

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: P624042

Luminaire Tested: **IFLD-L-SA8D-827-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624042
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-L-SA8D-827-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (128) 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

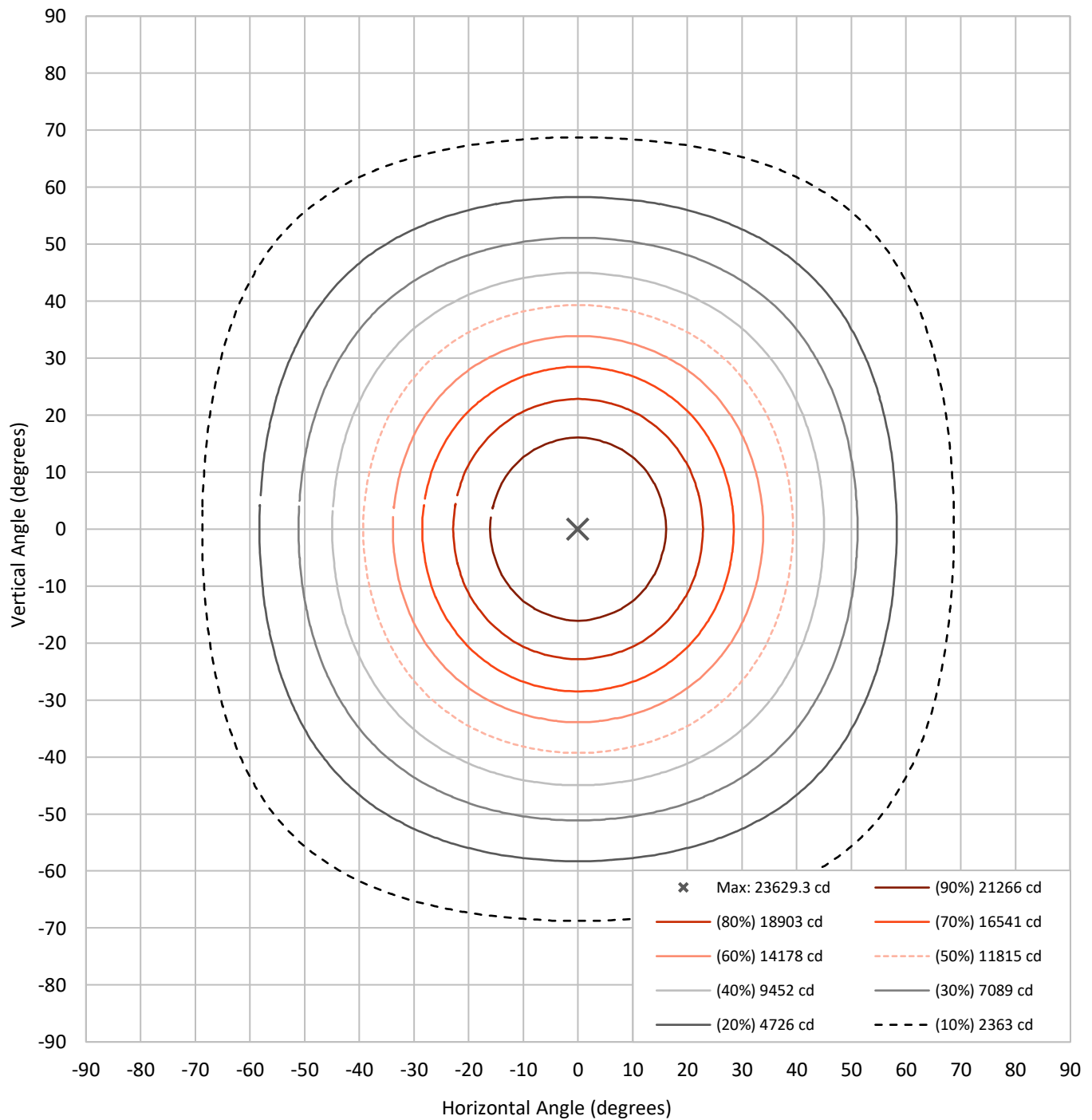
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	42545.1 lumens	Max Intensity:	23629.3 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	87.1 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	18408.9 lumens	Field Lumens:	30143.9 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%
Input Watts (W):	488.3		
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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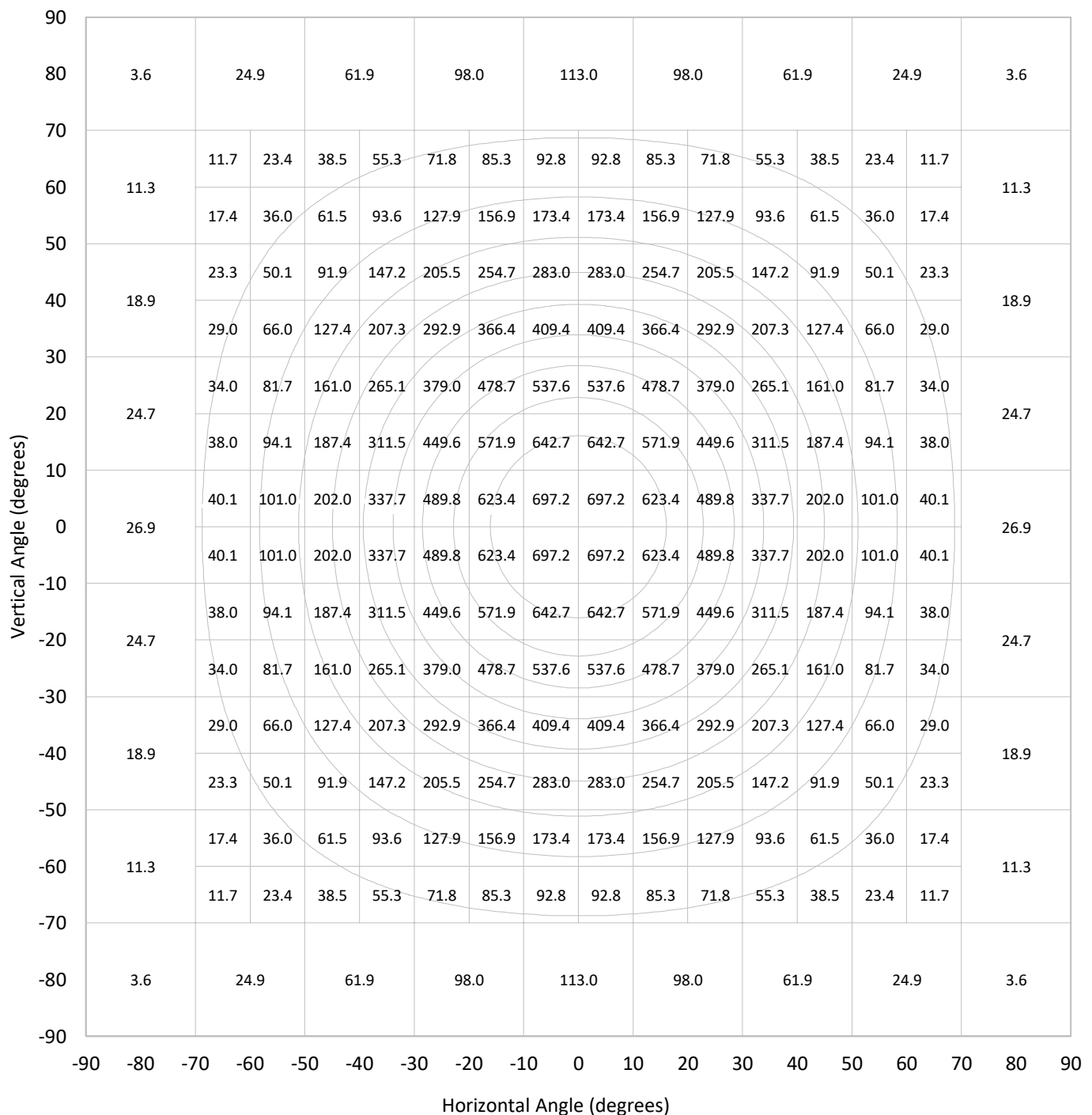
Iso-Candela Plot



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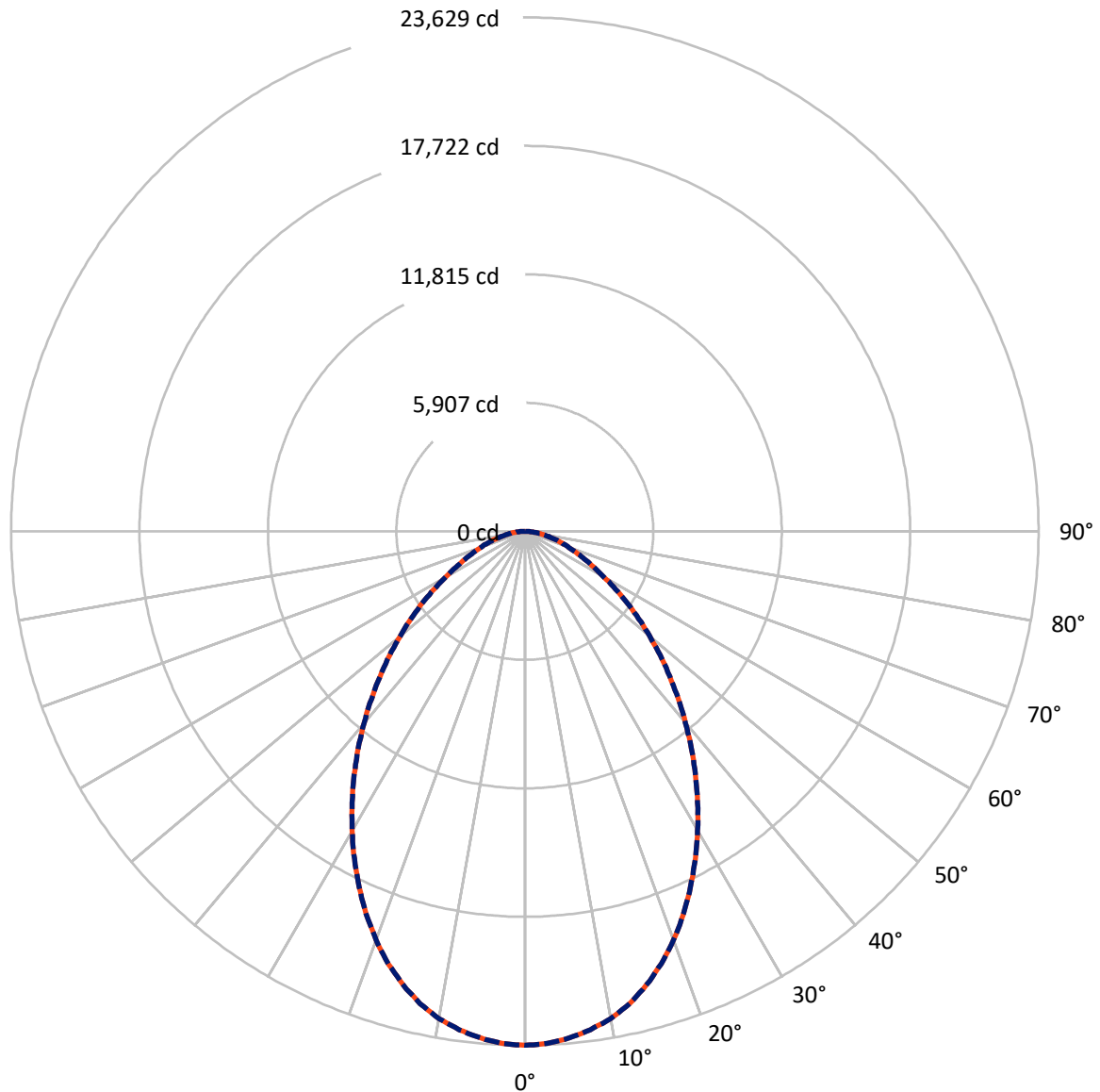
Lumen Table



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Luminous Intensity Polar Plot



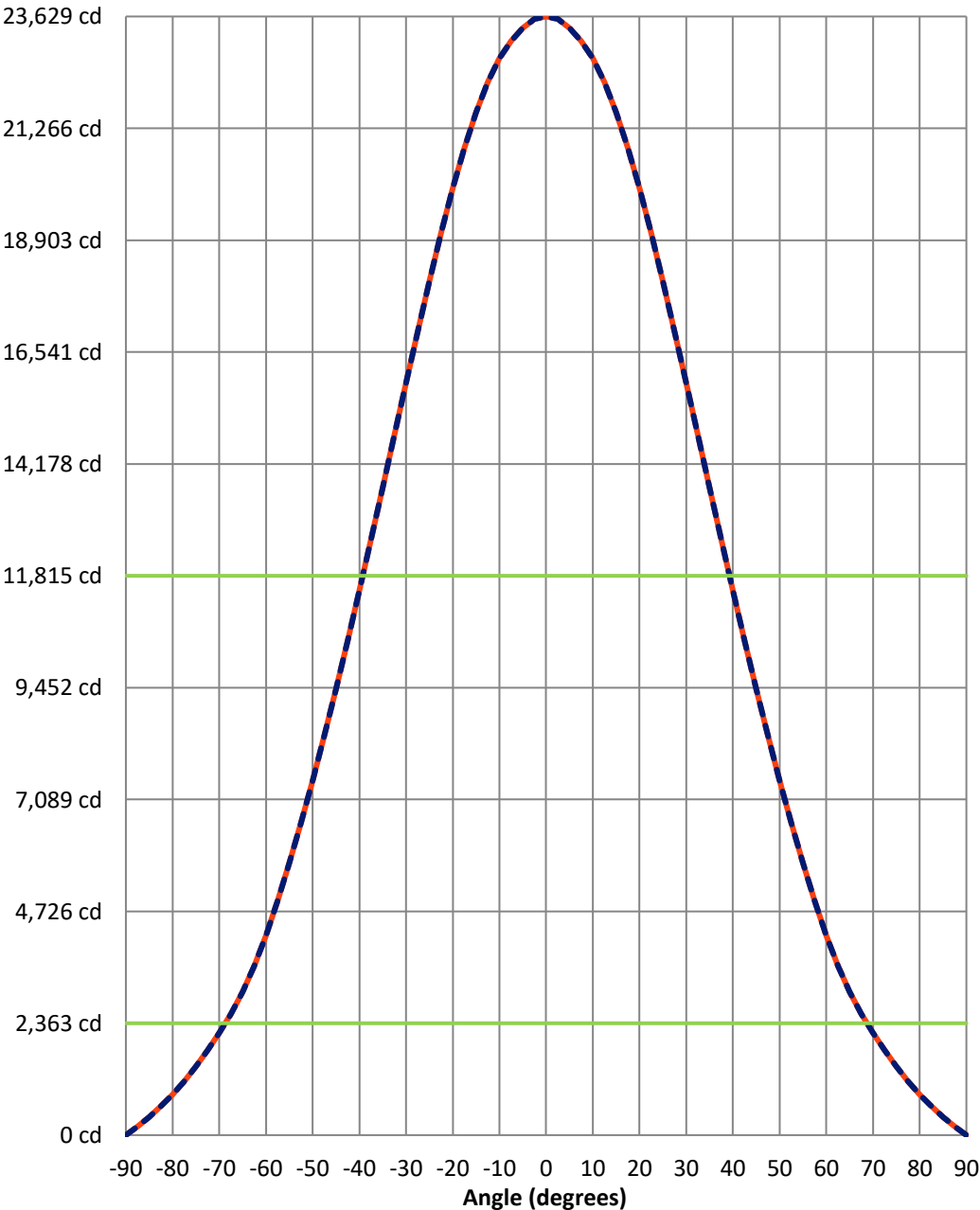
— Vertical Distribution Through 0-Deg

- - - Horizontal Distribution Through 0-Deg



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Luminous Intensity Plot



Beam:
H Angle: 78.6°
V Angle: 78.6°
Lumens: 18408.9
Efficiency: 43.3%

Field:
H Angle: 137.5°
V Angle: 137.5°
Lumens: 30143.9
Efficiency: 70.9%

Spill:
Lumens: 12401.3
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°	181.9	181.9	181.9	181.9	181.9	181.9	181.9	173.0	173.0	168.6	164.1
85°	381.5	381.5	381.5	381.5	381.5	372.6	368.2	363.7	359.3	350.4	346.0
82.5°	612.1	612.1	612.1	612.1	603.3	594.4	590.0	581.1	572.2	558.9	545.6
80°	856.1	856.1	856.1	856.1	842.8	833.9	820.6	811.7	798.4	780.7	763.0
77.5°	1135.6	1135.6	1135.6	1122.2	1113.4	1100.1	1086.8	1069.0	1051.3	1029.1	1002.5
75°	1450.5	1450.5	1450.5	1432.8	1419.4	1406.1	1384.0	1361.8	1335.2	1304.1	1268.6
72.5°	1792.0	1792.0	1792.0	1769.9	1756.6	1734.4	1707.8	1676.7	1645.7	1605.7	1561.4
70°	2160.2	2160.2	2160.2	2133.6	2111.4	2089.2	2053.8	2018.3	1973.9	1929.6	1876.3
67.5°	2559.4	2559.4	2559.4	2528.4	2501.8	2470.7	2430.8	2386.4	2333.2	2271.1	2209.0
65°	3025.2	3025.2	3007.4	2980.8	2949.8	2905.4	2856.6	2794.5	2728.0	2648.2	2563.9
62.5°	3575.2	3575.2	3548.6	3517.6	3477.6	3420.0	3353.4	3273.6	3180.4	3078.4	2976.4
60°	4214.0	4214.0	4182.9	4143.0	4085.3	4014.4	3925.7	3823.6	3708.3	3579.7	3455.5
57.5°	4950.3	4950.3	4910.4	4857.2	4786.2	4697.5	4586.6	4457.9	4311.6	4151.9	3996.6
55°	5748.8	5748.8	5700.0	5637.9	5553.6	5447.1	5314.0	5163.2	4985.8	4803.9	4604.3
52.5°	6596.0	6596.0	6538.3	6467.3	6369.8	6245.6	6094.7	5917.3	5713.3	5500.4	5265.3
50°	7487.6	7487.6	7421.0	7341.2	7230.3	7083.9	6910.9	6706.9	6480.7	6232.3	5961.7
47.5°	8441.3	8441.3	8365.9	8272.7	8139.6	7971.1	7767.0	7531.9	7274.7	6995.2	6689.1
45°	9421.6	9421.6	9337.3	9230.8	9084.4	8893.7	8667.5	8441.3	8113.0	7789.2	7434.3
42.5°	10441.8	10441.8	10344.2	10224.4	10055.9	9847.4	9590.1	9297.4	8973.6	8609.8	8223.9
40°	11501.9	11501.9	11391.0	11253.5	11067.2	10827.7	10539.4	10211.1	9847.4	9443.7	9017.9
37.5°	12584.3	12584.3	12460.1	12309.3	12100.8	11834.6	11510.8	11147.1	10739.0	10291.0	9820.8
35°	13675.5	13675.5	13538.0	13373.8	13143.2	12850.4	12500.0	12096.3	11643.9	11156.0	10628.1
32.5°	14788.8	14788.8	14638.0	14451.7	14190.0	13866.2	13480.3	13041.2	12584.3	12016.5	11439.8
30°	15888.9	15888.9	15724.8	15520.7	15241.3	14886.4	14465.0	13981.5	13444.8	12863.7	12242.7
27.5°	16971.2	16926.9	16789.4	16572.0	16266.0	15888.9	15432.0	14908.6	14327.5	13688.8	13023.4
25°	18035.8	17987.0	17836.2	17596.7	17268.4	16855.9	16363.5	15804.6	15179.2	14505.0	13777.5
22.5°	19056.1	19002.8	18843.1	18585.9	18235.4	17787.4	17259.6	16660.7	15995.4	15272.3	14505.0
20°	20000.9	19943.2	19779.1	19508.5	19144.8	18670.1	18111.2	17468.0	16758.3	15995.4	15179.2
17.5°	20852.5	20794.9	20621.9	20342.4	20000.9	19473.0	18896.4	18217.7	17468.0	16660.7	15804.6
15°	21602.2	21540.1	21362.7	21083.2	20692.8	20196.0	19588.3	18896.4	18111.2	17259.6	16363.5
12.5°	22240.9	22178.8	21997.0	21717.5	21313.9	20817.1	20196.0	19473.0	18670.1	17787.4	16855.9
10°	22746.6	22684.5	22511.5	22245.4	21828.4	21313.9	20692.8	20000.9	19144.8	18235.4	17268.4
7.5°	23110.3	23052.7	22893.0	22626.8	22245.4	21717.5	21083.2	20342.4	19508.5	18585.9	17596.7
5°	23385.4	23318.8	23159.1	22893.0	22511.5	21997.0	21362.7	20621.9	19779.1	18843.1	17836.2
2.5°	23576.1	23496.3	23318.8	23052.7	22684.5	22178.8	21540.1	20794.9	19943.2	19002.8	17987.0
0°	23629.3	23576.1	23385.4	23110.3	22746.6	22240.9	21602.2	20852.5	20000.9	19056.1	18035.8

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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°	159.7	159.7	155.3	150.8	146.4	137.5	133.1	128.6	124.2	115.3	110.9
85°	337.1	328.2	319.4	310.5	297.2	288.3	275.0	266.1	252.8	239.5	226.2
82.5°	532.3	519.0	501.2	487.9	470.2	448.0	430.3	408.1	385.9	368.2	346.0
80°	745.2	723.0	700.9	678.7	652.1	625.4	598.8	572.2	541.2	510.1	479.1
77.5°	975.9	944.8	913.8	878.3	847.2	811.7	776.3	740.8	700.9	660.9	621.0
75°	1233.1	1193.2	1148.9	1104.5	1064.6	1015.8	967.0	918.2	865.0	816.2	763.0
72.5°	1512.6	1463.8	1410.6	1357.3	1299.7	1237.6	1175.5	1108.9	1046.8	984.7	918.2
70°	1814.2	1756.6	1690.0	1623.5	1552.5	1477.1	1401.7	1321.9	1242.0	1162.2	1082.3
67.5°	2138.0	2067.1	1987.2	1907.4	1818.7	1729.9	1641.2	1548.1	1450.5	1352.9	1259.8
65°	2484.0	2395.3	2302.2	2200.1	2098.1	1996.1	1889.6	1778.7	1667.8	1552.5	1450.5
62.5°	2869.9	2759.0	2639.3	2515.1	2399.7	2275.5	2160.2	2022.7	1889.6	1761.0	1632.4
60°	3318.0	3171.6	3025.2	2869.9	2723.6	2563.9	2421.9	2271.1	2120.3	1973.9	1823.1
57.5°	3819.2	3632.9	3455.5	3269.2	3074.0	2896.6	2714.7	2532.8	2364.3	2191.3	2027.1
55°	4387.0	4160.7	3939.0	3708.3	3482.1	3260.3	3029.6	2825.6	2617.1	2421.9	2231.2
52.5°	5008.0	4750.7	4475.7	4214.0	3925.7	3650.6	3393.4	3136.1	2892.1	2657.0	2439.7
50°	5673.3	5371.7	5056.8	4737.4	4409.2	4085.3	3774.8	3473.2	3189.3	2914.3	2657.0
47.5°	6365.3	6023.8	5664.5	5300.7	4950.3	4555.5	4182.9	3841.4	3499.8	3189.3	2892.1
45°	7075.0	6689.1	6294.4	5881.8	5469.3	5043.5	4630.9	4214.0	3841.4	3473.2	3136.1
42.5°	7806.9	7372.2	6933.1	6476.2	6019.3	5553.6	5087.8	4630.9	4182.9	3774.8	3393.4
40°	8561.0	8082.0	7580.7	7083.9	6596.0	6063.7	5553.6	5043.5	4555.5	4085.3	3650.6
37.5°	9315.1	8791.7	8250.5	7691.6	7132.7	6596.0	6019.3	5469.3	4950.3	4409.2	3925.7
35°	10073.6	9497.0	8911.5	8303.8	7691.6	7083.9	6476.2	5881.8	5300.7	4737.4	4214.0
32.5°	10836.6	10206.7	9559.1	8911.5	8250.5	7580.7	6933.1	6294.4	5664.5	5056.8	4475.7
30°	11586.2	10903.1	10206.7	9497.0	8791.7	8082.0	7372.2	6689.1	6023.8	5371.7	4750.7
27.5°	12318.1	11586.2	10836.6	10073.6	9315.1	8561.0	7806.9	7075.0	6365.3	5673.3	5008.0
25°	13023.4	12242.7	11439.8	10628.1	9820.8	9017.9	8223.9	7434.3	6689.1	5961.7	5265.3
22.5°	13688.8	12863.7	12016.5	11156.0	10291.0	9443.7	8609.8	7789.2	6995.2	6232.3	5500.4
20°	14327.5	13444.8	12584.3	11643.9	10739.0	9847.4	8973.6	8113.0	7274.7	6480.7	5713.3
17.5°	14908.6	13981.5	13041.2	12096.3	11147.1	10211.1	9297.4	8441.3	7531.9	6706.9	5917.3
15°	15432.0	14465.0	13480.3	12500.0	11510.8	10539.4	9590.1	8667.5	7767.0	6910.9	6094.7
12.5°	15888.9	14886.4	13866.2	12850.4	11834.6	10827.7	9847.4	8893.7	7971.1	7083.9	6245.6
10°	16266.0	15241.3	14190.0	13143.2	12100.8	11067.2	10055.9	9084.4	8139.6	7230.3	6369.8
7.5°	16572.0	15520.7	14451.7	13373.8	12309.3	11253.5	10224.4	9230.8	8272.7	7341.2	6467.3
5°	16789.4	15724.8	14638.0	13538.0	12460.1	11391.0	10344.2	9337.3	8365.9	7421.0	6538.3
2.5°	16926.9	15888.9	14788.8	13675.5	12584.3	11501.9	10441.8	9421.6	8441.3	7487.6	6596.0
0°	16971.2	15888.9	14788.8	13675.5	12584.3	11501.9	10441.8	9421.6	8441.3	7487.6	6596.0

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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°	106.5	97.6	88.7	84.3	75.4	71.0	62.1	53.2	48.8	39.9	31.1
85°	212.9	195.2	181.9	168.6	155.3	137.5	124.2	110.9	93.2	79.8	62.1
82.5°	323.8	301.6	279.5	257.3	235.1	212.9	186.3	164.1	141.9	119.8	93.2
80°	448.0	412.5	381.5	350.4	319.4	288.3	252.8	221.8	186.3	155.3	124.2
77.5°	576.6	536.7	492.4	448.0	403.7	363.7	319.4	279.5	239.5	195.2	155.3
75°	714.2	660.9	612.1	554.5	501.2	443.6	390.3	337.1	288.3	239.5	186.3
72.5°	856.1	789.6	723.0	660.9	594.4	527.9	465.8	399.2	337.1	279.5	221.8
70°	1002.5	922.6	842.8	767.4	692.0	612.1	541.2	465.8	390.3	319.4	252.8
67.5°	1157.7	1064.6	971.4	873.8	789.6	700.9	612.1	527.9	443.6	363.7	288.3
65°	1326.3	1215.4	1100.1	998.0	887.2	789.6	692.0	594.4	501.2	403.7	319.4
62.5°	1499.3	1370.7	1242.0	1113.4	998.0	873.8	767.4	660.9	554.5	448.0	350.4
60°	1676.7	1530.3	1384.0	1242.0	1100.1	971.4	842.8	723.0	612.1	492.4	381.5
57.5°	1858.6	1694.5	1530.3	1370.7	1215.4	1064.6	922.6	789.6	660.9	536.7	412.5
55°	2044.9	1858.6	1676.7	1499.3	1326.3	1157.7	1002.5	856.1	714.2	576.6	448.0
52.5°	2231.2	2027.1	1823.1	1632.4	1450.5	1259.8	1082.3	918.2	763.0	621.0	479.1
50°	2421.9	2191.3	1973.9	1761.0	1552.5	1352.9	1162.2	984.7	816.2	660.9	510.1
47.5°	2617.1	2364.3	2120.3	1889.6	1667.8	1450.5	1242.0	1046.8	865.0	700.9	541.2
45°	2825.6	2532.8	2271.1	2022.7	1778.7	1548.1	1321.9	1108.9	918.2	740.8	572.2
42.5°	3029.6	2714.7	2421.9	2160.2	1889.6	1641.2	1401.7	1175.5	967.0	776.3	598.8
40°	3260.3	2896.6	2563.9	2275.5	1996.1	1729.9	1477.1	1237.6	1015.8	811.7	625.4
37.5°	3482.1	3074.0	2723.6	2399.7	2098.1	1818.7	1552.5	1299.7	1064.6	847.2	652.1
35°	3708.3	3269.2	2869.9	2515.1	2200.1	1907.4	1623.5	1357.3	1104.5	878.3	678.7
32.5°	3939.0	3455.5	3025.2	2639.3	2302.2	1987.2	1690.0	1410.6	1148.9	913.8	700.9
30°	4160.7	3632.9	3171.6	2759.0	2395.3	2067.1	1756.6	1463.8	1193.2	944.8	723.0
27.5°	4387.0	3819.2	3318.0	2869.9	2484.0	2138.0	1814.2	1512.6	1233.1	975.9	745.2
25°	4604.3	3996.6	3455.5	2976.4	2563.9	2209.0	1876.3	1561.4	1268.6	1002.5	763.0
22.5°	4803.9	4151.9	3579.7	3078.4	2648.2	2271.1	1929.6	1605.7	1304.1	1029.1	780.7
20°	4985.8	4311.6	3708.3	3180.4	2728.0	2333.2	1973.9	1645.7	1335.2	1051.3	798.4
17.5°	5163.2	4457.9	3823.6	3273.6	2794.5	2386.4	2018.3	1676.7	1361.8	1069.0	811.7
15°	5314.0	4586.6	3925.7	3353.4	2856.6	2430.8	2053.8	1707.8	1384.0	1086.8	820.6
12.5°	5447.1	4697.5	4014.4	3420.0	2905.4	2470.7	2089.2	1734.4	1406.1	1100.1	833.9
10°	5553.6	4786.2	4085.3	3477.6	2949.8	2501.8	2111.4	1756.6	1419.4	1113.4	842.8
7.5°	5637.9	4857.2	4143.0	3517.6	2980.8	2528.4	2133.6	1769.9	1432.8	1122.2	856.1
5°	5700.0	4910.4	4182.9	3548.6	3007.4	2559.4	2160.2	1792.0	1450.5	1135.6	856.1
2.5°	5748.8	4950.3	4214.0	3575.2	3025.2	2559.4	2160.2	1792.0	1450.5	1135.6	856.1
0°	5748.8	4950.3	4214.0	3575.2	3025.2	2559.4	2160.2	1792.0	1450.5	1135.6	856.1

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	22.2	17.7	8.9	0.0
85°	48.8	31.1	17.7	0.0
82.5°	71.0	48.8	22.2	0.0
80°	93.2	62.1	31.1	0.0
77.5°	119.8	79.8	39.9	0.0
75°	141.9	93.2	48.8	0.0
72.5°	164.1	110.9	53.2	0.0
70°	186.3	124.2	62.1	0.0
67.5°	212.9	137.5	71.0	0.0
65°	235.1	155.3	75.4	0.0
62.5°	257.3	168.6	84.3	0.0
60°	279.5	181.9	88.7	0.0
57.5°	301.6	195.2	97.6	0.0
55°	323.8	212.9	106.5	0.0
52.5°	346.0	226.2	110.9	0.0
50°	368.2	239.5	115.3	0.0
47.5°	385.9	252.8	124.2	0.0
45°	408.1	266.1	128.6	0.0
42.5°	430.3	275.0	133.1	0.0
40°	448.0	288.3	137.5	0.0
37.5°	470.2	297.2	146.4	0.0
35°	487.9	310.5	150.8	0.0
32.5°	501.2	319.4	155.3	0.0
30°	519.0	328.2	159.7	0.0
27.5°	532.3	337.1	159.7	0.0
25°	545.6	346.0	164.1	0.0
22.5°	558.9	350.4	168.6	0.0
20°	572.2	359.3	173.0	0.0
17.5°	581.1	363.7	173.0	0.0
15°	590.0	368.2	181.9	0.0
12.5°	594.4	372.6	181.9	0.0
10°	603.3	381.5	181.9	0.0
7.5°	612.1	381.5	181.9	0.0
5°	612.1	381.5	181.9	0.0
2.5°	612.1	381.5	181.9	0.0
0°	612.1	381.5	181.9	0.0

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