

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: P628376

Luminaire Tested: **IFLD-L-SA7D-827-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628376
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-L-SA7D-827-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (112) 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

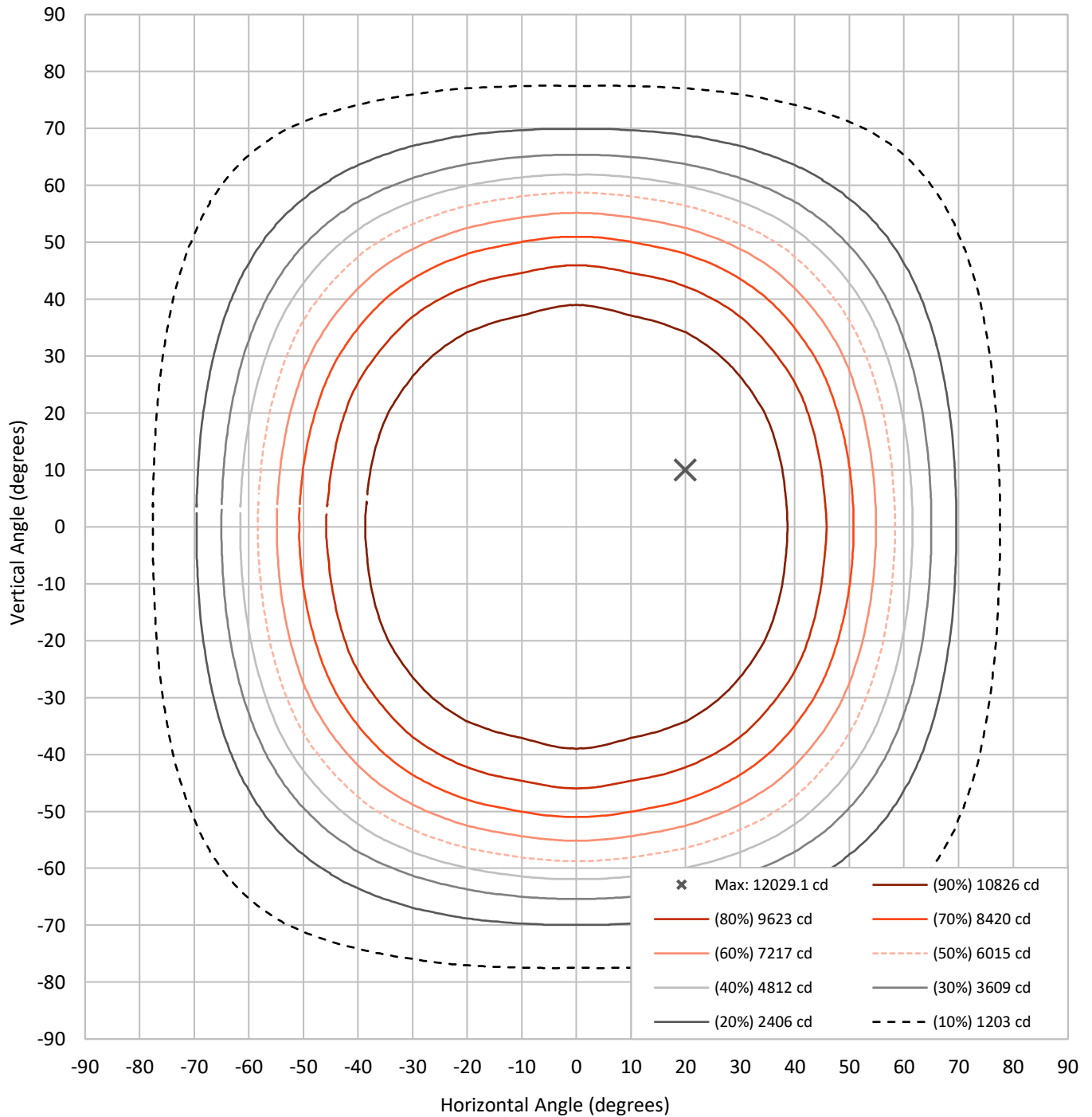
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	36903.5 lumens	Max Intensity:	12029.1 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	87.3 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	22644.7 lumens	Field Lumens:	27147.2 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

Input Watts (W): 422.6
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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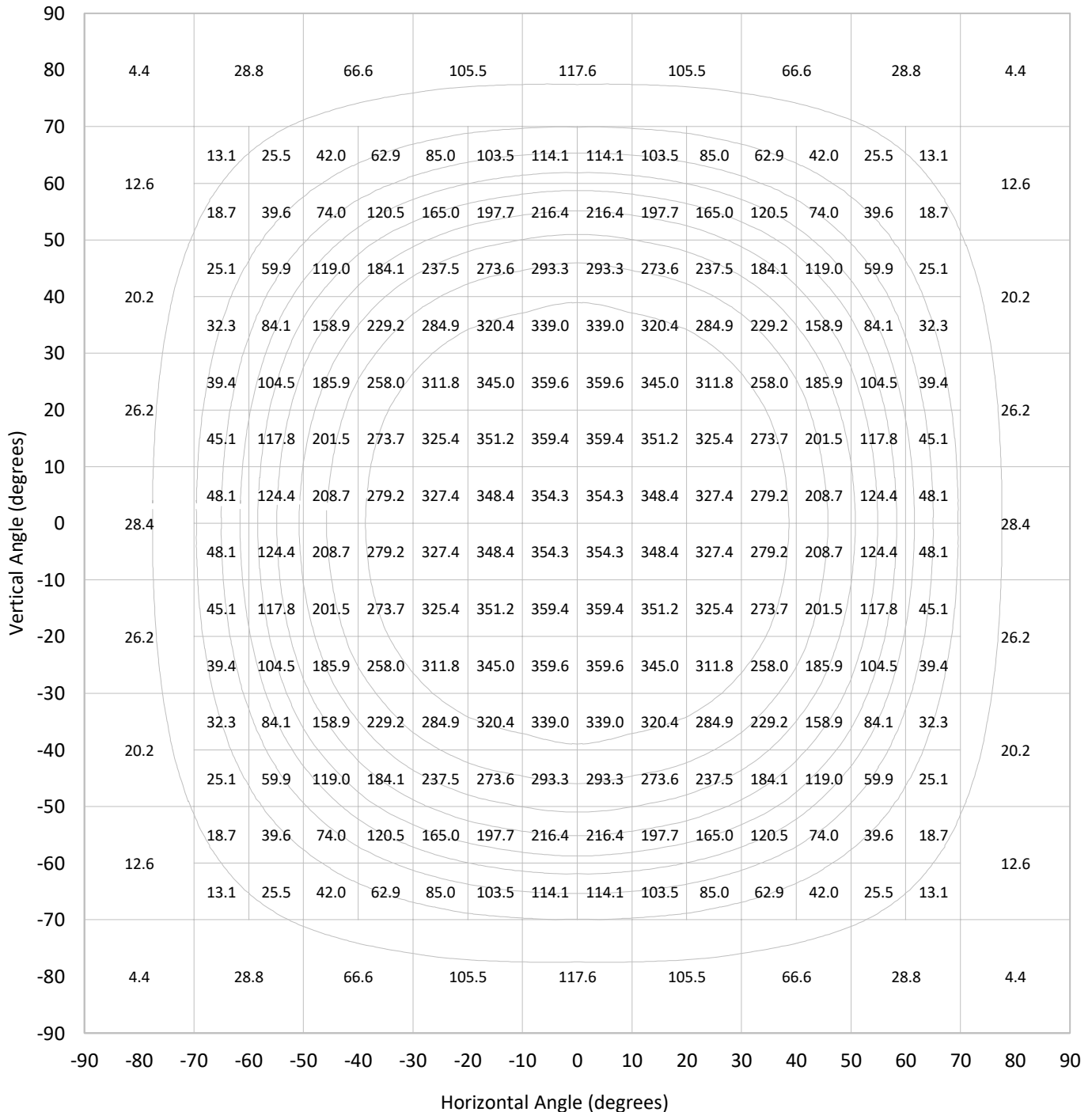
Iso-Candela Plot





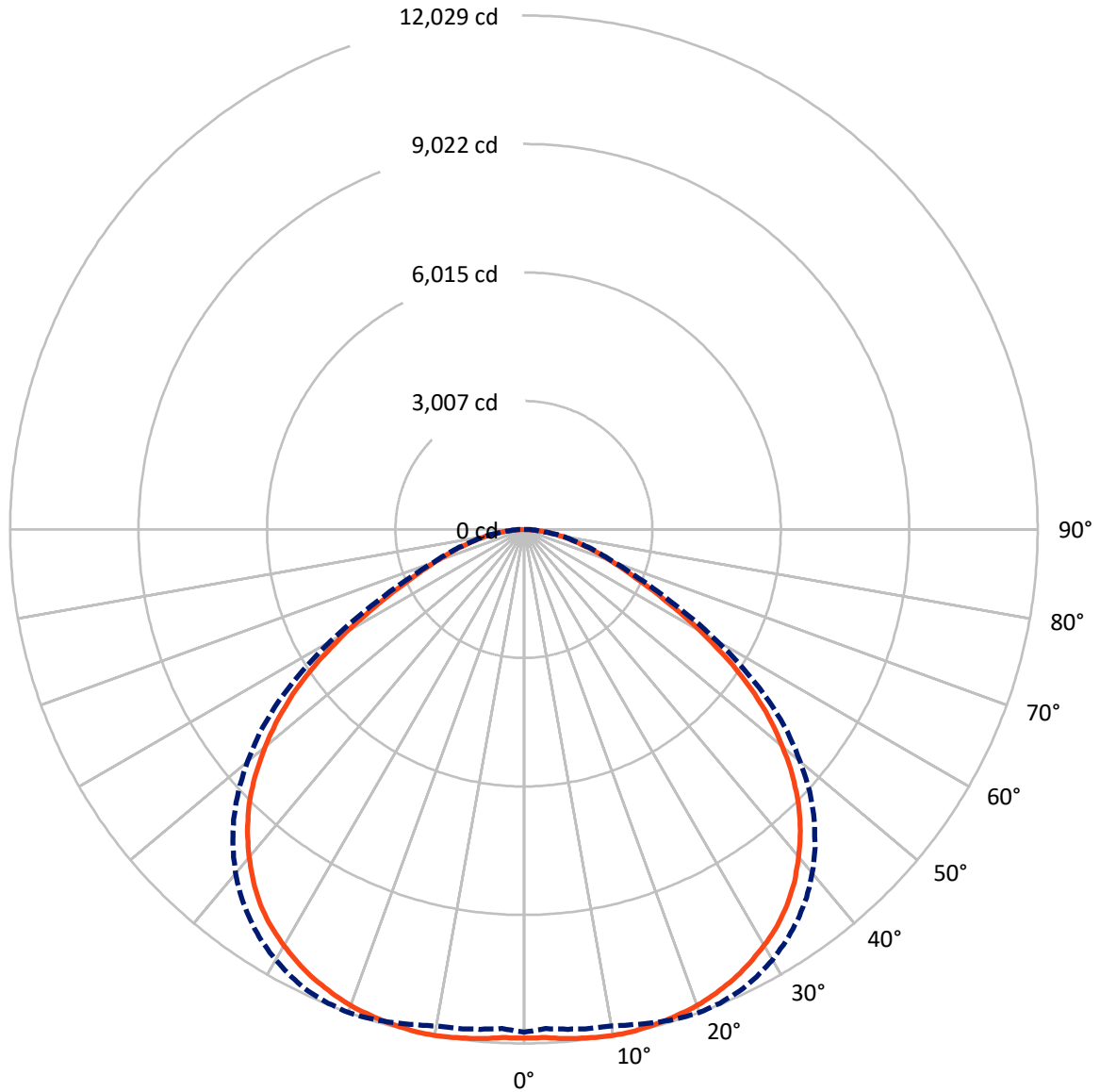
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Lumen Table



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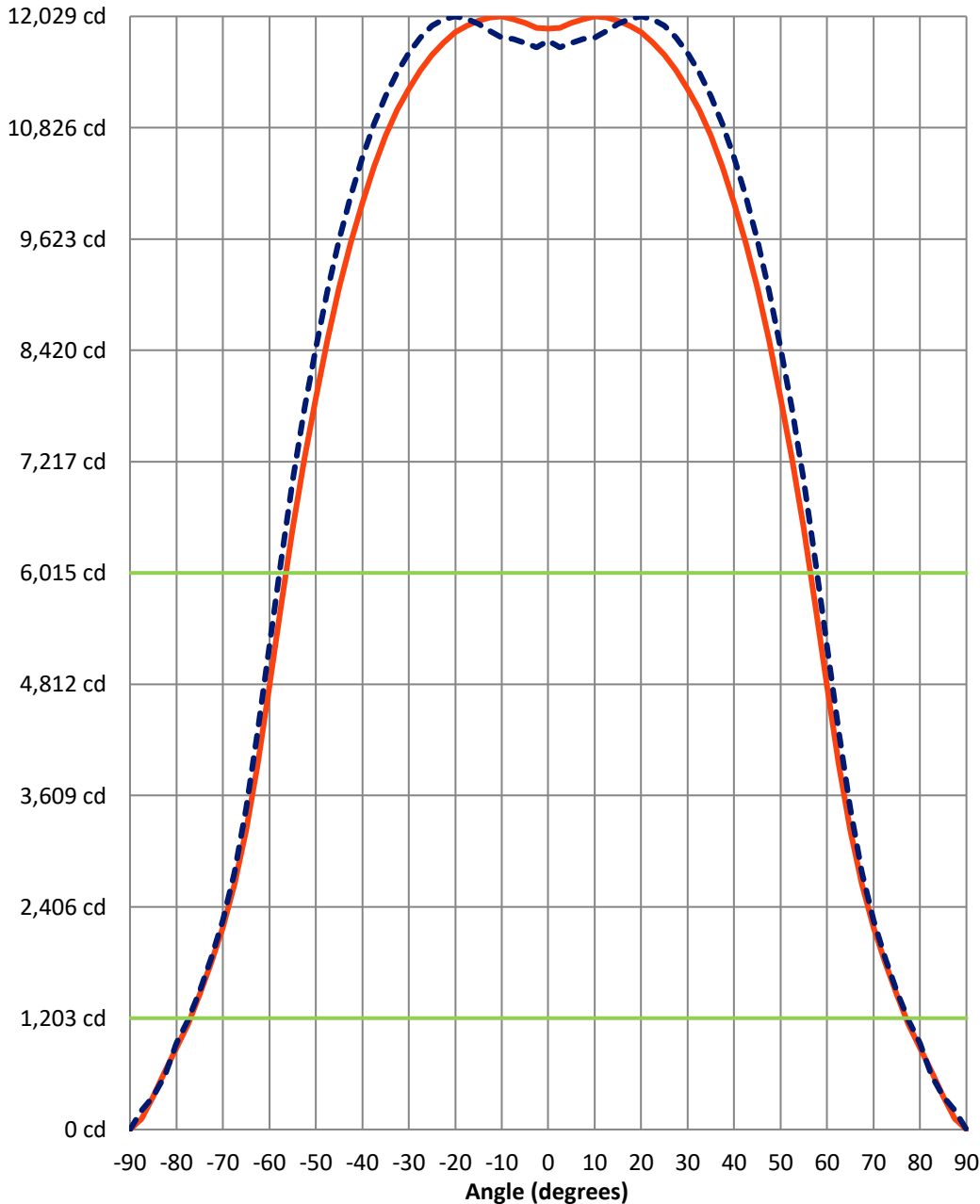
Luminous Intensity Polar Plot



— 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: 22644.7
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 27147.2
 Efficiency: 73.6%

Spill:
 Lumens: 9756.3
 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°	97.1	104.8	108.7	112.6	116.5	120.4	124.3	120.4	116.5	116.5	112.6
85°	260.2	267.9	271.8	299.0	326.2	341.7	361.1	357.2	357.2	353.3	349.5
82.5°	520.3	543.6	563.0	590.2	605.7	629.0	644.6	632.9	625.1	609.6	598.0
80°	924.1	931.9	935.8	939.6	920.2	916.4	908.6	896.9	881.4	862.0	842.6
77.5°	1176.5	1184.3	1192.0	1184.3	1180.4	1176.5	1164.9	1153.2	1137.7	1122.1	1098.8
75°	1557.0	1557.0	1557.0	1545.4	1537.6	1526.0	1506.5	1487.1	1459.9	1428.9	1393.9
72.5°	1960.8	1957.0	1953.1	1929.8	1910.4	1887.1	1859.9	1836.6	1805.5	1770.6	1724.0
70°	2384.1	2391.8	2395.7	2364.7	2341.4	2310.3	2275.3	2232.6	2186.0	2135.6	2069.6
67.5°	2966.5	2958.7	2951.0	2908.3	2877.2	2834.5	2784.0	2721.9	2652.0	2574.3	2481.1
65°	3688.7	3700.4	3677.1	3634.3	3576.1	3506.2	3428.6	3339.2	3234.4	3117.9	2985.9
62.5°	4562.3	4581.8	4554.6	4500.2	4426.4	4333.3	4224.5	4096.4	3952.7	3789.7	3626.6
60°	5556.4	5552.5	5502.0	5428.2	5331.1	5214.7	5094.3	4954.5	4791.4	4601.2	4403.1
57.5°	6468.8	6461.1	6398.9	6325.2	6228.1	6103.8	5975.7	5828.2	5657.3	5455.4	5226.3
55°	7288.1	7280.3	7218.2	7140.6	7039.6	6915.3	6798.9	6659.1	6492.1	6278.6	6033.9
52.5°	8014.2	8018.1	7963.7	7878.3	7769.6	7649.2	7536.6	7396.8	7237.6	7024.1	6787.2
50°	8682.0	8678.2	8619.9	8542.3	8441.3	8324.8	8212.2	8072.4	7905.5	7699.7	7470.6
47.5°	9303.3	9295.5	9229.5	9144.1	9039.3	8938.3	8833.5	8709.2	8534.5	8328.7	8099.6
45°	9823.6	9808.1	9742.1	9660.5	9559.6	9470.3	9377.1	9283.9	9097.5	8907.2	8689.8
42.5°	10270.1	10266.2	10200.2	10118.7	10017.7	9940.1	9854.7	9738.2	9582.9	9408.1	9194.6
40°	10697.2	10666.2	10600.2	10522.5	10429.3	10363.3	10277.9	10161.4	10010.0	9839.1	9633.3
37.5°	11015.6	11019.5	10949.6	10864.2	10782.7	10720.5	10642.9	10534.2	10402.1	10235.2	10029.4
35°	11318.5	11299.1	11240.8	11167.1	11093.3	11023.4	10941.9	10848.7	10739.9	10584.6	10390.5
32.5°	11516.5	11543.7	11473.8	11396.1	11353.4	11299.1	11213.7	11116.6	11019.5	10864.2	10689.5
30°	11734.0	11710.7	11656.3	11590.3	11559.2	11524.3	11450.5	11357.3	11244.7	11104.9	10941.9
27.5°	11885.4	11873.7	11807.7	11745.6	11730.1	11699.0	11640.8	11559.2	11446.6	11310.7	11159.3
25°	11951.4	11959.2	11897.0	11862.1	11862.1	11842.7	11796.1	11726.2	11613.6	11489.3	11341.8
22.5°	11982.5	11974.7	11932.0	11924.2	11943.6	11928.1	11908.7	11846.6	11745.6	11644.7	11520.4
20°	12001.9	11947.5	11908.7	11939.7	11963.0	11959.2	11943.6	11904.8	11858.2	11772.8	11664.1
17.5°	11959.2	11924.2	11877.6	11924.2	11974.7	11978.6	11963.0	11939.7	11928.1	11873.7	11776.7
15°	11854.3	11827.1	11834.9	11881.5	11939.7	11959.2	11970.8	11998.0	11982.5	11939.7	11854.3
12.5°	11784.4	11749.5	11784.4	11831.0	11862.1	11873.7	11966.9	12017.4	12017.4	11978.6	11924.2
10°	11765.0	11695.1	11741.7	11784.4	11800.0	11869.9	11947.5	12001.9	12029.1	11998.0	11928.1
7.5°	11726.2	11679.6	11699.0	11718.4	11807.7	11858.2	11900.9	11959.2	11998.0	11994.1	11932.0
5°	11706.8	11648.5	11656.3	11737.8	11800.0	11834.9	11850.4	11900.9	11959.2	11970.8	11924.2
2.5°	11656.3	11629.1	11687.4	11695.1	11741.7	11768.9	11784.4	11831.0	11904.8	11932.0	11912.6
0°	11629.1	11590.3	11551.5	11582.5	11660.2	11718.4	11741.7	11811.6	11897.0	11924.2	11881.5



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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°	108.7	104.8	101.0	97.1	101.0	101.0	101.0	97.1	101.0	97.1	97.1
85°	337.8	322.3	310.6	295.1	279.6	267.9	252.4	236.9	233.0	229.1	221.3
82.5°	582.4	563.0	543.6	520.3	497.0	469.8	442.6	411.6	403.8	396.1	384.4
80°	819.3	792.1	764.9	737.7	714.4	687.3	656.2	621.3	598.0	578.5	555.2
77.5°	1067.8	1029.0	990.1	943.5	916.4	889.2	858.1	823.2	788.2	757.2	722.2
75°	1351.2	1308.5	1269.7	1223.1	1172.6	1122.1	1071.7	1025.1	974.6	928.0	881.4
72.5°	1665.7	1603.6	1541.5	1483.2	1421.1	1359.0	1293.0	1230.9	1168.7	1106.6	1040.6
70°	1995.8	1918.1	1840.5	1762.8	1681.3	1599.7	1522.1	1444.4	1366.8	1285.2	1211.4
67.5°	2384.1	2294.8	2193.8	2085.1	1964.7	1859.9	1758.9	1665.7	1572.6	1479.4	1386.2
65°	2869.4	2745.2	2609.3	2461.7	2321.9	2182.2	2034.6	1894.8	1786.1	1677.4	1572.6
62.5°	3467.4	3292.7	3102.4	2912.1	2741.3	2558.8	2387.9	2205.5	2034.6	1879.3	1751.2
60°	4181.8	3945.0	3712.0	3467.4	3230.5	2982.0	2764.6	2539.4	2325.8	2135.6	1949.2
57.5°	4970.0	4694.4	4414.8	4115.8	3793.5	3502.3	3207.2	2912.1	2659.7	2407.4	2197.7
55°	5769.9	5478.7	5164.2	4826.4	4473.0	4100.3	3700.4	3370.3	3024.7	2729.6	2457.8
52.5°	6530.9	6228.1	5901.9	5591.3	5168.1	4741.0	4302.2	3867.3	3463.5	3086.9	2756.8
50°	7210.4	6915.3	6600.8	6239.7	5847.6	5393.3	4904.0	4414.8	3937.2	3494.6	3083.0
47.5°	7831.7	7544.4	7229.9	6868.8	6511.5	6006.8	5513.6	4973.9	4442.0	3933.3	3451.8
45°	8414.1	8122.9	7796.8	7451.2	7039.6	6589.2	6080.5	5536.9	4966.2	4395.4	3840.1
42.5°	8942.2	8651.0	8320.9	7963.7	7556.0	7109.5	6616.4	6068.9	5494.2	4873.0	4263.4
40°	9404.3	9120.8	8802.4	8429.7	8049.1	7579.3	7094.0	6573.7	5979.6	5354.4	4682.7
37.5°	9808.1	9544.0	9229.5	8860.7	8456.8	8037.5	7536.6	7016.3	6480.5	5801.0	5113.7
35°	10165.3	9920.7	9598.4	9248.9	8852.9	8410.2	7940.4	7431.8	6853.2	6216.4	5548.6
32.5°	10475.9	10227.4	9932.3	9582.9	9198.5	8783.0	8301.5	7789.0	7241.5	6593.1	5867.0
30°	10739.9	10499.2	10219.6	9889.6	9520.7	9109.2	8639.3	8122.9	7563.8	6919.2	6200.9
27.5°	10969.0	10739.9	10468.1	10161.4	9808.1	9412.0	8938.3	8418.0	7847.2	7226.0	6507.6
25°	11167.1	10945.7	10693.4	10402.1	10052.7	9664.4	9217.9	8674.3	8103.5	7478.4	6767.8
22.5°	11345.7	11132.1	10879.7	10596.3	10277.9	9889.6	9439.2	8899.5	8320.9	7703.6	7004.7
20°	11504.9	11306.8	11058.3	10767.1	10448.7	10056.6	9610.0	9097.5	8515.1	7909.4	7218.2
17.5°	11633.0	11458.3	11209.8	10903.0	10584.6	10204.1	9769.2	9299.4	8682.0	8084.1	7396.8
15°	11722.3	11551.5	11326.3	11015.6	10705.0	10328.4	9893.5	9408.1	8833.5	8223.9	7544.4
12.5°	11784.4	11601.9	11392.3	11104.9	10794.3	10421.6	9998.3	9520.7	8961.6	8348.1	7672.5
10°	11800.0	11633.0	11423.3	11167.1	10864.2	10503.1	10087.6	9613.9	9066.4	8445.2	7777.3
7.5°	11807.7	11648.5	11458.3	11213.7	10914.7	10565.2	10153.6	9687.7	9144.1	8526.7	7855.0
5°	11803.8	11652.4	11481.6	11244.7	10945.7	10600.2	10196.4	9738.2	9198.5	8581.1	7913.2
2.5°	11792.2	11656.3	11497.1	11268.0	10980.7	10639.0	10239.1	9796.4	9256.7	8627.7	7959.8
0°	11823.3	11706.8	11504.9	11260.3	10988.5	10639.0	10235.2	9804.2	9264.5	8623.8	7955.9



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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°	97.1	93.2	93.2	89.3	85.4	81.5	73.8	69.9	62.1	50.5	38.8
85°	209.7	198.0	186.4	178.6	170.8	163.1	151.4	139.8	124.3	101.0	77.7
82.5°	368.9	345.6	322.3	295.1	271.8	248.5	229.1	209.7	186.4	151.4	116.5
80°	528.1	493.1	458.2	419.3	384.4	345.6	310.6	279.6	248.5	201.9	155.3
77.5°	687.3	640.7	590.2	543.6	493.1	442.6	392.2	349.5	302.9	248.5	194.1
75°	834.8	780.5	733.9	667.8	605.7	539.7	473.7	415.5	357.2	291.2	233.0
72.5°	982.4	912.5	846.5	784.3	714.4	632.9	559.1	485.4	411.6	333.9	264.0
70°	1129.9	1044.5	962.9	889.2	811.5	730.0	640.7	555.2	465.9	372.8	291.2
67.5°	1281.3	1184.3	1091.1	997.9	908.6	815.4	722.2	625.1	520.3	411.6	322.3
65°	1448.3	1327.9	1215.3	1110.5	1005.7	904.7	799.9	695.0	578.5	454.3	349.5
62.5°	1615.3	1483.2	1351.2	1219.2	1102.7	990.1	877.5	761.0	632.9	500.9	376.6
60°	1793.9	1642.4	1491.0	1343.5	1199.8	1075.5	951.3	827.0	691.1	543.6	403.8
57.5°	1991.9	1809.4	1638.6	1471.6	1308.5	1161.0	1025.1	893.1	741.6	586.3	434.9
55°	2217.1	1991.9	1790.0	1603.6	1425.0	1246.4	1098.8	962.9	799.9	629.0	469.8
52.5°	2454.0	2193.8	1949.2	1739.5	1549.3	1347.3	1168.7	1017.3	858.1	671.7	500.9
50°	2729.6	2399.6	2127.8	1871.5	1658.0	1448.3	1242.5	1079.4	916.4	722.2	531.9
47.5°	3013.1	2648.1	2306.4	2026.8	1774.5	1545.4	1327.9	1133.8	970.7	768.8	563.0
45°	3343.1	2885.0	2508.3	2178.3	1887.1	1646.3	1413.4	1192.0	1017.3	815.4	594.1
42.5°	3661.5	3164.5	2718.0	2345.2	2015.2	1743.4	1491.0	1254.2	1063.9	862.0	621.3
40°	4038.2	3444.1	2919.9	2504.4	2143.3	1836.6	1568.7	1320.2	1106.6	904.7	648.4
37.5°	4399.3	3727.5	3164.5	2679.2	2267.6	1929.8	1646.3	1382.3	1145.4	947.4	683.4
35°	4756.5	4042.0	3397.5	2842.2	2395.7	2034.6	1724.0	1440.5	1184.3	982.4	714.4
32.5°	5098.2	4337.1	3634.3	3024.7	2535.5	2131.7	1793.9	1494.9	1223.1	1013.4	745.5
30°	5416.6	4616.7	3867.3	3211.1	2663.6	2221.0	1859.9	1549.3	1269.7	1040.6	776.6
27.5°	5707.8	4888.5	4100.3	3385.8	2784.0	2302.5	1929.8	1599.7	1308.5	1067.8	803.7
25°	5971.8	5133.1	4313.8	3545.0	2892.7	2391.8	1995.8	1650.2	1343.5	1091.1	827.0
22.5°	6220.3	5358.3	4508.0	3704.2	3024.7	2481.1	2057.9	1696.8	1378.4	1114.4	850.3
20°	6437.8	5564.1	4694.4	3863.4	3141.2	2562.7	2112.3	1739.5	1409.5	1129.9	873.6
17.5°	6612.5	5746.6	4861.3	4003.2	3242.2	2632.6	2158.9	1778.3	1436.7	1149.3	889.2
15°	6767.8	5901.9	5001.1	4123.6	3331.5	2690.8	2201.6	1809.4	1459.9	1161.0	908.6
12.5°	6899.8	6033.9	5121.5	4228.4	3409.1	2741.3	2236.5	1832.7	1479.4	1172.6	920.2
10°	7008.5	6138.8	5222.4	4310.0	3471.3	2780.1	2263.7	1856.0	1494.9	1184.3	931.9
7.5°	7090.1	6216.4	5296.2	4379.8	3521.7	2807.3	2287.0	1871.5	1510.4	1192.0	951.3
5°	7152.2	6282.4	5354.4	4426.4	3560.6	2846.1	2314.2	1890.9	1526.0	1199.8	951.3
2.5°	7198.8	6336.8	5401.0	4465.3	3591.6	2838.4	2314.2	1887.1	1526.0	1199.8	947.4
0°	7191.0	6340.7	5397.2	4465.3	3591.6	2830.6	2314.2	1883.2	1526.0	1199.8	947.4



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	27.2	19.4	7.8	0.0
85°	58.2	38.8	19.4	0.0
82.5°	85.4	54.4	27.2	0.0
80°	112.6	73.8	34.9	0.0
77.5°	143.7	93.2	46.6	0.0
75°	170.8	108.7	54.4	0.0
72.5°	198.0	128.1	62.1	0.0
70°	221.3	143.7	69.9	0.0
67.5°	244.6	163.1	81.5	0.0
65°	264.0	178.6	89.3	0.0
62.5°	279.6	198.0	97.1	0.0
60°	299.0	213.6	104.8	0.0
57.5°	314.5	225.2	112.6	0.0
55°	330.0	233.0	120.4	0.0
52.5°	345.6	244.6	128.1	0.0
50°	361.1	256.3	135.9	0.0
47.5°	376.6	264.0	139.8	0.0
45°	399.9	275.7	147.5	0.0
42.5°	419.3	283.4	155.3	0.0
40°	438.8	291.2	159.2	0.0
37.5°	458.2	299.0	167.0	0.0
35°	477.6	306.7	170.8	0.0
32.5°	493.1	314.5	174.7	0.0
30°	508.7	322.3	178.6	0.0
27.5°	524.2	326.2	182.5	0.0
25°	535.8	333.9	186.4	0.0
22.5°	547.5	337.8	190.3	0.0
20°	555.2	341.7	194.1	0.0
17.5°	566.9	345.6	198.0	0.0
15°	570.8	349.5	205.8	0.0
12.5°	578.5	353.3	205.8	0.0
10°	582.4	357.2	205.8	0.0
7.5°	590.2	357.2	205.8	0.0
5°	586.3	357.2	205.8	0.0
2.5°	586.3	357.2	205.8	0.0
0°	582.4	357.2	205.8	0.0

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