

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: P628391

Luminaire Tested: **IFLD-S-SA3E-830-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628391
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA3E-830-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (48) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

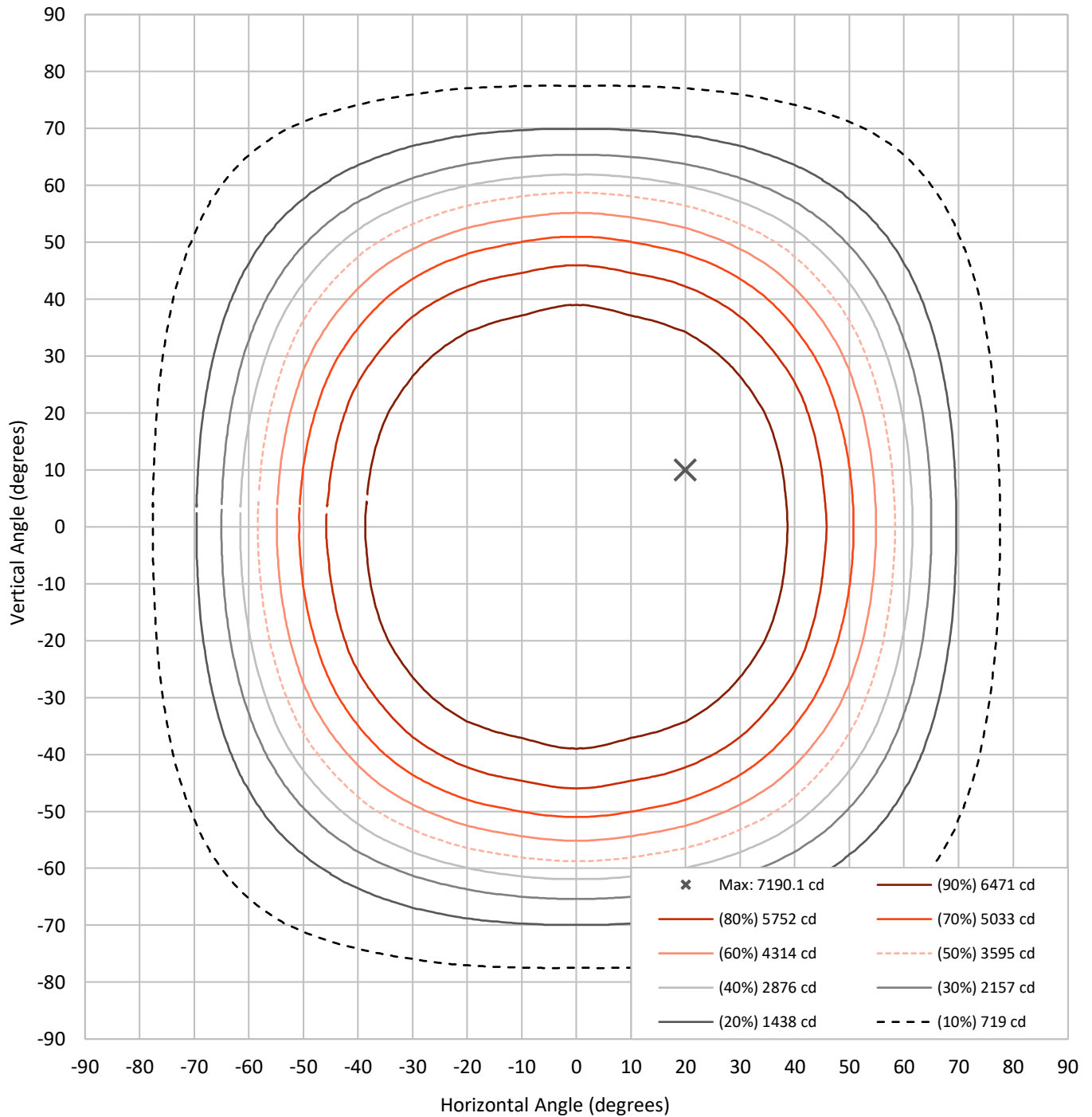
Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	22058.2 lumens	Max Intensity:	7190.1 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	95.0 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' 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:	13535.4 lumens	Field Lumens:	16226.6 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%
Input Watts (W):	232.1		
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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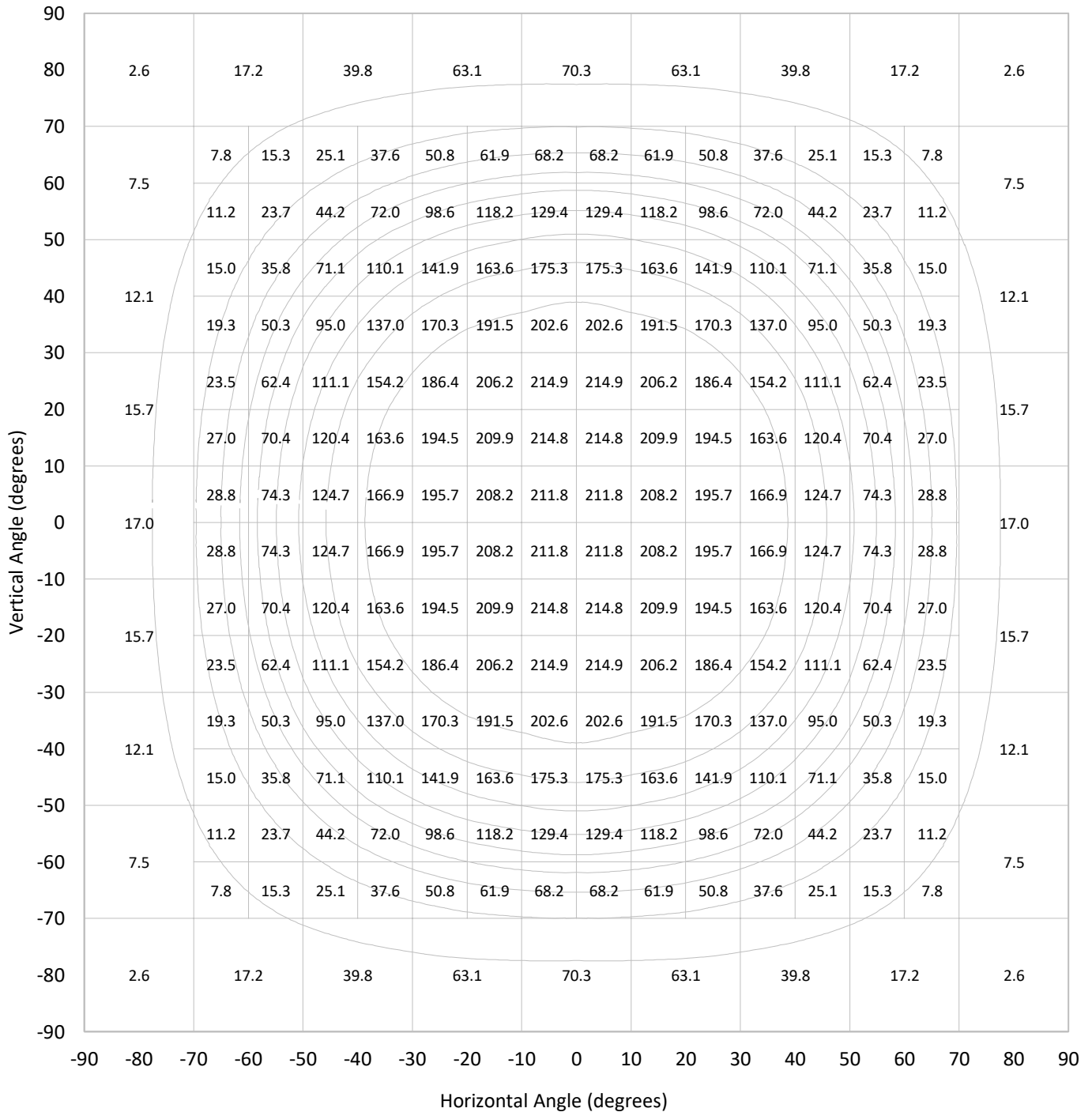
Iso-Candela Plot





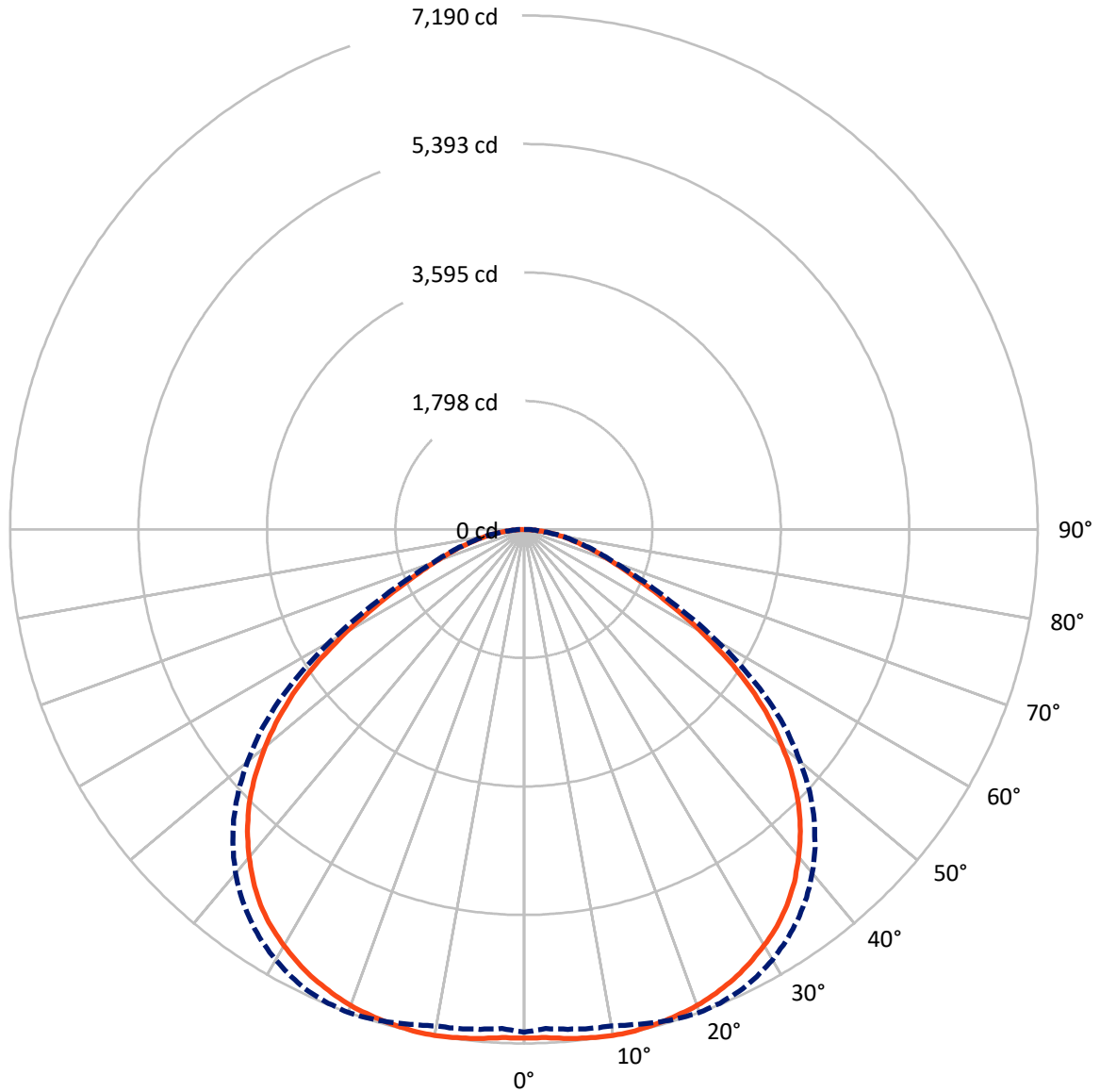
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Lumen Table



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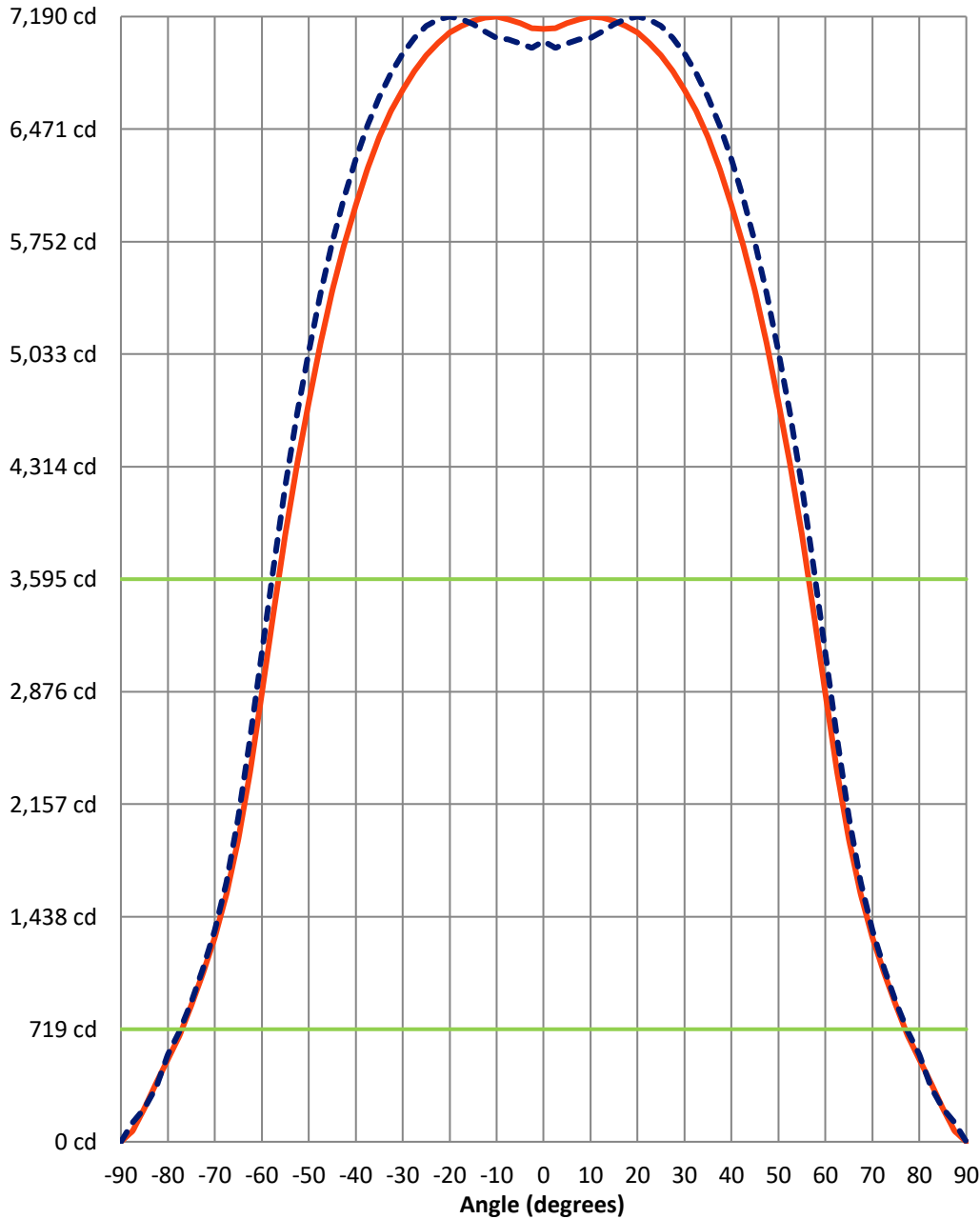
Luminous Intensity Polar Plot



— 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: 13535.4
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 16226.6
 Efficiency: 73.6%

Spill:
 Lumens: 5831.6
 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°	58.0	62.7	65.0	67.3	69.6	71.9	74.3	71.9	69.6	69.6	67.3
85°	155.5	160.1	162.5	178.7	195.0	204.2	215.8	213.5	213.5	211.2	208.9
82.5°	311.0	324.9	336.5	352.8	362.1	376.0	385.3	378.3	373.7	364.4	357.4
80°	552.4	557.0	559.3	561.7	550.0	547.7	543.1	536.1	526.8	515.2	503.6
77.5°	703.2	707.9	712.5	707.9	705.5	703.2	696.3	689.3	680.0	670.7	656.8
75°	930.7	930.7	930.7	923.7	919.1	912.1	900.5	888.9	872.7	854.1	833.2
72.5°	1172.0	1169.7	1167.4	1153.5	1141.9	1127.9	1111.7	1097.8	1079.2	1058.3	1030.5
70°	1425.0	1429.7	1432.0	1413.4	1399.5	1380.9	1360.0	1334.5	1306.7	1276.5	1237.0
67.5°	1773.2	1768.5	1763.9	1738.3	1719.8	1694.2	1664.1	1626.9	1585.2	1538.7	1483.0
65°	2204.8	2211.8	2197.9	2172.3	2137.5	2095.8	2049.3	1996.0	1933.3	1863.7	1784.8
62.5°	2727.0	2738.6	2722.4	2689.9	2645.8	2590.1	2525.1	2448.5	2362.7	2265.2	2167.7
60°	3321.2	3318.9	3288.7	3244.6	3186.6	3116.9	3045.0	2961.4	2864.0	2750.2	2631.9
57.5°	3866.6	3862.0	3824.8	3780.7	3722.7	3648.4	3571.8	3483.6	3381.5	3260.8	3123.9
55°	4356.3	4351.7	4314.5	4268.1	4207.8	4133.5	4063.9	3980.3	3880.5	3752.9	3606.7
52.5°	4790.3	4792.6	4760.1	4709.1	4644.1	4572.1	4504.8	4421.3	4326.1	4198.5	4056.9
50°	5189.5	5187.2	5152.4	5105.9	5045.6	4976.0	4908.7	4825.1	4725.3	4602.3	4465.4
47.5°	5560.8	5556.2	5516.7	5465.7	5403.0	5342.7	5280.0	5205.7	5101.3	4978.3	4841.4
45°	5871.8	5862.6	5823.1	5774.4	5714.0	5660.6	5604.9	5549.2	5437.8	5324.1	5194.1
42.5°	6138.7	6136.4	6097.0	6048.2	5987.9	5941.5	5890.4	5820.8	5727.9	5623.5	5495.9
40°	6394.0	6375.5	6336.0	6289.6	6233.9	6194.4	6143.4	6073.8	5983.2	5881.1	5758.1
37.5°	6584.3	6586.7	6544.9	6493.8	6445.1	6408.0	6361.5	6296.6	6217.6	6117.9	5994.8
35°	6765.4	6753.8	6719.0	6674.9	6630.8	6589.0	6540.3	6484.6	6419.6	6326.7	6210.7
32.5°	6883.7	6900.0	6858.2	6811.8	6786.3	6753.8	6702.7	6644.7	6586.7	6493.8	6389.4
30°	7013.7	6999.8	6967.3	6927.8	6909.3	6888.4	6844.3	6788.6	6721.3	6637.7	6540.3
27.5°	7104.2	7097.3	7057.8	7020.7	7011.4	6992.8	6958.0	6909.3	6842.0	6760.7	6670.2
25°	7143.7	7148.3	7111.2	7090.3	7090.3	7078.7	7050.8	7009.1	6941.8	6867.5	6779.3
22.5°	7162.2	7157.6	7132.1	7127.4	7139.0	7129.8	7118.2	7081.0	7020.7	6960.3	6886.1
20°	7173.9	7141.4	7118.2	7136.7	7150.6	7148.3	7139.0	7115.8	7088.0	7036.9	6971.9
17.5°	7148.3	7127.4	7099.6	7127.4	7157.6	7159.9	7150.6	7136.7	7129.8	7097.3	7039.2
15°	7085.7	7069.4	7074.1	7101.9	7136.7	7148.3	7155.3	7171.5	7162.2	7136.7	7085.7
12.5°	7043.9	7023.0	7043.9	7071.7	7090.3	7097.3	7153.0	7183.1	7183.1	7159.9	7127.4
10°	7032.3	6990.5	7018.4	7043.9	7053.2	7094.9	7141.4	7173.9	7190.1	7171.5	7129.8
7.5°	7009.1	6981.2	6992.8	7004.4	7057.8	7088.0	7113.5	7148.3	7171.5	7169.2	7132.1
5°	6997.5	6962.7	6967.3	7016.0	7053.2	7074.1	7083.3	7113.5	7148.3	7155.3	7127.4
2.5°	6967.3	6951.0	6985.9	6990.5	7018.4	7034.6	7043.9	7071.7	7115.8	7132.1	7120.5
0°	6951.0	6927.8	6904.6	6923.2	6969.6	7004.4	7018.4	7060.1	7111.2	7127.4	7101.9



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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°	65.0	62.7	60.3	58.0	60.3	60.3	60.3	58.0	60.3	58.0	58.0
85°	201.9	192.6	185.7	176.4	167.1	160.1	150.9	141.6	139.3	136.9	132.3
82.5°	348.1	336.5	324.9	311.0	297.1	280.8	264.6	246.0	241.4	236.7	229.8
80°	489.7	473.5	457.2	441.0	427.0	410.8	392.2	371.3	357.4	345.8	331.9
77.5°	638.2	615.0	591.8	564.0	547.7	531.5	512.9	492.0	471.1	452.6	431.7
75°	807.7	782.1	758.9	731.1	700.9	670.7	640.6	612.7	582.5	554.7	526.8
72.5°	995.7	958.5	921.4	886.6	849.4	812.3	772.9	735.7	698.6	661.5	622.0
70°	1192.9	1146.5	1100.1	1053.7	1004.9	956.2	909.8	863.4	817.0	768.2	724.1
67.5°	1425.0	1371.6	1311.3	1246.3	1174.4	1111.7	1051.4	995.7	940.0	884.3	828.6
65°	1715.1	1640.9	1559.6	1471.4	1387.9	1304.3	1216.1	1132.6	1067.6	1002.6	940.0
62.5°	2072.5	1968.1	1854.4	1740.7	1638.5	1529.5	1427.3	1318.3	1216.1	1123.3	1046.7
60°	2499.6	2358.0	2218.8	2072.5	1931.0	1782.4	1652.5	1517.9	1390.2	1276.5	1165.1
57.5°	2970.7	2805.9	2638.8	2460.1	2267.5	2093.4	1917.1	1740.7	1589.8	1438.9	1313.6
55°	3448.8	3274.8	3086.8	2884.9	2673.7	2450.9	2211.8	2014.5	1808.0	1631.6	1469.1
52.5°	3903.7	3722.7	3527.7	3342.1	3089.1	2833.8	2571.5	2311.6	2070.2	1845.1	1647.8
50°	4309.9	4133.5	3945.5	3729.7	3495.3	3223.7	2931.3	2638.8	2353.4	2088.8	1842.8
47.5°	4681.2	4509.5	4321.5	4105.6	3892.1	3590.4	3295.7	2973.1	2655.1	2351.1	2063.3
45°	5029.4	4855.3	4660.3	4453.8	4207.8	3938.5	3634.5	3309.6	2968.4	2627.2	2295.4
42.5°	5345.0	5170.9	4973.7	4760.1	4516.4	4249.5	3954.8	3627.5	3284.1	2912.7	2548.3
40°	5621.2	5451.8	5261.4	5038.6	4811.2	4530.4	4240.3	3929.3	3574.2	3200.5	2799.0
37.5°	5862.6	5704.7	5516.7	5296.3	5054.9	4804.2	4504.8	4193.8	3873.6	3467.4	3056.6
35°	6076.1	5929.9	5737.2	5528.3	5291.6	5027.0	4746.2	4442.2	4096.4	3715.7	3316.5
32.5°	6261.7	6113.2	5936.8	5727.9	5498.2	5249.8	4962.1	4655.7	4328.4	3940.9	3506.9
30°	6419.6	6275.7	6108.6	5911.3	5690.8	5444.8	5164.0	4855.3	4521.1	4135.8	3706.5
27.5°	6556.5	6419.6	6257.1	6073.8	5862.6	5625.8	5342.7	5031.7	4690.5	4319.2	3889.8
25°	6674.9	6542.6	6391.7	6217.6	6008.8	5776.7	5509.8	5184.9	4843.7	4470.0	4045.3
22.5°	6781.6	6654.0	6503.1	6333.7	6143.4	5911.3	5642.1	5319.5	4973.7	4604.6	4186.9
20°	6876.8	6758.4	6609.9	6435.8	6245.5	6011.1	5744.2	5437.8	5089.7	4727.6	4314.5
17.5°	6953.4	6848.9	6700.4	6517.0	6326.7	6099.3	5839.3	5558.5	5189.5	4832.1	4421.3
15°	7006.7	6904.6	6770.0	6584.3	6398.7	6173.6	5913.6	5623.5	5280.0	4915.6	4509.5
12.5°	7043.9	6934.8	6809.5	6637.7	6452.1	6229.3	5976.3	5690.8	5356.6	4989.9	4586.1
10°	7053.2	6953.4	6828.0	6674.9	6493.8	6278.0	6029.7	5746.5	5419.3	5047.9	4648.7
7.5°	7057.8	6962.7	6848.9	6702.7	6524.0	6315.1	6069.1	5790.6	5465.7	5096.7	4695.1
5°	7055.5	6965.0	6862.9	6721.3	6542.6	6336.0	6094.6	5820.8	5498.2	5129.2	4730.0
2.5°	7048.5	6967.3	6872.1	6735.2	6563.5	6359.2	6120.2	5855.6	5533.0	5157.0	4757.8
0°	7067.1	6997.5	6876.8	6730.6	6568.1	6359.2	6117.9	5860.2	5537.6	5154.7	4755.5



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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°	58.0	55.7	55.7	53.4	51.1	48.7	44.1	41.8	37.1	30.2	23.2
85°	125.3	118.4	111.4	106.8	102.1	97.5	90.5	83.6	74.3	60.3	46.4
82.5°	220.5	206.6	192.6	176.4	162.5	148.5	136.9	125.3	111.4	90.5	69.6
80°	315.6	294.8	273.9	250.7	229.8	206.6	185.7	167.1	148.5	120.7	92.8
77.5°	410.8	382.9	352.8	324.9	294.8	264.6	234.4	208.9	181.0	148.5	116.0
75°	499.0	466.5	438.6	399.2	362.1	322.6	283.1	248.3	213.5	174.1	139.3
72.5°	587.2	545.4	506.0	468.8	427.0	378.3	334.2	290.1	246.0	199.6	157.8
70°	675.4	624.3	575.6	531.5	485.1	436.3	382.9	331.9	278.5	222.8	174.1
67.5°	765.9	707.9	652.2	596.5	543.1	487.4	431.7	373.7	311.0	246.0	192.6
65°	865.7	793.7	726.4	663.8	601.1	540.8	478.1	415.4	345.8	271.5	208.9
62.5°	965.5	886.6	807.7	728.8	659.1	591.8	524.5	454.9	378.3	299.4	225.1
60°	1072.2	981.7	891.2	803.0	717.2	642.9	568.6	494.3	413.1	324.9	241.4
57.5°	1190.6	1081.5	979.4	879.6	782.1	693.9	612.7	533.8	443.3	350.5	259.9
55°	1325.2	1190.6	1069.9	958.5	851.8	745.0	656.8	575.6	478.1	376.0	280.8
52.5°	1466.8	1311.3	1165.1	1039.8	926.0	805.3	698.6	608.1	512.9	401.5	299.4
50°	1631.6	1434.3	1271.8	1118.7	991.0	865.7	742.7	645.2	547.7	431.7	318.0
47.5°	1801.0	1582.8	1378.6	1211.5	1060.6	923.7	793.7	677.7	580.2	459.5	336.5
45°	1998.3	1724.4	1499.3	1302.0	1127.9	984.1	844.8	712.5	608.1	487.4	355.1
42.5°	2188.6	1891.5	1624.6	1401.8	1204.5	1042.1	891.2	749.6	635.9	515.2	371.3
40°	2413.7	2058.6	1745.3	1497.0	1281.1	1097.8	937.6	789.1	661.5	540.8	387.6
37.5°	2629.6	2228.0	1891.5	1601.4	1355.4	1153.5	984.1	826.2	684.7	566.3	408.5
35°	2843.1	2416.0	2030.8	1698.9	1432.0	1216.1	1030.5	861.0	707.9	587.2	427.0
32.5°	3047.3	2592.4	2172.3	1808.0	1515.5	1274.2	1072.2	893.5	731.1	605.8	445.6
30°	3237.6	2759.5	2311.6	1919.4	1592.1	1327.5	1111.7	926.0	758.9	622.0	464.2
27.5°	3411.7	2922.0	2450.9	2023.8	1664.1	1376.3	1153.5	956.2	782.1	638.2	480.4
25°	3569.5	3068.2	2578.5	2119.0	1729.1	1429.7	1192.9	986.4	803.0	652.2	494.3
22.5°	3718.1	3202.8	2694.5	2214.1	1808.0	1483.0	1230.1	1014.2	823.9	666.1	508.3
20°	3848.0	3325.8	2805.9	2309.3	1877.6	1531.8	1262.6	1039.8	842.5	675.4	522.2
17.5°	3952.5	3434.9	2905.7	2392.8	1937.9	1573.6	1290.4	1063.0	858.7	687.0	531.5
15°	4045.3	3527.7	2989.3	2464.8	1991.3	1608.4	1315.9	1081.5	872.7	693.9	543.1
12.5°	4124.2	3606.7	3061.2	2527.4	2037.7	1638.5	1336.8	1095.5	884.3	700.9	550.0
10°	4189.2	3669.3	3121.6	2576.2	2074.9	1661.8	1353.1	1109.4	893.5	707.9	557.0
7.5°	4237.9	3715.7	3165.7	2618.0	2105.0	1678.0	1367.0	1118.7	902.8	712.5	568.6
5°	4275.1	3755.2	3200.5	2645.8	2128.3	1701.2	1383.2	1130.3	912.1	717.2	568.6
2.5°	4302.9	3787.7	3228.4	2669.0	2146.8	1696.6	1383.2	1127.9	912.1	717.2	566.3
0°	4298.3	3790.0	3226.0	2669.0	2146.8	1691.9	1383.2	1125.6	912.1	717.2	566.3



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	16.2	11.6	4.6	0.0
85°	34.8	23.2	11.6	0.0
82.5°	51.1	32.5	16.2	0.0
80°	67.3	44.1	20.9	0.0
77.5°	85.9	55.7	27.9	0.0
75°	102.1	65.0	32.5	0.0
72.5°	118.4	76.6	37.1	0.0
70°	132.3	85.9	41.8	0.0
67.5°	146.2	97.5	48.7	0.0
65°	157.8	106.8	53.4	0.0
62.5°	167.1	118.4	58.0	0.0
60°	178.7	127.6	62.7	0.0
57.5°	188.0	134.6	67.3	0.0
55°	197.3	139.3	71.9	0.0
52.5°	206.6	146.2	76.6	0.0
50°	215.8	153.2	81.2	0.0
47.5°	225.1	157.8	83.6	0.0
45°	239.1	164.8	88.2	0.0
42.5°	250.7	169.4	92.8	0.0
40°	262.3	174.1	95.2	0.0
37.5°	273.9	178.7	99.8	0.0
35°	285.5	183.3	102.1	0.0
32.5°	294.8	188.0	104.4	0.0
30°	304.0	192.6	106.8	0.0
27.5°	313.3	195.0	109.1	0.0
25°	320.3	199.6	111.4	0.0
22.5°	327.2	201.9	113.7	0.0
20°	331.9	204.2	116.0	0.0
17.5°	338.8	206.6	118.4	0.0
15°	341.2	208.9	123.0	0.0
12.5°	345.8	211.2	123.0	0.0
10°	348.1	213.5	123.0	0.0
7.5°	352.8	213.5	123.0	0.0
5°	350.5	213.5	123.0	0.0
2.5°	350.5	213.5	123.0	0.0
0°	348.1	213.5	123.0	0.0

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