

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: P624023

Luminaire Tested: **IFLD-S-SA3E-827-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624023
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA3E-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

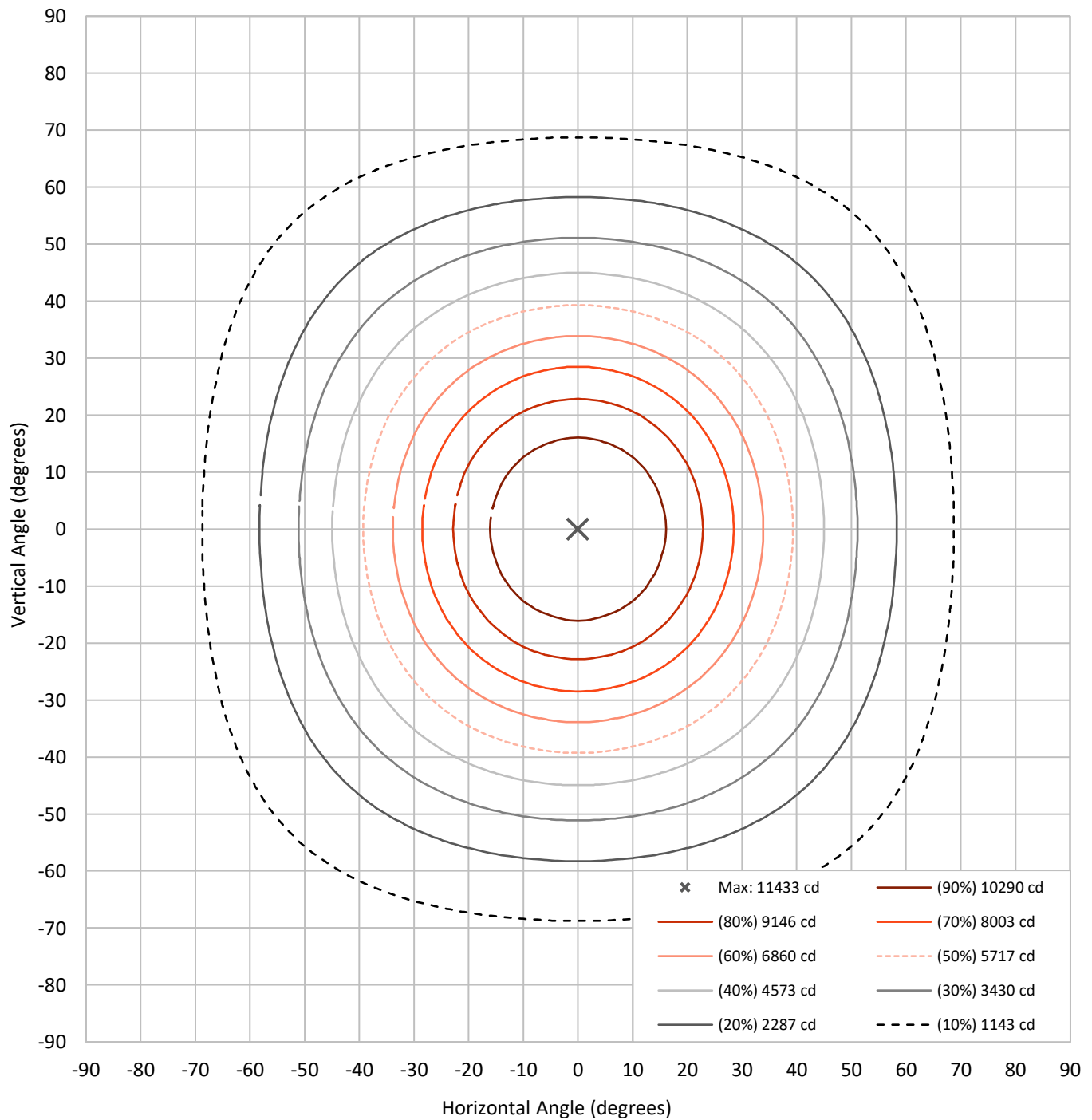
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	20585.3 lumens	Max Intensity:	11433 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	88.7 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	8907.1 lumens	Field Lumens:	14585 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%
Input Watts (W):	232.1		
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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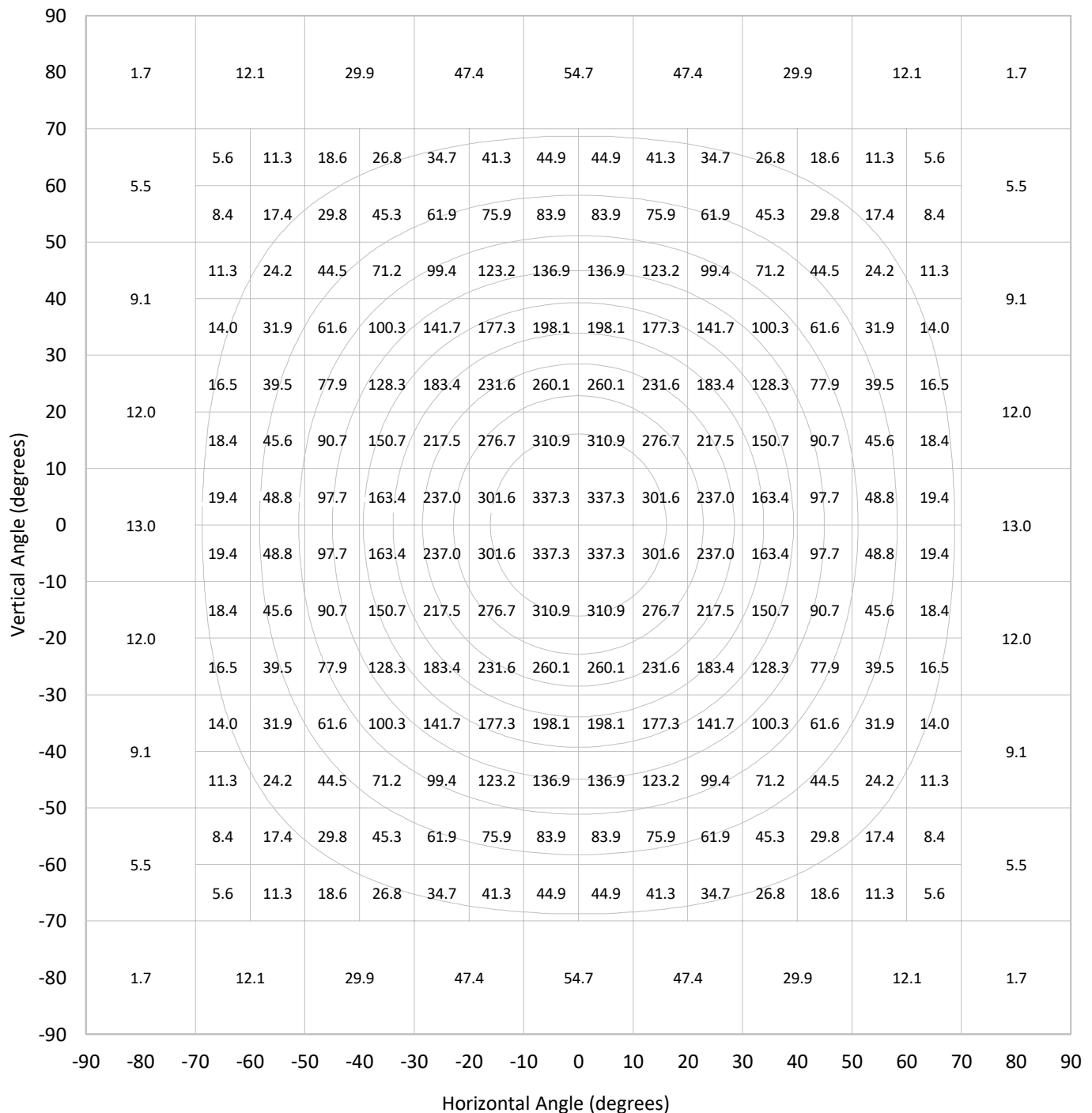
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Iso-Candela Plot



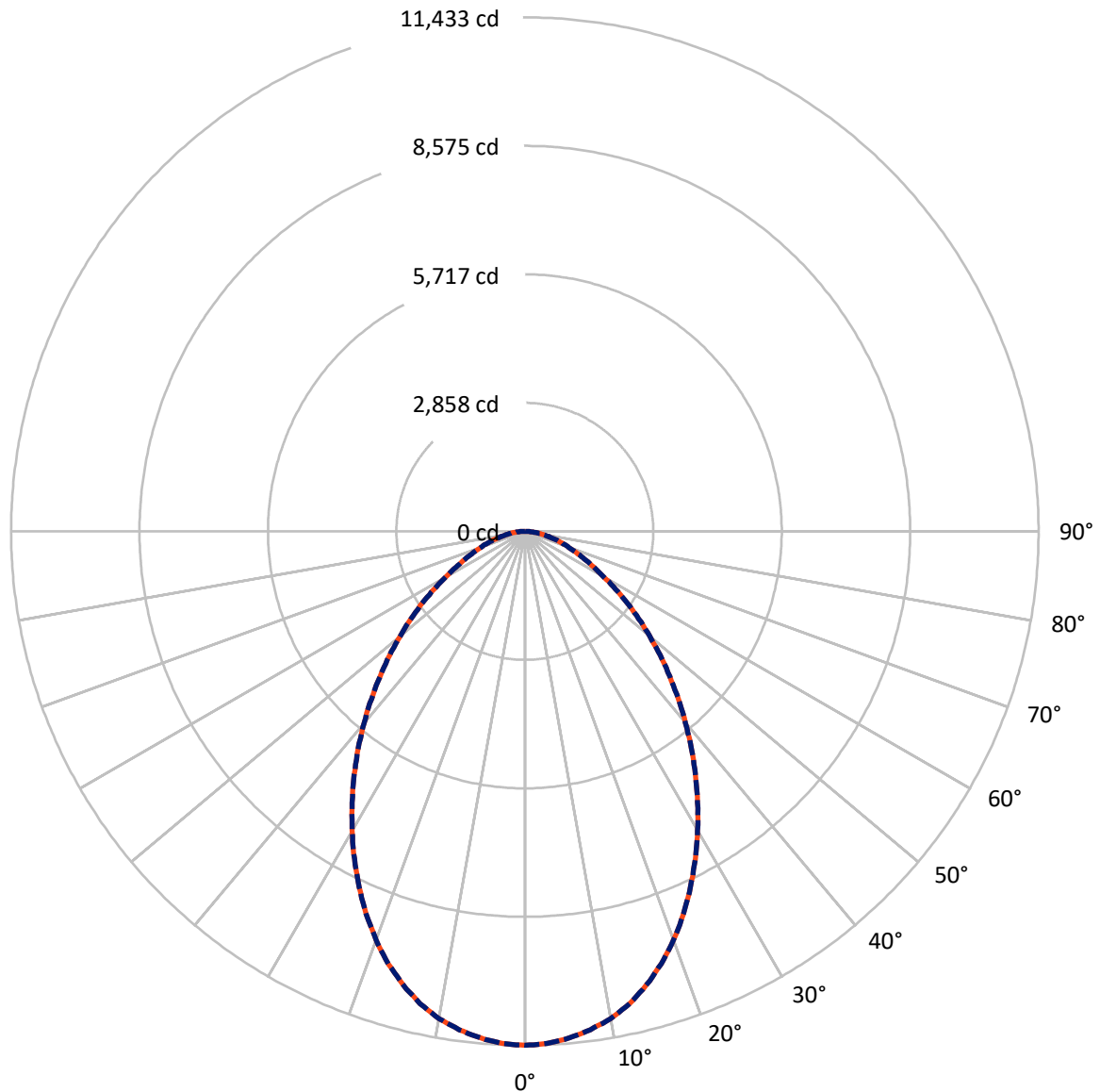
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Lumen Table



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Luminous Intensity Polar Plot

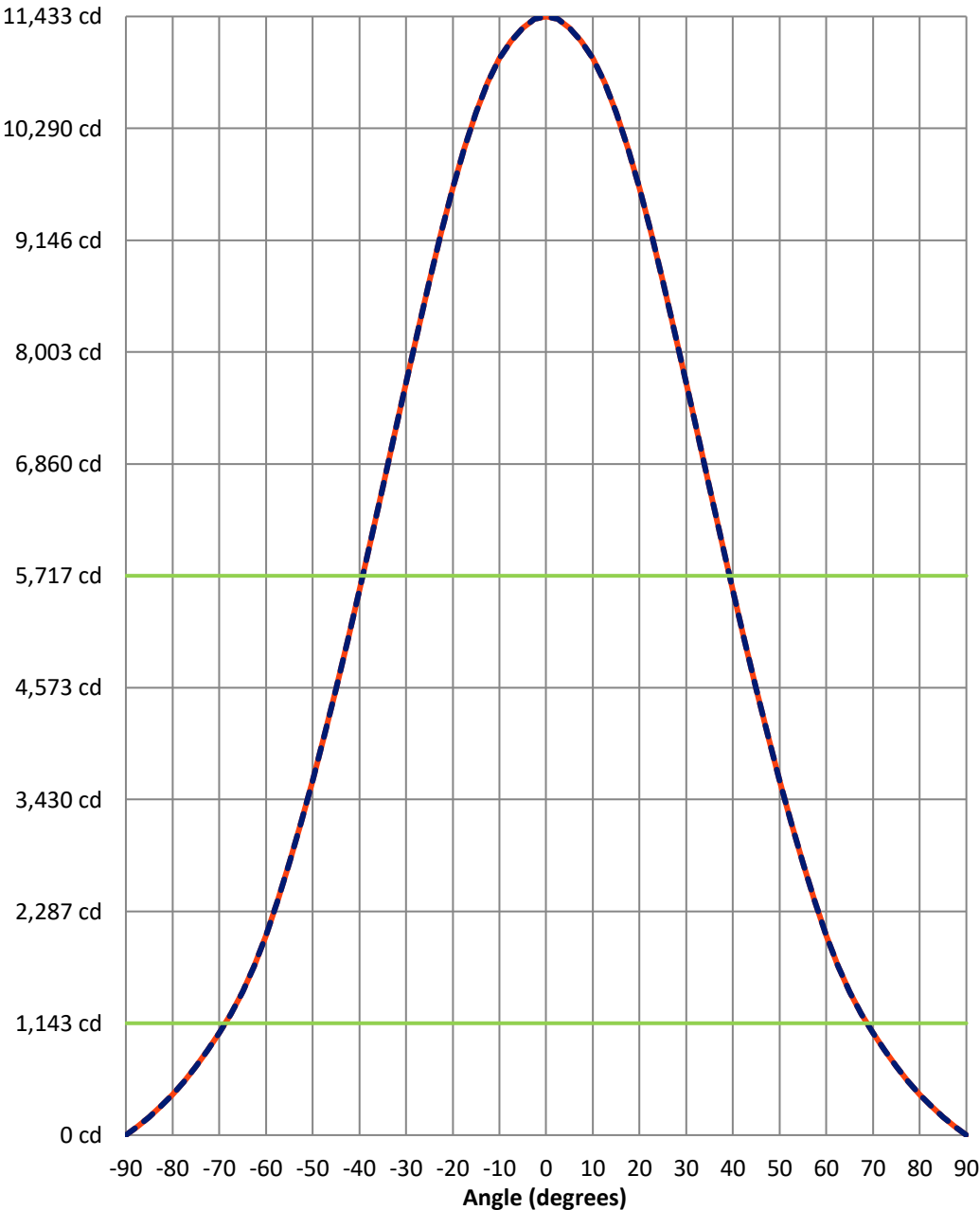


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg



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Luminous Intensity Plot



Beam:
H Angle: 78.6°
V Angle: 78.6°
Lumens: 8907.1
Efficiency: 43.3%

Field:
H Angle: 137.5°
V Angle: 137.5°
Lumens: 14585
Efficiency: 70.9%

Spill:
Lumens: 6000.3
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°	88.0	88.0	88.0	88.0	88.0	88.0	88.0	83.7	83.7	81.6	79.4
85°	184.6	184.6	184.6	184.6	184.6	180.3	178.1	176.0	173.8	169.6	167.4
82.5°	296.2	296.2	296.2	296.2	291.9	287.6	285.4	281.2	276.9	270.4	264.0
80°	414.2	414.2	414.2	414.2	407.8	403.5	397.1	392.8	386.3	377.7	369.2
77.5°	549.4	549.4	549.4	543.0	538.7	532.3	525.8	517.2	508.7	497.9	485.0
75°	701.8	701.8	701.8	693.2	686.8	680.4	669.6	658.9	646.0	631.0	613.8
72.5°	867.1	867.1	867.1	856.3	849.9	839.2	826.3	811.3	796.3	776.9	755.5
70°	1045.2	1045.2	1045.2	1032.3	1021.6	1010.9	993.7	976.5	955.1	933.6	907.9
67.5°	1238.4	1238.4	1238.4	1223.4	1210.5	1195.5	1176.1	1154.7	1128.9	1098.9	1068.8
65°	1463.7	1463.7	1455.1	1442.3	1427.2	1405.8	1382.2	1352.1	1319.9	1281.3	1240.5
62.5°	1729.9	1729.9	1717.0	1702.0	1682.6	1654.7	1622.6	1583.9	1538.8	1489.5	1440.1
60°	2038.9	2038.9	2023.9	2004.6	1976.7	1942.3	1899.4	1850.1	1794.3	1732.0	1671.9
57.5°	2395.2	2395.2	2375.9	2350.1	2315.8	2272.9	2219.2	2157.0	2086.1	2008.9	1933.8
55°	2781.5	2781.5	2757.9	2727.9	2687.1	2635.6	2571.2	2498.2	2412.4	2324.4	2227.8
52.5°	3191.4	3191.4	3163.5	3129.2	3082.0	3021.9	2948.9	2863.1	2764.3	2661.3	2547.6
50°	3622.8	3622.8	3590.6	3552.0	3498.4	3427.5	3343.8	3245.1	3135.6	3015.5	2884.5
47.5°	4084.3	4084.3	4047.8	4002.7	3938.3	3856.8	3758.1	3644.3	3519.8	3384.6	3236.5
45°	4558.6	4558.6	4517.8	4466.3	4395.5	4303.2	4193.7	4084.3	3925.5	3768.8	3597.1
42.5°	5052.2	5052.2	5005.0	4947.1	4865.5	4764.6	4640.2	4498.5	4341.8	4165.8	3979.1
40°	5565.2	5565.2	5511.5	5445.0	5354.9	5239.0	5099.5	4940.6	4764.6	4569.3	4363.3
37.5°	6088.9	6088.9	6028.8	5955.8	5854.9	5726.2	5569.5	5393.5	5196.0	4979.3	4751.8
35°	6616.8	6616.8	6550.3	6470.9	6359.3	6217.6	6048.1	5852.8	5633.9	5397.8	5142.4
32.5°	7155.5	7155.5	7082.6	6992.4	6865.8	6709.1	6522.4	6309.9	6088.9	5814.1	5535.1
30°	7687.8	7687.8	7608.4	7509.7	7374.5	7202.8	6998.9	6764.9	6505.2	6224.1	5923.6
27.5°	8211.5	8190.0	8123.5	8018.3	7870.2	7687.8	7466.7	7213.5	6932.3	6623.3	6301.3
25°	8726.6	8703.0	8630.0	8514.1	8355.3	8155.7	7917.5	7647.0	7344.4	7018.2	6666.2
22.5°	9220.2	9194.5	9117.2	8992.7	8823.2	8606.4	8351.0	8061.3	7739.3	7389.5	7018.2
20°	9677.4	9649.5	9570.1	9439.1	9263.1	9033.5	8763.1	8451.9	8108.5	7739.3	7344.4
17.5°	10089.4	10061.5	9977.8	9842.6	9677.4	9422.0	9143.0	8814.6	8451.9	8061.3	7647.0
15°	10452.2	10422.1	10336.3	10201.0	10012.2	9771.8	9477.8	9143.0	8763.1	8351.0	7917.5
12.5°	10761.2	10731.2	10643.2	10508.0	10312.7	10072.3	9771.8	9422.0	9033.5	8606.4	8155.7
10°	11005.9	10975.8	10892.1	10763.4	10561.6	10312.7	10012.2	9677.4	9263.1	8823.2	8355.3
7.5°	11181.9	11154.0	11076.7	10947.9	10763.4	10508.0	10201.0	9842.6	9439.1	8992.7	8514.1
5°	11314.9	11282.7	11205.5	11076.7	10892.1	10643.2	10336.3	9977.8	9570.1	9117.2	8630.0
2.5°	11407.2	11368.6	11282.7	11154.0	10975.8	10731.2	10422.1	10061.5	9649.5	9194.5	8703.0
0°	11433.0	11407.2	11314.9	11181.9	11005.9	10761.2	10452.2	10089.4	9677.4	9220.2	8726.6

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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°	77.3	77.3	75.1	73.0	70.8	66.5	64.4	62.2	60.1	55.8	53.7
85°	163.1	158.8	154.5	150.2	143.8	139.5	133.1	128.8	122.3	115.9	109.5
82.5°	257.5	251.1	242.5	236.1	227.5	216.8	208.2	197.5	186.7	178.1	167.4
80°	360.6	349.8	339.1	328.4	315.5	302.6	289.7	276.9	261.8	246.8	231.8
77.5°	472.2	457.1	442.1	425.0	409.9	392.8	375.6	358.4	339.1	319.8	300.5
75°	596.7	577.3	555.9	534.4	515.1	491.5	467.9	444.3	418.5	394.9	369.2
72.5°	731.9	708.3	682.5	656.7	628.8	598.8	568.8	536.6	506.5	476.5	444.3
70°	877.8	849.9	817.7	785.5	751.2	714.7	678.2	639.6	600.9	562.3	523.7
67.5°	1034.5	1000.1	961.5	922.9	880.0	837.0	794.1	749.0	701.8	654.6	609.5
65°	1201.9	1159.0	1113.9	1064.5	1015.2	965.8	914.3	860.6	807.0	751.2	701.8
62.5°	1388.6	1335.0	1277.0	1216.9	1161.1	1101.0	1045.2	978.7	914.3	852.1	789.8
60°	1605.4	1534.6	1463.7	1388.6	1317.8	1240.5	1171.8	1098.9	1025.9	955.1	882.1
57.5°	1847.9	1757.8	1671.9	1581.8	1487.3	1401.5	1313.5	1225.5	1143.9	1060.2	980.8
55°	2122.6	2013.2	1905.9	1794.3	1684.8	1577.5	1465.9	1367.2	1266.3	1171.8	1079.6
52.5°	2423.1	2298.6	2165.5	2038.9	1899.4	1766.3	1641.9	1517.4	1399.3	1285.6	1180.4
50°	2745.0	2599.1	2446.7	2292.2	2133.4	1976.7	1826.4	1680.5	1543.1	1410.1	1285.6
47.5°	3079.8	2914.6	2740.7	2564.7	2395.2	2204.2	2023.9	1858.6	1693.4	1543.1	1399.3
45°	3423.2	3236.5	3045.5	2845.9	2646.3	2440.3	2240.7	2038.9	1858.6	1680.5	1517.4
42.5°	3777.4	3567.0	3354.6	3133.5	2912.4	2687.1	2461.7	2240.7	2023.9	1826.4	1641.9
40°	4142.2	3910.4	3667.9	3427.5	3191.4	2933.9	2687.1	2440.3	2204.2	1976.7	1766.3
37.5°	4507.1	4253.8	3992.0	3721.6	3451.1	3191.4	2912.4	2646.3	2395.2	2133.4	1899.4
35°	4874.1	4595.1	4311.8	4017.7	3721.6	3427.5	3133.5	2845.9	2564.7	2292.2	2038.9
32.5°	5243.2	4938.5	4625.1	4311.8	3992.0	3667.9	3354.6	3045.5	2740.7	2446.7	2165.5
30°	5606.0	5275.4	4938.5	4595.1	4253.8	3910.4	3567.0	3236.5	2914.6	2599.1	2298.6
27.5°	5960.1	5606.0	5243.2	4874.1	4507.1	4142.2	3777.4	3423.2	3079.8	2745.0	2423.1
25°	6301.3	5923.6	5535.1	5142.4	4751.8	4363.3	3979.1	3597.1	3236.5	2884.5	2547.6
22.5°	6623.3	6224.1	5814.1	5397.8	4979.3	4569.3	4165.8	3768.8	3384.6	3015.5	2661.3
20°	6932.3	6505.2	6088.9	5633.9	5196.0	4764.6	4341.8	3925.5	3519.8	3135.6	2764.3
17.5°	7213.5	6764.9	6309.9	5852.8	5393.5	4940.6	4498.5	4084.3	3644.3	3245.1	2863.1
15°	7466.7	6998.9	6522.4	6048.1	5569.5	5099.5	4640.2	4193.7	3758.1	3343.8	2948.9
12.5°	7687.8	7202.8	6709.1	6217.6	5726.2	5239.0	4764.6	4303.2	3856.8	3427.5	3021.9
10°	7870.2	7374.5	6865.8	6359.3	5854.9	5354.9	4865.5	4395.5	3938.3	3498.4	3082.0
7.5°	8018.3	7509.7	6992.4	6470.9	5955.8	5445.0	4947.1	4466.3	4002.7	3552.0	3129.2
5°	8123.5	7608.4	7082.6	6550.3	6028.8	5511.5	5005.0	4517.8	4047.8	3590.6	3163.5
2.5°	8190.0	7687.8	7155.5	6616.8	6088.9	5565.2	5052.2	4558.6	4084.3	3622.8	3191.4
0°	8211.5	7687.8	7155.5	6616.8	6088.9	5565.2	5052.2	4558.6	4084.3	3622.8	3191.4

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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°	51.5	47.2	42.9	40.8	36.5	34.3	30.0	25.8	23.6	19.3	15.0
85°	103.0	94.4	88.0	81.6	75.1	66.5	60.1	53.7	45.1	38.6	30.0
82.5°	156.7	145.9	135.2	124.5	113.8	103.0	90.1	79.4	68.7	57.9	45.1
80°	216.8	199.6	184.6	169.6	154.5	139.5	122.3	107.3	90.1	75.1	60.1
77.5°	279.0	259.7	238.2	216.8	195.3	176.0	154.5	135.2	115.9	94.4	75.1
75°	345.5	319.8	296.2	268.3	242.5	214.6	188.9	163.1	139.5	115.9	90.1
72.5°	414.2	382.0	349.8	319.8	287.6	255.4	225.4	193.2	163.1	135.2	107.3
70°	485.0	446.4	407.8	371.3	334.8	296.2	261.8	225.4	188.9	154.5	122.3
67.5°	560.2	515.1	470.0	422.8	382.0	339.1	296.2	255.4	214.6	176.0	139.5
65°	641.7	588.1	532.3	482.9	429.2	382.0	334.8	287.6	242.5	195.3	154.5
62.5°	725.4	663.2	600.9	538.7	482.9	422.8	371.3	319.8	268.3	216.8	169.6
60°	811.3	740.5	669.6	600.9	532.3	470.0	407.8	349.8	296.2	238.2	184.6
57.5°	899.3	819.9	740.5	663.2	588.1	515.1	446.4	382.0	319.8	259.7	199.6
55°	989.4	899.3	811.3	725.4	641.7	560.2	485.0	414.2	345.5	279.0	216.8
52.5°	1079.6	980.8	882.1	789.8	701.8	609.5	523.7	444.3	369.2	300.5	231.8
50°	1171.8	1060.2	955.1	852.1	751.2	654.6	562.3	476.5	394.9	319.8	246.8
47.5°	1266.3	1143.9	1025.9	914.3	807.0	701.8	600.9	506.5	418.5	339.1	261.8
45°	1367.2	1225.5	1098.9	978.7	860.6	749.0	639.6	536.6	444.3	358.4	276.9
42.5°	1465.9	1313.5	1171.8	1045.2	914.3	794.1	678.2	568.8	467.9	375.6	289.7
40°	1577.5	1401.5	1240.5	1101.0	965.8	837.0	714.7	598.8	491.5	392.8	302.6
37.5°	1684.8	1487.3	1317.8	1161.1	1015.2	880.0	751.2	628.8	515.1	409.9	315.5
35°	1794.3	1581.8	1388.6	1216.9	1064.5	922.9	785.5	656.7	534.4	425.0	328.4
32.5°	1905.9	1671.9	1463.7	1277.0	1113.9	961.5	817.7	682.5	555.9	442.1	339.1
30°	2013.2	1757.8	1534.6	1335.0	1159.0	1000.1	849.9	708.3	577.3	457.1	349.8
27.5°	2122.6	1847.9	1605.4	1388.6	1201.9	1034.5	877.8	731.9	596.7	472.2	360.6
25°	2227.8	1933.8	1671.9	1440.1	1240.5	1068.8	907.9	755.5	613.8	485.0	369.2
22.5°	2324.4	2008.9	1732.0	1489.5	1281.3	1098.9	933.6	776.9	631.0	497.9	377.7
20°	2412.4	2086.1	1794.3	1538.8	1319.9	1128.9	955.1	796.3	646.0	508.7	386.3
17.5°	2498.2	2157.0	1850.1	1583.9	1352.1	1154.7	976.5	811.3	658.9	517.2	392.8
15°	2571.2	2219.2	1899.4	1622.6	1382.2	1176.1	993.7	826.3	669.6	525.8	397.1
12.5°	2635.6	2272.9	1942.3	1654.7	1405.8	1195.5	1010.9	839.2	680.4	532.3	403.5
10°	2687.1	2315.8	1976.7	1682.6	1427.2	1210.5	1021.6	849.9	686.8	538.7	407.8
7.5°	2727.9	2350.1	2004.6	1702.0	1442.3	1223.4	1032.3	856.3	693.2	543.0	414.2
5°	2757.9	2375.9	2023.9	1717.0	1455.1	1238.4	1045.2	867.1	701.8	549.4	414.2
2.5°	2781.5	2395.2	2038.9	1729.9	1463.7	1238.4	1045.2	867.1	701.8	549.4	414.2
0°	2781.5	2395.2	2038.9	1729.9	1463.7	1238.4	1045.2	867.1	701.8	549.4	414.2

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	10.7	8.6	4.3	0.0
85°	23.6	15.0	8.6	0.0
82.5°	34.3	23.6	10.7	0.0
80°	45.1	30.0	15.0	0.0
77.5°	57.9	38.6	19.3	0.0
75°	68.7	45.1	23.6	0.0
72.5°	79.4	53.7	25.8	0.0
70°	90.1	60.1	30.0	0.0
67.5°	103.0	66.5	34.3	0.0
65°	113.8	75.1	36.5	0.0
62.5°	124.5	81.6	40.8	0.0
60°	135.2	88.0	42.9	0.0
57.5°	145.9	94.4	47.2	0.0
55°	156.7	103.0	51.5	0.0
52.5°	167.4	109.5	53.7	0.0
50°	178.1	115.9	55.8	0.0
47.5°	186.7	122.3	60.1	0.0
45°	197.5	128.8	62.2	0.0
42.5°	208.2	133.1	64.4	0.0
40°	216.8	139.5	66.5	0.0
37.5°	227.5	143.8	70.8	0.0
35°	236.1	150.2	73.0	0.0
32.5°	242.5	154.5	75.1	0.0
30°	251.1	158.8	77.3	0.0
27.5°	257.5	163.1	77.3	0.0
25°	264.0	167.4	79.4	0.0
22.5°	270.4	169.6	81.6	0.0
20°	276.9	173.8	83.7	0.0
17.5°	281.2	176.0	83.7	0.0
15°	285.4	178.1	88.0	0.0
12.5°	287.6	180.3	88.0	0.0
10°	291.9	184.6	88.0	0.0
7.5°	296.2	184.6	88.0	0.0
5°	296.2	184.6	88.0	0.0
2.5°	296.2	184.6	88.0	0.0
0°	296.2	184.6	88.0	0.0

(END OF REPORT)