

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: P624004

Luminaire Tested: **IFLD-M-SA4E-760-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624004
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4E-760-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (64) 5700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

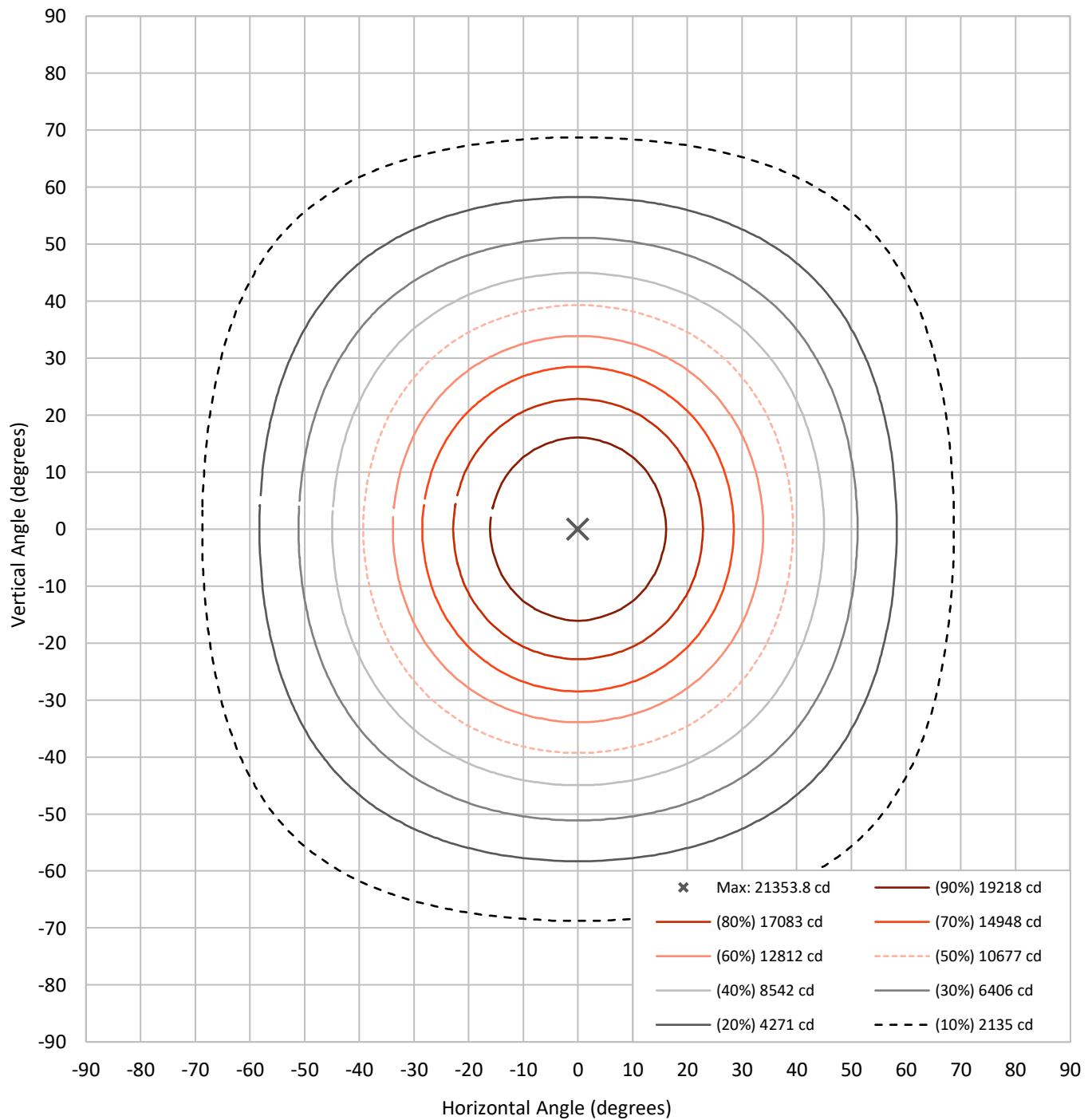
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	38448 lumens	Max Intensity:	21353.8 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	122.1 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 0.5' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	16636.1 lumens	Field Lumens:	27241 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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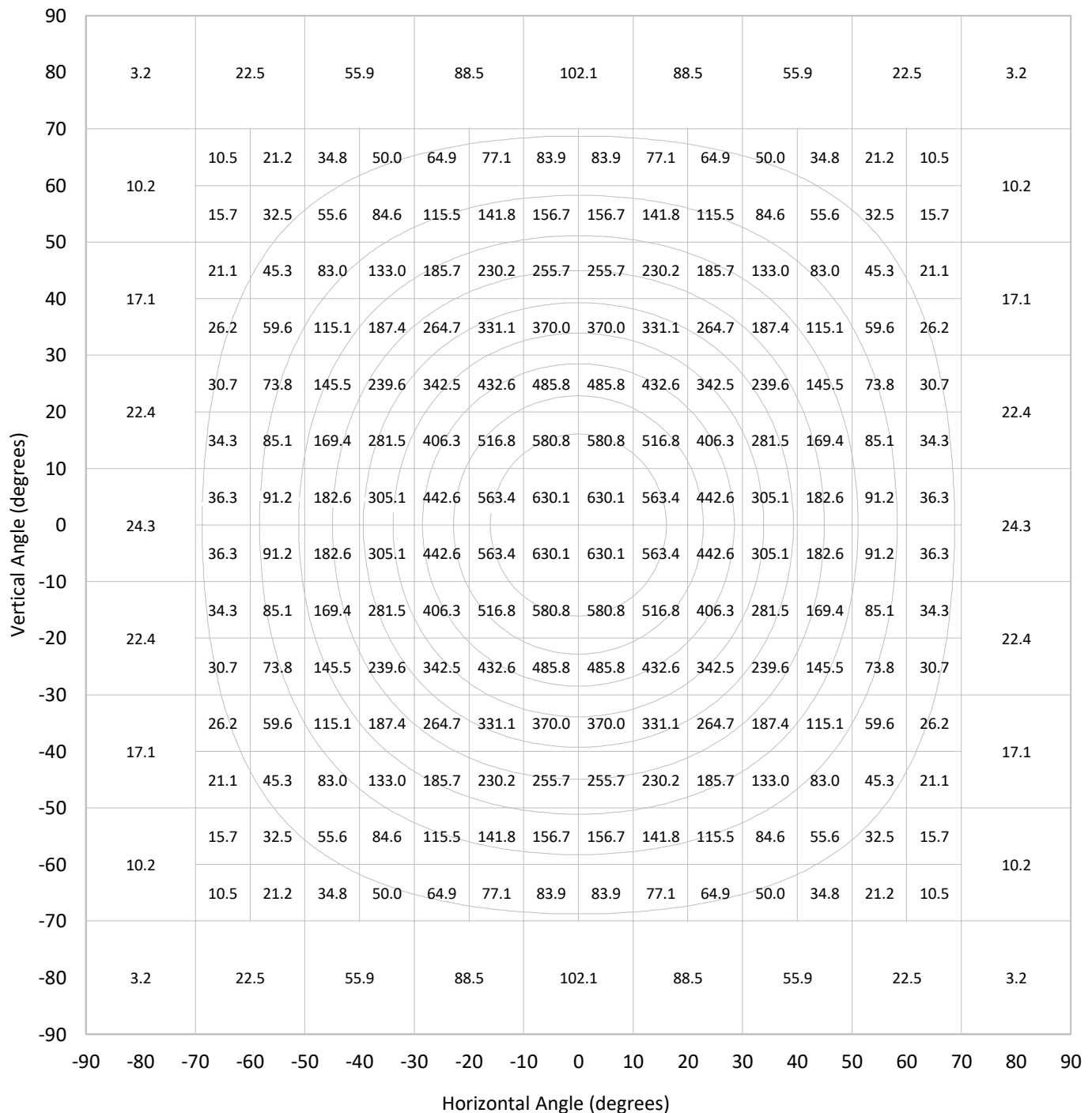
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Iso-Candela Plot



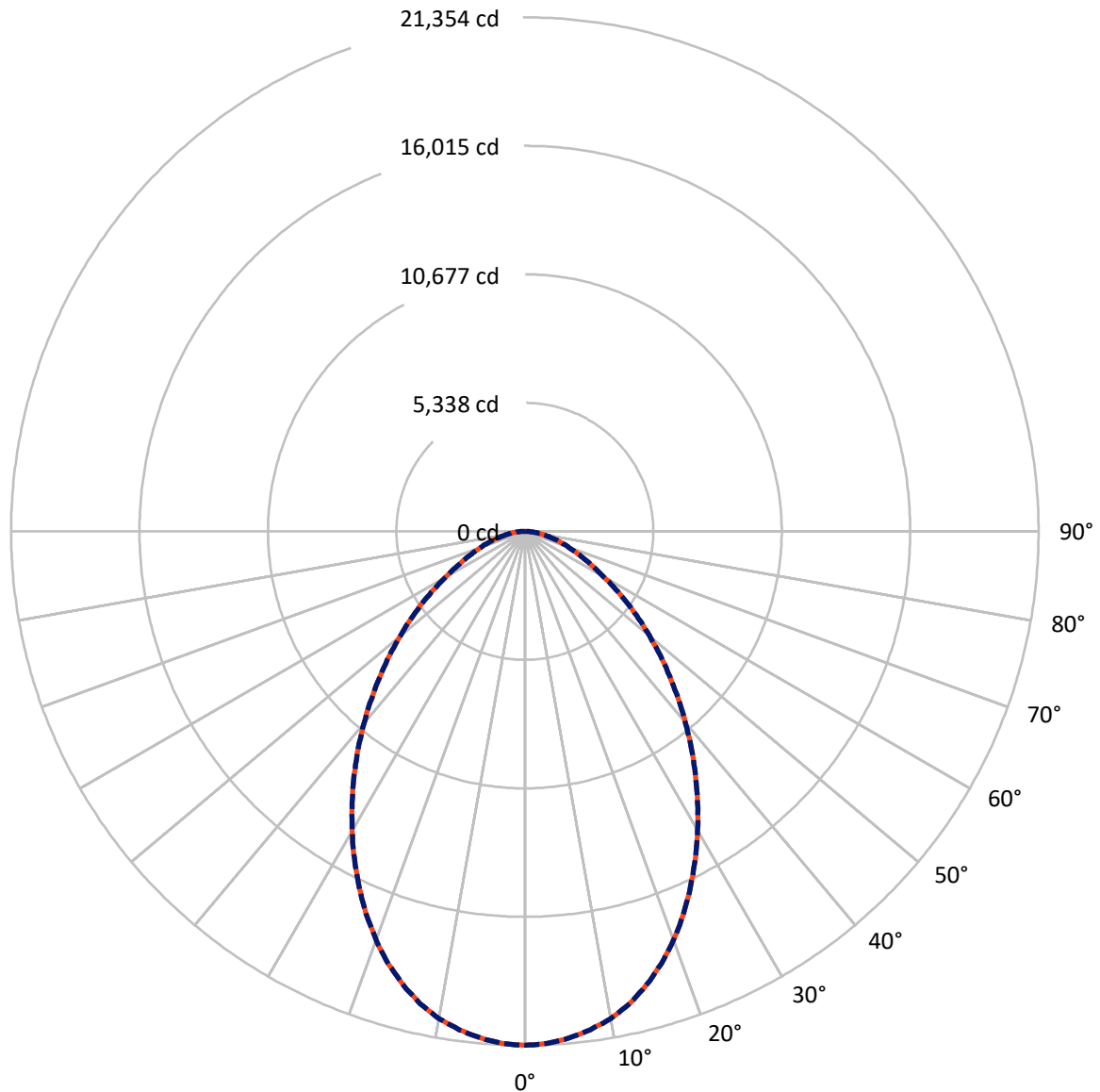
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Lumen Table



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Luminous Intensity Polar Plot

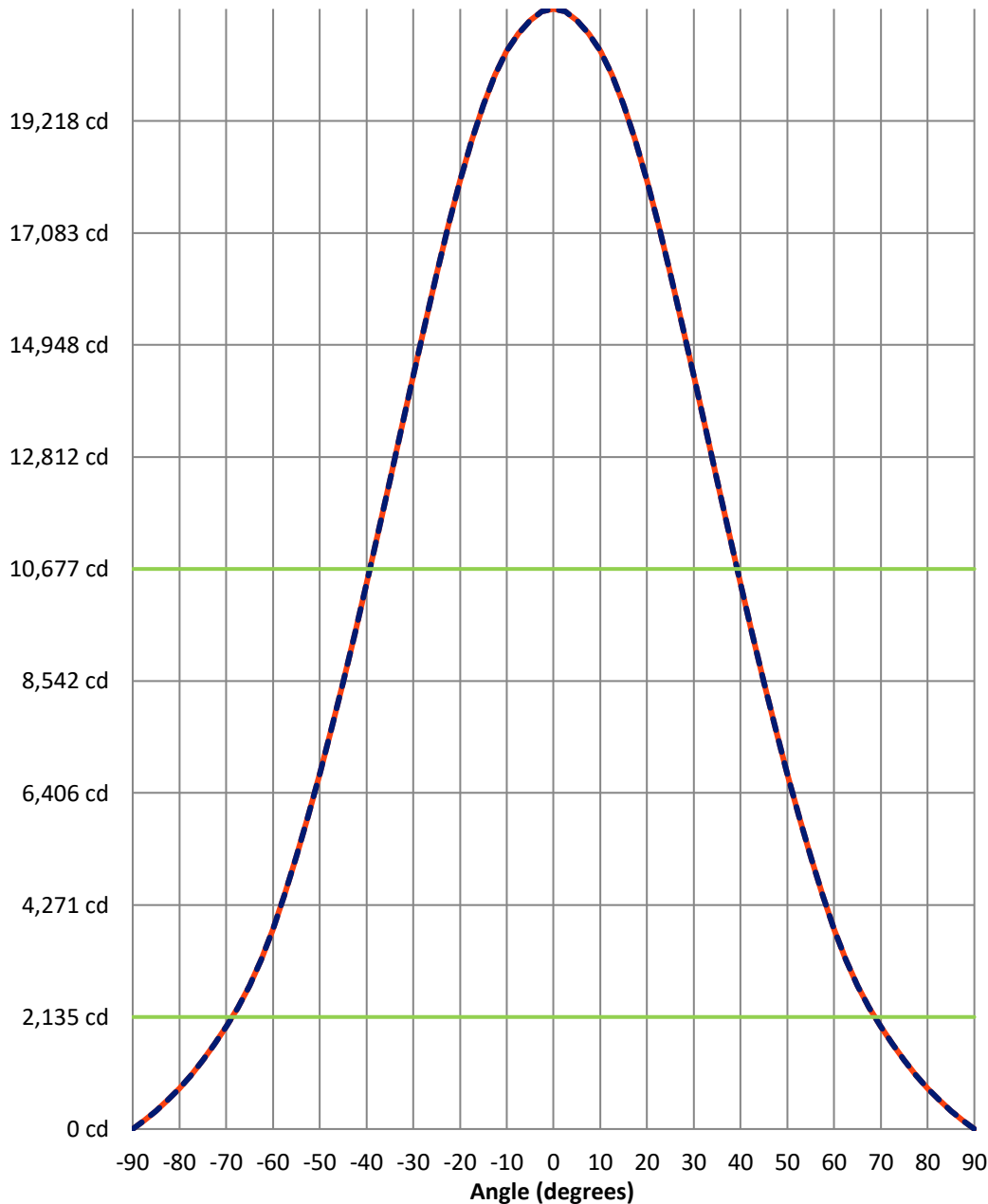


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg

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Luminous Intensity Plot



Beam:

H Angle: 78.6°
V Angle: 78.6°
Lumens: 16636.1
Efficiency: 43.3%

Field:

H Angle: 137.5°
V Angle: 137.5°
Lumens: 27241
Efficiency: 70.9%

Spill:

Lumens: 11207
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°	164.4	164.4	164.4	164.4	164.4	164.4	164.4	156.3	156.3	152.3	148.3
85°	344.7	344.7	344.7	344.7	344.7	336.7	332.7	328.7	324.7	316.7	312.7
82.5°	553.2	553.2	553.2	553.2	545.2	537.2	533.1	525.1	517.1	505.1	493.1
80°	773.7	773.7	773.7	773.7	761.6	753.6	741.6	733.6	721.5	705.5	689.5
77.5°	1026.2	1026.2	1026.2	1014.2	1006.2	994.1	982.1	966.1	950.0	930.0	905.9
75°	1310.8	1310.8	1310.8	1294.8	1282.8	1270.7	1250.7	1230.6	1206.6	1178.5	1146.5
72.5°	1619.5	1619.5	1619.5	1599.4	1587.4	1567.4	1543.3	1515.2	1487.2	1451.1	1411.0
70°	1952.2	1952.2	1952.2	1928.1	1908.1	1888.0	1856.0	1823.9	1783.8	1743.7	1695.6
67.5°	2313.0	2313.0	2313.0	2284.9	2260.8	2232.8	2196.7	2156.6	2108.5	2052.4	1996.3
65°	2733.9	2733.9	2717.8	2693.8	2665.7	2625.6	2581.5	2525.4	2465.3	2393.1	2317.0
62.5°	3230.9	3230.9	3206.9	3178.8	3142.7	3090.6	3030.5	2958.3	2874.2	2782.0	2689.8
60°	3808.2	3808.2	3780.1	3744.0	3691.9	3627.8	3547.6	3455.4	3351.2	3234.9	3122.7
57.5°	4473.6	4473.6	4437.5	4389.4	4325.3	4245.1	4144.9	4028.6	3896.4	3752.0	3611.7
55°	5195.1	5195.1	5151.0	5094.9	5018.8	4922.6	4802.3	4666.0	4505.7	4341.3	4160.9
52.5°	5960.8	5960.8	5908.7	5844.5	5756.3	5644.1	5507.8	5347.5	5163.1	4970.7	4758.2
50°	6766.5	6766.5	6706.4	6634.2	6534.0	6401.7	6245.4	6061.0	5856.6	5632.1	5387.6
47.5°	7628.4	7628.4	7560.2	7476.0	7355.8	7203.5	7019.1	6806.6	6574.1	6321.6	6045.0
45°	8514.3	8514.3	8438.1	8341.9	8209.6	8037.2	7832.8	7628.4	7331.7	7039.1	6718.4
42.5°	9436.2	9436.2	9348.0	9239.8	9087.5	8899.1	8666.6	8402.0	8109.4	7780.7	7431.9
40°	10394.3	10394.3	10294.1	10169.8	10001.5	9785.0	9524.4	9227.8	8899.1	8534.3	8149.5
37.5°	11372.4	11372.4	11260.2	11123.9	10935.5	10694.9	10402.3	10073.6	9704.8	9299.9	8875.0
35°	12358.5	12358.5	12234.2	12085.9	11877.5	11612.9	11296.2	10931.4	10522.6	10081.6	9604.6
32.5°	13364.7	13364.7	13228.4	13060.0	12823.5	12530.9	12182.1	11785.3	11372.4	10859.3	10338.2
30°	14358.8	14358.8	14210.5	14026.1	13773.5	13452.9	13072.0	12635.1	12150.1	11624.9	11063.7
27.5°	15336.9	15296.8	15172.5	14976.1	14699.5	14358.8	13945.9	13472.9	12947.8	12370.5	11769.2
25°	16299.0	16254.9	16118.6	15902.1	15605.5	15232.7	14787.7	14282.6	13717.4	13108.1	12450.7
22.5°	17220.9	17172.8	17028.5	16796.0	16479.3	16074.5	15597.5	15056.3	14455.0	13801.6	13108.1
20°	18074.8	18022.7	17874.3	17629.8	17301.1	16872.2	16367.1	15785.9	15144.5	14455.0	13717.4
17.5°	18844.4	18792.3	18636.0	18383.4	18074.8	17597.7	17076.6	16463.3	15785.9	15056.3	14282.6
15°	19521.9	19465.8	19305.4	19052.9	18700.1	18251.1	17702.0	17076.6	16367.1	15597.5	14787.7
12.5°	20099.1	20043.0	19878.6	19626.1	19261.3	18812.3	18251.1	17597.7	16872.2	16074.5	15232.7
10°	20556.1	20500.0	20343.6	20103.1	19726.3	19261.3	18700.1	18074.8	17301.1	16479.3	15605.5
7.5°	20884.8	20832.7	20688.4	20447.9	20103.1	19626.1	19052.9	18383.4	17629.8	16796.0	15902.1
5°	21133.3	21073.2	20928.9	20688.4	20343.6	19878.6	19305.4	18636.0	17874.3	17028.5	16118.6
2.5°	21305.7	21233.5	21073.2	20832.7	20500.0	20043.0	19465.8	18792.3	18022.7	17172.8	16254.9
0°	21353.8	21305.7	21133.3	20884.8	20556.1	20099.1	19521.9	18844.4	18074.8	17220.9	16299.0

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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°	144.3	144.3	140.3	136.3	132.3	124.3	120.3	116.2	112.2	104.2	100.2
85°	304.7	296.6	288.6	280.6	268.6	260.6	248.5	240.5	228.5	216.5	204.4
82.5°	481.0	469.0	453.0	440.9	424.9	404.9	388.8	368.8	348.7	332.7	312.7
80°	673.4	653.4	633.4	613.3	589.3	565.2	541.2	517.1	489.0	461.0	432.9
77.5°	881.9	853.8	825.8	793.7	765.6	733.6	701.5	669.4	633.4	597.3	561.2
75°	1114.4	1078.3	1038.2	998.1	962.1	918.0	873.9	829.8	781.7	737.6	689.5
72.5°	1366.9	1322.8	1274.7	1226.6	1174.5	1118.4	1062.3	1002.1	946.0	889.9	829.8
70°	1639.5	1587.4	1527.3	1467.1	1403.0	1334.9	1266.7	1194.6	1122.4	1050.3	978.1
67.5°	1932.1	1868.0	1795.9	1723.7	1643.5	1563.4	1483.2	1399.0	1310.8	1222.6	1138.4
65°	2244.8	2164.6	2080.5	1988.3	1896.1	1803.9	1707.7	1607.4	1507.2	1403.0	1310.8
62.5°	2593.6	2493.3	2385.1	2272.9	2168.7	2056.4	1952.2	1827.9	1707.7	1591.4	1475.2
60°	2998.4	2866.1	2733.9	2593.6	2461.3	2317.0	2188.7	2052.4	1916.1	1783.8	1647.5
57.5°	3451.4	3283.0	3122.7	2954.3	2778.0	2617.6	2453.3	2288.9	2136.6	1980.2	1831.9
55°	3964.5	3760.1	3559.6	3351.2	3146.7	2946.3	2737.9	2553.5	2365.1	2188.7	2016.3
52.5°	4525.7	4293.2	4044.7	3808.2	3547.6	3299.1	3066.6	2834.1	2613.6	2401.2	2204.7
50°	5127.0	4854.4	4569.8	4281.2	3984.5	3691.9	3411.3	3138.7	2882.2	2633.6	2401.2
47.5°	5752.3	5443.7	5119.0	4790.3	4473.6	4116.8	3780.1	3471.4	3162.8	2882.2	2613.6
45°	6393.7	6045.0	5688.2	5315.4	4942.6	4557.8	4185.0	3808.2	3471.4	3138.7	2834.1
42.5°	7055.1	6662.3	6265.4	5852.6	5439.7	5018.8	4597.9	4185.0	3780.1	3411.3	3066.6
40°	7736.6	7303.7	6850.7	6401.7	5960.8	5479.8	5018.8	4557.8	4116.8	3691.9	3299.1
37.5°	8418.1	7945.0	7456.0	6950.9	6445.8	5960.8	5439.7	4942.6	4473.6	3984.5	3547.6
35°	9103.5	8582.4	8053.3	7504.1	6950.9	6401.7	5852.6	5315.4	4790.3	4281.2	3808.2
32.5°	9793.0	9223.8	8638.5	8053.3	7456.0	6850.7	6265.4	5688.2	5119.0	4569.8	4044.7
30°	10470.5	9853.1	9223.8	8582.4	7945.0	7303.7	6662.3	6045.0	5443.7	4854.4	4293.2
27.5°	11131.9	10470.5	9793.0	9103.5	8418.1	7736.6	7055.1	6393.7	5752.3	5127.0	4525.7
25°	11769.2	11063.7	10338.2	9604.6	8875.0	8149.5	7431.9	6718.4	6045.0	5387.6	4758.2
22.5°	12370.5	11624.9	10859.3	10081.6	9299.9	8534.3	7780.7	7039.1	6321.6	5632.1	4970.7
20°	12947.8	12150.1	11372.4	10522.6	9704.8	8899.1	8109.4	7331.7	6574.1	5856.6	5163.1
17.5°	13472.9	12635.1	11785.3	10931.4	10073.6	9227.8	8402.0	7628.4	6806.6	6061.0	5347.5
15°	13945.9	13072.0	12182.1	11296.2	10402.3	9524.4	8666.6	7832.8	7019.1	6245.4	5507.8
12.5°	14358.8	13452.9	12530.9	11612.9	10694.9	9785.0	8899.1	8037.2	7203.5	6401.7	5644.1
10°	14699.5	13773.5	12823.5	11877.5	10935.5	10001.5	9087.5	8209.6	7355.8	6534.0	5756.3
7.5°	14976.1	14026.1	13060.0	12085.9	11123.9	10169.8	9239.8	8341.9	7476.0	6634.2	5844.5
5°	15172.5	14210.5	13228.4	12234.2	11260.2	10294.1	9348.0	8438.1	7560.2	6706.4	5908.7
2.5°	15296.8	14358.8	13364.7	12358.5	11372.4	10394.3	9436.2	8514.3	7628.4	6766.5	5960.8
0°	15336.9	14358.8	13364.7	12358.5	11372.4	10394.3	9436.2	8514.3	7628.4	6766.5	5960.8

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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°	96.2	88.2	80.2	76.2	68.1	64.1	56.1	48.1	44.1	36.1	28.1
85°	192.4	176.4	164.4	152.3	140.3	124.3	112.2	100.2	84.2	72.2	56.1
82.5°	292.6	272.6	252.5	232.5	212.5	192.4	168.4	148.3	128.3	108.2	84.2
80°	404.9	372.8	344.7	316.7	288.6	260.6	228.5	200.4	168.4	140.3	112.2
77.5°	521.1	485.0	445.0	404.9	364.8	328.7	288.6	252.5	216.5	176.4	140.3
75°	645.4	597.3	553.2	501.1	453.0	400.9	352.8	304.7	260.6	216.5	168.4
72.5°	773.7	713.5	653.4	597.3	537.2	477.0	420.9	360.8	304.7	252.5	200.4
70°	905.9	833.8	761.6	693.5	625.3	553.2	489.0	420.9	352.8	288.6	228.5
67.5°	1046.2	962.1	877.9	789.7	713.5	633.4	553.2	477.0	400.9	328.7	260.6
65°	1198.6	1098.4	994.1	901.9	801.7	713.5	625.3	537.2	453.0	364.8	288.6
62.5°	1354.9	1238.7	1122.4	1006.2	901.9	789.7	693.5	597.3	501.1	404.9	316.7
60°	1515.2	1383.0	1250.7	1122.4	994.1	877.9	761.6	653.4	553.2	445.0	344.7
57.5°	1679.6	1531.3	1383.0	1238.7	1098.4	962.1	833.8	713.5	597.3	485.0	372.8
55°	1848.0	1679.6	1515.2	1354.9	1198.6	1046.2	905.9	773.7	645.4	521.1	404.9
52.5°	2016.3	1831.9	1647.5	1475.2	1310.8	1138.4	978.1	829.8	689.5	561.2	432.9
50°	2188.7	1980.2	1783.8	1591.4	1403.0	1222.6	1050.3	889.9	737.6	597.3	461.0
47.5°	2365.1	2136.6	1916.1	1707.7	1507.2	1310.8	1122.4	946.0	781.7	633.4	489.0
45°	2553.5	2288.9	2052.4	1827.9	1607.4	1399.0	1194.6	1002.1	829.8	669.4	517.1
42.5°	2737.9	2453.3	2188.7	1952.2	1707.7	1483.2	1266.7	1062.3	873.9	701.5	541.2
40°	2946.3	2617.6	2317.0	2056.4	1803.9	1563.4	1334.9	1118.4	918.0	733.6	565.2
37.5°	3146.7	2778.0	2461.3	2168.7	1896.1	1643.5	1403.0	1174.5	962.1	765.6	589.3
35°	3351.2	2954.3	2593.6	2272.9	1988.3	1723.7	1467.1	1226.6	998.1	793.7	613.3
32.5°	3559.6	3122.7	2733.9	2385.1	2080.5	1795.9	1527.3	1274.7	1038.2	825.8	633.4
30°	3760.1	3283.0	2866.1	2493.3	2164.6	1868.0	1587.4	1322.8	1078.3	853.8	653.4
27.5°	3964.5	3451.4	2998.4	2593.6	2244.8	1932.1	1639.5	1366.9	1114.4	881.9	673.4
25°	4160.9	3611.7	3122.7	2689.8	2317.0	1996.3	1695.6	1411.0	1146.5	905.9	689.5
22.5°	4341.3	3752.0	3234.9	2782.0	2393.1	2052.4	1743.7	1451.1	1178.5	930.0	705.5
20°	4505.7	3896.4	3351.2	2874.2	2465.3	2108.5	1783.8	1487.2	1206.6	950.0	721.5
17.5°	4666.0	4028.6	3455.4	2958.3	2525.4	2156.6	1823.9	1515.2	1230.6	966.1	733.6
15°	4802.3	4144.9	3547.6	3030.5	2581.5	2196.7	1856.0	1543.3	1250.7	982.1	741.6
12.5°	4922.6	4245.1	3627.8	3090.6	2625.6	2232.8	1888.0	1567.4	1270.7	994.1	753.6
10°	5018.8	4325.3	3691.9	3142.7	2665.7	2260.8	1908.1	1587.4	1282.8	1006.2	761.6
7.5°	5094.9	4389.4	3744.0	3178.8	2693.8	2284.9	1928.1	1599.4	1294.8	1014.2	773.7
5°	5151.0	4437.5	3780.1	3206.9	2717.8	2313.0	1952.2	1619.5	1310.8	1026.2	773.7
2.5°	5195.1	4473.6	3808.2	3230.9	2733.9	2313.0	1952.2	1619.5	1310.8	1026.2	773.7
0°	5195.1	4473.6	3808.2	3230.9	2733.9	2313.0	1952.2	1619.5	1310.8	1026.2	773.7

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	20.0	16.0	8.0	0.0
85°	44.1	28.1	16.0	0.0
82.5°	64.1	44.1	20.0	0.0
80°	84.2	56.1	28.1	0.0
77.5°	108.2	72.2	36.1	0.0
75°	128.3	84.2	44.1	0.0
72.5°	148.3	100.2	48.1	0.0
70°	168.4	112.2	56.1	0.0
67.5°	192.4	124.3	64.1	0.0
65°	212.5	140.3	68.1	0.0
62.5°	232.5	152.3	76.2	0.0
60°	252.5	164.4	80.2	0.0
57.5°	272.6	176.4	88.2	0.0
55°	292.6	192.4	96.2	0.0
52.5°	312.7	204.4	100.2	0.0
50°	332.7	216.5	104.2	0.0
47.5°	348.7	228.5	112.2	0.0
45°	368.8	240.5	116.2	0.0
42.5°	388.8	248.5	120.3	0.0
40°	404.9	260.6	124.3	0.0
37.5°	424.9	268.6	132.3	0.0
35°	440.9	280.6	136.3	0.0
32.5°	453.0	288.6	140.3	0.0
30°	469.0	296.6	144.3	0.0
27.5°	481.0	304.7	144.3	0.0
25°	493.1	312.7	148.3	0.0
22.5°	505.1	316.7	152.3	0.0
20°	517.1	324.7	156.3	0.0
17.5°	525.1	328.7	156.3	0.0
15°	533.1	332.7	164.4	0.0
12.5°	537.2	336.7	164.4	0.0
10°	545.2	344.7	164.4	0.0
7.5°	553.2	344.7	164.4	0.0
5°	553.2	344.7	164.4	0.0
2.5°	553.2	344.7	164.4	0.0
0°	553.2	344.7	164.4	0.0

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