

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: P628567

Luminaire Tested: **EPH-VN-08-E-735-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628567
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: EPHESUS
Catalog Number: EPH-VN-08-E-735-U-LAM
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
LAMBERTIAN distribution lens
Light Source: (128) 3500K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	69497.5 lumens	Max Intensity:	22653.4 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	110.9 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		

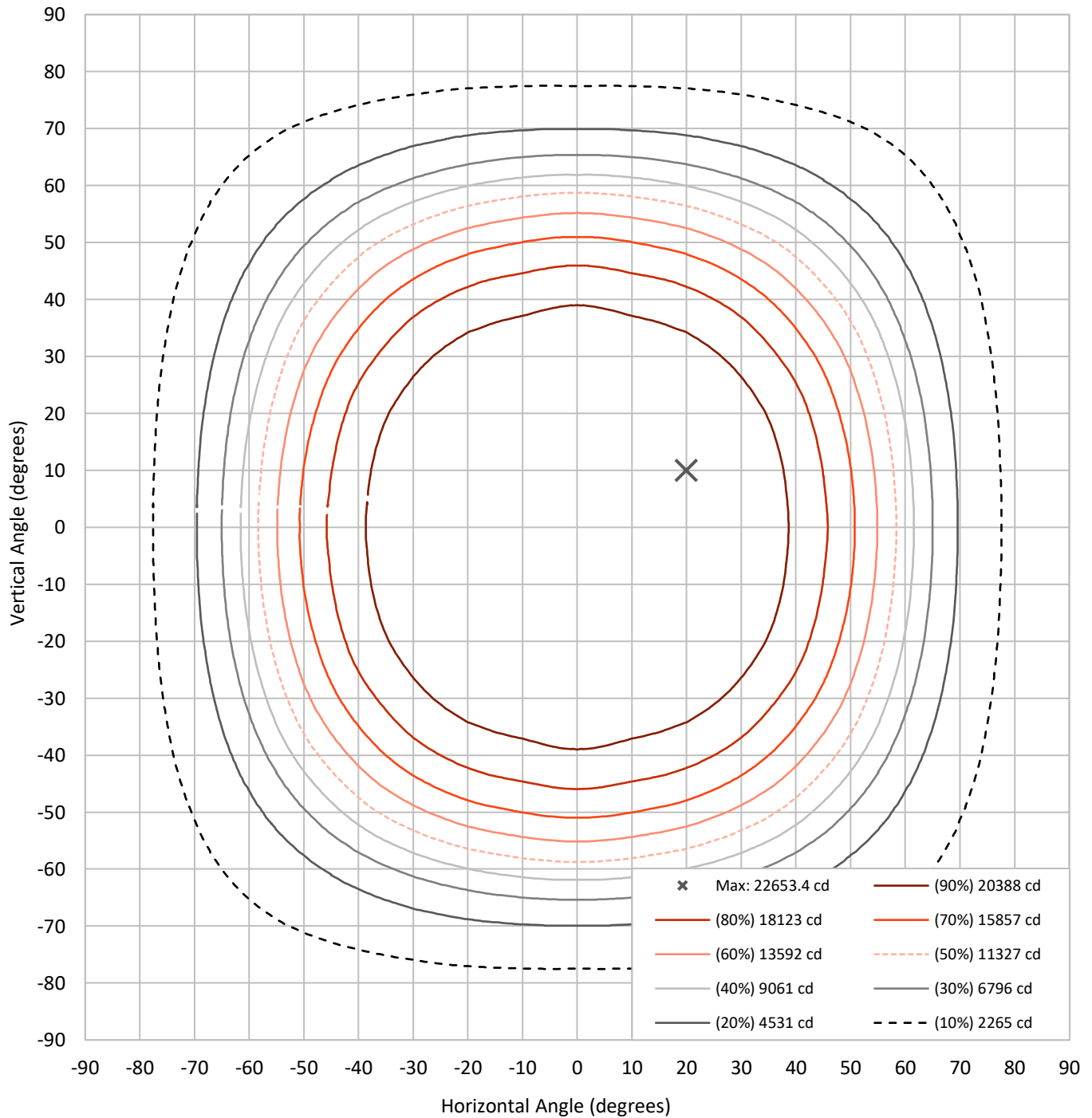
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	42645.1 lumens	Field Lumens:	51124.2 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

Input Watts (W): 626.8
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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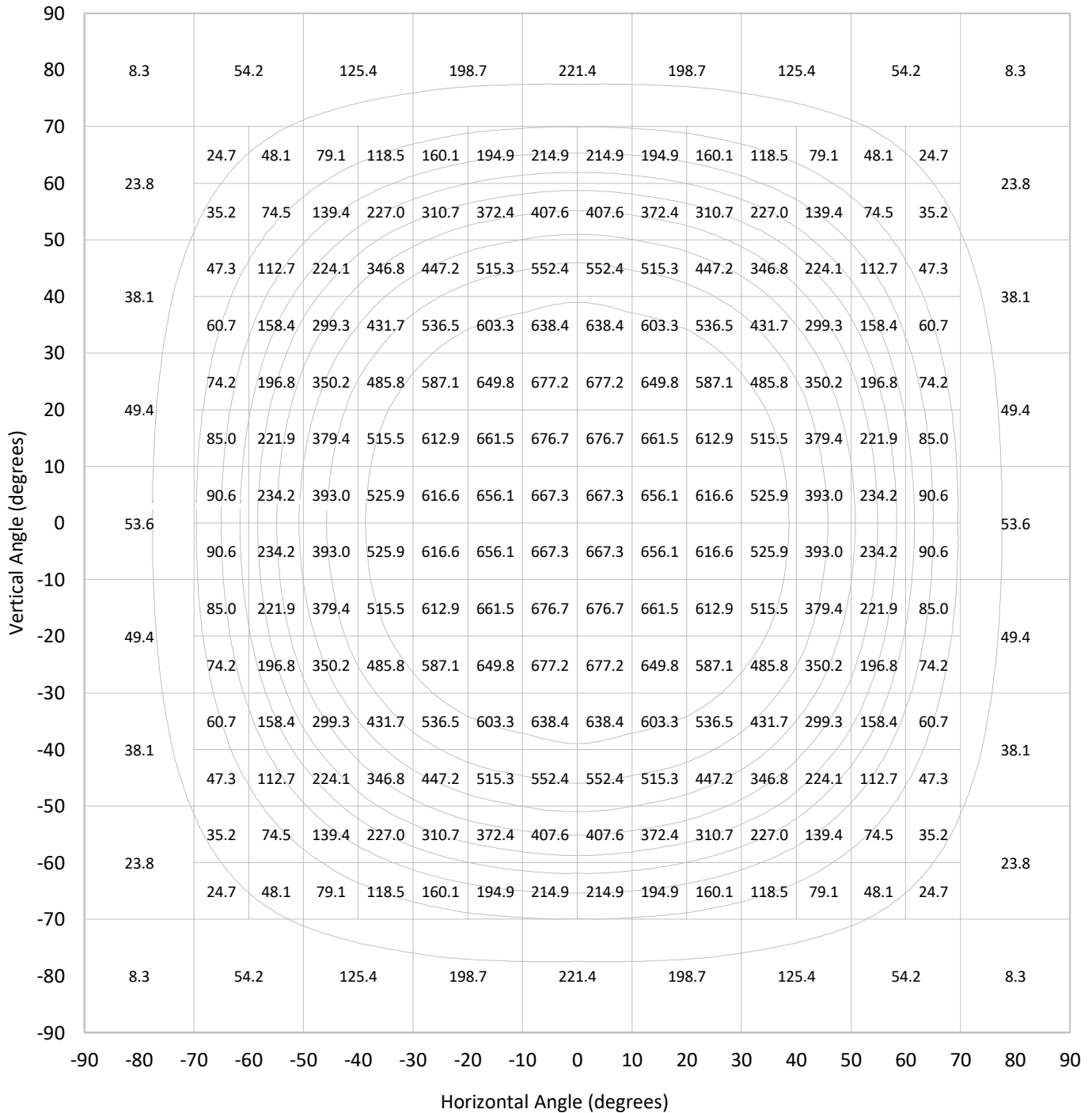
Iso-Candela Plot





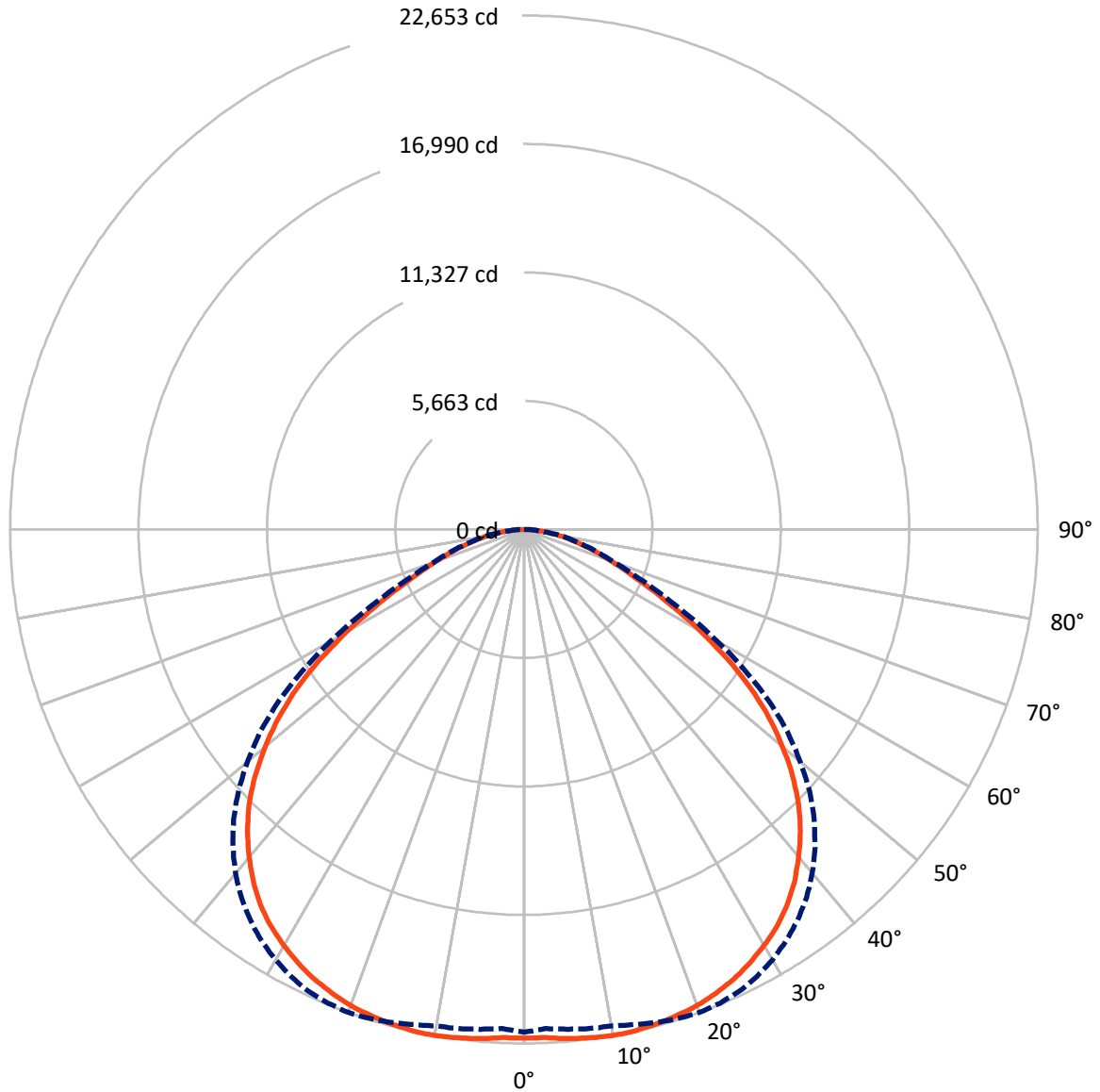
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Lumen Table



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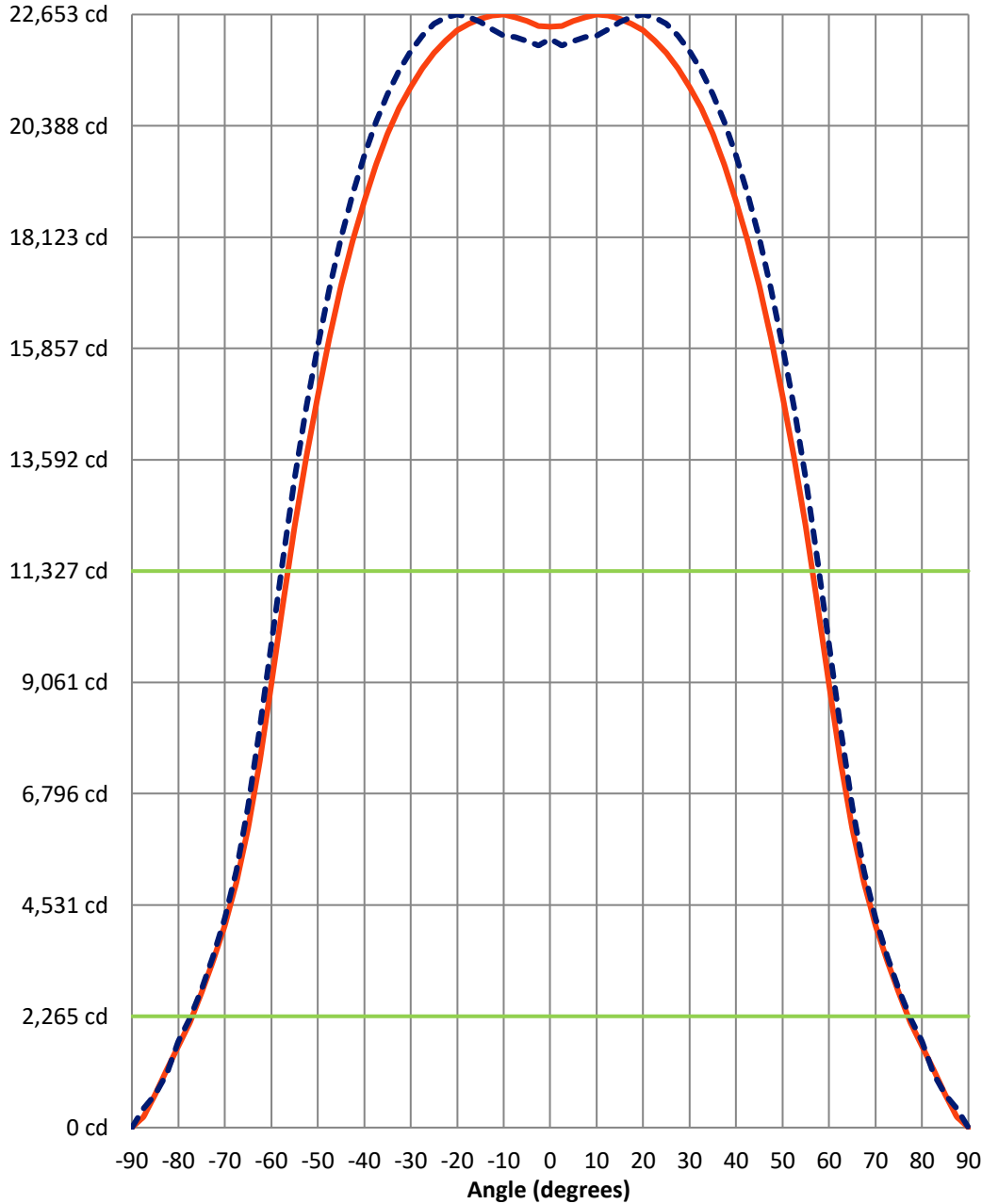
Luminous Intensity Polar Plot



— 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: 42645.1
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 51124.2
 Efficiency: 73.6%

Spill:
 Lumens: 18373.3
 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°	182.8	197.4	204.7	212.1	219.4	226.7	234.0	226.7	219.4	219.4	212.1
85°	489.9	504.5	511.9	563.0	614.2	643.5	680.0	672.7	672.7	665.4	658.1
82.5°	979.8	1023.7	1060.3	1111.5	1140.7	1184.6	1213.8	1191.9	1177.3	1148.0	1126.1
80°	1740.3	1754.9	1762.3	1769.6	1733.0	1725.7	1711.1	1689.1	1659.9	1623.3	1586.8
77.5°	2215.6	2230.2	2244.9	2230.2	2222.9	2215.6	2193.7	2171.7	2142.5	2113.2	2069.4
75°	2932.2	2932.2	2932.2	2910.3	2895.7	2873.7	2837.2	2800.6	2749.4	2690.9	2625.1
72.5°	3692.7	3685.4	3678.1	3634.2	3597.6	3553.8	3502.6	3458.7	3400.2	3334.4	3246.6
70°	4489.7	4504.4	4511.7	4453.2	4409.3	4350.8	4285.0	4204.6	4116.8	4021.7	3897.4
67.5°	5586.6	5571.9	5557.3	5476.9	5418.4	5338.0	5242.9	5125.9	4994.3	4848.0	4672.5
65°	6946.6	6968.6	6924.7	6844.3	6734.6	6603.0	6456.7	6288.5	6091.1	5871.7	5623.1
62.5°	8591.9	8628.5	8577.3	8474.9	8336.0	8160.5	7955.7	7714.4	7443.9	7136.8	6829.7
60°	10463.8	10456.5	10361.5	10222.5	10039.7	9820.4	9593.7	9330.4	9023.3	8665.0	8292.1
57.5°	12182.2	12167.6	12050.6	11911.7	11728.9	11494.9	11253.6	10975.7	10654.0	10273.7	9842.3
55°	13725.1	13710.5	13593.5	13447.2	13257.1	13023.1	12803.8	12540.5	12226.1	11823.9	11363.3
52.5°	15092.5	15099.8	14997.4	14836.6	14631.8	14405.2	14193.1	13929.9	13630.1	13227.9	12781.8
50°	16350.2	16342.9	16233.2	16087.0	15896.9	15677.5	15465.4	15202.2	14887.8	14500.2	14068.8
47.5°	17520.2	17505.6	17381.2	17220.4	17022.9	16832.8	16635.4	16401.4	16072.3	15684.8	15253.4
45°	18500.0	18470.8	18346.5	18192.9	18002.8	17834.6	17659.1	17483.6	17132.6	16774.3	16364.8
42.5°	19340.9	19333.6	19209.3	19055.8	18865.6	18719.4	18558.5	18339.2	18046.7	17717.6	17315.4
40°	20145.3	20086.8	19962.5	19816.2	19640.7	19516.4	19355.6	19136.2	18851.0	18529.3	18141.7
37.5°	20744.9	20752.2	20620.6	20459.7	20306.1	20189.2	20042.9	19838.2	19589.5	19275.1	18887.6
35°	21315.2	21278.7	21169.0	21030.1	20891.1	20759.5	20606.0	20430.5	20225.7	19933.2	19567.6
32.5°	21688.2	21739.4	21607.7	21461.5	21381.1	21278.7	21117.8	20935.0	20752.2	20459.7	20130.7
30°	22097.7	22053.8	21951.4	21827.1	21768.6	21702.8	21563.9	21388.4	21176.3	20913.1	20606.0
27.5°	22382.8	22360.9	22236.6	22119.6	22090.3	22031.8	21922.2	21768.6	21556.5	21300.6	21015.4
25°	22507.1	22521.8	22404.8	22339.0	22339.0	22302.4	22214.6	22083.0	21871.0	21637.0	21359.1
22.5°	22565.6	22551.0	22470.6	22456.0	22492.5	22463.3	22426.7	22309.7	22119.6	21929.5	21695.5
20°	22602.2	22499.8	22426.7	22485.2	22529.1	22521.8	22492.5	22419.4	22331.6	22170.8	21966.0
17.5°	22521.8	22456.0	22368.2	22456.0	22551.0	22558.3	22529.1	22485.2	22463.3	22360.9	22178.1
15°	22324.3	22273.1	22287.8	22375.5	22485.2	22521.8	22543.7	22594.9	22565.6	22485.2	22324.3
12.5°	22192.7	22126.9	22192.7	22280.5	22339.0	22360.9	22536.4	22631.4	22631.4	22558.3	22456.0
10°	22156.2	22024.5	22112.3	22192.7	22222.0	22353.6	22499.8	22602.2	22653.4	22594.9	22463.3
7.5°	22083.0	21995.3	22031.8	22068.4	22236.6	22331.6	22412.1	22521.8	22594.9	22587.6	22470.6
5°	22046.5	21936.8	21951.4	22105.0	22222.0	22287.8	22317.0	22412.1	22521.8	22543.7	22456.0
2.5°	21951.4	21900.2	22009.9	22024.5	22112.3	22163.5	22192.7	22280.5	22419.4	22470.6	22434.0
0°	21900.2	21827.1	21754.0	21812.5	21958.7	22068.4	22112.3	22243.9	22404.8	22456.0	22375.5



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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°	204.7	197.4	190.1	182.8	190.1	190.1	190.1	182.8	190.1	182.8	182.8
85°	636.2	606.9	585.0	555.7	526.5	504.5	475.3	446.0	438.7	431.4	416.8
82.5°	1096.8	1060.3	1023.7	979.8	936.0	884.8	833.6	775.1	760.5	745.9	723.9
80°	1542.9	1491.7	1440.5	1389.3	1345.5	1294.3	1235.8	1170.0	1126.1	1089.5	1045.7
77.5°	2010.9	1937.7	1864.6	1776.9	1725.7	1674.5	1616.0	1550.2	1484.4	1425.9	1360.1
75°	2544.7	2464.2	2391.1	2303.4	2208.3	2113.2	2018.2	1930.4	1835.4	1747.6	1659.9
72.5°	3137.0	3020.0	2903.0	2793.3	2676.3	2559.3	2435.0	2318.0	2201.0	2084.0	1959.7
70°	3758.5	3612.3	3466.0	3319.8	3166.2	3012.7	2866.4	2720.2	2573.9	2420.4	2281.4
67.5°	4489.7	4321.5	4131.4	3926.7	3700.0	3502.6	3312.5	3137.0	2961.5	2786.0	2610.5
65°	5403.8	5169.8	4913.8	4636.0	4372.7	4109.5	3831.6	3568.4	3363.6	3158.9	2961.5
62.5°	6529.8	6200.8	5842.5	5484.2	5162.5	4818.8	4497.0	4153.4	3831.6	3539.1	3297.8
60°	7875.3	7429.3	6990.5	6529.8	6083.8	5615.8	5206.3	4782.2	4380.0	4021.7	3670.8
57.5°	9359.7	8840.5	8314.0	7751.0	7144.1	6595.7	6039.9	5484.2	5008.9	4533.6	4138.7
55°	10866.0	10317.6	9725.3	9089.1	8423.7	7721.7	6968.6	6347.0	5696.3	5140.5	4628.7
52.5°	12299.2	11728.9	11114.6	10529.7	9732.6	8928.3	8102.0	7283.0	6522.5	5813.2	5191.7
50°	13578.9	13023.1	12430.8	11750.8	11012.3	10156.7	9235.4	8314.0	7414.6	6581.0	5805.9
47.5°	14748.8	14207.7	13615.4	12935.4	12262.7	11312.1	10383.4	9367.0	8365.2	7407.3	6500.6
45°	15845.7	15297.2	14683.0	14032.2	13257.1	12408.9	11451.0	10427.3	9352.4	8277.5	7231.8
42.5°	16840.1	16291.7	15670.2	14997.4	14229.7	13388.7	12460.1	11429.1	10346.8	9176.9	8028.9
40°	17710.3	17176.5	16576.9	15874.9	15158.3	14273.5	13359.5	12379.7	11260.9	10083.6	8818.6
37.5°	18470.8	17973.5	17381.2	16686.6	15926.1	15136.4	14193.1	13213.3	12204.2	10924.5	9630.2
35°	19143.5	18682.8	18075.9	17417.8	16672.0	15838.4	14953.6	13995.7	12906.1	11706.9	10449.2
32.5°	19728.5	19260.5	18704.8	18046.7	17322.7	16540.3	15633.6	14668.4	13637.4	12416.2	11048.8
30°	20225.7	19772.4	19245.9	18624.3	17929.7	17154.6	16269.8	15297.2	14244.3	13030.4	11677.7
27.5°	20657.1	20225.7	19713.9	19136.2	18470.8	17724.9	16832.8	15853.0	14778.1	13608.1	12255.3
25°	21030.1	20613.3	20138.0	19589.5	18931.4	18200.2	17359.3	16335.6	15260.7	14083.4	12745.3
22.5°	21366.4	20964.3	20489.0	19955.2	19355.6	18624.3	17776.1	16759.7	15670.2	14507.5	13191.3
20°	21666.2	21293.3	20825.3	20276.9	19677.3	18938.8	18097.8	17132.6	16035.8	14895.1	13593.5
17.5°	21907.5	21578.5	21110.5	20532.8	19933.2	19216.6	18397.6	17512.9	16350.2	15224.1	13929.9
15°	22075.7	21754.0	21329.9	20744.9	20159.9	19450.6	18631.6	17717.6	16635.4	15487.4	14207.7
12.5°	22192.7	21849.0	21454.2	20913.1	20328.1	19626.1	18829.1	17929.7	16876.7	15721.4	14449.0
10°	22222.0	21907.5	21512.7	21030.1	20459.7	19779.7	18997.3	18105.2	17074.1	15904.2	14646.5
7.5°	22236.6	21936.8	21578.5	21117.8	20554.8	19896.7	19121.6	18244.1	17220.4	16057.7	14792.7
5°	22229.3	21944.1	21622.4	21176.3	20613.3	19962.5	19202.0	18339.2	17322.7	16160.1	14902.4
2.5°	22207.3	21951.4	21651.6	21220.2	20679.1	20035.6	19282.4	18448.8	17432.4	16247.8	14990.1
0°	22265.8	22046.5	21666.2	21205.6	20693.7	20035.6	19275.1	18463.5	17447.1	16240.5	14982.8



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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°	182.8	175.5	175.5	168.2	160.9	153.6	138.9	131.6	117.0	95.1	73.1
85°	394.9	372.9	351.0	336.4	321.7	307.1	285.2	263.2	234.0	190.1	146.2
82.5°	694.7	650.8	606.9	555.7	511.9	468.0	431.4	394.9	351.0	285.2	219.4
80°	994.5	928.7	862.8	789.7	723.9	650.8	585.0	526.5	468.0	380.2	292.5
77.5°	1294.3	1206.5	1111.5	1023.7	928.7	833.6	738.5	658.1	570.4	468.0	365.6
75°	1572.1	1469.8	1382.0	1257.7	1140.7	1016.4	892.1	782.4	672.7	548.4	438.7
72.5°	1850.0	1718.4	1594.1	1477.1	1345.5	1191.9	1053.0	914.0	775.1	628.9	497.2
70°	2127.9	1967.0	1813.4	1674.5	1528.3	1374.7	1206.5	1045.7	877.5	702.0	548.4
67.5°	2413.0	2230.2	2054.7	1879.3	1711.1	1535.6	1360.1	1177.3	979.8	775.1	606.9
65°	2727.5	2500.8	2288.7	2091.3	1893.9	1703.8	1506.3	1308.9	1089.5	855.5	658.1
62.5°	3041.9	2793.3	2544.7	2296.0	2076.7	1864.6	1652.6	1433.2	1191.9	943.3	709.3
60°	3378.3	3093.1	2807.9	2530.0	2259.5	2025.5	1791.5	1557.5	1301.6	1023.7	760.5
57.5°	3751.2	3407.5	3085.8	2771.3	2464.2	2186.4	1930.4	1681.8	1396.6	1104.2	819.0
55°	4175.3	3751.2	3371.0	3020.0	2683.6	2347.2	2069.4	1813.4	1506.3	1184.6	884.8
52.5°	4621.3	4131.4	3670.8	3275.9	2917.6	2537.4	2201.0	1915.8	1616.0	1265.0	943.3
50°	5140.5	4519.0	4007.1	3524.5	3122.3	2727.5	2339.9	2032.8	1725.7	1360.1	1001.8
47.5°	5674.3	4987.0	4343.5	3817.0	3341.7	2910.3	2500.8	2135.2	1828.1	1447.8	1060.3
45°	6295.9	5433.0	4723.7	4102.2	3553.8	3100.4	2661.7	2244.9	1915.8	1535.6	1118.8
42.5°	6895.5	5959.5	5118.6	4416.6	3795.1	3283.2	2807.9	2361.9	2003.6	1623.3	1170.0
40°	7604.8	6486.0	5498.8	4716.4	4036.4	3458.7	2954.2	2486.2	2084.0	1703.8	1221.1
37.5°	8284.8	7019.8	5959.5	5045.5	4270.4	3634.2	3100.4	2603.2	2157.1	1784.2	1287.0
35°	8957.5	7612.1	6398.2	5352.6	4511.7	3831.6	3246.6	2712.8	2230.2	1850.0	1345.5
32.5°	9601.0	8167.8	6844.3	5696.3	4774.9	4014.4	3378.3	2815.2	2303.4	1908.5	1404.0
30°	10200.6	8694.3	7283.0	6047.2	5016.2	4182.6	3502.6	2917.6	2391.1	1959.7	1462.5
27.5°	10749.0	9206.1	7721.7	6376.3	5242.9	4336.2	3634.2	3012.7	2464.2	2010.9	1513.6
25°	11246.3	9666.8	8123.9	6676.1	5447.6	4504.4	3758.5	3107.7	2530.0	2054.7	1557.5
22.5°	11714.2	10090.9	8489.5	6975.9	5696.3	4672.5	3875.5	3195.5	2595.9	2098.6	1601.4
20°	12123.7	10478.5	8840.5	7275.7	5915.6	4826.1	3977.9	3275.9	2654.4	2127.9	1645.3
17.5°	12452.8	10822.1	9155.0	7538.9	6105.7	4957.7	4065.6	3349.0	2705.5	2164.4	1674.5
15°	12745.3	11114.6	9418.2	7765.6	6273.9	5067.4	4146.1	3407.5	2749.4	2186.4	1711.1
12.5°	12993.9	11363.3	9644.9	7963.1	6420.2	5162.5	4211.9	3451.4	2786.0	2208.3	1733.0
10°	13198.6	11560.7	9835.0	8116.6	6537.2	5235.6	4263.0	3495.3	2815.2	2230.2	1754.9
7.5°	13352.2	11706.9	9973.9	8248.2	6632.2	5286.8	4306.9	3524.5	2844.5	2244.9	1791.5
5°	13469.2	11831.2	10083.6	8336.0	6705.3	5359.9	4358.1	3561.1	2873.7	2259.5	1791.5
2.5°	13556.9	11933.6	10171.4	8409.1	6763.8	5345.3	4358.1	3553.8	2873.7	2259.5	1784.2
0°	13542.3	11940.9	10164.0	8409.1	6763.8	5330.6	4358.1	3546.4	2873.7	2259.5	1784.2



REPORT NUMBER: P628567
 CATALOG NUMBER: EPH-VN-08-E-735-U-LAM

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	51.2	36.6	14.6	0.0
85°	109.7	73.1	36.6	0.0
82.5°	160.9	102.4	51.2	0.0
80°	212.1	138.9	65.8	0.0
77.5°	270.6	175.5	87.7	0.0
75°	321.7	204.7	102.4	0.0
72.5°	372.9	241.3	117.0	0.0
70°	416.8	270.6	131.6	0.0
67.5°	460.7	307.1	153.6	0.0
65°	497.2	336.4	168.2	0.0
62.5°	526.5	372.9	182.8	0.0
60°	563.0	402.2	197.4	0.0
57.5°	592.3	424.1	212.1	0.0
55°	621.5	438.7	226.7	0.0
52.5°	650.8	460.7	241.3	0.0
50°	680.0	482.6	255.9	0.0
47.5°	709.3	497.2	263.2	0.0
45°	753.2	519.2	277.9	0.0
42.5°	789.7	533.8	292.5	0.0
40°	826.3	548.4	299.8	0.0
37.5°	862.8	563.0	314.4	0.0
35°	899.4	577.7	321.7	0.0
32.5°	928.7	592.3	329.1	0.0
30°	957.9	606.9	336.4	0.0
27.5°	987.2	614.2	343.7	0.0
25°	1009.1	628.9	351.0	0.0
22.5°	1031.0	636.2	358.3	0.0
20°	1045.7	643.5	365.6	0.0
17.5°	1067.6	650.8	372.9	0.0
15°	1074.9	658.1	387.5	0.0
12.5°	1089.5	665.4	387.5	0.0
10°	1096.8	672.7	387.5	0.0
7.5°	1111.5	672.7	387.5	0.0
5°	1104.2	672.7	387.5	0.0
2.5°	1104.2	672.7	387.5	0.0
0°	1096.8	672.7	387.5	0.0

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