

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: P628187

Luminaire Tested: **IFLD-S-SA3D-727-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628187
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA3D-727-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (48) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

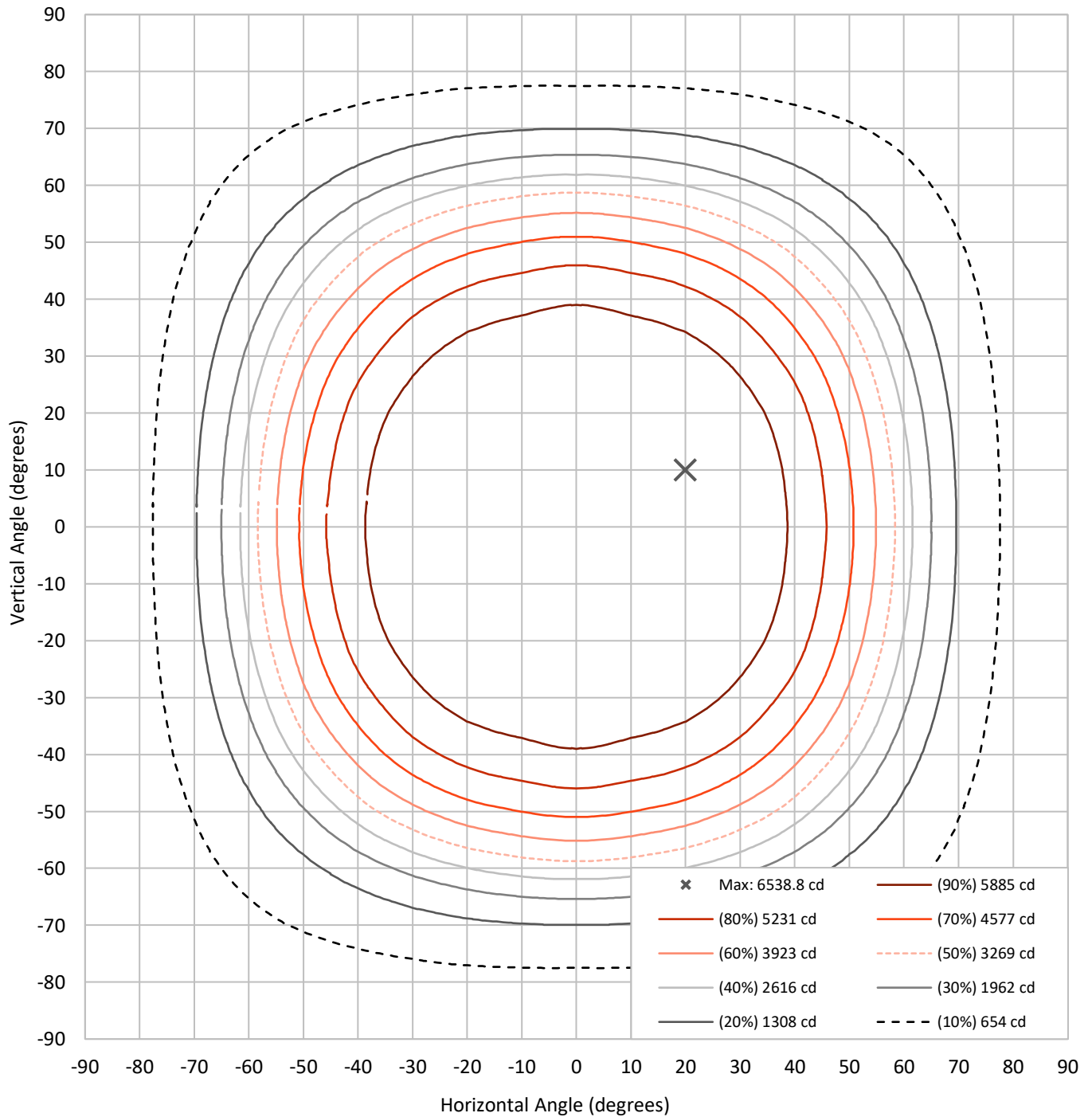
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	20060.2 lumens	Max Intensity:	6538.8 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	109.0 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	12309.4 lumens	Field Lumens:	14756.8 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

Input Watts (W): 184.1
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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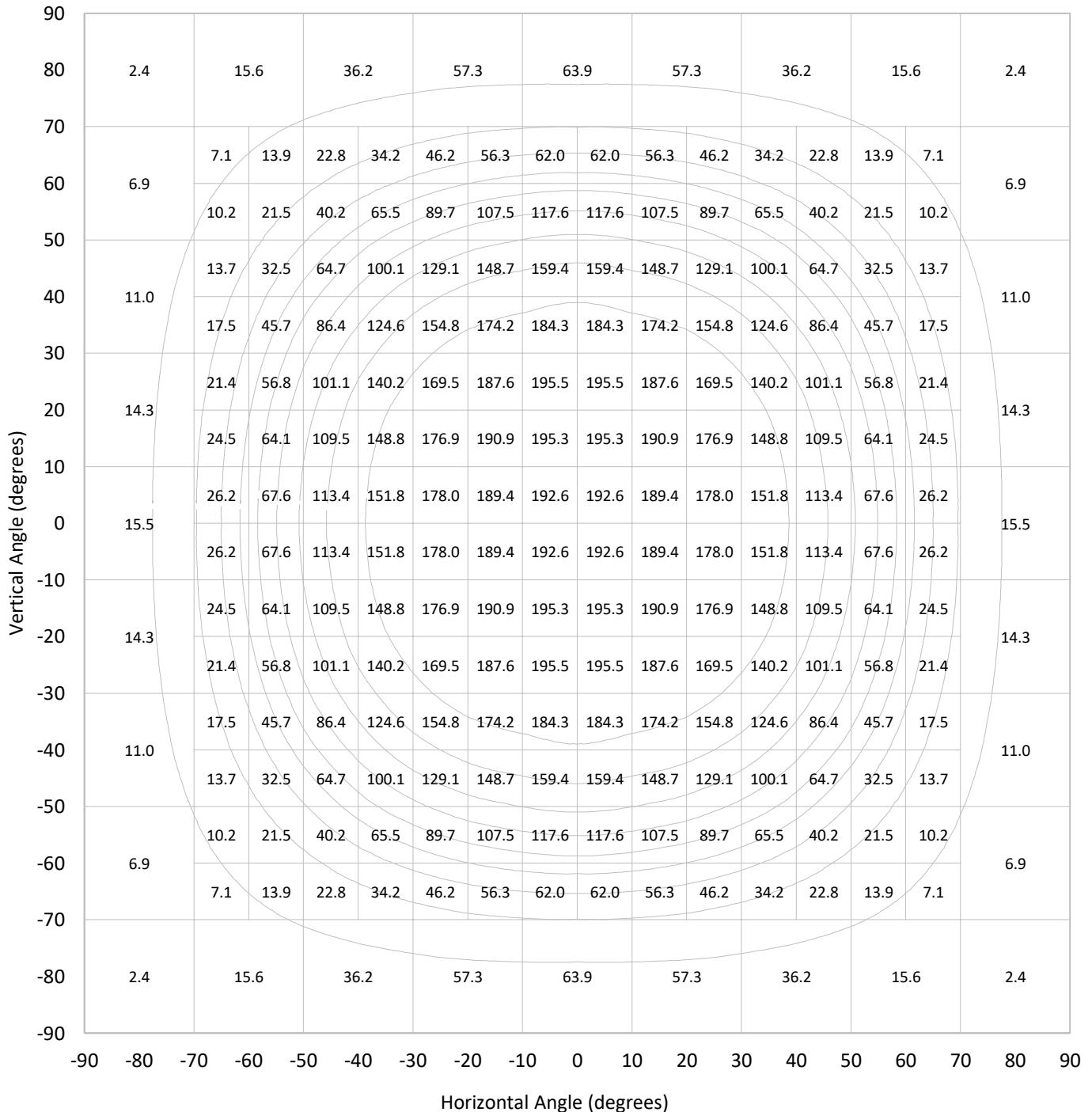
Iso-Candela Plot





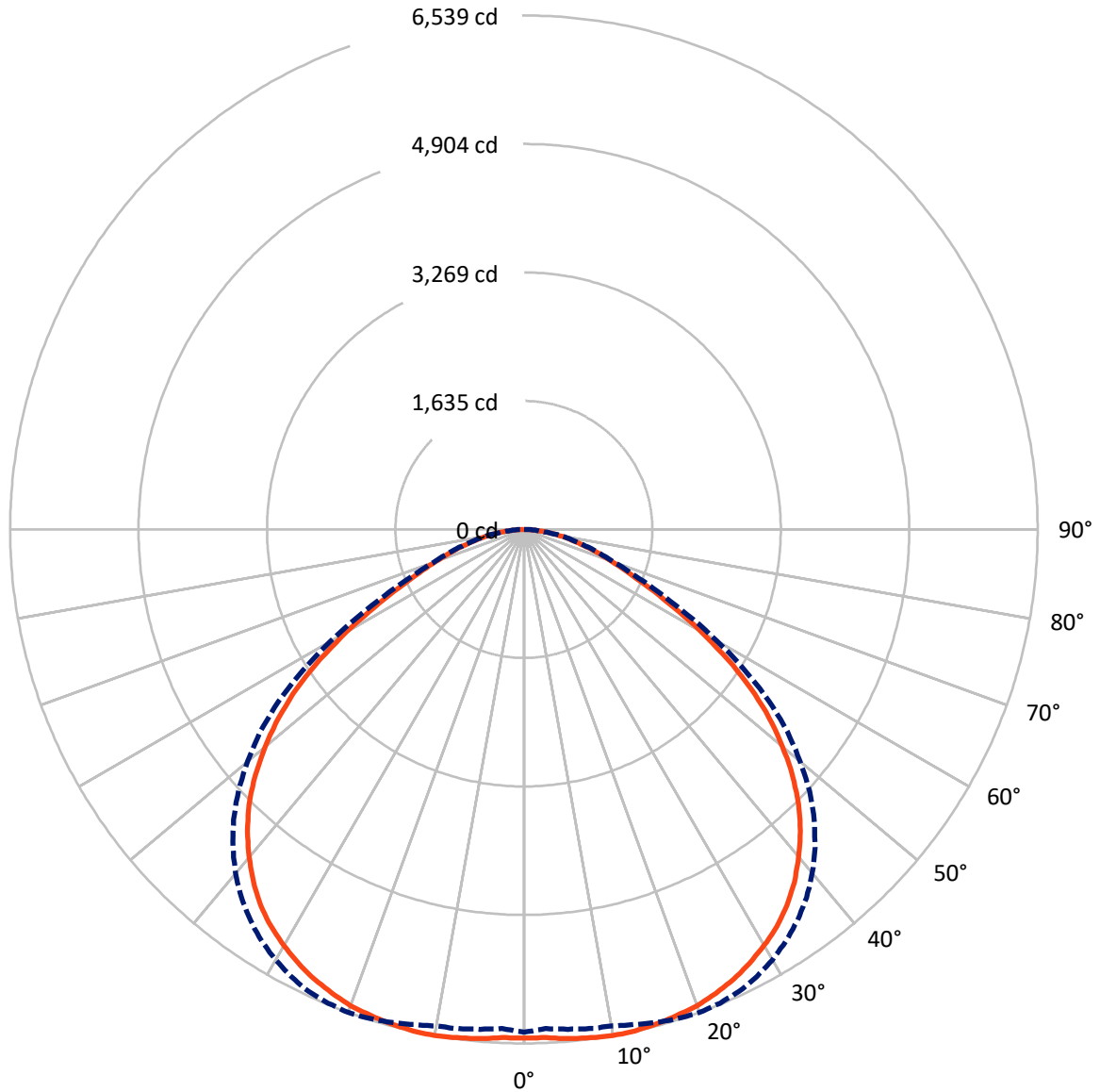
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Lumen Table



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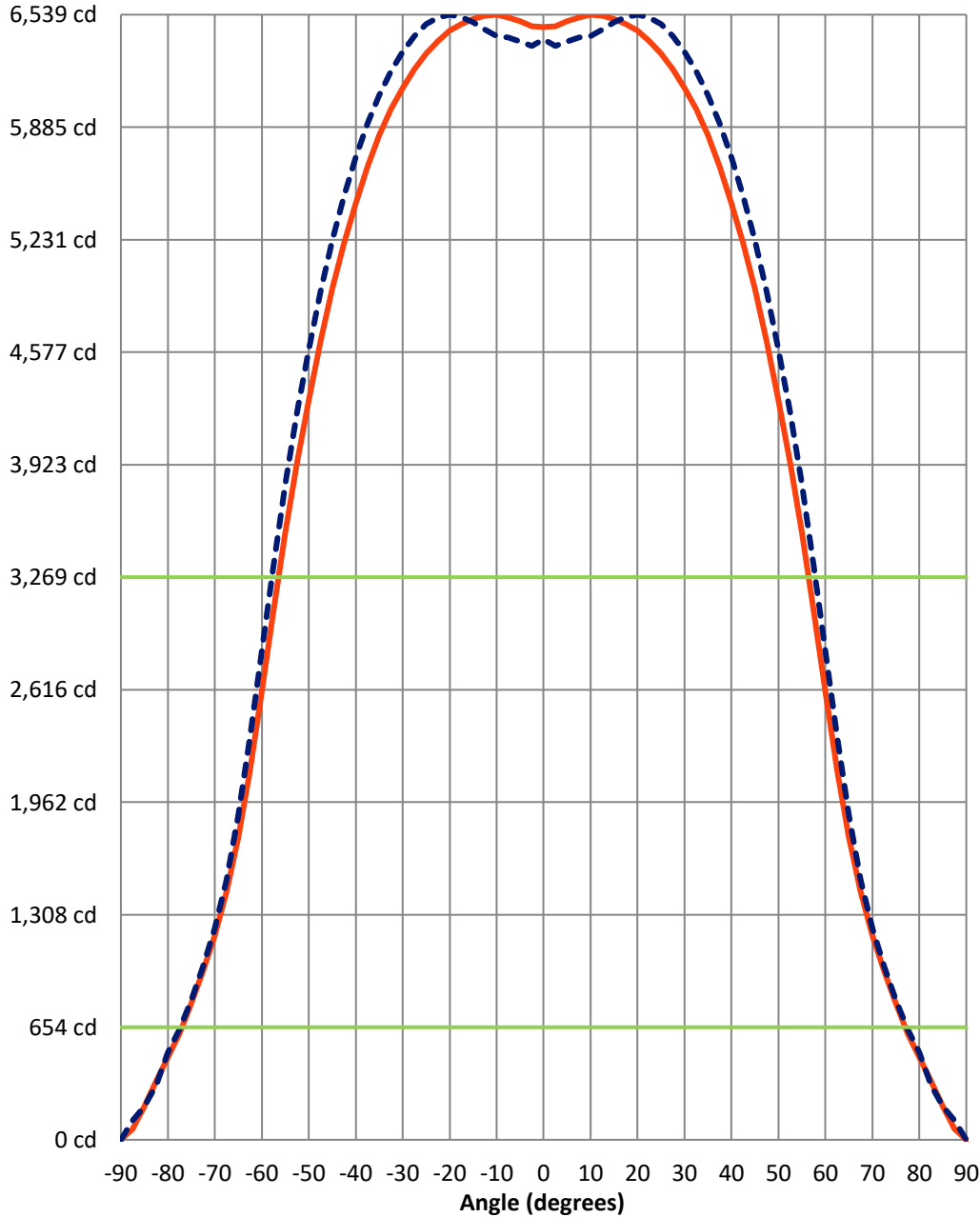
Luminous Intensity Polar Plot



— 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: 12309.4
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 14756.8
 Efficiency: 73.6%

Spill:
 Lumens: 5303.4
 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°	52.8	57.0	59.1	61.2	63.3	65.4	67.5	65.4	63.3	63.3	61.2
85°	141.4	145.6	147.7	162.5	177.3	185.7	196.3	194.2	194.2	192.1	190.0
82.5°	282.8	295.5	306.0	320.8	329.3	341.9	350.4	344.0	339.8	331.4	325.0
80°	502.3	506.6	508.7	510.8	500.2	498.1	493.9	487.6	479.1	468.6	458.0
77.5°	639.5	643.8	648.0	643.8	641.6	639.5	633.2	626.9	618.4	610.0	597.3
75°	846.4	846.4	846.4	840.0	835.8	829.5	818.9	808.4	793.6	776.7	757.7
72.5°	1065.9	1063.8	1061.7	1049.0	1038.4	1025.8	1011.0	998.3	981.5	962.5	937.1
70°	1295.9	1300.2	1302.3	1285.4	1272.7	1255.8	1236.8	1213.6	1188.3	1160.9	1125.0
67.5°	1612.5	1608.3	1604.1	1580.9	1564.0	1540.8	1513.3	1479.6	1441.6	1399.4	1348.7
65°	2005.1	2011.5	1998.8	1975.6	1943.9	1905.9	1863.7	1815.2	1758.2	1694.9	1623.1
62.5°	2480.0	2490.6	2475.8	2446.3	2406.2	2355.5	2296.4	2226.7	2148.7	2060.0	1971.4
60°	3020.4	3018.2	2990.8	2950.7	2897.9	2834.6	2769.2	2693.2	2604.6	2501.1	2393.5
57.5°	3516.4	3512.1	3478.4	3438.3	3385.5	3318.0	3248.3	3168.1	3075.2	2965.5	2841.0
55°	3961.7	3957.5	3923.7	3881.5	3826.6	3759.1	3695.8	3619.8	3529.0	3412.9	3280.0
52.5°	4356.4	4358.5	4329.0	4282.5	4223.4	4158.0	4096.8	4020.8	3934.3	3818.2	3689.4
50°	4719.4	4717.3	4685.7	4643.5	4588.6	4525.3	4464.1	4388.1	4297.3	4185.4	4060.9
47.5°	5057.1	5052.9	5017.0	4970.6	4913.6	4858.7	4801.8	4734.2	4639.2	4527.4	4402.8
45°	5340.0	5331.5	5295.7	5251.3	5196.5	5147.9	5097.2	5046.6	4945.3	4841.9	4723.7
42.5°	5582.7	5580.6	5544.7	5500.4	5445.5	5403.3	5356.9	5293.5	5209.1	5114.1	4998.0
40°	5814.9	5798.0	5762.1	5719.9	5669.2	5633.4	5586.9	5523.6	5441.3	5348.4	5236.6
37.5°	5987.9	5990.1	5952.1	5905.6	5861.3	5827.5	5785.3	5726.2	5654.5	5563.7	5451.8
35°	6152.6	6142.0	6110.4	6070.3	6030.2	5992.2	5947.8	5897.2	5838.1	5753.7	5648.1
32.5°	6260.2	6275.0	6237.0	6194.8	6171.6	6142.0	6095.6	6042.8	5990.1	5905.6	5810.7
30°	6378.4	6365.8	6336.2	6300.3	6283.4	6264.4	6224.3	6173.7	6112.5	6036.5	5947.8
27.5°	6460.7	6454.4	6418.5	6384.8	6376.3	6359.4	6327.8	6283.4	6222.2	6148.4	6066.0
25°	6496.6	6500.8	6467.1	6448.1	6448.1	6437.5	6412.2	6374.2	6313.0	6245.4	6165.2
22.5°	6513.5	6509.3	6486.1	6481.8	6492.4	6484.0	6473.4	6439.6	6384.8	6329.9	6262.3
20°	6524.1	6494.5	6473.4	6490.3	6503.0	6500.8	6492.4	6471.3	6446.0	6399.5	6340.4
17.5°	6500.8	6481.8	6456.5	6481.8	6509.3	6511.4	6503.0	6490.3	6484.0	6454.4	6401.6
15°	6443.9	6429.1	6433.3	6458.6	6490.3	6500.8	6507.2	6521.9	6513.5	6490.3	6443.9
12.5°	6405.9	6386.9	6405.9	6431.2	6448.1	6454.4	6505.1	6532.5	6532.5	6511.4	6481.8
10°	6395.3	6357.3	6382.6	6405.9	6414.3	6452.3	6494.5	6524.1	6538.8	6521.9	6484.0
7.5°	6374.2	6348.9	6359.4	6370.0	6418.5	6446.0	6469.2	6500.8	6521.9	6519.8	6486.1
5°	6363.6	6332.0	6336.2	6380.5	6414.3	6433.3	6441.7	6469.2	6500.8	6507.2	6481.8
2.5°	6336.2	6321.4	6353.1	6357.3	6382.6	6397.4	6405.9	6431.2	6471.3	6486.1	6475.5
0°	6321.4	6300.3	6279.2	6296.1	6338.3	6370.0	6382.6	6420.6	6467.1	6481.8	6458.6



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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°	59.1	57.0	54.9	52.8	54.9	54.9	54.9	52.8	54.9	52.8	52.8
85°	183.6	175.2	168.9	160.4	152.0	145.6	137.2	128.8	126.6	124.5	120.3
82.5°	316.6	306.0	295.5	282.8	270.2	255.4	240.6	223.7	219.5	215.3	209.0
80°	445.3	430.6	415.8	401.0	388.4	373.6	356.7	337.7	325.0	314.5	301.8
77.5°	580.4	559.3	538.2	512.9	498.1	483.3	466.5	447.5	428.5	411.6	392.6
75°	734.5	711.3	690.2	664.9	637.4	610.0	582.5	557.2	529.8	504.4	479.1
72.5°	905.5	871.7	837.9	806.3	772.5	738.7	702.9	669.1	635.3	601.5	565.7
70°	1084.9	1042.7	1000.5	958.2	913.9	869.6	827.4	785.2	743.0	698.6	658.5
67.5°	1295.9	1247.4	1192.5	1133.4	1068.0	1011.0	956.1	905.5	854.8	804.2	753.5
65°	1559.8	1492.2	1418.4	1338.2	1262.2	1186.2	1106.0	1030.0	970.9	911.8	854.8
62.5°	1884.8	1789.8	1686.4	1583.0	1490.1	1390.9	1298.1	1198.9	1106.0	1021.6	951.9
60°	2273.2	2144.4	2017.8	1884.8	1756.1	1621.0	1502.8	1380.4	1264.3	1160.9	1059.6
57.5°	2701.6	2551.8	2399.8	2237.3	2062.1	1903.8	1743.4	1583.0	1445.8	1308.6	1194.6
55°	3136.4	2978.1	2807.2	2623.6	2431.5	2228.9	2011.5	1832.1	1644.2	1483.8	1336.0
52.5°	3550.1	3385.5	3208.2	3039.4	2809.3	2577.1	2338.6	2102.2	1882.7	1678.0	1498.6
50°	3919.5	3759.1	3588.1	3391.8	3178.7	2931.7	2665.8	2399.8	2140.2	1899.6	1675.9
47.5°	4257.2	4101.0	3930.1	3733.8	3539.6	3265.2	2997.1	2703.8	2414.6	2138.1	1876.4
45°	4573.8	4415.5	4238.2	4050.4	3826.6	3581.8	3305.3	3009.8	2699.5	2389.3	2087.4
42.5°	4860.9	4702.6	4523.1	4329.0	4107.3	3864.6	3596.6	3299.0	2986.6	2648.9	2317.5
40°	5112.0	4957.9	4784.9	4582.2	4375.4	4120.0	3856.2	3573.4	3250.4	2910.6	2545.5
37.5°	5331.5	5188.0	5017.0	4816.5	4597.0	4369.1	4096.8	3814.0	3522.7	3153.3	2779.7
35°	5525.7	5392.7	5217.6	5027.6	4812.3	4571.7	4316.3	4039.8	3725.3	3379.2	3016.1
32.5°	5694.6	5559.5	5399.1	5209.1	5000.2	4774.3	4512.6	4234.0	3936.4	3583.9	3189.2
30°	5838.1	5707.2	5555.3	5375.9	5175.3	4951.6	4696.2	4415.5	4111.6	3761.2	3370.7
27.5°	5962.6	5838.1	5690.3	5523.6	5331.5	5116.2	4858.7	4575.9	4265.6	3927.9	3537.5
25°	6070.3	5950.0	5812.8	5654.5	5464.5	5253.4	5010.7	4715.2	4405.0	4065.1	3678.9
22.5°	6167.4	6051.3	5914.1	5760.0	5586.9	5375.9	5131.0	4837.6	4523.1	4187.6	3807.6
20°	6253.9	6146.2	6011.2	5852.9	5679.8	5466.6	5223.9	4945.3	4628.7	4299.4	3923.7
17.5°	6323.5	6228.6	6093.5	5926.7	5753.7	5546.8	5310.4	5055.0	4719.4	4394.4	4020.8
15°	6372.1	6279.2	6156.8	5987.9	5819.1	5614.4	5378.0	5114.1	4801.8	4470.4	4101.0
12.5°	6405.9	6306.7	6192.7	6036.5	5867.6	5665.0	5435.0	5175.3	4871.4	4537.9	4170.7
10°	6414.3	6323.5	6209.6	6070.3	5905.6	5709.3	5483.5	5226.0	4928.4	4590.7	4227.7
7.5°	6418.5	6332.0	6228.6	6095.6	5933.1	5743.1	5519.4	5266.1	4970.6	4635.0	4269.9
5°	6416.4	6334.1	6241.2	6112.5	5950.0	5762.1	5542.6	5293.5	5000.2	4664.6	4301.5
2.5°	6410.1	6336.2	6249.7	6125.1	5969.0	5783.2	5565.8	5325.2	5031.8	4689.9	4326.9
0°	6427.0	6363.6	6253.9	6120.9	5973.2	5783.2	5563.7	5329.4	5036.0	4687.8	4324.7



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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°	52.8	50.7	50.7	48.5	46.4	44.3	40.1	38.0	33.8	27.4	21.1
85°	114.0	107.6	101.3	97.1	92.9	88.6	82.3	76.0	67.5	54.9	42.2
82.5°	200.5	187.8	175.2	160.4	147.7	135.1	124.5	114.0	101.3	82.3	63.3
80°	287.1	268.1	249.1	228.0	209.0	187.8	168.9	152.0	135.1	109.8	84.4
77.5°	373.6	348.3	320.8	295.5	268.1	240.6	213.2	190.0	164.6	135.1	105.5
75°	453.8	424.2	398.9	363.0	329.3	293.4	257.5	225.8	194.2	158.3	126.6
72.5°	534.0	496.0	460.1	426.4	388.4	344.0	303.9	263.8	223.7	181.5	143.5
70°	614.2	567.8	523.4	483.3	441.1	396.8	348.3	301.8	253.3	202.6	158.3
67.5°	696.5	643.8	593.1	542.4	493.9	443.2	392.6	339.8	282.8	223.7	175.2
65°	787.3	721.8	660.6	603.6	546.7	491.8	434.8	377.8	314.5	246.9	190.0
62.5°	878.0	806.3	734.5	662.7	599.4	538.2	477.0	413.7	344.0	272.3	204.7
60°	975.1	892.8	810.5	730.3	652.2	584.7	517.1	449.6	375.7	295.5	219.5
57.5°	1082.8	983.6	890.7	799.9	711.3	631.1	557.2	485.5	403.1	318.7	236.4
55°	1205.2	1082.8	973.0	871.7	774.6	677.5	597.3	523.4	434.8	341.9	255.4
52.5°	1333.9	1192.5	1059.6	945.6	842.2	732.4	635.3	553.0	466.5	365.1	272.3
50°	1483.8	1304.4	1156.6	1017.3	901.3	787.3	675.4	586.8	498.1	392.6	289.2
47.5°	1637.9	1439.5	1253.7	1101.8	964.6	840.0	721.8	616.3	527.7	417.9	306.0
45°	1817.3	1568.2	1363.5	1184.1	1025.8	894.9	768.3	648.0	553.0	443.2	322.9
42.5°	1990.4	1720.2	1477.5	1274.8	1095.4	947.7	810.5	681.7	578.3	468.6	337.7
40°	2195.1	1872.2	1587.2	1361.4	1165.1	998.3	852.7	717.6	601.5	491.8	352.5
37.5°	2391.4	2026.2	1720.2	1456.4	1232.6	1049.0	894.9	751.4	622.6	515.0	371.5
35°	2585.6	2197.2	1846.8	1545.0	1302.3	1106.0	937.1	783.1	643.8	534.0	388.4
32.5°	2771.3	2357.6	1975.6	1644.2	1378.3	1158.8	975.1	812.6	664.9	550.9	405.2
30°	2944.4	2509.6	2102.2	1745.5	1447.9	1207.3	1011.0	842.2	690.2	565.7	422.1
27.5°	3102.7	2657.3	2228.9	1840.5	1513.3	1251.6	1049.0	869.6	711.3	580.4	436.9
25°	3246.2	2790.3	2344.9	1927.0	1572.4	1300.2	1084.9	897.0	730.3	593.1	449.6
22.5°	3381.3	2912.7	2450.5	2013.6	1644.2	1348.7	1118.7	922.4	749.3	605.8	462.2
20°	3499.5	3024.6	2551.8	2100.1	1707.5	1393.0	1148.2	945.6	766.2	614.2	474.9
17.5°	3594.5	3123.8	2642.5	2176.1	1762.4	1431.0	1173.5	966.7	780.9	624.8	483.3
15°	3678.9	3208.2	2718.5	2241.5	1810.9	1462.7	1196.7	983.6	793.6	631.1	493.9
12.5°	3750.6	3280.0	2784.0	2298.5	1853.2	1490.1	1215.7	996.2	804.2	637.4	500.2
10°	3809.7	3337.0	2838.8	2342.8	1886.9	1511.2	1230.5	1008.9	812.6	643.8	506.6
7.5°	3854.1	3379.2	2878.9	2380.8	1914.4	1526.0	1243.2	1017.3	821.0	648.0	517.1
5°	3887.8	3415.1	2910.6	2406.2	1935.5	1547.1	1258.0	1027.9	829.5	652.2	517.1
2.5°	3913.2	3444.6	2935.9	2427.3	1952.4	1542.9	1258.0	1025.8	829.5	652.2	515.0
0°	3908.9	3446.7	2933.8	2427.3	1952.4	1538.7	1258.0	1023.7	829.5	652.2	515.0



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	14.8	10.6	4.2	0.0
85°	31.7	21.1	10.6	0.0
82.5°	46.4	29.5	14.8	0.0
80°	61.2	40.1	19.0	0.0
77.5°	78.1	50.7	25.3	0.0
75°	92.9	59.1	29.5	0.0
72.5°	107.6	69.7	33.8	0.0
70°	120.3	78.1	38.0	0.0
67.5°	133.0	88.6	44.3	0.0
65°	143.5	97.1	48.5	0.0
62.5°	152.0	107.6	52.8	0.0
60°	162.5	116.1	57.0	0.0
57.5°	171.0	122.4	61.2	0.0
55°	179.4	126.6	65.4	0.0
52.5°	187.8	133.0	69.7	0.0
50°	196.3	139.3	73.9	0.0
47.5°	204.7	143.5	76.0	0.0
45°	217.4	149.9	80.2	0.0
42.5°	228.0	154.1	84.4	0.0
40°	238.5	158.3	86.5	0.0
37.5°	249.1	162.5	90.8	0.0
35°	259.6	166.7	92.9	0.0
32.5°	268.1	171.0	95.0	0.0
30°	276.5	175.2	97.1	0.0
27.5°	284.9	177.3	99.2	0.0
25°	291.3	181.5	101.3	0.0
22.5°	297.6	183.6	103.4	0.0
20°	301.8	185.7	105.5	0.0
17.5°	308.2	187.8	107.6	0.0
15°	310.3	190.0	111.9	0.0
12.5°	314.5	192.1	111.9	0.0
10°	316.6	194.2	111.9	0.0
7.5°	320.8	194.2	111.9	0.0
5°	318.7	194.2	111.9	0.0
2.5°	318.7	194.2	111.9	0.0
0°	316.6	194.2	111.9	0.0

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