

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: P624585

Luminaire Tested: **IFLD-S-SA2D-940-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624585
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA2D-940-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (32) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

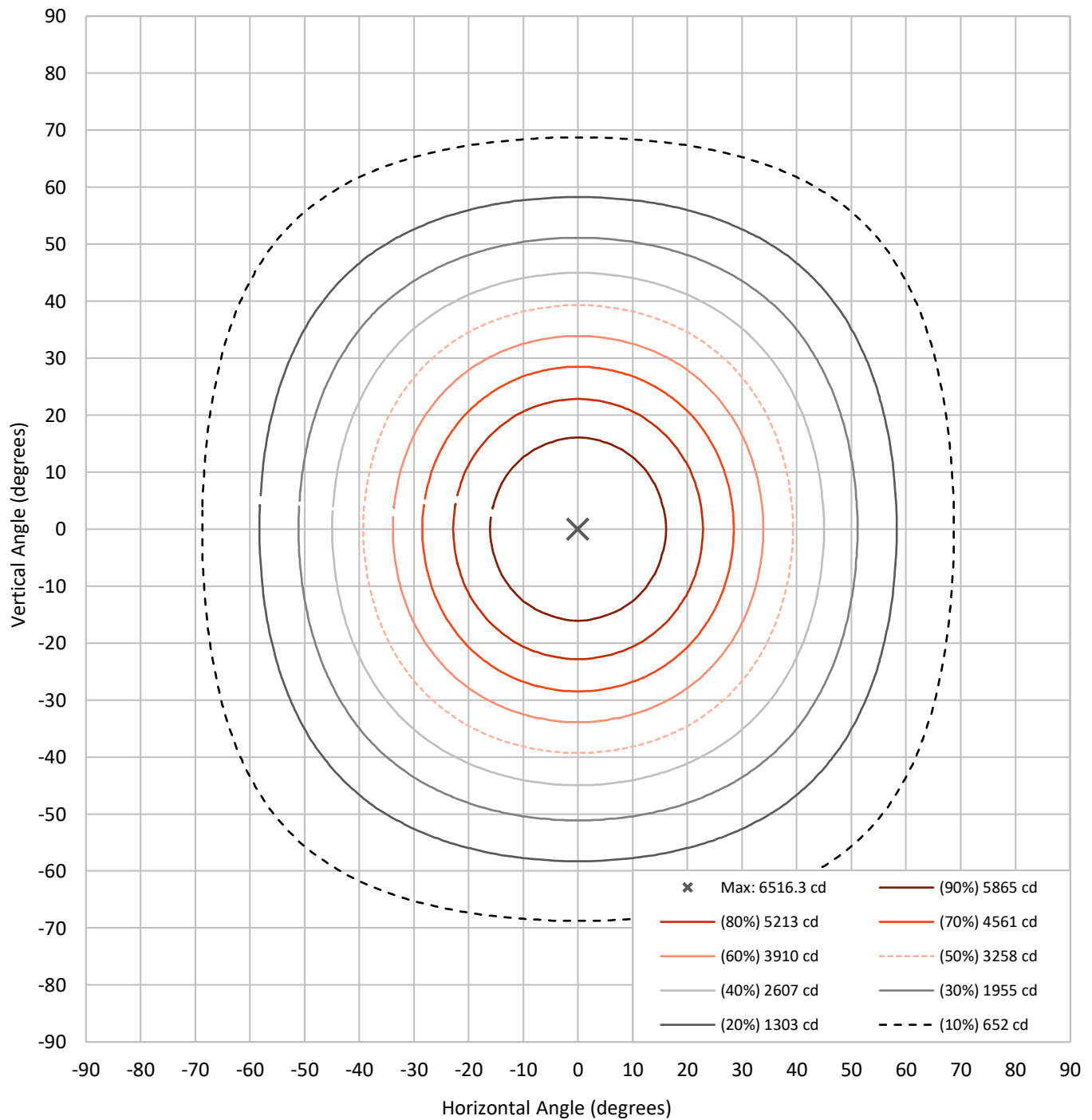
Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	11732.7 lumens	Max Intensity:	6516.3 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	94.7 lumens/watt		
Luminous Opening:	Rectangular (W 1' x L: 0.5' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	5076.6 lumens	Field Lumens:	8312.8 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%
Input Watts (W):	123.9		
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		



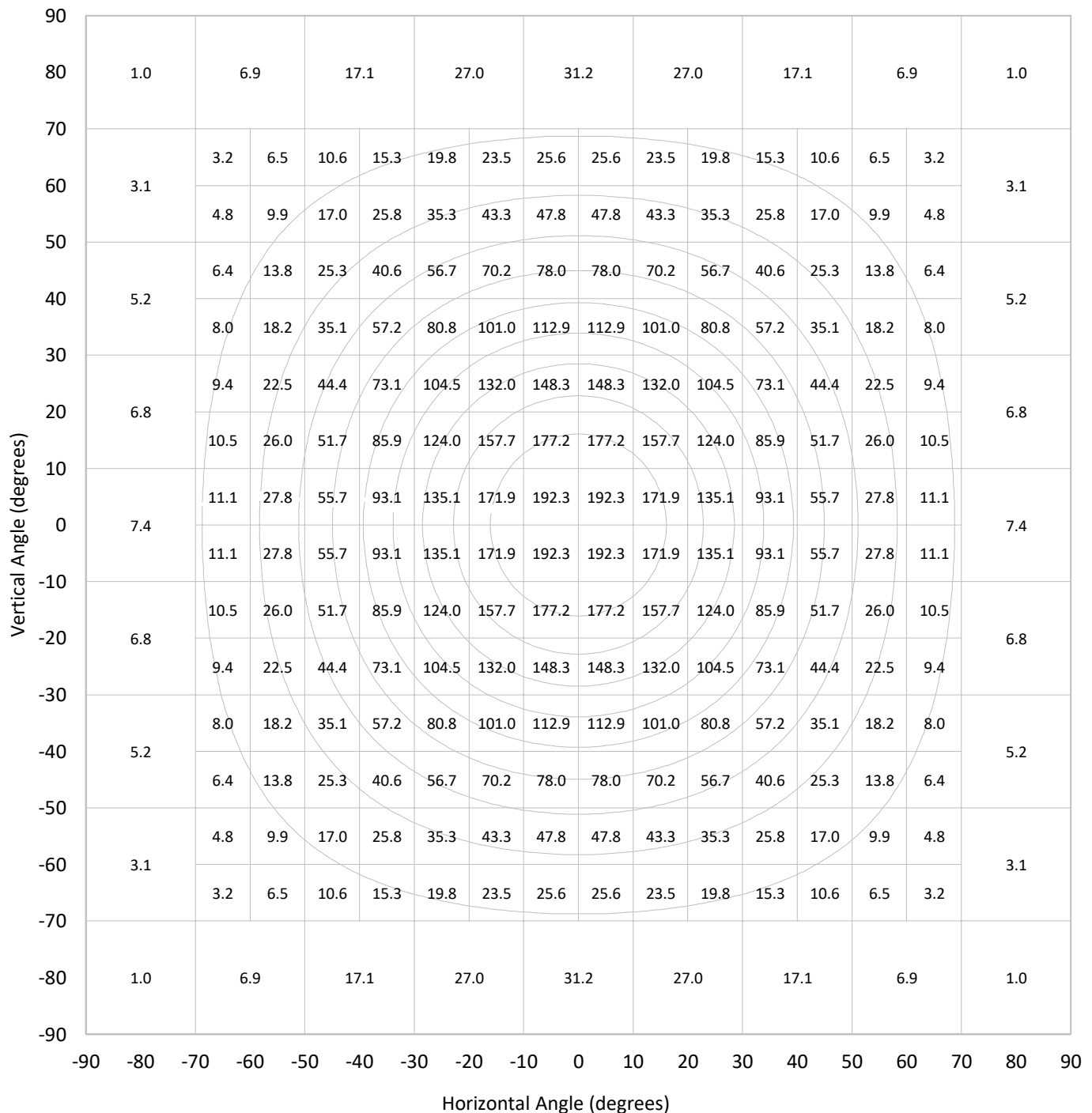
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Iso-Candela Plot



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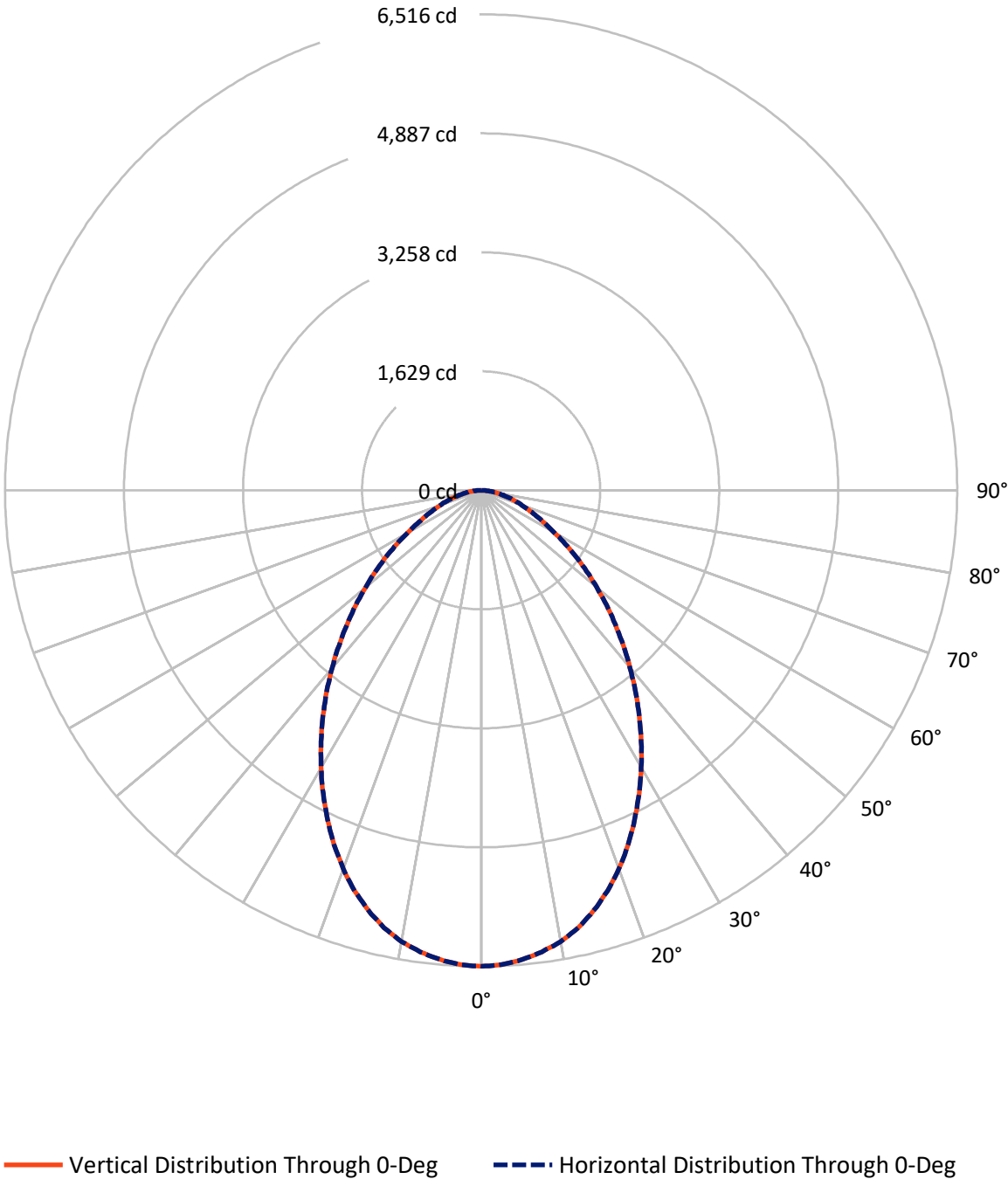
Lumen Table





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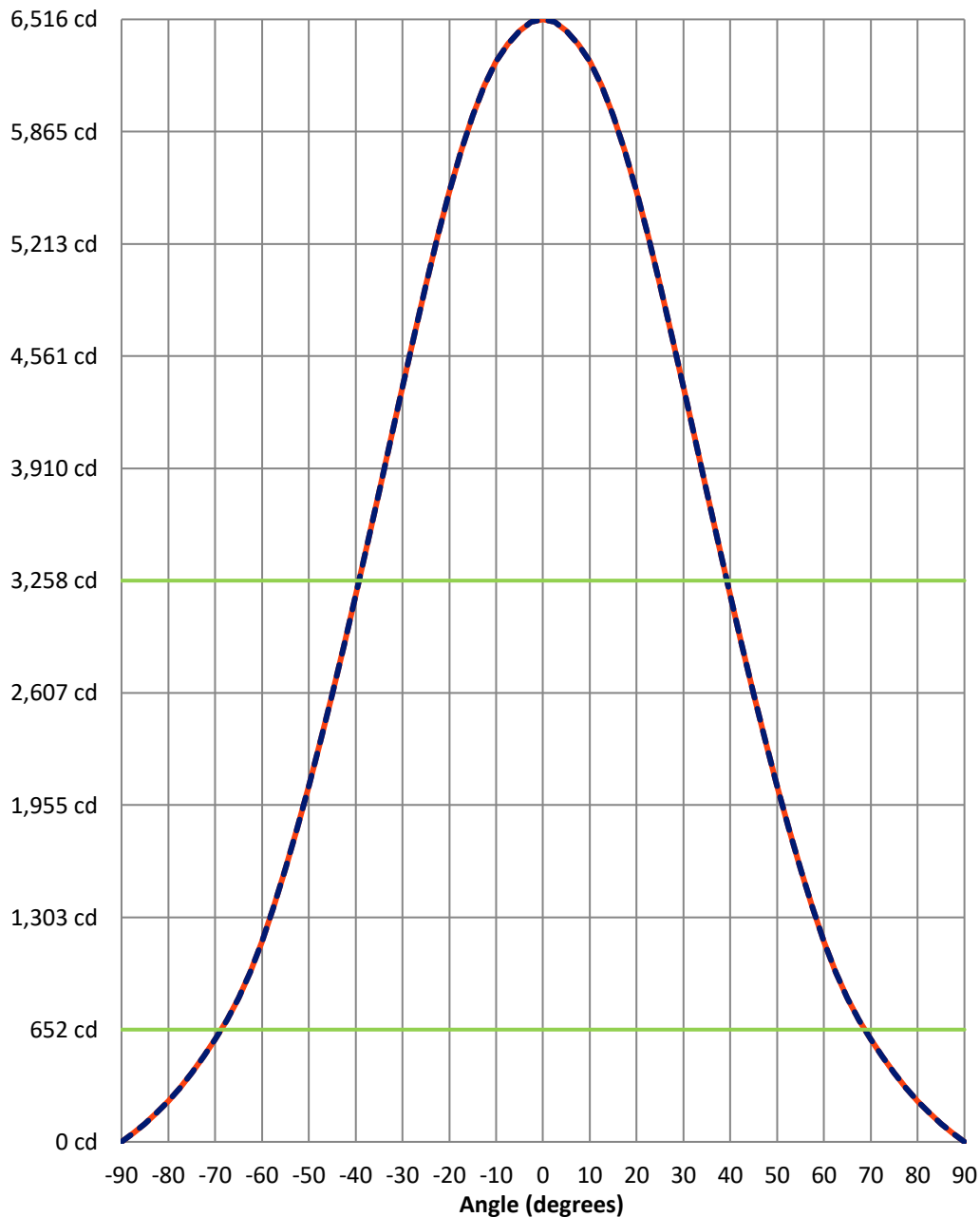
Luminous Intensity Polar Plot



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Luminous Intensity Plot



Beam:

H Angle:	78.6°
V Angle:	78.6°
Lumens:	5076.6
Efficiency:	43.3%

Field:

H Angle:	137.5°
V Angle:	137.5°
Lumens:	8312.8
Efficiency:	70.9%

Spill:

Lumens:	3419.9
Efficiency:	29.1%

— Vertical Distribution through 0-Deg
- - - Horizontal Distribution through 0-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°	50.2	50.2	50.2	50.2	50.2	50.2	50.2	47.7	47.7	46.5	45.3
85°	105.2	105.2	105.2	105.2	105.2	102.8	101.5	100.3	99.1	96.6	95.4
82.5°	168.8	168.8	168.8	168.8	166.4	163.9	162.7	160.2	157.8	154.1	150.5
80°	236.1	236.1	236.1	236.1	232.4	230.0	226.3	223.9	220.2	215.3	210.4
77.5°	313.2	313.2	313.2	309.5	307.0	303.4	299.7	294.8	289.9	283.8	276.5
75°	400.0	400.0	400.0	395.1	391.4	387.8	381.7	375.5	368.2	359.6	349.9
72.5°	494.2	494.2	494.2	488.1	484.4	478.3	471.0	462.4	453.8	442.8	430.6
70°	595.7	595.7	595.7	588.4	582.3	576.2	566.4	556.6	544.3	532.1	517.4
67.5°	705.8	705.8	705.8	697.3	689.9	681.4	670.3	658.1	643.4	626.3	609.2
65°	834.3	834.3	829.4	822.0	813.5	801.2	787.8	770.7	752.3	730.3	707.0
62.5°	985.9	985.9	978.6	970.0	959.0	943.1	924.8	902.8	877.1	848.9	820.8
60°	1162.1	1162.1	1153.5	1142.5	1126.6	1107.0	1082.6	1054.4	1022.6	987.2	952.9
57.5°	1365.2	1365.2	1354.1	1339.5	1319.9	1295.4	1264.8	1229.4	1189.0	1145.0	1102.2
55°	1585.3	1585.3	1571.9	1554.8	1531.5	1502.2	1465.5	1423.9	1374.9	1324.8	1269.7
52.5°	1819.0	1819.0	1803.1	1783.5	1756.6	1722.3	1680.8	1631.8	1575.6	1516.8	1452.0
50°	2064.9	2064.9	2046.5	2024.5	1993.9	1953.5	1905.8	1849.6	1787.2	1718.7	1644.1
47.5°	2327.9	2327.9	2307.1	2281.4	2244.7	2198.2	2141.9	2077.1	2006.1	1929.1	1844.7
45°	2598.2	2598.2	2575.0	2545.6	2505.2	2452.6	2390.2	2327.9	2237.3	2148.0	2050.2
42.5°	2879.5	2879.5	2852.6	2819.6	2773.1	2715.6	2644.7	2563.9	2474.6	2374.3	2267.9
40°	3171.9	3171.9	3141.3	3103.4	3052.0	2986.0	2906.5	2815.9	2715.6	2604.3	2486.9
37.5°	3470.4	3470.4	3436.1	3394.5	3337.0	3263.6	3174.3	3074.0	2961.5	2838.0	2708.3
35°	3771.3	3771.3	3733.4	3688.1	3624.5	3543.8	3447.1	3335.8	3211.0	3076.5	2930.9
32.5°	4078.3	4078.3	4036.7	3985.4	3913.2	3823.9	3717.5	3596.4	3470.4	3313.8	3154.8
30°	4381.7	4381.7	4336.4	4280.2	4203.1	4105.2	3989.0	3855.7	3707.7	3547.4	3376.2
27.5°	4680.2	4667.9	4630.0	4570.1	4485.7	4381.7	4255.7	4111.4	3951.1	3775.0	3591.5
25°	4973.8	4960.3	4918.7	4852.7	4762.1	4648.4	4512.6	4358.5	4186.0	4000.0	3799.4
22.5°	5255.1	5240.4	5196.4	5125.4	5028.8	4905.3	4759.7	4594.5	4411.1	4211.7	4000.0
20°	5515.7	5499.8	5454.5	5379.9	5279.6	5148.7	4994.6	4817.2	4621.5	4411.1	4186.0
17.5°	5750.5	5734.6	5686.9	5609.8	5515.7	5370.1	5211.1	5023.9	4817.2	4594.5	4358.5
15°	5957.3	5940.1	5891.2	5814.1	5706.5	5569.5	5401.9	5211.1	4994.6	4759.7	4512.6
12.5°	6133.4	6116.3	6066.1	5989.1	5877.7	5740.7	5569.5	5370.1	5148.7	4905.3	4648.4
10°	6272.9	6255.7	6208.0	6134.6	6019.6	5877.7	5706.5	5515.7	5279.6	5028.8	4762.1
7.5°	6373.2	6357.3	6313.2	6239.8	6134.6	5989.1	5814.1	5609.8	5379.9	5125.4	4852.7
5°	6449.0	6430.7	6386.6	6313.2	6208.0	6066.1	5891.2	5686.9	5454.5	5196.4	4918.7
2.5°	6501.6	6479.6	6430.7	6357.3	6255.7	6116.3	5940.1	5734.6	5499.8	5240.4	4960.3
0°	6516.3	6501.6	6449.0	6373.2	6272.9	6133.4	5957.3	5750.5	5515.7	5255.1	4973.8

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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°	44.0	44.0	42.8	41.6	40.4	37.9	36.7	35.5	34.3	31.8	30.6
85°	93.0	90.5	88.1	85.6	82.0	79.5	75.8	73.4	69.7	66.1	62.4
82.5°	146.8	143.1	138.2	134.6	129.7	123.5	118.7	112.5	106.4	101.5	95.4
80°	205.5	199.4	193.3	187.2	179.8	172.5	165.1	157.8	149.2	140.7	132.1
77.5°	269.1	260.6	252.0	242.2	233.6	223.9	214.1	204.3	193.3	182.3	171.3
75°	340.1	329.1	316.8	304.6	293.6	280.1	266.7	253.2	238.5	225.1	210.4
72.5°	417.1	403.7	389.0	374.3	358.4	341.3	324.2	305.8	288.7	271.6	253.2
70°	500.3	484.4	466.1	447.7	428.1	407.3	386.5	364.5	342.5	320.5	298.5
67.5°	589.6	570.0	548.0	526.0	501.5	477.1	452.6	426.9	400.0	373.1	347.4
65°	685.0	660.6	634.9	606.7	578.6	550.5	521.1	490.5	459.9	428.1	400.0
62.5°	791.4	760.9	727.8	693.6	661.8	627.5	595.7	557.8	521.1	485.6	450.2
60°	915.0	874.6	834.3	791.4	751.1	707.0	667.9	626.3	584.7	544.3	502.8
57.5°	1053.2	1001.8	952.9	901.5	847.7	798.8	748.6	698.5	652.0	604.3	559.0
55°	1209.8	1147.4	1086.3	1022.6	960.3	899.1	835.5	779.2	721.7	667.9	615.3
52.5°	1381.1	1310.1	1234.3	1162.1	1082.6	1006.7	935.8	864.8	797.6	732.7	672.8
50°	1564.5	1481.4	1394.5	1306.4	1215.9	1126.6	1041.0	957.8	879.5	803.7	732.7
47.5°	1755.4	1661.2	1562.1	1461.8	1365.2	1256.3	1153.5	1059.3	965.1	879.5	797.6
45°	1951.1	1844.7	1735.8	1622.0	1508.3	1390.8	1277.1	1162.1	1059.3	957.8	864.8
42.5°	2152.9	2033.1	1911.9	1786.0	1660.0	1531.5	1403.1	1277.1	1153.5	1041.0	935.8
40°	2360.9	2228.8	2090.5	1953.5	1819.0	1672.2	1531.5	1390.8	1256.3	1126.6	1006.7
37.5°	2568.8	2424.5	2275.3	2121.1	1967.0	1819.0	1660.0	1508.3	1365.2	1215.9	1082.6
35°	2778.0	2619.0	2457.5	2289.9	2121.1	1953.5	1786.0	1622.0	1461.8	1306.4	1162.1
32.5°	2988.4	2814.7	2636.1	2457.5	2275.3	2090.5	1911.9	1735.8	1562.1	1394.5	1234.3
30°	3195.1	3006.8	2814.7	2619.0	2424.5	2228.8	2033.1	1844.7	1661.2	1481.4	1310.1
27.5°	3397.0	3195.1	2988.4	2778.0	2568.8	2360.9	2152.9	1951.1	1755.4	1564.5	1381.1
25°	3591.5	3376.2	3154.8	2930.9	2708.3	2486.9	2267.9	2050.2	1844.7	1644.1	1452.0
22.5°	3775.0	3547.4	3313.8	3076.5	2838.0	2604.3	2374.3	2148.0	1929.1	1718.7	1516.8
20°	3951.1	3707.7	3470.4	3211.0	2961.5	2715.6	2474.6	2237.3	2006.1	1787.2	1575.6
17.5°	4111.4	3855.7	3596.4	3335.8	3074.0	2815.9	2563.9	2327.9	2077.1	1849.6	1631.8
15°	4255.7	3989.0	3717.5	3447.1	3174.3	2906.5	2644.7	2390.2	2141.9	1905.8	1680.8
12.5°	4381.7	4105.2	3823.9	3543.8	3263.6	2986.0	2715.6	2452.6	2198.2	1953.5	1722.3
10°	4485.7	4203.1	3913.2	3624.5	3337.0	3052.0	2773.1	2505.2	2244.7	1993.9	1756.6
7.5°	4570.1	4280.2	3985.4	3688.1	3394.5	3103.4	2819.6	2545.6	2281.4	2024.5	1783.5
5°	4630.0	4336.4	4036.7	3733.4	3436.1	3141.3	2852.6	2575.0	2307.1	2046.5	1803.1
2.5°	4667.9	4381.7	4078.3	3771.3	3470.4	3171.9	2879.5	2598.2	2327.9	2064.9	1819.0
0°	4680.2	4381.7	4078.3	3771.3	3470.4	3171.9	2879.5	2598.2	2327.9	2064.9	1819.0

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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°	29.4	26.9	24.5	23.2	20.8	19.6	17.1	14.7	13.5	11.0	8.6
85°	58.7	53.8	50.2	46.5	42.8	37.9	34.3	30.6	25.7	22.0	17.1
82.5°	89.3	83.2	77.1	70.9	64.8	58.7	51.4	45.3	39.1	33.0	25.7
80°	123.5	113.8	105.2	96.6	88.1	79.5	69.7	61.2	51.4	42.8	34.3
77.5°	159.0	148.0	135.8	123.5	111.3	100.3	88.1	77.1	66.1	53.8	42.8
75°	196.9	182.3	168.8	152.9	138.2	122.3	107.6	93.0	79.5	66.1	51.4
72.5°	236.1	217.7	199.4	182.3	163.9	145.6	128.4	110.1	93.0	77.1	61.2
70°	276.5	254.4	232.4	211.6	190.8	168.8	149.2	128.4	107.6	88.1	69.7
67.5°	319.3	293.6	267.9	241.0	217.7	193.3	168.8	145.6	122.3	100.3	79.5
65°	365.8	335.2	303.4	275.2	244.7	217.7	190.8	163.9	138.2	111.3	88.1
62.5°	413.5	378.0	342.5	307.0	275.2	241.0	211.6	182.3	152.9	123.5	96.6
60°	462.4	422.0	381.7	342.5	303.4	267.9	232.4	199.4	168.8	135.8	105.2
57.5°	512.5	467.3	422.0	378.0	335.2	293.6	254.4	217.7	182.3	148.0	113.8
55°	563.9	512.5	462.4	413.5	365.8	319.3	276.5	236.1	196.9	159.0	123.5
52.5°	615.3	559.0	502.8	450.2	400.0	347.4	298.5	253.2	210.4	171.3	132.1
50°	667.9	604.3	544.3	485.6	428.1	373.1	320.5	271.6	225.1	182.3	140.7
47.5°	721.7	652.0	584.7	521.1	459.9	400.0	342.5	288.7	238.5	193.3	149.2
45°	779.2	698.5	626.3	557.8	490.5	426.9	364.5	305.8	253.2	204.3	157.8
42.5°	835.5	748.6	667.9	595.7	521.1	452.6	386.5	324.2	266.7	214.1	165.1
40°	899.1	798.8	707.0	627.5	550.5	477.1	407.3	341.3	280.1	223.9	172.5
37.5°	960.3	847.7	751.1	661.8	578.6	501.5	428.1	358.4	293.6	233.6	179.8
35°	1022.6	901.5	791.4	693.6	606.7	526.0	447.7	374.3	304.6	242.2	187.2
32.5°	1086.3	952.9	834.3	727.8	634.9	548.0	466.1	389.0	316.8	252.0	193.3
30°	1147.4	1001.8	874.6	760.9	660.6	570.0	484.4	403.7	329.1	260.6	199.4
27.5°	1209.8	1053.2	915.0	791.4	685.0	589.6	500.3	417.1	340.1	269.1	205.5
25°	1269.7	1102.2	952.9	820.8	707.0	609.2	517.4	430.6	349.9	276.5	210.4
22.5°	1324.8	1145.0	987.2	848.9	730.3	626.3	532.1	442.8	359.6	283.8	215.3
20°	1374.9	1189.0	1022.6	877.1	752.3	643.4	544.3	453.8	368.2	289.9	220.2
17.5°	1423.9	1229.4	1054.4	902.8	770.7	658.1	556.6	462.4	375.5	294.8	223.9
15°	1465.5	1264.8	1082.6	924.8	787.8	670.3	566.4	471.0	381.7	299.7	226.3
12.5°	1502.2	1295.4	1107.0	943.1	801.2	681.4	576.2	478.3	387.8	303.4	230.0
10°	1531.5	1319.9	1126.6	959.0	813.5	689.9	582.3	484.4	391.4	307.0	232.4
7.5°	1554.8	1339.5	1142.5	970.0	822.0	697.3	588.4	488.1	395.1	309.5	236.1
5°	1571.9	1354.1	1153.5	978.6	829.4	705.8	595.7	494.2	400.0	313.2	236.1
2.5°	1585.3	1365.2	1162.1	985.9	834.3	705.8	595.7	494.2	400.0	313.2	236.1
0°	1585.3	1365.2	1162.1	985.9	834.3	705.8	595.7	494.2	400.0	313.2	236.1

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	6.1	4.9	2.4	0.0
85°	13.5	8.6	4.9	0.0
82.5°	19.6	13.5	6.1	0.0
80°	25.7	17.1	8.6	0.0
77.5°	33.0	22.0	11.0	0.0
75°	39.1	25.7	13.5	0.0
72.5°	45.3	30.6	14.7	0.0
70°	51.4	34.3	17.1	0.0
67.5°	58.7	37.9	19.6	0.0
65°	64.8	42.8	20.8	0.0
62.5°	70.9	46.5	23.2	0.0
60°	77.1	50.2	24.5	0.0
57.5°	83.2	53.8	26.9	0.0
55°	89.3	58.7	29.4	0.0
52.5°	95.4	62.4	30.6	0.0
50°	101.5	66.1	31.8	0.0
47.5°	106.4	69.7	34.3	0.0
45°	112.5	73.4	35.5	0.0
42.5°	118.7	75.8	36.7	0.0
40°	123.5	79.5	37.9	0.0
37.5°	129.7	82.0	40.4	0.0
35°	134.6	85.6	41.6	0.0
32.5°	138.2	88.1	42.8	0.0
30°	143.1	90.5	44.0	0.0
27.5°	146.8	93.0	44.0	0.0
25°	150.5	95.4	45.3	0.0
22.5°	154.1	96.6	46.5	0.0
20°	157.8	99.1	47.7	0.0
17.5°	160.2	100.3	47.7	0.0
15°	162.7	101.5	50.2	0.0
12.5°	163.9	102.8	50.2	0.0
10°	166.4	105.2	50.2	0.0
7.5°	168.8	105.2	50.2	0.0
5°	168.8	105.2	50.2	0.0
2.5°	168.8	105.2	50.2	0.0
0°	168.8	105.2	50.2	0.0

(END OF REPORT)