

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: P623858

Luminaire Tested: **IFLD-M-SA4D-727-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P623858
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4D-727-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (64) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

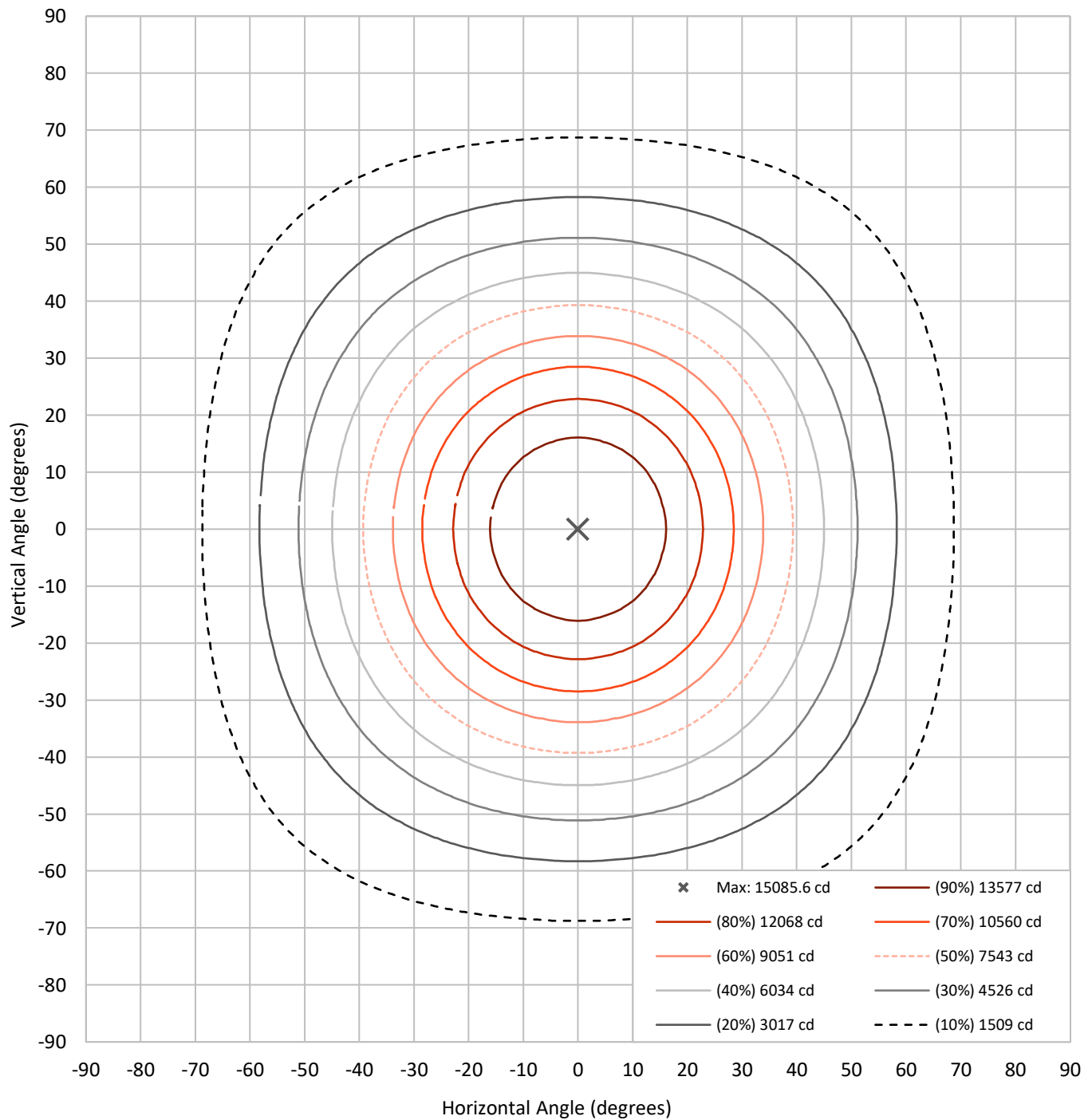
Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	27161.9 lumens	Max Intensity:	15085.6 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	108.8 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 0.5' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	11752.7 lumens	Field Lumens:	19244.6 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%
Input Watts (W):	249.7		
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		



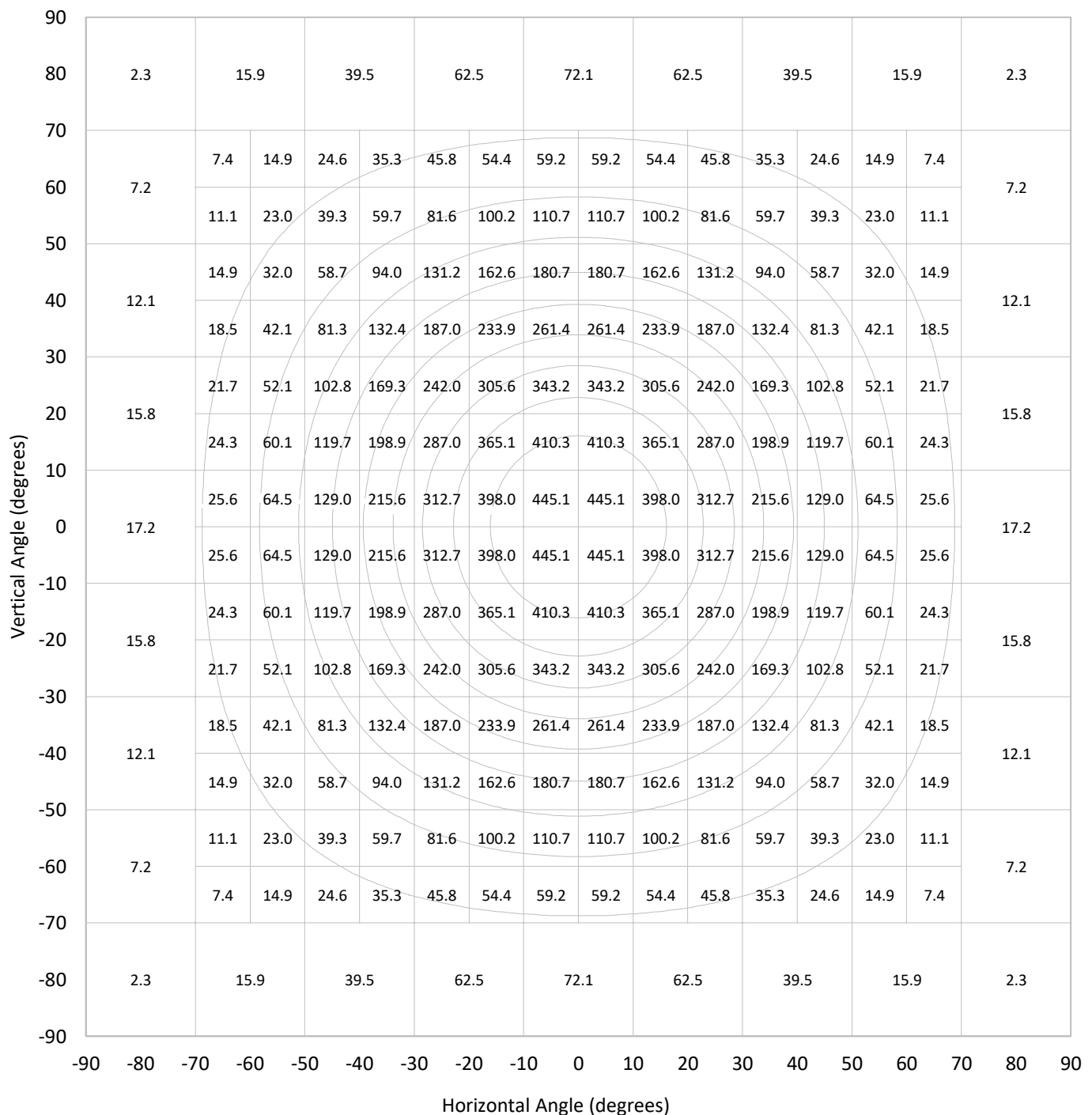
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Iso-Candela Plot



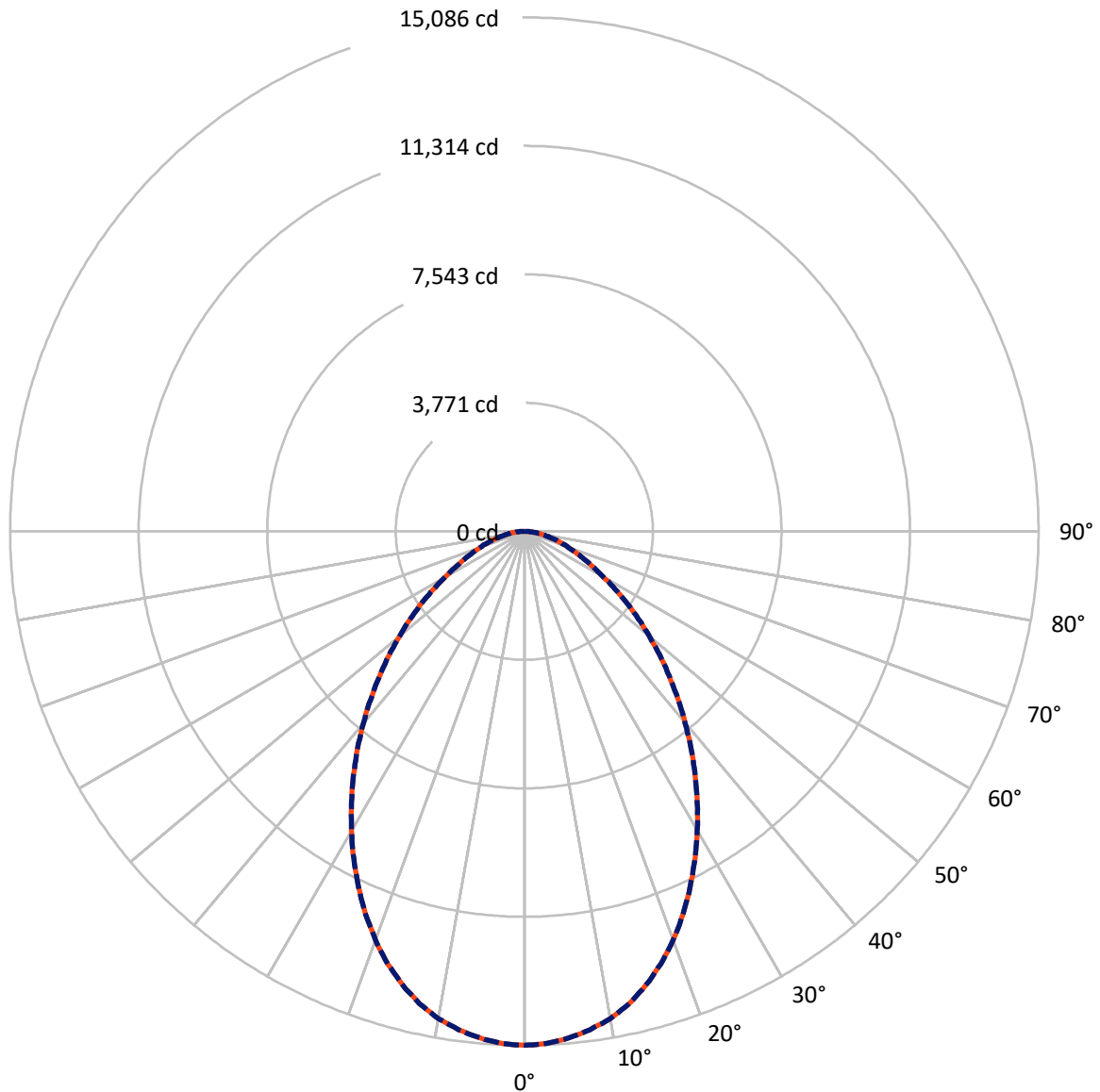
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Lumen Table



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Luminous Intensity Polar Plot

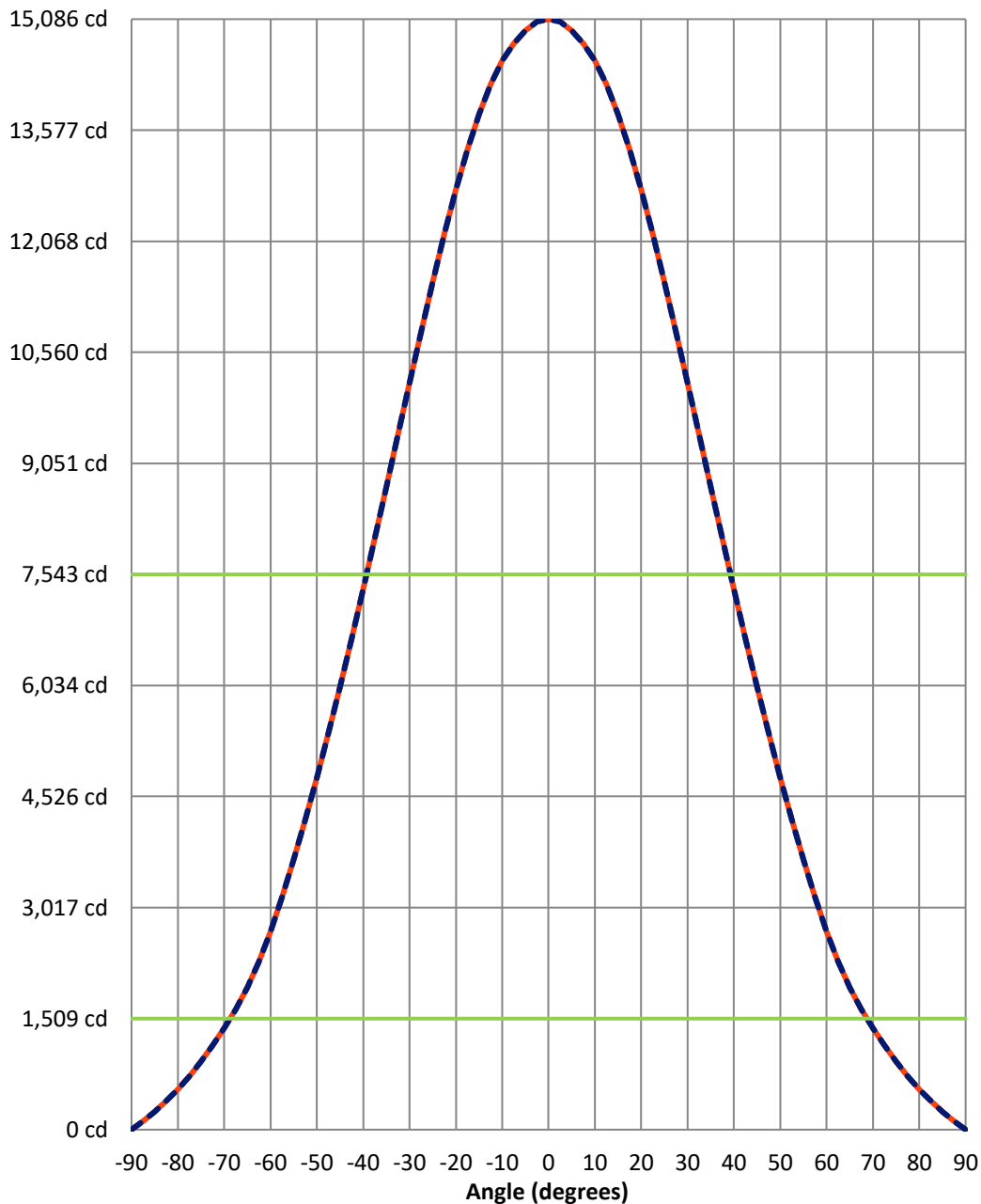


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg

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Luminous Intensity Plot



Beam:

H Angle: 78.6°
V Angle: 78.6°
Lumens: 11752.7
Efficiency: 43.3%

Field:

H Angle: 137.5°
V Angle: 137.5°
Lumens: 19244.6
Efficiency: 70.9%

Spill:

Lumens: 7917.3
Efficiency: 29.1%

— Vertical Distribution through 0-Deg
- - Horizontal Distribution through 0-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°	116.1	116.1	116.1	116.1	116.1	116.1	116.1	110.4	110.4	107.6	104.8
85°	243.5	243.5	243.5	243.5	243.5	237.9	235.0	232.2	229.4	223.7	220.9
82.5°	390.8	390.8	390.8	390.8	385.1	379.5	376.6	371.0	365.3	356.8	348.3
80°	546.6	546.6	546.6	546.6	538.1	532.4	523.9	518.2	509.7	498.4	487.1
77.5°	725.0	725.0	725.0	716.5	710.8	702.3	693.8	682.5	671.2	657.0	640.0
75°	926.0	926.0	926.0	914.7	906.2	897.7	883.6	869.4	852.4	832.6	809.9
72.5°	1144.1	1144.1	1144.1	1129.9	1121.4	1107.3	1090.3	1070.5	1050.6	1025.2	996.8
70°	1379.1	1379.1	1379.1	1362.1	1348.0	1333.8	1311.2	1288.5	1260.2	1231.9	1197.9
67.5°	1634.0	1634.0	1634.0	1614.2	1597.2	1577.4	1551.9	1523.6	1489.6	1449.9	1410.3
65°	1931.4	1931.4	1920.0	1903.0	1883.2	1854.9	1823.7	1784.1	1741.6	1690.6	1636.8
62.5°	2282.5	2282.5	2265.5	2245.7	2220.2	2183.4	2140.9	2089.9	2030.5	1965.3	1900.2
60°	2690.3	2690.3	2670.5	2645.0	2608.2	2562.9	2506.2	2441.1	2367.5	2285.3	2206.1
57.5°	3160.4	3160.4	3134.9	3100.9	3055.6	2999.0	2928.2	2846.1	2752.6	2650.7	2551.5
55°	3670.2	3670.2	3639.0	3599.4	3545.5	3477.6	3392.6	3296.3	3183.1	3067.0	2939.5
52.5°	4211.0	4211.0	4174.2	4128.9	4066.6	3987.3	3891.0	3777.8	3647.5	3511.6	3361.5
50°	4780.3	4780.3	4737.8	4686.8	4616.0	4522.6	4412.1	4281.8	4137.4	3978.8	3806.1
47.5°	5389.1	5389.1	5341.0	5281.5	5196.5	5088.9	4958.7	4808.6	4644.3	4465.9	4270.5
45°	6015.0	6015.0	5961.2	5893.2	5799.7	5678.0	5533.5	5389.1	5179.6	4972.8	4746.3
42.5°	6666.3	6666.3	6604.0	6527.5	6419.9	6286.8	6122.6	5935.7	5728.9	5496.7	5250.4
40°	7343.1	7343.1	7272.3	7184.5	7065.6	6912.7	6728.6	6519.1	6286.8	6029.1	5757.3
37.5°	8034.1	8034.1	7954.8	7858.5	7725.4	7555.5	7348.8	7116.6	6856.0	6570.0	6269.8
35°	8730.8	8730.8	8643.0	8538.2	8390.9	8204.0	7980.3	7722.6	7433.8	7122.2	6785.3
32.5°	9441.6	9441.6	9345.3	9226.4	9059.3	8852.5	8606.2	8325.8	8034.1	7671.6	7303.5
30°	10143.9	10143.9	10039.1	9908.8	9730.4	9503.9	9234.8	8926.2	8583.5	8212.5	7816.1
27.5°	10834.9	10806.6	10718.8	10580.0	10384.6	10143.9	9852.2	9518.0	9147.1	8739.3	8314.5
25°	11514.5	11483.4	11387.1	11234.2	11024.6	10761.2	10446.9	10090.1	9690.8	9260.3	8795.9
22.5°	12165.9	12131.9	12029.9	11865.7	11642.0	11355.9	11019.0	10636.6	10211.9	9750.3	9260.3
20°	12769.1	12732.3	12627.5	12454.7	12222.5	11919.5	11562.7	11152.1	10698.9	10211.9	9690.8
17.5°	13312.8	13276.0	13165.5	12987.1	12769.1	12432.1	12063.9	11630.6	11152.1	10636.6	10090.1
15°	13791.4	13751.7	13638.5	13460.1	13210.8	12893.7	12505.7	12063.9	11562.7	11019.0	10446.9
12.5°	14199.2	14159.5	14043.4	13865.0	13607.3	13290.1	12893.7	12432.1	11919.5	11355.9	10761.2
10°	14522.0	14482.4	14371.9	14202.0	13935.8	13607.3	13210.8	12769.1	12222.5	11642.0	11024.6
7.5°	14754.2	14717.4	14615.5	14445.6	14202.0	13865.0	13460.1	12987.1	12454.7	11865.7	11234.2
5°	14929.8	14887.3	14785.4	14615.5	14371.9	14043.4	13638.5	13165.5	12627.5	12029.9	11387.1
2.5°	15051.6	15000.6	14887.3	14717.4	14482.4	14159.5	13751.7	13276.0	12732.3	12131.9	11483.4
0°	15085.6	15051.6	14929.8	14754.2	14522.0	14199.2	13791.4	13312.8	12769.1	12165.9	11514.5

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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°	101.9	101.9	99.1	96.3	93.5	87.8	85.0	82.1	79.3	73.6	70.8
85°	215.2	209.6	203.9	198.2	189.7	184.1	175.6	169.9	161.4	152.9	144.4
82.5°	339.8	331.3	320.0	311.5	300.2	286.0	274.7	260.5	246.4	235.0	220.9
80°	475.8	461.6	447.4	433.3	416.3	399.3	382.3	365.3	345.5	325.7	305.8
77.5°	623.0	603.2	583.4	560.7	540.9	518.2	495.6	472.9	447.4	422.0	396.5
75°	787.3	761.8	733.5	705.1	679.7	648.5	617.4	586.2	552.2	521.1	487.1
72.5°	965.7	934.5	900.5	866.6	829.7	790.1	750.5	708.0	668.3	628.7	586.2
70°	1158.3	1121.4	1079.0	1036.5	991.2	943.0	894.9	843.9	792.9	742.0	691.0
67.5°	1365.0	1319.7	1268.7	1217.7	1161.1	1104.4	1047.8	988.3	926.0	863.7	804.3
65°	1585.9	1529.2	1469.8	1404.6	1339.5	1274.4	1206.4	1135.6	1064.8	991.2	926.0
62.5°	1832.2	1761.4	1685.0	1605.7	1532.1	1452.8	1379.1	1291.3	1206.4	1124.3	1042.1
60°	2118.3	2024.8	1931.4	1832.2	1738.8	1636.8	1546.2	1449.9	1353.7	1260.2	1163.9
57.5°	2438.3	2319.3	2206.1	2087.1	1962.5	1849.2	1733.1	1617.0	1509.4	1399.0	1294.2
55°	2800.8	2656.3	2514.7	2367.5	2223.0	2081.5	1934.2	1803.9	1670.8	1546.2	1424.4
52.5°	3197.2	3033.0	2857.4	2690.3	2506.2	2330.7	2166.4	2002.2	1846.4	1696.3	1557.5
50°	3622.0	3429.4	3228.4	3024.5	2814.9	2608.2	2410.0	2217.4	2036.1	1860.6	1696.3
47.5°	4063.8	3845.7	3616.3	3384.1	3160.4	2908.4	2670.5	2452.4	2234.4	2036.1	1846.4
45°	4516.9	4270.5	4018.5	3755.1	3491.7	3219.9	2956.5	2690.3	2452.4	2217.4	2002.2
42.5°	4984.2	4706.6	4426.3	4134.6	3842.9	3545.5	3248.2	2956.5	2670.5	2410.0	2166.4
40°	5465.6	5159.7	4839.7	4522.6	4211.0	3871.2	3545.5	3219.9	2908.4	2608.2	2330.7
37.5°	5947.0	5612.8	5267.3	4910.5	4553.7	4211.0	3842.9	3491.7	3160.4	2814.9	2506.2
35°	6431.3	6063.1	5689.3	5301.3	4910.5	4522.6	4134.6	3755.1	3384.1	3024.5	2690.3
32.5°	6918.3	6516.2	6102.8	5689.3	5267.3	4839.7	4426.3	4018.5	3616.3	3228.4	2857.4
30°	7396.9	6960.8	6516.2	6063.1	5612.8	5159.7	4706.6	4270.5	3845.7	3429.4	3033.0
27.5°	7864.2	7396.9	6918.3	6431.3	5947.0	5465.6	4984.2	4516.9	4063.8	3622.0	3197.2
25°	8314.5	7816.1	7303.5	6785.3	6269.8	5757.3	5250.4	4746.3	4270.5	3806.1	3361.5
22.5°	8739.3	8212.5	7671.6	7122.2	6570.0	6029.1	5496.7	4972.8	4465.9	3978.8	3511.6
20°	9147.1	8583.5	8034.1	7433.8	6856.0	6286.8	5728.9	5179.6	4644.3	4137.4	3647.5
17.5°	9518.0	8926.2	8325.8	7722.6	7116.6	6519.1	5935.7	5389.1	4808.6	4281.8	3777.8
15°	9852.2	9234.8	8606.2	7980.3	7348.8	6728.6	6122.6	5533.5	4958.7	4412.1	3891.0
12.5°	10143.9	9503.9	8852.5	8204.0	7555.5	6912.7	6286.8	5678.0	5088.9	4522.6	3987.3
10°	10384.6	9730.4	9059.3	8390.9	7725.4	7065.6	6419.9	5799.7	5196.5	4616.0	4066.6
7.5°	10580.0	9908.8	9226.4	8538.2	7858.5	7184.5	6527.5	5893.2	5281.5	4686.8	4128.9
5°	10718.8	10039.1	9345.3	8643.0	7954.8	7272.3	6604.0	5961.2	5341.0	4737.8	4174.2
2.5°	10806.6	10143.9	9441.6	8730.8	8034.1	7343.1	6666.3	6015.0	5389.1	4780.3	4211.0
0°	10834.9	10143.9	9441.6	8730.8	8034.1	7343.1	6666.3	6015.0	5389.1	4780.3	4211.0

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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°	68.0	62.3	56.6	53.8	48.1	45.3	39.6	34.0	31.2	25.5	19.8
85°	135.9	124.6	116.1	107.6	99.1	87.8	79.3	70.8	59.5	51.0	39.6
82.5°	206.7	192.6	178.4	164.3	150.1	135.9	118.9	104.8	90.6	76.5	59.5
80°	286.0	263.4	243.5	223.7	203.9	184.1	161.4	141.6	118.9	99.1	79.3
77.5°	368.1	342.7	314.3	286.0	257.7	232.2	203.9	178.4	152.9	124.6	99.1
75°	455.9	422.0	390.8	354.0	320.0	283.2	249.2	215.2	184.1	152.9	118.9
72.5°	546.6	504.1	461.6	422.0	379.5	337.0	297.4	254.9	215.2	178.4	141.6
70°	640.0	589.0	538.1	489.9	441.8	390.8	345.5	297.4	249.2	203.9	161.4
67.5°	739.1	679.7	620.2	557.9	504.1	447.4	390.8	337.0	283.2	232.2	184.1
65°	846.7	775.9	702.3	637.2	566.4	504.1	441.8	379.5	320.0	257.7	203.9
62.5°	957.2	875.1	792.9	710.8	637.2	557.9	489.9	422.0	354.0	286.0	223.7
60°	1070.5	977.0	883.6	792.9	702.3	620.2	538.1	461.6	390.8	314.3	243.5
57.5°	1186.6	1081.8	977.0	875.1	775.9	679.7	589.0	504.1	422.0	342.7	263.4
55°	1305.5	1186.6	1070.5	957.2	846.7	739.1	640.0	546.6	455.9	368.1	286.0
52.5°	1424.4	1294.2	1163.9	1042.1	926.0	804.3	691.0	586.2	487.1	396.5	305.8
50°	1546.2	1399.0	1260.2	1124.3	991.2	863.7	742.0	628.7	521.1	422.0	325.7
47.5°	1670.8	1509.4	1353.7	1206.4	1064.8	926.0	792.9	668.3	552.2	447.4	345.5
45°	1803.9	1617.0	1449.9	1291.3	1135.6	988.3	843.9	708.0	586.2	472.9	365.3
42.5°	1934.2	1733.1	1546.2	1379.1	1206.4	1047.8	894.9	750.5	617.4	495.6	382.3
40°	2081.5	1849.2	1636.8	1452.8	1274.4	1104.4	943.0	790.1	648.5	518.2	399.3
37.5°	2223.0	1962.5	1738.8	1532.1	1339.5	1161.1	991.2	829.7	679.7	540.9	416.3
35°	2367.5	2087.1	1832.2	1605.7	1404.6	1217.7	1036.5	866.6	705.1	560.7	433.3
32.5°	2514.7	2206.1	1931.4	1685.0	1469.8	1268.7	1079.0	900.5	733.5	583.4	447.4
30°	2656.3	2319.3	2024.8	1761.4	1529.2	1319.7	1121.4	934.5	761.8	603.2	461.6
27.5°	2800.8	2438.3	2118.3	1832.2	1585.9	1365.0	1158.3	965.7	787.3	623.0	475.8
25°	2939.5	2551.5	2206.1	1900.2	1636.8	1410.3	1197.9	996.8	809.9	640.0	487.1
22.5°	3067.0	2650.7	2285.3	1965.3	1690.6	1449.9	1231.9	1025.2	832.6	657.0	498.4
20°	3183.1	2752.6	2367.5	2030.5	1741.6	1489.6	1260.2	1050.6	852.4	671.2	509.7
17.5°	3296.3	2846.1	2441.1	2089.9	1784.1	1523.6	1288.5	1070.5	869.4	682.5	518.2
15°	3392.6	2928.2	2506.2	2140.9	1823.7	1551.9	1311.2	1090.3	883.6	693.8	523.9
12.5°	3477.6	2999.0	2562.9	2183.4	1854.9	1577.4	1333.8	1107.3	897.7	702.3	532.4
10°	3545.5	3055.6	2608.2	2220.2	1883.2	1597.2	1348.0	1121.4	906.2	710.8	538.1
7.5°	3599.4	3100.9	2645.0	2245.7	1903.0	1614.2	1362.1	1129.9	914.7	716.5	546.6
5°	3639.0	3134.9	2670.5	2265.5	1920.0	1634.0	1379.1	1144.1	926.0	725.0	546.6
2.5°	3670.2	3160.4	2690.3	2282.5	1931.4	1634.0	1379.1	1144.1	926.0	725.0	546.6
0°	3670.2	3160.4	2690.3	2282.5	1931.4	1634.0	1379.1	1144.1	926.0	725.0	546.6

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	14.2	11.3	5.7	0.0
85°	31.2	19.8	11.3	0.0
82.5°	45.3	31.2	14.2	0.0
80°	59.5	39.6	19.8	0.0
77.5°	76.5	51.0	25.5	0.0
75°	90.6	59.5	31.2	0.0
72.5°	104.8	70.8	34.0	0.0
70°	118.9	79.3	39.6	0.0
67.5°	135.9	87.8	45.3	0.0
65°	150.1	99.1	48.1	0.0
62.5°	164.3	107.6	53.8	0.0
60°	178.4	116.1	56.6	0.0
57.5°	192.6	124.6	62.3	0.0
55°	206.7	135.9	68.0	0.0
52.5°	220.9	144.4	70.8	0.0
50°	235.0	152.9	73.6	0.0
47.5°	246.4	161.4	79.3	0.0
45°	260.5	169.9	82.1	0.0
42.5°	274.7	175.6	85.0	0.0
40°	286.0	184.1	87.8	0.0
37.5°	300.2	189.7	93.5	0.0
35°	311.5	198.2	96.3	0.0
32.5°	320.0	203.9	99.1	0.0
30°	331.3	209.6	101.9	0.0
27.5°	339.8	215.2	101.9	0.0
25°	348.3	220.9	104.8	0.0
22.5°	356.8	223.7	107.6	0.0
20°	365.3	229.4	110.4	0.0
17.5°	371.0	232.2	110.4	0.0
15°	376.6	235.0	116.1	0.0
12.5°	379.5	237.9	116.1	0.0
10°	385.1	243.5	116.1	0.0
7.5°	390.8	243.5	116.1	0.0
5°	390.8	243.5	116.1	0.0
2.5°	390.8	243.5	116.1	0.0
0°	390.8	243.5	116.1	0.0

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