

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: P628181

Luminaire Tested: **IFLD-S-SA2C-727-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628181
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA2C-727-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (32) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	12233.4 lumens	Max Intensity:	3987.6 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	113.1 lumens/watt		
Luminous Opening:	Rectangular (W 1' x L: 0.5' x H: 0')		

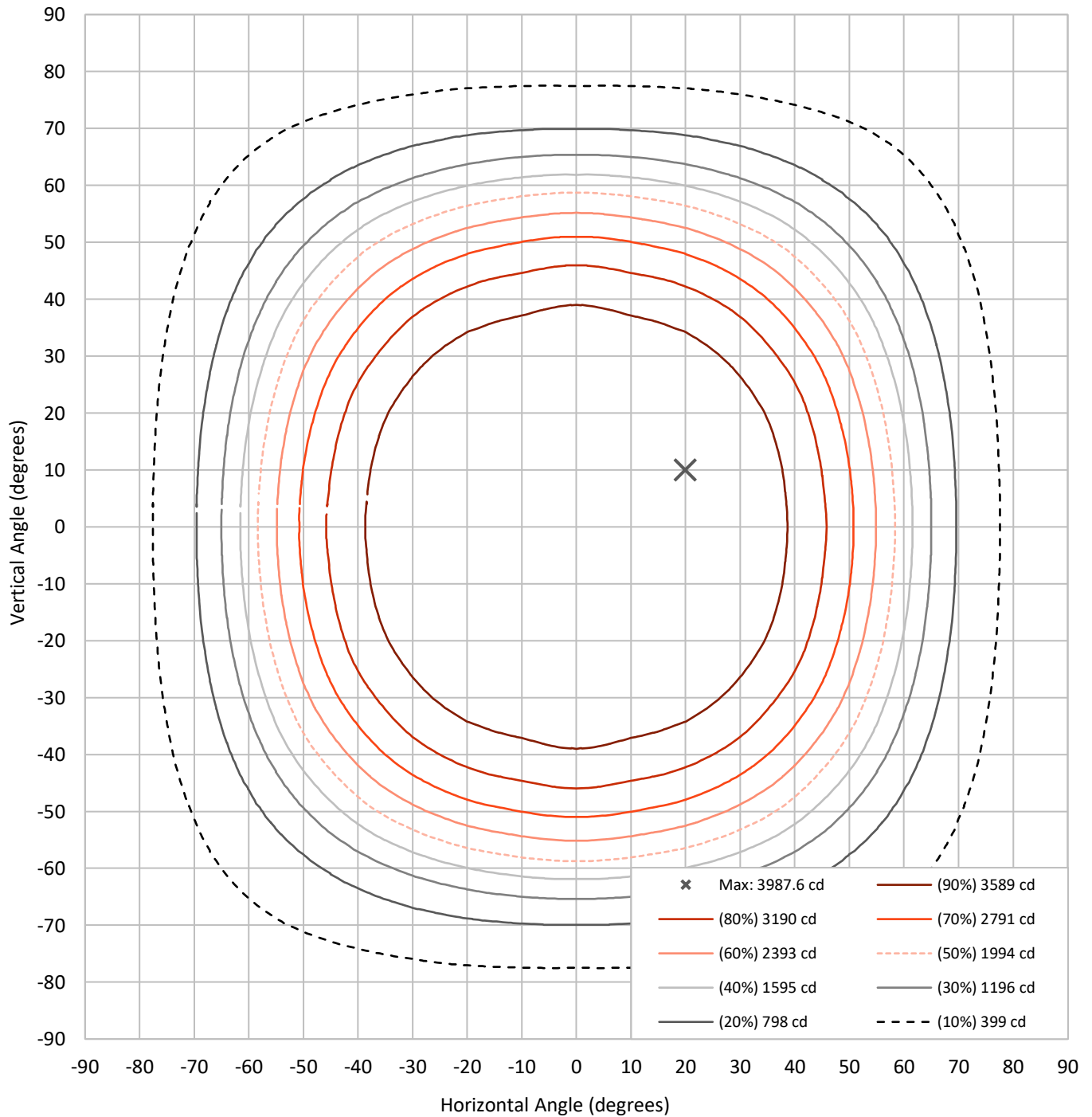
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	7506.7 lumens	Field Lumens:	8999.2 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

Input Watts (W): 108.2
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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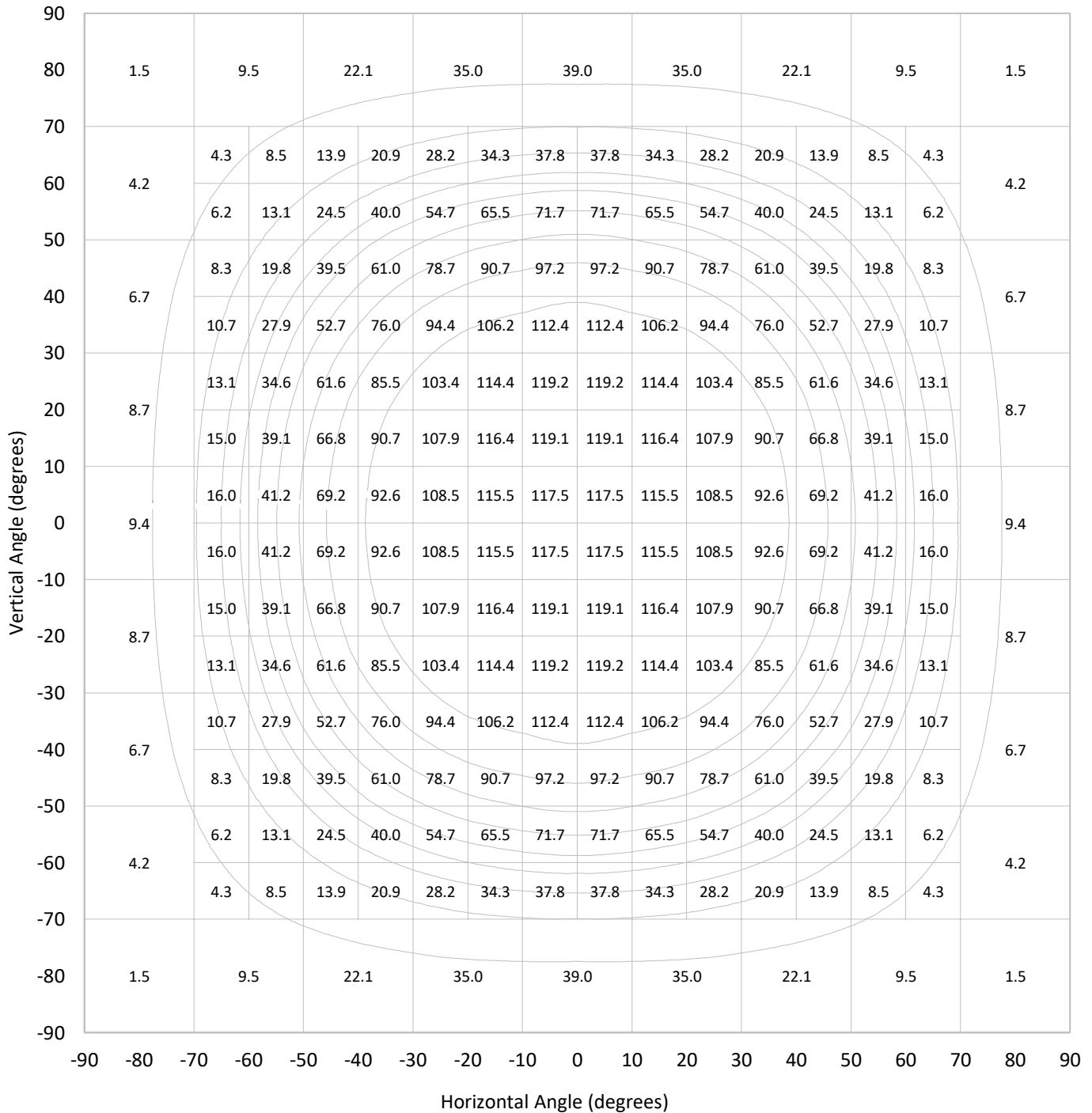
Iso-Candela Plot





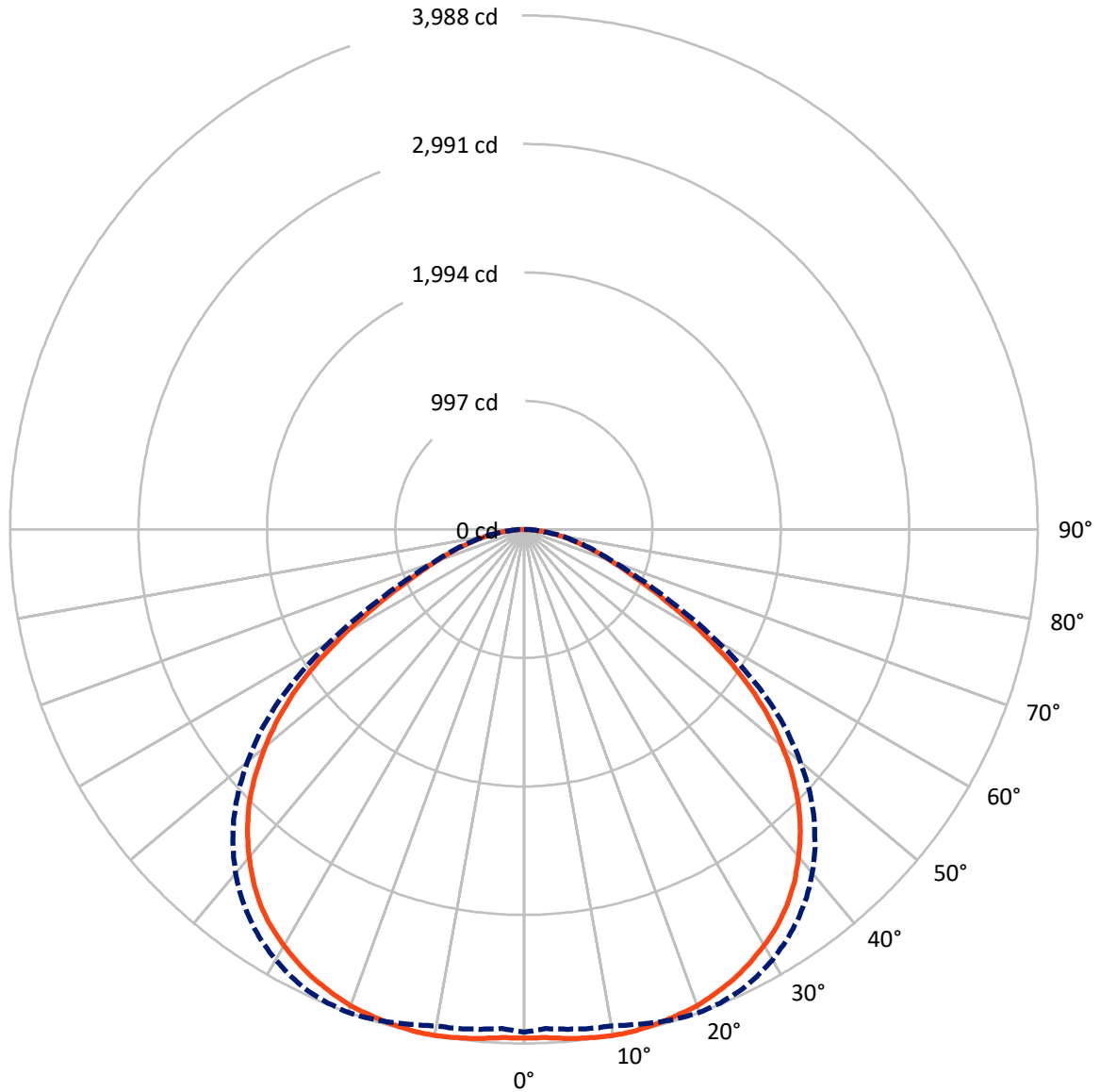
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Lumen Table



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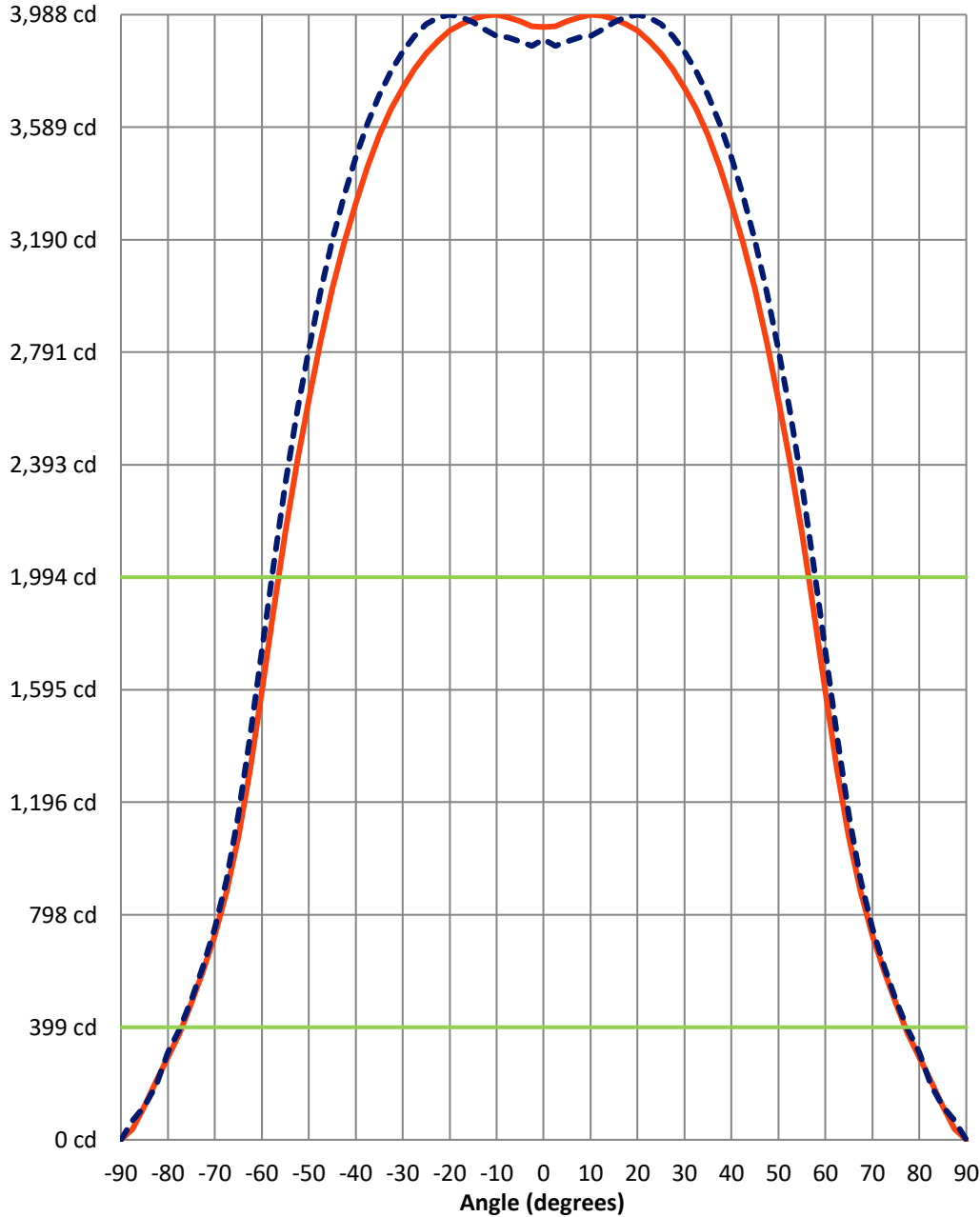
Luminous Intensity Polar Plot



— 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: 7506.7
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 8999.2
 Efficiency: 73.6%

Spill:
 Lumens: 3234.2
 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°	32.2	34.8	36.0	37.3	38.6	39.9	41.2	39.9	38.6	38.6	37.3
85°	86.2	88.8	90.1	99.1	108.1	113.3	119.7	118.4	118.4	117.1	115.8
82.5°	172.5	180.2	186.6	195.6	200.8	208.5	213.7	209.8	207.2	202.1	198.2
80°	306.3	308.9	310.2	311.5	305.1	303.8	301.2	297.3	292.2	285.7	279.3
77.5°	390.0	392.6	395.2	392.6	391.3	390.0	386.1	382.3	377.1	372.0	364.3
75°	516.1	516.1	516.1	512.3	509.7	505.9	499.4	493.0	484.0	473.7	462.1
72.5°	650.0	648.7	647.4	639.7	633.3	625.6	616.5	608.8	598.5	586.9	571.5
70°	790.3	792.9	794.2	783.9	776.2	765.9	754.3	740.1	724.7	707.9	686.1
67.5°	983.4	980.8	978.2	964.1	953.8	939.6	922.9	902.3	879.1	853.4	822.5
65°	1222.8	1226.7	1218.9	1204.8	1185.5	1162.3	1136.6	1107.0	1072.2	1033.6	989.8
62.5°	1512.4	1518.8	1509.8	1491.8	1467.4	1436.5	1400.4	1357.9	1310.3	1256.3	1202.2
60°	1841.9	1840.6	1823.9	1799.4	1767.3	1728.6	1688.7	1642.4	1588.3	1525.3	1459.6
57.5°	2144.4	2141.8	2121.2	2096.8	2064.6	2023.4	1980.9	1932.0	1875.4	1808.5	1732.5
55°	2416.0	2413.4	2392.8	2367.1	2333.6	2292.4	2253.8	2207.5	2152.1	2081.3	2000.2
52.5°	2656.7	2658.0	2640.0	2611.6	2575.6	2535.7	2498.4	2452.0	2399.3	2328.5	2249.9
50°	2878.1	2876.8	2857.5	2831.7	2798.3	2759.7	2722.3	2676.0	2620.6	2552.4	2476.5
47.5°	3084.0	3081.4	3059.6	3031.2	2996.5	2963.0	2928.3	2887.1	2829.2	2760.9	2685.0
45°	3256.5	3251.3	3229.5	3202.4	3169.0	3139.4	3108.5	3077.6	3015.8	2952.7	2880.6
42.5°	3404.5	3403.2	3381.4	3354.3	3320.9	3295.1	3266.8	3228.2	3176.7	3118.8	3048.0
40°	3546.1	3535.8	3513.9	3488.2	3457.3	3435.4	3407.1	3368.5	3318.3	3261.6	3193.4
37.5°	3651.7	3652.9	3629.8	3601.5	3574.4	3553.8	3528.1	3492.0	3448.3	3392.9	3324.7
35°	3752.1	3745.6	3726.3	3701.9	3677.4	3654.2	3627.2	3596.3	3560.3	3508.8	3444.4
32.5°	3817.7	3826.7	3803.5	3777.8	3763.6	3745.6	3717.3	3685.1	3652.9	3601.5	3543.5
30°	3889.8	3882.1	3864.0	3842.2	3831.9	3820.3	3795.8	3764.9	3727.6	3681.3	3627.2
27.5°	3940.0	3936.1	3914.2	3893.6	3888.5	3878.2	3858.9	3831.9	3794.5	3749.5	3699.3
25°	3961.9	3964.4	3943.8	3932.3	3932.3	3925.8	3910.4	3887.2	3849.9	3808.7	3759.8
22.5°	3972.2	3969.6	3955.4	3952.8	3959.3	3954.1	3947.7	3927.1	3893.6	3860.2	3819.0
20°	3978.6	3960.6	3947.7	3958.0	3965.7	3964.4	3959.3	3946.4	3931.0	3902.6	3866.6
17.5°	3964.4	3952.8	3937.4	3952.8	3969.6	3970.9	3965.7	3958.0	3954.1	3936.1	3903.9
15°	3929.7	3920.7	3923.2	3938.7	3958.0	3964.4	3968.3	3977.3	3972.2	3958.0	3929.7
12.5°	3906.5	3894.9	3906.5	3922.0	3932.3	3936.1	3967.0	3983.7	3983.7	3970.9	3952.8
10°	3900.1	3876.9	3892.4	3906.5	3911.7	3934.8	3960.6	3978.6	3987.6	3977.3	3954.1
7.5°	3887.2	3871.8	3878.2	3884.6	3914.2	3931.0	3945.1	3964.4	3977.3	3976.0	3955.4
5°	3880.8	3861.5	3864.0	3891.1	3911.7	3923.2	3928.4	3945.1	3964.4	3968.3	3952.8
2.5°	3864.0	3855.0	3874.3	3876.9	3892.4	3901.4	3906.5	3922.0	3946.4	3955.4	3949.0
0°	3855.0	3842.2	3829.3	3839.6	3865.3	3884.6	3892.4	3915.5	3943.8	3952.8	3938.7



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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°	36.0	34.8	33.5	32.2	33.5	33.5	33.5	32.2	33.5	32.2	32.2
85°	112.0	106.8	103.0	97.8	92.7	88.8	83.7	78.5	77.2	75.9	73.4
82.5°	193.1	186.6	180.2	172.5	164.8	155.7	146.7	136.4	133.9	131.3	127.4
80°	271.6	262.6	253.6	244.6	236.8	227.8	217.5	205.9	198.2	191.8	184.1
77.5°	354.0	341.1	328.2	312.8	303.8	294.8	284.5	272.9	261.3	251.0	239.4
75°	447.9	433.8	420.9	405.5	388.7	372.0	355.3	339.8	323.1	307.6	292.2
72.5°	552.2	531.6	511.0	491.7	471.1	450.5	428.6	408.0	387.4	366.8	345.0
70°	661.6	635.9	610.1	584.4	557.3	530.3	504.6	478.8	453.1	426.0	401.6
67.5°	790.3	760.7	727.2	691.2	651.3	616.5	583.1	552.2	521.3	490.4	459.5
65°	951.2	910.0	865.0	816.1	769.7	723.4	674.5	628.1	592.1	556.1	521.3
62.5°	1149.4	1091.5	1028.4	965.4	908.7	848.2	791.6	731.1	674.5	623.0	580.5
60°	1386.3	1307.7	1230.5	1149.4	1070.9	988.5	916.5	841.8	771.0	707.9	646.2
57.5°	1647.6	1556.2	1463.5	1364.4	1257.5	1161.0	1063.2	965.4	881.7	798.0	728.5
55°	1912.7	1816.2	1711.9	1599.9	1482.8	1359.2	1226.7	1117.2	1002.7	904.9	814.8
52.5°	2165.0	2064.6	1956.5	1853.5	1713.2	1571.6	1426.2	1282.0	1148.1	1023.3	913.9
50°	2390.2	2292.4	2188.2	2068.5	1938.5	1787.9	1625.7	1463.5	1305.2	1158.4	1022.0
47.5°	2596.2	2500.9	2396.7	2277.0	2158.6	1991.2	1827.8	1648.8	1472.5	1303.9	1144.3
45°	2789.3	2692.7	2584.6	2470.0	2333.6	2184.3	2015.7	1835.5	1646.3	1457.1	1273.0
42.5°	2964.3	2867.8	2758.4	2640.0	2504.8	2356.8	2193.3	2011.8	1821.3	1615.4	1413.3
40°	3117.5	3023.5	2918.0	2794.4	2668.3	2512.5	2351.6	2179.2	1982.2	1775.0	1552.3
37.5°	3251.3	3163.8	3059.6	2937.3	2803.4	2664.4	2498.4	2325.9	2148.3	1923.0	1695.2
35°	3369.8	3288.7	3181.8	3066.0	2934.7	2788.0	2632.2	2463.6	2271.8	2060.7	1839.3
32.5°	3472.7	3390.4	3292.5	3176.7	3049.3	2911.5	2751.9	2582.0	2400.5	2185.6	1944.9
30°	3560.3	3480.5	3387.8	3278.4	3156.1	3019.7	2863.9	2692.7	2507.4	2293.7	2055.6
27.5°	3636.2	3560.3	3470.2	3368.5	3251.3	3120.1	2963.0	2790.5	2601.3	2395.4	2157.3
25°	3701.9	3628.5	3544.8	3448.3	3332.4	3203.7	3055.7	2875.5	2686.3	2479.1	2243.5
22.5°	3761.1	3690.3	3606.6	3512.6	3407.1	3278.4	3129.1	2950.2	2758.4	2553.7	2322.0
20°	3813.8	3748.2	3665.8	3569.3	3463.7	3333.7	3185.7	3015.8	2822.7	2621.9	2392.8
17.5°	3856.3	3798.4	3716.0	3614.3	3508.8	3382.6	3238.5	3082.7	2878.1	2679.9	2452.0
15°	3885.9	3829.3	3754.6	3651.7	3548.7	3423.8	3279.7	3118.8	2928.3	2726.2	2500.9
12.5°	3906.5	3846.0	3776.5	3681.3	3578.3	3454.7	3314.4	3156.1	2970.7	2767.4	2543.4
10°	3911.7	3856.3	3786.8	3701.9	3601.5	3481.7	3344.0	3187.0	3005.5	2799.6	2578.2
7.5°	3914.2	3861.5	3798.4	3717.3	3618.2	3502.3	3365.9	3211.4	3031.2	2826.6	2603.9
5°	3912.9	3862.7	3806.1	3727.6	3628.5	3513.9	3380.1	3228.2	3049.3	2844.6	2623.2
2.5°	3909.1	3864.0	3811.3	3735.3	3640.1	3526.8	3394.2	3247.5	3068.6	2860.1	2638.7
0°	3919.4	3880.8	3813.8	3732.7	3642.6	3526.8	3392.9	3250.1	3071.1	2858.8	2637.4



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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°	32.2	30.9	30.9	29.6	28.3	27.0	24.5	23.2	20.6	16.7	12.9
85°	69.5	65.6	61.8	59.2	56.6	54.1	50.2	46.3	41.2	33.5	25.7
82.5°	122.3	114.6	106.8	97.8	90.1	82.4	75.9	69.5	61.8	50.2	38.6
80°	175.1	163.5	151.9	139.0	127.4	114.6	103.0	92.7	82.4	66.9	51.5
77.5°	227.8	212.4	195.6	180.2	163.5	146.7	130.0	115.8	100.4	82.4	64.4
75°	276.7	258.7	243.3	221.4	200.8	178.9	157.0	137.7	118.4	96.5	77.2
72.5°	325.6	302.5	280.6	260.0	236.8	209.8	185.4	160.9	136.4	110.7	87.5
70°	374.6	346.2	319.2	294.8	269.0	242.0	212.4	184.1	154.5	123.6	96.5
67.5°	424.8	392.6	361.7	330.8	301.2	270.3	239.4	207.2	172.5	136.4	106.8
65°	480.1	440.2	402.9	368.1	333.4	299.9	265.2	230.4	191.8	150.6	115.8
62.5°	535.5	491.7	447.9	404.2	365.6	328.2	290.9	252.3	209.8	166.0	124.9
60°	594.7	544.5	494.3	445.4	397.7	356.5	315.4	274.2	229.1	180.2	133.9
57.5°	660.3	599.8	543.2	487.8	433.8	384.9	339.8	296.0	245.8	194.4	144.2
55°	735.0	660.3	593.4	531.6	472.4	413.2	364.3	319.2	265.2	208.5	155.7
52.5°	813.5	727.2	646.2	576.6	513.6	446.6	387.4	337.2	284.5	222.7	166.0
50°	904.9	795.5	705.4	620.4	549.6	480.1	411.9	357.8	303.8	239.4	176.3
47.5°	998.8	877.8	764.6	671.9	588.2	512.3	440.2	375.8	321.8	254.9	186.6
45°	1108.2	956.4	831.5	722.1	625.6	545.8	468.5	395.2	337.2	270.3	196.9
42.5°	1213.8	1049.0	901.0	777.4	668.0	577.9	494.3	415.8	352.7	285.7	205.9
40°	1338.6	1141.7	967.9	830.2	710.5	608.8	520.0	437.6	366.8	299.9	215.0
37.5°	1458.3	1235.7	1049.0	888.1	751.7	639.7	545.8	458.2	379.7	314.1	226.5
35°	1576.8	1339.9	1126.3	942.2	794.2	674.5	571.5	477.5	392.6	325.6	236.8
32.5°	1690.0	1437.7	1204.8	1002.7	840.5	706.6	594.7	495.6	405.5	335.9	247.1
30°	1795.6	1530.4	1282.0	1064.5	883.0	736.3	616.5	513.6	420.9	345.0	257.4
27.5°	1892.1	1620.5	1359.2	1122.4	922.9	763.3	639.7	530.3	433.8	354.0	266.4
25°	1979.6	1701.6	1430.0	1175.2	958.9	792.9	661.6	547.0	445.4	361.7	274.2
22.5°	2062.0	1776.3	1494.4	1227.9	1002.7	822.5	682.2	562.5	456.9	369.4	281.9
20°	2134.1	1844.5	1556.2	1280.7	1041.3	849.5	700.2	576.6	467.2	374.6	289.6
17.5°	2192.0	1905.0	1611.5	1327.1	1074.8	872.7	715.7	589.5	476.2	381.0	294.8
15°	2243.5	1956.5	1657.9	1367.0	1104.4	892.0	729.8	599.8	484.0	384.9	301.2
12.5°	2287.3	2000.2	1697.8	1401.7	1130.1	908.7	741.4	607.5	490.4	388.7	305.1
10°	2323.3	2035.0	1731.2	1428.7	1150.7	921.6	750.4	615.3	495.6	392.6	308.9
7.5°	2350.3	2060.7	1755.7	1451.9	1167.4	930.6	758.1	620.4	500.7	395.2	315.4
5°	2370.9	2082.6	1775.0	1467.4	1180.3	943.5	767.1	626.8	505.9	397.7	315.4
2.5°	2386.4	2100.6	1790.4	1480.2	1190.6	940.9	767.1	625.6	505.9	397.7	314.1
0°	2383.8	2101.9	1789.1	1480.2	1190.6	938.3	767.1	624.3	505.9	397.7	314.1



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	9.0	6.4	2.6	0.0
85°	19.3	12.9	6.4	0.0
82.5°	28.3	18.0	9.0	0.0
80°	37.3	24.5	11.6	0.0
77.5°	47.6	30.9	15.4	0.0
75°	56.6	36.0	18.0	0.0
72.5°	65.6	42.5	20.6	0.0
70°	73.4	47.6	23.2	0.0
67.5°	81.1	54.1	27.0	0.0
65°	87.5	59.2	29.6	0.0
62.5°	92.7	65.6	32.2	0.0
60°	99.1	70.8	34.8	0.0
57.5°	104.3	74.7	37.3	0.0
55°	109.4	77.2	39.9	0.0
52.5°	114.6	81.1	42.5	0.0
50°	119.7	85.0	45.1	0.0
47.5°	124.9	87.5	46.3	0.0
45°	132.6	91.4	48.9	0.0
42.5°	139.0	94.0	51.5	0.0
40°	145.4	96.5	52.8	0.0
37.5°	151.9	99.1	55.3	0.0
35°	158.3	101.7	56.6	0.0
32.5°	163.5	104.3	57.9	0.0
30°	168.6	106.8	59.2	0.0
27.5°	173.8	108.1	60.5	0.0
25°	177.6	110.7	61.8	0.0
22.5°	181.5	112.0	63.1	0.0
20°	184.1	113.3	64.4	0.0
17.5°	187.9	114.6	65.6	0.0
15°	189.2	115.8	68.2	0.0
12.5°	191.8	117.1	68.2	0.0
10°	193.1	118.4	68.2	0.0
7.5°	195.6	118.4	68.2	0.0
5°	194.4	118.4	68.2	0.0
2.5°	194.4	118.4	68.2	0.0
0°	193.1	118.4	68.2	0.0

(END OF REPORT)