

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: P624129

Luminaire Tested: **EPH-VN-07-E-730-U-55**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624129
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-730-U-55
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
Nema 5 distribution lens
Light Source: (112) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

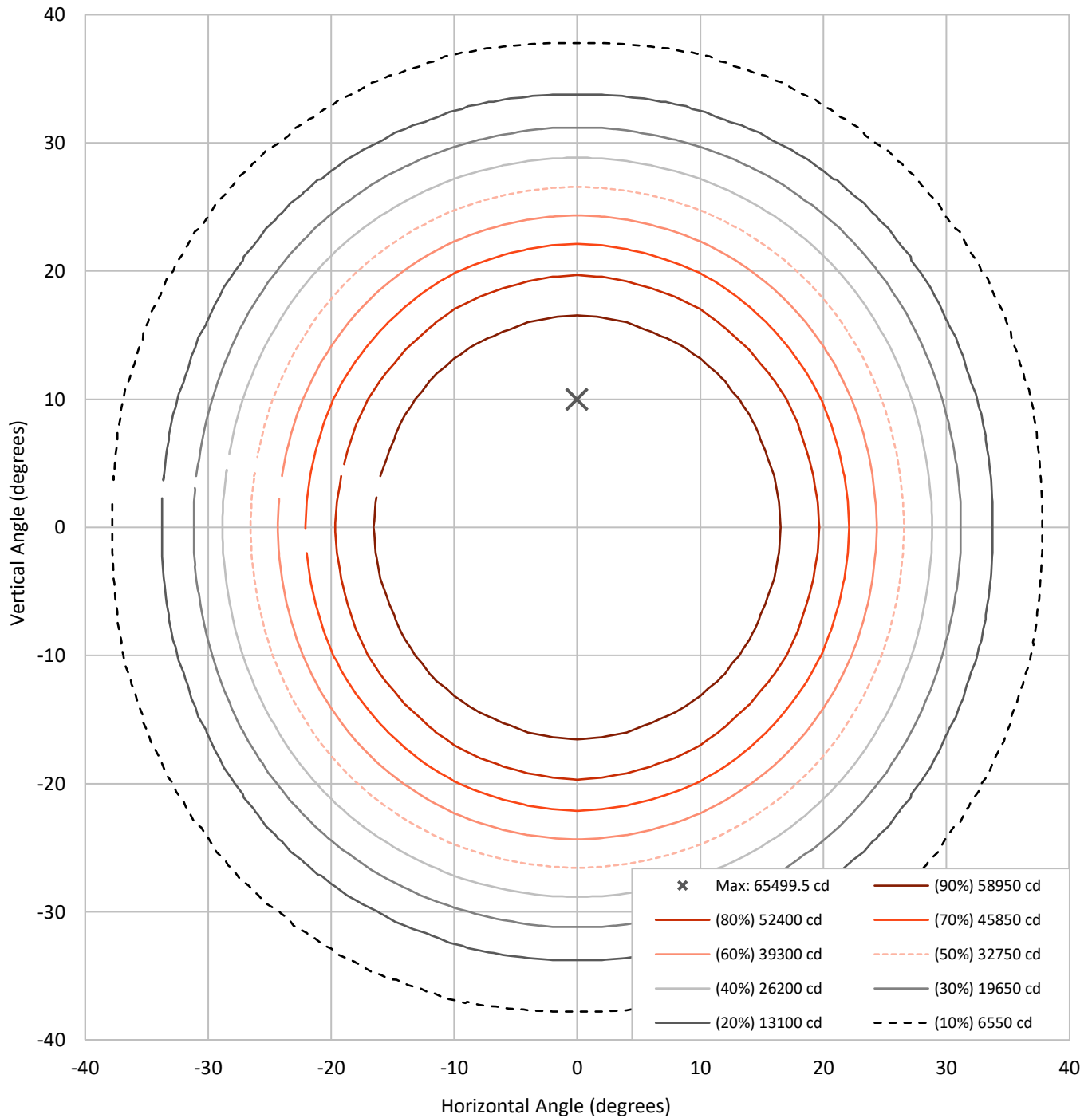
Lumens per Lamp:	N/A	NEMA Type:	5H x 5V
Luminaire Lumens:	53598.5 lumens	Max Intensity:	65499.5 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 10°V
Efficacy:	100.6 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	49.5°H x 53.1°V	Field Angle (10%):	73.6°H x 75.3°V
Beam Lumens:	26639.8 lumens	Field Lumens:	34645.8 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





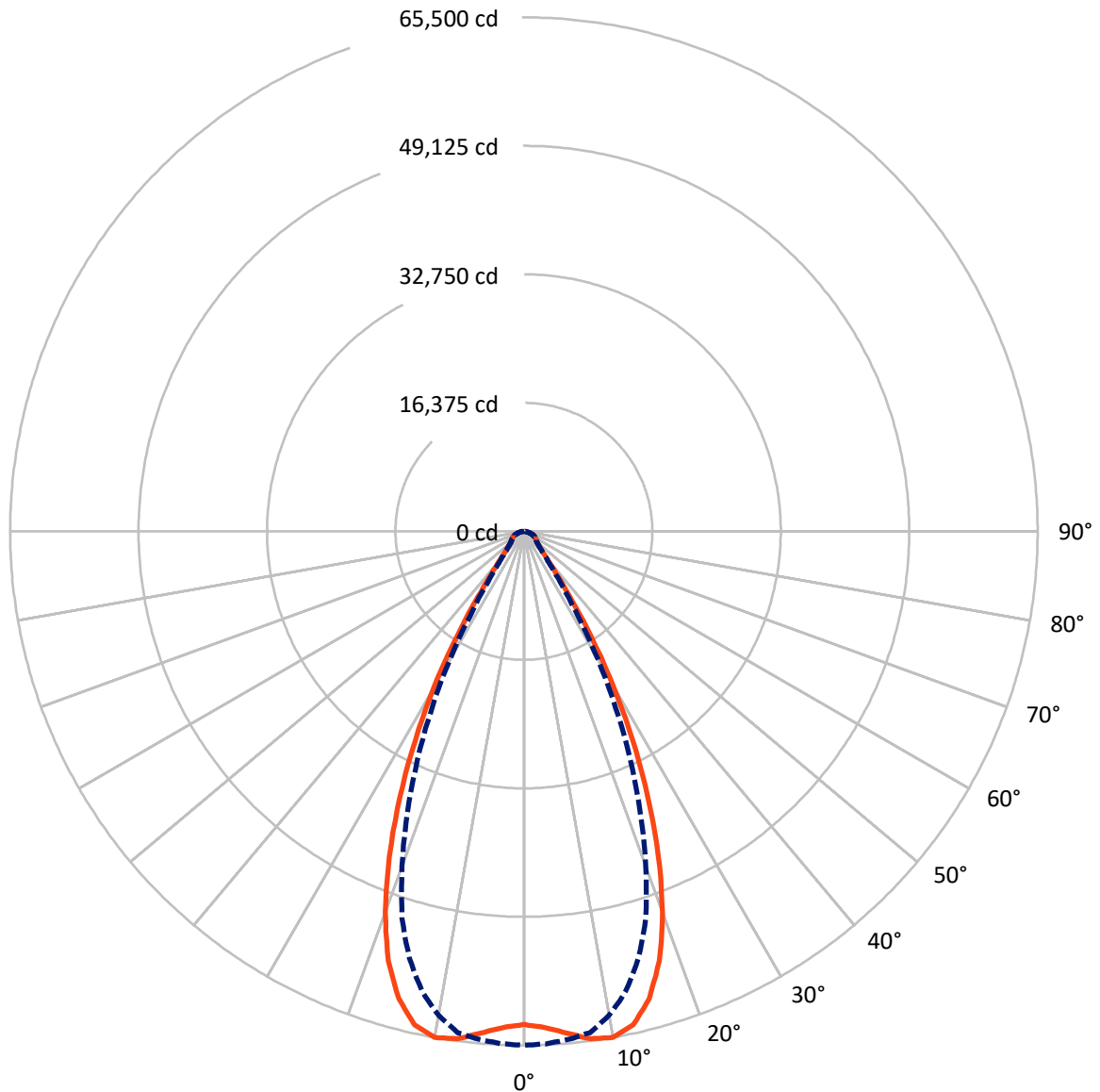
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Lumen Table

90	1.5	11.8	30.6	49.4	57.3	49.4	30.6	11.8	1.5												
80																					
70																					
60	5.4	5.8	12.1	20.0	28.1	35.1	40.2	42.9	42.9	40.2	35.1	28.1	20.0	12.1	5.8					5.4	
50		9.0	18.5	29.4	39.5	48.0	54.5	58.1	58.1	54.5	48.0	39.5	29.4	18.5	9.0						
40	9.5	12.1	23.9	36.2	48.5	62.8	79.5	92.4	92.4	79.5	62.8	48.5	36.2	23.9	12.1						9.5
30		14.7	27.7	41.9	63.6	113.2	221.3	333.7	333.7	221.3	113.2	63.6	41.9	27.7	14.7						
20	12.7	16.6	30.5	49.2	102.8	327.5	758.8	1077.0	1077.0	758.8	327.5	102.8	49.2	30.5	16.6						12.7
10		17.8	32.5	58.6	189.7	714.8	1398.5	1782.8	1782.8	1398.5	714.8	189.7	58.6	32.5	17.8						
0	13.8	18.4	33.6	66.2	278.4	984.6	1730.1	1961.9	1961.9	1730.1	984.6	278.4	66.2	33.6	18.4						13.8
-10		18.4	33.6	66.2	278.4	984.6	1730.1	1961.9	1961.9	1730.1	984.6	278.4	66.2	33.6	18.4						
-20	12.7	17.8	32.5	58.6	189.7	714.8	1398.5	1782.8	1782.8	1398.5	714.8	189.7	58.6	32.5	17.8						12.7
-30		16.6	30.5	49.2	102.8	327.5	758.8	1077.0	1077.0	758.8	327.5	102.8	49.2	30.5	16.6						
-40	9.5	14.7	27.7	41.9	63.6	113.2	221.3	333.7	333.7	221.3	113.2	63.6	41.9	27.7	14.7						9.5
-50		12.1	23.9	36.2	48.5	62.8	79.5	92.4	92.4	79.5	62.8	48.5	36.2	23.9	12.1						
-60	5.4	9.0	18.5	29.4	39.5	48.0	54.5	58.1	58.1	54.5	48.0	39.5	29.4	18.5	9.0						5.4
-70		5.8	12.1	20.0	28.1	35.1	40.2	42.9	42.9	40.2	35.1	28.1	20.0	12.1	5.8						
-80	1.5	11.8	30.6	49.4	57.3	49.4	30.6	11.8	1.5												
-90																					

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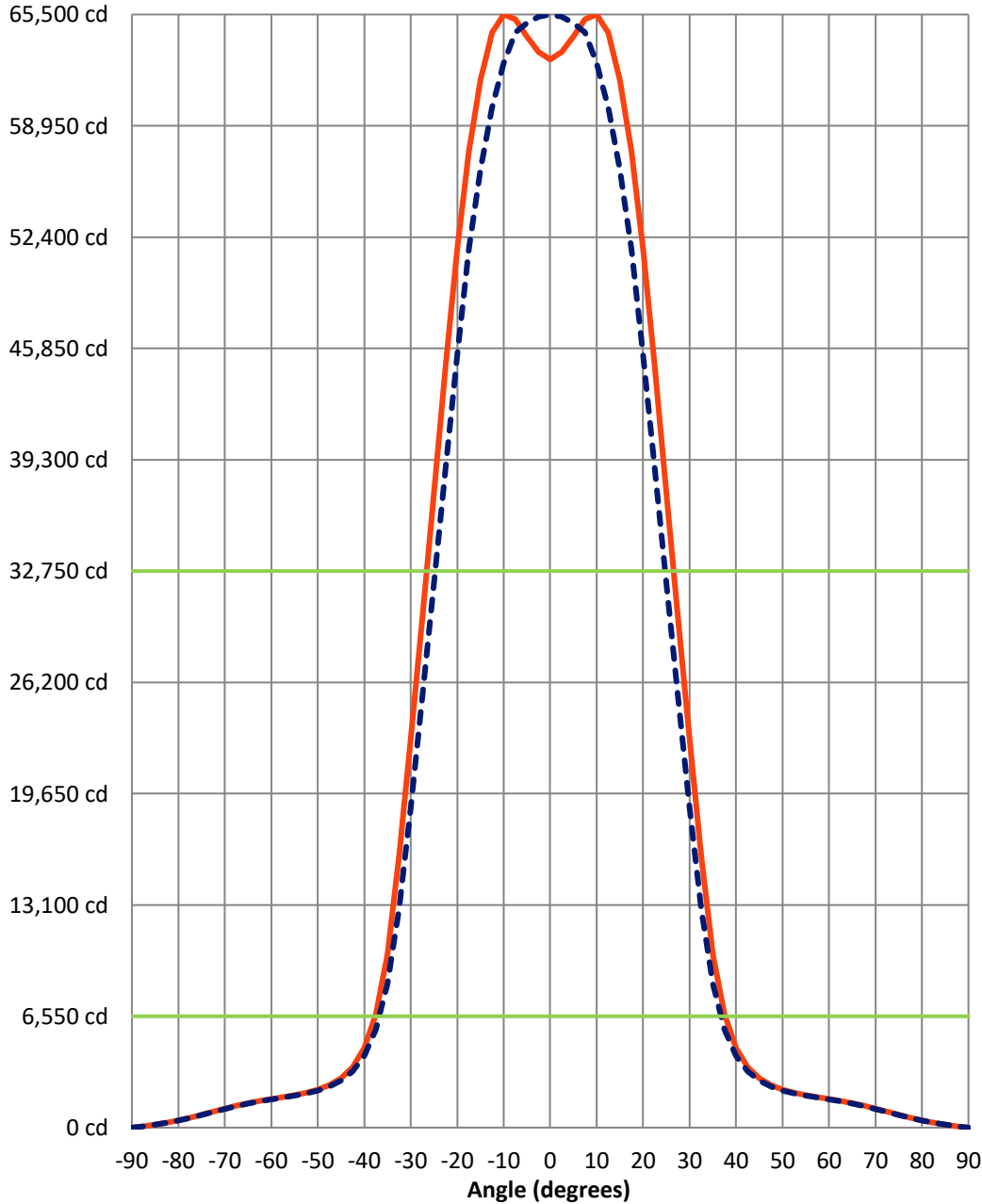
Luminous Intensity Polar Plot



— 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: 26639.8
 Efficiency: 49.7%

Field:
 H Angle: 73.6°
 V Angle: 75.3°
 Lumens: 34645.8
 Efficiency: 64.6%

Spill:
 Lumens: 18952.6
 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°	72.4	72.4	72.4	72.4	72.4	72.4	72.4	66.8	66.8	66.8	66.8
85°	178.2	178.2	178.2	178.2	178.2	172.6	172.6	167.0	167.0	161.5	155.9
82.5°	289.5	289.5	289.5	289.5	284.0	284.0	278.4	272.8	267.3	261.7	256.1
80°	423.2	423.2	423.2	423.2	417.6	412.0	406.4	400.9	389.7	384.2	373.0
77.5°	579.1	579.1	579.1	573.5	567.9	562.3	551.2	540.1	528.9	517.8	506.7
75°	757.2	757.2	757.2	746.1	740.5	729.4	718.2	707.1	690.4	673.7	657.0
72.5°	941.0	941.0	941.0	929.8	918.7	907.6	896.4	879.7	863.0	840.7	818.5
70°	1113.6	1113.6	1113.6	1102.4	1091.3	1080.2	1063.4	1046.7	1024.5	1002.2	979.9
67.5°	1291.7	1291.7	1291.7	1275.0	1263.9	1252.8	1236.1	1213.8	1191.5	1163.7	1135.8
65°	1436.5	1436.5	1430.9	1425.4	1414.2	1397.5	1386.4	1364.1	1341.8	1319.6	1291.7
62.5°	1570.1	1570.1	1564.5	1559.0	1547.8	1531.1	1514.4	1497.7	1475.5	1447.6	1419.8
60°	1681.5	1681.5	1675.9	1670.3	1659.2	1648.1	1631.4	1614.7	1592.4	1570.1	1542.3
57.5°	1792.8	1792.8	1787.3	1781.7	1770.6	1753.9	1737.2	1720.4	1698.2	1670.3	1642.5
55°	1909.8	1909.8	1904.2	1893.0	1881.9	1865.2	1848.5	1826.2	1798.4	1770.6	1742.7
52.5°	2048.9	2048.9	2037.8	2026.7	2010.0	1993.3	1965.4	1937.6	1904.2	1870.8	1837.4
50°	2232.7	2232.7	2221.5	2204.8	2177.0	2149.2	2115.8	2071.2	2032.2	1987.7	1943.2
47.5°	2505.5	2505.5	2483.2	2455.4	2416.4	2371.9	2310.6	2243.8	2188.1	2132.5	2065.7
45°	2906.4	2906.4	2873.0	2828.4	2767.2	2689.2	2600.2	2505.5	2410.9	2316.2	2221.5
42.5°	3557.8	3557.8	3496.6	3418.6	3312.8	3179.2	3012.2	2856.3	2722.7	2572.3	2444.3
40°	4682.5	4682.5	4565.6	4420.8	4220.4	3964.3	3658.0	3413.1	3179.2	2917.5	2739.4
37.5°	6681.4	6681.4	6453.1	6174.7	5784.9	5295.0	4704.8	4309.5	3875.2	3463.2	3162.5
35°	10211.3	10211.3	9771.5	9231.4	8479.7	7533.2	6525.5	5779.4	4949.8	4315.0	3752.7
32.5°	16001.8	16001.8	15211.2	14236.8	12895.0	11196.8	9582.2	8162.4	6681.4	5629.0	4615.7
30°	22883.6	22883.6	21848.0	20573.0	18824.7	16619.9	14320.4	11798.2	9459.7	7583.3	6052.2
27.5°	29999.3	29704.2	28813.3	27360.1	25366.9	22883.6	20016.2	16759.1	13596.6	10289.3	8101.1
25°	37359.9	37014.7	35995.8	34325.4	32042.7	29230.9	26001.6	22360.3	18457.2	14515.2	10729.1
22.5°	44798.5	44408.7	43250.6	41363.1	38802.0	35650.6	31992.5	27944.8	23585.2	19030.7	14515.2
20°	51674.7	51262.7	50048.9	48083.5	45433.2	41975.6	37911.1	33423.5	28601.8	23585.2	18457.2
17.5°	57431.8	57036.5	55867.2	53990.9	51674.7	47849.6	43623.7	38690.6	33423.5	27944.8	22360.3
15°	61635.5	61295.8	60299.2	58723.5	56362.8	52977.6	48673.7	43623.7	37911.1	31992.5	26001.6
12.5°	64424.9	64152.1	63367.1	62142.1	60026.4	57186.8	52977.6	47849.6	41975.6	35650.6	29230.9
10°	65499.5	65365.9	64998.4	64436.1	62632.1	60026.4	56362.8	51674.7	45433.2	38802.0	32042.7
7.5°	65215.6	65260.1	65388.2	65243.4	64436.1	62142.1	58723.5	53990.9	48083.5	41363.1	34325.4
5°	64202.2	64441.6	65037.4	65388.2	64998.4	63367.1	60299.2	55867.2	50048.9	43250.6	35995.8
2.5°	63300.2	63673.3	64441.6	65260.1	65365.9	64152.1	61295.8	57036.5	51262.7	44408.7	37014.7
0°	62854.8	63300.2	64202.2	65215.6	65499.5	64424.9	61635.5	57431.8	51674.7	44798.5	37359.9



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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°	66.8	61.2	61.2	61.2	55.7	55.7	55.7	50.1	50.1	44.5	44.5
85°	155.9	150.3	144.8	139.2	133.6	128.1	122.5	116.9	111.4	100.2	94.7
82.5°	250.6	245.0	239.4	228.3	222.7	211.6	200.4	189.3	178.2	172.6	161.5
80°	361.9	350.8	339.6	328.5	311.8	295.1	284.0	267.3	256.1	239.4	228.3
77.5°	490.0	473.3	456.6	434.3	417.6	400.9	378.6	361.9	339.6	317.4	295.1
75°	634.7	612.5	584.6	562.3	540.1	512.2	484.4	456.6	428.7	400.9	373.0
72.5°	790.6	762.8	734.9	707.1	673.7	634.7	601.3	562.3	528.9	495.5	456.6
70°	952.1	918.7	885.3	851.9	812.9	768.4	729.4	684.8	640.3	595.8	551.2
67.5°	1102.4	1069.0	1030.0	996.6	952.1	907.6	857.4	807.3	757.2	701.5	645.9
65°	1258.3	1219.3	1174.8	1130.3	1085.7	1035.6	985.5	935.4	874.1	812.9	757.2
62.5°	1386.4	1353.0	1314.0	1269.5	1219.3	1163.7	1113.6	1046.7	985.5	924.3	851.9
60°	1508.9	1469.9	1436.5	1386.4	1341.8	1291.7	1230.5	1163.7	1096.9	1024.5	957.7
57.5°	1614.7	1581.3	1542.3	1497.7	1447.6	1397.5	1341.8	1280.6	1202.6	1130.3	1052.3
55°	1709.3	1670.3	1631.4	1592.4	1547.8	1492.2	1436.5	1375.2	1308.4	1230.5	1147.0
52.5°	1804.0	1765.0	1720.4	1681.5	1631.4	1581.3	1525.6	1464.3	1397.5	1325.1	1236.1
50°	1898.6	1854.1	1809.5	1759.4	1709.3	1659.2	1603.5	1547.8	1475.5	1403.1	1325.1
47.5°	2010.0	1954.3	1898.6	1842.9	1792.8	1731.6	1675.9	1614.7	1553.4	1475.5	1397.5
45°	2149.2	2065.7	1998.8	1932.0	1870.8	1809.5	1742.7	1681.5	1614.7	1547.8	1464.3
42.5°	2321.8	2210.4	2121.3	2032.2	1954.3	1881.9	1815.1	1742.7	1675.9	1603.5	1525.6
40°	2555.6	2405.3	2260.5	2149.2	2048.9	1959.9	1881.9	1809.5	1731.6	1659.2	1581.3
37.5°	2861.8	2650.3	2449.8	2288.4	2160.3	2048.9	1954.3	1870.8	1792.8	1709.3	1631.4
35°	3324.0	2956.5	2700.4	2466.5	2288.4	2149.2	2032.2	1932.0	1842.9	1759.4	1681.5
32.5°	3975.4	3407.5	2995.5	2700.4	2449.8	2260.5	2121.3	1998.8	1898.6	1809.5	1720.4
30°	4832.8	4047.8	3407.5	2956.5	2650.3	2405.3	2210.4	2065.7	1954.3	1854.1	1765.0
27.5°	6191.4	4832.8	3975.4	3324.0	2861.8	2555.6	2321.8	2149.2	2010.0	1898.6	1804.0
25°	8101.1	6052.2	4615.7	3752.7	3162.5	2739.4	2444.3	2221.5	2065.7	1943.2	1837.4
22.5°	10289.3	7583.3	5629.0	4315.0	3463.2	2917.5	2572.3	2316.2	2132.5	1987.7	1870.8
20°	13596.6	9459.7	6681.4	4949.8	3875.2	3179.2	2722.7	2410.9	2188.1	2032.2	1904.2
17.5°	16759.1	11798.2	8162.4	5779.4	4309.5	3413.1	2856.3	2505.5	2243.8	2071.2	1937.6
15°	20016.2	14320.4	9582.2	6525.5	4704.8	3658.0	3012.2	2600.2	2310.6	2115.8	1965.4
12.5°	22883.6	16619.9	11196.8	7533.2	5295.0	3964.3	3179.2	2689.2	2371.9	2149.2	1993.3
10°	25366.9	18824.7	12895.0	8479.7	5784.9	4220.4	3312.8	2767.2	2416.4	2177.0	2010.0
7.5°	27360.1	20573.0	14236.8	9231.4	6174.7	4420.8	3418.6	2828.4	2455.4	2204.8	2026.7
5°	28813.3	21848.0	15211.2	9771.5	6453.1	4565.6	3496.6	2873.0	2483.2	2221.5	2037.8
2.5°	29704.2	22883.6	16001.8	10211.3	6681.4	4682.5	3557.8	2906.4	2505.5	2232.7	2048.9
0°	29999.3	22883.6	16001.8	10211.3	6681.4	4682.5	3557.8	2906.4	2505.5	2232.7	2048.9



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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°	39.0	39.0	33.4	33.4	27.8	27.8	22.3	22.3	16.7	16.7	11.1
85°	89.1	77.9	72.4	66.8	61.2	55.7	50.1	44.5	39.0	33.4	27.8
82.5°	150.3	139.2	122.5	111.4	100.2	89.1	72.4	66.8	55.7	44.5	39.0
80°	211.6	194.9	178.2	161.5	144.8	128.1	111.4	94.7	77.9	61.2	50.1
77.5°	272.8	250.6	233.8	211.6	189.3	167.0	144.8	122.5	100.2	77.9	61.2
75°	345.2	317.4	289.5	261.7	233.8	206.0	183.7	155.9	128.1	100.2	77.9
72.5°	423.2	384.2	350.8	317.4	278.4	250.6	217.1	189.3	155.9	122.5	94.7
70°	506.7	462.1	417.6	373.0	334.1	289.5	256.1	217.1	183.7	144.8	111.4
67.5°	590.2	540.1	490.0	434.3	384.2	339.6	289.5	250.6	206.0	167.0	128.1
65°	690.4	623.6	562.3	501.1	439.9	384.2	334.1	278.4	233.8	189.3	144.8
62.5°	785.1	712.7	640.3	567.9	501.1	434.3	373.0	317.4	261.7	211.6	161.5
60°	879.7	801.8	718.2	640.3	562.3	490.0	417.6	350.8	289.5	233.8	178.2
57.5°	974.4	885.3	801.8	712.7	623.6	540.1	462.1	384.2	317.4	250.6	194.9
55°	1057.9	974.4	879.7	785.1	690.4	590.2	506.7	423.2	345.2	272.8	211.6
52.5°	1147.0	1052.3	957.7	851.9	757.2	645.9	551.2	456.6	373.0	295.1	228.3
50°	1230.5	1130.3	1024.5	924.3	812.9	701.5	595.8	495.5	400.9	317.4	239.4
47.5°	1308.4	1202.6	1096.9	985.5	874.1	757.2	640.3	528.9	428.7	339.6	256.1
45°	1375.2	1280.6	1163.7	1046.7	935.4	807.3	684.8	562.3	456.6	361.9	267.3
42.5°	1436.5	1341.8	1230.5	1113.6	985.5	857.4	729.4	601.3	484.4	378.6	284.0
40°	1492.2	1397.5	1291.7	1163.7	1035.6	907.6	768.4	634.7	512.2	400.9	295.1
37.5°	1547.8	1447.6	1341.8	1219.3	1085.7	952.1	812.9	673.7	540.1	417.6	311.8
35°	1592.4	1497.7	1386.4	1269.5	1130.3	996.6	851.9	707.1	562.3	434.3	328.5
32.5°	1631.4	1542.3	1436.5	1314.0	1174.8	1030.0	885.3	734.9	584.6	456.6	339.6
30°	1670.3	1581.3	1469.9	1353.0	1219.3	1069.0	918.7	762.8	612.5	473.3	350.8
27.5°	1709.3	1614.7	1508.9	1386.4	1258.3	1102.4	952.1	790.6	634.7	490.0	361.9
25°	1742.7	1642.5	1542.3	1419.8	1291.7	1135.8	979.9	818.5	657.0	506.7	373.0
22.5°	1770.6	1670.3	1570.1	1447.6	1319.6	1163.7	1002.2	840.7	673.7	517.8	384.2
20°	1798.4	1698.2	1592.4	1475.5	1341.8	1191.5	1024.5	863.0	690.4	528.9	389.7
17.5°	1826.2	1720.4	1614.7	1497.7	1364.1	1213.8	1046.7	879.7	707.1	540.1	400.9
15°	1848.5	1737.2	1631.4	1514.4	1386.4	1236.1	1063.4	896.4	718.2	551.2	406.4
12.5°	1865.2	1753.9	1648.1	1531.1	1397.5	1252.8	1080.2	907.6	729.4	562.3	412.0
10°	1881.9	1770.6	1659.2	1547.8	1414.2	1263.9	1091.3	918.7	740.5	567.9	417.6
7.5°	1893.0	1781.7	1670.3	1559.0	1425.4	1275.0	1102.4	929.8	746.1	573.5	423.2
5°	1904.2	1787.3	1675.9	1564.5	1430.9	1291.7	1113.6	941.0	757.2	579.1	423.2
2.5°	1909.8	1792.8	1681.5	1570.1	1436.5	1291.7	1113.6	941.0	757.2	579.1	423.2
0°	1909.8	1792.8	1681.5	1570.1	1436.5	1291.7	1113.6	941.0	757.2	579.1	423.2



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	11.1	5.6	5.6	0.0
85°	16.7	11.1	5.6	0.0
82.5°	27.8	16.7	11.1	0.0
80°	39.0	27.8	11.1	0.0
77.5°	44.5	33.4	16.7	0.0
75°	55.7	39.0	16.7	0.0
72.5°	66.8	44.5	22.3	0.0
70°	72.4	50.1	22.3	0.0
67.5°	89.1	55.7	27.8	0.0
65°	100.2	61.2	27.8	0.0
62.5°	111.4	66.8	33.4	0.0
60°	122.5	72.4	33.4	0.0
57.5°	139.2	77.9	39.0	0.0
55°	150.3	89.1	39.0	0.0
52.5°	161.5	94.7	44.5	0.0
50°	172.6	100.2	44.5	0.0
47.5°	178.2	111.4	50.1	0.0
45°	189.3	116.9	50.1	0.0
42.5°	200.4	122.5	55.7	0.0
40°	211.6	128.1	55.7	0.0
37.5°	222.7	133.6	55.7	0.0
35°	228.3	139.2	61.2	0.0
32.5°	239.4	144.8	61.2	0.0
30°	245.0	150.3	61.2	0.0
27.5°	250.6	155.9	66.8	0.0
25°	256.1	155.9	66.8	0.0
22.5°	261.7	161.5	66.8	0.0
20°	267.3	167.0	66.8	0.0
17.5°	272.8	167.0	66.8	0.0
15°	278.4	172.6	72.4	0.0
12.5°	284.0	172.6	72.4	0.0
10°	284.0	178.2	72.4	0.0
7.5°	289.5	178.2	72.4	0.0
5°	289.5	178.2	72.4	0.0
2.5°	289.5	178.2	72.4	0.0
0°	289.5	178.2	72.4	0.0

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