

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: P623830

Luminaire Tested: **IFLD-M-SA4E-722-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P623830
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4E-722-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (64) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

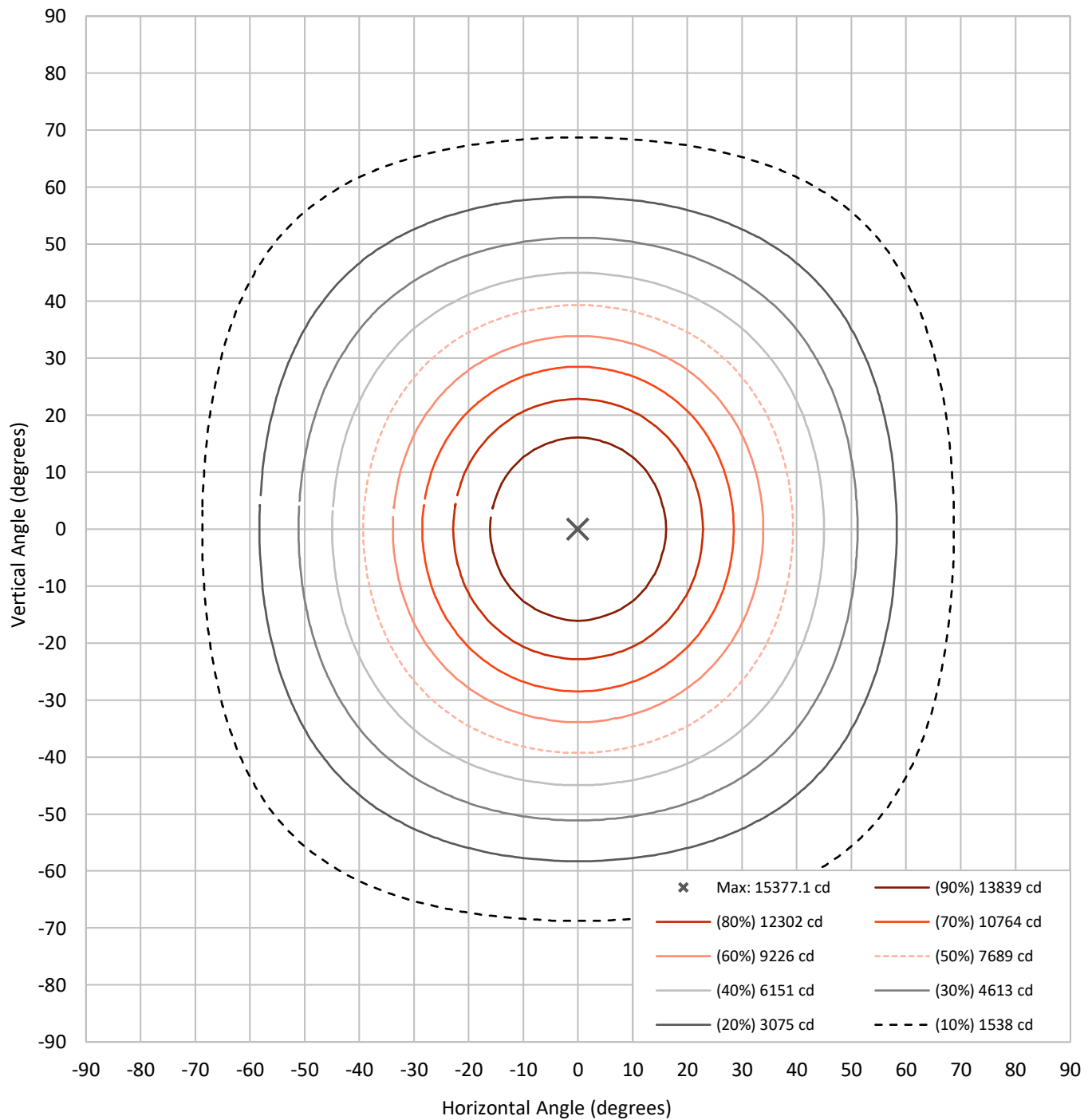
Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	27686.8 lumens	Max Intensity:	15377.1 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	88.0 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:	11979.8 lumens	Field Lumens:	19616.5 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		



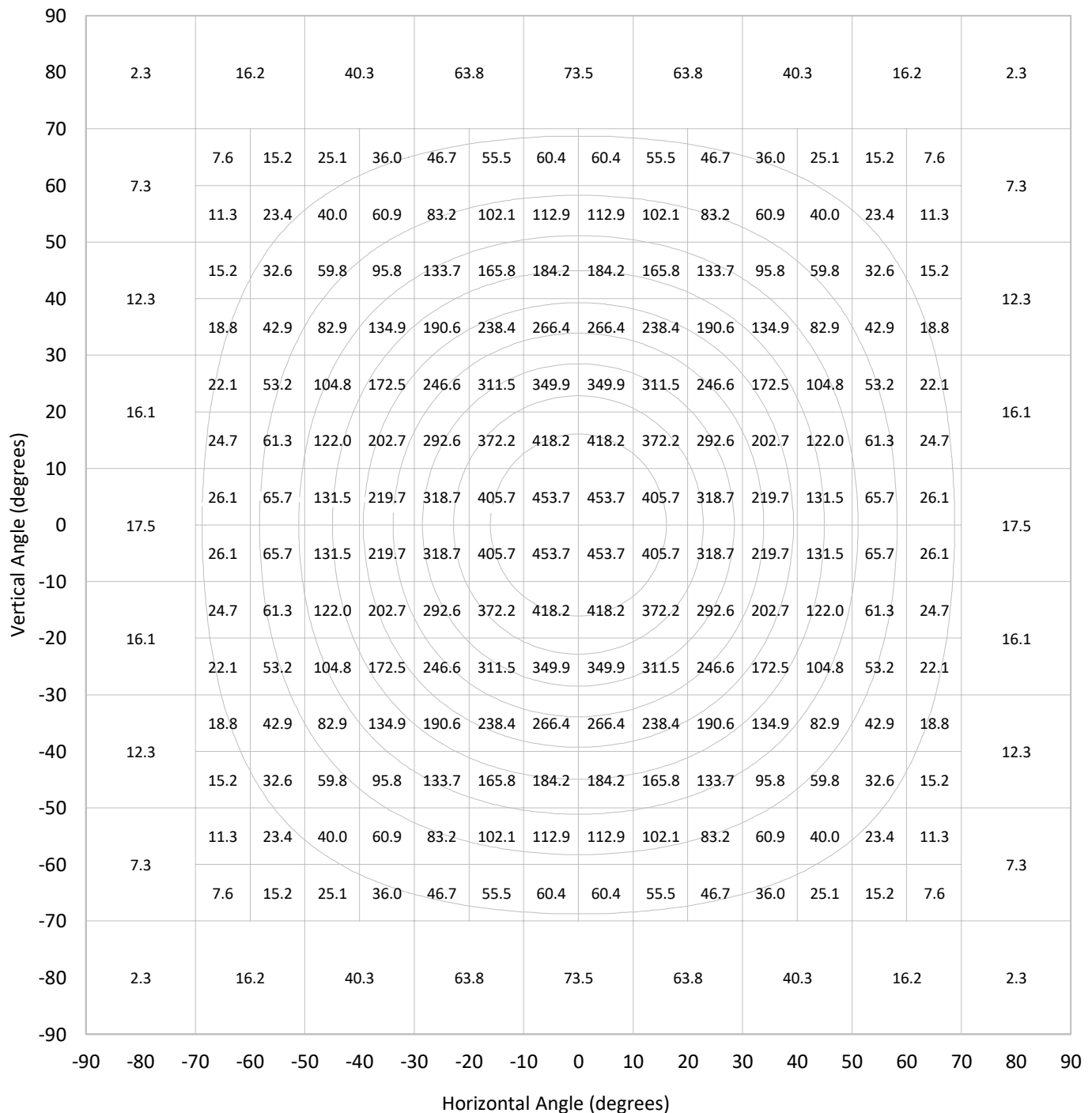
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Iso-Candela Plot



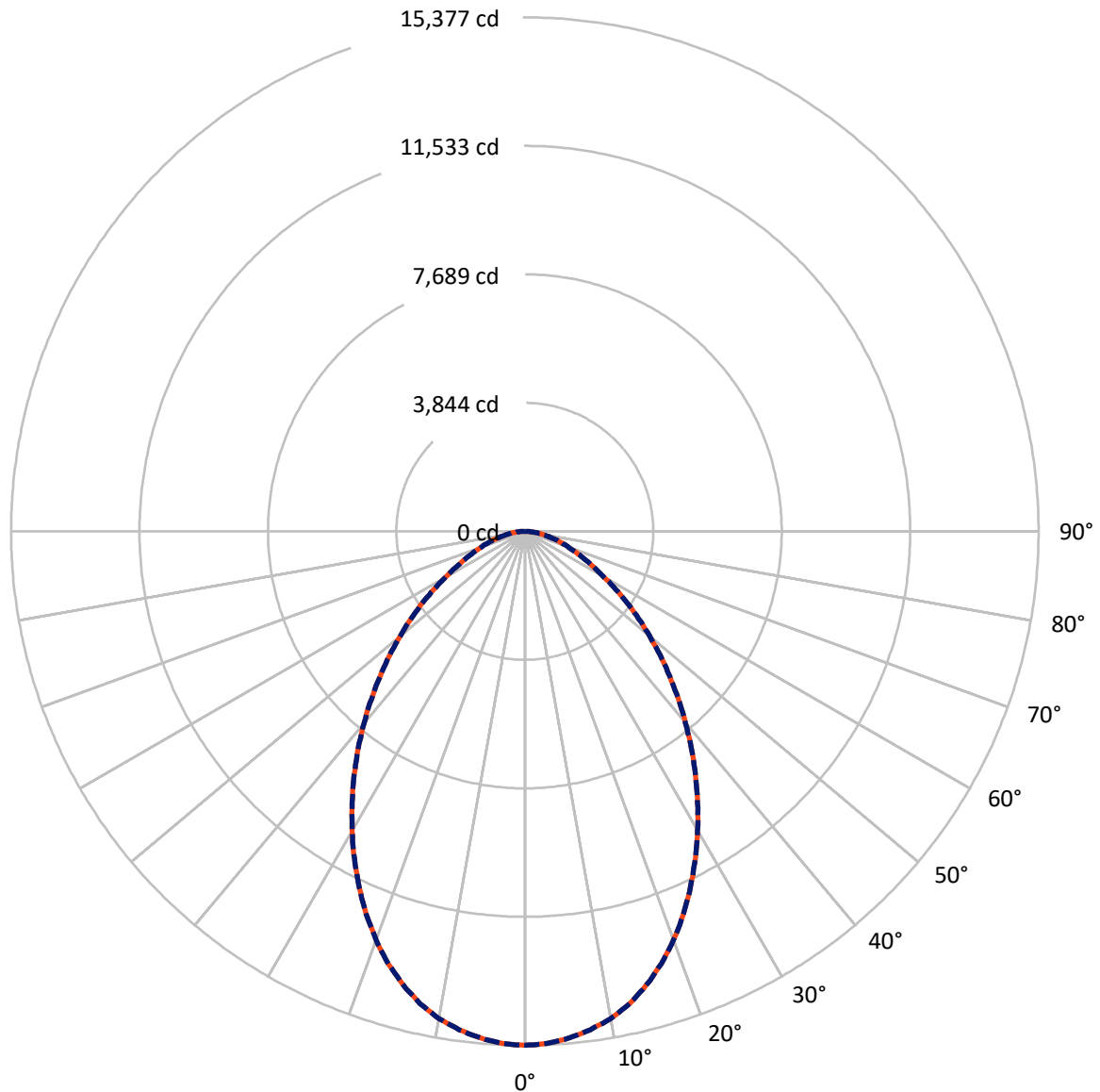
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Lumen Table



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Luminous Intensity Polar Plot

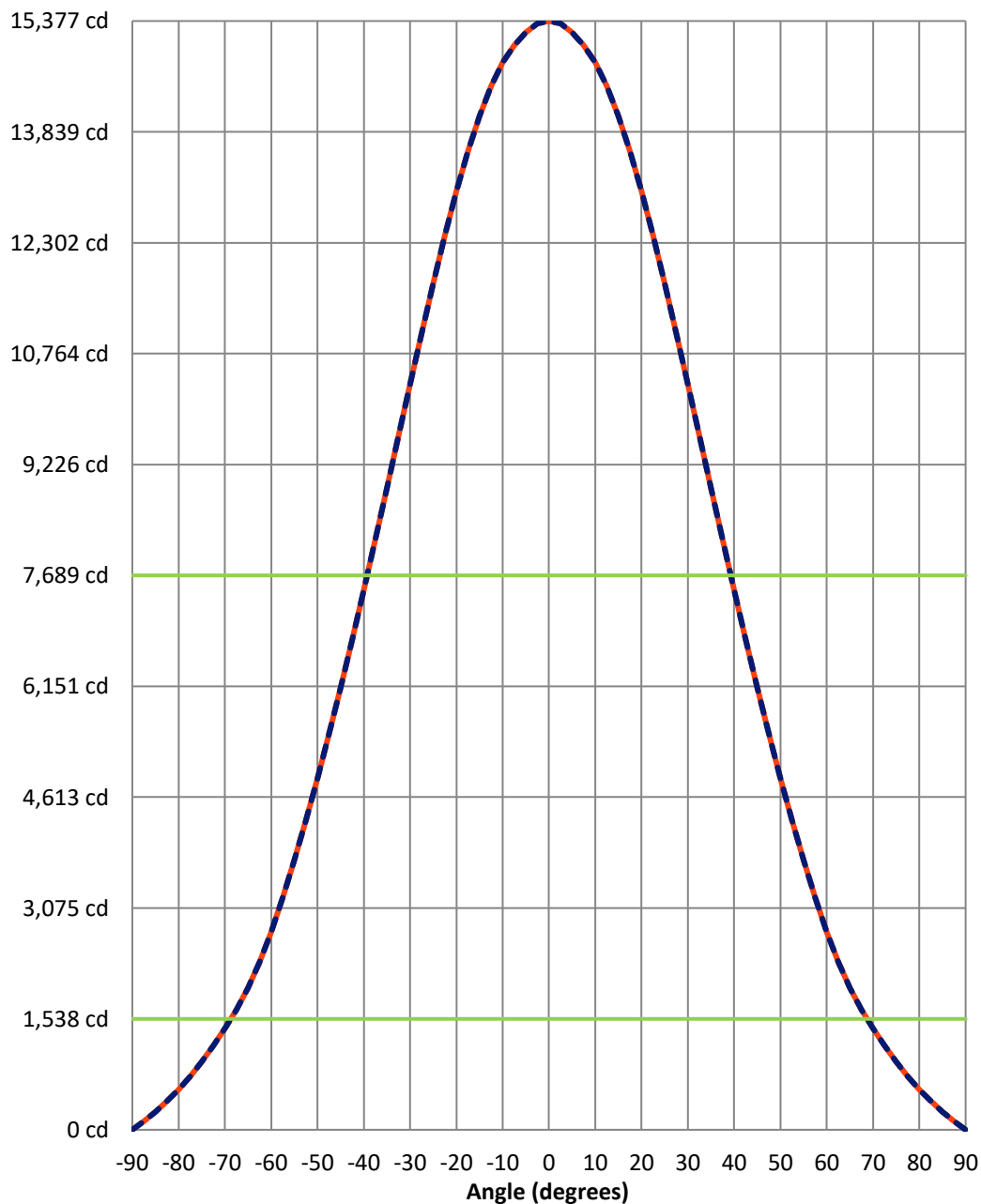


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg

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Luminous Intensity Plot



Beam:

H Angle: 78.6°
V Angle: 78.6°
Lumens: 11979.8
Efficiency: 43.3%

Field:

H Angle: 137.5°
V Angle: 137.5°
Lumens: 19616.5
Efficiency: 70.9%

Spill:

Lumens: 8070.3
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°	118.4	118.4	118.4	118.4	118.4	118.4	118.4	112.6	112.6	109.7	106.8
85°	248.3	248.3	248.3	248.3	248.3	242.5	239.6	236.7	233.8	228.0	225.2
82.5°	398.4	398.4	398.4	398.4	392.6	386.8	383.9	378.1	372.4	363.7	355.1
80°	557.1	557.1	557.1	557.1	548.5	542.7	534.0	528.3	519.6	508.0	496.5
77.5°	739.0	739.0	739.0	730.3	724.5	715.9	707.2	695.7	684.1	669.7	652.4
75°	943.9	943.9	943.9	932.4	923.7	915.1	900.6	886.2	868.9	848.7	825.6
72.5°	1166.2	1166.2	1166.2	1151.8	1143.1	1128.7	1111.4	1091.1	1070.9	1045.0	1016.1
70°	1405.8	1405.8	1405.8	1388.5	1374.0	1359.6	1336.5	1313.4	1284.6	1255.7	1221.0
67.5°	1665.6	1665.6	1665.6	1645.4	1628.1	1607.9	1581.9	1553.0	1518.4	1478.0	1437.5
65°	1968.7	1968.7	1957.1	1939.8	1919.6	1890.7	1859.0	1818.6	1775.3	1723.3	1668.5
62.5°	2326.6	2326.6	2309.3	2289.1	2263.1	2225.6	2182.3	2130.3	2069.7	2003.3	1936.9
60°	2742.3	2742.3	2722.1	2696.1	2658.6	2612.4	2554.7	2488.3	2413.2	2329.5	2248.7
57.5°	3221.5	3221.5	3195.5	3160.9	3114.7	3056.9	2984.8	2901.1	2805.8	2701.9	2600.9
55°	3741.1	3741.1	3709.3	3668.9	3614.1	3544.8	3458.2	3360.0	3244.6	3126.2	2996.3
52.5°	4292.4	4292.4	4254.9	4208.7	4145.2	4064.4	3966.2	3850.8	3718.0	3579.4	3426.4
50°	4872.6	4872.6	4829.3	4777.4	4705.2	4609.9	4497.4	4364.6	4217.4	4055.7	3879.6
47.5°	5493.3	5493.3	5444.2	5383.6	5297.0	5187.3	5054.5	4901.5	4734.1	4552.2	4353.0
45°	6131.2	6131.2	6076.4	6007.1	5911.8	5787.7	5640.5	5493.3	5279.6	5068.9	4838.0
42.5°	6795.1	6795.1	6731.6	6653.7	6544.0	6408.3	6240.9	6050.4	5839.7	5602.9	5351.8
40°	7485.0	7485.0	7412.9	7323.4	7202.1	7046.3	6858.6	6645.0	6408.3	6145.6	5868.5
37.5°	8189.4	8189.4	8108.5	8010.4	7874.7	7701.5	7490.8	7254.1	6988.5	6697.0	6391.0
35°	8899.5	8899.5	8810.0	8703.2	8553.1	8362.6	8134.5	7871.8	7577.4	7259.9	6916.4
32.5°	9624.0	9624.0	9525.9	9404.6	9234.3	9023.6	8772.5	8486.7	8189.4	7819.9	7444.6
30°	10339.9	10339.9	10233.1	10100.3	9918.5	9687.5	9413.3	9098.7	8749.4	8371.2	7967.1
27.5°	11044.2	11015.4	10925.9	10784.4	10585.3	10339.9	10042.6	9702.0	9323.8	8908.1	8475.1
25°	11737.0	11705.3	11607.1	11451.3	11237.6	10969.2	10648.8	10285.1	9878.0	9439.3	8965.9
22.5°	12401.0	12366.3	12262.4	12095.0	11866.9	11575.4	11231.9	10842.2	10409.2	9938.7	9439.3
20°	13015.8	12978.3	12871.5	12695.4	12458.7	12149.8	11786.1	11367.5	10905.7	10409.2	9878.0
17.5°	13570.0	13532.5	13419.9	13238.1	13015.8	12672.3	12297.0	11855.4	11367.5	10842.2	10285.1
15°	14057.9	14017.5	13902.0	13720.1	13466.1	13142.8	12747.4	12297.0	11786.1	11231.9	10648.8
12.5°	14473.6	14433.1	14314.8	14132.9	13870.3	13547.0	13142.8	12672.3	12149.8	11575.4	10969.2
10°	14802.6	14762.2	14649.6	14476.4	14205.1	13870.3	13466.1	13015.8	12458.7	11866.9	11237.6
7.5°	15039.3	15001.8	14897.9	14724.7	14476.4	14132.9	13720.1	13238.1	12695.4	12095.0	11451.3
5°	15218.3	15175.0	15071.1	14897.9	14649.6	14314.8	13902.0	13419.9	12871.5	12262.4	11607.1
2.5°	15342.4	15290.5	15175.0	15001.8	14762.2	14433.1	14017.5	13532.5	12978.3	12366.3	11705.3
0°	15377.1	15342.4	15218.3	15039.3	14802.6	14473.6	14057.9	13570.0	13015.8	12401.0	11737.0

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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°	103.9	103.9	101.0	98.1	95.3	89.5	86.6	83.7	80.8	75.1	72.2
85°	219.4	213.6	207.8	202.1	193.4	187.6	179.0	173.2	164.5	155.9	147.2
82.5°	346.4	337.7	326.2	317.5	306.0	291.5	280.0	265.6	251.1	239.6	225.2
80°	485.0	470.5	456.1	441.7	424.3	407.0	389.7	372.4	352.2	332.0	311.8
77.5°	635.1	614.9	594.6	571.6	551.3	528.3	505.2	482.1	456.1	430.1	404.1
75°	802.5	776.5	747.6	718.8	692.8	661.0	629.3	597.5	562.9	531.1	496.5
72.5°	984.3	952.6	917.9	883.3	845.8	805.4	765.0	721.7	681.2	640.8	597.5
70°	1180.6	1143.1	1099.8	1056.5	1010.3	961.2	912.2	860.2	808.3	756.3	704.3
67.5°	1391.4	1345.2	1293.2	1241.3	1183.5	1125.8	1068.1	1007.4	943.9	880.4	819.8
65°	1616.5	1558.8	1498.2	1431.8	1365.4	1299.0	1229.7	1157.5	1085.4	1010.3	943.9
62.5°	1867.6	1795.5	1717.5	1636.7	1561.7	1480.8	1405.8	1316.3	1229.7	1146.0	1062.3
60°	2159.2	2063.9	1968.7	1867.6	1772.4	1668.5	1576.1	1478.0	1379.8	1284.6	1186.4
57.5°	2485.4	2364.1	2248.7	2127.4	2000.4	1885.0	1766.6	1648.3	1538.6	1426.0	1319.2
55°	2854.9	2707.7	2563.3	2413.2	2266.0	2121.7	1971.6	1838.8	1703.1	1576.1	1452.0
52.5°	3259.0	3091.6	2912.6	2742.3	2554.7	2375.7	2208.3	2040.8	1882.1	1729.1	1587.6
50°	3692.0	3495.7	3290.8	3082.9	2869.3	2658.6	2456.5	2260.2	2075.5	1896.5	1729.1
47.5°	4142.3	3920.0	3686.2	3449.5	3221.5	2964.6	2722.1	2499.8	2277.6	2075.5	1882.1
45°	4604.2	4353.0	4096.1	3827.7	3559.2	3282.1	3013.6	2742.3	2499.8	2260.2	2040.8
42.5°	5080.5	4797.6	4511.8	4214.5	3917.2	3614.1	3311.0	3013.6	2722.1	2456.5	2208.3
40°	5571.2	5259.4	4933.2	4609.9	4292.4	3946.0	3614.1	3282.1	2964.6	2658.6	2375.7
37.5°	6061.9	5721.3	5369.1	5005.4	4641.7	4292.4	3917.2	3559.2	3221.5	2869.3	2554.7
35°	6555.5	6180.3	5799.2	5403.8	5005.4	4609.9	4214.5	3827.7	3449.5	3082.9	2742.3
32.5°	7052.0	6642.1	6220.7	5799.2	5369.1	4933.2	4511.8	4096.1	3686.2	3290.8	2912.6
30°	7539.9	7095.3	6642.1	6180.3	5721.3	5259.4	4797.6	4353.0	3920.0	3495.7	3091.6
27.5°	8016.2	7539.9	7052.0	6555.5	6061.9	5571.2	5080.5	4604.2	4142.3	3692.0	3259.0
25°	8475.1	7967.1	7444.6	6916.4	6391.0	5868.5	5351.8	4838.0	4353.0	3879.6	3426.4
22.5°	8908.1	8371.2	7819.9	7259.9	6697.0	6145.6	5602.9	5068.9	4552.2	4055.7	3579.4
20°	9323.8	8749.4	8189.4	7577.4	6988.5	6408.3	5839.7	5279.6	4734.1	4217.4	3718.0
17.5°	9702.0	9098.7	8486.7	7871.8	7254.1	6645.0	6050.4	5493.3	4901.5	4364.6	3850.8
15°	10042.6	9413.3	8772.5	8134.5	7490.8	6858.6	6240.9	5640.5	5054.5	4497.4	3966.2
12.5°	10339.9	9687.5	9023.6	8362.6	7701.5	7046.3	6408.3	5787.7	5187.3	4609.9	4064.4
10°	10585.3	9918.5	9234.3	8553.1	7874.7	7202.1	6544.0	5911.8	5297.0	4705.2	4145.2
7.5°	10784.4	10100.3	9404.6	8703.2	8010.4	7323.4	6653.7	6007.1	5383.6	4777.4	4208.7
5°	10925.9	10233.1	9525.9	8810.0	8108.5	7412.9	6731.6	6076.4	5444.2	4829.3	4254.9
2.5°	11015.4	10339.9	9624.0	8899.5	8189.4	7485.0	6795.1	6131.2	5493.3	4872.6	4292.4
0°	11044.2	10339.9	9624.0	8899.5	8189.4	7485.0	6795.1	6131.2	5493.3	4872.6	4292.4

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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°	69.3	63.5	57.7	54.8	49.1	46.2	40.4	34.6	31.8	26.0	20.2
85°	138.6	127.0	118.4	109.7	101.0	89.5	80.8	72.2	60.6	52.0	40.4
82.5°	210.7	196.3	181.9	167.4	153.0	138.6	121.2	106.8	92.4	77.9	60.6
80°	291.5	268.5	248.3	228.0	207.8	187.6	164.5	144.3	121.2	101.0	80.8
77.5°	375.3	349.3	320.4	291.5	262.7	236.7	207.8	181.9	155.9	127.0	101.0
75°	464.7	430.1	398.4	360.8	326.2	288.7	254.0	219.4	187.6	155.9	121.2
72.5°	557.1	513.8	470.5	430.1	386.8	343.5	303.1	259.8	219.4	181.9	144.3
70°	652.4	600.4	548.5	499.4	450.3	398.4	352.2	303.1	254.0	207.8	164.5
67.5°	753.4	692.8	632.2	568.7	513.8	456.1	398.4	343.5	288.7	236.7	187.6
65°	863.1	790.9	715.9	649.5	577.3	513.8	450.3	386.8	326.2	262.7	207.8
62.5°	975.7	892.0	808.3	724.5	649.5	568.7	499.4	430.1	360.8	291.5	228.0
60°	1091.1	995.9	900.6	808.3	715.9	632.2	548.5	470.5	398.4	320.4	248.3
57.5°	1209.5	1102.7	995.9	892.0	790.9	692.8	600.4	513.8	430.1	349.3	268.5
55°	1330.7	1209.5	1091.1	975.7	863.1	753.4	652.4	557.1	464.7	375.3	291.5
52.5°	1452.0	1319.2	1186.4	1062.3	943.9	819.8	704.3	597.5	496.5	404.1	311.8
50°	1576.1	1426.0	1284.6	1146.0	1010.3	880.4	756.3	640.8	531.1	430.1	332.0
47.5°	1703.1	1538.6	1379.8	1229.7	1085.4	943.9	808.3	681.2	562.9	456.1	352.2
45°	1838.8	1648.3	1478.0	1316.3	1157.5	1007.4	860.2	721.7	597.5	482.1	372.4
42.5°	1971.6	1766.6	1576.1	1405.8	1229.7	1068.1	912.2	765.0	629.3	505.2	389.7
40°	2121.7	1885.0	1668.5	1480.8	1299.0	1125.8	961.2	805.4	661.0	528.3	407.0
37.5°	2266.0	2000.4	1772.4	1561.7	1365.4	1183.5	1010.3	845.8	692.8	551.3	424.3
35°	2413.2	2127.4	1867.6	1636.7	1431.8	1241.3	1056.5	883.3	718.8	571.6	441.7
32.5°	2563.3	2248.7	1968.7	1717.5	1498.2	1293.2	1099.8	917.9	747.6	594.6	456.1
30°	2707.7	2364.1	2063.9	1795.5	1558.8	1345.2	1143.1	952.6	776.5	614.9	470.5
27.5°	2854.9	2485.4	2159.2	1867.6	1616.5	1391.4	1180.6	984.3	802.5	635.1	485.0
25°	2996.3	2600.9	2248.7	1936.9	1668.5	1437.5	1221.0	1016.1	825.6	652.4	496.5
22.5°	3126.2	2701.9	2329.5	2003.3	1723.3	1478.0	1255.7	1045.0	848.7	669.7	508.0
20°	3244.6	2805.8	2413.2	2069.7	1775.3	1518.4	1284.6	1070.9	868.9	684.1	519.6
17.5°	3360.0	2901.1	2488.3	2130.3	1818.6	1553.0	1313.4	1091.1	886.2	695.7	528.3
15°	3458.2	2984.8	2554.7	2182.3	1859.0	1581.9	1336.5	1111.4	900.6	707.2	534.0
12.5°	3544.8	3056.9	2612.4	2225.6	1890.7	1607.9	1359.6	1128.7	915.1	715.9	542.7
10°	3614.1	3114.7	2658.6	2263.1	1919.6	1628.1	1374.0	1143.1	923.7	724.5	548.5
7.5°	3668.9	3160.9	2696.1	2289.1	1939.8	1645.4	1388.5	1151.8	932.4	730.3	557.1
5°	3709.3	3195.5	2722.1	2309.3	1957.1	1665.6	1405.8	1166.2	943.9	739.0	557.1
2.5°	3741.1	3221.5	2742.3	2326.6	1968.7	1665.6	1405.8	1166.2	943.9	739.0	557.1
0°	3741.1	3221.5	2742.3	2326.6	1968.7	1665.6	1405.8	1166.2	943.9	739.0	557.1

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	14.4	11.5	5.8	0.0
85°	31.8	20.2	11.5	0.0
82.5°	46.2	31.8	14.4	0.0
80°	60.6	40.4	20.2	0.0
77.5°	77.9	52.0	26.0	0.0
75°	92.4	60.6	31.8	0.0
72.5°	106.8	72.2	34.6	0.0
70°	121.2	80.8	40.4	0.0
67.5°	138.6	89.5	46.2	0.0
65°	153.0	101.0	49.1	0.0
62.5°	167.4	109.7	54.8	0.0
60°	181.9	118.4	57.7	0.0
57.5°	196.3	127.0	63.5	0.0
55°	210.7	138.6	69.3	0.0
52.5°	225.2	147.2	72.2	0.0
50°	239.6	155.9	75.1	0.0
47.5°	251.1	164.5	80.8	0.0
45°	265.6	173.2	83.7	0.0
42.5°	280.0	179.0	86.6	0.0
40°	291.5	187.6	89.5	0.0
37.5°	306.0	193.4	95.3	0.0
35°	317.5	202.1	98.1	0.0
32.5°	326.2	207.8	101.0	0.0
30°	337.7	213.6	103.9	0.0
27.5°	346.4	219.4	103.9	0.0
25°	355.1	225.2	106.8	0.0
22.5°	363.7	228.0	109.7	0.0
20°	372.4	233.8	112.6	0.0
17.5°	378.1	236.7	112.6	0.0
15°	383.9	239.6	118.4	0.0
12.5°	386.8	242.5	118.4	0.0
10°	392.6	248.3	118.4	0.0
7.5°	398.4	248.3	118.4	0.0
5°	398.4	248.3	118.4	0.0
2.5°	398.4	248.3	118.4	0.0
0°	398.4	248.3	118.4	0.0

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