	7708.1	7348.0
47.5°	12781.7	11937.8	11361.5	11258.6	10790.3	10378.7	10008.2	9539.9	9004.8	8454.2	8058.0
50°	14773.0	13527.8	12750.8	12591.3	11963.5	11479.9	11006.4	10419.9	9848.7	9272.3	8814.5
52.5°	16769.5	15431.6	14397.4	14201.8	13275.7	12627.3	12004.7	11418.1	10744.1	10172.8	9653.2
55°	18375.0	17484.8	16285.8	16013.1	14685.6	13805.6	12987.5	12318.6	11649.7	11196.8	10584.5
57.5°	19342.4	19296.0	18349.2	17973.6	16157.2	14855.4	13944.6	13183.1	12534.7	12344.3	11531.3
60°	19316.6	20515.5	20109.0	19826.0	17644.3	15930.8	14747.3	13924.0	13388.9	13604.9	12483.3
62.5°	18138.2	20566.9	21055.8	20978.6	19229.1	16795.2	15405.9	14556.9	14273.9	14917.1	13471.1
63°	17711.2	20448.6	21096.9	21066.1	19532.7	16959.9	15519.1	14680.4	14448.9	15251.6	13651.3
65°	14968.5	19414.4	20597.8	20736.7	20186.2	17525.9	15781.6	14994.3	14968.5	15997.7	14078.4
67.5°	9123.2	16404.1	18349.2	18616.8	19265.1	17706.1	15632.3	14886.2	15256.7	16105.7	13949.8
70°	3900.4	10826.3	14747.3	15179.6	16764.3	16810.7	15205.2	14443.7	15189.8	15261.8	13033.8
72.5°	2310.3	5104.4	10039.0	10980.8	13265.3	14464.3	14227.6	13671.8	14310.0	13404.3	11099.0
75°	1636.3	2387.6	5099.3	6102.7	9236.3	11042.4	11953.3	12210.6	12184.8	10630.8	8330.7
77.5°	1173.2	1533.4	2150.9	2536.8	5155.9	7090.7	8202.1	8953.4	8711.6	7116.4	5135.3
80°	818.2	1060.0	1317.3	1399.6	2392.7	3643.1	4322.3	4651.7	4507.5	3555.6	2300.1
82.5°	591.8	694.7	849.0	900.5	1204.1	1682.7	2001.6	1764.9	1692.9	1312.1	993.1
85°	458.0	447.6	530.0	550.6	704.9	879.9	900.5	699.8	612.3	545.4	555.8
87.5°	324.2	277.8	283.1	293.3	365.3	468.2	458.0	288.2	246.9	262.4	298.4
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: P257964

CATALOG NUMBER: ARCH-L-AF72-280-D-U-T2U

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	3329.2	3329.2	3329.2	3329.2	3329.2	3329.2	3329.2	3329.2	3329.2	3329.2	3329.2
2.5°	3349.8	3355.0	3365.2	3370.4	3380.6	3380.6	3391.0	3396.1	3406.4	3416.7	3421.9
5°	3411.5	3427.0	3447.5	3457.9	3478.4	3493.9	3514.4	3524.8	3545.3	3560.8	3581.4
7.5°	3504.1	3529.9	3555.6	3586.5	3617.4	3643.1	3663.7	3689.4	3725.4	3751.2	3766.6
10°	3591.6	3627.7	3673.9	3709.9	3756.3	3792.3	3823.2	3869.5	3910.6	3946.6	3967.3
12.5°	3704.8	3751.2	3797.5	3854.1	3915.8	3962.1	4008.4	4070.2	4126.8	4167.9	4188.5
15°	3838.6	3895.2	3946.6	4013.5	4085.6	4147.3	4214.3	4281.2	4322.3	4322.3	4312.0
17.5°	3977.5	4023.9	4085.6	4162.8	4260.6	4337.7	4373.7	4384.1	4368.6	4332.6	4306.8
20°	4116.5	4157.7	4224.6	4317.2	4420.1	4435.5	4399.5	4353.2	4306.8	4245.1	4203.9
22.5°	4229.7	4286.3	4389.2	4497.3	4502.4	4415.0	4317.2	4239.9	4167.9	4095.9	4018.8
25°	4363.5	4440.6	4579.5	4620.8	4487.0	4322.3	4183.4	4070.2	3951.9	3833.5	3746.0
27.5°	4528.1	4641.3	4780.2	4661.9	4399.5	4167.9	3977.5	3807.7	3653.4	3488.7	3391.0
30°	4703.1	4878.0	4908.9	4600.2	4250.3	3951.9	3694.6	3437.2	3241.7	3092.5	3035.9
32.5°	4914.1	5140.4	4955.2	4492.1	4049.6	3658.5	3313.7	3005.0	2840.3	2747.7	2722.1
35°	5233.1	5418.4	4981.0	4378.9	3818.1	3308.6	2876.4	2629.4	2526.5	2464.7	2433.9
37.5°	5691.1	5685.9	4975.8	4239.9	3550.5	2927.9	2526.5	2351.6	2269.2	2217.8	2161.2
40°	6226.2	5891.7	4944.9	4039.3	3190.3	2562.5	2284.7	2120.0	2042.8	1981.0	1914.1
42.5°	6756.2	6030.6	4857.5	3740.8	2742.6	2300.1	2109.7	1960.5	1878.1	1811.2	1718.7
45°	7214.2	6087.3	4687.7	3329.2	2341.2	2094.3	1996.5	1867.8	1770.1	1667.2	1595.1
47.5°	7574.3	6076.9	4415.0	2845.5	2073.7	1950.2	1903.9	1816.4	1698.1	1569.4	1476.8
50°	7877.9	5999.8	4044.4	2418.5	1893.6	1821.6	1806.1	1780.3	1590.0	1481.9	1425.4
52.5°	8155.8	5886.6	3648.3	2130.3	1739.2	1677.4	1708.3	1682.7	1548.8	1456.2	1399.6
55°	8536.5	5809.3	3257.2	1909.0	1559.1	1543.6	1569.4	1605.4	1523.1	1435.6	1373.9
57.5°	8984.3	5850.6	2958.7	1662.0	1389.3	1399.6	1487.1	1538.5	1497.4	1404.7	1343.0
60°	9498.8	5974.0	2696.3	1425.4	1250.4	1276.1	1404.7	1476.8	1471.6	1363.6	1291.6
62.5°	10075.0	6102.7	2279.5	1245.2	1132.0	1173.2	1307.0	1399.6	1415.0	1322.5	1234.9
63°	10188.3	6112.9	2171.4	1209.2	1111.4	1157.8	1281.2	1379.0	1399.6	1312.1	1224.7
65°	10466.1	6020.4	1749.6	1111.4	1029.1	1080.5	1204.1	1291.6	1332.7	1255.6	1183.5
67.5°	10234.6	5263.9	1317.3	993.1	962.2	998.3	1106.3	1188.7	1224.7	1188.7	1116.6
70°	9359.9	3828.3	1029.1	885.1	890.2	916.0	998.3	1075.4	1116.6	1106.3	1039.4
72.5°	7538.3	2171.4	859.3	792.4	807.8	838.7	895.3	967.4	1003.4	998.3	952.0
75°	4965.5	1111.4	725.6	710.1	720.4	746.1	787.3	843.8	885.1	879.9	859.3
77.5°	2459.6	771.8	622.6	627.8	632.9	653.5	684.4	735.8	761.6	766.7	761.6
80°	1013.6	602.0	535.1	540.3	545.4	560.9	581.4	627.8	643.2	653.5	658.7
82.5°	607.2	458.0	427.1	437.4	442.5	458.0	473.4	514.5	530.0	545.4	545.4
85°	401.4	319.1	308.7	319.1	329.3	339.6	344.7	370.5	396.2	416.8	427.1
87.5°	216.1	190.4	185.3	190.4	190.4	200.7	210.9	236.7	267.6	288.2	298.4
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: P257964

CATALOG NUMBER: ARCH-L-AF72-280-D-U-T2U

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	3329.2	3329.2	3329.2	3329.2	3329.2
2.5°	3411.5	3416.7	3411.5	3416.7	3421.9
5°	3581.4	3591.6	3586.5	3586.5	3607.0
7.5°	3776.8	3797.5	3797.5	3807.7	3818.1
10°	3987.9	4008.4	4023.9	4023.9	4039.3
12.5°	4198.8	4209.1	4224.6	4224.6	4224.6
15°	4306.8	4301.7	4296.6	4291.4	4291.4
17.5°	4291.4	4270.8	4260.6	4250.3	4255.4
20°	4178.2	4142.2	4131.9	4116.5	4126.8
22.5°	3982.7	3931.2	3910.6	3885.0	3895.2
25°	3689.4	3627.7	3617.4	3586.5	3601.9
27.5°	3349.8	3319.0	3313.7	3308.6	3334.3
30°	3030.8	3041.0	3046.2	3056.5	3082.3
32.5°	2737.4	2758.1	2763.2	2768.3	2804.3
35°	2449.4	2423.6	2449.4	2439.0	2469.9
37.5°	2135.4	2114.8	2094.3	2068.5	2089.1
40°	1873.0	1837.0	1775.2	1744.3	1749.6
42.5°	1667.2	1620.9	1569.4	1538.5	1538.5
45°	1533.4	1476.8	1430.5	1409.9	1409.9
47.5°	1430.5	1404.7	1379.0	1363.6	1363.6
50°	1389.3	1358.5	1343.0	1332.7	1332.7
52.5°	1358.5	1327.6	1312.1	1301.8	1291.6
55°	1332.7	1286.4	1270.9	1265.8	1265.8
57.5°	1296.7	1255.6	1234.9	1229.8	1229.8
60°	1240.1	1209.2	1188.7	1183.5	1183.5
62.5°	1183.5	1152.7	1132.0	1132.0	1132.0
63°	1173.2	1137.2	1121.8	1121.8	1121.8
65°	1126.9	1090.9	1075.4	1075.4	1070.3
67.5°	1065.1	1029.1	1018.9	1018.9	1008.5
70°	993.1	962.2	952.0	957.1	936.5
72.5°	921.1	890.2	874.7	874.7	854.2
75°	838.7	807.8	787.3	782.1	761.6
77.5°	746.1	720.4	699.8	679.2	668.9
80°	648.3	627.8	602.0	586.6	571.1
82.5°	545.4	524.9	509.4	530.0	452.9
85°	427.1	406.5	386.0	416.8	324.2
87.5°	313.8	303.6	283.1	246.9	216.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)