

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: P623902

Luminaire Tested: **IFLD-S-SA2E-735-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P623902
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA2E-735-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (32) 3500K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

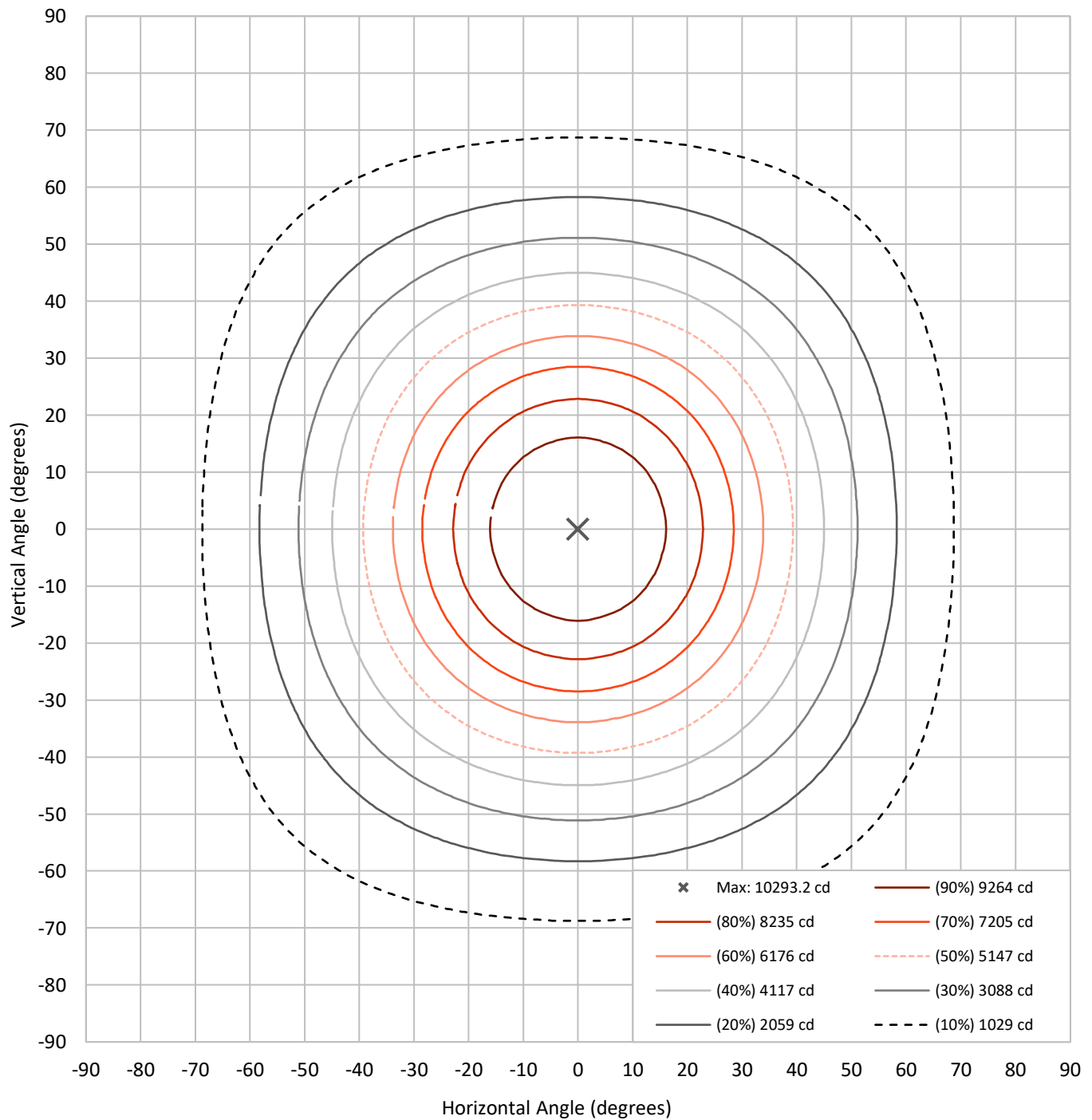
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	18533.1 lumens	Max Intensity:	10293.2 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	118.7 lumens/watt		
Luminous Opening:	Rectangular (W 1' x L: 0.5' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	8019.1 lumens	Field Lumens:	13131 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%
Input Watts (W):	156.2		
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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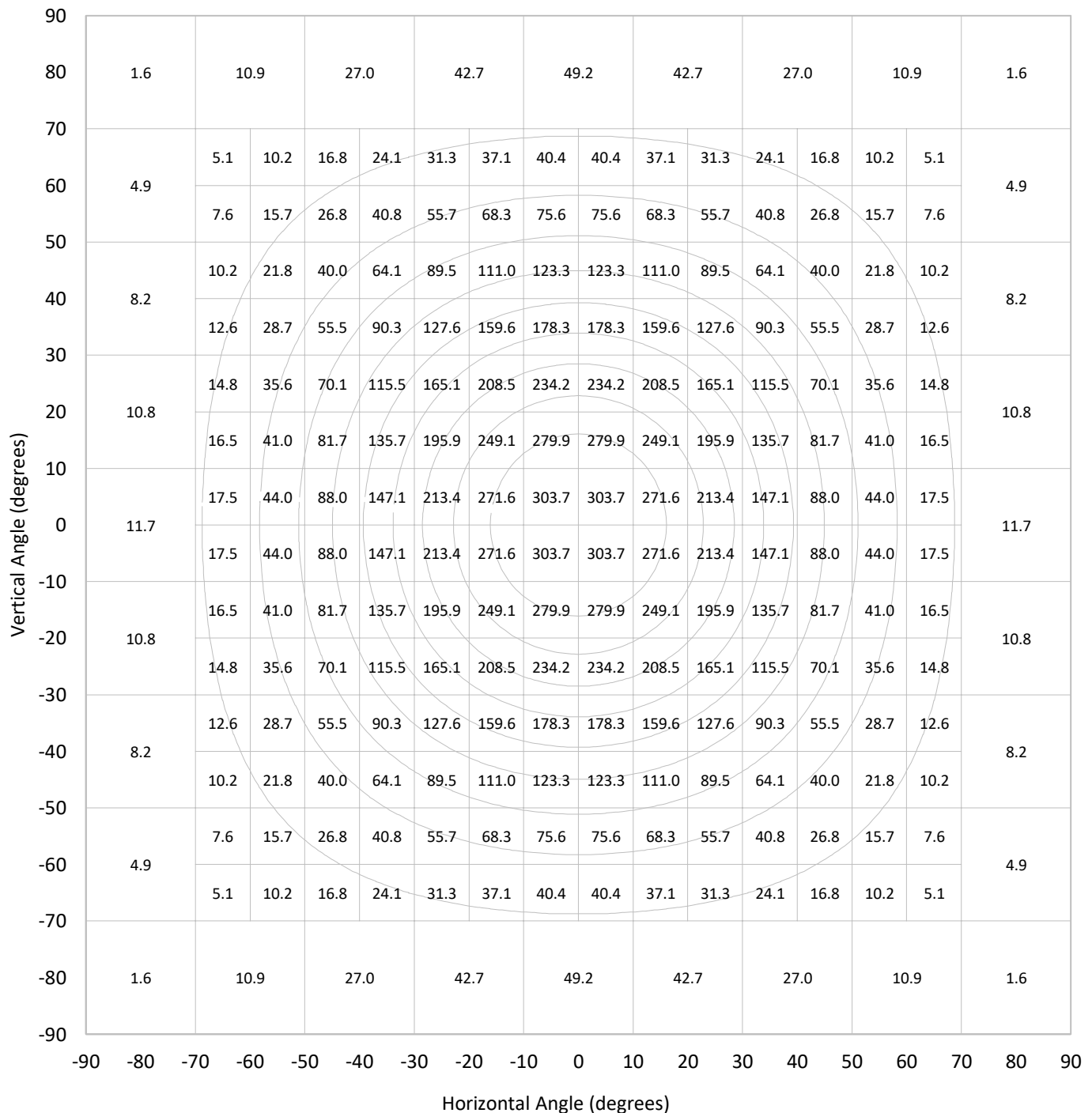
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Iso-Candela Plot



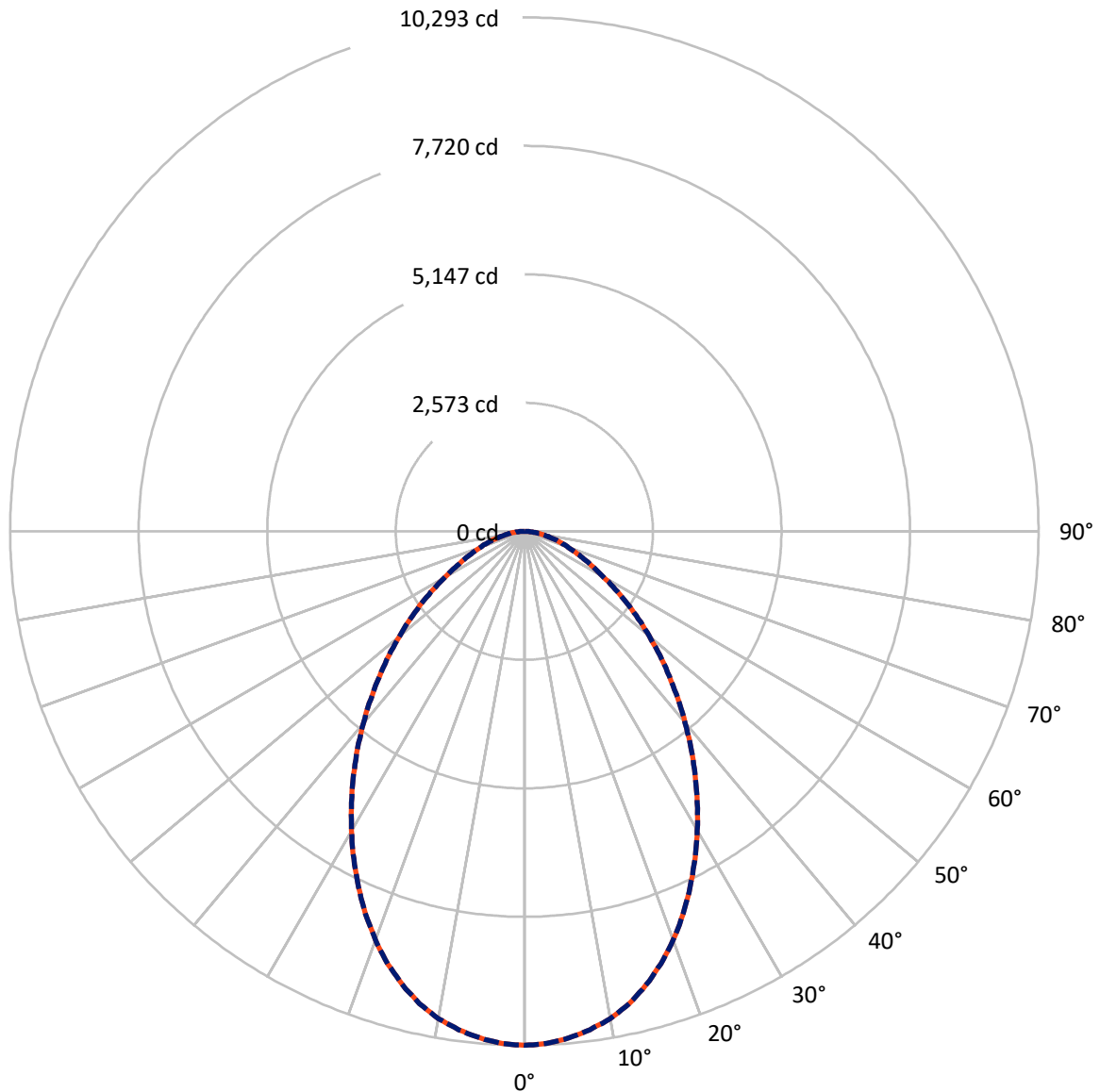
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Lumen Table



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Luminous Intensity Polar Plot

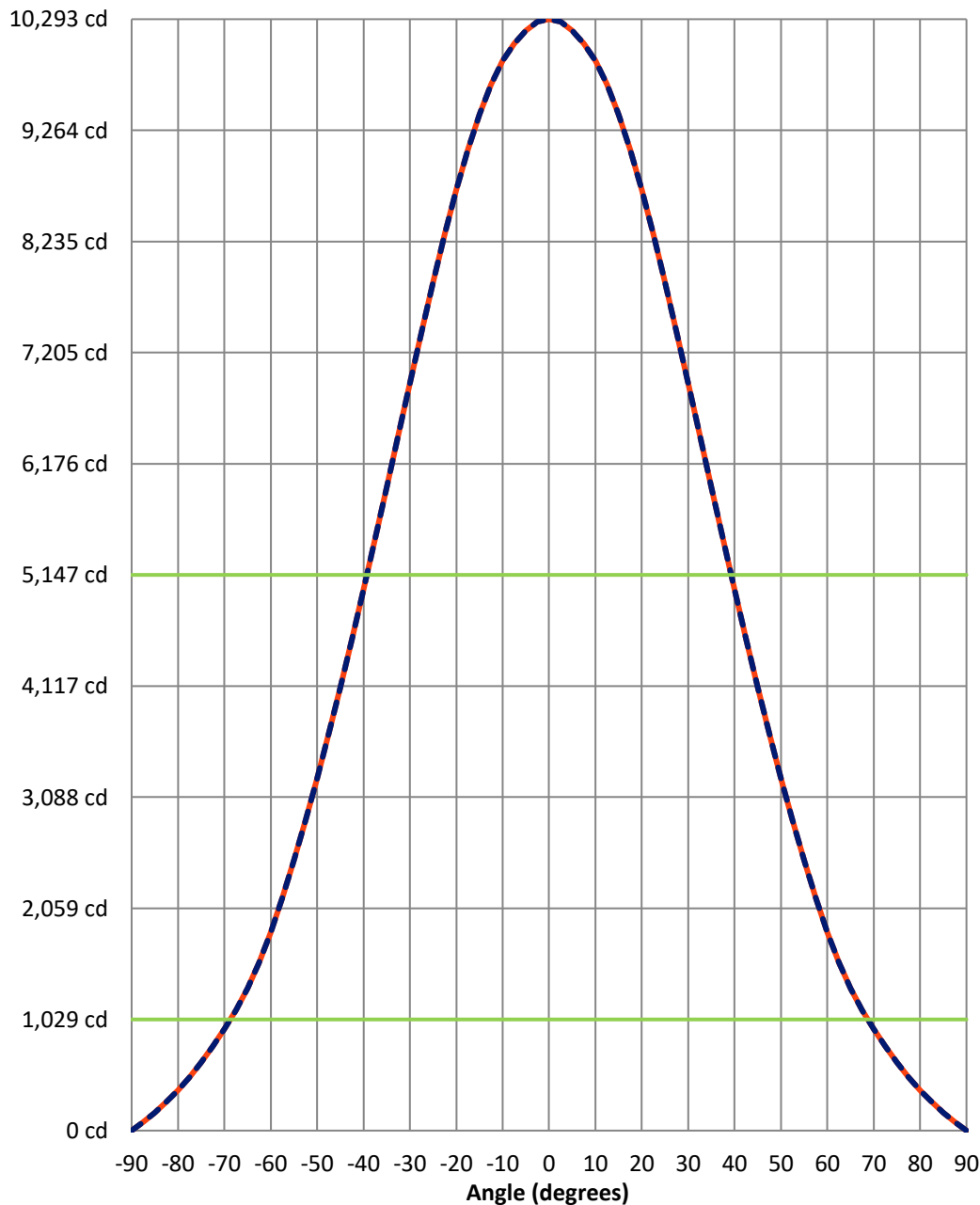


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg

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Luminous Intensity Plot



Beam:

H Angle: 78.6°
V Angle: 78.6°
Lumens: 8019.1
Efficiency: 43.3%

Field:

H Angle: 137.5°
V Angle: 137.5°
Lumens: 13131
Efficiency: 70.9%

Spill:

Lumens: 5402.1
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°	79.2	79.2	79.2	79.2	79.2	79.2	79.2	75.4	75.4	73.4	71.5
85°	166.2	166.2	166.2	166.2	166.2	162.3	160.4	158.4	156.5	152.6	150.7
82.5°	266.7	266.7	266.7	266.7	262.8	258.9	257.0	253.1	249.3	243.5	237.7
80°	372.9	372.9	372.9	372.9	367.1	363.3	357.5	353.6	347.8	340.1	332.4
77.5°	494.7	494.7	494.7	488.9	485.0	479.2	473.4	465.7	457.9	448.3	436.7
75°	631.9	631.9	631.9	624.1	618.3	612.5	602.9	593.2	581.6	568.1	552.6
72.5°	780.6	780.6	780.6	771.0	765.2	755.5	743.9	730.4	716.9	699.5	680.2
70°	941.0	941.0	941.0	929.4	919.8	910.1	894.6	879.2	859.9	840.5	817.4
67.5°	1114.9	1114.9	1114.9	1101.4	1089.8	1076.3	1058.9	1039.6	1016.4	989.3	962.3
65°	1317.8	1317.8	1310.1	1298.5	1285.0	1265.6	1244.4	1217.3	1188.3	1153.6	1116.9
62.5°	1557.4	1557.4	1545.8	1532.3	1514.9	1489.8	1460.8	1426.0	1385.4	1341.0	1296.6
60°	1835.7	1835.7	1822.1	1804.7	1779.6	1748.7	1710.1	1665.6	1615.4	1559.3	1505.2
57.5°	2156.4	2156.4	2139.0	2115.8	2084.9	2046.3	1998.0	1941.9	1878.2	1808.6	1741.0
55°	2504.2	2504.2	2483.0	2455.9	2419.2	2372.8	2314.9	2249.2	2171.9	2092.6	2005.7
52.5°	2873.3	2873.3	2848.2	2817.3	2774.7	2720.6	2654.9	2577.6	2488.8	2396.0	2293.6
50°	3261.7	3261.7	3232.7	3197.9	3149.6	3085.8	3010.5	2921.6	2823.0	2714.8	2597.0
47.5°	3677.1	3677.1	3644.3	3603.7	3545.7	3472.3	3383.4	3281.0	3168.9	3047.2	2913.9
45°	4104.1	4104.1	4067.4	4021.1	3957.3	3874.2	3775.7	3677.1	3534.1	3393.1	3238.5
42.5°	4548.6	4548.6	4506.1	4453.9	4380.5	4289.6	4177.6	4050.0	3909.0	3750.5	3582.4
40°	5010.4	5010.4	4962.1	4902.2	4821.0	4716.7	4591.1	4448.1	4289.6	4113.8	3928.3
37.5°	5481.9	5481.9	5427.7	5362.1	5271.2	5155.3	5014.2	4855.8	4678.0	4482.9	4278.0
35°	5957.2	5957.2	5897.3	5825.8	5725.3	5597.8	5445.1	5269.3	5072.2	4859.7	4629.7
32.5°	6442.2	6442.2	6376.5	6295.3	6181.3	6040.3	5872.2	5680.9	5481.9	5234.5	4983.3
30°	6921.4	6921.4	6849.9	6761.0	6639.3	6484.7	6301.1	6090.5	5856.7	5603.6	5333.1
27.5°	7392.9	7373.5	7313.6	7219.0	7085.6	6921.4	6722.4	6494.4	6241.2	5963.0	5673.1
25°	7856.6	7835.4	7769.7	7665.3	7522.3	7342.6	7128.1	6884.7	6612.2	6318.5	6001.6
22.5°	8301.0	8277.8	8208.3	8096.2	7943.6	7748.4	7518.5	7257.6	6967.8	6652.8	6318.5
20°	8712.6	8687.5	8616.0	8498.1	8339.7	8132.9	7889.5	7609.3	7300.1	6967.8	6612.2
17.5°	9083.6	9058.5	8983.1	8861.4	8712.6	8482.7	8231.5	7935.8	7609.3	7257.6	6884.7
15°	9410.2	9383.1	9305.8	9184.1	9014.0	8797.6	8532.9	8231.5	7889.5	7518.5	7128.1
12.5°	9688.4	9661.4	9582.1	9460.4	9284.6	9068.1	8797.6	8482.7	8132.9	7748.4	7342.6
10°	9908.7	9881.6	9806.3	9690.3	9508.7	9284.6	9014.0	8712.6	8339.7	7943.6	7522.3
7.5°	10067.1	10042.0	9972.5	9856.5	9690.3	9460.4	9184.1	8861.4	8498.1	8096.2	7665.3
5°	10186.9	10157.9	10088.4	9972.5	9806.3	9582.1	9305.8	8983.1	8616.0	8208.3	7769.7
2.5°	10270.0	10235.2	10157.9	10042.0	9881.6	9661.4	9383.1	9058.5	8687.5	8277.8	7835.4
0°	10293.2	10270.0	10186.9	10067.1	9908.7	9688.4	9410.2	9083.6	8712.6	8301.0	7856.6

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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°	69.6	69.6	67.6	65.7	63.8	59.9	58.0	56.0	54.1	50.2	48.3
85°	146.9	143.0	139.1	135.3	129.5	125.6	119.8	115.9	110.1	104.3	98.5
82.5°	231.9	226.1	218.3	212.5	204.8	195.2	187.4	177.8	168.1	160.4	150.7
80°	324.6	315.0	305.3	295.6	284.0	272.5	260.9	249.3	235.7	222.2	208.7
77.5°	425.1	411.6	398.0	382.6	369.1	353.6	338.1	322.7	305.3	287.9	270.5
75°	537.2	519.8	500.5	481.1	463.7	442.5	421.2	400.0	376.8	355.5	332.4
72.5°	658.9	637.6	614.5	591.3	566.2	539.1	512.1	483.1	456.0	429.0	400.0
70°	790.3	765.2	736.2	707.2	676.3	643.4	610.6	575.8	541.0	506.3	471.5
67.5°	931.4	900.4	865.7	830.9	792.2	753.6	714.9	674.4	631.9	589.3	548.8
65°	1082.1	1043.4	1002.8	958.4	914.0	869.5	823.1	774.8	726.5	676.3	631.9
62.5°	1250.2	1201.9	1149.7	1095.6	1045.4	991.3	941.0	881.1	823.1	767.1	711.1
60°	1445.3	1381.6	1317.8	1250.2	1186.4	1116.9	1055.0	989.3	923.6	859.9	794.2
57.5°	1663.7	1582.5	1505.2	1424.1	1339.1	1261.8	1182.5	1103.3	1029.9	954.5	883.0
55°	1911.0	1812.5	1715.9	1615.4	1516.8	1420.2	1319.7	1230.9	1140.0	1055.0	971.9
52.5°	2181.5	2069.5	1949.7	1835.7	1710.1	1590.3	1478.2	1366.1	1259.8	1157.4	1062.7
50°	2471.4	2340.0	2202.8	2063.7	1920.7	1779.6	1644.4	1513.0	1389.3	1269.5	1157.4
47.5°	2772.8	2624.0	2467.5	2309.1	2156.4	1984.4	1822.1	1673.3	1524.6	1389.3	1259.8
45°	3082.0	2913.9	2741.9	2562.2	2382.5	2197.0	2017.3	1835.7	1673.3	1513.0	1366.1
42.5°	3400.8	3211.4	3020.1	2821.1	2622.1	2419.2	2216.3	2017.3	1822.1	1644.4	1478.2
40°	3729.3	3520.6	3302.3	3085.8	2873.3	2641.4	2419.2	2197.0	1984.4	1779.6	1590.3
37.5°	4057.8	3829.8	3594.0	3350.6	3107.1	2873.3	2622.1	2382.5	2156.4	1920.7	1710.1
35°	4388.2	4137.0	3881.9	3617.2	3350.6	3085.8	2821.1	2562.2	2309.1	2063.7	1835.7
32.5°	4720.5	4446.2	4164.0	3881.9	3594.0	3302.3	3020.1	2741.9	2467.5	2202.8	1949.7
30°	5047.1	4749.5	4446.2	4137.0	3829.8	3520.6	3211.4	2913.9	2624.0	2340.0	2069.5
27.5°	5365.9	5047.1	4720.5	4388.2	4057.8	3729.3	3400.8	3082.0	2772.8	2471.4	2181.5
25°	5673.1	5333.1	4983.3	4629.7	4278.0	3928.3	3582.4	3238.5	2913.9	2597.0	2293.6
22.5°	5963.0	5603.6	5234.5	4859.7	4482.9	4113.8	3750.5	3393.1	3047.2	2714.8	2396.0
20°	6241.2	5856.7	5481.9	5072.2	4678.0	4289.6	3909.0	3534.1	3168.9	2823.0	2488.8
17.5°	6494.4	6090.5	5680.9	5269.3	4855.8	4448.1	4050.0	3677.1	3281.0	2921.6	2577.6
15°	6722.4	6301.1	5872.2	5445.1	5014.2	4591.1	4177.6	3775.7	3383.4	3010.5	2654.9
12.5°	6921.4	6484.7	6040.3	5597.8	5155.3	4716.7	4289.6	3874.2	3472.3	3085.8	2720.6
10°	7085.6	6639.3	6181.3	5725.3	5271.2	4821.0	4380.5	3957.3	3545.7	3149.6	2774.7
7.5°	7219.0	6761.0	6295.3	5825.8	5362.1	4902.2	4453.9	4021.1	3603.7	3197.9	2817.3
5°	7313.6	6849.9	6376.5	5897.3	5427.7	4962.1	4506.1	4067.4	3644.3	3232.7	2848.2
2.5°	7373.5	6921.4	6442.2	5957.2	5481.9	5010.4	4548.6	4104.1	3677.1	3261.7	2873.3
0°	7392.9	6921.4	6442.2	5957.2	5481.9	5010.4	4548.6	4104.1	3677.1	3261.7	2873.3

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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°	46.4	42.5	38.6	36.7	32.8	30.9	27.1	23.2	21.3	17.4	13.5
85°	92.7	85.0	79.2	73.4	67.6	59.9	54.1	48.3	40.6	34.8	27.1
82.5°	141.1	131.4	121.7	112.1	102.4	92.7	81.2	71.5	61.8	52.2	40.6
80°	195.2	179.7	166.2	152.6	139.1	125.6	110.1	96.6	81.2	67.6	54.1
77.5°	251.2	233.8	214.5	195.2	175.8	158.4	139.1	121.7	104.3	85.0	67.6
75°	311.1	287.9	266.7	241.5	218.3	193.2	170.0	146.9	125.6	104.3	81.2
72.5°	372.9	343.9	315.0	287.9	258.9	229.9	202.9	173.9	146.9	121.7	96.6
70°	436.7	401.9	367.1	334.3	301.4	266.7	235.7	202.9	170.0	139.1	110.1
67.5°	504.3	463.7	423.2	380.7	343.9	305.3	266.7	229.9	193.2	158.4	125.6
65°	577.7	529.4	479.2	434.8	386.5	343.9	301.4	258.9	218.3	175.8	139.1
62.5°	653.1	597.1	541.0	485.0	434.8	380.7	334.3	287.9	241.5	195.2	152.6
60°	730.4	666.6	602.9	541.0	479.2	423.2	367.1	315.0	266.7	214.5	166.2
57.5°	809.6	738.1	666.6	597.1	529.4	463.7	401.9	343.9	287.9	233.8	179.7
55°	890.8	809.6	730.4	653.1	577.7	504.3	436.7	372.9	311.1	251.2	195.2
52.5°	971.9	883.0	794.2	711.1	631.9	548.8	471.5	400.0	332.4	270.5	208.7
50°	1055.0	954.5	859.9	767.1	676.3	589.3	506.3	429.0	355.5	287.9	222.2
47.5°	1140.0	1029.9	923.6	823.1	726.5	631.9	541.0	456.0	376.8	305.3	235.7
45°	1230.9	1103.3	989.3	881.1	774.8	674.4	575.8	483.1	400.0	322.7	249.3
42.5°	1319.7	1182.5	1055.0	941.0	823.1	714.9	610.6	512.1	421.2	338.1	260.9
40°	1420.2	1261.8	1116.9	991.3	869.5	753.6	643.4	539.1	442.5	353.6	272.5
37.5°	1516.8	1339.1	1186.4	1045.4	914.0	792.2	676.3	566.2	463.7	369.1	284.0
35°	1615.4	1424.1	1250.2	1095.6	958.4	830.9	707.2	591.3	481.1	382.6	295.6
32.5°	1715.9	1505.2	1317.8	1149.7	1002.8	865.7	736.2	614.5	500.5	398.0	305.3
30°	1812.5	1582.5	1381.6	1201.9	1043.4	900.4	765.2	637.6	519.8	411.6	315.0
27.5°	1911.0	1663.7	1445.3	1250.2	1082.1	931.4	790.3	658.9	537.2	425.1	324.6
25°	2005.7	1741.0	1505.2	1296.6	1116.9	962.3	817.4	680.2	552.6	436.7	332.4
22.5°	2092.6	1808.6	1559.3	1341.0	1153.6	989.3	840.5	699.5	568.1	448.3	340.1
20°	2171.9	1878.2	1615.4	1385.4	1188.3	1016.4	859.9	716.9	581.6	457.9	347.8
17.5°	2249.2	1941.9	1665.6	1426.0	1217.3	1039.6	879.2	730.4	593.2	465.7	353.6
15°	2314.9	1998.0	1710.1	1460.8	1244.4	1058.9	894.6	743.9	602.9	473.4	357.5
12.5°	2372.8	2046.3	1748.7	1489.8	1265.6	1076.3	910.1	755.5	612.5	479.2	363.3
10°	2419.2	2084.9	1779.6	1514.9	1285.0	1089.8	919.8	765.2	618.3	485.0	367.1
7.5°	2455.9	2115.8	1804.7	1532.3	1298.5	1101.4	929.4	771.0	624.1	488.9	372.9
5°	2483.0	2139.0	1822.1	1545.8	1310.1	1114.9	941.0	780.6	631.9	494.7	372.9
2.5°	2504.2	2156.4	1835.7	1557.4	1317.8	1114.9	941.0	780.6	631.9	494.7	372.9
0°	2504.2	2156.4	1835.7	1557.4	1317.8	1114.9	941.0	780.6	631.9	494.7	372.9

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	9.7	7.7	3.9	0.0
85°	21.3	13.5	7.7	0.0
82.5°	30.9	21.3	9.7	0.0
80°	40.6	27.1	13.5	0.0
77.5°	52.2	34.8	17.4	0.0
75°	61.8	40.6	21.3	0.0
72.5°	71.5	48.3	23.2	0.0
70°	81.2	54.1	27.1	0.0
67.5°	92.7	59.9	30.9	0.0
65°	102.4	67.6	32.8	0.0
62.5°	112.1	73.4	36.7	0.0
60°	121.7	79.2	38.6	0.0
57.5°	131.4	85.0	42.5	0.0
55°	141.1	92.7	46.4	0.0
52.5°	150.7	98.5	48.3	0.0
50°	160.4	104.3	50.2	0.0
47.5°	168.1	110.1	54.1	0.0
45°	177.8	115.9	56.0	0.0
42.5°	187.4	119.8	58.0	0.0
40°	195.2	125.6	59.9	0.0
37.5°	204.8	129.5	63.8	0.0
35°	212.5	135.3	65.7	0.0
32.5°	218.3	139.1	67.6	0.0
30°	226.1	143.0	69.6	0.0
27.5°	231.9	146.9	69.6	0.0
25°	237.7	150.7	71.5	0.0
22.5°	243.5	152.6	73.4	0.0
20°	249.3	156.5	75.4	0.0
17.5°	253.1	158.4	75.4	0.0
15°	257.0	160.4	79.2	0.0
12.5°	258.9	162.3	79.2	0.0
10°	262.8	166.2	79.2	0.0
7.5°	266.7	166.2	79.2	0.0
5°	266.7	166.2	79.2	0.0
2.5°	266.7	166.2	79.2	0.0
0°	266.7	166.2	79.2	0.0

(END OF REPORT)