

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: P628368

Luminaire Tested: **IFLD-M-SA4A-827-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628368
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4A-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

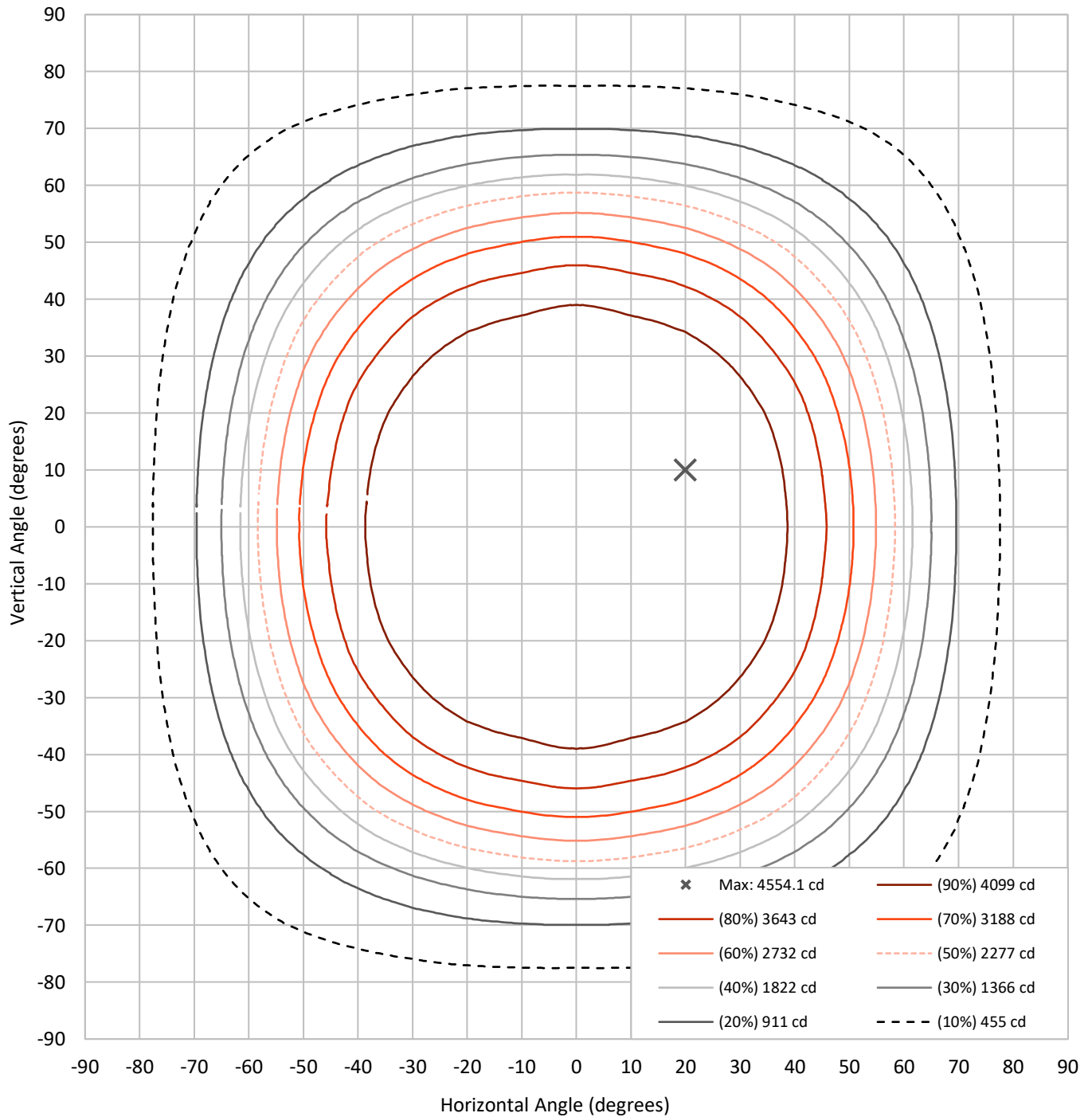
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	13971.4 lumens	Max Intensity:	4554.1 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	108.6 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 0.5' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	8573.1 lumens	Field Lumens:	10277.7 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

Input Watts (W): 128.6
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



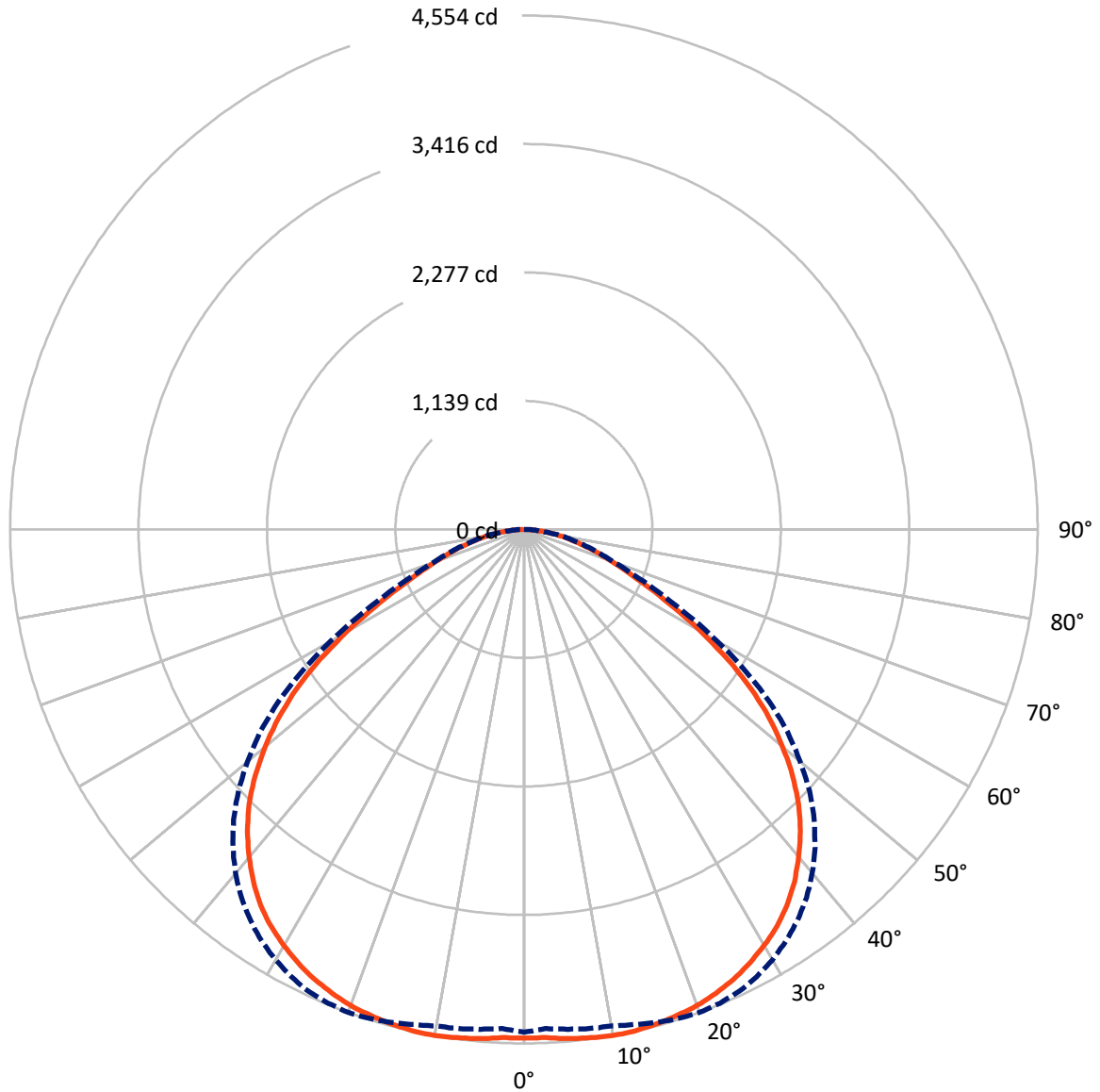
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Iso-Candela Plot



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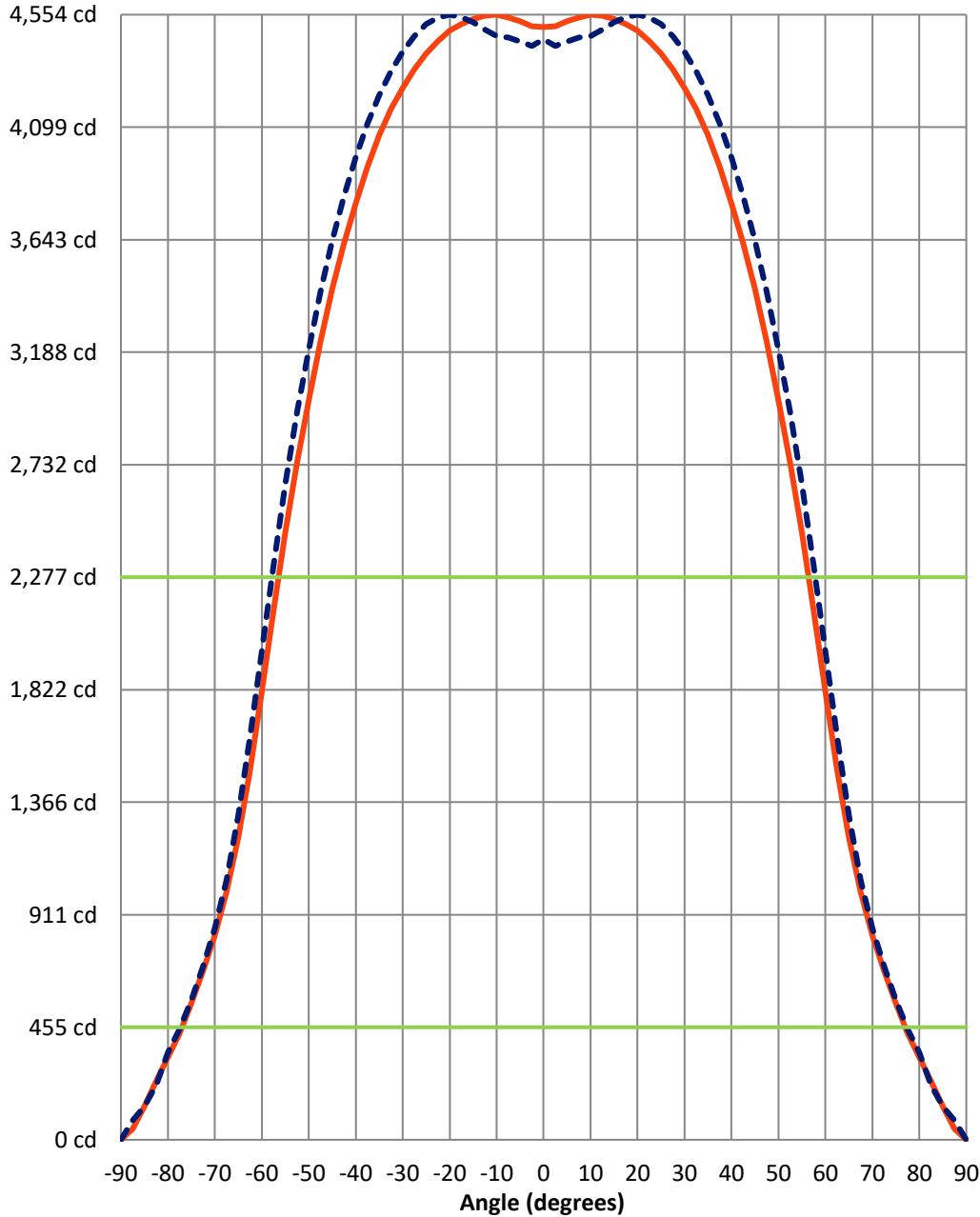
Luminous Intensity Polar Plot



— 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: 8573.1
Efficiency: 61.4%

Field:
H Angle: 154.7°
V Angle: 154°
Lumens: 10277.7
Efficiency: 73.6%

Spill:
Lumens: 3693.7
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°	36.8	39.7	41.2	42.6	44.1	45.6	47.0	45.6	44.1	44.1	42.6
85°	98.5	101.4	102.9	113.2	123.5	129.4	136.7	135.2	135.2	133.8	132.3
82.5°	197.0	205.8	213.2	223.4	229.3	238.1	244.0	239.6	236.7	230.8	226.4
80°	349.9	352.8	354.3	355.7	348.4	346.9	344.0	339.6	333.7	326.3	319.0
77.5°	445.4	448.4	451.3	448.4	446.9	445.4	441.0	436.6	430.7	424.8	416.0
75°	589.5	589.5	589.5	585.1	582.1	577.7	570.4	563.0	552.7	541.0	527.7
72.5°	742.4	740.9	739.4	730.6	723.2	714.4	704.1	695.3	683.6	670.3	652.7
70°	902.6	905.5	907.0	895.2	886.4	874.7	861.4	845.3	827.6	808.5	783.5
67.5°	1123.1	1120.2	1117.2	1101.0	1089.3	1073.1	1054.0	1030.5	1004.0	974.6	939.3
65°	1396.5	1400.9	1392.1	1375.9	1353.9	1327.4	1298.0	1264.2	1224.5	1180.4	1130.4
62.5°	1727.3	1734.6	1724.3	1703.7	1675.8	1640.5	1599.4	1550.9	1496.5	1434.7	1373.0
60°	2103.6	2102.1	2083.0	2055.1	2018.3	1974.2	1928.7	1875.7	1814.0	1742.0	1667.0
57.5°	2449.0	2446.1	2422.6	2394.7	2357.9	2310.9	2262.4	2206.5	2141.8	2065.4	1978.6
55°	2759.2	2756.3	2732.8	2703.4	2665.1	2618.1	2574.0	2521.1	2457.9	2377.0	2284.4
52.5°	3034.1	3035.6	3015.0	2982.7	2941.5	2895.9	2853.3	2800.4	2740.1	2659.3	2569.6
50°	3287.0	3285.5	3263.4	3234.0	3195.8	3151.7	3109.1	3056.2	2992.9	2915.0	2828.3
47.5°	3522.2	3519.2	3494.2	3461.9	3422.2	3384.0	3344.3	3297.2	3231.1	3153.2	3066.4
45°	3719.1	3713.3	3688.3	3657.4	3619.2	3585.4	3550.1	3514.8	3444.2	3372.2	3289.9
42.5°	3888.2	3886.7	3861.7	3830.9	3792.6	3763.2	3730.9	3686.8	3628.0	3561.8	3481.0
40°	4049.9	4038.1	4013.1	3983.7	3948.5	3923.5	3891.1	3847.0	3789.7	3725.0	3647.1
37.5°	4170.4	4171.9	4145.4	4113.1	4082.2	4058.7	4029.3	3988.1	3938.2	3875.0	3797.0
35°	4285.1	4277.7	4255.7	4227.8	4199.8	4173.4	4142.5	4107.2	4066.1	4007.3	3933.8
32.5°	4360.1	4370.4	4343.9	4314.5	4298.3	4277.7	4245.4	4208.7	4171.9	4113.1	4046.9
30°	4442.4	4433.6	4413.0	4388.0	4376.2	4363.0	4335.1	4299.8	4257.2	4204.2	4142.5
27.5°	4499.7	4495.3	4470.3	4446.8	4440.9	4429.2	4407.1	4376.2	4333.6	4282.2	4224.8
25°	4524.7	4527.6	4504.1	4490.9	4490.9	4483.5	4465.9	4439.4	4396.8	4349.8	4293.9
22.5°	4536.5	4533.5	4517.4	4514.4	4521.8	4515.9	4508.5	4485.0	4446.8	4408.6	4361.5
20°	4543.8	4523.2	4508.5	4520.3	4529.1	4527.6	4521.8	4507.1	4489.4	4457.1	4415.9
17.5°	4527.6	4514.4	4496.8	4514.4	4533.5	4535.0	4529.1	4520.3	4515.9	4495.3	4458.6
15°	4488.0	4477.7	4480.6	4498.2	4520.3	4527.6	4532.1	4542.3	4536.5	4520.3	4488.0
12.5°	4461.5	4448.3	4461.5	4479.1	4490.9	4495.3	4530.6	4549.7	4549.7	4535.0	4514.4
10°	4454.1	4427.7	4445.3	4461.5	4467.4	4493.8	4523.2	4543.8	4554.1	4542.3	4515.9
7.5°	4439.4	4421.8	4429.2	4436.5	4470.3	4489.4	4505.6	4527.6	4542.3	4540.9	4517.4
5°	4432.1	4410.0	4413.0	4443.9	4467.4	4480.6	4486.5	4505.6	4527.6	4532.1	4514.4
2.5°	4413.0	4402.7	4424.7	4427.7	4445.3	4455.6	4461.5	4479.1	4507.1	4517.4	4510.0
0°	4402.7	4388.0	4373.3	4385.1	4414.5	4436.5	4445.3	4471.8	4504.1	4514.4	4498.2



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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°	41.2	39.7	38.2	36.8	38.2	38.2	38.2	36.8	38.2	36.8	36.8
85°	127.9	122.0	117.6	111.7	105.8	101.4	95.6	89.7	88.2	86.7	83.8
82.5°	220.5	213.2	205.8	197.0	188.2	177.9	167.6	155.8	152.9	149.9	145.5
80°	310.2	299.9	289.6	279.3	270.5	260.2	248.4	235.2	226.4	219.0	210.2
77.5°	404.3	389.6	374.9	357.2	346.9	336.6	324.9	311.6	298.4	286.7	273.4
75°	511.6	495.4	480.7	463.1	443.9	424.8	405.7	388.1	369.0	351.3	333.7
72.5°	630.6	607.1	583.6	561.5	538.0	514.5	489.5	466.0	442.5	419.0	394.0
70°	755.6	726.2	696.8	667.4	636.5	605.6	576.2	546.8	517.4	486.6	458.6
67.5°	902.6	868.8	830.6	789.4	743.8	704.1	665.9	630.6	595.4	560.1	524.8
65°	1086.3	1039.3	987.8	932.0	879.1	826.1	770.3	717.4	676.2	635.0	595.4
62.5°	1312.7	1246.6	1174.5	1102.5	1037.8	968.7	904.1	835.0	770.3	711.5	663.0
60°	1583.2	1493.5	1405.3	1312.7	1223.1	1129.0	1046.7	961.4	880.5	808.5	737.9
57.5°	1881.6	1777.2	1671.4	1558.2	1436.2	1326.0	1214.2	1102.5	1007.0	911.4	832.0
55°	2184.4	2074.2	1955.1	1827.2	1693.5	1552.3	1400.9	1276.0	1145.1	1033.4	930.5
52.5°	2472.6	2357.9	2234.4	2116.8	1956.6	1794.9	1628.8	1464.1	1311.3	1168.7	1043.7
50°	2729.8	2618.1	2499.0	2362.3	2213.8	2041.8	1856.6	1671.4	1490.6	1323.0	1167.2
47.5°	2965.0	2856.2	2737.2	2600.5	2465.2	2274.1	2087.4	1883.1	1681.7	1489.1	1306.8
45°	3185.5	3075.3	2951.8	2821.0	2665.1	2494.6	2302.0	2096.2	1880.1	1664.1	1453.8
42.5°	3385.4	3275.2	3150.2	3015.0	2860.6	2691.6	2504.9	2297.6	2080.1	1844.9	1614.1
40°	3560.4	3453.1	3332.5	3191.4	3047.3	2869.5	2685.7	2488.7	2263.8	2027.1	1772.8
37.5°	3713.3	3613.3	3494.2	3354.6	3201.7	3042.9	2853.3	2656.3	2453.5	2196.2	1936.0
35°	3848.5	3755.9	3633.9	3501.6	3351.6	3184.1	3006.2	2813.6	2594.6	2353.5	2100.7
32.5°	3966.1	3872.0	3760.3	3628.0	3482.5	3325.2	3142.9	2948.8	2741.6	2496.1	2221.2
30°	4066.1	3974.9	3869.1	3744.1	3604.5	3448.7	3270.8	3075.3	2863.6	2619.6	2347.6
27.5°	4152.8	4066.1	3963.2	3847.0	3713.3	3563.3	3384.0	3187.0	2970.9	2735.7	2463.7
25°	4227.8	4144.0	4048.4	3938.2	3805.9	3658.9	3489.8	3284.0	3067.9	2831.2	2562.2
22.5°	4295.4	4214.5	4119.0	4011.7	3891.1	3744.1	3573.6	3369.3	3150.2	2916.5	2651.9
20°	4355.7	4280.7	4186.6	4076.3	3955.8	3807.3	3638.3	3444.2	3223.7	2994.4	2732.8
17.5°	4404.2	4338.0	4243.9	4127.8	4007.3	3863.2	3698.6	3520.7	3287.0	3060.6	2800.4
15°	4438.0	4373.3	4288.0	4170.4	4052.8	3910.2	3745.6	3561.8	3344.3	3113.5	2856.2
12.5°	4461.5	4392.4	4313.0	4204.2	4086.6	3945.5	3785.3	3604.5	3392.8	3160.5	2904.7
10°	4467.4	4404.2	4324.8	4227.8	4113.1	3976.4	3819.1	3639.8	3432.5	3197.3	2944.4
7.5°	4470.3	4410.0	4338.0	4245.4	4132.2	3999.9	3844.1	3667.7	3461.9	3228.2	2973.8
5°	4468.8	4411.5	4346.8	4257.2	4144.0	4013.1	3860.3	3686.8	3482.5	3248.7	2995.9
2.5°	4464.4	4413.0	4352.7	4266.0	4157.2	4027.8	3876.4	3708.8	3504.5	3266.4	3013.5
0°	4476.2	4432.1	4355.7	4263.0	4160.1	4027.8	3875.0	3711.8	3507.5	3264.9	3012.1



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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°	36.8	35.3	35.3	33.8	32.3	30.9	27.9	26.5	23.5	19.1	14.7
85°	79.4	75.0	70.6	67.6	64.7	61.7	57.3	52.9	47.0	38.2	29.4
82.5°	139.7	130.8	122.0	111.7	102.9	94.1	86.7	79.4	70.6	57.3	44.1
80°	199.9	186.7	173.5	158.8	145.5	130.8	117.6	105.8	94.1	76.4	58.8
77.5°	260.2	242.6	223.4	205.8	186.7	167.6	148.5	132.3	114.7	94.1	73.5
75°	316.1	295.5	277.8	252.8	229.3	204.3	179.3	157.3	135.2	110.3	88.2
72.5°	371.9	345.5	320.5	296.9	270.5	239.6	211.7	183.8	155.8	126.4	100.0
70°	427.8	395.4	364.6	336.6	307.2	276.4	242.6	210.2	176.4	141.1	110.3
67.5°	485.1	448.4	413.1	377.8	344.0	308.7	273.4	236.7	197.0	155.8	122.0
65°	548.3	502.7	460.1	420.4	380.7	342.5	302.8	263.1	219.0	172.0	132.3
62.5°	611.5	561.5	511.6	461.6	417.5	374.9	332.2	288.1	239.6	189.6	142.6
60°	679.1	621.8	564.5	508.6	454.2	407.2	360.2	313.1	261.7	205.8	152.9
57.5°	754.1	685.0	620.3	557.1	495.4	439.5	388.1	338.1	280.8	222.0	164.6
55°	839.4	754.1	677.7	607.1	539.5	471.9	416.0	364.6	302.8	238.1	177.9
52.5°	929.0	830.6	737.9	658.6	586.5	510.1	442.5	385.1	324.9	254.3	189.6
50°	1033.4	908.5	805.6	708.5	627.7	548.3	470.4	408.7	346.9	273.4	201.4
47.5°	1140.7	1002.5	873.2	767.3	671.8	585.1	502.7	429.2	367.5	291.1	213.2
45°	1265.7	1092.2	949.6	824.7	714.4	623.3	535.1	451.3	385.1	308.7	224.9
42.5°	1386.2	1198.1	1029.0	887.9	762.9	660.0	564.5	474.8	402.8	326.3	235.2
40°	1528.8	1303.9	1105.5	948.2	811.4	695.3	593.9	499.8	419.0	342.5	245.5
37.5°	1665.5	1411.2	1198.1	1014.3	858.5	730.6	623.3	523.3	433.7	358.7	258.7
35°	1800.8	1530.3	1286.3	1076.1	907.0	770.3	652.7	545.4	448.4	371.9	270.5
32.5°	1930.1	1642.0	1375.9	1145.1	959.9	807.0	679.1	566.0	463.1	383.7	282.2
30°	2050.7	1747.8	1464.1	1215.7	1008.4	840.8	704.1	586.5	480.7	394.0	294.0
27.5°	2160.9	1850.7	1552.3	1281.9	1054.0	871.7	730.6	605.6	495.4	404.3	304.3
25°	2260.9	1943.4	1633.2	1342.1	1095.2	905.5	755.6	624.8	508.6	413.1	313.1
22.5°	2355.0	2028.6	1706.7	1402.4	1145.1	939.3	779.1	642.4	521.9	421.9	321.9
20°	2437.3	2106.5	1777.2	1462.7	1189.2	970.2	799.7	658.6	533.6	427.8	330.8
17.5°	2503.4	2175.6	1840.5	1515.6	1227.5	996.7	817.3	673.3	543.9	435.1	336.6
15°	2562.2	2234.4	1893.4	1561.2	1261.3	1018.7	833.5	685.0	552.7	439.5	344.0
12.5°	2612.2	2284.4	1938.9	1600.8	1290.7	1037.8	846.7	693.8	560.1	443.9	348.4
10°	2653.4	2324.1	1977.2	1631.7	1314.2	1052.5	857.0	702.7	566.0	448.4	352.8
7.5°	2684.2	2353.5	2005.1	1658.2	1333.3	1062.8	865.8	708.5	571.8	451.3	360.2
5°	2707.8	2378.5	2027.1	1675.8	1348.0	1077.5	876.1	715.9	577.7	454.2	360.2
2.5°	2725.4	2399.1	2044.8	1690.5	1359.8	1074.6	876.1	714.4	577.7	454.2	358.7
0°	2722.5	2400.5	2043.3	1690.5	1359.8	1071.6	876.1	713.0	577.7	454.2	358.7



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	10.3	7.4	2.9	0.0
85°	22.1	14.7	7.4	0.0
82.5°	32.3	20.6	10.3	0.0
80°	42.6	27.9	13.2	0.0
77.5°	54.4	35.3	17.6	0.0
75°	64.7	41.2	20.6	0.0
72.5°	75.0	48.5	23.5	0.0
70°	83.8	54.4	26.5	0.0
67.5°	92.6	61.7	30.9	0.0
65°	100.0	67.6	33.8	0.0
62.5°	105.8	75.0	36.8	0.0
60°	113.2	80.9	39.7	0.0
57.5°	119.1	85.3	42.6	0.0
55°	125.0	88.2	45.6	0.0
52.5°	130.8	92.6	48.5	0.0
50°	136.7	97.0	51.5	0.0
47.5°	142.6	100.0	52.9	0.0
45°	151.4	104.4	55.9	0.0
42.5°	158.8	107.3	58.8	0.0
40°	166.1	110.3	60.3	0.0
37.5°	173.5	113.2	63.2	0.0
35°	180.8	116.1	64.7	0.0
32.5°	186.7	119.1	66.2	0.0
30°	192.6	122.0	67.6	0.0
27.5°	198.5	123.5	69.1	0.0
25°	202.9	126.4	70.6	0.0
22.5°	207.3	127.9	72.0	0.0
20°	210.2	129.4	73.5	0.0
17.5°	214.6	130.8	75.0	0.0
15°	216.1	132.3	77.9	0.0
12.5°	219.0	133.8	77.9	0.0
10°	220.5	135.2	77.9	0.0
7.5°	223.4	135.2	77.9	0.0
5°	222.0	135.2	77.9	0.0
2.5°	222.0	135.2	77.9	0.0
0°	220.5	135.2	77.9	0.0

(END OF REPORT)