

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: P624018

Luminaire Tested: **IFLD-S-SA2E-827-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624018
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA2E-827-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (32) 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

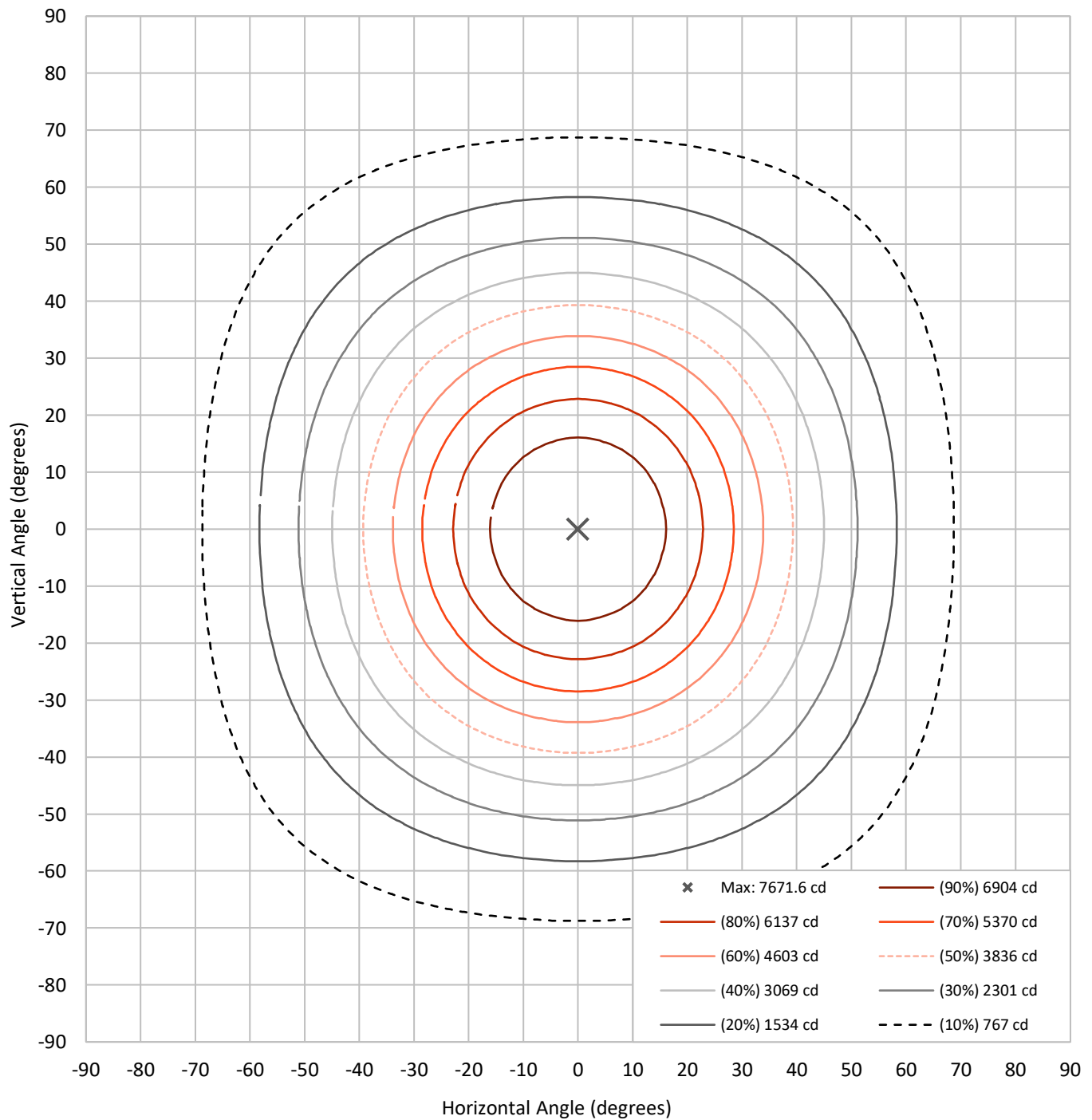
Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	13813 lumens	Max Intensity:	7671.6 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	88.4 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:	5976.7 lumens	Field Lumens:	9786.7 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		



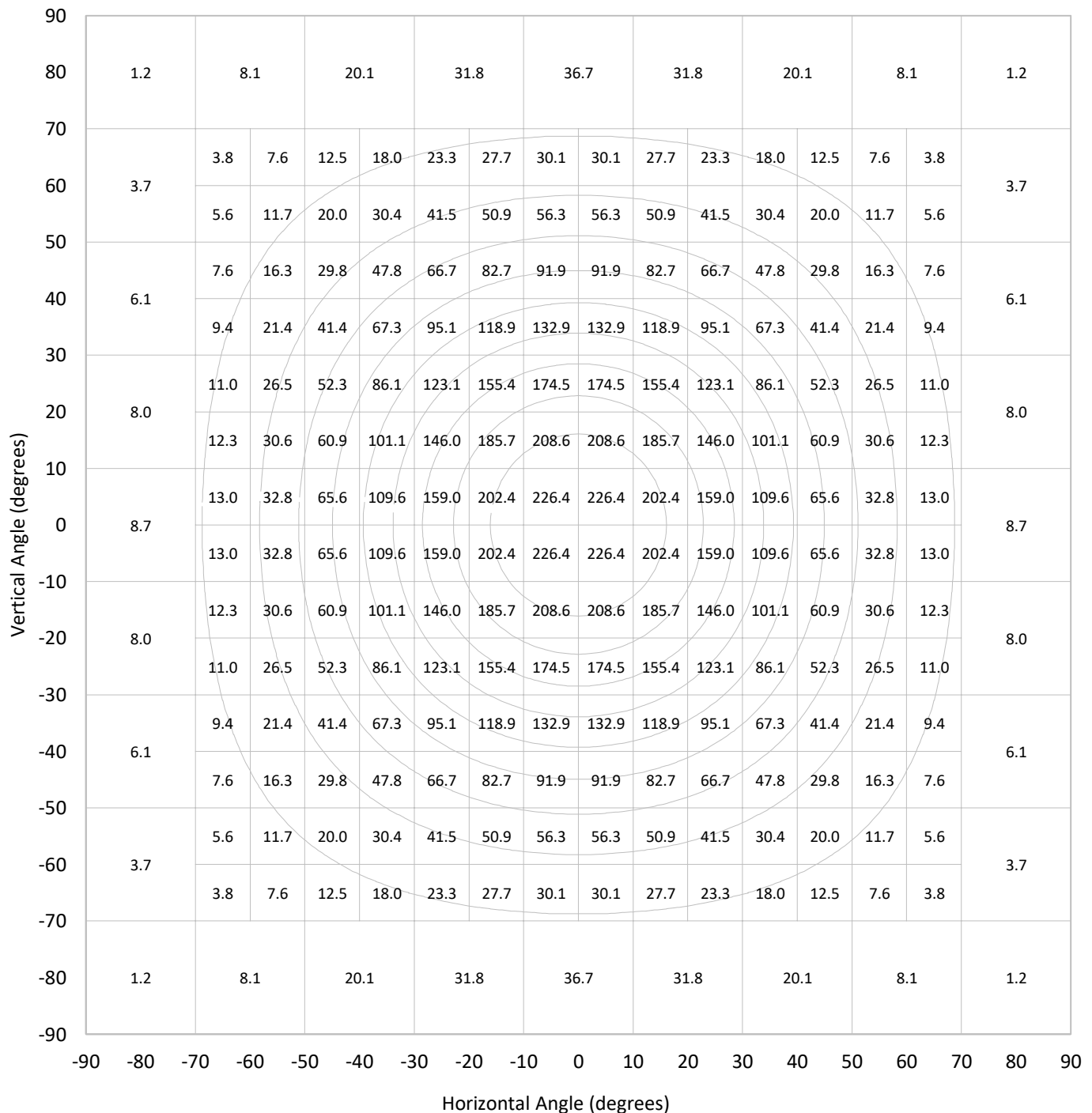
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Iso-Candela Plot



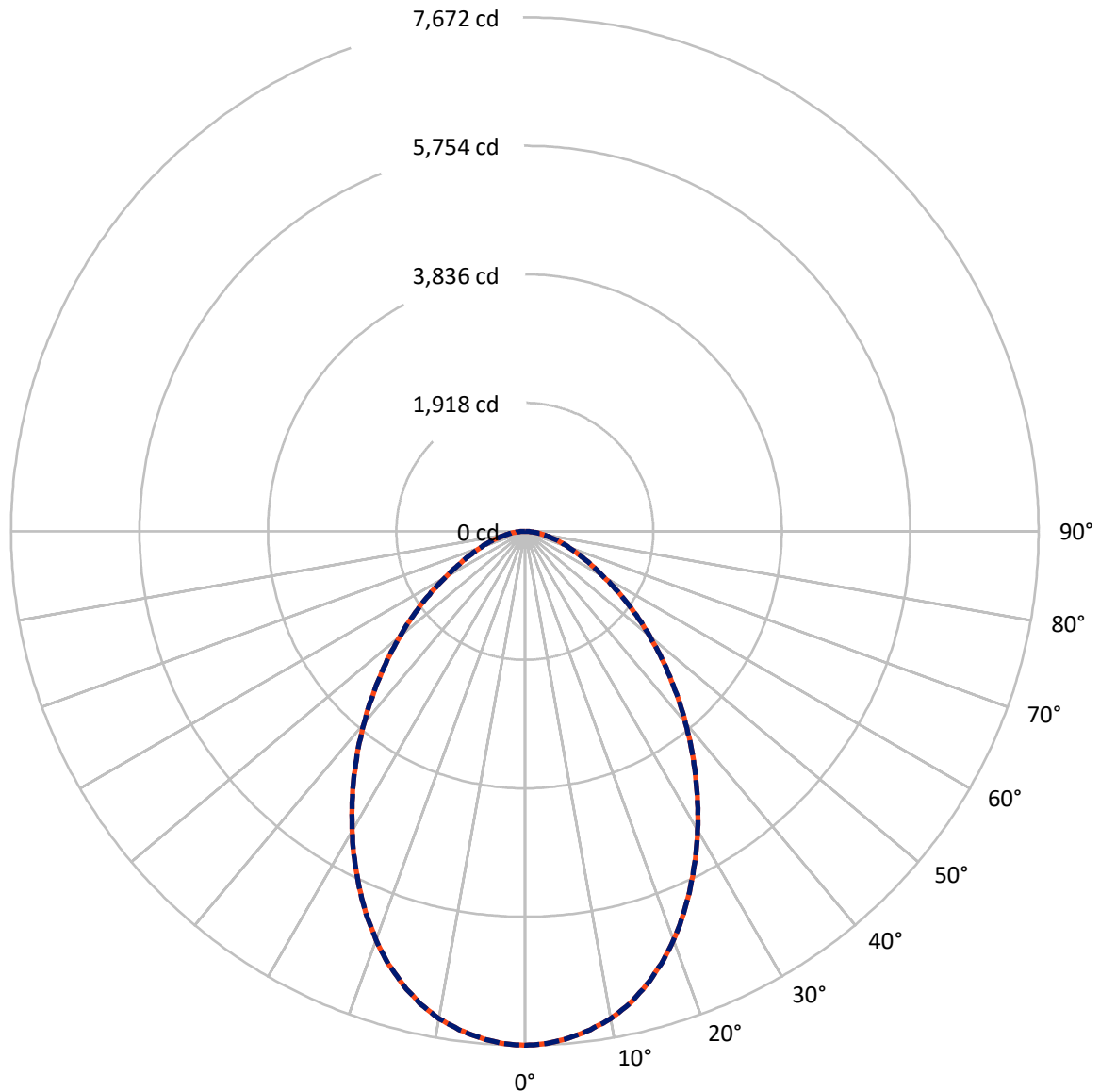
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Lumen Table



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Luminous Intensity Polar Plot

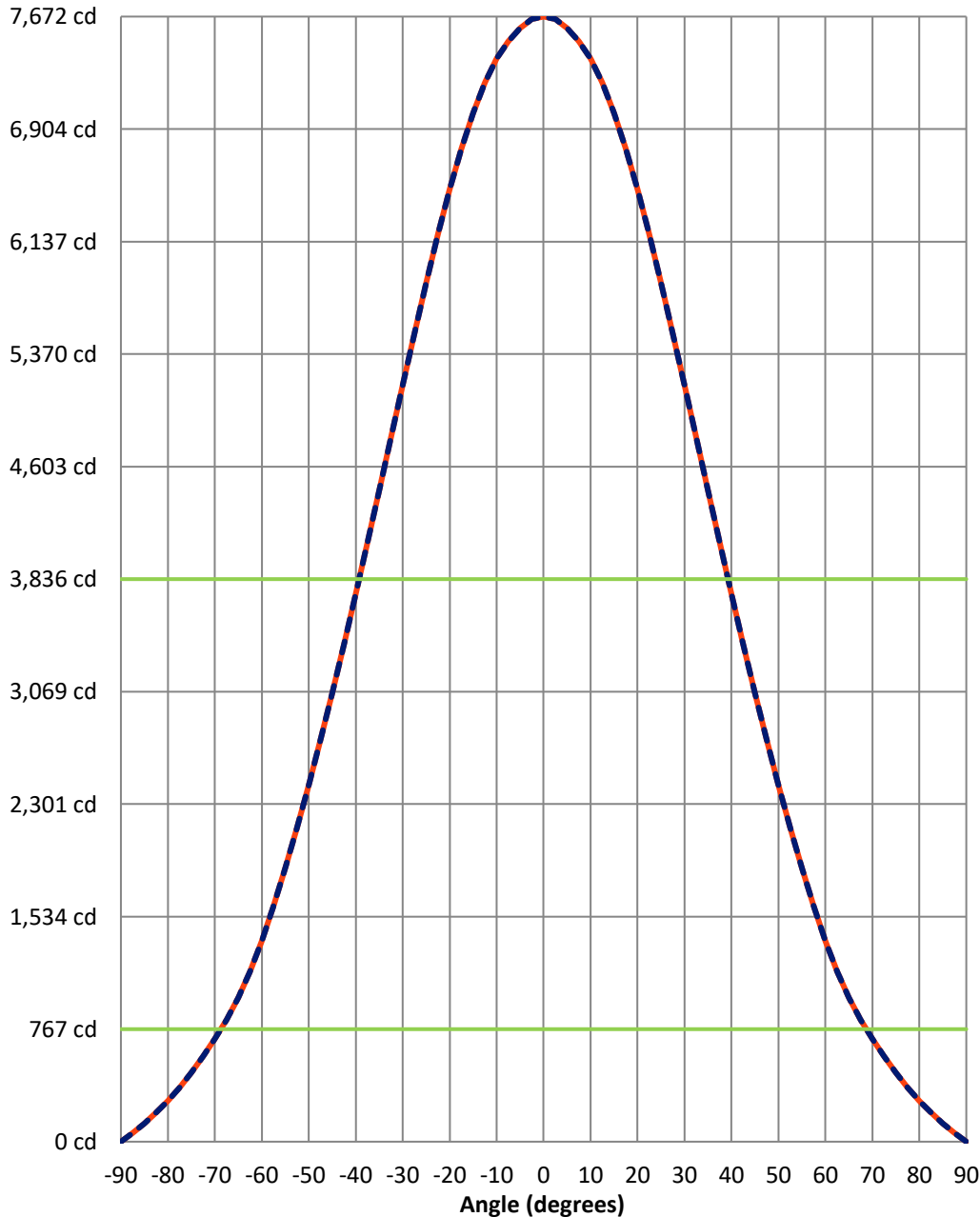


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg



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Luminous Intensity Plot



Beam:
H Angle: 78.6°
V Angle: 78.6°
Lumens: 5976.7
Efficiency: 43.3%

Field:
H Angle: 137.5°
V Angle: 137.5°
Lumens: 9786.7
Efficiency: 70.9%

Spill:
Lumens: 4026.3
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°	59.0	59.0	59.0	59.0	59.0	59.0	59.0	56.2	56.2	54.7	53.3
85°	123.9	123.9	123.9	123.9	123.9	121.0	119.5	118.1	116.7	113.8	112.3
82.5°	198.7	198.7	198.7	198.7	195.9	193.0	191.5	188.7	185.8	181.5	177.1
80°	277.9	277.9	277.9	277.9	273.6	270.7	266.4	263.5	259.2	253.5	247.7
77.5°	368.7	368.7	368.7	364.4	361.5	357.2	352.8	347.1	341.3	334.1	325.5
75°	470.9	470.9	470.9	465.2	460.8	456.5	449.3	442.1	433.5	423.4	411.9
72.5°	581.8	581.8	581.8	574.6	570.3	563.1	554.5	544.4	534.3	521.3	506.9
70°	701.3	701.3	701.3	692.7	685.5	678.3	666.8	655.3	640.9	626.5	609.2
67.5°	831.0	831.0	831.0	820.9	812.2	802.2	789.2	774.8	757.5	737.4	717.2
65°	982.2	982.2	976.4	967.8	957.7	943.3	927.5	907.3	885.7	859.8	832.4
62.5°	1160.8	1160.8	1152.1	1142.0	1129.1	1110.3	1088.7	1062.8	1032.6	999.5	966.3
60°	1368.1	1368.1	1358.1	1345.1	1326.4	1303.3	1274.5	1241.4	1204.0	1162.2	1121.9
57.5°	1607.2	1607.2	1594.2	1577.0	1553.9	1525.1	1489.1	1447.3	1399.8	1348.0	1297.6
55°	1866.4	1866.4	1850.6	1830.4	1803.1	1768.5	1725.3	1676.3	1618.7	1559.7	1494.9
52.5°	2141.5	2141.5	2122.8	2099.7	2068.0	2027.7	1978.8	1921.2	1854.9	1785.8	1709.4
50°	2431.0	2431.0	2409.4	2383.4	2347.4	2299.9	2243.7	2177.5	2104.0	2023.4	1935.6
47.5°	2740.6	2740.6	2716.1	2685.9	2642.7	2587.9	2521.7	2445.4	2361.8	2271.1	2171.7
45°	3058.9	3058.9	3031.5	2996.9	2949.4	2887.5	2814.0	2740.6	2634.0	2528.9	2413.7
42.5°	3390.1	3390.1	3358.4	3319.5	3264.8	3197.1	3113.6	3018.5	2913.4	2795.3	2670.0
40°	3734.3	3734.3	3698.3	3653.6	3593.2	3515.4	3421.8	3315.2	3197.1	3066.1	2927.8
37.5°	4085.7	4085.7	4045.4	3996.4	3928.7	3842.3	3737.2	3619.1	3486.6	3341.1	3188.5
35°	4440.0	4440.0	4395.3	4342.0	4267.1	4172.1	4058.3	3927.3	3780.4	3622.0	3450.6
32.5°	4801.4	4801.4	4752.5	4692.0	4607.0	4501.9	4376.6	4234.0	4085.7	3901.3	3714.1
30°	5158.6	5158.6	5105.3	5039.1	4948.3	4833.1	4696.3	4539.3	4365.1	4176.4	3974.8
27.5°	5510.0	5495.6	5450.9	5380.4	5281.0	5158.6	5010.3	4840.3	4651.7	4444.3	4228.3
25°	5855.6	5839.8	5790.8	5713.0	5606.5	5472.5	5312.7	5131.2	4928.2	4709.3	4473.1
22.5°	6186.9	6169.6	6117.7	6034.2	5920.4	5775.0	5603.6	5409.2	5193.2	4958.4	4709.3
20°	6493.6	6474.9	6421.6	6333.7	6215.7	6061.6	5880.1	5671.3	5440.9	5193.2	4928.2
17.5°	6770.1	6751.4	6695.2	6604.5	6493.6	6322.2	6135.0	5914.7	5671.3	5409.2	5131.2
15°	7013.5	6993.3	6935.7	6845.0	6718.3	6557.0	6359.7	6135.0	5880.1	5603.6	5312.7
12.5°	7220.9	7200.7	7141.7	7050.9	6919.9	6758.6	6557.0	6322.2	6061.6	5775.0	5472.5
10°	7385.1	7364.9	7308.7	7222.3	7086.9	6919.9	6718.3	6493.6	6215.7	5920.4	5606.5
7.5°	7503.1	7484.4	7432.6	7346.2	7222.3	7050.9	6845.0	6604.5	6333.7	6034.2	5713.0
5°	7592.4	7570.8	7519.0	7432.6	7308.7	7141.7	6935.7	6695.2	6421.6	6117.7	5790.8
2.5°	7654.4	7628.4	7570.8	7484.4	7364.9	7200.7	6993.3	6751.4	6474.9	6169.6	5839.8
0°	7671.6	7654.4	7592.4	7503.1	7385.1	7220.9	7013.5	6770.1	6493.6	6186.9	5855.6

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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°	51.8	51.8	50.4	49.0	47.5	44.6	43.2	41.8	40.3	37.4	36.0
85°	109.5	106.6	103.7	100.8	96.5	93.6	89.3	86.4	82.1	77.8	73.4
82.5°	172.8	168.5	162.7	158.4	152.7	145.5	139.7	132.5	125.3	119.5	112.3
80°	241.9	234.7	227.5	220.3	211.7	203.1	194.4	185.8	175.7	165.6	155.5
77.5°	316.8	306.8	296.7	285.1	275.1	263.5	252.0	240.5	227.5	214.6	201.6
75°	400.4	387.4	373.0	358.6	345.6	329.8	314.0	298.1	280.8	265.0	247.7
72.5°	491.1	475.2	458.0	440.7	422.0	401.8	381.6	360.0	339.9	319.7	298.1
70°	589.0	570.3	548.7	527.1	504.0	479.6	455.1	429.2	403.2	377.3	351.4
67.5°	694.1	671.1	645.2	619.3	590.5	561.7	532.9	502.6	470.9	439.2	409.0
65°	806.5	777.7	747.4	714.3	681.2	648.1	613.5	577.5	541.5	504.0	470.9
62.5°	931.8	895.8	856.9	816.6	779.1	738.8	701.3	656.7	613.5	571.7	530.0
60°	1077.2	1029.7	982.2	931.8	884.2	832.4	786.3	737.4	688.4	640.9	591.9
57.5°	1240.0	1179.5	1121.9	1061.4	998.0	940.4	881.4	822.3	767.6	711.4	658.1
55°	1424.3	1350.9	1278.8	1204.0	1130.5	1058.5	983.6	917.4	849.7	786.3	724.4
52.5°	1625.9	1542.4	1453.1	1368.1	1274.5	1185.2	1101.7	1018.2	939.0	862.6	792.1
50°	1841.9	1744.0	1641.8	1538.1	1431.5	1326.4	1225.6	1127.6	1035.5	946.2	862.6
47.5°	2066.6	1955.7	1839.1	1721.0	1607.2	1479.0	1358.1	1247.2	1136.3	1035.5	939.0
45°	2297.0	2171.7	2043.6	1909.6	1775.7	1637.4	1503.5	1368.1	1247.2	1127.6	1018.2
42.5°	2534.7	2393.5	2250.9	2102.6	1954.3	1803.1	1651.8	1503.5	1358.1	1225.6	1101.7
40°	2779.5	2623.9	2461.2	2299.9	2141.5	1968.7	1803.1	1637.4	1479.0	1326.4	1185.2
37.5°	3024.3	2854.4	2678.7	2497.2	2315.7	2141.5	1954.3	1775.7	1607.2	1431.5	1274.5
35°	3270.6	3083.3	2893.2	2695.9	2497.2	2299.9	2102.6	1909.6	1721.0	1538.1	1368.1
32.5°	3518.3	3313.8	3103.5	2893.2	2678.7	2461.2	2250.9	2043.6	1839.1	1641.8	1453.1
30°	3761.7	3539.9	3313.8	3083.3	2854.4	2623.9	2393.5	2171.7	1955.7	1744.0	1542.4
27.5°	3999.3	3761.7	3518.3	3270.6	3024.3	2779.5	2534.7	2297.0	2066.6	1841.9	1625.9
25°	4228.3	3974.8	3714.1	3450.6	3188.5	2927.8	2670.0	2413.7	2171.7	1935.6	1709.4
22.5°	4444.3	4176.4	3901.3	3622.0	3341.1	3066.1	2795.3	2528.9	2271.1	2023.4	1785.8
20°	4651.7	4365.1	4085.7	3780.4	3486.6	3197.1	2913.4	2634.0	2361.8	2104.0	1854.9
17.5°	4840.3	4539.3	4234.0	3927.3	3619.1	3315.2	3018.5	2740.6	2445.4	2177.5	1921.2
15°	5010.3	4696.3	4376.6	4058.3	3737.2	3421.8	3113.6	2814.0	2521.7	2243.7	1978.8
12.5°	5158.6	4833.1	4501.9	4172.1	3842.3	3515.4	3197.1	2887.5	2587.9	2299.9	2027.7
10°	5281.0	4948.3	4607.0	4267.1	3928.7	3593.2	3264.8	2949.4	2642.7	2347.4	2068.0
7.5°	5380.4	5039.1	4692.0	4342.0	3996.4	3653.6	3319.5	2996.9	2685.9	2383.4	2099.7
5°	5450.9	5105.3	4752.5	4395.3	4045.4	3698.3	3358.4	3031.5	2716.1	2409.4	2122.8
2.5°	5495.6	5158.6	4801.4	4440.0	4085.7	3734.3	3390.1	3058.9	2740.6	2431.0	2141.5
0°	5510.0	5158.6	4801.4	4440.0	4085.7	3734.3	3390.1	3058.9	2740.6	2431.0	2141.5

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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°	34.6	31.7	28.8	27.4	24.5	23.0	20.2	17.3	15.8	13.0	10.1
85°	69.1	63.4	59.0	54.7	50.4	44.6	40.3	36.0	30.2	25.9	20.2
82.5°	105.1	97.9	90.7	83.5	76.3	69.1	60.5	53.3	46.1	38.9	30.2
80°	145.5	133.9	123.9	113.8	103.7	93.6	82.1	72.0	60.5	50.4	40.3
77.5°	187.2	174.3	159.9	145.5	131.1	118.1	103.7	90.7	77.8	63.4	50.4
75°	231.9	214.6	198.7	180.0	162.7	144.0	126.7	109.5	93.6	77.8	60.5
72.5°	277.9	256.3	234.7	214.6	193.0	171.4	151.2	129.6	109.5	90.7	72.0
70°	325.5	299.5	273.6	249.1	224.7	198.7	175.7	151.2	126.7	103.7	82.1
67.5°	375.9	345.6	315.4	283.7	256.3	227.5	198.7	171.4	144.0	118.1	93.6
65°	430.6	394.6	357.2	324.0	288.0	256.3	224.7	193.0	162.7	131.1	103.7
62.5°	486.8	445.0	403.2	361.5	324.0	283.7	249.1	214.6	180.0	145.5	113.8
60°	544.4	496.8	449.3	403.2	357.2	315.4	273.6	234.7	198.7	159.9	123.9
57.5°	603.4	550.1	496.8	445.0	394.6	345.6	299.5	256.3	214.6	174.3	133.9
55°	663.9	603.4	544.4	486.8	430.6	375.9	325.5	277.9	231.9	187.2	145.5
52.5°	724.4	658.1	591.9	530.0	470.9	409.0	351.4	298.1	247.7	201.6	155.5
50°	786.3	711.4	640.9	571.7	504.0	439.2	377.3	319.7	265.0	214.6	165.6
47.5°	849.7	767.6	688.4	613.5	541.5	470.9	403.2	339.9	280.8	227.5	175.7
45°	917.4	822.3	737.4	656.7	577.5	502.6	429.2	360.0	298.1	240.5	185.8
42.5°	983.6	881.4	786.3	701.3	613.5	532.9	455.1	381.6	314.0	252.0	194.4
40°	1058.5	940.4	832.4	738.8	648.1	561.7	479.6	401.8	329.8	263.5	203.1
37.5°	1130.5	998.0	884.2	779.1	681.2	590.5	504.0	422.0	345.6	275.1	211.7
35°	1204.0	1061.4	931.8	816.6	714.3	619.3	527.1	440.7	358.6	285.1	220.3
32.5°	1278.8	1121.9	982.2	856.9	747.4	645.2	548.7	458.0	373.0	296.7	227.5
30°	1350.9	1179.5	1029.7	895.8	777.7	671.1	570.3	475.2	387.4	306.8	234.7
27.5°	1424.3	1240.0	1077.2	931.8	806.5	694.1	589.0	491.1	400.4	316.8	241.9
25°	1494.9	1297.6	1121.9	966.3	832.4	717.2	609.2	506.9	411.9	325.5	247.7
22.5°	1559.7	1348.0	1162.2	999.5	859.8	737.4	626.5	521.3	423.4	334.1	253.5
20°	1618.7	1399.8	1204.0	1032.6	885.7	757.5	640.9	534.3	433.5	341.3	259.2
17.5°	1676.3	1447.3	1241.4	1062.8	907.3	774.8	655.3	544.4	442.1	347.1	263.5
15°	1725.3	1489.1	1274.5	1088.7	927.5	789.2	666.8	554.5	449.3	352.8	266.4
12.5°	1768.5	1525.1	1303.3	1110.3	943.3	802.2	678.3	563.1	456.5	357.2	270.7
10°	1803.1	1553.9	1326.4	1129.1	957.7	812.2	685.5	570.3	460.8	361.5	273.6
7.5°	1830.4	1577.0	1345.1	1142.0	967.8	820.9	692.7	574.6	465.2	364.4	277.9
5°	1850.6	1594.2	1358.1	1152.1	976.4	831.0	701.3	581.8	470.9	368.7	277.9
2.5°	1866.4	1607.2	1368.1	1160.8	982.2	831.0	701.3	581.8	470.9	368.7	277.9
0°	1866.4	1607.2	1368.1	1160.8	982.2	831.0	701.3	581.8	470.9	368.7	277.9

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	7.2	5.8	2.9	0.0
85°	15.8	10.1	5.8	0.0
82.5°	23.0	15.8	7.2	0.0
80°	30.2	20.2	10.1	0.0
77.5°	38.9	25.9	13.0	0.0
75°	46.1	30.2	15.8	0.0
72.5°	53.3	36.0	17.3	0.0
70°	60.5	40.3	20.2	0.0
67.5°	69.1	44.6	23.0	0.0
65°	76.3	50.4	24.5	0.0
62.5°	83.5	54.7	27.4	0.0
60°	90.7	59.0	28.8	0.0
57.5°	97.9	63.4	31.7	0.0
55°	105.1	69.1	34.6	0.0
52.5°	112.3	73.4	36.0	0.0
50°	119.5	77.8	37.4	0.0
47.5°	125.3	82.1	40.3	0.0
45°	132.5	86.4	41.8	0.0
42.5°	139.7	89.3	43.2	0.0
40°	145.5	93.6	44.6	0.0
37.5°	152.7	96.5	47.5	0.0
35°	158.4	100.8	49.0	0.0
32.5°	162.7	103.7	50.4	0.0
30°	168.5	106.6	51.8	0.0
27.5°	172.8	109.5	51.8	0.0
25°	177.1	112.3	53.3	0.0
22.5°	181.5	113.8	54.7	0.0
20°	185.8	116.7	56.2	0.0
17.5°	188.7	118.1	56.2	0.0
15°	191.5	119.5	59.0	0.0
12.5°	193.0	121.0	59.0	0.0
10°	195.9	123.9	59.0	0.0
7.5°	198.7	123.9	59.0	0.0
5°	198.7	123.9	59.0	0.0
2.5°	198.7	123.9	59.0	0.0
0°	198.7	123.9	59.0	0.0

(END OF REPORT)