

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: P628565

Luminaire Tested: **EPH-VN-07-E-735-U-LAM**

Issue Date: 01/11/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P628565  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 01/11/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: EPHESUS  
Catalog Number: EPH-VN-07-E-735-U-LAM  
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/  
LAMBERTIAN distribution lens  
Light Source: (112) 3500K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

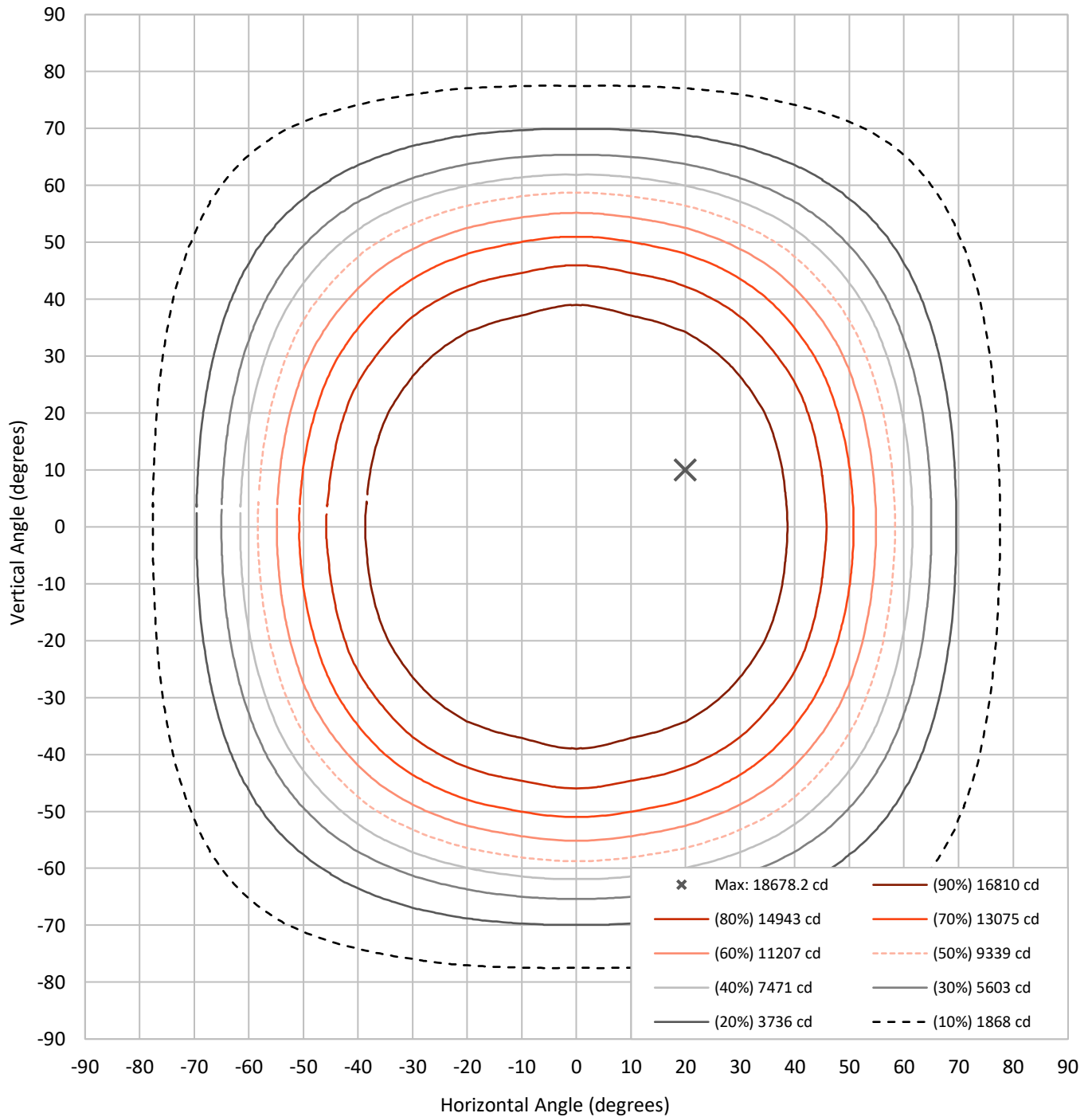
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	57302.2 lumens	Max Intensity:	18678.2 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	107.6 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	35161.8 lumens	Field Lumens:	42153.1 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

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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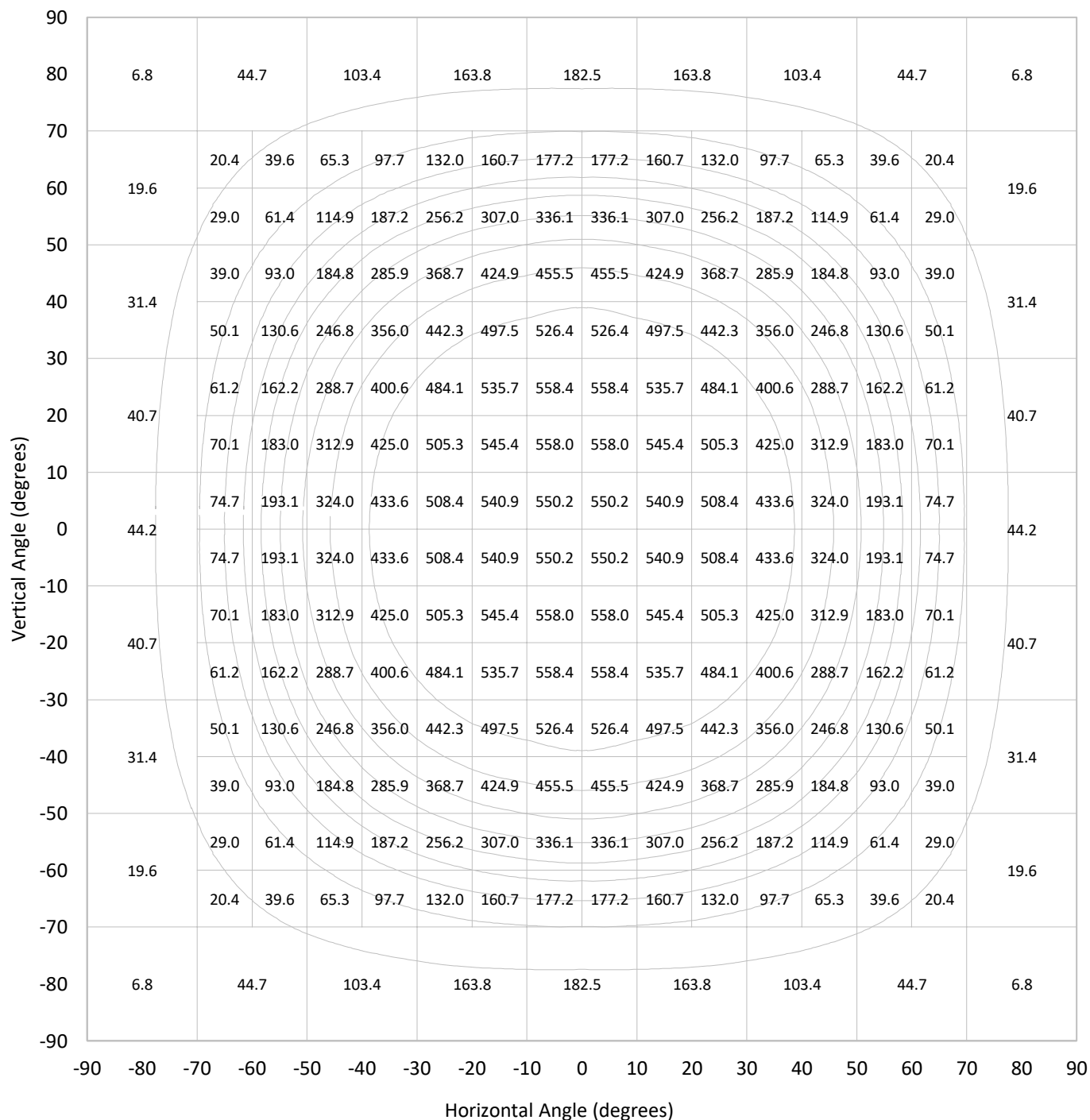
### Iso-Candela Plot





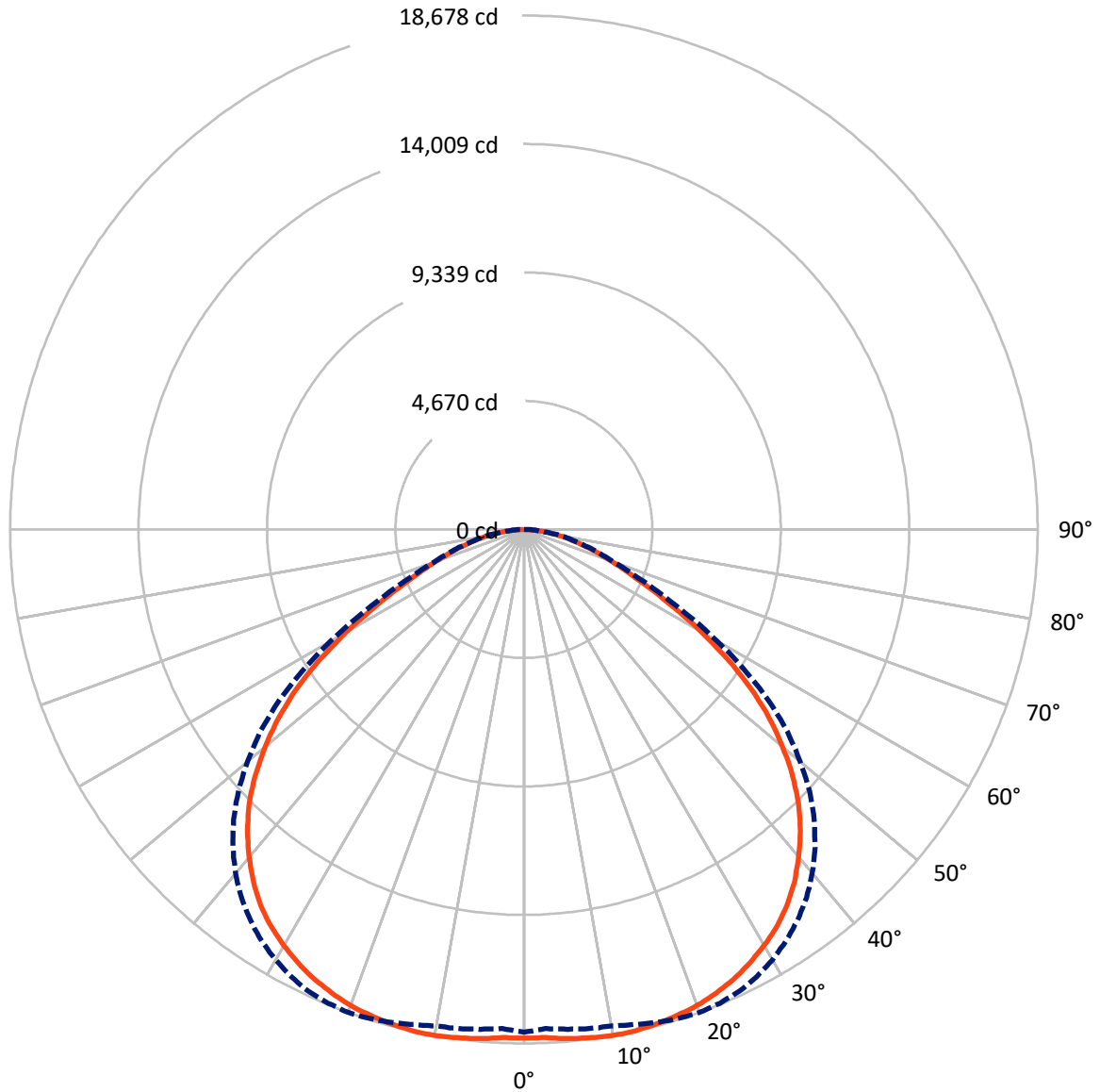
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### Lumen Table



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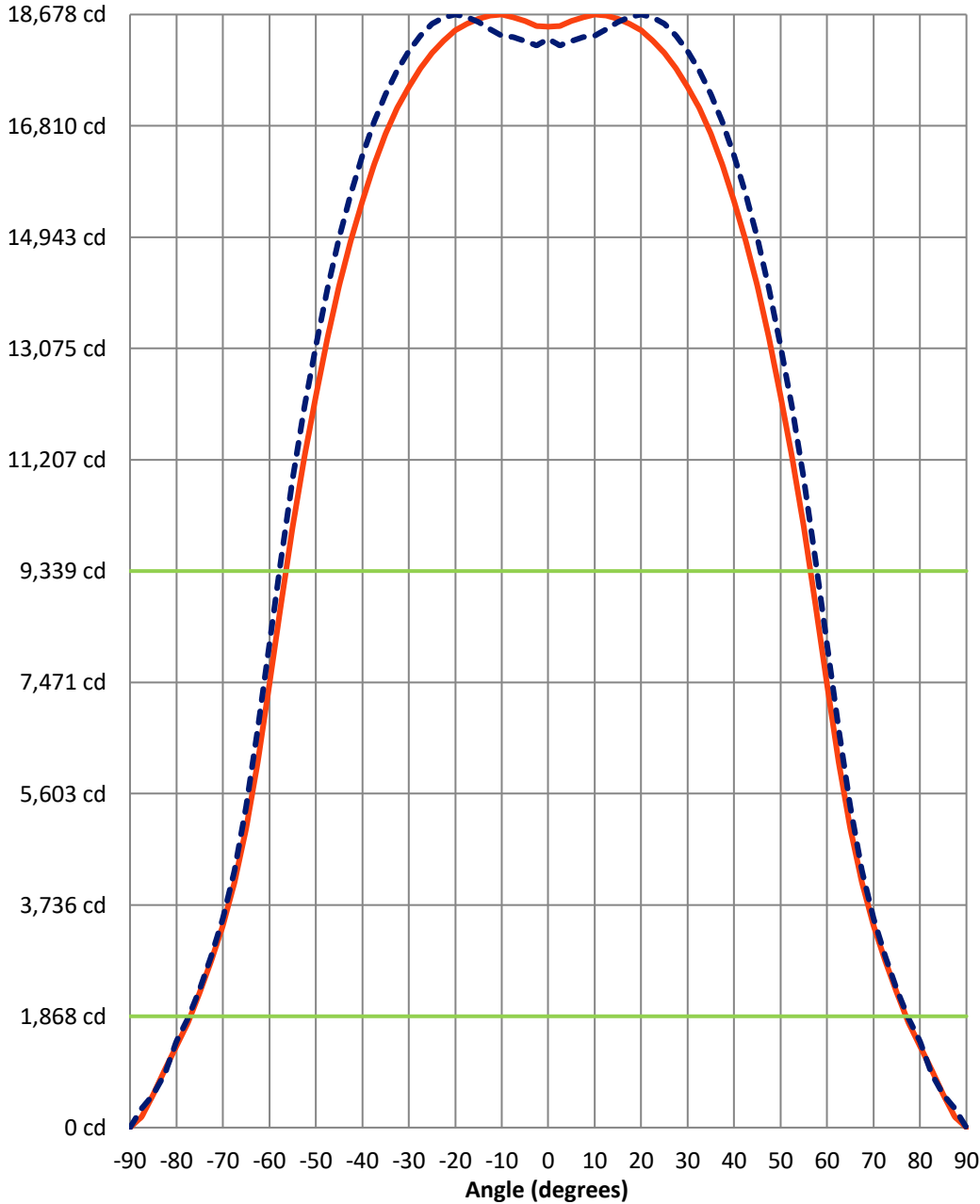
### Luminous Intensity Polar Plot



— Vertical Distribution Through 20-Deg    - - - Horizontal Distribution Through 10-Deg

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### Luminous Intensity Plot



**Beam:**  
 H Angle: 115.7°  
 V Angle: 112.9°  
 Lumens: 35161.8  
 Efficiency: 61.4%

**Field:**  
 H Angle: 154.7°  
 V Angle: 154°  
 Lumens: 42153.1  
 Efficiency: 73.6%

**Spill:**  
 Lumens: 15149.2  
 Efficiency: 26.4%

- Vertical Distribution through 20-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°	150.7	162.8	168.8	174.8	180.9	186.9	192.9	186.9	180.9	180.9	174.8
85°	404.0	416.0	422.0	464.2	506.4	530.6	560.7	554.7	554.7	548.7	542.6
82.5°	807.9	844.1	874.2	916.4	940.5	976.7	1000.8	982.7	970.7	946.6	928.5
80°	1434.9	1447.0	1453.0	1459.0	1428.9	1422.9	1410.8	1392.7	1368.6	1338.5	1308.3
77.5°	1826.8	1838.9	1850.9	1838.9	1832.9	1826.8	1808.7	1790.6	1766.5	1742.4	1706.2
75°	2417.7	2417.7	2417.7	2399.6	2387.5	2369.4	2339.3	2309.2	2267.0	2218.7	2164.5
72.5°	3044.7	3038.7	3032.6	2996.5	2966.3	2930.2	2887.9	2851.8	2803.5	2749.3	2676.9
70°	3701.9	3713.9	3720.0	3671.7	3635.6	3587.3	3533.1	3466.7	3394.4	3316.0	3213.5
67.5°	4606.2	4594.2	4582.1	4515.8	4467.6	4401.3	4322.9	4226.4	4117.9	3997.3	3852.6
65°	5727.7	5745.8	5709.6	5643.3	5552.8	5444.3	5323.7	5185.0	5022.3	4841.4	4636.4
62.5°	7084.2	7114.4	7072.2	6987.8	6873.2	6728.5	6559.7	6360.7	6137.6	5884.4	5631.2
60°	8627.7	8621.6	8543.3	8428.7	8278.0	8097.1	7910.2	7693.2	7439.9	7144.5	6837.0
57.5°	10044.5	10032.5	9936.0	9821.4	9670.7	9477.8	9278.8	9049.7	8784.4	8470.9	8115.2
55°	11316.7	11304.6	11208.1	11087.6	10930.8	10737.9	10557.0	10339.9	10080.7	9749.1	9369.3
52.5°	12444.1	12450.1	12365.7	12233.1	12064.3	11877.4	11702.5	11485.5	11238.3	10906.7	10538.9
50°	13481.1	13475.1	13384.7	13264.1	13107.3	12926.4	12751.6	12534.5	12275.3	11955.8	11600.0
47.5°	14445.8	14433.7	14331.2	14198.6	14035.8	13879.0	13716.3	13523.3	13252.0	12932.5	12576.8
45°	15253.7	15229.6	15127.1	15000.5	14843.7	14705.0	14560.3	14415.6	14126.2	13830.8	13493.2
42.5°	15947.0	15941.0	15838.5	15711.9	15555.1	15434.6	15301.9	15121.0	14879.9	14608.6	14277.0
40°	16610.2	16562.0	16459.5	16338.9	16194.2	16091.7	15959.1	15778.2	15543.1	15277.8	14958.3
37.5°	17104.6	17110.7	17002.1	16869.5	16742.9	16646.4	16525.8	16357.0	16152.0	15892.8	15573.2
35°	17574.9	17544.7	17454.3	17339.8	17225.2	17116.7	16990.1	16845.4	16676.6	16435.4	16133.9
32.5°	17882.4	17924.6	17816.1	17695.5	17629.2	17544.7	17412.1	17261.4	17110.7	16869.5	16598.2
30°	18220.0	18183.8	18099.4	17996.9	17948.7	17894.4	17779.9	17635.2	17460.3	17243.3	16990.1
27.5°	18455.1	18437.1	18334.6	18238.1	18214.0	18165.7	18075.3	17948.7	17773.9	17562.8	17327.7
25°	18557.6	18569.7	18473.2	18419.0	18419.0	18388.8	18316.5	18208.0	18033.1	17840.2	17611.1
22.5°	18605.9	18593.8	18527.5	18515.4	18545.6	18521.5	18491.3	18394.9	18238.1	18081.3	17888.4
20°	18636.0	18551.6	18491.3	18539.6	18575.7	18569.7	18545.6	18485.3	18412.9	18280.3	18111.5
17.5°	18569.7	18515.4	18443.1	18515.4	18593.8	18599.8	18575.7	18539.6	18521.5	18437.1	18286.3
15°	18406.9	18364.7	18376.8	18449.1	18539.6	18569.7	18587.8	18630.0	18605.9	18539.6	18406.9
12.5°	18298.4	18244.1	18298.4	18370.7	18419.0	18437.1	18581.8	18660.1	18660.1	18599.8	18515.4
10°	18268.2	18159.7	18232.1	18298.4	18322.5	18431.0	18551.6	18636.0	18678.2	18630.0	18521.5
7.5°	18208.0	18135.6	18165.7	18195.9	18334.6	18412.9	18479.3	18569.7	18630.0	18624.0	18527.5
5°	18177.8	18087.4	18099.4	18226.0	18322.5	18376.8	18400.9	18479.3	18569.7	18587.8	18515.4
2.5°	18099.4	18057.2	18147.7	18159.7	18232.1	18274.3	18298.4	18370.7	18485.3	18527.5	18497.3
0°	18057.2	17996.9	17936.6	17984.9	18105.5	18195.9	18232.1	18340.6	18473.2	18515.4	18449.1



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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°	168.8	162.8	156.8	150.7	156.8	156.8	156.8	150.7	156.8	150.7	150.7
85°	524.5	500.4	482.3	458.2	434.1	416.0	391.9	367.8	361.7	355.7	343.7
82.5°	904.4	874.2	844.1	807.9	771.7	729.5	687.3	639.1	627.0	615.0	596.9
80°	1272.1	1229.9	1187.7	1145.5	1109.4	1067.2	1018.9	964.7	928.5	898.3	862.2
77.5°	1658.0	1597.7	1537.4	1465.1	1422.9	1380.7	1332.4	1278.2	1223.9	1175.7	1121.4
75°	2098.1	2031.8	1971.5	1899.2	1820.8	1742.4	1664.0	1591.7	1513.3	1441.0	1368.6
72.5°	2586.5	2490.0	2393.6	2303.1	2206.7	2110.2	2007.7	1911.2	1814.8	1718.3	1615.8
70°	3099.0	2978.4	2857.8	2737.2	2610.6	2484.0	2363.4	2242.8	2122.3	1995.6	1881.1
67.5°	3701.9	3563.2	3406.5	3237.6	3050.7	2887.9	2731.2	2586.5	2441.8	2297.1	2152.4
65°	4455.5	4262.6	4051.6	3822.5	3605.4	3388.4	3159.3	2942.2	2773.4	2604.6	2441.8
62.5°	5384.0	5112.7	4817.3	4521.8	4256.6	3973.2	3707.9	3424.5	3159.3	2918.1	2719.1
60°	6493.4	6125.6	5763.8	5384.0	5016.2	4630.4	4292.7	3943.0	3611.4	3316.0	3026.6
57.5°	7717.3	7289.2	6855.1	6390.9	5890.5	5438.3	4980.1	4521.8	4129.9	3738.1	3412.5
55°	8959.3	8507.1	8018.7	7494.2	6945.5	6366.8	5745.8	5233.3	4696.7	4238.5	3816.4
52.5°	10141.0	9670.7	9164.3	8681.9	8024.8	7361.6	6680.3	6005.0	5378.0	4793.2	4280.7
50°	11196.1	10737.9	10249.5	9688.8	9079.9	8374.5	7614.8	6855.1	6113.5	5426.2	4787.1
47.5°	12160.7	11714.6	11226.2	10665.5	10110.8	9327.1	8561.4	7723.3	6897.3	6107.5	5359.9
45°	13065.1	12612.9	12106.5	11569.9	10930.8	10231.4	9441.6	8597.5	7711.2	6825.0	5962.8
42.5°	13885.1	13432.9	12920.4	12365.7	11732.7	11039.3	10273.6	9423.5	8531.2	7566.5	6620.0
40°	14602.5	14162.4	13668.0	13089.2	12498.4	11768.8	11015.2	10207.3	9284.8	8314.2	7271.1
37.5°	15229.6	14819.6	14331.2	13758.5	13131.4	12480.3	11702.5	10894.6	10062.6	9007.5	7940.4
35°	15784.2	15404.4	14904.0	14361.4	13746.4	13059.1	12329.6	11539.7	10641.4	9652.6	8615.6
32.5°	16266.6	15880.7	15422.5	14879.9	14283.0	13637.9	12890.3	12094.4	11244.3	10237.5	9110.0
30°	16676.6	16302.7	15868.7	15356.2	14783.4	14144.3	13414.8	12612.9	11744.7	10743.9	9628.5
27.5°	17032.3	16676.6	16254.5	15778.2	15229.6	14614.6	13879.0	13071.1	12184.9	11220.2	10104.8
25°	17339.8	16996.1	16604.2	16152.0	15609.4	15006.5	14313.1	13469.1	12582.8	11612.1	10508.8
22.5°	17617.1	17285.5	16893.6	16453.5	15959.1	15356.2	14656.8	13818.7	12920.4	11961.8	10876.5
20°	17864.3	17556.8	17170.9	16718.8	16224.4	15615.4	14922.1	14126.2	13221.9	12281.3	11208.1
17.5°	18063.3	17791.9	17406.1	16929.8	16435.4	15844.5	15169.3	14439.7	13481.1	12552.6	11485.5
15°	18201.9	17936.6	17587.0	17104.6	16622.3	16037.5	15362.2	14608.6	13716.3	12769.7	11714.6
12.5°	18298.4	18015.0	17689.4	17243.3	16761.0	16182.2	15525.0	14783.4	13915.2	12962.6	11913.5
10°	18322.5	18063.3	17737.7	17339.8	16869.5	16308.8	15663.7	14928.1	14078.0	13113.3	12076.3
7.5°	18334.6	18087.4	17791.9	17412.1	16947.9	16405.2	15766.2	15042.7	14198.6	13240.0	12196.9
5°	18328.5	18093.4	17828.1	17460.3	16996.1	16459.5	15832.5	15121.0	14283.0	13324.4	12287.4
2.5°	18310.4	18099.4	17852.2	17496.5	17050.4	16519.8	15898.8	15211.5	14373.4	13396.7	12359.7
0°	18358.7	18177.8	17864.3	17484.5	17062.4	16519.8	15892.8	15223.5	14385.5	13390.7	12353.7





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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°	150.7	144.7	144.7	138.7	132.6	126.6	114.6	108.5	96.5	78.4	60.3
85°	325.6	307.5	289.4	277.3	265.3	253.2	235.1	217.0	192.9	156.8	120.6
82.5°	572.8	536.6	500.4	458.2	422.0	385.9	355.7	325.6	289.4	235.1	180.9
80°	820.0	765.7	711.4	651.1	596.9	536.6	482.3	434.1	385.9	313.5	241.2
77.5°	1067.2	994.8	916.4	844.1	765.7	687.3	608.9	542.6	470.3	385.9	301.5
75°	1296.3	1211.9	1139.5	1037.0	940.5	838.0	735.6	645.1	554.7	452.2	361.7
72.5°	1525.4	1416.8	1314.3	1217.9	1109.4	982.7	868.2	753.6	639.1	518.5	410.0
70°	1754.5	1621.8	1495.2	1380.7	1260.1	1133.5	994.8	862.2	723.5	578.8	452.2
67.5°	1989.6	1838.9	1694.2	1549.5	1410.8	1266.1	1121.4	970.7	807.9	639.1	500.4
65°	2248.9	2062.0	1887.1	1724.3	1561.5	1404.8	1242.0	1079.2	898.3	705.4	542.6
62.5°	2508.1	2303.1	2098.1	1893.1	1712.3	1537.4	1362.6	1181.7	982.7	777.8	584.8
60°	2785.5	2550.3	2315.2	2086.1	1863.0	1670.1	1477.1	1284.2	1073.2	844.1	627.0
57.5°	3092.9	2809.6	2544.3	2285.0	2031.8	1802.7	1591.7	1386.7	1151.6	910.4	675.3
55°	3442.6	3092.9	2779.4	2490.0	2212.7	1935.3	1706.2	1495.2	1242.0	976.7	729.5
52.5°	3810.4	3406.5	3026.6	2701.0	2405.6	2092.1	1814.8	1579.6	1332.4	1043.0	777.8
50°	4238.5	3726.0	3304.0	2906.0	2574.4	2248.9	1929.3	1676.1	1422.9	1121.4	826.0
47.5°	4678.6	4111.9	3581.3	3147.2	2755.3	2399.6	2062.0	1760.5	1507.3	1193.8	874.2
45°	5191.1	4479.6	3894.8	3382.3	2930.2	2556.3	2194.6	1850.9	1579.6	1266.1	922.5
42.5°	5685.5	4913.7	4220.4	3641.6	3129.1	2707.1	2315.2	1947.4	1652.0	1338.5	964.7
40°	6270.3	5347.8	4533.9	3888.8	3328.1	2851.8	2435.8	2049.9	1718.3	1404.8	1006.9
37.5°	6831.0	5788.0	4913.7	4160.1	3521.0	2996.5	2556.3	2146.4	1778.6	1471.1	1061.1
35°	7385.7	6276.3	5275.5	4413.3	3720.0	3159.3	2676.9	2236.8	1838.9	1525.4	1109.4
32.5°	7916.2	6734.5	5643.3	4696.7	3937.0	3310.0	2785.5	2321.2	1899.2	1573.6	1157.6
30°	8410.6	7168.6	6005.0	4986.1	4136.0	3448.7	2887.9	2405.6	1971.5	1615.8	1205.8
27.5°	8862.8	7590.7	6366.8	5257.4	4322.9	3575.3	2996.5	2484.0	2031.8	1658.0	1248.0
25°	9272.8	7970.5	6698.4	5504.6	4491.7	3713.9	3099.0	2562.4	2086.1	1694.2	1284.2
22.5°	9658.7	8320.2	6999.8	5751.8	4696.7	3852.6	3195.4	2634.7	2140.3	1730.4	1320.4
20°	9996.3	8639.7	7289.2	5999.0	4877.6	3979.2	3279.8	2701.0	2188.6	1754.5	1356.6
17.5°	10267.6	8923.1	7548.5	6216.0	5034.3	4087.7	3352.2	2761.3	2230.8	1784.6	1380.7
15°	10508.8	9164.3	7765.5	6402.9	5173.0	4178.2	3418.5	2809.6	2267.0	1802.7	1410.8
12.5°	10713.8	9369.3	7952.4	6565.7	5293.6	4256.6	3472.8	2845.7	2297.1	1820.8	1428.9
10°	10882.6	9532.0	8109.2	6692.3	5390.0	4316.9	3515.0	2881.9	2321.2	1838.9	1447.0
7.5°	11009.2	9652.6	8223.7	6800.9	5468.4	4359.1	3551.2	2906.0	2345.3	1850.9	1477.1
5°	11105.6	9755.1	8314.2	6873.2	5528.7	4419.3	3593.4	2936.2	2369.4	1863.0	1477.1
2.5°	11178.0	9839.5	8386.5	6933.5	5576.9	4407.3	3593.4	2930.2	2369.4	1863.0	1471.1
0°	11165.9	9845.6	8380.5	6933.5	5576.9	4395.2	3593.4	2924.1	2369.4	1863.0	1471.1



REPORT NUMBER: P628565  
 CATALOG NUMBER: EPH-VN-07-E-735-U-LAM

**CANDELA DISTRIBUTION (continued):**

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	42.2	30.1	12.1	0.0
85°	90.4	60.3	30.1	0.0
82.5°	132.6	84.4	42.2	0.0
80°	174.8	114.6	54.3	0.0
77.5°	223.1	144.7	72.3	0.0
75°	265.3	168.8	84.4	0.0
72.5°	307.5	199.0	96.5	0.0
70°	343.7	223.1	108.5	0.0
67.5°	379.8	253.2	126.6	0.0
65°	410.0	277.3	138.7	0.0
62.5°	434.1	307.5	150.7	0.0
60°	464.2	331.6	162.8	0.0
57.5°	488.4	349.7	174.8	0.0
55°	512.5	361.7	186.9	0.0
52.5°	536.6	379.8	199.0	0.0
50°	560.7	397.9	211.0	0.0
47.5°	584.8	410.0	217.0	0.0
45°	621.0	428.1	229.1	0.0
42.5°	651.1	440.1	241.2	0.0
40°	681.3	452.2	247.2	0.0
37.5°	711.4	464.2	259.3	0.0
35°	741.6	476.3	265.3	0.0
32.5°	765.7	488.4	271.3	0.0
30°	789.8	500.4	277.3	0.0
27.5°	813.9	506.4	283.4	0.0
25°	832.0	518.5	289.4	0.0
22.5°	850.1	524.5	295.4	0.0
20°	862.2	530.6	301.5	0.0
17.5°	880.3	536.6	307.5	0.0
15°	886.3	542.6	319.5	0.0
12.5°	898.3	548.7	319.5	0.0
10°	904.4	554.7	319.5	0.0
7.5°	916.4	554.7	319.5	0.0
5°	910.4	554.7	319.5	0.0
2.5°	910.4	554.7	319.5	0.0
0°	904.4	554.7	319.5	0.0

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