

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: P628196

Luminaire Tested: **IFLD-M-SA4C-727-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628196
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4C-727-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (64) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

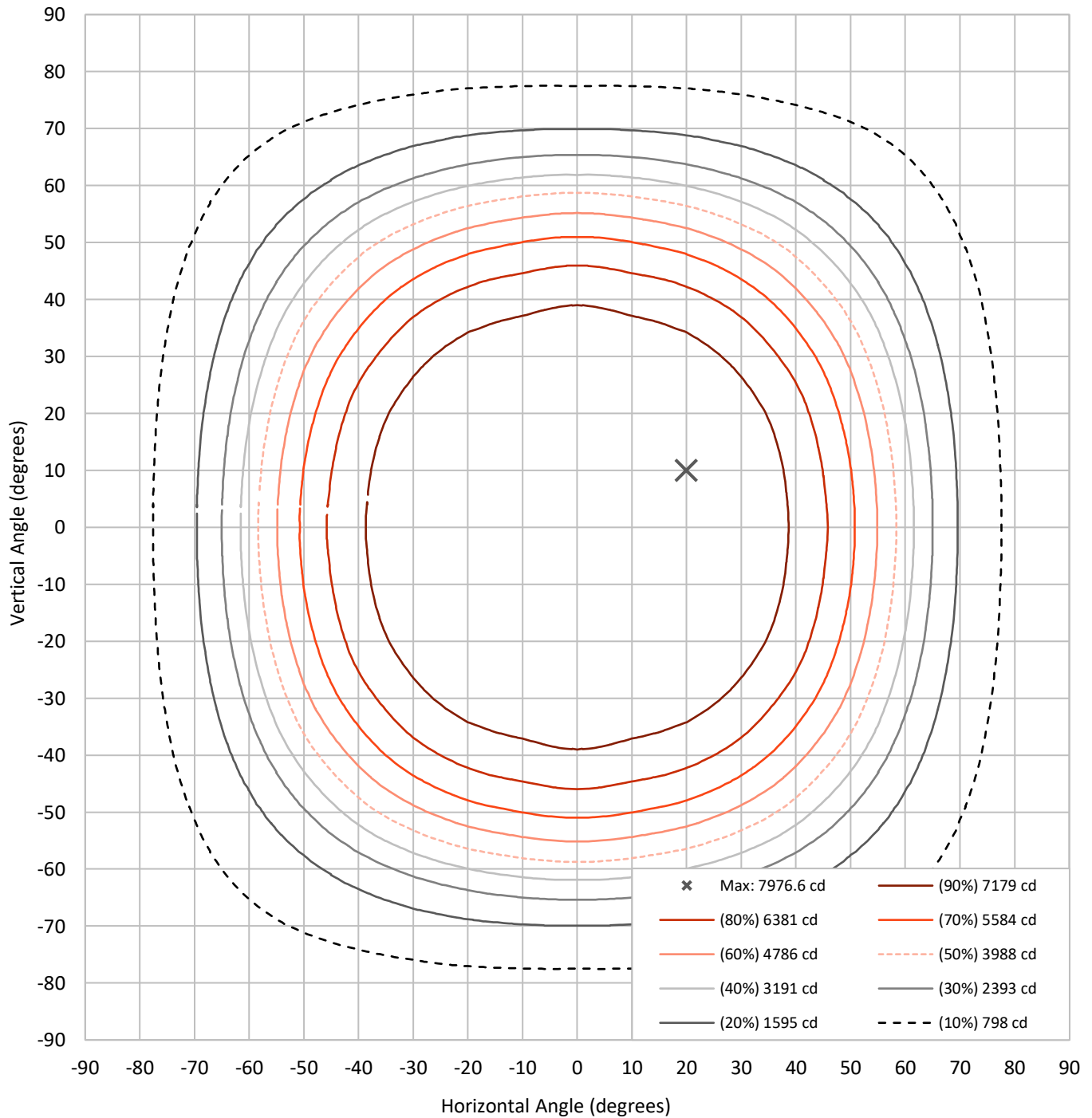
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	24471 lumens	Max Intensity:	7976.6 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	112.2 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 0.5' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	15015.9 lumens	Field Lumens:	18001.5 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

Input Watts (W): 218.1
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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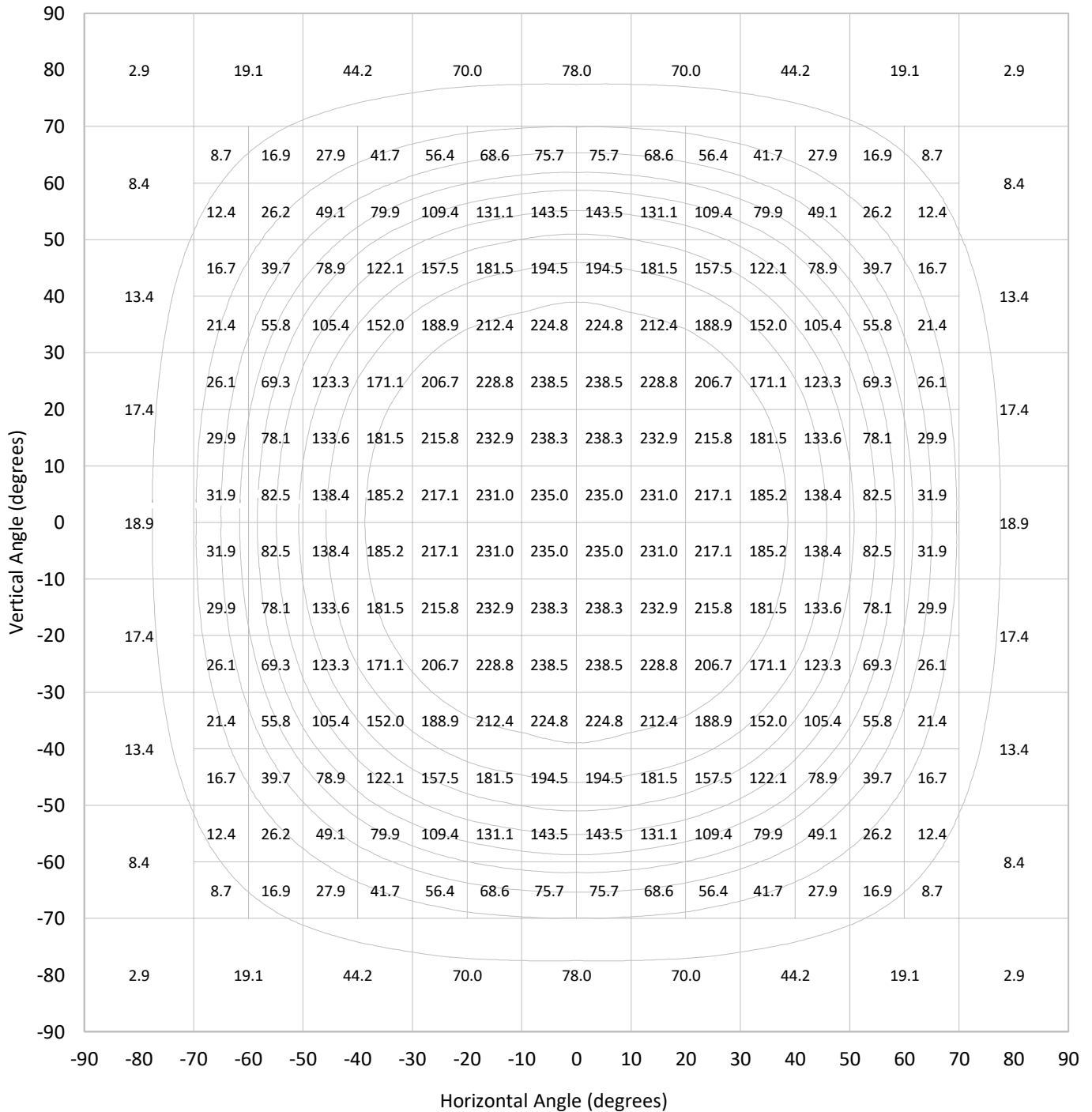
Iso-Candela Plot





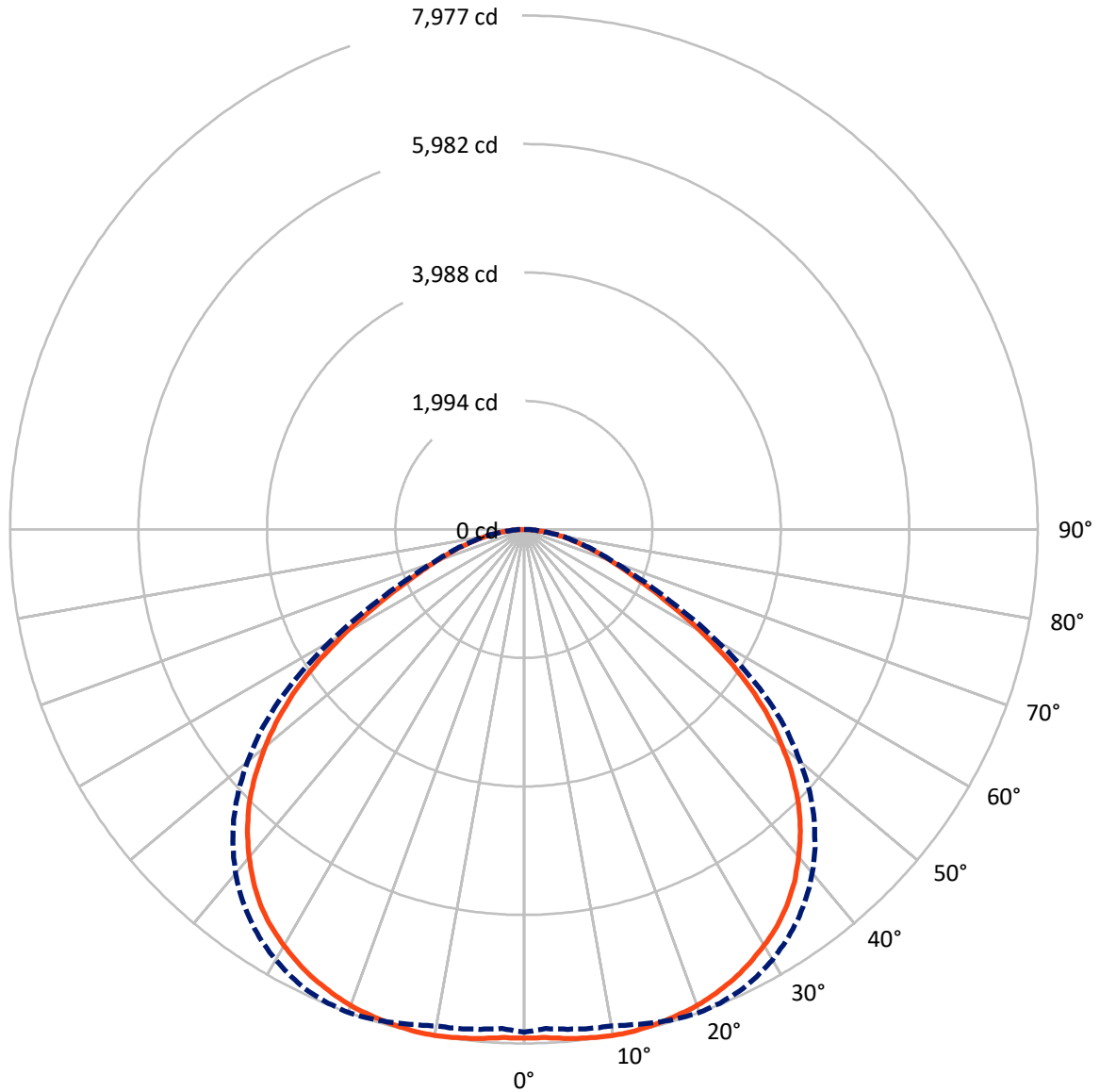
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Lumen Table



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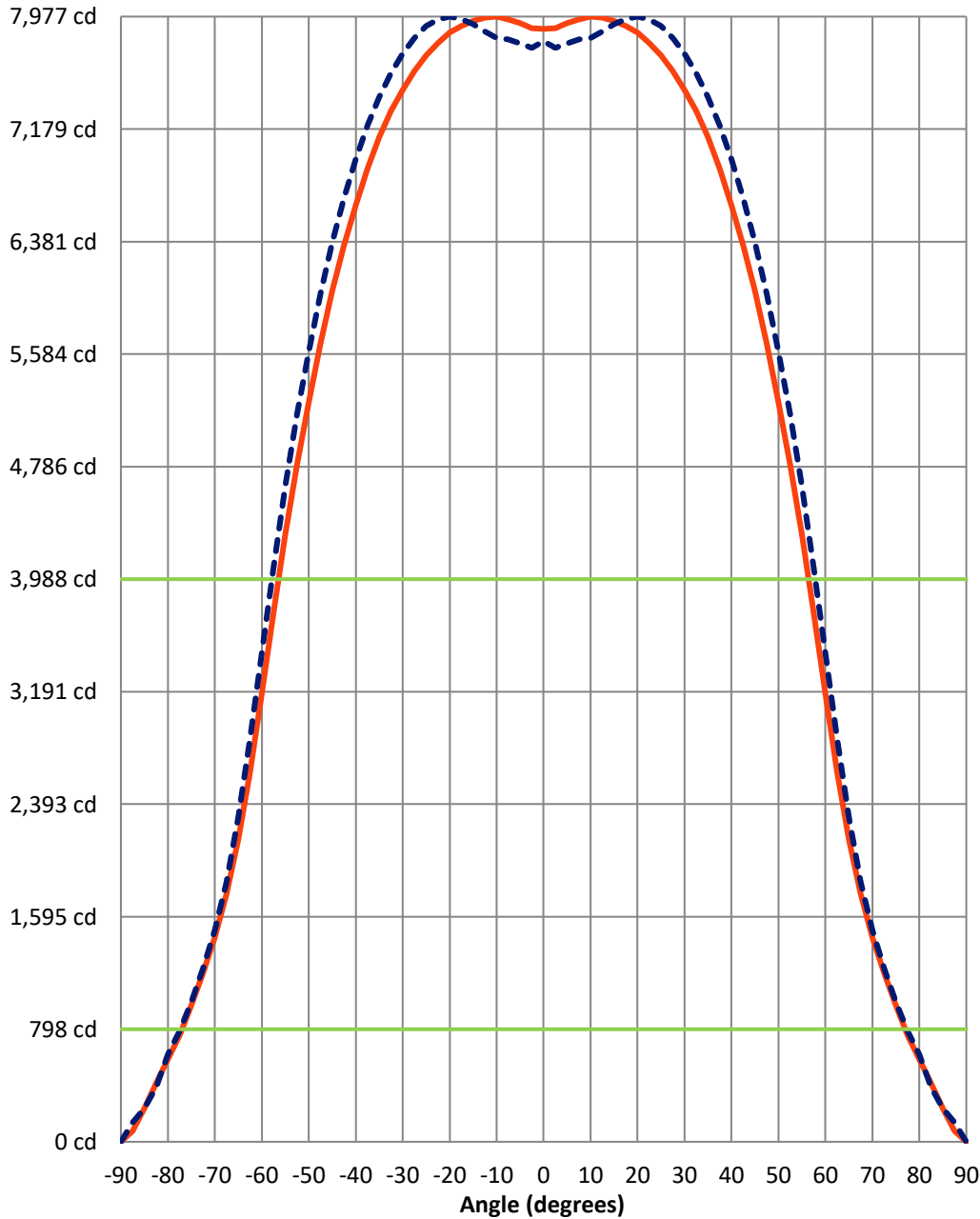
Luminous Intensity Polar Plot



— 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: 15015.9
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 18001.5
 Efficiency: 73.6%

Spill:
 Lumens: 6469.5
 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°	64.4	69.5	72.1	74.7	77.2	79.8	82.4	79.8	77.2	77.2	74.7
85°	172.5	177.7	180.2	198.3	216.3	226.6	239.5	236.9	236.9	234.3	231.7
82.5°	345.0	360.5	373.3	391.4	401.7	417.1	427.4	419.7	414.5	404.2	396.5
80°	612.8	617.9	620.5	623.1	610.2	607.6	602.5	594.8	584.5	571.6	558.7
77.5°	780.1	785.3	790.4	785.3	782.7	780.1	772.4	764.7	754.4	744.1	728.7
75°	1032.5	1032.5	1032.5	1024.7	1019.6	1011.9	999.0	986.1	968.1	947.5	924.3
72.5°	1300.2	1297.7	1295.1	1279.6	1266.8	1251.3	1233.3	1217.9	1197.3	1174.1	1143.2
70°	1580.9	1586.0	1588.6	1568.0	1552.6	1532.0	1508.8	1480.5	1449.6	1416.1	1372.3
67.5°	1967.1	1962.0	1956.8	1928.5	1907.9	1879.6	1846.1	1804.9	1758.6	1707.1	1645.3
65°	2446.0	2453.7	2438.3	2410.0	2371.3	2325.0	2273.5	2214.3	2144.8	2067.5	1980.0
62.5°	3025.3	3038.2	3020.2	2984.1	2935.2	2873.4	2801.3	2716.4	2621.1	2513.0	2404.8
60°	3684.5	3681.9	3648.4	3599.5	3535.1	3457.9	3378.1	3285.4	3177.2	3051.1	2919.8
57.5°	4289.5	4284.4	4243.2	4194.3	4129.9	4047.5	3962.5	3864.7	3751.4	3617.5	3465.6
55°	4832.8	4827.7	4786.5	4735.0	4668.0	4585.6	4508.4	4415.7	4305.0	4163.4	4001.2
52.5°	5314.3	5316.9	5280.8	5224.2	5152.1	5072.3	4997.6	4904.9	4799.3	4657.7	4500.7
50°	5757.1	5754.6	5715.9	5664.4	5597.5	5520.3	5445.6	5352.9	5242.2	5105.7	4953.8
47.5°	6169.1	6163.9	6120.2	6063.5	5994.0	5927.1	5857.6	5775.2	5659.3	5522.8	5370.9
45°	6514.1	6503.8	6460.0	6406.0	6339.0	6279.8	6218.0	6156.2	6032.6	5906.5	5762.3
42.5°	6810.2	6807.6	6763.9	6709.8	6642.9	6591.4	6534.7	6457.5	6354.5	6238.6	6097.0
40°	7093.4	7072.8	7029.1	6977.6	6915.8	6872.0	6815.4	6738.1	6637.7	6524.4	6387.9
37.5°	7304.6	7307.1	7260.8	7204.1	7150.1	7108.9	7057.4	6985.3	6897.8	6787.0	6650.6
35°	7505.4	7492.5	7453.9	7405.0	7356.1	7309.7	7255.6	7193.8	7121.8	7018.8	6890.0
32.5°	7636.7	7654.7	7608.4	7556.9	7528.6	7492.5	7435.9	7371.5	7307.1	7204.1	7088.3
30°	7780.9	7765.4	7729.4	7685.6	7665.0	7641.9	7592.9	7531.1	7456.5	7363.8	7255.6
27.5°	7881.3	7873.6	7829.8	7788.6	7778.3	7757.7	7719.1	7665.0	7590.4	7500.2	7399.8
25°	7925.1	7930.2	7889.0	7865.9	7865.9	7853.0	7822.1	7775.7	7701.1	7618.7	7520.8
22.5°	7945.7	7940.5	7912.2	7907.1	7919.9	7909.6	7896.8	7855.6	7788.6	7721.7	7639.3
20°	7958.5	7922.5	7896.8	7917.4	7932.8	7930.2	7919.9	7894.2	7863.3	7806.6	7734.5
17.5°	7930.2	7907.1	7876.2	7907.1	7940.5	7943.1	7932.8	7917.4	7909.6	7873.6	7809.2
15°	7860.7	7842.7	7847.8	7878.7	7917.4	7930.2	7937.9	7956.0	7945.7	7917.4	7860.7
12.5°	7814.4	7791.2	7814.4	7845.3	7865.9	7873.6	7935.4	7968.8	7968.8	7943.1	7907.1
10°	7801.5	7755.1	7786.0	7814.4	7824.7	7871.0	7922.5	7958.5	7976.6	7956.0	7909.6
7.5°	7775.7	7744.8	7757.7	7770.6	7829.8	7863.3	7891.6	7930.2	7956.0	7953.4	7912.2
5°	7762.9	7724.2	7729.4	7783.5	7824.7	7847.8	7858.1	7891.6	7930.2	7937.9	7907.1
2.5°	7729.4	7711.4	7750.0	7755.1	7786.0	7804.1	7814.4	7845.3	7894.2	7912.2	7899.3
0°	7711.4	7685.6	7659.9	7680.5	7732.0	7770.6	7786.0	7832.4	7889.0	7907.1	7878.7



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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°	72.1	69.5	66.9	64.4	66.9	66.9	66.9	64.4	66.9	64.4	64.4
85°	224.0	213.7	206.0	195.7	185.4	177.7	167.4	157.1	154.5	151.9	146.8
82.5°	386.2	373.3	360.5	345.0	329.6	311.5	293.5	272.9	267.8	262.6	254.9
80°	543.3	525.2	507.2	489.2	473.8	455.7	435.1	412.0	396.5	383.6	368.2
77.5°	708.1	682.3	656.6	625.7	607.6	589.6	569.0	545.8	522.7	502.1	478.9
75°	896.0	867.7	841.9	811.0	777.6	744.1	710.6	679.7	646.3	615.4	584.5
72.5°	1104.6	1063.4	1022.2	983.6	942.4	901.2	857.4	816.2	775.0	733.8	690.0
70°	1323.4	1271.9	1220.4	1168.9	1114.9	1060.8	1009.3	957.8	906.3	852.2	803.3
67.5°	1580.9	1521.7	1454.7	1382.6	1302.8	1233.3	1166.4	1104.6	1042.8	981.0	919.2
65°	1902.7	1820.3	1730.2	1632.4	1539.7	1447.0	1349.2	1256.5	1184.4	1112.3	1042.8
62.5°	2299.3	2183.4	2057.2	1931.1	1817.8	1696.8	1583.5	1462.5	1349.2	1246.2	1161.2
60°	2773.0	2615.9	2461.5	2299.3	2142.2	1977.4	1833.2	1683.9	1542.3	1416.1	1292.5
57.5°	3295.7	3112.9	2927.5	2729.2	2515.5	2322.4	2126.7	1931.1	1763.7	1596.3	1457.3
55°	3826.1	3633.0	3424.4	3200.4	2966.1	2718.9	2453.7	2234.9	2005.7	1810.0	1629.8
52.5°	4330.7	4129.9	3913.6	3707.6	3427.0	3143.8	2852.8	2564.4	2296.7	2046.9	1828.1
50°	4781.3	4585.6	4377.1	4137.6	3877.6	3576.3	3251.9	2927.5	2610.8	2317.3	2044.3
47.5°	5193.3	5002.7	4794.2	4554.7	4317.9	3983.1	3656.1	3298.3	2945.5	2608.2	2289.0
45°	5579.5	5386.4	5170.1	4940.9	4668.0	4369.3	4032.1	3671.6	3293.1	2914.6	2546.4
42.5°	5929.6	5736.5	5517.7	5280.8	5010.5	4714.4	4387.4	4024.3	3643.3	3231.3	2827.1
40°	6236.0	6048.1	5837.0	5589.8	5337.5	5025.9	4704.1	4359.0	3965.1	3550.6	3105.1
37.5°	6503.8	6328.7	6120.2	5875.6	5607.8	5329.7	4997.6	4652.6	4297.3	3846.7	3390.9
35°	6740.7	6578.5	6364.8	6133.0	5870.4	5576.9	5265.4	4928.1	4544.4	4122.2	3679.3
32.5°	6946.7	6781.9	6586.2	6354.5	6099.6	5824.1	5504.8	5164.9	4801.9	4371.9	3890.4
30°	7121.8	6962.1	6776.7	6557.9	6313.3	6040.4	5728.8	5386.4	5015.6	4588.2	4111.9
27.5°	7273.7	7121.8	6941.5	6738.1	6503.8	6241.2	5927.1	5582.1	5203.6	4791.6	4315.3
25°	7405.0	7258.2	7090.9	6897.8	6666.0	6408.5	6112.5	5752.0	5373.5	4959.0	4487.8
22.5°	7523.4	7381.8	7214.4	7026.5	6815.4	6557.9	6259.2	5901.3	5517.7	5108.3	4644.8
20°	7629.0	7497.7	7332.9	7139.8	6928.6	6668.6	6372.5	6032.6	5646.4	5244.8	4786.5
17.5°	7713.9	7598.1	7433.3	7229.9	7018.8	6766.4	6478.1	6166.5	5757.1	5360.6	4904.9
15°	7773.2	7659.9	7510.5	7304.6	7098.6	6848.8	6560.5	6238.6	5857.6	5453.3	5002.7
12.5°	7814.4	7693.3	7554.3	7363.8	7157.8	6910.6	6630.0	6313.3	5942.5	5535.7	5087.7
10°	7824.7	7713.9	7574.9	7405.0	7204.1	6964.7	6689.2	6375.1	6012.0	5600.1	5157.2
7.5°	7829.8	7724.2	7598.1	7435.9	7237.6	7005.9	6733.0	6424.0	6063.5	5654.1	5208.7
5°	7827.2	7726.8	7613.5	7456.5	7258.2	7029.1	6761.3	6457.5	6099.6	5690.2	5247.3
2.5°	7819.5	7729.4	7623.8	7471.9	7281.4	7054.8	6789.6	6496.1	6138.2	5721.1	5278.2
0°	7840.1	7762.9	7629.0	7466.8	7286.5	7054.8	6787.0	6501.2	6143.3	5718.5	5275.7



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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°	64.4	61.8	61.8	59.2	56.6	54.1	48.9	46.3	41.2	33.5	25.7
85°	139.0	131.3	123.6	118.4	113.3	108.1	100.4	92.7	82.4	66.9	51.5
82.5°	244.6	229.2	213.7	195.7	180.2	164.8	151.9	139.0	123.6	100.4	77.2
80°	350.2	327.0	303.8	278.1	254.9	229.2	206.0	185.4	164.8	133.9	103.0
77.5°	455.7	424.8	391.4	360.5	327.0	293.5	260.0	231.7	200.8	164.8	128.7
75°	553.6	517.5	486.6	442.9	401.7	357.9	314.1	275.5	236.9	193.1	154.5
72.5°	651.4	605.1	561.3	520.1	473.8	419.7	370.8	321.8	272.9	221.4	175.1
70°	749.3	692.6	638.5	589.6	538.1	484.1	424.8	368.2	309.0	247.2	193.1
67.5°	849.7	785.3	723.5	661.7	602.5	540.7	478.9	414.5	345.0	272.9	213.7
65°	960.4	880.6	805.9	736.4	666.9	599.9	530.4	460.9	383.6	301.2	231.7
62.5°	1071.1	983.6	896.0	808.5	731.2	656.6	581.9	504.7	419.7	332.1	249.8
60°	1189.5	1089.1	988.7	890.9	795.6	713.2	630.8	548.4	458.3	360.5	267.8
57.5°	1320.8	1199.8	1086.5	975.8	867.7	769.8	679.7	592.2	491.8	388.8	288.4
55°	1470.2	1320.8	1187.0	1063.4	944.9	826.5	728.7	638.5	530.4	417.1	311.5
52.5°	1627.2	1454.7	1292.5	1153.5	1027.3	893.4	775.0	674.6	569.0	445.4	332.1
50°	1810.0	1591.2	1411.0	1241.0	1099.4	960.4	823.9	715.8	607.6	478.9	352.7
47.5°	1998.0	1756.0	1529.4	1344.0	1176.7	1024.7	880.6	751.8	643.7	509.8	373.3
45°	2216.9	1913.0	1663.3	1444.4	1251.3	1091.7	937.2	790.4	674.6	540.7	393.9
42.5°	2428.0	2098.4	1802.3	1555.1	1336.3	1156.1	988.7	831.6	705.5	571.6	412.0
40°	2677.7	2283.8	1936.2	1660.7	1421.3	1217.9	1040.2	875.4	733.8	599.9	430.0
37.5°	2917.2	2471.8	2098.4	1776.6	1503.7	1279.6	1091.7	916.6	759.6	628.2	453.2
35°	3154.1	2680.3	2252.9	1884.7	1588.6	1349.2	1143.2	955.2	785.3	651.4	473.8
32.5°	3380.6	2876.0	2410.0	2005.7	1681.3	1413.5	1189.5	991.3	811.0	672.0	494.4
30°	3591.8	3061.4	2564.4	2129.3	1766.3	1472.8	1233.3	1027.3	841.9	690.0	514.9
27.5°	3784.9	3241.6	2718.9	2245.2	1846.1	1526.8	1279.6	1060.8	867.7	708.1	533.0
25°	3960.0	3403.8	2860.5	2350.7	1918.2	1586.0	1323.4	1094.3	890.9	723.5	548.4
22.5°	4124.7	3553.2	2989.3	2456.3	2005.7	1645.3	1364.6	1125.2	914.0	739.0	563.9
20°	4268.9	3689.6	3112.9	2561.9	2083.0	1699.3	1400.7	1153.5	934.6	749.3	579.3
17.5°	4384.8	3810.6	3223.6	2654.6	2149.9	1745.7	1431.6	1179.2	952.7	762.1	589.6
15°	4487.8	3913.6	3316.3	2734.4	2209.1	1784.3	1459.9	1199.8	968.1	769.8	602.5
12.5°	4575.3	4001.2	3396.1	2803.9	2260.6	1817.8	1483.1	1215.3	981.0	777.6	610.2
10°	4647.4	4070.7	3463.0	2858.0	2301.8	1843.5	1501.1	1230.7	991.3	785.3	617.9
7.5°	4701.5	4122.2	3512.0	2904.3	2335.3	1861.5	1516.5	1241.0	1001.6	790.4	630.8
5°	4742.7	4165.9	3550.6	2935.2	2361.0	1887.3	1534.5	1253.9	1011.9	795.6	630.8
2.5°	4773.6	4202.0	3581.5	2961.0	2381.6	1882.1	1534.5	1251.3	1011.9	795.6	628.2
0°	4768.4	4204.6	3578.9	2961.0	2381.6	1877.0	1534.5	1248.8	1011.9	795.6	628.2



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	18.0	12.9	5.1	0.0
85°	38.6	25.7	12.9	0.0
82.5°	56.6	36.0	18.0	0.0
80°	74.7	48.9	23.2	0.0
77.5°	95.3	61.8	30.9	0.0
75°	113.3	72.1	36.0	0.0
72.5°	131.3	85.0	41.2	0.0
70°	146.8	95.3	46.3	0.0
67.5°	162.2	108.1	54.1	0.0
65°	175.1	118.4	59.2	0.0
62.5°	185.4	131.3	64.4	0.0
60°	198.3	141.6	69.5	0.0
57.5°	208.6	149.3	74.7	0.0
55°	218.9	154.5	79.8	0.0
52.5°	229.2	162.2	85.0	0.0
50°	239.5	169.9	90.1	0.0
47.5°	249.8	175.1	92.7	0.0
45°	265.2	182.8	97.8	0.0
42.5°	278.1	188.0	103.0	0.0
40°	290.9	193.1	105.6	0.0
37.5°	303.8	198.3	110.7	0.0
35°	316.7	203.4	113.3	0.0
32.5°	327.0	208.6	115.9	0.0
30°	337.3	213.7	118.4	0.0
27.5°	347.6	216.3	121.0	0.0
25°	355.3	221.4	123.6	0.0
22.5°	363.0	224.0	126.2	0.0
20°	368.2	226.6	128.7	0.0
17.5°	375.9	229.2	131.3	0.0
15°	378.5	231.7	136.5	0.0
12.5°	383.6	234.3	136.5	0.0
10°	386.2	236.9	136.5	0.0
7.5°	391.4	236.9	136.5	0.0
5°	388.8	236.9	136.5	0.0
2.5°	388.8	236.9	136.5	0.0
0°	386.2	236.9	136.5	0.0

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