

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: P623946

Luminaire Tested: **IFLD-M-SA4E-740-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P623946
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4E-740-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (64) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

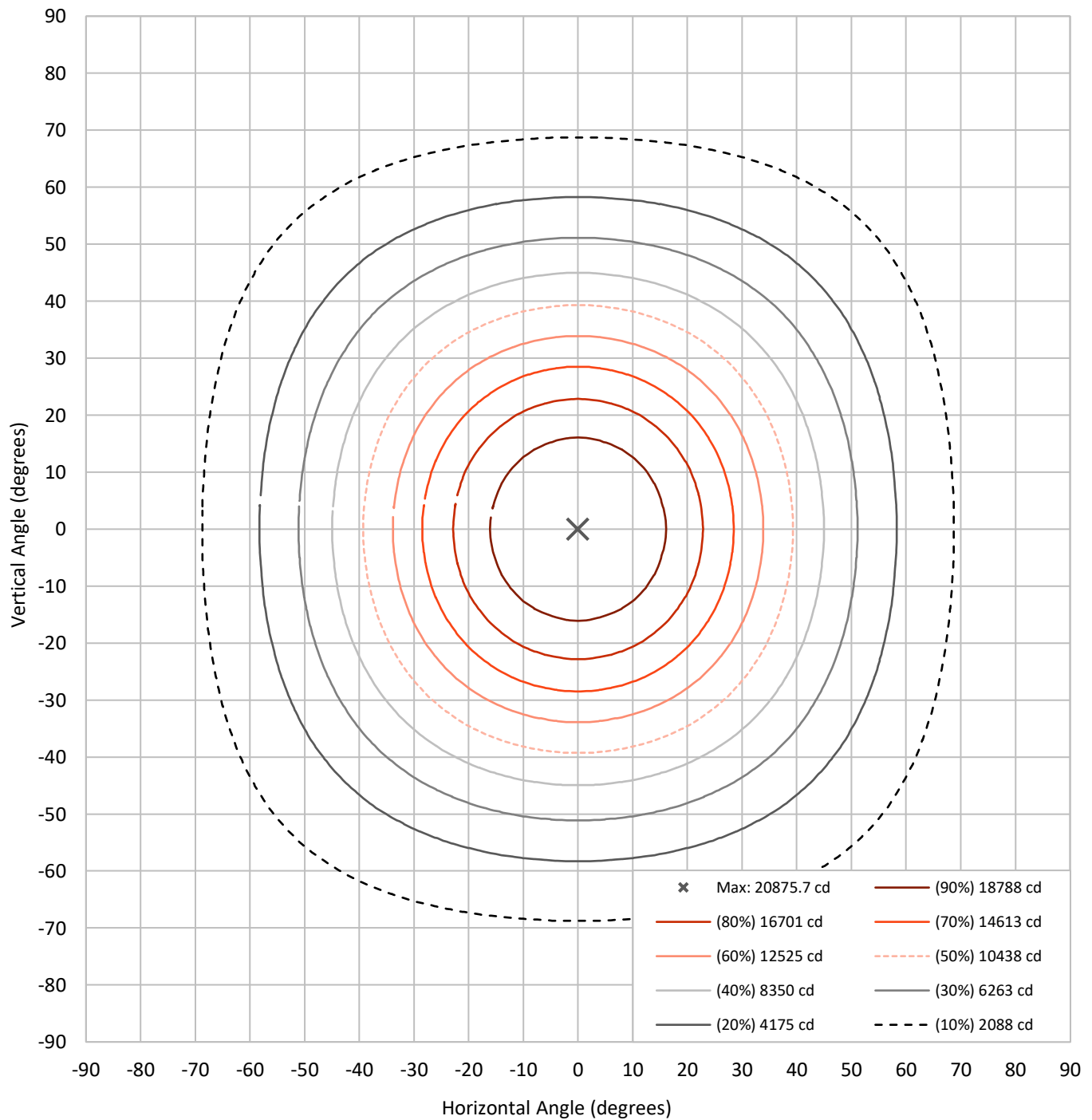
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	37587.2 lumens	Max Intensity:	20875.7 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	119.4 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 0.5' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	16263.6 lumens	Field Lumens:	26631.1 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%
Input Watts (W):	314.8		
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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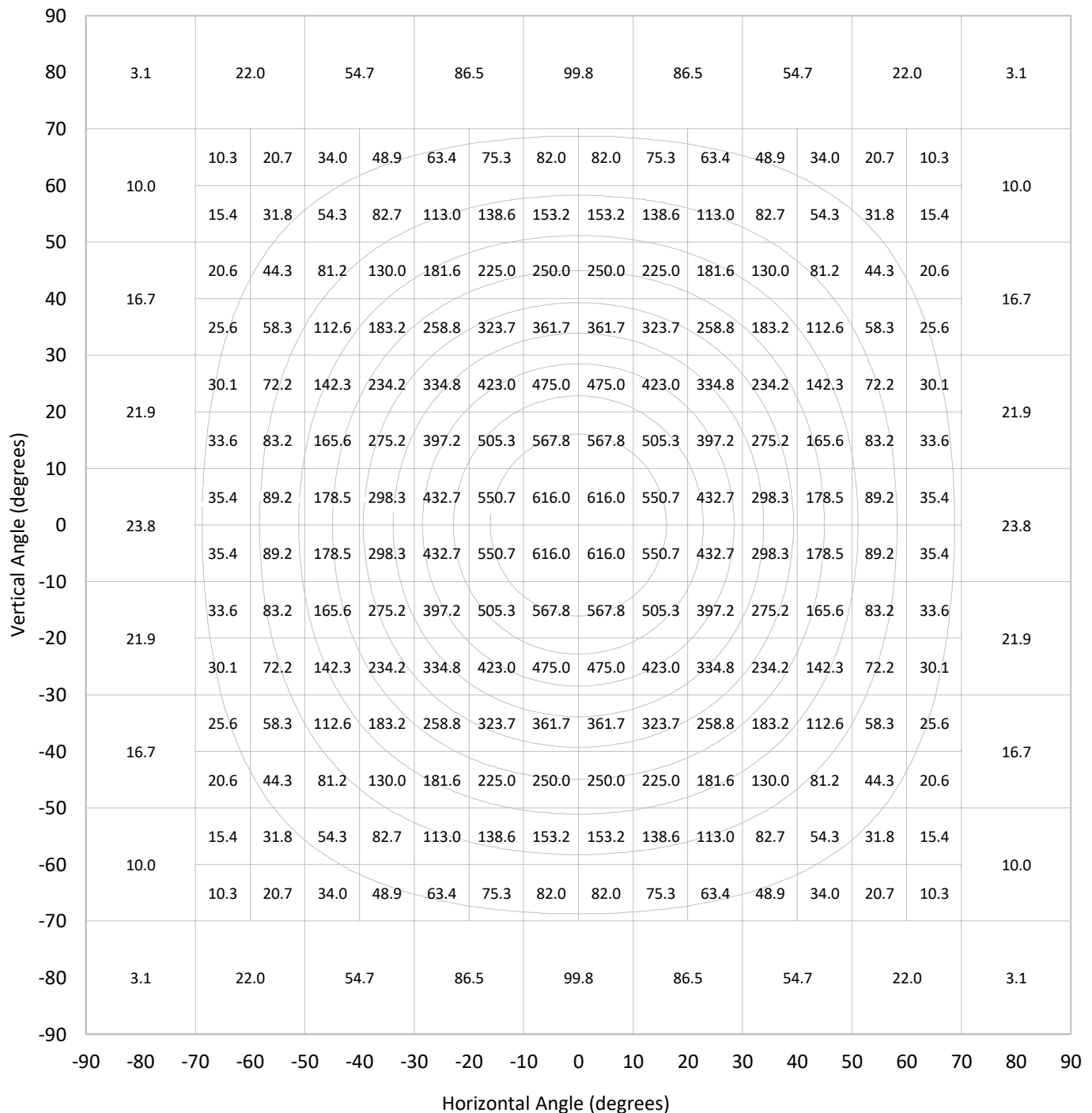
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Iso-Candela Plot



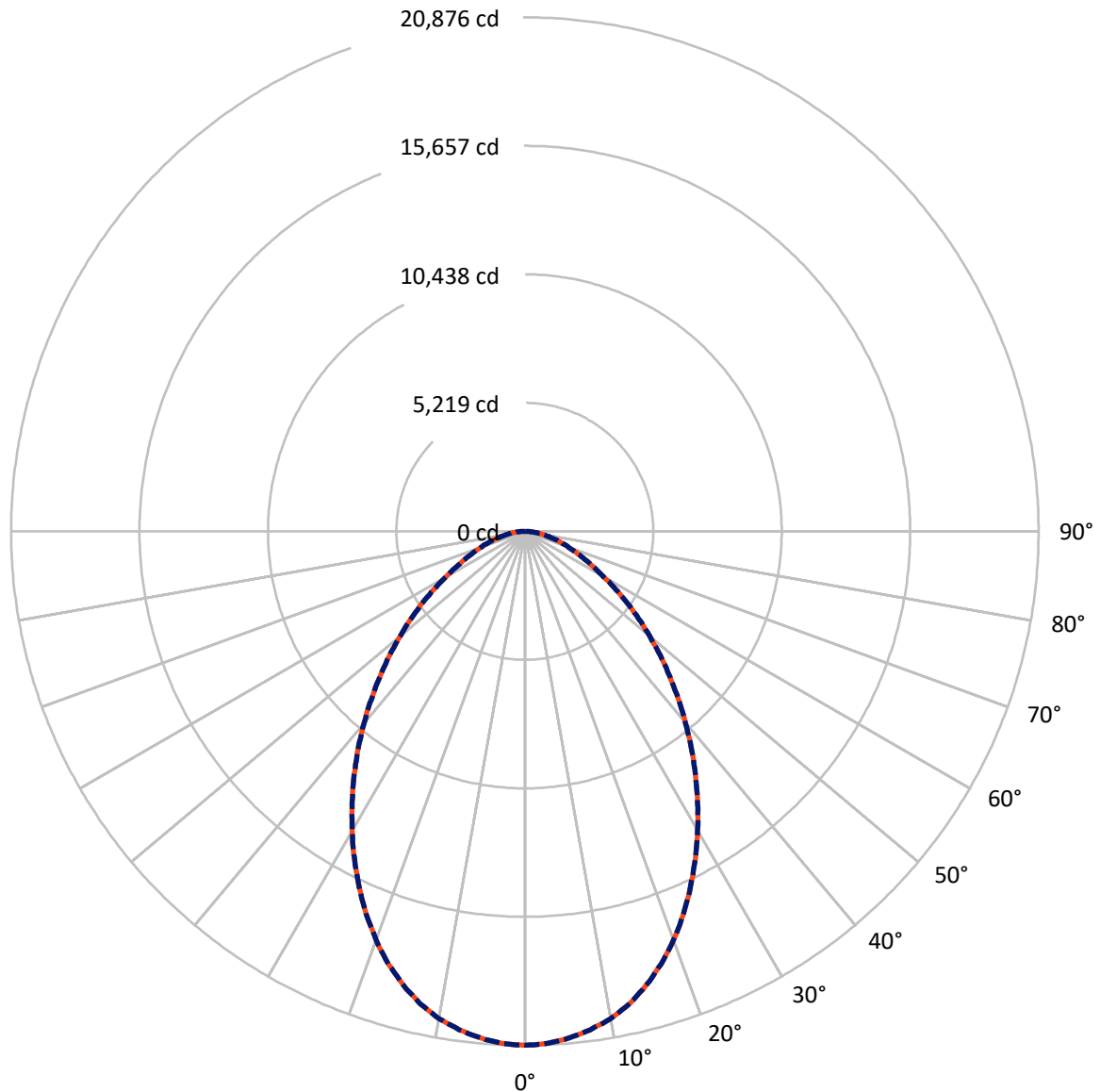
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Lumen Table



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Luminous Intensity Polar Plot

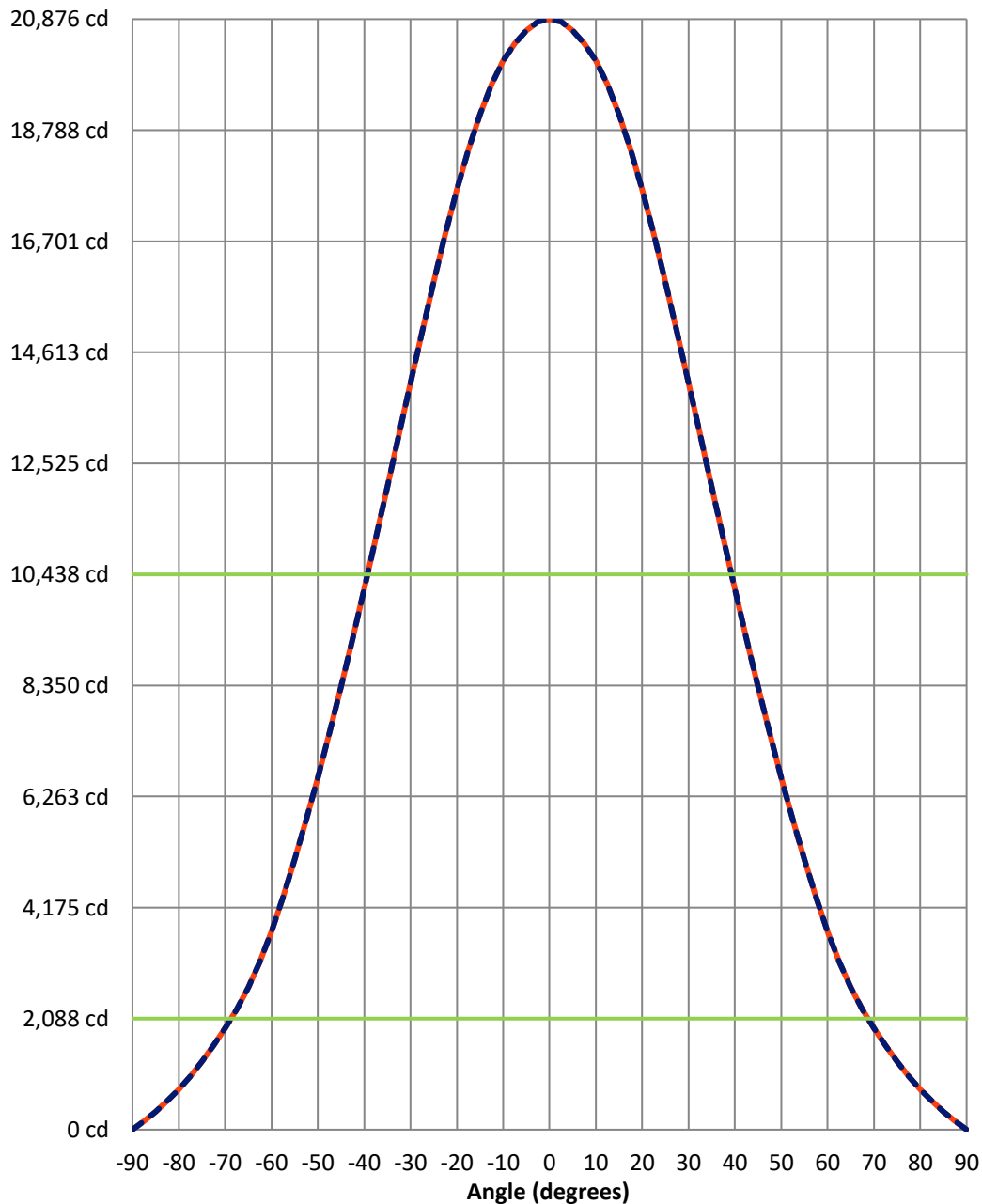


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg

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Luminous Intensity Plot



Beam:

H Angle: 78.6°
V Angle: 78.6°
Lumens: 16263.6
Efficiency: 43.3%

Field:

H Angle: 137.5°
V Angle: 137.5°
Lumens: 26631.1
Efficiency: 70.9%

Spill:

Lumens: 10956.1
Efficiency: 29.1%

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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°	160.7	160.7	160.7	160.7	160.7	160.7	160.7	152.8	152.8	148.9	145.0
85°	337.0	337.0	337.0	337.0	337.0	329.2	325.3	321.3	317.4	309.6	305.7
82.5°	540.8	540.8	540.8	540.8	533.0	525.1	521.2	513.4	505.5	493.8	482.0
80°	756.3	756.3	756.3	756.3	744.6	736.7	725.0	717.2	705.4	689.7	674.0
77.5°	1003.2	1003.2	1003.2	991.5	983.6	971.9	960.1	944.4	928.8	909.2	885.7
75°	1281.5	1281.5	1281.5	1265.8	1254.0	1242.3	1222.7	1203.1	1179.6	1152.1	1120.8
72.5°	1583.2	1583.2	1583.2	1563.6	1551.9	1532.3	1508.8	1481.3	1453.9	1418.6	1379.4
70°	1908.5	1908.5	1908.5	1885.0	1865.4	1845.8	1814.4	1783.1	1743.9	1704.7	1657.7
67.5°	2261.2	2261.2	2261.2	2233.7	2210.2	2182.8	2147.5	2108.3	2061.3	2006.5	1951.6
65°	2672.7	2672.7	2657.0	2633.5	2606.0	2566.9	2523.7	2468.9	2410.1	2339.6	2265.1
62.5°	3158.6	3158.6	3135.1	3107.7	3072.4	3021.4	2962.7	2892.1	2809.8	2719.7	2629.6
60°	3722.9	3722.9	3695.5	3660.2	3609.3	3546.6	3468.2	3378.1	3276.2	3162.5	3052.8
57.5°	4373.4	4373.4	4338.2	4291.1	4228.4	4150.1	4052.1	3938.5	3809.1	3668.0	3530.9
55°	5078.8	5078.8	5035.7	4980.9	4906.4	4812.4	4694.8	4561.5	4404.8	4244.1	4067.8
52.5°	5827.3	5827.3	5776.4	5713.7	5627.5	5517.7	5384.5	5227.8	5047.5	4859.4	4651.7
50°	6615.0	6615.0	6556.2	6485.7	6387.7	6258.4	6105.6	5925.3	5725.4	5506.0	5266.9
47.5°	7457.6	7457.6	7391.0	7308.7	7191.1	7042.2	6861.9	6654.2	6426.9	6180.0	5909.6
45°	8323.6	8323.6	8249.2	8155.1	8025.8	7857.3	7657.4	7457.6	7167.6	6881.5	6568.0
42.5°	9225.0	9225.0	9138.8	9033.0	8884.0	8699.9	8472.6	8213.9	7927.8	7606.5	7265.6
40°	10161.6	10161.6	10063.6	9942.1	9777.5	9565.9	9311.2	9021.2	8699.9	8343.2	7967.0
37.5°	11117.8	11117.8	11008.1	10874.8	10690.6	10455.5	10169.4	9848.1	9487.6	9091.7	8676.3
35°	12081.8	12081.8	11960.3	11815.4	11611.6	11352.9	11043.3	10686.7	10287.0	9855.9	9389.6
32.5°	13065.5	13065.5	12932.2	12767.6	12536.4	12250.3	11909.4	11521.4	11117.8	10616.2	10106.7
30°	14037.3	14037.3	13892.3	13712.1	13465.2	13151.7	12779.4	12352.2	11878.1	11364.7	10816.0
27.5°	14993.5	14954.4	14832.9	14640.8	14370.4	14037.3	13633.7	13171.3	12657.9	12093.6	11505.8
25°	15934.1	15891.0	15757.7	15546.1	15256.1	14891.7	14456.7	13962.9	13410.3	12814.7	12172.0
22.5°	16835.4	16788.4	16647.3	16420.0	16110.4	15714.6	15248.3	14719.2	14131.4	13492.6	12814.7
20°	17670.1	17619.2	17474.2	17235.1	16913.8	16494.5	16000.7	15432.5	14805.4	14131.4	13410.3
17.5°	18422.5	18371.6	18218.8	17971.9	17670.1	17203.8	16694.3	16094.7	15432.5	14719.2	13962.9
15°	19084.8	19030.0	18873.2	18626.3	18281.5	17842.6	17305.7	16694.3	16000.7	15248.3	14456.7
12.5°	19649.1	19594.3	19433.6	19186.7	18830.1	18391.2	17842.6	17203.8	16494.5	15714.6	14891.7
10°	20095.9	20041.0	19888.2	19653.1	19284.7	18830.1	18281.5	17670.1	16913.8	16110.4	15256.1
7.5°	20417.2	20366.3	20225.2	19990.1	19653.1	19186.7	18626.3	17971.9	17235.1	16420.0	15546.1
5°	20660.2	20601.4	20460.3	20225.2	19888.2	19433.6	18873.2	18218.8	17474.2	16647.3	15757.7
2.5°	20828.7	20758.2	20601.4	20366.3	20041.0	19594.3	19030.0	18371.6	17619.2	16788.4	15891.0
0°	20875.7	20828.7	20660.2	20417.2	20095.9	19649.1	19084.8	18422.5	17670.1	16835.4	15934.1

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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°	141.1	141.1	137.2	133.2	129.3	121.5	117.6	113.6	109.7	101.9	98.0
85°	297.8	290.0	282.2	274.3	262.6	254.7	243.0	235.1	223.4	211.6	199.9
82.5°	470.3	458.5	442.8	431.1	415.4	395.8	380.1	360.5	340.9	325.3	305.7
80°	658.4	638.8	619.2	599.6	576.1	552.6	529.0	505.5	478.1	450.7	423.2
77.5°	862.1	834.7	807.3	775.9	748.5	717.2	685.8	654.4	619.2	583.9	548.6
75°	1089.4	1054.2	1015.0	975.8	940.5	897.4	854.3	811.2	764.2	721.1	674.0
72.5°	1336.3	1293.2	1246.2	1199.2	1148.2	1093.4	1038.5	979.7	924.8	870.0	811.2
70°	1602.8	1551.9	1493.1	1434.3	1371.6	1305.0	1238.4	1167.8	1097.3	1026.7	956.2
67.5°	1888.9	1826.2	1755.6	1685.1	1606.7	1528.4	1450.0	1367.7	1281.5	1195.3	1113.0
65°	2194.6	2116.2	2033.9	1943.8	1853.6	1763.5	1669.4	1571.5	1473.5	1371.6	1281.5
62.5°	2535.5	2437.5	2331.7	2222.0	2120.1	2010.4	1908.5	1787.0	1669.4	1555.8	1442.1
60°	2931.3	2802.0	2672.7	2535.5	2406.2	2265.1	2139.7	2006.5	1873.2	1743.9	1610.6
57.5°	3374.1	3209.5	3052.8	2888.2	2715.8	2559.0	2398.3	2237.7	2088.8	1935.9	1790.9
55°	3875.7	3675.9	3479.9	3276.2	3076.3	2880.4	2676.6	2496.3	2312.1	2139.7	1971.2
52.5°	4424.4	4197.1	3954.1	3722.9	3468.2	3225.2	2997.9	2770.6	2555.1	2347.4	2155.4
50°	5012.2	4745.7	4467.5	4185.3	3895.3	3609.3	3334.9	3068.5	2817.7	2574.7	2347.4
47.5°	5623.6	5321.8	5004.4	4683.0	4373.4	4024.7	3695.5	3393.7	3092.0	2817.7	2555.1
45°	6250.6	5909.6	5560.9	5196.4	4831.9	4455.7	4091.3	3722.9	3393.7	3068.5	2770.6
42.5°	6897.2	6513.1	6125.2	5721.5	5317.9	4906.4	4494.9	4091.3	3695.5	3334.9	2997.9
40°	7563.4	7140.2	6697.3	6258.4	5827.3	5357.1	4906.4	4455.7	4024.7	3609.3	3225.2
37.5°	8229.6	7767.2	7289.1	6795.3	6301.5	5827.3	5317.9	4831.9	4373.4	3895.3	3468.2
35°	8899.7	8390.3	7873.0	7336.1	6795.3	6258.4	5721.5	5196.4	4683.0	4185.3	3722.9
32.5°	9573.8	9017.3	8445.1	7873.0	7289.1	6697.3	6125.2	5560.9	5004.4	4467.5	3954.1
30°	10236.1	9632.5	9017.3	8390.3	7767.2	7140.2	6513.1	5909.6	5321.8	4745.7	4197.1
27.5°	10882.7	10236.1	9573.8	8899.7	8229.6	7563.4	6897.2	6250.6	5623.6	5012.2	4424.4
25°	11505.8	10816.0	10106.7	9389.6	8676.3	7967.0	7265.6	6568.0	5909.6	5266.9	4651.7
22.5°	12093.6	11364.7	10616.2	9855.9	9091.7	8343.2	7606.5	6881.5	6180.0	5506.0	4859.4
20°	12657.9	11878.1	11117.8	10287.0	9487.6	8699.9	7927.8	7167.6	6426.9	5725.4	5047.5
17.5°	13171.3	12352.2	11521.4	10686.7	9848.1	9021.2	8213.9	7457.6	6654.2	5925.3	5227.8
15°	13633.7	12779.4	11909.4	11043.3	10169.4	9311.2	8472.6	7657.4	6861.9	6105.6	5384.5
12.5°	14037.3	13151.7	12250.3	11352.9	10455.5	9565.9	8699.9	7857.3	7042.2	6258.4	5517.7
10°	14370.4	13465.2	12536.4	11611.6	10690.6	9777.5	8884.0	8025.8	7191.1	6387.7	5627.5
7.5°	14640.8	13712.1	12767.6	11815.4	10874.8	9942.1	9033.0	8155.1	7308.7	6485.7	5713.7
5°	14832.9	13892.3	12932.2	11960.3	11008.1	10063.6	9138.8	8249.2	7391.0	6556.2	5776.4
2.5°	14954.4	14037.3	13065.5	12081.8	11117.8	10161.6	9225.0	8323.6	7457.6	6615.0	5827.3
0°	14993.5	14037.3	13065.5	12081.8	11117.8	10161.6	9225.0	8323.6	7457.6	6615.0	5827.3

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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°	94.1	86.2	78.4	74.5	66.6	62.7	54.9	47.0	43.1	35.3	27.4
85°	188.1	172.4	160.7	148.9	137.2	121.5	109.7	98.0	82.3	70.5	54.9
82.5°	286.1	266.5	246.9	227.3	207.7	188.1	164.6	145.0	125.4	105.8	82.3
80°	395.8	364.5	337.0	309.6	282.2	254.7	223.4	195.9	164.6	137.2	109.7
77.5°	509.5	474.2	435.0	395.8	356.6	321.3	282.2	246.9	211.6	172.4	137.2
75°	630.9	583.9	540.8	489.9	442.8	391.9	344.9	297.8	254.7	211.6	164.6
72.5°	756.3	697.6	638.8	583.9	525.1	466.3	411.5	352.7	297.8	246.9	195.9
70°	885.7	815.1	744.6	678.0	611.3	540.8	478.1	411.5	344.9	282.2	223.4
67.5°	1022.8	940.5	858.2	772.0	697.6	619.2	540.8	466.3	391.9	321.3	254.7
65°	1171.7	1073.8	971.9	881.7	783.8	697.6	611.3	525.1	442.8	356.6	282.2
62.5°	1324.6	1210.9	1097.3	983.6	881.7	772.0	678.0	583.9	489.9	395.8	309.6
60°	1481.3	1352.0	1222.7	1097.3	971.9	858.2	744.6	638.8	540.8	435.0	337.0
57.5°	1642.0	1497.0	1352.0	1210.9	1073.8	940.5	815.1	697.6	583.9	474.2	364.5
55°	1806.6	1642.0	1481.3	1324.6	1171.7	1022.8	885.7	756.3	630.9	509.5	395.8
52.5°	1971.2	1790.9	1610.6	1442.1	1281.5	1113.0	956.2	811.2	674.0	548.6	423.2
50°	2139.7	1935.9	1743.9	1555.8	1371.6	1195.3	1026.7	870.0	721.1	583.9	450.7
47.5°	2312.1	2088.8	1873.2	1669.4	1473.5	1281.5	1097.3	924.8	764.2	619.2	478.1
45°	2496.3	2237.7	2006.5	1787.0	1571.5	1367.7	1167.8	979.7	811.2	654.4	505.5
42.5°	2676.6	2398.3	2139.7	1908.5	1669.4	1450.0	1238.4	1038.5	854.3	685.8	529.0
40°	2880.4	2559.0	2265.1	2010.4	1763.5	1528.4	1305.0	1093.4	897.4	717.2	552.6
37.5°	3076.3	2715.8	2406.2	2120.1	1853.6	1606.7	1371.6	1148.2	940.5	748.5	576.1
35°	3276.2	2888.2	2535.5	2222.0	1943.8	1685.1	1434.3	1199.2	975.8	775.9	599.6
32.5°	3479.9	3052.8	2672.7	2331.7	2033.9	1755.6	1493.1	1246.2	1015.0	807.3	619.2
30°	3675.9	3209.5	2802.0	2437.5	2116.2	1826.2	1551.9	1293.2	1054.2	834.7	638.8
27.5°	3875.7	3374.1	2931.3	2535.5	2194.6	1888.9	1602.8	1336.3	1089.4	862.1	658.4
25°	4067.8	3530.9	3052.8	2629.6	2265.1	1951.6	1657.7	1379.4	1120.8	885.7	674.0
22.5°	4244.1	3668.0	3162.5	2719.7	2339.6	2006.5	1704.7	1418.6	1152.1	909.2	689.7
20°	4404.8	3809.1	3276.2	2809.8	2410.1	2061.3	1743.9	1453.9	1179.6	928.8	705.4
17.5°	4561.5	3938.5	3378.1	2892.1	2468.9	2108.3	1783.1	1481.3	1203.1	944.4	717.2
15°	4694.8	4052.1	3468.2	2962.7	2523.7	2147.5	1814.4	1508.8	1222.7	960.1	725.0
12.5°	4812.4	4150.1	3546.6	3021.4	2566.9	2182.8	1845.8	1532.3	1242.3	971.9	736.7
10°	4906.4	4228.4	3609.3	3072.4	2606.0	2210.2	1865.4	1551.9	1254.0	983.6	744.6
7.5°	4980.9	4291.1	3660.2	3107.7	2633.5	2233.7	1885.0	1563.6	1265.8	991.5	756.3
5°	5035.7	4338.2	3695.5	3135.1	2657.0	2261.2	1908.5	1583.2	1281.5	1003.2	756.3
2.5°	5078.8	4373.4	3722.9	3158.6	2672.7	2261.2	1908.5	1583.2	1281.5	1003.2	756.3
0°	5078.8	4373.4	3722.9	3158.6	2672.7	2261.2	1908.5	1583.2	1281.5	1003.2	756.3

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	19.6	15.7	7.8	0.0
85°	43.1	27.4	15.7	0.0
82.5°	62.7	43.1	19.6	0.0
80°	82.3	54.9	27.4	0.0
77.5°	105.8	70.5	35.3	0.0
75°	125.4	82.3	43.1	0.0
72.5°	145.0	98.0	47.0	0.0
70°	164.6	109.7	54.9	0.0
67.5°	188.1	121.5	62.7	0.0
65°	207.7	137.2	66.6	0.0
62.5°	227.3	148.9	74.5	0.0
60°	246.9	160.7	78.4	0.0
57.5°	266.5	172.4	86.2	0.0
55°	286.1	188.1	94.1	0.0
52.5°	305.7	199.9	98.0	0.0
50°	325.3	211.6	101.9	0.0
47.5°	340.9	223.4	109.7	0.0
45°	360.5	235.1	113.6	0.0
42.5°	380.1	243.0	117.6	0.0
40°	395.8	254.7	121.5	0.0
37.5°	415.4	262.6	129.3	0.0
35°	431.1	274.3	133.2	0.0
32.5°	442.8	282.2	137.2	0.0
30°	458.5	290.0	141.1	0.0
27.5°	470.3	297.8	141.1	0.0
25°	482.0	305.7	145.0	0.0
22.5°	493.8	309.6	148.9	0.0
20°	505.5	317.4	152.8	0.0
17.5°	513.4	321.3	152.8	0.0
15°	521.2	325.3	160.7	0.0
12.5°	525.1	329.2	160.7	0.0
10°	533.0	337.0	160.7	0.0
7.5°	540.8	337.0	160.7	0.0
5°	540.8	337.0	160.7	0.0
2.5°	540.8	337.0	160.7	0.0
0°	540.8	337.0	160.7	0.0

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