

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: P624221

Luminaire Tested: **EPH-VN-08-E-935-U-77**

Issue Date: 11/2/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P624221  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 11/2/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: EPHESUS  
Catalog Number: EPH-VN-08-E-935-U-77  
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/  
Nema 7 distribution lens  
Light Source: (128) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

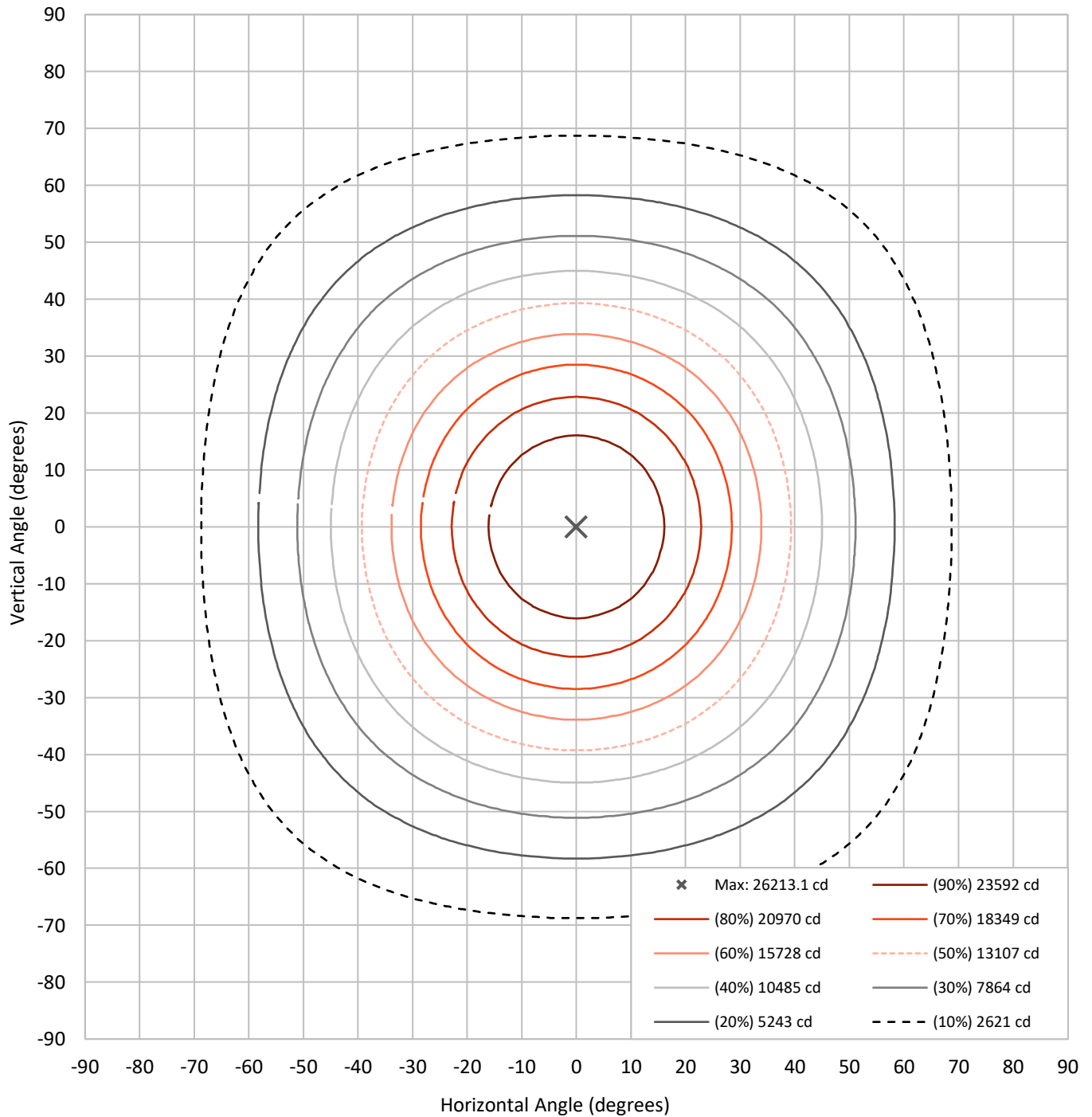
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	47197.3 lumens	Max Intensity:	26213.1 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	75.3 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	20421.8 lumens	Field Lumens:	33440 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%

Input Watts (W): 626.8  
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





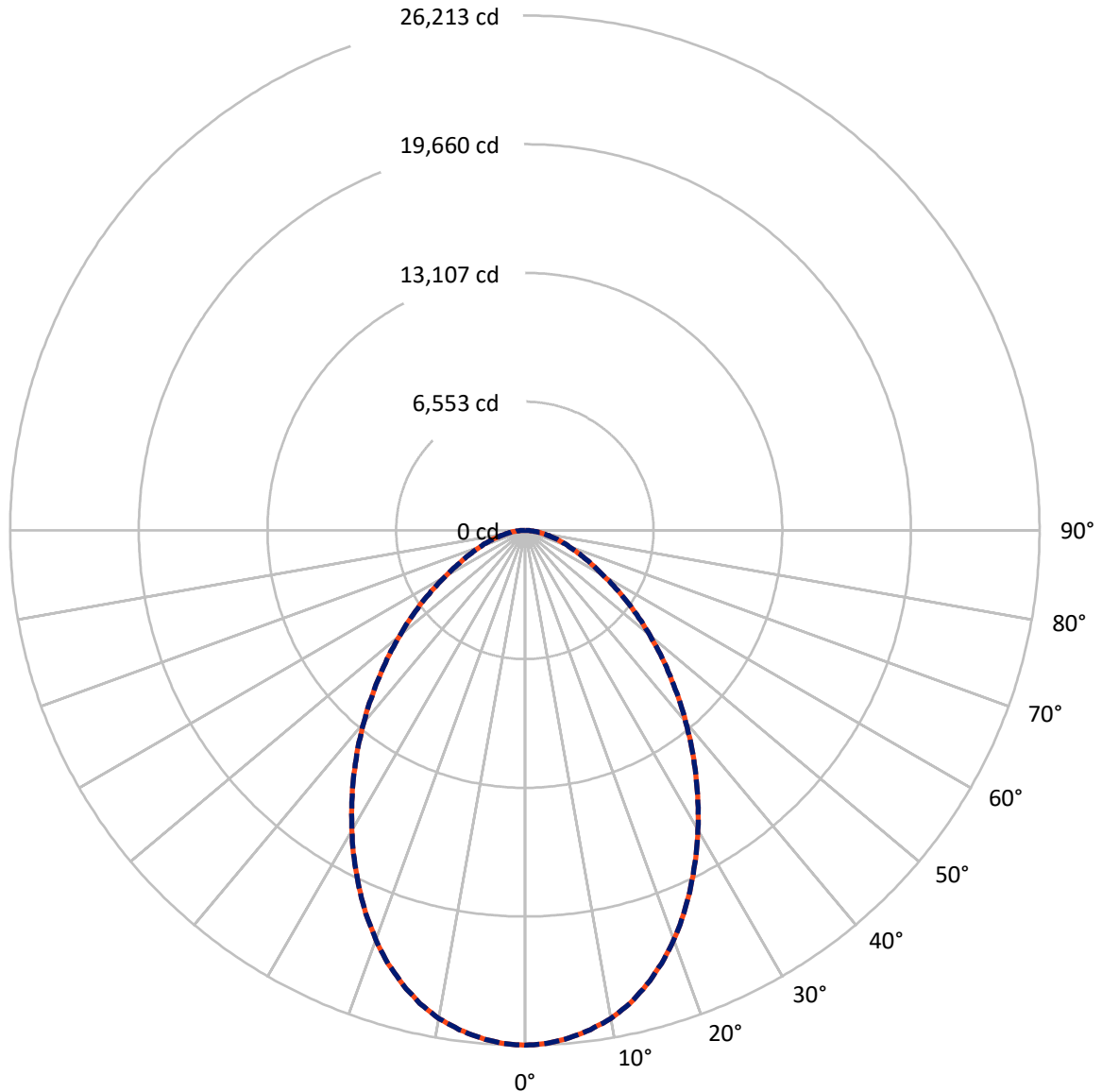
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### Lumen Table

90	4.0	27.7	68.7	108.7	125.3	108.7	68.7	27.7	4.0							
80	4.0	27.7	68.7	108.7	125.3	108.7	68.7	27.7	4.0							
70	12.5	12.9	26.0	42.8	61.4	79.6	94.6	102.9	102.9	94.6	79.6	61.4	42.8	26.0	12.9	12.5
60		19.3	39.9	68.2	103.8	141.8	174.1	192.4	192.4	174.1	141.8	103.8	68.2	39.9	19.3	
50	21.0	25.9	55.6	101.9	163.3	228.0	282.6	313.9	313.9	282.6	228.0	163.3	101.9	55.6	25.9	21.0
40		32.1	73.2	141.3	230.0	324.9	406.4	454.2	454.2	406.4	324.9	230.0	141.3	73.2	32.1	
30	27.4	37.7	90.6	178.6	294.1	420.5	531.1	596.4	596.4	531.1	420.5	294.1	178.6	90.6	37.7	27.4
20		42.1	104.4	207.9	345.5	498.8	634.4	712.9	712.9	634.4	498.8	345.5	207.9	104.4	42.1	
10	29.9	44.5	112.0	224.1	374.6	543.4	691.6	773.5	773.5	691.6	543.4	374.6	224.1	112.0	44.5	29.9
0		44.5	112.0	224.1	374.6	543.4	691.6	773.5	773.5	691.6	543.4	374.6	224.1	112.0	44.5	
-10	27.4	42.1	104.4	207.9	345.5	498.8	634.4	712.9	712.9	634.4	498.8	345.5	207.9	104.4	42.1	27.4
-20		37.7	90.6	178.6	294.1	420.5	531.1	596.4	596.4	531.1	420.5	294.1	178.6	90.6	37.7	
-30	21.0	32.1	73.2	141.3	230.0	324.9	406.4	454.2	454.2	406.4	324.9	230.0	141.3	73.2	32.1	21.0
-40		25.9	55.6	101.9	163.3	228.0	282.6	313.9	313.9	282.6	228.0	163.3	101.9	55.6	25.9	
-50	12.5	19.3	39.9	68.2	103.8	141.8	174.1	192.4	192.4	174.1	141.8	103.8	68.2	39.9	19.3	12.5
-60		12.9	26.0	42.8	61.4	79.6	94.6	102.9	102.9	94.6	79.6	61.4	42.8	26.0	12.9	
-70	4.0	27.7	68.7	108.7	125.3	108.7	68.7	27.7	4.0							
-80		4.0	27.7	68.7	108.7	125.3	108.7	68.7	27.7	4.0						
-90	4.0	27.7	68.7	108.7	125.3	108.7	68.7	27.7	4.0							

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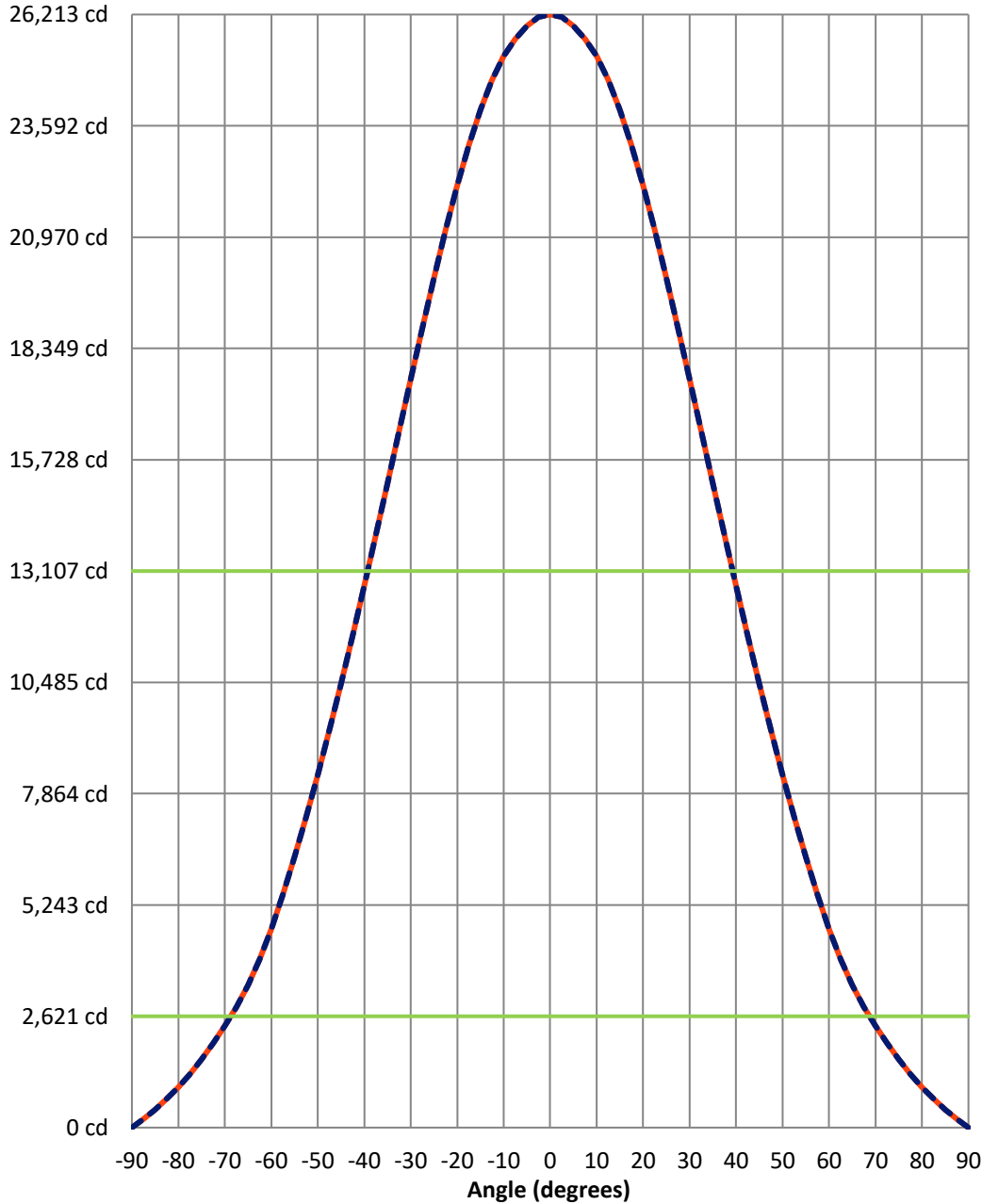
### Luminous Intensity Polar Plot



— 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: 20421.8  
 Efficiency: 43.3%

**Field:**  
 H Angle: 137.5°  
 V Angle: 137.5°  
 Lumens: 33440  
 Efficiency: 70.9%

**Spill:**  
 Lumens: 13757.3  
 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°	201.8	201.8	201.8	201.8	201.8	201.8	201.8	191.9	191.9	187.0	182.1
85°	423.2	423.2	423.2	423.2	423.2	413.3	408.4	403.5	398.6	388.7	383.8
82.5°	679.1	679.1	679.1	679.1	669.2	659.4	654.5	644.6	634.8	620.0	605.3
80°	949.7	949.7	949.7	949.7	935.0	925.1	910.3	900.5	885.7	866.1	846.4
77.5°	1259.7	1259.7	1259.7	1245.0	1235.1	1220.4	1205.6	1185.9	1166.2	1141.6	1112.1
75°	1609.1	1609.1	1609.1	1589.4	1574.7	1559.9	1535.3	1510.7	1481.2	1446.7	1407.4
72.5°	1988.0	1988.0	1988.0	1963.4	1948.6	1924.0	1894.5	1860.1	1825.6	1781.3	1732.1
70°	2396.4	2396.4	2396.4	2366.9	2342.3	2317.7	2278.3	2239.0	2189.8	2140.6	2081.5
67.5°	2839.3	2839.3	2839.3	2804.9	2775.3	2740.9	2696.6	2647.4	2588.3	2519.5	2450.6
65°	3356.0	3356.0	3336.3	3306.8	3272.3	3223.1	3169.0	3100.1	3026.3	2937.7	2844.2
62.5°	3966.2	3966.2	3936.6	3902.2	3857.9	3793.9	3720.1	3631.6	3528.2	3415.0	3301.9
60°	4674.8	4674.8	4640.3	4596.0	4532.1	4453.3	4354.9	4241.7	4113.8	3971.1	3833.3
57.5°	5491.6	5491.6	5447.3	5388.3	5309.6	5211.1	5088.1	4945.4	4783.0	4605.9	4433.6
55°	6377.4	6377.4	6323.2	6254.3	6160.8	6042.8	5895.1	5727.8	5531.0	5329.2	5107.8
52.5°	7317.2	7317.2	7253.3	7174.5	7066.3	6928.5	6761.2	6564.4	6338.0	6101.8	5841.0
50°	8306.3	8306.3	8232.5	8143.9	8020.9	7858.5	7666.6	7440.3	7189.3	6913.7	6613.6
47.5°	9364.3	9364.3	9280.6	9177.3	9029.7	8842.7	8616.3	8355.5	8070.1	7760.1	7420.6
45°	10451.8	10451.8	10358.3	10240.2	10077.8	9866.2	9615.3	9364.3	9000.2	8640.9	8247.3
42.5°	11583.6	11583.6	11475.3	11342.5	11155.5	10924.2	10638.8	10314.0	9954.8	9551.3	9123.2
40°	12759.7	12759.7	12636.6	12484.1	12277.4	12011.7	11691.8	11327.7	10924.2	10476.4	10004.0
37.5°	13960.3	13960.3	13822.5	13655.2	13424.0	13128.7	12769.5	12366.0	11913.3	11416.3	10894.7
35°	15170.8	15170.8	15018.3	14836.2	14580.4	14255.6	13866.8	13419.0	12917.1	12375.8	11790.3
32.5°	16406.0	16406.0	16238.7	16032.0	15741.7	15382.4	14954.3	14467.2	13960.3	13330.5	12690.8
30°	17626.3	17626.3	17444.3	17217.9	16907.9	16514.2	16046.8	15510.4	14915.0	14270.3	13581.4
27.5°	18827.0	18777.8	18625.3	18384.1	18044.6	17626.3	17119.5	16538.8	15894.2	15185.6	14447.5
25°	20008.0	19953.9	19786.6	19520.8	19156.7	18699.1	18152.9	17532.8	16839.0	16091.0	15284.0
22.5°	21139.8	21080.7	20903.6	20618.2	20229.4	19732.4	19146.9	18482.5	17744.4	16942.3	16091.0
20°	22187.9	22123.9	21941.9	21641.7	21238.2	20711.7	20091.7	19378.1	18590.8	17744.4	16839.0
17.5°	23132.7	23068.7	22876.8	22566.8	22187.9	21602.3	20962.6	20209.8	19378.1	18482.5	17532.8
15°	23964.3	23895.4	23698.6	23388.6	22955.6	22404.4	21730.3	20962.6	20091.7	19146.9	18152.9
12.5°	24672.9	24604.0	24402.3	24092.3	23644.5	23093.3	22404.4	21602.3	20711.7	19732.4	18699.1
10°	25233.9	25165.0	24973.1	24677.8	24215.3	23644.5	22955.6	22187.9	21238.2	20229.4	19156.7
7.5°	25637.4	25573.4	25396.3	25101.0	24677.8	24092.3	23388.6	22566.8	21641.7	20618.2	19520.8
5°	25942.5	25868.7	25691.5	25396.3	24973.1	24402.3	23698.6	22876.8	21941.9	20903.6	19786.6
2.5°	26154.1	26065.5	25868.7	25573.4	25165.0	24604.0	23895.4	23068.7	22123.9	21080.7	19953.9
0°	26213.1	26154.1	25942.5	25637.4	25233.9	24672.9	23964.3	23132.7	22187.9	21139.8	20008.0



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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°	177.1	177.1	172.2	167.3	162.4	152.5	147.6	142.7	137.8	127.9	123.0
85°	374.0	364.1	354.3	344.5	329.7	319.9	305.1	295.2	280.5	265.7	251.0
82.5°	590.5	575.7	556.1	541.3	521.6	497.0	477.3	452.7	428.1	408.4	383.8
80°	826.7	802.1	777.5	752.9	723.4	693.8	664.3	634.8	600.3	565.9	531.4
77.5°	1082.6	1048.1	1013.7	974.3	939.9	900.5	861.1	821.8	777.5	733.2	688.9
75°	1368.0	1323.7	1274.5	1225.3	1181.0	1126.9	1072.7	1018.6	959.6	905.4	846.4
72.5°	1678.0	1623.9	1564.8	1505.8	1441.8	1372.9	1304.0	1230.2	1161.3	1092.4	1018.6
70°	2012.6	1948.6	1874.8	1801.0	1722.3	1638.6	1555.0	1466.4	1377.8	1289.3	1200.7
67.5°	2371.8	2293.1	2204.5	2115.9	2017.5	1919.1	1820.7	1717.4	1609.1	1500.8	1397.5
65°	2755.7	2657.2	2553.9	2440.7	2327.5	2214.4	2096.3	1973.2	1850.2	1722.3	1609.1
62.5°	3183.8	3060.7	2927.9	2790.1	2662.2	2524.4	2396.4	2243.9	2096.3	1953.6	1810.9
60°	3680.8	3518.4	3356.0	3183.8	3021.4	2844.2	2686.8	2519.5	2352.1	2189.8	2022.5
57.5°	4236.8	4030.1	3833.3	3626.6	3410.1	3213.3	3011.5	2809.8	2622.8	2430.9	2248.8
55°	4866.7	4615.7	4369.7	4113.8	3862.8	3616.8	3360.9	3134.6	2903.3	2686.8	2475.2
52.5°	5555.6	5270.2	4965.1	4674.8	4354.9	4049.8	3764.4	3479.0	3208.4	2947.6	2706.4
50°	6293.7	5959.1	5609.7	5255.4	4891.3	4532.1	4187.6	3853.0	3538.1	3233.0	2947.6
47.5°	7061.4	6682.5	6283.9	5880.4	5491.6	5053.7	4640.3	4261.4	3882.5	3538.1	3208.4
45°	7848.7	7420.6	6982.6	6525.0	6067.4	5595.0	5137.3	4674.8	4261.4	3853.0	3479.0
42.5°	8660.6	8178.4	7691.2	7184.4	6677.5	6160.8	5644.2	5137.3	4640.3	4187.6	3764.4
40°	9497.2	8965.7	8409.7	7858.5	7317.2	6726.7	6160.8	5595.0	5053.7	4532.1	4049.8
37.5°	10333.7	9753.0	9152.7	8532.7	7912.7	7317.2	6677.5	6067.4	5491.6	4891.3	4354.9
35°	11175.2	10535.4	9885.9	9211.8	8532.7	7858.5	7184.4	6525.0	5880.4	5255.4	4674.8
32.5°	12021.5	11322.8	10604.3	9885.9	9152.7	8409.7	7691.2	6982.6	6283.9	5609.7	4965.1
30°	12853.1	12095.3	11322.8	10535.4	9753.0	8965.7	8178.4	7420.6	6682.5	5959.1	5270.2
27.5°	13665.1	12853.1	12021.5	11175.2	10333.7	9497.2	8660.6	7848.7	7061.4	6293.7	5555.6
25°	14447.5	13581.4	12690.8	11790.3	10894.7	10004.0	9123.2	8247.3	7420.6	6613.6	5841.0
22.5°	15185.6	14270.3	13330.5	12375.8	11416.3	10476.4	9551.3	8640.9	7760.1	6913.7	6101.8
20°	15894.2	14915.0	13960.3	12917.1	11913.3	10924.2	9954.8	9000.2	8070.1	7189.3	6338.0
17.5°	16538.8	15510.4	14467.2	13419.0	12366.0	11327.7	10314.0	9364.3	8355.5	7440.3	6564.4
15°	17119.5	16046.8	14954.3	13866.8	12769.5	11691.8	10638.8	9615.3	8616.3	7666.6	6761.2
12.5°	17626.3	16514.2	15382.4	14255.6	13128.7	12011.7	10924.2	9866.2	8842.7	7858.5	6928.5
10°	18044.6	16907.9	15741.7	14580.4	13424.0	12277.4	11155.5	10077.8	9029.7	8020.9	7066.3
7.5°	18384.1	17217.9	16032.0	14836.2	13655.2	12484.1	11342.5	10240.2	9177.3	8143.9	7174.5
5°	18625.3	17444.3	16238.7	15018.3	13822.5	12636.6	11475.3	10358.3	9280.6	8232.5	7253.3
2.5°	18777.8	17626.3	16406.0	15170.8	13960.3	12759.7	11583.6	10451.8	9364.3	8306.3	7317.2
0°	18827.0	17626.3	16406.0	15170.8	13960.3	12759.7	11583.6	10451.8	9364.3	8306.3	7317.2





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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°	118.1	108.3	98.4	93.5	83.7	78.7	68.9	59.0	54.1	44.3	34.4
85°	236.2	216.5	201.8	187.0	172.2	152.5	137.8	123.0	103.3	88.6	68.9
82.5°	359.2	334.6	310.0	285.4	260.8	236.2	206.7	182.1	157.5	132.9	103.3
80°	497.0	457.6	423.2	388.7	354.3	319.9	280.5	246.0	206.7	172.2	137.8
77.5°	639.7	595.4	546.2	497.0	447.8	403.5	354.3	310.0	265.7	216.5	172.2
75°	792.2	733.2	679.1	615.1	556.1	492.1	433.0	374.0	319.9	265.7	206.7
72.5°	949.7	875.9	802.1	733.2	659.4	585.6	516.7	442.9	374.0	310.0	246.0
70°	1112.1	1023.5	935.0	851.3	767.6	679.1	600.3	516.7	433.0	354.3	280.5
67.5°	1284.3	1181.0	1077.7	969.4	875.9	777.5	679.1	585.6	492.1	403.5	319.9
65°	1471.3	1348.3	1220.4	1107.2	984.2	875.9	767.6	659.4	556.1	447.8	354.3
62.5°	1663.2	1520.5	1377.8	1235.1	1107.2	969.4	851.3	733.2	615.1	497.0	388.7
60°	1860.1	1697.7	1535.3	1377.8	1220.4	1077.7	935.0	802.1	679.1	546.2	423.2
57.5°	2061.8	1879.7	1697.7	1520.5	1348.3	1181.0	1023.5	875.9	733.2	595.4	457.6
55°	2268.5	2061.8	1860.1	1663.2	1471.3	1284.3	1112.1	949.7	792.2	639.7	497.0
52.5°	2475.2	2248.8	2022.5	1810.9	1609.1	1397.5	1200.7	1018.6	846.4	688.9	531.4
50°	2686.8	2430.9	2189.8	1953.6	1722.3	1500.8	1289.3	1092.4	905.4	733.2	565.9
47.5°	2903.3	2622.8	2352.1	2096.3	1850.2	1609.1	1377.8	1161.3	959.6	777.5	600.3
45°	3134.6	2809.8	2519.5	2243.9	1973.2	1717.4	1466.4	1230.2	1018.6	821.8	634.8
42.5°	3360.9	3011.5	2686.8	2396.4	2096.3	1820.7	1555.0	1304.0	1072.7	861.1	664.3
40°	3616.8	3213.3	2844.2	2524.4	2214.4	1919.1	1638.6	1372.9	1126.9	900.5	693.8
37.5°	3862.8	3410.1	3021.4	2662.2	2327.5	2017.5	1722.3	1441.8	1181.0	939.9	723.4
35°	4113.8	3626.6	3183.8	2790.1	2440.7	2115.9	1801.0	1505.8	1225.3	974.3	752.9
32.5°	4369.7	3833.3	3356.0	2927.9	2553.9	2204.5	1874.8	1564.8	1274.5	1013.7	777.5
30°	4615.7	4030.1	3518.4	3060.7	2657.2	2293.1	1948.6	1623.9	1323.7	1048.1	802.1
27.5°	4866.7	4236.8	3680.8	3183.8	2755.7	2371.8	2012.6	1678.0	1368.0	1082.6	826.7
25°	5107.8	4433.6	3833.3	3301.9	2844.2	2450.6	2081.5	1732.1	1407.4	1112.1	846.4
22.5°	5329.2	4605.9	3971.1	3415.0	2937.7	2519.5	2140.6	1781.3	1446.7	1141.6	866.1
20°	5531.0	4783.0	4113.8	3528.2	3026.3	2588.3	2189.8	1825.6	1481.2	1166.2	885.7
17.5°	5727.8	4945.4	4241.7	3631.6	3100.1	2647.4	2239.0	1860.1	1510.7	1185.9	900.5
15°	5895.1	5088.1	4354.9	3720.1	3169.0	2696.6	2278.3	1894.5	1535.3	1205.6	910.3
12.5°	6042.8	5211.1	4453.3	3793.9	3223.1	2740.9	2317.7	1924.0	1559.9	1220.4	925.1
10°	6160.8	5309.6	4532.1	3857.9	3272.3	2775.3	2342.3	1948.6	1574.7	1235.1	935.0
7.5°	6254.3	5388.3	4596.0	3902.2	3306.8	2804.9	2366.9	1963.4	1589.4	1245.0	949.7
5°	6323.2	5447.3	4640.3	3936.6	3336.3	2839.3	2396.4	1988.0	1609.1	1259.7	949.7
2.5°	6377.4	5491.6	4674.8	3966.2	3356.0	2839.3	2396.4	1988.0	1609.1	1259.7	949.7
0°	6377.4	5491.6	4674.8	3966.2	3356.0	2839.3	2396.4	1988.0	1609.1	1259.7	949.7



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2.5°	679.1	423.2	201.8	0.0
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