

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: P623888

Luminaire Tested: **IFLD-M-SA4E-730-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P623888
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4E-730-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (64) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

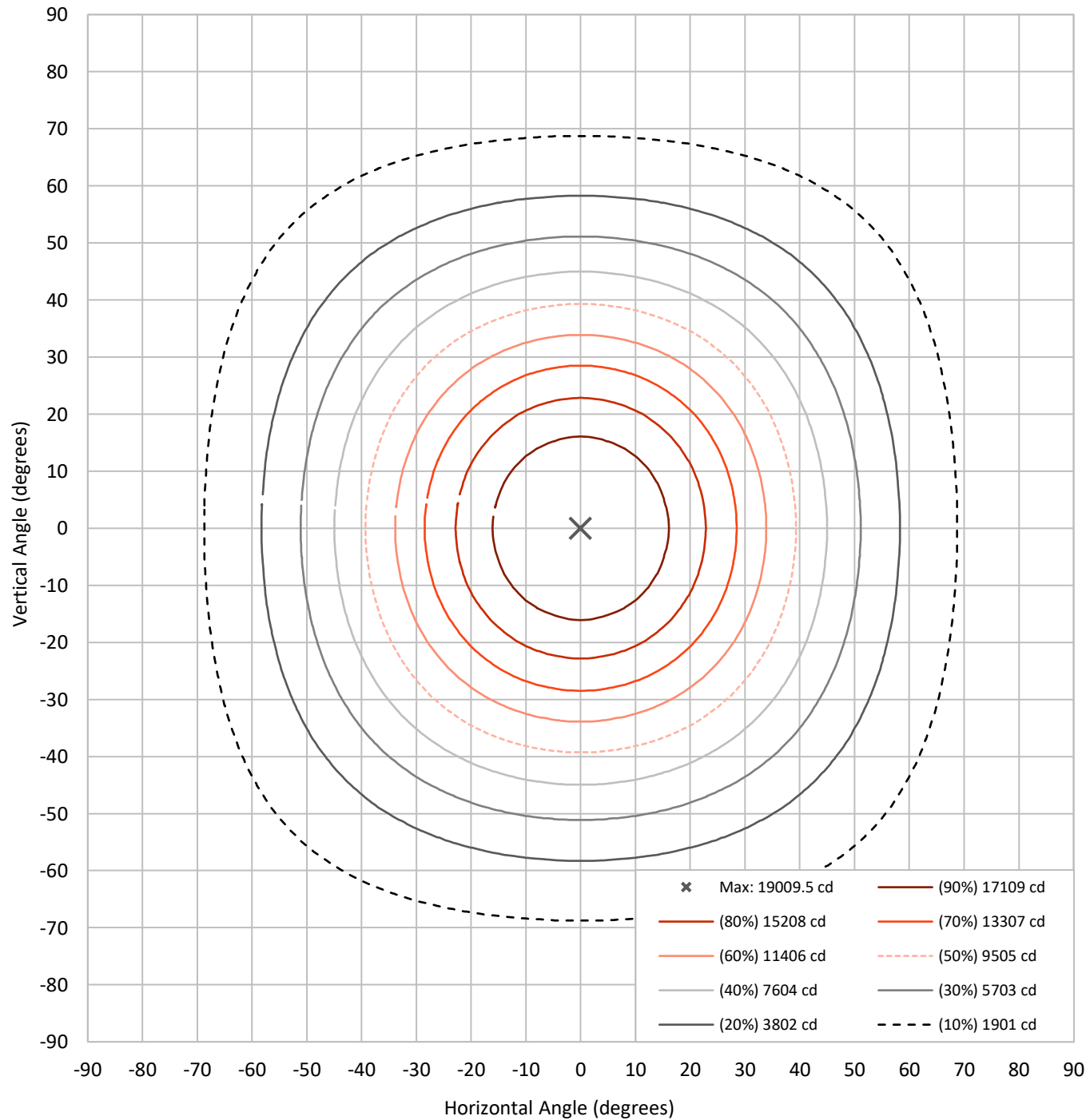
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	34226.9 lumens	Max Intensity:	19009.5 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	108.7 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 0.5' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	14809.7 lumens	Field Lumens:	24250.3 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		





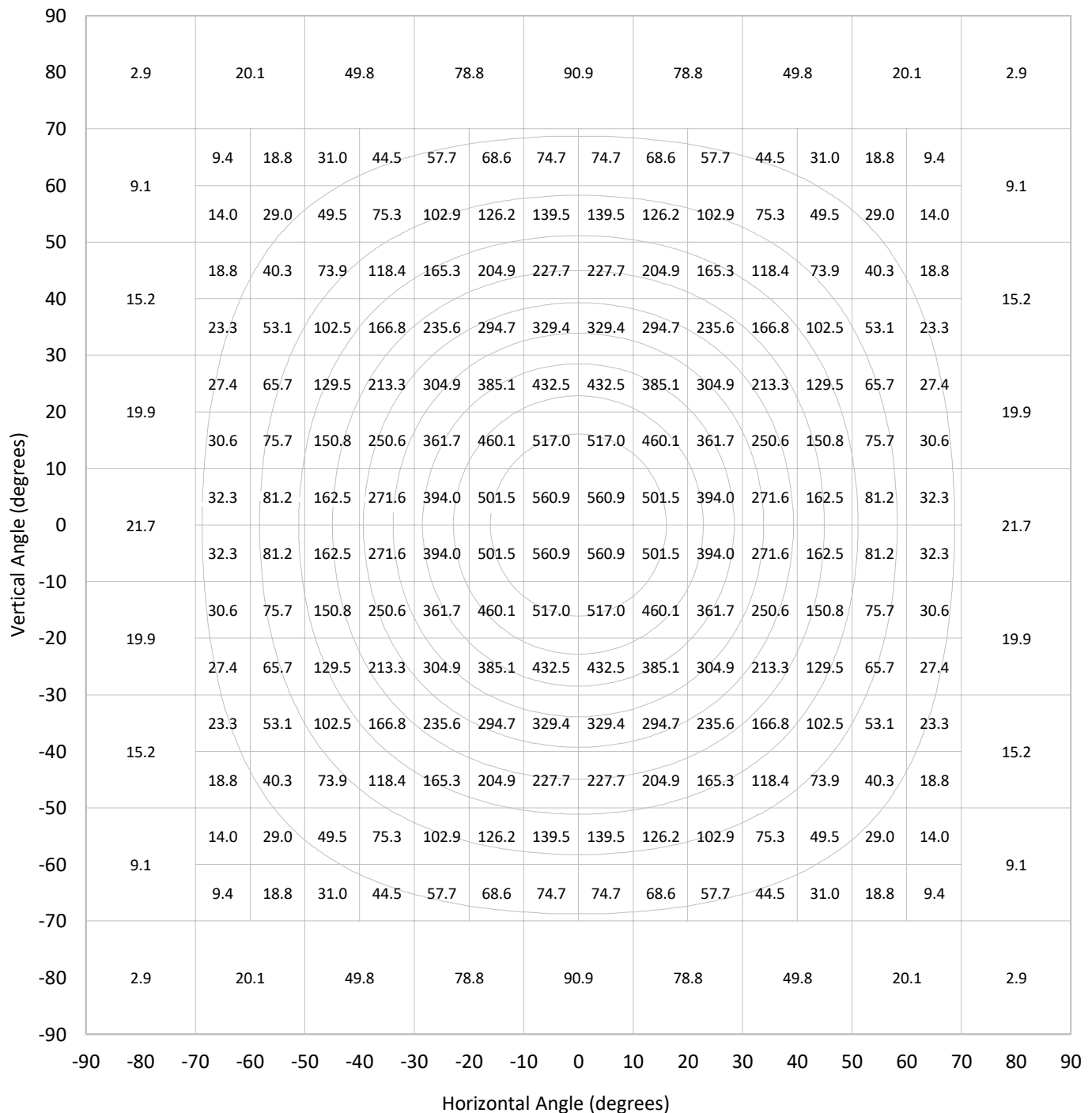
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Iso-Candela Plot



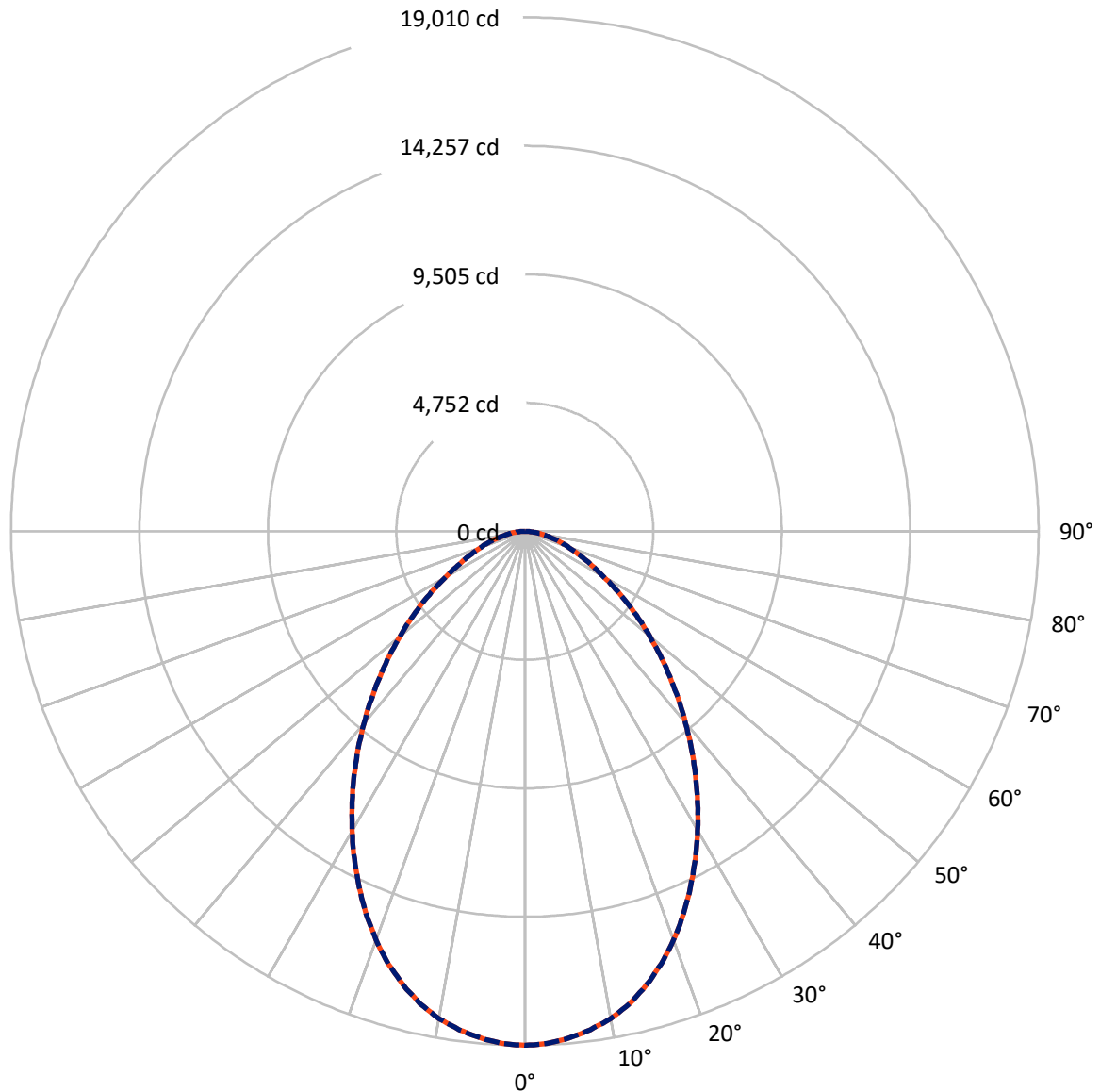
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Lumen Table



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Luminous Intensity Polar Plot

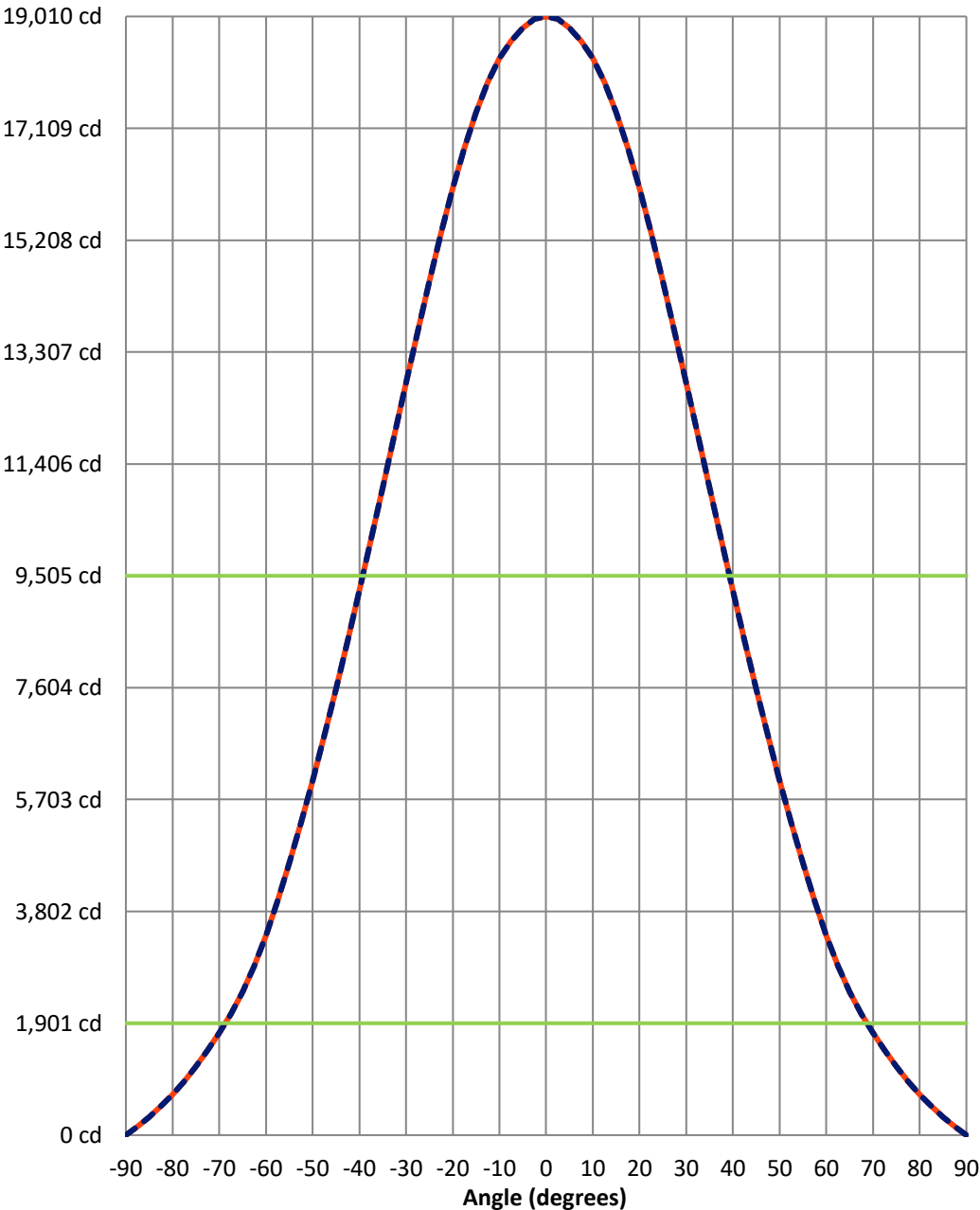


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg



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Luminous Intensity Plot



Beam:
H Angle: 78.6°
V Angle: 78.6°
Lumens: 14809.7
Efficiency: 43.3%

Field:
H Angle: 137.5°
V Angle: 137.5°
Lumens: 24250.3
Efficiency: 70.9%

Spill:
Lumens: 9976.6
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°	146.3	146.3	146.3	146.3	146.3	146.3	146.3	139.2	139.2	135.6	132.0
85°	306.9	306.9	306.9	306.9	306.9	299.8	296.2	292.6	289.0	281.9	278.3
82.5°	492.5	492.5	492.5	492.5	485.3	478.2	474.6	467.5	460.3	449.6	438.9
80°	688.7	688.7	688.7	688.7	678.0	670.9	660.2	653.0	642.3	628.1	613.8
77.5°	913.5	913.5	913.5	902.8	895.7	885.0	874.3	860.0	845.7	827.9	806.5
75°	1166.9	1166.9	1166.9	1152.6	1141.9	1131.2	1113.4	1095.5	1074.1	1049.1	1020.6
72.5°	1441.7	1441.7	1441.7	1423.8	1413.1	1395.3	1373.9	1348.9	1323.9	1291.8	1256.1
70°	1737.9	1737.9	1737.9	1716.5	1698.6	1680.8	1652.2	1623.7	1588.0	1552.3	1509.5
67.5°	2059.0	2059.0	2059.0	2034.1	2012.6	1987.7	1955.5	1919.9	1877.0	1827.1	1777.1
65°	2433.7	2433.7	2419.4	2398.0	2373.1	2337.4	2298.1	2248.2	2194.6	2130.4	2062.6
62.5°	2876.2	2876.2	2854.8	2829.8	2797.7	2751.3	2697.8	2633.6	2558.6	2476.5	2394.5
60°	3390.1	3390.1	3365.1	3333.0	3286.6	3229.5	3158.1	3076.1	2983.3	2879.8	2779.9
57.5°	3982.5	3982.5	3950.3	3907.5	3850.4	3779.1	3689.8	3586.4	3468.6	3340.1	3215.2
55°	4624.8	4624.8	4585.5	4535.6	4467.8	4382.1	4275.1	4153.7	4011.0	3864.7	3704.1
52.5°	5306.4	5306.4	5260.0	5202.9	5124.4	5024.5	4903.1	4760.4	4596.2	4425.0	4235.8
50°	6023.6	6023.6	5970.1	5905.9	5816.7	5698.9	5559.7	5395.6	5213.6	5013.8	4796.1
47.5°	6790.9	6790.9	6730.2	6655.3	6548.2	6412.6	6248.5	6059.3	5852.4	5627.5	5381.3
45°	7579.5	7579.5	7511.7	7426.1	7308.3	7154.9	6972.9	6790.9	6526.8	6266.3	5980.8
42.5°	8400.3	8400.3	8321.8	8225.4	8089.8	7922.1	7715.1	7479.6	7219.1	6926.5	6616.0
40°	9253.1	9253.1	9163.9	9053.3	8903.4	8710.7	8478.8	8214.7	7922.1	7597.4	7254.8
37.5°	10123.9	10123.9	10023.9	9902.6	9734.9	9520.8	9260.3	8967.7	8639.4	8278.9	7900.7
35°	11001.7	11001.7	10891.1	10759.1	10573.5	10338.0	10056.1	9731.3	9367.3	8974.8	8550.2
32.5°	11897.4	11897.4	11776.1	11626.2	11415.7	11155.2	10844.7	10491.4	10123.9	9667.1	9203.2
30°	12782.4	12782.4	12650.4	12486.2	12261.4	11975.9	11636.9	11247.9	10816.2	10348.7	9849.1
27.5°	13653.1	13617.4	13506.8	13332.0	13085.7	12782.4	12414.8	11993.8	11526.3	11012.4	10477.1
25°	14509.6	14470.3	14349.0	14156.3	13892.2	13560.3	13164.2	12714.6	12211.4	11669.0	11083.8
22.5°	15330.3	15287.5	15159.0	14952.1	14670.1	14309.7	13885.1	13403.3	12868.0	12286.4	11669.0
20°	16090.4	16044.0	15912.0	15694.3	15401.7	15019.9	14570.2	14052.8	13481.8	12868.0	12211.4
17.5°	16775.6	16729.2	16590.0	16365.2	16090.4	15665.8	15201.9	14655.9	14052.8	13403.3	12714.6
15°	17378.6	17328.7	17185.9	16961.1	16647.1	16247.4	15758.5	15201.9	14570.2	13885.1	13164.2
12.5°	17892.5	17842.6	17696.2	17471.4	17146.7	16747.0	16247.4	15665.8	15019.9	14309.7	13560.3
10°	18299.3	18249.4	18110.2	17896.1	17560.6	17146.7	16647.1	16090.4	15401.7	14670.1	13892.2
7.5°	18591.9	18545.5	18417.1	18203.0	17896.1	17471.4	16961.1	16365.2	15694.3	14952.1	14156.3
5°	18813.2	18759.7	18631.2	18417.1	18110.2	17696.2	17185.9	16590.0	15912.0	15159.0	14349.0
2.5°	18966.6	18902.4	18759.7	18545.5	18249.4	17842.6	17328.7	16729.2	16044.0	15287.5	14470.3
0°	19009.5	18966.6	18813.2	18591.9	18299.3	17892.5	17378.6	16775.6	16090.4	15330.3	14509.6

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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°	128.5	128.5	124.9	121.3	117.8	110.6	107.1	103.5	99.9	92.8	89.2
85°	271.2	264.1	256.9	249.8	239.1	232.0	221.2	214.1	203.4	192.7	182.0
82.5°	428.2	417.5	403.2	392.5	378.3	360.4	346.1	328.3	310.5	296.2	278.3
80°	599.5	581.7	563.8	546.0	524.6	503.2	481.7	460.3	435.4	410.4	385.4
77.5°	785.1	760.1	735.1	706.6	681.6	653.0	624.5	595.9	563.8	531.7	499.6
75°	992.0	959.9	924.2	888.6	856.4	817.2	777.9	738.7	695.9	656.6	613.8
72.5°	1216.9	1177.6	1134.8	1092.0	1045.6	995.6	945.7	892.1	842.2	792.2	738.7
70°	1459.5	1413.1	1359.6	1306.1	1249.0	1188.3	1127.6	1063.4	999.2	934.9	870.7
67.5°	1720.0	1662.9	1598.7	1534.5	1463.1	1391.7	1320.3	1245.4	1166.9	1088.4	1013.5
65°	1998.4	1927.0	1852.1	1770.0	1687.9	1605.8	1520.2	1431.0	1341.8	1249.0	1166.9
62.5°	2308.8	2219.6	2123.3	2023.3	1930.6	1830.6	1737.9	1627.2	1520.2	1416.7	1313.2
60°	2669.2	2551.5	2433.7	2308.8	2191.1	2062.6	1948.4	1827.1	1705.7	1588.0	1466.7
57.5°	3072.5	2922.6	2779.9	2630.0	2473.0	2330.2	2183.9	2037.6	1902.0	1762.8	1630.8
55°	3529.3	3347.3	3168.8	2983.3	2801.3	2622.9	2437.3	2273.1	2105.4	1948.4	1795.0
52.5°	4028.8	3821.9	3600.6	3390.1	3158.1	2936.9	2729.9	2522.9	2326.7	2137.5	1962.7
50°	4564.1	4321.5	4068.1	3811.2	3547.1	3286.6	3036.8	2794.1	2565.8	2344.5	2137.5
47.5°	5120.8	4846.0	4557.0	4264.4	3982.5	3664.9	3365.1	3090.3	2815.6	2565.8	2326.7
45°	5691.8	5381.3	5063.7	4731.8	4400.0	4057.4	3725.5	3390.1	3090.3	2794.1	2522.9
42.5°	6280.6	5930.9	5577.6	5210.0	4842.5	4467.8	4093.1	3725.5	3365.1	3036.8	2729.9
40°	6887.2	6501.8	6098.6	5698.9	5306.4	4878.2	4467.8	4057.4	3664.9	3286.6	2936.9
37.5°	7493.9	7072.8	6637.4	6187.8	5738.2	5306.4	4842.5	4400.0	3982.5	3547.1	3158.1
35°	8104.1	7640.2	7169.1	6680.3	6187.8	5698.9	5210.0	4731.8	4264.4	3811.2	3390.1
32.5°	8717.9	8211.1	7690.1	7169.1	6637.4	6098.6	5577.6	5063.7	4557.0	4068.1	3600.6
30°	9320.9	8771.4	8211.1	7640.2	7072.8	6501.8	5930.9	5381.3	4846.0	4321.5	3821.9
27.5°	9909.8	9320.9	8717.9	8104.1	7493.9	6887.2	6280.6	5691.8	5120.8	4564.1	4028.8
25°	10477.1	9849.1	9203.2	8550.2	7900.7	7254.8	6616.0	5980.8	5381.3	4796.1	4235.8
22.5°	11012.4	10348.7	9667.1	8974.8	8278.9	7597.4	6926.5	6266.3	5627.5	5013.8	4425.0
20°	11526.3	10816.2	10123.9	9367.3	8639.4	7922.1	7219.1	6526.8	5852.4	5213.6	4596.2
17.5°	11993.8	11247.9	10491.4	9731.3	8967.7	8214.7	7479.6	6790.9	6059.3	5395.6	4760.4
15°	12414.8	11636.9	10844.7	10056.1	9260.3	8478.8	7715.1	6972.9	6248.5	5559.7	4903.1
12.5°	12782.4	11975.9	11155.2	10338.0	9520.8	8710.7	7922.1	7154.9	6412.6	5698.9	5024.5
10°	13085.7	12261.4	11415.7	10573.5	9734.9	8903.4	8089.8	7308.3	6548.2	5816.7	5124.4
7.5°	13332.0	12486.2	11626.2	10759.1	9902.6	9053.3	8225.4	7426.1	6655.3	5905.9	5202.9
5°	13506.8	12650.4	11776.1	10891.1	10023.9	9163.9	8321.8	7511.7	6730.2	5970.1	5260.0
2.5°	13617.4	12782.4	11897.4	11001.7	10123.9	9253.1	8400.3	7579.5	6790.9	6023.6	5306.4
0°	13653.1	12782.4	11897.4	11001.7	10123.9	9253.1	8400.3	7579.5	6790.9	6023.6	5306.4

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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°	85.6	78.5	71.4	67.8	60.7	57.1	50.0	42.8	39.3	32.1	25.0
85°	171.3	157.0	146.3	135.6	124.9	110.6	99.9	89.2	74.9	64.2	50.0
82.5°	260.5	242.7	224.8	207.0	189.1	171.3	149.9	132.0	114.2	96.3	74.9
80°	360.4	331.9	306.9	281.9	256.9	232.0	203.4	178.4	149.9	124.9	99.9
77.5°	463.9	431.8	396.1	360.4	324.7	292.6	256.9	224.8	192.7	157.0	124.9
75°	574.5	531.7	492.5	446.1	403.2	356.9	314.0	271.2	232.0	192.7	149.9
72.5°	688.7	635.2	581.7	531.7	478.2	424.7	374.7	321.2	271.2	224.8	178.4
70°	806.5	742.3	678.0	617.4	556.7	492.5	435.4	374.7	314.0	256.9	203.4
67.5°	931.4	856.4	781.5	703.0	635.2	563.8	492.5	424.7	356.9	292.6	232.0
65°	1067.0	977.8	885.0	802.9	713.7	635.2	556.7	478.2	403.2	324.7	256.9
62.5°	1206.2	1102.7	999.2	895.7	802.9	703.0	617.4	531.7	446.1	360.4	281.9
60°	1348.9	1231.1	1113.4	999.2	885.0	781.5	678.0	581.7	492.5	396.1	306.9
57.5°	1495.2	1363.2	1231.1	1102.7	977.8	856.4	742.3	635.2	531.7	431.8	331.9
55°	1645.1	1495.2	1348.9	1206.2	1067.0	931.4	806.5	688.7	574.5	463.9	360.4
52.5°	1795.0	1630.8	1466.7	1313.2	1166.9	1013.5	870.7	738.7	613.8	499.6	385.4
50°	1948.4	1762.8	1588.0	1416.7	1249.0	1088.4	934.9	792.2	656.6	531.7	410.4
47.5°	2105.4	1902.0	1705.7	1520.2	1341.8	1166.9	999.2	842.2	695.9	563.8	435.4
45°	2273.1	2037.6	1827.1	1627.2	1431.0	1245.4	1063.4	892.1	738.7	595.9	460.3
42.5°	2437.3	2183.9	1948.4	1737.9	1520.2	1320.3	1127.6	945.7	777.9	624.5	481.7
40°	2622.9	2330.2	2062.6	1830.6	1605.8	1391.7	1188.3	995.6	817.2	653.0	503.2
37.5°	2801.3	2473.0	2191.1	1930.6	1687.9	1463.1	1249.0	1045.6	856.4	681.6	524.6
35°	2983.3	2630.0	2308.8	2023.3	1770.0	1534.5	1306.1	1092.0	888.6	706.6	546.0
32.5°	3168.8	2779.9	2433.7	2123.3	1852.1	1598.7	1359.6	1134.8	924.2	735.1	563.8
30°	3347.3	2922.6	2551.5	2219.6	1927.0	1662.9	1413.1	1177.6	959.9	760.1	581.7
27.5°	3529.3	3072.5	2669.2	2308.8	1998.4	1720.0	1459.5	1216.9	992.0	785.1	599.5
25°	3704.1	3215.2	2779.9	2394.5	2062.6	1777.1	1509.5	1256.1	1020.6	806.5	613.8
22.5°	3864.7	3340.1	2879.8	2476.5	2130.4	1827.1	1552.3	1291.8	1049.1	827.9	628.1
20°	4011.0	3468.6	2983.3	2558.6	2194.6	1877.0	1588.0	1323.9	1074.1	845.7	642.3
17.5°	4153.7	3586.4	3076.1	2633.6	2248.2	1919.9	1623.7	1348.9	1095.5	860.0	653.0
15°	4275.1	3689.8	3158.1	2697.8	2298.1	1955.5	1652.2	1373.9	1113.4	874.3	660.2
12.5°	4382.1	3779.1	3229.5	2751.3	2337.4	1987.7	1680.8	1395.3	1131.2	885.0	670.9
10°	4467.8	3850.4	3286.6	2797.7	2373.1	2012.6	1698.6	1413.1	1141.9	895.7	678.0
7.5°	4535.6	3907.5	3333.0	2829.8	2398.0	2034.1	1716.5	1423.8	1152.6	902.8	688.7
5°	4585.5	3950.3	3365.1	2854.8	2419.4	2059.0	1737.9	1441.7	1166.9	913.5	688.7
2.5°	4624.8	3982.5	3390.1	2876.2	2433.7	2059.0	1737.9	1441.7	1166.9	913.5	688.7
0°	4624.8	3982.5	3390.1	2876.2	2433.7	2059.0	1737.9	1441.7	1166.9	913.5	688.7

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	17.8	14.3	7.1	0.0
85°	39.3	25.0	14.3	0.0
82.5°	57.1	39.3	17.8	0.0
80°	74.9	50.0	25.0	0.0
77.5°	96.3	64.2	32.1	0.0
75°	114.2	74.9	39.3	0.0
72.5°	132.0	89.2	42.8	0.0
70°	149.9	99.9	50.0	0.0
67.5°	171.3	110.6	57.1	0.0
65°	189.1	124.9	60.7	0.0
62.5°	207.0	135.6	67.8	0.0
60°	224.8	146.3	71.4	0.0
57.5°	242.7	157.0	78.5	0.0
55°	260.5	171.3	85.6	0.0
52.5°	278.3	182.0	89.2	0.0
50°	296.2	192.7	92.8	0.0
47.5°	310.5	203.4	99.9	0.0
45°	328.3	214.1	103.5	0.0
42.5°	346.1	221.2	107.1	0.0
40°	360.4	232.0	110.6	0.0
37.5°	378.3	239.1	117.8	0.0
35°	392.5	249.8	121.3	0.0
32.5°	403.2	256.9	124.9	0.0
30°	417.5	264.1	128.5	0.0
27.5°	428.2	271.2	128.5	0.0
25°	438.9	278.3	132.0	0.0
22.5°	449.6	281.9	135.6	0.0
20°	460.3	289.0	139.2	0.0
17.5°	467.5	292.6	139.2	0.0
15°	474.6	296.2	146.3	0.0
12.5°	478.2	299.8	146.3	0.0
10°	485.3	306.9	146.3	0.0
7.5°	492.5	306.9	146.3	0.0
5°	492.5	306.9	146.3	0.0
2.5°	492.5	306.9	146.3	0.0
0°	492.5	306.9	146.3	0.0

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