

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: P628514

Luminaire Tested: **IFLD-M-SA4B-940-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628514
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4B-940-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (64) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

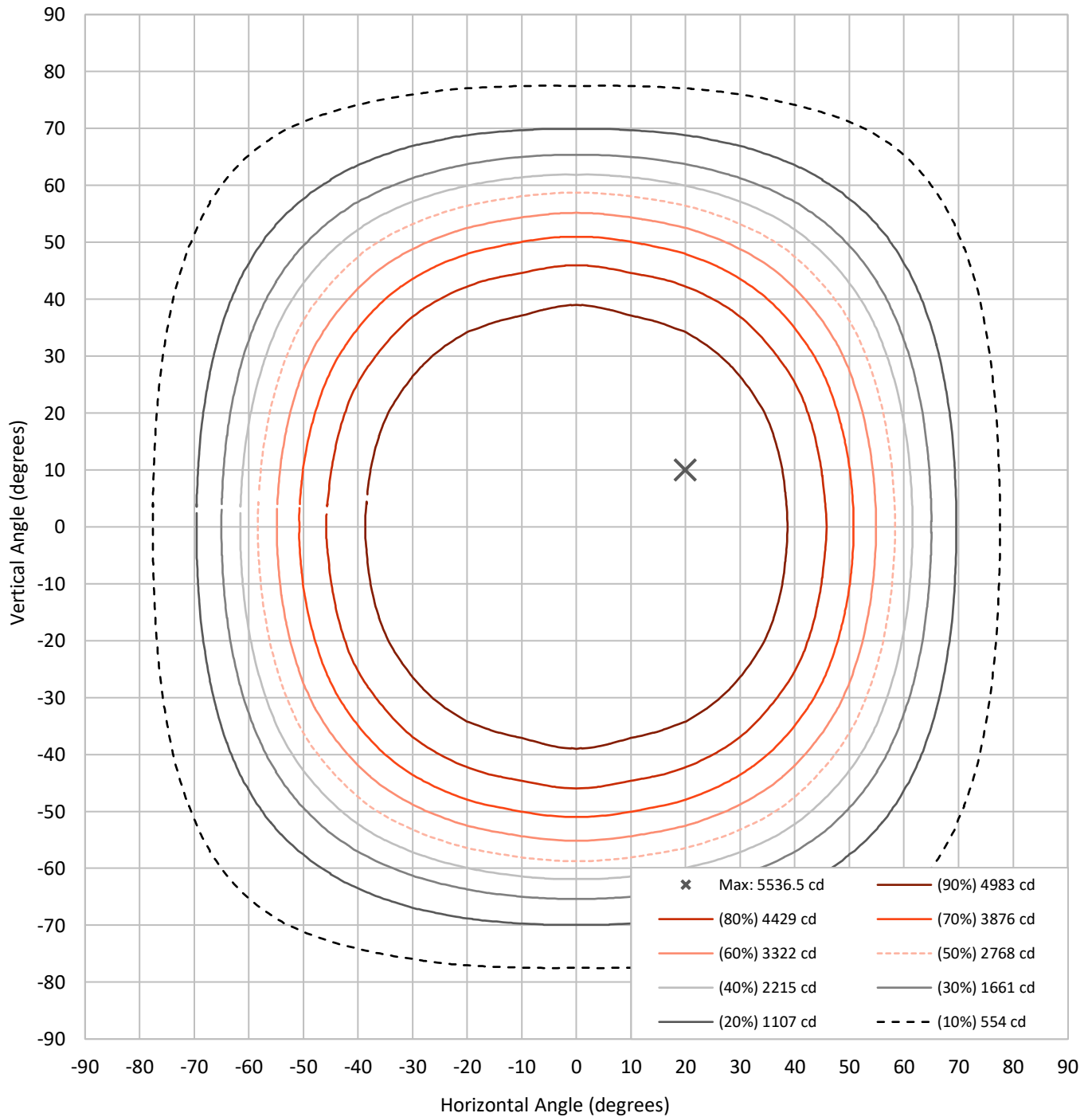
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	16985.2 lumens	Max Intensity:	5536.5 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	102.3 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 0.5' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	10422.5 lumens	Field Lumens:	12494.8 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

Input Watts (W): 166.1
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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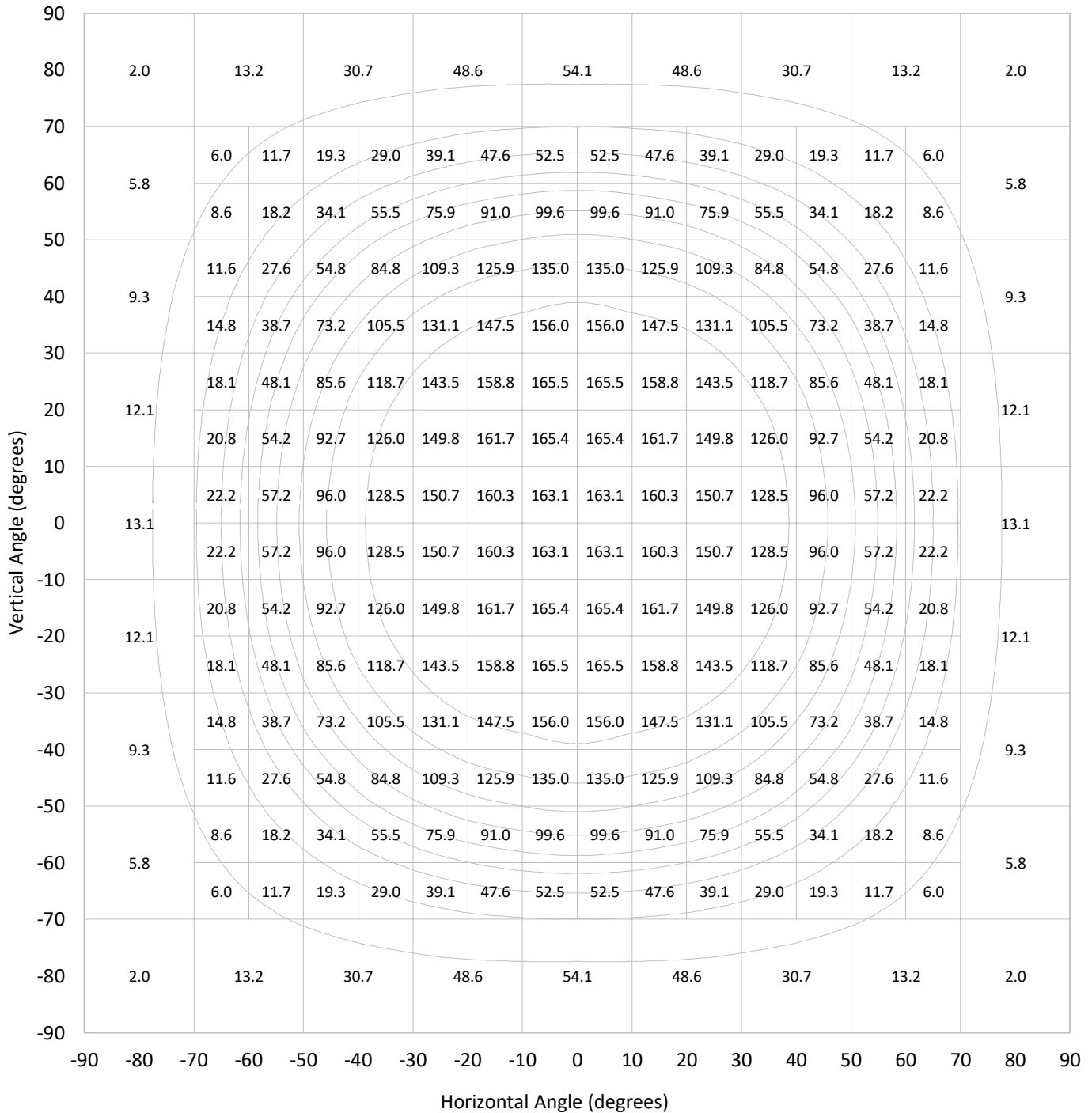
Iso-Candela Plot





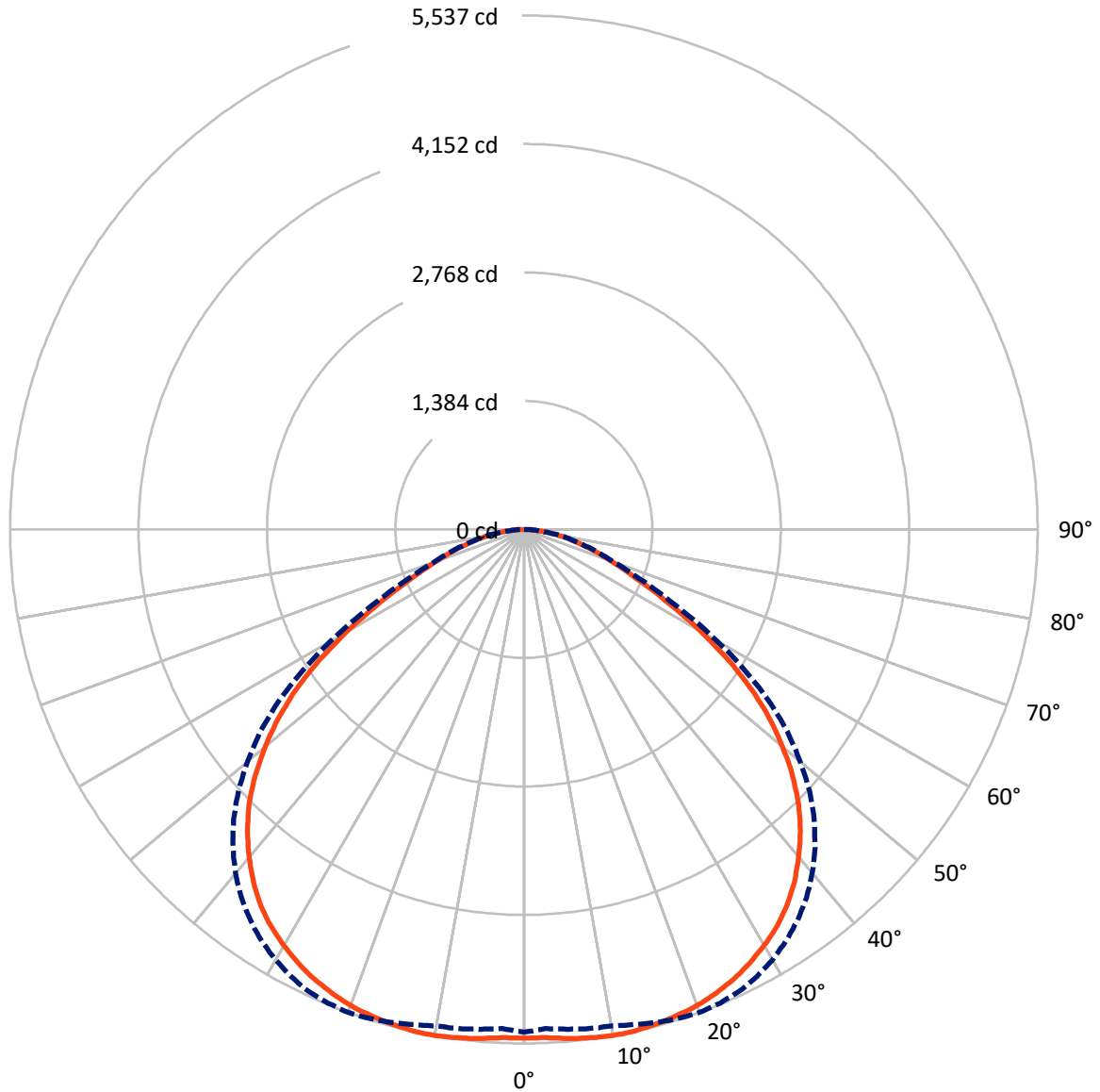
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Lumen Table



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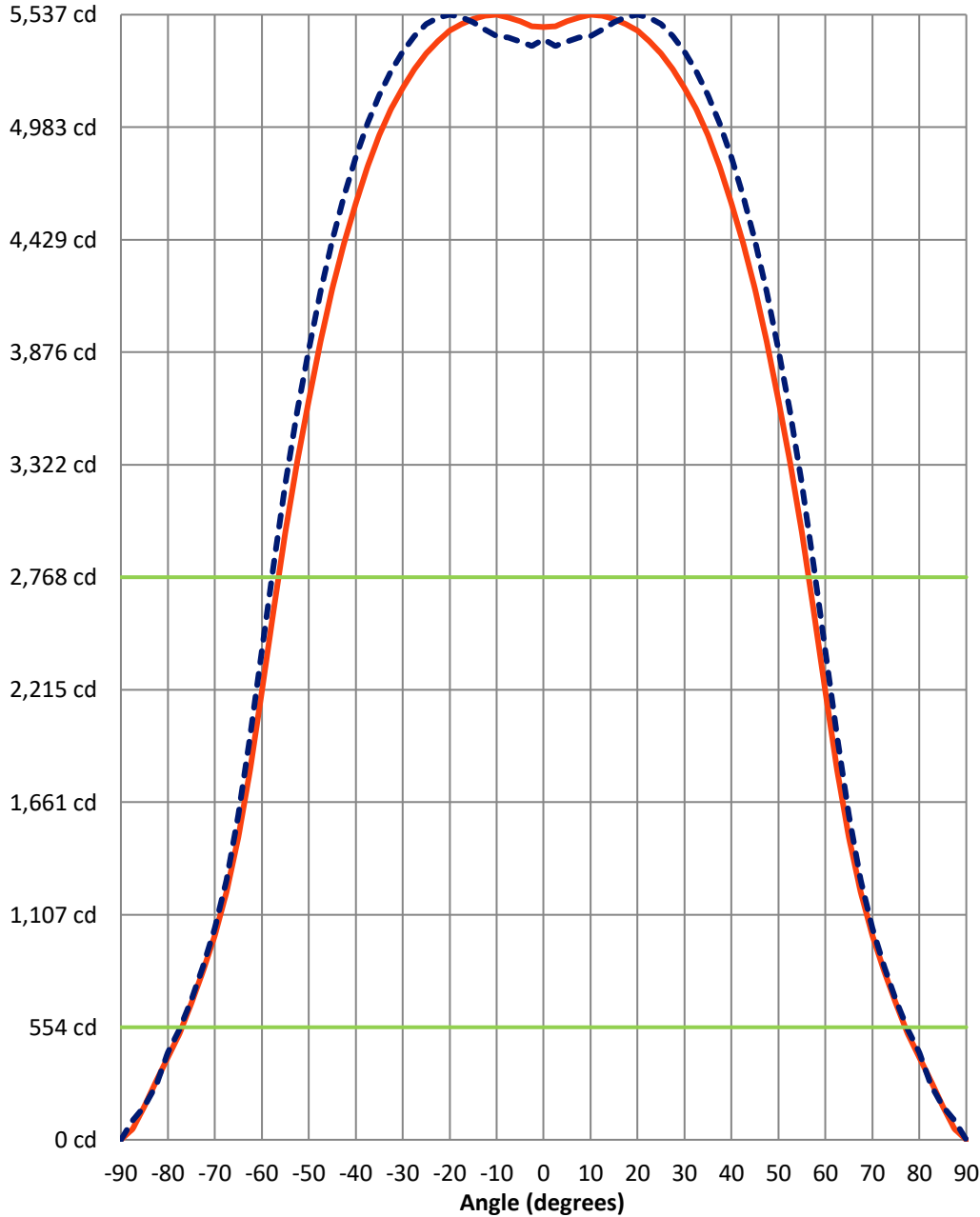
Luminous Intensity Polar Plot



— 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: 10422.5
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 12494.8
 Efficiency: 73.6%

Spill:
 Lumens: 4490.4
 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°	44.7	48.3	50.0	51.8	53.6	55.4	57.2	55.4	53.6	53.6	51.8
85°	119.7	123.3	125.1	137.6	150.1	157.3	166.2	164.4	164.4	162.6	160.8
82.5°	239.5	250.2	259.1	271.6	278.8	289.5	296.7	291.3	287.7	280.6	275.2
80°	425.3	428.9	430.7	432.5	423.5	421.8	418.2	412.8	405.7	396.7	387.8
77.5°	541.5	545.1	548.6	545.1	543.3	541.5	536.1	530.8	523.6	516.5	505.8
75°	716.6	716.6	716.6	711.3	707.7	702.3	693.4	684.5	672.0	657.7	641.6
72.5°	902.5	900.7	898.9	888.2	879.3	868.5	856.0	845.3	831.0	814.9	793.5
70°	1097.3	1100.9	1102.7	1088.4	1077.6	1063.3	1047.3	1027.6	1006.1	982.9	952.5
67.5°	1365.4	1361.8	1358.2	1338.6	1324.3	1304.6	1281.4	1252.8	1220.6	1184.9	1142.0
65°	1697.8	1703.1	1692.4	1672.7	1645.9	1613.8	1578.0	1536.9	1488.7	1435.1	1374.3
62.5°	2099.9	2108.8	2096.3	2071.3	2037.3	1994.4	1944.4	1885.4	1819.3	1744.2	1669.2
60°	2557.4	2555.6	2532.3	2498.4	2453.7	2400.1	2344.7	2280.4	2205.3	2117.7	2026.6
57.5°	2977.3	2973.8	2945.2	2911.2	2866.5	2809.4	2750.4	2682.5	2603.8	2510.9	2405.5
55°	3354.4	3350.8	3322.3	3286.5	3240.0	3182.9	3129.2	3064.9	2988.1	2889.8	2777.2
52.5°	3688.6	3690.4	3665.4	3626.1	3576.0	3520.6	3468.8	3404.5	3331.2	3232.9	3123.9
50°	3996.0	3994.2	3967.4	3931.7	3885.2	3831.6	3779.8	3715.4	3638.6	3543.9	3438.4
47.5°	4281.9	4278.4	4248.0	4208.7	4160.4	4113.9	4065.7	4008.5	3928.1	3833.4	3727.9
45°	4521.4	4514.3	4483.9	4446.4	4399.9	4358.8	4315.9	4273.0	4187.2	4099.7	3999.6
42.5°	4726.9	4725.1	4694.8	4657.2	4610.8	4575.0	4535.7	4482.1	4410.6	4330.2	4231.9
40°	4923.5	4909.2	4878.8	4843.1	4800.2	4769.8	4730.5	4676.9	4607.2	4528.6	4433.8
37.5°	5070.1	5071.8	5039.7	5000.4	4962.8	4934.2	4898.5	4848.5	4787.7	4710.8	4616.1
35°	5209.5	5200.5	5173.7	5139.8	5105.8	5073.6	5036.1	4993.2	4943.2	4871.7	4782.3
32.5°	5300.6	5313.1	5280.9	5245.2	5225.5	5200.5	5161.2	5116.5	5071.8	5000.4	4919.9
30°	5400.7	5390.0	5364.9	5334.6	5320.3	5304.2	5270.2	5227.3	5175.5	5111.2	5036.1
27.5°	5470.4	5465.0	5434.6	5406.0	5398.9	5384.6	5357.8	5320.3	5268.4	5205.9	5136.2
25°	5500.8	5504.3	5475.7	5459.6	5459.6	5450.7	5429.3	5397.1	5345.3	5288.1	5220.2
22.5°	5515.1	5511.5	5491.8	5488.2	5497.2	5490.0	5481.1	5452.5	5406.0	5359.6	5302.4
20°	5524.0	5499.0	5481.1	5495.4	5506.1	5504.3	5497.2	5479.3	5457.9	5418.5	5368.5
17.5°	5504.3	5488.2	5466.8	5488.2	5511.5	5513.3	5506.1	5495.4	5490.0	5465.0	5420.3
15°	5456.1	5443.6	5447.1	5468.6	5495.4	5504.3	5509.7	5522.2	5515.1	5495.4	5456.1
12.5°	5423.9	5407.8	5423.9	5445.4	5459.6	5465.0	5507.9	5531.1	5531.1	5513.3	5488.2
10°	5415.0	5382.8	5404.2	5423.9	5431.1	5463.2	5499.0	5524.0	5536.5	5522.2	5490.0
7.5°	5397.1	5375.7	5384.6	5393.5	5434.6	5457.9	5477.5	5504.3	5522.2	5520.4	5491.8
5°	5388.2	5361.4	5364.9	5402.5	5431.1	5447.1	5454.3	5477.5	5504.3	5509.7	5488.2
2.5°	5364.9	5352.4	5379.2	5382.8	5404.2	5416.8	5423.9	5445.4	5479.3	5491.8	5482.9
0°	5352.4	5334.6	5316.7	5331.0	5366.7	5393.5	5404.2	5436.4	5475.7	5488.2	5468.6



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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°	50.0	48.3	46.5	44.7	46.5	46.5	46.5	44.7	46.5	44.7	44.7
85°	155.5	148.3	143.0	135.8	128.7	123.3	116.2	109.0	107.2	105.4	101.9
82.5°	268.1	259.1	250.2	239.5	228.8	216.2	203.7	189.4	185.9	182.3	176.9
80°	377.1	364.6	352.1	339.6	328.8	316.3	302.0	285.9	275.2	266.3	255.6
77.5°	491.5	473.6	455.7	434.3	421.8	409.3	395.0	378.9	362.8	348.5	332.4
75°	621.9	602.3	584.4	562.9	539.7	516.5	493.2	471.8	448.6	427.1	405.7
72.5°	766.7	738.1	709.5	682.7	654.1	625.5	595.1	566.5	537.9	509.3	478.9
70°	918.6	882.8	847.1	811.4	773.8	736.3	700.6	664.8	629.1	591.5	557.6
67.5°	1097.3	1056.2	1009.7	959.7	904.3	856.0	809.6	766.7	723.8	680.9	638.0
65°	1320.7	1263.5	1200.9	1133.0	1068.7	1004.4	936.5	872.1	822.1	772.0	723.8
62.5°	1595.9	1515.5	1427.9	1340.3	1261.7	1177.7	1099.1	1015.1	936.5	865.0	806.0
60°	1924.7	1815.7	1708.5	1595.9	1486.9	1372.5	1272.4	1168.8	1070.5	982.9	897.1
57.5°	2287.5	2160.6	2032.0	1894.3	1746.0	1612.0	1476.2	1340.3	1224.2	1108.0	1011.5
55°	2655.7	2521.6	2376.9	2221.4	2058.8	1887.2	1703.1	1551.2	1392.2	1256.3	1131.2
52.5°	3005.9	2866.5	2716.4	2573.5	2378.7	2182.1	1980.1	1780.0	1594.1	1420.8	1268.9
50°	3318.7	3182.9	3038.1	2871.9	2691.4	2482.3	2257.1	2032.0	1812.1	1608.4	1419.0
47.5°	3604.6	3472.4	3327.6	3161.4	2997.0	2764.7	2537.7	2289.3	2044.5	1810.4	1588.7
45°	3872.7	3738.7	3588.5	3429.5	3240.0	3032.7	2798.6	2548.4	2285.7	2023.0	1767.5
42.5°	4115.7	3981.7	3829.8	3665.4	3477.7	3272.2	3045.3	2793.3	2528.8	2242.8	1962.3
40°	4328.4	4197.9	4051.4	3879.8	3704.7	3488.5	3265.1	3025.6	2752.2	2464.4	2155.3
37.5°	4514.3	4392.7	4248.0	4078.2	3892.3	3699.3	3468.8	3229.3	2982.7	2670.0	2353.6
35°	4678.7	4566.1	4417.8	4256.9	4074.6	3870.9	3654.7	3420.5	3154.3	2861.2	2553.8
32.5°	4821.6	4707.3	4571.5	4410.6	4233.7	4042.5	3820.9	3585.0	3333.0	3034.5	2700.3
30°	4943.2	4832.4	4703.7	4551.8	4382.0	4192.6	3976.3	3738.7	3481.3	3184.6	2854.0
27.5°	5048.6	4943.2	4818.1	4676.9	4514.3	4332.0	4113.9	3874.5	3611.8	3325.8	2995.2
25°	5139.8	5037.9	4921.7	4787.7	4626.9	4448.1	4242.6	3992.4	3729.7	3442.0	3114.9
22.5°	5222.0	5123.7	5007.5	4877.0	4730.5	4551.8	4344.5	4096.1	3829.8	3545.6	3224.0
20°	5295.2	5204.1	5089.7	4955.7	4809.1	4628.6	4423.1	4187.2	3919.2	3640.4	3322.3
17.5°	5354.2	5273.8	5159.4	5018.2	4871.7	4696.5	4496.4	4280.2	3996.0	3720.8	3404.5
15°	5395.3	5316.7	5213.0	5070.1	4927.1	4753.7	4553.6	4330.2	4065.7	3785.1	3472.4
12.5°	5423.9	5339.9	5243.4	5111.2	4968.2	4796.6	4601.8	4382.0	4124.7	3842.3	3531.3
10°	5431.1	5354.2	5257.7	5139.8	5000.4	4834.2	4642.9	4424.9	4172.9	3887.0	3579.6
7.5°	5434.6	5361.4	5273.8	5161.2	5023.6	4862.8	4673.3	4458.9	4208.7	3924.5	3615.3
5°	5432.8	5363.1	5284.5	5175.5	5037.9	4878.8	4693.0	4482.1	4233.7	3949.5	3642.1
2.5°	5427.5	5364.9	5291.7	5186.2	5054.0	4896.7	4712.6	4508.9	4260.5	3971.0	3663.6
0°	5441.8	5388.2	5295.2	5182.6	5057.5	4896.7	4710.8	4512.5	4264.1	3969.2	3661.8



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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°	44.7	42.9	42.9	41.1	39.3	37.5	34.0	32.2	28.6	23.2	17.9
85°	96.5	91.1	85.8	82.2	78.6	75.1	69.7	64.3	57.2	46.5	35.7
82.5°	169.8	159.1	148.3	135.8	125.1	114.4	105.4	96.5	85.8	69.7	53.6
80°	243.0	227.0	210.9	193.0	176.9	159.1	143.0	128.7	114.4	92.9	71.5
77.5°	316.3	294.9	271.6	250.2	227.0	203.7	180.5	160.8	139.4	114.4	89.4
75°	384.2	359.2	337.8	307.4	278.8	248.4	218.0	191.2	164.4	134.0	107.2
72.5°	452.1	420.0	389.6	361.0	328.8	291.3	257.3	223.4	189.4	153.7	121.5
70°	520.1	480.7	443.2	409.3	373.5	336.0	294.9	255.6	214.5	171.6	134.0
67.5°	589.7	545.1	502.2	459.3	418.2	375.3	332.4	287.7	239.5	189.4	148.3
65°	666.6	611.2	559.4	511.1	462.9	416.4	368.1	319.9	266.3	209.1	160.8
62.5°	743.4	682.7	621.9	561.2	507.5	455.7	403.9	350.3	291.3	230.5	173.4
60°	825.6	756.0	686.3	618.3	552.2	495.0	437.8	380.7	318.1	250.2	185.9
57.5°	916.8	832.8	754.2	677.3	602.3	534.3	471.8	411.0	341.3	269.9	200.2
55°	1020.4	916.8	823.9	738.1	655.9	573.7	505.8	443.2	368.1	289.5	216.2
52.5°	1129.5	1009.7	897.1	800.6	713.1	620.1	537.9	468.2	395.0	309.2	230.5
50°	1256.3	1104.4	979.3	861.4	763.1	666.6	571.9	496.8	421.8	332.4	244.8
47.5°	1386.8	1218.8	1061.5	932.9	816.7	711.3	611.2	521.8	446.8	353.8	259.1
45°	1538.7	1327.8	1154.5	1002.6	868.5	757.7	650.5	548.6	468.2	375.3	273.4
42.5°	1685.3	1456.5	1251.0	1079.4	927.5	802.4	686.3	577.2	489.7	396.7	285.9
40°	1858.6	1585.2	1343.9	1152.7	986.5	845.3	722.0	607.6	509.3	416.4	298.4
37.5°	2024.8	1715.6	1456.5	1233.1	1043.7	888.2	757.7	636.2	527.2	436.1	314.5
35°	2189.2	1860.4	1563.7	1308.2	1102.7	936.5	793.5	663.0	545.1	452.1	328.8
32.5°	2346.5	1996.2	1672.7	1392.2	1167.0	981.1	825.6	688.0	562.9	466.4	343.1
30°	2493.0	2124.9	1780.0	1477.9	1226.0	1022.2	856.0	713.1	584.4	478.9	357.4
27.5°	2627.1	2250.0	1887.2	1558.4	1281.4	1059.8	888.2	736.3	602.3	491.5	369.9
25°	2748.6	2362.6	1985.5	1631.6	1331.4	1100.9	918.6	759.5	618.3	502.2	380.7
22.5°	2863.0	2466.2	2074.8	1704.9	1392.2	1142.0	947.2	781.0	634.4	512.9	391.4
20°	2963.0	2560.9	2160.6	1778.2	1445.8	1179.5	972.2	800.6	648.7	520.1	402.1
17.5°	3043.5	2644.9	2237.5	1842.5	1492.2	1211.7	993.6	818.5	661.2	529.0	409.3
15°	3114.9	2716.4	2301.8	1897.9	1533.3	1238.5	1013.3	832.8	672.0	534.3	418.2
12.5°	3175.7	2777.2	2357.2	1946.2	1569.1	1261.7	1029.4	843.5	680.9	539.7	423.5
10°	3225.8	2825.4	2403.7	1983.7	1597.7	1279.6	1041.9	854.2	688.0	545.1	428.9
7.5°	3263.3	2861.2	2437.6	2015.9	1620.9	1292.1	1052.6	861.4	695.2	548.6	437.8
5°	3291.9	2891.6	2464.4	2037.3	1638.8	1310.0	1065.1	870.3	702.3	552.2	437.8
2.5°	3313.3	2916.6	2485.9	2055.2	1653.1	1306.4	1065.1	868.5	702.3	552.2	436.1
0°	3309.7	2918.4	2484.1	2055.2	1653.1	1302.8	1065.1	866.8	702.3	552.2	436.1



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	12.5	8.9	3.6	0.0
85°	26.8	17.9	8.9	0.0
82.5°	39.3	25.0	12.5	0.0
80°	51.8	34.0	16.1	0.0
77.5°	66.1	42.9	21.4	0.0
75°	78.6	50.0	25.0	0.0
72.5°	91.1	59.0	28.6	0.0
70°	101.9	66.1	32.2	0.0
67.5°	112.6	75.1	37.5	0.0
65°	121.5	82.2	41.1	0.0
62.5°	128.7	91.1	44.7	0.0
60°	137.6	98.3	48.3	0.0
57.5°	144.8	103.7	51.8	0.0
55°	151.9	107.2	55.4	0.0
52.5°	159.1	112.6	59.0	0.0
50°	166.2	117.9	62.5	0.0
47.5°	173.4	121.5	64.3	0.0
45°	184.1	126.9	67.9	0.0
42.5°	193.0	130.5	71.5	0.0
40°	201.9	134.0	73.3	0.0
37.5°	210.9	137.6	76.8	0.0
35°	219.8	141.2	78.6	0.0
32.5°	227.0	144.8	80.4	0.0
30°	234.1	148.3	82.2	0.0
27.5°	241.3	150.1	84.0	0.0
25°	246.6	153.7	85.8	0.0
22.5°	252.0	155.5	87.6	0.0
20°	255.6	157.3	89.4	0.0
17.5°	260.9	159.1	91.1	0.0
15°	262.7	160.8	94.7	0.0
12.5°	266.3	162.6	94.7	0.0
10°	268.1	164.4	94.7	0.0
7.5°	271.6	164.4	94.7	0.0
5°	269.9	164.4	94.7	0.0
2.5°	269.9	164.4	94.7	0.0
0°	268.1	164.4	94.7	0.0

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