

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: P624022

Luminaire Tested: **IFLD-S-SA3D-827-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624022
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA3D-827-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (48) 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

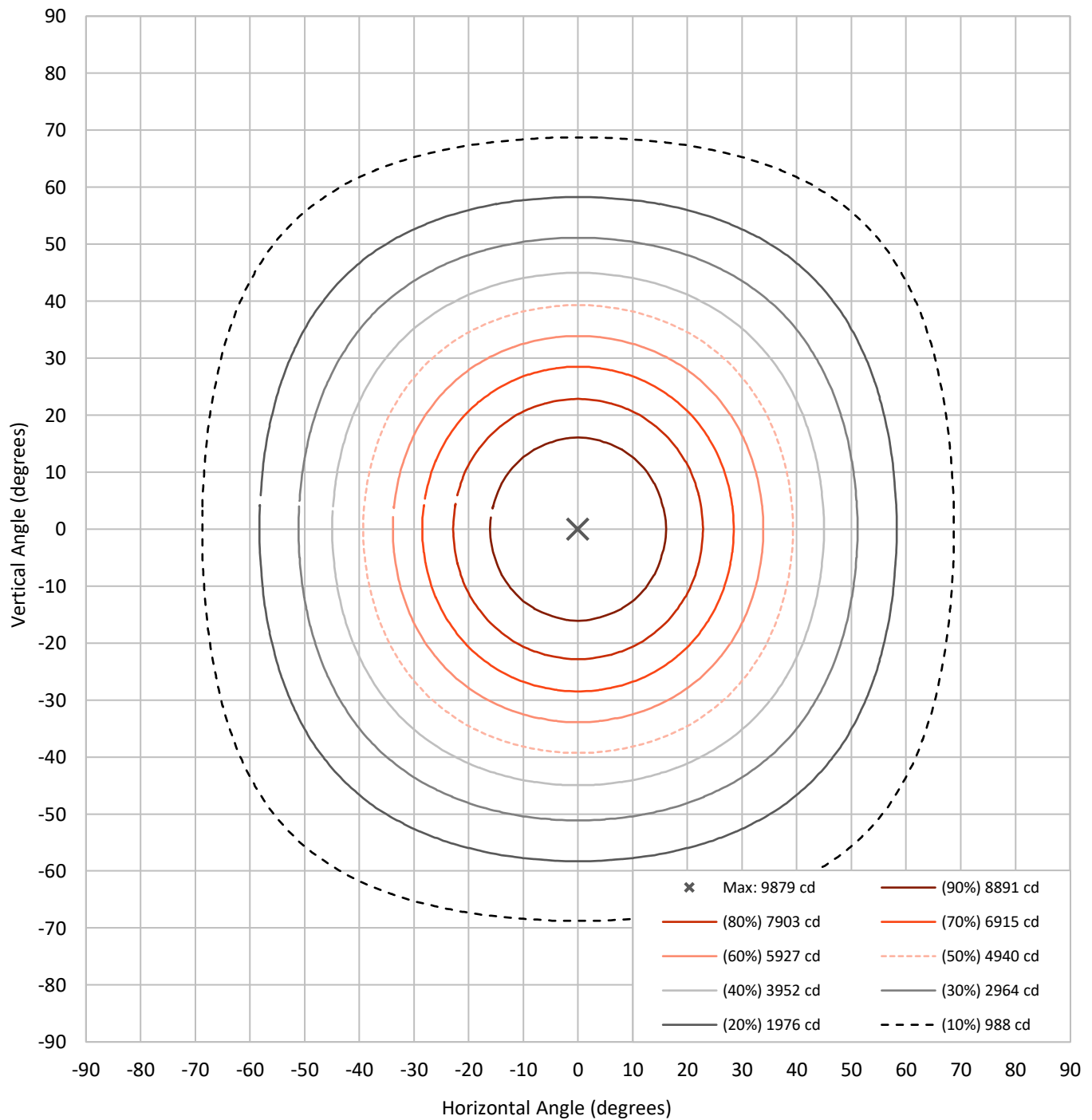
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	17787.3 lumens	Max Intensity:	9879 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	96.6 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	7696.4 lumens	Field Lumens:	12602.6 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%
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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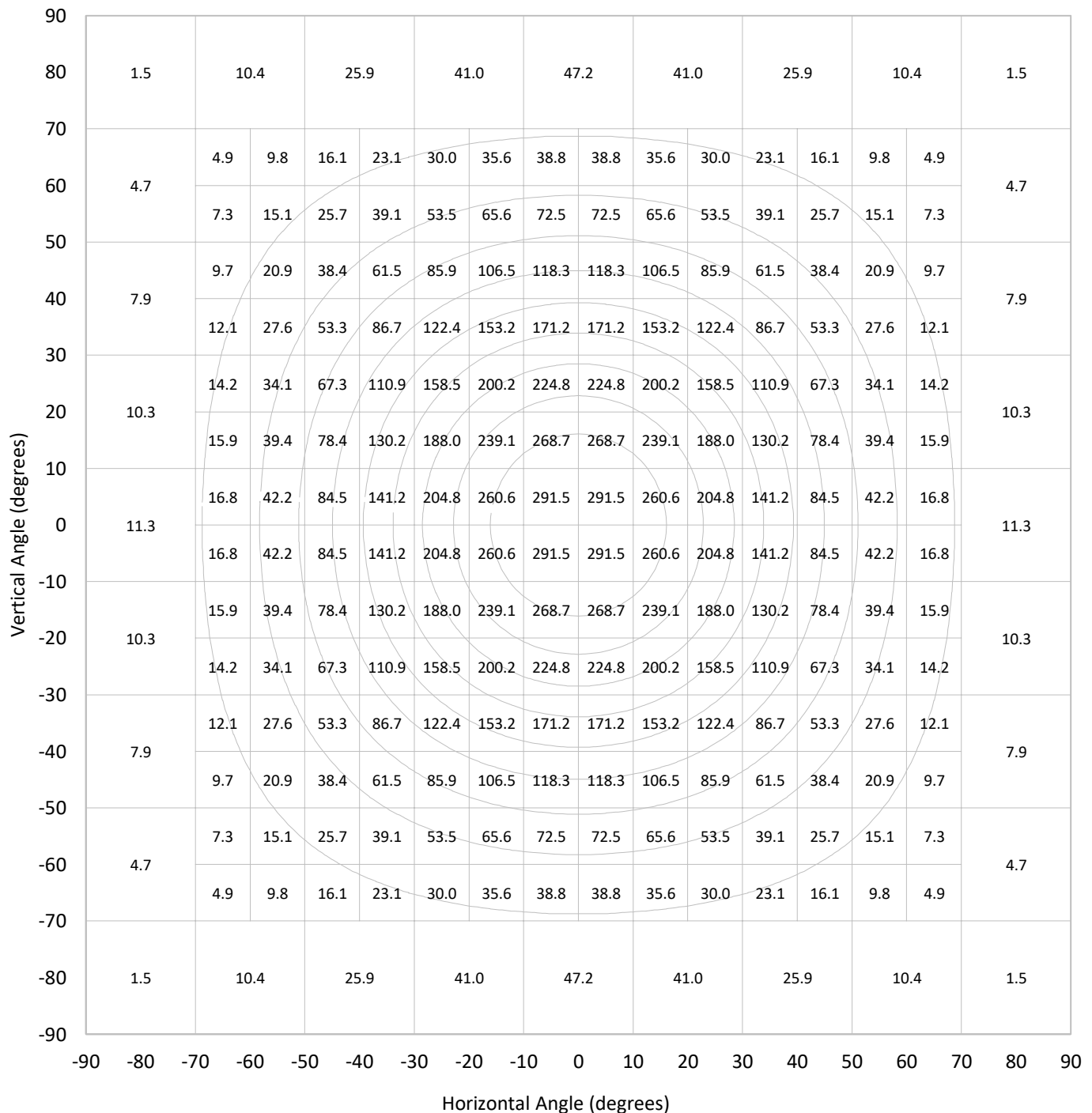
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Iso-Candela Plot



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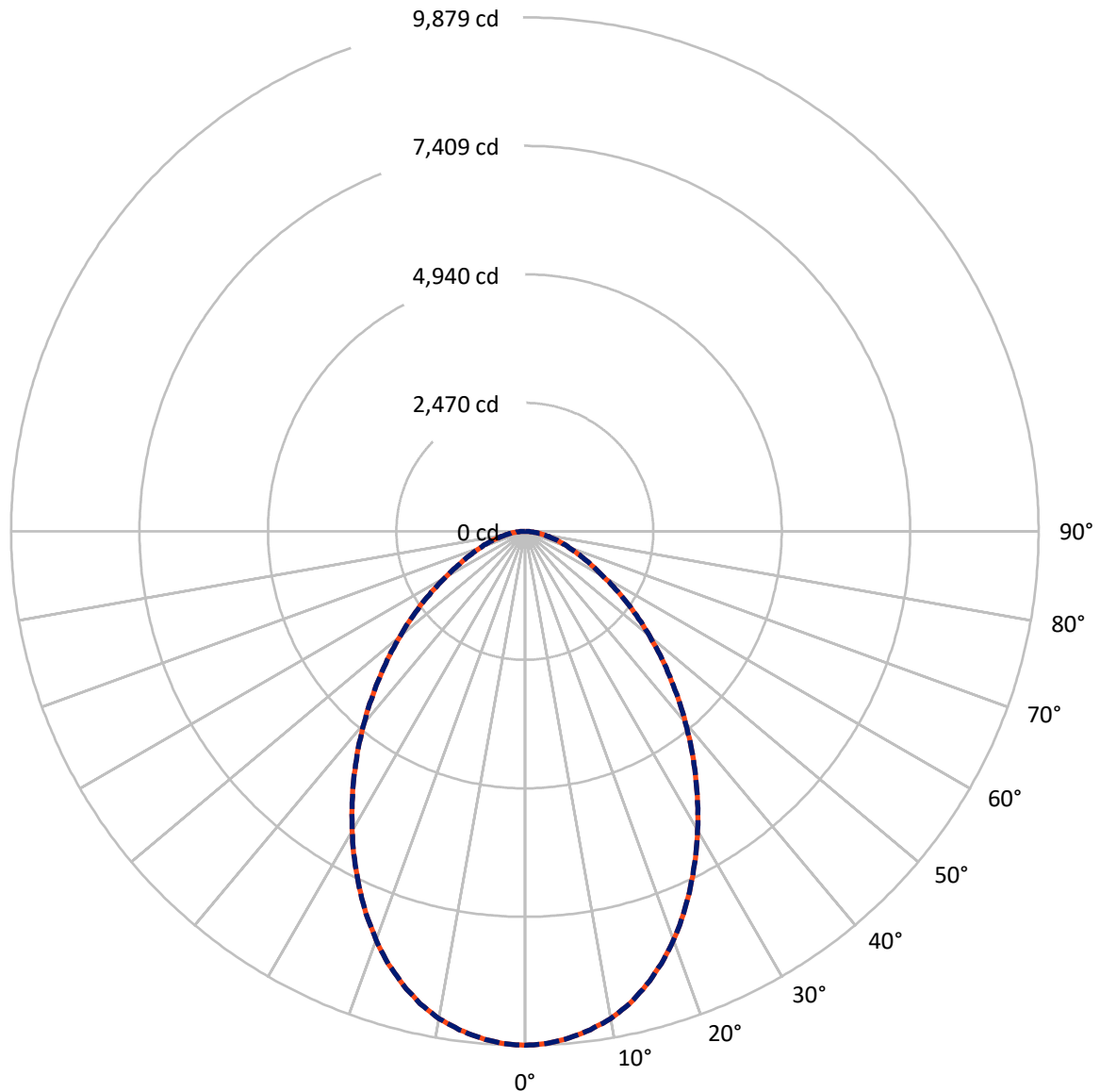
Lumen Table



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Luminous Intensity Polar Plot



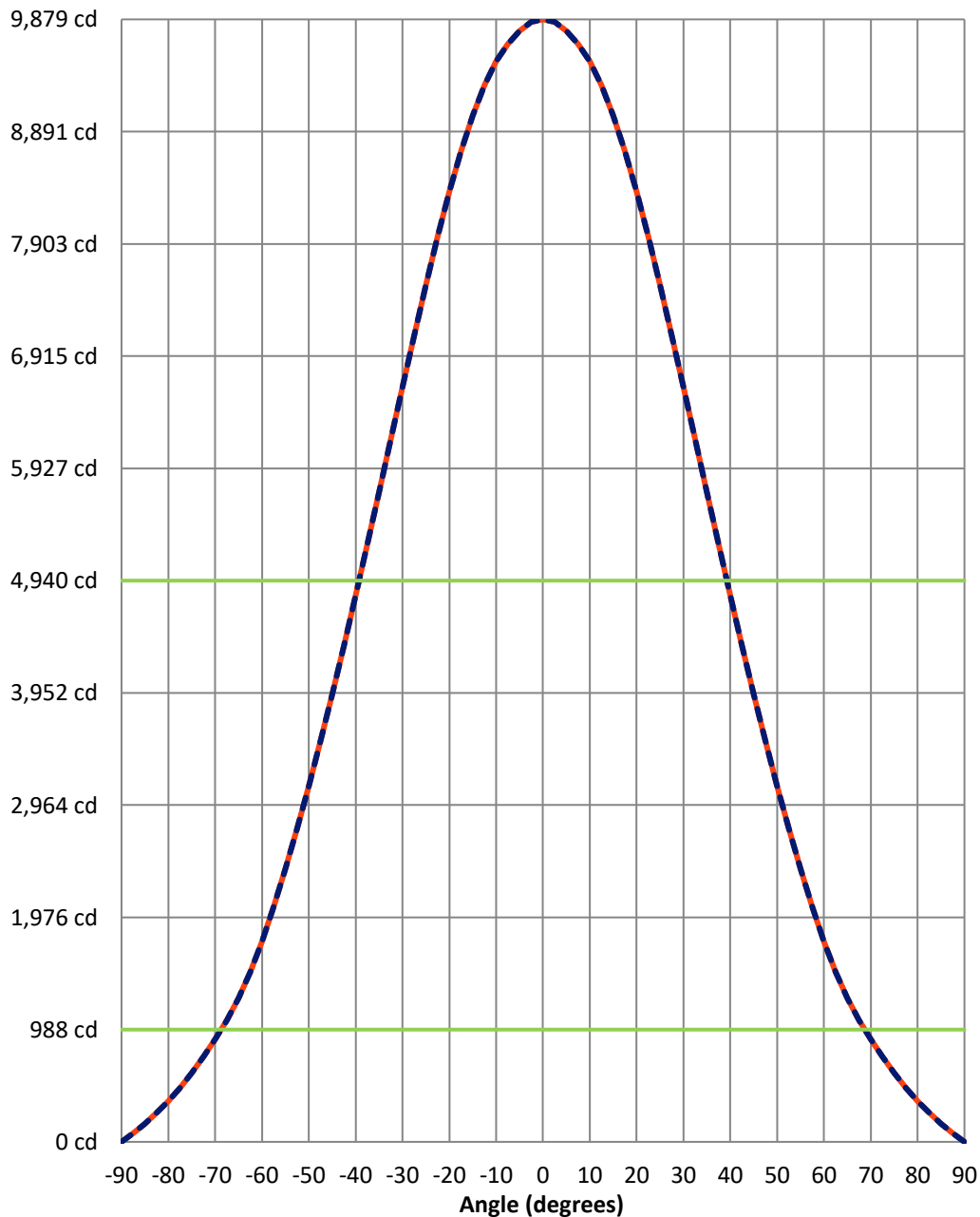
— Vertical Distribution Through 0-Deg

- - - Horizontal Distribution Through 0-Deg

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Luminous Intensity Plot



Beam:

H Angle: 78.6°
V Angle: 78.6°
Lumens: 7696.4
Efficiency: 43.3%

Field:

H Angle: 137.5°
V Angle: 137.5°
Lumens: 12602.6
Efficiency: 70.9%

Spill:

Lumens: 5184.7
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°	76.0	76.0	76.0	76.0	76.0	76.0	76.0	72.3	72.3	70.5	68.6
85°	159.5	159.5	159.5	159.5	159.5	155.8	153.9	152.1	150.2	146.5	144.7
82.5°	255.9	255.9	255.9	255.9	252.2	248.5	246.6	242.9	239.2	233.7	228.1
80°	357.9	357.9	357.9	357.9	352.4	348.6	343.1	339.4	333.8	326.4	319.0
77.5°	474.8	474.8	474.8	469.2	465.5	459.9	454.4	446.9	439.5	430.2	419.1
75°	606.4	606.4	606.4	599.0	593.4	587.9	578.6	569.3	558.2	545.2	530.4
72.5°	749.2	749.2	749.2	739.9	734.4	725.1	714.0	701.0	688.0	671.3	652.8
70°	903.1	903.1	903.1	892.0	882.7	873.5	858.6	843.8	825.3	806.7	784.5
67.5°	1070.1	1070.1	1070.1	1057.1	1045.9	1033.0	1016.3	997.7	975.5	949.5	923.5
65°	1264.8	1264.8	1257.4	1246.2	1233.2	1214.7	1194.3	1168.3	1140.5	1107.1	1071.9
62.5°	1494.7	1494.7	1483.6	1470.6	1453.9	1429.8	1402.0	1368.6	1329.7	1287.0	1244.4
60°	1761.8	1761.8	1748.8	1732.1	1708.0	1678.3	1641.2	1598.6	1550.4	1496.6	1444.7
57.5°	2069.6	2069.6	2052.9	2030.7	2001.0	1963.9	1917.6	1863.8	1802.6	1735.8	1670.9
55°	2403.4	2403.4	2383.0	2357.1	2321.8	2277.3	2221.7	2158.6	2084.5	2008.4	1925.0
52.5°	2757.7	2757.7	2733.5	2703.9	2663.1	2611.1	2548.1	2473.9	2388.6	2299.6	2201.3
50°	3130.4	3130.4	3102.6	3069.2	3022.8	2961.6	2889.3	2804.0	2709.4	2605.6	2492.5
47.5°	3529.1	3529.1	3497.6	3458.7	3403.0	3332.6	3247.2	3149.0	3041.4	2924.6	2796.6
45°	3939.0	3939.0	3903.7	3859.2	3798.0	3718.3	3623.7	3529.1	3391.9	3256.5	3108.2
42.5°	4365.5	4365.5	4324.7	4274.6	4204.2	4117.0	4009.4	3887.0	3751.7	3599.6	3438.3
40°	4808.7	4808.7	4762.4	4704.9	4627.0	4526.9	4406.3	4269.1	4117.0	3948.2	3770.2
37.5°	5261.2	5261.2	5209.3	5146.3	5059.1	4947.8	4812.4	4660.4	4489.8	4302.5	4105.9
35°	5717.4	5717.4	5660.0	5591.3	5494.9	5372.5	5226.0	5057.2	4868.1	4664.1	4443.4
32.5°	6182.9	6182.9	6119.9	6042.0	5932.6	5797.2	5635.8	5452.3	5261.2	5023.9	4782.8
30°	6642.8	6642.8	6574.2	6488.9	6372.1	6223.7	6047.5	5845.4	5621.0	5378.1	5118.4
27.5°	7095.3	7076.8	7019.3	6928.4	6800.5	6642.8	6451.8	6233.0	5990.1	5723.0	5444.8
25°	7540.4	7520.0	7457.0	7356.8	7219.6	7047.1	6841.3	6607.6	6346.1	6064.2	5760.1
22.5°	7967.0	7944.7	7877.9	7770.4	7623.9	7436.6	7215.9	6965.5	6687.4	6385.1	6064.2
20°	8362.0	8337.9	8269.2	8156.1	8004.1	7805.6	7572.0	7303.1	7006.3	6687.4	6346.1
17.5°	8718.0	8693.9	8621.6	8504.8	8362.0	8141.3	7900.2	7616.5	7303.1	6965.5	6607.6
15°	9031.5	9005.5	8931.3	8814.5	8651.3	8443.6	8189.5	7900.2	7572.0	7215.9	6841.3
12.5°	9298.5	9272.5	9196.5	9079.7	8910.9	8703.2	8443.6	8141.3	7805.6	7436.6	7047.1
10°	9509.9	9484.0	9411.6	9300.4	9126.0	8910.9	8651.3	8362.0	8004.1	7623.9	7219.6
7.5°	9662.0	9637.9	9571.1	9459.8	9300.4	9079.7	8814.5	8504.8	8156.1	7770.4	7356.8
5°	9777.0	9749.1	9682.4	9571.1	9411.6	9196.5	8931.3	8621.6	8269.2	7877.9	7457.0
2.5°	9856.7	9823.3	9749.1	9637.9	9484.0	9272.5	9005.5	8693.9	8337.9	7944.7	7520.0
0°	9879.0	9856.7	9777.0	9662.0	9509.9	9298.5	9031.5	8718.0	8362.0	7967.0	7540.4

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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°	66.8	66.8	64.9	63.1	61.2	57.5	55.6	53.8	51.9	48.2	46.4
85°	140.9	137.2	133.5	129.8	124.3	120.5	115.0	111.3	105.7	100.1	94.6
82.5°	222.5	217.0	209.6	204.0	196.6	187.3	179.9	170.6	161.3	153.9	144.7
80°	311.6	302.3	293.0	283.7	272.6	261.5	250.4	239.2	226.2	213.3	200.3
77.5°	408.0	395.0	382.0	367.2	354.2	339.4	324.5	309.7	293.0	276.3	259.6
75°	515.6	498.9	480.3	461.8	445.1	424.7	404.3	383.9	361.6	341.2	319.0
72.5°	632.4	612.0	589.7	567.5	543.4	517.4	491.4	463.6	437.7	411.7	383.9
70°	758.5	734.4	706.6	678.7	649.1	617.6	586.0	552.6	519.3	485.9	452.5
67.5°	893.9	864.2	830.8	797.4	760.3	723.3	686.2	647.2	606.4	565.6	526.7
65°	1038.5	1001.4	962.5	919.8	877.2	834.5	790.0	743.7	697.3	649.1	606.4
62.5°	1199.9	1153.5	1103.4	1051.5	1003.3	951.4	903.1	845.7	790.0	736.2	682.5
60°	1387.2	1326.0	1264.8	1199.9	1138.7	1071.9	1012.6	949.5	886.5	825.3	762.2
57.5°	1596.7	1518.8	1444.7	1366.8	1285.2	1211.0	1135.0	1058.9	988.5	916.1	847.5
55°	1834.1	1739.5	1646.8	1550.4	1455.8	1363.1	1266.6	1181.3	1094.2	1012.6	932.8
52.5°	2093.7	1986.2	1871.2	1761.8	1641.2	1526.3	1418.7	1311.1	1209.1	1110.9	1020.0
50°	2371.9	2245.8	2114.1	1980.6	1843.4	1708.0	1578.2	1452.1	1333.4	1218.4	1110.9
47.5°	2661.2	2518.4	2368.2	2216.1	2069.6	1904.6	1748.8	1606.0	1463.2	1333.4	1209.1
45°	2957.9	2796.6	2631.5	2459.1	2286.6	2108.6	1936.1	1761.8	1606.0	1452.1	1311.1
42.5°	3263.9	3082.2	2898.6	2707.6	2516.6	2321.8	2127.1	1936.1	1748.8	1578.2	1418.7
40°	3579.2	3378.9	3169.4	2961.6	2757.7	2535.1	2321.8	2108.6	1904.6	1708.0	1526.3
37.5°	3894.5	3675.6	3449.4	3215.7	2982.0	2757.7	2516.6	2286.6	2069.6	1843.4	1641.2
35°	4211.6	3970.5	3725.7	3471.6	3215.7	2961.6	2707.6	2459.1	2216.1	1980.6	1761.8
32.5°	4530.6	4267.2	3996.5	3725.7	3449.4	3169.4	2898.6	2631.5	2368.2	2114.1	1871.2
30°	4844.0	4558.4	4267.2	3970.5	3675.6	3378.9	3082.2	2796.6	2518.4	2245.8	1986.2
27.5°	5150.0	4844.0	4530.6	4211.6	3894.5	3579.2	3263.9	2957.9	2661.2	2371.9	2093.7
25°	5444.8	5118.4	4782.8	4443.4	4105.9	3770.2	3438.3	3108.2	2796.6	2492.5	2201.3
22.5°	5723.0	5378.1	5023.9	4664.1	4302.5	3948.2	3599.6	3256.5	2924.6	2605.6	2299.6
20°	5990.1	5621.0	5261.2	4868.1	4489.8	4117.0	3751.7	3391.9	3041.4	2709.4	2388.6
17.5°	6233.0	5845.4	5452.3	5057.2	4660.4	4269.1	3887.0	3529.1	3149.0	2804.0	2473.9
15°	6451.8	6047.5	5635.8	5226.0	4812.4	4406.3	4009.4	3623.7	3247.2	2889.3	2548.1
12.5°	6642.8	6223.7	5797.2	5372.5	4947.8	4526.9	4117.0	3718.3	3332.6	2961.6	2611.1
10°	6800.5	6372.1	5932.6	5494.9	5059.1	4627.0	4204.2	3798.0	3403.0	3022.8	2663.1
7.5°	6928.4	6488.9	6042.0	5591.3	5146.3	4704.9	4274.6	3859.2	3458.7	3069.2	2703.9
5°	7019.3	6574.2	6119.9	5660.0	5209.3	4762.4	4324.7	3903.7	3497.6	3102.6	2733.5
2.5°	7076.8	6642.8	6182.9	5717.4	5261.2	4808.7	4365.5	3939.0	3529.1	3130.4	2757.7
0°	7095.3	6642.8	6182.9	5717.4	5261.2	4808.7	4365.5	3939.0	3529.1	3130.4	2757.7

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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°	44.5	40.8	37.1	35.2	31.5	29.7	26.0	22.3	20.4	16.7	13.0
85°	89.0	81.6	76.0	70.5	64.9	57.5	51.9	46.4	38.9	33.4	26.0
82.5°	135.4	126.1	116.8	107.6	98.3	89.0	77.9	68.6	59.3	50.1	38.9
80°	187.3	172.5	159.5	146.5	133.5	120.5	105.7	92.7	77.9	64.9	51.9
77.5°	241.1	224.4	205.9	187.3	168.8	152.1	133.5	116.8	100.1	81.6	64.9
75°	298.6	276.3	255.9	231.8	209.6	185.5	163.2	140.9	120.5	100.1	77.9
72.5°	357.9	330.1	302.3	276.3	248.5	220.7	194.7	166.9	140.9	116.8	92.7
70°	419.1	385.7	352.4	320.8	289.3	255.9	226.2	194.7	163.2	133.5	105.7
67.5°	484.0	445.1	406.1	365.3	330.1	293.0	255.9	220.7	185.5	152.1	120.5
65°	554.5	508.1	459.9	417.3	370.9	330.1	289.3	248.5	209.6	168.8	133.5
62.5°	626.8	573.0	519.3	465.5	417.3	365.3	320.8	276.3	231.8	187.3	146.5
60°	701.0	639.8	578.6	519.3	459.9	406.1	352.4	302.3	255.9	205.9	159.5
57.5°	777.0	708.4	639.8	573.0	508.1	445.1	385.7	330.1	276.3	224.4	172.5
55°	854.9	777.0	701.0	626.8	554.5	484.0	419.1	357.9	298.6	241.1	187.3
52.5°	932.8	847.5	762.2	682.5	606.4	526.7	452.5	383.9	319.0	259.6	200.3
50°	1012.6	916.1	825.3	736.2	649.1	565.6	485.9	411.7	341.2	276.3	213.3
47.5°	1094.2	988.5	886.5	790.0	697.3	606.4	519.3	437.7	361.6	293.0	226.2
45°	1181.3	1058.9	949.5	845.7	743.7	647.2	552.6	463.6	383.9	309.7	239.2
42.5°	1266.6	1135.0	1012.6	903.1	790.0	686.2	586.0	491.4	404.3	324.5	250.4
40°	1363.1	1211.0	1071.9	951.4	834.5	723.3	617.6	517.4	424.7	339.4	261.5
37.5°	1455.8	1285.2	1138.7	1003.3	877.2	760.3	649.1	543.4	445.1	354.2	272.6
35°	1550.4	1366.8	1199.9	1051.5	919.8	797.4	678.7	567.5	461.8	367.2	283.7
32.5°	1646.8	1444.7	1264.8	1103.4	962.5	830.8	706.6	589.7	480.3	382.0	293.0
30°	1739.5	1518.8	1326.0	1153.5	1001.4	864.2	734.4	612.0	498.9	395.0	302.3
27.5°	1834.1	1596.7	1387.2	1199.9	1038.5	893.9	758.5	632.4	515.6	408.0	311.6
25°	1925.0	1670.9	1444.7	1244.4	1071.9	923.5	784.5	652.8	530.4	419.1	319.0
22.5°	2008.4	1735.8	1496.6	1287.0	1107.1	949.5	806.7	671.3	545.2	430.2	326.4
20°	2084.5	1802.6	1550.4	1329.7	1140.5	975.5	825.3	688.0	558.2	439.5	333.8
17.5°	2158.6	1863.8	1598.6	1368.6	1168.3	997.7	843.8	701.0	569.3	446.9	339.4
15°	2221.7	1917.6	1641.2	1402.0	1194.3	1016.3	858.6	714.0	578.6	454.4	343.1
12.5°	2277.3	1963.9	1678.3	1429.8	1214.7	1033.0	873.5	725.1	587.9	459.9	348.6
10°	2321.8	2001.0	1708.0	1453.9	1233.2	1045.9	882.7	734.4	593.4	465.5	352.4
7.5°	2357.1	2030.7	1732.1	1470.6	1246.2	1057.1	892.0	739.9	599.0	469.2	357.9
5°	2383.0	2052.9	1748.8	1483.6	1257.4	1070.1	903.1	749.2	606.4	474.8	357.9
2.5°	2403.4	2069.6	1761.8	1494.7	1264.8	1070.1	903.1	749.2	606.4	474.8	357.9
0°	2403.4	2069.6	1761.8	1494.7	1264.8	1070.1	903.1	749.2	606.4	474.8	357.9

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	9.3	7.4	3.7	0.0
85°	20.4	13.0	7.4	0.0
82.5°	29.7	20.4	9.3	0.0
80°	38.9	26.0	13.0	0.0
77.5°	50.1	33.4	16.7	0.0
75°	59.3	38.9	20.4	0.0
72.5°	68.6	46.4	22.3	0.0
70°	77.9	51.9	26.0	0.0
67.5°	89.0	57.5	29.7	0.0
65°	98.3	64.9	31.5	0.0
62.5°	107.6	70.5	35.2	0.0
60°	116.8	76.0	37.1	0.0
57.5°	126.1	81.6	40.8	0.0
55°	135.4	89.0	44.5	0.0
52.5°	144.7	94.6	46.4	0.0
50°	153.9	100.1	48.2	0.0
47.5°	161.3	105.7	51.9	0.0
45°	170.6	111.3	53.8	0.0
42.5°	179.9	115.0	55.6	0.0
40°	187.3	120.5	57.5	0.0
37.5°	196.6	124.3	61.2	0.0
35°	204.0	129.8	63.1	0.0
32.5°	209.6	133.5	64.9	0.0
30°	217.0	137.2	66.8	0.0
27.5°	222.5	140.9	66.8	0.0
25°	228.1	144.7	68.6	0.0
22.5°	233.7	146.5	70.5	0.0
20°	239.2	150.2	72.3	0.0
17.5°	242.9	152.1	72.3	0.0
15°	246.6	153.9	76.0	0.0
12.5°	248.5	155.8	76.0	0.0
10°	252.2	159.5	76.0	0.0
7.5°	255.9	159.5	76.0	0.0
5°	255.9	159.5	76.0	0.0
2.5°	255.9	159.5	76.0	0.0
0°	255.9	159.5	76.0	0.0

(END OF REPORT)