

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: P623844

Luminaire Tested: **IFLD-S-SA2E-727-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P623844
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA2E-727-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (32) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

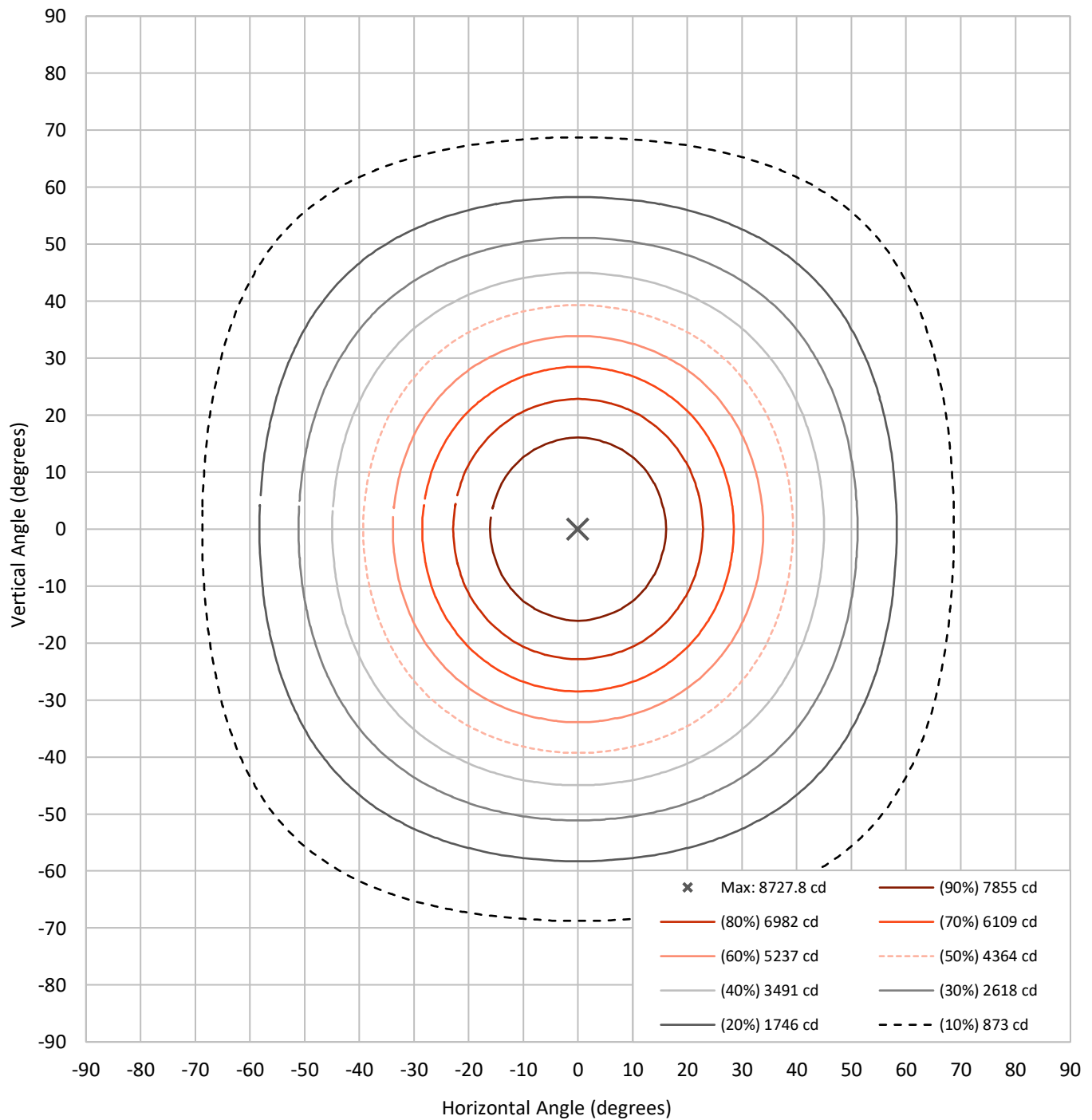
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	15714.6 lumens	Max Intensity:	8727.8 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	100.6 lumens/watt		
Luminous Opening:	Rectangular (W 1' x L: 0.5' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	6799.5 lumens	Field Lumens:	11134 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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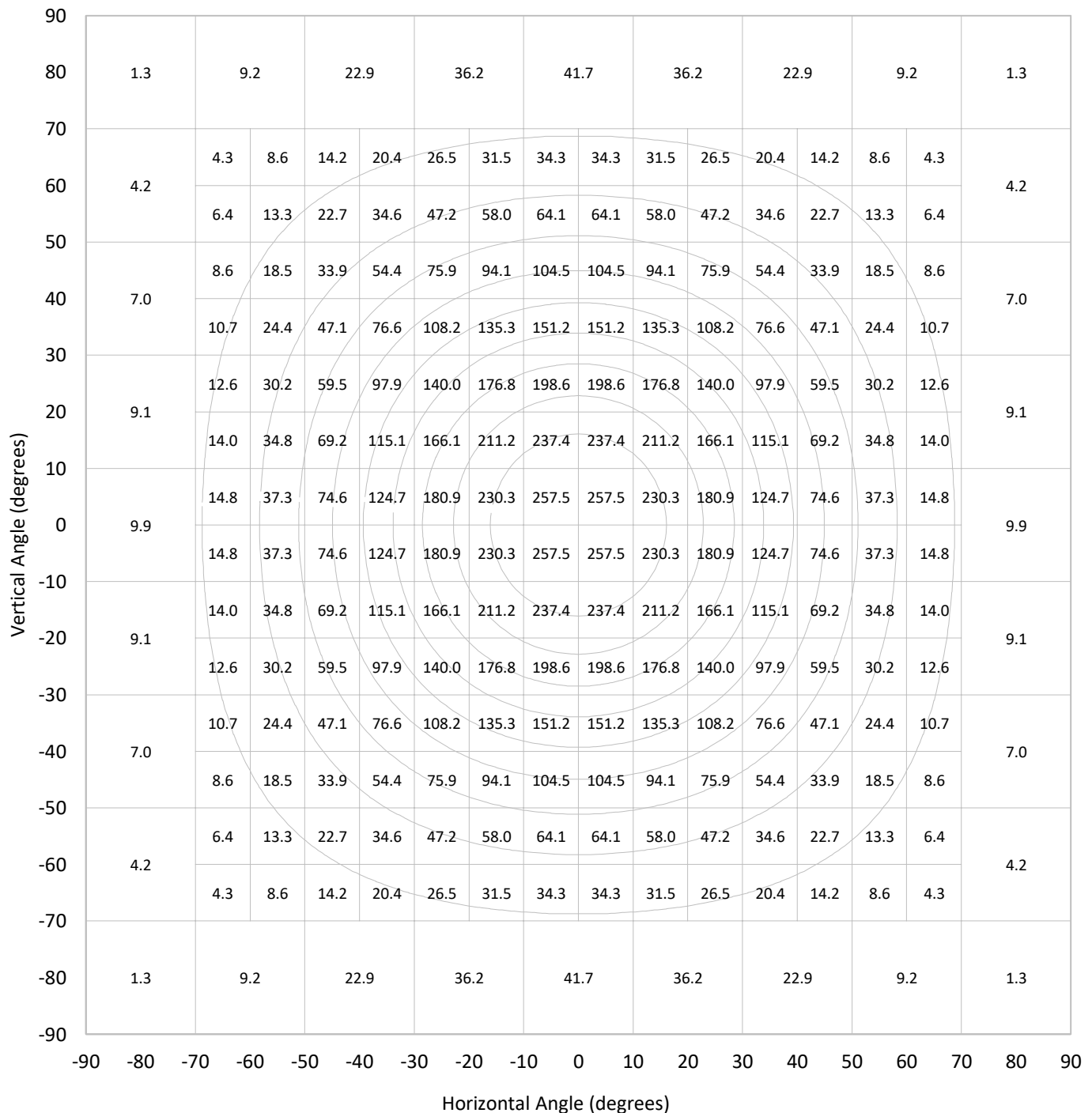
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Iso-Candela Plot



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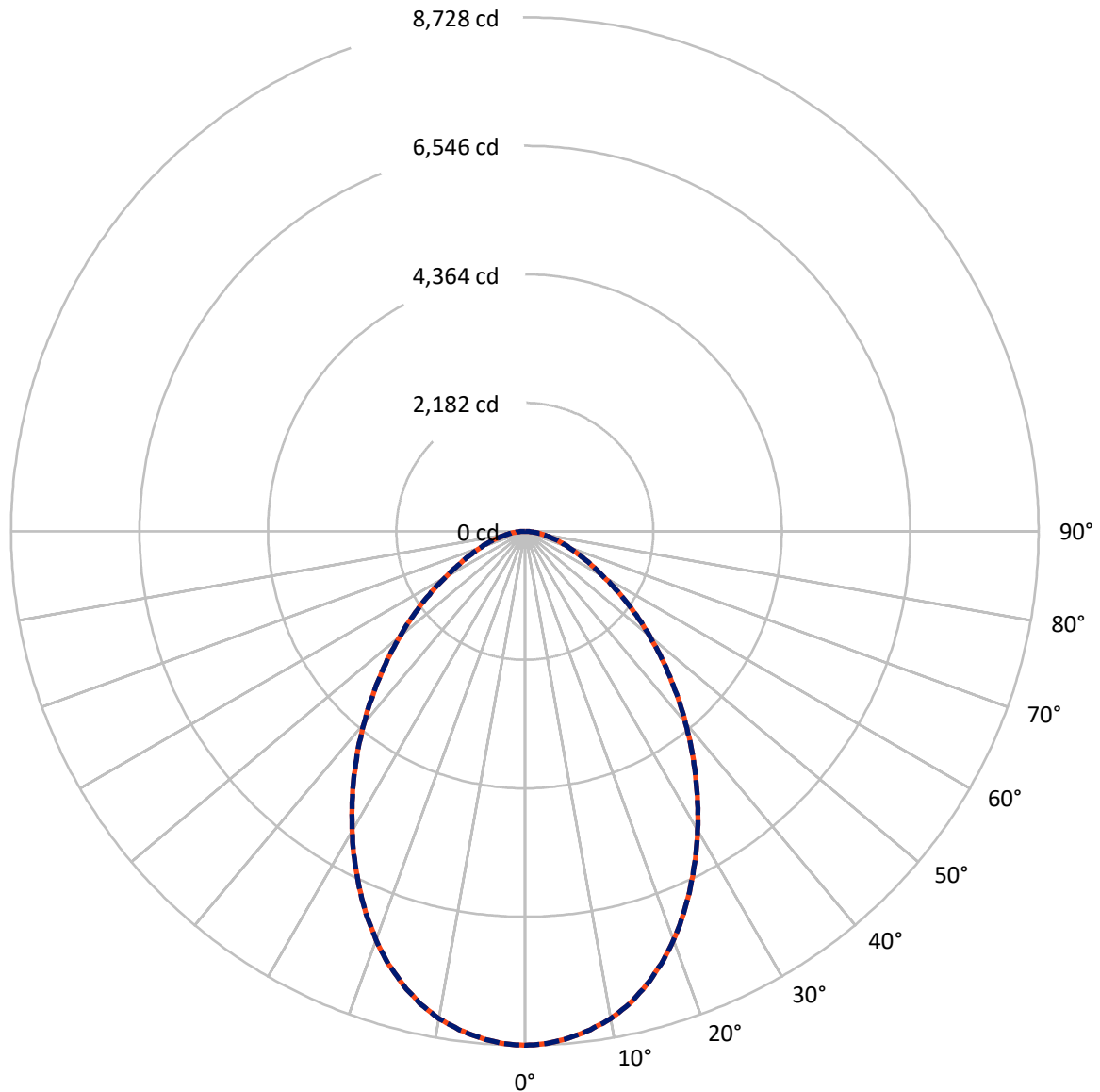
Lumen Table



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Luminous Intensity Polar Plot



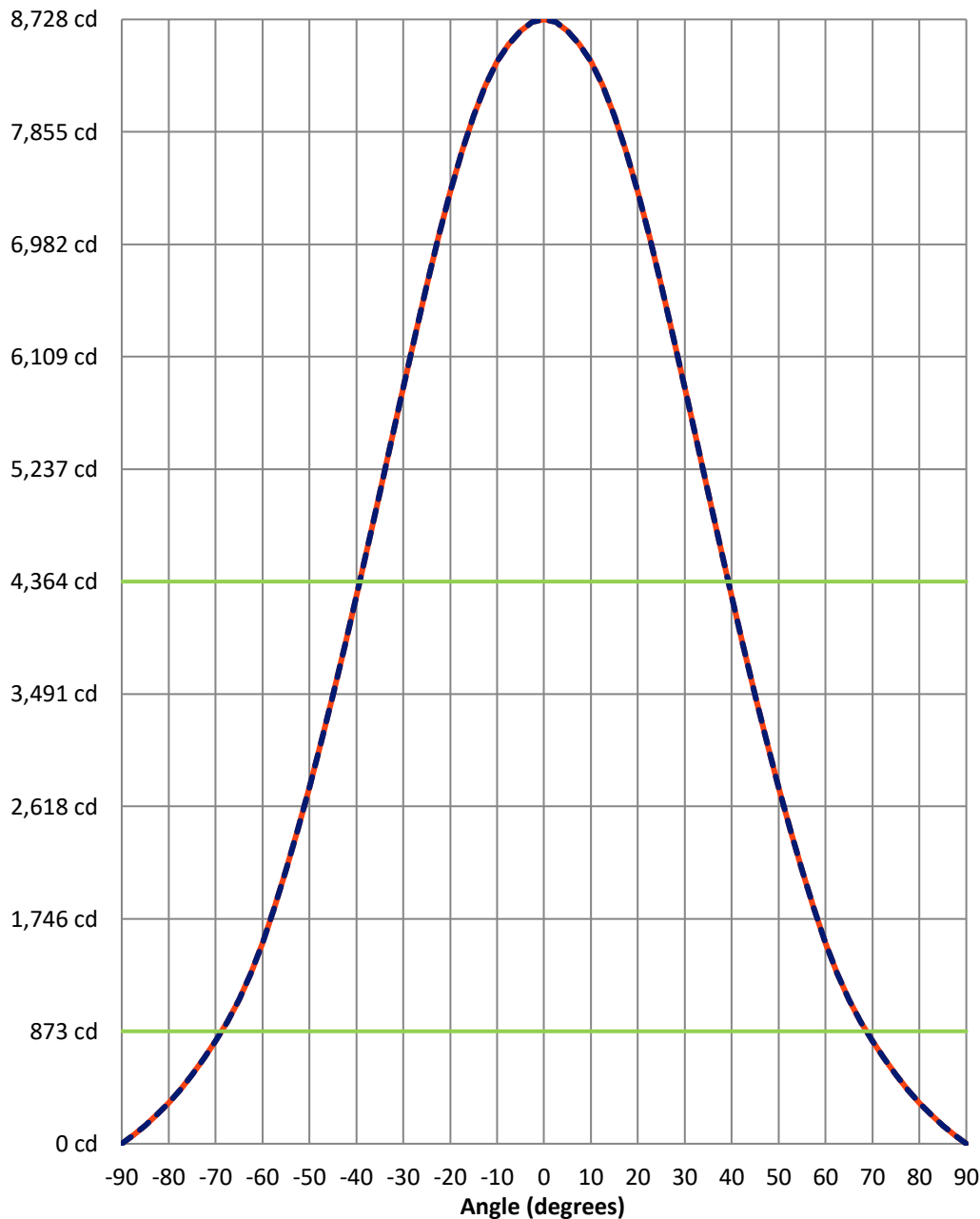
— Vertical Distribution Through 0-Deg

- - - Horizontal Distribution Through 0-Deg

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Luminous Intensity Plot



Beam:

H Angle: 78.6°
V Angle: 78.6°
Lumens: 6799.5
Efficiency: 43.3%

Field:

H Angle: 137.5°
V Angle: 137.5°
Lumens: 11134
Efficiency: 70.9%

Spill:

Lumens: 4580.6
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°	67.2	67.2	67.2	67.2	67.2	67.2	67.2	63.9	63.9	62.3	60.6
85°	140.9	140.9	140.9	140.9	140.9	137.6	136.0	134.3	132.7	129.4	127.8
82.5°	226.1	226.1	226.1	226.1	222.8	219.5	217.9	214.6	211.4	206.4	201.5
80°	316.2	316.2	316.2	316.2	311.3	308.0	303.1	299.8	294.9	288.4	281.8
77.5°	419.4	419.4	419.4	414.5	411.2	406.3	401.4	394.9	388.3	380.1	370.3
75°	535.8	535.8	535.8	529.2	524.3	519.4	511.2	503.0	493.2	481.7	468.6
72.5°	661.9	661.9	661.9	653.7	648.8	640.6	630.8	619.3	607.8	593.1	576.7
70°	797.9	797.9	797.9	788.1	779.9	771.7	758.6	745.5	729.1	712.7	693.0
67.5°	945.4	945.4	945.4	933.9	924.1	912.6	897.8	881.5	861.8	838.9	815.9
65°	1117.4	1117.4	1110.8	1101.0	1089.5	1073.2	1055.1	1032.2	1007.6	978.1	947.0
62.5°	1320.6	1320.6	1310.7	1299.3	1284.5	1263.2	1238.6	1209.1	1174.7	1137.1	1099.4
60°	1556.5	1556.5	1545.0	1530.3	1509.0	1482.8	1450.0	1412.3	1369.7	1322.2	1276.3
57.5°	1828.5	1828.5	1813.7	1794.1	1767.8	1735.1	1694.1	1646.6	1592.5	1533.5	1476.2
55°	2123.4	2123.4	2105.3	2082.4	2051.3	2012.0	1962.8	1907.1	1841.6	1774.4	1700.7
52.5°	2436.3	2436.3	2415.0	2388.8	2352.7	2306.9	2251.2	2185.6	2110.3	2031.6	1944.8
50°	2765.6	2765.6	2741.1	2711.6	2670.6	2616.5	2552.6	2477.3	2393.7	2302.0	2202.0
47.5°	3117.9	3117.9	3090.0	3055.6	3006.5	2944.2	2868.8	2782.0	2687.0	2583.8	2470.7
45°	3480.0	3480.0	3448.8	3409.5	3355.5	3285.0	3201.4	3117.9	2996.6	2877.0	2746.0
42.5°	3856.8	3856.8	3820.8	3776.5	3714.3	3637.3	3542.2	3434.1	3314.5	3180.1	3037.6
40°	4248.4	4248.4	4207.4	4156.6	4087.8	3999.3	3892.8	3771.6	3637.3	3488.2	3330.9
37.5°	4648.2	4648.2	4602.3	4546.6	4469.6	4371.3	4251.7	4117.3	3966.6	3801.1	3627.4
35°	5051.2	5051.2	5000.4	4939.8	4854.6	4746.5	4617.0	4467.9	4300.8	4120.6	3925.6
32.5°	5462.4	5462.4	5406.7	5337.9	5241.3	5121.7	4979.1	4816.9	4648.2	4438.4	4225.4
30°	5868.8	5868.8	5808.1	5732.8	5629.6	5498.5	5342.8	5164.3	4966.0	4751.4	4522.0
27.5°	6268.5	6252.2	6201.4	6121.1	6008.0	5868.8	5700.0	5506.7	5292.0	5056.1	4810.4
25°	6661.8	6643.7	6588.0	6499.6	6378.3	6225.9	6044.1	5837.6	5606.6	5357.6	5088.9
22.5°	7038.6	7018.9	6959.9	6864.9	6735.5	6570.0	6375.0	6153.8	5908.1	5641.0	5357.6
20°	7387.6	7366.3	7305.6	7205.7	7071.4	6896.0	6689.6	6452.0	6189.9	5908.1	5606.6
17.5°	7702.1	7680.8	7616.9	7513.7	7387.6	7192.6	6979.6	6728.9	6452.0	6153.8	5837.6
15°	7979.0	7956.1	7890.6	7787.3	7643.2	7459.7	7235.2	6979.6	6689.6	6375.0	6044.1
12.5°	8215.0	8192.0	8124.8	8021.6	7872.5	7689.0	7459.7	7192.6	6896.0	6570.0	6225.9
10°	8401.7	8378.8	8314.9	8216.6	8062.6	7872.5	7643.2	7387.6	7071.4	6735.5	6378.3
7.5°	8536.1	8514.8	8455.8	8357.5	8216.6	8021.6	7787.3	7513.7	7205.7	6864.9	6499.6
5°	8637.7	8613.1	8554.1	8455.8	8314.9	8124.8	7890.6	7616.9	7305.6	6959.9	6588.0
2.5°	8708.1	8678.6	8613.1	8514.8	8378.8	8192.0	7956.1	7680.8	7366.3	7018.9	6643.7
0°	8727.8	8708.1	8637.7	8536.1	8401.7	8215.0	7979.0	7702.1	7387.6	7038.6	6661.8

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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°	59.0	59.0	57.3	55.7	54.1	50.8	49.2	47.5	45.9	42.6	41.0
85°	124.5	121.2	118.0	114.7	109.8	106.5	101.6	98.3	93.4	88.5	83.6
82.5°	196.6	191.7	185.1	180.2	173.7	165.5	158.9	150.7	142.5	136.0	127.8
80°	275.3	267.1	258.9	250.7	240.8	231.0	221.2	211.4	199.9	188.4	176.9
77.5°	360.4	349.0	337.5	324.4	312.9	299.8	286.7	273.6	258.9	244.1	229.4
75°	455.5	440.7	424.3	408.0	393.2	375.2	357.2	339.1	319.5	301.5	281.8
72.5°	558.7	540.7	521.0	501.4	480.1	457.1	434.2	409.6	386.7	363.7	339.1
70°	670.1	648.8	624.2	599.7	573.4	545.6	517.7	488.2	458.8	429.3	399.8
67.5°	789.7	763.5	734.0	704.5	671.7	639.0	606.2	571.8	535.8	499.7	465.3
65°	917.5	884.7	850.3	812.6	775.0	737.3	698.0	657.0	616.0	573.4	535.8
62.5°	1060.0	1019.1	974.9	929.0	886.4	840.5	797.9	747.1	698.0	650.4	602.9
60°	1225.5	1171.5	1117.4	1060.0	1006.0	947.0	894.6	838.9	783.2	729.1	673.4
57.5°	1410.7	1341.9	1276.3	1207.5	1135.4	1069.9	1002.7	935.5	873.3	809.4	748.8
55°	1620.4	1536.8	1454.9	1369.7	1286.1	1204.2	1119.0	1043.7	966.7	894.6	824.1
52.5°	1849.8	1754.7	1653.2	1556.5	1450.0	1348.4	1253.4	1158.4	1068.2	981.4	901.1
50°	2095.5	1984.1	1867.8	1749.8	1628.6	1509.0	1394.3	1282.9	1178.0	1076.4	981.4
47.5°	2351.1	2225.0	2092.2	1957.9	1828.5	1682.6	1545.0	1418.9	1292.7	1178.0	1068.2
45°	2613.3	2470.7	2324.9	2172.5	2020.2	1862.9	1710.5	1556.5	1418.9	1282.9	1158.4
42.5°	2883.6	2723.0	2560.8	2392.1	2223.3	2051.3	1879.2	1710.5	1545.0	1394.3	1253.4
40°	3162.1	2985.2	2800.0	2616.5	2436.3	2239.7	2051.3	1862.9	1682.6	1509.0	1348.4
37.5°	3440.6	3247.3	3047.4	2841.0	2634.6	2436.3	2223.3	2020.2	1828.5	1628.6	1450.0
35°	3720.8	3507.8	3291.6	3067.1	2841.0	2616.5	2392.1	2172.5	1957.9	1749.8	1556.5
32.5°	4002.6	3770.0	3530.8	3291.6	3047.4	2800.0	2560.8	2324.9	2092.2	1867.8	1653.2
30°	4279.5	4027.2	3770.0	3507.8	3247.3	2985.2	2723.0	2470.7	2225.0	1984.1	1754.7
27.5°	4549.8	4279.5	4002.6	3720.8	3440.6	3162.1	2883.6	2613.3	2351.1	2095.5	1849.8
25°	4810.4	4522.0	4225.4	3925.6	3627.4	3330.9	3037.6	2746.0	2470.7	2202.0	1944.8
22.5°	5056.1	4751.4	4438.4	4120.6	3801.1	3488.2	3180.1	2877.0	2583.8	2302.0	2031.6
20°	5292.0	4966.0	4648.2	4300.8	3966.6	3637.3	3314.5	2996.6	2687.0	2393.7	2110.3
17.5°	5506.7	5164.3	4816.9	4467.9	4117.3	3771.6	3434.1	3117.9	2782.0	2477.3	2185.6
15°	5700.0	5342.8	4979.1	4617.0	4251.7	3892.8	3542.2	3201.4	2868.8	2552.6	2251.2
12.5°	5868.8	5498.5	5121.7	4746.5	4371.3	3999.3	3637.3	3285.0	2944.2	2616.5	2306.9
10°	6008.0	5629.6	5241.3	4854.6	4469.6	4087.8	3714.3	3355.5	3006.5	2670.6	2352.7
7.5°	6121.1	5732.8	5337.9	4939.8	4546.6	4156.6	3776.5	3409.5	3055.6	2711.6	2388.8
5°	6201.4	5808.1	5406.7	5000.4	4602.3	4207.4	3820.8	3448.8	3090.0	2741.1	2415.0
2.5°	6252.2	5868.8	5462.4	5051.2	4648.2	4248.4	3856.8	3480.0	3117.9	2765.6	2436.3
0°	6268.5	5868.8	5462.4	5051.2	4648.2	4248.4	3856.8	3480.0	3117.9	2765.6	2436.3

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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°	39.3	36.0	32.8	31.1	27.9	26.2	22.9	19.7	18.0	14.7	11.5
85°	78.6	72.1	67.2	62.3	57.3	50.8	45.9	41.0	34.4	29.5	22.9
82.5°	119.6	111.4	103.2	95.0	86.8	78.6	68.8	60.6	52.4	44.2	34.4
80°	165.5	152.4	140.9	129.4	118.0	106.5	93.4	81.9	68.8	57.3	45.9
77.5°	213.0	198.2	181.9	165.5	149.1	134.3	118.0	103.2	88.5	72.1	57.3
75°	263.8	244.1	226.1	204.8	185.1	163.8	144.2	124.5	106.5	88.5	68.8
72.5°	316.2	291.6	267.1	244.1	219.5	195.0	172.0	147.5	124.5	103.2	81.9
70°	370.3	340.8	311.3	283.4	255.6	226.1	199.9	172.0	144.2	118.0	93.4
67.5°	427.6	393.2	358.8	322.8	291.6	258.9	226.1	195.0	163.8	134.3	106.5
65°	489.9	448.9	406.3	368.6	327.7	291.6	255.6	219.5	185.1	149.1	118.0
62.5°	553.8	506.3	458.8	411.2	368.6	322.8	283.4	244.1	204.8	165.5	129.4
60°	619.3	565.2	511.2	458.8	406.3	358.8	311.3	267.1	226.1	181.9	140.9
57.5°	686.5	625.9	565.2	506.3	448.9	393.2	340.8	291.6	244.1	198.2	152.4
55°	755.3	686.5	619.3	553.8	489.9	427.6	370.3	316.2	263.8	213.0	165.5
52.5°	824.1	748.8	673.4	602.9	535.8	465.3	399.8	339.1	281.8	229.4	176.9
50°	894.6	809.4	729.1	650.4	573.4	499.7	429.3	363.7	301.5	244.1	188.4
47.5°	966.7	873.3	783.2	698.0	616.0	535.8	458.8	386.7	319.5	258.9	199.9
45°	1043.7	935.5	838.9	747.1	657.0	571.8	488.2	409.6	339.1	273.6	211.4
42.5°	1119.0	1002.7	894.6	797.9	698.0	606.2	517.7	434.2	357.2	286.7	221.2
40°	1204.2	1069.9	947.0	840.5	737.3	639.0	545.6	457.1	375.2	299.8	231.0
37.5°	1286.1	1135.4	1006.0	886.4	775.0	671.7	573.4	480.1	393.2	312.9	240.8
35°	1369.7	1207.5	1060.0	929.0	812.6	704.5	599.7	501.4	408.0	324.4	250.7
32.5°	1454.9	1276.3	1117.4	974.9	850.3	734.0	624.2	521.0	424.3	337.5	258.9
30°	1536.8	1341.9	1171.5	1019.1	884.7	763.5	648.8	540.7	440.7	349.0	267.1
27.5°	1620.4	1410.7	1225.5	1060.0	917.5	789.7	670.1	558.7	455.5	360.4	275.3
25°	1700.7	1476.2	1276.3	1099.4	947.0	815.9	693.0	576.7	468.6	370.3	281.8
22.5°	1774.4	1533.5	1322.2	1137.1	978.1	838.9	712.7	593.1	481.7	380.1	288.4
20°	1841.6	1592.5	1369.7	1174.7	1007.6	861.8	729.1	607.8	493.2	388.3	294.9
17.5°	1907.1	1646.6	1412.3	1209.1	1032.2	881.5	745.5	619.3	503.0	394.9	299.8
15°	1962.8	1694.1	1450.0	1238.6	1055.1	897.8	758.6	630.8	511.2	401.4	303.1
12.5°	2012.0	1735.1	1482.8	1263.2	1073.2	912.6	771.7	640.6	519.4	406.3	308.0
10°	2051.3	1767.8	1509.0	1284.5	1089.5	924.1	779.9	648.8	524.3	411.2	311.3
7.5°	2082.4	1794.1	1530.3	1299.3	1101.0	933.9	788.1	653.7	529.2	414.5	316.2
5°	2105.3	1813.7	1545.0	1310.7	1110.8	945.4	797.9	661.9	535.8	419.4	316.2
2.5°	2123.4	1828.5	1556.5	1320.6	1117.4	945.4	797.9	661.9	535.8	419.4	316.2
0°	2123.4	1828.5	1556.5	1320.6	1117.4	945.4	797.9	661.9	535.8	419.4	316.2

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	8.2	6.6	3.3	0.0
85°	18.0	11.5	6.6	0.0
82.5°	26.2	18.0	8.2	0.0
80°	34.4	22.9	11.5	0.0
77.5°	44.2	29.5	14.7	0.0
75°	52.4	34.4	18.0	0.0
72.5°	60.6	41.0	19.7	0.0
70°	68.8	45.9	22.9	0.0
67.5°	78.6	50.8	26.2	0.0
65°	86.8	57.3	27.9	0.0
62.5°	95.0	62.3	31.1	0.0
60°	103.2	67.2	32.8	0.0
57.5°	111.4	72.1	36.0	0.0
55°	119.6	78.6	39.3	0.0
52.5°	127.8	83.6	41.0	0.0
50°	136.0	88.5	42.6	0.0
47.5°	142.5	93.4	45.9	0.0
45°	150.7	98.3	47.5	0.0
42.5°	158.9	101.6	49.2	0.0
40°	165.5	106.5	50.8	0.0
37.5°	173.7	109.8	54.1	0.0
35°	180.2	114.7	55.7	0.0
32.5°	185.1	118.0	57.3	0.0
30°	191.7	121.2	59.0	0.0
27.5°	196.6	124.5	59.0	0.0
25°	201.5	127.8	60.6	0.0
22.5°	206.4	129.4	62.3	0.0
20°	211.4	132.7	63.9	0.0
17.5°	214.6	134.3	63.9	0.0
15°	217.9	136.0	67.2	0.0
12.5°	219.5	137.6	67.2	0.0
10°	222.8	140.9	67.2	0.0
7.5°	226.1	140.9	67.2	0.0
5°	226.1	140.9	67.2	0.0
2.5°	226.1	140.9	67.2	0.0
0°	226.1	140.9	67.2	0.0

(END OF REPORT)