

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: P628390

Luminaire Tested: **IFLD-S-SA3D-830-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628390
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA3D-830-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (48) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	19060 lumens	Max Intensity:	6212.8 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	103.5 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')		

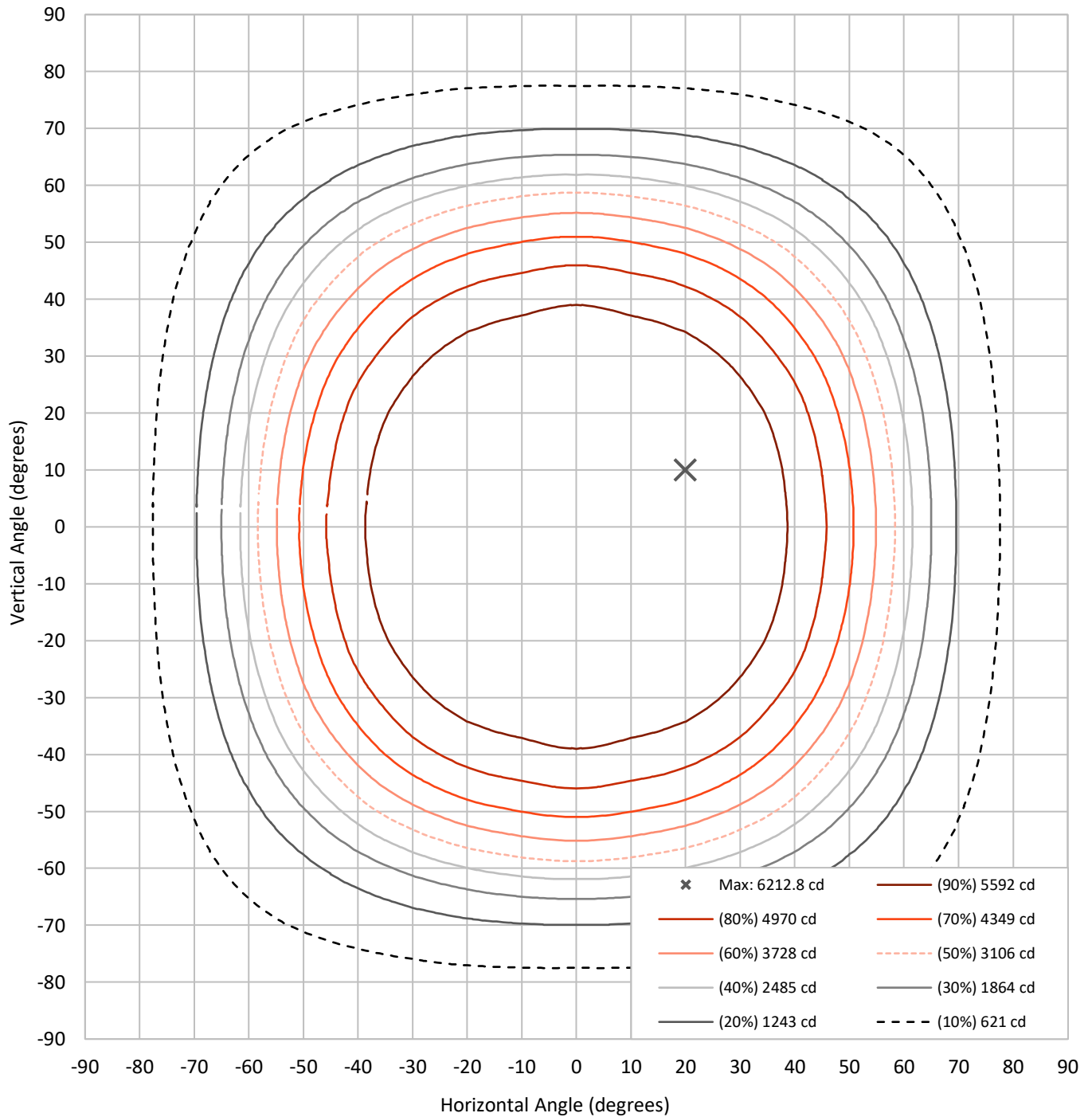
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	11695.6 lumens	Field Lumens:	14021 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

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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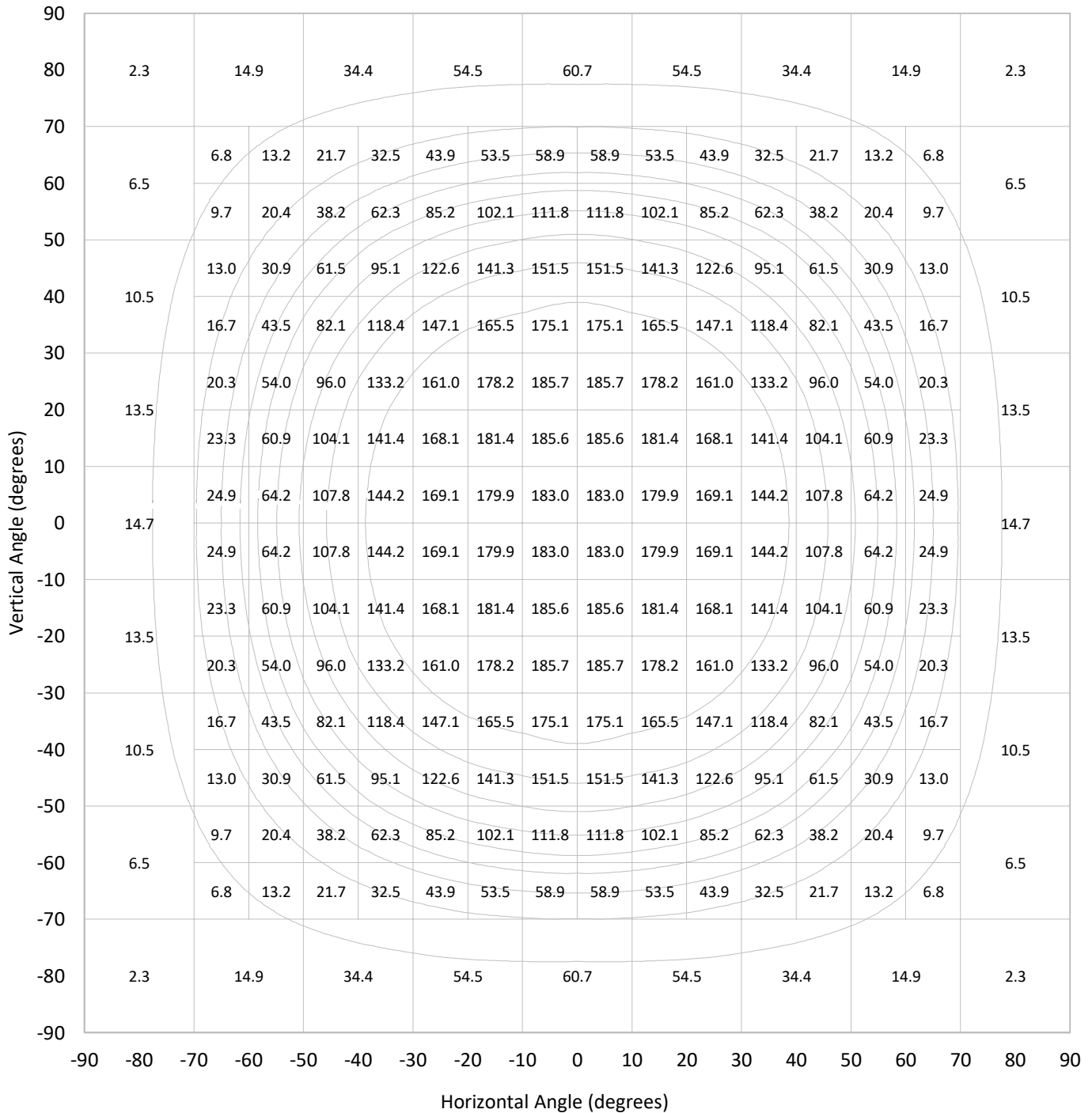
Iso-Candela Plot





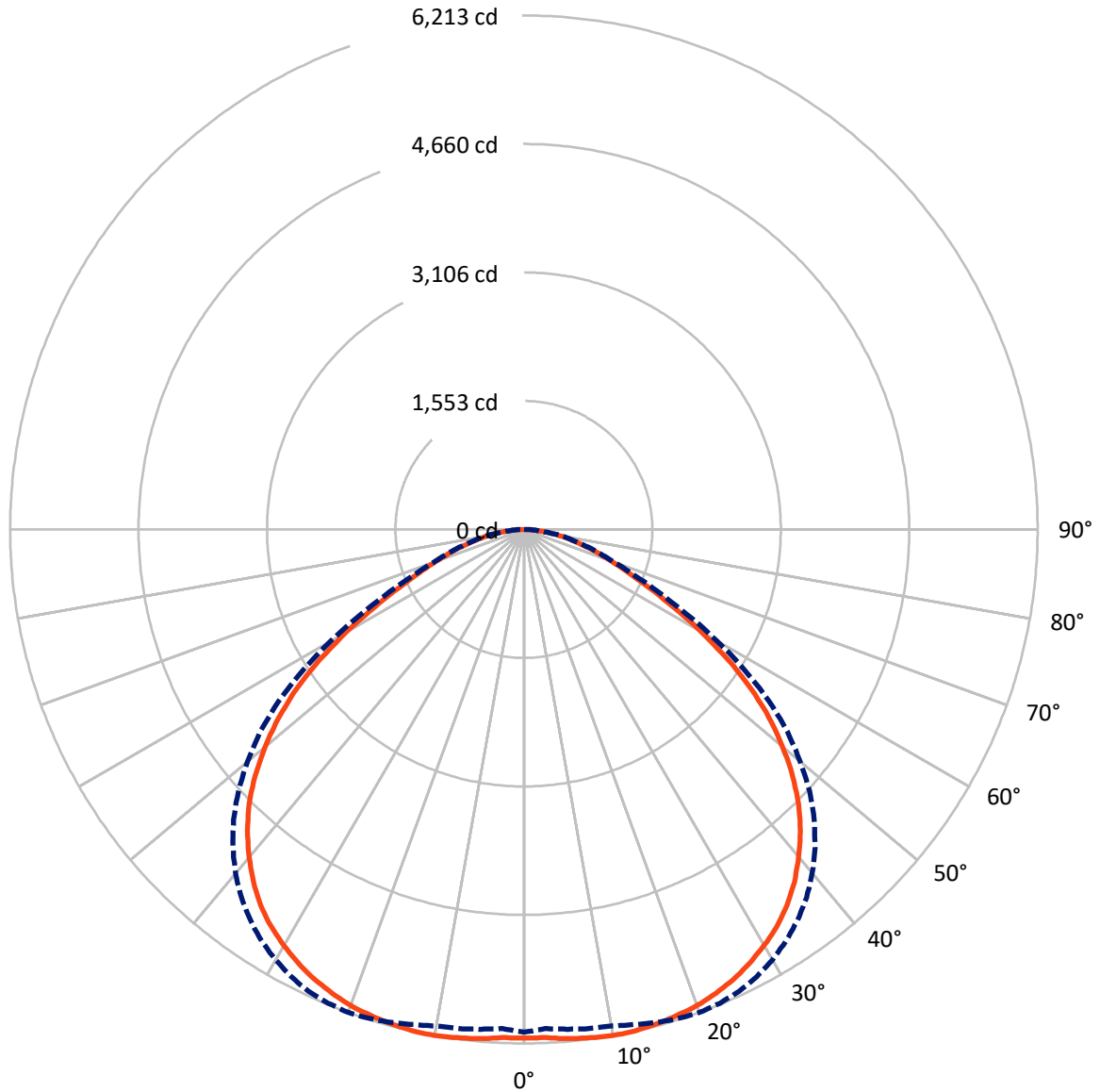
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Lumen Table



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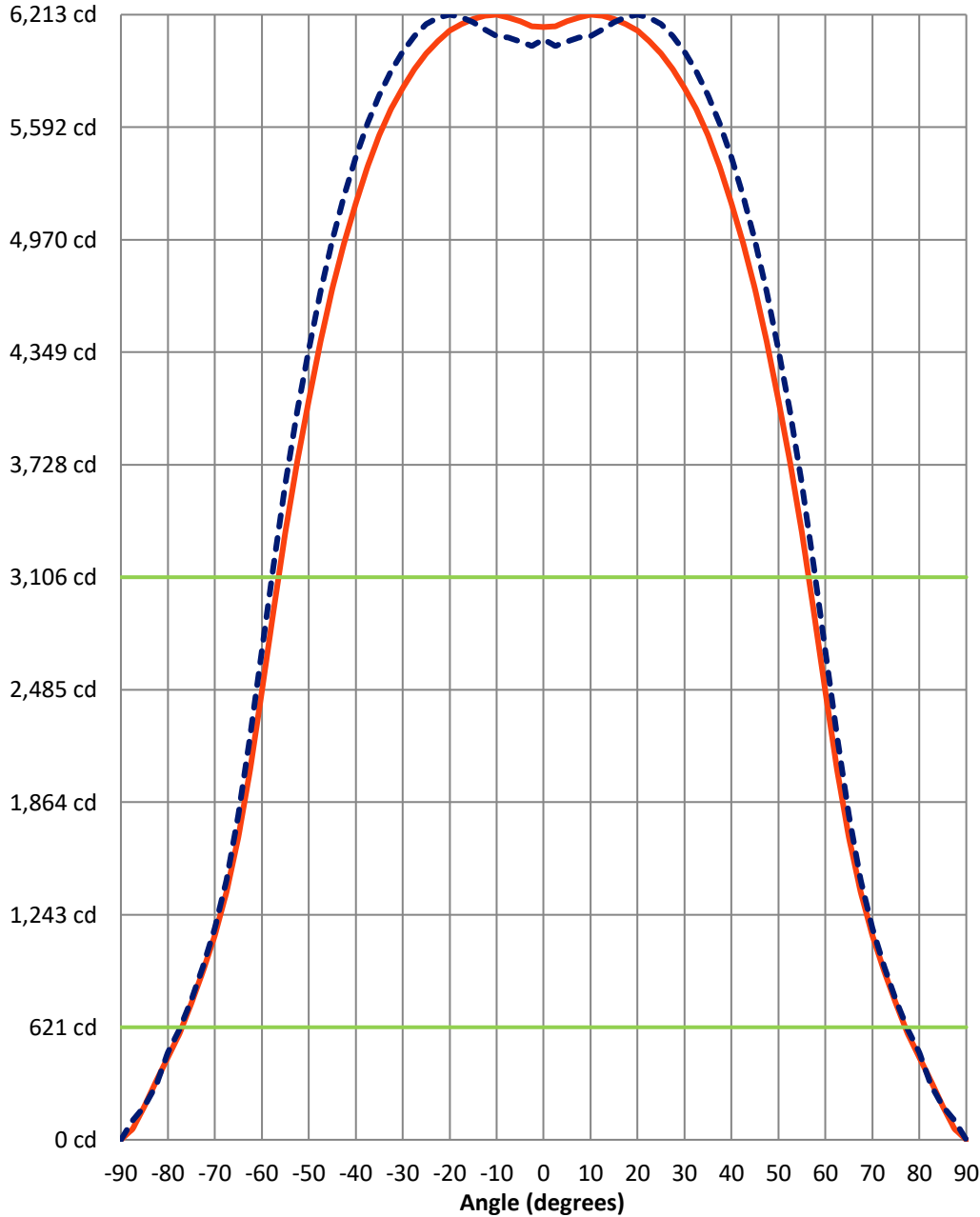
Luminous Intensity Polar Plot



— 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: 11695.6
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 14021
 Efficiency: 73.6%

Spill:
 Lumens: 5039
 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°	50.1	54.1	56.2	58.2	60.2	62.2	64.2	62.2	60.2	60.2	58.2
85°	134.4	138.4	140.4	154.4	168.5	176.5	186.5	184.5	184.5	182.5	180.5
82.5°	268.7	280.8	290.8	304.8	312.8	324.9	332.9	326.9	322.9	314.9	308.8
80°	477.3	481.3	483.3	485.3	475.3	473.3	469.3	463.3	455.2	445.2	435.2
77.5°	607.6	611.7	615.7	611.7	609.6	607.6	601.6	595.6	587.6	579.6	567.5
75°	804.2	804.2	804.2	798.2	794.1	788.1	778.1	768.1	754.0	738.0	719.9
72.5°	1012.7	1010.7	1008.7	996.7	986.7	974.6	960.6	948.6	932.5	914.5	890.4
70°	1231.3	1235.3	1237.3	1221.3	1209.3	1193.2	1175.2	1153.1	1129.1	1103.0	1068.9
67.5°	1532.1	1528.1	1524.1	1502.1	1486.0	1464.0	1437.9	1405.8	1369.7	1329.6	1281.5
65°	1905.1	1911.2	1899.1	1877.1	1847.0	1810.9	1770.8	1724.7	1670.5	1610.4	1542.2
62.5°	2356.4	2366.4	2352.4	2324.3	2286.2	2238.0	2181.9	2115.7	2041.5	1957.3	1873.1
60°	2869.8	2867.7	2841.7	2803.6	2753.4	2693.3	2631.1	2558.9	2474.7	2376.4	2274.1
57.5°	3341.0	3337.0	3304.9	3266.8	3216.7	3152.5	3086.3	3010.1	2921.9	2817.6	2699.3
55°	3764.2	3760.2	3728.1	3688.0	3635.8	3571.7	3511.5	3439.3	3353.1	3242.8	3116.4
52.5°	4139.2	4141.2	4113.1	4069.0	4012.8	3950.7	3892.5	3820.3	3738.1	3627.8	3505.5
50°	4484.1	4482.1	4452.0	4411.9	4359.8	4299.6	4241.5	4169.3	4083.0	3976.7	3858.4
47.5°	4805.0	4801.0	4766.9	4722.8	4668.6	4616.5	4562.3	4498.2	4407.9	4301.6	4183.3
45°	5073.7	5065.7	5031.6	4989.5	4937.3	4891.2	4843.1	4795.0	4698.7	4600.4	4488.1
42.5°	5304.3	5302.3	5268.2	5226.1	5174.0	5133.9	5089.8	5029.6	4949.4	4859.1	4748.8
40°	5524.9	5508.9	5474.8	5434.7	5386.6	5352.5	5308.3	5248.2	5170.0	5081.7	4975.4
37.5°	5689.4	5691.4	5655.3	5611.2	5569.0	5537.0	5496.9	5440.7	5372.5	5286.3	5180.0
35°	5845.8	5835.8	5805.7	5767.6	5729.5	5693.4	5651.3	5603.1	5547.0	5466.8	5366.5
32.5°	5948.1	5962.1	5926.0	5885.9	5863.8	5835.8	5791.7	5741.5	5691.4	5611.2	5520.9
30°	6060.4	6048.3	6020.3	5986.2	5970.1	5952.1	5914.0	5865.9	5807.7	5735.5	5651.3
27.5°	6138.6	6132.6	6098.5	6066.4	6058.4	6042.3	6012.2	5970.1	5912.0	5841.8	5763.6
25°	6172.7	6176.7	6144.6	6126.6	6126.6	6116.5	6092.5	6056.4	5998.2	5934.0	5857.8
22.5°	6188.7	6184.7	6162.7	6158.6	6168.7	6160.6	6150.6	6118.5	6066.4	6014.3	5950.1
20°	6198.8	6170.7	6150.6	6166.7	6178.7	6176.7	6168.7	6148.6	6124.6	6080.4	6024.3
17.5°	6176.7	6158.6	6134.6	6158.6	6184.7	6186.7	6178.7	6166.7	6160.6	6132.6	6082.4
15°	6122.5	6108.5	6112.5	6136.6	6166.7	6176.7	6182.7	6196.7	6188.7	6166.7	6122.5
12.5°	6086.4	6068.4	6086.4	6110.5	6126.6	6132.6	6180.7	6206.8	6206.8	6186.7	6158.6
10°	6076.4	6040.3	6064.4	6086.4	6094.5	6130.6	6170.7	6198.8	6212.8	6196.7	6160.6
7.5°	6056.4	6032.3	6042.3	6052.4	6098.5	6124.6	6146.6	6176.7	6196.7	6194.7	6162.7
5°	6046.3	6016.3	6020.3	6062.4	6094.5	6112.5	6120.5	6146.6	6176.7	6182.7	6158.6
2.5°	6020.3	6006.2	6036.3	6040.3	6064.4	6078.4	6086.4	6110.5	6148.6	6162.7	6152.6
0°	6006.2	5986.2	5966.1	5982.2	6022.3	6052.4	6064.4	6100.5	6144.6	6158.6	6136.6



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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°	56.2	54.1	52.1	50.1	52.1	52.1	52.1	50.1	52.1	50.1	50.1
85°	174.5	166.4	160.4	152.4	144.4	138.4	130.4	122.3	120.3	118.3	114.3
82.5°	300.8	290.8	280.8	268.7	256.7	242.7	228.6	212.6	208.6	204.6	198.5
80°	423.1	409.1	395.1	381.0	369.0	355.0	338.9	320.9	308.8	298.8	286.8
77.5°	551.5	531.4	511.4	487.3	473.3	459.2	443.2	425.1	407.1	391.1	373.0
75°	697.9	675.8	655.8	631.7	605.6	579.6	553.5	529.4	503.4	479.3	455.2
72.5°	860.3	828.2	796.2	766.1	734.0	701.9	667.8	635.7	603.6	571.5	537.5
70°	1030.8	990.7	950.6	910.5	868.3	826.2	786.1	746.0	705.9	663.8	625.7
67.5°	1231.3	1185.2	1133.1	1076.9	1014.7	960.6	908.5	860.3	812.2	764.1	715.9
65°	1482.0	1417.8	1347.6	1271.4	1199.2	1127.0	1050.8	978.6	922.5	866.3	812.2
62.5°	1790.8	1700.6	1602.3	1504.1	1415.8	1321.6	1233.3	1139.1	1050.8	970.6	904.4
60°	2159.8	2037.5	1917.2	1790.8	1668.5	1540.2	1427.9	1311.5	1201.2	1103.0	1006.7
57.5°	2566.9	2424.6	2280.2	2125.7	1959.3	1808.9	1656.5	1504.1	1373.7	1243.4	1135.1
55°	2980.1	2829.6	2667.2	2492.7	2310.2	2117.7	1911.2	1740.7	1562.2	1409.8	1269.4
52.5°	3373.1	3216.7	3048.2	2887.8	2669.2	2448.6	2222.0	1997.4	1788.8	1594.3	1423.8
50°	3724.1	3571.7	3409.2	3222.7	3020.2	2785.5	2532.8	2280.2	2033.5	1804.9	1592.3
47.5°	4044.9	3896.5	3734.1	3547.6	3363.1	3102.4	2847.7	2568.9	2294.2	2031.5	1782.8
45°	4345.7	4195.3	4026.9	3848.4	3635.8	3403.2	3140.5	2859.7	2564.9	2270.1	1983.4
42.5°	4618.5	4468.1	4297.6	4113.1	3902.5	3671.9	3417.2	3134.5	2837.7	2516.8	2202.0
40°	4857.1	4710.7	4546.3	4353.8	4157.2	3914.6	3663.9	3395.2	3088.3	2765.5	2418.5
37.5°	5065.7	4929.3	4766.9	4576.4	4367.8	4151.2	3892.5	3623.8	3347.0	2996.1	2641.1
35°	5250.2	5123.8	4957.4	4776.9	4572.4	4343.7	4101.1	3838.4	3539.6	3210.7	2865.7
32.5°	5410.6	5282.3	5129.9	4949.4	4750.8	4536.3	4287.6	4022.9	3740.1	3405.2	3030.2
30°	5547.0	5422.7	5278.3	5107.8	4917.3	4704.7	4462.1	4195.3	3906.6	3573.7	3202.7
27.5°	5665.3	5547.0	5406.6	5248.2	5065.7	4861.1	4616.5	4347.7	4053.0	3732.1	3361.1
25°	5767.6	5653.3	5522.9	5372.5	5192.0	4991.5	4760.9	4480.1	4185.3	3862.4	3495.4
22.5°	5859.8	5749.5	5619.2	5472.8	5308.3	5107.8	4875.2	4596.4	4297.6	3978.8	3617.8
20°	5942.1	5839.8	5711.4	5561.0	5396.6	5194.0	4963.4	4698.7	4397.9	4085.0	3728.1
17.5°	6008.2	5918.0	5789.6	5631.2	5466.8	5270.2	5045.6	4803.0	4484.1	4175.3	3820.3
15°	6054.4	5966.1	5849.8	5689.4	5528.9	5334.4	5109.8	4859.1	4562.3	4247.5	3896.5
12.5°	6086.4	5992.2	5883.9	5735.5	5575.1	5382.5	5164.0	4917.3	4628.5	4311.7	3962.7
10°	6094.5	6008.2	5899.9	5767.6	5611.2	5424.7	5210.1	4965.4	4682.7	4361.8	4016.9
7.5°	6098.5	6016.3	5918.0	5791.7	5637.2	5456.7	5244.2	5003.5	4722.8	4403.9	4057.0
5°	6096.5	6018.3	5930.0	5807.7	5653.3	5474.8	5266.2	5029.6	4750.8	4432.0	4087.0
2.5°	6090.5	6020.3	5938.0	5819.7	5671.3	5494.8	5288.3	5059.7	4780.9	4456.0	4111.1
0°	6106.5	6046.3	5942.1	5815.7	5675.3	5494.8	5286.3	5063.7	4784.9	4454.0	4109.1



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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°	50.1	48.1	48.1	46.1	44.1	42.1	38.1	36.1	32.1	26.1	20.1
85°	108.3	102.3	96.3	92.2	88.2	84.2	78.2	72.2	64.2	52.1	40.1
82.5°	190.5	178.5	166.4	152.4	140.4	128.3	118.3	108.3	96.3	78.2	60.2
80°	272.7	254.7	236.6	216.6	198.5	178.5	160.4	144.4	128.3	104.3	80.2
77.5°	355.0	330.9	304.8	280.8	254.7	228.6	202.5	180.5	156.4	128.3	100.3
75°	431.2	403.1	379.0	344.9	312.8	278.8	244.7	214.6	184.5	150.4	120.3
72.5°	507.4	471.3	437.2	405.1	369.0	326.9	288.8	250.7	212.6	172.5	136.4
70°	583.6	539.5	497.3	459.2	419.1	377.0	330.9	286.8	240.7	192.5	150.4
67.5°	661.8	611.7	563.5	515.4	469.3	421.1	373.0	322.9	268.7	212.6	166.4
65°	748.0	685.9	627.7	573.5	519.4	467.3	413.1	359.0	298.8	234.6	180.5
62.5°	834.3	766.1	697.9	629.7	569.5	511.4	453.2	393.1	326.9	258.7	194.5
60°	926.5	848.3	770.1	693.9	619.7	555.5	491.3	427.2	357.0	280.8	208.6
57.5°	1028.8	934.5	846.3	760.1	675.8	599.6	529.4	461.2	383.0	302.8	224.6
55°	1145.1	1028.8	924.5	828.2	736.0	643.7	567.5	497.3	413.1	324.9	242.7
52.5°	1267.4	1133.1	1006.7	898.4	800.2	695.9	603.6	525.4	443.2	346.9	258.7
50°	1409.8	1239.3	1099.0	966.6	856.3	748.0	641.7	557.5	473.3	373.0	274.7
47.5°	1556.2	1367.7	1191.2	1046.8	916.5	798.2	685.9	585.6	501.4	397.1	290.8
45°	1726.7	1490.0	1295.5	1125.0	974.6	850.3	730.0	615.7	525.4	421.1	306.8
42.5°	1891.1	1634.4	1403.8	1211.3	1040.8	900.4	770.1	647.8	549.5	445.2	320.9
40°	2085.6	1778.8	1508.1	1293.5	1107.0	948.6	810.2	681.8	571.5	467.3	334.9
37.5°	2272.1	1925.2	1634.4	1383.7	1171.2	996.7	850.3	713.9	591.6	489.3	353.0
35°	2456.6	2087.6	1754.7	1468.0	1237.3	1050.8	890.4	744.0	611.7	507.4	369.0
32.5°	2633.1	2240.1	1877.1	1562.2	1309.5	1101.0	926.5	772.1	631.7	523.4	385.0
30°	2797.6	2384.4	1997.4	1658.5	1375.7	1147.1	960.6	800.2	655.8	537.5	401.1
27.5°	2948.0	2524.8	2117.7	1748.7	1437.9	1189.2	996.7	826.2	675.8	551.5	415.1
25°	3084.3	2651.2	2228.0	1830.9	1494.0	1235.3	1030.8	852.3	693.9	563.5	427.2
22.5°	3212.7	2767.5	2328.3	1913.2	1562.2	1281.5	1062.9	876.4	711.9	575.6	439.2
20°	3325.0	2873.8	2424.6	1995.4	1622.4	1323.6	1090.9	898.4	728.0	583.6	451.2
17.5°	3415.2	2968.0	2510.8	2067.6	1674.5	1359.7	1115.0	918.5	742.0	593.6	459.2
15°	3495.4	3048.2	2583.0	2129.8	1720.6	1389.8	1137.1	934.5	754.0	599.6	469.3
12.5°	3563.6	3116.4	2645.1	2183.9	1760.8	1415.8	1155.1	946.6	764.1	605.6	475.3
10°	3619.8	3170.6	2697.3	2226.0	1792.8	1435.9	1169.2	958.6	772.1	611.7	481.3
7.5°	3661.9	3210.7	2735.4	2262.1	1818.9	1449.9	1181.2	966.6	780.1	615.7	491.3
5°	3694.0	3244.8	2765.5	2286.2	1839.0	1470.0	1195.2	976.6	788.1	619.7	491.3
2.5°	3718.0	3272.8	2789.5	2306.2	1855.0	1466.0	1195.2	974.6	788.1	619.7	489.3
0°	3714.0	3274.8	2787.5	2306.2	1855.0	1462.0	1195.2	972.6	788.1	619.7	489.3



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	14.0	10.0	4.0	0.0
85°	30.1	20.1	10.0	0.0
82.5°	44.1	28.1	14.0	0.0
80°	58.2	38.1	18.0	0.0
77.5°	74.2	48.1	24.1	0.0
75°	88.2	56.2	28.1	0.0
72.5°	102.3	66.2	32.1	0.0
70°	114.3	74.2	36.1	0.0
67.5°	126.3	84.2	42.1	0.0
65°	136.4	92.2	46.1	0.0
62.5°	144.4	102.3	50.1	0.0
60°	154.4	110.3	54.1	0.0
57.5°	162.4	116.3	58.2	0.0
55°	170.5	120.3	62.2	0.0
52.5°	178.5	126.3	66.2	0.0
50°	186.5	132.4	70.2	0.0
47.5°	194.5	136.4	72.2	0.0
45°	206.6	142.4	76.2	0.0
42.5°	216.6	146.4	80.2	0.0
40°	226.6	150.4	82.2	0.0
37.5°	236.6	154.4	86.2	0.0
35°	246.7	158.4	88.2	0.0
32.5°	254.7	162.4	90.2	0.0
30°	262.7	166.4	92.2	0.0
27.5°	270.7	168.5	94.3	0.0
25°	276.7	172.5	96.3	0.0
22.5°	282.8	174.5	98.3	0.0
20°	286.8	176.5	100.3	0.0
17.5°	292.8	178.5	102.3	0.0
15°	294.8	180.5	106.3	0.0
12.5°	298.8	182.5	106.3	0.0
10°	300.8	184.5	106.3	0.0
7.5°	304.8	184.5	106.3	0.0
5°	302.8	184.5	106.3	0.0
2.5°	302.8	184.5	106.3	0.0
0°	300.8	184.5	106.3	0.0

(END OF REPORT)