

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: P239131

Luminaire Tested: **ARCH-AF16-60-D-U-T2U-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239131
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-AF16-60-D-U-T2U-7050
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 1160mA LIGHT ENGINE WITH 16 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6705 lumens
Efficiency: N/A
Efficacy: 106.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G2

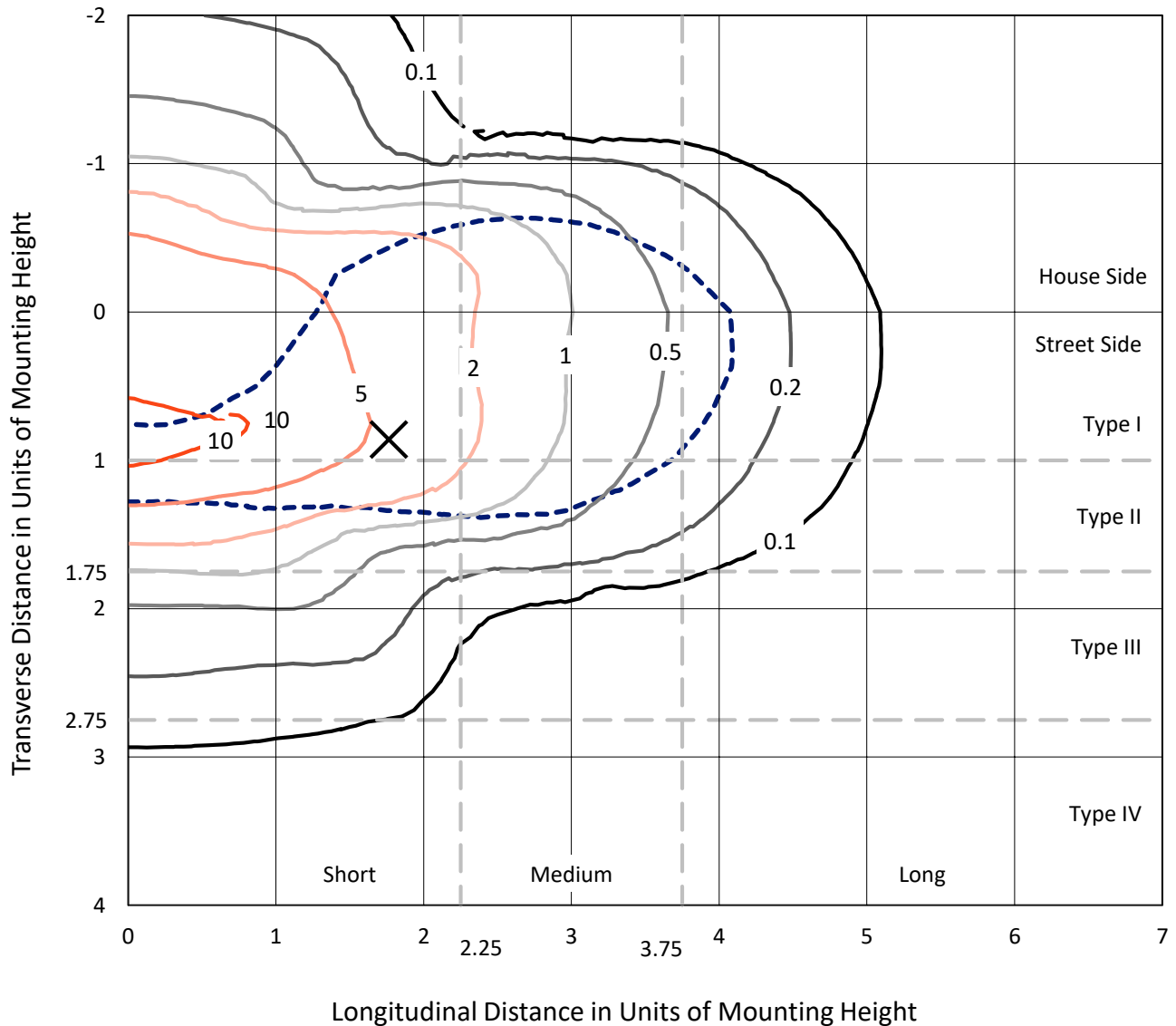
Input Watts (W): 63
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

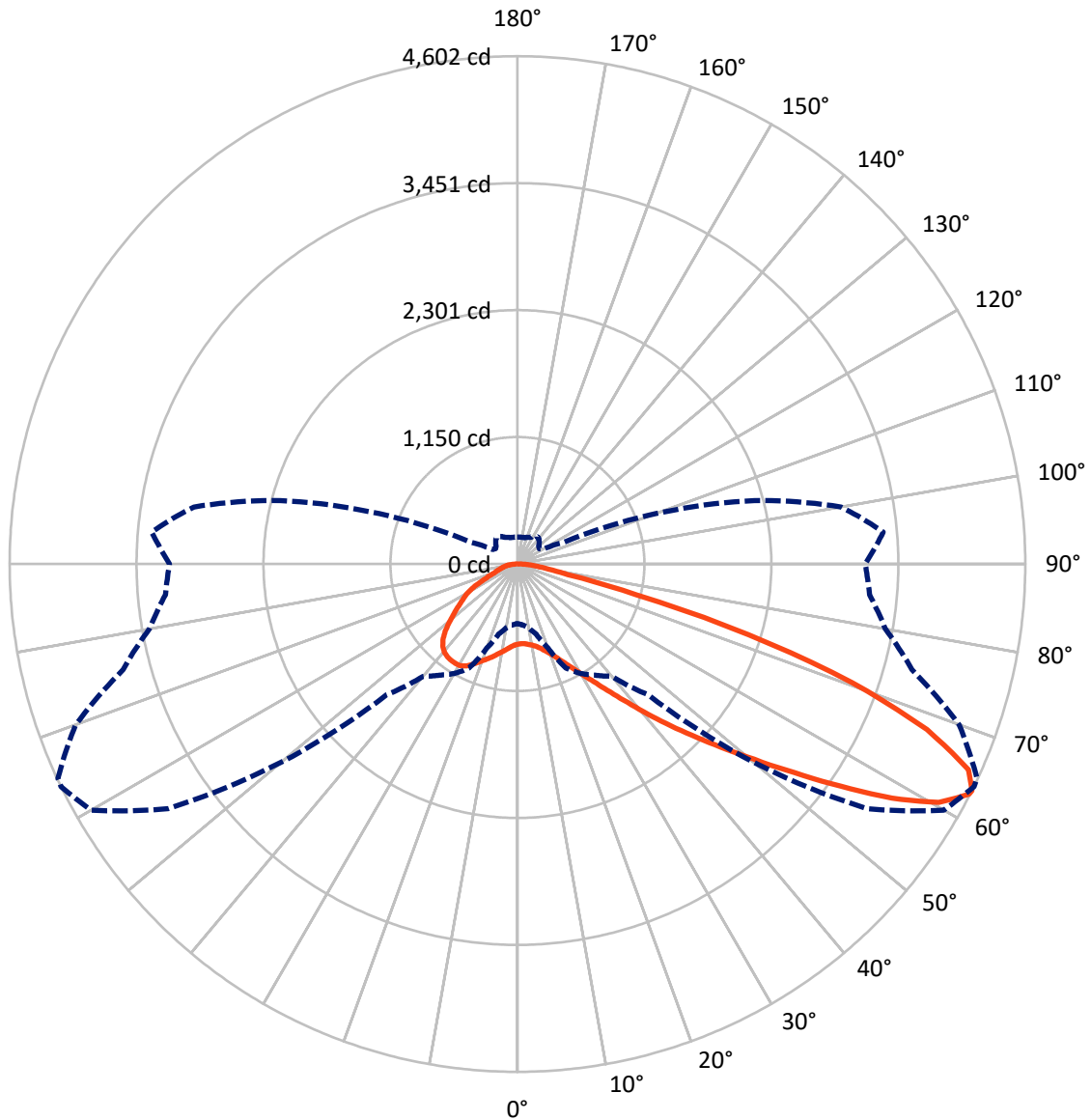
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 11.8 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	1971.0	0.0	1971.0
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	4734.0	0.0	4734.0
	% Fixture	70.6	0.0	70.6
Total	Lumens	6705.0	0.0	6705.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.5	1.1
10°-20°	241.5	3.6
20°-30°	453.3	6.8
30°-40°	759.8	11.3
40°-50°	1274.7	19.0
50°-60°	1615.9	24.1
60°-70°	1425.5	21.3
70°-80°	735.9	11.0
80°-90°	125.9	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°	6705.0	100.0
0°-180°	6705.0	100.0



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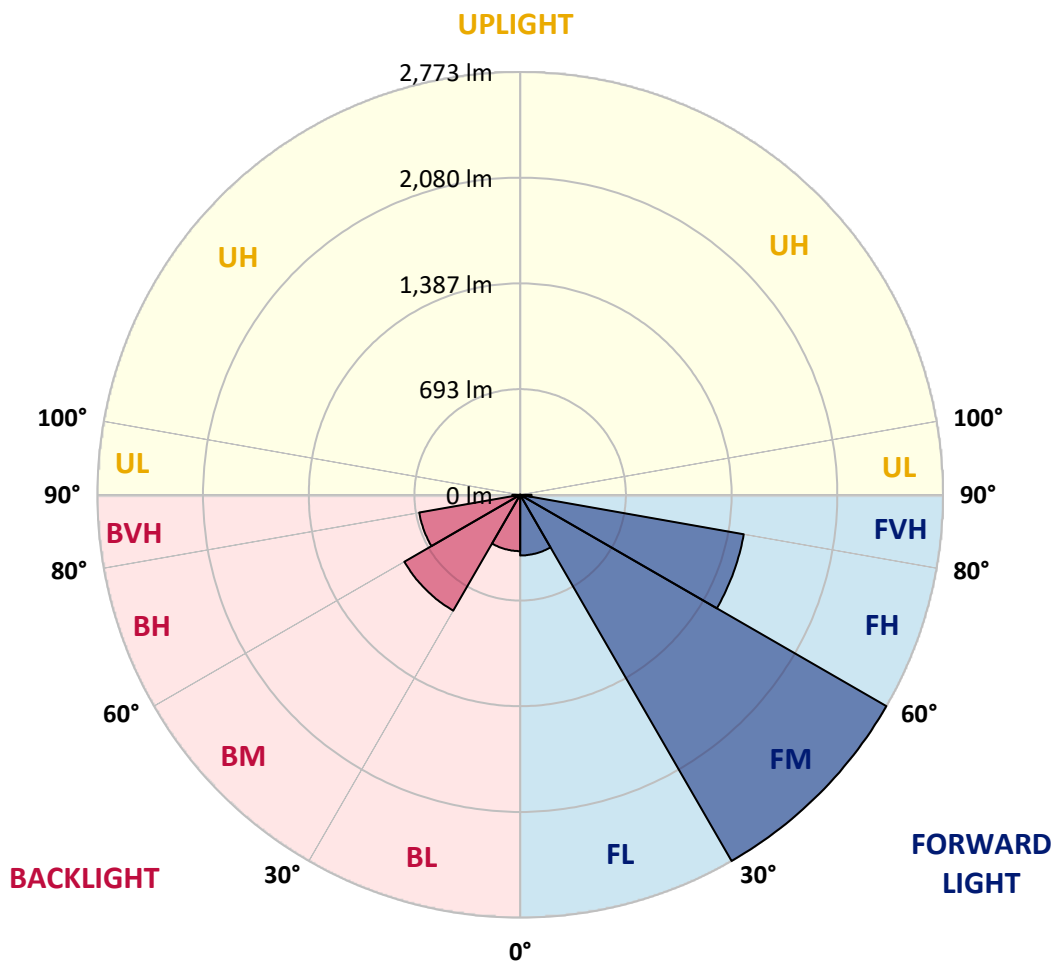
CATALOG NUMBER: ARCH-AF16-60-D-U-T2U-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	398.0	5.9			
FM	(30°-60°)	2773.0	41.4			
FH	(60°-80°)	1488.9	22.2			G1/1800
FVH	(80°-90°)	74.1	1.1			G1/100
BL	(0°-30°)	369.3	5.5	B1/500		
BM	(30°-60°)	877.4	13.1	B1/1000		
BH	(60°-80°)	672.5	10.0	B2/1000		G2/1000
BVH	(80°-90°)	51.8	0.8			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	726.1	726.1	726.1	726.1	726.1	726.1	726.1	726.1	726.1	726.1	726.1
2.5°	721.7	720.5	720.5	720.5	720.5	719.4	720.5	722.8	721.7	720.5	722.8
5°	723.9	722.8	722.8	722.8	723.9	722.8	723.9	727.3	725.0	725.0	727.3
7.5°	729.5	728.4	729.5	728.4	728.4	728.4	729.5	732.9	731.8	732.9	736.2
10°	736.2	736.2	736.2	736.2	736.2	736.2	738.5	740.7	741.9	743.0	747.5
12.5°	756.5	756.5	756.5	755.3	755.3	752.0	756.5	758.7	760.9	763.2	766.6
15°	799.1	799.1	798.0	793.5	793.5	786.8	787.9	789.0	789.0	791.2	793.5
17.5°	855.2	854.1	851.8	848.5	844.0	836.1	833.9	831.6	828.3	827.2	827.2
20°	933.8	932.7	928.2	919.2	913.6	901.2	892.3	883.3	879.9	874.3	873.2
22.5°	1046.0	1046.0	1037.0	1023.6	1019.1	993.3	967.5	948.4	941.6	933.8	933.8
25°	1181.8	1180.7	1168.3	1152.6	1133.6	1106.6	1075.2	1049.4	1032.5	1014.6	1007.9
27.5°	1344.6	1341.2	1324.4	1305.3	1269.4	1235.7	1198.7	1171.7	1142.5	1120.1	1099.9
30°	1535.3	1532.0	1502.8	1466.9	1429.9	1396.2	1342.3	1309.8	1263.7	1236.8	1214.4
32.5°	1756.4	1753.1	1700.3	1665.5	1626.3	1584.7	1520.8	1469.1	1410.8	1372.6	1341.2
35°	2038.2	2024.7	1949.5	1901.2	1839.5	1798.0	1730.6	1661.1	1592.6	1538.7	1492.7
37.5°	2342.3	2326.6	2260.4	2188.5	2127.9	2077.4	1982.0	1894.5	1813.7	1739.6	1682.4
40°	2659.9	2618.4	2547.7	2494.9	2453.4	2405.2	2305.3	2213.2	2086.4	2003.4	1916.9
42.5°	2879.9	2839.5	2790.1	2755.3	2735.1	2698.1	2642.0	2562.3	2448.9	2451.2	2223.3
45°	3024.7	2965.2	2931.5	2933.8	2941.6	2941.6	2931.5	2919.2	2869.8	2903.5	2712.7
47.5°	2973.1	2933.8	2912.5	2957.3	3013.5	3069.6	3134.7	3205.4	3286.2	3381.6	3147.0
50°	2670.0	2684.6	2694.7	2790.1	2910.2	3038.2	3187.4	3380.5	3606.1	3649.8	3536.5
52.5°	2186.3	2217.7	2251.4	2397.3	2555.5	2776.6	3038.2	3356.9	3659.9	3838.4	3827.2
55°	1698.1	1737.4	1809.2	1918.1	2043.8	2252.5	2575.8	3067.3	3539.8	3823.8	3996.6
57.5°	1208.8	1266.0	1360.3	1511.8	1622.9	1740.7	1979.8	2525.2	3042.6	3571.3	3968.6
60°	803.6	830.5	892.3	1080.8	1268.2	1391.7	1561.2	1758.7	2181.8	2910.2	3679.0
62.5°	570.1	588.1	626.3	711.6	881.0	1104.4	1206.5	1297.4	1433.2	1872.0	2954.0
63°	538.7	554.4	585.9	657.7	810.3	1041.5	1145.9	1229.0	1327.7	1674.5	2794.6
65°	446.7	453.4	470.3	505.0	587.0	778.9	949.5	1000.0	1016.8	1076.3	1750.8
67.5°	377.1	381.6	387.2	397.3	429.9	518.5	708.2	772.2	753.1	712.7	865.3
70°	327.7	331.1	340.1	352.4	363.6	386.1	487.1	582.5	561.2	506.2	529.7
72.5°	261.5	267.1	277.2	298.5	321.0	350.2	374.9	434.3	420.9	368.1	373.7
75°	206.5	209.9	218.9	234.6	255.9	289.6	337.8	358.0	321.0	271.6	271.6
77.5°	163.9	167.2	175.1	187.4	200.9	224.5	258.1	310.9	288.4	204.3	203.1
80°	123.5	126.8	134.7	145.9	159.4	176.2	196.4	220.0	264.9	190.8	152.6
82.5°	90.9	92.0	105.5	113.4	117.8	131.3	148.1	161.6	181.8	176.2	135.8
85°	68.5	67.3	76.3	81.9	83.1	86.4	96.5	110.0	119.0	114.5	105.5
87.5°	38.2	33.7	39.3	44.9	44.9	46.0	48.3	56.1	64.0	61.7	56.1
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°	726.1	726.1	726.1	726.1	726.1	726.1	726.1	726.1	726.1	726.1	726.1
2.5°	722.8	722.8	721.7	721.7	722.8	722.8	721.7	725.0	727.3	727.3	728.4
5°	726.1	727.3	726.1	726.1	727.3	727.3	728.4	731.8	735.1	737.4	740.7
7.5°	736.2	737.4	736.2	736.2	737.4	738.5	740.7	745.2	747.5	752.0	757.6
10°	747.5	748.6	747.5	748.6	749.7	750.8	754.2	757.6	760.9	765.4	774.4
12.5°	767.7	768.8	766.6	767.7	771.0	771.0	773.3	775.5	781.1	786.8	795.7
15°	795.7	795.7	793.5	794.6	798.0	798.0	799.1	801.3	808.1	814.8	823.8
17.5°	828.3	830.5	829.4	830.5	832.8	833.9	833.9	836.1	840.6	845.1	854.1
20°	872.1	873.2	870.9	873.2	875.4	873.2	870.9	869.8	872.1	874.3	884.4
22.5°	931.5	930.4	924.8	924.8	924.8	920.3	914.7	908.0	908.0	904.6	912.5
25°	1002.2	998.9	991.0	992.1	984.3	977.6	967.5	957.3	948.4	945.0	946.1
27.5°	1085.3	1078.6	1070.7	1068.5	1060.6	1048.3	1031.4	1012.3	997.8	986.5	984.3
30°	1189.7	1175.1	1161.6	1159.4	1147.0	1126.8	1099.9	1074.1	1049.4	1030.3	1023.6
32.5°	1313.1	1290.7	1269.4	1267.1	1246.9	1220.0	1187.4	1151.5	1115.6	1085.3	1070.7
35°	1457.9	1424.2	1404.0	1398.4	1369.2	1335.6	1299.7	1253.6	1203.1	1160.5	1133.6
37.5°	1634.1	1599.3	1564.5	1565.7	1525.2	1486.0	1437.7	1381.6	1317.6	1258.1	1220.0
40°	1851.8	1802.5	1757.6	1747.5	1712.7	1657.7	1604.9	1539.8	1461.3	1382.7	1327.7
42.5°	2115.6	2034.8	1973.1	1964.1	1918.1	1850.7	1786.8	1700.3	1620.6	1525.2	1459.0
45°	2415.3	2286.2	2212.1	2198.6	2124.6	2056.1	1978.7	1886.6	1789.0	1681.3	1602.7
47.5°	2787.9	2603.8	2478.1	2455.7	2353.5	2263.7	2182.9	2080.8	1964.1	1844.0	1757.6
50°	3222.2	2950.6	2781.1	2746.3	2609.4	2503.9	2400.7	2272.7	2148.1	2022.4	1922.6
52.5°	3657.7	3365.9	3140.3	3097.6	2895.6	2754.2	2618.4	2490.5	2343.4	2218.9	2105.5
55°	4007.8	3813.7	3552.2	3492.7	3203.1	3011.2	2832.8	2686.9	2541.0	2442.2	2308.6
57.5°	4218.8	4208.7	4002.2	3920.3	3524.1	3240.2	3041.5	2875.4	2734.0	2692.5	2515.1
60°	4213.2	4474.7	4386.1	4324.3	3848.5	3474.7	3216.6	3037.0	2920.3	2967.4	2722.8
62.5°	3956.2	4486.0	4592.6	4575.7	4194.2	3663.3	3360.3	3175.1	3113.3	3253.6	2938.3
63°	3863.1	4460.1	4601.6	4594.8	4260.4	3699.2	3385.0	3202.0	3151.5	3326.6	2977.5
65°	3264.9	4234.6	4492.7	4523.0	4402.9	3822.7	3442.2	3270.5	3264.9	3489.3	3070.7
67.5°	1989.9	3578.0	4002.2	4060.6	4202.0	3861.9	3409.6	3246.9	3327.7	3512.9	3042.6
70°	850.7	2361.4	3216.6	3310.9	3656.6	3666.7	3316.5	3150.4	3313.1	3328.8	2842.9
72.5°	503.9	1113.4	2189.7	2395.1	2893.4	3154.9	3103.2	2982.0	3121.2	2923.7	2420.9
75°	356.9	520.8	1112.2	1331.1	2014.6	2408.5	2607.2	2663.3	2657.7	2318.7	1817.1
77.5°	255.9	334.5	469.1	553.3	1124.6	1546.6	1789.0	1952.9	1900.1	1552.2	1120.1
80°	178.5	231.2	287.3	305.3	521.9	794.6	942.8	1014.6	983.2	775.5	501.7
82.5°	129.1	151.5	185.2	196.4	262.6	367.0	436.6	385.0	369.2	286.2	216.6
85°	99.9	97.6	115.6	120.1	153.8	191.9	196.4	152.6	133.6	119.0	121.2
87.5°	70.7	60.6	61.7	64.0	79.7	102.1	99.9	62.9	53.9	57.2	65.1
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°	726.1	726.1	726.1	726.1	726.1	726.1	726.1	726.1	726.1	726.1	726.1
2.5°	730.6	731.8	734.0	735.1	737.4	737.4	739.6	740.7	743.0	745.2	746.4
5°	744.1	747.5	752.0	754.2	758.7	762.1	766.6	768.8	773.3	776.7	781.1
7.5°	764.3	769.9	775.5	782.3	789.0	794.6	799.1	804.7	812.6	818.2	821.5
10°	783.4	791.2	801.3	809.2	819.3	827.2	833.9	844.0	853.0	860.8	865.3
12.5°	808.1	818.2	828.3	840.6	854.1	864.2	874.3	887.8	900.1	909.1	913.6
15°	837.3	849.6	860.8	875.4	891.1	904.6	919.2	933.8	942.8	942.8	940.5
17.5°	867.6	877.7	891.1	908.0	929.3	946.1	954.0	956.2	952.9	945.0	939.4
20°	897.9	906.8	921.4	941.6	964.1	967.5	959.6	949.5	939.4	925.9	916.9
22.5°	922.6	934.9	957.3	980.9	982.0	963.0	941.6	924.8	909.1	893.4	876.5
25°	951.7	968.6	998.9	1007.9	978.7	942.8	912.5	887.8	862.0	836.1	817.1
27.5°	987.7	1012.3	1042.6	1016.8	959.6	909.1	867.6	830.5	796.9	760.9	739.6
30°	1025.8	1064.0	1070.7	1003.4	927.0	862.0	805.8	749.7	707.1	674.5	662.2
32.5°	1071.8	1121.2	1080.8	979.8	883.3	798.0	722.8	655.4	619.5	599.3	593.7
35°	1141.4	1181.8	1086.4	955.1	832.8	721.7	627.4	573.5	551.1	537.6	530.9
37.5°	1241.3	1240.2	1085.3	924.8	774.4	638.6	551.1	512.9	494.9	483.7	471.4
40°	1358.0	1285.1	1078.6	881.0	695.8	558.9	498.3	462.4	445.6	432.1	417.5
42.5°	1473.6	1315.4	1059.5	815.9	598.2	501.7	460.2	427.6	409.7	395.1	374.9
45°	1573.5	1327.7	1022.4	726.1	510.7	456.8	435.5	407.4	386.1	363.6	347.9
47.5°	1652.1	1325.5	963.0	620.6	452.3	425.4	415.3	396.2	370.4	342.3	322.1
50°	1718.3	1308.6	882.2	527.5	413.0	397.3	393.9	388.3	346.8	323.2	310.9
52.5°	1778.9	1283.9	795.7	464.6	379.3	365.9	372.6	367.0	337.8	317.6	305.3
55°	1861.9	1267.1	710.4	416.4	340.1	336.7	342.3	350.2	332.2	313.1	299.7
57.5°	1959.6	1276.1	645.3	362.5	303.0	305.3	324.4	335.6	326.6	306.4	292.9
60°	2071.8	1303.0	588.1	310.9	272.7	278.3	306.4	322.1	321.0	297.4	281.7
62.5°	2197.5	1331.1	497.2	271.6	246.9	255.9	285.1	305.3	308.6	288.4	269.4
63°	2222.2	1333.3	473.6	263.7	242.4	252.5	279.5	300.8	305.3	286.2	267.1
65°	2282.8	1313.1	381.6	242.4	224.5	235.7	262.6	281.7	290.7	273.8	258.1
67.5°	2232.3	1148.1	287.3	216.6	209.9	217.7	241.3	259.3	267.1	259.3	243.5
70°	2041.5	835.0	224.5	193.0	194.2	199.8	217.7	234.6	243.5	241.3	226.7
72.5°	1644.2	473.6	187.4	172.8	176.2	182.9	195.3	211.0	218.9	217.7	207.6
75°	1083.1	242.4	158.2	154.9	157.1	162.7	171.7	184.1	193.0	191.9	187.4
77.5°	536.5	168.3	135.8	136.9	138.0	142.5	149.3	160.5	166.1	167.2	166.1
80°	221.1	131.3	116.7	117.8	119.0	122.3	126.8	136.9	140.3	142.5	143.7
82.5°	132.4	99.9	93.2	95.4	96.5	99.9	103.3	112.2	115.6	119.0	119.0
85°	87.5	69.6	67.3	69.6	71.8	74.1	75.2	80.8	86.4	90.9	93.2
87.5°	47.1	41.5	40.4	41.5	41.5	43.8	46.0	51.6	58.4	62.9	65.1
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°	726.1	726.1	726.1	726.1	726.1
2.5°	744.1	745.2	744.1	745.2	746.4
5°	781.1	783.4	782.3	782.3	786.8
7.5°	823.8	828.3	828.3	830.5	832.8
10°	869.8	874.3	877.7	877.7	881.0
12.5°	915.8	918.1	921.4	921.4	921.4
15°	939.4	938.3	937.1	936.0	936.0
17.5°	936.0	931.5	929.3	927.0	928.2
20°	911.3	903.5	901.2	897.9	900.1
22.5°	868.7	857.5	853.0	847.4	849.6
25°	804.7	791.2	789.0	782.3	785.6
27.5°	730.6	723.9	722.8	721.7	727.3
30°	661.1	663.3	664.4	666.7	672.3
32.5°	597.1	601.6	602.7	603.8	611.7
35°	534.2	528.6	534.2	532.0	538.7
37.5°	465.8	461.3	456.8	451.2	455.7
40°	408.5	400.7	387.2	380.5	381.6
42.5°	363.6	353.5	342.3	335.6	335.6
45°	334.5	322.1	312.0	307.5	307.5
47.5°	312.0	306.4	300.8	297.4	297.4
50°	303.0	296.3	292.9	290.7	290.7
52.5°	296.3	289.6	286.2	283.9	281.7
55°	290.7	280.6	277.2	276.1	276.1
57.5°	282.8	273.8	269.4	268.2	268.2
60°	270.5	263.7	259.3	258.1	258.1
62.5°	258.1	251.4	246.9	246.9	246.9
63°	255.9	248.0	244.7	244.7	244.7
65°	245.8	237.9	234.6	234.6	233.4
67.5°	232.3	224.5	222.2	222.2	220.0
70°	216.6	209.9	207.6	208.8	204.3
72.5°	200.9	194.2	190.8	190.8	186.3
75°	182.9	176.2	171.7	170.6	166.1
77.5°	162.7	157.1	152.6	148.1	145.9
80°	141.4	136.9	131.3	127.9	124.6
82.5°	119.0	114.5	111.1	115.6	98.8
85°	93.2	88.7	84.2	90.9	70.7
87.5°	68.5	66.2	61.7	53.9	47.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)