

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: P628201

Luminaire Tested: **IFLD-L-SA7C-727-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628201
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-L-SA7C-727-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (112) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	38155.4 lumens	Max Intensity:	12437.1 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	103.4 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		

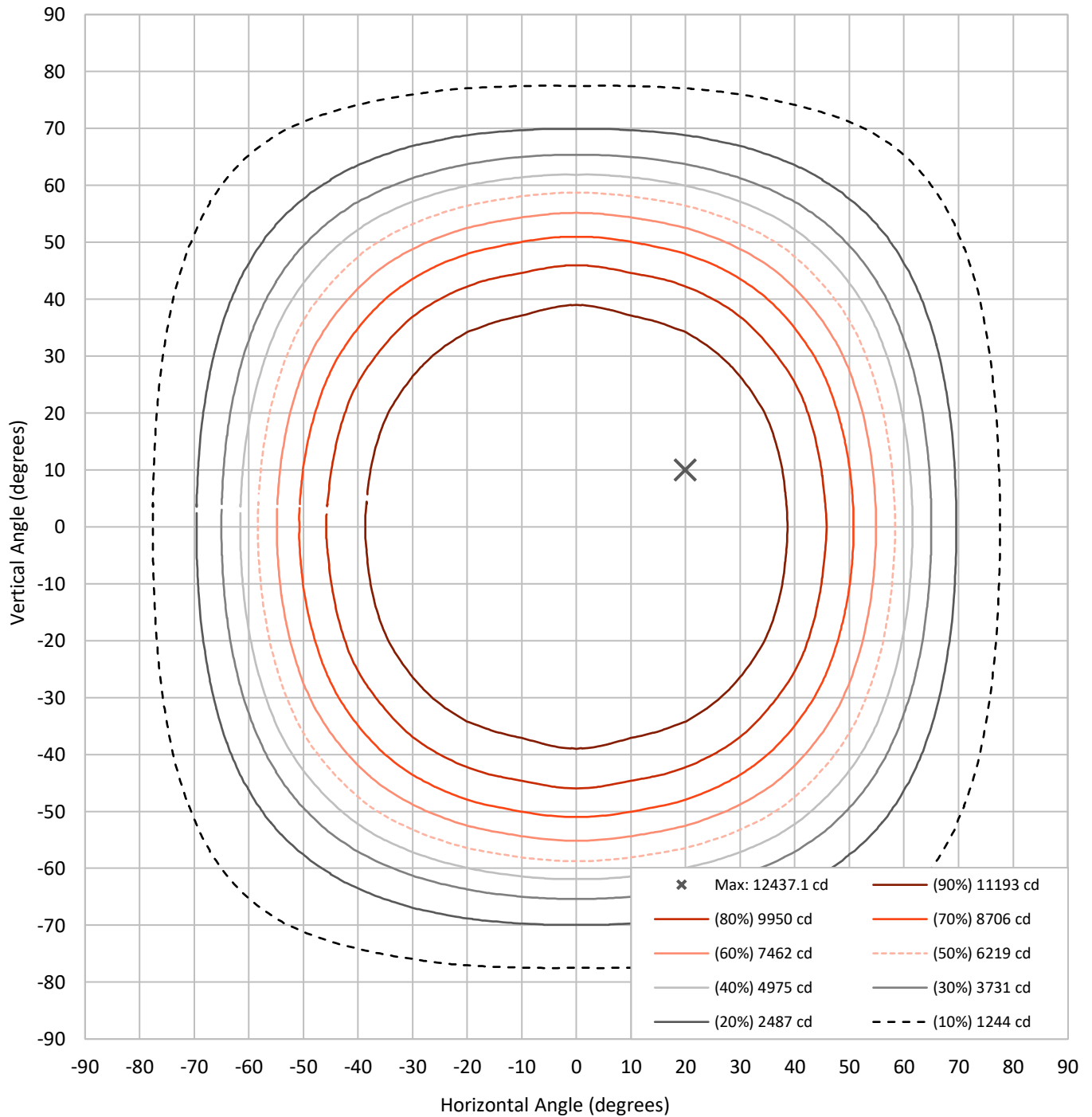
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	23412.9 lumens	Field Lumens:	28068.1 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

Input Watts (W): 369
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



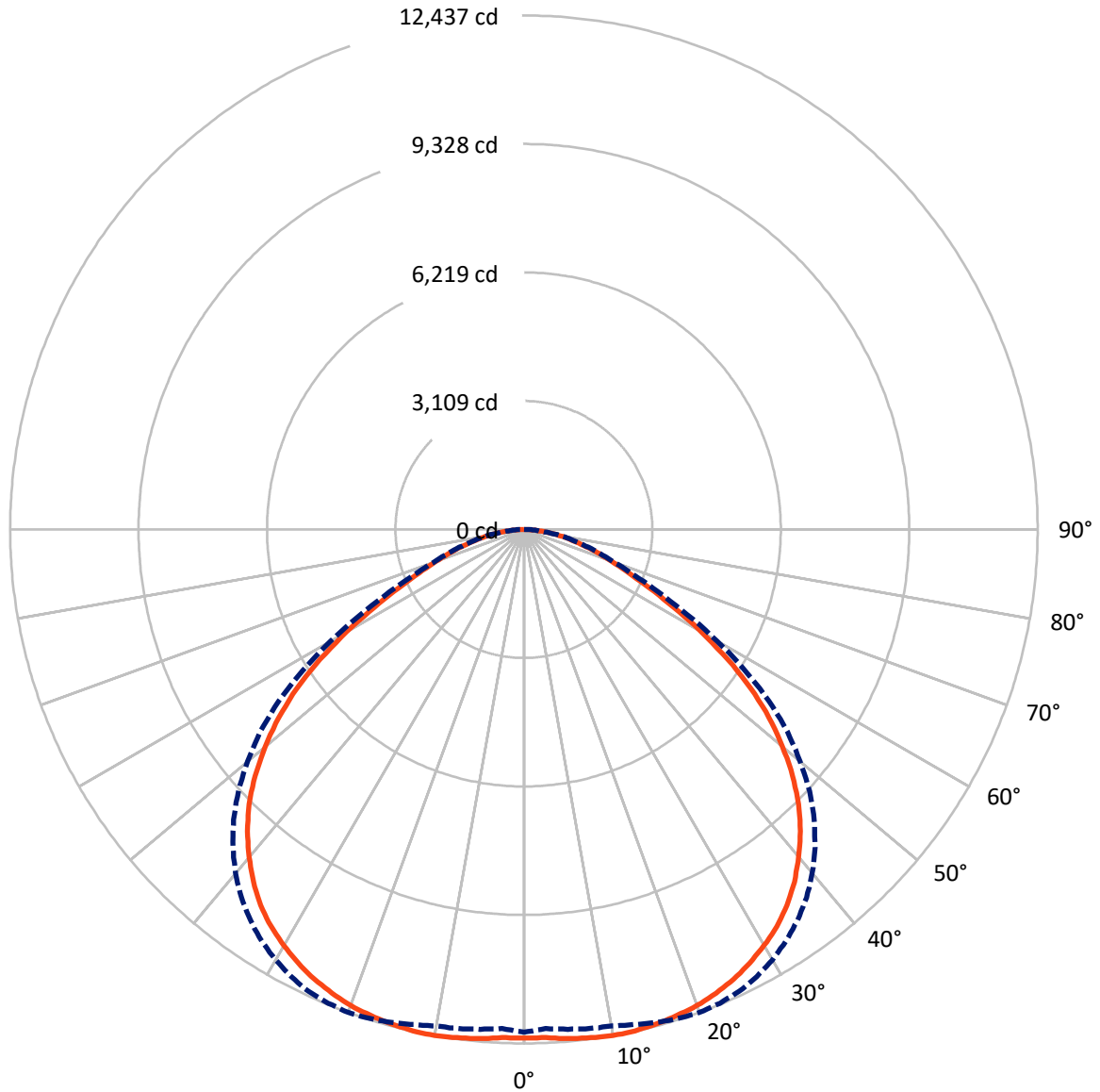
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Iso-Candela Plot



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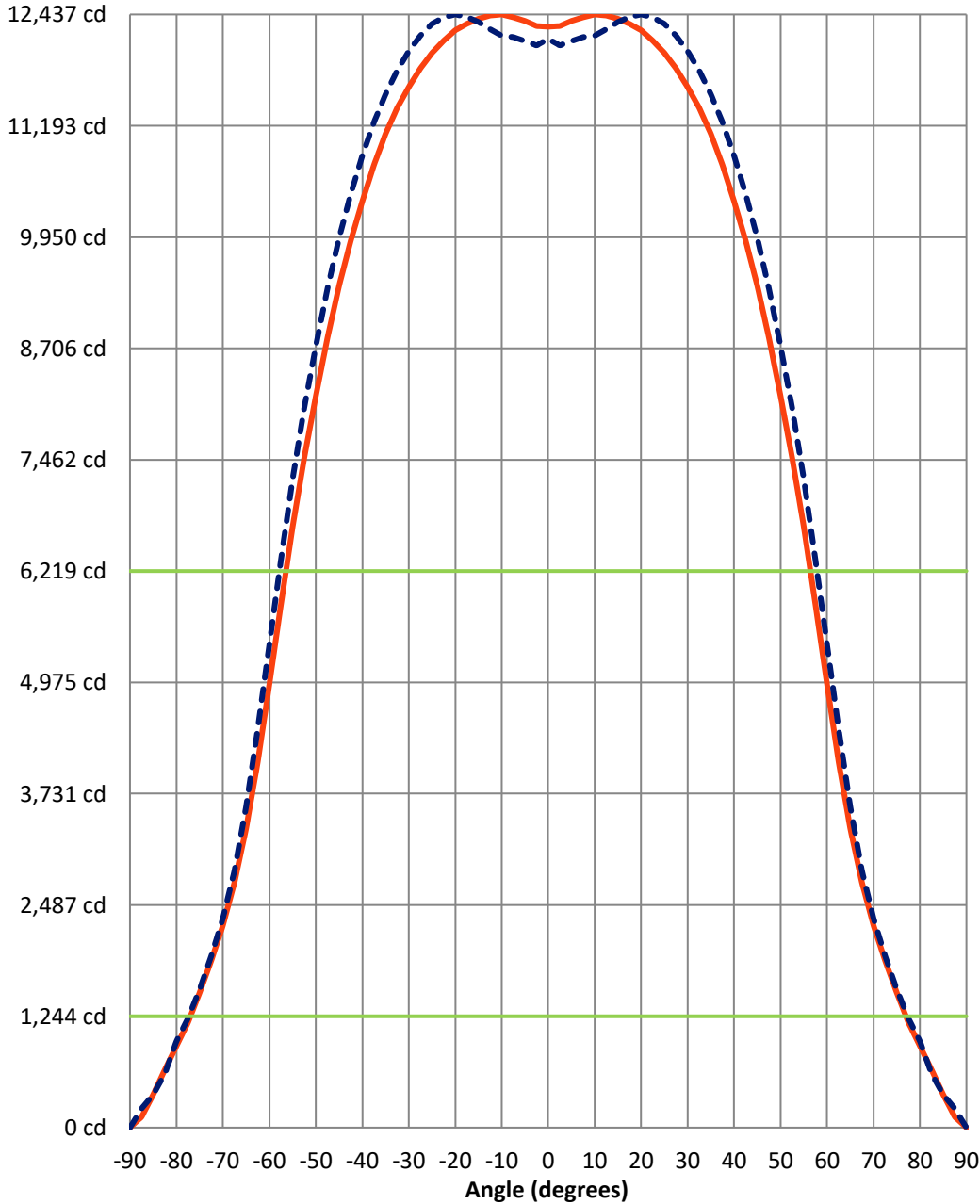
Luminous Intensity Polar Plot



— 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: 23412.9
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 28068.1
 Efficiency: 73.6%

Spill:
 Lumens: 10087.3
 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°	100.4	108.4	112.4	116.4	120.4	124.5	128.5	124.5	120.4	120.4	116.4
85°	269.0	277.0	281.0	309.1	337.2	353.3	373.4	369.3	369.3	365.3	361.3
82.5°	538.0	562.0	582.1	610.2	626.3	650.4	666.4	654.4	646.3	630.3	618.2
80°	955.5	963.5	967.5	971.5	951.5	947.4	939.4	927.4	911.3	891.2	871.2
77.5°	1216.4	1224.4	1232.5	1224.4	1220.4	1216.4	1204.4	1192.3	1176.3	1160.2	1136.1
75°	1609.8	1609.8	1609.8	1597.8	1589.8	1577.7	1557.7	1537.6	1509.5	1477.4	1441.2
72.5°	2027.4	2023.3	2019.3	1995.2	1975.2	1951.1	1923.0	1898.9	1866.8	1830.6	1782.5
70°	2464.9	2473.0	2477.0	2444.9	2420.8	2388.7	2352.5	2308.4	2260.2	2208.0	2139.8
67.5°	3067.1	3059.1	3051.1	3006.9	2974.8	2930.6	2878.4	2814.2	2741.9	2661.7	2565.3
65°	3813.8	3825.9	3801.8	3757.6	3697.4	3625.2	3544.9	3452.5	3344.1	3223.7	3087.2
62.5°	4717.1	4737.2	4709.1	4652.9	4576.6	4480.3	4367.8	4235.4	4086.8	3918.2	3749.6
60°	5744.8	5740.8	5688.6	5612.4	5512.0	5391.6	5267.1	5122.6	4954.0	4757.3	4552.5
57.5°	6688.3	6680.2	6616.0	6539.7	6439.4	6310.9	6178.4	6025.9	5849.2	5640.5	5403.6
55°	7535.3	7527.3	7463.1	7382.8	7278.4	7149.9	7029.5	6885.0	6712.3	6491.5	6238.6
52.5°	8286.1	8290.1	8233.9	8145.5	8033.1	7908.7	7792.3	7647.7	7483.1	7262.3	7017.5
50°	8976.6	8972.5	8912.3	8832.0	8727.7	8607.2	8490.8	8346.3	8173.7	7960.9	7724.0
47.5°	9618.9	9610.9	9542.6	9454.3	9345.9	9241.5	9133.1	9004.7	8824.0	8611.2	8374.4
45°	10156.8	10140.8	10072.5	9988.2	9883.9	9791.5	9695.2	9598.8	9406.1	9209.4	8984.6
42.5°	10618.5	10614.5	10546.3	10462.0	10357.6	10277.3	10189.0	10068.5	9907.9	9727.3	9506.5
40°	11060.1	11028.0	10959.8	10879.5	10783.1	10714.9	10626.5	10506.1	10349.5	10172.9	9960.1
37.5°	11389.3	11393.3	11321.1	11232.7	11148.4	11084.2	11003.9	10891.5	10755.0	10582.4	10369.6
35°	11702.5	11682.4	11622.2	11545.9	11469.6	11397.3	11313.0	11216.7	11104.3	10943.7	10743.0
32.5°	11907.2	11935.3	11863.0	11782.7	11738.6	11682.4	11594.1	11493.7	11393.3	11232.7	11052.1
30°	12132.0	12107.9	12051.7	11983.5	11951.4	11915.2	11838.9	11742.6	11626.2	11481.7	11313.0
27.5°	12288.6	12276.5	12208.3	12144.1	12128.0	12095.9	12035.7	11951.4	11834.9	11694.4	11537.9
25°	12356.8	12364.9	12300.6	12264.5	12264.5	12244.4	12196.2	12124.0	12007.6	11879.1	11726.5
22.5°	12388.9	12380.9	12336.8	12328.7	12348.8	12332.7	12312.7	12248.4	12144.1	12039.7	11911.2
20°	12409.0	12352.8	12312.7	12344.8	12368.9	12364.9	12348.8	12308.7	12260.5	12172.2	12059.7
17.5°	12364.9	12328.7	12280.5	12328.7	12380.9	12384.9	12368.9	12344.8	12332.7	12276.5	12176.2
15°	12256.5	12228.4	12236.4	12284.6	12344.8	12364.9	12376.9	12405.0	12388.9	12344.8	12256.5
12.5°	12184.2	12148.1	12184.2	12232.4	12264.5	12276.5	12372.9	12425.1	12425.1	12384.9	12328.7
10°	12164.1	12091.9	12140.0	12184.2	12200.3	12272.5	12352.8	12409.0	12437.1	12405.0	12332.7
7.5°	12124.0	12075.8	12095.9	12116.0	12208.3	12260.5	12304.6	12364.9	12405.0	12401.0	12336.8
5°	12103.9	12043.7	12051.7	12136.0	12200.3	12236.4	12252.4	12304.6	12364.9	12376.9	12328.7
2.5°	12051.7	12023.6	12083.8	12091.9	12140.0	12168.1	12184.2	12232.4	12308.7	12336.8	12316.7
0°	12023.6	11983.5	11943.3	11975.4	12055.7	12116.0	12140.0	12212.3	12300.6	12328.7	12284.6



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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°	112.4	108.4	104.4	100.4	104.4	104.4	104.4	100.4	104.4	100.4	100.4
85°	349.3	333.2	321.2	305.1	289.0	277.0	260.9	244.9	240.9	236.9	228.8
82.5°	602.2	582.1	562.0	538.0	513.9	485.8	457.7	425.5	417.5	409.5	397.4
80°	847.1	819.0	790.9	762.8	738.7	710.6	678.5	642.3	618.2	598.2	574.1
77.5°	1104.0	1063.9	1023.7	975.5	947.4	919.3	887.2	851.1	815.0	782.8	746.7
75°	1397.1	1352.9	1312.8	1264.6	1212.4	1160.2	1108.0	1059.8	1007.7	959.5	911.3
72.5°	1722.2	1658.0	1593.8	1533.6	1469.3	1405.1	1336.8	1272.6	1208.4	1144.2	1075.9
70°	2063.5	1983.2	1902.9	1822.6	1738.3	1654.0	1573.7	1493.4	1413.1	1328.8	1252.5
67.5°	2464.9	2372.6	2268.2	2155.8	2031.4	1923.0	1818.6	1722.2	1625.9	1529.5	1433.2
65°	2966.8	2838.3	2697.8	2545.2	2400.7	2256.2	2103.6	1959.1	1846.7	1734.3	1625.9
62.5°	3585.0	3404.3	3207.6	3010.9	2834.3	2645.6	2469.0	2280.3	2103.6	1943.0	1810.6
60°	4323.7	4078.8	3837.9	3585.0	3340.1	3083.2	2858.4	2625.5	2404.7	2208.0	2015.3
57.5°	5138.6	4853.6	4564.6	4255.4	3922.2	3621.1	3316.0	3010.9	2750.0	2489.0	2272.2
55°	5965.6	5664.5	5339.4	4990.1	4624.8	4239.4	3825.9	3484.6	3127.3	2822.2	2541.2
52.5°	6752.5	6439.4	6102.1	5781.0	5343.4	4901.8	4448.1	3998.5	3581.0	3191.6	2850.3
50°	7455.0	7149.9	6824.8	6451.4	6045.9	5576.2	5070.4	4564.6	4070.8	3613.1	3187.6
47.5°	8097.4	7800.3	7475.1	7101.8	6732.4	6210.5	5700.7	5142.7	4592.7	4066.8	3568.9
45°	8699.6	8398.5	8061.2	7703.9	7278.4	6812.7	6286.8	5724.8	5134.6	4544.5	3970.4
42.5°	9245.5	8944.4	8603.2	8233.9	7812.3	7350.7	6840.8	6274.8	5680.6	5038.3	4408.0
40°	9723.3	9430.2	9101.0	8715.6	8322.2	7836.4	7334.6	6796.7	6182.4	5536.1	4841.6
37.5°	10140.8	9867.8	9542.6	9161.2	8743.7	8310.1	7792.3	7254.3	6700.3	5997.8	5287.2
35°	10510.1	10257.2	9924.0	9562.7	9153.2	8695.5	8209.8	7683.9	7085.7	6427.3	5736.8
32.5°	10831.3	10574.4	10269.3	9907.9	9510.5	9080.9	8583.1	8053.2	7487.2	6816.7	6066.0
30°	11104.3	10855.4	10566.3	10225.1	9843.7	9418.2	8932.4	8398.5	7820.4	7154.0	6411.3
27.5°	11341.1	11104.3	10823.3	10506.1	10140.8	9731.3	9241.5	8703.6	8113.4	7471.1	6728.4
25°	11545.9	11317.1	11056.1	10755.0	10393.7	9992.2	9530.6	8968.5	8378.4	7732.0	6997.4
22.5°	11730.6	11509.8	11248.8	10955.7	10626.5	10225.1	9759.4	9201.4	8603.2	7964.9	7242.3
20°	11895.2	11690.4	11433.5	11132.4	10803.2	10397.7	9936.0	9406.1	8803.9	8177.7	7463.1
17.5°	12027.6	11847.0	11590.0	11272.9	10943.7	10550.3	10100.6	9614.9	8976.6	8358.3	7647.7
15°	12120.0	11943.3	11710.5	11389.3	11068.2	10678.7	10229.1	9727.3	9133.1	8502.8	7800.3
12.5°	12184.2	11995.5	11778.7	11481.7	11160.5	10775.1	10337.5	9843.7	9265.6	8631.3	7932.8
10°	12200.3	12027.6	11810.8	11545.9	11232.7	10859.4	10429.8	9940.1	9374.0	8731.7	8041.2
7.5°	12208.3	12043.7	11847.0	11594.1	11284.9	10923.6	10498.1	10016.3	9454.3	8816.0	8121.5
5°	12204.3	12047.7	11871.1	11626.2	11317.1	10959.8	10542.2	10068.5	9510.5	8872.2	8181.7
2.5°	12192.2	12051.7	11887.1	11650.3	11353.2	10999.9	10586.4	10128.7	9570.7	8920.4	8229.9
0°	12224.3	12103.9	11895.2	11642.2	11361.2	10999.9	10582.4	10136.8	9578.7	8916.3	8225.8



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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°	100.4	96.3	96.3	92.3	88.3	84.3	76.3	72.3	64.2	52.2	40.1
85°	216.8	204.7	192.7	184.7	176.6	168.6	156.6	144.5	128.5	104.4	80.3
82.5°	381.4	357.3	333.2	305.1	281.0	256.9	236.9	216.8	192.7	156.6	120.4
80°	546.0	509.8	473.7	433.6	397.4	357.3	321.2	289.0	256.9	208.8	160.6
77.5°	710.6	662.4	610.2	562.0	509.8	457.7	405.5	361.3	313.1	256.9	200.7
75°	863.1	806.9	758.8	690.5	626.3	558.0	489.8	429.6	369.3	301.1	240.9
72.5°	1015.7	943.4	875.2	810.9	738.7	654.4	578.1	501.8	425.5	345.3	273.0
70°	1168.2	1079.9	995.6	919.3	839.0	754.7	662.4	574.1	481.7	385.4	301.1
67.5°	1324.8	1224.4	1128.1	1031.7	939.4	843.1	746.7	646.3	538.0	425.5	333.2
65°	1497.4	1373.0	1256.6	1148.2	1039.8	935.4	827.0	718.6	598.2	469.7	361.3
62.5°	1670.1	1533.6	1397.1	1260.6	1140.1	1023.7	907.3	786.9	654.4	517.9	389.4
60°	1854.7	1698.2	1541.6	1389.0	1240.5	1112.0	983.6	855.1	714.6	562.0	417.5
57.5°	2059.5	1870.8	1694.1	1521.5	1352.9	1200.4	1059.8	923.3	766.8	606.2	449.6
55°	2292.3	2059.5	1850.7	1658.0	1473.3	1288.7	1136.1	995.6	827.0	650.4	485.8
52.5°	2537.2	2268.2	2015.3	1798.5	1601.8	1393.1	1208.4	1051.8	887.2	694.5	517.9
50°	2822.2	2481.0	2200.0	1935.0	1714.2	1497.4	1284.7	1116.0	947.4	746.7	550.0
47.5°	3115.3	2737.9	2384.7	2095.6	1834.7	1597.8	1373.0	1172.3	1003.6	794.9	582.1
45°	3456.5	2982.8	2593.4	2252.2	1951.1	1702.2	1461.3	1232.5	1051.8	843.1	614.2
42.5°	3785.7	3271.9	2810.2	2424.8	2083.6	1802.5	1541.6	1296.7	1100.0	891.2	642.3
40°	4175.1	3560.9	3019.0	2589.4	2216.0	1898.9	1621.9	1365.0	1144.2	935.4	670.4
37.5°	4548.5	3854.0	3271.9	2770.0	2344.5	1995.2	1702.2	1429.2	1184.3	979.6	706.6
35°	4917.8	4179.2	3512.7	2938.7	2477.0	2103.6	1782.5	1489.4	1224.4	1015.7	738.7
32.5°	5271.1	4484.3	3757.6	3127.3	2621.5	2204.0	1854.7	1545.6	1264.6	1047.8	770.8
30°	5600.3	4773.3	3998.5	3320.0	2754.0	2296.3	1923.0	1601.8	1312.8	1075.9	802.9
27.5°	5901.4	5054.3	4239.4	3500.7	2878.4	2380.6	1995.2	1654.0	1352.9	1104.0	831.0
25°	6174.4	5307.3	4460.2	3665.3	2990.8	2473.0	2063.5	1706.2	1389.0	1128.1	855.1
22.5°	6431.3	5540.1	4660.9	3829.9	3127.3	2565.3	2127.7	1754.4	1425.2	1152.2	879.2
20°	6656.1	5752.9	4853.6	3994.5	3247.8	2649.6	2183.9	1798.5	1457.3	1168.2	903.3
17.5°	6836.8	5941.6	5026.2	4139.0	3352.2	2721.9	2232.1	1838.7	1485.4	1188.3	919.3
15°	6997.4	6102.1	5170.8	4263.5	3444.5	2782.1	2276.3	1870.8	1509.5	1200.4	939.4
12.5°	7133.9	6238.6	5295.2	4371.9	3524.8	2834.3	2312.4	1894.9	1529.5	1212.4	951.5
10°	7246.3	6347.0	5399.6	4456.2	3589.0	2874.4	2340.5	1919.0	1545.6	1224.4	963.5
7.5°	7330.6	6427.3	5475.9	4528.4	3641.2	2902.5	2364.6	1935.0	1561.7	1232.5	983.6
5°	7394.8	6495.6	5536.1	4576.6	3681.4	2942.7	2392.7	1955.1	1577.7	1240.5	983.6
2.5°	7443.0	6551.8	5584.3	4616.7	3713.5	2934.6	2392.7	1951.1	1577.7	1240.5	979.6
0°	7435.0	6555.8	5580.2	4616.7	3713.5	2926.6	2392.7	1947.1	1577.7	1240.5	979.6



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	28.1	20.1	8.0	0.0
85°	60.2	40.1	20.1	0.0
82.5°	88.3	56.2	28.1	0.0
80°	116.4	76.3	36.1	0.0
77.5°	148.5	96.3	48.2	0.0
75°	176.6	112.4	56.2	0.0
72.5°	204.7	132.5	64.2	0.0
70°	228.8	148.5	72.3	0.0
67.5°	252.9	168.6	84.3	0.0
65°	273.0	184.7	92.3	0.0
62.5°	289.0	204.7	100.4	0.0
60°	309.1	220.8	108.4	0.0
57.5°	325.2	232.8	116.4	0.0
55°	341.2	240.9	124.5	0.0
52.5°	357.3	252.9	132.5	0.0
50°	373.4	265.0	140.5	0.0
47.5°	389.4	273.0	144.5	0.0
45°	413.5	285.0	152.6	0.0
42.5°	433.6	293.1	160.6	0.0
40°	453.6	301.1	164.6	0.0
37.5°	473.7	309.1	172.6	0.0
35°	493.8	317.2	176.6	0.0
32.5°	509.8	325.2	180.7	0.0
30°	525.9	333.2	184.7	0.0
27.5°	542.0	337.2	188.7	0.0
25°	554.0	345.3	192.7	0.0
22.5°	566.1	349.3	196.7	0.0
20°	574.1	353.3	200.7	0.0
17.5°	586.1	357.3	204.7	0.0
15°	590.1	361.3	212.8	0.0
12.5°	598.2	365.3	212.8	0.0
10°	602.2	369.3	212.8	0.0
7.5°	610.2	369.3	212.8	0.0
5°	606.2	369.3	212.8	0.0
2.5°	606.2	369.3	212.8	0.0
0°	602.2	369.3	212.8	0.0

(END OF REPORT)