

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: P628578

Luminaire Tested: **EPH-VN-08-D-750-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628578
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: EPHESUS
Catalog Number: EPH-VN-08-D-750-U-LAM
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
LAMBERTIAN distribution lens
Light Source: (128) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

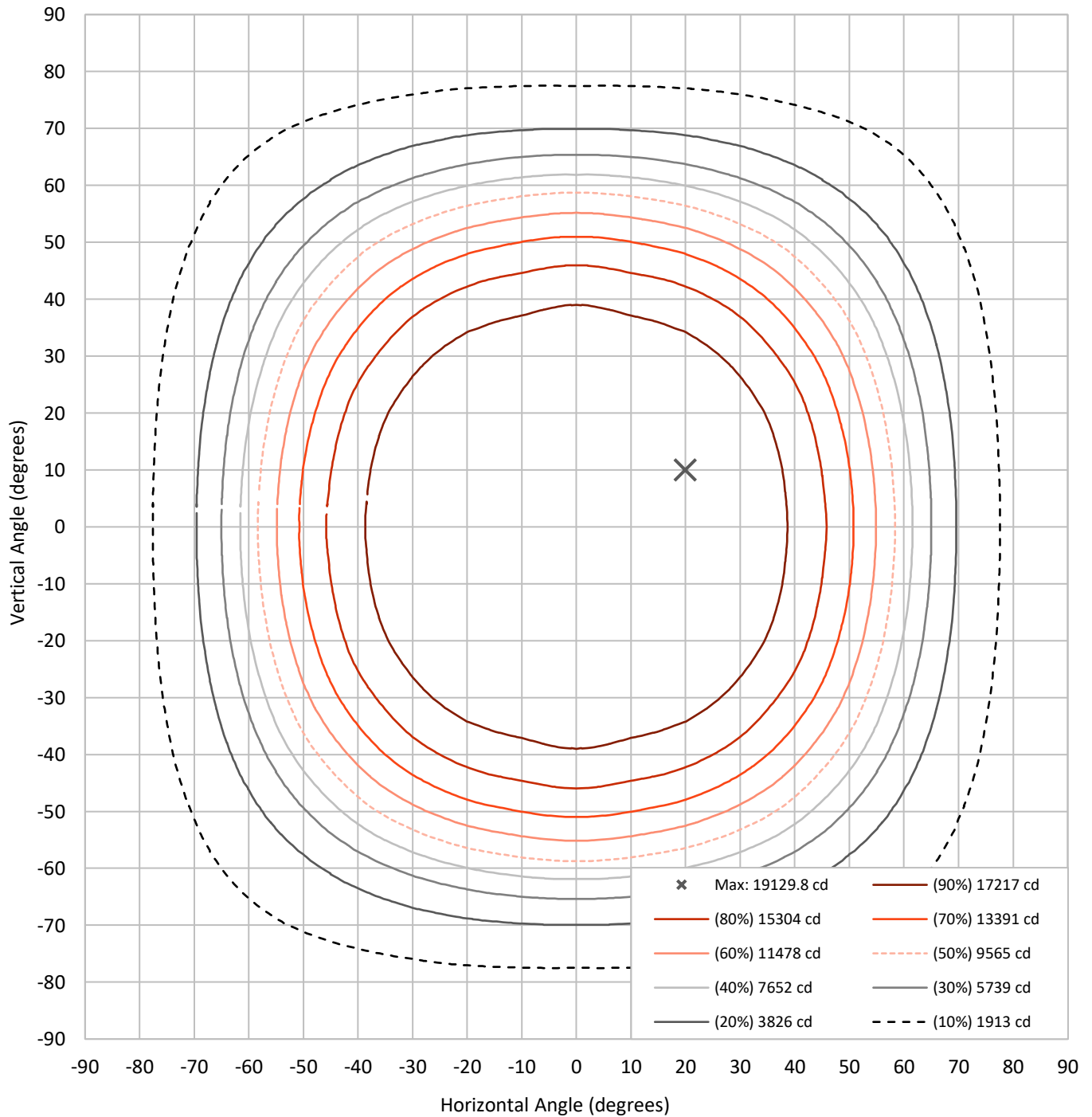
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	58687.7 lumens	Max Intensity:	19129.8 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	120.2 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	36012 lumens	Field Lumens:	43172.3 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

Input Watts (W): 488.3
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



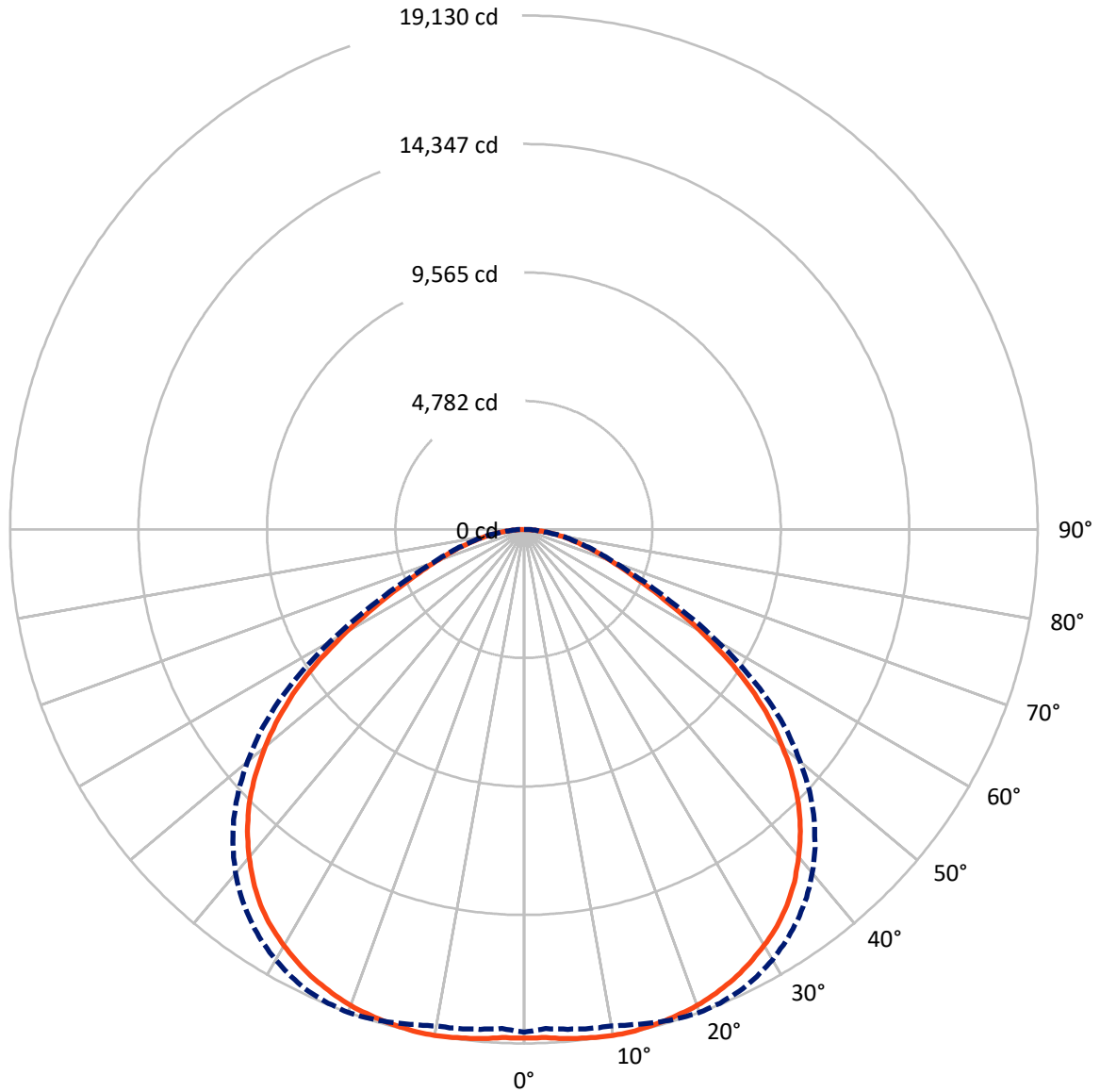
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Iso-Candela Plot



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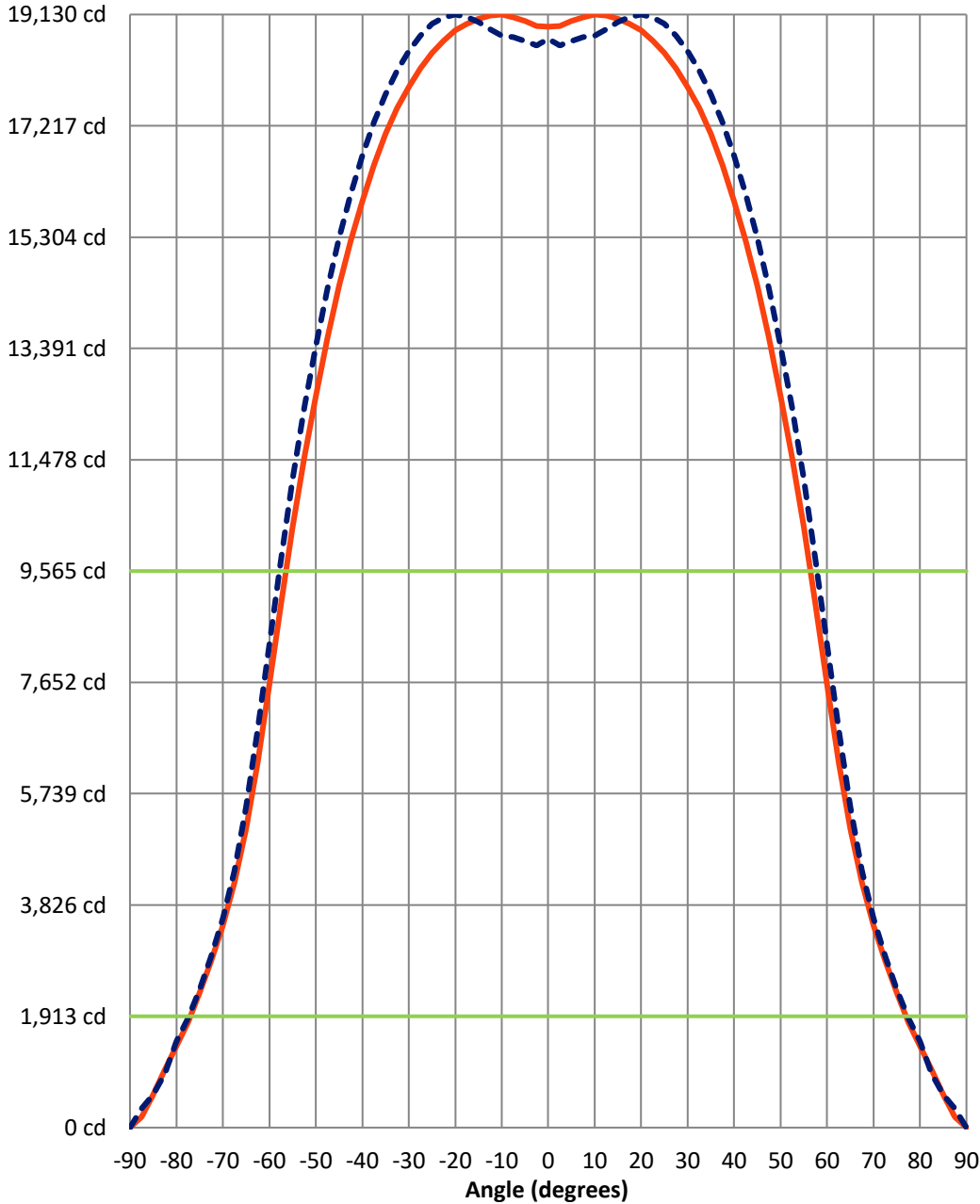
Luminous Intensity Polar Plot



— 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: 36012
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 43172.3
 Efficiency: 73.6%

Spill:
 Lumens: 15515.5
 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°	154.4	166.7	172.9	179.1	185.2	191.4	197.6	191.4	185.2	185.2	179.1
85°	413.7	426.1	432.2	475.5	518.7	543.4	574.3	568.1	568.1	561.9	555.7
82.5°	827.4	864.5	895.4	938.6	963.3	1000.3	1025.0	1006.5	994.2	969.5	950.9
80°	1469.6	1482.0	1488.2	1494.3	1463.5	1457.3	1444.9	1426.4	1401.7	1370.8	1340.0
77.5°	1871.0	1883.3	1895.7	1883.3	1877.2	1871.0	1852.5	1833.9	1809.2	1784.5	1747.5
75°	2476.1	2476.1	2476.1	2457.6	2445.3	2426.7	2395.9	2365.0	2321.8	2272.4	2216.8
72.5°	3118.3	3112.1	3106.0	3068.9	3038.1	3001.0	2957.8	2920.7	2871.3	2815.8	2741.7
70°	3791.4	3803.7	3809.9	3760.5	3723.5	3674.1	3618.5	3550.6	3476.5	3396.2	3291.2
67.5°	4717.6	4705.3	4692.9	4625.0	4575.6	4507.7	4427.4	4328.6	4217.5	4094.0	3945.8
65°	5866.2	5884.7	5847.6	5779.7	5687.1	5575.9	5452.4	5310.4	5143.7	4958.4	4748.5
62.5°	7255.5	7286.4	7243.2	7156.7	7039.4	6891.2	6718.3	6514.5	6286.0	6026.7	5767.4
60°	8836.3	8830.1	8749.8	8632.5	8478.1	8292.9	8101.5	7879.2	7619.8	7317.3	7002.3
57.5°	10287.4	10275.0	10176.2	10058.9	9904.5	9706.9	9503.2	9268.5	8996.8	8675.7	8311.4
55°	11590.3	11577.9	11479.1	11355.6	11195.1	10997.5	10812.2	10590.0	10324.4	9984.8	9595.8
52.5°	12745.0	12751.2	12664.7	12528.9	12356.0	12164.6	11985.5	11763.2	11510.0	11170.4	10793.7
50°	13807.1	13800.9	13708.3	13584.8	13424.2	13239.0	13059.9	12837.6	12572.1	12244.8	11880.5
47.5°	14795.1	14782.7	14677.7	14541.9	14375.2	14214.6	14047.9	13850.3	13572.4	13245.2	12880.8
45°	15622.5	15597.8	15492.8	15363.1	15202.6	15060.6	14912.4	14764.2	14467.8	14165.2	13819.4
42.5°	16332.6	16326.4	16221.5	16091.8	15931.2	15807.7	15671.9	15486.6	15239.6	14961.8	14622.2
40°	17011.8	16962.4	16857.5	16734.0	16585.8	16480.8	16345.0	16159.7	15918.9	15647.2	15319.9
37.5°	17518.2	17524.4	17413.2	17277.4	17147.7	17048.9	16925.4	16752.5	16542.6	16277.0	15949.8
35°	17999.8	17969.0	17876.3	17759.0	17641.7	17530.5	17400.9	17252.7	17079.8	16832.8	16524.0
32.5°	18314.7	18358.0	18246.8	18123.3	18055.4	17969.0	17833.1	17678.7	17524.4	17277.4	16999.5
30°	18660.5	18623.5	18537.0	18432.1	18382.7	18327.1	18209.8	18061.6	17882.5	17660.2	17400.9
27.5°	18901.4	18882.8	18777.9	18679.1	18654.4	18605.0	18512.3	18382.7	18203.6	17987.5	17746.7
25°	19006.3	19018.7	18919.9	18864.3	18864.3	18833.4	18759.3	18648.2	18469.1	18271.5	18036.9
22.5°	19055.7	19043.4	18975.5	18963.1	18994.0	18969.3	18938.4	18839.6	18679.1	18518.5	18320.9
20°	19086.6	19000.2	18938.4	18987.8	19024.9	19018.7	18994.0	18932.2	18858.1	18722.3	18549.4
17.5°	19018.7	18963.1	18889.0	18963.1	19043.4	19049.6	19024.9	18987.8	18969.3	18882.8	18728.5
15°	18852.0	18808.7	18821.1	18895.2	18987.8	19018.7	19037.2	19080.4	19055.7	18987.8	18852.0
12.5°	18740.8	18685.2	18740.8	18814.9	18864.3	18882.8	19031.0	19111.3	19111.3	19049.6	18963.1
10°	18709.9	18598.8	18672.9	18740.8	18765.5	18876.7	19000.2	19086.6	19129.8	19080.4	18969.3
7.5°	18648.2	18574.1	18605.0	18635.8	18777.9	18858.1	18926.1	19018.7	19080.4	19074.3	18975.5
5°	18617.3	18524.7	18537.0	18666.7	18765.5	18821.1	18845.8	18926.1	19018.7	19037.2	18963.1
2.5°	18537.0	18493.8	18586.4	18598.8	18672.9	18716.1	18740.8	18814.9	18932.2	18975.5	18944.6
0°	18493.8	18432.1	18370.3	18419.7	18543.2	18635.8	18672.9	18784.0	18919.9	18963.1	18895.2



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 CATALOG NUMBER: EPH-VN-08-D-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°	172.9	166.7	160.5	154.4	160.5	160.5	160.5	154.4	160.5	154.4	154.4
85°	537.2	512.5	494.0	469.3	444.6	426.1	401.4	376.7	370.5	364.3	352.0
82.5°	926.2	895.4	864.5	827.4	790.4	747.2	703.9	654.5	642.2	629.8	611.3
80°	1302.9	1259.7	1216.5	1173.2	1136.2	1093.0	1043.6	988.0	950.9	920.1	883.0
77.5°	1698.1	1636.3	1574.6	1500.5	1457.3	1414.1	1364.7	1309.1	1253.5	1204.1	1148.5
75°	2148.9	2080.9	2019.2	1945.1	1864.8	1784.5	1704.3	1630.2	1549.9	1475.8	1401.7
72.5°	2649.0	2550.2	2451.4	2358.8	2260.0	2161.2	2056.2	1957.4	1858.6	1759.8	1654.9
70°	3173.9	3050.4	2926.9	2803.4	2673.7	2544.1	2420.6	2297.1	2173.6	2043.9	1926.6
67.5°	3791.4	3649.4	3488.8	3315.9	3124.5	2957.8	2797.2	2649.0	2500.8	2352.6	2204.4
65°	4563.3	4365.7	4149.5	3914.9	3692.6	3470.3	3235.6	3013.4	2840.5	2667.6	2500.8
62.5°	5514.2	5236.3	4933.7	4631.2	4359.5	4069.3	3797.6	3507.3	3235.6	2988.7	2784.9
60°	6650.4	6273.7	5903.2	5514.2	5137.5	4742.3	4396.5	4038.4	3698.8	3396.2	3099.8
57.5°	7903.9	7465.5	7020.9	6545.4	6032.9	5569.8	5100.5	4631.2	4229.8	3828.4	3495.0
55°	9175.9	8712.8	8212.6	7675.4	7113.5	6520.7	5884.7	5359.8	4810.2	4341.0	3908.7
52.5°	10386.2	9904.5	9385.8	8891.9	8218.8	7539.6	6841.8	6150.2	5508.0	4909.0	4384.2
50°	11466.8	10997.5	10497.3	9923.1	9299.4	8576.9	7798.9	7020.9	6261.3	5557.4	4902.9
47.5°	12454.8	11997.8	11497.7	10923.4	10355.3	9552.6	8768.4	7910.0	7064.1	6255.2	5489.5
45°	13381.0	12917.9	12399.2	11849.6	11195.1	10478.8	9669.9	8805.4	7897.7	6990.0	6107.0
42.5°	14220.8	13757.7	13232.8	12664.7	12016.4	11306.2	10522.0	9651.4	8737.5	7749.5	6780.0
40°	14955.6	14504.8	13998.5	13405.7	12800.6	12053.4	11281.5	10454.1	9509.3	8515.2	7446.9
37.5°	15597.8	15177.9	14677.7	14091.1	13448.9	12782.0	11985.5	11158.0	10305.9	9225.3	8132.3
35°	16165.9	15776.9	15264.3	14708.6	14078.8	13374.8	12627.7	11818.8	10898.7	9886.0	8823.9
32.5°	16659.9	16264.7	15795.4	15239.6	14628.3	13967.6	13201.9	12386.8	11516.2	10485.0	9330.3
30°	17079.8	16696.9	16252.3	15727.5	15140.9	14486.3	13739.1	12917.9	12028.7	11003.7	9861.3
27.5°	17444.1	17079.8	16647.5	16159.7	15597.8	14968.0	14214.6	13387.2	12479.5	11491.5	10349.1
25°	17759.0	17407.0	17005.7	16542.6	15986.8	15369.3	14659.2	13794.7	12887.0	11892.9	10762.8
22.5°	18043.1	17703.4	17302.1	16851.3	16345.0	15727.5	15011.2	14152.9	13232.8	12251.0	11139.5
20°	18296.2	17981.3	17586.1	17123.0	16616.7	15993.0	15282.9	14467.8	13541.6	12578.3	11479.1
17.5°	18500.0	18222.1	17826.9	17339.1	16832.8	16227.6	15536.0	14788.9	13807.1	12856.1	11763.2
15°	18642.0	18370.3	18012.2	17518.2	17024.2	16425.2	15733.6	14961.8	14047.9	13078.4	11997.8
12.5°	18740.8	18450.6	18117.2	17660.2	17166.2	16573.4	15900.4	15140.9	14251.7	13276.0	12201.6
10°	18765.5	18500.0	18166.6	17759.0	17277.4	16703.1	16042.4	15289.0	14418.4	13430.4	12368.3
7.5°	18777.9	18524.7	18222.1	17833.1	17357.6	16801.9	16147.4	15406.4	14541.9	13560.1	12491.8
5°	18771.7	18530.9	18259.2	17882.5	17407.0	16857.5	16215.3	15486.6	14628.3	13646.5	12584.4
2.5°	18753.2	18537.0	18283.9	17919.6	17462.6	16919.2	16283.2	15579.3	14721.0	13720.6	12658.5
0°	18802.6	18617.3	18296.2	17907.2	17475.0	16919.2	16277.0	15591.6	14733.3	13714.4	12652.4



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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°	154.4	148.2	148.2	142.0	135.8	129.7	117.3	111.1	98.8	80.3	61.7
85°	333.4	314.9	296.4	284.0	271.7	259.3	240.8	222.3	197.6	160.5	123.5
82.5°	586.6	549.6	512.5	469.3	432.2	395.2	364.3	333.4	296.4	240.8	185.2
80°	839.8	784.2	728.6	666.9	611.3	549.6	494.0	444.6	395.2	321.1	247.0
77.5°	1093.0	1018.9	938.6	864.5	784.2	703.9	623.7	555.7	481.6	395.2	308.7
75°	1327.6	1241.2	1167.1	1062.1	963.3	858.3	753.3	660.7	568.1	463.1	370.5
72.5°	1562.2	1451.1	1346.1	1247.3	1136.2	1006.5	889.2	771.9	654.5	531.0	419.9
70°	1796.9	1661.0	1531.4	1414.1	1290.6	1160.9	1018.9	883.0	741.0	592.8	463.1
67.5°	2037.7	1883.3	1735.1	1586.9	1444.9	1296.7	1148.5	994.2	827.4	654.5	512.5
65°	2303.2	2111.8	1932.7	1766.0	1599.3	1438.8	1272.0	1105.3	920.1	722.5	555.7
62.5°	2568.8	2358.8	2148.9	1938.9	1753.7	1574.6	1395.5	1210.3	1006.5	796.6	599.0
60°	2852.8	2612.0	2371.2	2136.5	1908.0	1710.4	1512.9	1315.3	1099.1	864.5	642.2
57.5°	3167.7	2877.5	2605.8	2340.3	2080.9	1846.3	1630.2	1420.2	1179.4	932.4	691.6
55°	3525.9	3167.7	2846.6	2550.2	2266.2	1982.1	1747.5	1531.4	1272.0	1000.3	747.2
52.5°	3902.5	3488.8	3099.8	2766.4	2463.8	2142.7	1858.6	1617.8	1364.7	1068.3	796.6
50°	4341.0	3816.1	3383.8	2976.3	2636.7	2303.2	1976.0	1716.6	1457.3	1148.5	846.0
47.5°	4791.7	4211.3	3667.9	3223.3	2821.9	2457.6	2111.8	1803.1	1543.7	1222.6	895.4
45°	5316.6	4587.9	3989.0	3464.1	3001.0	2618.2	2247.7	1895.7	1617.8	1296.7	944.8
42.5°	5822.9	5032.5	4322.4	3729.6	3204.8	2772.5	2371.2	1994.5	1691.9	1370.8	988.0
40°	6421.9	5477.1	4643.5	3982.8	3408.5	2920.7	2494.7	2099.5	1759.8	1438.8	1031.2
37.5°	6996.2	5927.9	5032.5	4260.7	3606.1	3068.9	2618.2	2198.3	1821.6	1506.7	1086.8
35°	7564.3	6428.1	5403.0	4520.0	3809.9	3235.6	2741.7	2290.9	1883.3	1562.2	1136.2
32.5°	8107.6	6897.4	5779.7	4810.2	4032.2	3390.0	2852.8	2377.3	1945.1	1611.6	1185.6
30°	8614.0	7342.0	6150.2	5106.6	4236.0	3532.0	2957.8	2463.8	2019.2	1654.9	1235.0
27.5°	9077.1	7774.2	6520.7	5384.5	4427.4	3661.7	3068.9	2544.1	2080.9	1698.1	1278.2
25°	9497.0	8163.2	6860.3	5637.7	4600.3	3803.7	3173.9	2624.3	2136.5	1735.1	1315.3
22.5°	9892.2	8521.4	7169.1	5890.9	4810.2	3945.8	3272.7	2698.4	2192.1	1772.2	1352.3
20°	10238.0	8848.6	7465.5	6144.0	4995.5	4075.4	3359.1	2766.4	2241.5	1796.9	1389.4
17.5°	10515.9	9138.8	7731.0	6366.3	5156.0	4186.6	3433.2	2828.1	2284.7	1827.8	1414.1
15°	10762.8	9385.8	7953.3	6557.7	5298.1	4279.2	3501.2	2877.5	2321.8	1846.3	1444.9
12.5°	10972.8	9595.8	8144.7	6724.5	5421.6	4359.5	3556.7	2914.6	2352.6	1864.8	1463.5
10°	11145.7	9762.5	8305.2	6854.1	5520.4	4421.2	3600.0	2951.6	2377.3	1883.3	1482.0
7.5°	11275.4	9886.0	8422.6	6965.3	5600.6	4464.5	3637.0	2976.3	2402.0	1895.7	1512.9
5°	11374.2	9991.0	8515.2	7039.4	5662.4	4526.2	3680.2	3007.2	2426.7	1908.0	1512.9
2.5°	11448.3	10077.4	8589.3	7101.1	5711.8	4513.9	3680.2	3001.0	2426.7	1908.0	1506.7
0°	11435.9	10083.6	8583.1	7101.1	5711.8	4501.5	3680.2	2994.8	2426.7	1908.0	1506.7



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 CATALOG NUMBER: EPH-VN-08-D-750-U-LAM

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	43.2	30.9	12.3	0.0
85°	92.6	61.7	30.9	0.0
82.5°	135.8	86.4	43.2	0.0
80°	179.1	117.3	55.6	0.0
77.5°	228.5	148.2	74.1	0.0
75°	271.7	172.9	86.4	0.0
72.5°	314.9	203.8	98.8	0.0
70°	352.0	228.5	111.1	0.0
67.5°	389.0	259.3	129.7	0.0
65°	419.9	284.0	142.0	0.0
62.5°	444.6	314.9	154.4	0.0
60°	475.5	339.6	166.7	0.0
57.5°	500.2	358.1	179.1	0.0
55°	524.9	370.5	191.4	0.0
52.5°	549.6	389.0	203.8	0.0
50°	574.3	407.5	216.1	0.0
47.5°	599.0	419.9	222.3	0.0
45°	636.0	438.4	234.6	0.0
42.5°	666.9	450.8	247.0	0.0
40°	697.8	463.1	253.2	0.0
37.5°	728.6	475.5	265.5	0.0
35°	759.5	487.8	271.7	0.0
32.5°	784.2	500.2	277.9	0.0
30°	808.9	512.5	284.0	0.0
27.5°	833.6	518.7	290.2	0.0
25°	852.1	531.0	296.4	0.0
22.5°	870.7	537.2	302.6	0.0
20°	883.0	543.4	308.7	0.0
17.5°	901.5	549.6	314.9	0.0
15°	907.7	555.7	327.3	0.0
12.5°	920.1	561.9	327.3	0.0
10°	926.2	568.1	327.3	0.0
7.5°	938.6	568.1	327.3	0.0
5°	932.4	568.1	327.3	0.0
2.5°	932.4	568.1	327.3	0.0
0°	926.2	568.1	327.3	0.0

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