

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: EPHESUS

Report Number: P628133

Luminaire Tested: **EPH-VN-04-E-740-U-T1**

Issue Date: 01/09/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P628133  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 01/09/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: EPHESUS  
Catalog Number: EPH-VN-04-E-740-U-T1  
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/  
Type I distribution lens  
Light Source: (64) 4000K CCT, 70 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 35499.3 lumens  
Efficiency: N/A  
Efficacy: 116.9 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 0.5' x H: 0')  
IES Classification: Type I - Short  
BUG Rating: B5 - U0 - G5

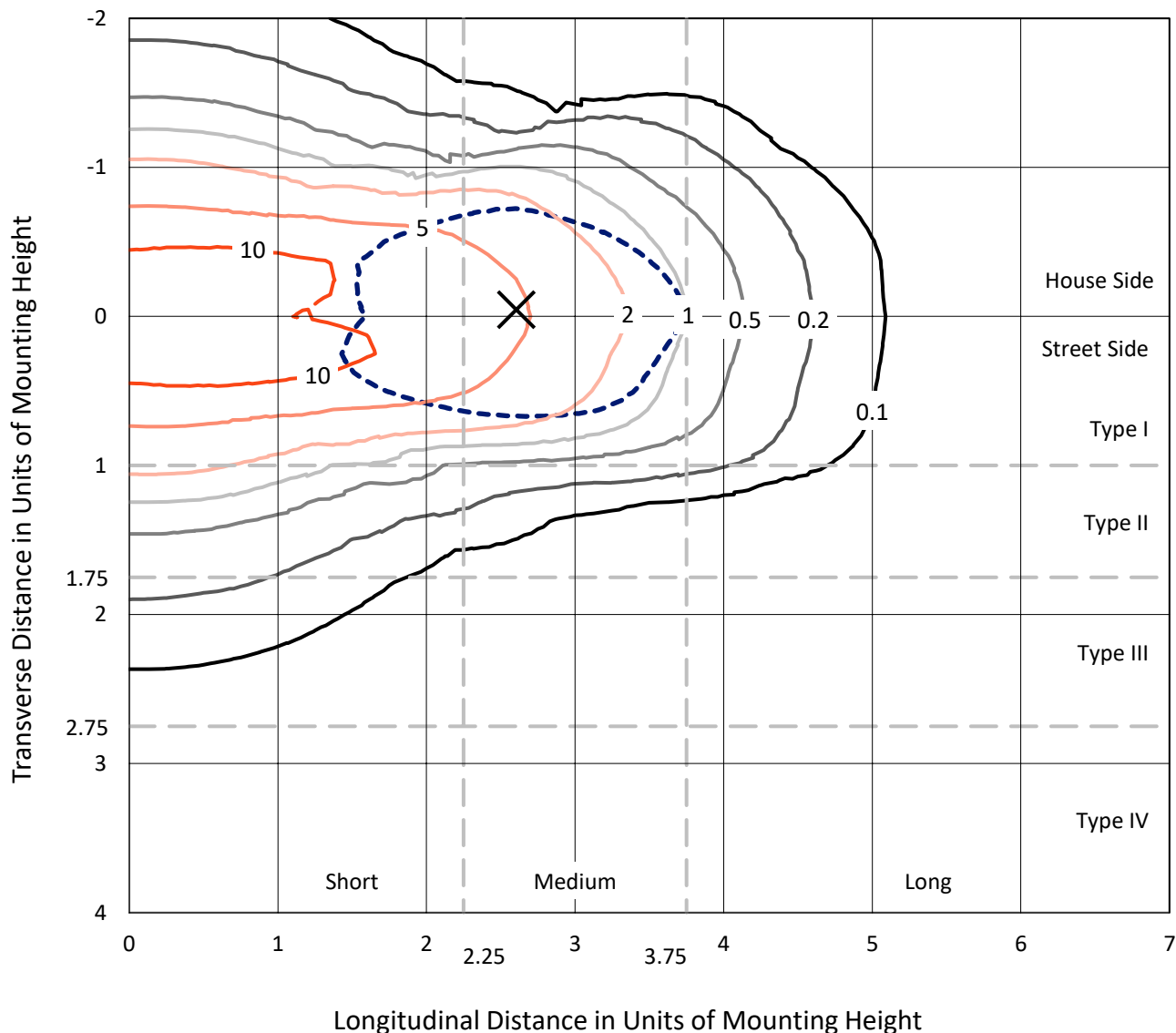
Input Watts (W): 303.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

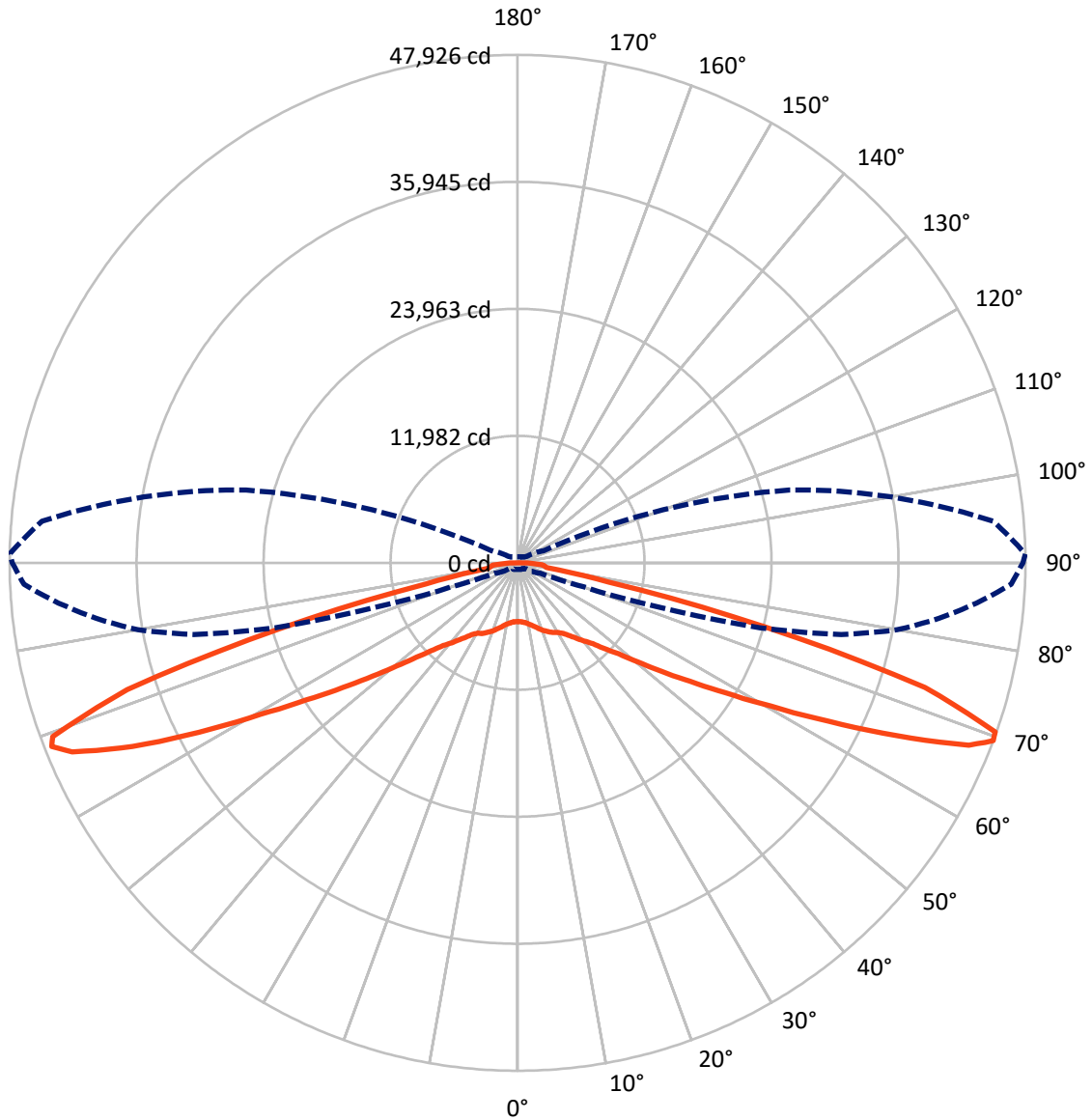
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 15.1 fc  
 Type I - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 91-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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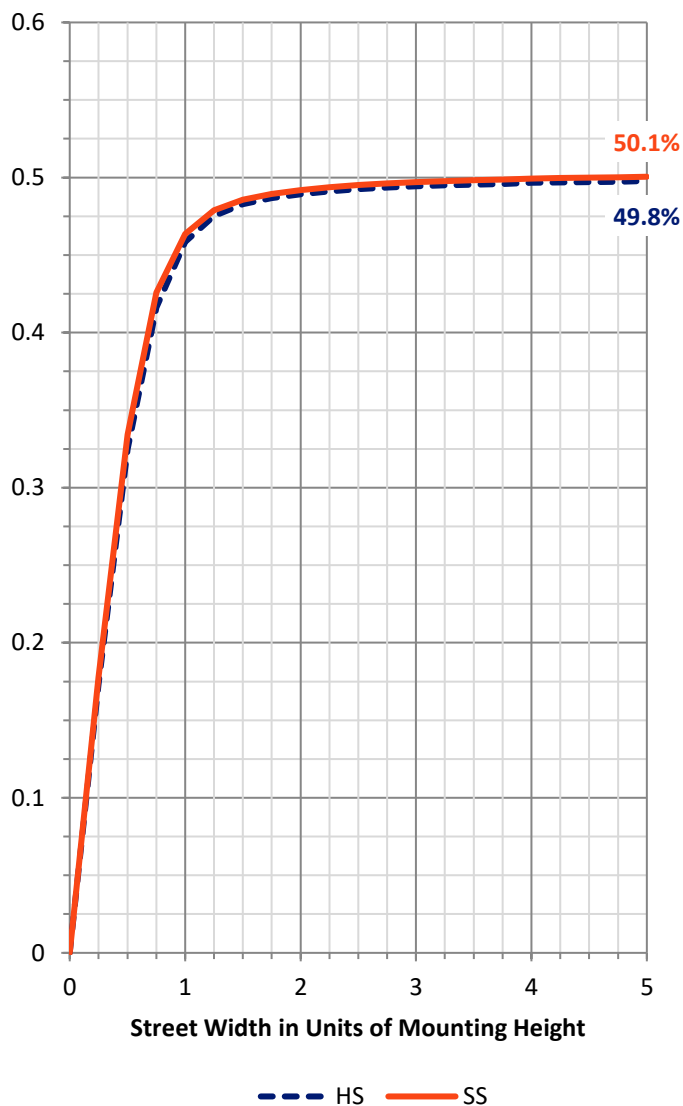
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	17797.5	0.0	17797.5
	% Fixture	50.1	0.0	50.1
<b>Street Side</b>	Lumens	17701.9	0.0	17701.9
	% Fixture	49.9	0.0	49.9
<b>Total</b>	Lumens	35499.3	0.0	35499.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	559.2	1.6
10°-20°	1831.1	5.2
20°-30°	3140.1	8.8
30°-40°	4337.9	12.2
40°-50°	5577.3	15.7
50°-60°	6939.3	19.5
60°-70°	8510.9	24.0
70°-80°	4198.4	11.8
80°-90°	405.0	1.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	35499.3	100.0
0°-180°	35499.3	100.0

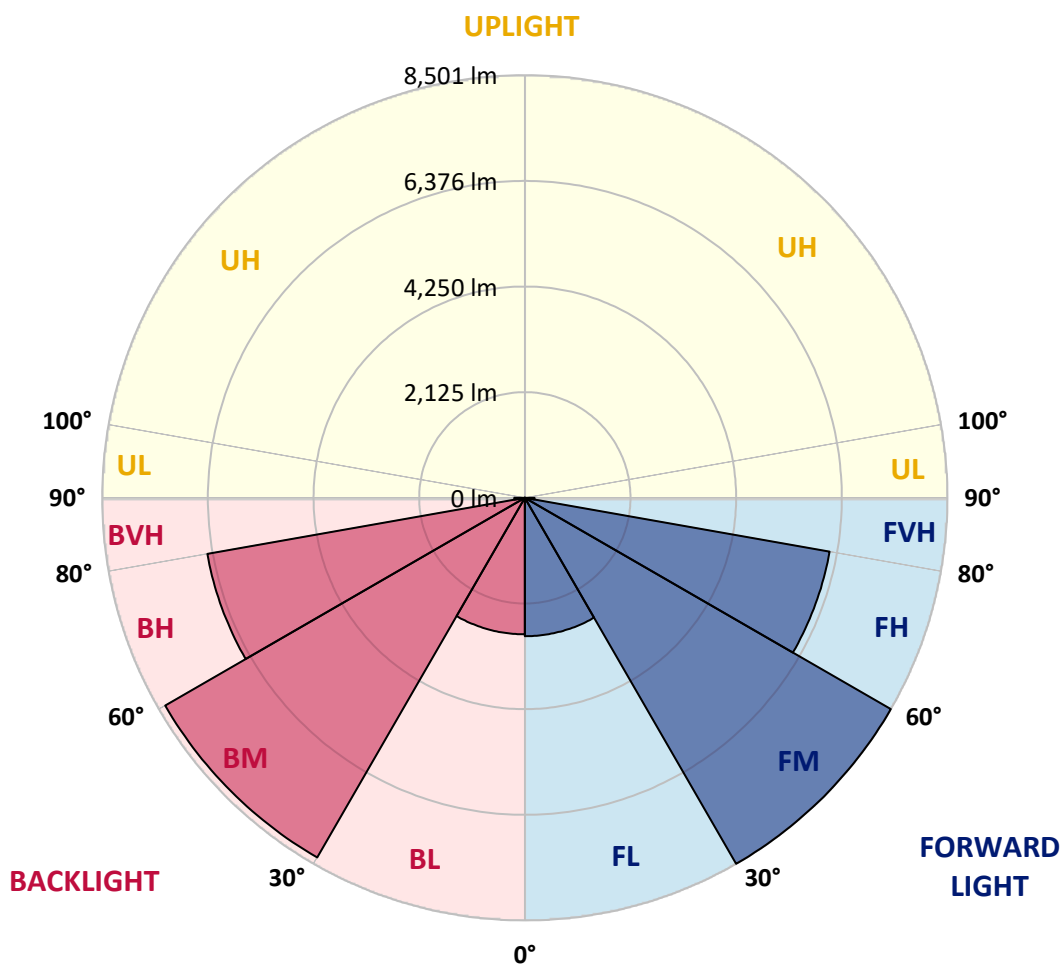


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2783.8	7.8			
FM (30°-60°)	8500.9	23.9			
FH (60°-80°)	6225.1	17.5			G3/7500
FVH (80°-90°)	192.0	0.5			G2/225
BL (0°-30°)	2746.7	7.7	B4/5000		
BM (30°-60°)	8353.6	23.5	B4/8500		
BH (60°-80°)	6484.2	18.3	B5		G5
BVH (80°-90°)	213.0	0.6			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B5-U0-G5**  
 Type I Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67.5°	70°
0°	5568.8	5568.8	5568.8	5568.8	5568.8	5568.8	5568.8	5568.8	5568.8	5568.8
2.5°	5618.1	5667.3	5625.7	5644.6	5667.3	5656.0	5648.4	5595.4	5614.3	5591.6
5°	5815.1	5849.2	5822.7	5818.9	5796.1	5792.3	5769.6	5686.3	5724.2	5671.1
7.5°	5985.5	6019.6	5985.5	5996.9	6004.5	5981.8	5962.8	5871.9	5879.5	5845.4
10°	6110.6	6163.6	6125.7	6201.5	6201.5	6231.8	6205.3	6072.7	6076.5	6034.8
12.5°	6193.9	6258.3	6243.2	6368.2	6432.6	6447.7	6478.0	6364.4	6356.8	6277.2
15°	6133.3	6144.7	6224.2	6417.4	6640.9	6747.0	6800.0	6667.4	6675.0	6584.1
17.5°	5940.1	5978.0	6053.7	6390.9	6675.0	6989.5	7095.5	7019.8	7004.6	6902.3
20°	5727.9	5735.5	5860.5	6246.9	6686.4	7137.2	7451.6	7391.0	7387.2	7322.8
22.5°	5462.8	5466.5	5640.8	6068.9	6652.3	7205.4	7769.8	7849.4	7796.4	7735.8
25°	5133.2	5174.8	5379.4	5860.5	6534.9	7277.4	7955.5	8216.9	8197.9	8141.1
27.5°	4822.5	4852.8	5076.4	5565.0	6284.8	7171.3	8224.4	8682.8	8633.6	8542.7
30°	4542.2	4591.4	4822.5	5262.0	5974.2	7038.7	8402.5	9065.5	9122.3	9020.0
32.5°	4239.1	4299.7	4542.2	4996.8	5686.3	6913.7	8554.0	9516.3	9656.4	9539.0
35°	3936.1	3981.5	4224.0	4712.7	5477.9	6637.1	8584.3	10099.7	10273.9	10209.5
37.5°	3670.9	3712.6	3951.2	4417.2	5197.6	6432.6	8516.1	10584.6	10899.0	11073.3
40°	3375.4	3428.4	3663.3	4133.1	4826.3	6129.5	8432.8	11126.3	11577.1	11808.2
42.5°	3045.8	3117.8	3345.1	3830.0	4538.4	5754.5	8182.8	11490.0	12190.8	12600.0
45°	2697.3	2750.3	2996.6	3443.6	4197.5	5318.8	7830.5	11933.2	12850.0	13607.7
47.5°	2276.8	2310.9	2560.9	3030.7	3720.1	4868.0	7383.4	12274.2	13588.7	14539.6
50°	1818.4	1852.5	2053.3	2526.8	3197.3	4307.3	6697.8	12418.1	14107.7	15441.2
52.5°	1420.6	1447.1	1606.2	1962.4	2598.8	3667.1	5894.6	12384.0	14437.3	16376.9
55°	1106.2	1128.9	1242.6	1511.5	1992.7	2909.4	5053.6	11759.0	14539.6	17032.3
57.5°	950.9	962.2	1015.3	1170.6	1526.7	2204.8	3985.3	10660.3	14035.7	17475.5
60°	837.2	841.0	882.7	988.8	1182.0	1640.3	2913.2	8906.3	12781.8	17195.2
62.5°	780.4	784.2	806.9	878.9	977.4	1238.8	2064.6	6841.7	10558.1	16039.8
65°	731.1	734.9	753.9	799.3	841.0	992.5	1519.1	4511.9	7607.0	13069.7
67.5°	666.7	674.3	693.3	731.1	765.2	825.9	1155.4	2909.4	4788.4	9027.6
69°	625.1	632.6	651.6	681.9	712.2	769.0	1000.1	2322.2	3614.1	6637.1
70°	594.8	602.3	625.1	655.4	681.9	734.9	920.6	2060.8	3087.5	5402.1
72.5°	519.0	526.6	541.7	572.0	602.3	640.2	742.5	1473.7	2098.7	3318.6
75°	443.2	447.0	458.4	488.7	519.0	549.3	625.1	1041.8	1394.1	2038.1
77.5°	344.7	348.5	363.7	397.8	416.7	458.4	530.4	723.6	913.0	1185.7
80°	250.0	261.4	280.3	310.6	322.0	344.7	409.1	519.0	602.3	727.4
82.5°	170.5	178.1	197.0	223.5	231.1	231.1	291.7	382.6	428.1	473.5
85°	98.5	102.3	98.5	113.6	132.6	136.4	189.4	231.1	265.2	306.9
87.5°	30.3	30.3	30.3	37.9	45.5	49.2	83.3	106.1	132.6	159.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

72.5°		75°	77.5°	80°	82.5°	85°	87.5°	90°	91°	95°
5568.8	0°	5568.8	5568.8	5568.8	5568.8	5568.8	5568.8	5568.8	5568.8	5568.8
5595.4	2.5°	5580.2	5625.7	5572.6	5568.8	5565.0	5538.5	5557.5	5553.7	5595.4
5693.8	5°	5659.8	5659.8	5629.4	5652.2	5644.6	5557.5	5637.0	5637.0	5678.7
5818.9	7.5°	5773.4	5781.0	5765.8	5754.5	5739.3	5674.9	5724.2	5716.6	5750.7
6049.9	10°	5993.1	5985.5	5917.4	5917.4	5902.2	5834.0	5864.3	5887.1	5951.5
6273.5	12.5°	6231.8	6182.5	6190.1	6163.6	6114.4	5996.9	6042.4	6046.2	6110.6
6587.9	15°	6493.2	6440.1	6417.4	6394.7	6345.4	6235.6	6300.0	6262.1	6307.6
6875.8	17.5°	6845.5	6777.3	6697.8	6637.1	6565.2	6478.0	6508.3	6538.6	6569.0
7250.8	20°	7235.7	7125.8	7034.9	6936.4	6875.8	6765.9	6803.8	6807.6	6841.7
7644.8	22.5°	7546.3	7451.6	7349.3	7277.4	7152.4	7042.5	7000.8	7008.4	7069.0
8050.2	25°	7951.7	7781.2	7678.9	7561.5	7451.6	7262.2	7243.3	7250.8	7349.3
8504.8	27.5°	8304.0	8163.8	7993.4	7815.3	7656.2	7504.7	7481.9	7455.4	7572.9
8921.5	30°	8762.4	8554.0	8281.3	8110.8	7845.6	7633.5	7603.2	7629.7	7697.9
9531.4	32.5°	9254.9	9035.1	8747.2	8527.5	8205.5	7959.3	7925.2	7951.7	8076.7
10160.3	35°	9978.4	9739.8	9391.2	9054.1	8747.2	8478.3	8459.3	8417.7	8584.3
11024.0	37.5°	10846.0	10527.7	10198.2	9823.1	9497.3	9118.5	9008.6	9042.7	9179.1
11861.2	40°	11823.4	11520.3	11107.4	10679.3	10281.5	9879.9	9720.8	9698.1	9936.8
12952.3	42.5°	12952.3	12743.9	12141.6	11633.9	11111.1	10607.3	10417.9	10429.3	10649.0
14168.3	45°	14270.6	14115.3	13581.1	12944.7	12331.0	11690.8	11565.7	11573.3	11868.8
15266.9	47.5°	15827.6	15926.1	15422.3	14751.7	13994.1	13221.2	12918.2	12842.4	13172.0
16634.5	50°	17403.6	18024.8	17646.0	17005.8	16111.7	15198.7	14808.6	14672.2	15145.7
17990.7	52.5°	19248.5	20248.6	20366.0	19873.5	18869.6	17593.0	17161.1	17020.9	17623.3
19358.3	55°	21161.6	22688.3	23260.3	23328.5	22131.4	20729.7	19915.2	19752.3	20695.6
20555.4	57.5°	23093.6	25400.7	26571.3	27264.6	26260.6	24438.5	23279.2	23105.0	24775.6
21510.1	60°	25078.7	28207.8	30086.9	31837.1	31257.4	29234.5	27442.6	27450.2	29738.3
21919.2	62.5°	26529.6	30465.7	33458.5	36280.8	36803.5	35394.3	33125.1	32894.0	35314.7
20699.4	65°	27302.4	32598.5	36273.2	39622.1	41444.2	41376.1	39527.4	39322.8	41103.3
17168.7	67.5°	26147.0	32678.1	37284.7	40618.4	43959.7	45804.6	45569.7	45922.0	44876.5
13603.9	69°	23684.6	31272.6	36383.0	40110.8	43486.1	46603.9	47668.5	47926.1	45046.9
11258.9	70°	20979.7	29526.2	34879.1	38478.0	41576.8	45452.3	47732.9	47812.4	43539.2
6341.7	72.5°	13092.4	22131.4	27397.1	30836.9	32757.6	36428.5	40269.9	40205.5	34443.4
3545.9	75°	6875.8	12751.5	17043.7	18790.1	19866.0	21752.5	24351.3	24025.5	20703.2
1814.6	77.5°	3061.0	5417.3	6906.1	7894.9	8171.4	8720.7	8978.3	8766.2	8322.9
977.4	80°	1485.0	2242.7	2917.0	3083.7	2886.7	2750.3	2814.7	2784.4	3045.8
564.5	82.5°	738.7	1030.4	1163.0	1394.1	2053.3	2523.0	2595.0	2564.7	2299.5
340.9	85°	394.0	473.5	545.5	1000.1	1837.3	2303.3	2371.5	2360.1	2125.2
185.6	87.5°	219.7	272.8	394.0	799.3	1110.0	1174.4	1238.8	1200.9	1235.0
0.0	90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





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**CANDELA DISTRIBUTION (continued):**

105°	115°		125°	135°	145°	155°	165°	175°	180°
5568.8	5568.8	0°	5568.8	5568.8	5568.8	5568.8	5568.8	5568.8	5568.8
5584.0	5633.2	2.5°	5602.9	5633.2	5648.4	5591.6	5625.7	5595.4	5602.9
5671.1	5735.5	5°	5697.6	5769.6	5758.2	5758.2	5765.8	5720.4	5739.3
5750.7	5845.4	7.5°	5887.1	5913.6	5974.2	5951.5	5928.7	5883.3	5890.8
5966.6	6057.5	10°	6144.7	6144.7	6182.5	6144.7	6072.7	6042.4	6034.8
6186.3	6356.8	12.5°	6394.7	6356.8	6379.5	6269.7	6186.3	6125.7	6156.0
6383.3	6580.3	15°	6618.2	6610.6	6527.3	6387.1	6182.5	6072.7	6080.3
6724.3	6898.5	17.5°	6951.6	6883.4	6663.7	6300.0	6046.2	5940.1	5887.1
7042.5	7243.3	20°	7281.2	7091.7	6648.5	6159.8	5822.7	5648.4	5652.2
7311.5	7599.4	22.5°	7569.1	7171.3	6595.5	5981.8	5618.1	5383.2	5379.4
7690.3	7970.6	25°	7845.6	7125.8	6489.4	5818.9	5390.8	5163.5	5133.2
8023.7	8387.3	27.5°	8061.5	7084.2	6231.8	5557.5	5080.1	4894.5	4875.6
8326.7	8845.7	30°	8197.9	6993.2	6000.7	5250.6	4792.2	4610.4	4602.8
8883.6	9235.9	32.5°	8353.2	6853.1	5697.6	4977.9	4538.4	4341.4	4330.1
9539.0	9811.8	35°	8497.2	6640.9	5451.4	4720.2	4273.2	4042.1	4008.0
10338.3	10463.3	37.5°	8527.5	6406.1	5144.5	4413.4	3943.6	3720.1	3716.3
11357.4	11027.8	40°	8531.3	6121.9	4818.7	4106.5	3621.6	3394.3	3379.2
12459.8	11505.1	42.5°	8379.8	5796.1	4492.9	3742.9	3288.3	3019.3	3000.4
13774.3	12088.5	45°	8031.2	5405.9	4076.2	3341.3	2920.8	2670.8	2640.5
15327.6	12615.1	47.5°	7565.3	4917.2	3655.7	2932.2	2504.1	2276.8	2257.8
17020.9	12956.1	50°	6936.4	4367.9	3148.1	2488.9	2083.6	1897.9	1852.5
18998.4	13001.5	52.5°	6156.0	3739.1	2617.7	2026.8	1697.2	1534.3	1507.8
21157.8	12622.7	55°	5224.1	3061.0	2091.2	1617.6	1318.3	1193.3	1170.6
23154.2	11664.2	57.5°	4186.1	2356.3	1610.0	1250.1	1056.9	969.8	943.3
25374.2	9879.9	60°	3129.2	1776.7	1235.0	992.5	863.7	803.1	791.8
27355.5	7675.1	62.5°	2250.3	1337.3	969.8	829.6	757.7	727.4	719.8
28473.0	5155.9	65°	1655.5	1030.4	806.9	750.1	697.1	670.5	659.2
28283.6	3375.4	67.5°	1231.2	825.9	716.0	681.9	644.0	617.5	609.9
26506.9	2689.7	69°	1038.0	746.3	670.5	636.4	602.3	579.6	568.2
24400.6	2288.1	70°	939.5	704.6	647.8	613.7	575.8	556.9	545.5
16369.3	1538.1	72.5°	738.7	609.9	575.8	537.9	511.4	488.7	484.9
8599.5	1087.2	75°	609.9	522.8	496.3	466.0	439.4	416.7	416.7
3746.7	780.4	77.5°	511.4	431.9	409.1	378.8	352.3	329.6	325.8
1799.5	564.5	80°	397.8	329.6	314.4	303.1	272.8	238.7	234.9
950.9	405.4	82.5°	284.1	223.5	219.7	212.1	185.6	166.7	159.1
515.2	242.5	85°	178.1	128.8	117.4	102.3	90.9	90.9	90.9
250.0	106.1	87.5°	68.2	37.9	37.9	30.3	22.7	22.7	22.7
0.0	0.0	90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)