

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: P628401

Luminaire Tested: **IFLD-M-SA4E-830-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628401
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4E-830-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (64) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	29607.4 lumens	Max Intensity:	9650.8 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	94.1 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 0.5' x H: 0')		

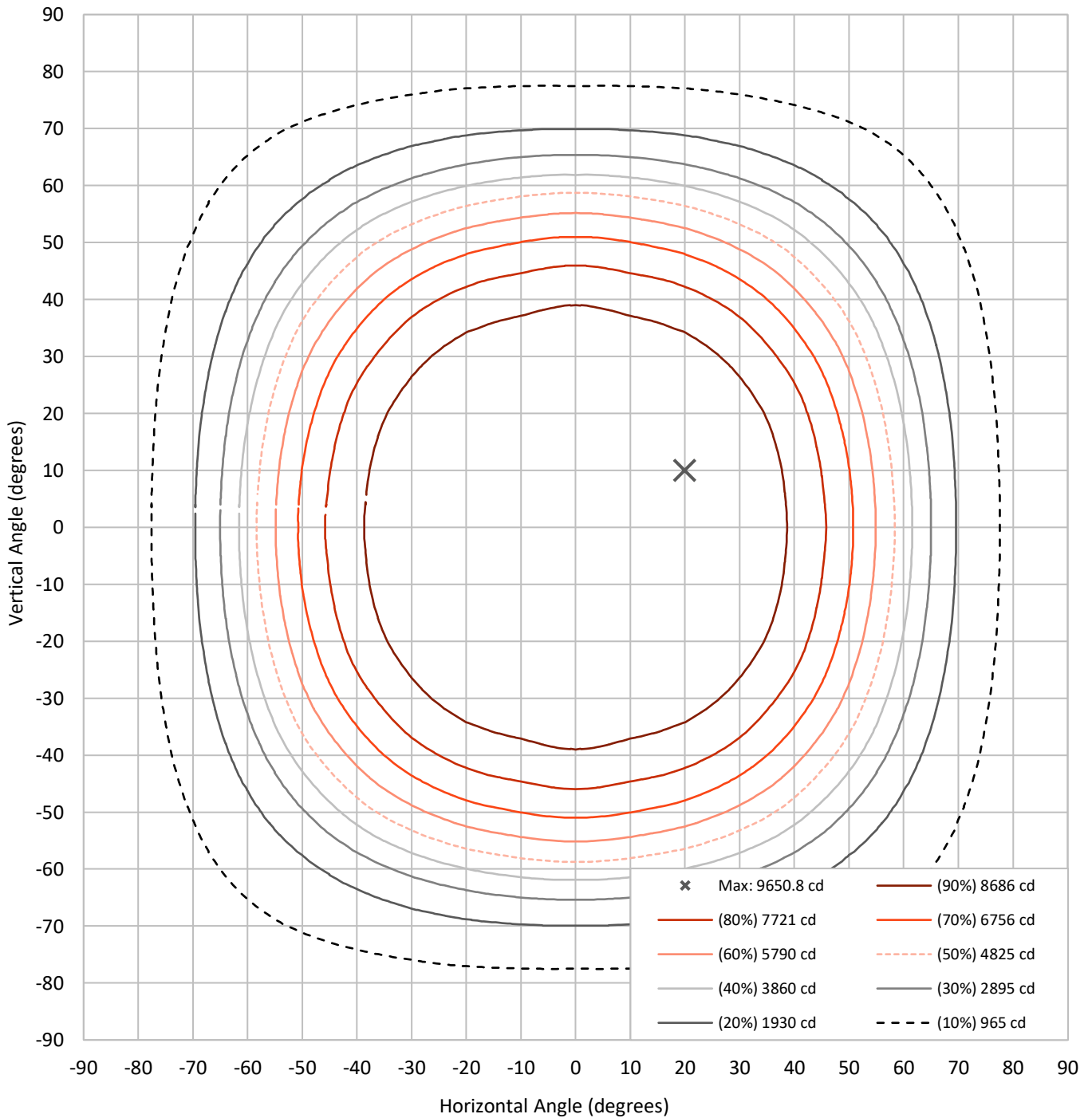
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	18167.7 lumens	Field Lumens:	21780 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

Input Watts (W): 314.8
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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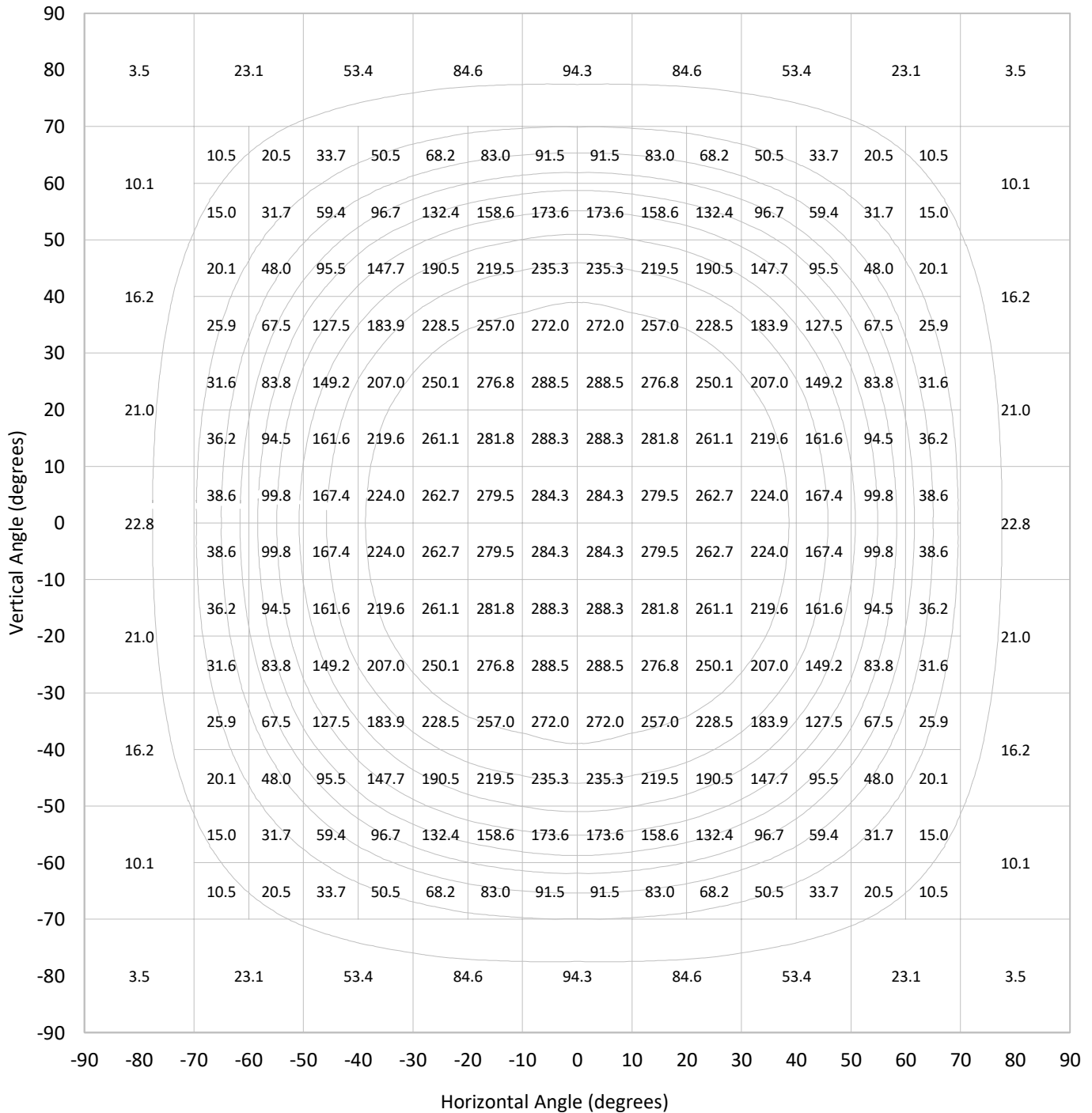
Iso-Candela Plot





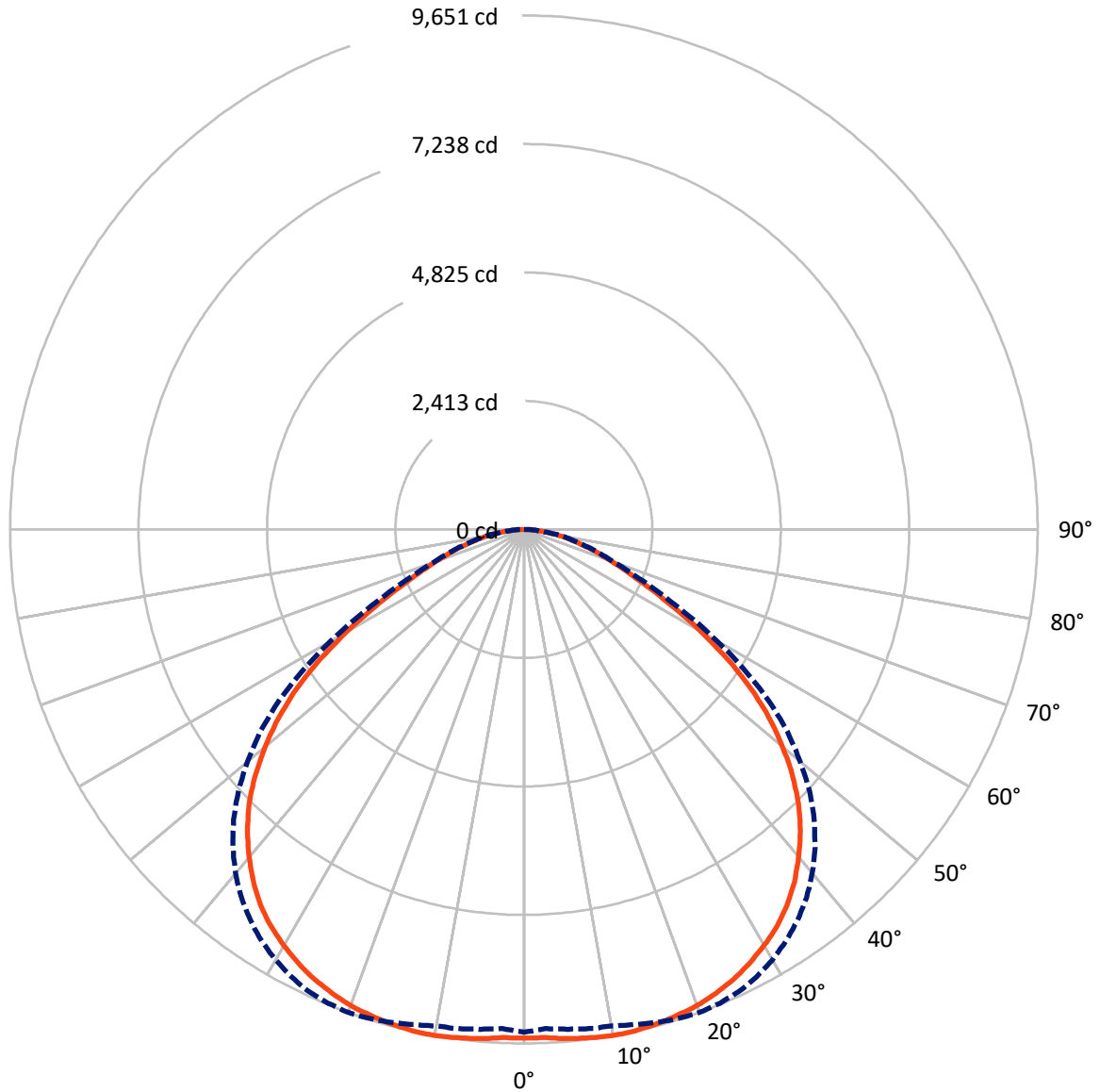
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Lumen Table



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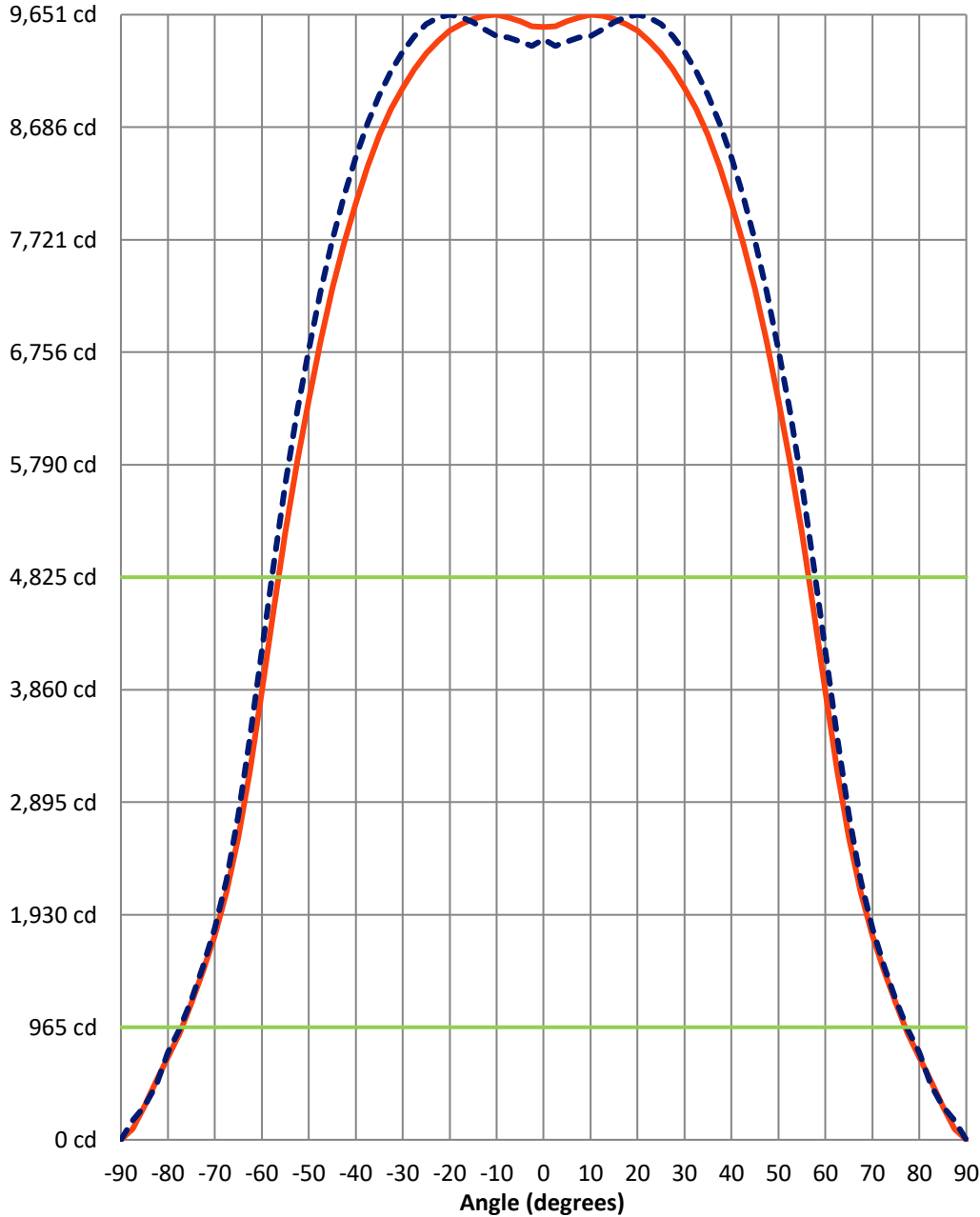
Luminous Intensity Polar Plot



— 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: 18167.7
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 21780
 Efficiency: 73.6%

Spill:
 Lumens: 7827.4
 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°	77.9	84.1	87.2	90.3	93.5	96.6	99.7	96.6	93.5	93.5	90.3
85°	208.7	214.9	218.1	239.9	261.7	274.1	289.7	286.6	286.6	283.5	280.4
82.5°	417.4	436.1	451.7	473.5	486.0	504.7	517.1	507.8	501.5	489.1	479.7
80°	741.4	747.6	750.8	753.9	738.3	735.2	729.0	719.6	707.1	691.6	676.0
77.5°	943.9	950.1	956.4	950.1	947.0	943.9	934.6	925.2	912.7	900.3	881.6
75°	1249.2	1249.2	1249.2	1239.8	1233.6	1224.3	1208.7	1193.1	1171.3	1146.4	1118.3
72.5°	1573.2	1570.0	1566.9	1548.2	1532.7	1514.0	1492.2	1473.5	1448.6	1420.5	1383.1
70°	1912.7	1918.9	1922.1	1897.1	1878.4	1853.5	1825.5	1791.2	1753.8	1713.3	1660.4
67.5°	2380.0	2373.8	2367.5	2333.3	2308.3	2274.1	2233.6	2183.7	2127.7	2065.4	1990.6
65°	2959.4	2968.8	2950.1	2915.8	2869.1	2813.0	2750.7	2679.0	2594.9	2501.5	2395.6
62.5°	3660.3	3675.9	3654.1	3610.5	3551.3	3476.5	3389.3	3286.5	3171.2	3040.4	2909.6
60°	4457.8	4454.7	4414.2	4355.0	4277.1	4183.7	4087.1	3975.0	3844.1	3691.5	3532.6
57.5°	5189.9	5183.6	5133.8	5074.6	4996.7	4897.1	4794.3	4675.9	4538.8	4376.8	4193.0
55°	5847.2	5841.0	5791.1	5728.8	5647.8	5548.1	5454.7	5342.5	5208.6	5037.2	4841.0
52.5°	6429.7	6432.8	6389.2	6320.7	6233.5	6136.9	6046.6	5934.4	5806.7	5635.3	5445.3
50°	6965.5	6962.4	6915.7	6853.4	6772.4	6678.9	6588.6	6476.4	6342.5	6177.4	5993.6
47.5°	7464.0	7457.7	7404.8	7336.2	7252.1	7171.1	7087.0	6987.3	6847.2	6682.0	6498.3
45°	7881.4	7868.9	7816.0	7750.6	7669.6	7597.9	7523.1	7448.4	7298.9	7146.2	6971.8
42.5°	8239.6	8236.5	8183.6	8118.1	8037.1	7974.8	7906.3	7812.9	7688.2	7548.1	7376.7
40°	8582.3	8557.4	8504.4	8442.1	8367.4	8314.4	8245.9	8152.4	8030.9	7893.9	7728.7
37.5°	8837.7	8840.9	8784.8	8716.3	8650.8	8601.0	8538.7	8451.5	8345.6	8211.6	8046.5
35°	9080.7	9065.2	9018.4	8959.2	8900.1	8844.0	8778.6	8703.8	8616.6	8492.0	8336.2
32.5°	9239.6	9261.4	9205.3	9143.0	9108.8	9065.2	8996.6	8918.7	8840.9	8716.3	8576.1
30°	9414.1	9395.4	9351.8	9298.8	9273.9	9245.8	9186.6	9111.9	9021.5	8909.4	8778.6
27.5°	9535.5	9526.2	9473.2	9423.4	9410.9	9386.0	9339.3	9273.9	9183.5	9074.5	8953.0
25°	9588.5	9594.7	9544.9	9516.9	9516.9	9501.3	9463.9	9407.8	9317.5	9217.8	9099.4
22.5°	9613.4	9607.2	9572.9	9566.7	9582.3	9569.8	9554.2	9504.4	9423.4	9342.4	9242.7
20°	9629.0	9585.4	9554.2	9579.2	9597.9	9594.7	9582.3	9551.1	9513.7	9445.2	9358.0
17.5°	9594.7	9566.7	9529.3	9566.7	9607.2	9610.3	9597.9	9579.2	9569.8	9526.2	9448.3
15°	9510.6	9488.8	9495.0	9532.4	9579.2	9594.7	9604.1	9625.9	9613.4	9579.2	9510.6
12.5°	9454.6	9426.5	9454.6	9491.9	9516.9	9526.2	9601.0	9641.5	9641.5	9610.3	9566.7
10°	9439.0	9382.9	9420.3	9454.6	9467.0	9523.1	9585.4	9629.0	9650.8	9625.9	9569.8
7.5°	9407.8	9370.4	9386.0	9401.6	9473.2	9513.7	9548.0	9594.7	9625.9	9622.8	9572.9
5°	9392.2	9345.5	9351.8	9417.2	9467.0	9495.0	9507.5	9548.0	9594.7	9604.1	9566.7
2.5°	9351.8	9329.9	9376.7	9382.9	9420.3	9442.1	9454.6	9491.9	9551.1	9572.9	9557.4
0°	9329.9	9298.8	9267.6	9292.6	9354.9	9401.6	9420.3	9476.4	9544.9	9566.7	9532.4



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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°	87.2	84.1	81.0	77.9	81.0	81.0	81.0	77.9	81.0	77.9	77.9
85°	271.0	258.6	249.2	236.8	224.3	214.9	202.5	190.0	186.9	183.8	177.6
82.5°	467.3	451.7	436.1	417.4	398.7	376.9	355.1	330.2	324.0	317.7	308.4
80°	657.3	635.5	613.7	591.9	573.2	551.4	526.5	498.4	479.7	464.2	445.5
77.5°	856.7	825.5	794.4	757.0	735.2	713.4	688.5	660.4	632.4	607.5	579.4
75°	1084.1	1049.8	1018.7	981.3	940.8	900.3	859.8	822.4	781.9	744.5	707.1
72.5°	1336.4	1286.6	1236.7	1190.0	1140.2	1090.3	1037.4	987.5	937.7	887.8	834.9
70°	1601.2	1538.9	1476.6	1414.3	1348.9	1283.5	1221.1	1158.8	1096.5	1031.1	971.9
67.5°	1912.7	1841.1	1760.1	1672.8	1576.3	1492.2	1411.2	1336.4	1261.6	1186.9	1112.1
65°	2302.1	2202.4	2093.4	1975.0	1862.9	1750.7	1632.4	1520.2	1433.0	1345.8	1261.6
62.5°	2781.9	2641.7	2489.0	2336.4	2199.3	2052.9	1915.8	1769.4	1632.4	1507.7	1404.9
60°	3355.0	3165.0	2978.1	2781.9	2591.8	2392.5	2218.0	2037.3	1866.0	1713.3	1563.8
57.5°	3987.4	3766.2	3542.0	3302.1	3043.5	2809.9	2573.1	2336.4	2133.9	1931.4	1763.2
55°	4629.1	4395.5	4143.2	3872.2	3588.7	3289.6	2968.8	2704.0	2426.7	2190.0	1971.9
52.5°	5239.7	4996.7	4735.1	4485.9	4146.3	3803.6	3451.6	3102.7	2778.7	2476.6	2211.8
50°	5784.9	5548.1	5295.8	5006.1	4691.5	4327.0	3934.5	3542.0	3158.8	2803.7	2473.4
47.5°	6283.3	6052.8	5800.5	5510.7	5224.1	4819.2	4423.5	3990.5	3563.8	3155.7	2769.4
45°	6750.6	6516.9	6255.3	5978.0	5647.8	5286.4	4878.4	4442.2	3984.3	3526.4	3080.9
42.5°	7174.2	6940.6	6675.8	6389.2	6062.1	5703.9	5308.3	4869.0	4408.0	3909.5	3420.5
40°	7545.0	7317.5	7062.1	6763.0	6457.8	6080.8	5691.4	5274.0	4797.4	4295.8	3756.9
37.5°	7868.9	7657.1	7404.8	7108.8	6784.8	6448.4	6046.6	5629.1	5199.2	4654.1	4102.7
35°	8155.5	7959.3	7700.7	7420.3	7102.6	6747.5	6370.5	5962.4	5498.3	4987.4	4451.6
32.5°	8404.7	8205.4	7968.6	7688.2	7379.8	7046.5	6660.2	6249.0	5809.8	5289.6	4707.0
30°	8616.6	8423.4	8199.1	7934.3	7638.4	7308.2	6931.3	6516.9	6068.4	5551.2	4974.9
27.5°	8800.4	8616.6	8398.5	8152.4	7868.9	7551.2	7171.1	6753.7	6295.8	5797.3	5221.0
25°	8959.2	8781.7	8579.2	8345.6	8065.2	7753.7	7395.4	6959.3	6501.4	5999.8	5429.7
22.5°	9102.5	8931.2	8728.7	8501.3	8245.9	7934.3	7573.0	7140.0	6675.8	6180.5	5619.8
20°	9230.3	9071.4	8872.0	8638.4	8382.9	8068.3	7710.1	7298.9	6831.6	6345.6	5791.1
17.5°	9333.1	9192.9	8993.5	8747.4	8492.0	8186.7	7837.8	7460.8	6965.5	6485.8	5934.4
15°	9404.7	9267.6	9087.0	8837.7	8588.5	8286.4	7937.5	7548.1	7087.0	6597.9	6052.8
12.5°	9454.6	9308.1	9139.9	8909.4	8660.2	8361.1	8021.6	7638.4	7189.8	6697.6	6155.6
10°	9467.0	9333.1	9164.8	8959.2	8716.3	8426.5	8093.2	7713.2	7273.9	6775.5	6239.7
7.5°	9473.2	9345.5	9192.9	8996.6	8756.8	8476.4	8146.2	7772.4	7336.2	6840.9	6302.0
5°	9470.1	9348.6	9211.6	9021.5	8781.7	8504.4	8180.4	7812.9	7379.8	6884.5	6348.7
2.5°	9460.8	9351.8	9224.0	9040.2	8809.7	8535.6	8214.7	7859.6	7426.6	6921.9	6386.1
0°	9485.7	9392.2	9230.3	9034.0	8815.9	8535.6	8211.6	7865.8	7432.8	6918.8	6383.0



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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°	77.9	74.8	74.8	71.6	68.5	65.4	59.2	56.1	49.8	40.5	31.2
85°	168.2	158.9	149.5	143.3	137.1	130.8	121.5	112.1	99.7	81.0	62.3
82.5°	295.9	277.3	258.6	236.8	218.1	199.4	183.8	168.2	149.5	121.5	93.5
80°	423.7	395.6	367.6	336.4	308.4	277.3	249.2	224.3	199.4	162.0	124.6
77.5°	551.4	514.0	473.5	436.1	395.6	355.1	314.6	280.4	243.0	199.4	155.8
75°	669.8	626.1	588.8	535.8	486.0	433.0	380.1	333.3	286.6	233.6	186.9
72.5°	788.1	732.1	679.1	629.3	573.2	507.8	448.6	389.4	330.2	267.9	211.8
70°	906.5	838.0	772.6	713.4	651.1	585.7	514.0	445.5	373.8	299.1	233.6
67.5°	1028.0	950.1	875.4	800.6	729.0	654.2	579.4	501.5	417.4	330.2	258.6
65°	1162.0	1065.4	975.0	890.9	806.8	725.8	641.7	557.6	464.2	364.5	280.4
62.5°	1295.9	1190.0	1084.1	978.2	884.7	794.4	704.0	610.6	507.8	401.9	302.2
60°	1439.2	1317.7	1196.2	1077.9	962.6	862.9	763.2	663.5	554.5	436.1	324.0
57.5°	1598.1	1451.7	1314.6	1180.7	1049.8	931.4	822.4	716.5	595.0	470.4	348.9
55°	1778.8	1598.1	1436.1	1286.6	1143.3	1000.0	881.6	772.6	641.7	504.7	376.9
52.5°	1968.8	1760.1	1563.8	1395.6	1243.0	1081.0	937.7	816.2	688.5	538.9	401.9
50°	2190.0	1925.2	1707.1	1501.5	1330.2	1162.0	996.9	866.0	735.2	579.4	426.8
47.5°	2417.4	2124.5	1850.4	1626.1	1423.6	1239.8	1065.4	909.6	778.8	616.8	451.7
45°	2682.2	2314.6	2012.4	1747.6	1514.0	1320.8	1133.9	956.4	816.2	654.2	476.6
42.5°	2937.6	2538.9	2180.6	1881.6	1616.8	1398.7	1196.2	1006.2	853.6	691.6	498.4
40°	3239.8	2763.2	2342.6	2009.3	1719.6	1473.5	1258.5	1059.2	887.8	725.8	520.2
37.5°	3529.5	2990.6	2538.9	2149.5	1819.3	1548.2	1320.8	1109.0	919.0	760.1	548.3
35°	3816.1	3242.9	2725.8	2280.3	1922.1	1632.4	1383.1	1155.7	950.1	788.1	573.2
32.5°	4090.2	3479.6	2915.8	2426.7	2034.2	1710.2	1439.2	1199.3	981.3	813.1	598.1
30°	4345.7	3703.9	3102.7	2576.2	2137.0	1781.9	1492.2	1243.0	1018.7	834.9	623.0
27.5°	4579.3	3922.0	3289.6	2716.4	2233.6	1847.3	1548.2	1283.5	1049.8	856.7	644.8
25°	4791.1	4118.3	3461.0	2844.2	2320.8	1918.9	1601.2	1323.9	1077.9	875.4	663.5
22.5°	4990.5	4298.9	3616.7	2971.9	2426.7	1990.6	1651.0	1361.3	1105.9	894.1	682.2
20°	5165.0	4464.0	3766.2	3099.6	2520.2	2056.0	1694.7	1395.6	1130.8	906.5	700.9
17.5°	5305.1	4610.5	3900.2	3211.7	2601.2	2112.1	1732.0	1426.7	1152.6	922.1	713.4
15°	5429.7	4735.1	4012.3	3308.3	2672.8	2158.8	1766.3	1451.7	1171.3	931.4	729.0
12.5°	5535.7	4841.0	4108.9	3392.4	2735.1	2199.3	1794.3	1470.4	1186.9	940.8	738.3
10°	5622.9	4925.1	4189.9	3457.8	2785.0	2230.5	1816.1	1489.1	1199.3	950.1	747.6
7.5°	5688.3	4987.4	4249.1	3513.9	2825.5	2252.3	1834.8	1501.5	1211.8	956.4	763.2
5°	5738.2	5040.4	4295.8	3551.3	2856.6	2283.4	1856.6	1517.1	1224.3	962.6	763.2
2.5°	5775.5	5084.0	4333.2	3582.4	2881.5	2277.2	1856.6	1514.0	1224.3	962.6	760.1
0°	5769.3	5087.1	4330.1	3582.4	2881.5	2271.0	1856.6	1510.9	1224.3	962.6	760.1



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	21.8	15.6	6.2	0.0
85°	46.7	31.2	15.6	0.0
82.5°	68.5	43.6	21.8	0.0
80°	90.3	59.2	28.0	0.0
77.5°	115.3	74.8	37.4	0.0
75°	137.1	87.2	43.6	0.0
72.5°	158.9	102.8	49.8	0.0
70°	177.6	115.3	56.1	0.0
67.5°	196.3	130.8	65.4	0.0
65°	211.8	143.3	71.6	0.0
62.5°	224.3	158.9	77.9	0.0
60°	239.9	171.3	84.1	0.0
57.5°	252.3	180.7	90.3	0.0
55°	264.8	186.9	96.6	0.0
52.5°	277.3	196.3	102.8	0.0
50°	289.7	205.6	109.0	0.0
47.5°	302.2	211.8	112.1	0.0
45°	320.9	221.2	118.4	0.0
42.5°	336.4	227.4	124.6	0.0
40°	352.0	233.6	127.7	0.0
37.5°	367.6	239.9	134.0	0.0
35°	383.2	246.1	137.1	0.0
32.5°	395.6	252.3	140.2	0.0
30°	408.1	258.6	143.3	0.0
27.5°	420.5	261.7	146.4	0.0
25°	429.9	267.9	149.5	0.0
22.5°	439.2	271.0	152.6	0.0
20°	445.5	274.1	155.8	0.0
17.5°	454.8	277.3	158.9	0.0
15°	457.9	280.4	165.1	0.0
12.5°	464.2	283.5	165.1	0.0
10°	467.3	286.6	165.1	0.0
7.5°	473.5	286.6	165.1	0.0
5°	470.4	286.6	165.1	0.0
2.5°	470.4	286.6	165.1	0.0
0°	467.3	286.6	165.1	0.0

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