

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: P624590

Luminaire Tested: **IFLD-S-SA3D-940-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624590
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA3D-940-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (48) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

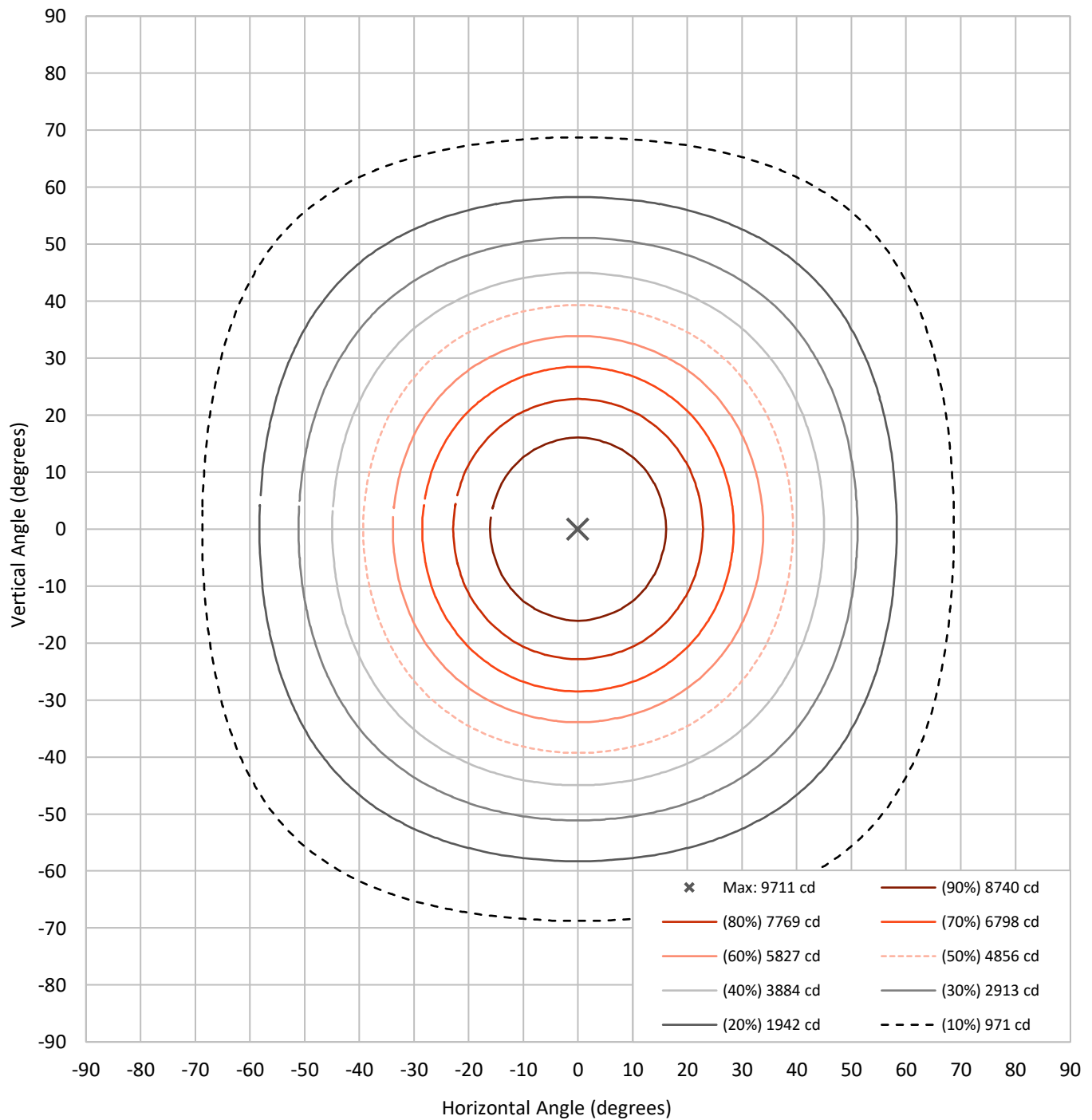
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	17484.8 lumens	Max Intensity:	9711 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	95.0 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	7565.5 lumens	Field Lumens:	12388.3 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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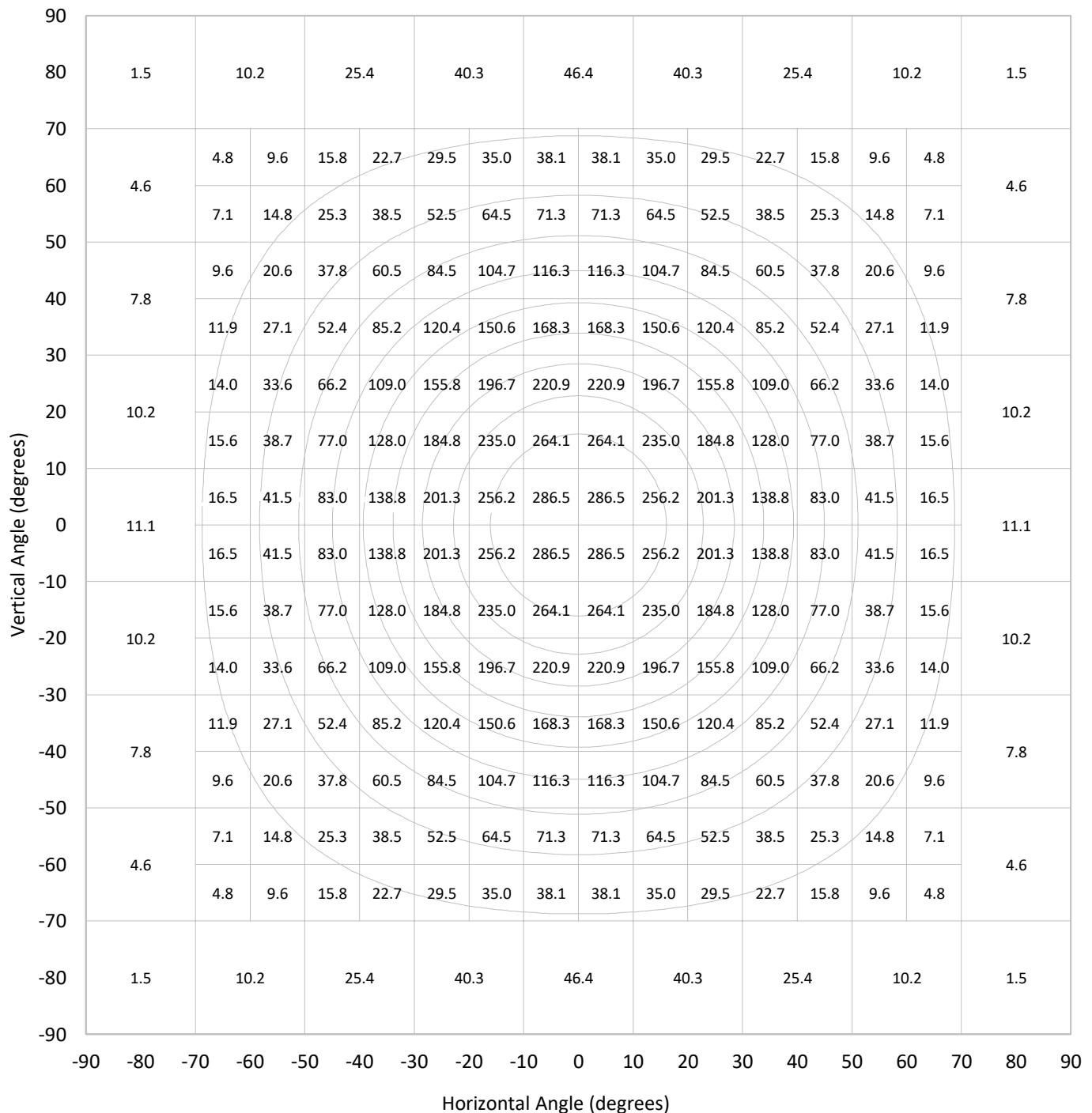
CATALOG NUMBER: IFLD-S-SA3D-940-U-77

Iso-Candela Plot



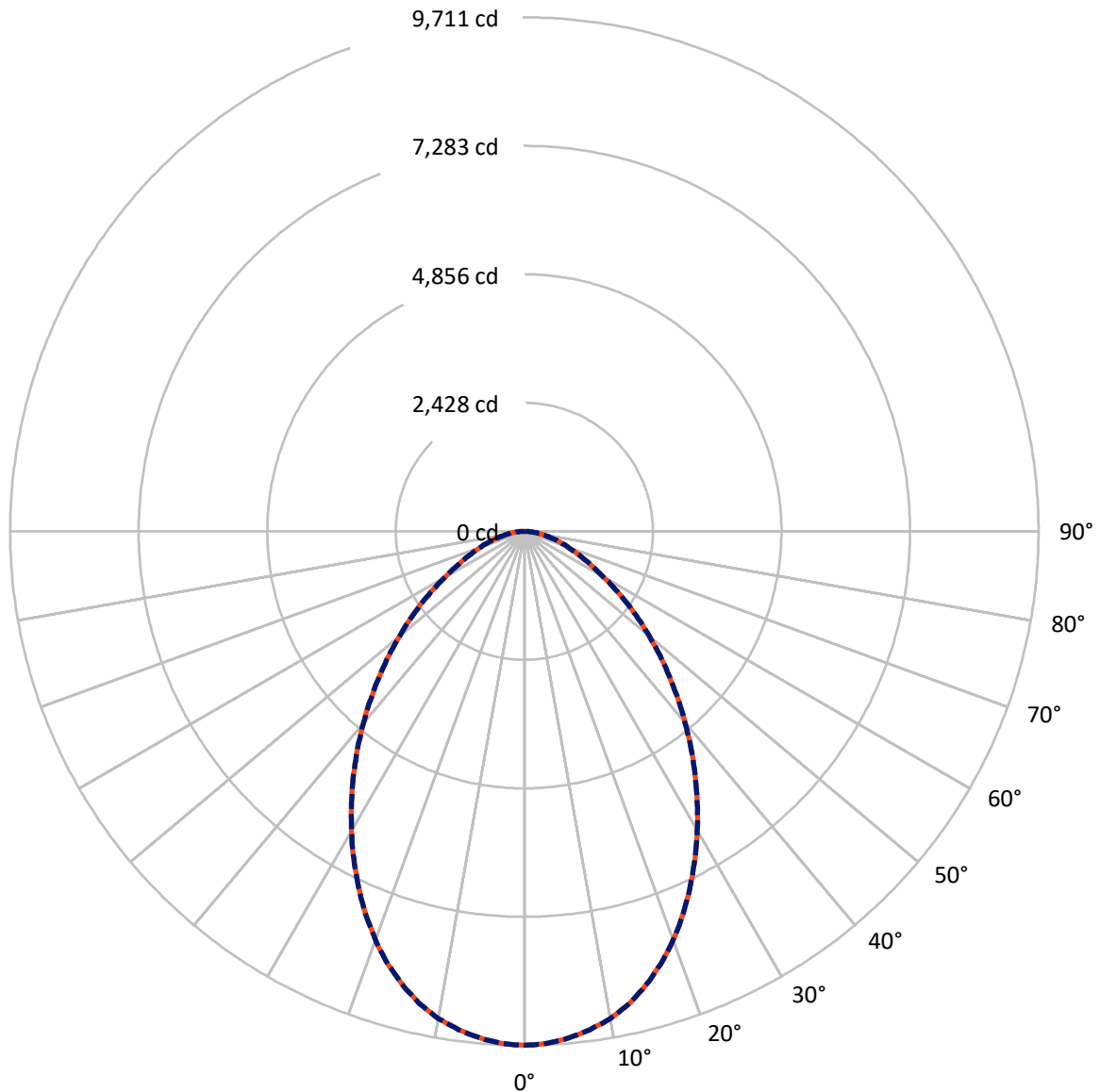
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Lumen Table



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Luminous Intensity Polar Plot

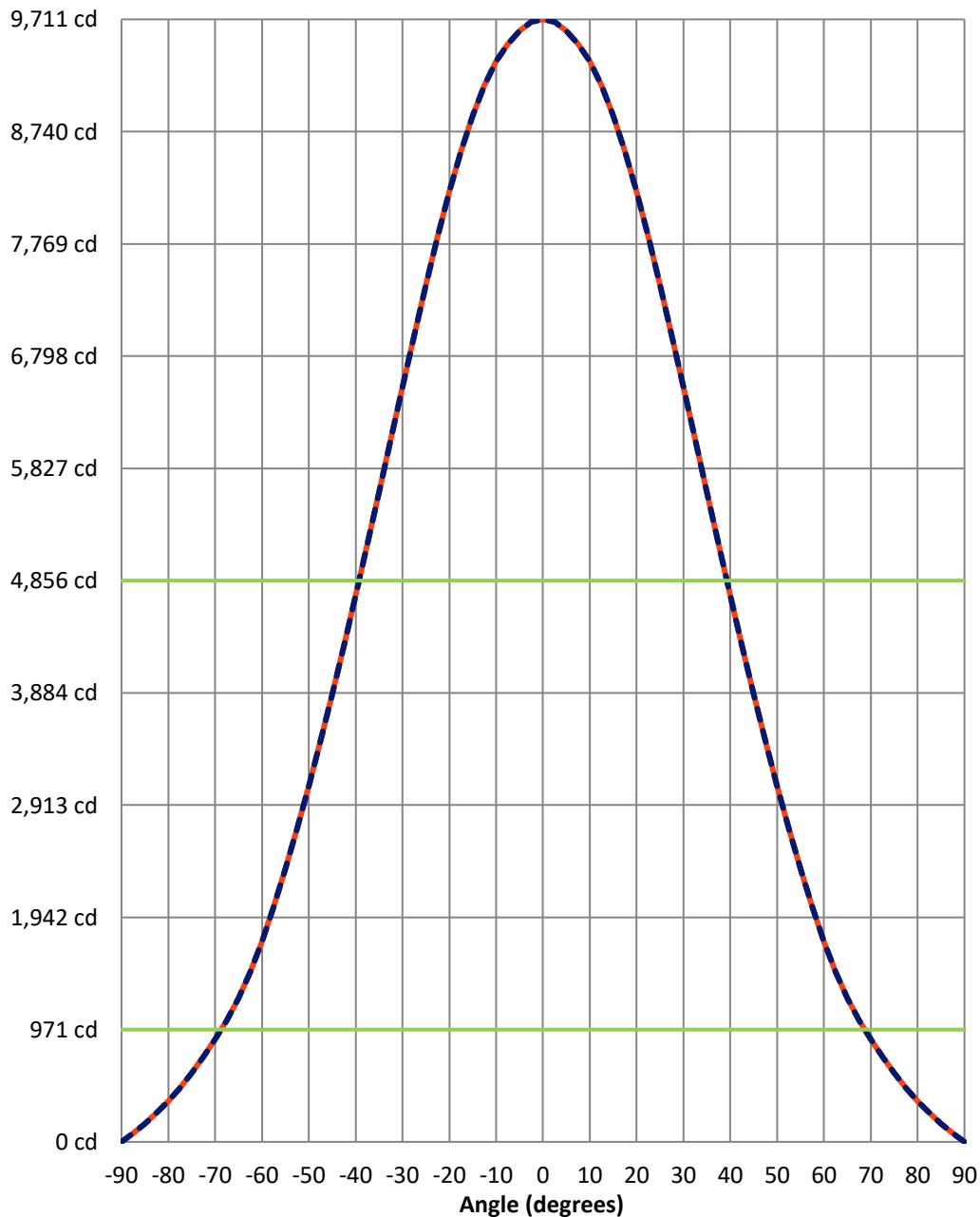


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg

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Luminous Intensity Plot



Beam:

H Angle: 78.6°
V Angle: 78.6°
Lumens: 7565.5
Efficiency: 43.3%

Field:

H Angle: 137.5°
V Angle: 137.5°
Lumens: 12388.3
Efficiency: 70.9%

Spill:

Lumens: 5096.6
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°	74.7	74.7	74.7	74.7	74.7	74.7	74.7	71.1	71.1	69.3	67.4
85°	156.8	156.8	156.8	156.8	156.8	153.1	151.3	149.5	147.7	144.0	142.2
82.5°	251.6	251.6	251.6	251.6	247.9	244.3	242.5	238.8	235.2	229.7	224.2
80°	351.8	351.8	351.8	351.8	346.4	342.7	337.2	333.6	328.1	320.8	313.6
77.5°	466.7	466.7	466.7	461.2	457.6	452.1	446.6	439.3	432.0	422.9	412.0
75°	596.1	596.1	596.1	588.8	583.4	577.9	568.8	559.7	548.7	536.0	521.4
72.5°	736.5	736.5	736.5	727.4	721.9	712.8	701.8	689.1	676.3	659.9	641.7
70°	887.8	887.8	887.8	876.8	867.7	858.6	844.0	829.5	811.2	793.0	771.1
67.5°	1051.9	1051.9	1051.9	1039.1	1028.2	1015.4	999.0	980.8	958.9	933.4	907.8
65°	1243.3	1243.3	1236.0	1225.0	1212.3	1194.0	1174.0	1148.5	1121.1	1088.3	1053.7
62.5°	1469.3	1469.3	1458.4	1445.6	1429.2	1405.5	1378.2	1345.4	1307.1	1265.1	1223.2
60°	1731.8	1731.8	1719.1	1702.7	1679.0	1649.8	1613.3	1571.4	1524.0	1471.1	1420.1
57.5°	2034.4	2034.4	2018.0	1996.2	1967.0	1930.5	1885.0	1832.1	1771.9	1706.3	1642.5
55°	2362.6	2362.6	2342.5	2317.0	2282.4	2238.6	2183.9	2121.9	2049.0	1974.3	1892.2
52.5°	2710.8	2710.8	2687.1	2657.9	2617.8	2566.7	2504.8	2431.8	2348.0	2260.5	2163.9
50°	3077.2	3077.2	3049.8	3017.0	2971.4	2911.3	2840.2	2756.3	2663.4	2561.3	2450.1
47.5°	3469.1	3469.1	3438.1	3399.8	3345.2	3275.9	3192.0	3095.4	2989.7	2874.8	2749.0
45°	3872.0	3872.0	3837.4	3793.6	3733.4	3655.1	3562.1	3469.1	3334.2	3201.1	3055.3
42.5°	4291.3	4291.3	4251.2	4202.0	4132.7	4047.0	3941.3	3821.0	3687.9	3538.4	3379.8
40°	4727.0	4727.0	4681.4	4624.9	4548.3	4449.9	4331.4	4196.5	4047.0	3881.1	3706.1
37.5°	5171.8	5171.8	5120.7	5058.7	4973.1	4863.7	4730.6	4581.1	4413.4	4229.3	4036.1
35°	5620.2	5620.2	5563.7	5496.3	5401.5	5281.2	5137.1	4971.2	4785.3	4584.8	4367.8
32.5°	6077.8	6077.8	6015.8	5939.2	5831.7	5698.6	5540.0	5359.5	5171.8	4938.4	4701.4
30°	6529.9	6529.9	6462.4	6378.6	6263.7	6117.9	5944.7	5746.0	5525.4	5286.6	5031.4
27.5°	6974.7	6956.5	6900.0	6810.6	6684.8	6529.9	6342.1	6127.0	5888.2	5625.7	5352.2
25°	7412.2	7392.2	7330.2	7231.7	7096.8	6927.3	6724.9	6495.3	6238.2	5961.1	5662.2
22.5°	7831.5	7809.6	7744.0	7638.3	7494.2	7310.1	7093.2	6847.1	6573.6	6276.5	5961.1
20°	8219.8	8196.1	8128.6	8017.4	7868.0	7672.9	7443.2	7178.9	6887.2	6573.6	6238.2
17.5°	8569.8	8546.1	8475.0	8360.2	8219.8	8002.9	7765.9	7486.9	7178.9	6847.1	6495.3
15°	8877.9	8852.4	8779.4	8664.6	8504.2	8300.0	8050.2	7765.9	7443.2	7093.2	6724.9
12.5°	9140.4	9114.9	9040.1	8925.3	8759.4	8555.2	8300.0	8002.9	7672.9	7310.1	6927.3
10°	9348.2	9322.7	9251.6	9142.2	8970.8	8759.4	8504.2	8219.8	7868.0	7494.2	7096.8
7.5°	9497.7	9474.0	9408.4	9299.0	9142.2	8925.3	8664.6	8360.2	8017.4	7638.3	7231.7
5°	9610.7	9583.4	9517.7	9408.4	9251.6	9040.1	8779.4	8475.0	8128.6	7744.0	7330.2
2.5°	9689.1	9656.3	9583.4	9474.0	9322.7	9114.9	8852.4	8546.1	8196.1	7809.6	7392.2
0°	9711.0	9689.1	9610.7	9497.7	9348.2	9140.4	8877.9	8569.8	8219.8	7831.5	7412.2

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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°	65.6	65.6	63.8	62.0	60.2	56.5	54.7	52.9	51.0	47.4	45.6
85°	138.5	134.9	131.3	127.6	122.1	118.5	113.0	109.4	103.9	98.4	93.0
82.5°	218.8	213.3	206.0	200.5	193.2	184.1	176.8	167.7	158.6	151.3	142.2
80°	306.3	297.1	288.0	278.9	268.0	257.0	246.1	235.2	222.4	209.6	196.9
77.5°	401.1	388.3	375.5	360.9	348.2	333.6	319.0	304.4	288.0	271.6	255.2
75°	506.8	490.4	472.1	453.9	437.5	417.5	397.4	377.4	355.5	335.4	313.6
72.5°	621.6	601.6	579.7	557.8	534.1	508.6	483.1	455.7	430.2	404.7	377.4
70°	745.6	721.9	694.6	667.2	638.0	607.0	576.1	543.2	510.4	477.6	444.8
67.5°	878.7	849.5	816.7	783.9	747.4	711.0	674.5	636.2	596.1	556.0	517.7
65°	1020.9	984.4	946.1	904.2	862.3	820.3	776.6	731.0	685.4	638.0	596.1
62.5°	1179.5	1133.9	1084.7	1033.6	986.2	935.2	887.8	831.3	776.6	723.7	670.9
60°	1363.6	1303.4	1243.3	1179.5	1119.3	1053.7	995.3	933.4	871.4	811.2	749.2
57.5°	1569.6	1493.0	1420.1	1343.5	1263.3	1190.4	1115.7	1040.9	971.6	900.5	833.1
55°	1802.9	1709.9	1618.8	1524.0	1431.0	1339.9	1245.1	1161.2	1075.6	995.3	917.0
52.5°	2058.1	1952.4	1839.4	1731.8	1613.3	1500.3	1394.6	1288.8	1188.6	1092.0	1002.6
50°	2331.6	2207.6	2078.2	1946.9	1812.0	1679.0	1551.3	1427.4	1310.7	1197.7	1092.0
47.5°	2616.0	2475.6	2327.9	2178.5	2034.4	1872.2	1719.1	1578.7	1438.3	1310.7	1188.6
45°	2907.6	2749.0	2586.8	2417.3	2247.7	2072.7	1903.2	1731.8	1578.7	1427.4	1288.8
42.5°	3208.4	3029.8	2849.3	2661.5	2473.8	2282.4	2090.9	1903.2	1719.1	1551.3	1394.6
40°	3518.3	3321.5	3115.5	2911.3	2710.8	2492.0	2282.4	2072.7	1872.2	1679.0	1500.3
37.5°	3828.2	3613.1	3390.7	3161.0	2931.3	2710.8	2473.8	2247.7	2034.4	1812.0	1613.3
35°	4140.0	3903.0	3662.4	3412.6	3161.0	2911.3	2661.5	2417.3	2178.5	1946.9	1731.8
32.5°	4453.5	4194.7	3928.5	3662.4	3390.7	3115.5	2849.3	2586.8	2327.9	2078.2	1839.4
30°	4761.6	4480.9	4194.7	3903.0	3613.1	3321.5	3029.8	2749.0	2475.6	2207.6	1952.4
27.5°	5062.4	4761.6	4453.5	4140.0	3828.2	3518.3	3208.4	2907.6	2616.0	2331.6	2058.1
25°	5352.2	5031.4	4701.4	4367.8	4036.1	3706.1	3379.8	3055.3	2749.0	2450.1	2163.9
22.5°	5625.7	5286.6	4938.4	4584.8	4229.3	3881.1	3538.4	3201.1	2874.8	2561.3	2260.5
20°	5888.2	5525.4	5171.8	4785.3	4413.4	4047.0	3687.9	3334.2	2989.7	2663.4	2348.0
17.5°	6127.0	5746.0	5359.5	4971.2	4581.1	4196.5	3821.0	3469.1	3095.4	2756.3	2431.8
15°	6342.1	5944.7	5540.0	5137.1	4730.6	4331.4	3941.3	3562.1	3192.0	2840.2	2504.8
12.5°	6529.9	6117.9	5698.6	5281.2	4863.7	4449.9	4047.0	3655.1	3275.9	2911.3	2566.7
10°	6684.8	6263.7	5831.7	5401.5	4973.1	4548.3	4132.7	3733.4	3345.2	2971.4	2617.8
7.5°	6810.6	6378.6	5939.2	5496.3	5058.7	4624.9	4202.0	3793.6	3399.8	3017.0	2657.9
5°	6900.0	6462.4	6015.8	5563.7	5120.7	4681.4	4251.2	3837.4	3438.1	3049.8	2687.1
2.5°	6956.5	6529.9	6077.8	5620.2	5171.8	4727.0	4291.3	3872.0	3469.1	3077.2	2710.8
0°	6974.7	6529.9	6077.8	5620.2	5171.8	4727.0	4291.3	3872.0	3469.1	3077.2	2710.8

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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°	43.8	40.1	36.5	34.6	31.0	29.2	25.5	21.9	20.1	16.4	12.8
85°	87.5	80.2	74.7	69.3	63.8	56.5	51.0	45.6	38.3	32.8	25.5
82.5°	133.1	124.0	114.8	105.7	96.6	87.5	76.6	67.4	58.3	49.2	38.3
80°	184.1	169.5	156.8	144.0	131.3	118.5	103.9	91.1	76.6	63.8	51.0
77.5°	237.0	220.6	202.3	184.1	165.9	149.5	131.3	114.8	98.4	80.2	63.8
75°	293.5	271.6	251.6	227.9	206.0	182.3	160.4	138.5	118.5	98.4	76.6
72.5°	351.8	324.5	297.1	271.6	244.3	216.9	191.4	164.1	138.5	114.8	91.1
70°	412.0	379.2	346.4	315.4	284.4	251.6	222.4	191.4	160.4	131.3	103.9
67.5°	475.8	437.5	399.2	359.1	324.5	288.0	251.6	216.9	182.3	149.5	118.5
65°	545.1	499.5	452.1	410.2	364.6	324.5	284.4	244.3	206.0	165.9	131.3
62.5°	616.2	563.3	510.4	457.6	410.2	359.1	315.4	271.6	227.9	184.1	144.0
60°	689.1	628.9	568.8	510.4	452.1	399.2	346.4	297.1	251.6	202.3	156.8
57.5°	763.8	696.4	628.9	563.3	499.5	437.5	379.2	324.5	271.6	220.6	169.5
55°	840.4	763.8	689.1	616.2	545.1	475.8	412.0	351.8	293.5	237.0	184.1
52.5°	917.0	833.1	749.2	670.9	596.1	517.7	444.8	377.4	313.6	255.2	196.9
50°	995.3	900.5	811.2	723.7	638.0	556.0	477.6	404.7	335.4	271.6	209.6
47.5°	1075.6	971.6	871.4	776.6	685.4	596.1	510.4	430.2	355.5	288.0	222.4
45°	1161.2	1040.9	933.4	831.3	731.0	636.2	543.2	455.7	377.4	304.4	235.2
42.5°	1245.1	1115.7	995.3	887.8	776.6	674.5	576.1	483.1	397.4	319.0	246.1
40°	1339.9	1190.4	1053.7	935.2	820.3	711.0	607.0	508.6	417.5	333.6	257.0
37.5°	1431.0	1263.3	1119.3	986.2	862.3	747.4	638.0	534.1	437.5	348.2	268.0
35°	1524.0	1343.5	1179.5	1033.6	904.2	783.9	667.2	557.8	453.9	360.9	278.9
32.5°	1618.8	1420.1	1243.3	1084.7	946.1	816.7	694.6	579.7	472.1	375.5	288.0
30°	1709.9	1493.0	1303.4	1133.9	984.4	849.5	721.9	601.6	490.4	388.3	297.1
27.5°	1802.9	1569.6	1363.6	1179.5	1020.9	878.7	745.6	621.6	506.8	401.1	306.3
25°	1892.2	1642.5	1420.1	1223.2	1053.7	907.8	771.1	641.7	521.4	412.0	313.6
22.5°	1974.3	1706.3	1471.1	1265.1	1088.3	933.4	793.0	659.9	536.0	422.9	320.8
20°	2049.0	1771.9	1524.0	1307.1	1121.1	958.9	811.2	676.3	548.7	432.0	328.1
17.5°	2121.9	1832.1	1571.4	1345.4	1148.5	980.8	829.5	689.1	559.7	439.3	333.6
15°	2183.9	1885.0	1613.3	1378.2	1174.0	999.0	844.0	701.8	568.8	446.6	337.2
12.5°	2238.6	1930.5	1649.8	1405.5	1194.0	1015.4	858.6	712.8	577.9	452.1	342.7
10°	2282.4	1967.0	1679.0	1429.2	1212.3	1028.2	867.7	721.9	583.4	457.6	346.4
7.5°	2317.0	1996.2	1702.7	1445.6	1225.0	1039.1	876.8	727.4	588.8	461.2	351.8
5°	2342.5	2018.0	1719.1	1458.4	1236.0	1051.9	887.8	736.5	596.1	466.7	351.8
2.5°	2362.6	2034.4	1731.8	1469.3	1243.3	1051.9	887.8	736.5	596.1	466.7	351.8
0°	2362.6	2034.4	1731.8	1469.3	1243.3	1051.9	887.8	736.5	596.1	466.7	351.8

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	9.1	7.3	3.6	0.0
85°	20.1	12.8	7.3	0.0
82.5°	29.2	20.1	9.1	0.0
80°	38.3	25.5	12.8	0.0
77.5°	49.2	32.8	16.4	0.0
75°	58.3	38.3	20.1	0.0
72.5°	67.4	45.6	21.9	0.0
70°	76.6	51.0	25.5	0.0
67.5°	87.5	56.5	29.2	0.0
65°	96.6	63.8	31.0	0.0
62.5°	105.7	69.3	34.6	0.0
60°	114.8	74.7	36.5	0.0
57.5°	124.0	80.2	40.1	0.0
55°	133.1	87.5	43.8	0.0
52.5°	142.2	93.0	45.6	0.0
50°	151.3	98.4	47.4	0.0
47.5°	158.6	103.9	51.0	0.0
45°	167.7	109.4	52.9	0.0
42.5°	176.8	113.0	54.7	0.0
40°	184.1	118.5	56.5	0.0
37.5°	193.2	122.1	60.2	0.0
35°	200.5	127.6	62.0	0.0
32.5°	206.0	131.3	63.8	0.0
30°	213.3	134.9	65.6	0.0
27.5°	218.8	138.5	65.6	0.0
25°	224.2	142.2	67.4	0.0
22.5°	229.7	144.0	69.3	0.0
20°	235.2	147.7	71.1	0.0
17.5°	238.8	149.5	71.1	0.0
15°	242.5	151.3	74.7	0.0
12.5°	244.3	153.1	74.7	0.0
10°	247.9	156.8	74.7	0.0
7.5°	251.6	156.8	74.7	0.0
5°	251.6	156.8	74.7	0.0
2.5°	251.6	156.8	74.7	0.0
0°	251.6	156.8	74.7	0.0

(END OF REPORT)