

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: P623868

Luminaire Tested: **IFLD-L-SA8D-727-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P623868
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-L-SA8D-727-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (128) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

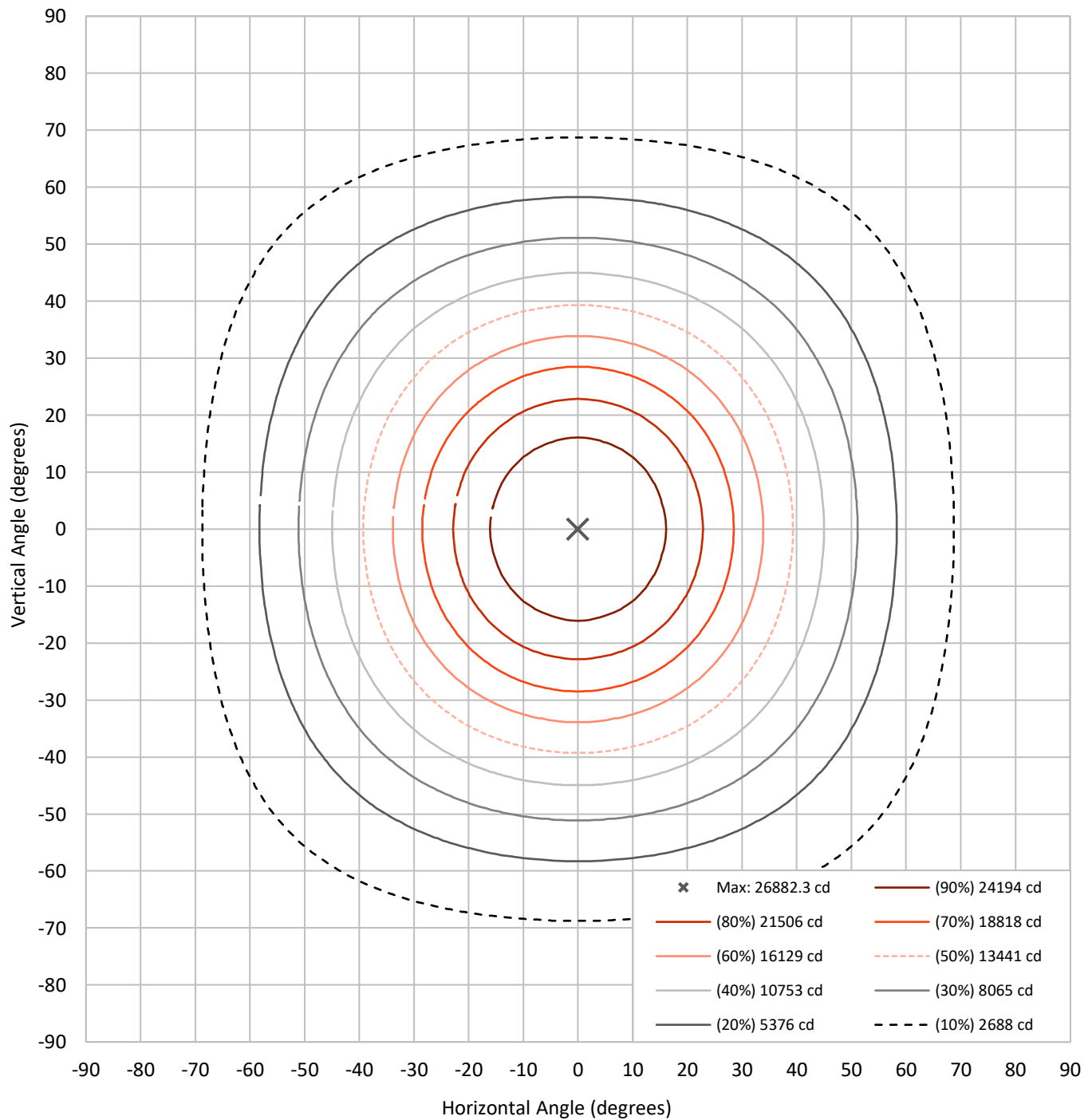
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	48402.2 lumens	Max Intensity:	26882.3 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	99.1 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	20943.2 lumens	Field Lumens:	34293.7 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%
Input Watts (W):	488.3		
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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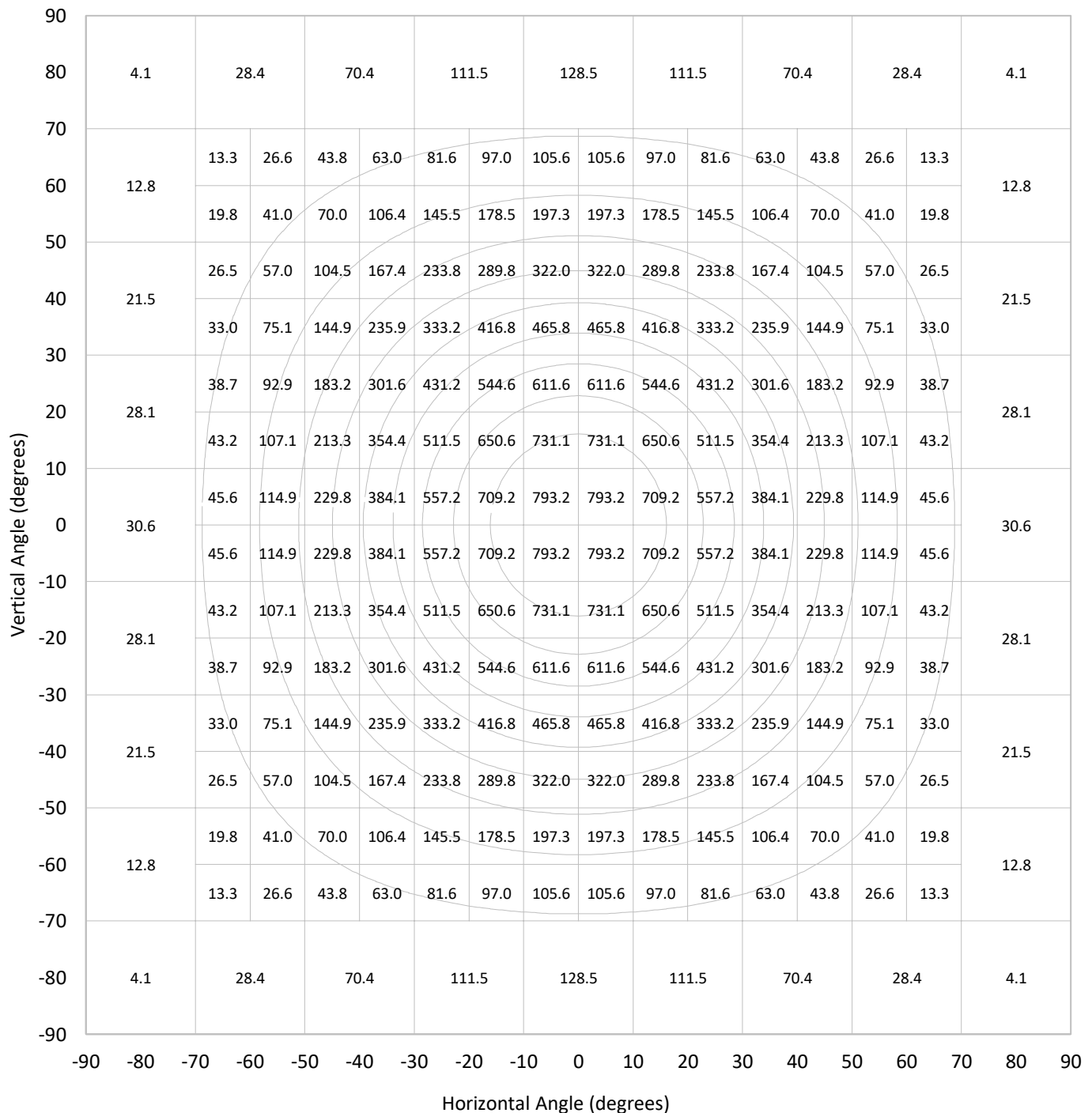
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Iso-Candela Plot



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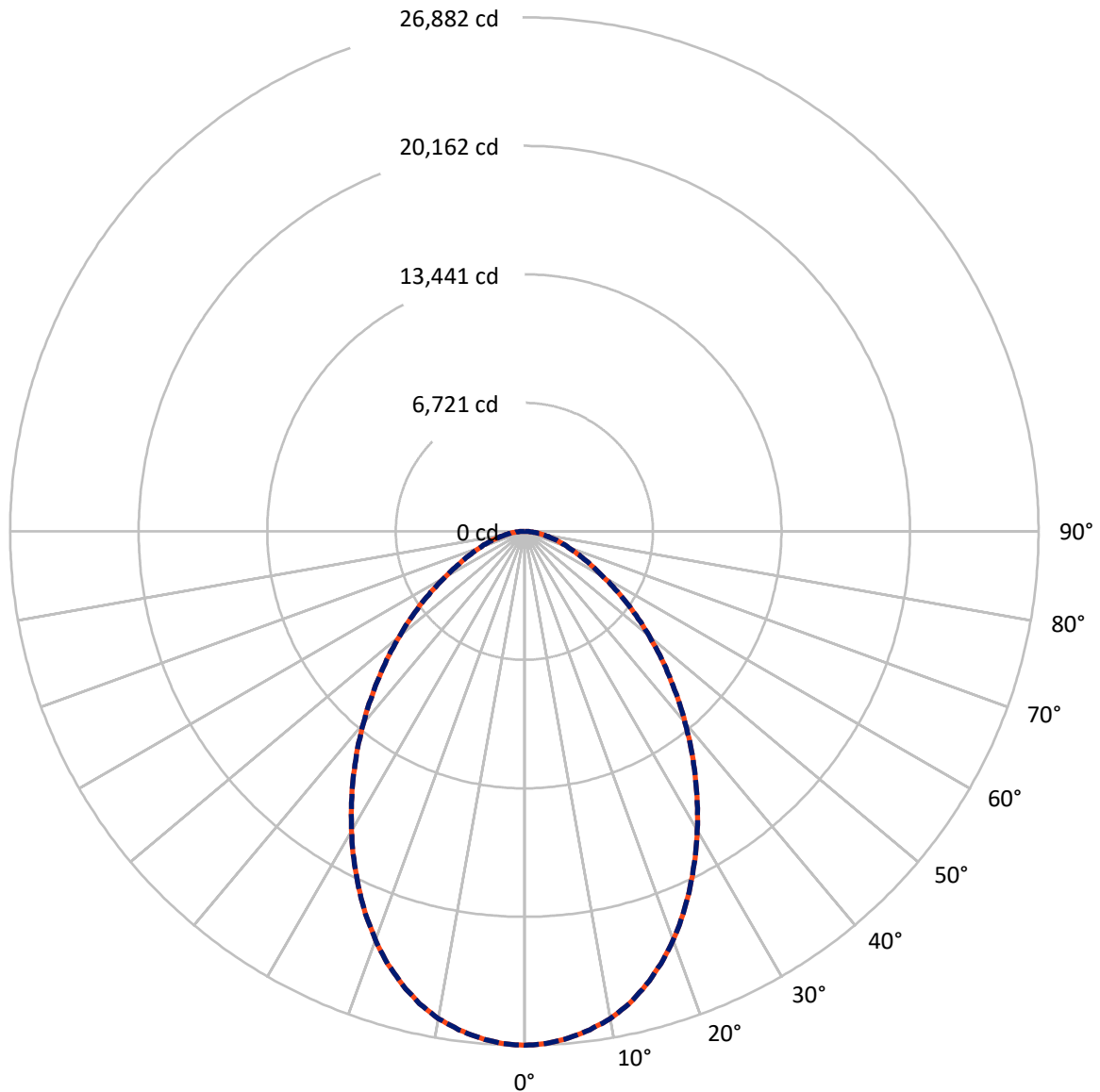
Lumen Table



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Luminous Intensity Polar Plot



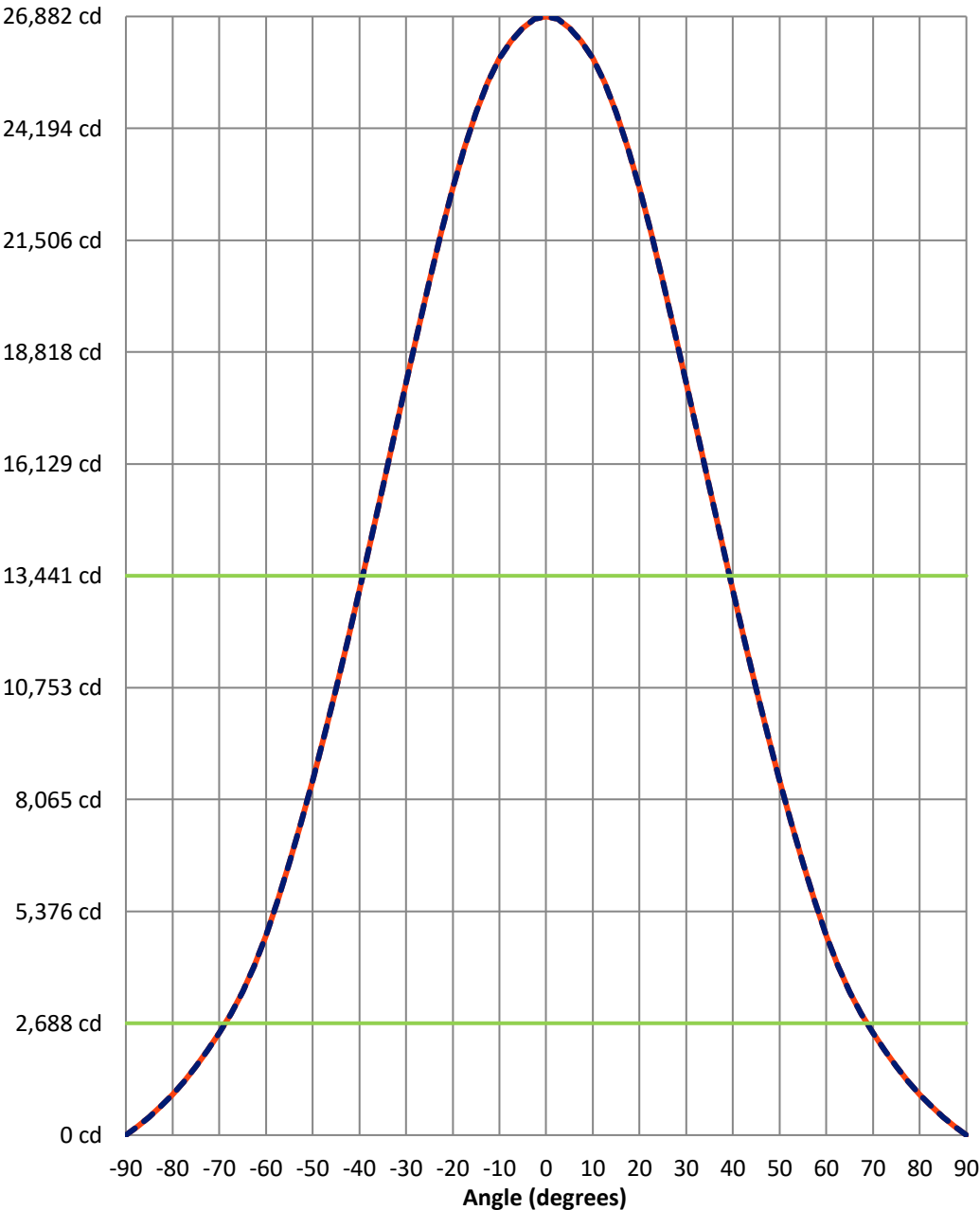
— Vertical Distribution Through 0-Deg

- - - Horizontal Distribution Through 0-Deg



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Luminous Intensity Plot



Beam:
H Angle: 78.6°
V Angle: 78.6°
Lumens: 20943.2
Efficiency: 43.3%

Field:
H Angle: 137.5°
V Angle: 137.5°
Lumens: 34293.7
Efficiency: 70.9%

Spill:
Lumens: 14108.5
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°	206.9	206.9	206.9	206.9	206.9	206.9	206.9	196.8	196.8	191.8	186.7
85°	434.0	434.0	434.0	434.0	434.0	423.9	418.9	413.8	408.8	398.7	393.6
82.5°	696.4	696.4	696.4	696.4	686.3	676.2	671.2	661.1	651.0	635.9	620.7
80°	974.0	974.0	974.0	974.0	958.8	948.7	933.6	923.5	908.4	888.2	868.0
77.5°	1291.9	1291.9	1291.9	1276.7	1266.7	1251.5	1236.4	1216.2	1196.0	1170.8	1140.5
75°	1650.2	1650.2	1650.2	1630.0	1614.9	1599.7	1574.5	1549.3	1519.0	1483.7	1443.3
72.5°	2038.8	2038.8	2038.8	2013.5	1998.4	1973.2	1942.9	1907.6	1872.2	1826.8	1776.3
70°	2457.6	2457.6	2457.6	2427.3	2402.1	2376.9	2336.5	2296.1	2245.7	2195.2	2134.6
67.5°	2911.8	2911.8	2911.8	2876.5	2846.2	2810.9	2765.4	2715.0	2654.4	2583.8	2513.1
65°	3441.7	3441.7	3421.5	3391.2	3355.9	3305.4	3249.9	3179.3	3103.6	3012.7	2916.8
62.5°	4067.4	4067.4	4037.1	4001.8	3956.4	3890.8	3815.1	3724.3	3618.3	3502.2	3386.2
60°	4794.1	4794.1	4758.8	4713.4	4647.8	4567.0	4466.1	4350.0	4218.8	4072.5	3931.2
57.5°	5631.8	5631.8	5586.4	5525.8	5445.1	5344.2	5218.0	5071.7	4905.1	4723.5	4546.8
55°	6540.2	6540.2	6484.7	6414.0	6318.1	6197.0	6045.6	5874.0	5672.2	5465.3	5238.2
52.5°	7504.0	7504.0	7438.4	7357.7	7246.7	7105.4	6933.8	6731.9	6499.8	6257.6	5990.1
50°	8518.4	8518.4	8442.7	8351.8	8225.7	8059.1	7862.3	7630.2	7372.8	7090.2	6782.4
47.5°	9603.4	9603.4	9517.6	9411.6	9260.2	9068.4	8836.3	8568.8	8276.1	7958.2	7610.0
45°	10718.6	10718.6	10622.7	10501.6	10335.1	10118.1	9860.7	9603.4	9229.9	8861.5	8457.8
42.5°	11879.3	11879.3	11768.3	11632.0	11440.3	11203.1	10910.4	10577.3	10208.9	9795.1	9356.1
40°	13085.4	13085.4	12959.2	12802.8	12590.8	12318.3	11990.3	11616.9	11203.1	10743.9	10259.4
37.5°	14316.7	14316.7	14175.4	14003.8	13766.7	13463.9	13095.5	12681.7	12217.4	11707.7	11172.8
35°	15558.1	15558.1	15401.7	15215.0	14952.6	14619.5	14220.8	13761.6	13246.9	12691.8	12091.2
32.5°	16824.8	16824.8	16653.2	16441.3	16143.5	15775.1	15336.1	14836.5	14316.7	13670.8	13014.7
30°	18076.3	18076.3	17889.6	17657.5	17339.5	16935.8	16456.4	15906.3	15295.7	14634.6	13928.1
27.5°	19307.6	19257.2	19100.7	18853.5	18505.3	18076.3	17556.5	16961.1	16300.0	15573.3	14816.3
25°	20518.8	20463.3	20291.7	20019.2	19645.8	19176.4	18616.3	17980.4	17268.9	16501.8	15674.2
22.5°	21679.5	21618.9	21437.2	21144.5	20745.9	20236.2	19635.7	18954.4	18197.4	17374.9	16501.8
20°	22754.4	22688.8	22502.0	22194.2	21780.4	21240.4	20604.6	19872.8	19065.4	18197.4	17268.9
17.5°	23723.3	23657.7	23460.9	23142.9	22754.4	22153.8	21497.8	20725.7	19872.8	18954.4	17980.4
15°	24576.1	24505.5	24303.6	23985.7	23541.6	22976.4	22285.0	21497.8	20604.6	19635.7	18616.3
12.5°	25302.8	25232.2	25025.3	24707.3	24248.1	23682.9	22976.4	22153.8	21240.4	20236.2	19176.4
10°	25878.1	25807.4	25610.6	25307.9	24833.5	24248.1	23541.6	22754.4	21780.4	20745.9	19645.8
7.5°	26291.9	26226.3	26044.6	25741.8	25307.9	24707.3	23985.7	23142.9	22194.2	21144.5	20019.2
5°	26604.8	26529.1	26347.4	26044.6	25610.6	25025.3	24303.6	23460.9	22502.0	21437.2	20291.7
2.5°	26821.8	26730.9	26529.1	26226.3	25807.4	25232.2	24505.5	23657.7	22688.8	21618.9	20463.3
0°	26882.3	26821.8	26604.8	26291.9	25878.1	25302.8	24576.1	23723.3	22754.4	21679.5	20518.8

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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°	181.7	181.7	176.6	171.6	166.5	156.4	151.4	146.3	141.3	131.2	126.2
85°	383.5	373.4	363.3	353.3	338.1	328.0	312.9	302.8	287.6	272.5	257.4
82.5°	605.6	590.4	570.2	555.1	534.9	509.7	489.5	464.3	439.0	418.9	393.6
80°	847.8	822.6	797.3	772.1	741.8	711.5	681.3	651.0	615.7	580.3	545.0
77.5°	1110.2	1074.9	1039.6	999.2	963.9	923.5	883.1	842.8	797.3	751.9	706.5
75°	1402.9	1357.5	1307.0	1256.6	1211.1	1155.6	1100.1	1044.6	984.1	928.5	868.0
72.5°	1720.8	1665.3	1604.8	1544.2	1478.6	1408.0	1337.3	1261.6	1191.0	1120.3	1044.6
70°	2064.0	1998.4	1922.7	1847.0	1766.3	1680.5	1594.7	1503.8	1413.0	1322.2	1231.3
67.5°	2432.4	2351.6	2260.8	2170.0	2069.0	1968.1	1867.2	1761.2	1650.2	1539.2	1433.2
65°	2826.0	2725.1	2619.1	2503.0	2387.0	2270.9	2149.8	2023.6	1897.5	1766.3	1650.2
62.5°	3265.0	3138.9	3002.6	2861.3	2730.1	2588.8	2457.6	2301.2	2149.8	2003.4	1857.1
60°	3774.7	3608.2	3441.7	3265.0	3098.5	2916.8	2755.4	2583.8	2412.2	2245.7	2074.1
57.5°	4345.0	4133.0	3931.2	3719.2	3497.2	3295.3	3088.4	2881.5	2689.7	2492.9	2306.2
55°	4990.9	4733.6	4481.2	4218.8	3961.4	3709.1	3446.7	3214.6	2977.4	2755.4	2538.4
52.5°	5697.4	5404.7	5091.8	4794.1	4466.1	4153.2	3860.5	3567.8	3290.3	3022.8	2775.5
50°	6454.4	6111.2	5752.9	5389.6	5016.2	4647.8	4294.5	3951.4	3628.4	3315.5	3022.8
47.5°	7241.6	6853.1	6444.3	6030.5	5631.8	5182.7	4758.8	4370.2	3981.6	3628.4	3290.3
45°	8049.1	7610.0	7160.9	6691.6	6222.2	5737.8	5268.5	4794.1	4370.2	3951.4	3567.8
42.5°	8881.7	8387.2	7887.6	7367.8	6848.0	6318.1	5788.3	5268.5	4758.8	4294.5	3860.5
40°	9739.6	9194.6	8624.4	8059.1	7504.0	6898.5	6318.1	5737.8	5182.7	4647.8	4153.2
37.5°	10597.5	10002.0	9386.4	8750.5	8114.7	7504.0	6848.0	6222.2	5631.8	5016.2	4466.1
35°	11460.4	10804.4	10138.3	9446.9	8750.5	8059.1	7367.8	6691.6	6030.5	5389.6	4794.1
32.5°	12328.4	11611.8	10875.1	10138.3	9386.4	8624.4	7887.6	7160.9	6444.3	5752.9	5091.8
30°	13181.3	12404.1	11611.8	10804.4	10002.0	9194.6	8387.2	7610.0	6853.1	6111.2	5404.7
27.5°	14013.9	13181.3	12328.4	11460.4	10597.5	9739.6	8881.7	8049.1	7241.6	6454.4	5697.4
25°	14816.3	13928.1	13014.7	12091.2	11172.8	10259.4	9356.1	8457.8	7610.0	6782.4	5990.1
22.5°	15573.3	14634.6	13670.8	12691.8	11707.7	10743.9	9795.1	8861.5	7958.2	7090.2	6257.6
20°	16300.0	15295.7	14316.7	13246.9	12217.4	11203.1	10208.9	9229.9	8276.1	7372.8	6499.8
17.5°	16961.1	15906.3	14836.5	13761.6	12681.7	11616.9	10577.3	9603.4	8568.8	7630.2	6731.9
15°	17556.5	16456.4	15336.1	14220.8	13095.5	11990.3	10910.4	9860.7	8836.3	7862.3	6933.8
12.5°	18076.3	16935.8	15775.1	14619.5	13463.9	12318.3	11203.1	10118.1	9068.4	8059.1	7105.4
10°	18505.3	17339.5	16143.5	14952.6	13766.7	12590.8	11440.3	10335.1	9260.2	8225.7	7246.7
7.5°	18853.5	17657.5	16441.3	15215.0	14003.8	12802.8	11632.0	10501.6	9411.6	8351.8	7357.7
5°	19100.7	17889.6	16653.2	15401.7	14175.4	12959.2	11768.3	10622.7	9517.6	8442.7	7438.4
2.5°	19257.2	18076.3	16824.8	15558.1	14316.7	13085.4	11879.3	10718.6	9603.4	8518.4	7504.0
0°	19307.6	18076.3	16824.8	15558.1	14316.7	13085.4	11879.3	10718.6	9603.4	8518.4	7504.0

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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°	121.1	111.0	100.9	95.9	85.8	80.7	70.7	60.6	55.5	45.4	35.3
85°	242.2	222.0	206.9	191.8	176.6	156.4	141.3	126.2	106.0	90.8	70.7
82.5°	368.4	343.2	317.9	292.7	267.5	242.2	212.0	186.7	161.5	136.3	106.0
80°	509.7	469.3	434.0	398.7	363.3	328.0	287.6	252.3	212.0	176.6	141.3
77.5°	656.0	610.6	560.2	509.7	459.2	413.8	363.3	317.9	272.5	222.0	176.6
75°	812.5	751.9	696.4	630.8	570.2	504.6	444.1	383.5	328.0	272.5	212.0
72.5°	974.0	898.3	822.6	751.9	676.2	600.5	529.9	454.2	383.5	317.9	252.3
70°	1140.5	1049.7	958.8	873.0	787.2	696.4	615.7	529.9	444.1	363.3	287.6
67.5°	1317.1	1211.1	1105.2	994.1	898.3	797.3	696.4	600.5	504.6	413.8	328.0
65°	1508.9	1382.7	1251.5	1135.4	1009.3	898.3	787.2	676.2	570.2	459.2	363.3
62.5°	1705.7	1559.3	1413.0	1266.7	1135.4	994.1	873.0	751.9	630.8	509.7	398.7
60°	1907.6	1741.0	1574.5	1413.0	1251.5	1105.2	958.8	822.6	696.4	560.2	434.0
57.5°	2114.5	1927.7	1741.0	1559.3	1382.7	1211.1	1049.7	898.3	751.9	610.6	469.3
55°	2326.4	2114.5	1907.6	1705.7	1508.9	1317.1	1140.5	974.0	812.5	656.0	509.7
52.5°	2538.4	2306.2	2074.1	1857.1	1650.2	1433.2	1231.3	1044.6	868.0	706.5	545.0
50°	2755.4	2492.9	2245.7	2003.4	1766.3	1539.2	1322.2	1120.3	928.5	751.9	580.3
47.5°	2977.4	2689.7	2412.2	2149.8	1897.5	1650.2	1413.0	1191.0	984.1	797.3	615.7
45°	3214.6	2881.5	2583.8	2301.2	2023.6	1761.2	1503.8	1261.6	1044.6	842.8	651.0
42.5°	3446.7	3088.4	2755.4	2457.6	2149.8	1867.2	1594.7	1337.3	1100.1	883.1	681.3
40°	3709.1	3295.3	2916.8	2588.8	2270.9	1968.1	1680.5	1408.0	1155.6	923.5	711.5
37.5°	3961.4	3497.2	3098.5	2730.1	2387.0	2069.0	1766.3	1478.6	1211.1	963.9	741.8
35°	4218.8	3719.2	3265.0	2861.3	2503.0	2170.0	1847.0	1544.2	1256.6	999.2	772.1
32.5°	4481.2	3931.2	3441.7	3002.6	2619.1	2260.8	1922.7	1604.8	1307.0	1039.6	797.3
30°	4733.6	4133.0	3608.2	3138.9	2725.1	2351.6	1998.4	1665.3	1357.5	1074.9	822.6
27.5°	4990.9	4345.0	3774.7	3265.0	2826.0	2432.4	2064.0	1720.8	1402.9	1110.2	847.8
25°	5238.2	4546.8	3931.2	3386.2	2916.8	2513.1	2134.6	1776.3	1443.3	1140.5	868.0
22.5°	5465.3	4723.5	4072.5	3502.2	3012.7	2583.8	2195.2	1826.8	1483.7	1170.8	888.2
20°	5672.2	4905.1	4218.8	3618.3	3103.6	2654.4	2245.7	1872.2	1519.0	1196.0	908.4
17.5°	5874.0	5071.7	4350.0	3724.3	3179.3	2715.0	2296.1	1907.6	1549.3	1216.2	923.5
15°	6045.6	5218.0	4466.1	3815.1	3249.9	2765.4	2336.5	1942.9	1574.5	1236.4	933.6
12.5°	6197.0	5344.2	4567.0	3890.8	3305.4	2810.9	2376.9	1973.2	1599.7	1251.5	948.7
10°	6318.1	5445.1	4647.8	3956.4	3355.9	2846.2	2402.1	1998.4	1614.9	1266.7	958.8
7.5°	6414.0	5525.8	4713.4	4001.8	3391.2	2876.5	2427.3	2013.5	1630.0	1276.7	974.0
5°	6484.7	5586.4	4758.8	4037.1	3421.5	2911.8	2457.6	2038.8	1650.2	1291.9	974.0
2.5°	6540.2	5631.8	4794.1	4067.4	3441.7	2911.8	2457.6	2038.8	1650.2	1291.9	974.0
0°	6540.2	5631.8	4794.1	4067.4	3441.7	2911.8	2457.6	2038.8	1650.2	1291.9	974.0

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	25.2	20.2	10.1	0.0
85°	55.5	35.3	20.2	0.0
82.5°	80.7	55.5	25.2	0.0
80°	106.0	70.7	35.3	0.0
77.5°	136.3	90.8	45.4	0.0
75°	161.5	106.0	55.5	0.0
72.5°	186.7	126.2	60.6	0.0
70°	212.0	141.3	70.7	0.0
67.5°	242.2	156.4	80.7	0.0
65°	267.5	176.6	85.8	0.0
62.5°	292.7	191.8	95.9	0.0
60°	317.9	206.9	100.9	0.0
57.5°	343.2	222.0	111.0	0.0
55°	368.4	242.2	121.1	0.0
52.5°	393.6	257.4	126.2	0.0
50°	418.9	272.5	131.2	0.0
47.5°	439.0	287.6	141.3	0.0
45°	464.3	302.8	146.3	0.0
42.5°	489.5	312.9	151.4	0.0
40°	509.7	328.0	156.4	0.0
37.5°	534.9	338.1	166.5	0.0
35°	555.1	353.3	171.6	0.0
32.5°	570.2	363.3	176.6	0.0
30°	590.4	373.4	181.7	0.0
27.5°	605.6	383.5	181.7	0.0
25°	620.7	393.6	186.7	0.0
22.5°	635.9	398.7	191.8	0.0
20°	651.0	408.8	196.8	0.0
17.5°	661.1	413.8	196.8	0.0
15°	671.2	418.9	206.9	0.0
12.5°	676.2	423.9	206.9	0.0
10°	686.3	434.0	206.9	0.0
7.5°	696.4	434.0	206.9	0.0
5°	696.4	434.0	206.9	0.0
2.5°	696.4	434.0	206.9	0.0
0°	696.4	434.0	206.9	0.0

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