

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: P257960

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P257960
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-AF72-240-D-U-T2U
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 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: 28152.6 lumens
Efficiency: N/A
Efficacy: 116.3 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

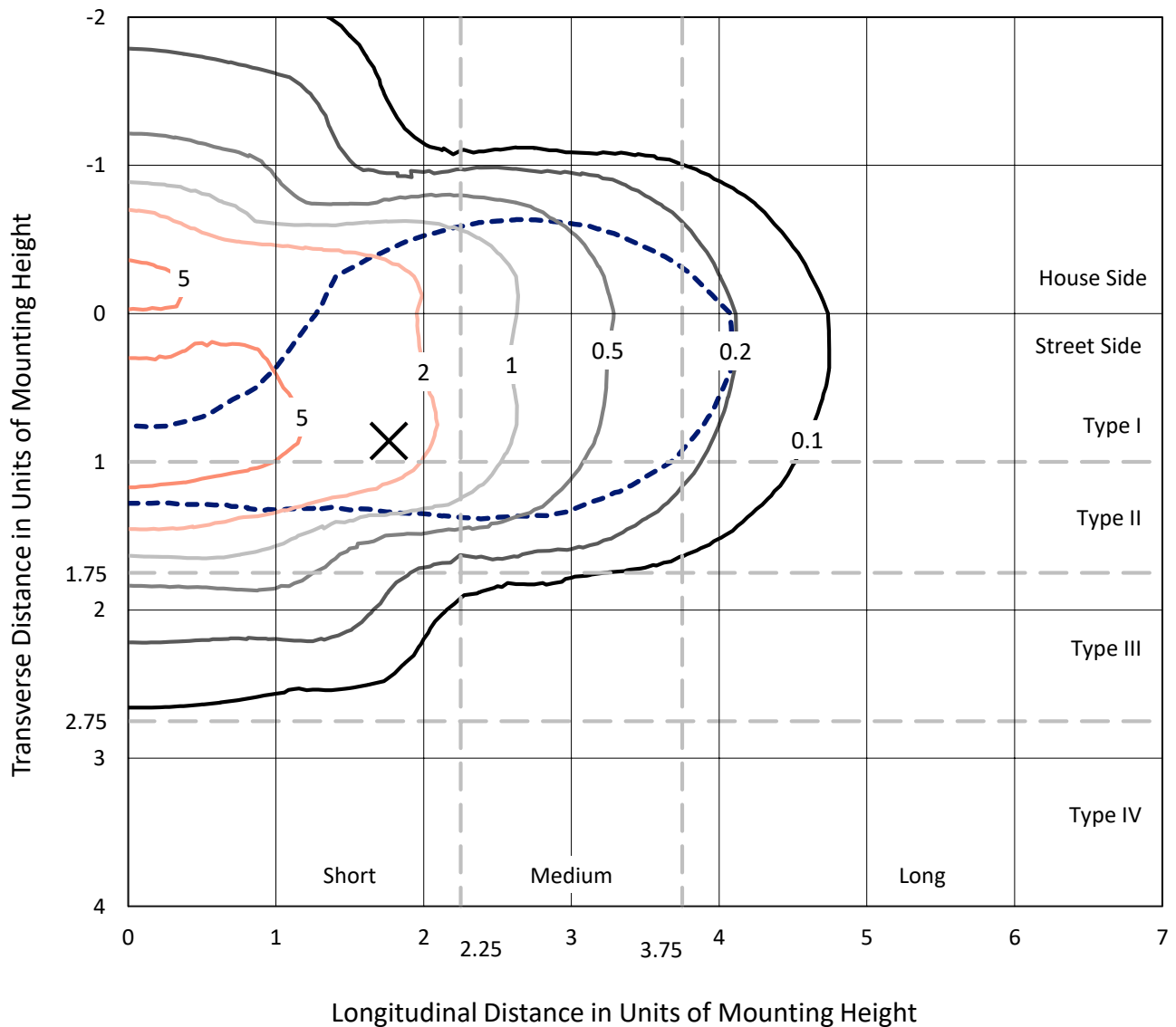
Input Watts (W): 242
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

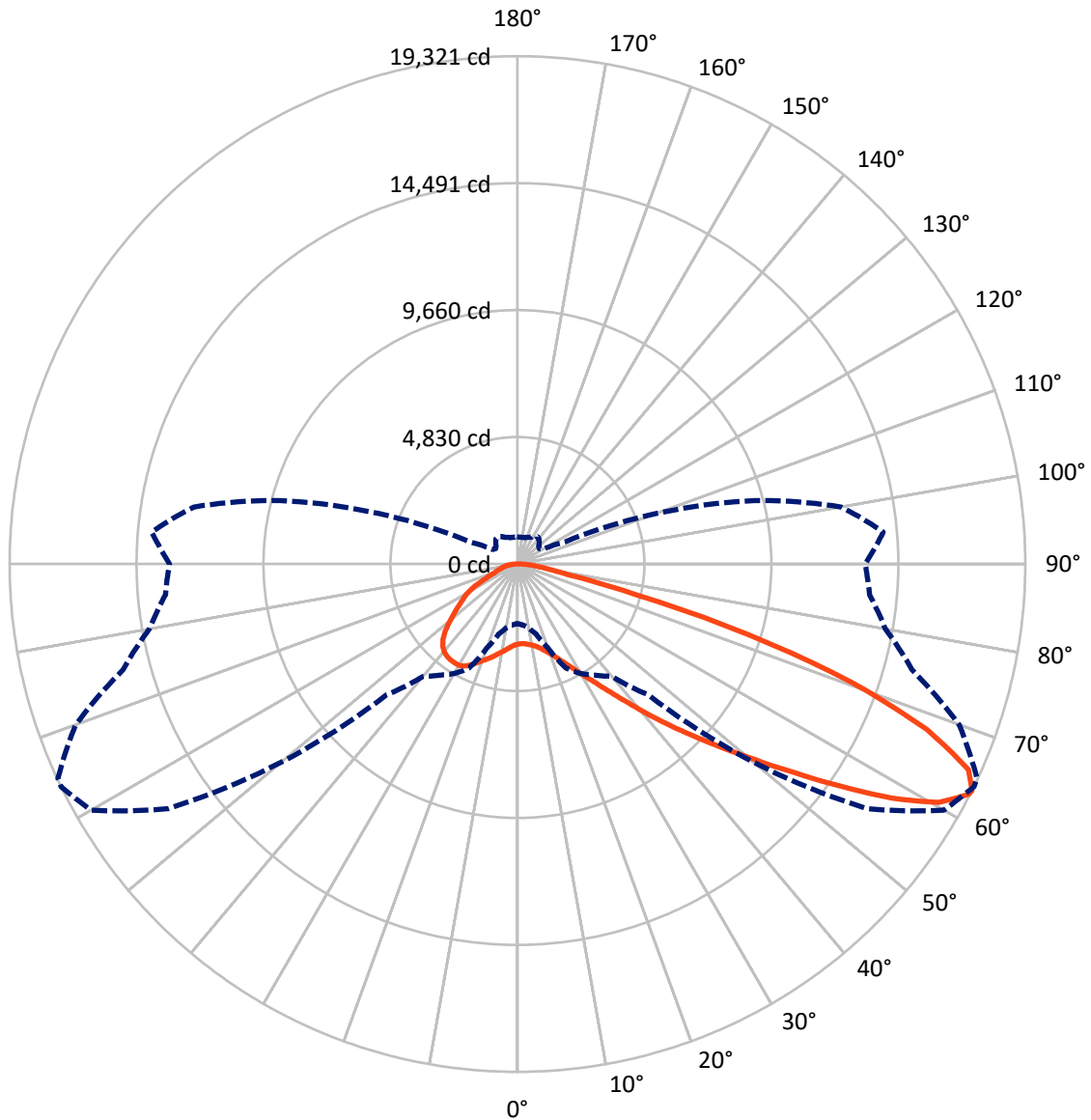


Based on 25 foot mounting height. Maximum calculated value = 7.9 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8275.8	0.0	8275.8
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	19876.8	0.0	19876.8
	% Fixture	70.6	0.0	70.6
Total	Lumens	28152.6	0.0	28152.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	304.4	1.1
10°-20°	1013.9	3.6
20°-30°	1903.3	6.8
30°-40°	3190.0	11.3
40°-50°	5352.2	19.0
50°-60°	6785.0	24.1
60°-70°	5985.4	21.3
70°-80°	3089.8	11.0
80°-90°	528.7	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°	28152.6	100.0
0°-180°	28152.6	100.0



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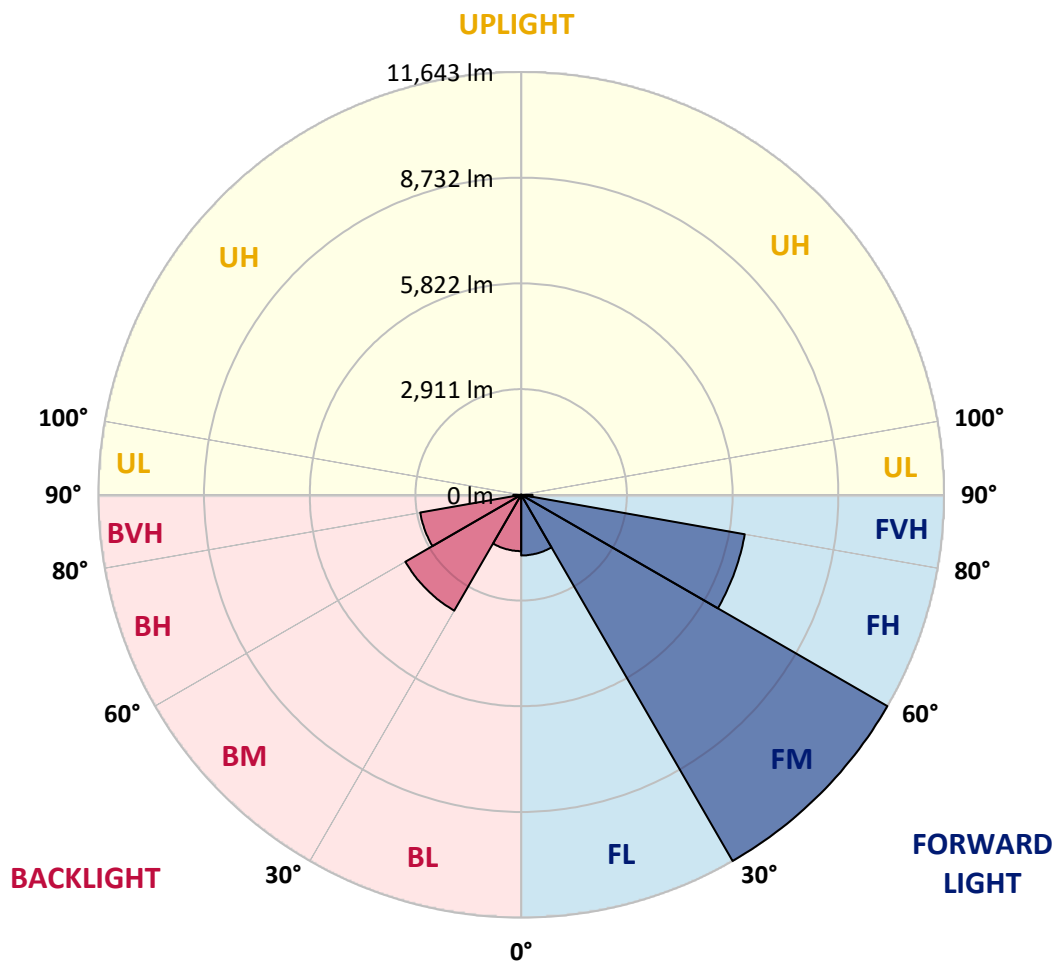
CATALOG NUMBER: ARCH-L-AF72-240-D-U-T2U

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1671.0	5.9			
FM	(30°-60°)	11643.2	41.4			
FH	(60°-80°)	6251.5	22.2			G3/7500
FVH	(80°-90°)	311.1	1.1			G3/500
BL	(0°-30°)	1550.6	5.5	B3/2500		
BM	(30°-60°)	3684.0	13.1	B3/5000		
BH	(60°-80°)	2823.7	10.0	B4/5000		G4/5000
BVH	(80°-90°)	217.6	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3048.9	3048.9	3048.9	3048.9	3048.9	3048.9	3048.9	3048.9	3048.9	3048.9	3048.9
2.5°	3030.1	3025.4	3025.4	3025.4	3025.4	3020.7	3025.4	3034.8	3030.1	3025.4	3034.8
5°	3039.5	3034.8	3034.8	3034.8	3039.5	3034.8	3039.5	3053.6	3044.2	3044.2	3053.6
7.5°	3063.0	3058.3	3063.0	3058.3	3058.3	3058.3	3063.0	3077.2	3072.4	3077.2	3091.4
10°	3091.4	3091.4	3091.4	3091.4	3091.4	3091.4	3100.8	3110.2	3114.9	3119.6	3138.4
12.5°	3176.2	3176.2	3176.2	3171.5	3171.5	3157.3	3176.2	3185.6	3195.0	3204.4	3218.6
15°	3355.2	3355.2	3350.5	3331.6	3331.6	3303.4	3308.1	3312.8	3312.8	3322.2	3331.6
17.5°	3590.9	3586.2	3576.7	3562.5	3543.7	3510.8	3501.4	3491.8	3477.7	3473.0	3473.0
20°	3920.7	3916.0	3897.1	3859.5	3835.9	3784.1	3746.4	3708.6	3694.5	3671.0	3666.3
22.5°	4391.9	4391.9	4354.3	4297.7	4278.9	4170.5	4062.0	3981.9	3953.7	3920.7	3920.7
25°	4962.1	4957.4	4905.6	4839.6	4759.5	4646.4	4514.5	4406.1	4335.4	4260.0	4231.7
27.5°	5645.5	5631.3	5560.7	5480.6	5329.7	5188.3	5032.8	4919.8	4797.2	4703.0	4618.1
30°	6446.5	6432.4	6309.9	6159.1	6003.6	5862.2	5636.0	5499.4	5306.1	5193.0	5098.8
32.5°	7374.9	7360.7	7139.3	6993.2	6828.3	6653.9	6385.3	6168.5	5923.5	5763.3	5631.3
35°	8557.7	8501.1	8185.4	7982.8	7723.6	7549.3	7266.5	6974.4	6686.9	6460.7	6267.5
37.5°	9834.8	9768.8	9490.7	9189.2	8934.7	8722.6	8322.1	7954.6	7615.3	7304.2	7063.9
40°	11168.4	10994.1	10697.1	10475.6	10301.3	10098.7	9679.3	9292.8	8760.3	8411.6	8048.8
42.5°	12092.0	11922.4	11715.0	11569.0	11484.1	11328.6	11093.0	10758.4	10282.4	10291.9	9335.2
45°	12699.9	12450.1	12308.8	12318.2	12351.2	12351.2	12308.8	12256.9	12049.5	12190.9	11389.8
47.5°	12483.2	12318.2	12228.7	12417.2	12652.8	12888.4	13161.7	13458.6	13797.9	14198.5	13213.6
50°	11210.8	11272.0	11314.4	11715.0	12219.2	12756.4	13383.2	14193.7	15140.9	15324.7	14848.7
52.5°	9179.8	9311.7	9453.1	10065.6	10730.1	11658.5	12756.4	14094.7	15367.1	16116.4	16069.2
55°	7129.9	7294.8	7596.3	8053.5	8581.2	9457.8	10814.9	12879.0	14862.9	16055.1	16780.8
57.5°	5075.3	5315.6	5711.4	6347.6	6814.1	7308.9	8312.7	10602.9	12775.3	14994.8	16663.1
60°	3374.1	3487.1	3746.4	4538.0	5325.0	5843.4	6555.0	7384.3	9160.9	12219.2	15447.3
62.5°	2393.9	2469.3	2629.5	2987.6	3699.2	4637.0	5065.9	5447.5	6017.7	7860.3	12403.0
63°	2261.9	2327.9	2459.9	2761.5	3402.3	4373.1	4811.3	5160.1	5574.8	7030.8	11733.9
65°	1875.6	1903.8	1974.5	2120.6	2464.6	3270.4	3986.6	4198.7	4269.4	4519.2	7351.3
67.5°	1583.3	1602.2	1625.8	1668.2	1804.9	2177.1	2973.5	3242.1	3162.0	2992.3	3633.2
70°	1376.0	1390.2	1427.8	1479.7	1526.9	1621.1	2045.2	2445.8	2356.2	2125.3	2224.2
72.5°	1098.0	1121.6	1163.9	1253.5	1347.7	1470.3	1573.9	1823.7	1767.1	1545.7	1569.2
75°	867.1	881.2	918.9	984.9	1074.4	1215.8	1418.4	1503.2	1347.7	1140.4	1140.4
77.5°	688.0	702.2	735.1	787.0	843.5	942.4	1083.8	1305.3	1211.1	857.6	852.9
80°	518.3	532.5	565.5	612.6	669.1	739.8	824.7	923.6	1112.2	801.1	640.9
82.5°	381.7	386.4	442.9	476.0	494.8	551.4	622.1	678.6	763.4	739.8	570.2
85°	287.4	282.7	320.5	344.0	348.7	362.8	405.3	461.9	499.5	480.7	442.9
87.5°	160.2	141.4	164.9	188.5	188.5	193.2	202.6	235.6	268.6	259.2	235.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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

CANDELA DISTRIBUTION (continued):

	55°	60°	64°	65°	70°	75°	80°	85°	90°	95°	100°
0°	3048.9	3048.9	3048.9	3048.9	3048.9	3048.9	3048.9	3048.9	3048.9	3048.9	3048.9
2.5°	3034.8	3034.8	3030.1	3030.1	3034.8	3034.8	3030.1	3044.2	3053.6	3053.6	3058.3
5°	3048.9	3053.6	3048.9	3048.9	3053.6	3053.6	3058.3	3072.4	3086.7	3096.1	3110.2
7.5°	3091.4	3096.1	3091.4	3091.4	3096.1	3100.8	3110.2	3129.0	3138.4	3157.3	3180.9
10°	3138.4	3143.1	3138.4	3143.1	3147.9	3152.6	3166.7	3180.9	3195.0	3213.8	3251.6
12.5°	3223.3	3228.0	3218.6	3223.3	3237.4	3237.4	3246.8	3256.3	3279.8	3303.4	3341.1
15°	3341.1	3341.1	3331.6	3336.4	3350.5	3350.5	3355.2	3364.7	3392.9	3421.2	3458.9
17.5°	3477.7	3487.1	3482.4	3487.1	3496.5	3501.4	3501.4	3510.8	3529.6	3548.4	3586.2
20°	3661.6	3666.3	3656.8	3666.3	3675.7	3666.3	3656.8	3652.1	3661.6	3671.0	3713.4
22.5°	3911.3	3906.5	3883.0	3883.0	3883.0	3864.2	3840.6	3812.3	3812.3	3798.2	3831.2
25°	4208.2	4194.0	4161.1	4165.8	4132.7	4104.5	4062.0	4019.7	3981.9	3967.8	3972.5
27.5°	4556.8	4528.6	4495.7	4486.2	4453.2	4401.3	4330.7	4250.6	4189.3	4142.2	4132.7
30°	4995.2	4933.9	4877.3	4867.9	4816.1	4731.2	4618.1	4509.8	4406.1	4326.0	4297.7
32.5°	5513.5	5419.3	5329.7	5320.3	5235.5	5122.3	4985.8	4834.9	4684.1	4556.8	4495.7
35°	6121.4	5980.1	5895.2	5871.6	5749.1	5607.7	5456.9	5263.7	5051.6	4872.6	4759.5
37.5°	6861.2	6715.2	6569.1	6573.8	6404.2	6239.2	6036.5	5800.9	5532.3	5282.6	5122.3
40°	7775.4	7568.1	7379.6	7337.2	7191.1	6960.2	6738.7	6465.4	6135.6	5805.7	5574.8
42.5°	8882.9	8543.6	8284.4	8246.7	8053.5	7770.7	7502.1	7139.3	6804.7	6404.2	6126.1
45°	10141.0	9599.2	9288.1	9231.6	8920.5	8633.1	8308.0	7921.5	7511.5	7059.2	6729.3
47.5°	11705.6	10932.8	10404.9	10310.7	9881.9	9504.8	9165.6	8736.8	8246.7	7742.5	7379.6
50°	13529.2	12388.9	11677.3	11531.2	10956.3	10513.4	10079.9	9542.6	9019.6	8491.7	8072.3
52.5°	15357.7	14132.5	13185.3	13006.2	12158.0	11564.3	10994.1	10456.8	9839.5	9316.4	8840.4
55°	16828.0	16012.8	14914.7	14664.9	13449.1	12643.4	11894.1	11281.5	10668.9	10254.2	9693.4
57.5°	17713.9	17671.5	16804.4	16460.4	14796.9	13604.6	12770.6	12073.2	11479.3	11305.0	10560.4
60°	17690.3	18788.3	18416.0	18156.9	16158.8	14589.5	13505.7	12751.7	12261.6	12459.5	11432.3
62.5°	16611.2	18835.4	19283.1	19212.4	17610.2	15381.3	14108.9	13331.4	13072.2	13661.2	12337.1
63°	16220.0	18727.1	19320.8	19292.5	17888.2	15532.1	14212.6	13444.4	13232.4	13967.6	12502.0
65°	13708.4	17779.9	18863.7	18991.0	18486.7	16050.4	14452.9	13731.9	13708.4	14650.8	12893.1
67.5°	8355.1	15023.2	16804.4	17049.4	17643.2	16215.3	14316.3	13633.0	13972.3	14749.8	12775.3
70°	3572.0	9914.8	13505.7	13901.6	15353.0	15395.4	13925.1	13227.7	13911.0	13977.0	11936.5
72.5°	2115.9	4674.7	9193.9	10056.2	12148.6	13246.5	13029.7	12520.8	13105.1	12275.8	10164.7
75°	1498.5	2186.6	4670.0	5588.9	8458.8	10112.8	10946.9	11182.5	11159.0	9735.8	7629.4
77.5°	1074.4	1404.3	1969.8	2323.2	4721.8	6493.7	7511.5	8199.6	7978.1	6517.2	4703.0
80°	749.3	970.8	1206.4	1281.8	2191.3	3336.4	3958.4	4260.0	4128.0	3256.3	2106.5
82.5°	542.0	636.2	777.5	824.7	1102.7	1541.0	1833.1	1616.4	1550.4	1201.7	909.5
85°	419.4	410.0	485.4	504.2	645.6	805.8	824.7	640.9	560.8	499.5	508.9
87.5°	296.9	254.5	259.2	268.6	334.6	428.8	419.4	263.9	226.2	240.3	273.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	3048.9	3048.9	3048.9	3048.9	3048.9	3048.9	3048.9	3048.9	3048.9	3048.9	3048.9
2.5°	3067.7	3072.4	3081.9	3086.7	3096.1	3096.1	3105.5	3110.2	3119.6	3129.0	3133.7
5°	3124.3	3138.4	3157.3	3166.7	3185.6	3199.7	3218.6	3228.0	3246.8	3261.0	3279.8
7.5°	3209.1	3232.7	3256.3	3284.5	3312.8	3336.4	3355.2	3378.8	3411.7	3435.4	3449.5
10°	3289.3	3322.2	3364.7	3397.6	3440.1	3473.0	3501.4	3543.7	3581.5	3614.4	3633.2
12.5°	3392.9	3435.4	3477.7	3529.6	3586.2	3628.5	3671.0	3727.5	3779.3	3817.0	3835.9
15°	3515.5	3567.2	3614.4	3675.7	3741.6	3798.2	3859.5	3920.7	3958.4	3958.4	3949.0
17.5°	3642.7	3685.1	3741.6	3812.3	3901.8	3972.5	4005.6	4015.0	4000.9	3967.8	3944.3
20°	3769.9	3807.6	3868.9	3953.7	4047.9	4062.0	4029.1	3986.6	3944.3	3887.7	3850.0
22.5°	3873.6	3925.5	4019.7	4118.6	4123.3	4043.2	3953.7	3883.0	3817.0	3751.1	3680.4
25°	3996.2	4066.8	4194.0	4231.7	4109.2	3958.4	3831.2	3727.5	3619.1	3510.8	3430.7
27.5°	4146.9	4250.6	4377.8	4269.4	4029.1	3817.0	3642.7	3487.1	3345.8	3195.0	3105.5
30°	4307.1	4467.3	4495.7	4212.9	3892.4	3619.1	3383.5	3147.9	2968.8	2832.1	2780.3
32.5°	4500.4	4707.7	4538.0	4113.9	3708.6	3350.5	3034.8	2752.0	2601.3	2516.5	2492.8
35°	4792.5	4962.1	4561.6	4010.3	3496.5	3030.1	2634.2	2408.0	2313.8	2257.2	2229.0
37.5°	5211.9	5207.2	4556.8	3883.0	3251.6	2681.4	2313.8	2153.5	2078.1	2031.1	1979.2
40°	5702.0	5395.7	4528.6	3699.2	2921.6	2346.8	2092.3	1941.5	1870.8	1814.3	1753.0
42.5°	6187.4	5522.9	4448.5	3425.9	2511.8	2106.5	1932.0	1795.4	1720.0	1658.7	1573.9
45°	6606.7	5574.8	4293.0	3048.9	2144.1	1917.9	1828.4	1710.6	1621.1	1526.9	1460.9
47.5°	6936.6	5565.4	4043.2	2606.0	1899.1	1786.0	1743.6	1663.5	1555.1	1437.2	1352.4
50°	7214.7	5494.7	3703.9	2214.8	1734.2	1668.2	1654.0	1630.5	1456.2	1357.1	1305.3
52.5°	7469.2	5391.0	3341.1	1951.0	1592.8	1536.3	1564.5	1541.0	1418.4	1333.6	1281.8
55°	7817.9	5320.3	2982.9	1748.3	1427.8	1413.7	1437.2	1470.3	1394.9	1314.8	1258.2
57.5°	8227.8	5358.0	2709.6	1522.2	1272.3	1281.8	1361.9	1409.0	1371.3	1286.5	1229.9
60°	8699.1	5471.0	2469.3	1305.3	1145.1	1168.7	1286.5	1352.4	1347.7	1248.8	1182.8
62.5°	9226.9	5588.9	2087.6	1140.4	1036.8	1074.4	1197.0	1281.8	1295.9	1211.1	1131.0
63°	9330.5	5598.3	1988.6	1107.4	1017.8	1060.3	1173.4	1262.9	1281.8	1201.7	1121.6
65°	9585.0	5513.5	1602.2	1017.8	942.4	989.6	1102.7	1182.8	1220.5	1149.8	1083.8
67.5°	9373.0	4820.8	1206.4	909.5	881.2	914.2	1013.1	1088.5	1121.6	1088.5	1022.5
70°	8571.8	3506.1	942.4	810.5	815.3	838.8	914.2	984.9	1022.5	1013.1	951.9
72.5°	6903.7	1988.6	787.0	725.7	739.8	768.1	820.0	886.0	918.9	914.2	871.8
75°	4547.4	1017.8	664.4	650.3	659.7	683.3	721.0	772.8	810.5	805.8	787.0
77.5°	2252.5	706.9	570.2	574.9	579.6	598.4	626.8	673.9	697.4	702.2	697.4
80°	928.3	551.4	490.1	494.8	499.5	513.6	532.5	574.9	589.0	598.4	603.2
82.5°	556.1	419.4	391.2	400.6	405.3	419.4	433.5	471.3	485.4	499.5	499.5
85°	367.5	292.2	282.7	292.2	301.6	311.0	315.7	339.3	362.8	381.7	391.2
87.5°	197.9	174.3	169.6	174.3	174.3	183.8	193.2	216.8	245.0	263.9	273.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	3048.9	3048.9	3048.9	3048.9	3048.9
2.5°	3124.3	3129.0	3124.3	3129.0	3133.7
5°	3279.8	3289.3	3284.5	3284.5	3303.4
7.5°	3458.9	3477.7	3477.7	3487.1	3496.5
10°	3652.1	3671.0	3685.1	3685.1	3699.2
12.5°	3845.3	3854.8	3868.9	3868.9	3868.9
15°	3944.3	3939.6	3934.9	3930.2	3930.2
17.5°	3930.2	3911.3	3901.8	3892.4	3897.1
20°	3826.4	3793.5	3784.1	3769.9	3779.3
22.5°	3647.4	3600.3	3581.5	3557.8	3567.2
25°	3378.8	3322.2	3312.8	3284.5	3298.7
27.5°	3067.7	3039.5	3034.8	3030.1	3053.6
30°	2775.6	2785.0	2789.7	2799.2	2822.7
32.5°	2506.9	2525.9	2530.6	2535.3	2568.2
35°	2243.1	2219.5	2243.1	2233.7	2261.9
37.5°	1955.7	1936.8	1917.9	1894.4	1913.2
40°	1715.3	1682.3	1625.8	1597.5	1602.2
42.5°	1526.9	1484.4	1437.2	1409.0	1409.0
45°	1404.3	1352.4	1310.1	1291.2	1291.2
47.5°	1310.1	1286.5	1262.9	1248.8	1248.8
50°	1272.3	1244.1	1229.9	1220.5	1220.5
52.5°	1244.1	1215.8	1201.7	1192.2	1182.8
55°	1220.5	1178.1	1163.9	1159.2	1159.2
57.5°	1187.5	1149.8	1131.0	1126.3	1126.3
60°	1135.7	1107.4	1088.5	1083.8	1083.8
62.5°	1083.8	1055.6	1036.8	1036.8	1036.8
63°	1074.4	1041.5	1027.3	1027.3	1027.3
65°	1032.1	999.0	984.9	984.9	980.2
67.5°	975.5	942.4	933.0	933.0	923.6
70°	909.5	881.2	871.8	876.5	857.6
72.5°	843.5	815.3	801.1	801.1	782.3
75°	768.1	739.8	721.0	716.3	697.4
77.5°	683.3	659.7	640.9	622.1	612.6
80°	593.7	574.9	551.4	537.3	523.0
82.5°	499.5	480.7	466.6	485.4	414.7
85°	391.2	372.3	353.4	381.7	296.9
87.5°	287.4	278.0	259.2	226.2	197.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)