

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: P628369

Luminaire Tested: **IFLD-M-SA4B-827-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628369
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4B-827-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (64) 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

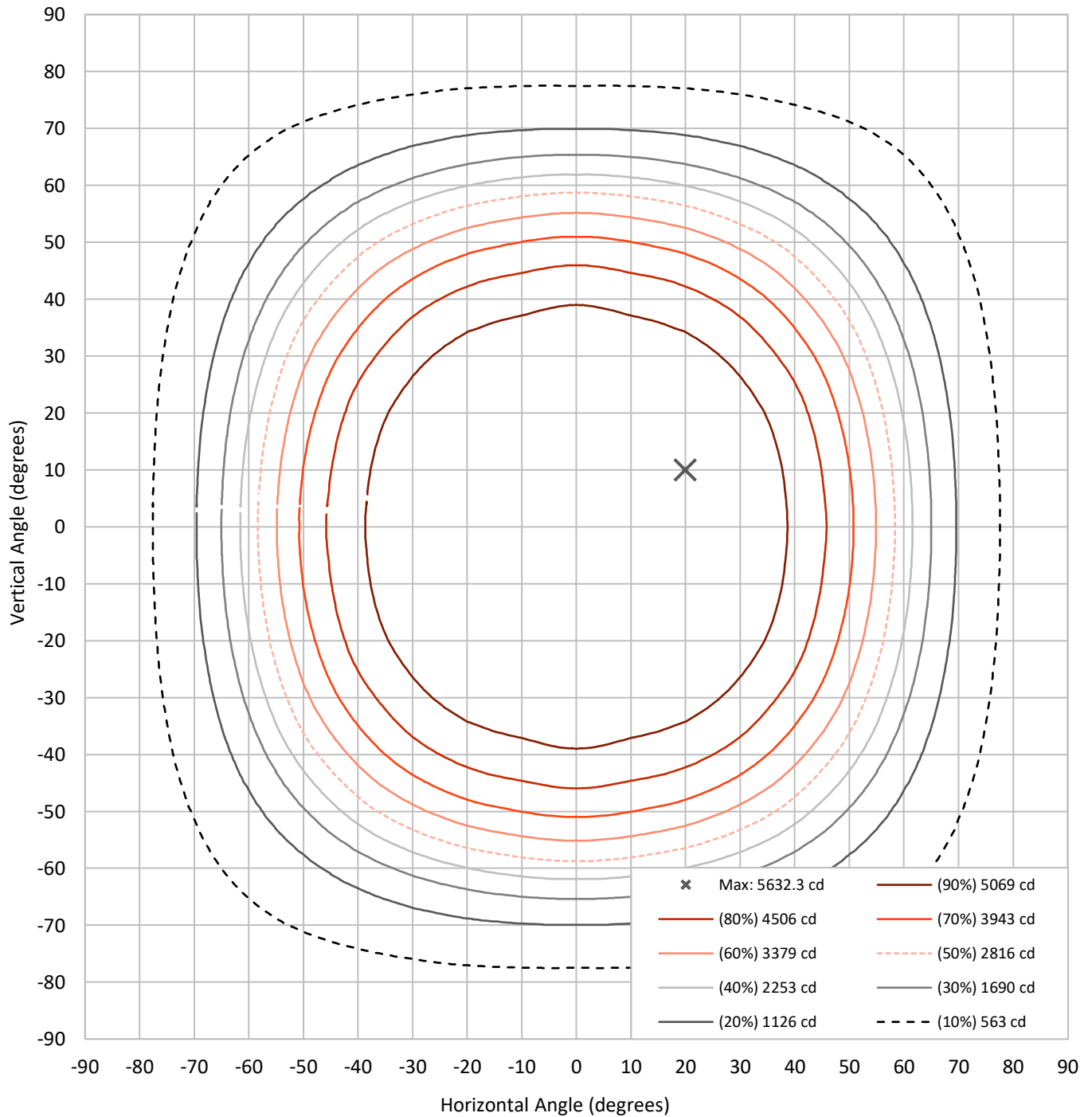
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	17279 lumens	Max Intensity:	5632.3 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	104.0 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 0.5' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	10602.8 lumens	Field Lumens:	12710.9 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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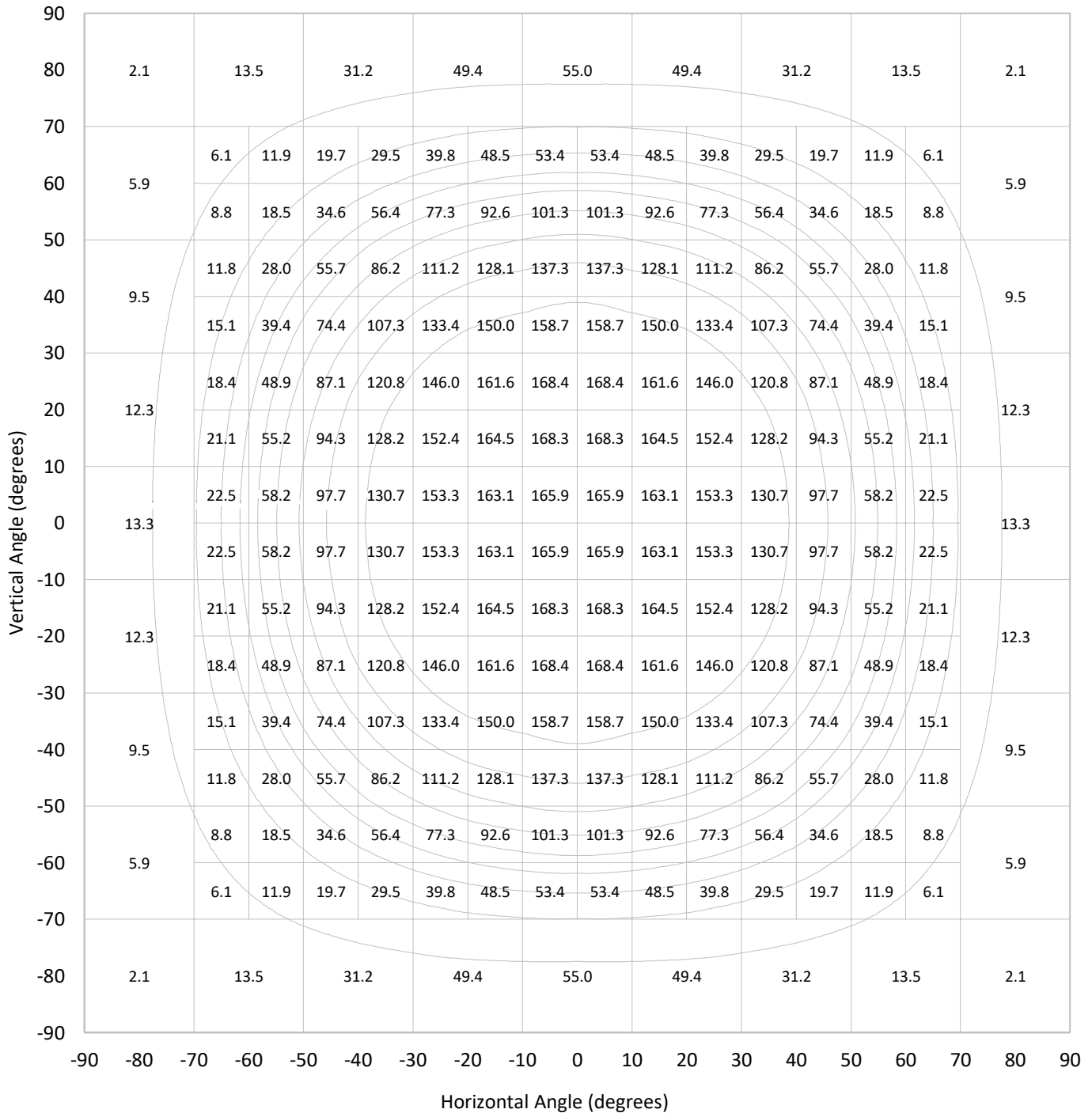
Iso-Candela Plot





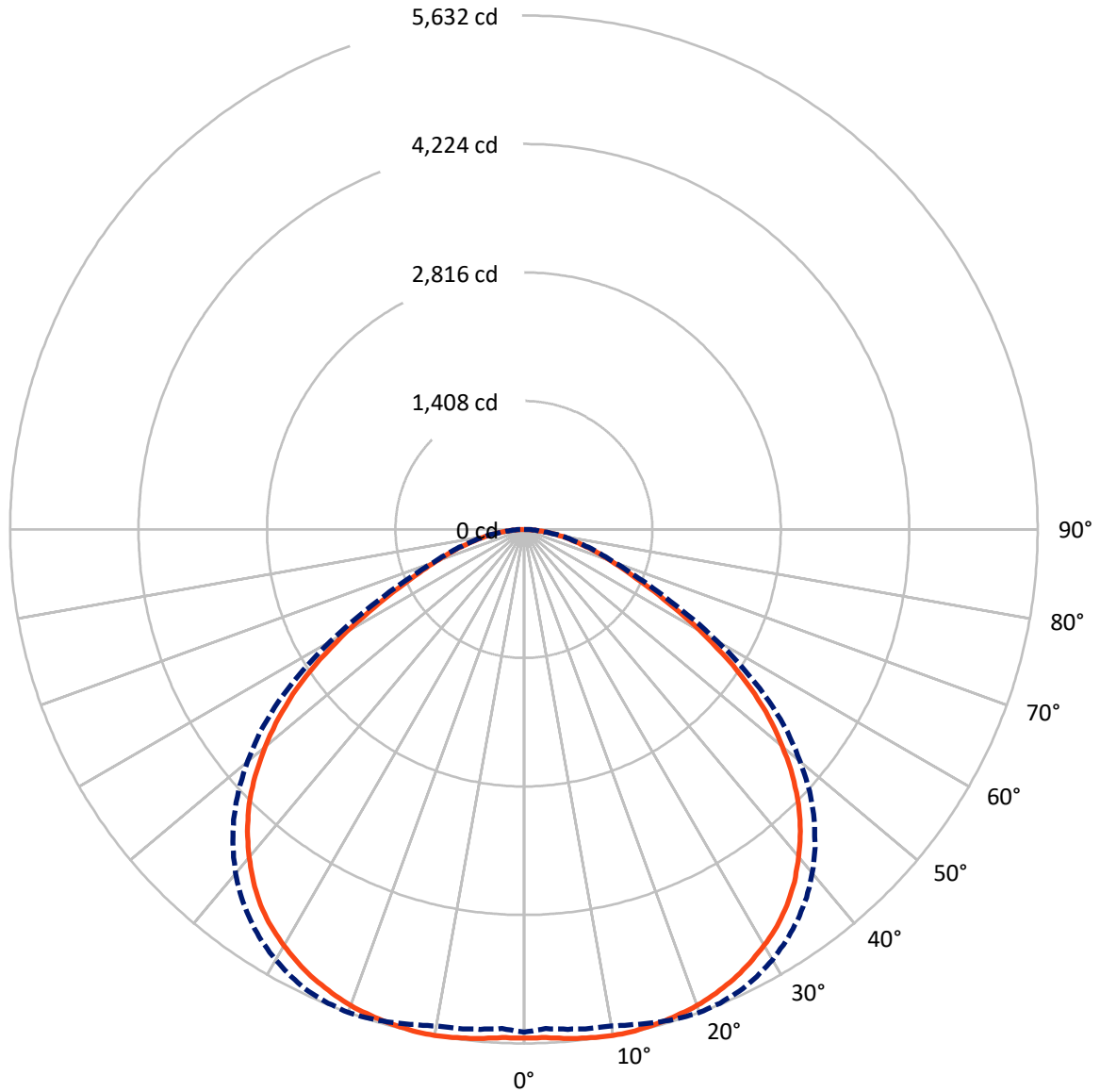
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Lumen Table



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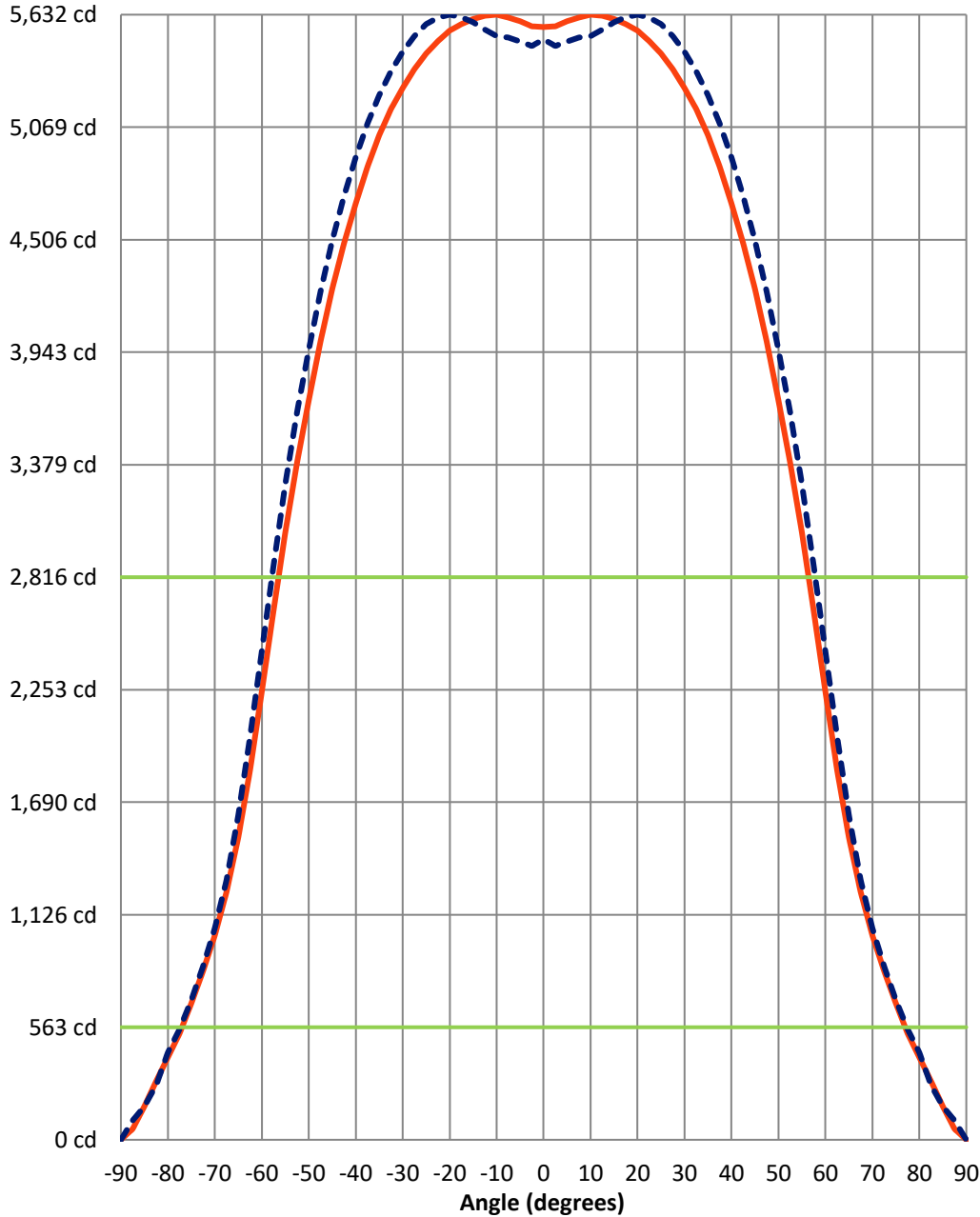
Luminous Intensity Polar Plot



— 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: 10602.8
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 12710.9
 Efficiency: 73.6%

Spill:
 Lumens: 4568.1
 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°	45.5	49.1	50.9	52.7	54.5	56.4	58.2	56.4	54.5	54.5	52.7
85°	121.8	125.4	127.3	140.0	152.7	160.0	169.1	167.3	167.3	165.4	163.6
82.5°	243.6	254.5	263.6	276.3	283.6	294.5	301.8	296.3	292.7	285.4	280.0
80°	432.7	436.3	438.1	440.0	430.9	429.1	425.4	420.0	412.7	403.6	394.5
77.5°	550.9	554.5	558.1	554.5	552.7	550.9	545.4	540.0	532.7	525.4	514.5
75°	729.0	729.0	729.0	723.6	719.9	714.5	705.4	696.3	683.6	669.0	652.7
72.5°	918.1	916.3	914.5	903.6	894.5	883.6	870.8	859.9	845.4	829.0	807.2
70°	1116.3	1119.9	1121.7	1107.2	1096.3	1081.7	1065.4	1045.4	1023.6	999.9	969.0
67.5°	1389.0	1385.3	1381.7	1361.7	1347.2	1327.2	1303.5	1274.4	1241.7	1205.4	1161.7
65°	1727.1	1732.6	1721.7	1701.7	1674.4	1641.7	1605.3	1563.5	1514.4	1459.9	1398.1
62.5°	2136.2	2145.3	2132.6	2107.1	2072.6	2028.9	1978.0	1918.0	1850.8	1774.4	1698.0
60°	2601.6	2599.8	2576.2	2541.6	2496.2	2441.6	2385.3	2319.8	2243.5	2154.4	2061.7
57.5°	3028.8	3025.2	2996.1	2961.6	2916.1	2857.9	2798.0	2728.9	2648.9	2554.3	2447.1
55°	3412.5	3408.8	3379.7	3343.4	3296.1	3237.9	3183.4	3117.9	3039.8	2939.8	2825.2
52.5°	3752.4	3754.2	3728.8	3688.8	3637.9	3581.5	3528.8	3463.4	3388.8	3288.8	3177.9
50°	4065.1	4063.3	4036.0	3999.7	3952.4	3897.9	3845.1	3779.7	3701.5	3605.2	3497.9
47.5°	4356.0	4352.4	4321.5	4281.5	4232.4	4185.1	4136.0	4077.9	3996.0	3899.7	3792.4
45°	4599.6	4592.4	4561.4	4523.3	4476.0	4434.2	4390.6	4346.9	4259.7	4170.6	4068.8
42.5°	4808.7	4806.9	4776.0	4737.8	4690.5	4654.2	4614.2	4559.6	4486.9	4405.1	4305.1
40°	5008.7	4994.1	4963.2	4926.9	4883.2	4852.3	4812.3	4757.8	4686.9	4606.9	4510.5
37.5°	5157.8	5159.6	5126.9	5086.9	5048.7	5019.6	4983.2	4932.3	4870.5	4792.3	4696.0
35°	5299.6	5290.5	5263.2	5228.7	5194.1	5161.4	5123.2	5079.6	5028.7	4956.0	4865.1
32.5°	5392.3	5405.0	5372.3	5335.9	5315.9	5290.5	5250.5	5205.0	5159.6	5086.9	5005.0
30°	5494.1	5483.2	5457.7	5426.8	5412.3	5395.9	5361.4	5317.8	5265.0	5199.6	5123.2
27.5°	5565.0	5559.5	5528.6	5499.6	5492.3	5477.7	5450.5	5412.3	5359.6	5295.9	5225.0
25°	5595.9	5599.5	5570.5	5554.1	5554.1	5545.0	5523.2	5490.5	5437.7	5379.6	5310.5
22.5°	5610.5	5606.8	5586.8	5583.2	5592.3	5585.0	5575.9	5546.8	5499.6	5452.3	5394.1
20°	5619.5	5594.1	5575.9	5590.5	5601.4	5599.5	5592.3	5574.1	5552.3	5512.3	5461.4
17.5°	5599.5	5583.2	5561.4	5583.2	5606.8	5608.6	5601.4	5590.5	5585.0	5559.5	5514.1
15°	5550.5	5537.7	5541.4	5563.2	5590.5	5599.5	5605.0	5617.7	5610.5	5590.5	5550.5
12.5°	5517.7	5501.4	5517.7	5539.6	5554.1	5559.5	5603.2	5626.8	5626.8	5608.6	5583.2
10°	5508.6	5475.9	5497.7	5517.7	5525.0	5557.7	5594.1	5619.5	5632.3	5617.7	5585.0
7.5°	5490.5	5468.6	5477.7	5486.8	5528.6	5552.3	5572.3	5599.5	5617.7	5615.9	5586.8
5°	5481.4	5454.1	5457.7	5495.9	5525.0	5541.4	5548.6	5572.3	5599.5	5605.0	5583.2
2.5°	5457.7	5445.0	5472.3	5475.9	5497.7	5510.5	5517.7	5539.6	5574.1	5586.8	5577.7
0°	5445.0	5426.8	5408.7	5423.2	5459.6	5486.8	5497.7	5530.5	5570.5	5583.2	5563.2



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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°	50.9	49.1	47.3	45.5	47.3	47.3	47.3	45.5	47.3	45.5	45.5
85°	158.2	150.9	145.4	138.2	130.9	125.4	118.2	110.9	109.1	107.3	103.6
82.5°	272.7	263.6	254.5	243.6	232.7	220.0	207.3	192.7	189.1	185.4	180.0
80°	383.6	370.9	358.2	345.4	334.5	321.8	307.2	290.9	280.0	270.9	260.0
77.5°	500.0	481.8	463.6	441.8	429.1	416.3	401.8	385.4	369.1	354.5	338.2
75°	632.7	612.7	594.5	572.7	549.0	525.4	501.8	480.0	456.3	434.5	412.7
72.5°	779.9	750.8	721.8	694.5	665.4	636.3	605.4	576.3	547.2	518.1	487.2
70°	934.5	898.1	861.7	825.4	787.2	749.0	712.7	676.3	639.9	601.8	567.2
67.5°	1116.3	1074.5	1027.2	976.3	919.9	870.8	823.6	779.9	736.3	692.7	649.0
65°	1343.5	1285.4	1221.7	1152.6	1087.2	1021.7	952.6	887.2	836.3	785.4	736.3
62.5°	1623.5	1541.7	1452.6	1363.5	1283.5	1198.1	1118.1	1032.6	952.6	879.9	819.9
60°	1958.0	1847.1	1738.0	1623.5	1512.6	1396.3	1294.4	1189.0	1089.0	999.9	912.7
57.5°	2327.1	2198.0	2067.1	1927.1	1776.2	1639.9	1501.7	1363.5	1245.4	1127.2	1029.0
55°	2701.6	2565.2	2418.0	2259.8	2094.4	1919.8	1732.6	1578.1	1416.2	1278.1	1150.8
52.5°	3057.9	2916.1	2763.4	2618.0	2419.8	2219.8	2014.4	1810.8	1621.7	1445.3	1290.8
50°	3376.1	3237.9	3090.7	2921.6	2738.0	2525.2	2296.2	2067.1	1843.5	1636.2	1443.5
47.5°	3667.0	3532.4	3385.2	3216.1	3048.8	2812.5	2581.6	2328.9	2079.8	1841.7	1616.2
45°	3939.7	3803.3	3650.6	3488.8	3296.1	3085.2	2847.0	2592.5	2325.3	2058.0	1798.0
42.5°	4186.9	4050.6	3896.0	3728.8	3537.9	3328.8	3097.9	2841.6	2572.5	2281.6	1996.2
40°	4403.3	4270.6	4121.5	3947.0	3768.8	3548.8	3321.5	3077.9	2799.8	2507.1	2192.5
37.5°	4592.4	4468.7	4321.5	4148.8	3959.7	3763.3	3528.8	3285.2	3034.3	2716.1	2394.4
35°	4759.6	4645.1	4494.2	4330.6	4145.1	3937.9	3717.9	3479.7	3208.8	2910.7	2598.0
32.5°	4905.1	4788.7	4650.5	4486.9	4306.9	4112.4	3887.0	3647.0	3390.6	3087.0	2747.0
30°	5028.7	4916.0	4785.1	4630.5	4457.8	4265.1	4045.1	3803.3	3541.5	3239.7	2903.4
27.5°	5135.9	5028.7	4901.4	4757.8	4592.4	4406.9	4185.1	3941.5	3674.2	3383.4	3047.0
25°	5228.7	5125.0	5006.9	4870.5	4706.9	4525.1	4316.0	4061.5	3794.2	3501.5	3168.8
22.5°	5312.3	5212.3	5094.1	4961.4	4812.3	4630.5	4419.6	4166.9	3896.0	3607.0	3279.7
20°	5386.8	5294.1	5177.8	5041.4	4892.3	4708.7	4499.6	4259.7	3986.9	3703.3	3379.7
17.5°	5446.8	5365.0	5248.7	5105.0	4956.0	4777.8	4574.2	4354.2	4065.1	3785.1	3463.4
15°	5488.6	5408.7	5303.2	5157.8	5012.3	4836.0	4632.4	4405.1	4136.0	3850.6	3532.4
12.5°	5517.7	5432.3	5334.1	5199.6	5054.1	4879.6	4681.4	4457.8	4196.0	3908.8	3592.4
10°	5525.0	5446.8	5348.7	5228.7	5086.9	4917.8	4723.3	4501.5	4245.1	3954.2	3641.5
7.5°	5528.6	5454.1	5365.0	5250.5	5110.5	4946.9	4754.2	4536.0	4281.5	3992.4	3677.9
5°	5526.8	5455.9	5375.9	5265.0	5125.0	4963.2	4774.2	4559.6	4306.9	4017.9	3705.2
2.5°	5521.4	5457.7	5383.2	5275.9	5141.4	4981.4	4794.2	4586.9	4334.2	4039.7	3727.0
0°	5535.9	5481.4	5386.8	5272.3	5145.0	4981.4	4792.3	4590.5	4337.8	4037.9	3725.2



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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°	45.5	43.6	43.6	41.8	40.0	38.2	34.5	32.7	29.1	23.6	18.2
85°	98.2	92.7	87.3	83.6	80.0	76.4	70.9	65.4	58.2	47.3	36.4
82.5°	172.7	161.8	150.9	138.2	127.3	116.4	107.3	98.2	87.3	70.9	54.5
80°	247.3	230.9	214.5	196.3	180.0	161.8	145.4	130.9	116.4	94.5	72.7
77.5°	321.8	300.0	276.3	254.5	230.9	207.3	183.6	163.6	141.8	116.4	90.9
75°	390.9	365.4	343.6	312.7	283.6	252.7	221.8	194.5	167.3	136.4	109.1
72.5°	460.0	427.2	396.3	367.2	334.5	296.3	261.8	227.3	192.7	156.4	123.6
70°	529.0	489.1	450.9	416.3	380.0	341.8	300.0	260.0	218.2	174.5	136.4
67.5°	600.0	554.5	510.9	467.2	425.4	381.8	338.2	292.7	243.6	192.7	150.9
65°	678.1	621.8	569.0	520.0	470.9	423.6	374.5	325.4	270.9	212.7	163.6
62.5°	756.3	694.5	632.7	570.9	516.3	463.6	410.9	356.3	296.3	234.5	176.3
60°	839.9	769.0	698.1	629.0	561.8	503.6	445.4	387.2	323.6	254.5	189.1
57.5°	932.7	847.2	767.2	689.0	612.7	543.6	480.0	418.1	347.2	274.5	203.6
55°	1038.1	932.7	838.1	750.8	667.2	583.6	514.5	450.9	374.5	294.5	220.0
52.5°	1149.0	1027.2	912.7	814.5	725.4	630.9	547.2	476.3	401.8	314.5	234.5
50°	1278.1	1123.5	996.3	876.3	776.3	678.1	581.8	505.4	429.1	338.2	249.1
47.5°	1410.8	1239.9	1079.9	949.0	830.8	723.6	621.8	530.9	454.5	360.0	263.6
45°	1565.3	1350.8	1174.5	1019.9	883.6	770.8	661.8	558.1	476.3	381.8	278.2
42.5°	1714.4	1481.7	1272.6	1098.1	943.6	816.3	698.1	587.2	498.1	403.6	290.9
40°	1890.8	1612.6	1367.2	1172.6	1003.6	859.9	734.5	618.1	518.1	423.6	303.6
37.5°	2059.8	1745.3	1481.7	1254.4	1061.7	903.6	770.8	647.2	536.3	443.6	320.0
35°	2227.1	1892.6	1590.8	1330.8	1121.7	952.6	807.2	674.5	554.5	460.0	334.5
32.5°	2387.1	2030.7	1701.7	1416.2	1187.2	998.1	839.9	699.9	572.7	474.5	349.1
30°	2536.2	2161.6	1810.8	1503.5	1247.2	1039.9	870.8	725.4	594.5	487.2	363.6
27.5°	2672.5	2288.9	1919.8	1585.3	1303.5	1078.1	903.6	749.0	612.7	500.0	376.3
25°	2796.1	2403.4	2019.8	1659.9	1354.4	1119.9	934.5	772.7	629.0	510.9	387.2
22.5°	2912.5	2508.9	2110.7	1734.4	1416.2	1161.7	963.6	794.5	645.4	521.8	398.1
20°	3014.3	2605.2	2198.0	1808.9	1470.8	1199.9	989.0	814.5	659.9	529.0	409.1
17.5°	3096.1	2690.7	2276.2	1874.4	1518.1	1232.6	1010.8	832.7	672.7	538.1	416.3
15°	3168.8	2763.4	2341.6	1930.8	1559.9	1259.9	1030.8	847.2	683.6	543.6	425.4
12.5°	3230.6	2825.2	2398.0	1979.8	1596.2	1283.5	1047.2	858.1	692.7	549.0	430.9
10°	3281.6	2874.3	2445.3	2018.0	1625.3	1301.7	1059.9	869.0	699.9	554.5	436.3
7.5°	3319.7	2910.7	2479.8	2050.7	1649.0	1314.4	1070.8	876.3	707.2	558.1	445.4
5°	3348.8	2941.6	2507.1	2072.6	1667.1	1332.6	1083.5	885.4	714.5	561.8	445.4
2.5°	3370.6	2967.0	2528.9	2090.7	1681.7	1329.0	1083.5	883.6	714.5	561.8	443.6
0°	3367.0	2968.8	2527.1	2090.7	1681.7	1325.3	1083.5	881.7	714.5	561.8	443.6



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	12.7	9.1	3.6	0.0
85°	27.3	18.2	9.1	0.0
82.5°	40.0	25.5	12.7	0.0
80°	52.7	34.5	16.4	0.0
77.5°	67.3	43.6	21.8	0.0
75°	80.0	50.9	25.5	0.0
72.5°	92.7	60.0	29.1	0.0
70°	103.6	67.3	32.7	0.0
67.5°	114.5	76.4	38.2	0.0
65°	123.6	83.6	41.8	0.0
62.5°	130.9	92.7	45.5	0.0
60°	140.0	100.0	49.1	0.0
57.5°	147.3	105.4	52.7	0.0
55°	154.5	109.1	56.4	0.0
52.5°	161.8	114.5	60.0	0.0
50°	169.1	120.0	63.6	0.0
47.5°	176.3	123.6	65.4	0.0
45°	187.3	129.1	69.1	0.0
42.5°	196.3	132.7	72.7	0.0
40°	205.4	136.4	74.5	0.0
37.5°	214.5	140.0	78.2	0.0
35°	223.6	143.6	80.0	0.0
32.5°	230.9	147.3	81.8	0.0
30°	238.2	150.9	83.6	0.0
27.5°	245.4	152.7	85.4	0.0
25°	250.9	156.4	87.3	0.0
22.5°	256.3	158.2	89.1	0.0
20°	260.0	160.0	90.9	0.0
17.5°	265.4	161.8	92.7	0.0
15°	267.3	163.6	96.4	0.0
12.5°	270.9	165.4	96.4	0.0
10°	272.7	167.3	96.4	0.0
7.5°	276.3	167.3	96.4	0.0
5°	274.5	167.3	96.4	0.0
2.5°	274.5	167.3	96.4	0.0
0°	272.7	167.3	96.4	0.0

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