

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P628501

Luminaire Tested: **IFLD-S-SA2D-940-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628501
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA2D-940-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (32) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	11630.8 lumens	Max Intensity:	3791.2 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	93.9 lumens/watt		
Luminous Opening:	Rectangular (W 1' x L: 0.5' x H: 0')		

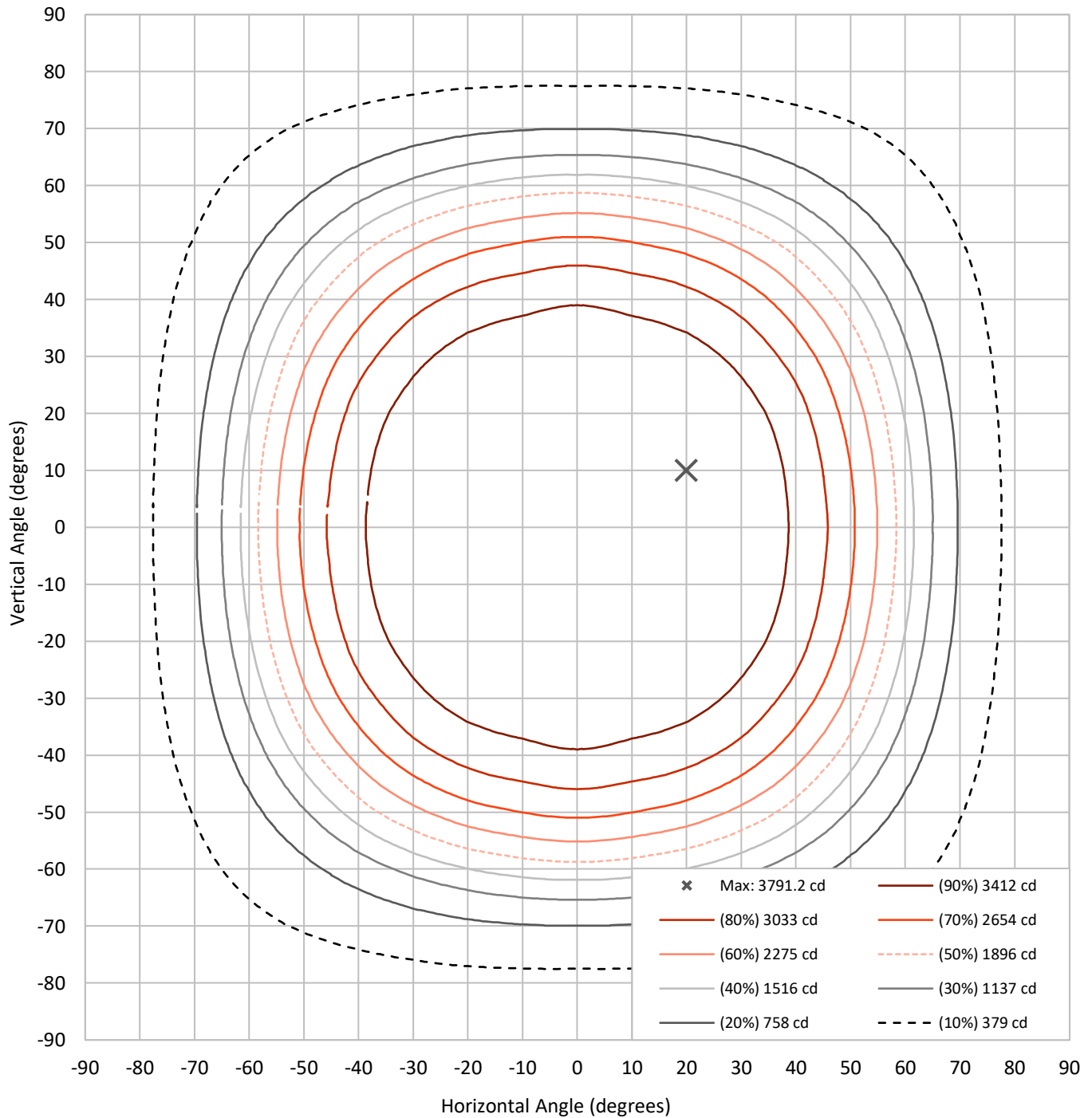
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	7136.9 lumens	Field Lumens:	8555.9 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

Input Watts (W): 123.9
Input Voltage (V): 120
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: 25 FT



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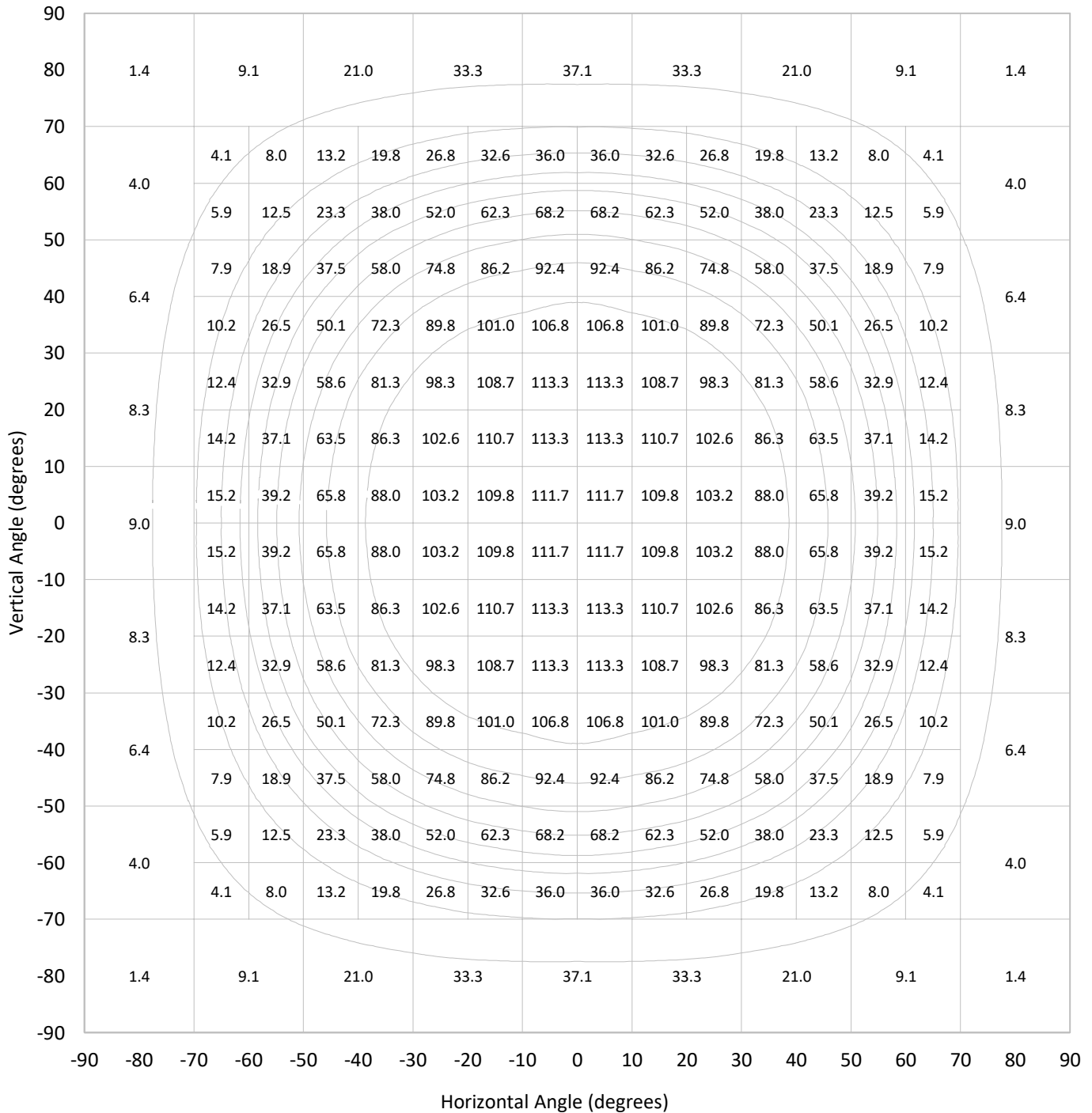
Iso-Candela Plot





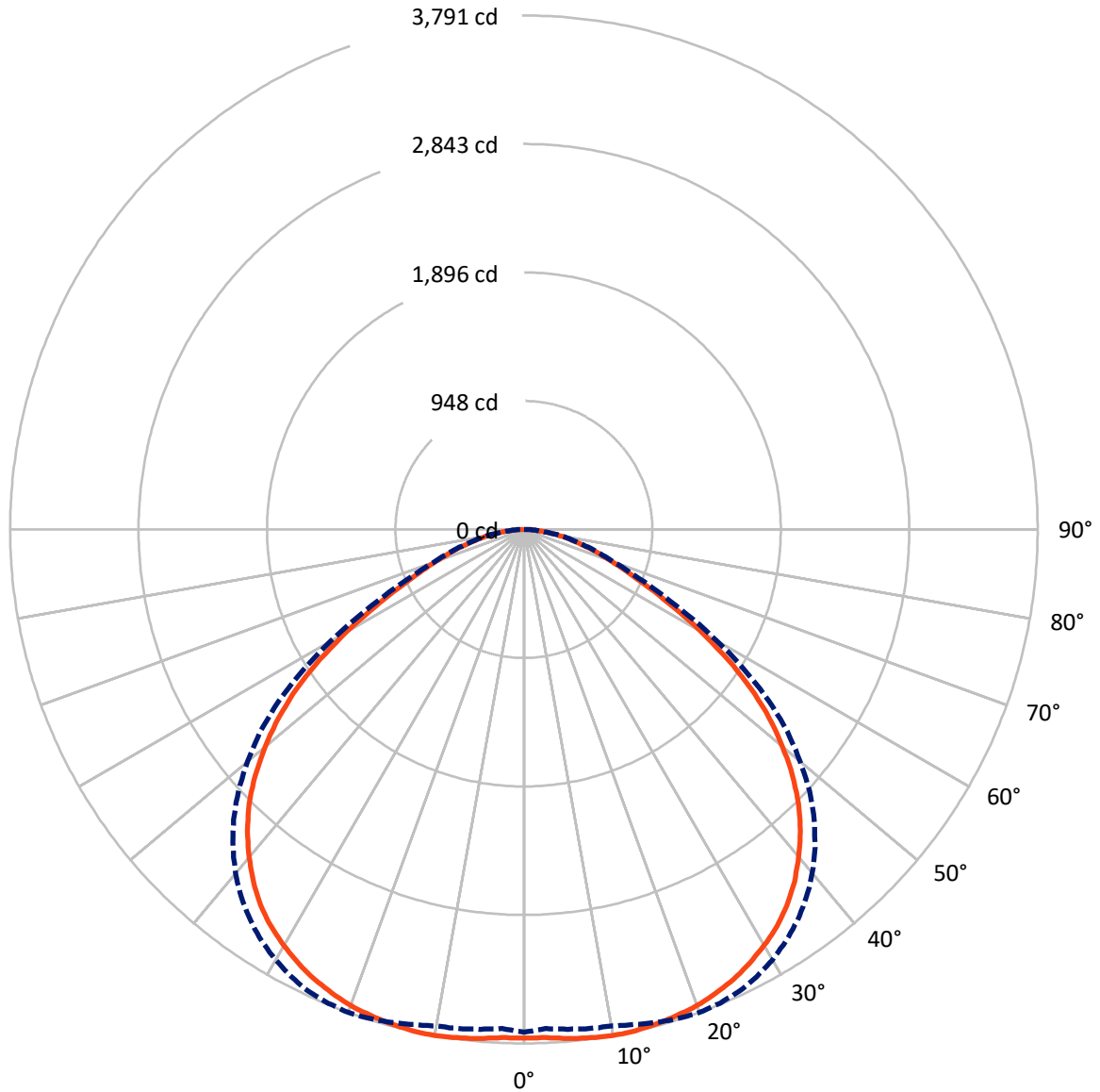
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Lumen Table



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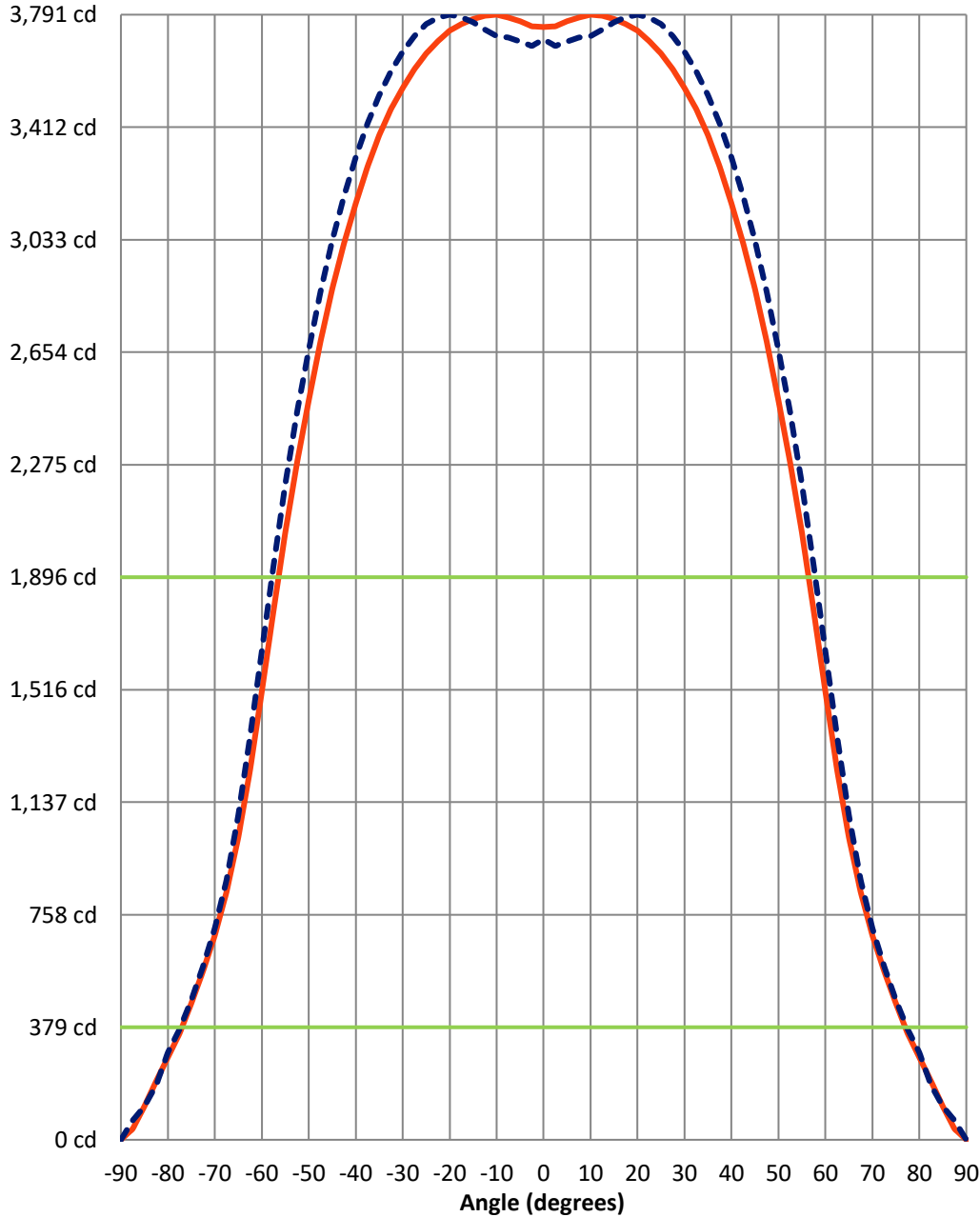
Luminous Intensity Polar Plot



— Vertical Distribution Through 20-Deg - - - Horizontal Distribution Through 10-Deg

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Luminous Intensity Plot



Beam:
 H Angle: 115.7°
 V Angle: 112.9°
 Lumens: 7136.9
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 8555.9
 Efficiency: 73.6%

Spill:
 Lumens: 3074.9
 Efficiency: 26.4%

- Vertical Distribution through 20-Deg
- - - Horizontal Distribution through 10-Deg



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FIELD
 BEAM

CANDELA DISTRIBUTION:

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	30.6	33.0	34.3	35.5	36.7	37.9	39.2	37.9	36.7	36.7	35.5
85°	82.0	84.4	85.7	94.2	102.8	107.7	113.8	112.6	112.6	111.4	110.1
82.5°	164.0	171.3	177.4	186.0	190.9	198.2	203.1	199.5	197.0	192.1	188.5
80°	291.3	293.7	294.9	296.1	290.0	288.8	286.4	282.7	277.8	271.7	265.6
77.5°	370.8	373.2	375.7	373.2	372.0	370.8	367.1	363.5	358.6	353.7	346.3
75°	490.7	490.7	490.7	487.1	484.6	480.9	474.8	468.7	460.1	450.3	439.3
72.5°	618.0	616.8	615.5	608.2	602.1	594.7	586.2	578.8	569.0	558.0	543.3
70°	751.4	753.8	755.1	745.3	737.9	728.1	717.1	703.7	689.0	673.1	652.3
67.5°	934.9	932.5	930.0	916.6	906.8	893.3	877.4	857.8	835.8	811.3	782.0
65°	1162.6	1166.2	1158.9	1145.4	1127.1	1105.0	1080.6	1052.4	1019.4	982.7	941.1
62.5°	1437.9	1444.0	1435.5	1418.3	1395.1	1365.7	1331.4	1291.1	1245.8	1194.4	1143.0
60°	1751.2	1750.0	1734.0	1710.8	1680.2	1643.5	1605.6	1561.5	1510.1	1450.1	1387.7
57.5°	2038.8	2036.3	2016.7	1993.5	1962.9	1923.7	1883.3	1836.8	1783.0	1719.4	1647.2
55°	2297.0	2294.5	2274.9	2250.5	2218.7	2179.5	2142.8	2098.7	2046.1	1978.8	1901.7
52.5°	2525.8	2527.0	2509.9	2483.0	2448.7	2410.8	2375.3	2331.2	2281.1	2213.8	2139.1
50°	2736.3	2735.1	2716.7	2692.2	2660.4	2623.7	2588.2	2544.2	2491.5	2426.7	2354.5
47.5°	2932.1	2929.6	2908.8	2881.9	2848.9	2817.1	2784.0	2744.9	2689.8	2624.9	2552.7
45°	3096.1	3091.2	3070.4	3044.7	3012.9	2984.7	2955.3	2926.0	2867.2	2807.3	2738.7
42.5°	3236.8	3235.6	3214.8	3189.1	3157.3	3132.8	3105.9	3069.2	3020.2	2965.1	2897.8
40°	3371.4	3361.6	3340.8	3316.4	3287.0	3266.2	3239.3	3202.5	3154.8	3101.0	3036.1
37.5°	3471.8	3473.0	3451.0	3424.0	3398.3	3378.8	3354.3	3320.0	3278.4	3225.8	3160.9
35°	3567.2	3561.1	3542.7	3519.5	3496.2	3474.2	3448.5	3419.1	3384.9	3335.9	3274.7
32.5°	3629.6	3638.2	3616.2	3591.7	3578.2	3561.1	3534.2	3503.6	3473.0	3424.0	3369.0
30°	3698.2	3690.8	3673.7	3652.9	3643.1	3632.1	3608.8	3579.5	3544.0	3499.9	3448.5
27.5°	3745.9	3742.2	3721.4	3701.8	3696.9	3687.1	3668.8	3643.1	3607.6	3564.8	3517.0
25°	3766.7	3769.1	3749.6	3738.5	3738.5	3732.4	3717.7	3695.7	3660.2	3621.1	3574.6
22.5°	3776.5	3774.0	3760.6	3758.1	3764.2	3759.4	3753.2	3733.7	3701.8	3670.0	3630.9
20°	3782.6	3765.5	3753.2	3763.0	3770.4	3769.1	3764.2	3752.0	3737.3	3710.4	3676.1
17.5°	3769.1	3758.1	3743.4	3758.1	3774.0	3775.3	3770.4	3763.0	3759.4	3742.2	3711.6
15°	3736.1	3727.5	3730.0	3744.7	3763.0	3769.1	3772.8	3781.4	3776.5	3763.0	3736.1
12.5°	3714.1	3703.1	3714.1	3728.8	3738.5	3742.2	3771.6	3787.5	3787.5	3775.3	3758.1
10°	3708.0	3685.9	3700.6	3714.1	3719.0	3741.0	3765.5	3782.6	3791.2	3781.4	3759.4
7.5°	3695.7	3681.0	3687.1	3693.3	3721.4	3737.3	3750.8	3769.1	3781.4	3780.2	3760.6
5°	3689.6	3671.2	3673.7	3699.4	3719.0	3730.0	3734.9	3750.8	3769.1	3772.8	3758.1
2.5°	3673.7	3665.1	3683.5	3685.9	3700.6	3709.2	3714.1	3728.8	3752.0	3760.6	3754.5
0°	3665.1	3652.9	3640.6	3650.4	3674.9	3693.3	3700.6	3722.6	3749.6	3758.1	3744.7



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CANDELA DISTRIBUTION (continued):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	34.3	33.0	31.8	30.6	31.8	31.8	31.8	30.6	31.8	30.6	30.6
85°	106.5	101.6	97.9	93.0	88.1	84.4	79.5	74.6	73.4	72.2	69.8
82.5°	183.6	177.4	171.3	164.0	156.6	148.1	139.5	129.7	127.3	124.8	121.2
80°	258.2	249.6	241.1	232.5	225.2	216.6	206.8	195.8	188.5	182.3	175.0
77.5°	336.5	324.3	312.1	297.4	288.8	280.2	270.4	259.4	248.4	238.6	227.6
75°	425.9	412.4	400.2	385.5	369.6	353.7	337.8	323.1	307.2	292.5	277.8
72.5°	525.0	505.4	485.8	467.5	447.9	428.3	407.5	387.9	368.3	348.8	328.0
70°	629.0	604.5	580.1	555.6	529.9	504.2	479.7	455.2	430.8	405.1	381.8
67.5°	751.4	723.2	691.4	657.2	619.2	586.2	554.4	525.0	495.6	466.2	436.9
65°	904.3	865.2	822.4	775.9	731.8	687.7	641.2	597.2	562.9	528.7	495.6
62.5°	1092.8	1037.7	977.8	917.8	864.0	806.4	752.6	695.1	641.2	592.3	551.9
60°	1318.0	1243.3	1169.9	1092.8	1018.2	939.8	871.3	800.3	733.0	673.1	614.3
57.5°	1566.4	1479.5	1391.4	1297.2	1195.6	1103.8	1010.8	917.8	838.3	758.7	692.6
55°	1818.5	1726.7	1627.6	1521.1	1409.8	1292.3	1166.2	1062.2	953.3	860.3	774.6
52.5°	2058.3	1962.9	1860.1	1762.2	1628.8	1494.2	1355.9	1218.9	1091.6	972.9	868.9
50°	2272.5	2179.5	2080.4	1966.6	1843.0	1699.8	1545.6	1391.4	1240.9	1101.4	971.7
47.5°	2468.3	2377.7	2278.6	2164.8	2052.2	1893.1	1737.7	1567.6	1400.0	1239.7	1087.9
45°	2651.9	2560.1	2457.3	2348.4	2218.7	2076.7	1916.4	1745.1	1565.2	1385.3	1210.3
42.5°	2818.3	2726.5	2622.5	2509.9	2381.4	2240.7	2085.3	1912.7	1731.6	1535.8	1343.7
40°	2963.9	2874.6	2774.2	2656.8	2536.8	2388.8	2235.8	2071.8	1884.6	1687.5	1475.8
37.5°	3091.2	3008.0	2908.8	2792.6	2665.3	2533.2	2375.3	2211.3	2042.4	1828.3	1611.7
35°	3203.8	3126.7	3025.1	2915.0	2790.1	2650.6	2502.6	2342.3	2159.9	1959.2	1748.7
32.5°	3301.7	3223.3	3130.3	3020.2	2899.1	2768.1	2616.4	2454.8	2282.3	2077.9	1849.1
30°	3384.9	3309.0	3220.9	3116.9	3000.6	2870.9	2722.8	2560.1	2383.9	2180.7	1954.3
27.5°	3457.1	3384.9	3299.2	3202.5	3091.2	2966.4	2817.1	2653.1	2473.2	2277.4	2051.0
25°	3519.5	3449.7	3370.2	3278.4	3168.3	3045.9	2905.2	2733.9	2554.0	2356.9	2133.0
22.5°	3575.8	3508.5	3428.9	3339.6	3239.3	3116.9	2974.9	2804.8	2622.5	2427.9	2207.6
20°	3626.0	3563.6	3485.2	3393.4	3293.1	3169.5	3028.8	2867.2	2683.7	2492.8	2274.9
17.5°	3666.3	3611.3	3533.0	3436.3	3335.9	3216.0	3078.9	2930.9	2736.3	2547.8	2331.2
15°	3694.5	3640.6	3569.7	3471.8	3373.9	3255.2	3118.1	2965.1	2784.0	2591.9	2377.7
12.5°	3714.1	3656.6	3590.5	3499.9	3402.0	3284.5	3151.1	3000.6	2824.4	2631.1	2418.1
10°	3719.0	3666.3	3600.3	3519.5	3424.0	3310.2	3179.3	3030.0	2857.4	2661.6	2451.2
7.5°	3721.4	3671.2	3611.3	3534.2	3440.0	3329.8	3200.1	3053.2	2881.9	2687.3	2475.6
5°	3720.2	3672.5	3618.6	3544.0	3449.7	3340.8	3213.6	3069.2	2899.1	2704.5	2494.0
2.5°	3716.5	3673.7	3623.5	3551.3	3460.8	3353.1	3227.0	3087.5	2917.4	2719.2	2508.7
0°	3726.3	3689.6	3626.0	3548.9	3463.2	3353.1	3225.8	3090.0	2919.9	2717.9	2507.5



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CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	30.6	29.4	29.4	28.1	26.9	25.7	23.3	22.0	19.6	15.9	12.2
85°	66.1	62.4	58.7	56.3	53.8	51.4	47.7	44.1	39.2	31.8	24.5
82.5°	116.3	108.9	101.6	93.0	85.7	78.3	72.2	66.1	58.7	47.7	36.7
80°	166.4	155.4	144.4	132.2	121.2	108.9	97.9	88.1	78.3	63.6	48.9
77.5°	216.6	201.9	186.0	171.3	155.4	139.5	123.6	110.1	95.5	78.3	61.2
75°	263.1	246.0	231.3	210.5	190.9	170.1	149.3	130.9	112.6	91.8	73.4
72.5°	309.6	287.6	266.8	247.2	225.2	199.5	176.2	153.0	129.7	105.2	83.2
70°	356.1	329.2	303.5	280.2	255.8	230.1	201.9	175.0	146.8	117.5	91.8
67.5°	403.8	373.2	343.9	314.5	286.4	257.0	227.6	197.0	164.0	129.7	101.6
65°	456.5	418.5	383.0	350.0	317.0	285.1	252.1	219.1	182.3	143.2	110.1
62.5°	509.1	467.5	425.9	384.3	347.5	312.1	276.6	239.9	199.5	157.9	118.7
60°	565.4	517.6	469.9	423.4	378.1	339.0	299.8	260.7	217.8	171.3	127.3
57.5°	627.8	570.3	516.4	463.8	412.4	365.9	323.1	281.5	233.7	184.8	137.1
55°	698.8	627.8	564.1	505.4	449.1	392.8	346.3	303.5	252.1	198.2	148.1
52.5°	773.4	691.4	614.3	548.2	488.3	424.6	368.3	320.6	270.4	211.7	157.9
50°	860.3	756.3	670.6	589.8	522.5	456.5	391.6	340.2	288.8	227.6	167.7
47.5°	949.6	834.6	726.9	638.8	559.3	487.1	418.5	357.3	305.9	242.3	177.4
45°	1053.6	909.2	790.5	686.5	594.7	518.9	445.4	375.7	320.6	257.0	187.2
42.5°	1154.0	997.4	856.6	739.1	635.1	549.5	469.9	395.3	335.3	271.7	195.8
40°	1272.7	1085.5	920.3	789.3	675.5	578.8	494.4	416.1	348.8	285.1	204.4
37.5°	1386.5	1174.8	997.4	844.4	714.7	608.2	518.9	435.7	361.0	298.6	215.4
35°	1499.1	1273.9	1070.8	895.8	755.1	641.2	543.3	454.0	373.2	309.6	225.2
32.5°	1606.8	1366.9	1145.4	953.3	799.1	671.8	565.4	471.1	385.5	319.4	235.0
30°	1707.1	1455.0	1218.9	1012.0	839.5	700.0	586.2	488.3	400.2	328.0	244.7
27.5°	1798.9	1540.7	1292.3	1067.1	877.4	725.7	608.2	504.2	412.4	336.5	253.3
25°	1882.1	1617.8	1359.6	1117.3	911.7	753.8	629.0	520.1	423.4	343.9	260.7
22.5°	1960.4	1688.8	1420.8	1167.5	953.3	782.0	648.6	534.8	434.4	351.2	268.0
20°	2029.0	1753.6	1479.5	1217.6	990.0	807.7	665.7	548.2	444.2	356.1	275.3
17.5°	2084.0	1811.1	1532.1	1261.7	1021.8	829.7	680.4	560.5	452.8	362.2	280.2
15°	2133.0	1860.1	1576.2	1299.6	1050.0	848.1	693.9	570.3	460.1	365.9	286.4
12.5°	2174.6	1901.7	1614.1	1332.7	1074.4	864.0	704.9	577.6	466.2	369.6	290.0
10°	2208.9	1934.7	1645.9	1358.4	1094.0	876.2	713.4	585.0	471.1	373.2	293.7
7.5°	2234.6	1959.2	1669.2	1380.4	1109.9	884.8	720.8	589.8	476.0	375.7	299.8
5°	2254.1	1980.0	1687.5	1395.1	1122.2	897.0	729.4	596.0	480.9	378.1	299.8
2.5°	2268.8	1997.2	1702.2	1407.3	1132.0	894.6	729.4	594.7	480.9	378.1	298.6
0°	2266.4	1998.4	1701.0	1407.3	1132.0	892.1	729.4	593.5	480.9	378.1	298.6



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	8.6	6.1	2.4	0.0
85°	18.4	12.2	6.1	0.0
82.5°	26.9	17.1	8.6	0.0
80°	35.5	23.3	11.0	0.0
77.5°	45.3	29.4	14.7	0.0
75°	53.8	34.3	17.1	0.0
72.5°	62.4	40.4	19.6	0.0
70°	69.8	45.3	22.0	0.0
67.5°	77.1	51.4	25.7	0.0
65°	83.2	56.3	28.1	0.0
62.5°	88.1	62.4	30.6	0.0
60°	94.2	67.3	33.0	0.0
57.5°	99.1	71.0	35.5	0.0
55°	104.0	73.4	37.9	0.0
52.5°	108.9	77.1	40.4	0.0
50°	113.8	80.8	42.8	0.0
47.5°	118.7	83.2	44.1	0.0
45°	126.0	86.9	46.5	0.0
42.5°	132.2	89.3	48.9	0.0
40°	138.3	91.8	50.2	0.0
37.5°	144.4	94.2	52.6	0.0
35°	150.5	96.7	53.8	0.0
32.5°	155.4	99.1	55.1	0.0
30°	160.3	101.6	56.3	0.0
27.5°	165.2	102.8	57.5	0.0
25°	168.9	105.2	58.7	0.0
22.5°	172.5	106.5	60.0	0.0
20°	175.0	107.7	61.2	0.0
17.5°	178.7	108.9	62.4	0.0
15°	179.9	110.1	64.9	0.0
12.5°	182.3	111.4	64.9	0.0
10°	183.6	112.6	64.9	0.0
7.5°	186.0	112.6	64.9	0.0
5°	184.8	112.6	64.9	0.0
2.5°	184.8	112.6	64.9	0.0
0°	183.6	112.6	64.9	0.0

(END OF REPORT)