

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: P628406

Luminaire Tested: **IFLD-L-SA7E-830-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628406
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-L-SA7E-830-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (112) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	46164.8 lumens	Max Intensity:	15047.9 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	86.7 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		

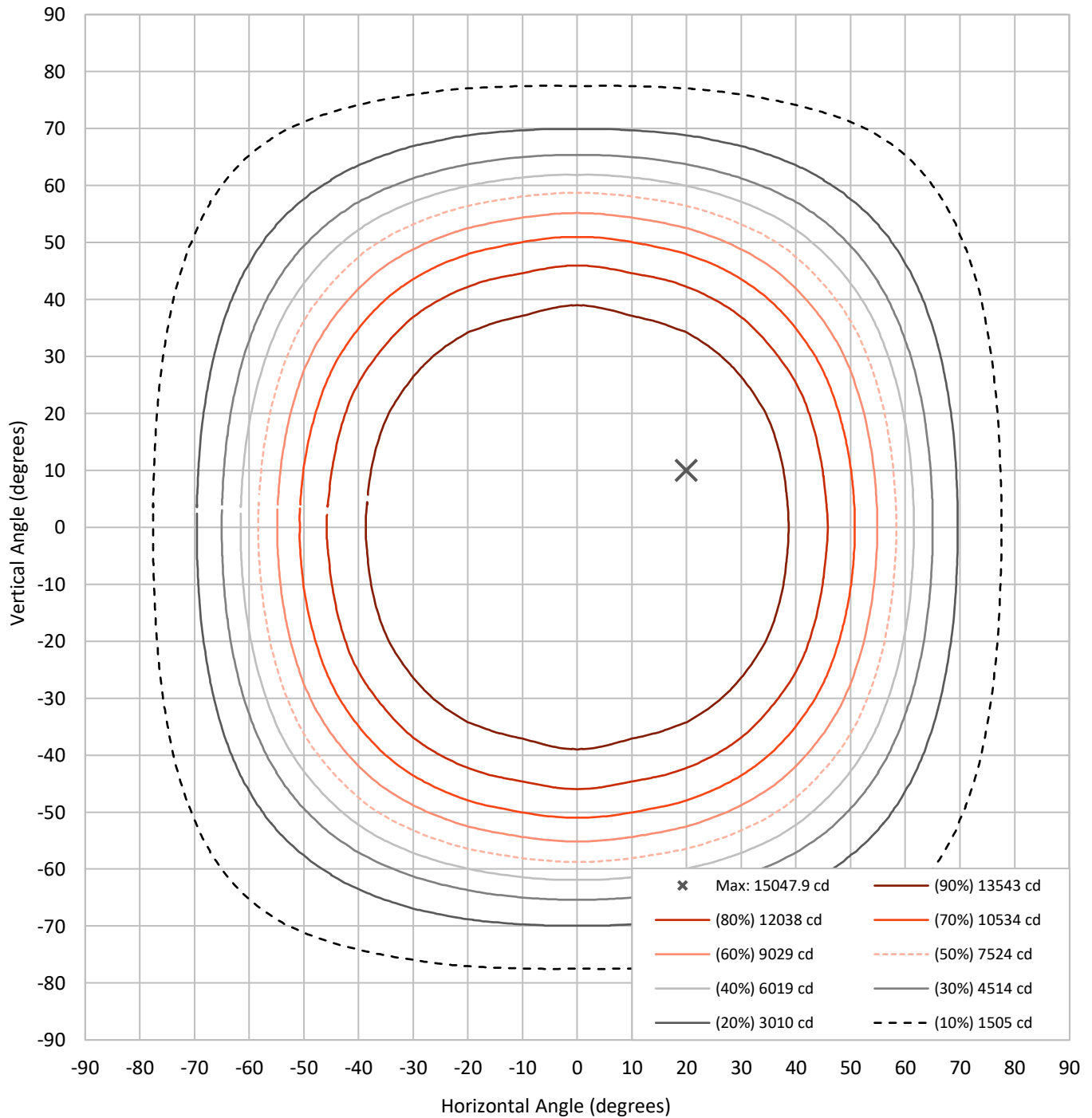
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	28327.7 lumens	Field Lumens:	33960.1 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

Input Watts (W): 532.7
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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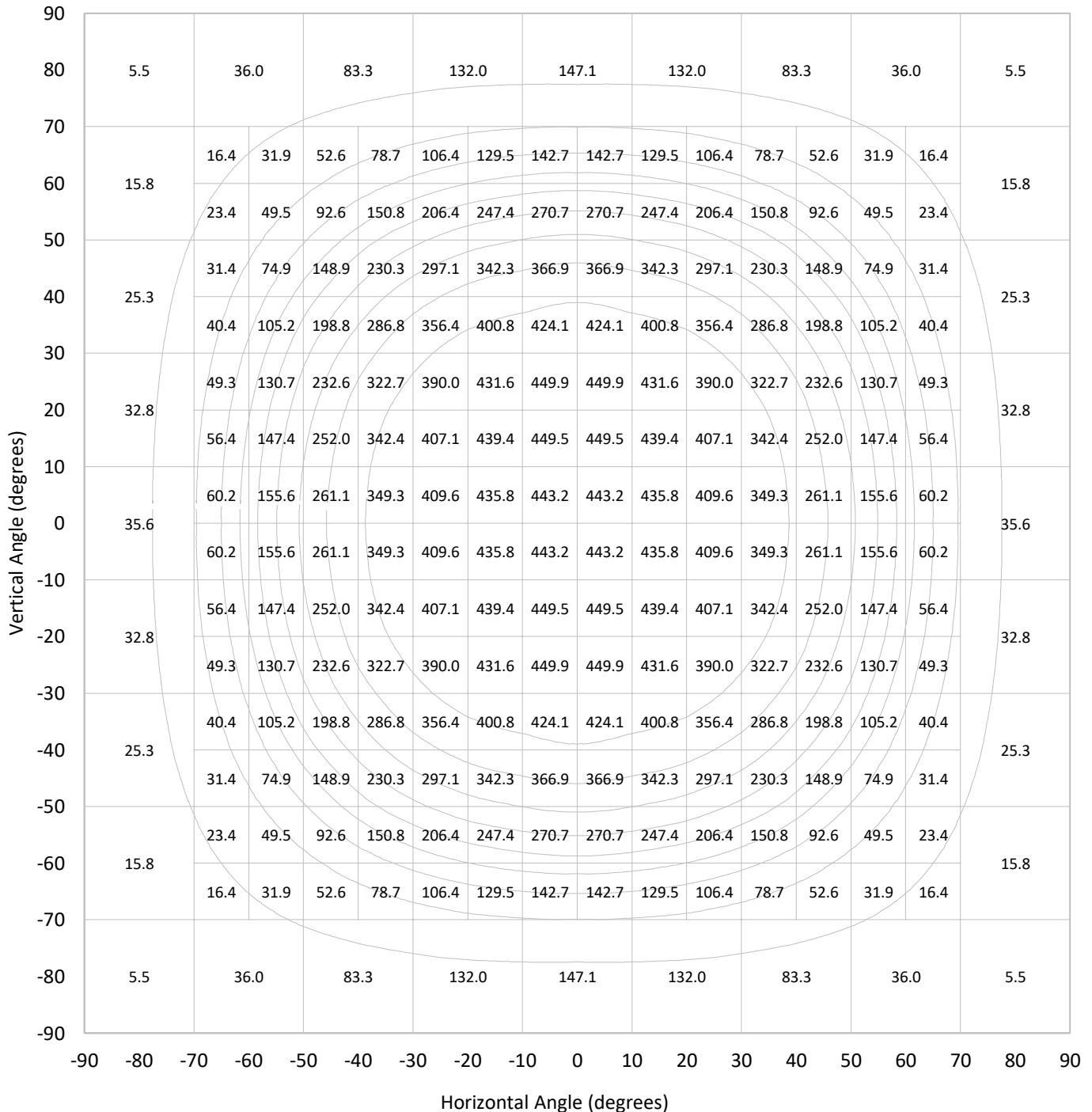
Iso-Candela Plot





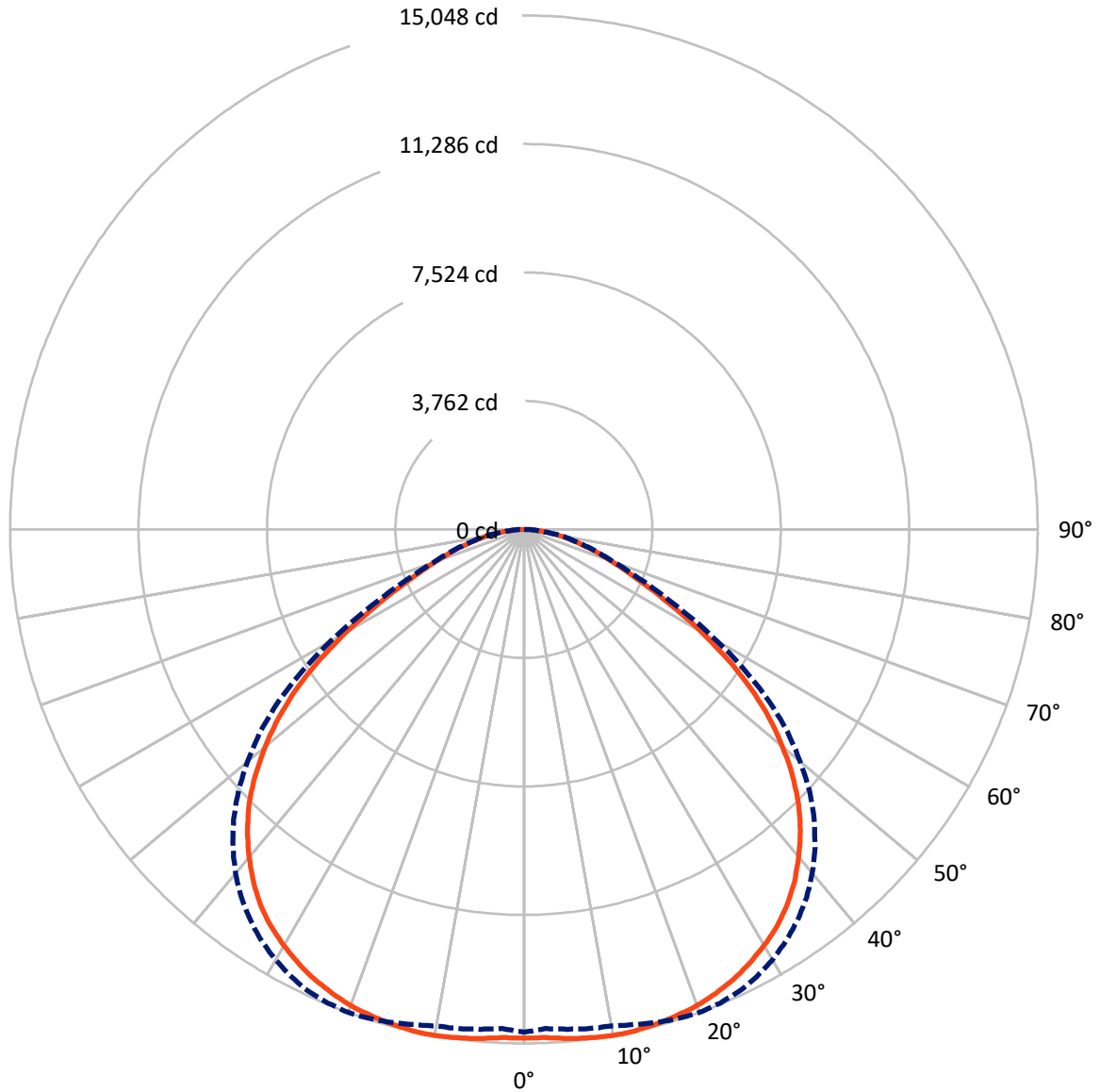
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Lumen Table



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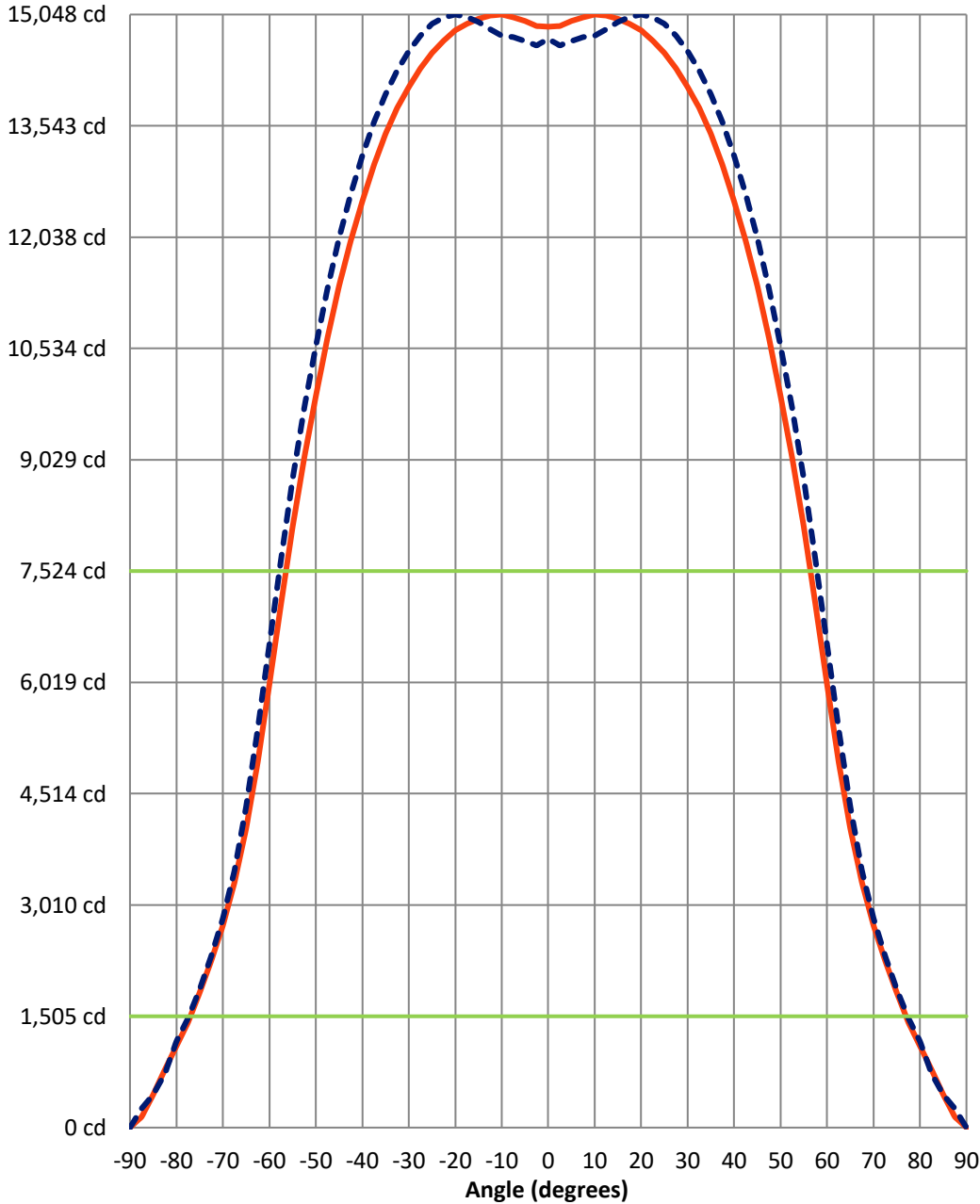
Luminous Intensity Polar Plot



— 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: 28327.7
Efficiency: 61.4%

Field:
H Angle: 154.7°
V Angle: 154°
Lumens: 33960.1
Efficiency: 73.6%

Spill:
Lumens: 12204.7
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°	121.4	131.1	136.0	140.9	145.7	150.6	155.4	150.6	145.7	145.7	140.9
85°	325.4	335.2	340.0	374.0	408.0	427.4	451.7	446.9	446.9	442.0	437.2
82.5°	650.9	680.0	704.3	738.3	757.7	786.9	806.3	791.7	782.0	762.6	748.0
80°	1156.0	1165.7	1170.6	1175.5	1151.2	1146.3	1136.6	1122.0	1102.6	1078.3	1054.0
77.5°	1471.8	1481.5	1491.2	1481.5	1476.6	1471.8	1457.2	1442.6	1423.2	1403.8	1374.6
75°	1947.8	1947.8	1947.8	1933.2	1923.5	1908.9	1884.6	1860.3	1826.3	1787.5	1743.8
72.5°	2452.9	2448.1	2443.2	2414.1	2389.8	2360.6	2326.6	2297.5	2258.6	2214.9	2156.6
70°	2982.4	2992.1	2996.9	2958.1	2928.9	2890.1	2846.4	2792.9	2734.7	2671.5	2588.9
67.5°	3711.0	3701.3	3691.5	3638.1	3599.2	3545.8	3482.7	3405.0	3317.5	3220.4	3103.8
65°	4614.4	4629.0	4599.8	4546.4	4473.6	4386.1	4289.0	4177.3	4046.1	3900.4	3735.3
62.5°	5707.3	5731.6	5697.6	5629.6	5537.3	5420.7	5284.7	5124.4	4944.7	4740.7	4536.7
60°	6950.8	6945.9	6882.8	6790.5	6669.1	6523.3	6372.8	6197.9	5993.9	5755.9	5508.2
57.5°	8092.2	8082.5	8004.8	7912.5	7791.1	7635.7	7475.4	7290.8	7077.1	6824.5	6537.9
55°	9117.1	9107.4	9029.7	8932.5	8806.3	8650.8	8505.1	8330.2	8121.4	7854.2	7548.2
52.5°	10025.4	10030.3	9962.3	9855.4	9719.4	9568.9	9428.0	9253.1	9054.0	8786.8	8490.5
50°	10860.9	10856.0	10783.2	10686.0	10559.7	10414.0	10273.2	10098.3	9889.4	9632.0	9345.4
47.5°	11638.1	11628.3	11545.8	11438.9	11307.8	11181.5	11050.3	10894.9	10676.3	10418.9	10132.3
45°	12288.9	12269.5	12186.9	12084.9	11958.6	11846.9	11730.3	11613.8	11380.6	11142.6	10870.6
42.5°	12847.5	12842.7	12760.1	12658.1	12531.8	12434.7	12327.8	12182.1	11987.8	11769.2	11502.1
40°	13381.8	13343.0	13260.4	13163.2	13046.7	12964.1	12857.2	12711.5	12522.1	12308.4	12050.9
37.5°	13780.1	13785.0	13697.5	13590.7	13488.7	13411.0	13313.8	13177.8	13012.7	12803.8	12546.4
35°	14159.0	14134.7	14061.8	13969.6	13877.3	13789.8	13687.8	13571.3	13435.3	13241.0	12998.1
32.5°	14406.7	14440.7	14353.3	14256.1	14202.7	14134.7	14027.8	13906.4	13785.0	13590.7	13372.1
30°	14678.7	14649.6	14581.6	14499.0	14460.1	14416.4	14324.1	14207.6	14066.7	13891.8	13687.8
27.5°	14868.2	14853.6	14771.0	14693.3	14673.9	14635.0	14562.1	14460.1	14319.3	14149.3	13959.8
25°	14950.7	14960.4	14882.7	14839.0	14839.0	14814.7	14756.4	14669.0	14528.1	14372.7	14188.1
22.5°	14989.6	14979.9	14926.4	14916.7	14941.0	14921.6	14897.3	14819.6	14693.3	14567.0	14411.6
20°	15013.9	14945.9	14897.3	14936.2	14965.3	14960.4	14941.0	14892.4	14834.2	14727.3	14591.3
17.5°	14960.4	14916.7	14858.4	14916.7	14979.9	14984.7	14965.3	14936.2	14921.6	14853.6	14732.1
15°	14829.3	14795.3	14805.0	14863.3	14936.2	14960.4	14975.0	15009.0	14989.6	14936.2	14829.3
12.5°	14741.9	14698.1	14741.9	14800.1	14839.0	14853.6	14970.2	15033.3	15033.3	14984.7	14916.7
10°	14717.6	14630.1	14688.4	14741.9	14761.3	14848.7	14945.9	15013.9	15047.9	15009.0	14921.6
7.5°	14669.0	14610.7	14635.0	14659.3	14771.0	14834.2	14887.6	14960.4	15009.0	15004.2	14926.4
5°	14644.7	14571.9	14581.6	14683.6	14761.3	14805.0	14824.4	14887.6	14960.4	14975.0	14916.7
2.5°	14581.6	14547.6	14620.4	14630.1	14688.4	14722.4	14741.9	14800.1	14892.4	14926.4	14902.2
0°	14547.6	14499.0	14450.4	14489.3	14586.4	14659.3	14688.4	14775.9	14882.7	14916.7	14863.3



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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°	136.0	131.1	126.3	121.4	126.3	126.3	126.3	121.4	126.3	121.4	121.4
85°	422.6	403.2	388.6	369.2	349.7	335.2	315.7	296.3	291.4	286.6	276.9
82.5°	728.6	704.3	680.0	650.9	621.7	587.7	553.7	514.9	505.2	495.4	480.9
80°	1024.9	990.9	956.9	922.9	893.7	859.7	820.9	777.2	748.0	723.7	694.6
77.5°	1335.8	1287.2	1238.6	1180.3	1146.3	1112.3	1073.5	1029.7	986.0	947.2	903.5
75°	1690.3	1636.9	1588.3	1530.0	1466.9	1403.8	1340.6	1282.3	1219.2	1160.9	1102.6
72.5°	2083.8	2006.1	1928.3	1855.5	1777.8	1700.1	1617.5	1539.8	1462.0	1384.3	1301.8
70°	2496.6	2399.5	2302.4	2205.2	2103.2	2001.2	1904.1	1806.9	1709.8	1607.8	1515.5
67.5°	2982.4	2870.7	2744.4	2608.4	2457.8	2326.6	2200.4	2083.8	1967.2	1850.6	1734.1
65°	3589.5	3434.1	3264.1	3079.5	2904.7	2729.8	2545.2	2370.4	2234.4	2098.3	1967.2
62.5°	4337.6	4119.0	3881.0	3643.0	3429.2	3201.0	2987.2	2758.9	2545.2	2350.9	2190.6
60°	5231.3	4935.0	4643.6	4337.6	4041.3	3730.4	3458.4	3176.7	2909.5	2671.5	2438.4
57.5°	6217.3	5872.5	5522.7	5148.7	4745.6	4381.3	4012.1	3643.0	3327.2	3011.5	2749.2
55°	7217.9	6853.6	6460.2	6037.6	5595.6	5129.3	4629.0	4216.1	3783.8	3414.7	3074.7
52.5°	8170.0	7791.1	7383.1	6994.5	6465.0	5930.7	5381.9	4837.9	4332.7	3861.5	3448.7
50°	9020.0	8650.8	8257.4	7805.7	7315.1	6746.8	6134.8	5522.7	4925.3	4371.6	3856.7
47.5°	9797.1	9437.7	9044.3	8592.5	8145.7	7514.2	6897.3	6222.2	5556.7	4920.4	4318.1
45°	10525.7	10161.4	9753.4	9321.1	8806.3	8242.8	7606.5	6926.5	6212.5	5498.4	4803.9
42.5°	11186.3	10822.0	10409.2	9962.3	9452.3	8893.7	8276.8	7591.9	6873.1	6095.9	5333.3
40°	11764.3	11409.8	11011.5	10545.2	10069.2	9481.4	8874.3	8223.4	7480.2	6698.2	5857.9
37.5°	12269.5	11939.2	11545.8	11084.3	10579.2	10054.6	9428.0	8777.1	8106.8	7256.8	6397.0
35°	12716.4	12410.4	12007.2	11570.1	11074.6	10520.9	9933.1	9296.8	8573.1	7776.5	6941.1
32.5°	13105.0	12794.1	12424.9	11987.8	11506.9	10987.2	10384.9	9743.7	9058.8	8247.7	7339.4
30°	13435.3	13134.1	12784.4	12371.5	11910.1	11395.2	10807.5	10161.4	9462.0	8655.7	7757.1
27.5°	13721.8	13435.3	13095.2	12711.5	12269.5	11774.1	11181.5	10530.6	9816.6	9039.4	8140.8
25°	13969.6	13692.7	13377.0	13012.7	12575.5	12089.8	11531.2	10851.2	10137.2	9355.1	8466.2
22.5°	14193.0	13925.8	13610.1	13255.5	12857.2	12371.5	11808.1	11132.9	10409.2	9636.9	8762.5
20°	14392.1	14144.4	13833.6	13469.3	13071.0	12580.4	12021.8	11380.6	10652.0	9894.3	9029.7
17.5°	14552.4	14333.9	14023.0	13639.3	13241.0	12764.9	12220.9	11633.2	10860.9	10112.9	9253.1
15°	14664.1	14450.4	14168.7	13780.1	13391.5	12920.4	12376.4	11769.2	11050.3	10287.7	9437.7
12.5°	14741.9	14513.6	14251.3	13891.8	13503.3	13037.0	12507.5	11910.1	11210.6	10443.2	9598.0
10°	14761.3	14552.4	14290.1	13969.6	13590.7	13139.0	12619.2	12026.6	11341.8	10564.6	9729.1
7.5°	14771.0	14571.9	14333.9	14027.8	13653.8	13216.7	12701.8	12118.9	11438.9	10666.6	9826.3
5°	14766.1	14576.7	14363.0	14066.7	13692.7	13260.4	12755.2	12182.1	11506.9	10734.6	9899.1
2.5°	14751.6	14581.6	14382.4	14095.8	13736.4	13309.0	12808.7	12254.9	11579.8	10792.9	9957.4
0°	14790.4	14644.7	14392.1	14086.1	13746.1	13309.0	12803.8	12264.6	11589.5	10788.0	9952.6



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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°	121.4	116.6	116.6	111.7	106.9	102.0	92.3	87.4	77.7	63.1	48.6
85°	262.3	247.7	233.1	223.4	213.7	204.0	189.4	174.9	155.4	126.3	97.1
82.5°	461.4	432.3	403.2	369.2	340.0	310.9	286.6	262.3	233.1	189.4	145.7
80°	660.6	616.9	573.2	524.6	480.9	432.3	388.6	349.7	310.9	252.6	194.3
77.5°	859.7	801.5	738.3	680.0	616.9	553.7	490.6	437.2	378.9	310.9	242.9
75°	1044.3	976.3	918.0	835.5	757.7	675.2	592.6	519.7	446.9	364.3	291.4
72.5°	1228.9	1141.5	1058.9	981.2	893.7	791.7	699.4	607.2	514.9	417.7	330.3
70°	1413.5	1306.6	1204.6	1112.3	1015.2	913.2	801.5	694.6	582.9	466.3	364.3
67.5°	1602.9	1481.5	1364.9	1248.3	1136.6	1020.0	903.5	782.0	650.9	514.9	403.2
65°	1811.8	1661.2	1520.3	1389.2	1258.0	1131.7	1000.6	869.5	723.7	568.3	437.2
62.5°	2020.6	1855.5	1690.3	1525.2	1379.5	1238.6	1097.7	952.0	791.7	626.6	471.2
60°	2244.1	2054.6	1865.2	1680.6	1500.9	1345.5	1190.0	1034.6	864.6	680.0	505.2
57.5°	2491.8	2263.5	2049.8	1840.9	1636.9	1452.3	1282.3	1117.2	927.7	733.5	544.0
55°	2773.5	2491.8	2239.2	2006.1	1782.6	1559.2	1374.6	1204.6	1000.6	786.9	587.7
52.5°	3069.8	2744.4	2438.4	2176.1	1938.1	1685.5	1462.0	1272.6	1073.5	840.3	626.6
50°	3414.7	3001.8	2661.8	2341.2	2074.1	1811.8	1554.3	1350.3	1146.3	903.5	665.4
47.5°	3769.3	3312.7	2885.2	2535.5	2219.8	1933.2	1661.2	1418.3	1214.3	961.7	704.3
45°	4182.1	3609.0	3137.8	2724.9	2360.6	2059.5	1768.1	1491.2	1272.6	1020.0	743.2
42.5°	4580.4	3958.7	3400.1	2933.8	2520.9	2180.9	1865.2	1568.9	1330.9	1078.3	777.2
40°	5051.6	4308.4	3652.7	3132.9	2681.2	2297.5	1962.3	1651.5	1384.3	1131.7	811.2
37.5°	5503.3	4663.0	3958.7	3351.5	2836.7	2414.1	2059.5	1729.2	1432.9	1185.2	854.9
35°	5950.2	5056.4	4250.1	3555.5	2996.9	2545.2	2156.6	1802.1	1481.5	1228.9	893.7
32.5°	6377.6	5425.6	4546.4	3783.8	3171.8	2666.6	2244.1	1870.1	1530.0	1267.8	932.6
30°	6775.9	5775.3	4837.9	4017.0	3332.1	2778.4	2326.6	1938.1	1588.3	1301.8	971.5
27.5°	7140.2	6115.3	5129.3	4235.6	3482.7	2880.4	2414.1	2001.2	1636.9	1335.8	1005.5
25°	7470.5	6421.3	5396.4	4434.7	3618.7	2992.1	2496.6	2064.3	1680.6	1364.9	1034.6
22.5°	7781.4	6703.1	5639.3	4633.9	3783.8	3103.8	2574.4	2122.6	1724.3	1394.0	1063.7
20°	8053.4	6960.5	5872.5	4833.0	3929.5	3205.8	2642.4	2176.1	1763.2	1413.5	1092.9
17.5°	8272.0	7188.8	6081.3	5007.9	4055.8	3293.2	2700.7	2224.6	1797.2	1437.8	1112.3
15°	8466.2	7383.1	6256.2	5158.4	4167.6	3366.1	2754.1	2263.5	1826.3	1452.3	1136.6
12.5°	8631.4	7548.2	6406.8	5289.6	4264.7	3429.2	2797.8	2292.6	1850.6	1466.9	1151.2
10°	8767.4	7679.4	6533.0	5391.6	4342.4	3477.8	2831.8	2321.8	1870.1	1481.5	1165.7
7.5°	8869.4	7776.5	6625.3	5479.0	4405.6	3511.8	2860.9	2341.2	1889.5	1491.2	1190.0
5°	8947.1	7859.1	6698.2	5537.3	4454.1	3560.4	2894.9	2365.5	1908.9	1500.9	1190.0
2.5°	9005.4	7927.1	6756.5	5585.9	4493.0	3550.7	2894.9	2360.6	1908.9	1500.9	1185.2
0°	8995.7	7931.9	6751.6	5585.9	4493.0	3541.0	2894.9	2355.8	1908.9	1500.9	1185.2



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	34.0	24.3	9.7	0.0
85°	72.9	48.6	24.3	0.0
82.5°	106.9	68.0	34.0	0.0
80°	140.9	92.3	43.7	0.0
77.5°	179.7	116.6	58.3	0.0
75°	213.7	136.0	68.0	0.0
72.5°	247.7	160.3	77.7	0.0
70°	276.9	179.7	87.4	0.0
67.5°	306.0	204.0	102.0	0.0
65°	330.3	223.4	111.7	0.0
62.5°	349.7	247.7	121.4	0.0
60°	374.0	267.2	131.1	0.0
57.5°	393.4	281.7	140.9	0.0
55°	412.9	291.4	150.6	0.0
52.5°	432.3	306.0	160.3	0.0
50°	451.7	320.6	170.0	0.0
47.5°	471.2	330.3	174.9	0.0
45°	500.3	344.9	184.6	0.0
42.5°	524.6	354.6	194.3	0.0
40°	548.9	364.3	199.1	0.0
37.5°	573.2	374.0	208.9	0.0
35°	597.4	383.7	213.7	0.0
32.5°	616.9	393.4	218.6	0.0
30°	636.3	403.2	223.4	0.0
27.5°	655.7	408.0	228.3	0.0
25°	670.3	417.7	233.1	0.0
22.5°	684.9	422.6	238.0	0.0
20°	694.6	427.4	242.9	0.0
17.5°	709.2	432.3	247.7	0.0
15°	714.0	437.2	257.4	0.0
12.5°	723.7	442.0	257.4	0.0
10°	728.6	446.9	257.4	0.0
7.5°	738.3	446.9	257.4	0.0
5°	733.5	446.9	257.4	0.0
2.5°	733.5	446.9	257.4	0.0
0°	728.6	446.9	257.4	0.0

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