

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: EPHESUS

Report Number: P624184

Luminaire Tested: **EPH-VN-08-D-730-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624184
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: EPHEBUS
Catalog Number: EPH-VN-08-D-730-U-77
Description: EPHEBUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
Nema 7 distribution lens
Light Source: (128) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

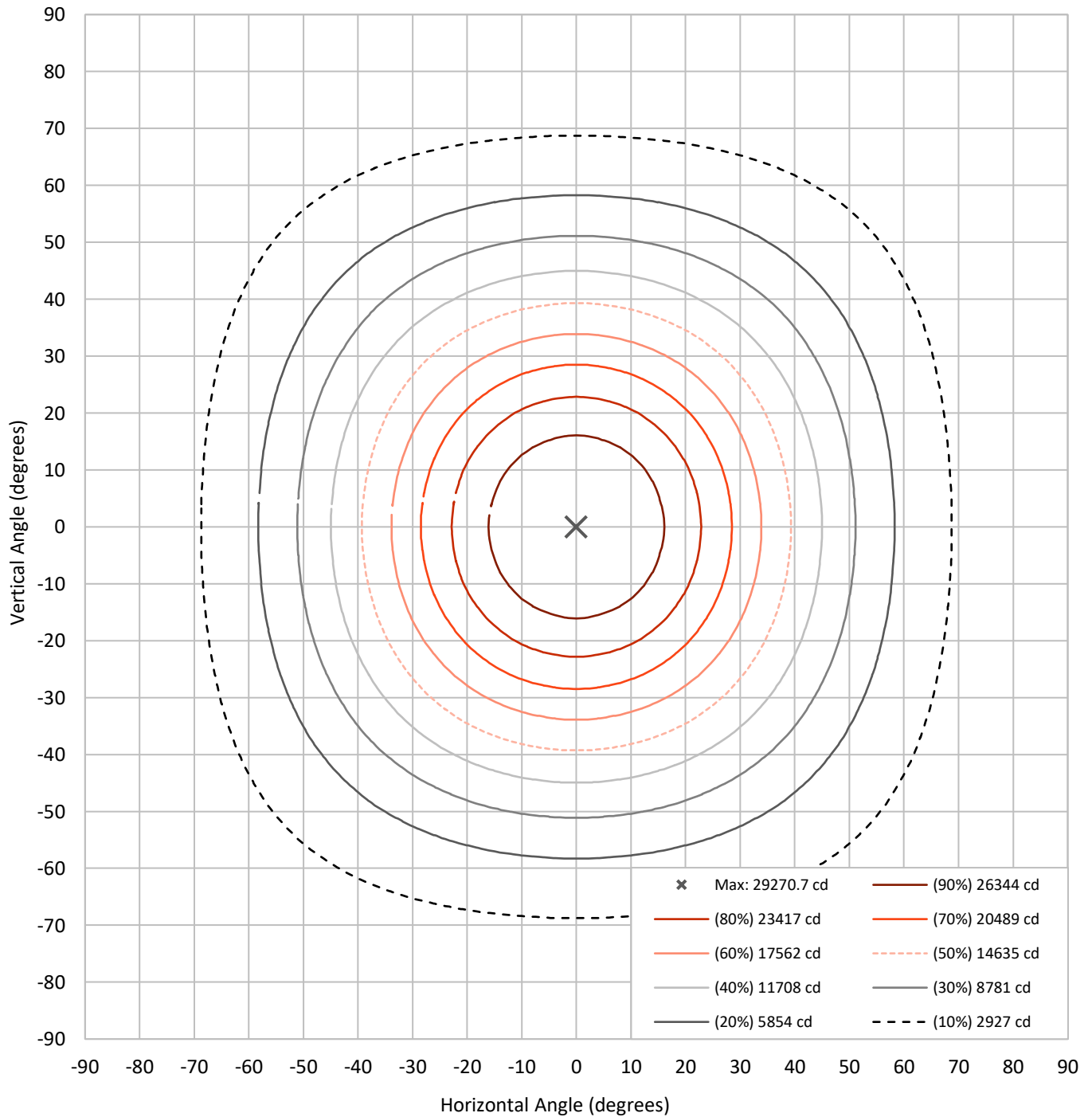
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	52702.5 lumens	Max Intensity:	29270.7 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	107.9 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	22803.9 lumens	Field Lumens:	37340.5 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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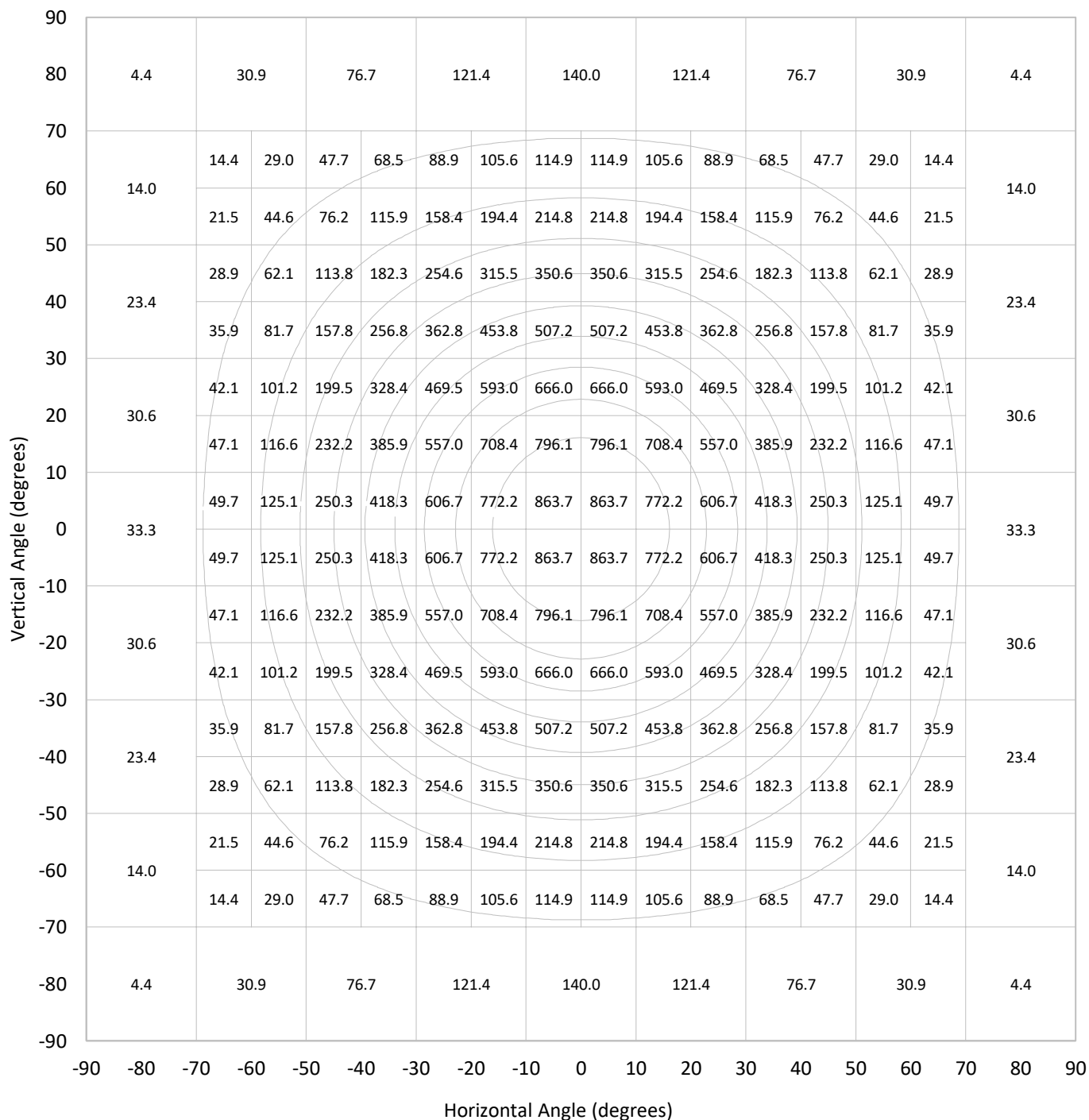
Iso-Candela Plot





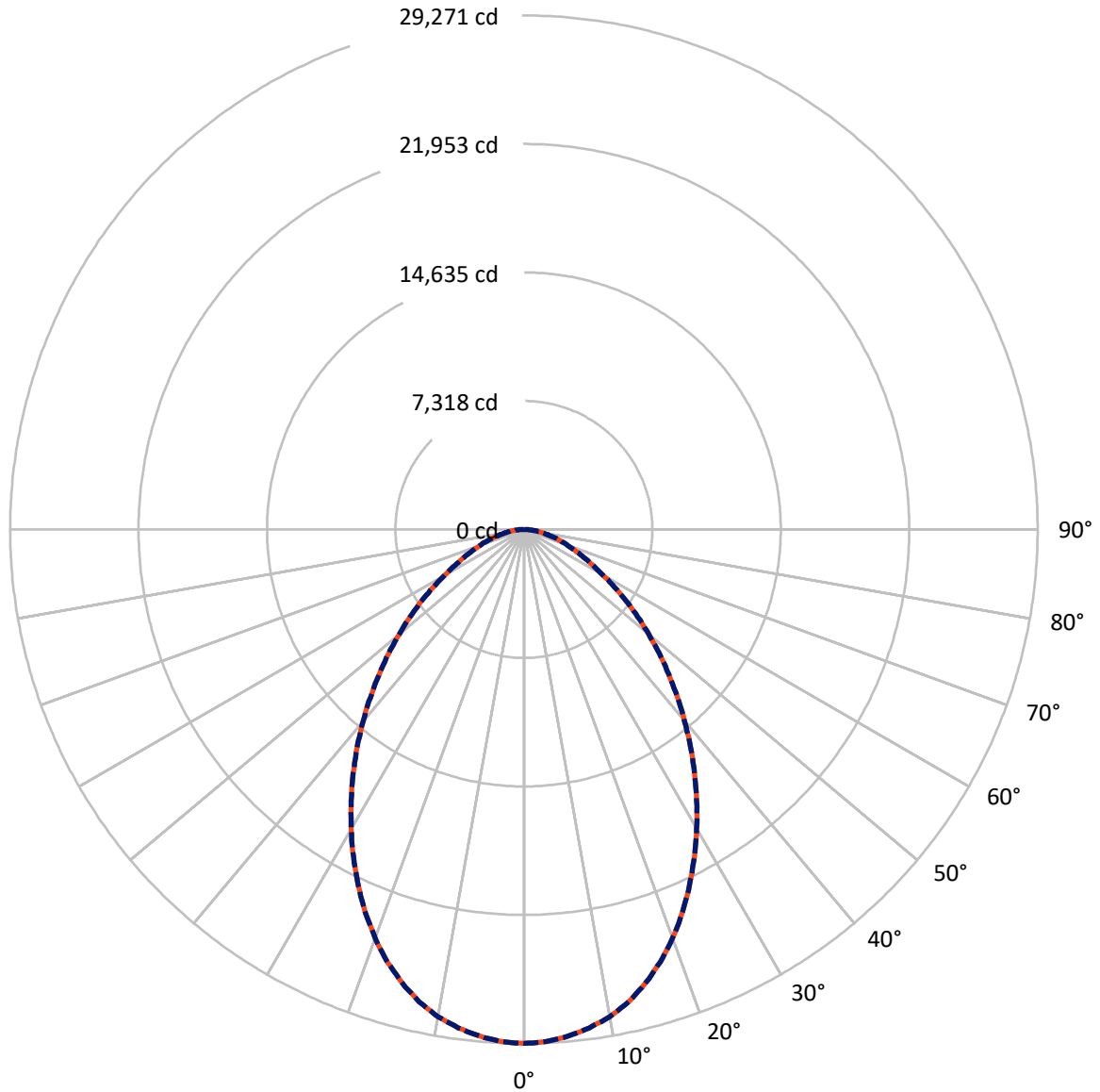
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Lumen Table



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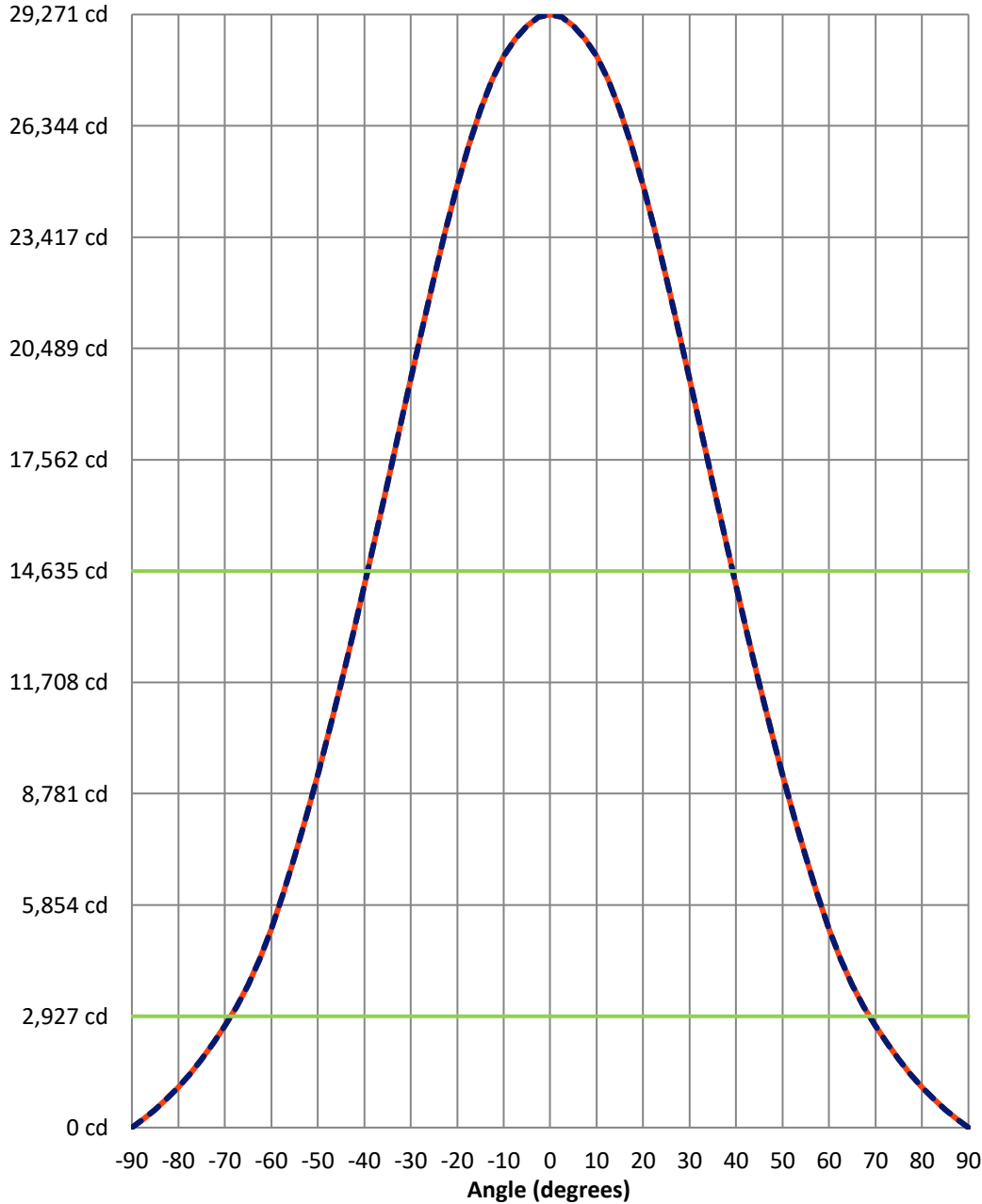
Luminous Intensity Polar Plot



— 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: 22803.9
 Efficiency: 43.3%

Field:
 H Angle: 137.5°
 V Angle: 137.5°
 Lumens: 37340.5
 Efficiency: 70.9%

Spill:
 Lumens: 15362
 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°	225.3	225.3	225.3	225.3	225.3	225.3	225.3	214.3	214.3	208.8	203.3
85°	472.6	472.6	472.6	472.6	472.6	461.6	456.1	450.6	445.1	434.1	428.6
82.5°	758.3	758.3	758.3	758.3	747.3	736.3	730.8	719.8	708.8	692.3	675.9
80°	1060.5	1060.5	1060.5	1060.5	1044.0	1033.0	1016.5	1005.5	989.1	967.1	945.1
77.5°	1406.7	1406.7	1406.7	1390.2	1379.2	1362.7	1346.2	1324.2	1302.3	1274.8	1241.8
75°	1796.8	1796.8	1796.8	1774.8	1758.3	1741.8	1714.4	1686.9	1653.9	1615.5	1571.5
72.5°	2219.9	2219.9	2219.9	2192.4	2175.9	2148.5	2115.5	2077.0	2038.6	1989.1	1934.2
70°	2676.0	2676.0	2676.0	2643.0	2615.5	2588.0	2544.1	2500.1	2445.2	2390.2	2324.3
67.5°	3170.5	3170.5	3170.5	3132.0	3099.1	3060.6	3011.1	2956.2	2890.3	2813.3	2736.4
65°	3747.4	3747.4	3725.5	3692.5	3654.0	3599.1	3538.6	3461.7	3379.3	3280.4	3176.0
62.5°	4428.8	4428.8	4395.8	4357.4	4307.9	4236.5	4154.0	4055.1	3939.8	3813.4	3687.0
60°	5220.0	5220.0	5181.6	5132.1	5060.7	4972.8	4862.9	4736.5	4593.6	4434.3	4280.4
57.5°	6132.2	6132.2	6082.7	6016.8	5928.9	5819.0	5681.6	5522.2	5340.9	5143.1	4950.8
55°	7121.2	7121.2	7060.8	6983.9	6879.5	6747.6	6582.7	6395.9	6176.1	5950.8	5703.6
52.5°	8170.7	8170.7	8099.3	8011.4	7890.5	7736.6	7549.8	7330.0	7077.3	6813.5	6522.3
50°	9275.2	9275.2	9192.8	9093.9	8956.5	8775.2	8560.9	8308.1	8027.9	7720.2	7385.0
47.5°	10456.6	10456.6	10363.1	10247.8	10082.9	9874.1	9621.4	9330.1	9011.4	8665.3	8286.1
45°	11670.9	11670.9	11566.5	11434.6	11253.3	11017.0	10736.8	10456.6	10049.9	9648.8	9209.2
42.5°	12934.7	12934.7	12813.8	12665.5	12456.7	12198.4	11879.7	11517.0	11115.9	10665.4	10187.3
40°	14248.0	14248.0	14110.6	13940.2	13709.5	13412.7	13055.6	12649.0	12198.4	11698.4	11170.9
37.5°	15588.7	15588.7	15434.8	15248.0	14989.7	14660.1	14258.9	13808.4	13302.8	12747.9	12165.4
35°	16940.4	16940.4	16770.1	16566.7	16281.0	15918.4	15484.3	14984.2	14423.8	13819.4	13165.5
32.5°	18319.6	18319.6	18132.8	17902.0	17577.8	17176.7	16698.6	16154.6	15588.7	14885.3	14171.0
30°	19682.3	19682.3	19479.0	19226.2	18880.0	18440.5	17918.5	17319.5	16654.7	15934.8	15165.6
27.5°	21023.0	20968.1	20797.7	20528.5	20149.3	19682.3	19116.3	18467.9	17748.1	16956.9	16132.7
25°	22341.8	22281.3	22094.5	21797.8	21391.2	20880.1	20270.2	19577.9	18803.1	17967.9	17066.8
22.5°	23605.6	23539.6	23341.8	23023.1	22589.0	22034.0	21380.2	20638.4	19814.2	18918.5	17967.9
20°	24775.9	24704.5	24501.2	24166.0	23715.4	23127.5	22435.2	21638.4	20759.3	19814.2	18803.1
17.5°	25830.9	25759.5	25545.2	25199.0	24775.9	24122.1	23407.7	22567.0	21638.4	20638.4	19577.9
15°	26759.6	26682.6	26462.8	26116.7	25633.1	25017.7	24264.9	23407.7	22435.2	21380.2	20270.2
12.5°	27550.8	27473.9	27248.6	26902.4	26402.4	25787.0	25017.7	24122.1	23127.5	22034.0	20880.1
10°	28177.2	28100.3	27886.0	27556.3	27039.8	26402.4	25633.1	24775.9	23715.4	22589.0	21391.2
7.5°	28627.8	28556.3	28358.5	28028.8	27556.3	26902.4	26116.7	25199.0	24166.0	23023.1	21797.8
5°	28968.5	28886.0	28688.2	28358.5	27886.0	27248.6	26462.8	25545.2	24501.2	23341.8	22094.5
2.5°	29204.7	29105.8	28886.0	28556.3	28100.3	27473.9	26682.6	25759.5	24704.5	23539.6	22281.3
0°	29270.7	29204.7	28968.5	28627.8	28177.2	27550.8	26759.6	25830.9	24775.9	23605.6	22341.8



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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°	197.8	197.8	192.3	186.8	181.3	170.3	164.8	159.3	153.9	142.9	137.4
85°	417.6	406.6	395.6	384.6	368.1	357.2	340.7	329.7	313.2	296.7	280.2
82.5°	659.4	642.9	620.9	604.4	582.4	555.0	533.0	505.5	478.0	456.1	428.6
80°	923.1	895.6	868.2	840.7	807.7	774.8	741.8	708.8	670.4	631.9	593.4
77.5°	1208.9	1170.4	1131.9	1088.0	1049.5	1005.5	961.6	917.6	868.2	818.7	769.3
75°	1527.5	1478.1	1423.1	1368.2	1318.7	1258.3	1197.9	1137.4	1071.5	1011.0	945.1
72.5°	1873.7	1813.3	1747.3	1681.4	1610.0	1533.0	1456.1	1373.7	1296.8	1219.8	1137.4
70°	2247.4	2175.9	2093.5	2011.1	1923.2	1829.8	1736.3	1637.4	1538.5	1439.6	1340.7
67.5°	2648.5	2560.6	2461.7	2362.8	2252.9	2143.0	2033.1	1917.7	1796.8	1675.9	1560.5
65°	3077.1	2967.2	2851.8	2725.4	2599.0	2472.6	2340.8	2203.4	2066.0	1923.2	1796.8
62.5°	3555.1	3417.7	3269.4	3115.5	2972.7	2818.8	2676.0	2505.6	2340.8	2181.4	2022.1
60°	4110.1	3928.8	3747.4	3555.1	3373.8	3176.0	3000.1	2813.3	2626.5	2445.2	2258.4
57.5°	4731.0	4500.2	4280.4	4049.6	3807.9	3588.1	3362.8	3137.5	2928.7	2714.4	2511.1
55°	5434.3	5154.1	4879.4	4593.6	4313.4	4038.7	3752.9	3500.2	3241.9	3000.1	2763.9
52.5°	6203.6	5884.9	5544.2	5220.0	4862.9	4522.2	4203.5	3884.8	3582.6	3291.4	3022.1
50°	7027.8	6654.2	6264.0	5868.4	5461.8	5060.7	4676.1	4302.4	3950.7	3610.1	3291.4
47.5°	7885.0	7461.9	7016.8	6566.3	6132.2	5643.1	5181.6	4758.5	4335.4	3950.7	3582.6
45°	8764.2	8286.1	7797.1	7286.1	6775.1	6247.6	5736.5	5220.0	4758.5	4302.4	3884.8
42.5°	9670.8	9132.3	8588.3	8022.4	7456.4	6879.5	6302.5	5736.5	5181.6	4676.1	4203.5
40°	10604.9	10011.5	9390.6	8775.2	8170.7	7511.4	6879.5	6247.6	5643.1	5060.7	4522.2
37.5°	11539.0	10890.6	10220.3	9527.9	8835.6	8170.7	7456.4	6775.1	6132.2	5461.8	4862.9
35°	12478.6	11764.3	11039.0	10286.2	9527.9	8775.2	8022.4	7286.1	6566.3	5868.4	5220.0
32.5°	13423.7	12643.5	11841.2	11039.0	10220.3	9390.6	8588.3	7797.1	7016.8	6264.0	5544.2
30°	14352.4	13506.2	12643.5	11764.3	10890.6	10011.5	9132.3	8286.1	7461.9	6654.2	5884.9
27.5°	15259.0	14352.4	13423.7	12478.6	11539.0	10604.9	9670.8	8764.2	7885.0	7027.8	6203.6
25°	16132.7	15165.6	14171.0	13165.5	12165.4	11170.9	10187.3	9209.2	8286.1	7385.0	6522.3
22.5°	16956.9	15934.8	14885.3	13819.4	12747.9	11698.4	10665.4	9648.8	8665.3	7720.2	6813.5
20°	17748.1	16654.7	15588.7	14423.8	13302.8	12198.4	11115.9	10049.9	9011.4	8027.9	7077.3
17.5°	18467.9	17319.5	16154.6	14984.2	13808.4	12649.0	11517.0	10456.6	9330.1	8308.1	7330.0
15°	19116.3	17918.5	16698.6	15484.3	14258.9	13055.6	11879.7	10736.8	9621.4	8560.9	7549.8
12.5°	19682.3	18440.5	17176.7	15918.4	14660.1	13412.7	12198.4	11017.0	9874.1	8775.2	7736.6
10°	20149.3	18880.0	17577.8	16281.0	14989.7	13709.5	12456.7	11253.3	10082.9	8956.5	7890.5
7.5°	20528.5	19226.2	17902.0	16566.7	15248.0	13940.2	12665.5	11434.6	10247.8	9093.9	8011.4
5°	20797.7	19479.0	18132.8	16770.1	15434.8	14110.6	12813.8	11566.5	10363.1	9192.8	8099.3
2.5°	20968.1	19682.3	18319.6	16940.4	15588.7	14248.0	12934.7	11670.9	10456.6	9275.2	8170.7
0°	21023.0	19682.3	18319.6	16940.4	15588.7	14248.0	12934.7	11670.9	10456.6	9275.2	8170.7



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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°	131.9	120.9	109.9	104.4	93.4	87.9	76.9	65.9	60.4	49.5	38.5
85°	263.7	241.8	225.3	208.8	192.3	170.3	153.9	137.4	115.4	98.9	76.9
82.5°	401.1	373.6	346.2	318.7	291.2	263.7	230.8	203.3	175.8	148.4	115.4
80°	555.0	511.0	472.6	434.1	395.6	357.2	313.2	274.7	230.8	192.3	153.9
77.5°	714.3	664.9	609.9	555.0	500.0	450.6	395.6	346.2	296.7	241.8	192.3
75°	884.7	818.7	758.3	686.8	620.9	549.5	483.5	417.6	357.2	296.7	230.8
72.5°	1060.5	978.1	895.6	818.7	736.3	653.9	577.0	494.5	417.6	346.2	274.7
70°	1241.8	1142.9	1044.0	950.6	857.2	758.3	670.4	577.0	483.5	395.6	313.2
67.5°	1434.1	1318.7	1203.4	1082.5	978.1	868.2	758.3	653.9	549.5	450.6	357.2
65°	1642.9	1505.6	1362.7	1236.3	1099.0	978.1	857.2	736.3	620.9	500.0	395.6
62.5°	1857.2	1697.9	1538.5	1379.2	1236.3	1082.5	950.6	818.7	686.8	555.0	434.1
60°	2077.0	1895.7	1714.4	1538.5	1362.7	1203.4	1044.0	895.6	758.3	609.9	472.6
57.5°	2302.3	2099.0	1895.7	1697.9	1505.6	1318.7	1142.9	978.1	818.7	664.9	511.0
55°	2533.1	2302.3	2077.0	1857.2	1642.9	1434.1	1241.8	1060.5	884.7	714.3	555.0
52.5°	2763.9	2511.1	2258.4	2022.1	1796.8	1560.5	1340.7	1137.4	945.1	769.3	593.4
50°	3000.1	2714.4	2445.2	2181.4	1923.2	1675.9	1439.6	1219.8	1011.0	818.7	631.9
47.5°	3241.9	2928.7	2626.5	2340.8	2066.0	1796.8	1538.5	1296.8	1071.5	868.2	670.4
45°	3500.2	3137.5	2813.3	2505.6	2203.4	1917.7	1637.4	1373.7	1137.4	917.6	708.8
42.5°	3752.9	3362.8	3000.1	2676.0	2340.8	2033.1	1736.3	1456.1	1197.9	961.6	741.8
40°	4038.7	3588.1	3176.0	2818.8	2472.6	2143.0	1829.8	1533.0	1258.3	1005.5	774.8
37.5°	4313.4	3807.9	3373.8	2972.7	2599.0	2252.9	1923.2	1610.0	1318.7	1049.5	807.7
35°	4593.6	4049.6	3555.1	3115.5	2725.4	2362.8	2011.1	1681.4	1368.2	1088.0	840.7
32.5°	4879.4	4280.4	3747.4	3269.4	2851.8	2461.7	2093.5	1747.3	1423.1	1131.9	868.2
30°	5154.1	4500.2	3928.8	3417.7	2967.2	2560.6	2175.9	1813.3	1478.1	1170.4	895.6
27.5°	5434.3	4731.0	4110.1	3555.1	3077.1	2648.5	2247.4	1873.7	1527.5	1208.9	923.1
25°	5703.6	4950.8	4280.4	3687.0	3176.0	2736.4	2324.3	1934.2	1571.5	1241.8	945.1
22.5°	5950.8	5143.1	4434.3	3813.4	3280.4	2813.3	2390.2	1989.1	1615.5	1274.8	967.1
20°	6176.1	5340.9	4593.6	3939.8	3379.3	2890.3	2445.2	2038.6	1653.9	1302.3	989.1
17.5°	6395.9	5522.2	4736.5	4055.1	3461.7	2956.2	2500.1	2077.0	1686.9	1324.2	1005.5
15°	6582.7	5681.6	4862.9	4154.0	3538.6	3011.1	2544.1	2115.5	1714.4	1346.2	1016.5
12.5°	6747.6	5819.0	4972.8	4236.5	3599.1	3060.6	2588.0	2148.5	1741.8	1362.7	1033.0
10°	6879.5	5928.9	5060.7	4307.9	3654.0	3099.1	2615.5	2175.9	1758.3	1379.2	1044.0
7.5°	6983.9	6016.8	5132.1	4357.4	3692.5	3132.0	2643.0	2192.4	1774.8	1390.2	1060.5
5°	7060.8	6082.7	5181.6	4395.8	3725.5	3170.5	2676.0	2219.9	1796.8	1406.7	1060.5
2.5°	7121.2	6132.2	5220.0	4428.8	3747.4	3170.5	2676.0	2219.9	1796.8	1406.7	1060.5
0°	7121.2	6132.2	5220.0	4428.8	3747.4	3170.5	2676.0	2219.9	1796.8	1406.7	1060.5



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	27.5	22.0	11.0	0.0
85°	60.4	38.5	22.0	0.0
82.5°	87.9	60.4	27.5	0.0
80°	115.4	76.9	38.5	0.0
77.5°	148.4	98.9	49.5	0.0
75°	175.8	115.4	60.4	0.0
72.5°	203.3	137.4	65.9	0.0
70°	230.8	153.9	76.9	0.0
67.5°	263.7	170.3	87.9	0.0
65°	291.2	192.3	93.4	0.0
62.5°	318.7	208.8	104.4	0.0
60°	346.2	225.3	109.9	0.0
57.5°	373.6	241.8	120.9	0.0
55°	401.1	263.7	131.9	0.0
52.5°	428.6	280.2	137.4	0.0
50°	456.1	296.7	142.9	0.0
47.5°	478.0	313.2	153.9	0.0
45°	505.5	329.7	159.3	0.0
42.5°	533.0	340.7	164.8	0.0
40°	555.0	357.2	170.3	0.0
37.5°	582.4	368.1	181.3	0.0
35°	604.4	384.6	186.8	0.0
32.5°	620.9	395.6	192.3	0.0
30°	642.9	406.6	197.8	0.0
27.5°	659.4	417.6	197.8	0.0
25°	675.9	428.6	203.3	0.0
22.5°	692.3	434.1	208.8	0.0
20°	708.8	445.1	214.3	0.0
17.5°	719.8	450.6	214.3	0.0
15°	730.8	456.1	225.3	0.0
12.5°	736.3	461.6	225.3	0.0
10°	747.3	472.6	225.3	0.0
7.5°	758.3	472.6	225.3	0.0
5°	758.3	472.6	225.3	0.0
2.5°	758.3	472.6	225.3	0.0
0°	758.3	472.6	225.3	0.0

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