

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: P624040

Luminaire Tested: **IFLD-L-SA8B-827-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624040
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-L-SA8B-827-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (128) 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	31060.2 lumens	Max Intensity:	17250.6 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	97.1 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:	13439.4 lumens	Field Lumens:	22006.6 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%

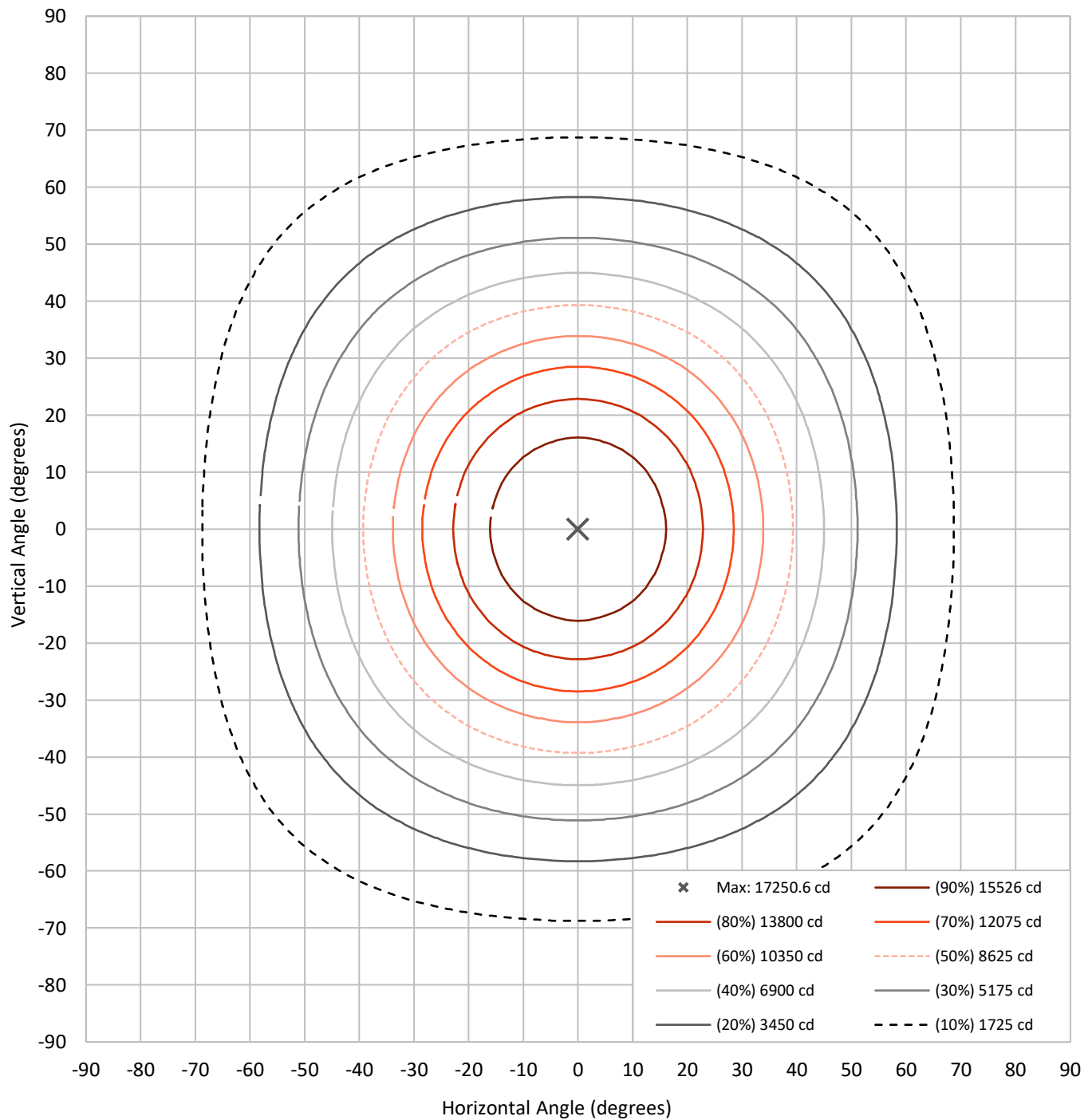
Input Watts (W): 320
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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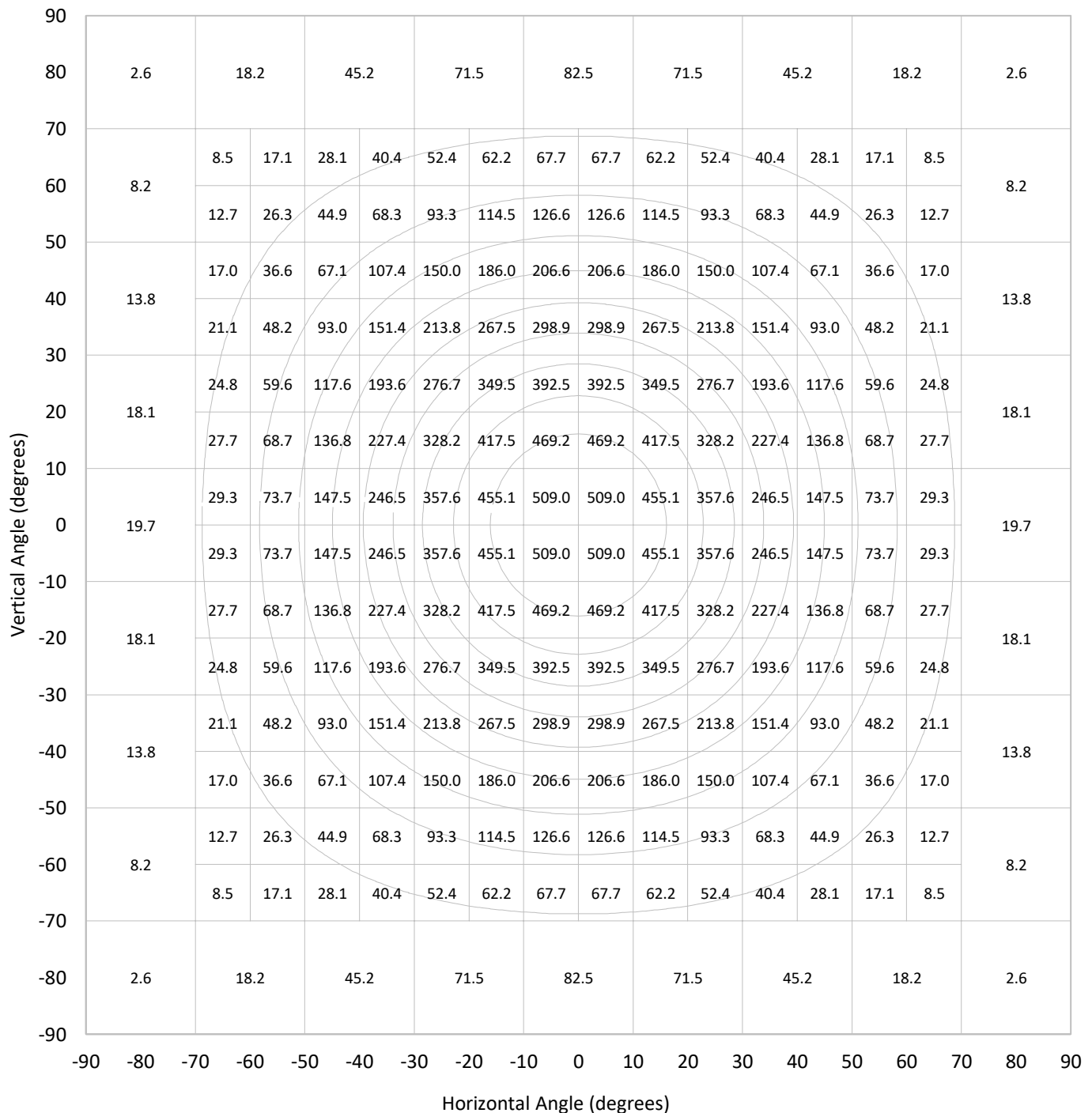
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Iso-Candela Plot



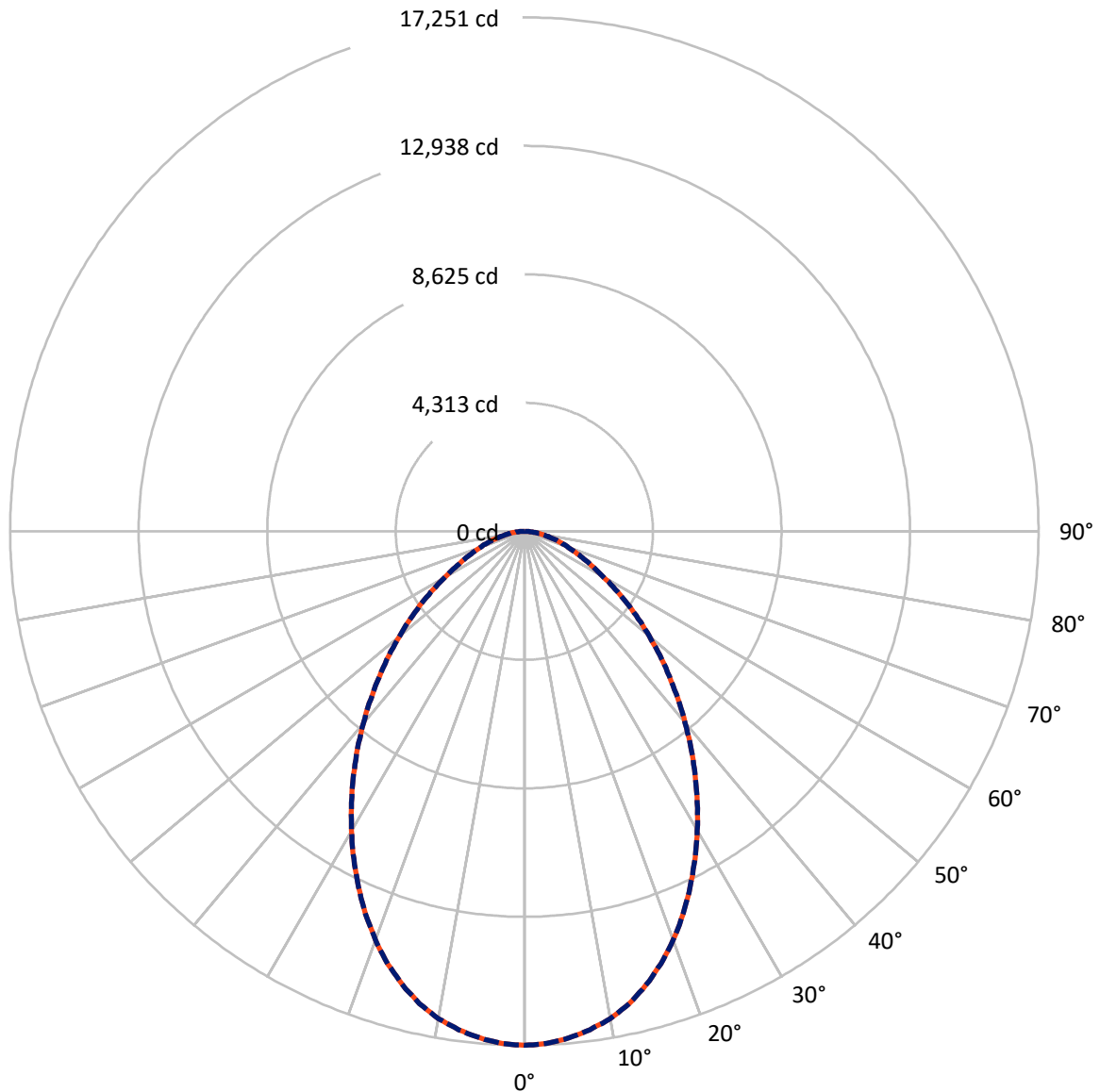
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Lumen Table



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Luminous Intensity Polar Plot

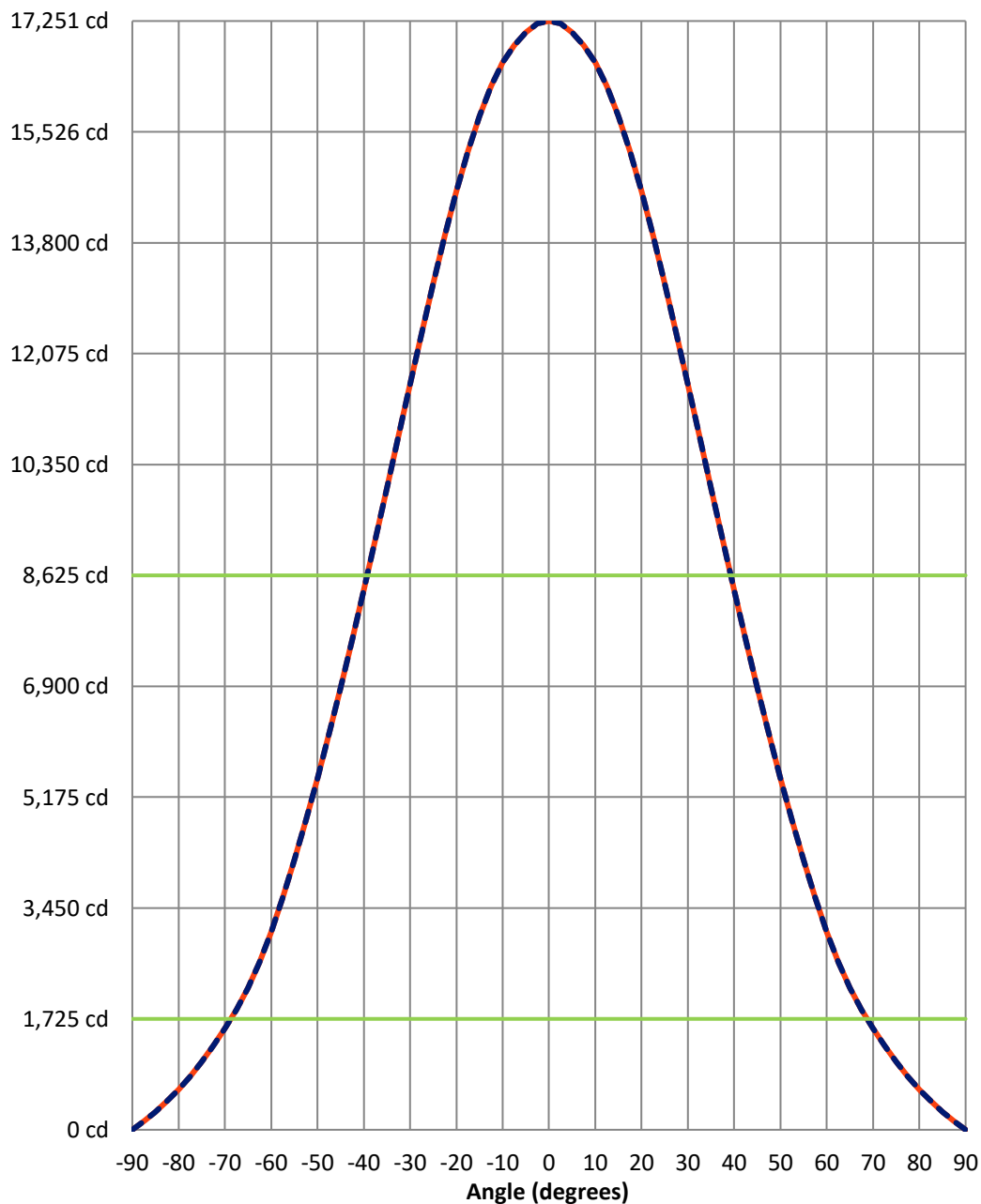


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg

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Luminous Intensity Plot



Beam:

H Angle: 78.6°
V Angle: 78.6°
Lumens: 13439.4
Efficiency: 43.3%

Field:

H Angle: 137.5°
V Angle: 137.5°
Lumens: 22006.6
Efficiency: 70.9%

Spill:

Lumens: 9053.6
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°	132.8	132.8	132.8	132.8	132.8	132.8	132.8	126.3	126.3	123.1	119.8
85°	278.5	278.5	278.5	278.5	278.5	272.0	268.8	265.5	262.3	255.8	252.6
82.5°	446.9	446.9	446.9	446.9	440.4	433.9	430.7	424.2	417.7	408.0	398.3
80°	625.0	625.0	625.0	625.0	615.3	608.8	599.1	592.6	582.9	569.9	557.0
77.5°	829.0	829.0	829.0	819.3	812.8	803.1	793.4	780.4	767.5	751.3	731.9
75°	1058.9	1058.9	1058.9	1046.0	1036.3	1026.6	1010.4	994.2	974.7	952.1	926.2
72.5°	1308.3	1308.3	1308.3	1292.1	1282.4	1266.2	1246.8	1224.1	1201.4	1172.3	1139.9
70°	1577.1	1577.1	1577.1	1557.6	1541.4	1525.3	1499.4	1473.4	1441.1	1408.7	1369.8
67.5°	1868.5	1868.5	1868.5	1845.9	1826.4	1803.8	1774.6	1742.2	1703.4	1658.0	1612.7
65°	2208.5	2208.5	2195.6	2176.2	2153.5	2121.1	2085.5	2040.2	1991.6	1933.3	1871.8
62.5°	2610.1	2610.1	2590.7	2568.0	2538.9	2496.8	2448.2	2389.9	2321.9	2247.4	2172.9
60°	3076.4	3076.4	3053.8	3024.6	2982.5	2930.7	2865.9	2791.4	2707.3	2613.3	2522.7
57.5°	3614.0	3614.0	3584.8	3546.0	3494.2	3429.4	3348.4	3254.5	3147.7	3031.1	2917.7
55°	4196.9	4196.9	4161.3	4115.9	4054.4	3976.7	3879.5	3769.4	3639.9	3507.1	3361.4
52.5°	4815.4	4815.4	4773.3	4721.5	4650.3	4559.6	4449.5	4319.9	4171.0	4015.5	3843.9
50°	5466.3	5466.3	5417.7	5359.5	5278.5	5171.6	5045.3	4896.4	4731.2	4549.9	4352.3
47.5°	6162.6	6162.6	6107.5	6039.5	5942.4	5819.3	5670.3	5498.7	5310.9	5106.9	4883.4
45°	6878.2	6878.2	6816.7	6739.0	6632.1	6492.9	6327.7	6162.6	5922.9	5686.5	5427.5
42.5°	7623.1	7623.1	7551.8	7464.4	7341.3	7189.1	7001.3	6787.6	6551.2	6285.6	6003.9
40°	8397.0	8397.0	8316.1	8215.7	8079.7	7904.8	7694.3	7454.7	7189.1	6894.4	6583.5
37.5°	9187.2	9187.2	9096.5	8986.4	8834.2	8639.9	8403.5	8137.9	7840.0	7512.9	7169.7
35°	9983.8	9983.8	9883.4	9763.6	9595.2	9381.5	9125.6	8831.0	8500.6	8144.4	7759.1
32.5°	10796.6	10796.6	10686.5	10550.5	10359.4	10123.1	9841.3	9520.7	9187.2	8772.7	8351.7
30°	11599.7	11599.7	11479.9	11331.0	11126.9	10867.9	10560.2	10207.2	9815.4	9391.2	8937.8
27.5°	12389.9	12357.5	12257.1	12098.4	11875.0	11599.7	11266.2	10884.1	10459.8	9993.5	9507.8
25°	13167.1	13131.5	13021.4	12846.5	12606.9	12305.7	11946.2	11538.2	11081.6	10589.4	10058.3
22.5°	13911.9	13873.0	13756.5	13568.6	13312.8	12985.7	12600.4	12163.2	11677.5	11149.6	10589.4
20°	14601.7	14559.6	14439.8	14242.2	13976.7	13630.2	13222.1	12752.6	12234.4	11677.5	11081.6
17.5°	15223.4	15181.3	15055.0	14851.0	14601.7	14216.3	13795.3	13299.9	12752.6	12163.2	11538.2
15°	15770.7	15725.4	15595.8	15391.8	15106.9	14744.2	14300.5	13795.3	13222.1	12600.4	11946.2
12.5°	16237.0	16191.7	16058.9	15854.9	15560.2	15197.5	14744.2	14216.3	13630.2	12985.7	12305.7
10°	16606.2	16560.9	16434.6	16240.3	15935.9	15560.2	15106.9	14601.7	13976.7	13312.8	12606.9
7.5°	16871.8	16829.7	16713.1	16518.8	16240.3	15854.9	15391.8	14851.0	14242.2	13568.6	12846.5
5°	17072.5	17024.0	16907.4	16713.1	16434.6	16058.9	15595.8	15055.0	14439.8	13756.5	13021.4
2.5°	17211.8	17153.5	17024.0	16829.7	16560.9	16191.7	15725.4	15181.3	14559.6	13873.0	13131.5
0°	17250.6	17211.8	17072.5	16871.8	16606.2	16237.0	15770.7	15223.4	14601.7	13911.9	13167.1

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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°	116.6	116.6	113.3	110.1	106.9	100.4	97.2	93.9	90.7	84.2	81.0
85°	246.1	239.6	233.2	226.7	217.0	210.5	200.8	194.3	184.6	174.9	165.2
82.5°	388.6	378.9	365.9	356.2	343.3	327.1	314.1	297.9	281.7	268.8	252.6
80°	544.0	527.8	511.7	495.5	476.0	456.6	437.2	417.7	395.1	372.4	349.7
77.5°	712.4	689.8	667.1	641.2	618.5	592.6	566.7	540.8	511.7	482.5	453.4
75°	900.3	871.1	838.7	806.3	777.2	741.6	706.0	670.3	631.5	595.9	557.0
72.5°	1104.3	1068.7	1029.8	990.9	948.8	903.5	858.2	809.6	764.2	718.9	670.3
70°	1324.5	1282.4	1233.8	1185.2	1133.4	1078.4	1023.3	965.0	906.7	848.4	790.2
67.5°	1560.9	1509.1	1450.8	1392.5	1327.7	1263.0	1198.2	1130.2	1058.9	987.7	919.7
65°	1813.5	1748.7	1680.7	1606.2	1531.7	1457.3	1379.5	1298.6	1217.6	1133.4	1058.9
62.5°	2095.2	2014.2	1926.8	1836.1	1751.9	1661.3	1577.1	1476.7	1379.5	1285.6	1191.7
60°	2422.3	2315.4	2208.5	2095.2	1988.3	1871.8	1768.1	1658.0	1547.9	1441.1	1331.0
57.5°	2788.2	2652.2	2522.7	2386.7	2244.2	2114.6	1981.9	1849.1	1726.0	1599.7	1479.9
55°	3202.7	3037.6	2875.6	2707.3	2542.1	2380.2	2211.8	2062.8	1910.6	1768.1	1628.9
52.5°	3656.1	3468.3	3267.5	3076.4	2865.9	2665.2	2477.3	2289.5	2111.4	1939.8	1781.1
50°	4141.8	3921.6	3691.7	3458.5	3218.9	2982.5	2755.8	2535.6	2328.4	2127.6	1939.8
47.5°	4647.0	4397.7	4135.4	3869.8	3614.0	3325.8	3053.8	2804.4	2555.1	2328.4	2111.4
45°	5165.2	4883.4	4595.2	4294.0	3992.9	3682.0	3380.8	3076.4	2804.4	2535.6	2289.5
42.5°	5699.5	5382.1	5061.5	4728.0	4394.4	4054.4	3714.4	3380.8	3053.8	2755.8	2477.3
40°	6250.0	5900.3	5534.3	5171.6	4815.4	4426.8	4054.4	3682.0	3325.8	2982.5	2665.2
37.5°	6800.5	6418.4	6023.3	5615.3	5207.3	4815.4	4394.4	3992.9	3614.0	3218.9	2865.9
35°	7354.3	6933.3	6505.8	6062.2	5615.3	5171.6	4728.0	4294.0	3869.8	3458.5	3076.4
32.5°	7911.3	7451.4	6978.6	6505.8	6023.3	5534.3	5061.5	4595.2	4135.4	3691.7	3267.5
30°	8458.5	7959.8	7451.4	6933.3	6418.4	5900.3	5382.1	4883.4	4397.7	3921.6	3468.3
27.5°	8992.9	8458.5	7911.3	7354.3	6800.5	6250.0	5699.5	5165.2	4647.0	4141.8	3656.1
25°	9507.8	8937.8	8351.7	7759.1	7169.7	6583.5	6003.9	5427.5	4883.4	4352.3	3843.9
22.5°	9993.5	9391.2	8772.7	8144.4	7512.9	6894.4	6285.6	5686.5	5106.9	4549.9	4015.5
20°	10459.8	9815.4	9187.2	8500.6	7840.0	7189.1	6551.2	5922.9	5310.9	4731.2	4171.0
17.5°	10884.1	10207.2	9520.7	8831.0	8137.9	7454.7	6787.6	6162.6	5498.7	4896.4	4319.9
15°	11266.2	10560.2	9841.3	9125.6	8403.5	7694.3	7001.3	6327.7	5670.3	5045.3	4449.5
12.5°	11599.7	10867.9	10123.1	9381.5	8639.9	7904.8	7189.1	6492.9	5819.3	5171.6	4559.6
10°	11875.0	11126.9	10359.4	9595.2	8834.2	8079.7	7341.3	6632.1	5942.4	5278.5	4650.3
7.5°	12098.4	11331.0	10550.5	9763.6	8986.4	8215.7	7464.4	6739.0	6039.5	5359.5	4721.5
5°	12257.1	11479.9	10686.5	9883.4	9096.5	8316.1	7551.8	6816.7	6107.5	5417.7	4773.3
2.5°	12357.5	11599.7	10796.6	9983.8	9187.2	8397.0	7623.1	6878.2	6162.6	5466.3	4815.4
0°	12389.9	11599.7	10796.6	9983.8	9187.2	8397.0	7623.1	6878.2	6162.6	5466.3	4815.4

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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°	77.7	71.2	64.8	61.5	55.1	51.8	45.3	38.9	35.6	29.1	22.7
85°	155.4	142.5	132.8	123.1	113.3	100.4	90.7	81.0	68.0	58.3	45.3
82.5°	236.4	220.2	204.0	187.8	171.6	155.4	136.0	119.8	103.6	87.4	68.0
80°	327.1	301.2	278.5	255.8	233.2	210.5	184.6	161.9	136.0	113.3	90.7
77.5°	421.0	391.8	359.5	327.1	294.7	265.5	233.2	204.0	174.9	142.5	113.3
75°	521.4	482.5	446.9	404.8	365.9	323.8	285.0	246.1	210.5	174.9	136.0
72.5°	625.0	576.4	527.8	482.5	433.9	385.4	340.0	291.5	246.1	204.0	161.9
70°	731.9	673.6	615.3	560.2	505.2	446.9	395.1	340.0	285.0	233.2	184.6
67.5°	845.2	777.2	709.2	638.0	576.4	511.7	446.9	385.4	323.8	265.5	210.5
65°	968.3	887.3	803.1	728.6	647.7	576.4	505.2	433.9	365.9	294.7	233.2
62.5°	1094.6	1000.6	906.7	812.8	728.6	638.0	560.2	482.5	404.8	327.1	255.8
60°	1224.1	1117.2	1010.4	906.7	803.1	709.2	615.3	527.8	446.9	359.5	278.5
57.5°	1356.9	1237.0	1117.2	1000.6	887.3	777.2	673.6	576.4	482.5	391.8	301.2
55°	1492.9	1356.9	1224.1	1094.6	968.3	845.2	731.9	625.0	521.4	421.0	327.1
52.5°	1628.9	1479.9	1331.0	1191.7	1058.9	919.7	790.2	670.3	557.0	453.4	349.7
50°	1768.1	1599.7	1441.1	1285.6	1133.4	987.7	848.4	718.9	595.9	482.5	372.4
47.5°	1910.6	1726.0	1547.9	1379.5	1217.6	1058.9	906.7	764.2	631.5	511.7	395.1
45°	2062.8	1849.1	1658.0	1476.7	1298.6	1130.2	965.0	809.6	670.3	540.8	417.7
42.5°	2211.8	1981.9	1768.1	1577.1	1379.5	1198.2	1023.3	858.2	706.0	566.7	437.2
40°	2380.2	2114.6	1871.8	1661.3	1457.3	1263.0	1078.4	903.5	741.6	592.6	456.6
37.5°	2542.1	2244.2	1988.3	1751.9	1531.7	1327.7	1133.4	948.8	777.2	618.5	476.0
35°	2707.3	2386.7	2095.2	1836.1	1606.2	1392.5	1185.2	990.9	806.3	641.2	495.5
32.5°	2875.6	2522.7	2208.5	1926.8	1680.7	1450.8	1233.8	1029.8	838.7	667.1	511.7
30°	3037.6	2652.2	2315.4	2014.2	1748.7	1509.1	1282.4	1068.7	871.1	689.8	527.8
27.5°	3202.7	2788.2	2422.3	2095.2	1813.5	1560.9	1324.5	1104.3	900.3	712.4	544.0
25°	3361.4	2917.7	2522.7	2172.9	1871.8	1612.7	1369.8	1139.9	926.2	731.9	557.0
22.5°	3507.1	3031.1	2613.3	2247.4	1933.3	1658.0	1408.7	1172.3	952.1	751.3	569.9
20°	3639.9	3147.7	2707.3	2321.9	1991.6	1703.4	1441.1	1201.4	974.7	767.5	582.9
17.5°	3769.4	3254.5	2791.4	2389.9	2040.2	1742.2	1473.4	1224.1	994.2	780.4	592.6
15°	3879.5	3348.4	2865.9	2448.2	2085.5	1774.6	1499.4	1246.8	1010.4	793.4	599.1
12.5°	3976.7	3429.4	2930.7	2496.8	2121.1	1803.8	1525.3	1266.2	1026.6	803.1	608.8
10°	4054.4	3494.2	2982.5	2538.9	2153.5	1826.4	1541.4	1282.4	1036.3	812.8	615.3
7.5°	4115.9	3546.0	3024.6	2568.0	2176.2	1845.9	1557.6	1292.1	1046.0	819.3	625.0
5°	4161.3	3584.8	3053.8	2590.7	2195.6	1868.5	1577.1	1308.3	1058.9	829.0	625.0
2.5°	4196.9	3614.0	3076.4	2610.1	2208.5	1868.5	1577.1	1308.3	1058.9	829.0	625.0
0°	4196.9	3614.0	3076.4	2610.1	2208.5	1868.5	1577.1	1308.3	1058.9	829.0	625.0

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	16.2	13.0	6.5	0.0
85°	35.6	22.7	13.0	0.0
82.5°	51.8	35.6	16.2	0.0
80°	68.0	45.3	22.7	0.0
77.5°	87.4	58.3	29.1	0.0
75°	103.6	68.0	35.6	0.0
72.5°	119.8	81.0	38.9	0.0
70°	136.0	90.7	45.3	0.0
67.5°	155.4	100.4	51.8	0.0
65°	171.6	113.3	55.1	0.0
62.5°	187.8	123.1	61.5	0.0
60°	204.0	132.8	64.8	0.0
57.5°	220.2	142.5	71.2	0.0
55°	236.4	155.4	77.7	0.0
52.5°	252.6	165.2	81.0	0.0
50°	268.8	174.9	84.2	0.0
47.5°	281.7	184.6	90.7	0.0
45°	297.9	194.3	93.9	0.0
42.5°	314.1	200.8	97.2	0.0
40°	327.1	210.5	100.4	0.0
37.5°	343.3	217.0	106.9	0.0
35°	356.2	226.7	110.1	0.0
32.5°	365.9	233.2	113.3	0.0
30°	378.9	239.6	116.6	0.0
27.5°	388.6	246.1	116.6	0.0
25°	398.3	252.6	119.8	0.0
22.5°	408.0	255.8	123.1	0.0
20°	417.7	262.3	126.3	0.0
17.5°	424.2	265.5	126.3	0.0
15°	430.7	268.8	132.8	0.0
12.5°	433.9	272.0	132.8	0.0
10°	440.4	278.5	132.8	0.0
7.5°	446.9	278.5	132.8	0.0
5°	446.9	278.5	132.8	0.0
2.5°	446.9	278.5	132.8	0.0
0°	446.9	278.5	132.8	0.0

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