

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: P624041

Luminaire Tested: **IFLD-L-SA8C-827-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624041
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-L-SA8C-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

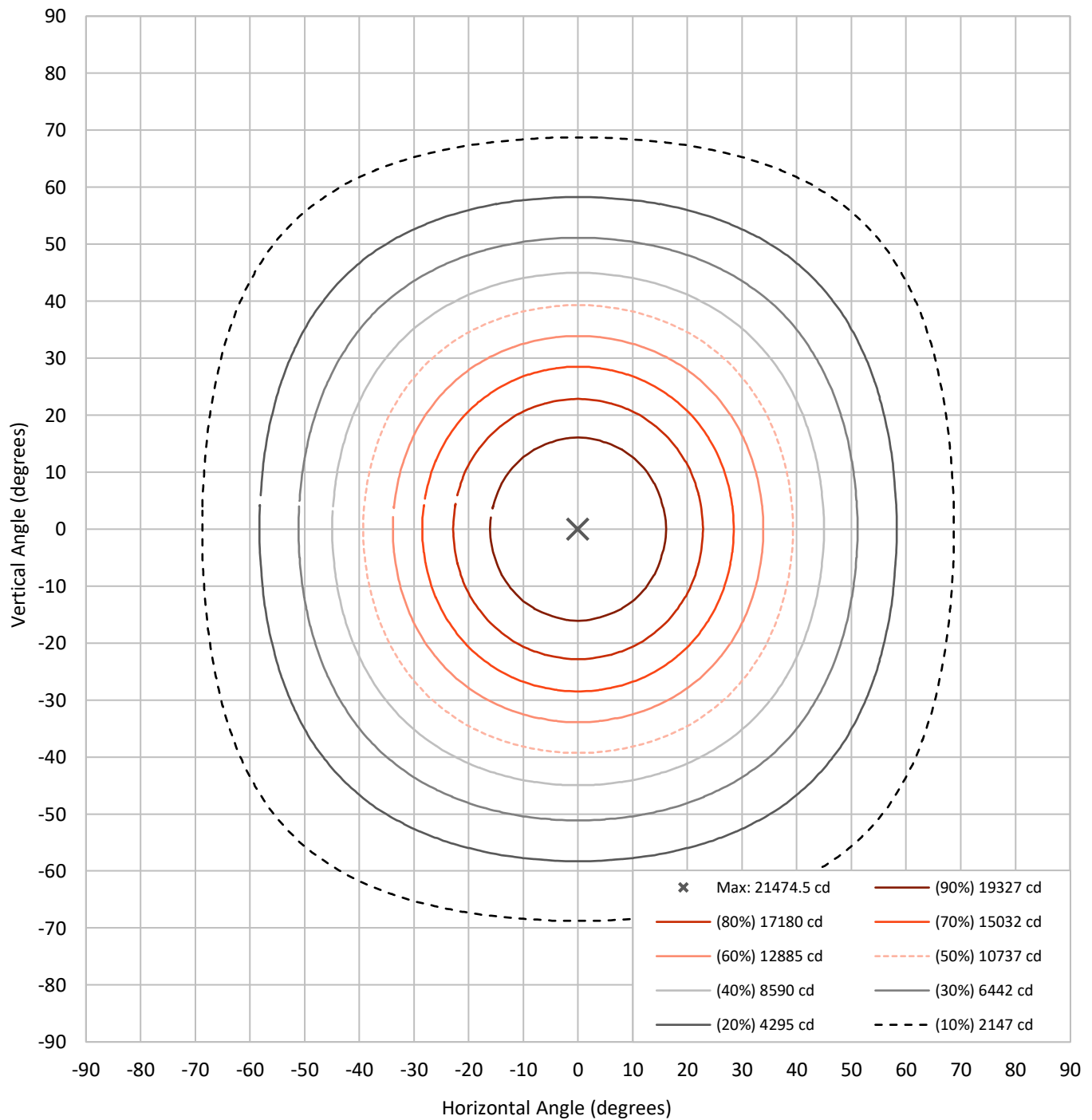
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	38665.4 lumens	Max Intensity:	21474.5 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	92.0 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	16730.1 lumens	Field Lumens:	27395 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%
Input Watts (W):	420.3		
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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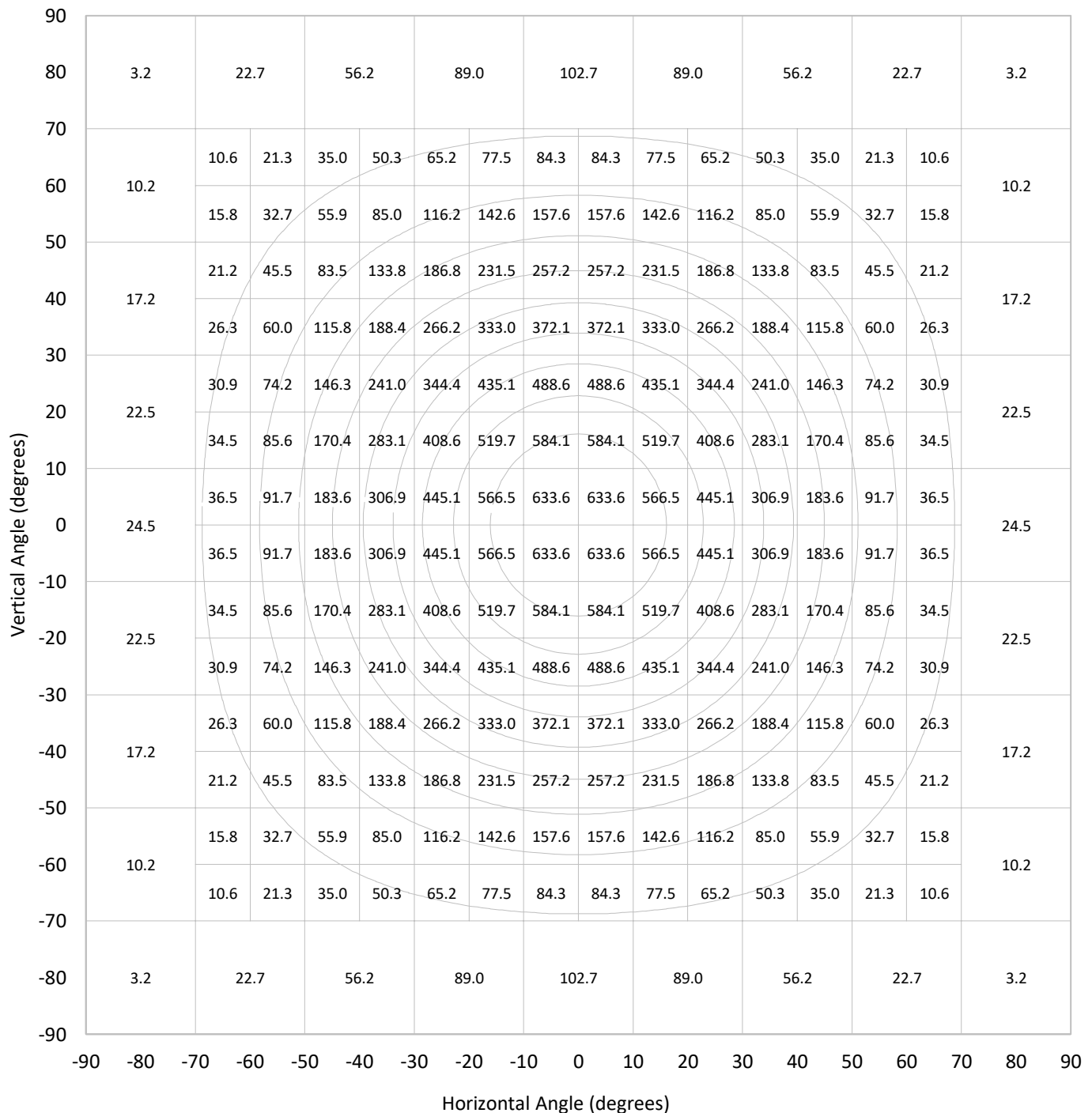
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Iso-Candela Plot



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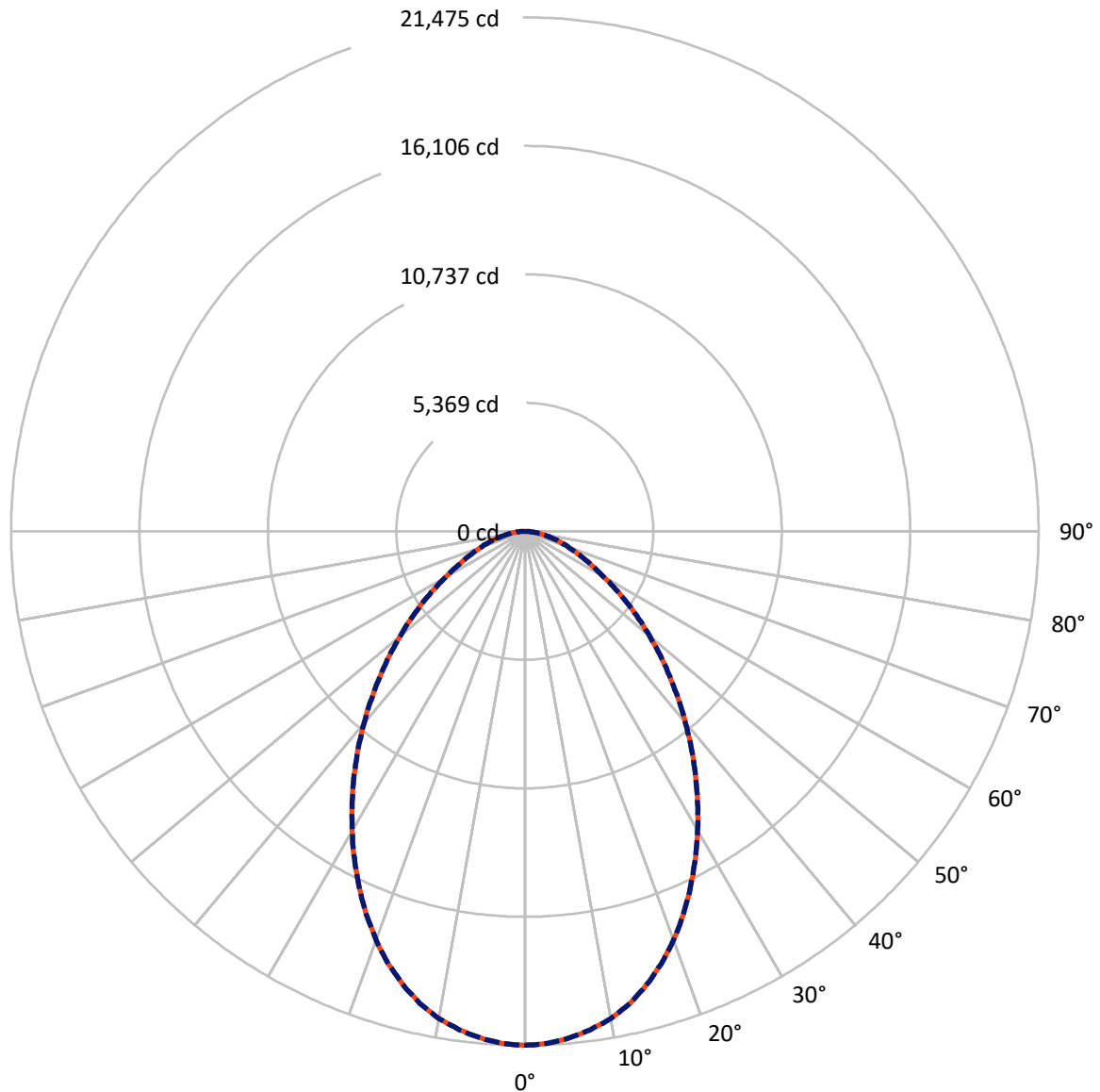
Lumen Table



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Luminous Intensity Polar Plot



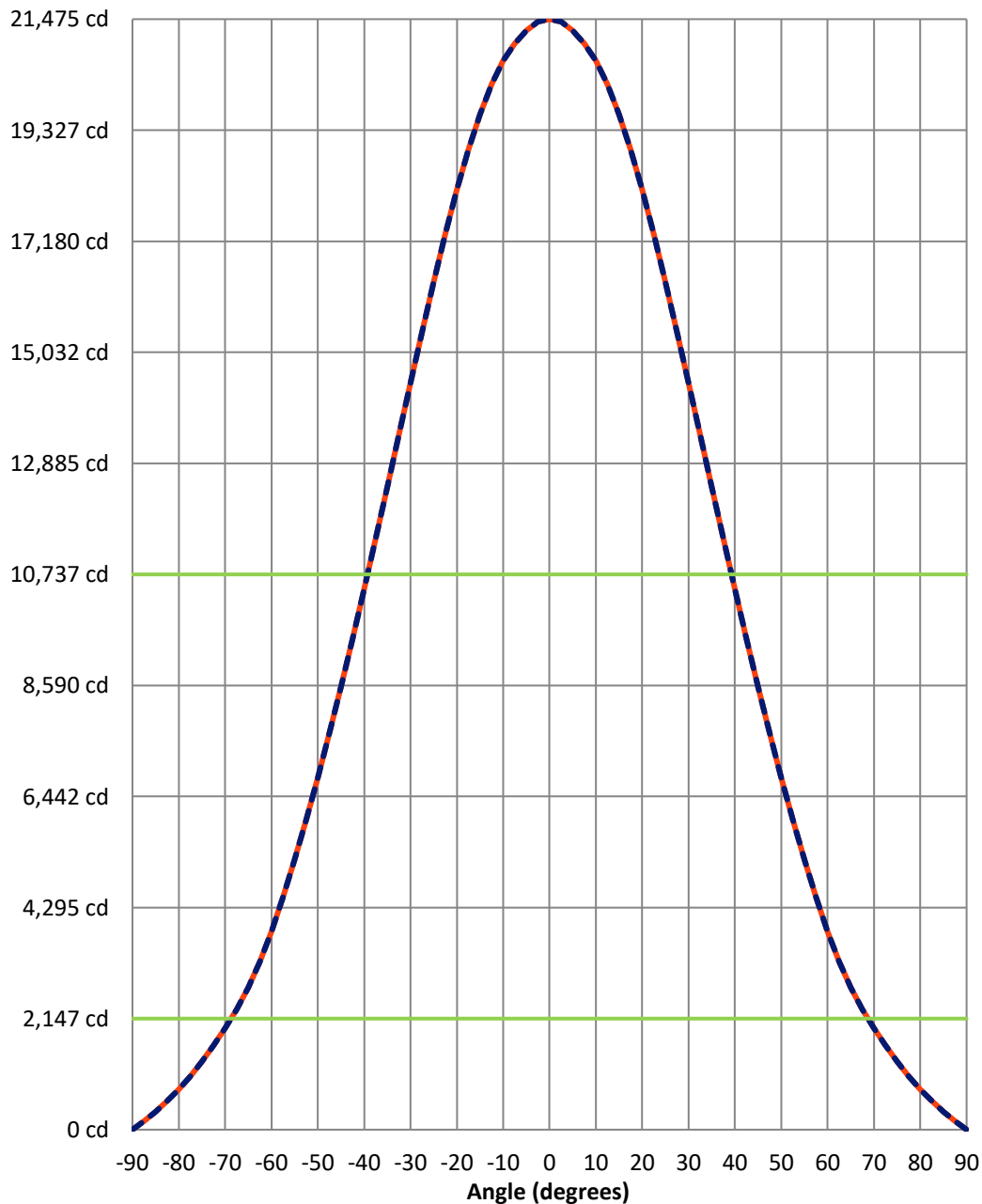
— Vertical Distribution Through 0-Deg

- - - Horizontal Distribution Through 0-Deg

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Luminous Intensity Plot



Beam:

H Angle: 78.6°
V Angle: 78.6°
Lumens: 16730.1
Efficiency: 43.3%

Field:

H Angle: 137.5°
V Angle: 137.5°
Lumens: 27395
Efficiency: 70.9%

Spill:

Lumens: 11270.4
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°	165.3	165.3	165.3	165.3	165.3	165.3	165.3	157.2	157.2	153.2	149.2
85°	346.7	346.7	346.7	346.7	346.7	338.6	334.6	330.6	326.5	318.5	314.4
82.5°	556.3	556.3	556.3	556.3	548.3	540.2	536.2	528.1	520.0	507.9	495.8
80°	778.0	778.0	778.0	778.0	765.9	757.9	745.8	737.7	725.6	709.5	693.4
77.5°	1032.0	1032.0	1032.0	1019.9	1011.8	999.8	987.7	971.5	955.4	935.3	911.1
75°	1318.2	1318.2	1318.2	1302.1	1290.0	1277.9	1257.8	1237.6	1213.4	1185.2	1152.9
72.5°	1628.6	1628.6	1628.6	1608.5	1596.4	1576.2	1552.0	1523.8	1495.6	1459.3	1419.0
70°	1963.2	1963.2	1963.2	1939.0	1918.9	1898.7	1866.5	1834.2	1793.9	1753.6	1705.2
67.5°	2326.0	2326.0	2326.0	2297.8	2273.6	2245.4	2209.1	2168.8	2120.4	2064.0	2007.6
65°	2749.3	2749.3	2733.2	2709.0	2680.8	2640.5	2596.1	2539.7	2479.2	2406.7	2330.1
62.5°	3249.2	3249.2	3225.0	3196.8	3160.5	3108.1	3047.6	2975.1	2890.4	2797.7	2705.0
60°	3829.7	3829.7	3801.5	3765.2	3712.8	3648.3	3567.7	3475.0	3370.1	3253.2	3140.4
57.5°	4498.9	4498.9	4462.6	4414.2	4349.7	4269.1	4168.3	4051.4	3918.4	3773.3	3632.2
55°	5224.5	5224.5	5180.2	5123.7	5047.1	4950.4	4829.5	4692.4	4531.1	4365.9	4184.5
52.5°	5994.5	5994.5	5942.1	5877.6	5788.9	5676.0	5539.0	5377.7	5192.3	4998.8	4785.1
50°	6804.8	6804.8	6744.3	6671.7	6571.0	6437.9	6280.7	6095.3	5889.7	5663.9	5418.0
47.5°	7671.5	7671.5	7603.0	7518.3	7397.4	7244.2	7058.7	6845.1	6611.3	6357.3	6079.1
45°	8562.4	8562.4	8485.8	8389.1	8256.0	8082.7	7877.1	7671.5	7373.2	7078.9	6756.4
42.5°	9489.6	9489.6	9400.9	9292.1	9138.9	8949.4	8715.6	8449.5	8155.2	7824.7	7474.0
40°	10453.1	10453.1	10352.3	10227.3	10058.0	9840.3	9578.3	9280.0	8949.4	8582.6	8195.6
37.5°	11436.7	11436.7	11323.8	11186.8	10997.3	10755.4	10461.1	10130.6	9759.7	9352.5	8925.2
35°	12428.4	12428.4	12303.4	12154.3	11944.6	11678.6	11360.1	10993.3	10582.1	10138.6	9658.9
32.5°	13440.2	13440.2	13303.2	13133.9	12896.0	12601.7	12251.0	11851.9	11436.7	10920.7	10396.6
30°	14440.0	14440.0	14290.8	14105.4	13851.4	13528.9	13146.0	12706.5	12218.8	11690.7	11126.3
27.5°	15423.6	15383.3	15258.3	15060.8	14782.6	14440.0	14024.8	13549.1	13021.0	12440.5	11835.8
25°	16391.1	16346.8	16209.7	15992.0	15693.7	15318.8	14871.3	14363.4	13795.0	13182.2	12521.1
22.5°	17318.3	17269.9	17124.8	16891.0	16572.5	16165.4	15685.7	15141.4	14536.7	13879.6	13182.2
20°	18177.0	18124.6	17975.4	17729.5	17398.9	16967.6	16459.7	15875.1	15230.1	14536.7	13795.0
17.5°	18951.0	18898.6	18741.4	18487.4	18177.0	17697.3	17173.2	16556.4	15875.1	15141.4	14363.4
15°	19632.3	19575.8	19414.6	19160.6	18805.9	18354.3	17802.1	17173.2	16459.7	15685.7	14871.3
12.5°	20212.8	20156.3	19991.0	19737.1	19370.2	18918.7	18354.3	17697.3	16967.6	16165.4	15318.8
10°	20672.3	20615.9	20458.7	20216.8	19837.9	19370.2	18805.9	18177.0	17398.9	16572.5	15693.7
7.5°	21002.9	20950.5	20805.4	20563.5	20216.8	19737.1	19160.6	18487.4	17729.5	16891.0	15992.0
5°	21252.8	21192.4	21047.2	20805.4	20458.7	19991.0	19414.6	18741.4	17975.4	17124.8	16209.7
2.5°	21426.2	21353.6	21192.4	20950.5	20615.9	20156.3	19575.8	18898.6	18124.6	17269.9	16346.8
0°	21474.5	21426.2	21252.8	21002.9	20672.3	20212.8	19632.3	18951.0	18177.0	17318.3	16391.1

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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°	145.1	145.1	141.1	137.1	133.0	125.0	120.9	116.9	112.9	104.8	100.8
85°	306.4	298.3	290.3	282.2	270.1	262.0	249.9	241.9	229.8	217.7	205.6
82.5°	483.8	471.7	455.5	443.4	427.3	407.2	391.0	370.9	350.7	334.6	314.4
80°	677.3	657.1	636.9	616.8	592.6	568.4	544.2	520.0	491.8	463.6	435.4
77.5°	886.9	858.7	830.4	798.2	770.0	737.7	705.5	673.2	636.9	600.7	564.4
75°	1120.7	1084.4	1044.1	1003.8	967.5	923.2	878.8	834.5	786.1	741.8	693.4
72.5°	1374.7	1330.3	1281.9	1233.6	1181.2	1124.7	1068.3	1007.8	951.4	894.9	834.5
70°	1648.8	1596.4	1535.9	1475.4	1410.9	1342.4	1273.9	1201.3	1128.8	1056.2	983.6
67.5°	1943.1	1878.6	1806.0	1733.4	1652.8	1572.2	1491.6	1406.9	1318.2	1229.5	1144.9
65°	2257.5	2176.9	2092.2	1999.5	1906.8	1814.1	1717.3	1616.5	1515.8	1410.9	1318.2
62.5°	2608.2	2507.4	2398.6	2285.7	2180.9	2068.0	1963.2	1838.3	1717.3	1600.4	1483.5
60°	3015.4	2882.4	2749.3	2608.2	2475.2	2330.1	2201.1	2064.0	1926.9	1793.9	1656.8
57.5°	3470.9	3301.6	3140.4	2971.0	2793.7	2632.4	2467.1	2301.9	2148.7	1991.4	1842.3
55°	3986.9	3781.3	3579.8	3370.1	3164.5	2963.0	2753.4	2567.9	2378.4	2201.1	2027.7
52.5°	4551.3	4317.5	4067.5	3829.7	3567.7	3317.7	3083.9	2850.1	2628.4	2414.7	2217.2
50°	5156.0	4881.9	4595.6	4305.4	4007.1	3712.8	3430.6	3156.5	2898.5	2648.5	2414.7
47.5°	5784.9	5474.5	5147.9	4817.4	4498.9	4140.1	3801.5	3491.1	3180.7	2898.5	2628.4
45°	6429.9	6079.1	5720.4	5345.5	4970.5	4583.5	4208.6	3829.7	3491.1	3156.5	2850.1
42.5°	7095.0	6700.0	6300.9	5885.6	5470.4	5047.1	4623.9	4208.6	3801.5	3430.6	3083.9
40°	7780.3	7345.0	6889.4	6437.9	5994.5	5510.7	5047.1	4583.5	4140.1	3712.8	3317.7
37.5°	8465.7	7990.0	7498.2	6990.2	6482.3	5994.5	5470.4	4970.5	4498.9	4007.1	3567.7
35°	9155.0	8630.9	8098.8	7546.5	6990.2	6437.9	5885.6	5345.5	4817.4	4305.4	3829.7
32.5°	9848.4	9275.9	8687.4	8098.8	7498.2	6889.4	6300.9	5720.4	5147.9	4595.6	4067.5
30°	10529.7	9908.8	9275.9	8630.9	7990.0	7345.0	6700.0	6079.1	5474.5	4881.9	4317.5
27.5°	11194.8	10529.7	9848.4	9155.0	8465.7	7780.3	7095.0	6429.9	5784.9	5156.0	4551.3
25°	11835.8	11126.3	10396.6	9658.9	8925.2	8195.6	7474.0	6756.4	6079.1	5418.0	4785.1
22.5°	12440.5	11690.7	10920.7	10138.6	9352.5	8582.6	7824.7	7078.9	6357.3	5663.9	4998.8
20°	13021.0	12218.8	11436.7	10582.1	9759.7	8949.4	8155.2	7373.2	6611.3	5889.7	5192.3
17.5°	13549.1	12706.5	11851.9	10993.3	10130.6	9280.0	8449.5	7671.5	6845.1	6095.3	5377.7
15°	14024.8	13146.0	12251.0	11360.1	10461.1	9578.3	8715.6	7877.1	7058.7	6280.7	5539.0
12.5°	14440.0	13528.9	12601.7	11678.6	10755.4	9840.3	8949.4	8082.7	7244.2	6437.9	5676.0
10°	14782.6	13851.4	12896.0	11944.6	10997.3	10058.0	9138.9	8256.0	7397.4	6571.0	5788.9
7.5°	15060.8	14105.4	13133.9	12154.3	11186.8	10227.3	9292.1	8389.1	7518.3	6671.7	5877.6
5°	15258.3	14290.8	13303.2	12303.4	11323.8	10352.3	9400.9	8485.8	7603.0	6744.3	5942.1
2.5°	15383.3	14440.0	13440.2	12428.4	11436.7	10453.1	9489.6	8562.4	7671.5	6804.8	5994.5
0°	15423.6	14440.0	13440.2	12428.4	11436.7	10453.1	9489.6	8562.4	7671.5	6804.8	5994.5

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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°	96.8	88.7	80.6	76.6	68.5	64.5	56.4	48.4	44.3	36.3	28.2
85°	193.5	177.4	165.3	153.2	141.1	125.0	112.9	100.8	84.7	72.6	56.4
82.5°	294.3	274.1	254.0	233.8	213.7	193.5	169.3	149.2	129.0	108.8	84.7
80°	407.2	374.9	346.7	318.5	290.3	262.0	229.8	201.6	169.3	141.1	112.9
77.5°	524.1	487.8	447.5	407.2	366.8	330.6	290.3	254.0	217.7	177.4	141.1
75°	649.0	600.7	556.3	503.9	455.5	403.1	354.8	306.4	262.0	217.7	169.3
72.5°	778.0	717.6	657.1	600.7	540.2	479.7	423.3	362.8	306.4	254.0	201.6
70°	911.1	838.5	765.9	697.4	628.9	556.3	491.8	423.3	354.8	290.3	229.8
67.5°	1052.2	967.5	882.8	794.2	717.6	636.9	556.3	479.7	403.1	330.6	262.0
65°	1205.3	1104.6	999.8	907.0	806.3	717.6	628.9	540.2	455.5	366.8	290.3
62.5°	1362.6	1245.7	1128.8	1011.8	907.0	794.2	697.4	600.7	503.9	407.2	318.5
60°	1523.8	1390.8	1257.8	1128.8	999.8	882.8	765.9	657.1	556.3	447.5	346.7
57.5°	1689.1	1539.9	1390.8	1245.7	1104.6	967.5	838.5	717.6	600.7	487.8	374.9
55°	1858.4	1689.1	1523.8	1362.6	1205.3	1052.2	911.1	778.0	649.0	524.1	407.2
52.5°	2027.7	1842.3	1656.8	1483.5	1318.2	1144.9	983.6	834.5	693.4	564.4	435.4
50°	2201.1	1991.4	1793.9	1600.4	1410.9	1229.5	1056.2	894.9	741.8	600.7	463.6
47.5°	2378.4	2148.7	1926.9	1717.3	1515.8	1318.2	1128.8	951.4	786.1	636.9	491.8
45°	2567.9	2301.9	2064.0	1838.3	1616.5	1406.9	1201.3	1007.8	834.5	673.2	520.0
42.5°	2753.4	2467.1	2201.1	1963.2	1717.3	1491.6	1273.9	1068.3	878.8	705.5	544.2
40°	2963.0	2632.4	2330.1	2068.0	1814.1	1572.2	1342.4	1124.7	923.2	737.7	568.4
37.5°	3164.5	2793.7	2475.2	2180.9	1906.8	1652.8	1410.9	1181.2	967.5	770.0	592.6
35°	3370.1	2971.0	2608.2	2285.7	1999.5	1733.4	1475.4	1233.6	1003.8	798.2	616.8
32.5°	3579.8	3140.4	2749.3	2398.6	2092.2	1806.0	1535.9	1281.9	1044.1	830.4	636.9
30°	3781.3	3301.6	2882.4	2507.4	2176.9	1878.6	1596.4	1330.3	1084.4	858.7	657.1
27.5°	3986.9	3470.9	3015.4	2608.2	2257.5	1943.1	1648.8	1374.7	1120.7	886.9	677.3
25°	4184.5	3632.2	3140.4	2705.0	2330.1	2007.6	1705.2	1419.0	1152.9	911.1	693.4
22.5°	4365.9	3773.3	3253.2	2797.7	2406.7	2064.0	1753.6	1459.3	1185.2	935.3	709.5
20°	4531.1	3918.4	3370.1	2890.4	2479.2	2120.4	1793.9	1495.6	1213.4	955.4	725.6
17.5°	4692.4	4051.4	3475.0	2975.1	2539.7	2168.8	1834.2	1523.8	1237.6	971.5	737.7
15°	4829.5	4168.3	3567.7	3047.6	2596.1	2209.1	1866.5	1552.0	1257.8	987.7	745.8
12.5°	4950.4	4269.1	3648.3	3108.1	2640.5	2245.4	1898.7	1576.2	1277.9	999.8	757.9
10°	5047.1	4349.7	3712.8	3160.5	2680.8	2273.6	1918.9	1596.4	1290.0	1011.8	765.9
7.5°	5123.7	4414.2	3765.2	3196.8	2709.0	2297.8	1939.0	1608.5	1302.1	1019.9	778.0
5°	5180.2	4462.6	3801.5	3225.0	2733.2	2326.0	1963.2	1628.6	1318.2	1032.0	778.0
2.5°	5224.5	4498.9	3829.7	3249.2	2749.3	2326.0	1963.2	1628.6	1318.2	1032.0	778.0
0°	5224.5	4498.9	3829.7	3249.2	2749.3	2326.0	1963.2	1628.6	1318.2	1032.0	778.0

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	20.2	16.1	8.1	0.0
85°	44.3	28.2	16.1	0.0
82.5°	64.5	44.3	20.2	0.0
80°	84.7	56.4	28.2	0.0
77.5°	108.8	72.6	36.3	0.0
75°	129.0	84.7	44.3	0.0
72.5°	149.2	100.8	48.4	0.0
70°	169.3	112.9	56.4	0.0
67.5°	193.5	125.0	64.5	0.0
65°	213.7	141.1	68.5	0.0
62.5°	233.8	153.2	76.6	0.0
60°	254.0	165.3	80.6	0.0
57.5°	274.1	177.4	88.7	0.0
55°	294.3	193.5	96.8	0.0
52.5°	314.4	205.6	100.8	0.0
50°	334.6	217.7	104.8	0.0
47.5°	350.7	229.8	112.9	0.0
45°	370.9	241.9	116.9	0.0
42.5°	391.0	249.9	120.9	0.0
40°	407.2	262.0	125.0	0.0
37.5°	427.3	270.1	133.0	0.0
35°	443.4	282.2	137.1	0.0
32.5°	455.5	290.3	141.1	0.0
30°	471.7	298.3	145.1	0.0
27.5°	483.8	306.4	145.1	0.0
25°	495.8	314.4	149.2	0.0
22.5°	507.9	318.5	153.2	0.0
20°	520.0	326.5	157.2	0.0
17.5°	528.1	330.6	157.2	0.0
15°	536.2	334.6	165.3	0.0
12.5°	540.2	338.6	165.3	0.0
10°	548.3	346.7	165.3	0.0
7.5°	556.3	346.7	165.3	0.0
5°	556.3	346.7	165.3	0.0
2.5°	556.3	346.7	165.3	0.0
0°	556.3	346.7	165.3	0.0

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