

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: P624141

Luminaire Tested: **EPH-VN-07-E-740-U-55**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624141
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: EPHESUS
Catalog Number: EPH-VN-07-E-740-U-55
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
Nema 5 distribution lens
Light Source: (112) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	5H x 5V
Luminaire Lumens:	58860.6 lumens	Max Intensity:	71930.1 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 10°V
Efficacy:	110.5 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		

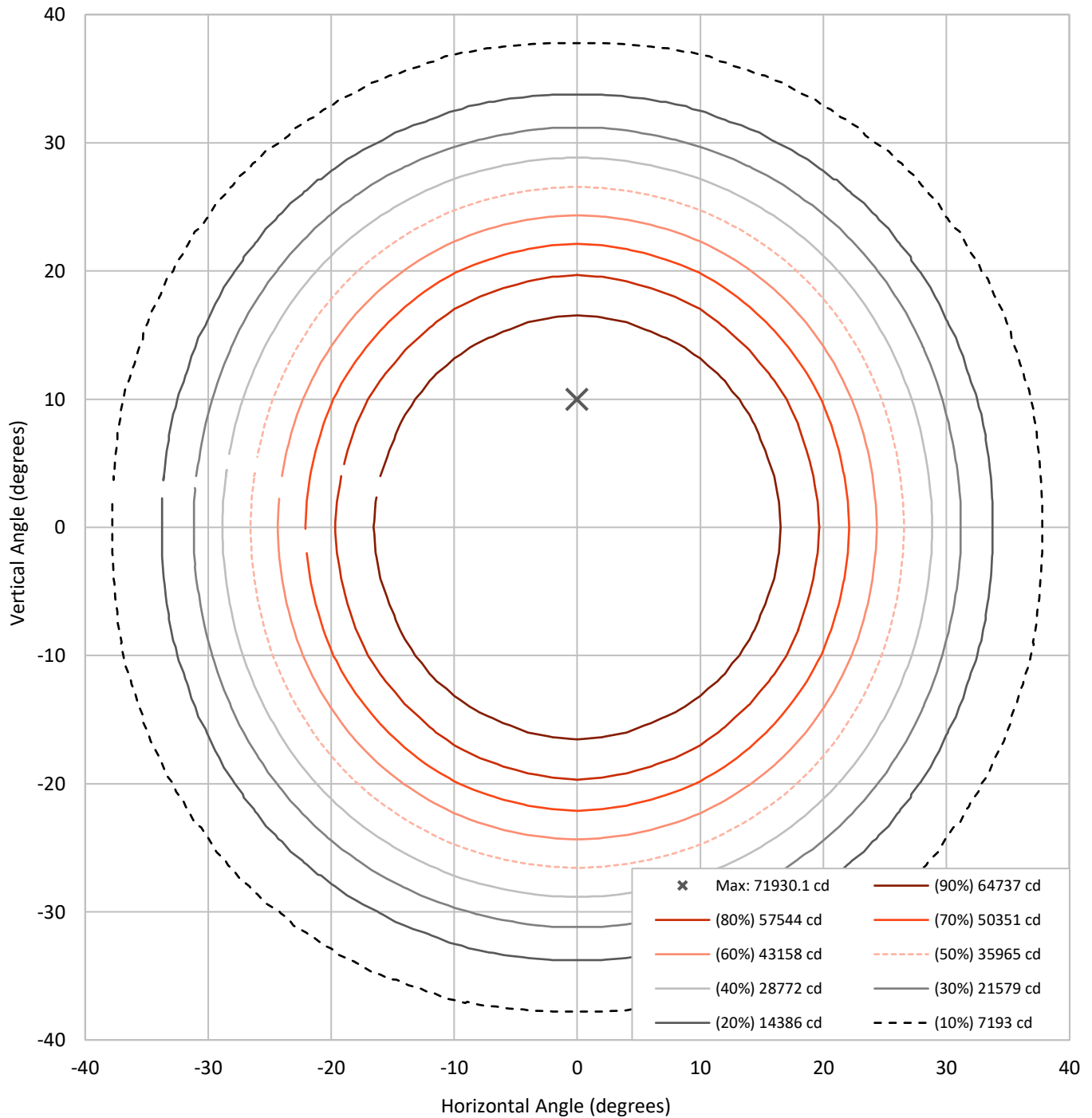
Beam Angle (50%):	49.5°H x 53.1°V	Field Angle (10%):	73.6°H x 75.3°V
Beam Lumens:	29255.2 lumens	Field Lumens:	38047.2 lumens
Beam Efficiency:	49.7%	Field Efficiency:	64.6%

Input Watts (W): 532.7
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





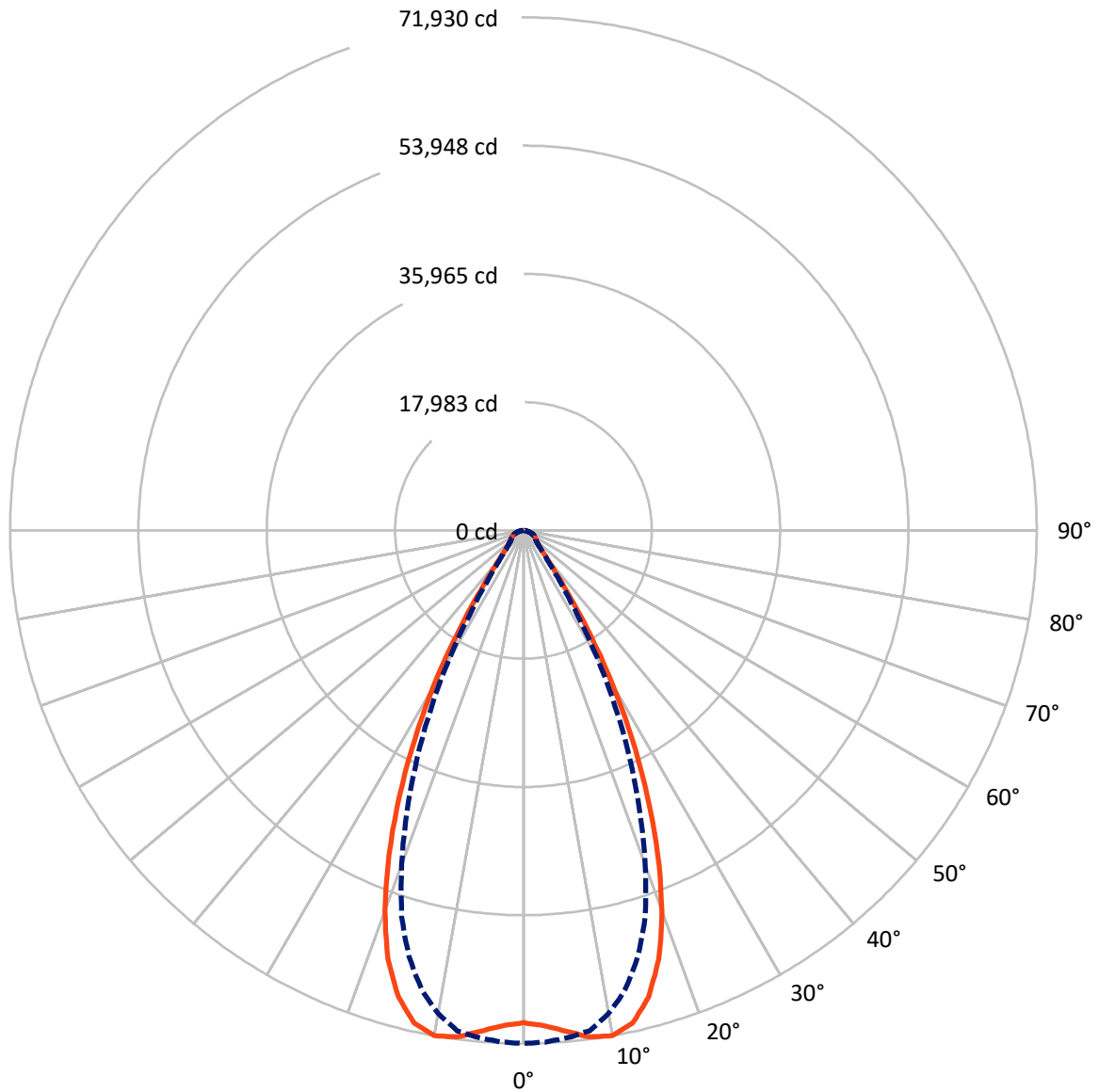
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Lumen Table

90	1.7	12.9	33.7	54.3	62.9	54.3	33.7	12.9	1.7							
80	1.7	12.9	33.7	54.3	62.9	54.3	33.7	12.9	1.7							
70	5.9	6.4	13.3	22.0	30.9	38.6	44.2	47.2	47.2	44.2	38.6	30.9	22.0	13.3	6.4	5.9
60		9.9	20.4	32.3	43.4	52.7	59.8	63.8	63.8	59.8	52.7	43.4	32.3	20.4	9.9	
50	10.4	13.3	26.3	39.7	53.3	69.0	87.3	101.4	101.4	87.3	69.0	53.3	39.7	26.3	13.3	10.4
40		16.1	30.5	46.1	69.8	124.4	243.0	366.5	366.5	243.0	124.4	69.8	46.1	30.5	16.1	
30	13.9	18.2	33.5	54.0	112.9	359.6	833.3	1182.7	1182.7	833.3	359.6	112.9	54.0	33.5	18.2	13.9
20		19.6	35.7	64.4	208.3	784.9	1535.7	1957.8	1957.8	1535.7	784.9	208.3	64.4	35.7	19.6	
10	15.2	20.2	36.9	72.7	305.7	1081.3	1899.9	2154.6	2154.6	1899.9	1081.3	305.7	72.7	36.9	20.2	15.2
0		20.2	36.9	72.7	305.7	1081.3	1899.9	2154.6	2154.6	1899.9	1081.3	305.7	72.7	36.9	20.2	
-10	13.9	19.6	35.7	64.4	208.3	784.9	1535.7	1957.8	1957.8	1535.7	784.9	208.3	64.4	35.7	19.6	13.9
-20		18.2	33.5	54.0	112.9	359.6	833.3	1182.7	1182.7	833.3	359.6	112.9	54.0	33.5	18.2	
-30	10.4	16.1	30.5	46.1	69.8	124.4	243.0	366.5	366.5	243.0	124.4	69.8	46.1	30.5	16.1	10.4
-40		13.3	26.3	39.7	53.3	69.0	87.3	101.4	101.4	87.3	69.0	53.3	39.7	26.3	13.3	
-50	5.9	9.9	20.4	32.3	43.4	52.7	59.8	63.8	63.8	59.8	52.7	43.4	32.3	20.4	9.9	5.9
-60		6.4	13.3	22.0	30.9	38.6	44.2	47.2	47.2	44.2	38.6	30.9	22.0	13.3	6.4	
-70	1.7	12.9	33.7	54.3	62.9	54.3	33.7	12.9	1.7							
-80		1.7	12.9	33.7	54.3	62.9	54.3	33.7	12.9	1.7						
-90	1.7	12.9	33.7	54.3	62.9	54.3	33.7	12.9	1.7							

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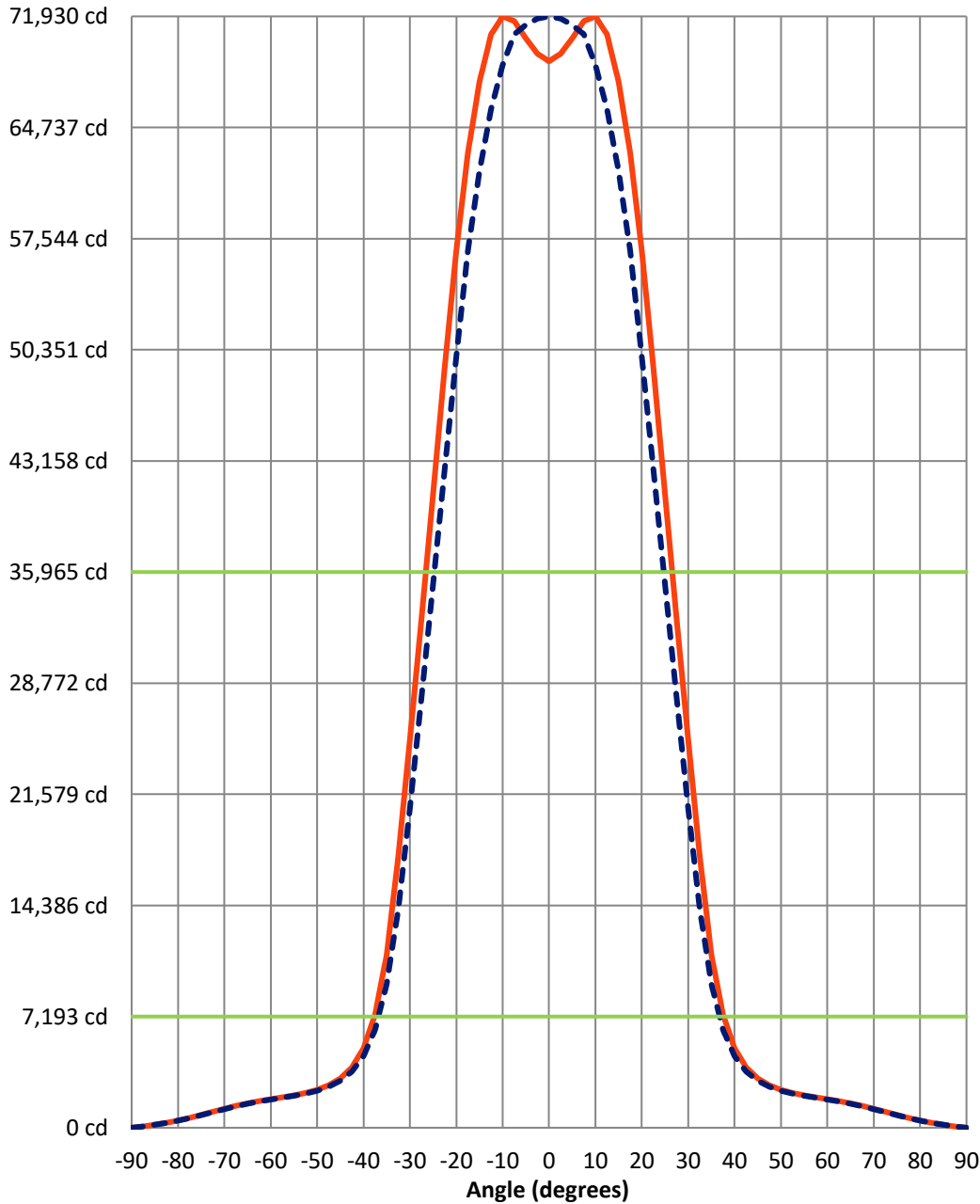
Luminous Intensity Polar Plot



— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 10-Deg

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Luminous Intensity Plot



Beam:
 H Angle: 49.5°
 V Angle: 53.1°
 Lumens: 29255.2
 Efficiency: 49.7%

Field:
 H Angle: 73.6°
 V Angle: 75.3°
 Lumens: 38047.2
 Efficiency: 64.6%

Spill:
 Lumens: 20813.3
 Efficiency: 35.4%

- Vertical Distribution through 0-Deg
- - - Horizontal Distribution through 10-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°	79.5	79.5	79.5	79.5	79.5	79.5	79.5	73.4	73.4	73.4	73.4
85°	195.7	195.7	195.7	195.7	195.7	189.5	189.5	183.4	183.4	177.3	171.2
82.5°	317.9	317.9	317.9	317.9	311.8	311.8	305.7	299.6	293.5	287.4	281.3
80°	464.7	464.7	464.7	464.7	458.6	452.5	446.4	440.2	428.0	421.9	409.7
77.5°	635.9	635.9	635.9	629.8	623.7	617.6	605.3	593.1	580.9	568.6	556.4
75°	831.6	831.6	831.6	819.3	813.2	801.0	788.8	776.5	758.2	739.8	721.5
72.5°	1033.3	1033.3	1033.3	1021.1	1008.9	996.7	984.4	966.1	947.7	923.3	898.8
70°	1222.9	1222.9	1222.9	1210.7	1198.4	1186.2	1167.9	1149.5	1125.1	1100.6	1076.1
67.5°	1418.5	1418.5	1418.5	1400.2	1388.0	1375.7	1357.4	1332.9	1308.5	1277.9	1247.3
65°	1577.5	1577.5	1571.4	1565.3	1553.1	1534.7	1522.5	1498.0	1473.6	1449.1	1418.5
62.5°	1724.3	1724.3	1718.2	1712.0	1699.8	1681.5	1663.1	1644.8	1620.3	1589.7	1559.2
60°	1846.6	1846.6	1840.4	1834.3	1822.1	1809.9	1791.5	1773.2	1748.7	1724.3	1693.7
57.5°	1968.8	1968.8	1962.7	1956.6	1944.4	1926.0	1907.7	1889.4	1864.9	1834.3	1803.8
55°	2097.2	2097.2	2091.1	2078.9	2066.7	2048.3	2030.0	2005.5	1975.0	1944.4	1913.8
52.5°	2250.1	2250.1	2237.9	2225.6	2207.3	2189.0	2158.4	2127.8	2091.1	2054.4	2017.8
50°	2451.9	2451.9	2439.7	2421.3	2390.7	2360.2	2323.5	2274.6	2231.8	2182.8	2133.9
47.5°	2751.5	2751.5	2727.0	2696.5	2653.7	2604.7	2537.5	2464.1	2403.0	2341.8	2268.5
45°	3191.7	3191.7	3155.0	3106.1	3038.9	2953.3	2855.4	2751.5	2647.5	2543.6	2439.7
42.5°	3907.1	3907.1	3839.9	3754.3	3638.1	3491.3	3307.9	3136.7	2990.0	2824.9	2684.2
40°	5142.2	5142.2	5013.8	4854.9	4634.7	4353.5	4017.2	3748.1	3491.3	3204.0	3008.3
37.5°	7337.3	7337.3	7086.6	6780.9	6352.9	5814.8	5166.7	4732.6	4255.6	3803.2	3473.0
35°	11213.9	11213.9	10730.8	10137.7	9312.3	8272.8	7166.1	6346.8	5435.7	4738.7	4121.1
32.5°	17572.9	17572.9	16704.6	15634.6	14161.0	12296.1	10522.9	8963.7	7337.3	6181.7	5068.9
30°	25130.3	25130.3	23993.0	22592.8	20672.9	18251.6	15726.3	12956.5	10388.4	8327.8	6646.4
27.5°	32944.5	32620.4	31642.1	30046.3	27857.3	25130.3	21981.4	18404.4	14931.4	11299.5	8896.5
25°	41027.8	40648.7	39529.7	37695.4	35188.5	32100.7	28554.4	24555.5	20269.3	15940.3	11782.5
22.5°	49196.6	48768.6	47496.8	45424.0	42611.4	39150.6	35133.5	30688.3	25900.7	20899.1	15940.3
20°	56748.0	56295.5	54962.5	52804.2	49893.7	46096.6	41633.1	36704.9	31409.8	25900.7	20269.3
17.5°	63070.3	62636.1	61352.1	59291.6	56748.0	52547.4	47906.5	42489.1	36704.9	30688.3	24555.5
15°	67686.7	67313.7	66219.2	64488.8	61896.3	58178.7	53452.3	47906.5	41633.1	35133.5	28554.4
12.5°	70750.0	70450.4	69588.2	68243.1	65919.6	62801.2	58178.7	52547.4	46096.6	39150.6	32100.7
10°	71930.1	71783.3	71379.8	70762.2	68781.1	65919.6	61896.3	56748.0	49893.7	42611.4	35188.5
7.5°	71618.2	71667.2	71807.8	71648.8	70762.2	68243.1	64488.8	59291.6	52804.2	45424.0	37695.4
5°	70505.4	70768.3	71422.6	71807.8	71379.8	69588.2	66219.2	61352.1	54962.5	47496.8	39529.7
2.5°	69514.9	69924.5	70768.3	71667.2	71783.3	70450.4	67313.7	62636.1	56295.5	48768.6	40648.7
0°	69025.7	69514.9	70505.4	71618.2	71930.1	70750.0	67686.7	63070.3	56748.0	49196.6	41027.8



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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°	73.4	67.3	67.3	67.3	61.1	61.1	61.1	55.0	55.0	48.9	48.9
85°	171.2	165.1	159.0	152.9	146.7	140.6	134.5	128.4	122.3	110.1	103.9
82.5°	275.1	269.0	262.9	250.7	244.6	232.3	220.1	207.9	195.7	189.5	177.3
80°	397.4	385.2	373.0	360.8	342.4	324.1	311.8	293.5	281.3	262.9	250.7
77.5°	538.1	519.7	501.4	476.9	458.6	440.2	415.8	397.4	373.0	348.5	324.1
75°	697.0	672.6	642.0	617.6	593.1	562.5	532.0	501.4	470.8	440.2	409.7
72.5°	868.2	837.7	807.1	776.5	739.8	697.0	660.4	617.6	580.9	544.2	501.4
70°	1045.6	1008.9	972.2	935.5	892.7	843.8	801.0	752.1	703.2	654.2	605.3
67.5°	1210.7	1174.0	1131.2	1094.5	1045.6	996.7	941.6	886.6	831.6	770.4	709.3
65°	1381.9	1339.1	1290.1	1241.2	1192.3	1137.3	1082.3	1027.2	960.0	892.7	831.6
62.5°	1522.5	1485.8	1443.0	1394.1	1339.1	1277.9	1222.9	1149.5	1082.3	1015.0	935.5
60°	1657.0	1614.2	1577.5	1522.5	1473.6	1418.5	1351.3	1277.9	1204.5	1125.1	1051.7
57.5°	1773.2	1736.5	1693.7	1644.8	1589.7	1534.7	1473.6	1406.3	1320.7	1241.2	1155.6
55°	1877.1	1834.3	1791.5	1748.7	1699.8	1638.7	1577.5	1510.3	1436.9	1351.3	1259.6
52.5°	1981.1	1938.3	1889.4	1846.6	1791.5	1736.5	1675.4	1608.1	1534.7	1455.2	1357.4
50°	2085.0	2036.1	1987.2	1932.2	1877.1	1822.1	1761.0	1699.8	1620.3	1540.8	1455.2
47.5°	2207.3	2146.2	2085.0	2023.9	1968.8	1901.6	1840.4	1773.2	1705.9	1620.3	1534.7
45°	2360.2	2268.5	2195.1	2121.7	2054.4	1987.2	1913.8	1846.6	1773.2	1699.8	1608.1
42.5°	2549.7	2427.4	2329.6	2231.8	2146.2	2066.7	1993.3	1913.8	1840.4	1761.0	1675.4
40°	2806.5	2641.4	2482.5	2360.2	2250.1	2152.3	2066.7	1987.2	1901.6	1822.1	1736.5
37.5°	3142.8	2910.5	2690.3	2513.0	2372.4	2250.1	2146.2	2054.4	1968.8	1877.1	1791.5
35°	3650.3	3246.8	2965.5	2708.7	2513.0	2360.2	2231.8	2121.7	2023.9	1932.2	1846.6
32.5°	4365.7	3742.0	3289.6	2965.5	2690.3	2482.5	2329.6	2195.1	2085.0	1987.2	1889.4
30°	5307.3	4445.2	3742.0	3246.8	2910.5	2641.4	2427.4	2268.5	2146.2	2036.1	1938.3
27.5°	6799.2	5307.3	4365.7	3650.3	3142.8	2806.5	2549.7	2360.2	2207.3	2085.0	1981.1
25°	8896.5	6646.4	5068.9	4121.1	3473.0	3008.3	2684.2	2439.7	2268.5	2133.9	2017.8
22.5°	11299.5	8327.8	6181.7	4738.7	3803.2	3204.0	2824.9	2543.6	2341.8	2182.8	2054.4
20°	14931.4	10388.4	7337.3	5435.7	4255.6	3491.3	2990.0	2647.5	2403.0	2231.8	2091.1
17.5°	18404.4	12956.5	8963.7	6346.8	4732.6	3748.1	3136.7	2751.5	2464.1	2274.6	2127.8
15°	21981.4	15726.3	10522.9	7166.1	5166.7	4017.2	3307.9	2855.4	2537.5	2323.5	2158.4
12.5°	25130.3	18251.6	12296.1	8272.8	5814.8	4353.5	3491.3	2953.3	2604.7	2360.2	2189.0
10°	27857.3	20672.9	14161.0	9312.3	6352.9	4634.7	3638.1	3038.9	2653.7	2390.7	2207.3
7.5°	30046.3	22592.8	15634.6	10137.7	6780.9	4854.9	3754.3	3106.1	2696.5	2421.3	2225.6
5°	31642.1	23993.0	16704.6	10730.8	7086.6	5013.8	3839.9	3155.0	2727.0	2439.7	2237.9
2.5°	32620.4	25130.3	17572.9	11213.9	7337.3	5142.2	3907.1	3191.7	2751.5	2451.9	2250.1
0°	32944.5	25130.3	17572.9	11213.9	7337.3	5142.2	3907.1	3191.7	2751.5	2451.9	2250.1



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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°	42.8	42.8	36.7	36.7	30.6	30.6	24.5	24.5	18.3	18.3	12.2
85°	97.8	85.6	79.5	73.4	67.3	61.1	55.0	48.9	42.8	36.7	30.6
82.5°	165.1	152.9	134.5	122.3	110.1	97.8	79.5	73.4	61.1	48.9	42.8
80°	232.3	214.0	195.7	177.3	159.0	140.6	122.3	103.9	85.6	67.3	55.0
77.5°	299.6	275.1	256.8	232.3	207.9	183.4	159.0	134.5	110.1	85.6	67.3
75°	379.1	348.5	317.9	287.4	256.8	226.2	201.8	171.2	140.6	110.1	85.6
72.5°	464.7	421.9	385.2	348.5	305.7	275.1	238.5	207.9	171.2	134.5	103.9
70°	556.4	507.5	458.6	409.7	366.9	317.9	281.3	238.5	201.8	159.0	122.3
67.5°	648.1	593.1	538.1	476.9	421.9	373.0	317.9	275.1	226.2	183.4	140.6
65°	758.2	684.8	617.6	550.3	483.0	421.9	366.9	305.7	256.8	207.9	159.0
62.5°	862.1	782.6	703.2	623.7	550.3	476.9	409.7	348.5	287.4	232.3	177.3
60°	966.1	880.5	788.8	703.2	617.6	538.1	458.6	385.2	317.9	256.8	195.7
57.5°	1070.0	972.2	880.5	782.6	684.8	593.1	507.5	421.9	348.5	275.1	214.0
55°	1161.7	1070.0	966.1	862.1	758.2	648.1	556.4	464.7	379.1	299.6	232.3
52.5°	1259.6	1155.6	1051.7	935.5	831.6	709.3	605.3	501.4	409.7	324.1	250.7
50°	1351.3	1241.2	1125.1	1015.0	892.7	770.4	654.2	544.2	440.2	348.5	262.9
47.5°	1436.9	1320.7	1204.5	1082.3	960.0	831.6	703.2	580.9	470.8	373.0	281.3
45°	1510.3	1406.3	1277.9	1149.5	1027.2	886.6	752.1	617.6	501.4	397.4	293.5
42.5°	1577.5	1473.6	1351.3	1222.9	1082.3	941.6	801.0	660.4	532.0	415.8	311.8
40°	1638.7	1534.7	1418.5	1277.9	1137.3	996.7	843.8	697.0	562.5	440.2	324.1
37.5°	1699.8	1589.7	1473.6	1339.1	1192.3	1045.6	892.7	739.8	593.1	458.6	342.4
35°	1748.7	1644.8	1522.5	1394.1	1241.2	1094.5	935.5	776.5	617.6	476.9	360.8
32.5°	1791.5	1693.7	1577.5	1443.0	1290.1	1131.2	972.2	807.1	642.0	501.4	373.0
30°	1834.3	1736.5	1614.2	1485.8	1339.1	1174.0	1008.9	837.7	672.6	519.7	385.2
27.5°	1877.1	1773.2	1657.0	1522.5	1381.9	1210.7	1045.6	868.2	697.0	538.1	397.4
25°	1913.8	1803.8	1693.7	1559.2	1418.5	1247.3	1076.1	898.8	721.5	556.4	409.7
22.5°	1944.4	1834.3	1724.3	1589.7	1449.1	1277.9	1100.6	923.3	739.8	568.6	421.9
20°	1975.0	1864.9	1748.7	1620.3	1473.6	1308.5	1125.1	947.7	758.2	580.9	428.0
17.5°	2005.5	1889.4	1773.2	1644.8	1498.0	1332.9	1149.5	966.1	776.5	593.1	440.2
15°	2030.0	1907.7	1791.5	1663.1	1522.5	1357.4	1167.9	984.4	788.8	605.3	446.4
12.5°	2048.3	1926.0	1809.9	1681.5	1534.7	1375.7	1186.2	996.7	801.0	617.6	452.5
10°	2066.7	1944.4	1822.1	1699.8	1553.1	1388.0	1198.4	1008.9	813.2	623.7	458.6
7.5°	2078.9	1956.6	1834.3	1712.0	1565.3	1400.2	1210.7	1021.1	819.3	629.8	464.7
5°	2091.1	1962.7	1840.4	1718.2	1571.4	1418.5	1222.9	1033.3	831.6	635.9	464.7
2.5°	2097.2	1968.8	1846.6	1724.3	1577.5	1418.5	1222.9	1033.3	831.6	635.9	464.7
0°	2097.2	1968.8	1846.6	1724.3	1577.5	1418.5	1222.9	1033.3	831.6	635.9	464.7



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	12.2	6.1	6.1	0.0
85°	18.3	12.2	6.1	0.0
82.5°	30.6	18.3	12.2	0.0
80°	42.8	30.6	12.2	0.0
77.5°	48.9	36.7	18.3	0.0
75°	61.1	42.8	18.3	0.0
72.5°	73.4	48.9	24.5	0.0
70°	79.5	55.0	24.5	0.0
67.5°	97.8	61.1	30.6	0.0
65°	110.1	67.3	30.6	0.0
62.5°	122.3	73.4	36.7	0.0
60°	134.5	79.5	36.7	0.0
57.5°	152.9	85.6	42.8	0.0
55°	165.1	97.8	42.8	0.0
52.5°	177.3	103.9	48.9	0.0
50°	189.5	110.1	48.9	0.0
47.5°	195.7	122.3	55.0	0.0
45°	207.9	128.4	55.0	0.0
42.5°	220.1	134.5	61.1	0.0
40°	232.3	140.6	61.1	0.0
37.5°	244.6	146.7	61.1	0.0
35°	250.7	152.9	67.3	0.0
32.5°	262.9	159.0	67.3	0.0
30°	269.0	165.1	67.3	0.0
27.5°	275.1	171.2	73.4	0.0
25°	281.3	171.2	73.4	0.0
22.5°	287.4	177.3	73.4	0.0
20°	293.5	183.4	73.4	0.0
17.5°	299.6	183.4	73.4	0.0
15°	305.7	189.5	79.5	0.0
12.5°	311.8	189.5	79.5	0.0
10°	311.8	195.7	79.5	0.0
7.5°	317.9	195.7	79.5	0.0
5°	317.9	195.7	79.5	0.0
2.5°	317.9	195.7	79.5	0.0
0°	317.9	195.7	79.5	0.0

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