

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: P628564

Luminaire Tested: **EPH-VN-06-E-735-U-LAM**

Issue Date: 01/11/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P628564  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 01/11/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: EPHESUS  
Catalog Number: EPH-VN-06-E-735-U-LAM  
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/  
LAMBERTIAN distribution lens  
Light Source: (96) 3500K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

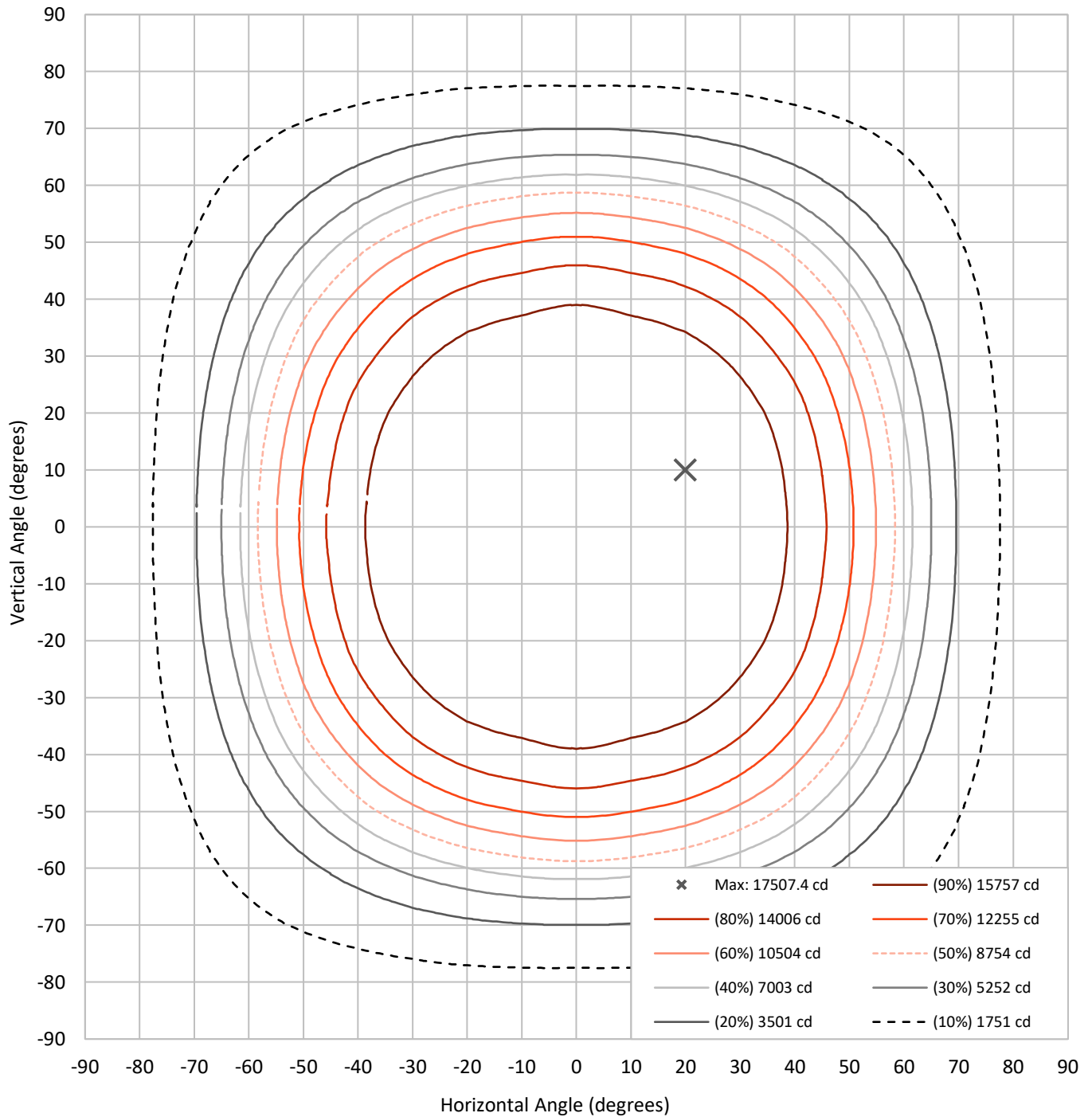
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	53710.4 lumens	Max Intensity:	17507.4 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	115.7 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	32957.8 lumens	Field Lumens:	39510.8 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

Input Watts (W): 464.2  
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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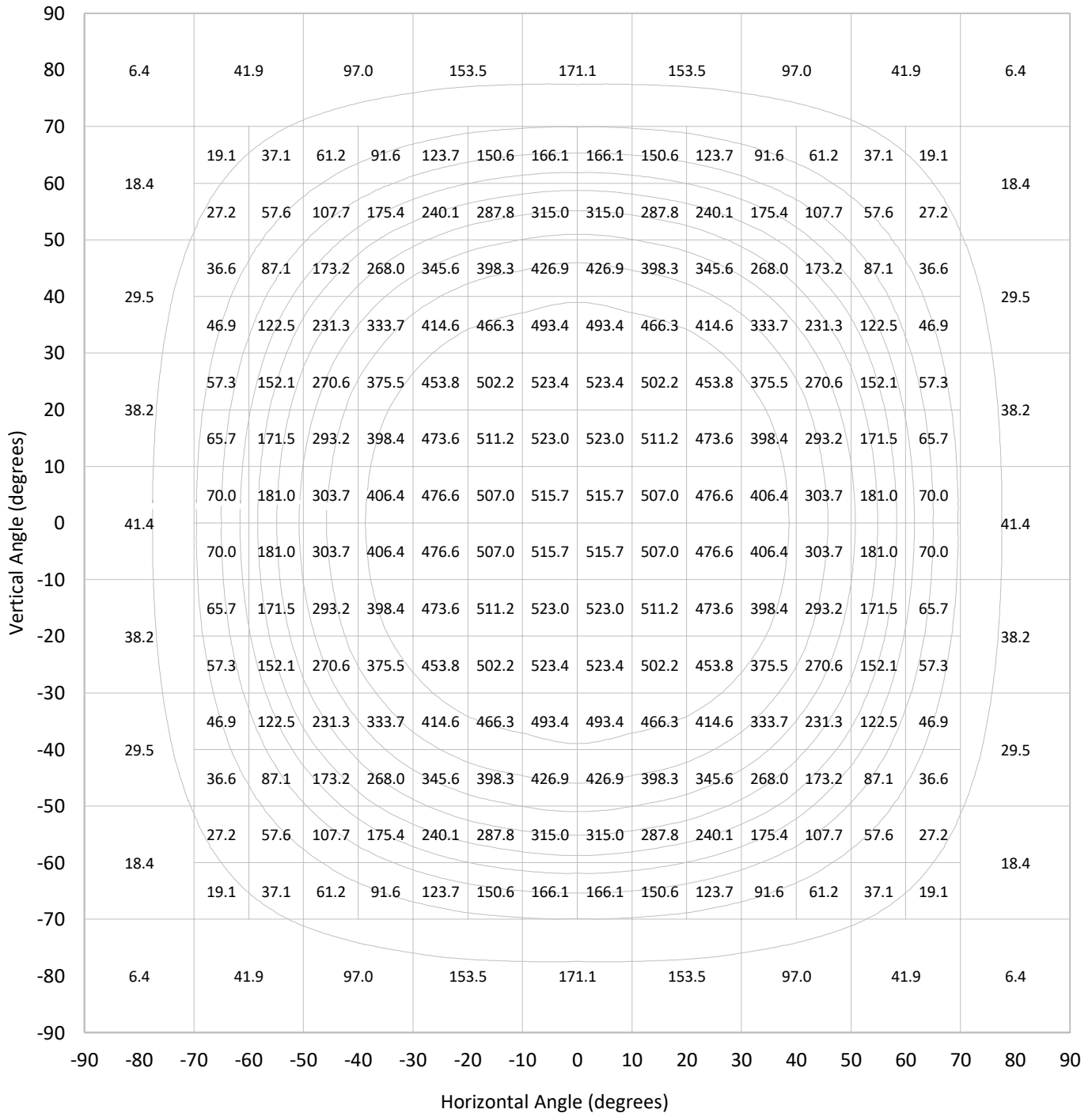
### Iso-Candela Plot





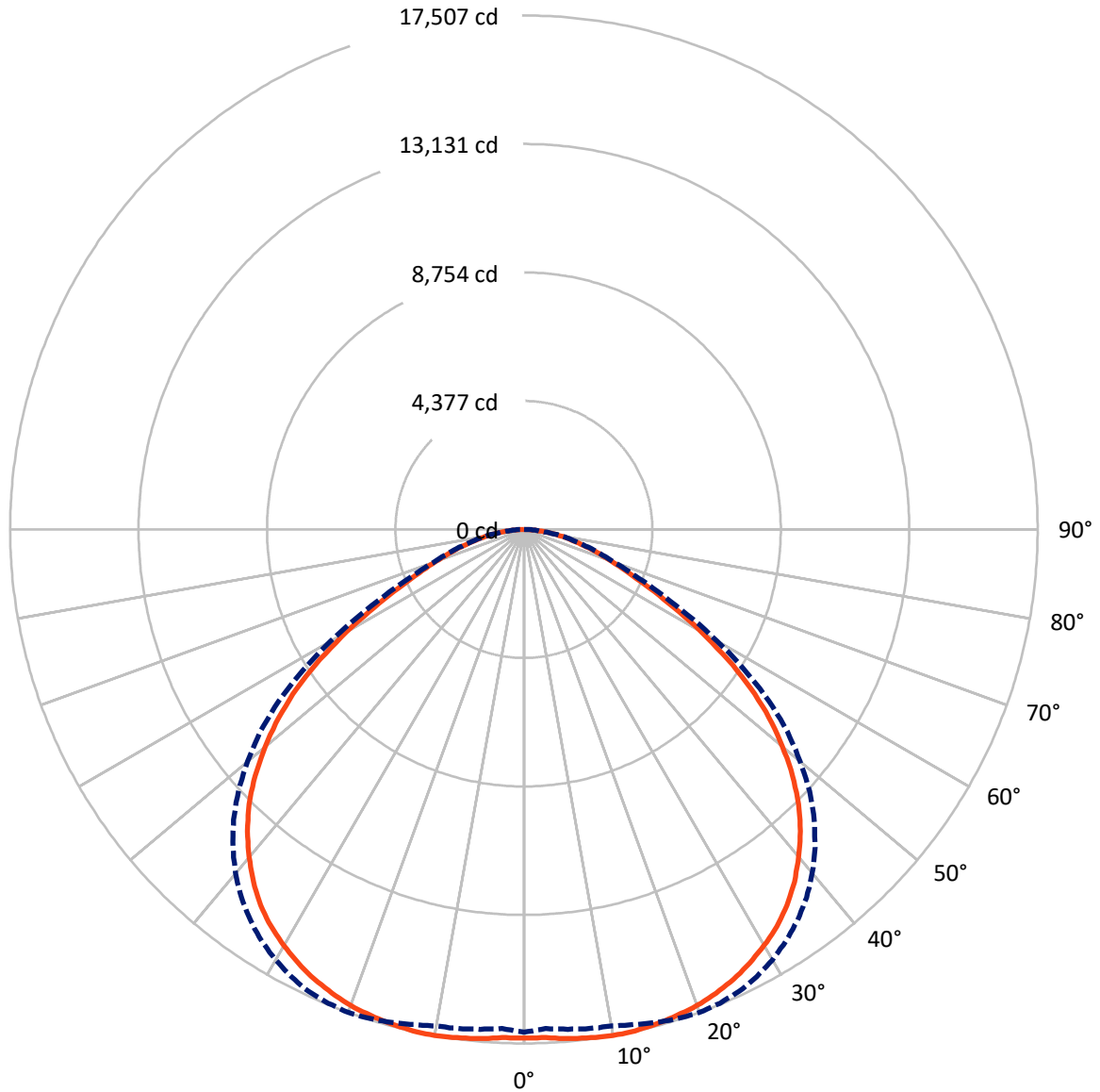
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### Lumen Table



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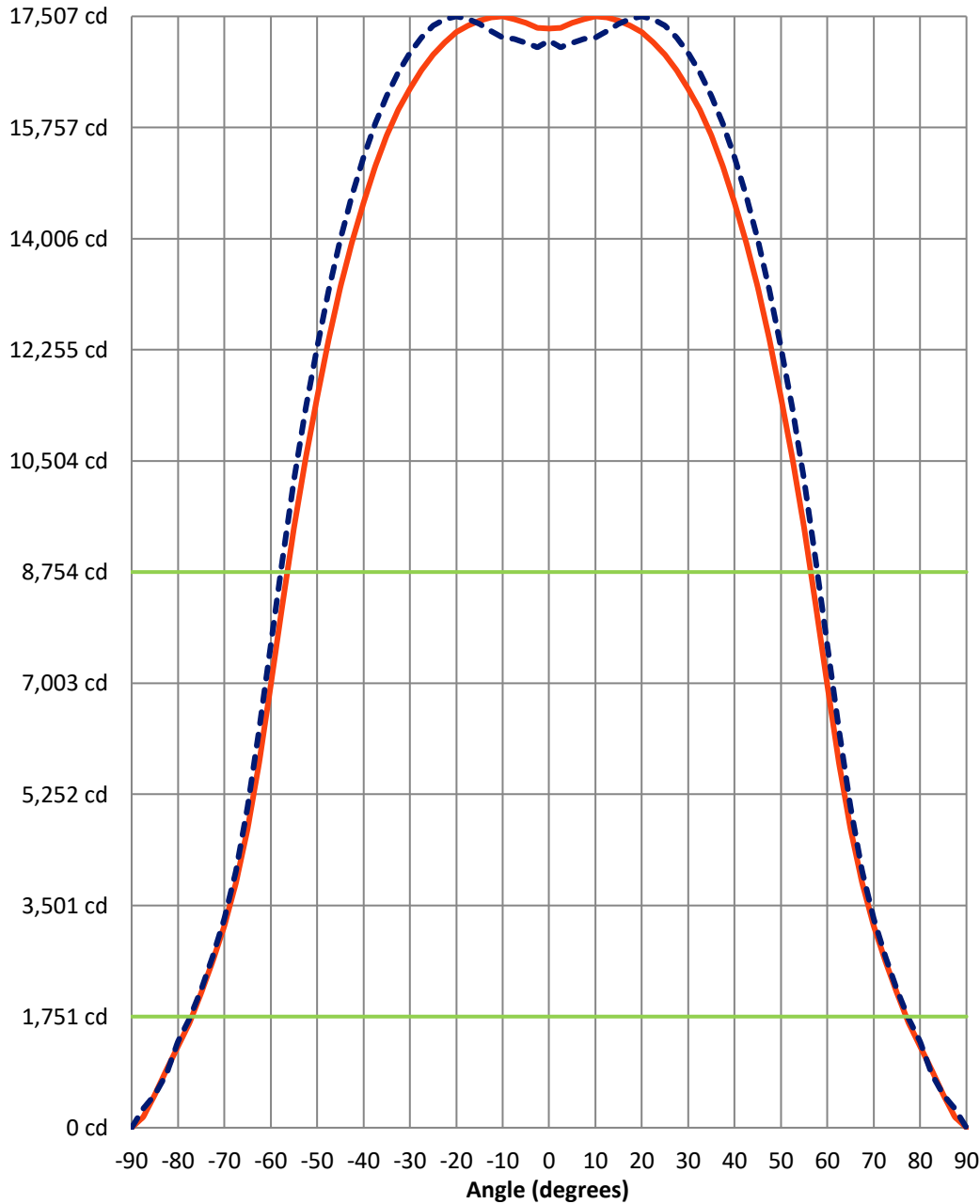
### Luminous Intensity Polar Plot



— 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: 32957.8  
Efficiency: 61.4%

**Field:**  
H Angle: 154.7°  
V Angle: 154°  
Lumens: 39510.8  
Efficiency: 73.6%

**Spill:**  
Lumens: 14199.6  
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°	141.3	152.6	158.2	163.9	169.5	175.2	180.8	175.2	169.5	169.5	163.9
85°	378.6	389.9	395.6	435.1	474.7	497.3	525.6	519.9	519.9	514.3	508.6
82.5°	757.3	791.2	819.4	859.0	881.6	915.5	938.1	921.1	909.8	887.2	870.3
80°	1345.0	1356.3	1361.9	1367.6	1339.3	1333.7	1322.4	1305.4	1282.8	1254.6	1226.3
77.5°	1712.3	1723.6	1734.9	1723.6	1718.0	1712.3	1695.4	1678.4	1655.8	1633.2	1599.3
75°	2266.1	2266.1	2266.1	2249.2	2237.9	2220.9	2192.7	2164.4	2124.9	2079.6	2028.8
72.5°	2853.9	2848.2	2842.6	2808.7	2780.4	2746.5	2706.9	2673.0	2627.8	2577.0	2509.1
70°	3469.8	3481.1	3486.8	3441.6	3407.7	3362.5	3311.6	3249.4	3181.6	3108.2	3012.1
67.5°	4317.5	4306.2	4294.9	4232.8	4187.5	4125.4	4051.9	3961.5	3859.8	3746.8	3611.1
65°	5368.6	5385.6	5351.7	5289.5	5204.8	5103.0	4990.0	4860.0	4707.5	4537.9	4345.8
62.5°	6640.2	6668.4	6628.9	6549.8	6442.4	6306.7	6148.5	5962.0	5752.9	5515.6	5278.2
60°	8086.9	8081.2	8007.8	7900.4	7759.1	7589.6	7414.4	7210.9	6973.6	6696.7	6408.5
57.5°	9414.9	9403.6	9313.2	9205.8	9064.5	8883.7	8697.2	8482.5	8233.8	7939.9	7606.5
55°	10607.3	10596.0	10505.6	10392.6	10245.6	10064.8	9895.3	9691.8	9448.8	9138.0	8782.0
52.5°	11664.1	11669.7	11590.6	11466.3	11308.1	11132.9	10969.0	10765.6	10533.9	10223.0	9878.3
50°	12636.1	12630.4	12545.7	12432.7	12285.7	12116.2	11952.3	11748.9	11505.9	11206.3	10872.9
47.5°	13540.3	13529.0	13432.9	13308.6	13156.0	13009.1	12856.5	12675.7	12421.4	12121.8	11788.4
45°	14297.6	14275.0	14178.9	14060.2	13913.3	13783.3	13647.7	13512.0	13240.8	12963.9	12647.4
42.5°	14947.4	14941.8	14845.7	14727.0	14580.1	14467.1	14342.8	14173.2	13947.2	13692.9	13382.1
40°	15569.1	15523.9	15427.8	15314.8	15179.1	15083.1	14958.7	14789.2	14568.8	14320.2	14020.6
37.5°	16032.5	16038.1	15936.4	15812.1	15693.4	15603.0	15490.0	15331.7	15139.6	14896.6	14597.1
35°	16473.3	16445.0	16360.2	16252.9	16145.5	16043.8	15925.1	15789.5	15631.2	15405.2	15122.6
32.5°	16761.5	16801.0	16699.3	16586.3	16524.1	16445.0	16320.7	16179.4	16038.1	15812.1	15557.8
30°	17078.0	17044.0	16964.9	16868.9	16823.6	16772.8	16665.4	16529.8	16365.9	16162.5	15925.1
27.5°	17298.3	17281.4	17185.3	17094.9	17072.3	17027.1	16942.3	16823.6	16659.8	16462.0	16241.6
25°	17394.4	17405.7	17315.3	17264.4	17264.4	17236.2	17168.4	17066.6	16902.8	16721.9	16507.2
22.5°	17439.6	17428.3	17366.2	17354.9	17383.1	17360.5	17332.3	17241.8	17094.9	16948.0	16767.1
20°	17467.9	17388.8	17332.3	17377.5	17411.4	17405.7	17383.1	17326.6	17258.8	17134.5	16976.2
17.5°	17405.7	17354.9	17287.0	17354.9	17428.3	17434.0	17411.4	17377.5	17360.5	17281.4	17140.1
15°	17253.1	17213.6	17224.9	17292.7	17377.5	17405.7	17422.7	17462.2	17439.6	17377.5	17253.1
12.5°	17151.4	17100.6	17151.4	17219.2	17264.4	17281.4	17417.0	17490.5	17490.5	17434.0	17354.9
10°	17123.2	17021.4	17089.3	17151.4	17174.0	17275.7	17388.8	17467.9	17507.4	17462.2	17360.5
7.5°	17066.6	16998.8	17027.1	17055.3	17185.3	17258.8	17321.0	17405.7	17462.2	17456.6	17366.2
5°	17038.4	16953.6	16964.9	17083.6	17174.0	17224.9	17247.5	17321.0	17405.7	17422.7	17354.9
2.5°	16964.9	16925.4	17010.1	17021.4	17089.3	17128.8	17151.4	17219.2	17326.6	17366.2	17337.9
0°	16925.4	16868.9	16812.3	16857.6	16970.6	17055.3	17089.3	17191.0	17315.3	17354.9	17292.7



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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°	158.2	152.6	146.9	141.3	146.9	146.9	146.9	141.3	146.9	141.3	141.3
85°	491.7	469.1	452.1	429.5	406.9	389.9	367.3	344.7	339.1	333.4	322.1
82.5°	847.7	819.4	791.2	757.3	723.4	683.8	644.2	599.0	587.7	576.4	559.5
80°	1192.4	1152.8	1113.3	1073.7	1039.8	1000.3	955.1	904.2	870.3	842.0	808.1
77.5°	1554.1	1497.6	1441.1	1373.2	1333.7	1294.1	1248.9	1198.1	1147.2	1102.0	1051.1
75°	1966.6	1904.5	1847.9	1780.1	1706.7	1633.2	1559.7	1491.9	1418.5	1350.6	1282.8
72.5°	2424.4	2333.9	2243.5	2158.8	2068.3	1977.9	1881.9	1791.4	1701.0	1610.6	1514.5
70°	2904.7	2791.7	2678.7	2565.6	2447.0	2328.3	2215.3	2102.2	1989.2	1870.5	1763.2
67.5°	3469.8	3339.9	3192.9	3034.7	2859.5	2706.9	2560.0	2424.4	2288.7	2153.1	2017.5
65°	4176.2	3995.4	3797.6	3582.9	3379.4	3176.0	2961.2	2757.8	2599.6	2441.3	2288.7
62.5°	5046.5	4792.2	4515.3	4238.4	3989.8	3724.1	3475.5	3209.9	2961.2	2735.2	2548.7
60°	6086.4	5741.6	5402.6	5046.5	4701.8	4340.1	4023.7	3695.9	3385.1	3108.2	2836.9
57.5°	7233.5	6832.3	6425.4	5990.3	5521.2	5097.4	4667.9	4238.4	3871.1	3503.7	3198.6
55°	8397.7	7973.9	7516.1	7024.5	6510.2	5967.7	5385.6	4905.2	4402.3	3972.8	3577.2
52.5°	9505.3	9064.5	8589.8	8137.7	7521.8	6900.1	6261.5	5628.6	5040.9	4492.7	4012.4
50°	10494.3	10064.8	9607.1	9081.5	8510.7	7849.5	7137.5	6425.4	5730.3	5086.1	4487.1
47.5°	11398.5	10980.3	10522.5	9997.0	9477.1	8742.4	8024.7	7239.2	6465.0	5724.7	5023.9
45°	12246.2	11822.3	11347.6	10844.7	10245.6	9590.1	8849.8	8058.6	7227.9	6397.2	5589.0
42.5°	13014.7	12590.9	12110.5	11590.6	10997.3	10347.4	9629.7	8832.8	7996.5	7092.3	6205.0
40°	13687.2	13274.7	12811.3	12268.8	11715.0	11031.2	10324.8	9567.5	8702.9	7793.0	6815.4
37.5°	14275.0	13890.7	13432.9	12896.1	12308.3	11698.0	10969.0	10211.7	9431.9	8442.9	7442.6
35°	14794.9	14438.8	13969.8	13461.2	12884.8	12240.5	11556.7	10816.4	9974.4	9047.6	8075.6
32.5°	15247.0	14885.3	14455.8	13947.2	13387.7	12783.0	12082.3	11336.3	10539.5	9595.8	8539.0
30°	15631.2	15280.9	14874.0	14393.6	13856.8	13257.7	12573.9	11822.3	11008.6	10070.5	9025.0
27.5°	15964.7	15631.2	15235.7	14789.2	14275.0	13698.5	13009.1	12251.8	11421.1	10516.9	9471.4
25°	16252.9	15930.8	15563.4	15139.6	14631.0	14065.9	13416.0	12624.8	11794.1	10884.2	9850.1
22.5°	16512.8	16202.0	15834.7	15422.1	14958.7	14393.6	13738.1	12952.6	12110.5	11212.0	10194.8
20°	16744.5	16456.3	16094.6	15670.8	15207.4	14636.6	13986.7	13240.8	12393.1	11511.5	10505.6
17.5°	16931.0	16676.7	16315.0	15868.6	15405.2	14851.4	14218.4	13534.6	12636.1	11765.8	10765.6
15°	17061.0	16812.3	16484.6	16032.5	15580.4	15032.2	14399.3	13692.9	12856.5	11969.3	10980.3
12.5°	17151.4	16885.8	16580.6	16162.5	15710.4	15167.8	14551.9	13856.8	13043.0	12150.1	11166.8
10°	17174.0	16931.0	16625.9	16252.9	15812.1	15286.5	14681.8	13992.4	13195.6	12291.4	11319.4
7.5°	17185.3	16953.6	16676.7	16320.7	15885.5	15376.9	14777.9	14099.8	13308.6	12410.1	11432.4
5°	17179.7	16959.3	16710.6	16365.9	15930.8	15427.8	14840.1	14173.2	13387.7	12489.2	11517.2
2.5°	17162.7	16964.9	16733.2	16399.8	15981.6	15484.3	14902.2	14258.0	13472.5	12557.0	11585.0
0°	17207.9	17038.4	16744.5	16388.5	15992.9	15484.3	14896.6	14269.3	13483.8	12551.3	11579.3





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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°	141.3	135.6	135.6	130.0	124.3	118.7	107.4	101.7	90.4	73.5	56.5
85°	305.2	288.2	271.3	260.0	248.7	237.4	220.4	203.4	180.8	146.9	113.0
82.5°	536.9	503.0	469.1	429.5	395.6	361.7	333.4	305.2	271.3	220.4	169.5
80°	768.6	717.7	666.8	610.3	559.5	503.0	452.1	406.9	361.7	293.9	226.0
77.5°	1000.3	932.4	859.0	791.2	717.7	644.2	570.8	508.6	440.8	361.7	282.6
75°	1215.0	1135.9	1068.1	972.0	881.6	785.5	689.4	604.7	519.9	423.8	339.1
72.5°	1429.8	1328.0	1232.0	1141.5	1039.8	921.1	813.8	706.4	599.0	486.0	384.3
70°	1644.5	1520.2	1401.5	1294.1	1181.1	1062.4	932.4	808.1	678.1	542.5	423.8
67.5°	1864.9	1723.6	1588.0	1452.4	1322.4	1186.8	1051.1	909.8	757.3	599.0	469.1
65°	2107.9	1932.7	1768.8	1616.2	1463.7	1316.7	1164.1	1011.6	842.0	661.2	508.6
62.5°	2350.9	2158.8	1966.6	1774.5	1604.9	1441.1	1277.2	1107.6	921.1	729.0	548.2
60°	2610.9	2390.5	2170.1	1955.3	1746.2	1565.4	1384.5	1203.7	1005.9	791.2	587.7
57.5°	2899.1	2633.5	2384.8	2141.8	1904.5	1689.7	1491.9	1299.8	1079.4	853.3	632.9
55°	3226.8	2899.1	2605.2	2333.9	2074.0	1814.0	1599.3	1401.5	1164.1	915.5	683.8
52.5°	3571.6	3192.9	2836.9	2531.7	2254.8	1961.0	1701.0	1480.6	1248.9	977.7	729.0
50°	3972.8	3492.4	3096.9	2723.9	2413.1	2107.9	1808.4	1571.0	1333.7	1051.1	774.2
47.5°	4385.3	3854.1	3356.8	2949.9	2582.6	2249.2	1932.7	1650.2	1412.8	1118.9	819.4
45°	4865.7	4198.8	3650.7	3170.3	2746.5	2396.1	2057.0	1734.9	1480.6	1186.8	864.6
42.5°	5329.1	4605.7	3955.8	3413.3	2933.0	2537.4	2170.1	1825.3	1548.4	1254.6	904.2
40°	5877.3	5012.6	4249.7	3645.0	3119.5	2673.0	2283.1	1921.4	1610.6	1316.7	943.8
37.5°	6402.8	5425.2	4605.7	3899.3	3300.3	2808.7	2396.1	2011.8	1667.1	1378.9	994.6
35°	6922.7	5882.9	4944.8	4136.7	3486.8	2961.2	2509.1	2096.6	1723.6	1429.8	1039.8
32.5°	7420.0	6312.4	5289.5	4402.3	3690.2	3102.5	2610.9	2175.7	1780.1	1475.0	1085.0
30°	7883.4	6719.3	5628.6	4673.5	3876.7	3232.5	2706.9	2254.8	1847.9	1514.5	1130.2
27.5°	8307.3	7114.9	5967.7	4927.9	4051.9	3351.2	2808.7	2328.3	1904.5	1554.1	1169.8
25°	8691.6	7470.9	6278.5	5159.6	4210.1	3481.1	2904.7	2401.8	1955.3	1588.0	1203.7
22.5°	9053.2	7798.7	6561.1	5391.3	4402.3	3611.1	2995.1	2469.6	2006.2	1621.9	1237.6
20°	9369.7	8098.2	6832.3	5623.0	4571.8	3729.8	3074.3	2531.7	2051.4	1644.5	1271.5
17.5°	9624.0	8363.8	7075.3	5826.4	4718.8	3831.5	3142.1	2588.3	2090.9	1672.8	1294.1
15°	9850.1	8589.8	7278.8	6001.6	4848.7	3916.3	3204.2	2633.5	2124.9	1689.7	1322.4
12.5°	10042.2	8782.0	7453.9	6154.2	4961.8	3989.8	3255.1	2667.4	2153.1	1706.7	1339.3
10°	10200.4	8934.6	7600.9	6272.8	5052.2	4046.3	3294.7	2701.3	2175.7	1723.6	1356.3
7.5°	10319.1	9047.6	7708.2	6374.6	5125.6	4085.8	3328.6	2723.9	2198.3	1734.9	1384.5
5°	10409.5	9143.7	7793.0	6442.4	5182.2	4142.3	3368.1	2752.1	2220.9	1746.2	1384.5
2.5°	10477.3	9222.8	7860.8	6498.9	5227.4	4131.0	3368.1	2746.5	2220.9	1746.2	1378.9
0°	10466.0	9228.4	7855.2	6498.9	5227.4	4119.7	3368.1	2740.8	2220.9	1746.2	1378.9



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 CATALOG NUMBER: EPH-VN-06-E-735-U-LAM

**CANDELA DISTRIBUTION (continued):**

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	39.6	28.3	11.3	0.0
85°	84.8	56.5	28.3	0.0
82.5°	124.3	79.1	39.6	0.0
80°	163.9	107.4	50.9	0.0
77.5°	209.1	135.6	67.8	0.0
75°	248.7	158.2	79.1	0.0
72.5°	288.2	186.5	90.4	0.0
70°	322.1	209.1	101.7	0.0
67.5°	356.0	237.4	118.7	0.0
65°	384.3	260.0	130.0	0.0
62.5°	406.9	288.2	141.3	0.0
60°	435.1	310.8	152.6	0.0
57.5°	457.7	327.8	163.9	0.0
55°	480.4	339.1	175.2	0.0
52.5°	503.0	356.0	186.5	0.0
50°	525.6	373.0	197.8	0.0
47.5°	548.2	384.3	203.4	0.0
45°	582.1	401.2	214.7	0.0
42.5°	610.3	412.5	226.0	0.0
40°	638.6	423.8	231.7	0.0
37.5°	666.8	435.1	243.0	0.0
35°	695.1	446.4	248.7	0.0
32.5°	717.7	457.7	254.3	0.0
30°	740.3	469.1	260.0	0.0
27.5°	762.9	474.7	265.6	0.0
25°	779.9	486.0	271.3	0.0
22.5°	796.8	491.7	276.9	0.0
20°	808.1	497.3	282.6	0.0
17.5°	825.1	503.0	288.2	0.0
15°	830.7	508.6	299.5	0.0
12.5°	842.0	514.3	299.5	0.0
10°	847.7	519.9	299.5	0.0
7.5°	859.0	519.9	299.5	0.0
5°	853.3	519.9	299.5	0.0
2.5°	853.3	519.9	299.5	0.0
0°	847.7	519.9	299.5	0.0

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