

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: P624605

Luminaire Tested: **IFLD-L-SA7D-940-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624605
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-L-SA7D-940-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (112) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

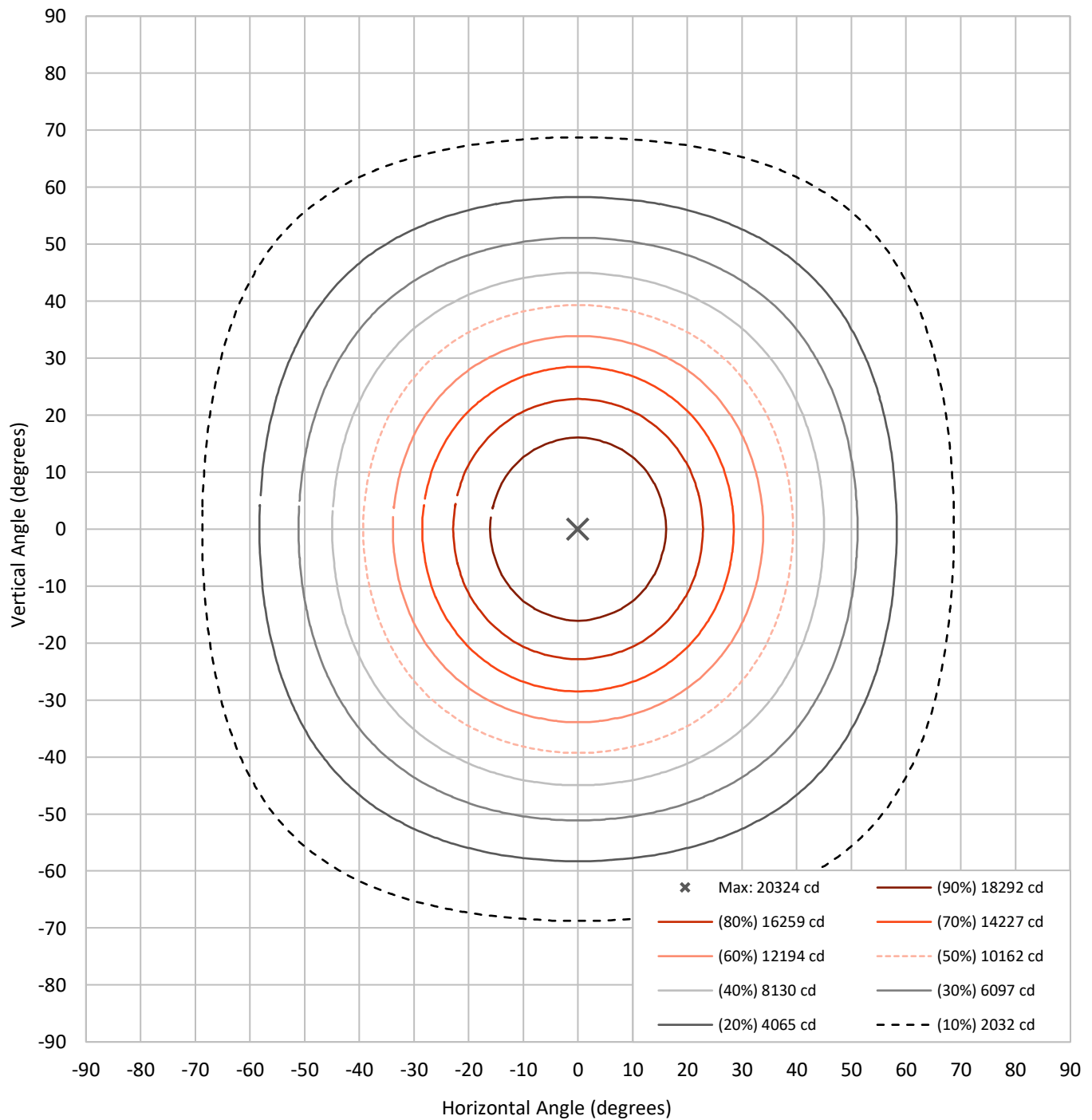
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	36593.9 lumens	Max Intensity:	20324 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	86.6 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	15833.8 lumens	Field Lumens:	25927.3 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%
Input Watts (W):	422.6		
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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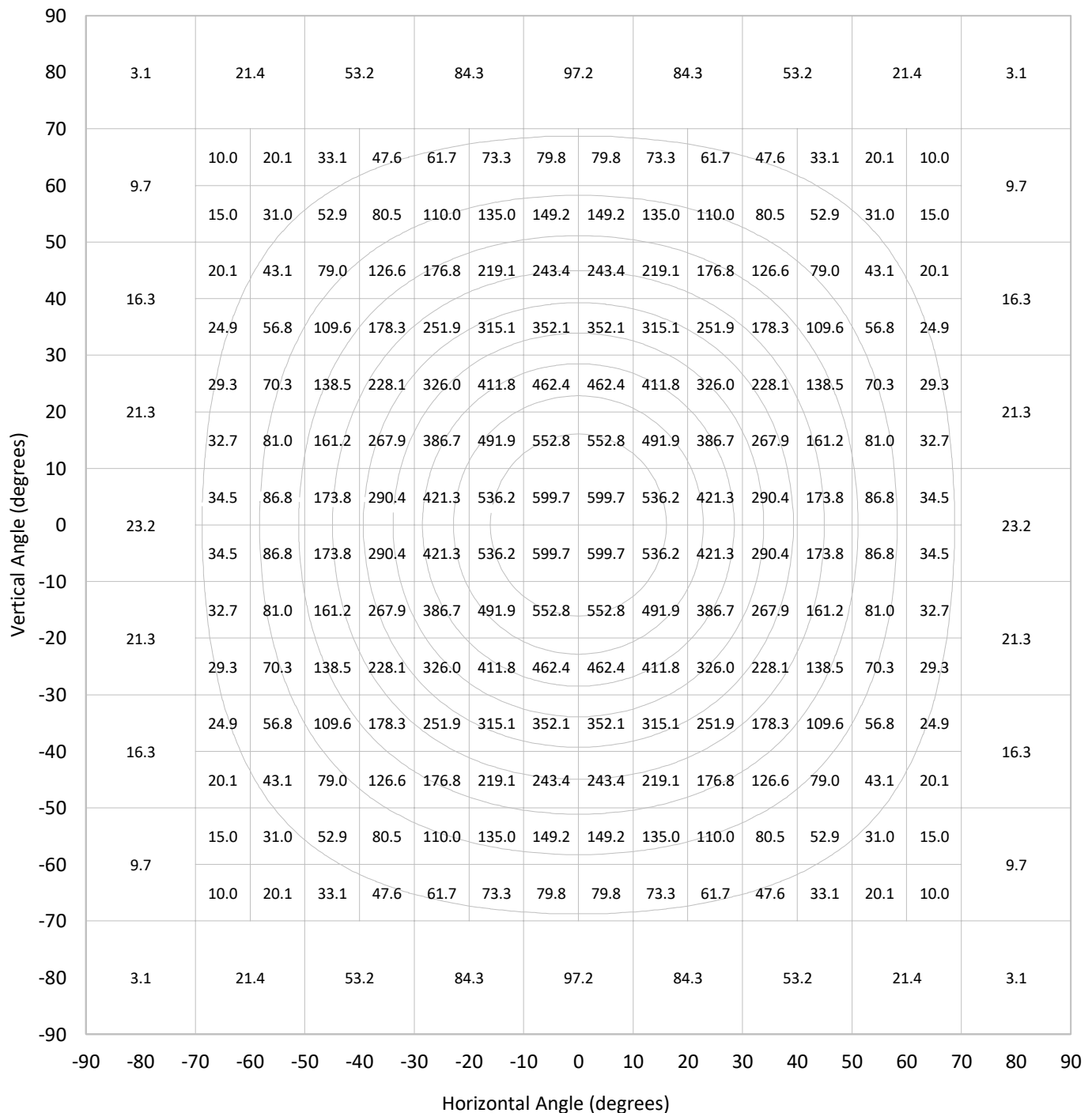
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Iso-Candela Plot



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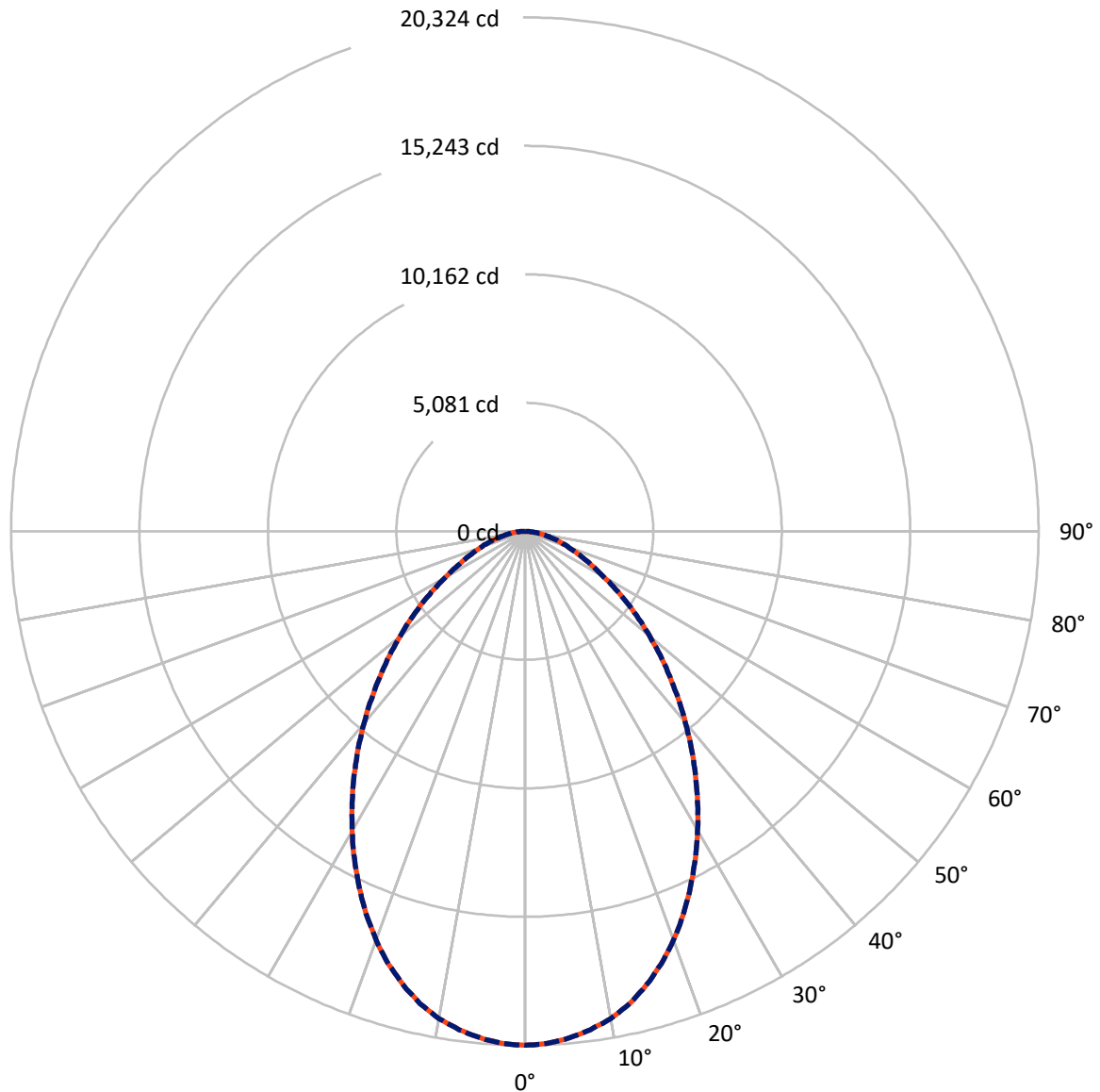
Lumen Table



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Luminous Intensity Polar Plot



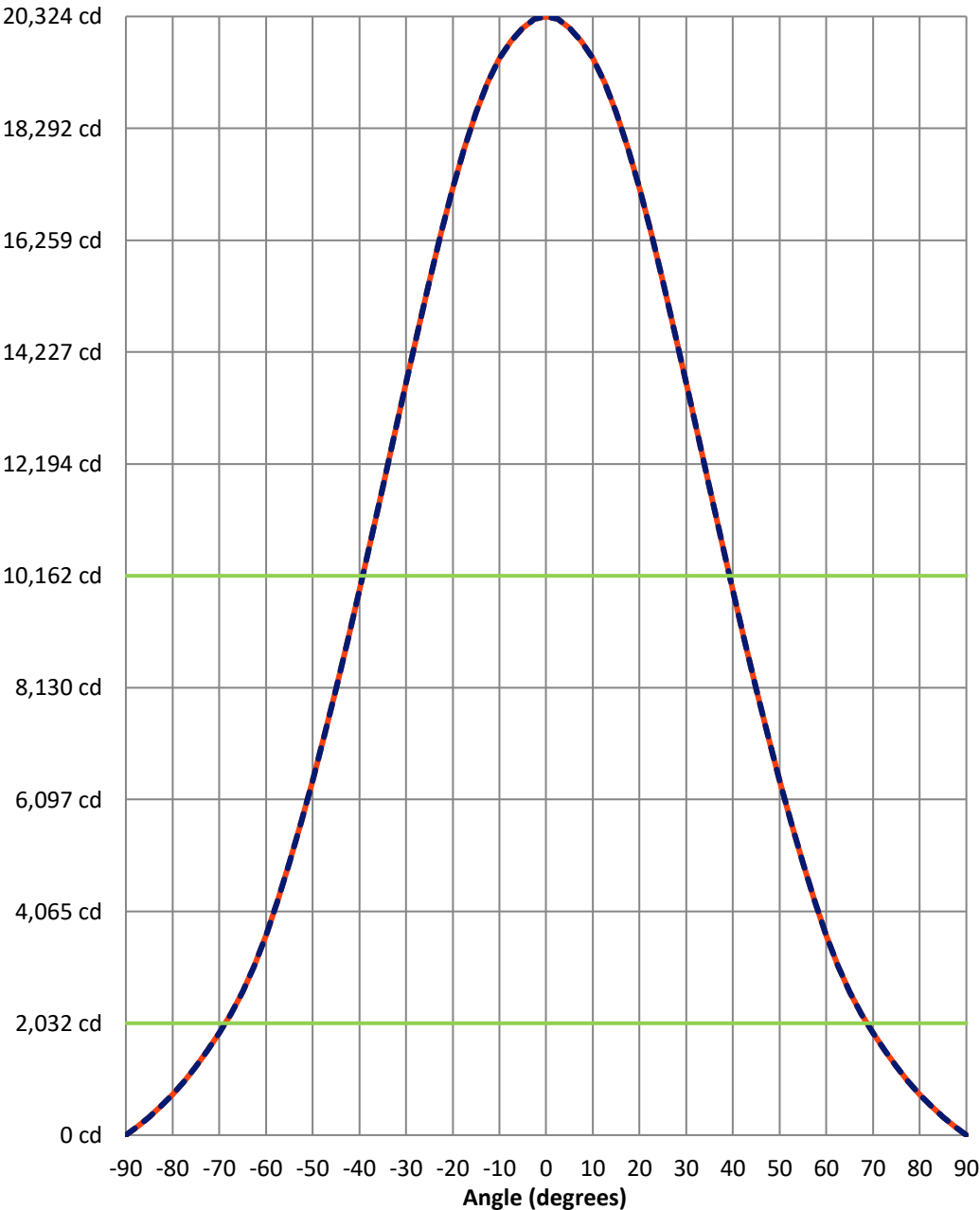
— Vertical Distribution Through 0-Deg

- - - Horizontal Distribution Through 0-Deg



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Luminous Intensity Plot



Beam:
H Angle: 78.6°
V Angle: 78.6°
Lumens: 15833.8
Efficiency: 43.3%

Field:
H Angle: 137.5°
V Angle: 137.5°
Lumens: 25927.3
Efficiency: 70.9%

Spill:
Lumens: 10666.6
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°	156.4	156.4	156.4	156.4	156.4	156.4	156.4	148.8	148.8	145.0	141.2
85°	328.1	328.1	328.1	328.1	328.1	320.5	316.7	312.9	309.0	301.4	297.6
82.5°	526.5	526.5	526.5	526.5	518.9	511.2	507.4	499.8	492.2	480.7	469.3
80°	736.4	736.4	736.4	736.4	724.9	717.3	705.8	698.2	686.8	671.5	656.2
77.5°	976.7	976.7	976.7	965.3	957.6	946.2	934.7	919.5	904.2	885.1	862.3
75°	1247.6	1247.6	1247.6	1232.3	1220.9	1209.4	1190.4	1171.3	1148.4	1121.7	1091.2
72.5°	1541.4	1541.4	1541.4	1522.3	1510.9	1491.8	1468.9	1442.2	1415.5	1381.1	1343.0
70°	1858.0	1858.0	1858.0	1835.2	1816.1	1797.0	1766.5	1736.0	1697.8	1659.6	1613.9
67.5°	2201.4	2201.4	2201.4	2174.7	2151.8	2125.1	2090.8	2052.6	2006.8	1953.4	1900.0
65°	2602.0	2602.0	2586.8	2563.9	2537.2	2499.0	2457.0	2403.6	2346.4	2277.7	2205.2
62.5°	3075.1	3075.1	3052.2	3025.5	2991.2	2941.6	2884.4	2815.7	2735.6	2647.8	2560.1
60°	3624.5	3624.5	3597.8	3563.5	3513.9	3452.8	3376.5	3288.8	3189.6	3078.9	2972.1
57.5°	4257.9	4257.9	4223.5	4177.7	4116.7	4040.4	3945.0	3834.4	3708.5	3571.1	3437.6
55°	4944.6	4944.6	4902.6	4849.2	4776.7	4685.2	4570.7	4441.0	4288.4	4132.0	3960.3
52.5°	5673.3	5673.3	5623.7	5562.7	5478.8	5371.9	5242.2	5089.6	4914.1	4731.0	4528.7
50°	6440.2	6440.2	6383.0	6314.3	6218.9	6093.0	5944.2	5768.7	5574.1	5360.5	5127.7
47.5°	7260.5	7260.5	7195.6	7115.5	7001.1	6856.1	6680.6	6478.4	6257.1	6016.7	5753.5
45°	8103.7	8103.7	8031.2	7939.6	7813.7	7649.6	7455.1	7260.5	6978.2	6699.6	6394.4
42.5°	8981.2	8981.2	8897.2	8794.2	8649.3	8469.9	8248.6	7996.8	7718.3	7405.5	7073.5
40°	9893.0	9893.0	9797.7	9679.4	9519.1	9313.1	9065.1	8782.8	8469.9	8122.7	7756.5
37.5°	10824.0	10824.0	10717.1	10587.4	10408.1	10179.2	9900.7	9587.8	9236.8	8851.5	8447.0
35°	11762.5	11762.5	11644.3	11503.1	11304.7	11052.9	10751.5	10404.3	10015.1	9595.4	9141.4
32.5°	12720.2	12720.2	12590.4	12430.2	12205.1	11926.6	11594.7	11216.9	10824.0	10335.6	9839.6
30°	13666.4	13666.4	13525.2	13349.7	13109.3	12804.1	12441.6	12025.8	11564.1	11064.3	10530.2
27.5°	14597.3	14559.1	14440.9	14253.9	13990.7	13666.4	13273.4	12823.2	12323.4	11774.0	11201.7
25°	15513.0	15471.0	15341.3	15135.2	14852.9	14498.1	14074.6	13593.9	13055.9	12476.0	11850.3
22.5°	16390.5	16344.7	16207.3	15986.1	15684.6	15299.3	14845.3	14330.2	13757.9	13136.0	12476.0
20°	17203.1	17153.5	17012.4	16779.6	16466.8	16058.5	15577.8	15024.6	14414.2	13757.9	13055.9
17.5°	17935.7	17886.1	17737.3	17496.9	17203.1	16749.1	16253.1	15669.4	15024.6	14330.2	13593.9
15°	18580.4	18527.0	18374.4	18134.1	17798.3	17371.0	16848.3	16253.1	15577.8	14845.3	14074.6
12.5°	19129.8	19076.4	18920.0	18679.6	18332.5	17905.1	17371.0	16749.1	16058.5	15299.3	14498.1
10°	19564.8	19511.4	19362.6	19133.7	18775.0	18332.5	17798.3	17203.1	16466.8	15684.6	14852.9
7.5°	19877.6	19828.0	19690.7	19461.8	19133.7	18679.6	18134.1	17496.9	16779.6	15986.1	15135.2
5°	20114.2	20057.0	19919.6	19690.7	19362.6	18920.0	18374.4	17737.3	17012.4	16207.3	15341.3
2.5°	20278.2	20209.6	20057.0	19828.0	19511.4	19076.4	18527.0	17886.1	17153.5	16344.7	15471.0
0°	20324.0	20278.2	20114.2	19877.6	19564.8	19129.8	18580.4	17935.7	17203.1	16390.5	15513.0

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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°	137.4	137.4	133.5	129.7	125.9	118.3	114.5	110.6	106.8	99.2	95.4
85°	290.0	282.3	274.7	267.1	255.6	248.0	236.5	228.9	217.5	206.0	194.6
82.5°	457.8	446.4	431.1	419.7	404.4	385.3	370.1	351.0	331.9	316.7	297.6
80°	641.0	621.9	602.8	583.7	560.8	538.0	515.1	492.2	465.5	438.8	412.1
77.5°	839.4	812.7	785.9	755.4	728.7	698.2	667.7	637.2	602.8	568.5	534.1
75°	1060.6	1026.3	988.2	950.0	915.7	873.7	831.7	789.8	744.0	702.0	656.2
72.5°	1301.0	1259.0	1213.3	1167.5	1117.9	1064.5	1011.1	953.8	900.4	847.0	789.8
70°	1560.5	1510.9	1453.6	1396.4	1335.4	1270.5	1205.6	1137.0	1068.3	999.6	930.9
67.5°	1839.0	1777.9	1709.2	1640.6	1564.3	1488.0	1411.7	1331.5	1247.6	1163.7	1083.5
65°	2136.6	2060.3	1980.1	1892.4	1804.6	1716.9	1625.3	1529.9	1434.5	1335.4	1247.6
62.5°	2468.5	2373.1	2270.1	2163.3	2064.1	1957.2	1858.0	1739.8	1625.3	1514.7	1404.0
60°	2853.8	2727.9	2602.0	2468.5	2342.6	2205.2	2083.1	1953.4	1823.7	1697.8	1568.1
57.5°	3285.0	3124.7	2972.1	2811.9	2644.0	2491.4	2335.0	2178.5	2033.5	1884.8	1743.6
55°	3773.3	3578.7	3388.0	3189.6	2995.0	2804.2	2605.8	2430.3	2251.0	2083.1	1919.1
52.5°	4307.5	4086.2	3849.6	3624.5	3376.5	3140.0	2918.7	2697.4	2487.6	2285.4	2098.4
50°	4879.8	4620.3	4349.4	4074.7	3792.4	3513.9	3246.8	2987.4	2743.2	2506.6	2285.4
47.5°	5474.9	5181.2	4872.1	4559.3	4257.9	3918.3	3597.8	3304.0	3010.3	2743.2	2487.6
45°	6085.4	5753.5	5413.9	5059.1	4704.2	4338.0	3983.2	3624.5	3304.0	2987.4	2697.4
42.5°	6714.9	6341.0	5963.3	5570.3	5177.3	4776.7	4376.1	3983.2	3597.8	3246.8	2918.7
40°	7363.5	6951.5	6520.3	6093.0	5673.3	5215.5	4776.7	4338.0	3918.3	3513.9	3140.0
37.5°	8012.1	7561.9	7096.4	6615.7	6135.0	5673.3	5177.3	4704.2	4257.9	3792.4	3376.5
35°	8664.5	8168.5	7664.9	7142.2	6615.7	6093.0	5570.3	5059.1	4559.3	4074.7	3624.5
32.5°	9320.7	8779.0	8221.9	7664.9	7096.4	6520.3	5963.3	5413.9	4872.1	4349.4	3849.6
30°	9965.5	9378.0	8779.0	8168.5	7561.9	6951.5	6341.0	5753.5	5181.2	4620.3	4086.2
27.5°	10595.1	9965.5	9320.7	8664.5	8012.1	7363.5	6714.9	6085.4	5474.9	4879.8	4307.5
25°	11201.7	10530.2	9839.6	9141.4	8447.0	7756.5	7073.5	6394.4	5753.5	5127.7	4528.7
22.5°	11774.0	11064.3	10335.6	9595.4	8851.5	8122.7	7405.5	6699.6	6016.7	5360.5	4731.0
20°	12323.4	11564.1	10824.0	10015.1	9236.8	8469.9	7718.3	6978.2	6257.1	5574.1	4914.1
17.5°	12823.2	12025.8	11216.9	10404.3	9587.8	8782.8	7996.8	7260.5	6478.4	5768.7	5089.6
15°	13273.4	12441.6	11594.7	10751.5	9900.7	9065.1	8248.6	7455.1	6680.6	5944.2	5242.2
12.5°	13666.4	12804.1	11926.6	11052.9	10179.2	9313.1	8469.9	7649.6	6856.1	6093.0	5371.9
10°	13990.7	13109.3	12205.1	11304.7	10408.1	9519.1	8649.3	7813.7	7001.1	6218.9	5478.8
7.5°	14253.9	13349.7	12430.2	11503.1	10587.4	9679.4	8794.2	7939.6	7115.5	6314.3	5562.7
5°	14440.9	13525.2	12590.4	11644.3	10717.1	9797.7	8897.2	8031.2	7195.6	6383.0	5623.7
2.5°	14559.1	13666.4	12720.2	11762.5	10824.0	9893.0	8981.2	8103.7	7260.5	6440.2	5673.3
0°	14597.3	13666.4	12720.2	11762.5	10824.0	9893.0	8981.2	8103.7	7260.5	6440.2	5673.3

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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°	91.6	83.9	76.3	72.5	64.9	61.0	53.4	45.8	42.0	34.3	26.7
85°	183.1	167.9	156.4	145.0	133.5	118.3	106.8	95.4	80.1	68.7	53.4
82.5°	278.5	259.4	240.4	221.3	202.2	183.1	160.2	141.2	122.1	103.0	80.1
80°	385.3	354.8	328.1	301.4	274.7	248.0	217.5	190.8	160.2	133.5	106.8
77.5°	496.0	461.6	423.5	385.3	347.2	312.9	274.7	240.4	206.0	167.9	133.5
75°	614.3	568.5	526.5	476.9	431.1	381.5	335.7	290.0	248.0	206.0	160.2
72.5°	736.4	679.1	621.9	568.5	511.2	454.0	400.6	343.4	290.0	240.4	190.8
70°	862.3	793.6	724.9	660.0	595.2	526.5	465.5	400.6	335.7	274.7	217.5
67.5°	995.8	915.7	835.5	751.6	679.1	602.8	526.5	454.0	381.5	312.9	248.0
65°	1140.8	1045.4	946.2	858.4	763.1	679.1	595.2	511.2	431.1	347.2	274.7
62.5°	1289.6	1178.9	1068.3	957.6	858.4	751.6	660.0	568.5	476.9	385.3	301.4
60°	1442.2	1316.3	1190.4	1068.3	946.2	835.5	724.9	621.9	526.5	423.5	328.1
57.5°	1598.6	1457.4	1316.3	1178.9	1045.4	915.7	793.6	679.1	568.5	461.6	354.8
55°	1758.8	1598.6	1442.2	1289.6	1140.8	995.8	862.3	736.4	614.3	496.0	385.3
52.5°	1919.1	1743.6	1568.1	1404.0	1247.6	1083.5	930.9	789.8	656.2	534.1	412.1
50°	2083.1	1884.8	1697.8	1514.7	1335.4	1163.7	999.6	847.0	702.0	568.5	438.8
47.5°	2251.0	2033.5	1823.7	1625.3	1434.5	1247.6	1068.3	900.4	744.0	602.8	465.5
45°	2430.3	2178.5	1953.4	1739.8	1529.9	1331.5	1137.0	953.8	789.8	637.2	492.2
42.5°	2605.8	2335.0	2083.1	1858.0	1625.3	1411.7	1205.6	1011.1	831.7	667.7	515.1
40°	2804.2	2491.4	2205.2	1957.2	1716.9	1488.0	1270.5	1064.5	873.7	698.2	538.0
37.5°	2995.0	2644.0	2342.6	2064.1	1804.6	1564.3	1335.4	1117.9	915.7	728.7	560.8
35°	3189.6	2811.9	2468.5	2163.3	1892.4	1640.6	1396.4	1167.5	950.0	755.4	583.7
32.5°	3388.0	2972.1	2602.0	2270.1	1980.1	1709.2	1453.6	1213.3	988.2	785.9	602.8
30°	3578.7	3124.7	2727.9	2373.1	2060.3	1777.9	1510.9	1259.0	1026.3	812.7	621.9
27.5°	3773.3	3285.0	2853.8	2468.5	2136.6	1839.0	1560.5	1301.0	1060.6	839.4	641.0
25°	3960.3	3437.6	2972.1	2560.1	2205.2	1900.0	1613.9	1343.0	1091.2	862.3	656.2
22.5°	4132.0	3571.1	3078.9	2647.8	2277.7	1953.4	1659.6	1381.1	1121.7	885.1	671.5
20°	4288.4	3708.5	3189.6	2735.6	2346.4	2006.8	1697.8	1415.5	1148.4	904.2	686.8
17.5°	4441.0	3834.4	3288.8	2815.7	2403.6	2052.6	1736.0	1442.2	1171.3	919.5	698.2
15°	4570.7	3945.0	3376.5	2884.4	2457.0	2090.8	1766.5	1468.9	1190.4	934.7	705.8
12.5°	4685.2	4040.4	3452.8	2941.6	2499.0	2125.1	1797.0	1491.8	1209.4	946.2	717.3
10°	4776.7	4116.7	3513.9	2991.2	2537.2	2151.8	1816.1	1510.9	1220.9	957.6	724.9
7.5°	4849.2	4177.7	3563.5	3025.5	2563.9	2174.7	1835.2	1522.3	1232.3	965.3	736.4
5°	4902.6	4223.5	3597.8	3052.2	2586.8	2201.4	1858.0	1541.4	1247.6	976.7	736.4
2.5°	4944.6	4257.9	3624.5	3075.1	2602.0	2201.4	1858.0	1541.4	1247.6	976.7	736.4
0°	4944.6	4257.9	3624.5	3075.1	2602.0	2201.4	1858.0	1541.4	1247.6	976.7	736.4

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	19.1	15.3	7.6	0.0
85°	42.0	26.7	15.3	0.0
82.5°	61.0	42.0	19.1	0.0
80°	80.1	53.4	26.7	0.0
77.5°	103.0	68.7	34.3	0.0
75°	122.1	80.1	42.0	0.0
72.5°	141.2	95.4	45.8	0.0
70°	160.2	106.8	53.4	0.0
67.5°	183.1	118.3	61.0	0.0
65°	202.2	133.5	64.9	0.0
62.5°	221.3	145.0	72.5	0.0
60°	240.4	156.4	76.3	0.0
57.5°	259.4	167.9	83.9	0.0
55°	278.5	183.1	91.6	0.0
52.5°	297.6	194.6	95.4	0.0
50°	316.7	206.0	99.2	0.0
47.5°	331.9	217.5	106.8	0.0
45°	351.0	228.9	110.6	0.0
42.5°	370.1	236.5	114.5	0.0
40°	385.3	248.0	118.3	0.0
37.5°	404.4	255.6	125.9	0.0
35°	419.7	267.1	129.7	0.0
32.5°	431.1	274.7	133.5	0.0
30°	446.4	282.3	137.4	0.0
27.5°	457.8	290.0	137.4	0.0
25°	469.3	297.6	141.2	0.0
22.5°	480.7	301.4	145.0	0.0
20°	492.2	309.0	148.8	0.0
17.5°	499.8	312.9	148.8	0.0
15°	507.4	316.7	156.4	0.0
12.5°	511.2	320.5	156.4	0.0
10°	518.9	328.1	156.4	0.0
7.5°	526.5	328.1	156.4	0.0
5°	526.5	328.1	156.4	0.0
2.5°	526.5	328.1	156.4	0.0
0°	526.5	328.1	156.4	0.0

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