

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: P628371

Luminaire Tested: **IFLD-M-SA4D-827-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628371
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4D-827-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (64) 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

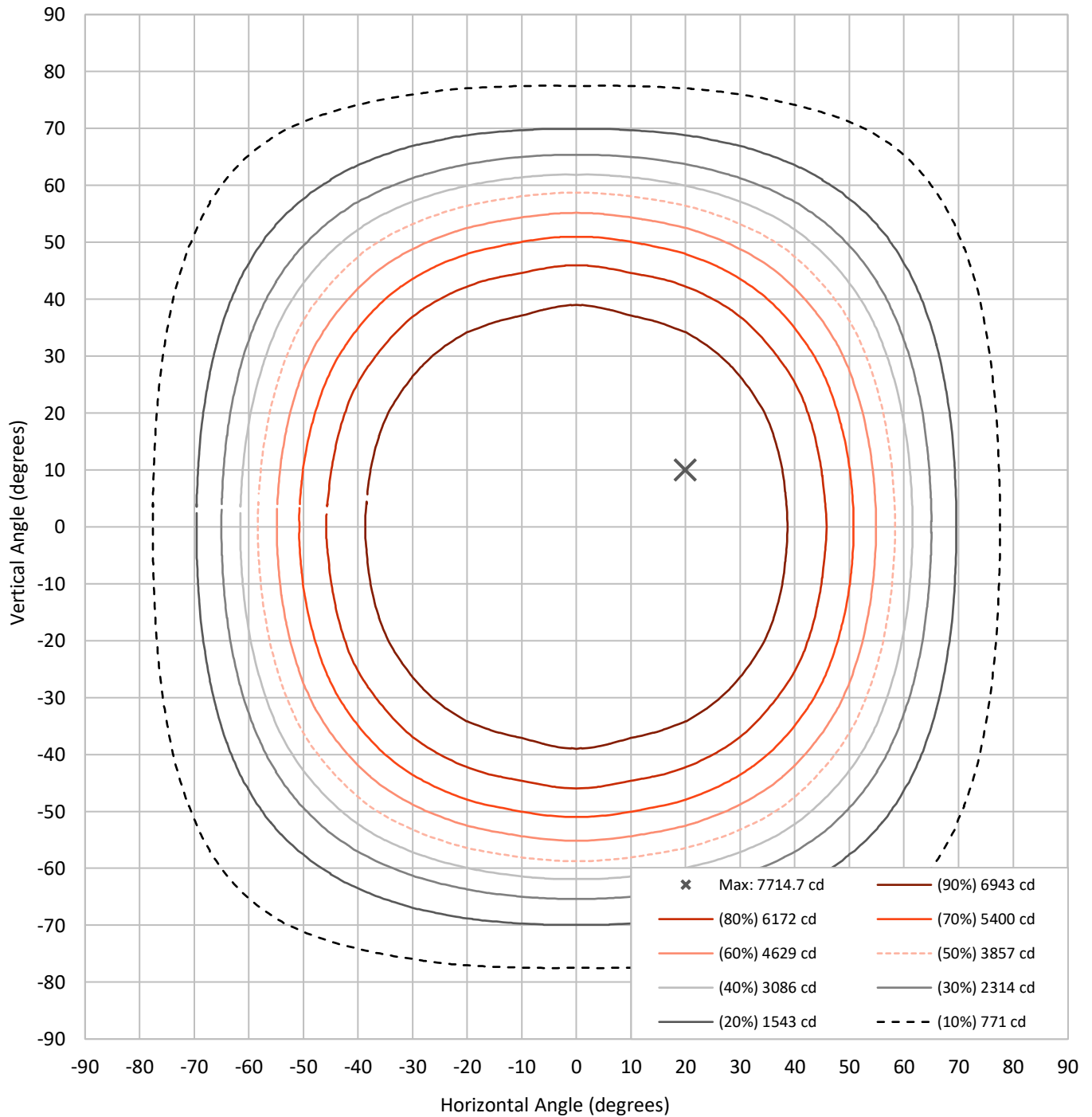
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	23667.7 lumens	Max Intensity:	7714.7 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	94.8 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 0.5' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	14523 lumens	Field Lumens:	17410.6 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

Input Watts (W): 249.7
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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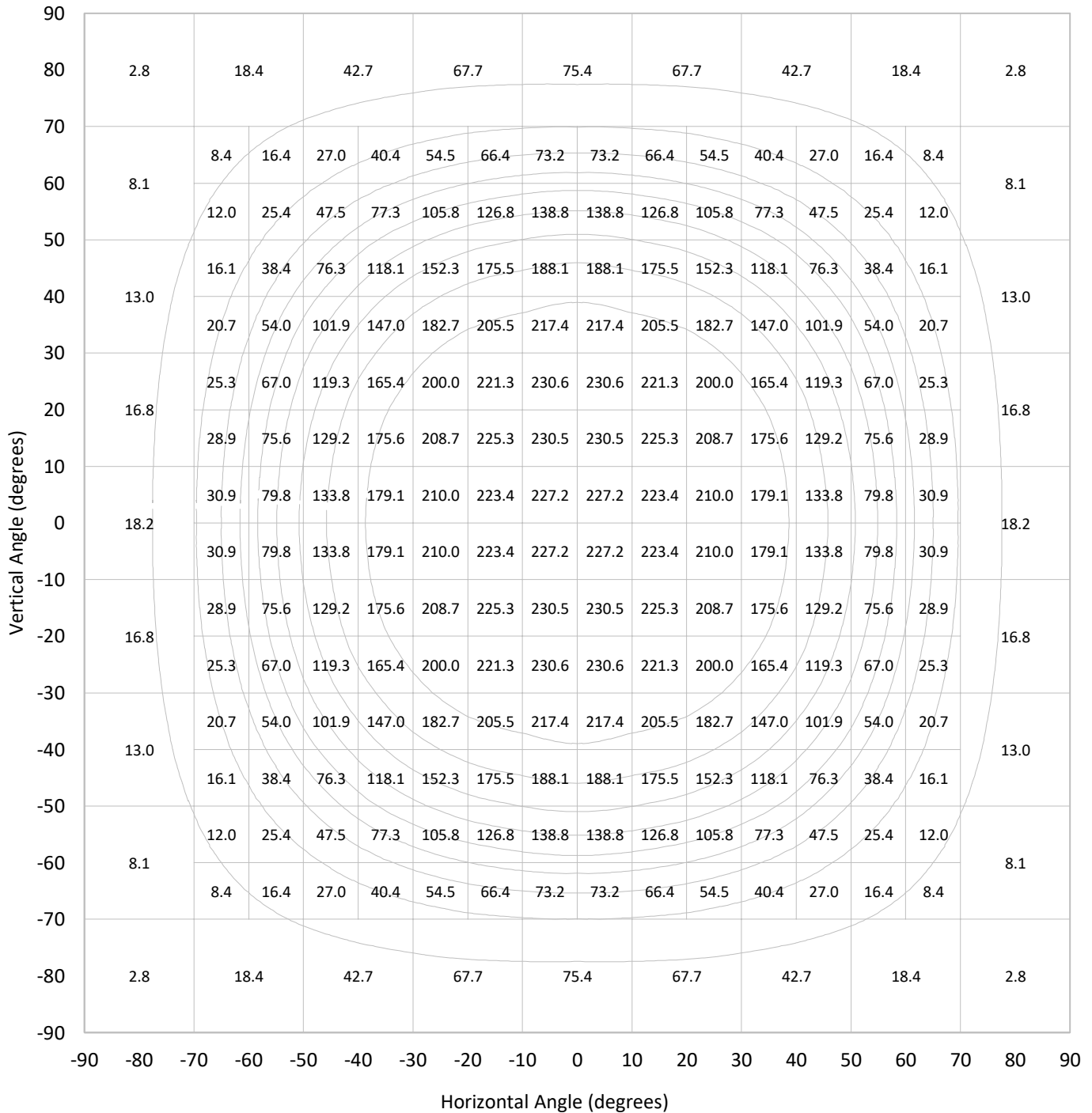
Iso-Candela Plot





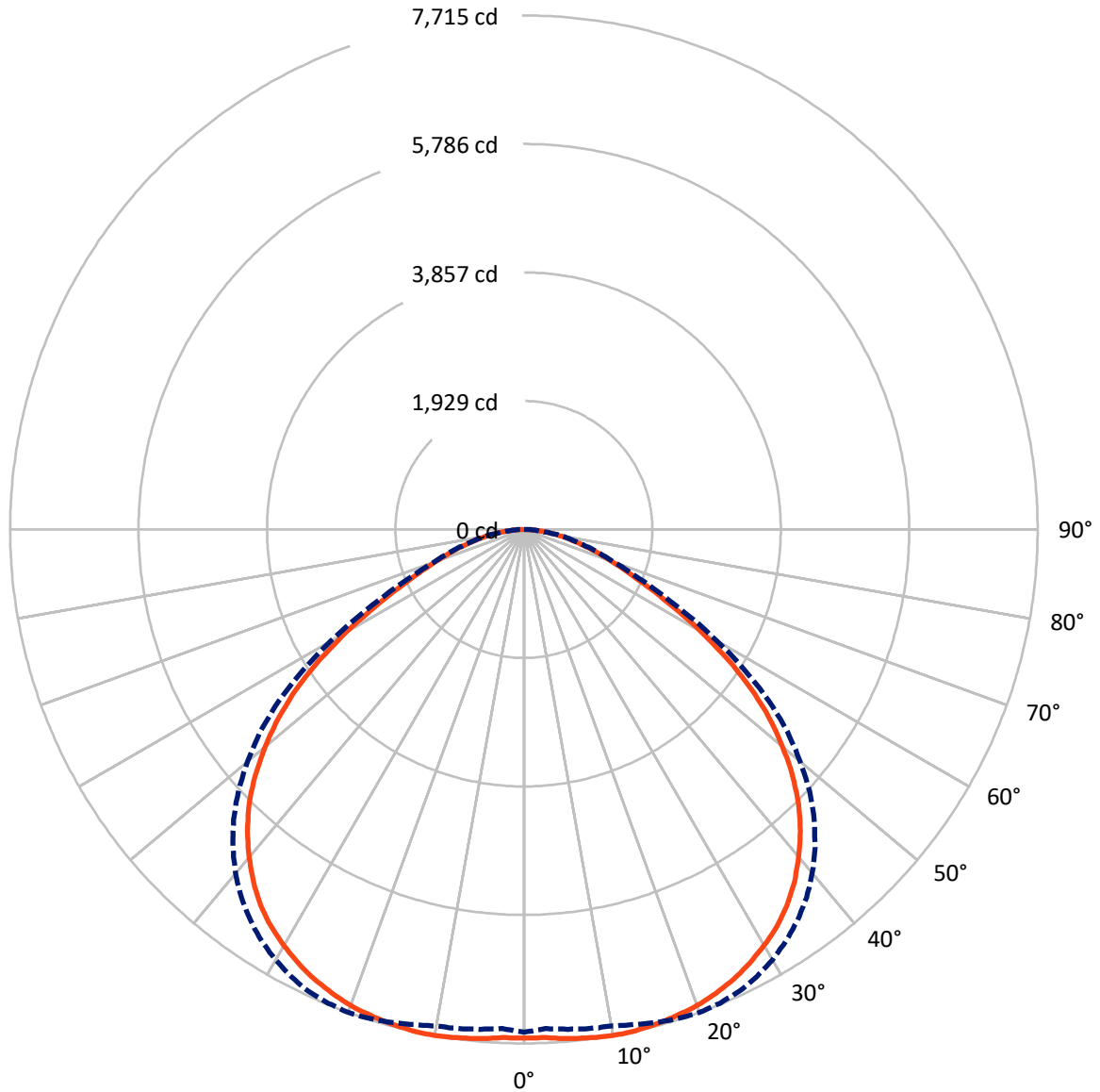
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Lumen Table



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Luminous Intensity Polar Plot



— Vertical Distribution Through 20-Deg - - - Horizontal Distribution Through 10-Deg

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Luminous Intensity Plot



Beam:
 H Angle: 115.7°
 V Angle: 112.9°
 Lumens: 14523
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 17410.6
 Efficiency: 73.6%

Spill:
 Lumens: 6257.1
 Efficiency: 26.4%

- Vertical Distribution through 20-Deg
- - - Horizontal Distribution through 10-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°	62.3	67.2	69.7	72.2	74.7	77.2	79.7	77.2	74.7	74.7	72.2
85°	166.8	171.8	174.3	191.7	209.2	219.1	231.6	229.1	229.1	226.6	224.1
82.5°	333.7	348.6	361.1	378.5	388.5	403.4	413.4	405.9	400.9	391.0	383.5
80°	592.7	597.7	600.1	602.6	590.2	587.7	582.7	575.2	565.3	552.8	540.4
77.5°	754.5	759.5	764.5	759.5	757.0	754.5	747.1	739.6	729.6	719.7	704.7
75°	998.6	998.6	998.6	991.1	986.1	978.7	966.2	953.8	936.3	916.4	894.0
72.5°	1257.6	1255.1	1252.6	1237.6	1225.2	1210.2	1192.8	1177.9	1158.0	1135.5	1105.7
70°	1529.0	1534.0	1536.5	1516.5	1501.6	1481.7	1459.3	1431.9	1402.0	1369.6	1327.3
67.5°	1902.5	1897.5	1892.6	1865.2	1845.3	1817.9	1785.5	1745.6	1700.8	1651.0	1591.3
65°	2365.7	2373.2	2358.2	2330.8	2293.5	2248.7	2198.9	2141.6	2074.4	1999.6	1915.0
62.5°	2926.0	2938.5	2921.0	2886.2	2838.9	2779.1	2709.4	2627.2	2535.0	2430.5	2325.9
60°	3563.5	3561.0	3528.6	3481.3	3419.1	3344.4	3267.2	3177.5	3072.9	2950.9	2823.9
57.5°	4148.7	4143.7	4103.9	4056.6	3994.3	3914.6	3832.4	3737.8	3628.3	3498.8	3351.8
55°	4674.1	4669.2	4629.3	4579.5	4514.8	4435.1	4360.4	4270.7	4163.6	4026.7	3869.8
52.5°	5139.8	5142.3	5107.4	5052.7	4982.9	4905.7	4833.5	4743.9	4641.8	4504.8	4352.9
50°	5568.1	5565.6	5528.3	5478.5	5413.7	5339.0	5266.8	5177.2	5070.1	4938.1	4791.2
47.5°	5966.6	5961.6	5919.3	5864.5	5797.2	5732.5	5665.3	5585.6	5473.5	5341.5	5194.6
45°	6300.3	6290.3	6248.0	6195.7	6130.9	6073.6	6013.9	5954.1	5834.6	5712.6	5573.1
42.5°	6586.6	6584.1	6541.8	6489.5	6424.8	6375.0	6320.2	6245.5	6145.9	6033.8	5896.8
40°	6860.6	6840.6	6798.3	6748.5	6688.7	6646.4	6591.6	6516.9	6419.8	6310.2	6178.2
37.5°	7064.8	7067.2	7022.4	6967.6	6915.3	6875.5	6825.7	6756.0	6671.3	6564.2	6432.2
35°	7259.0	7246.5	7209.2	7161.9	7114.6	7069.7	7017.4	6957.7	6887.9	6788.3	6663.8
32.5°	7386.0	7403.4	7358.6	7308.8	7281.4	7246.5	7191.8	7129.5	7067.2	6967.6	6855.6
30°	7525.4	7510.5	7475.6	7433.3	7413.4	7391.0	7343.7	7283.9	7211.7	7122.0	7017.4
27.5°	7622.6	7615.1	7572.8	7532.9	7523.0	7503.0	7465.7	7413.4	7341.2	7254.0	7156.9
25°	7664.9	7669.9	7630.0	7607.6	7607.6	7595.2	7565.3	7520.5	7448.2	7368.6	7273.9
22.5°	7684.8	7679.8	7652.4	7647.5	7659.9	7650.0	7637.5	7597.7	7532.9	7468.2	7388.5
20°	7697.3	7662.4	7637.5	7657.4	7672.4	7669.9	7659.9	7635.0	7605.1	7550.3	7480.6
17.5°	7669.9	7647.5	7617.6	7647.5	7679.8	7682.3	7672.4	7657.4	7650.0	7615.1	7552.8
15°	7602.6	7585.2	7590.2	7620.1	7657.4	7669.9	7677.3	7694.8	7684.8	7657.4	7602.6
12.5°	7557.8	7535.4	7557.8	7587.7	7607.6	7615.1	7674.9	7707.2	7707.2	7682.3	7647.5
10°	7545.4	7500.5	7530.4	7557.8	7567.8	7612.6	7662.4	7697.3	7714.7	7694.8	7650.0
7.5°	7520.5	7490.6	7503.0	7515.5	7572.8	7605.1	7632.5	7669.9	7694.8	7692.3	7652.4
5°	7508.0	7470.7	7475.6	7527.9	7567.8	7590.2	7600.2	7632.5	7669.9	7677.3	7647.5
2.5°	7475.6	7458.2	7495.6	7500.5	7530.4	7547.9	7557.8	7587.7	7635.0	7652.4	7640.0
0°	7458.2	7433.3	7408.4	7428.3	7478.1	7515.5	7530.4	7575.3	7630.0	7647.5	7620.1



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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°	69.7	67.2	64.7	62.3	64.7	64.7	64.7	62.3	64.7	62.3	62.3
85°	216.6	206.7	199.2	189.3	179.3	171.8	161.9	151.9	149.4	146.9	141.9
82.5°	373.5	361.1	348.6	333.7	318.7	301.3	283.9	264.0	259.0	254.0	246.5
80°	525.4	508.0	490.6	473.1	458.2	440.8	420.8	398.4	383.5	371.0	356.1
77.5°	684.8	659.9	635.0	605.1	587.7	570.3	550.3	527.9	505.5	485.6	463.2
75°	866.6	839.2	814.3	784.4	752.0	719.7	687.3	657.4	625.0	595.2	565.3
72.5°	1068.3	1028.5	988.6	951.3	911.4	871.6	829.2	789.4	749.6	709.7	667.4
70°	1280.0	1230.2	1180.4	1130.6	1078.3	1026.0	976.2	926.4	876.6	824.3	776.9
67.5°	1529.0	1471.7	1407.0	1337.2	1260.1	1192.8	1128.1	1068.3	1008.5	948.8	889.0
65°	1840.3	1760.6	1673.4	1578.8	1489.2	1399.5	1304.9	1215.2	1145.5	1075.8	1008.5
62.5°	2223.8	2111.7	1989.7	1867.7	1758.1	1641.1	1531.5	1414.4	1304.9	1205.3	1123.1
60°	2682.0	2530.1	2380.7	2223.8	2071.9	1912.5	1773.0	1628.6	1491.6	1369.6	1250.1
57.5°	3187.5	3010.7	2831.4	2639.6	2432.9	2246.2	2056.9	1867.7	1705.8	1543.9	1409.5
55°	3700.5	3513.7	3312.0	3095.3	2868.7	2629.7	2373.2	2161.5	1939.9	1750.6	1576.3
52.5°	4188.6	3994.3	3785.1	3585.9	3314.5	3040.6	2759.2	2480.3	2221.3	1979.7	1768.1
50°	4624.3	4435.1	4233.4	4001.8	3750.3	3458.9	3145.1	2831.4	2525.1	2241.2	1977.2
47.5°	5022.8	4838.5	4636.8	4405.2	4176.1	3852.4	3536.1	3190.0	2848.8	2522.6	2213.8
45°	5396.3	5209.5	5000.4	4778.7	4514.8	4225.9	3899.7	3551.1	3185.0	2818.9	2462.8
42.5°	5735.0	5548.2	5336.5	5107.4	4846.0	4559.6	4243.3	3892.2	3523.7	3125.2	2734.3
40°	6031.3	5849.5	5645.3	5406.3	5162.2	4860.9	4549.6	4215.9	3834.9	3434.0	3003.2
37.5°	6290.3	6121.0	5919.3	5682.7	5423.7	5154.8	4833.5	4499.8	4156.2	3720.4	3279.6
35°	6519.4	6362.5	6155.8	5931.7	5677.7	5393.8	5092.5	4766.3	4395.2	3986.8	3558.5
32.5°	6718.6	6559.2	6370.0	6145.9	5899.3	5632.9	5324.1	4995.4	4644.3	4228.4	3762.7
30°	6887.9	6733.6	6554.3	6342.6	6106.0	5842.1	5540.7	5209.5	4850.9	4437.6	3976.9
27.5°	7034.9	6887.9	6713.6	6516.9	6290.3	6036.3	5732.5	5398.8	5032.7	4634.3	4173.6
25°	7161.9	7019.9	6858.1	6671.3	6447.2	6198.2	5911.8	5563.2	5197.1	4796.2	4340.5
22.5°	7276.4	7139.5	6977.6	6795.8	6591.6	6342.6	6053.7	5707.6	5336.5	4940.6	4492.4
20°	7378.5	7251.5	7092.1	6905.4	6701.2	6449.7	6163.3	5834.6	5461.1	5072.6	4629.3
17.5°	7460.7	7348.6	7189.3	6992.5	6788.3	6544.3	6265.4	5964.1	5568.1	5184.6	4743.9
15°	7518.0	7408.4	7264.0	7064.8	6865.5	6624.0	6345.1	6033.8	5665.3	5274.3	4838.5
12.5°	7557.8	7440.8	7306.3	7122.0	6922.8	6683.8	6412.3	6106.0	5747.4	5354.0	4920.7
10°	7567.8	7460.7	7326.2	7161.9	6967.6	6736.0	6469.6	6165.8	5814.7	5416.2	4987.9
7.5°	7572.8	7470.7	7348.6	7191.8	7000.0	6775.9	6511.9	6213.1	5864.5	5468.5	5037.7
5°	7570.3	7473.2	7363.6	7211.7	7019.9	6798.3	6539.3	6245.5	5899.3	5503.4	5075.1
2.5°	7562.8	7475.6	7373.5	7226.6	7042.3	6823.2	6566.7	6282.8	5936.7	5533.3	5105.0
0°	7582.7	7508.0	7378.5	7221.6	7047.3	6823.2	6564.2	6287.8	5941.7	5530.8	5102.5



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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°	62.3	59.8	59.8	57.3	54.8	52.3	47.3	44.8	39.8	32.4	24.9
85°	134.5	127.0	119.5	114.6	109.6	104.6	97.1	89.6	79.7	64.7	49.8
82.5°	236.6	221.6	206.7	189.3	174.3	159.4	146.9	134.5	119.5	97.1	74.7
80°	338.7	316.3	293.8	268.9	246.5	221.6	199.2	179.3	159.4	129.5	99.6
77.5°	440.8	410.9	378.5	348.6	316.3	283.9	251.5	224.1	194.2	159.4	124.5
75°	535.4	500.5	470.7	428.3	388.5	346.1	303.8	266.5	229.1	186.8	149.4
72.5°	630.0	585.2	542.9	503.0	458.2	405.9	358.6	311.3	264.0	214.2	169.3
70°	724.7	669.9	617.6	570.3	520.5	468.2	410.9	356.1	298.8	239.1	186.8
67.5°	821.8	759.5	699.8	640.0	582.7	522.9	463.2	400.9	333.7	264.0	206.7
65°	928.9	851.7	779.4	712.2	645.0	580.2	513.0	445.7	371.0	291.4	224.1
62.5°	1035.9	951.3	866.6	781.9	707.2	635.0	562.8	488.1	405.9	321.2	241.6
60°	1150.5	1053.4	956.2	861.6	769.5	689.8	610.1	530.4	443.3	348.6	259.0
57.5°	1277.5	1160.4	1050.9	943.8	839.2	744.6	657.4	572.8	475.6	376.0	278.9
55°	1421.9	1277.5	1148.0	1028.5	913.9	799.4	704.7	617.6	513.0	403.4	301.3
52.5°	1573.8	1407.0	1250.1	1115.6	993.6	864.1	749.6	652.4	550.3	430.8	321.2
50°	1750.6	1539.0	1364.6	1200.3	1063.3	928.9	796.9	692.3	587.7	463.2	341.2
47.5°	1932.4	1698.3	1479.2	1299.9	1138.0	991.1	851.7	727.1	622.6	493.1	361.1
45°	2144.1	1850.2	1608.7	1397.0	1210.2	1055.9	906.4	764.5	652.4	522.9	381.0
42.5°	2348.3	2029.5	1743.2	1504.1	1292.4	1118.1	956.2	804.3	682.3	552.8	398.4
40°	2589.8	2208.8	1872.6	1606.2	1374.6	1177.9	1006.0	846.7	709.7	580.2	415.9
37.5°	2821.4	2390.6	2029.5	1718.3	1454.3	1237.6	1055.9	886.5	734.6	607.6	438.3
35°	3050.5	2592.3	2178.9	1822.8	1536.5	1304.9	1105.7	923.9	759.5	630.0	458.2
32.5°	3269.7	2781.6	2330.8	1939.9	1626.1	1367.1	1150.5	958.7	784.4	649.9	478.1
30°	3473.9	2960.9	2480.3	2059.4	1708.3	1424.4	1192.8	993.6	814.3	667.4	498.0
27.5°	3660.6	3135.2	2629.7	2171.5	1785.5	1476.7	1237.6	1026.0	839.2	684.8	515.5
25°	3830.0	3292.1	2766.6	2273.6	1855.2	1534.0	1280.0	1058.3	861.6	699.8	530.4
22.5°	3989.3	3436.5	2891.1	2375.7	1939.9	1591.3	1319.8	1088.2	884.0	714.7	545.4
20°	4128.8	3568.5	3010.7	2477.8	2014.6	1643.5	1354.7	1115.6	904.0	724.7	560.3
17.5°	4240.8	3685.5	3117.8	2567.4	2079.3	1688.4	1384.6	1140.5	921.4	737.1	570.3
15°	4340.5	3785.1	3207.4	2644.6	2136.6	1725.7	1412.0	1160.4	936.3	744.6	582.7
12.5°	4425.1	3869.8	3284.6	2711.9	2186.4	1758.1	1434.4	1175.4	948.8	752.0	590.2
10°	4494.8	3937.0	3349.3	2764.1	2226.3	1783.0	1451.8	1190.3	958.7	759.5	597.7
7.5°	4547.1	3986.8	3396.7	2809.0	2258.6	1800.4	1466.7	1200.3	968.7	764.5	610.1
5°	4587.0	4029.2	3434.0	2838.9	2283.5	1825.3	1484.2	1212.7	978.7	769.5	610.1
2.5°	4616.9	4064.0	3463.9	2863.8	2303.5	1820.4	1484.2	1210.2	978.7	769.5	607.6
0°	4611.9	4066.5	3461.4	2863.8	2303.5	1815.4	1484.2	1207.8	978.7	769.5	607.6



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	17.4	12.5	5.0	0.0
85°	37.4	24.9	12.5	0.0
82.5°	54.8	34.9	17.4	0.0
80°	72.2	47.3	22.4	0.0
77.5°	92.1	59.8	29.9	0.0
75°	109.6	69.7	34.9	0.0
72.5°	127.0	82.2	39.8	0.0
70°	141.9	92.1	44.8	0.0
67.5°	156.9	104.6	52.3	0.0
65°	169.3	114.6	57.3	0.0
62.5°	179.3	127.0	62.3	0.0
60°	191.7	137.0	67.2	0.0
57.5°	201.7	144.4	72.2	0.0
55°	211.7	149.4	77.2	0.0
52.5°	221.6	156.9	82.2	0.0
50°	231.6	164.4	87.2	0.0
47.5°	241.6	169.3	89.6	0.0
45°	256.5	176.8	94.6	0.0
42.5°	268.9	181.8	99.6	0.0
40°	281.4	186.8	102.1	0.0
37.5°	293.8	191.7	107.1	0.0
35°	306.3	196.7	109.6	0.0
32.5°	316.3	201.7	112.1	0.0
30°	326.2	206.7	114.6	0.0
27.5°	336.2	209.2	117.0	0.0
25°	343.7	214.2	119.5	0.0
22.5°	351.1	216.6	122.0	0.0
20°	356.1	219.1	124.5	0.0
17.5°	363.6	221.6	127.0	0.0
15°	366.1	224.1	132.0	0.0
12.5°	371.0	226.6	132.0	0.0
10°	373.5	229.1	132.0	0.0
7.5°	378.5	229.1	132.0	0.0
5°	376.0	229.1	132.0	0.0
2.5°	376.0	229.1	132.0	0.0
0°	373.5	229.1	132.0	0.0

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