

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: P623916

Luminaire Tested: **IFLD-M-SA4D-735-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P623916
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4D-735-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (64) 3500K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

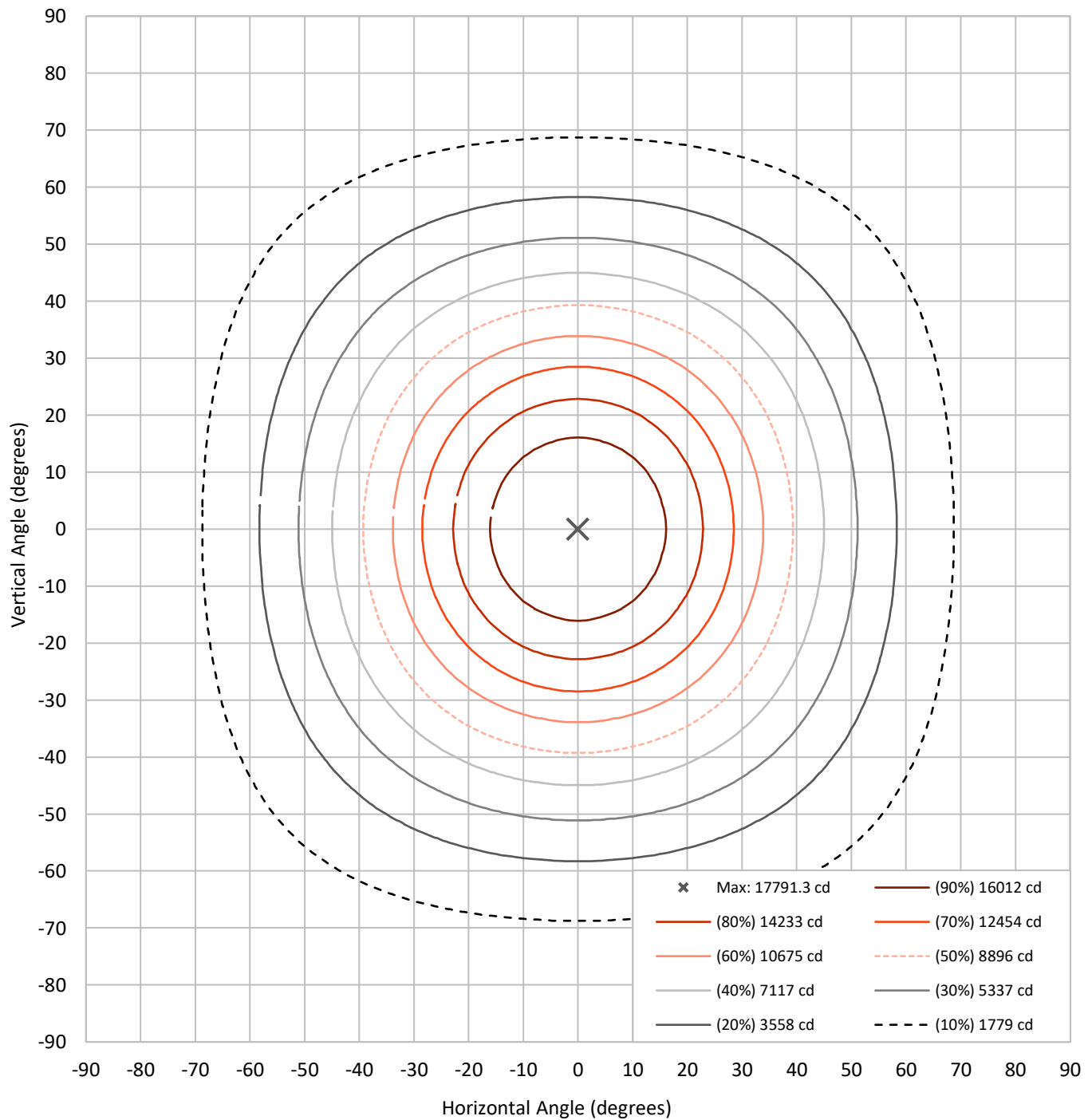
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	32033.7 lumens	Max Intensity:	17791.3 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	128.3 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 0.5' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	13860.7 lumens	Field Lumens:	22696.4 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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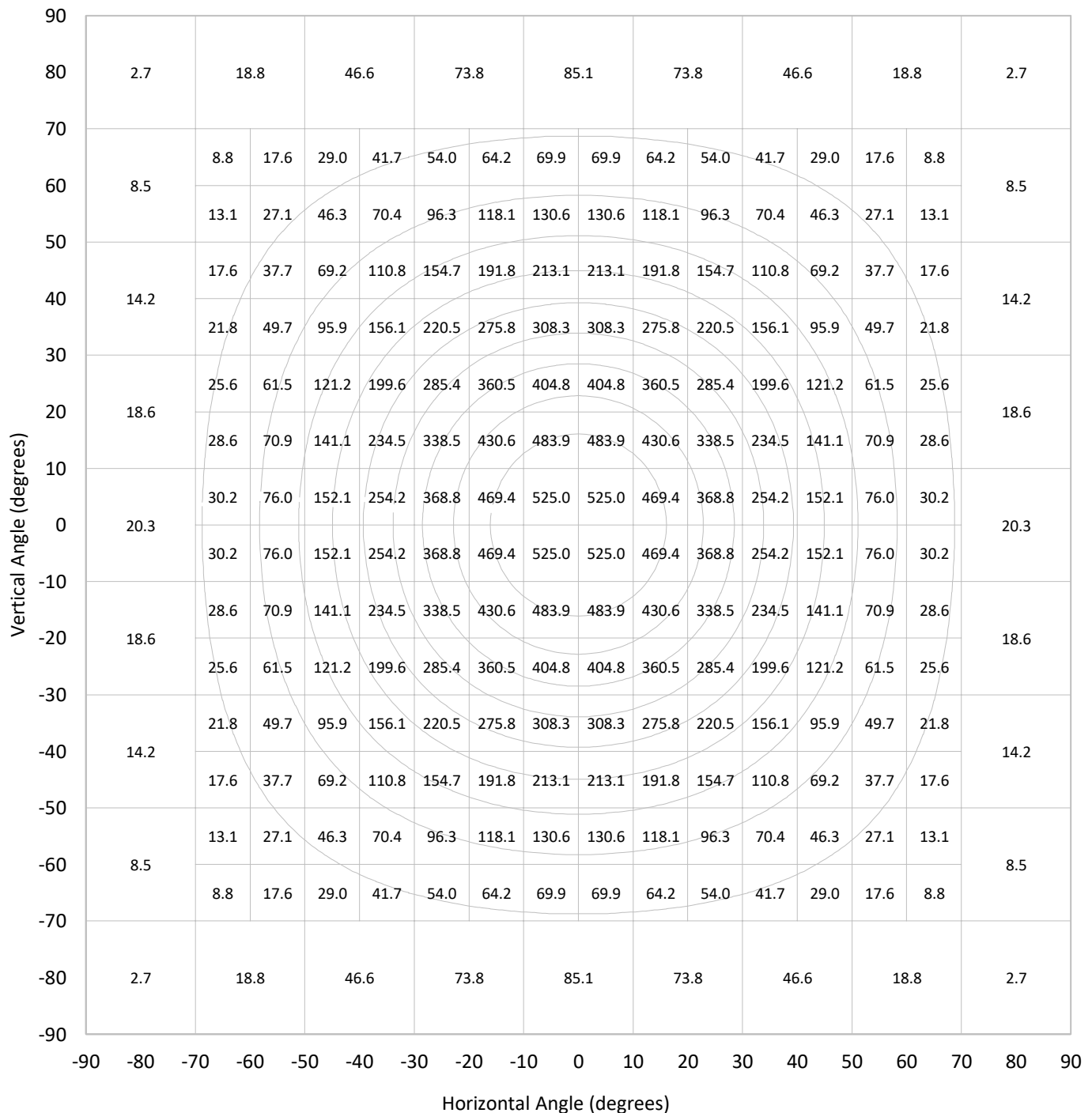
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Iso-Candela Plot



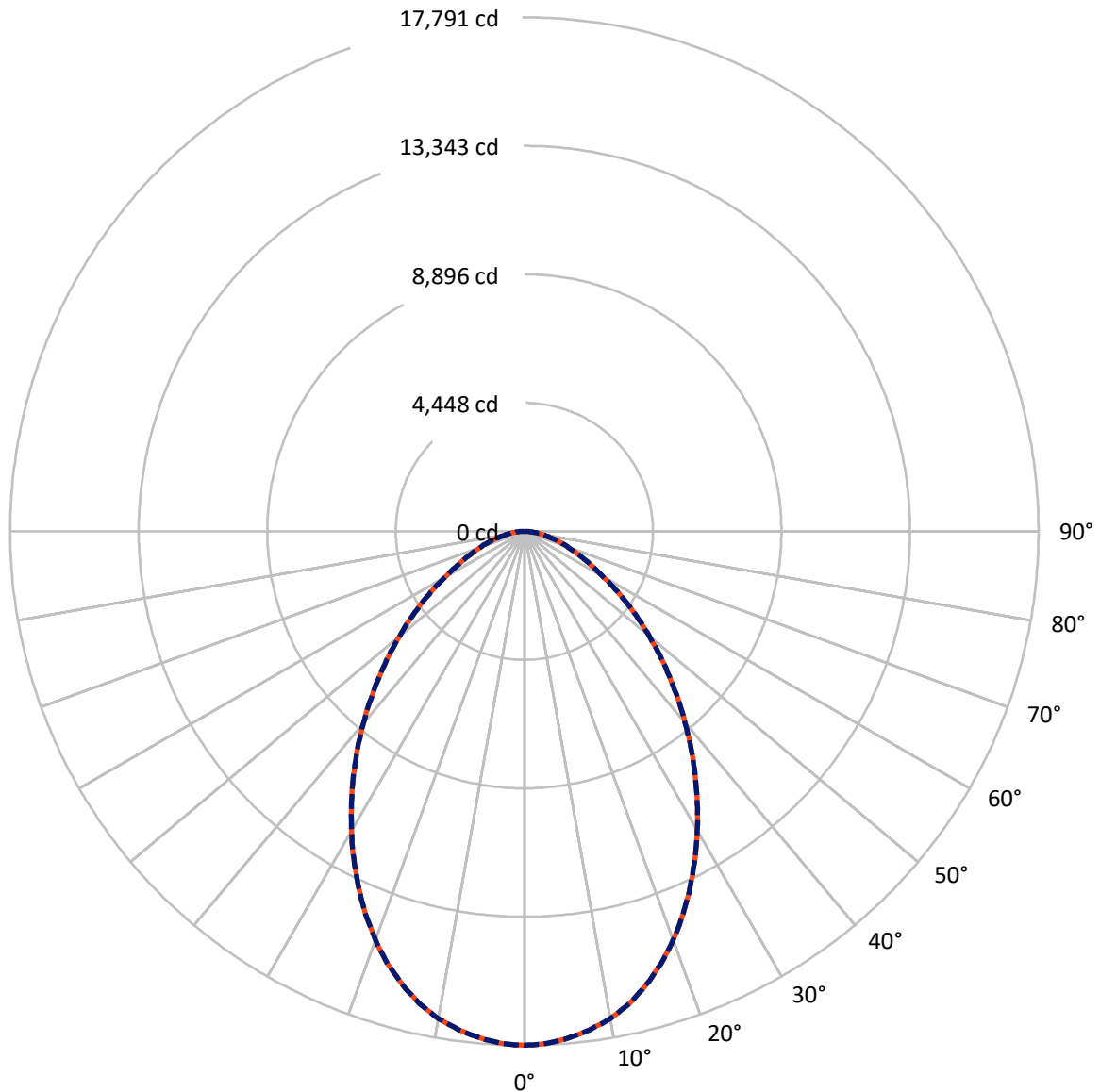
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Lumen Table



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Luminous Intensity Polar Plot

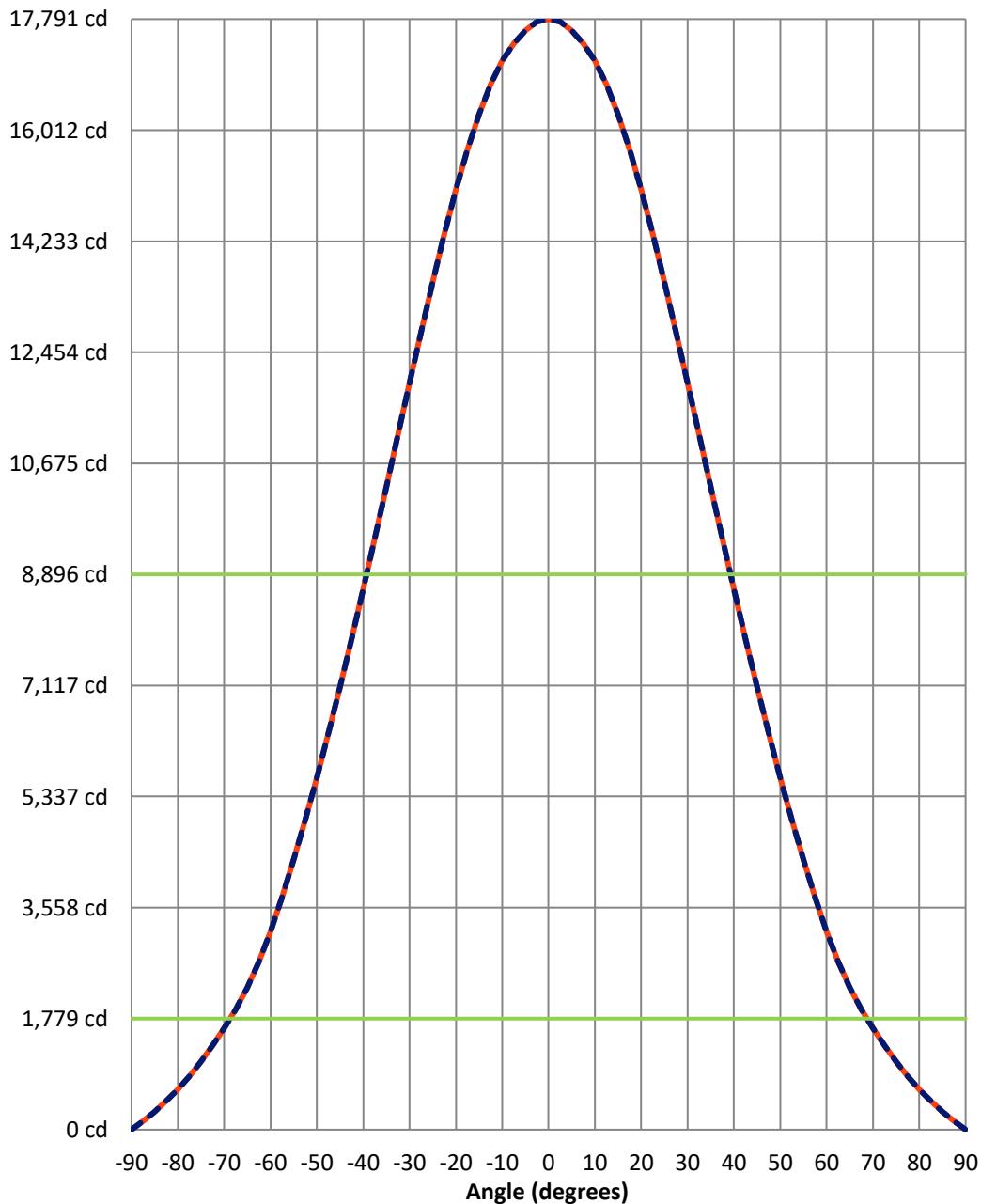


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg

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Luminous Intensity Plot



Beam:

H Angle: 78.6°
V Angle: 78.6°
Lumens: 13860.7
Efficiency: 43.3%

Field:

H Angle: 137.5°
V Angle: 137.5°
Lumens: 22696.4
Efficiency: 70.9%

Spill:

Lumens: 9337.3
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°	136.9	136.9	136.9	136.9	136.9	136.9	136.9	130.3	130.3	126.9	123.6
85°	287.2	287.2	287.2	287.2	287.2	280.5	277.2	273.9	270.5	263.8	260.5
82.5°	460.9	460.9	460.9	460.9	454.2	447.5	444.2	437.5	430.8	420.8	410.8
80°	644.6	644.6	644.6	644.6	634.6	627.9	617.9	611.2	601.2	587.8	574.5
77.5°	855.0	855.0	855.0	845.0	838.3	828.3	818.3	804.9	791.5	774.8	754.8
75°	1092.1	1092.1	1092.1	1078.8	1068.7	1058.7	1042.0	1025.3	1005.3	981.9	955.2
72.5°	1349.3	1349.3	1349.3	1332.6	1322.6	1305.9	1285.8	1262.5	1239.1	1209.0	1175.6
70°	1626.5	1626.5	1626.5	1606.5	1589.8	1573.1	1546.3	1519.6	1486.2	1452.8	1412.8
67.5°	1927.1	1927.1	1927.1	1903.7	1883.7	1860.3	1830.2	1796.8	1756.8	1710.0	1663.2
65°	2277.8	2277.8	2264.4	2244.4	2221.0	2187.6	2150.9	2104.1	2054.0	1993.9	1930.4
62.5°	2691.9	2691.9	2671.9	2648.5	2618.4	2575.0	2524.9	2464.8	2394.7	2317.9	2241.0
60°	3172.9	3172.9	3149.5	3119.4	3076.0	3022.6	2955.8	2878.9	2792.1	2695.3	2601.7
57.5°	3727.3	3727.3	3697.2	3657.1	3603.7	3536.9	3453.4	3356.5	3246.3	3126.1	3009.2
55°	4328.4	4328.4	4291.7	4244.9	4181.5	4101.3	4001.1	3887.6	3754.0	3617.0	3466.8
52.5°	4966.3	4966.3	4922.9	4869.5	4796.0	4702.5	4588.9	4455.3	4301.7	4141.4	3964.4
50°	5637.7	5637.7	5587.6	5527.4	5443.9	5333.7	5203.5	5049.8	4879.5	4692.5	4488.7
47.5°	6355.7	6355.7	6298.9	6228.8	6128.6	6001.7	5848.1	5671.1	5477.3	5266.9	5036.5
45°	7093.8	7093.8	7030.4	6950.2	6840.0	6696.4	6526.1	6355.7	6108.6	5864.8	5597.6
42.5°	7862.0	7862.0	7788.5	7698.3	7571.4	7414.5	7220.7	7000.3	6756.5	6482.6	6192.1
40°	8660.2	8660.2	8576.7	8473.2	8332.9	8152.6	7935.5	7688.3	7414.5	7110.5	6789.9
37.5°	9475.1	9475.1	9381.6	9268.1	9111.1	8910.7	8666.9	8393.0	8085.8	7748.4	7394.4
35°	10296.7	10296.7	10193.2	10069.6	9896.0	9675.5	9411.7	9107.8	8767.1	8399.7	8002.3
32.5°	11135.0	11135.0	11021.5	10881.2	10684.2	10440.3	10149.8	9819.1	9475.1	9047.6	8613.5
30°	11963.3	11963.3	11839.7	11686.1	11475.7	11208.5	10891.2	10527.2	10123.1	9685.5	9218.0
27.5°	12778.2	12744.8	12641.3	12477.7	12247.2	11963.3	11619.3	11225.2	10787.7	10306.8	9805.8
25°	13579.8	13543.1	13429.5	13249.2	13002.0	12691.4	12320.7	11899.9	11428.9	10921.3	10373.6
22.5°	14348.0	14307.9	14187.7	13993.9	13730.1	13392.8	12995.3	12544.4	12043.5	11499.1	10921.3
20°	15059.3	15015.9	14892.4	14688.6	14414.8	14057.4	13636.6	13152.3	12617.9	12043.5	11428.9
17.5°	15700.6	15657.2	15526.9	15316.5	15059.3	14661.9	14227.7	13716.7	13152.3	12544.4	11899.9
15°	16265.0	16218.3	16084.7	15874.3	15580.4	15206.3	14748.7	14227.7	13636.6	12995.3	12320.7
12.5°	16746.0	16699.2	16562.3	16351.9	16047.9	15673.9	15206.3	14661.9	14057.4	13392.8	12691.4
10°	17126.7	17080.0	16949.7	16749.3	16435.4	16047.9	15580.4	15059.3	14414.8	13730.1	13002.0
7.5°	17400.6	17357.2	17236.9	17036.5	16749.3	16351.9	15874.3	15316.5	14688.6	13993.9	13249.2
5°	17607.6	17557.6	17437.3	17236.9	16949.7	16562.3	16084.7	15526.9	14892.4	14187.7	13429.5
2.5°	17751.3	17691.1	17557.6	17357.2	17080.0	16699.2	16218.3	15657.2	15015.9	14307.9	13543.1
0°	17791.3	17751.3	17607.6	17400.6	17126.7	16746.0	16265.0	15700.6	15059.3	14348.0	13579.8

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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°	120.2	120.2	116.9	113.6	110.2	103.5	100.2	96.9	93.5	86.8	83.5
85°	253.8	247.1	240.5	233.8	223.8	217.1	207.1	200.4	190.4	180.4	170.3
82.5°	400.8	390.8	377.4	367.4	354.0	337.3	324.0	307.3	290.6	277.2	260.5
80°	561.1	544.4	527.7	511.0	491.0	470.9	450.9	430.8	407.5	384.1	360.7
77.5°	734.8	711.4	688.0	661.3	637.9	611.2	584.5	557.8	527.7	497.6	467.6
75°	928.5	898.4	865.0	831.6	801.6	764.8	728.1	691.3	651.3	614.5	574.5
72.5°	1138.9	1102.1	1062.1	1022.0	978.6	931.8	885.1	835.0	788.2	741.4	691.3
70°	1366.0	1322.6	1272.5	1222.4	1168.9	1112.2	1055.4	995.3	935.2	875.0	814.9
67.5°	1609.8	1556.4	1496.2	1436.1	1369.3	1302.5	1235.7	1165.6	1092.1	1018.7	948.5
65°	1870.3	1803.5	1733.4	1656.6	1579.7	1502.9	1422.8	1339.3	1255.8	1168.9	1092.1
62.5°	2160.9	2077.4	1987.2	1893.7	1806.9	1713.3	1626.5	1523.0	1422.8	1325.9	1229.1
60°	2498.2	2388.0	2277.8	2160.9	2050.7	1930.4	1823.6	1710.0	1596.4	1486.2	1372.7
57.5°	2875.6	2735.3	2601.7	2461.5	2314.5	2180.9	2044.0	1907.1	1780.1	1649.9	1526.3
55°	3303.1	3132.8	2965.8	2792.1	2621.8	2454.8	2281.1	2127.5	1970.5	1823.6	1679.9
52.5°	3770.7	3577.0	3369.9	3172.9	2955.8	2748.7	2555.0	2361.3	2177.6	2000.6	1836.9
50°	4271.7	4044.5	3807.4	3567.0	3319.8	3076.0	2842.2	2615.1	2401.3	2194.3	2000.6
47.5°	4792.7	4535.5	4265.0	3991.1	3727.3	3430.0	3149.5	2892.3	2635.1	2401.3	2177.6
45°	5327.0	5036.5	4739.2	4428.6	4118.0	3797.4	3486.8	3172.9	2892.3	2615.1	2361.3
42.5°	5878.1	5550.8	5220.2	4876.2	4532.2	4181.5	3830.8	3486.8	3149.5	2842.2	2555.0
40°	6445.9	6085.2	5707.8	5333.7	4966.3	4565.6	4181.5	3797.4	3430.0	3076.0	2748.7
37.5°	7013.7	6619.6	6212.1	5791.3	5370.5	4966.3	4532.2	4118.0	3727.3	3319.8	2955.8
35°	7584.8	7150.6	6709.7	6252.2	5791.3	5333.7	4876.2	4428.6	3991.1	3567.0	3172.9
32.5°	8159.2	7685.0	7197.4	6709.7	6212.1	5707.8	5220.2	4739.2	4265.0	3807.4	3369.9
30°	8723.7	8209.3	7685.0	7150.6	6619.6	6085.2	5550.8	5036.5	4535.5	4044.5	3577.0
27.5°	9274.7	8723.7	8159.2	7584.8	7013.7	6445.9	5878.1	5327.0	4792.7	4271.7	3770.7
25°	9805.8	9218.0	8613.5	8002.3	7394.4	6789.9	6192.1	5597.6	5036.5	4488.7	3964.4
22.5°	10306.8	9685.5	9047.6	8399.7	7748.4	7110.5	6482.6	5864.8	5266.9	4692.5	4141.4
20°	10787.7	10123.1	9475.1	8767.1	8085.8	7414.5	6756.5	6108.6	5477.3	4879.5	4301.7
17.5°	11225.2	10527.2	9819.1	9107.8	8393.0	7688.3	7000.3	6355.7	5671.1	5049.8	4455.3
15°	11619.3	10891.2	10149.8	9411.7	8666.9	7935.5	7220.7	6526.1	5848.1	5203.5	4588.9
12.5°	11963.3	11208.5	10440.3	9675.5	8910.7	8152.6	7414.5	6696.4	6001.7	5333.7	4702.5
10°	12247.2	11475.7	10684.2	9896.0	9111.1	8332.9	7571.4	6840.0	6128.6	5443.9	4796.0
7.5°	12477.7	11686.1	10881.2	10069.6	9268.1	8473.2	7698.3	6950.2	6228.8	5527.4	4869.5
5°	12641.3	11839.7	11021.5	10193.2	9381.6	8576.7	7788.5	7030.4	6298.9	5587.6	4922.9
2.5°	12744.8	11963.3	11135.0	10296.7	9475.1	8660.2	7862.0	7093.8	6355.7	5637.7	4966.3
0°	12778.2	11963.3	11135.0	10296.7	9475.1	8660.2	7862.0	7093.8	6355.7	5637.7	4966.3

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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°	80.2	73.5	66.8	63.5	56.8	53.4	46.8	40.1	36.7	30.1	23.4
85°	160.3	147.0	136.9	126.9	116.9	103.5	93.5	83.5	70.1	60.1	46.8
82.5°	243.8	227.1	210.4	193.7	177.0	160.3	140.3	123.6	106.9	90.2	70.1
80°	337.3	310.6	287.2	263.8	240.5	217.1	190.4	167.0	140.3	116.9	93.5
77.5°	434.2	404.1	370.7	337.3	303.9	273.9	240.5	210.4	180.4	147.0	116.9
75°	537.7	497.6	460.9	417.5	377.4	334.0	293.9	253.8	217.1	180.4	140.3
72.5°	644.6	594.5	544.4	497.6	447.5	397.4	350.7	300.6	253.8	210.4	167.0
70°	754.8	694.7	634.6	577.8	521.0	460.9	407.5	350.7	293.9	240.5	190.4
67.5°	871.7	801.6	731.4	657.9	594.5	527.7	460.9	397.4	334.0	273.9	217.1
65°	998.6	915.1	828.3	751.5	668.0	594.5	521.0	447.5	377.4	303.9	240.5
62.5°	1128.9	1032.0	935.2	838.3	751.5	657.9	577.8	497.6	417.5	337.3	263.8
60°	1262.5	1152.2	1042.0	935.2	828.3	731.4	634.6	544.4	460.9	370.7	287.2
57.5°	1399.4	1275.8	1152.2	1032.0	915.1	801.6	694.7	594.5	497.6	404.1	310.6
55°	1539.7	1399.4	1262.5	1128.9	998.6	871.7	754.8	644.6	537.7	434.2	337.3
52.5°	1679.9	1526.3	1372.7	1229.1	1092.1	948.5	814.9	691.3	574.5	467.6	360.7
50°	1823.6	1649.9	1486.2	1325.9	1168.9	1018.7	875.0	741.4	614.5	497.6	384.1
47.5°	1970.5	1780.1	1596.4	1422.8	1255.8	1092.1	935.2	788.2	651.3	527.7	407.5
45°	2127.5	1907.1	1710.0	1523.0	1339.3	1165.6	995.3	835.0	691.3	557.8	430.8
42.5°	2281.1	2044.0	1823.6	1626.5	1422.8	1235.7	1055.4	885.1	728.1	584.5	450.9
40°	2454.8	2180.9	1930.4	1713.3	1502.9	1302.5	1112.2	931.8	764.8	611.2	470.9
37.5°	2621.8	2314.5	2050.7	1806.9	1579.7	1369.3	1168.9	978.6	801.6	637.9	491.0
35°	2792.1	2461.5	2160.9	1893.7	1656.6	1436.1	1222.4	1022.0	831.6	661.3	511.0
32.5°	2965.8	2601.7	2277.8	1987.2	1733.4	1496.2	1272.5	1062.1	865.0	688.0	527.7
30°	3132.8	2735.3	2388.0	2077.4	1803.5	1556.4	1322.6	1102.1	898.4	711.4	544.4
27.5°	3303.1	2875.6	2498.2	2160.9	1870.3	1609.8	1366.0	1138.9	928.5	734.8	561.1
25°	3466.8	3009.2	2601.7	2241.0	1930.4	1663.2	1412.8	1175.6	955.2	754.8	574.5
22.5°	3617.0	3126.1	2695.3	2317.9	1993.9	1710.0	1452.8	1209.0	981.9	774.8	587.8
20°	3754.0	3246.3	2792.1	2394.7	2054.0	1756.8	1486.2	1239.1	1005.3	791.5	601.2
17.5°	3887.6	3356.5	2878.9	2464.8	2104.1	1796.8	1519.6	1262.5	1025.3	804.9	611.2
15°	4001.1	3453.4	2955.8	2524.9	2150.9	1830.2	1546.3	1285.8	1042.0	818.3	617.9
12.5°	4101.3	3536.9	3022.6	2575.0	2187.6	1860.3	1573.1	1305.9	1058.7	828.3	627.9
10°	4181.5	3603.7	3076.0	2618.4	2221.0	1883.7	1589.8	1322.6	1068.7	838.3	634.6
7.5°	4244.9	3657.1	3119.4	2648.5	2244.4	1903.7	1606.5	1332.6	1078.8	845.0	644.6
5°	4291.7	3697.2	3149.5	2671.9	2264.4	1927.1	1626.5	1349.3	1092.1	855.0	644.6
2.5°	4328.4	3727.3	3172.9	2691.9	2277.8	1927.1	1626.5	1349.3	1092.1	855.0	644.6
0°	4328.4	3727.3	3172.9	2691.9	2277.8	1927.1	1626.5	1349.3	1092.1	855.0	644.6

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	16.7	13.4	6.7	0.0
85°	36.7	23.4	13.4	0.0
82.5°	53.4	36.7	16.7	0.0
80°	70.1	46.8	23.4	0.0
77.5°	90.2	60.1	30.1	0.0
75°	106.9	70.1	36.7	0.0
72.5°	123.6	83.5	40.1	0.0
70°	140.3	93.5	46.8	0.0
67.5°	160.3	103.5	53.4	0.0
65°	177.0	116.9	56.8	0.0
62.5°	193.7	126.9	63.5	0.0
60°	210.4	136.9	66.8	0.0
57.5°	227.1	147.0	73.5	0.0
55°	243.8	160.3	80.2	0.0
52.5°	260.5	170.3	83.5	0.0
50°	277.2	180.4	86.8	0.0
47.5°	290.6	190.4	93.5	0.0
45°	307.3	200.4	96.9	0.0
42.5°	324.0	207.1	100.2	0.0
40°	337.3	217.1	103.5	0.0
37.5°	354.0	223.8	110.2	0.0
35°	367.4	233.8	113.6	0.0
32.5°	377.4	240.5	116.9	0.0
30°	390.8	247.1	120.2	0.0
27.5°	400.8	253.8	120.2	0.0
25°	410.8	260.5	123.6	0.0
22.5°	420.8	263.8	126.9	0.0
20°	430.8	270.5	130.3	0.0
17.5°	437.5	273.9	130.3	0.0
15°	444.2	277.2	136.9	0.0
12.5°	447.5	280.5	136.9	0.0
10°	454.2	287.2	136.9	0.0
7.5°	460.9	287.2	136.9	0.0
5°	460.9	287.2	136.9	0.0
2.5°	460.9	287.2	136.9	0.0
0°	460.9	287.2	136.9	0.0

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