

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: P628577

Luminaire Tested: **EPH-VN-07-E-750-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628577
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-750-U-LAM
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
LAMBERTIAN distribution lens
Light Source: (112) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

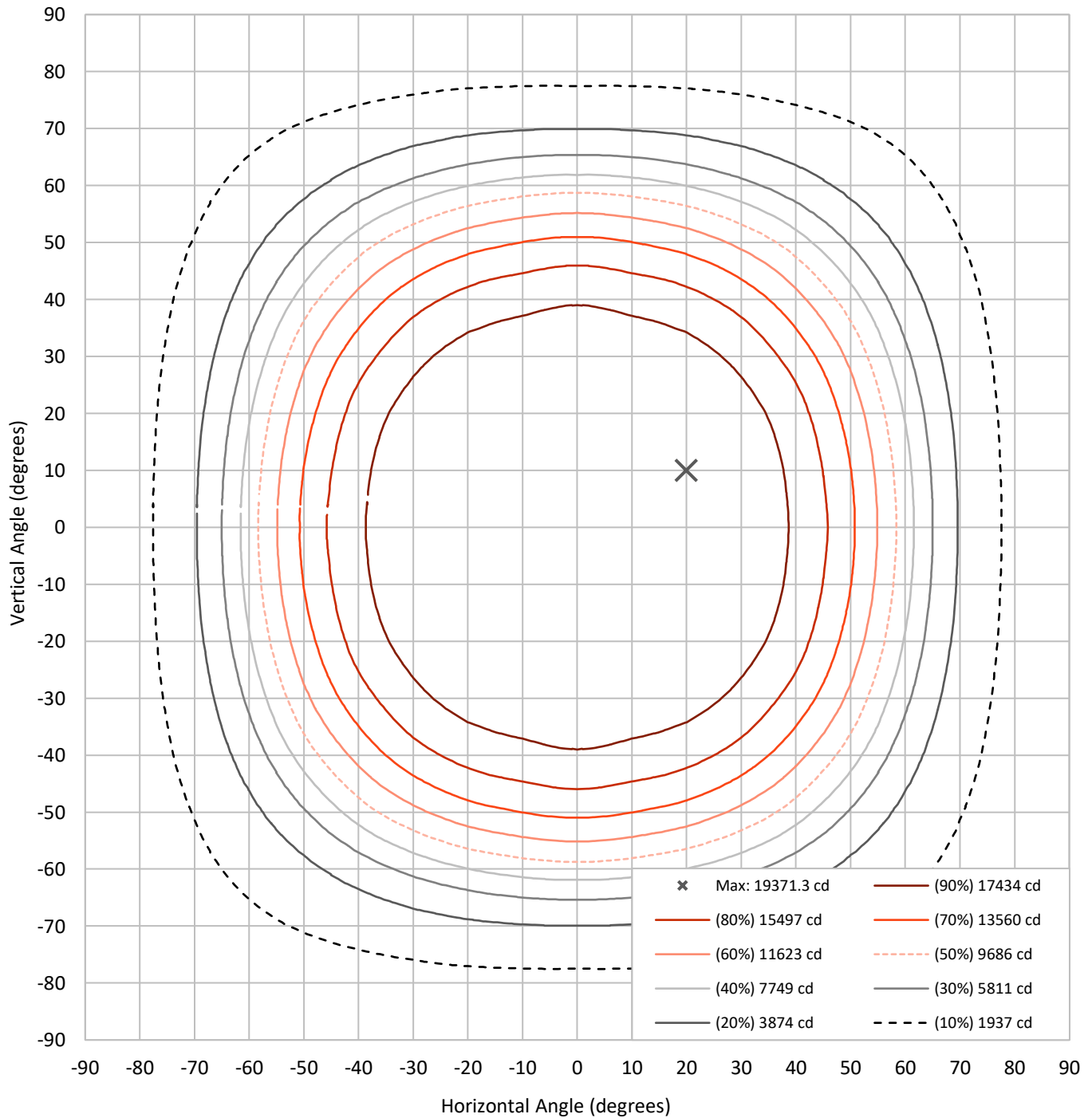
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	59428.6 lumens	Max Intensity:	19371.3 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	111.6 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	36466.6 lumens	Field Lumens:	43717.3 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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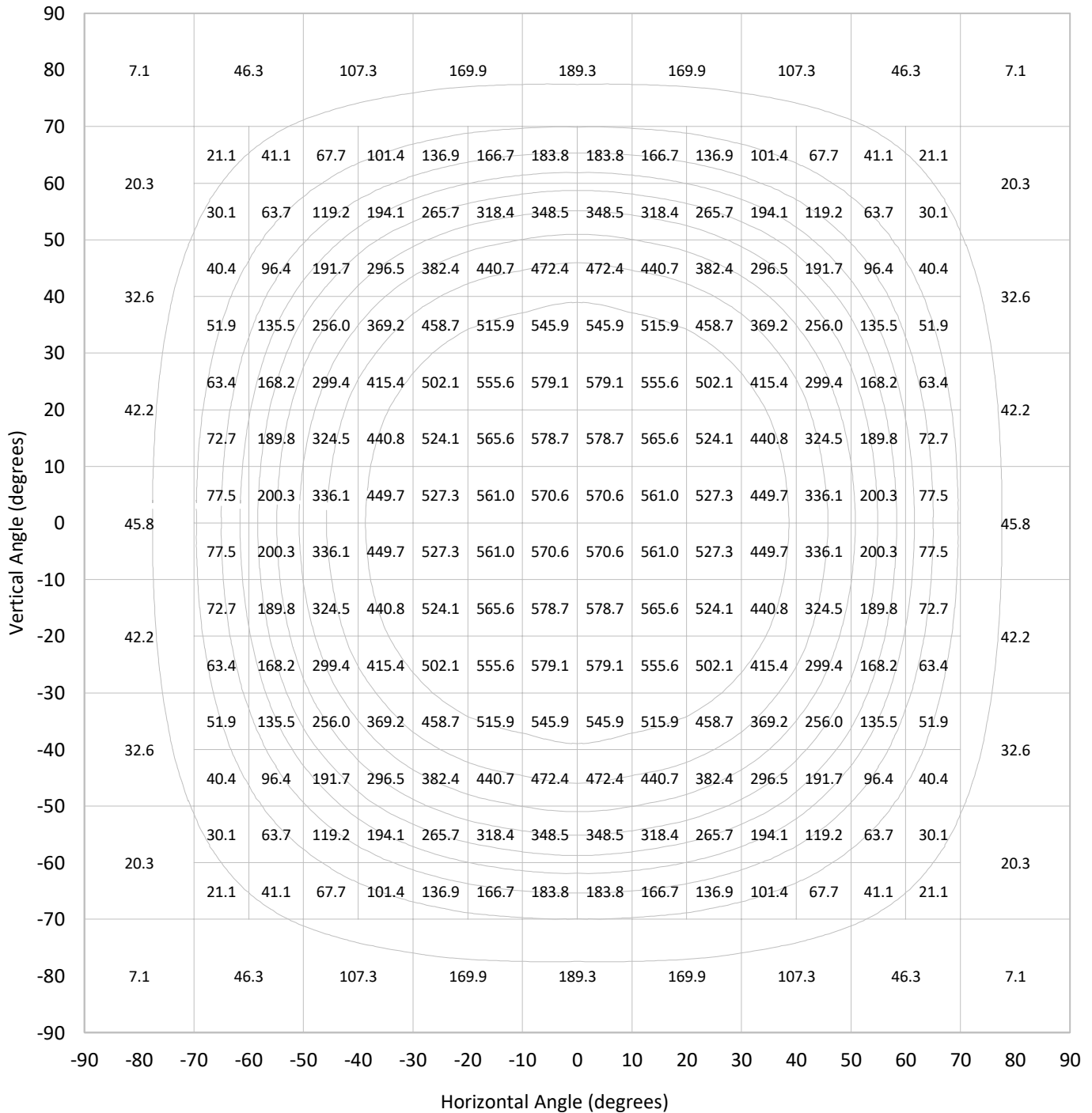
Iso-Candela Plot





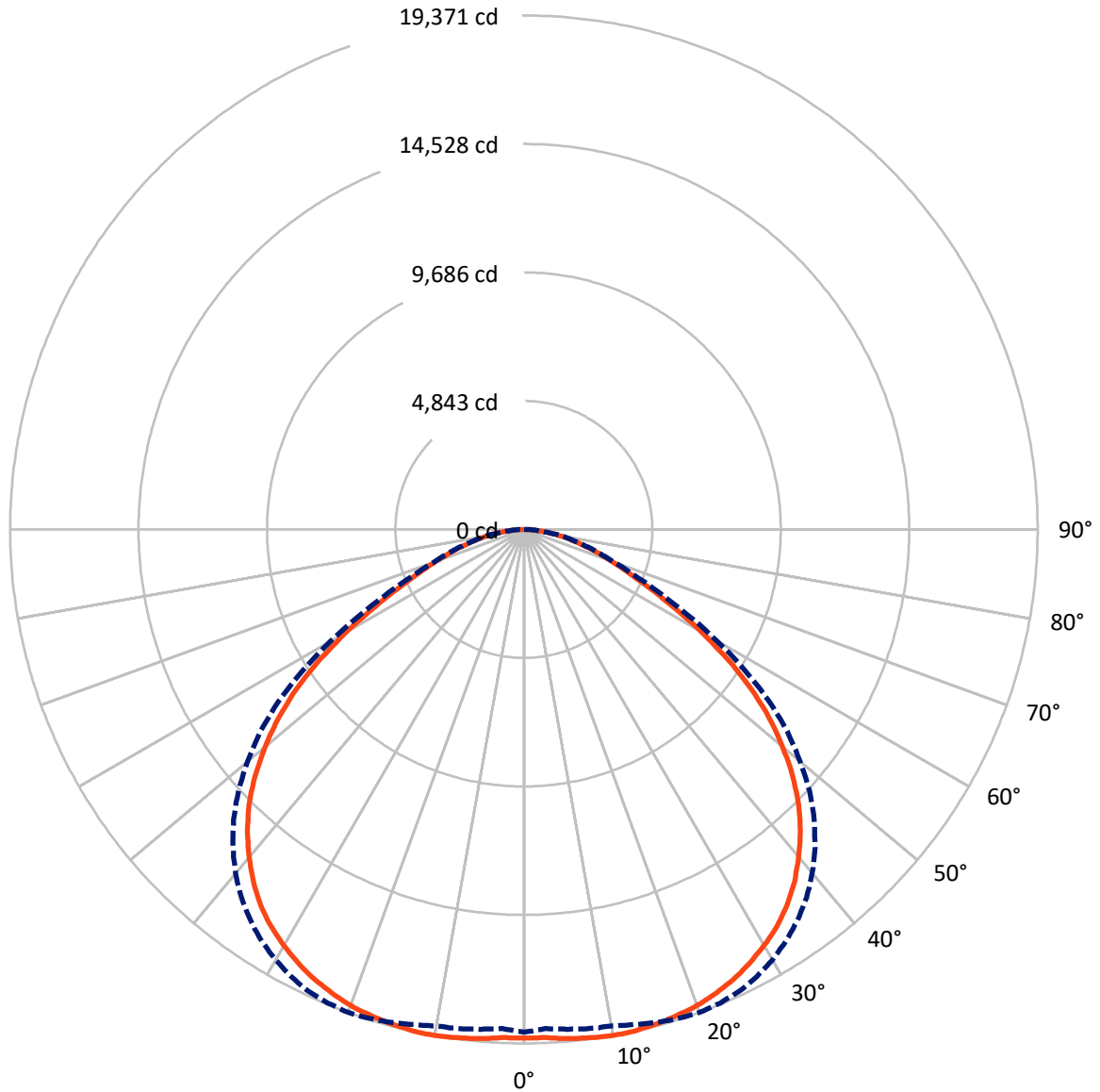
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Lumen Table



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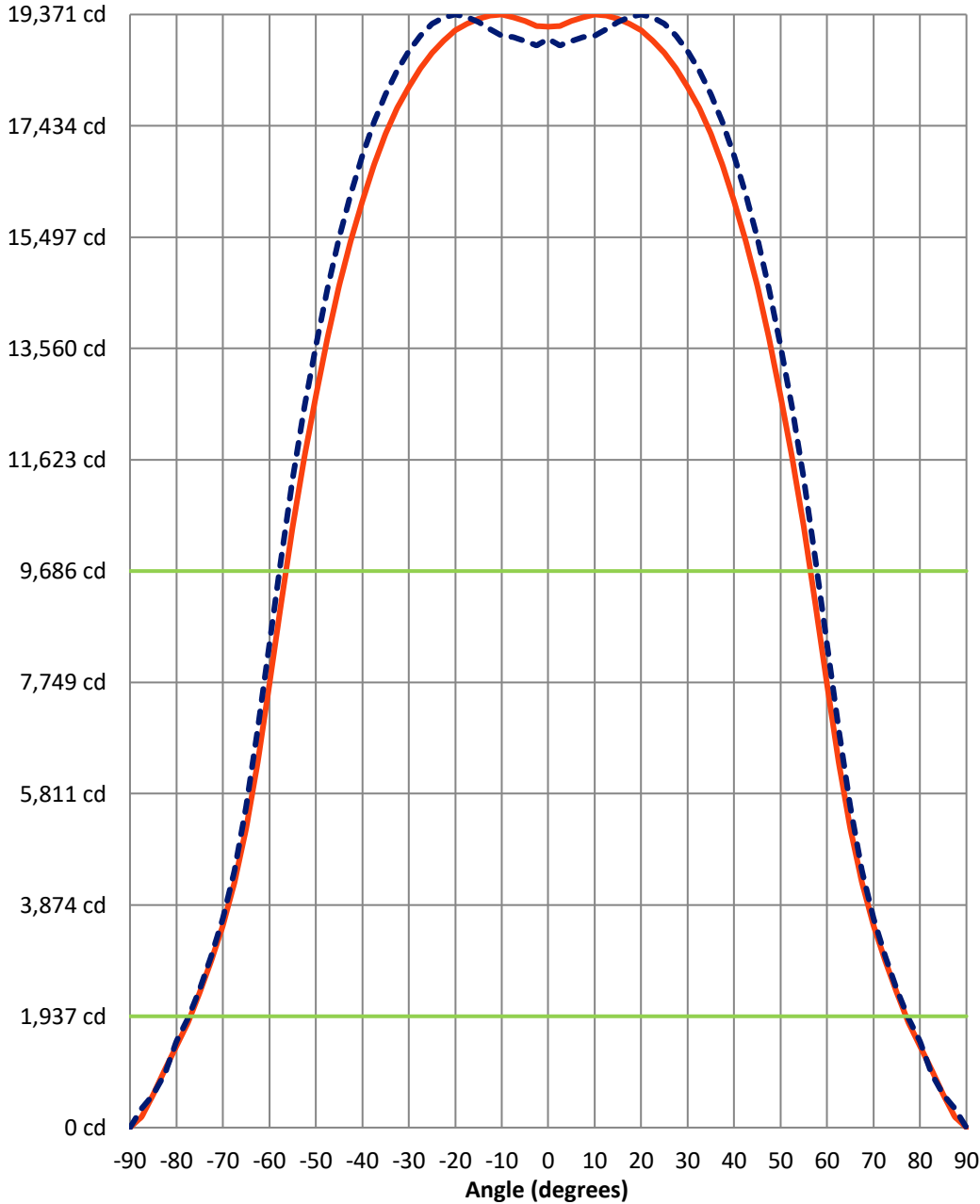
Luminous Intensity Polar Plot



— 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: 36466.6
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 43717.3
 Efficiency: 73.6%

Spill:
 Lumens: 15711.3
 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°	156.3	168.8	175.1	181.3	187.6	193.8	200.1	193.8	187.6	187.6	181.3
85°	418.9	431.4	437.7	481.5	525.2	550.3	581.5	575.3	575.3	569.0	562.8
82.5°	837.9	875.4	906.7	950.4	975.4	1013.0	1038.0	1019.2	1006.7	981.7	962.9
80°	1488.2	1500.7	1506.9	1513.2	1481.9	1475.7	1463.2	1444.4	1419.4	1388.1	1356.9
77.5°	1894.6	1907.1	1919.6	1907.1	1900.9	1894.6	1875.9	1857.1	1832.1	1807.1	1769.6
75°	2507.4	2507.4	2507.4	2488.6	2476.1	2457.4	2426.1	2394.8	2351.1	2301.1	2244.8
72.5°	3157.7	3151.4	3145.2	3107.7	3076.4	3038.9	2995.1	2957.6	2907.6	2851.3	2776.3
70°	3839.3	3851.8	3858.0	3808.0	3770.5	3720.4	3664.2	3595.4	3520.4	3439.1	3332.8
67.5°	4777.2	4764.7	4752.2	4683.4	4633.4	4564.6	4483.3	4383.3	4270.7	4145.6	3995.6
65°	5940.2	5959.0	5921.5	5852.7	5758.9	5646.3	5521.3	5377.5	5208.6	5021.0	4808.4
62.5°	7347.1	7378.4	7334.6	7247.1	7128.3	6978.2	6803.1	6596.8	6365.4	6102.8	5840.2
60°	8947.8	8941.6	8860.3	8741.5	8585.2	8397.6	8203.7	7978.6	7716.0	7409.6	7090.7
57.5°	10417.3	10404.7	10304.7	10185.9	10029.6	9829.5	9623.1	9385.5	9110.4	8785.3	8416.3
55°	11736.6	11724.1	11624.1	11499.0	11336.4	11136.3	10948.7	10723.6	10454.8	10110.9	9716.9
52.5°	12905.9	12912.1	12824.6	12687.0	12512.0	12318.1	12136.8	11911.7	11655.3	11311.4	10930.0
50°	13981.4	13975.1	13881.3	13756.3	13593.7	13406.1	13224.8	12999.7	12730.8	12399.4	12030.5
47.5°	14981.8	14969.3	14863.0	14725.5	14556.6	14394.1	14225.2	14025.2	13743.8	13412.4	13043.5
45°	15819.7	15794.7	15688.4	15557.1	15394.5	15250.7	15100.6	14950.6	14650.4	14344.0	13993.9
42.5°	16538.8	16532.5	16426.2	16294.9	16132.4	16007.3	15869.7	15682.2	15432.0	15150.7	14806.8
40°	17226.6	17176.6	17070.3	16945.2	16795.2	16688.9	16551.3	16363.7	16119.9	15844.7	15513.3
37.5°	17739.3	17745.6	17633.0	17495.5	17364.2	17264.1	17139.1	16964.0	16751.4	16482.5	16151.1
35°	18227.1	18195.8	18102.0	17983.2	17864.4	17751.9	17620.5	17470.5	17295.4	17045.3	16732.6
32.5°	18546.0	18589.7	18477.2	18352.1	18283.3	18195.8	18058.2	17901.9	17745.6	17495.5	17214.1
30°	18896.1	18858.6	18771.1	18664.8	18614.7	18558.5	18439.7	18289.6	18108.3	17883.2	17620.5
27.5°	19140.0	19121.2	19014.9	18914.9	18889.9	18839.8	18746.1	18614.7	18433.4	18214.6	17970.7
25°	19246.3	19258.8	19158.7	19102.5	19102.5	19071.2	18996.2	18883.6	18702.3	18502.2	18264.6
22.5°	19296.3	19283.8	19215.0	19202.5	19233.8	19208.8	19177.5	19077.5	18914.9	18752.3	18552.2
20°	19327.6	19240.0	19177.5	19227.5	19265.0	19258.8	19233.8	19171.2	19096.2	18958.7	18783.6
17.5°	19258.8	19202.5	19127.5	19202.5	19283.8	19290.1	19265.0	19227.5	19208.8	19121.2	18964.9
15°	19090.0	19046.2	19058.7	19133.7	19227.5	19258.8	19277.5	19321.3	19296.3	19227.5	19090.0
12.5°	18977.4	18921.1	18977.4	19052.4	19102.5	19121.2	19271.3	19352.6	19352.6	19290.1	19202.5
10°	18946.1	18833.6	18908.6	18977.4	19002.4	19115.0	19240.0	19327.6	19371.3	19321.3	19208.8
7.5°	18883.6	18808.6	18839.8	18871.1	19014.9	19096.2	19165.0	19258.8	19321.3	19315.1	19215.0
5°	18852.4	18758.6	18771.1	18902.4	19002.4	19058.7	19083.7	19165.0	19258.8	19277.5	19202.5
2.5°	18771.1	18727.3	18821.1	18833.6	18908.6	18952.4	18977.4	19052.4	19171.2	19215.0	19183.8
0°	18727.3	18664.8	18602.2	18652.3	18777.3	18871.1	18908.6	19021.2	19158.7	19202.5	19133.7



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 CATALOG NUMBER: EPH-VN-07-E-750-U-LAM

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°	175.1	168.8	162.6	156.3	162.6	162.6	162.6	156.3	162.6	156.3	156.3
85°	544.0	519.0	500.2	475.2	450.2	431.4	406.4	381.4	375.2	368.9	356.4
82.5°	937.9	906.7	875.4	837.9	800.4	756.6	712.8	662.8	650.3	637.8	619.0
80°	1319.4	1275.6	1231.8	1188.0	1150.5	1106.8	1056.7	1000.5	962.9	931.7	894.2
77.5°	1719.5	1657.0	1594.5	1519.4	1475.7	1431.9	1381.9	1325.6	1269.3	1219.3	1163.0
75°	2176.0	2107.2	2044.7	1969.6	1888.4	1807.1	1725.8	1650.8	1569.5	1494.4	1419.4
72.5°	2682.5	2582.4	2482.4	2388.6	2288.5	2188.5	2082.2	1982.2	1882.1	1782.1	1675.8
70°	3214.0	3088.9	2963.9	2838.8	2707.5	2576.2	2451.1	2326.1	2201.0	2069.7	1950.9
67.5°	3839.3	3695.4	3532.9	3357.8	3163.9	2995.1	2832.5	2682.5	2532.4	2382.3	2232.3
65°	4620.9	4420.8	4201.9	3964.3	3739.2	3514.1	3276.5	3051.4	2876.3	2701.2	2532.4
62.5°	5583.8	5302.4	4996.0	4689.6	4414.5	4120.6	3845.5	3551.6	3276.5	3026.4	2820.0
60°	6734.3	6352.9	5977.7	5583.8	5202.4	4802.2	4452.0	4089.4	3745.5	3439.1	3138.9
57.5°	8003.7	7559.7	7109.5	6628.0	6109.0	5640.1	5164.9	4689.6	4283.2	3876.8	3539.1
55°	9291.7	8822.8	8316.3	7772.3	7203.3	6603.0	5959.0	5427.5	4871.0	4395.8	3958.1
52.5°	10517.3	10029.6	9504.3	9004.1	8322.5	7634.7	6928.2	6227.8	5577.5	4971.0	4439.5
50°	11611.5	11136.3	10629.9	10048.3	9416.8	8685.2	7897.4	7109.5	6340.4	5627.6	4964.8
47.5°	12612.0	12149.3	11642.8	11061.3	10486.0	9673.2	8879.1	8009.9	7153.3	6334.1	5558.8
45°	13549.9	13081.0	12555.7	11999.2	11336.4	10611.1	9792.0	8916.6	7997.4	7078.2	6184.1
42.5°	14400.3	13931.4	13399.9	12824.6	12168.1	11449.0	10654.9	9773.2	8847.8	7847.3	6865.6
40°	15144.4	14688.0	14175.2	13574.9	12962.2	12205.6	11424.0	10586.1	9629.4	8622.7	7540.9
37.5°	15794.7	15369.5	14863.0	14269.0	13618.7	12943.4	12136.8	11298.9	10436.0	9341.8	8235.0
35°	16370.0	15976.0	15457.1	14894.3	14256.5	13543.7	12787.1	11968.0	11036.3	10010.8	8935.3
32.5°	16870.2	16470.0	15994.8	15432.0	14813.0	14144.0	13368.6	12543.2	11661.6	10617.3	9448.1
30°	17295.4	16907.7	16457.5	15926.0	15332.0	14669.2	13912.6	13081.0	12180.6	11142.6	9985.8
27.5°	17664.3	17295.4	16857.7	16363.7	15794.7	15156.9	14394.1	13556.2	12637.0	11636.6	10479.8
25°	17983.2	17626.8	17220.4	16751.4	16188.6	15563.4	14844.3	13968.9	13049.7	12043.0	10898.7
22.5°	18270.8	17926.9	17520.5	17064.0	16551.3	15926.0	15200.7	14331.5	13399.9	12405.7	11280.1
20°	18527.2	18208.3	17808.1	17339.2	16826.4	16194.9	15475.8	14650.4	13712.5	12737.1	11624.1
17.5°	18733.6	18452.2	18052.0	17558.0	17045.3	16432.5	15732.2	14975.6	13981.4	13018.4	11911.7
15°	18877.4	18602.2	18239.6	17739.3	17239.1	16632.6	15932.3	15150.7	14225.2	13243.5	12149.3
12.5°	18977.4	18683.5	18345.9	17883.2	17382.9	16782.7	16101.1	15332.0	14431.6	13443.6	12355.6
10°	19002.4	18733.6	18395.9	17983.2	17495.5	16914.0	16244.9	15482.1	14600.4	13600.0	12524.5
7.5°	19014.9	18758.6	18452.2	18058.2	17576.8	17014.0	16351.2	15600.9	14725.5	13731.3	12649.5
5°	19008.7	18764.8	18489.7	18108.3	17626.8	17070.3	16420.0	15682.2	14813.0	13818.8	12743.3
2.5°	18989.9	18771.1	18514.7	18145.8	17683.1	17132.8	16488.8	15776.0	14906.8	13893.8	12818.4
0°	19039.9	18852.4	18527.2	18133.3	17695.6	17132.8	16482.5	15788.5	14919.3	13887.6	12812.1



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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°	156.3	150.1	150.1	143.8	137.6	131.3	118.8	112.6	100.0	81.3	62.5
85°	337.7	318.9	300.1	287.6	275.1	262.6	243.9	225.1	200.1	162.6	125.1
82.5°	594.0	556.5	519.0	475.2	437.7	400.2	368.9	337.7	300.1	243.9	187.6
80°	850.4	794.1	737.8	675.3	619.0	556.5	500.2	450.2	400.2	325.1	250.1
77.5°	1106.8	1031.7	950.4	875.4	794.1	712.8	631.5	562.8	487.7	400.2	312.6
75°	1344.4	1256.8	1181.8	1075.5	975.4	869.1	762.8	669.1	575.3	469.0	375.2
72.5°	1582.0	1469.4	1363.1	1263.1	1150.5	1019.2	900.4	781.6	662.8	537.7	425.2
70°	1819.6	1682.0	1550.7	1431.9	1306.8	1175.5	1031.7	894.2	750.3	600.3	469.0
67.5°	2063.4	1907.1	1757.1	1607.0	1463.2	1313.1	1163.0	1006.7	837.9	662.8	519.0
65°	2332.3	2138.5	1957.1	1788.3	1619.5	1456.9	1288.1	1119.3	931.7	731.6	562.8
62.5°	2601.2	2388.6	2176.0	1963.4	1775.8	1594.5	1413.1	1225.6	1019.2	806.6	606.5
60°	2888.8	2645.0	2401.1	2163.5	1932.1	1732.0	1531.9	1331.9	1113.0	875.4	650.3
57.5°	3207.7	2913.8	2638.7	2369.8	2107.2	1869.6	1650.8	1438.2	1194.3	944.2	700.3
55°	3570.4	3207.7	2882.6	2582.4	2294.8	2007.2	1769.6	1550.7	1288.1	1013.0	756.6
52.5°	3951.8	3532.9	3138.9	2801.3	2494.9	2169.7	1882.1	1638.2	1381.9	1081.7	806.6
50°	4395.8	3864.3	3426.6	3013.9	2670.0	2332.3	2000.9	1738.3	1475.7	1163.0	856.6
47.5°	4852.2	4264.4	3714.2	3264.0	2857.6	2488.6	2138.5	1825.8	1563.2	1238.1	906.7
45°	5383.7	4645.9	4039.3	3507.9	3038.9	2651.2	2276.0	1919.6	1638.2	1313.1	956.7
42.5°	5896.4	5096.1	4377.0	3776.7	3245.2	2807.5	2401.1	2019.7	1713.3	1388.1	1000.5
40°	6503.0	5546.3	4702.1	4033.1	3451.6	2957.6	2526.2	2126.0	1782.1	1456.9	1044.2
37.5°	7084.5	6002.7	5096.1	4314.5	3651.7	3107.7	2651.2	2226.0	1844.6	1525.7	1100.5
35°	7659.7	6509.2	5471.2	4577.1	3858.0	3276.5	2776.3	2319.8	1907.1	1582.0	1150.5
32.5°	8210.0	6984.4	5852.7	4871.0	4083.1	3432.8	2888.8	2407.3	1969.6	1632.0	1200.5
30°	8722.7	7434.6	6227.8	5171.1	4289.5	3576.6	2995.1	2494.9	2044.7	1675.8	1250.6
27.5°	9191.7	7872.3	6603.0	5452.5	4483.3	3707.9	3107.7	2576.2	2107.2	1719.5	1294.3
25°	9616.9	8266.3	6946.9	5708.9	4658.4	3851.8	3214.0	2657.5	2163.5	1757.1	1331.9
22.5°	10017.1	8628.9	7259.6	5965.2	4871.0	3995.6	3314.0	2732.5	2219.8	1794.6	1369.4
20°	10367.2	8960.3	7559.7	6221.6	5058.6	4126.9	3401.6	2801.3	2269.8	1819.6	1406.9
17.5°	10648.6	9254.2	7828.6	6446.7	5221.1	4239.4	3476.6	2863.8	2313.6	1850.8	1431.9
15°	10898.7	9504.3	8053.7	6640.5	5364.9	4333.2	3545.4	2913.8	2351.1	1869.6	1463.2
12.5°	11111.3	9716.9	8247.5	6809.4	5490.0	4414.5	3601.6	2951.3	2382.3	1888.4	1481.9
10°	11286.4	9885.8	8410.1	6940.7	5590.1	4477.0	3645.4	2988.9	2407.3	1907.1	1500.7
7.5°	11417.7	10010.8	8528.9	7053.2	5671.3	4520.8	3682.9	3013.9	2432.4	1919.6	1531.9
5°	11517.8	10117.1	8622.7	7128.3	5733.9	4583.3	3726.7	3045.1	2457.4	1932.1	1531.9
2.5°	11592.8	10204.7	8697.7	7190.8	5783.9	4570.8	3726.7	3038.9	2457.4	1932.1	1525.7
0°	11580.3	10210.9	8691.5	7190.8	5783.9	4558.3	3726.7	3032.6	2457.4	1932.1	1525.7



REPORT NUMBER: P628577
 CATALOG NUMBER: EPH-VN-07-E-750-U-LAM

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	43.8	31.3	12.5	0.0
85°	93.8	62.5	31.3	0.0
82.5°	137.6	87.5	43.8	0.0
80°	181.3	118.8	56.3	0.0
77.5°	231.4	150.1	75.0	0.0
75°	275.1	175.1	87.5	0.0
72.5°	318.9	206.3	100.0	0.0
70°	356.4	231.4	112.6	0.0
67.5°	393.9	262.6	131.3	0.0
65°	425.2	287.6	143.8	0.0
62.5°	450.2	318.9	156.3	0.0
60°	481.5	343.9	168.8	0.0
57.5°	506.5	362.7	181.3	0.0
55°	531.5	375.2	193.8	0.0
52.5°	556.5	393.9	206.3	0.0
50°	581.5	412.7	218.8	0.0
47.5°	606.5	425.2	225.1	0.0
45°	644.0	444.0	237.6	0.0
42.5°	675.3	456.5	250.1	0.0
40°	706.6	469.0	256.4	0.0
37.5°	737.8	481.5	268.9	0.0
35°	769.1	494.0	275.1	0.0
32.5°	794.1	506.5	281.4	0.0
30°	819.1	519.0	287.6	0.0
27.5°	844.1	525.2	293.9	0.0
25°	862.9	537.7	300.1	0.0
22.5°	881.7	544.0	306.4	0.0
20°	894.2	550.3	312.6	0.0
17.5°	912.9	556.5	318.9	0.0
15°	919.2	562.8	331.4	0.0
12.5°	931.7	569.0	331.4	0.0
10°	937.9	575.3	331.4	0.0
7.5°	950.4	575.3	331.4	0.0
5°	944.2	575.3	331.4	0.0
2.5°	944.2	575.3	331.4	0.0
0°	937.9	575.3	331.4	0.0

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