

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: P623917

Luminaire Tested: **IFLD-M-SA4E-735-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P623917
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4E-735-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (64) 3500K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

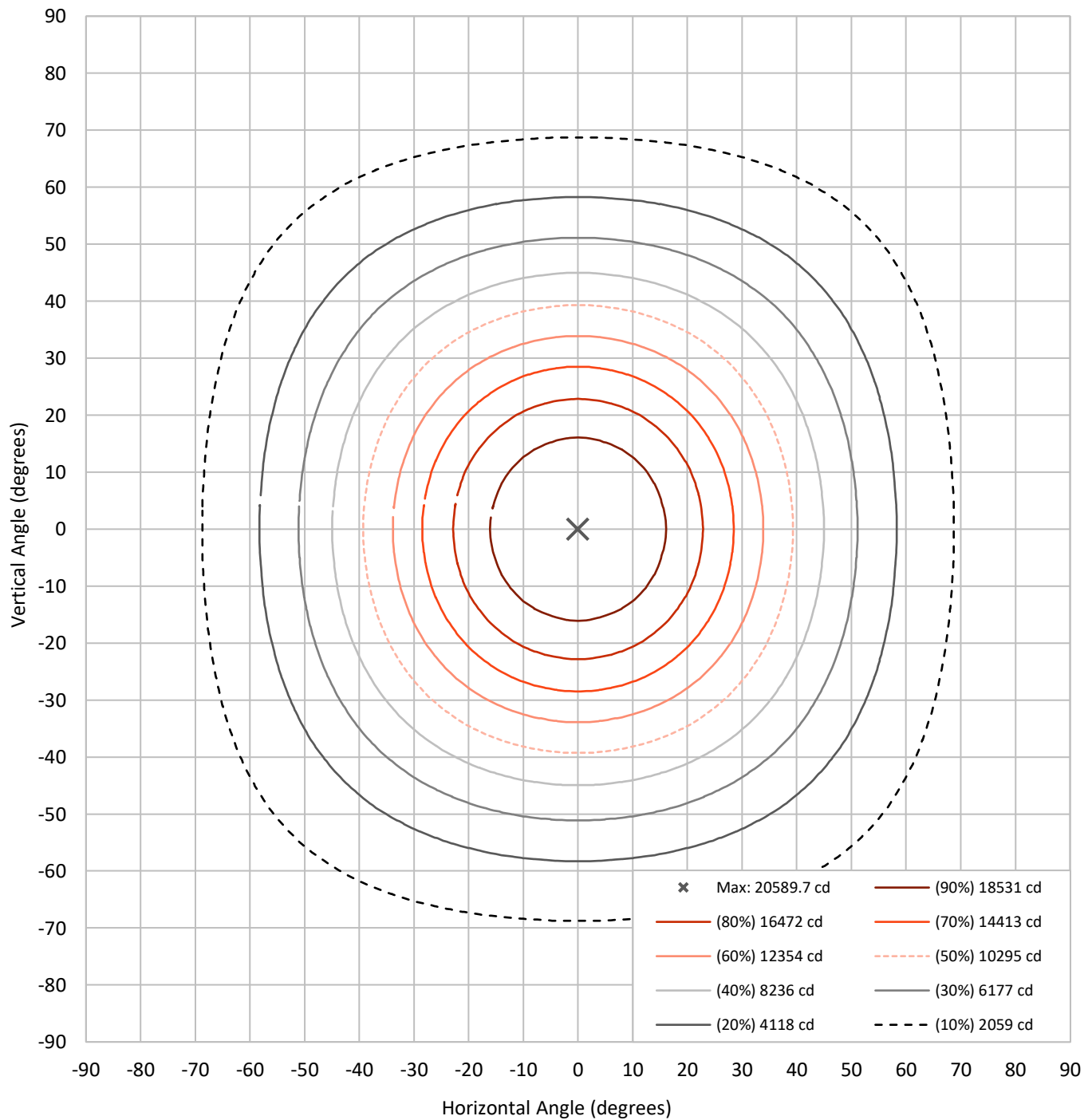
Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	37072.3 lumens	Max Intensity:	20589.7 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	117.8 lumens/watt		
Luminous Opening:	Rectangular (W 2' 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:	16040.8 lumens	Field Lumens:	26266.3 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%
Input Watts (W):	314.8		
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		



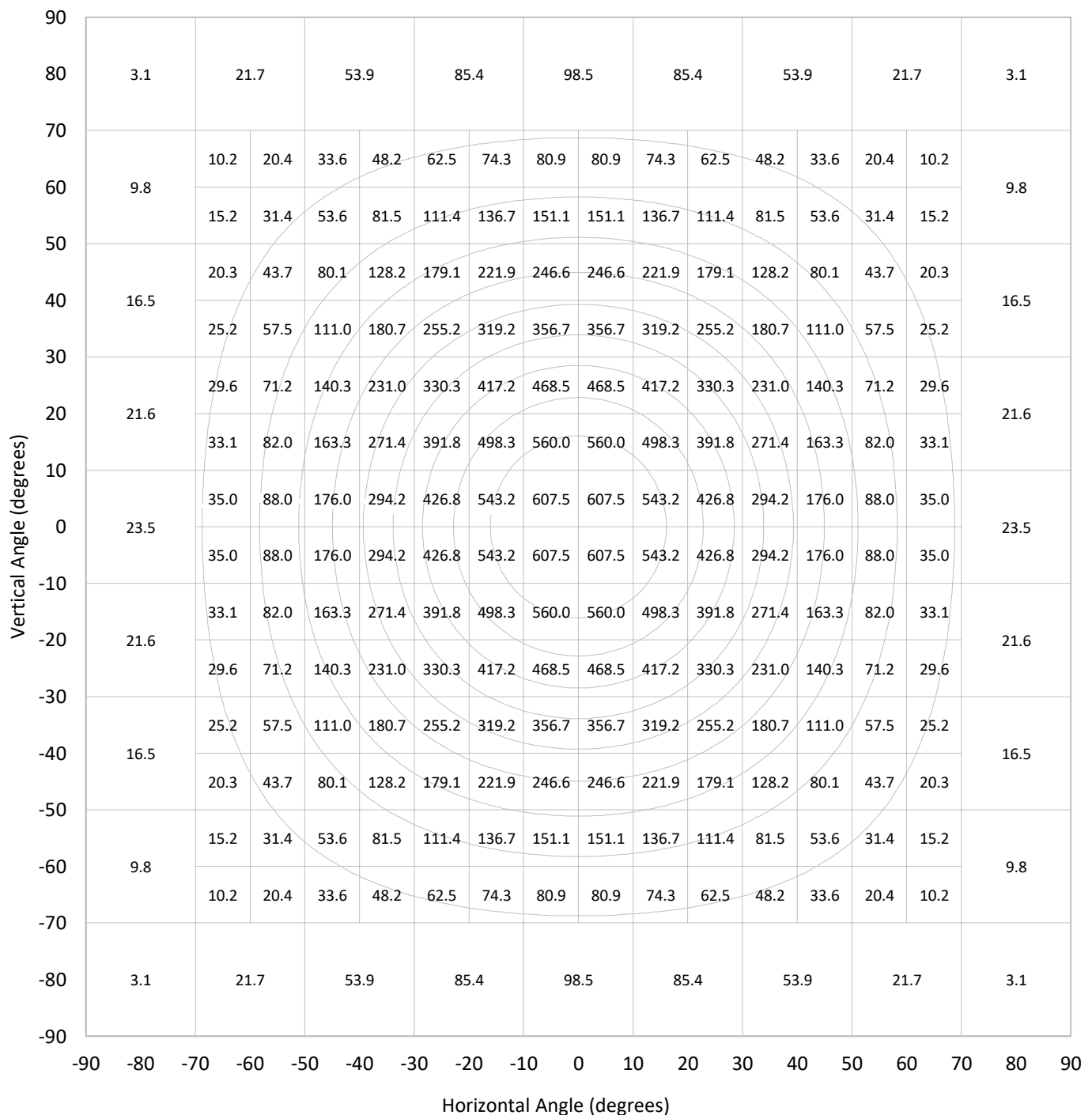
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Iso-Candela Plot



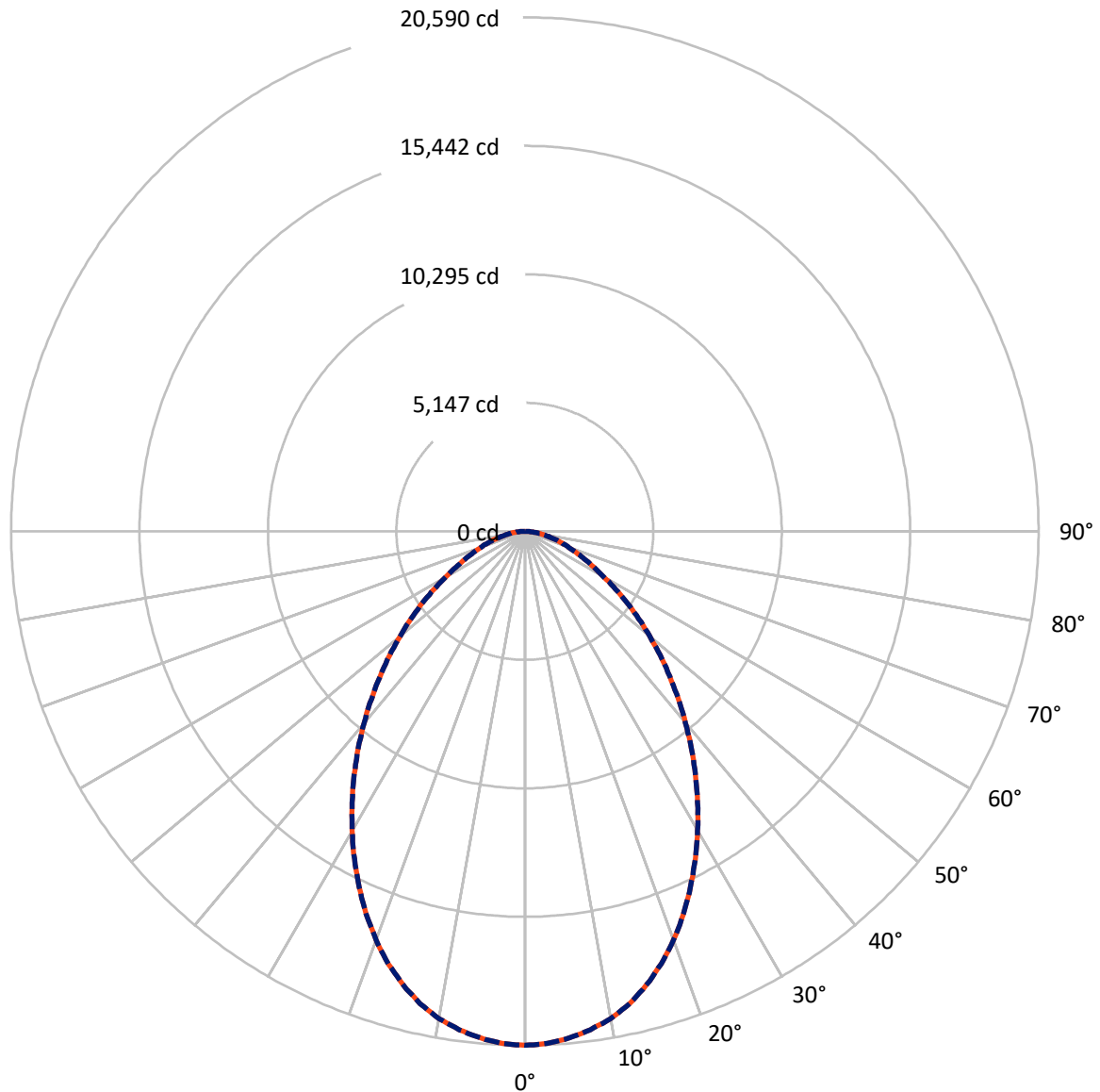
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Lumen Table



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Luminous Intensity Polar Plot

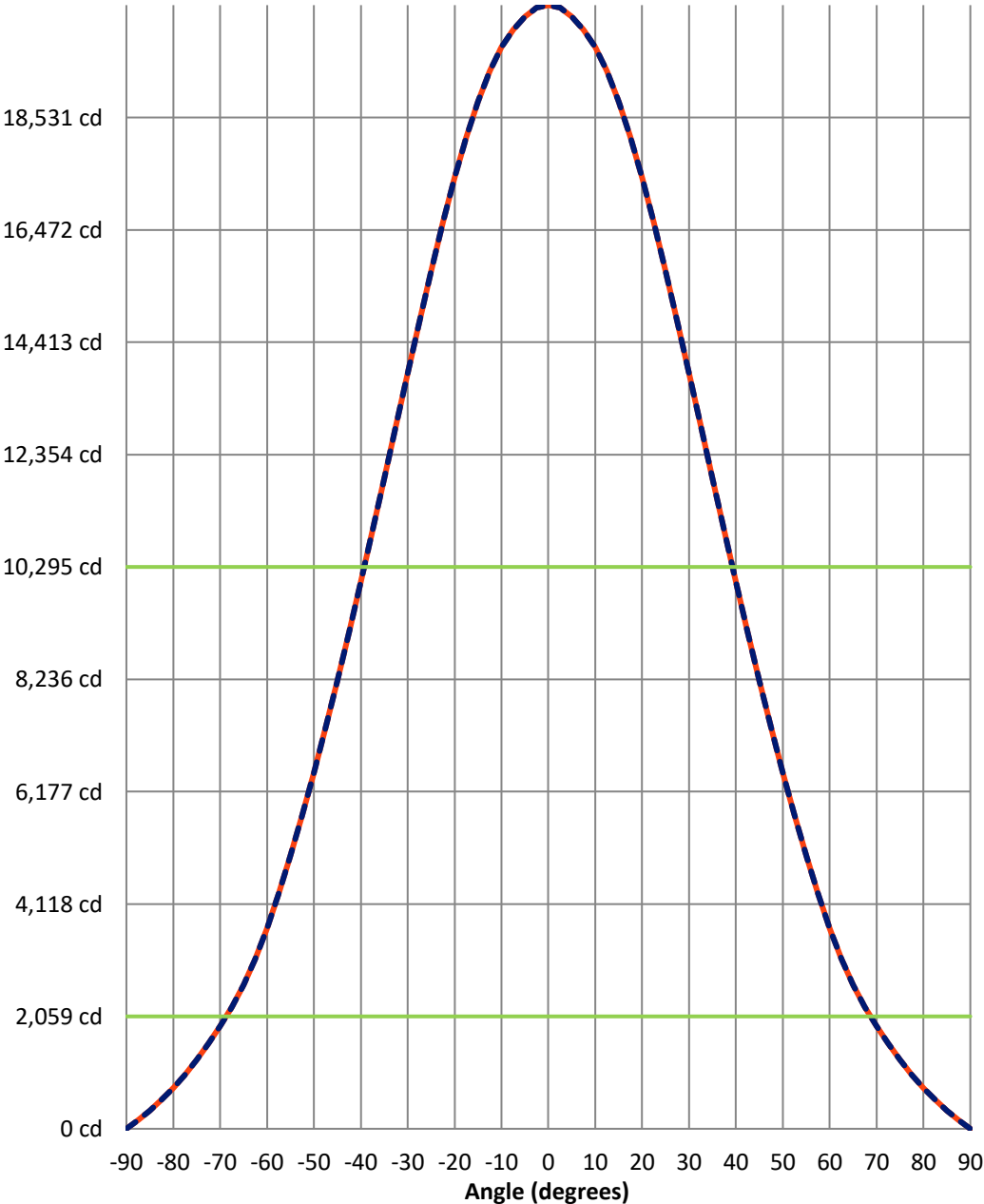


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg



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Luminous Intensity Plot



Beam:
H Angle: 78.6°
V Angle: 78.6°
Lumens: 16040.8
Efficiency: 43.3%

Field:
H Angle: 137.5°
V Angle: 137.5°
Lumens: 26266.3
Efficiency: 70.9%

Spill:
Lumens: 10806
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°	158.5	158.5	158.5	158.5	158.5	158.5	158.5	150.7	150.7	146.9	143.0
85°	332.4	332.4	332.4	332.4	332.4	324.7	320.8	316.9	313.1	305.3	301.5
82.5°	533.4	533.4	533.4	533.4	525.7	517.9	514.1	506.3	498.6	487.0	475.4
80°	746.0	746.0	746.0	746.0	734.4	726.7	715.1	707.3	695.7	680.3	664.8
77.5°	989.5	989.5	989.5	977.9	970.2	958.6	947.0	931.5	916.0	896.7	873.5
75°	1263.9	1263.9	1263.9	1248.4	1236.9	1225.3	1205.9	1186.6	1163.4	1136.4	1105.4
72.5°	1561.5	1561.5	1561.5	1542.2	1530.6	1511.3	1488.1	1461.0	1434.0	1399.2	1360.5
70°	1882.3	1882.3	1882.3	1859.1	1839.8	1820.5	1789.6	1758.7	1720.0	1681.3	1635.0
67.5°	2230.2	2230.2	2230.2	2203.1	2180.0	2152.9	2118.1	2079.5	2033.1	1979.0	1924.9
65°	2636.0	2636.0	2620.6	2597.4	2570.3	2531.7	2489.2	2435.1	2377.1	2307.5	2234.1
62.5°	3115.3	3115.3	3092.1	3065.1	3030.3	2980.0	2922.1	2852.5	2771.3	2682.4	2593.5
60°	3671.9	3671.9	3644.9	3610.1	3559.8	3498.0	3420.7	3331.8	3231.3	3119.2	3011.0
57.5°	4313.5	4313.5	4278.7	4232.4	4170.5	4093.2	3996.6	3884.5	3756.9	3617.8	3482.5
55°	5009.3	5009.3	4966.7	4912.6	4839.2	4746.4	4630.5	4499.1	4344.4	4186.0	4012.0
52.5°	5747.5	5747.5	5697.3	5635.4	5550.4	5442.2	5310.7	5156.1	4978.3	4792.8	4588.0
50°	6524.4	6524.4	6466.4	6396.9	6300.2	6172.7	6021.9	5844.1	5647.0	5430.6	5194.8
47.5°	7355.4	7355.4	7289.7	7208.5	7092.6	6945.7	6767.9	6563.1	6338.9	6095.4	5828.7
45°	8209.6	8209.6	8136.2	8043.4	7915.9	7749.7	7552.5	7355.4	7069.4	6787.2	6478.0
42.5°	9098.6	9098.6	9013.6	8909.2	8762.3	8580.7	8356.5	8101.4	7819.2	7502.3	7166.0
40°	10022.4	10022.4	9925.8	9805.9	9643.6	9434.9	9183.6	8897.6	8580.7	8228.9	7857.9
37.5°	10965.5	10965.5	10857.3	10725.8	10544.2	10312.3	10030.1	9713.2	9357.6	8967.2	8557.5
35°	11916.3	11916.3	11796.5	11653.5	11452.5	11197.4	10892.0	10540.3	10146.1	9720.9	9260.9
32.5°	12886.5	12886.5	12755.1	12592.7	12364.7	12082.5	11746.2	11363.6	10965.5	10470.7	9968.3
30°	13845.0	13845.0	13702.0	13524.2	13280.7	12971.5	12604.3	12183.0	11715.3	11209.0	10667.9
27.5°	14788.1	14749.5	14629.7	14440.3	14173.6	13845.0	13446.9	12990.8	12484.5	11927.9	11348.1
25°	15715.8	15673.3	15541.8	15333.1	15047.1	14687.6	14258.6	13771.6	13226.6	12639.1	12005.2
22.5°	16604.8	16558.4	16419.2	16195.1	15889.7	15499.3	15039.4	14517.6	13937.8	13307.8	12639.1
20°	17428.0	17377.8	17234.8	16999.0	16682.1	16268.5	15781.5	15221.0	14602.6	13937.8	13226.6
17.5°	18170.2	18119.9	17969.2	17725.7	17428.0	16968.1	16465.6	15874.2	15221.0	14517.6	13771.6
15°	18823.4	18769.3	18614.6	18371.1	18031.0	17598.1	17068.6	16465.6	15781.5	15039.4	14258.6
12.5°	19380.0	19325.8	19167.4	18923.9	18572.1	18139.2	17598.1	16968.1	16268.5	15499.3	14687.6
10°	19820.6	19766.5	19615.7	19383.8	19020.5	18572.1	18031.0	17428.0	16682.1	15889.7	15047.1
7.5°	20137.5	20087.3	19948.1	19716.2	19383.8	18923.9	18371.1	17725.7	16999.0	16195.1	15333.1
5°	20377.2	20319.2	20180.0	19948.1	19615.7	19167.4	18614.6	17969.2	17234.8	16419.2	15541.8
2.5°	20543.4	20473.8	20319.2	20087.3	19766.5	19325.8	18769.3	18119.9	17377.8	16558.4	15673.3
0°	20589.7	20543.4	20377.2	20137.5	19820.6	19380.0	18823.4	18170.2	17428.0	16604.8	15715.8

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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°	139.1	139.1	135.3	131.4	127.6	119.8	116.0	112.1	108.2	100.5	96.6
85°	293.8	286.0	278.3	270.6	259.0	251.2	239.6	231.9	220.3	208.7	197.1
82.5°	463.8	452.2	436.8	425.2	409.7	390.4	374.9	355.6	336.3	320.8	301.5
80°	649.3	630.0	610.7	591.4	568.2	545.0	521.8	498.6	471.6	444.5	417.4
77.5°	850.3	823.3	796.2	765.3	738.2	707.3	676.4	645.5	610.7	575.9	541.1
75°	1074.5	1039.7	1001.1	962.4	927.6	885.1	842.6	800.1	753.7	711.2	664.8
72.5°	1318.0	1275.5	1229.1	1182.7	1132.5	1078.4	1024.3	966.3	912.2	858.1	800.1
70°	1580.9	1530.6	1472.6	1414.7	1352.8	1287.1	1221.4	1151.8	1082.2	1012.7	943.1
67.5°	1863.0	1801.2	1731.6	1662.0	1584.7	1507.4	1430.1	1348.9	1263.9	1178.9	1097.7
65°	2164.5	2087.2	2006.0	1917.1	1828.2	1739.3	1646.6	1549.9	1453.3	1352.8	1263.9
62.5°	2500.8	2404.1	2299.8	2191.6	2091.1	1982.8	1882.3	1762.5	1646.6	1534.5	1422.4
60°	2891.1	2763.6	2636.0	2500.8	2373.2	2234.1	2110.4	1979.0	1847.6	1720.0	1588.6
57.5°	3327.9	3165.6	3011.0	2848.6	2678.6	2524.0	2365.5	2207.0	2060.1	1909.4	1766.4
55°	3822.7	3625.5	3432.3	3231.3	3034.2	2840.9	2639.9	2462.1	2280.4	2110.4	1944.2
52.5°	4363.8	4139.6	3900.0	3671.9	3420.7	3181.0	2956.9	2732.7	2520.1	2315.2	2125.8
50°	4943.5	4680.7	4406.3	4128.0	3842.0	3559.8	3289.3	3026.4	2779.1	2539.4	2315.2
47.5°	5546.5	5248.9	4935.8	4618.9	4313.5	3969.5	3644.9	3347.2	3049.6	2779.1	2520.1
45°	6164.9	5828.7	5484.7	5125.2	4765.8	4394.7	4035.2	3671.9	3347.2	3026.4	2732.7
42.5°	6802.7	6423.9	6041.3	5643.1	5245.0	4839.2	4433.3	4035.2	3644.9	3289.3	2956.9
40°	7459.8	7042.3	6605.6	6172.7	5747.5	5283.7	4839.2	4394.7	3969.5	3559.8	3181.0
37.5°	8116.9	7660.8	7189.2	6702.2	6215.2	5747.5	5245.0	4765.8	4313.5	3842.0	3420.7
35°	8777.8	8275.3	7765.1	7235.6	6702.2	6172.7	5643.1	5125.2	4618.9	4128.0	3671.9
32.5°	9442.6	8893.8	8329.4	7765.1	7189.2	6605.6	6041.3	5484.7	4935.8	4406.3	3900.0
30°	10095.8	9500.6	8893.8	8275.3	7660.8	7042.3	6423.9	5828.7	5248.9	4680.7	4139.6
27.5°	10733.6	10095.8	9442.6	8777.8	8116.9	7459.8	6802.7	6164.9	5546.5	4943.5	4363.8
25°	11348.1	10667.9	9968.3	9260.9	8557.5	7857.9	7166.0	6478.0	5828.7	5194.8	4588.0
22.5°	11927.9	11209.0	10470.7	9720.9	8967.2	8228.9	7502.3	6787.2	6095.4	5430.6	4792.8
20°	12484.5	11715.3	10965.5	10146.1	9357.6	8580.7	7819.2	7069.4	6338.9	5647.0	4978.3
17.5°	12990.8	12183.0	11363.6	10540.3	9713.2	8897.6	8101.4	7355.4	6563.1	5844.1	5156.1
15°	13446.9	12604.3	11746.2	10892.0	10030.1	9183.6	8356.5	7552.5	6767.9	6021.9	5310.7
12.5°	13845.0	12971.5	12082.5	11197.4	10312.3	9434.9	8580.7	7749.7	6945.7	6172.7	5442.2
10°	14173.6	13280.7	12364.7	11452.5	10544.2	9643.6	8762.3	7915.9	7092.6	6300.2	5550.4
7.5°	14440.3	13524.2	12592.7	11653.5	10725.8	9805.9	8909.2	8043.4	7208.5	6396.9	5635.4
5°	14629.7	13702.0	12755.1	11796.5	10857.3	9925.8	9013.6	8136.2	7289.7	6466.4	5697.3
2.5°	14749.5	13845.0	12886.5	11916.3	10965.5	10022.4	9098.6	8209.6	7355.4	6524.4	5747.5
0°	14788.1	13845.0	12886.5	11916.3	10965.5	10022.4	9098.6	8209.6	7355.4	6524.4	5747.5

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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°	92.8	85.0	77.3	73.4	65.7	61.8	54.1	46.4	42.5	34.8	27.1
85°	185.5	170.1	158.5	146.9	135.3	119.8	108.2	96.6	81.2	69.6	54.1
82.5°	282.2	262.8	243.5	224.2	204.9	185.5	162.3	143.0	123.7	104.4	81.2
80°	390.4	359.5	332.4	305.3	278.3	251.2	220.3	193.3	162.3	135.3	108.2
77.5°	502.5	467.7	429.0	390.4	351.7	316.9	278.3	243.5	208.7	170.1	135.3
75°	622.3	575.9	533.4	483.1	436.8	386.5	340.1	293.8	251.2	208.7	162.3
72.5°	746.0	688.0	630.0	575.9	517.9	460.0	405.8	347.9	293.8	243.5	193.3
70°	873.5	804.0	734.4	668.7	603.0	533.4	471.6	405.8	340.1	278.3	220.3
67.5°	1008.8	927.6	846.5	761.4	688.0	610.7	533.4	460.0	386.5	316.9	251.2
65°	1155.7	1059.1	958.6	869.7	773.0	688.0	603.0	517.9	436.8	351.7	278.3
62.5°	1306.4	1194.3	1082.2	970.2	869.7	761.4	668.7	575.9	483.1	390.4	305.3
60°	1461.0	1333.5	1205.9	1082.2	958.6	846.5	734.4	630.0	533.4	429.0	332.4
57.5°	1619.5	1476.5	1333.5	1194.3	1059.1	927.6	804.0	688.0	575.9	467.7	359.5
55°	1781.8	1619.5	1461.0	1306.4	1155.7	1008.8	873.5	746.0	622.3	502.5	390.4
52.5°	1944.2	1766.4	1588.6	1422.4	1263.9	1097.7	943.1	800.1	664.8	541.1	417.4
50°	2110.4	1909.4	1720.0	1534.5	1352.8	1178.9	1012.7	858.1	711.2	575.9	444.5
47.5°	2280.4	2060.1	1847.6	1646.6	1453.3	1263.9	1082.2	912.2	753.7	610.7	471.6
45°	2462.1	2207.0	1979.0	1762.5	1549.9	1348.9	1151.8	966.3	800.1	645.5	498.6
42.5°	2639.9	2365.5	2110.4	1882.3	1646.6	1430.1	1221.4	1024.3	842.6	676.4	521.8
40°	2840.9	2524.0	2234.1	1982.8	1739.3	1507.4	1287.1	1078.4	885.1	707.3	545.0
37.5°	3034.2	2678.6	2373.2	2091.1	1828.2	1584.7	1352.8	1132.5	927.6	738.2	568.2
35°	3231.3	2848.6	2500.8	2191.6	1917.1	1662.0	1414.7	1182.7	962.4	765.3	591.4
32.5°	3432.3	3011.0	2636.0	2299.8	2006.0	1731.6	1472.6	1229.1	1001.1	796.2	610.7
30°	3625.5	3165.6	2763.6	2404.1	2087.2	1801.2	1530.6	1275.5	1039.7	823.3	630.0
27.5°	3822.7	3327.9	2891.1	2500.8	2164.5	1863.0	1580.9	1318.0	1074.5	850.3	649.3
25°	4012.0	3482.5	3011.0	2593.5	2234.1	1924.9	1635.0	1360.5	1105.4	873.5	664.8
22.5°	4186.0	3617.8	3119.2	2682.4	2307.5	1979.0	1681.3	1399.2	1136.4	896.7	680.3
20°	4344.4	3756.9	3231.3	2771.3	2377.1	2033.1	1720.0	1434.0	1163.4	916.0	695.7
17.5°	4499.1	3884.5	3331.8	2852.5	2435.1	2079.5	1758.7	1461.0	1186.6	931.5	707.3
15°	4630.5	3996.6	3420.7	2922.1	2489.2	2118.1	1789.6	1488.1	1205.9	947.0	715.1
12.5°	4746.4	4093.2	3498.0	2980.0	2531.7	2152.9	1820.5	1511.3	1225.3	958.6	726.7
10°	4839.2	4170.5	3559.8	3030.3	2570.3	2180.0	1839.8	1530.6	1236.9	970.2	734.4
7.5°	4912.6	4232.4	3610.1	3065.1	2597.4	2203.1	1859.1	1542.2	1248.4	977.9	746.0
5°	4966.7	4278.7	3644.9	3092.1	2620.6	2230.2	1882.3	1561.5	1263.9	989.5	746.0
2.5°	5009.3	4313.5	3671.9	3115.3	2636.0	2230.2	1882.3	1561.5	1263.9	989.5	746.0
0°	5009.3	4313.5	3671.9	3115.3	2636.0	2230.2	1882.3	1561.5	1263.9	989.5	746.0

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	19.3	15.5	7.7	0.0
85°	42.5	27.1	15.5	0.0
82.5°	61.8	42.5	19.3	0.0
80°	81.2	54.1	27.1	0.0
77.5°	104.4	69.6	34.8	0.0
75°	123.7	81.2	42.5	0.0
72.5°	143.0	96.6	46.4	0.0
70°	162.3	108.2	54.1	0.0
67.5°	185.5	119.8	61.8	0.0
65°	204.9	135.3	65.7	0.0
62.5°	224.2	146.9	73.4	0.0
60°	243.5	158.5	77.3	0.0
57.5°	262.8	170.1	85.0	0.0
55°	282.2	185.5	92.8	0.0
52.5°	301.5	197.1	96.6	0.0
50°	320.8	208.7	100.5	0.0
47.5°	336.3	220.3	108.2	0.0
45°	355.6	231.9	112.1	0.0
42.5°	374.9	239.6	116.0	0.0
40°	390.4	251.2	119.8	0.0
37.5°	409.7	259.0	127.6	0.0
35°	425.2	270.6	131.4	0.0
32.5°	436.8	278.3	135.3	0.0
30°	452.2	286.0	139.1	0.0
27.5°	463.8	293.8	139.1	0.0
25°	475.4	301.5	143.0	0.0
22.5°	487.0	305.3	146.9	0.0
20°	498.6	313.1	150.7	0.0
17.5°	506.3	316.9	150.7	0.0
15°	514.1	320.8	158.5	0.0
12.5°	517.9	324.7	158.5	0.0
10°	525.7	332.4	158.5	0.0
7.5°	533.4	332.4	158.5	0.0
5°	533.4	332.4	158.5	0.0
2.5°	533.4	332.4	158.5	0.0
0°	533.4	332.4	158.5	0.0

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