

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: P623945

Luminaire Tested: **IFLD-M-SA4D-740-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P623945
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4D-740-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (64) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

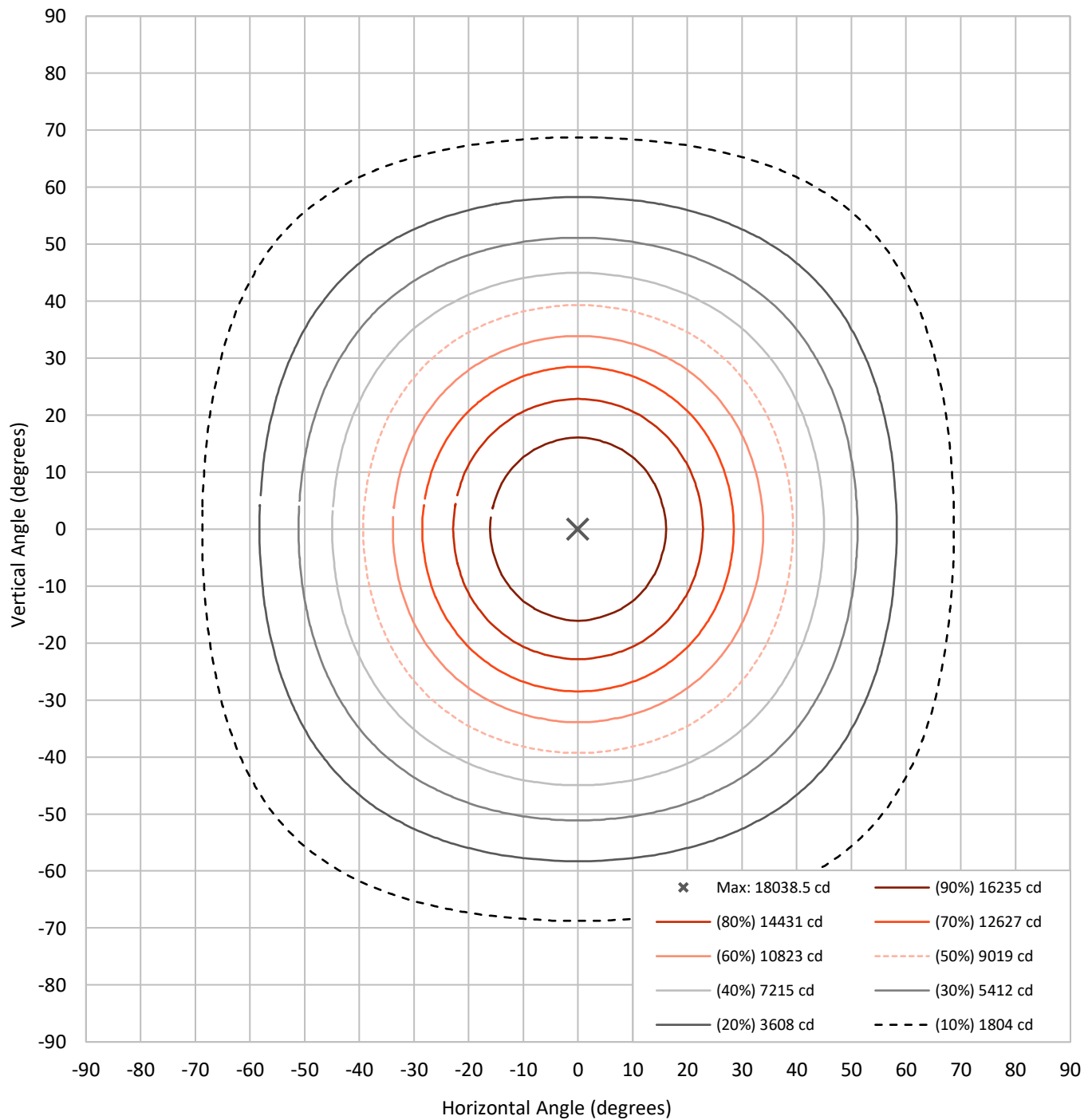
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	32478.7 lumens	Max Intensity:	18038.5 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	130.1 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 0.5' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	14053.2 lumens	Field Lumens:	23011.6 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%

Input Watts (W): 249.7
Input Voltage (V): 120
Input Current (A_{in}): 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



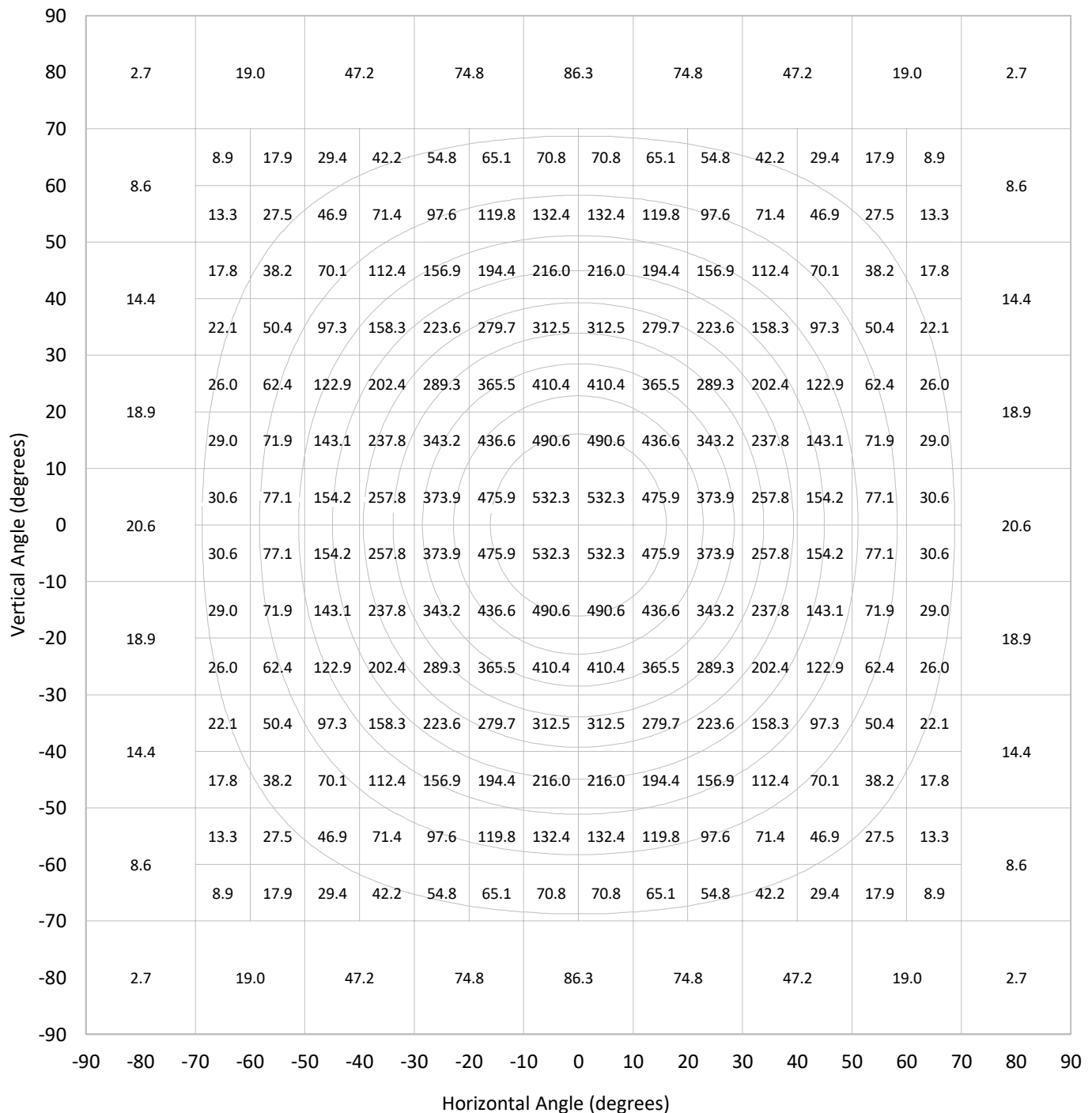
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Iso-Candela Plot



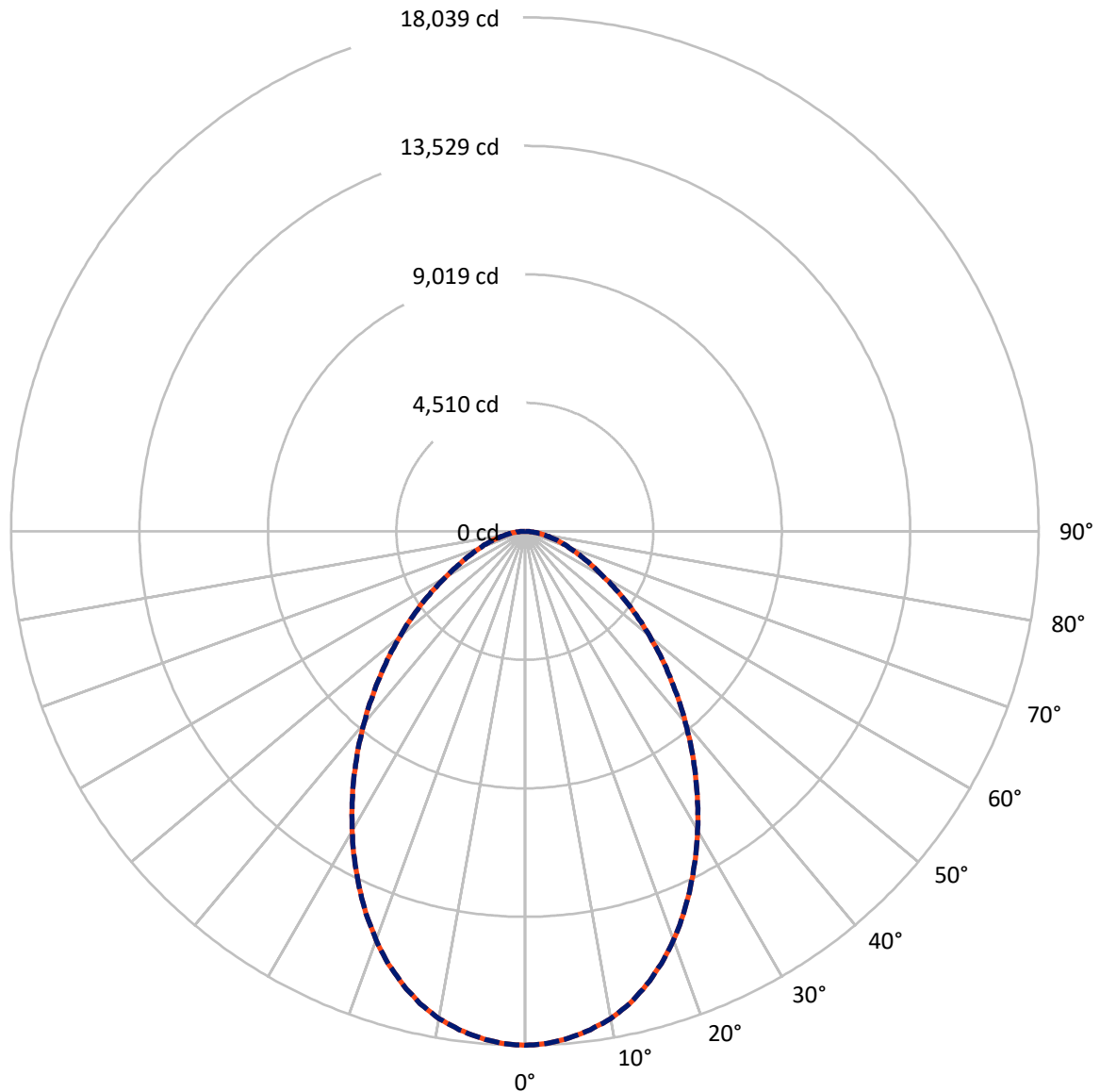
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Lumen Table



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Luminous Intensity Polar Plot

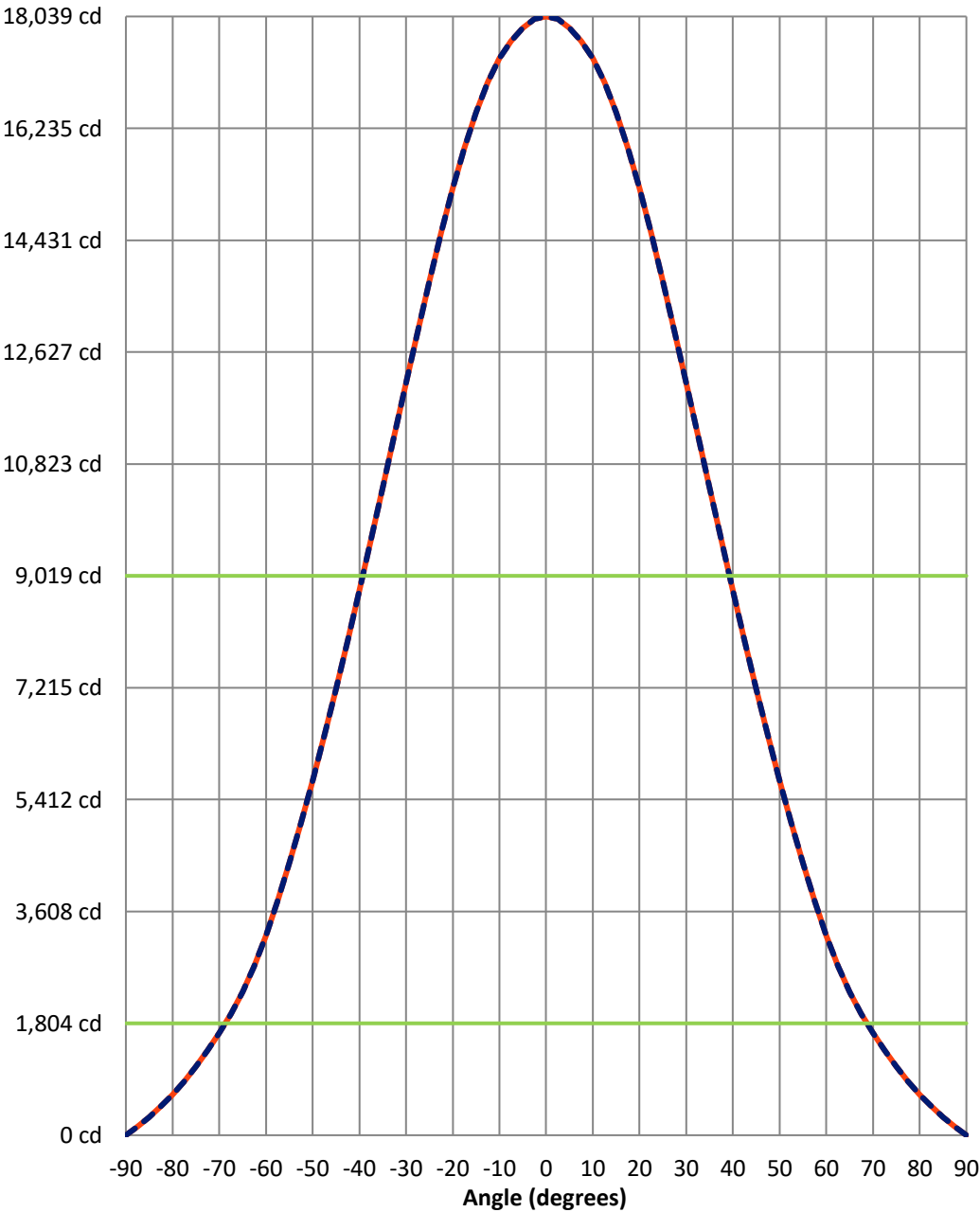


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg



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Luminous Intensity Plot



Beam:
H Angle: 78.6°
V Angle: 78.6°
Lumens: 14053.2
Efficiency: 43.3%

Field:
H Angle: 137.5°
V Angle: 137.5°
Lumens: 23011.6
Efficiency: 70.9%

Spill:
Lumens: 9467
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°	138.8	138.8	138.8	138.8	138.8	138.8	138.8	132.1	132.1	128.7	125.3
85°	291.2	291.2	291.2	291.2	291.2	284.4	281.1	277.7	274.3	267.5	264.1
82.5°	467.3	467.3	467.3	467.3	460.5	453.8	450.4	443.6	436.8	426.7	416.5
80°	653.5	653.5	653.5	653.5	643.4	636.6	626.5	619.7	609.5	596.0	582.4
77.5°	866.9	866.9	866.9	856.7	849.9	839.8	829.6	816.1	802.5	785.6	765.3
75°	1107.3	1107.3	1107.3	1093.8	1083.6	1073.4	1056.5	1039.6	1019.3	995.6	968.5
72.5°	1368.0	1368.0	1368.0	1351.1	1340.9	1324.0	1303.7	1280.0	1256.3	1225.8	1192.0
70°	1649.1	1649.1	1649.1	1628.8	1611.8	1594.9	1567.8	1540.7	1506.9	1473.0	1432.4
67.5°	1953.9	1953.9	1953.9	1930.2	1909.8	1886.1	1855.7	1821.8	1781.2	1733.8	1686.3
65°	2309.4	2309.4	2295.9	2275.5	2251.8	2218.0	2180.7	2133.3	2082.5	2021.6	1957.2
62.5°	2729.3	2729.3	2709.0	2685.3	2654.8	2610.8	2560.0	2499.0	2427.9	2350.0	2272.2
60°	3216.9	3216.9	3193.2	3162.7	3118.7	3064.5	2996.8	2918.9	2830.9	2732.7	2637.9
57.5°	3779.0	3779.0	3748.6	3707.9	3653.7	3586.0	3501.4	3403.2	3291.4	3169.5	3051.0
55°	4388.6	4388.6	4351.3	4303.9	4239.6	4158.3	4056.7	3941.6	3806.1	3667.3	3514.9
52.5°	5035.3	5035.3	4991.3	4937.1	4862.6	4767.8	4652.7	4517.2	4361.5	4198.9	4019.5
50°	5716.0	5716.0	5665.2	5604.2	5519.6	5407.8	5275.8	5120.0	4947.3	4757.7	4551.1
47.5°	6444.0	6444.0	6386.4	6315.3	6213.7	6085.1	5929.3	5749.8	5553.4	5340.1	5106.4
45°	7192.4	7192.4	7128.0	7046.8	6935.0	6789.4	6616.7	6444.0	6193.4	5946.2	5675.3
42.5°	7971.2	7971.2	7896.7	7805.3	7676.6	7517.4	7321.0	7097.5	6850.4	6572.7	6278.1
40°	8780.5	8780.5	8695.8	8590.9	8448.7	8265.8	8045.7	7795.1	7517.4	7209.3	6884.2
37.5°	9606.7	9606.7	9511.9	9396.8	9237.6	9034.5	8787.3	8509.6	8198.1	7856.1	7497.1
35°	10439.8	10439.8	10334.8	10209.5	10033.4	9809.9	9542.4	9234.3	8888.9	8516.4	8113.4
32.5°	11289.7	11289.7	11174.6	11032.3	10832.6	10585.4	10290.8	9955.5	9606.7	9173.3	8733.1
30°	12129.5	12129.5	12004.2	11848.4	11635.1	11364.2	11042.5	10673.4	10263.7	9820.1	9346.0
27.5°	12955.7	12921.9	12816.9	12651.0	12417.3	12129.5	11780.7	11381.1	10937.5	10449.9	9942.0
25°	13768.4	13731.2	13616.0	13433.2	13182.6	12867.7	12491.8	12065.2	11587.7	11073.0	10517.6
22.5°	14547.3	14506.6	14384.7	14188.3	13920.8	13578.8	13175.8	12718.7	12210.8	11658.8	11073.0
20°	15268.5	15224.5	15099.2	14892.7	14615.0	14252.7	13826.0	13335.0	12793.2	12210.8	11587.7
17.5°	15918.7	15874.7	15742.6	15529.3	15268.5	14865.6	14425.4	13907.3	13335.0	12718.7	12065.2
15°	16491.0	16443.6	16308.1	16094.8	15796.8	15417.5	14953.6	14425.4	13826.0	13175.8	12491.8
12.5°	16978.6	16931.2	16792.3	16579.0	16270.9	15891.6	15417.5	14865.6	14252.7	13578.8	12867.7
10°	17364.6	17317.2	17185.1	16982.0	16663.7	16270.9	15796.8	15268.5	14615.0	13920.8	13182.6
7.5°	17642.3	17598.3	17476.4	17273.2	16982.0	16579.0	16094.8	15529.3	14892.7	14188.3	13433.2
5°	17852.2	17801.4	17679.5	17476.4	17185.1	16792.3	16308.1	15742.6	15099.2	14384.7	13616.0
2.5°	17997.8	17936.9	17801.4	17598.3	17317.2	16931.2	16443.6	15874.7	15224.5	14506.6	13731.2
0°	18038.5	17997.8	17852.2	17642.3	17364.6	16978.6	16491.0	15918.7	15268.5	14547.3	13768.4

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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°	121.9	121.9	118.5	115.1	111.7	105.0	101.6	98.2	94.8	88.0	84.7
85°	257.4	250.6	243.8	237.0	226.9	220.1	209.9	203.2	193.0	182.9	172.7
82.5°	406.3	396.2	382.6	372.5	358.9	342.0	328.5	311.5	294.6	281.1	264.1
80°	568.9	552.0	535.0	518.1	497.8	477.5	457.1	436.8	413.1	389.4	365.7
77.5°	745.0	721.3	697.6	670.5	646.8	619.7	592.6	565.5	535.0	504.5	474.1
75°	941.4	910.9	877.0	843.2	812.7	775.4	738.2	701.0	660.3	623.1	582.4
72.5°	1154.7	1117.5	1076.8	1036.2	992.2	944.8	897.4	846.6	799.2	751.7	701.0
70°	1385.0	1340.9	1290.2	1239.4	1185.2	1127.6	1070.0	1009.1	948.1	887.2	826.2
67.5°	1632.2	1578.0	1517.0	1456.1	1388.4	1320.6	1252.9	1181.8	1107.3	1032.8	961.7
65°	1896.3	1828.6	1757.5	1679.6	1601.7	1523.8	1442.5	1357.9	1273.2	1185.2	1107.3
62.5°	2190.9	2106.2	2014.8	1920.0	1832.0	1737.1	1649.1	1544.1	1442.5	1344.3	1246.1
60°	2532.9	2421.2	2309.4	2190.9	2079.1	1957.2	1848.9	1733.8	1618.6	1506.9	1391.7
57.5°	2915.5	2773.3	2637.9	2495.7	2346.7	2211.2	2072.4	1933.5	1804.9	1672.8	1547.5
55°	3349.0	3176.3	3007.0	2830.9	2658.2	2488.9	2312.8	2157.0	1997.9	1848.9	1703.3
52.5°	3823.1	3626.7	3416.7	3216.9	2996.8	2786.9	2590.5	2394.1	2207.8	2028.4	1862.4
50°	4331.0	4100.7	3860.3	3616.5	3365.9	3118.7	2881.7	2651.4	2434.7	2224.8	2028.4
47.5°	4859.2	4598.5	4324.2	4046.5	3779.0	3477.7	3193.2	2932.5	2671.7	2434.7	2207.8
45°	5401.0	5106.4	4805.1	4490.1	4175.2	3850.1	3535.2	3216.9	2932.5	2651.4	2394.1
42.5°	5959.8	5627.9	5292.7	4943.9	4595.1	4239.6	3884.0	3535.2	3193.2	2881.7	2590.5
40°	6535.4	6169.7	5787.1	5407.8	5035.3	4629.0	4239.6	3850.1	3477.7	3118.7	2786.9
37.5°	7111.1	6711.5	6298.4	5871.7	5445.1	5035.3	4595.1	4175.2	3779.0	3365.9	2996.8
35°	7690.1	7249.9	6802.9	6339.0	5871.7	5407.8	4943.9	4490.1	4046.5	3616.5	3216.9
32.5°	8272.6	7791.7	7297.3	6802.9	6298.4	5787.1	5292.7	4805.1	4324.2	3860.3	3416.7
30°	8844.8	8323.4	7791.7	7249.9	6711.5	6169.7	5627.9	5106.4	4598.5	4100.7	3626.7
27.5°	9403.6	8844.8	8272.6	7690.1	7111.1	6535.4	5959.8	5401.0	4859.2	4331.0	3823.1
25°	9942.0	9346.0	8733.1	8113.4	7497.1	6884.2	6278.1	5675.3	5106.4	4551.1	4019.5
22.5°	10449.9	9820.1	9173.3	8516.4	7856.1	7209.3	6572.7	5946.2	5340.1	4757.7	4198.9
20°	10937.5	10263.7	9606.7	8888.9	8198.1	7517.4	6850.4	6193.4	5553.4	4947.3	4361.5
17.5°	11381.1	10673.4	9955.5	9234.3	8509.6	7795.1	7097.5	6444.0	5749.8	5120.0	4517.2
15°	11780.7	11042.5	10290.8	9542.4	8787.3	8045.7	7321.0	6616.7	5929.3	5275.8	4652.7
12.5°	12129.5	11364.2	10585.4	9809.9	9034.5	8265.8	7517.4	6789.4	6085.1	5407.8	4767.8
10°	12417.3	11635.1	10832.6	10033.4	9237.6	8448.7	7676.6	6935.0	6213.7	5519.6	4862.6
7.5°	12651.0	11848.4	11032.3	10209.5	9396.8	8590.9	7805.3	7046.8	6315.3	5604.2	4937.1
5°	12816.9	12004.2	11174.6	10334.8	9511.9	8695.8	7896.7	7128.0	6386.4	5665.2	4991.3
2.5°	12921.9	12129.5	11289.7	10439.8	9606.7	8780.5	7971.2	7192.4	6444.0	5716.0	5035.3
0°	12955.7	12129.5	11289.7	10439.8	9606.7	8780.5	7971.2	7192.4	6444.0	5716.0	5035.3

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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°	81.3	74.5	67.7	64.3	57.6	54.2	47.4	40.6	37.2	30.5	23.7
85°	162.5	149.0	138.8	128.7	118.5	105.0	94.8	84.7	71.1	61.0	47.4
82.5°	247.2	230.3	213.3	196.4	179.5	162.5	142.2	125.3	108.4	91.4	71.1
80°	342.0	314.9	291.2	267.5	243.8	220.1	193.0	169.3	142.2	118.5	94.8
77.5°	440.2	409.7	375.9	342.0	308.1	277.7	243.8	213.3	182.9	149.0	118.5
75°	545.2	504.5	467.3	423.3	382.6	338.6	298.0	257.4	220.1	182.9	142.2
72.5°	653.5	602.7	552.0	504.5	453.8	403.0	355.6	304.8	257.4	213.3	169.3
70°	765.3	704.3	643.4	585.8	528.3	467.3	413.1	355.6	298.0	243.8	193.0
67.5°	883.8	812.7	741.6	667.1	602.7	535.0	467.3	403.0	338.6	277.7	220.1
65°	1012.5	927.8	839.8	761.9	677.2	602.7	528.3	453.8	382.6	308.1	243.8
62.5°	1144.5	1046.3	948.1	849.9	761.9	667.1	585.8	504.5	423.3	342.0	267.5
60°	1280.0	1168.3	1056.5	948.1	839.8	741.6	643.4	552.0	467.3	375.9	291.2
57.5°	1418.8	1293.5	1168.3	1046.3	927.8	812.7	704.3	602.7	504.5	409.7	314.9
55°	1561.1	1418.8	1280.0	1144.5	1012.5	883.8	765.3	653.5	545.2	440.2	342.0
52.5°	1703.3	1547.5	1391.7	1246.1	1107.3	961.7	826.2	701.0	582.4	474.1	365.7
50°	1848.9	1672.8	1506.9	1344.3	1185.2	1032.8	887.2	751.7	623.1	504.5	389.4
47.5°	1997.9	1804.9	1618.6	1442.5	1273.2	1107.3	948.1	799.2	660.3	535.0	413.1
45°	2157.0	1933.5	1733.8	1544.1	1357.9	1181.8	1009.1	846.6	701.0	565.5	436.8
42.5°	2312.8	2072.4	1848.9	1649.1	1442.5	1252.9	1070.0	897.4	738.2	592.6	457.1
40°	2488.9	2211.2	1957.2	1737.1	1523.8	1320.6	1127.6	944.8	775.4	619.7	477.5
37.5°	2658.2	2346.7	2079.1	1832.0	1601.7	1388.4	1185.2	992.2	812.7	646.8	497.8
35°	2830.9	2495.7	2190.9	1920.0	1679.6	1456.1	1239.4	1036.2	843.2	670.5	518.1
32.5°	3007.0	2637.9	2309.4	2014.8	1757.5	1517.0	1290.2	1076.8	877.0	697.6	535.0
30°	3176.3	2773.3	2421.2	2106.2	1828.6	1578.0	1340.9	1117.5	910.9	721.3	552.0
27.5°	3349.0	2915.5	2532.9	2190.9	1896.3	1632.2	1385.0	1154.7	941.4	745.0	568.9
25°	3514.9	3051.0	2637.9	2272.2	1957.2	1686.3	1432.4	1192.0	968.5	765.3	582.4
22.5°	3667.3	3169.5	2732.7	2350.0	2021.6	1733.8	1473.0	1225.8	995.6	785.6	596.0
20°	3806.1	3291.4	2830.9	2427.9	2082.5	1781.2	1506.9	1256.3	1019.3	802.5	609.5
17.5°	3941.6	3403.2	2918.9	2499.0	2133.3	1821.8	1540.7	1280.0	1039.6	816.1	619.7
15°	4056.7	3501.4	2996.8	2560.0	2180.7	1855.7	1567.8	1303.7	1056.5	829.6	626.5
12.5°	4158.3	3586.0	3064.5	2610.8	2218.0	1886.1	1594.9	1324.0	1073.4	839.8	636.6
10°	4239.6	3653.7	3118.7	2654.8	2251.8	1909.8	1611.8	1340.9	1083.6	849.9	643.4
7.5°	4303.9	3707.9	3162.7	2685.3	2275.5	1930.2	1628.8	1351.1	1093.8	856.7	653.5
5°	4351.3	3748.6	3193.2	2709.0	2295.9	1953.9	1649.1	1368.0	1107.3	866.9	653.5
2.5°	4388.6	3779.0	3216.9	2729.3	2309.4	1953.9	1649.1	1368.0	1107.3	866.9	653.5
0°	4388.6	3779.0	3216.9	2729.3	2309.4	1953.9	1649.1	1368.0	1107.3	866.9	653.5

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	16.9	13.5	6.8	0.0
85°	37.2	23.7	13.5	0.0
82.5°	54.2	37.2	16.9	0.0
80°	71.1	47.4	23.7	0.0
77.5°	91.4	61.0	30.5	0.0
75°	108.4	71.1	37.2	0.0
72.5°	125.3	84.7	40.6	0.0
70°	142.2	94.8	47.4	0.0
67.5°	162.5	105.0	54.2	0.0
65°	179.5	118.5	57.6	0.0
62.5°	196.4	128.7	64.3	0.0
60°	213.3	138.8	67.7	0.0
57.5°	230.3	149.0	74.5	0.0
55°	247.2	162.5	81.3	0.0
52.5°	264.1	172.7	84.7	0.0
50°	281.1	182.9	88.0	0.0
47.5°	294.6	193.0	94.8	0.0
45°	311.5	203.2	98.2	0.0
42.5°	328.5	209.9	101.6	0.0
40°	342.0	220.1	105.0	0.0
37.5°	358.9	226.9	111.7	0.0
35°	372.5	237.0	115.1	0.0
32.5°	382.6	243.8	118.5	0.0
30°	396.2	250.6	121.9	0.0
27.5°	406.3	257.4	121.9	0.0
25°	416.5	264.1	125.3	0.0
22.5°	426.7	267.5	128.7	0.0
20°	436.8	274.3	132.1	0.0
17.5°	443.6	277.7	132.1	0.0
15°	450.4	281.1	138.8	0.0
12.5°	453.8	284.4	138.8	0.0
10°	460.5	291.2	138.8	0.0
7.5°	467.3	291.2	138.8	0.0
5°	467.3	291.2	138.8	0.0
2.5°	467.3	291.2	138.8	0.0
0°	467.3	291.2	138.8	0.0

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