

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: P257953

Luminaire Tested: **ARCH-L-AF72-170-D-U-T2U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P257953
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-AF72-170-D-U-T2U
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 750mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22416.9 lumens
Efficiency: N/A
Efficacy: 129.6 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G3

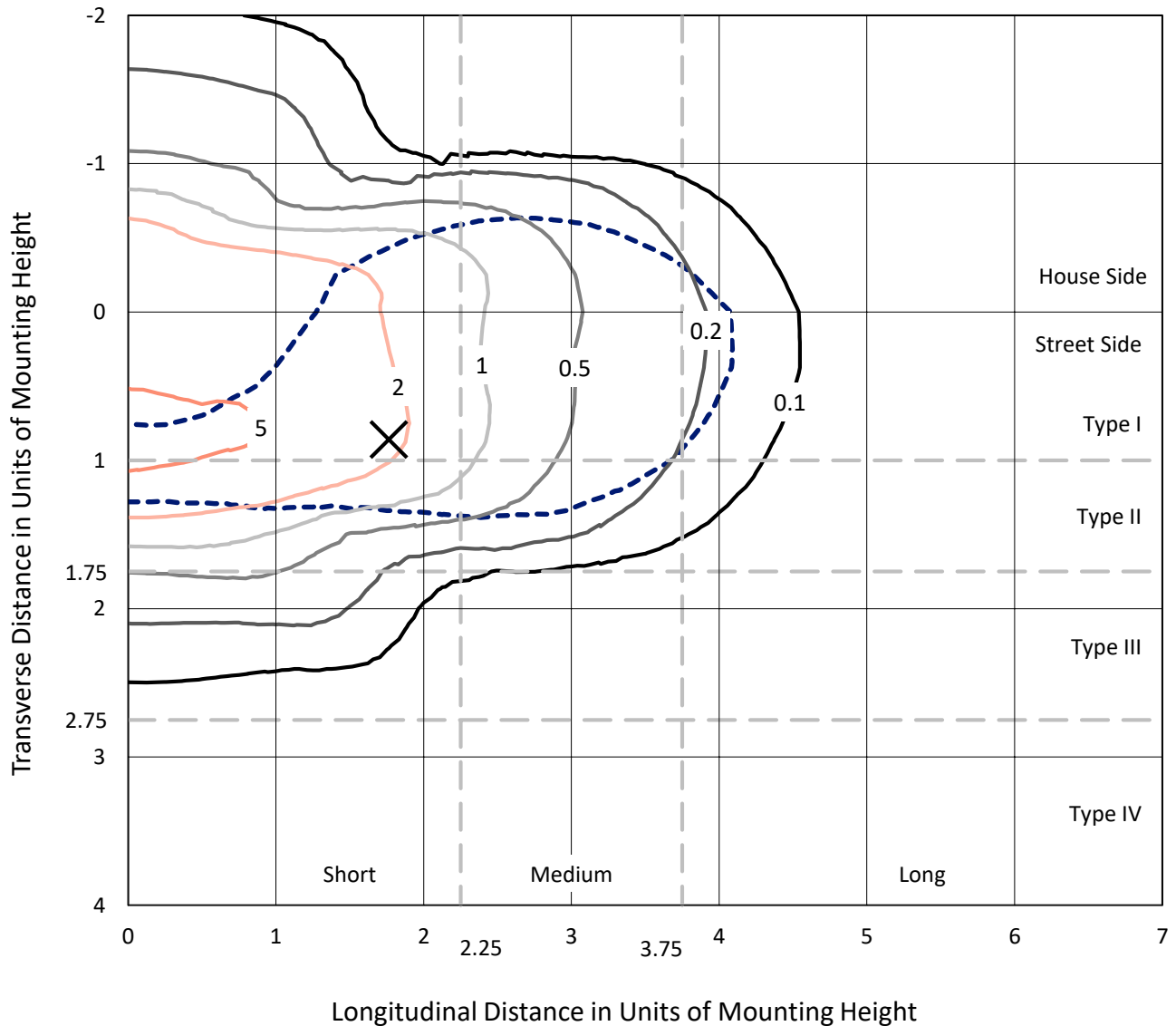
Input Watts (W): 173
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

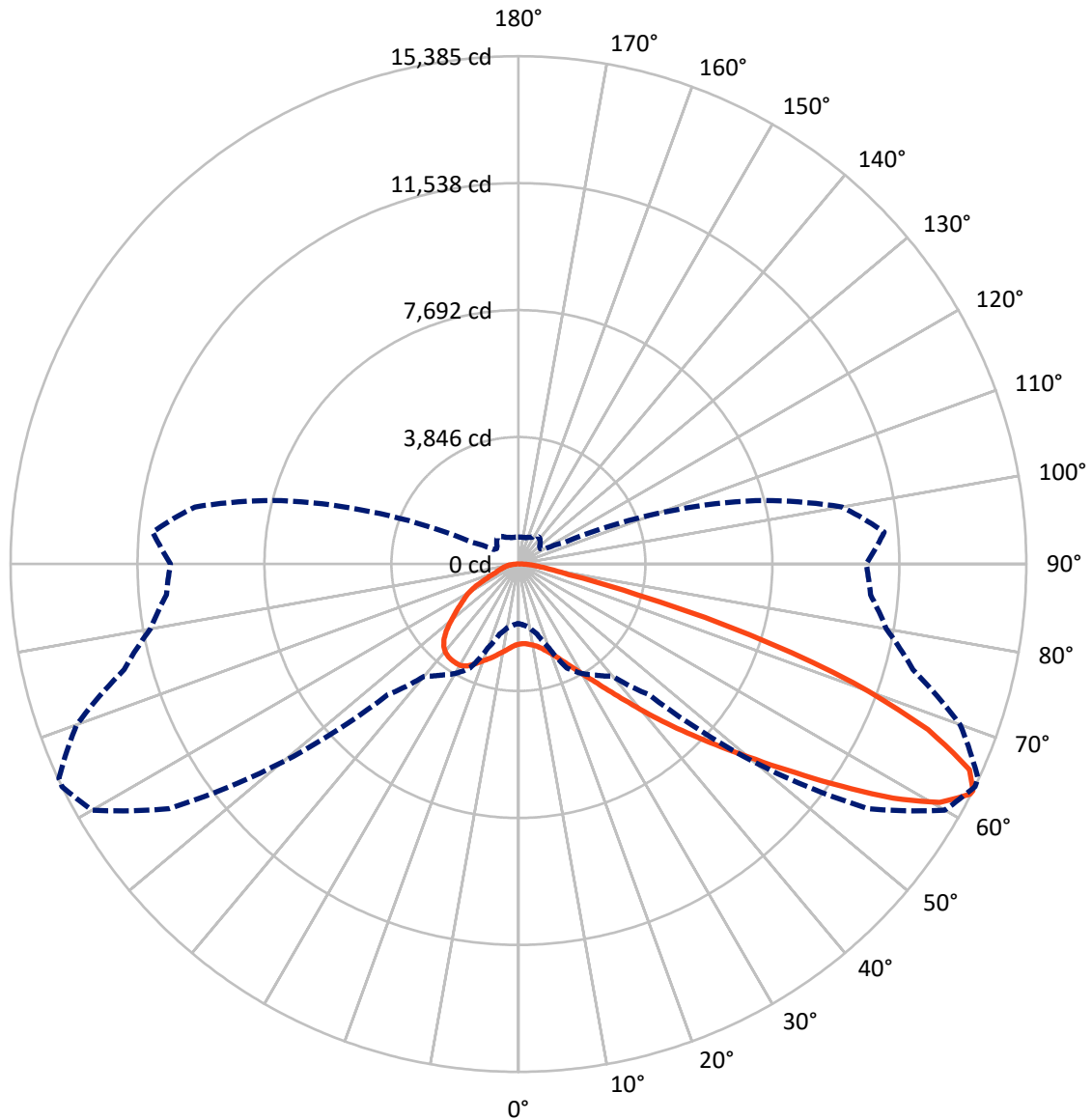
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.3 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	6589.8	0.0	6589.8
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	15827.2	0.0	15827.2
	% Fixture	70.6	0.0	70.6
Total	Lumens	22416.9	0.0	22416.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	242.4	1.1
10°-20°	807.3	3.6
20°-30°	1515.5	6.8
30°-40°	2540.1	11.3
40°-50°	4261.8	19.0
50°-60°	5402.6	24.1
60°-70°	4765.9	21.3
70°-80°	2460.3	11.0
80°-90°	421.0	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°	22416.9	100.0
0°-180°	22416.9	100.0



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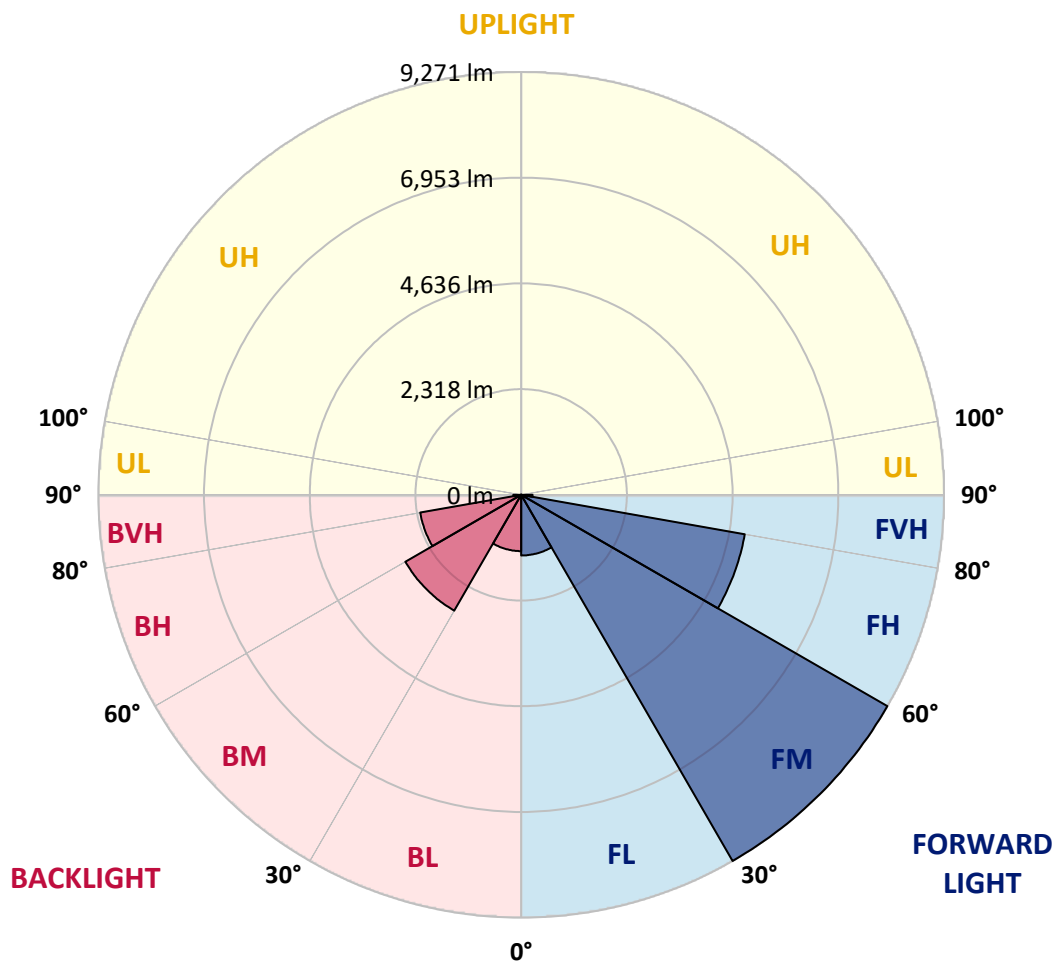
CATALOG NUMBER: ARCH-L-AF72-170-D-U-T2U

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1330.5	5.9			
FM	(30°-60°)	9271.1	41.4			
FH	(60°-80°)	4977.8	22.2			G2/5000
FVH	(80°-90°)	247.7	1.1			G3/500
BL	(0°-30°)	1234.7	5.5	B3/2500		
BM	(30°-60°)	2933.5	13.1	B3/5000		
BH	(60°-80°)	2248.4	10.0	B3/2500		G3/2500
BVH	(80°-90°)	173.2	0.8			G2/225
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 Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2427.8	2427.8	2427.8	2427.8	2427.8	2427.8	2427.8	2427.8	2427.8	2427.8	2427.8
2.5°	2412.7	2408.9	2408.9	2408.9	2408.9	2405.3	2408.9	2416.5	2412.7	2408.9	2416.5
5°	2420.2	2416.5	2416.5	2416.5	2420.2	2416.5	2420.2	2431.5	2424.0	2424.0	2431.5
7.5°	2439.0	2435.2	2439.0	2435.2	2435.2	2435.2	2439.0	2450.3	2446.5	2450.3	2461.5
10°	2461.5	2461.5	2461.5	2461.5	2461.5	2461.5	2469.0	2476.6	2480.2	2484.0	2499.1
12.5°	2529.0	2529.0	2529.0	2525.3	2525.3	2514.0	2529.0	2536.6	2544.1	2551.5	2562.8
15°	2671.6	2671.6	2667.9	2652.9	2652.9	2630.4	2634.1	2637.9	2637.9	2645.4	2652.9
17.5°	2859.2	2855.5	2848.0	2836.7	2821.7	2795.5	2788.0	2780.5	2769.2	2765.4	2765.4
20°	3121.9	3118.2	3103.1	3073.1	3054.4	3013.1	2983.1	2953.1	2941.8	2923.1	2919.3
22.5°	3497.2	3497.2	3467.1	3422.1	3407.1	3320.8	3234.5	3170.7	3148.2	3121.9	3121.9
25°	3951.1	3947.5	3906.1	3853.7	3789.8	3699.8	3594.8	3508.4	3452.2	3392.1	3369.6
27.5°	4495.3	4484.0	4427.7	4363.9	4243.8	4131.3	4007.5	3917.4	3819.9	3744.8	3677.3
30°	5133.2	5121.9	5024.3	4904.2	4780.5	4667.8	4487.8	4378.9	4225.1	4135.1	4060.0
32.5°	5872.4	5861.1	5684.7	5568.4	5437.1	5298.3	5084.4	4911.8	4716.6	4589.1	4484.0
35°	6814.2	6769.2	6517.7	6356.4	6150.1	6011.2	5786.0	5553.4	5324.6	5144.4	4990.6
37.5°	7831.1	7778.5	7557.2	7317.0	7114.4	6945.5	6626.6	6333.9	6063.7	5816.1	5624.7
40°	8893.0	8754.1	8517.7	8341.3	8202.5	8041.2	7707.2	7399.5	6975.5	6697.9	6409.0
42.5°	9628.4	9493.4	9328.3	9211.9	9144.4	9020.6	8833.0	8566.5	8187.5	8195.1	7433.4
45°	10112.5	9913.6	9801.0	9808.6	9834.9	9834.9	9801.0	9759.8	9594.7	9707.2	9069.4
47.5°	9939.9	9808.6	9737.3	9887.3	10074.9	10262.5	10480.2	10716.6	10986.8	11305.8	10521.5
50°	8926.8	8975.6	9009.3	9328.3	9729.7	10157.5	10656.6	11302.0	12056.2	12202.5	11823.6
52.5°	7309.5	7414.6	7527.2	8014.9	8544.0	9283.2	10157.5	11223.2	12236.3	12832.9	12795.4
55°	5677.3	5808.6	6048.7	6412.7	6833.0	7530.9	8611.5	10255.1	11834.8	12784.1	13362.0
57.5°	4041.3	4232.6	4547.8	5054.4	5425.8	5819.9	6619.1	8442.7	10172.5	11939.9	13268.2
60°	2686.7	2776.7	2983.1	3613.5	4240.1	4652.9	5219.5	5879.9	7294.5	9729.7	12300.1
62.5°	1906.2	1966.2	2093.8	2379.0	2945.6	3692.2	4033.7	4337.7	4791.7	6258.8	9876.1
63°	1801.1	1853.7	1958.7	2198.8	2709.2	3482.1	3831.2	4108.8	4439.0	5598.4	9343.2
65°	1493.4	1515.9	1572.2	1688.6	1962.4	2604.1	3174.4	3343.3	3399.6	3598.4	5853.6
67.5°	1260.8	1275.8	1294.5	1328.3	1437.1	1733.6	2367.7	2581.6	2517.8	2382.8	2893.0
70°	1095.7	1106.9	1136.9	1178.2	1215.8	1290.8	1628.5	1947.5	1876.2	1692.3	1771.1
72.5°	874.3	893.0	926.8	998.1	1073.2	1170.8	1253.3	1452.2	1407.1	1230.7	1249.5
75°	690.4	701.6	731.7	784.2	855.5	968.1	1129.4	1197.0	1073.2	908.1	908.1
77.5°	547.8	559.1	585.3	626.7	671.7	750.4	863.1	1039.4	964.3	682.9	679.1
80°	412.8	424.0	450.3	487.8	532.9	589.1	656.6	735.5	885.6	637.9	510.4
82.5°	303.9	307.7	352.7	379.0	394.0	439.1	495.3	540.3	607.8	589.1	454.0
85°	228.9	225.2	255.1	273.9	277.6	288.9	322.7	367.8	397.7	382.7	352.7
87.5°	127.6	112.5	131.3	150.1	150.1	153.9	161.3	187.6	213.9	206.3	187.6
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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CANDELA DISTRIBUTION (continued):

	55°	60°	64°	65°	70°	75°	80°	85°	90°	95°	100°
0°	2427.8	2427.8	2427.8	2427.8	2427.8	2427.8	2427.8	2427.8	2427.8	2427.8	2427.8
2.5°	2416.5	2416.5	2412.7	2412.7	2416.5	2416.5	2412.7	2424.0	2431.5	2431.5	2435.2
5°	2427.8	2431.5	2427.8	2427.8	2431.5	2431.5	2435.2	2446.5	2457.7	2465.3	2476.6
7.5°	2461.5	2465.3	2461.5	2461.5	2465.3	2469.0	2476.6	2491.5	2499.1	2514.0	2532.8
10°	2499.1	2502.8	2499.1	2502.8	2506.5	2510.3	2521.6	2532.8	2544.1	2559.1	2589.1
12.5°	2566.6	2570.4	2562.8	2566.6	2577.8	2577.8	2585.3	2592.9	2611.6	2630.4	2660.4
15°	2660.4	2660.4	2652.9	2656.6	2667.9	2667.9	2671.6	2679.1	2701.7	2724.2	2754.2
17.5°	2769.2	2776.7	2772.9	2776.7	2784.2	2788.0	2788.0	2795.5	2810.5	2825.5	2855.5
20°	2915.5	2919.3	2911.8	2919.3	2926.8	2919.3	2911.8	2908.0	2915.5	2923.1	2956.8
22.5°	3114.4	3110.7	3091.9	3091.9	3091.9	3076.9	3058.1	3035.6	3035.6	3024.4	3050.6
25°	3350.8	3339.5	3313.3	3317.0	3290.7	3268.2	3234.5	3200.7	3170.7	3159.5	3163.2
27.5°	3628.5	3606.0	3579.7	3572.2	3546.0	3504.6	3448.4	3384.5	3335.8	3298.3	3290.7
30°	3977.4	3928.6	3883.6	3876.2	3834.8	3767.3	3677.3	3591.0	3508.4	3444.6	3422.1
32.5°	4390.2	4315.1	4243.8	4236.3	4168.8	4078.8	3970.0	3849.9	3729.8	3628.5	3579.7
35°	4874.3	4761.7	4694.1	4675.4	4577.8	4465.3	4345.2	4191.3	4022.4	3879.8	3789.8
37.5°	5463.4	5347.1	5230.8	5234.4	5099.4	4968.1	4806.7	4619.1	4405.2	4206.4	4078.8
40°	6191.3	6026.2	5876.1	5842.4	5726.1	5542.1	5365.8	5148.2	4885.5	4622.8	4439.0
42.5°	7073.1	6802.9	6596.6	6566.5	6412.7	6187.5	5973.7	5684.7	5418.4	5099.4	4878.0
45°	8075.0	7643.5	7395.8	7350.8	7103.2	6874.2	6615.3	6307.6	5981.2	5621.0	5358.3
47.5°	9320.7	8705.4	8285.1	8210.1	7868.6	7568.4	7298.2	6956.8	6566.5	6165.0	5876.1
50°	10772.9	9864.8	9298.2	9181.9	8724.1	8371.4	8026.2	7598.5	7181.9	6761.7	6427.7
52.5°	12228.8	11253.2	10499.0	10356.4	9681.0	9208.2	8754.1	8326.4	7834.8	7418.3	7039.3
55°	13399.5	12750.4	11876.0	11677.2	10709.1	10067.5	9470.8	8983.0	8495.2	8165.0	7718.5
57.5°	14105.0	14071.2	13380.7	13106.9	11782.2	10832.9	10168.7	9613.4	9140.7	9001.8	8409.0
60°	14086.1	14960.5	14664.0	14457.7	12866.7	11617.1	10754.1	10153.7	9763.6	9921.1	9103.1
62.5°	13226.9	14998.0	15354.5	15298.1	14022.4	12247.6	11234.5	10615.3	10408.9	10878.0	9823.6
63°	12915.5	14911.7	15384.5	15362.0	14243.8	12367.6	11317.0	10705.4	10536.5	11121.8	9954.8
65°	10915.5	14157.4	15020.5	15121.8	14720.4	12780.3	11508.3	10934.2	10915.5	11665.9	10266.3
67.5°	6652.9	11962.4	13380.7	13575.9	14048.7	12911.7	11399.6	10855.5	11125.6	11744.7	10172.5
70°	2844.2	7894.8	10754.1	11069.4	12225.1	12258.8	11088.1	10532.7	11076.8	11129.4	9504.6
72.5°	1684.8	3722.3	7320.7	8007.5	9673.4	10547.7	10375.2	9969.9	10435.2	9774.8	8093.7
75°	1193.3	1741.1	3718.5	4450.2	6735.4	8052.5	8716.7	8904.3	8885.5	7752.2	6075.0
77.5°	855.5	1118.2	1568.5	1849.9	3759.9	5170.7	5981.2	6529.0	6352.6	5189.4	3744.8
80°	596.6	772.9	960.6	1020.6	1744.8	2656.6	3151.9	3392.1	3287.0	2592.9	1677.3
82.5°	431.5	506.6	619.1	656.6	878.0	1227.0	1459.6	1287.1	1234.5	956.9	724.1
85°	334.0	326.4	386.5	401.5	514.0	641.6	656.6	510.4	446.5	397.7	405.3
87.5°	236.4	202.6	206.3	213.9	266.4	341.5	334.0	210.1	180.1	191.4	217.7
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°	2427.8	2427.8	2427.8	2427.8	2427.8	2427.8	2427.8	2427.8	2427.8	2427.8	2427.8
2.5°	2442.7	2446.5	2454.1	2457.7	2465.3	2465.3	2472.8	2476.6	2484.0	2491.5	2495.3
5°	2487.8	2499.1	2514.0	2521.6	2536.6	2547.9	2562.8	2570.4	2585.3	2596.6	2611.6
7.5°	2555.3	2574.1	2592.9	2615.4	2637.9	2656.6	2671.6	2690.4	2716.7	2735.5	2746.7
10°	2619.2	2645.4	2679.1	2705.4	2739.2	2765.4	2788.0	2821.7	2851.8	2878.1	2893.0
12.5°	2701.7	2735.5	2769.2	2810.5	2855.5	2889.3	2923.1	2968.1	3009.3	3039.4	3054.4
15°	2799.2	2840.5	2878.1	2926.8	2979.3	3024.4	3073.1	3121.9	3151.9	3151.9	3144.4
17.5°	2900.6	2934.3	2979.3	3035.6	3106.9	3163.2	3189.5	3196.9	3185.7	3159.5	3140.7
20°	3001.8	3031.8	3080.6	3148.2	3223.2	3234.5	3208.2	3174.4	3140.7	3095.7	3065.7
22.5°	3084.4	3125.6	3200.7	3279.5	3283.3	3219.5	3148.2	3091.9	3039.4	2986.8	2930.5
25°	3182.0	3238.3	3339.5	3369.6	3272.0	3151.9	3050.6	2968.1	2881.8	2795.5	2731.7
27.5°	3302.1	3384.5	3485.9	3399.6	3208.2	3039.4	2900.6	2776.7	2664.2	2544.1	2472.8
30°	3429.6	3557.2	3579.7	3354.6	3099.4	2881.8	2694.1	2506.5	2363.9	2255.1	2213.9
32.5°	3583.5	3748.6	3613.5	3275.8	2953.1	2667.9	2416.5	2191.4	2071.3	2003.8	1984.9
35°	3816.1	3951.1	3632.2	3193.2	2784.2	2412.7	2097.6	1917.4	1842.3	1797.3	1774.8
37.5°	4150.0	4146.3	3628.5	3091.9	2589.1	2135.1	1842.3	1714.8	1654.7	1617.3	1576.0
40°	4540.3	4296.4	3606.0	2945.6	2326.4	1868.6	1666.0	1546.0	1489.6	1444.6	1395.8
42.5°	4926.7	4397.7	3542.2	2727.9	2000.0	1677.3	1538.4	1429.7	1369.6	1320.8	1253.3
45°	5260.7	4439.0	3418.4	2427.8	1707.3	1527.2	1455.9	1362.1	1290.8	1215.8	1163.2
47.5°	5523.4	4431.5	3219.5	2075.1	1512.2	1422.1	1388.3	1324.5	1238.3	1144.5	1077.0
50°	5744.8	4375.2	2949.3	1763.6	1380.9	1328.3	1317.0	1298.3	1159.5	1080.6	1039.4
52.5°	5947.4	4292.6	2660.4	1553.5	1268.3	1223.2	1245.7	1227.0	1129.4	1061.9	1020.6
55°	6225.1	4236.3	2375.2	1392.1	1136.9	1125.7	1144.5	1170.8	1110.7	1046.9	1001.9
57.5°	6551.5	4266.4	2157.6	1212.0	1013.1	1020.6	1084.4	1122.0	1091.9	1024.4	979.4
60°	6926.8	4356.4	1966.2	1039.4	911.9	930.6	1024.4	1077.0	1073.2	994.4	941.8
62.5°	7347.0	4450.2	1662.3	908.1	825.5	855.5	953.1	1020.6	1031.9	964.3	900.6
63°	7429.6	4457.7	1583.4	881.8	810.5	844.2	934.4	1005.7	1020.6	956.9	893.0
65°	7632.2	4390.2	1275.8	810.5	750.4	788.0	878.0	941.8	971.8	915.5	863.1
67.5°	7463.3	3838.6	960.6	724.1	701.6	727.9	806.7	866.7	893.0	866.7	814.3
70°	6825.4	2791.7	750.4	645.4	649.2	667.9	727.9	784.2	814.3	806.7	758.0
72.5°	5497.1	1583.4	626.7	577.9	589.1	611.6	652.9	705.4	731.7	727.9	694.2
75°	3620.9	810.5	529.1	517.8	525.3	544.1	574.1	615.4	645.4	641.6	626.7
77.5°	1793.6	562.8	454.0	457.8	461.6	476.6	499.1	536.5	555.4	559.1	555.4
80°	739.2	439.1	390.3	394.0	397.7	409.0	424.0	457.8	469.0	476.6	480.3
82.5°	442.7	334.0	311.5	319.0	322.7	334.0	345.2	375.2	386.5	397.7	397.7
85°	292.7	232.6	225.2	232.6	240.2	247.7	251.4	270.2	288.9	303.9	311.5
87.5°	157.6	138.8	135.1	138.8	138.8	146.4	153.9	172.6	195.1	210.1	217.7
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°	2427.8	2427.8	2427.8	2427.8	2427.8
2.5°	2487.8	2491.5	2487.8	2491.5	2495.3
5°	2611.6	2619.2	2615.4	2615.4	2630.4
7.5°	2754.2	2769.2	2769.2	2776.7	2784.2
10°	2908.0	2923.1	2934.3	2934.3	2945.6
12.5°	3061.9	3069.4	3080.6	3080.6	3080.6
15°	3140.7	3137.0	3133.2	3129.4	3129.4
17.5°	3129.4	3114.4	3106.9	3099.4	3103.1
20°	3046.9	3020.6	3013.1	3001.8	3009.3
22.5°	2904.3	2866.7	2851.8	2833.0	2840.5
25°	2690.4	2645.4	2637.9	2615.4	2626.6
27.5°	2442.7	2420.2	2416.5	2412.7	2431.5
30°	2210.1	2217.7	2221.3	2228.9	2247.6
32.5°	1996.2	2011.2	2015.0	2018.8	2045.0
35°	1786.1	1767.4	1786.1	1778.6	1801.1
37.5°	1557.2	1542.2	1527.2	1508.4	1523.5
40°	1365.8	1339.6	1294.5	1272.0	1275.8
42.5°	1215.8	1182.0	1144.5	1122.0	1122.0
45°	1118.2	1077.0	1043.1	1028.2	1028.2
47.5°	1043.1	1024.4	1005.7	994.4	994.4
50°	1013.1	990.6	979.4	971.8	971.8
52.5°	990.6	968.1	956.9	949.3	941.8
55°	971.8	938.0	926.8	923.1	923.1
57.5°	945.6	915.5	900.6	896.8	896.8
60°	904.3	881.8	866.7	863.1	863.1
62.5°	863.1	840.6	825.5	825.5	825.5
63°	855.5	829.3	818.1	818.1	818.1
65°	821.7	795.4	784.2	784.2	780.5
67.5°	776.7	750.4	743.0	743.0	735.5
70°	724.1	701.6	694.2	698.0	682.9
72.5°	671.7	649.2	637.9	637.9	622.9
75°	611.6	589.1	574.1	570.4	555.4
77.5°	544.1	525.3	510.4	495.3	487.8
80°	472.8	457.8	439.1	427.8	416.5
82.5°	397.7	382.7	371.4	386.5	330.2
85°	311.5	296.5	281.4	303.9	236.4
87.5°	228.9	221.4	206.3	180.1	157.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)