

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: P624064

Luminaire Tested: **IFLD-L-SA7B-830-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624064
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-L-SA7B-830-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (112) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

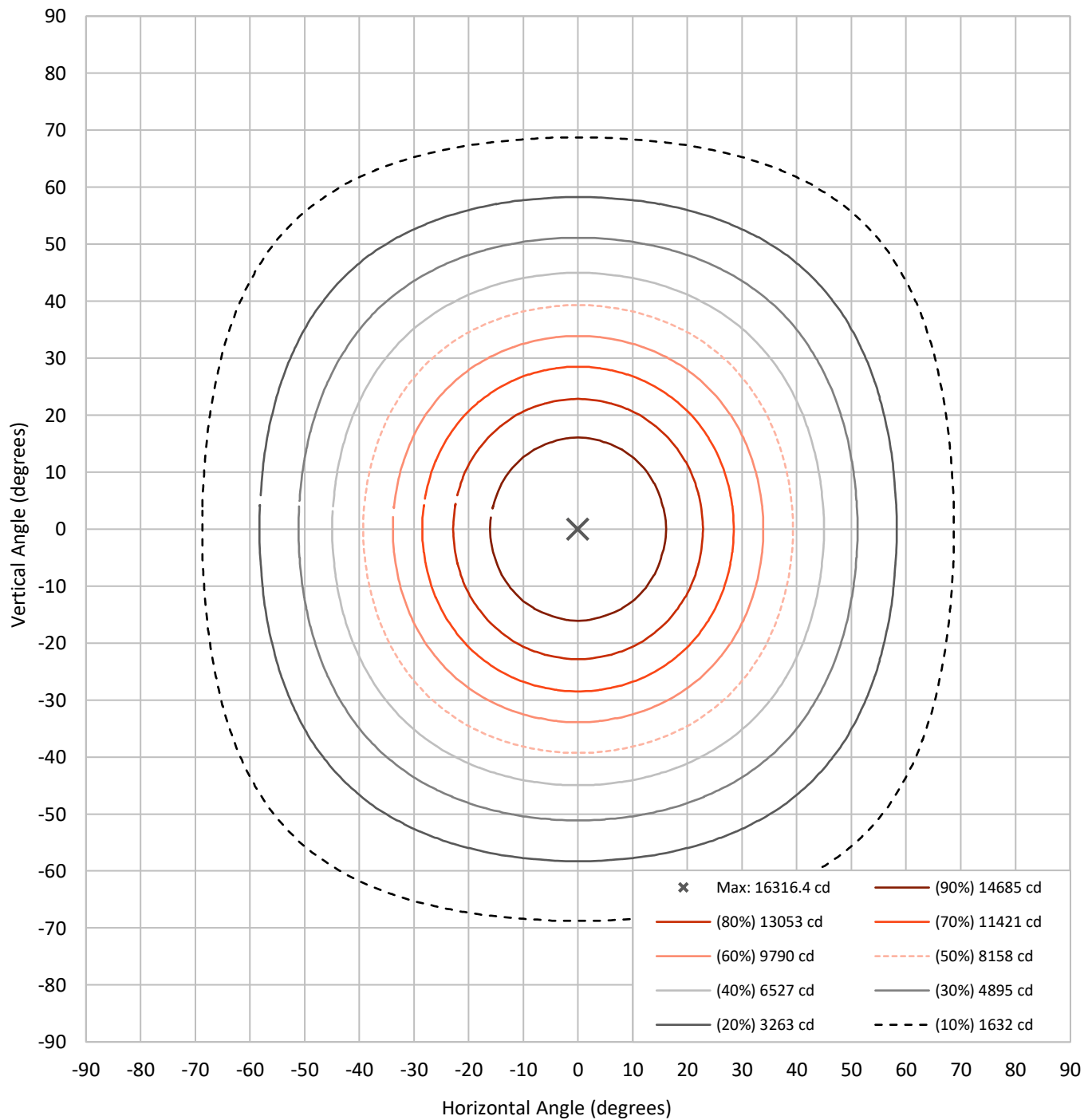
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	29378 lumens	Max Intensity:	16316.4 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	104.5 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	12711.6 lumens	Field Lumens:	20814.8 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%
Input Watts (W):	281		
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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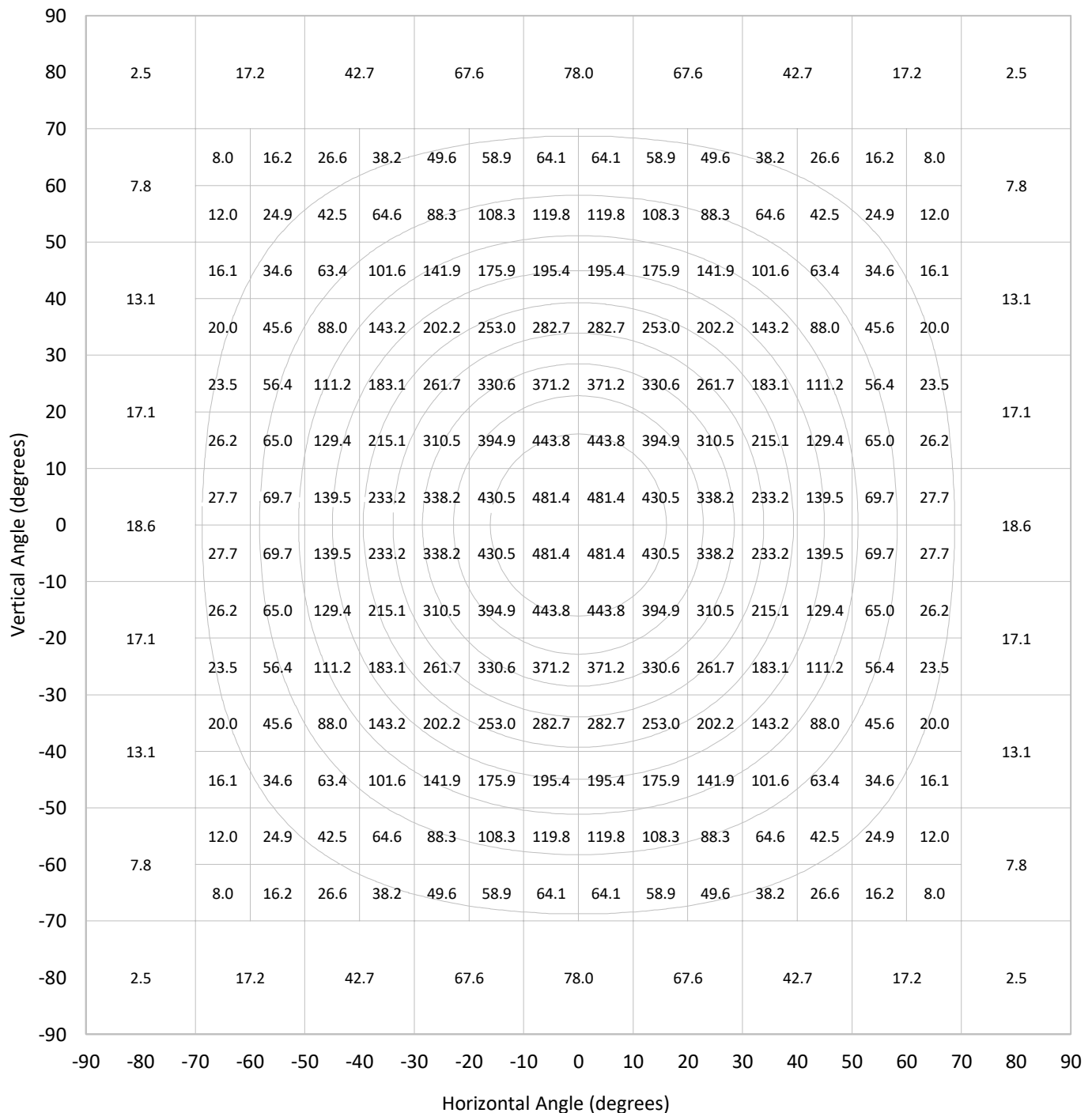
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Iso-Candela Plot



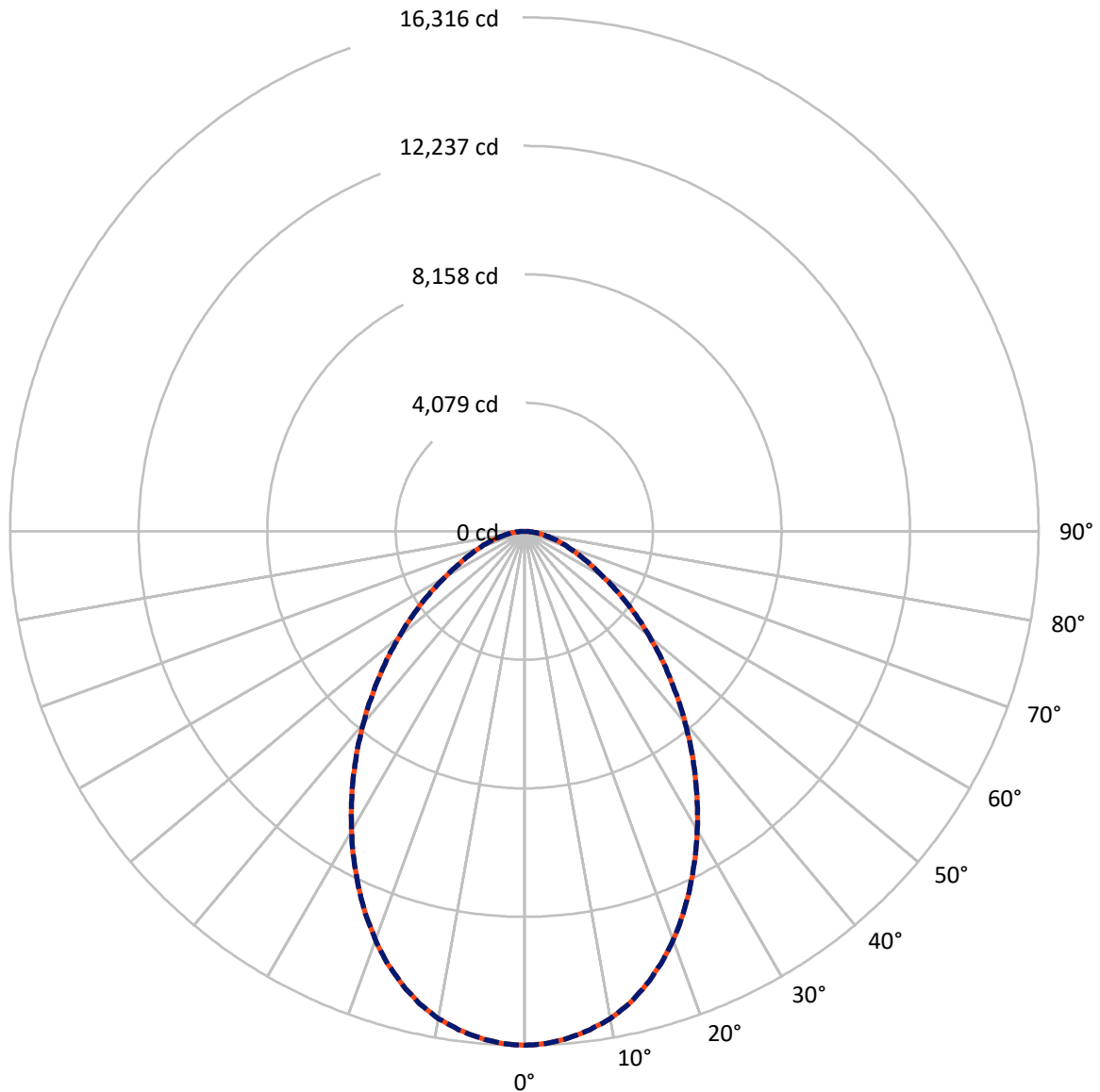
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Lumen Table



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Luminous Intensity Polar Plot

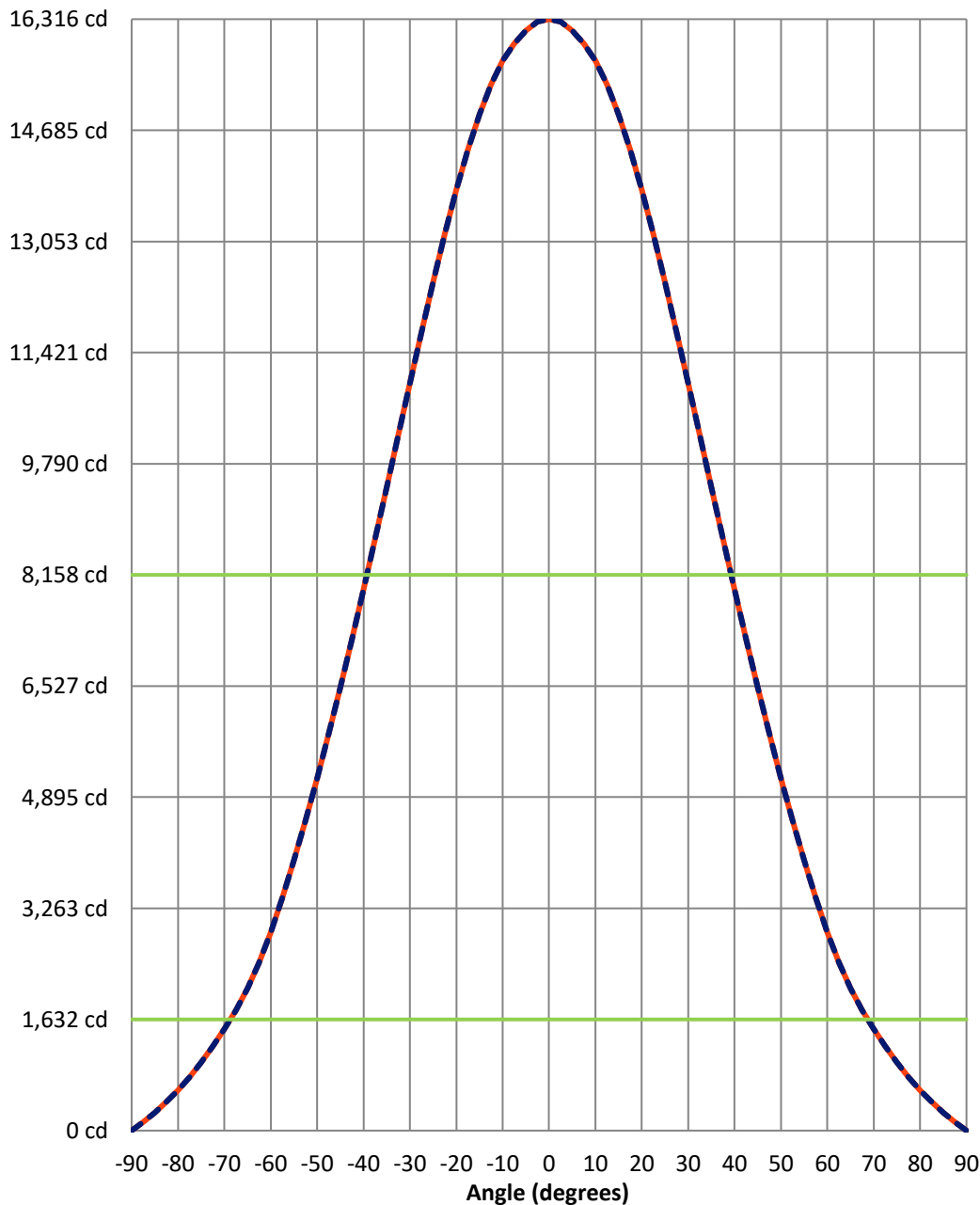


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg

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Luminous Intensity Plot



Beam:

H Angle: 78.6°
V Angle: 78.6°
Lumens: 12711.6
Efficiency: 43.3%

Field:

H Angle: 137.5°
V Angle: 137.5°
Lumens: 20814.8
Efficiency: 70.9%

Spill:

Lumens: 8563.3
Efficiency: 29.1%

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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°	125.6	125.6	125.6	125.6	125.6	125.6	125.6	119.5	119.5	116.4	113.3
85°	263.4	263.4	263.4	263.4	263.4	257.3	254.2	251.2	248.1	242.0	238.9
82.5°	422.7	422.7	422.7	422.7	416.6	410.4	407.4	401.2	395.1	385.9	376.7
80°	591.2	591.2	591.2	591.2	582.0	575.8	566.6	560.5	551.3	539.1	526.8
77.5°	784.1	784.1	784.1	774.9	768.8	759.6	750.4	738.2	725.9	710.6	692.2
75°	1001.6	1001.6	1001.6	989.3	980.1	971.0	955.6	940.3	922.0	900.5	876.0
72.5°	1237.4	1237.4	1237.4	1222.1	1212.9	1197.6	1179.2	1157.8	1136.4	1108.8	1078.2
70°	1491.7	1491.7	1491.7	1473.3	1458.0	1442.7	1418.2	1393.6	1363.0	1332.4	1295.6
67.5°	1767.3	1767.3	1767.3	1745.9	1727.5	1706.1	1678.5	1647.9	1611.1	1568.2	1525.4
65°	2088.9	2088.9	2076.7	2058.3	2036.9	2006.2	1972.5	1929.7	1883.7	1828.6	1770.4
62.5°	2468.7	2468.7	2450.4	2428.9	2401.4	2361.5	2315.6	2260.5	2196.1	2125.7	2055.2
60°	2909.8	2909.8	2888.4	2860.8	2821.0	2772.0	2710.7	2640.3	2560.6	2471.8	2386.0
57.5°	3418.3	3418.3	3390.7	3353.9	3304.9	3243.7	3167.1	3078.3	2977.2	2866.9	2759.7
55°	3969.6	3969.6	3935.9	3893.0	3834.8	3761.3	3669.4	3565.3	3442.8	3317.2	3179.4
52.5°	4554.6	4554.6	4514.8	4465.8	4398.4	4312.7	4208.5	4086.0	3945.1	3798.1	3635.7
50°	5170.3	5170.3	5124.3	5069.2	4992.6	4891.5	4772.1	4631.2	4475.0	4303.5	4116.6
47.5°	5828.8	5828.8	5776.7	5712.4	5620.5	5504.1	5363.2	5200.9	5023.3	4830.3	4618.9
45°	6505.7	6505.7	6447.5	6374.0	6272.9	6141.2	5985.0	5828.8	5602.2	5378.6	5133.5
42.5°	7210.2	7210.2	7142.8	7060.1	6943.7	6799.8	6622.1	6420.0	6196.4	5945.2	5678.7
40°	7942.3	7942.3	7865.7	7770.7	7642.1	7476.7	7277.6	7050.9	6799.8	6521.0	6227.0
37.5°	8689.6	8689.6	8603.9	8499.7	8355.8	8172.0	7948.4	7697.2	7415.4	7106.1	6781.4
35°	9443.1	9443.1	9348.2	9234.8	9075.6	8873.4	8631.4	8352.7	8040.3	7703.3	7338.9
32.5°	10211.9	10211.9	10107.8	9979.1	9798.4	9574.8	9308.3	9005.1	8689.6	8297.6	7899.4
30°	10971.5	10971.5	10858.2	10717.3	10524.3	10279.3	9988.3	9654.5	9283.8	8882.6	8453.8
27.5°	11718.9	11688.3	11593.3	11443.2	11231.9	10971.5	10656.0	10294.6	9893.4	9452.3	8992.9
25°	12454.0	12420.3	12316.2	12150.8	11924.1	11639.3	11299.3	10913.3	10481.5	10015.9	9513.6
22.5°	13158.5	13121.7	13011.5	12833.8	12591.8	12282.5	11918.0	11504.5	11045.0	10545.8	10015.9
20°	13810.9	13771.1	13657.7	13470.9	13219.7	12892.0	12506.1	12061.9	11571.9	11045.0	10481.5
17.5°	14399.0	14359.2	14239.7	14046.7	13810.9	13446.4	13048.2	12579.6	12061.9	11504.5	10913.3
15°	14916.6	14873.7	14751.2	14558.3	14288.7	13945.7	13526.0	13048.2	12506.1	11918.0	11299.3
12.5°	15357.7	15314.8	15189.2	14996.3	14717.5	14374.5	13945.7	13446.4	12892.0	12282.5	11639.3
10°	15706.9	15664.0	15544.5	15360.8	15072.8	14717.5	14288.7	13810.9	13219.7	12591.8	11924.1
7.5°	15958.0	15918.2	15807.9	15624.2	15360.8	14996.3	14558.3	14046.7	13470.9	12833.8	12150.8
5°	16147.9	16102.0	15991.7	15807.9	15544.5	15189.2	14751.2	14239.7	13657.7	13011.5	12316.2
2.5°	16279.6	16224.5	16102.0	15918.2	15664.0	15314.8	14873.7	14359.2	13771.1	13121.7	12420.3
0°	16316.4	16279.6	16147.9	15958.0	15706.9	15357.7	14916.6	14399.0	13810.9	13158.5	12454.0

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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°	110.3	110.3	107.2	104.1	101.1	95.0	91.9	88.8	85.8	79.6	76.6
85°	232.8	226.7	220.5	214.4	205.2	199.1	189.9	183.8	174.6	165.4	156.2
82.5°	367.6	358.4	346.1	336.9	324.7	309.4	297.1	281.8	266.5	254.2	238.9
80°	514.6	499.3	483.9	468.6	450.3	431.9	413.5	395.1	373.7	352.2	330.8
77.5°	673.9	652.4	631.0	606.5	585.0	560.5	536.0	511.5	483.9	456.4	428.8
75°	851.5	823.9	793.3	762.7	735.1	701.4	667.7	634.0	597.3	563.6	526.8
72.5°	1044.5	1010.8	974.0	937.3	897.4	854.6	811.7	765.7	722.9	680.0	634.0
70°	1252.8	1212.9	1167.0	1121.0	1072.0	1020.0	967.9	912.8	857.6	802.5	747.4
67.5°	1476.3	1427.3	1372.2	1317.1	1255.8	1194.6	1133.3	1069.0	1001.6	934.2	869.9
65°	1715.3	1654.0	1589.7	1519.2	1448.8	1378.3	1304.8	1228.2	1151.7	1072.0	1001.6
62.5°	1981.7	1905.2	1822.5	1736.7	1657.1	1571.3	1491.7	1396.7	1304.8	1216.0	1127.2
60°	2291.1	2190.0	2088.9	1981.7	1880.7	1770.4	1672.4	1568.2	1464.1	1363.0	1258.9
57.5°	2637.2	2508.6	2386.0	2257.4	2122.6	2000.1	1874.5	1749.0	1632.6	1513.1	1399.8
55°	3029.3	2873.1	2719.9	2560.6	2404.4	2251.3	2092.0	1951.1	1807.1	1672.4	1540.7
52.5°	3458.1	3280.4	3090.5	2909.8	2710.7	2520.8	2343.2	2165.5	1997.1	1834.7	1684.6
50°	3917.5	3709.2	3491.8	3271.2	3044.6	2821.0	2606.6	2398.3	2202.3	2012.4	1834.7
47.5°	4395.4	4159.5	3911.4	3660.2	3418.3	3145.7	2888.4	2652.5	2416.7	2202.3	1997.1
45°	4885.4	4618.9	4346.3	4061.5	3776.6	3482.6	3197.7	2909.8	2652.5	2398.3	2165.5
42.5°	5390.8	5090.6	4787.4	4471.9	4156.4	3834.8	3513.2	3197.7	2888.4	2606.6	2343.2
40°	5911.5	5580.7	5234.6	4891.5	4554.6	4187.1	3834.8	3482.6	3145.7	2821.0	2520.8
37.5°	6432.2	6070.8	5697.1	5311.2	4925.2	4554.6	4156.4	3776.6	3418.3	3044.6	2710.7
35°	6956.0	6557.8	6153.5	5733.9	5311.2	4891.5	4471.9	4061.5	3660.2	3271.2	2909.8
32.5°	7482.8	7047.9	6600.7	6153.5	5697.1	5234.6	4787.4	4346.3	3911.4	3491.8	3090.5
30°	8000.5	7528.8	7047.9	6557.8	6070.8	5580.7	5090.6	4618.9	4159.5	3709.2	3280.4
27.5°	8505.8	8000.5	7482.8	6956.0	6432.2	5911.5	5390.8	4885.4	4395.4	3917.5	3458.1
25°	8992.9	8453.8	7899.4	7338.9	6781.4	6227.0	5678.7	5133.5	4618.9	4116.6	3635.7
22.5°	9452.3	8882.6	8297.6	7703.3	7106.1	6521.0	5945.2	5378.6	4830.3	4303.5	3798.1
20°	9893.4	9283.8	8689.6	8040.3	7415.4	6799.8	6196.4	5602.2	5023.3	4475.0	3945.1
17.5°	10294.6	9654.5	9005.1	8352.7	7697.2	7050.9	6420.0	5828.8	5200.9	4631.2	4086.0
15°	10656.0	9988.3	9308.3	8631.4	7948.4	7277.6	6622.1	5985.0	5363.2	4772.1	4208.5
12.5°	10971.5	10279.3	9574.8	8873.4	8172.0	7476.7	6799.8	6141.2	5504.1	4891.5	4312.7
10°	11231.9	10524.3	9798.4	9075.6	8355.8	7642.1	6943.7	6272.9	5620.5	4992.6	4398.4
7.5°	11443.2	10717.3	9979.1	9234.8	8499.7	7770.7	7060.1	6374.0	5712.4	5069.2	4465.8
5°	11593.3	10858.2	10107.8	9348.2	8603.9	7865.7	7142.8	6447.5	5776.7	5124.3	4514.8
2.5°	11688.3	10971.5	10211.9	9443.1	8689.6	7942.3	7210.2	6505.7	5828.8	5170.3	4554.6
0°	11718.9	10971.5	10211.9	9443.1	8689.6	7942.3	7210.2	6505.7	5828.8	5170.3	4554.6

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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°	73.5	67.4	61.3	58.2	52.1	49.0	42.9	36.8	33.7	27.6	21.4
85°	147.0	134.8	125.6	116.4	107.2	95.0	85.8	76.6	64.3	55.1	42.9
82.5°	223.6	208.3	193.0	177.7	162.3	147.0	128.6	113.3	98.0	82.7	64.3
80°	309.4	284.9	263.4	242.0	220.5	199.1	174.6	153.1	128.6	107.2	85.8
77.5°	398.2	370.6	340.0	309.4	278.7	251.2	220.5	193.0	165.4	134.8	107.2
75°	493.1	456.4	422.7	382.9	346.1	306.3	269.5	232.8	199.1	165.4	128.6
72.5°	591.2	545.2	499.3	456.4	410.4	364.5	321.6	275.7	232.8	193.0	153.1
70°	692.2	637.1	582.0	529.9	477.8	422.7	373.7	321.6	269.5	220.5	174.6
67.5°	799.4	735.1	670.8	603.4	545.2	483.9	422.7	364.5	306.3	251.2	199.1
65°	915.8	839.3	759.6	689.2	612.6	545.2	477.8	410.4	346.1	278.7	220.5
62.5°	1035.3	946.5	857.6	768.8	689.2	603.4	529.9	456.4	382.9	309.4	242.0
60°	1157.8	1056.7	955.6	857.6	759.6	670.8	582.0	499.3	422.7	340.0	263.4
57.5°	1283.4	1170.1	1056.7	946.5	839.3	735.1	637.1	545.2	456.4	370.6	284.9
55°	1412.0	1283.4	1157.8	1035.3	915.8	799.4	692.2	591.2	493.1	398.2	309.4
52.5°	1540.7	1399.8	1258.9	1127.2	1001.6	869.9	747.4	634.0	526.8	428.8	330.8
50°	1672.4	1513.1	1363.0	1216.0	1072.0	934.2	802.5	680.0	563.6	456.4	352.2
47.5°	1807.1	1632.6	1464.1	1304.8	1151.7	1001.6	857.6	722.9	597.3	483.9	373.7
45°	1951.1	1749.0	1568.2	1396.7	1228.2	1069.0	912.8	765.7	634.0	511.5	395.1
42.5°	2092.0	1874.5	1672.4	1491.7	1304.8	1133.3	967.9	811.7	667.7	536.0	413.5
40°	2251.3	2000.1	1770.4	1571.3	1378.3	1194.6	1020.0	854.6	701.4	560.5	431.9
37.5°	2404.4	2122.6	1880.7	1657.1	1448.8	1255.8	1072.0	897.4	735.1	585.0	450.3
35°	2560.6	2257.4	1981.7	1736.7	1519.2	1317.1	1121.0	937.3	762.7	606.5	468.6
32.5°	2719.9	2386.0	2088.9	1822.5	1589.7	1372.2	1167.0	974.0	793.3	631.0	483.9
30°	2873.1	2508.6	2190.0	1905.2	1654.0	1427.3	1212.9	1010.8	823.9	652.4	499.3
27.5°	3029.3	2637.2	2291.1	1981.7	1715.3	1476.3	1252.8	1044.5	851.5	673.9	514.6
25°	3179.4	2759.7	2386.0	2055.2	1770.4	1525.4	1295.6	1078.2	876.0	692.2	526.8
22.5°	3317.2	2866.9	2471.8	2125.7	1828.6	1568.2	1332.4	1108.8	900.5	710.6	539.1
20°	3442.8	2977.2	2560.6	2196.1	1883.7	1611.1	1363.0	1136.4	922.0	725.9	551.3
17.5°	3565.3	3078.3	2640.3	2260.5	1929.7	1647.9	1393.6	1157.8	940.3	738.2	560.5
15°	3669.4	3167.1	2710.7	2315.6	1972.5	1678.5	1418.2	1179.2	955.6	750.4	566.6
12.5°	3761.3	3243.7	2772.0	2361.5	2006.2	1706.1	1442.7	1197.6	971.0	759.6	575.8
10°	3834.8	3304.9	2821.0	2401.4	2036.9	1727.5	1458.0	1212.9	980.1	768.8	582.0
7.5°	3893.0	3353.9	2860.8	2428.9	2058.3	1745.9	1473.3	1222.1	989.3	774.9	591.2
5°	3935.9	3390.7	2888.4	2450.4	2076.7	1767.3	1491.7	1237.4	1001.6	784.1	591.2
2.5°	3969.6	3418.3	2909.8	2468.7	2088.9	1767.3	1491.7	1237.4	1001.6	784.1	591.2
0°	3969.6	3418.3	2909.8	2468.7	2088.9	1767.3	1491.7	1237.4	1001.6	784.1	591.2

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	15.3	12.3	6.1	0.0
85°	33.7	21.4	12.3	0.0
82.5°	49.0	33.7	15.3	0.0
80°	64.3	42.9	21.4	0.0
77.5°	82.7	55.1	27.6	0.0
75°	98.0	64.3	33.7	0.0
72.5°	113.3	76.6	36.8	0.0
70°	128.6	85.8	42.9	0.0
67.5°	147.0	95.0	49.0	0.0
65°	162.3	107.2	52.1	0.0
62.5°	177.7	116.4	58.2	0.0
60°	193.0	125.6	61.3	0.0
57.5°	208.3	134.8	67.4	0.0
55°	223.6	147.0	73.5	0.0
52.5°	238.9	156.2	76.6	0.0
50°	254.2	165.4	79.6	0.0
47.5°	266.5	174.6	85.8	0.0
45°	281.8	183.8	88.8	0.0
42.5°	297.1	189.9	91.9	0.0
40°	309.4	199.1	95.0	0.0
37.5°	324.7	205.2	101.1	0.0
35°	336.9	214.4	104.1	0.0
32.5°	346.1	220.5	107.2	0.0
30°	358.4	226.7	110.3	0.0
27.5°	367.6	232.8	110.3	0.0
25°	376.7	238.9	113.3	0.0
22.5°	385.9	242.0	116.4	0.0
20°	395.1	248.1	119.5	0.0
17.5°	401.2	251.2	119.5	0.0
15°	407.4	254.2	125.6	0.0
12.5°	410.4	257.3	125.6	0.0
10°	416.6	263.4	125.6	0.0
7.5°	422.7	263.4	125.6	0.0
5°	422.7	263.4	125.6	0.0
2.5°	422.7	263.4	125.6	0.0
0°	422.7	263.4	125.6	0.0

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