

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: P628361

Luminaire Tested: **IFLD-S-SA3D-827-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628361
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA3D-827-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (48) 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

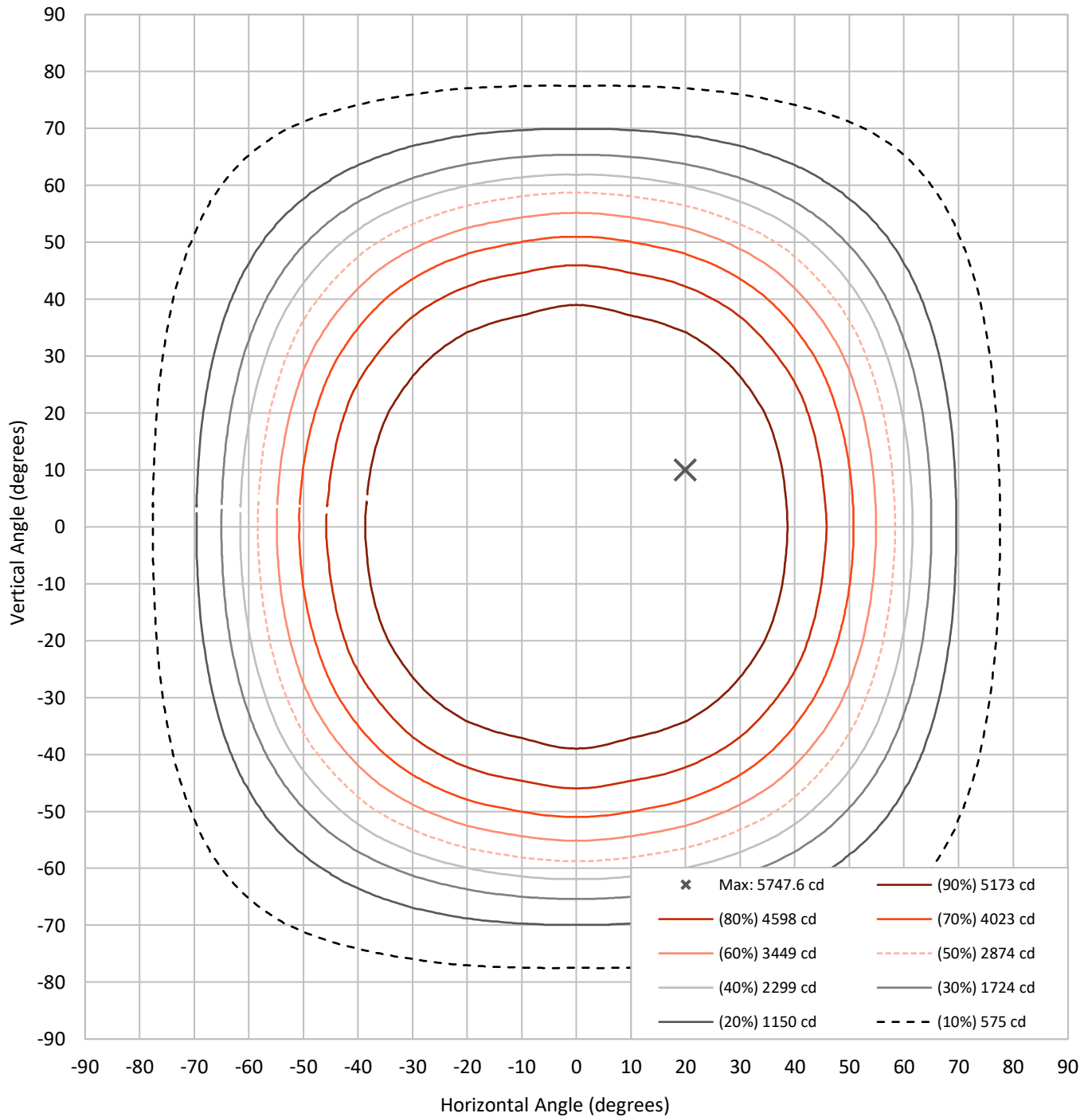
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	17632.8 lumens	Max Intensity:	5747.6 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	95.8 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	10819.8 lumens	Field Lumens:	12971.1 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

Input Watts (W): 184.1
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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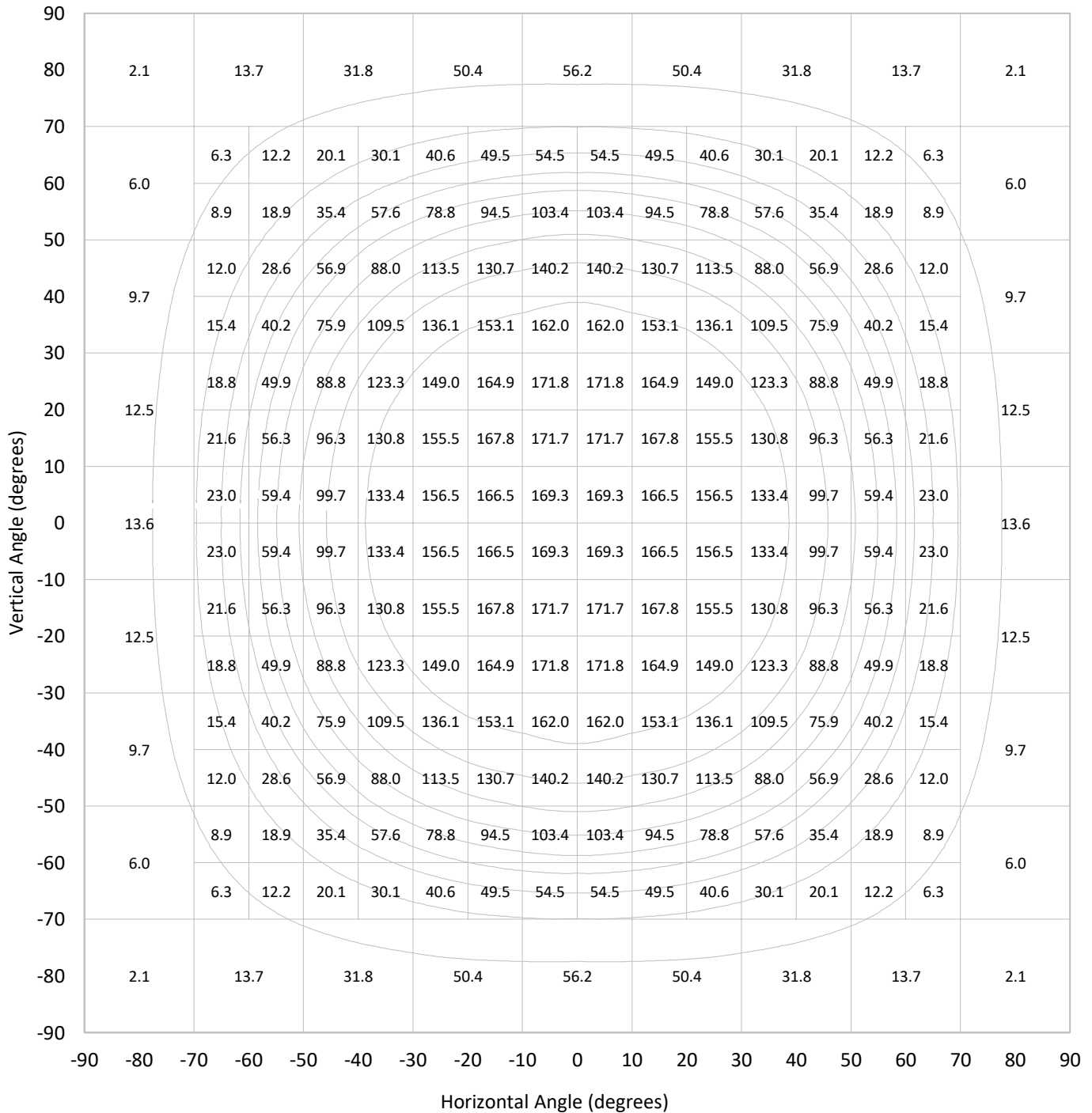
Iso-Candela Plot





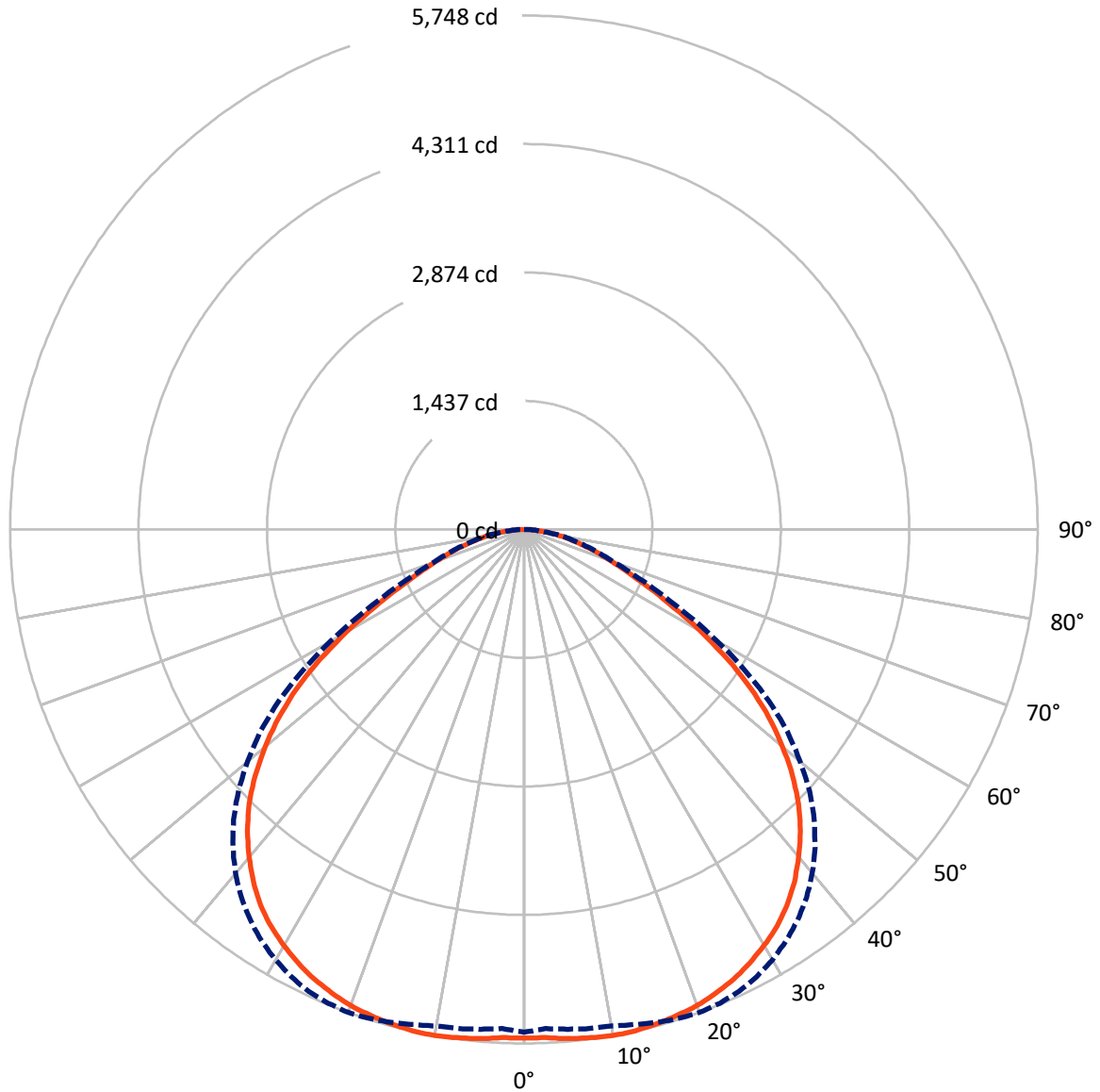
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Lumen Table



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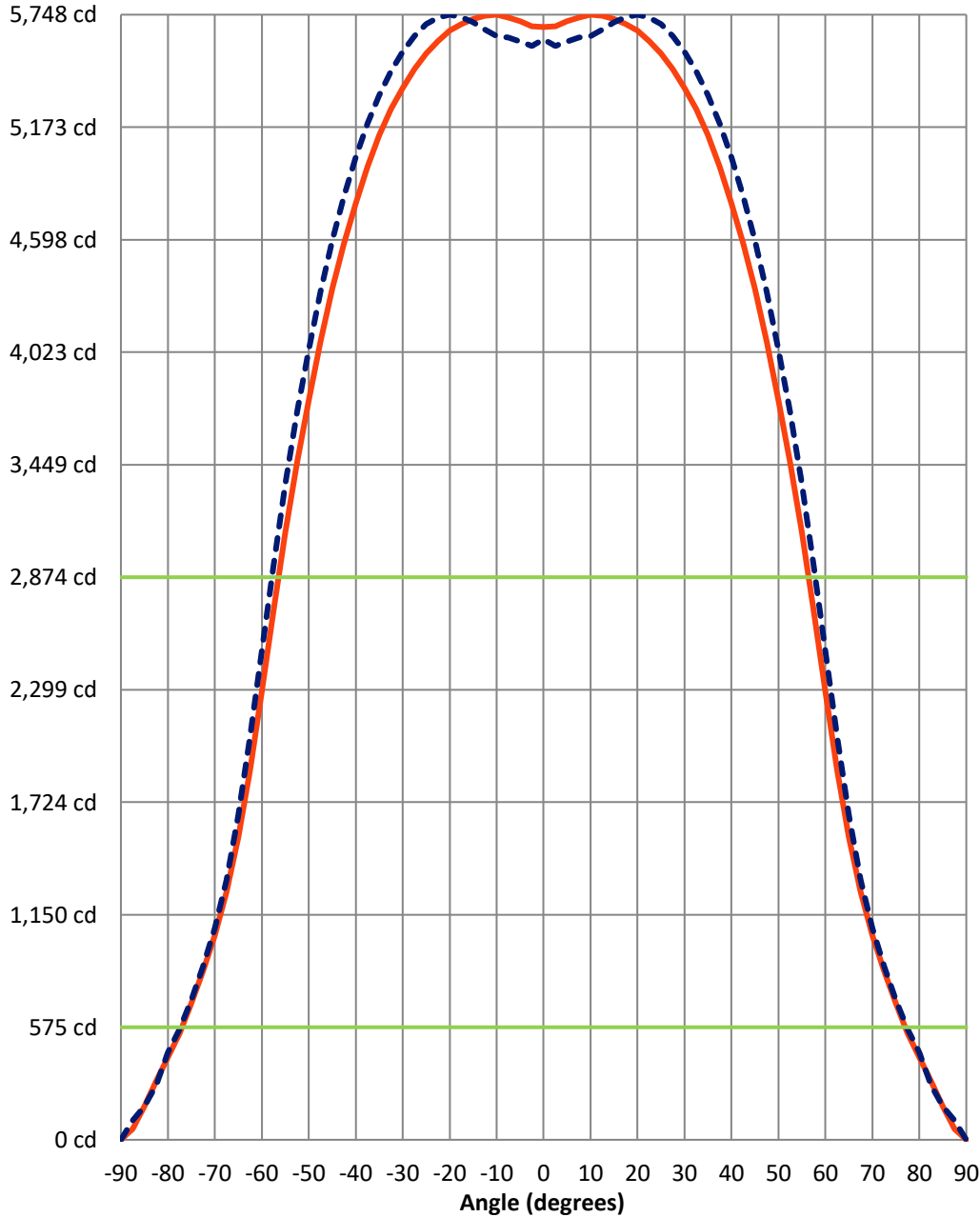
Luminous Intensity Polar Plot



— 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: 10819.8
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 12971.1
 Efficiency: 73.6%

Spill:
 Lumens: 4661.6
 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°	46.4	50.1	51.9	53.8	55.7	57.5	59.4	57.5	55.7	55.7	53.8
85°	124.3	128.0	129.9	142.9	155.8	163.3	172.5	170.7	170.7	168.8	167.0
82.5°	248.6	259.7	269.0	282.0	289.4	300.6	308.0	302.4	298.7	291.3	285.7
80°	441.6	445.3	447.1	449.0	439.7	437.8	434.1	428.6	421.1	411.9	402.6
77.5°	562.1	565.9	569.6	565.9	564.0	562.1	556.6	551.0	543.6	536.2	525.0
75°	744.0	744.0	744.0	738.4	734.7	729.1	719.8	710.6	697.6	682.7	666.0
72.5°	936.9	935.0	933.2	922.1	912.8	901.7	888.7	877.5	862.7	846.0	823.7
70°	1139.1	1142.8	1144.7	1129.8	1118.7	1103.9	1087.2	1066.8	1044.5	1020.4	988.8
67.5°	1417.4	1413.7	1410.0	1389.6	1374.7	1354.3	1330.2	1300.5	1267.1	1230.0	1185.5
65°	1762.5	1768.1	1756.9	1736.5	1708.7	1675.3	1638.2	1595.5	1545.4	1489.8	1426.7
62.5°	2179.9	2189.2	2176.2	2150.2	2115.0	2070.5	2018.5	1957.3	1888.6	1810.7	1732.8
60°	2654.9	2653.0	2628.9	2593.6	2547.3	2491.6	2434.1	2367.3	2289.4	2198.5	2103.9
57.5°	3090.9	3087.1	3057.5	3022.2	2975.8	2916.5	2855.2	2784.7	2703.1	2606.6	2497.2
55°	3482.3	3478.6	3448.9	3411.8	3363.6	3304.2	3248.5	3181.8	3102.0	2999.9	2883.1
52.5°	3829.2	3831.1	3805.1	3764.3	3712.4	3654.8	3601.0	3534.3	3458.2	3356.2	3243.0
50°	4148.3	4146.5	4118.7	4081.6	4033.3	3977.7	3923.9	3857.1	3777.3	3679.0	3569.5
47.5°	4445.2	4441.5	4409.9	4369.1	4319.0	4270.8	4220.7	4161.3	4077.8	3979.5	3870.1
45°	4693.8	4686.4	4654.8	4615.9	4567.6	4525.0	4480.4	4435.9	4346.9	4255.9	4152.1
42.5°	4907.1	4905.3	4873.7	4834.8	4786.6	4749.4	4708.6	4653.0	4578.8	4495.3	4393.2
40°	5111.2	5096.4	5064.8	5027.7	4983.2	4951.7	4910.9	4855.2	4782.8	4701.2	4602.9
37.5°	5263.4	5265.2	5231.8	5191.0	5152.0	5122.4	5085.2	5033.3	4970.2	4890.4	4792.1
35°	5408.1	5398.8	5371.0	5335.7	5300.5	5267.1	5228.1	5183.6	5131.6	5057.4	4964.7
32.5°	5502.7	5515.7	5482.3	5445.2	5424.8	5398.8	5358.0	5311.6	5265.2	5191.0	5107.5
30°	5606.6	5595.4	5569.5	5537.9	5523.1	5506.4	5471.1	5426.6	5372.8	5306.0	5228.1
27.5°	5678.9	5673.4	5641.8	5612.1	5604.7	5589.9	5562.0	5523.1	5469.3	5404.4	5332.0
25°	5710.5	5714.2	5684.5	5667.8	5667.8	5658.5	5636.3	5602.9	5549.1	5489.7	5419.2
22.5°	5725.3	5721.6	5701.2	5697.5	5706.8	5699.3	5690.1	5660.4	5612.1	5563.9	5504.5
20°	5734.6	5708.6	5690.1	5704.9	5716.0	5714.2	5706.8	5688.2	5665.9	5625.1	5573.2
17.5°	5714.2	5697.5	5675.2	5697.5	5721.6	5723.5	5716.0	5704.9	5699.3	5673.4	5627.0
15°	5664.1	5651.1	5654.8	5677.1	5704.9	5714.2	5719.7	5732.7	5725.3	5704.9	5664.1
12.5°	5630.7	5614.0	5630.7	5653.0	5667.8	5673.4	5717.9	5742.0	5742.0	5723.5	5697.5
10°	5621.4	5588.0	5610.3	5630.7	5638.1	5671.5	5708.6	5734.6	5747.6	5732.7	5699.3
7.5°	5602.9	5580.6	5589.9	5599.2	5641.8	5665.9	5686.3	5714.2	5732.7	5730.9	5701.2
5°	5593.6	5565.8	5569.5	5608.4	5638.1	5654.8	5662.2	5686.3	5714.2	5719.7	5697.5
2.5°	5569.5	5556.5	5584.3	5588.0	5610.3	5623.3	5630.7	5653.0	5688.2	5701.2	5691.9
0°	5556.5	5537.9	5519.4	5534.2	5571.3	5599.2	5610.3	5643.7	5684.5	5697.5	5677.1



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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°	51.9	50.1	48.2	46.4	48.2	48.2	48.2	46.4	48.2	46.4	46.4
85°	161.4	154.0	148.4	141.0	133.6	128.0	120.6	113.2	111.3	109.5	105.7
82.5°	278.3	269.0	259.7	248.6	237.5	224.5	211.5	196.7	192.9	189.2	183.7
80°	391.5	378.5	365.5	352.5	341.4	328.4	313.5	296.8	285.7	276.4	265.3
77.5°	510.2	491.6	473.1	450.8	437.8	424.9	410.0	393.3	376.6	361.8	345.1
75°	645.6	625.2	606.7	584.4	560.3	536.2	512.0	489.8	465.7	443.4	421.1
72.5°	795.9	766.2	736.5	708.7	679.0	649.3	617.8	588.1	558.4	528.7	497.2
70°	953.6	916.5	879.4	842.3	803.3	764.4	727.3	690.2	653.0	614.1	578.8
67.5°	1139.1	1096.5	1048.2	996.3	938.8	888.7	840.4	795.9	751.4	706.9	662.3
65°	1371.0	1311.7	1246.7	1176.2	1109.4	1042.7	972.2	905.4	853.4	801.5	751.4
62.5°	1656.7	1573.3	1482.3	1391.4	1309.8	1222.6	1141.0	1053.8	972.2	897.9	836.7
60°	1998.1	1884.9	1773.6	1656.7	1543.6	1424.8	1320.9	1213.3	1111.3	1020.4	931.3
57.5°	2374.7	2243.0	2109.4	1966.6	1812.6	1673.4	1532.4	1391.4	1270.8	1150.3	1050.1
55°	2756.9	2617.8	2467.5	2306.1	2137.3	1959.1	1768.1	1610.4	1445.2	1304.2	1174.4
52.5°	3120.5	2975.8	2820.0	2671.6	2469.3	2265.3	2055.6	1847.8	1654.9	1474.9	1317.2
50°	3445.2	3304.2	3153.9	2981.4	2794.0	2576.9	2343.2	2109.4	1881.2	1669.7	1473.1
47.5°	3742.0	3604.8	3454.5	3281.9	3111.3	2870.1	2634.5	2376.6	2122.4	1879.4	1649.3
45°	4020.3	3881.2	3725.3	3560.2	3363.6	3148.4	2905.3	2645.6	2372.9	2100.1	1834.8
42.5°	4272.6	4133.5	3975.8	3805.1	3610.3	3397.0	3161.4	2899.8	2625.2	2328.3	2037.1
40°	4493.4	4358.0	4205.9	4027.8	3845.9	3621.5	3389.5	3140.9	2857.1	2558.4	2237.4
37.5°	4686.4	4560.2	4409.9	4233.7	4040.7	3840.4	3601.0	3352.4	3096.4	2771.7	2443.4
35°	4857.1	4740.2	4586.2	4419.2	4230.0	4018.5	3794.0	3551.0	3274.5	2970.3	2651.2
32.5°	5005.5	4886.7	4745.7	4578.8	4395.1	4196.6	3966.5	3721.6	3460.0	3150.2	2803.3
30°	5131.6	5016.6	4883.0	4725.3	4549.1	4352.4	4127.9	3881.2	3614.0	3306.1	2962.8
27.5°	5241.1	5131.6	5001.8	4855.2	4686.4	4497.1	4270.8	4022.2	3749.5	3452.6	3109.4
25°	5335.7	5230.0	5109.4	4970.2	4803.2	4617.7	4404.4	4144.6	3871.9	3573.2	3233.7
22.5°	5421.0	5319.0	5198.4	5063.0	4910.9	4725.3	4510.1	4252.2	3975.8	3680.8	3346.9
20°	5497.1	5402.5	5283.8	5144.6	4992.5	4805.1	4591.8	4346.9	4068.6	3779.1	3448.9
17.5°	5558.3	5474.9	5356.1	5209.5	5057.4	4875.6	4667.8	4443.3	4148.3	3862.6	3534.3
15°	5601.0	5519.4	5411.8	5263.4	5114.9	4935.0	4727.2	4495.3	4220.7	3929.4	3604.8
12.5°	5630.7	5543.5	5443.3	5306.0	5157.6	4979.5	4777.3	4549.1	4281.9	3988.8	3666.0
10°	5638.1	5558.3	5458.2	5335.7	5191.0	5018.5	4819.9	4593.6	4332.0	4035.2	3716.1
7.5°	5641.8	5565.8	5474.9	5358.0	5215.1	5048.1	4851.5	4628.9	4369.1	4074.1	3753.2
5°	5640.0	5567.6	5486.0	5372.8	5230.0	5064.8	4871.9	4653.0	4395.1	4100.1	3781.0
2.5°	5634.4	5569.5	5493.4	5383.9	5246.7	5083.4	4892.3	4680.8	4422.9	4122.4	3803.3
0°	5649.2	5593.6	5497.1	5380.2	5250.4	5083.4	4890.4	4684.5	4426.6	4120.5	3801.4



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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°	46.4	44.5	44.5	42.7	40.8	39.0	35.2	33.4	29.7	24.1	18.6
85°	100.2	94.6	89.1	85.3	81.6	77.9	72.4	66.8	59.4	48.2	37.1
82.5°	176.2	165.1	154.0	141.0	129.9	118.7	109.5	100.2	89.1	72.4	55.7
80°	252.3	235.6	218.9	200.4	183.7	165.1	148.4	133.6	118.7	96.5	74.2
77.5°	328.4	306.1	282.0	259.7	235.6	211.5	187.4	167.0	144.7	118.7	92.8
75°	398.9	372.9	350.6	319.1	289.4	257.9	226.3	198.5	170.7	139.1	111.3
72.5°	469.4	436.0	404.4	374.8	341.4	302.4	267.2	231.9	196.7	159.6	126.2
70°	539.9	499.1	460.1	424.9	387.7	348.8	306.1	265.3	222.6	178.1	139.1
67.5°	612.2	565.9	521.3	476.8	434.1	389.6	345.1	298.7	248.6	196.7	154.0
65°	692.0	634.5	580.7	530.6	480.5	432.3	382.2	332.1	276.4	217.1	167.0
62.5°	771.8	708.7	645.6	582.5	526.9	473.1	419.3	363.6	302.4	239.3	180.0
60°	857.1	784.8	712.4	641.9	573.3	513.9	454.5	395.2	330.2	259.7	192.9
57.5°	951.7	864.5	782.9	703.1	625.2	554.7	489.8	426.7	354.4	280.1	207.8
55°	1059.3	951.7	855.3	766.2	680.9	595.5	525.0	460.1	382.2	300.6	224.5
52.5°	1172.5	1048.2	931.3	831.2	740.2	643.8	558.4	486.1	410.0	321.0	239.3
50°	1304.2	1146.5	1016.7	894.2	792.2	692.0	593.7	515.8	437.8	345.1	254.2
47.5°	1439.7	1265.3	1102.0	968.4	847.9	738.4	634.5	541.7	463.8	367.3	269.0
45°	1597.4	1378.5	1198.5	1040.8	901.7	786.6	675.3	569.6	486.1	389.6	283.9
42.5°	1749.5	1512.0	1298.7	1120.6	962.9	833.0	712.4	599.2	508.3	411.9	296.8
40°	1929.5	1645.6	1395.2	1196.6	1024.1	877.5	749.5	630.8	528.7	432.3	309.8
37.5°	2102.0	1781.0	1512.0	1280.1	1083.5	922.1	786.6	660.5	547.3	452.7	326.5
35°	2272.7	1931.3	1623.3	1358.0	1144.7	972.2	823.7	688.3	565.9	469.4	341.4
32.5°	2435.9	2072.3	1736.5	1445.2	1211.5	1018.5	857.1	714.3	584.4	484.2	356.2
30°	2588.1	2205.9	1847.8	1534.3	1272.7	1061.2	888.7	740.2	606.7	497.2	371.1
27.5°	2727.2	2335.8	1959.1	1617.8	1330.2	1100.2	922.1	764.4	625.2	510.2	384.0
25°	2853.4	2452.6	2061.2	1693.8	1382.2	1142.8	953.6	788.5	641.9	521.3	395.2
22.5°	2972.1	2560.2	2153.9	1769.9	1445.2	1185.5	983.3	810.7	658.6	532.5	406.3
20°	3076.0	2658.6	2243.0	1846.0	1500.9	1224.5	1009.3	831.2	673.5	539.9	417.4
17.5°	3159.5	2745.8	2322.8	1912.8	1549.1	1257.9	1031.5	849.7	686.4	549.2	424.9
15°	3233.7	2820.0	2389.6	1970.3	1591.8	1285.7	1051.9	864.5	697.6	554.7	434.1
12.5°	3296.8	2883.1	2447.1	2020.4	1628.9	1309.8	1068.6	875.7	706.9	560.3	439.7
10°	3348.7	2933.2	2495.3	2059.3	1658.6	1328.4	1081.6	886.8	714.3	565.9	445.3
7.5°	3387.7	2970.3	2530.6	2092.7	1682.7	1341.3	1092.7	894.2	721.7	569.6	454.5
5°	3417.4	3001.8	2558.4	2115.0	1701.3	1359.9	1105.7	903.5	729.1	573.3	454.5
2.5°	3439.6	3027.8	2580.7	2133.5	1716.1	1356.2	1105.7	901.7	729.1	573.3	452.7
0°	3435.9	3029.6	2578.8	2133.5	1716.1	1352.5	1105.7	899.8	729.1	573.3	452.7



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	13.0	9.3	3.7	0.0
85°	27.8	18.6	9.3	0.0
82.5°	40.8	26.0	13.0	0.0
80°	53.8	35.2	16.7	0.0
77.5°	68.6	44.5	22.3	0.0
75°	81.6	51.9	26.0	0.0
72.5°	94.6	61.2	29.7	0.0
70°	105.7	68.6	33.4	0.0
67.5°	116.9	77.9	39.0	0.0
65°	126.2	85.3	42.7	0.0
62.5°	133.6	94.6	46.4	0.0
60°	142.9	102.0	50.1	0.0
57.5°	150.3	107.6	53.8	0.0
55°	157.7	111.3	57.5	0.0
52.5°	165.1	116.9	61.2	0.0
50°	172.5	122.4	64.9	0.0
47.5°	180.0	126.2	66.8	0.0
45°	191.1	131.7	70.5	0.0
42.5°	200.4	135.4	74.2	0.0
40°	209.6	139.1	76.1	0.0
37.5°	218.9	142.9	79.8	0.0
35°	228.2	146.6	81.6	0.0
32.5°	235.6	150.3	83.5	0.0
30°	243.0	154.0	85.3	0.0
27.5°	250.5	155.8	87.2	0.0
25°	256.0	159.6	89.1	0.0
22.5°	261.6	161.4	90.9	0.0
20°	265.3	163.3	92.8	0.0
17.5°	270.9	165.1	94.6	0.0
15°	272.7	167.0	98.3	0.0
12.5°	276.4	168.8	98.3	0.0
10°	278.3	170.7	98.3	0.0
7.5°	282.0	170.7	98.3	0.0
5°	280.1	170.7	98.3	0.0
2.5°	280.1	170.7	98.3	0.0
0°	278.3	170.7	98.3	0.0

(END OF REPORT)