

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: P624057

Luminaire Tested: **IFLD-S-SA6E-830-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624057
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA6E-830-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (96) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

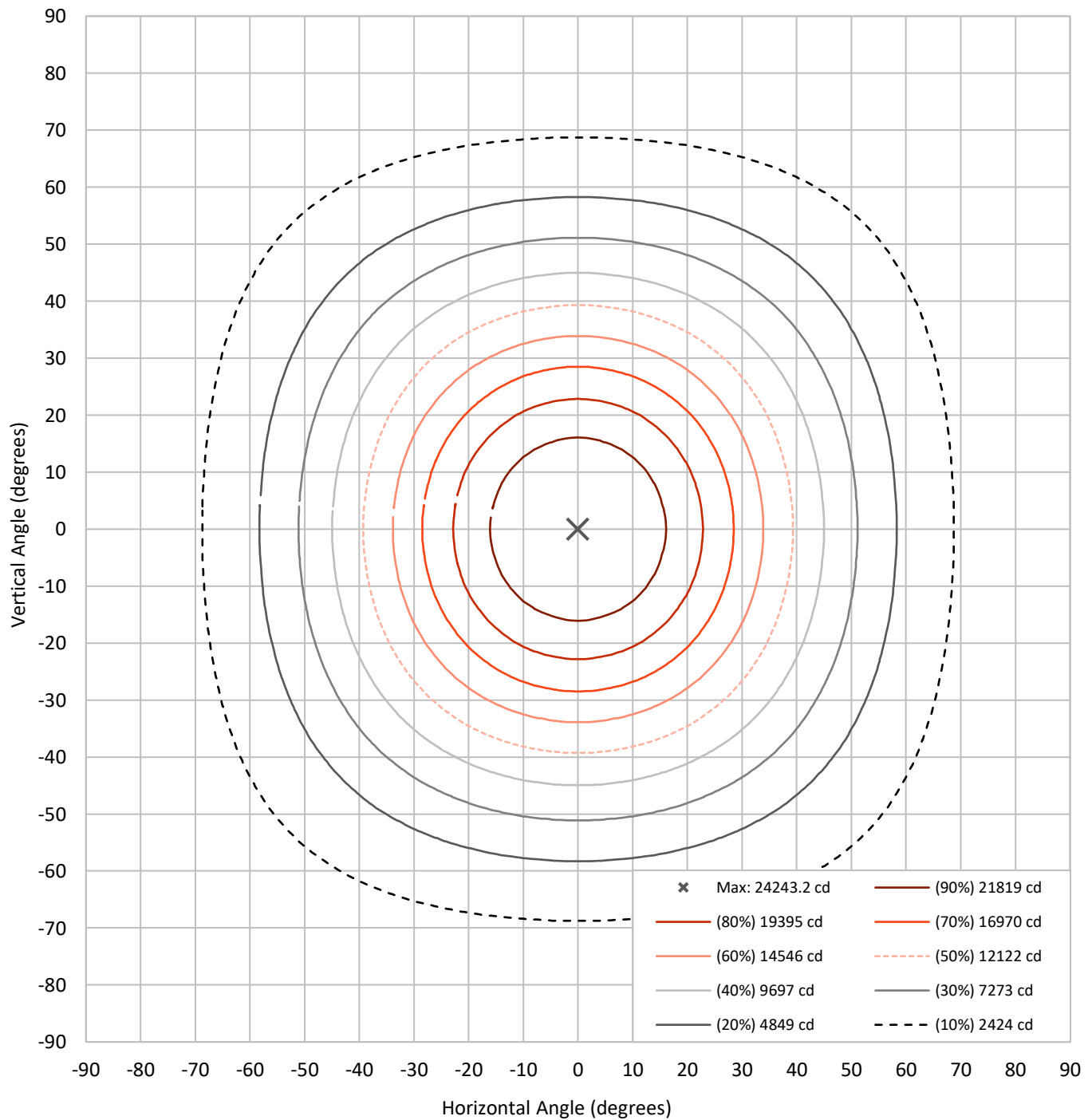
Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	43650.3 lumens	Max Intensity:	24243.2 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	94.0 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' 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:	18887.1 lumens	Field Lumens:	30926.9 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%
Input Watts (W):	464.2		
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		



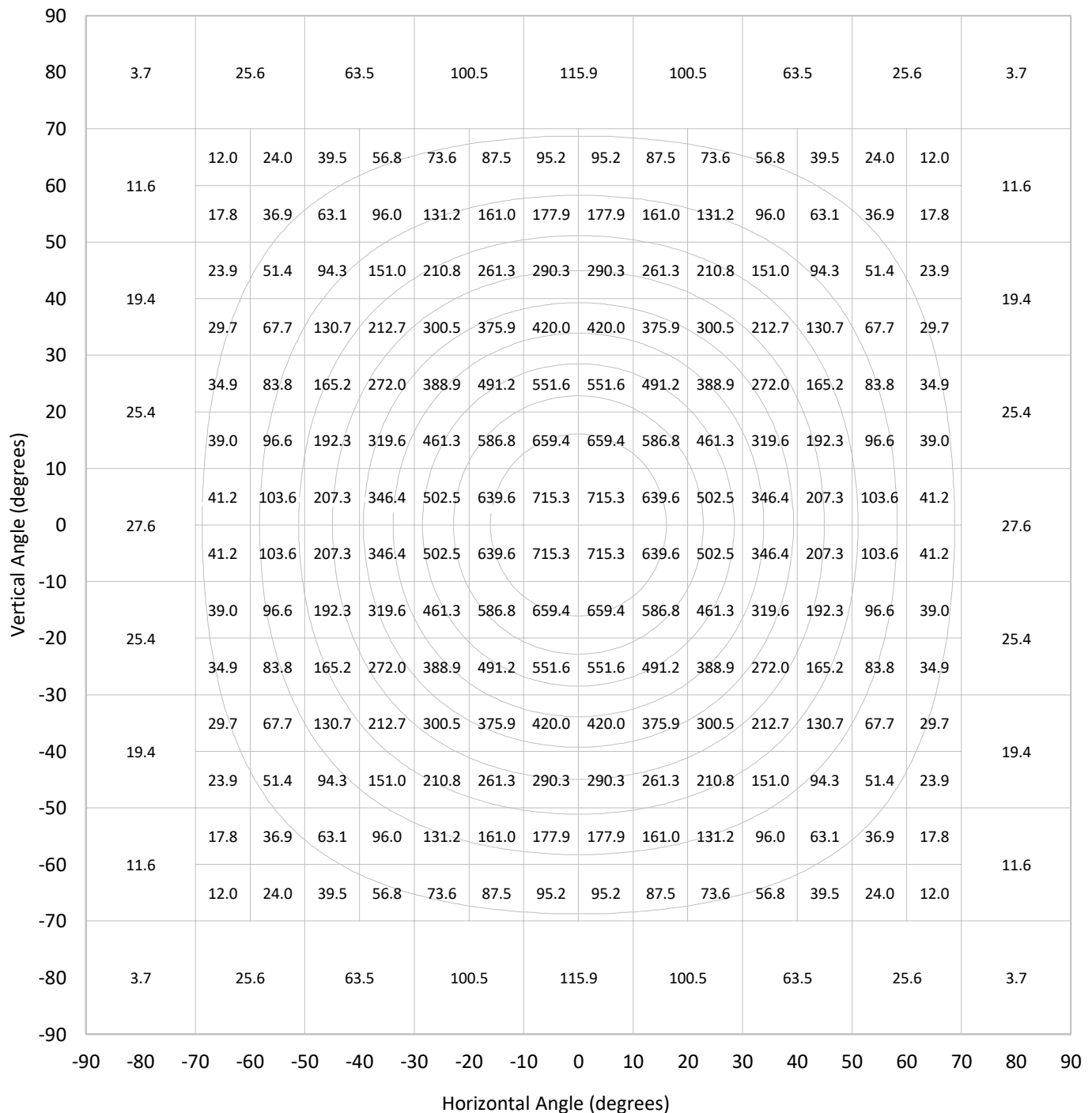
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Iso-Candela Plot



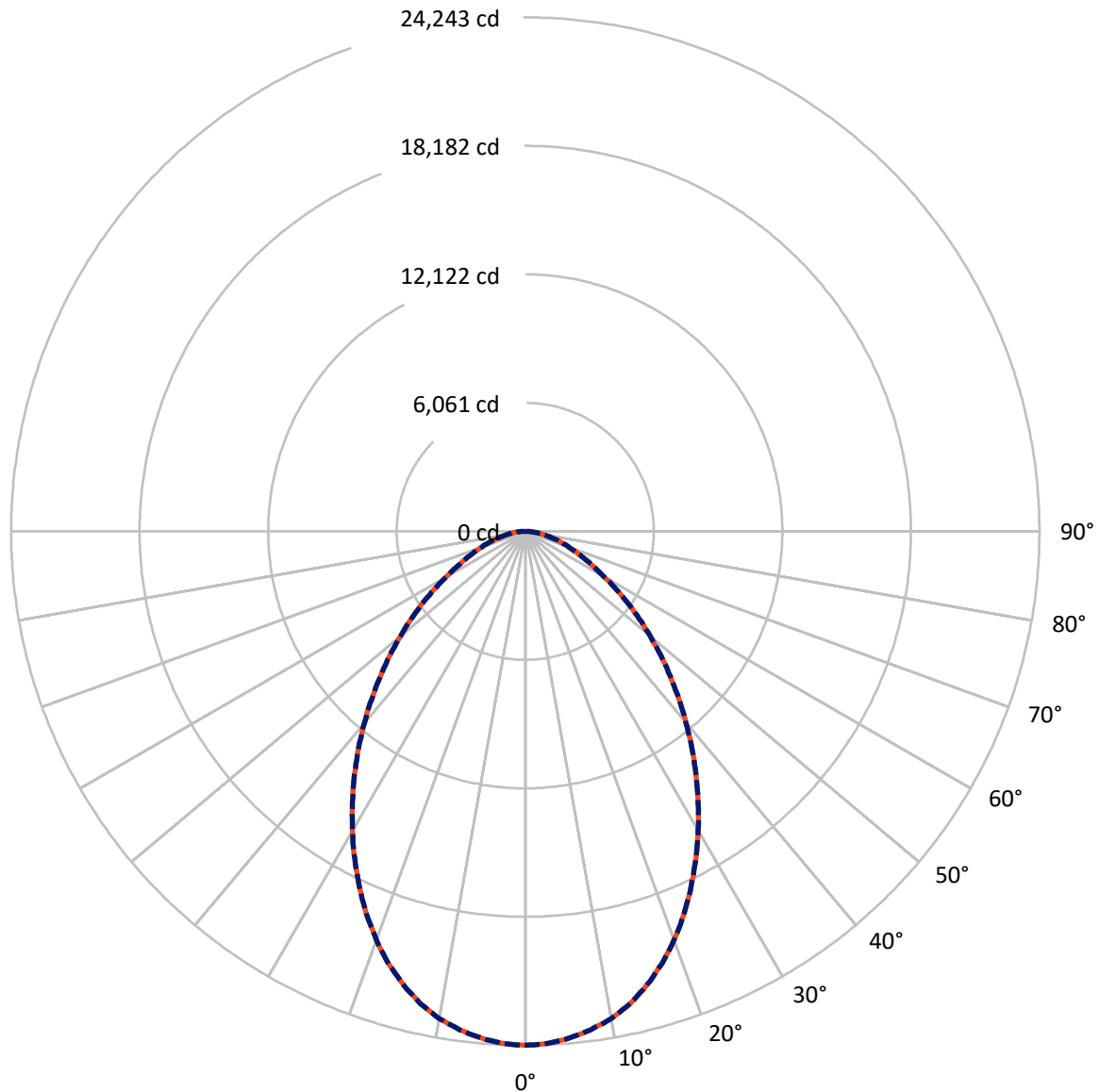
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Lumen Table



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Luminous Intensity Polar Plot

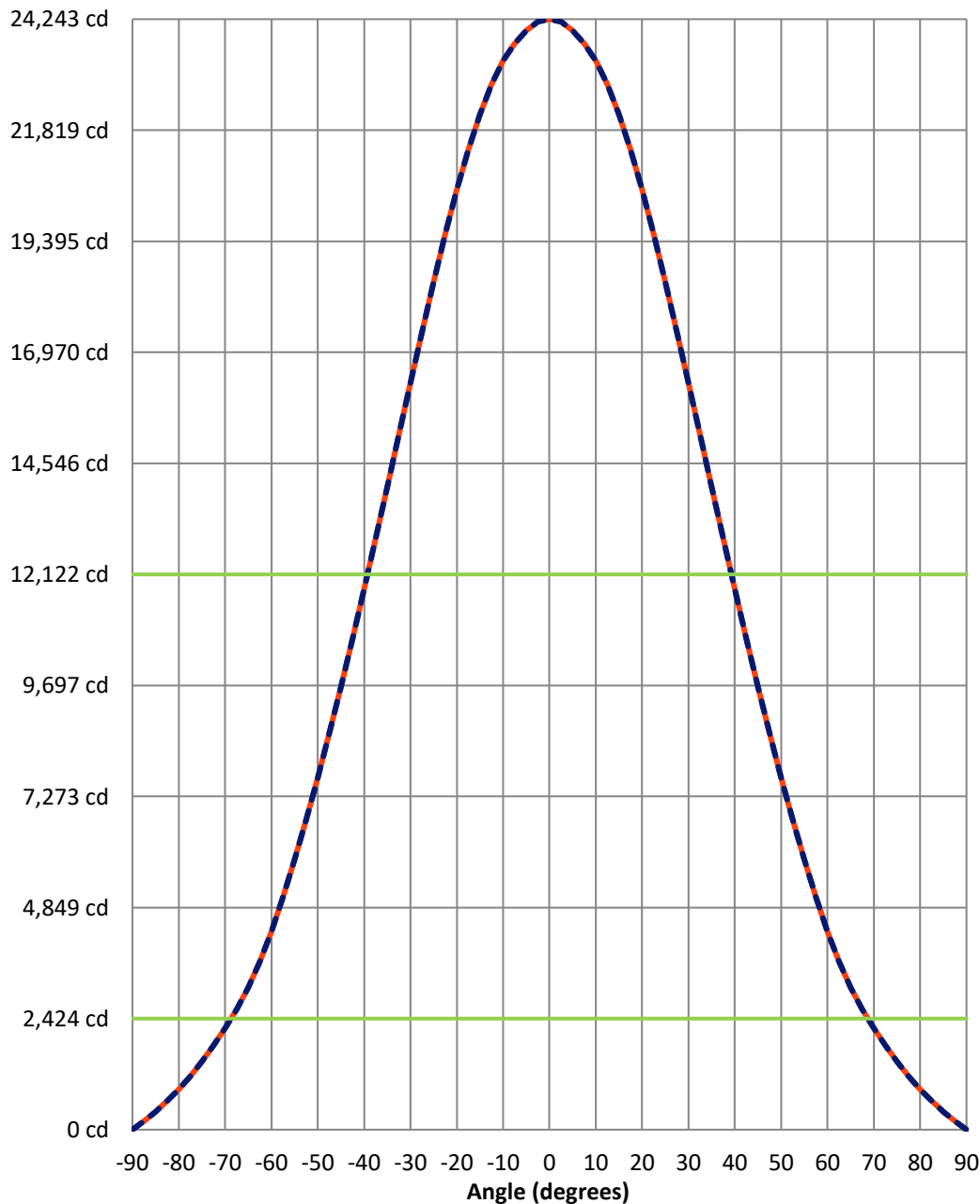


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg

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Luminous Intensity Plot



Beam:

H Angle: 78.6°
V Angle: 78.6°
Lumens: 18887.1
Efficiency: 43.3%

Field:

H Angle: 137.5°
V Angle: 137.5°
Lumens: 30926.9
Efficiency: 70.9%

Spill:

Lumens: 12723.4
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°	186.6	186.6	186.6	186.6	186.6	186.6	186.6	177.5	177.5	172.9	168.4
85°	391.4	391.4	391.4	391.4	391.4	382.3	377.7	373.2	368.6	359.5	355.0
82.5°	628.0	628.0	628.0	628.0	618.9	609.8	605.3	596.2	587.1	573.4	559.8
80°	878.3	878.3	878.3	878.3	864.7	855.6	841.9	832.8	819.2	801.0	782.8
77.5°	1165.1	1165.1	1165.1	1151.4	1142.3	1128.6	1115.0	1096.8	1078.6	1055.8	1028.5
75°	1488.2	1488.2	1488.2	1470.0	1456.3	1442.7	1419.9	1397.2	1369.8	1338.0	1301.6
72.5°	1838.6	1838.6	1838.6	1815.8	1802.2	1779.4	1752.1	1720.3	1688.4	1647.5	1602.0
70°	2216.3	2216.3	2216.3	2189.0	2166.3	2143.5	2107.1	2070.7	2025.2	1979.7	1925.1
67.5°	2625.9	2625.9	2625.9	2594.1	2566.8	2534.9	2493.9	2448.4	2393.8	2330.1	2266.4
65°	3103.8	3103.8	3085.6	3058.3	3026.4	2980.9	2930.8	2867.1	2798.9	2716.9	2630.5
62.5°	3668.1	3668.1	3640.8	3608.9	3568.0	3508.8	3440.6	3358.6	3263.1	3158.4	3053.7
60°	4323.4	4323.4	4291.6	4250.6	4191.5	4118.7	4027.6	3923.0	3804.6	3672.7	3545.2
57.5°	5078.9	5078.9	5038.0	4983.3	4910.5	4819.5	4705.7	4573.8	4423.6	4259.7	4100.4
55°	5898.1	5898.1	5848.0	5784.3	5697.8	5588.6	5452.1	5297.4	5115.3	4928.7	4723.9
52.5°	6767.3	6767.3	6708.2	6635.4	6535.2	6407.8	6253.1	6071.0	5861.7	5643.2	5402.0
50°	7682.1	7682.1	7613.8	7531.9	7418.1	7267.9	7090.5	6881.1	6649.0	6394.1	6116.5
47.5°	8660.5	8660.5	8583.2	8487.6	8351.1	8178.1	7968.8	7727.6	7463.6	7176.9	6862.9
45°	9666.3	9666.3	9579.8	9470.6	9320.4	9124.7	8892.6	8660.5	8323.8	7991.5	7627.5
42.5°	10713.0	10713.0	10612.9	10490.0	10317.1	10103.2	9839.3	9538.9	9206.7	8833.5	8437.5
40°	11800.7	11800.7	11687.0	11545.9	11354.7	11109.0	10813.2	10476.4	10103.2	9689.1	9252.2
37.5°	12911.2	12911.2	12783.7	12629.0	12415.1	12142.1	11809.8	11436.7	11018.0	10558.3	10075.9
35°	14030.7	14030.7	13889.6	13721.3	13484.6	13184.2	12824.7	12410.6	11946.4	11445.8	10904.2
32.5°	15173.0	15173.0	15018.3	14827.1	14558.6	14226.4	13830.5	13379.9	12911.2	12328.6	11737.0
30°	16301.7	16301.7	16133.3	15923.9	15637.2	15273.1	14840.8	14344.7	13794.1	13197.9	12560.7
27.5°	17412.1	17366.6	17225.5	17002.5	16688.5	16301.7	15832.9	15295.9	14699.7	14044.4	13361.7
25°	18504.3	18454.3	18299.6	18053.8	17717.0	17293.8	16788.6	16215.2	15573.5	14881.8	14135.4
22.5°	19551.1	19496.5	19332.6	19068.7	18709.1	18249.5	17707.9	17093.5	16410.9	15669.1	14881.8
20°	20520.4	20461.3	20292.9	20015.3	19642.1	19155.1	18581.7	17921.8	17193.7	16410.9	15573.5
17.5°	21394.2	21335.1	21157.6	20870.9	20520.4	19978.9	19387.2	18690.9	17921.8	17093.5	16215.2
15°	22163.3	22099.6	21917.6	21630.9	21230.4	20720.7	20097.2	19387.2	18581.7	17707.9	16788.6
12.5°	22818.7	22755.0	22568.4	22281.7	21867.5	21357.8	20720.7	19978.9	19155.1	18249.5	17293.8
10°	23337.5	23273.8	23096.3	22823.2	22395.4	21867.5	21230.4	20520.4	19642.1	18709.1	17717.0
7.5°	23710.7	23651.5	23487.7	23214.6	22823.2	22281.7	21630.9	20870.9	20015.3	19068.7	18053.8
5°	23992.8	23924.6	23760.7	23487.7	23096.3	22568.4	21917.6	21157.6	20292.9	19332.6	18299.6
2.5°	24188.5	24106.6	23924.6	23651.5	23273.8	22755.0	22099.6	21335.1	20461.3	19496.5	18454.3
0°	24243.2	24188.5	23992.8	23710.7	23337.5	22818.7	22163.3	21394.2	20520.4	19551.1	18504.3

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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°	163.8	163.8	159.3	154.7	150.2	141.1	136.5	132.0	127.4	118.3	113.8
85°	345.9	336.8	327.7	318.6	304.9	295.8	282.2	273.1	259.4	245.8	232.1
82.5°	546.1	532.5	514.3	500.6	482.4	459.7	441.4	418.7	395.9	377.7	355.0
80°	764.6	741.8	719.1	696.3	669.0	641.7	614.4	587.1	555.2	523.4	491.5
77.5°	1001.2	969.4	937.5	901.1	869.2	832.8	796.4	760.0	719.1	678.1	637.1
75°	1265.2	1224.2	1178.7	1133.2	1092.2	1042.2	992.1	942.1	887.4	837.4	782.8
72.5°	1551.9	1501.8	1447.2	1392.6	1333.4	1269.7	1206.0	1137.7	1074.0	1010.3	942.1
70°	1861.4	1802.2	1733.9	1665.7	1592.8	1515.5	1438.1	1356.2	1274.3	1192.4	1110.4
67.5°	2193.6	2120.8	2038.8	1956.9	1865.9	1774.9	1683.9	1588.3	1488.2	1388.1	1292.5
65°	2548.6	2457.5	2362.0	2257.3	2152.6	2047.9	1938.7	1824.9	1711.2	1592.8	1488.2
62.5°	2944.5	2830.7	2707.8	2580.4	2462.1	2334.7	2216.3	2075.3	1938.7	1806.7	1674.8
60°	3404.1	3254.0	3103.8	2944.5	2794.3	2630.5	2484.8	2330.1	2175.4	2025.2	1870.5
57.5°	3918.4	3727.3	3545.2	3354.1	3153.8	2971.8	2785.2	2598.6	2425.7	2248.2	2079.8
55°	4500.9	4268.8	4041.3	3804.6	3572.5	3345.0	3108.3	2899.0	2685.1	2484.8	2289.2
52.5°	5138.1	4874.1	4592.0	4323.4	4027.6	3745.5	3481.5	3217.6	2967.2	2726.0	2503.0
50°	5820.7	5511.3	5188.1	4860.5	4523.7	4191.5	3872.9	3563.4	3272.2	2990.0	2726.0
47.5°	6530.7	6180.3	5811.6	5438.4	5078.9	4673.9	4291.6	3941.2	3590.7	3272.2	2967.2
45°	7258.8	6862.9	6457.9	6034.6	5611.4	5174.5	4751.2	4323.4	3941.2	3563.4	3217.6
42.5°	8009.8	7563.8	7113.2	6644.5	6175.7	5697.8	5220.0	4751.2	4291.6	3872.9	3481.5
40°	8783.4	8291.9	7777.7	7267.9	6767.3	6221.2	5697.8	5174.5	4673.9	4191.5	3745.5
37.5°	9557.1	9020.1	8464.9	7891.4	7318.0	6767.3	6175.7	5611.4	5078.9	4523.7	4027.6
35°	10335.3	9743.7	9142.9	8519.5	7891.4	7267.9	6644.5	6034.6	5438.4	4860.5	4323.4
32.5°	11118.1	10471.8	9807.4	9142.9	8464.9	7777.7	7113.2	6457.9	5811.6	5188.1	4592.0
30°	11887.2	11186.3	10471.8	9743.7	9020.1	8291.9	7563.8	6862.9	6180.3	5511.3	4874.1
27.5°	12638.1	11887.2	11118.1	10335.3	9557.1	8783.4	8009.8	7258.8	6530.7	5820.7	5138.1
25°	13361.7	12560.7	11737.0	10904.2	10075.9	9252.2	8437.5	7627.5	6862.9	6116.5	5402.0
22.5°	14044.4	13197.9	12328.6	11445.8	10558.3	9689.1	8833.5	7991.5	7176.9	6394.1	5643.2
20°	14699.7	13794.1	12911.2	11946.4	11018.0	10103.2	9206.7	8323.8	7463.6	6649.0	5861.7
17.5°	15295.9	14344.7	13379.9	12410.6	11436.7	10476.4	9538.9	8660.5	7727.6	6881.1	6071.0
15°	15832.9	14840.8	13830.5	12824.7	11809.8	10813.2	9839.3	8892.6	7968.8	7090.5	6253.1
12.5°	16301.7	15273.1	14226.4	13184.2	12142.1	11109.0	10103.2	9124.7	8178.1	7267.9	6407.8
10°	16688.5	15637.2	14558.6	13484.6	12415.1	11354.7	10317.1	9320.4	8351.1	7418.1	6535.2
7.5°	17002.5	15923.9	14827.1	13721.3	12629.0	11545.9	10490.0	9470.6	8487.6	7531.9	6635.4
5°	17225.5	16133.3	15018.3	13889.6	12783.7	11687.0	10612.9	9579.8	8583.2	7613.8	6708.2
2.5°	17366.6	16301.7	15173.0	14030.7	12911.2	11800.7	10713.0	9666.3	8660.5	7682.1	6767.3
0°	17412.1	16301.7	15173.0	14030.7	12911.2	11800.7	10713.0	9666.3	8660.5	7682.1	6767.3

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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°	109.2	100.1	91.0	86.5	77.4	72.8	63.7	54.6	50.1	41.0	31.9
85°	218.4	200.2	186.6	172.9	159.3	141.1	127.4	113.8	95.6	81.9	63.7
82.5°	332.2	309.5	286.7	264.0	241.2	218.4	191.1	168.4	145.6	122.9	95.6
80°	459.7	423.2	391.4	359.5	327.7	295.8	259.4	227.5	191.1	159.3	127.4
77.5°	591.6	550.7	505.2	459.7	414.1	373.2	327.7	286.7	245.8	200.2	159.3
75°	732.7	678.1	628.0	568.9	514.3	455.1	400.5	345.9	295.8	245.8	191.1
72.5°	878.3	810.1	741.8	678.1	609.8	541.6	477.9	409.6	345.9	286.7	227.5
70°	1028.5	946.6	864.7	787.3	710.0	628.0	555.2	477.9	400.5	327.7	259.4
67.5°	1187.8	1092.2	996.7	896.5	810.1	719.1	628.0	541.6	455.1	373.2	295.8
65°	1360.7	1247.0	1128.6	1024.0	910.2	810.1	710.0	609.8	514.3	414.1	327.7
62.5°	1538.2	1406.3	1274.3	1142.3	1024.0	896.5	787.3	678.1	568.9	459.7	359.5
60°	1720.3	1570.1	1419.9	1274.3	1128.6	996.7	864.7	741.8	628.0	505.2	391.4
57.5°	1906.9	1738.5	1570.1	1406.3	1247.0	1092.2	946.6	810.1	678.1	550.7	423.2
55°	2098.0	1906.9	1720.3	1538.2	1360.7	1187.8	1028.5	878.3	732.7	591.6	459.7
52.5°	2289.2	2079.8	1870.5	1674.8	1488.2	1292.5	1110.4	942.1	782.8	637.1	491.5
50°	2484.8	2248.2	2025.2	1806.7	1592.8	1388.1	1192.4	1010.3	837.4	678.1	523.4
47.5°	2685.1	2425.7	2175.4	1938.7	1711.2	1488.2	1274.3	1074.0	887.4	719.1	555.2
45°	2899.0	2598.6	2330.1	2075.3	1824.9	1588.3	1356.2	1137.7	942.1	760.0	587.1
42.5°	3108.3	2785.2	2484.8	2216.3	1938.7	1683.9	1438.1	1206.0	992.1	796.4	614.4
40°	3345.0	2971.8	2630.5	2334.7	2047.9	1774.9	1515.5	1269.7	1042.2	832.8	641.7
37.5°	3572.5	3153.8	2794.3	2462.1	2152.6	1865.9	1592.8	1333.4	1092.2	869.2	669.0
35°	3804.6	3354.1	2944.5	2580.4	2257.3	1956.9	1665.7	1392.6	1133.2	901.1	696.3
32.5°	4041.3	3545.2	3103.8	2707.8	2362.0	2038.8	1733.9	1447.2	1178.7	937.5	719.1
30°	4268.8	3727.3	3254.0	2830.7	2457.5	2120.8	1802.2	1501.8	1224.2	969.4	741.8
27.5°	4500.9	3918.4	3404.1	2944.5	2548.6	2193.6	1861.4	1551.9	1265.2	1001.2	764.6
25°	4723.9	4100.4	3545.2	3053.7	2630.5	2266.4	1925.1	1602.0	1301.6	1028.5	782.8
22.5°	4928.7	4259.7	3672.7	3158.4	2716.9	2330.1	1979.7	1647.5	1338.0	1055.8	801.0
20°	5115.3	4423.6	3804.6	3263.1	2798.9	2393.8	2025.2	1688.4	1369.8	1078.6	819.2
17.5°	5297.4	4573.8	3923.0	3358.6	2867.1	2448.4	2070.7	1720.3	1397.2	1096.8	832.8
15°	5452.1	4705.7	4027.6	3440.6	2930.8	2493.9	2107.1	1752.1	1419.9	1115.0	841.9
12.5°	5588.6	4819.5	4118.7	3508.8	2980.9	2534.9	2143.5	1779.4	1442.7	1128.6	855.6
10°	5697.8	4910.5	4191.5	3568.0	3026.4	2566.8	2166.3	1802.2	1456.3	1142.3	864.7
7.5°	5784.3	4983.3	4250.6	3608.9	3058.3	2594.1	2189.0	1815.8	1470.0	1151.4	878.3
5°	5848.0	5038.0	4291.6	3640.8	3085.6	2625.9	2216.3	1838.6	1488.2	1165.1	878.3
2.5°	5898.1	5078.9	4323.4	3668.1	3103.8	2625.9	2216.3	1838.6	1488.2	1165.1	878.3
0°	5898.1	5078.9	4323.4	3668.1	3103.8	2625.9	2216.3	1838.6	1488.2	1165.1	878.3

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	22.8	18.2	9.1	0.0
85°	50.1	31.9	18.2	0.0
82.5°	72.8	50.1	22.8	0.0
80°	95.6	63.7	31.9	0.0
77.5°	122.9	81.9	41.0	0.0
75°	145.6	95.6	50.1	0.0
72.5°	168.4	113.8	54.6	0.0
70°	191.1	127.4	63.7	0.0
67.5°	218.4	141.1	72.8	0.0
65°	241.2	159.3	77.4	0.0
62.5°	264.0	172.9	86.5	0.0
60°	286.7	186.6	91.0	0.0
57.5°	309.5	200.2	100.1	0.0
55°	332.2	218.4	109.2	0.0
52.5°	355.0	232.1	113.8	0.0
50°	377.7	245.8	118.3	0.0
47.5°	395.9	259.4	127.4	0.0
45°	418.7	273.1	132.0	0.0
42.5°	441.4	282.2	136.5	0.0
40°	459.7	295.8	141.1	0.0
37.5°	482.4	304.9	150.2	0.0
35°	500.6	318.6	154.7	0.0
32.5°	514.3	327.7	159.3	0.0
30°	532.5	336.8	163.8	0.0
27.5°	546.1	345.9	163.8	0.0
25°	559.8	355.0	168.4	0.0
22.5°	573.4	359.5	172.9	0.0
20°	587.1	368.6	177.5	0.0
17.5°	596.2	373.2	177.5	0.0
15°	605.3	377.7	186.6	0.0
12.5°	609.8	382.3	186.6	0.0
10°	618.9	391.4	186.6	0.0
7.5°	628.0	391.4	186.6	0.0
5°	628.0	391.4	186.6	0.0
2.5°	628.0	391.4	186.6	0.0
0°	628.0	391.4	186.6	0.0

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