

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: P628566

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

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628566
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-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

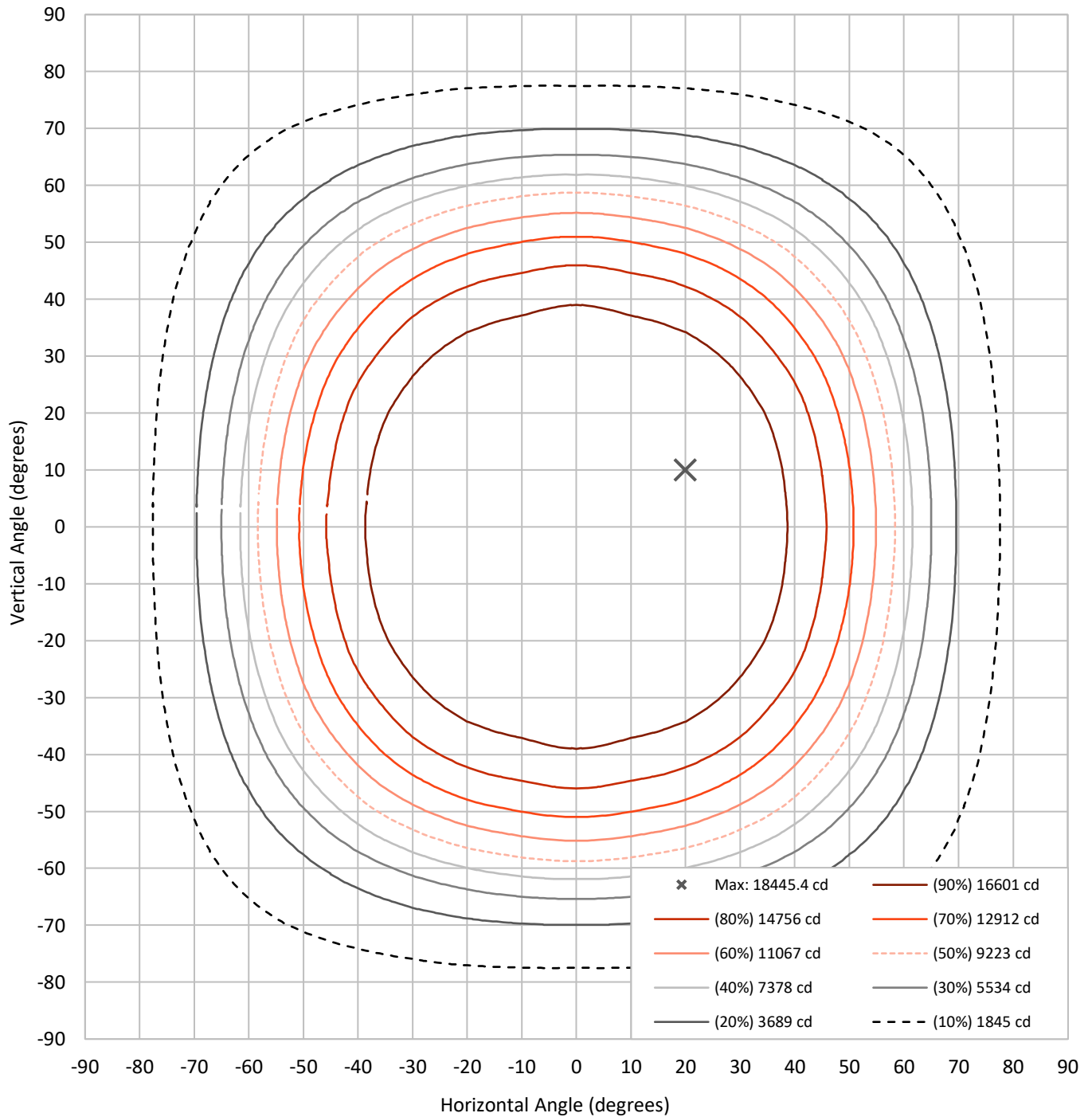
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	56587.8 lumens	Max Intensity:	18445.4 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	115.9 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	34723.5 lumens	Field Lumens:	41627.5 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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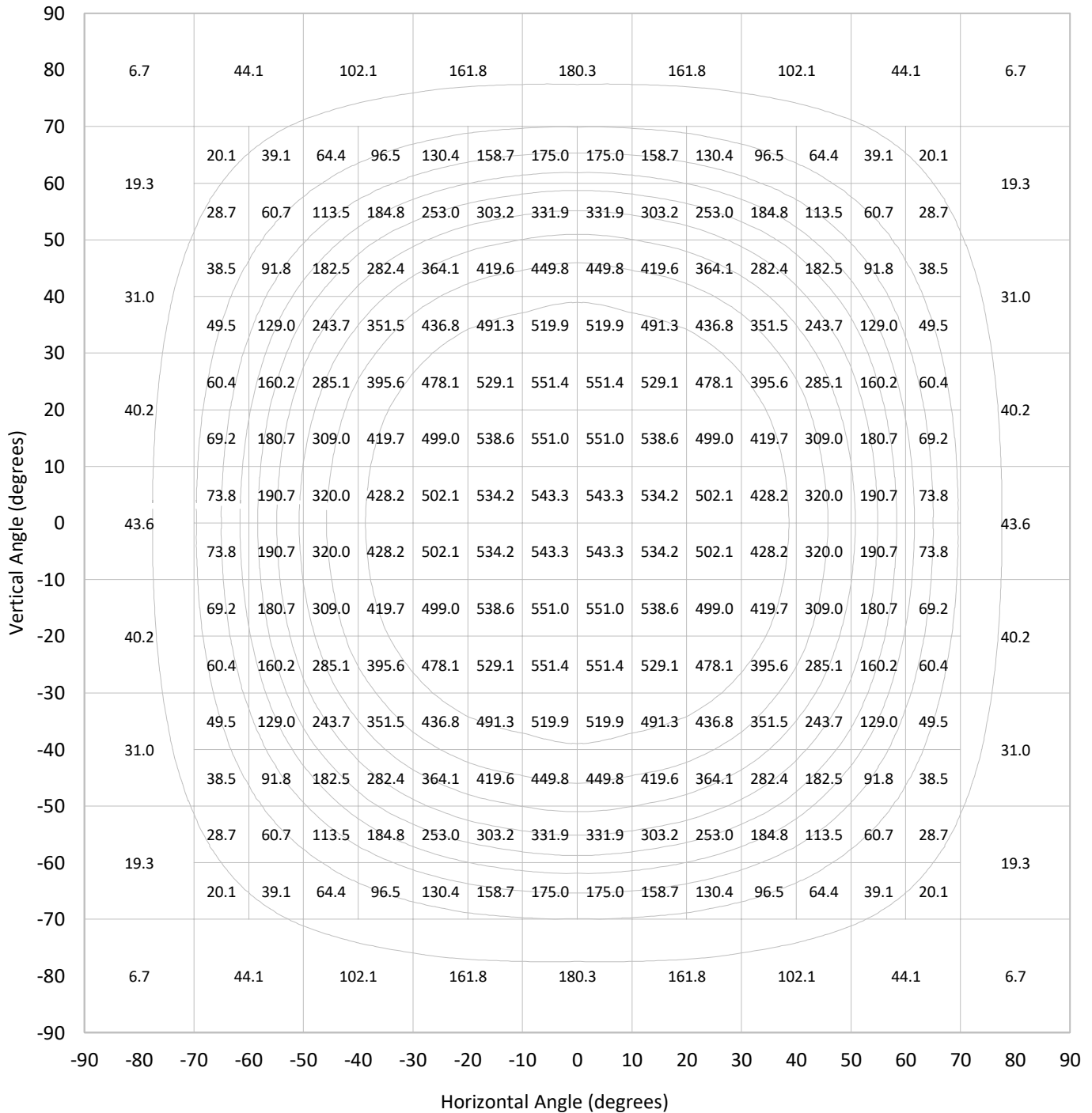
Iso-Candela Plot





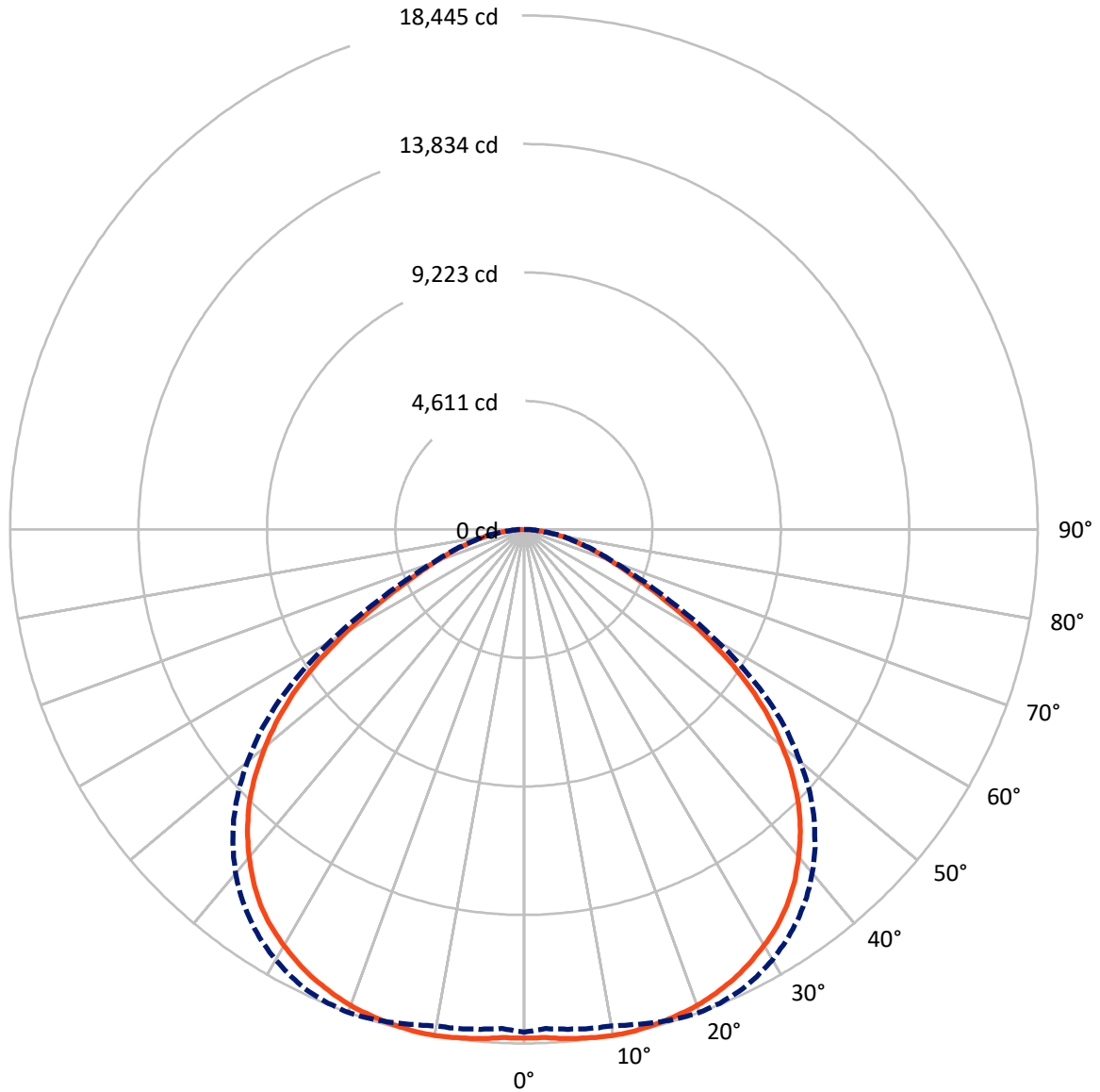
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Lumen Table



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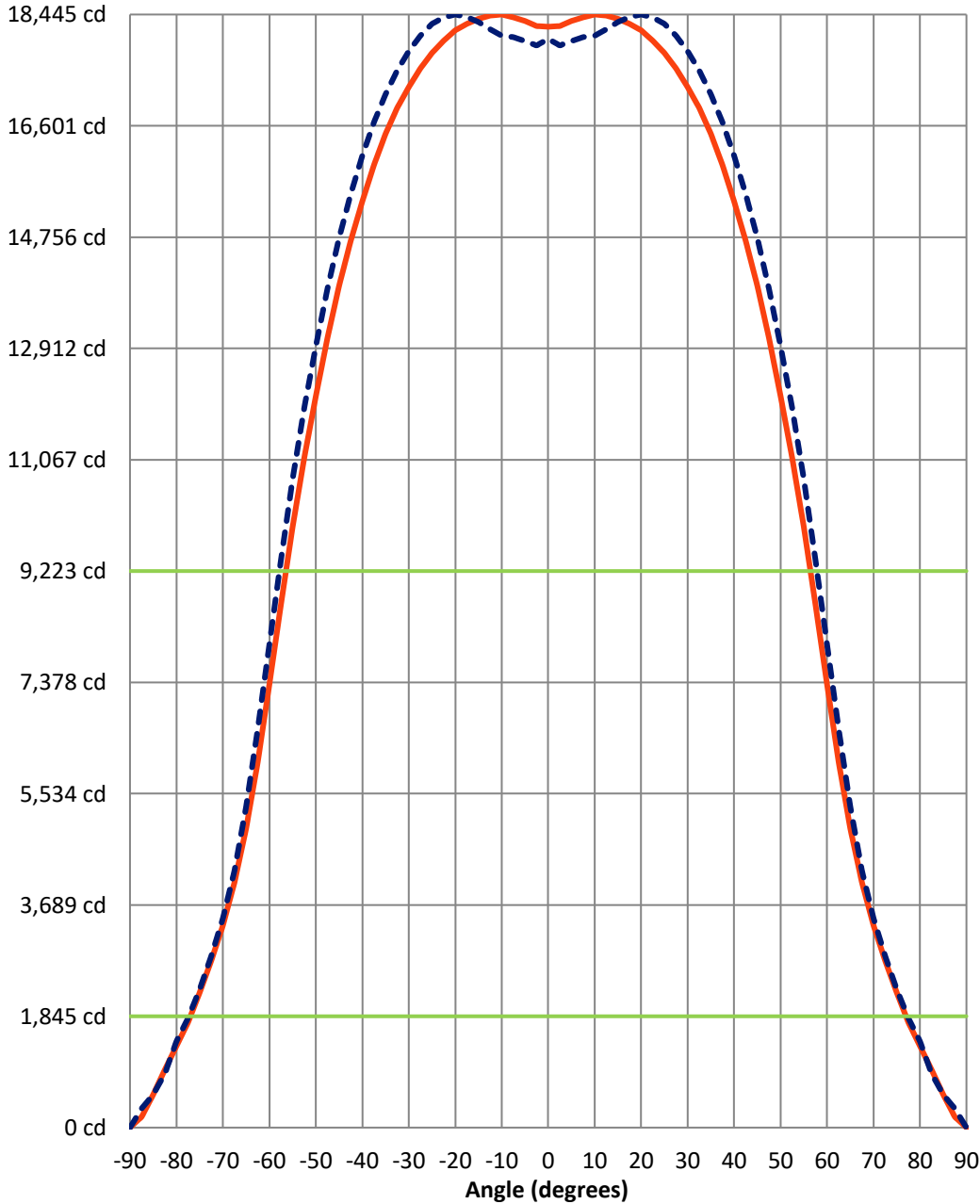
Luminous Intensity Polar Plot



— 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: 34723.5
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 41627.5
 Efficiency: 73.6%

Spill:
 Lumens: 14960.3
 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°	148.8	160.8	166.7	172.7	178.6	184.6	190.5	184.6	178.6	178.6	172.7
85°	398.9	410.8	416.8	458.5	500.1	523.9	553.7	547.8	547.8	541.8	535.9
82.5°	797.8	833.6	863.3	905.0	928.8	964.5	988.4	970.5	958.6	934.8	916.9
80°	1417.0	1428.9	1434.9	1440.9	1411.1	1405.1	1393.2	1375.4	1351.5	1321.8	1292.0
77.5°	1804.0	1816.0	1827.9	1816.0	1810.0	1804.0	1786.2	1768.3	1744.5	1720.7	1685.0
75°	2387.5	2387.5	2387.5	2369.7	2357.8	2339.9	2310.1	2280.4	2238.7	2191.1	2137.5
72.5°	3006.7	3000.8	2994.8	2959.1	2929.3	2893.6	2851.9	2816.2	2768.6	2715.0	2643.6
70°	3655.7	3667.6	3673.6	3626.0	3590.2	3542.6	3489.0	3423.5	3352.1	3274.7	3173.5
67.5°	4548.8	4536.9	4525.0	4459.5	4411.9	4346.4	4269.0	4173.7	4066.6	3947.5	3804.6
65°	5656.3	5674.1	5638.4	5572.9	5483.6	5376.4	5257.3	5120.4	4959.6	4781.0	4578.6
62.5°	6995.9	7025.7	6984.0	6900.6	6787.5	6644.6	6477.9	6281.4	6061.1	5811.1	5561.0
60°	8520.1	8514.2	8436.8	8323.6	8174.8	7996.2	7811.6	7597.2	7347.2	7055.4	6751.8
57.5°	9919.3	9907.4	9812.1	9699.0	9550.1	9359.6	9163.1	8936.9	8674.9	8365.3	8014.0
55°	11175.6	11163.7	11068.4	10949.3	10794.5	10604.0	10425.4	10211.0	9955.0	9627.5	9252.4
52.5°	12289.0	12294.9	12211.6	12080.6	11913.9	11729.3	11556.6	11342.3	11098.2	10770.7	10407.5
50°	13313.0	13307.1	13217.8	13098.7	12943.9	12765.3	12592.6	12378.3	12122.3	11806.7	11455.4
47.5°	14265.7	14253.8	14152.6	14021.6	13860.8	13706.0	13545.3	13354.7	13086.8	12771.2	12420.0
45°	15063.5	15039.7	14938.5	14813.4	14658.6	14521.7	14378.8	14235.9	13950.1	13658.4	13325.0
42.5°	15748.2	15742.3	15641.0	15516.0	15361.2	15242.1	15111.1	14932.5	14694.4	14426.4	14099.0
40°	16403.2	16355.5	16254.3	16135.2	15992.3	15891.1	15760.1	15581.5	15349.3	15087.3	14771.8
37.5°	16891.4	16897.3	16790.2	16659.2	16534.1	16438.9	16319.8	16153.1	15950.7	15694.6	15379.1
35°	17355.8	17326.0	17236.7	17123.6	17010.5	16903.3	16778.3	16635.4	16468.6	16230.5	15932.8
32.5°	17659.4	17701.1	17593.9	17474.9	17409.4	17326.0	17195.0	17046.2	16897.3	16659.2	16391.2
30°	17992.9	17957.1	17873.8	17772.6	17724.9	17671.3	17558.2	17415.3	17242.7	17028.3	16778.3
27.5°	18225.1	18207.2	18106.0	18010.7	17986.9	17939.3	17850.0	17724.9	17552.3	17343.9	17111.7
25°	18326.3	18338.2	18242.9	18189.3	18189.3	18159.6	18088.1	17980.9	17808.3	17617.8	17391.5
22.5°	18373.9	18362.0	18296.5	18284.6	18314.4	18290.6	18260.8	18165.5	18010.7	17855.9	17665.4
20°	18403.7	18320.3	18260.8	18308.4	18344.1	18338.2	18314.4	18254.8	18183.4	18052.4	17885.7
17.5°	18338.2	18284.6	18213.2	18284.6	18362.0	18368.0	18344.1	18308.4	18290.6	18207.2	18058.4
15°	18177.4	18135.8	18147.7	18219.1	18308.4	18338.2	18356.0	18397.7	18373.9	18308.4	18177.4
12.5°	18070.3	18016.7	18070.3	18141.7	18189.3	18207.2	18350.1	18427.5	18427.5	18368.0	18284.6
10°	18040.5	17933.3	18004.8	18070.3	18094.1	18201.2	18320.3	18403.7	18445.4	18397.7	18290.6
7.5°	17980.9	17909.5	17939.3	17969.0	18106.0	18183.4	18248.9	18338.2	18397.7	18391.8	18296.5
5°	17951.2	17861.9	17873.8	17998.8	18094.1	18147.7	18171.5	18248.9	18338.2	18356.0	18284.6
2.5°	17873.8	17832.1	17921.4	17933.3	18004.8	18046.4	18070.3	18141.7	18254.8	18296.5	18266.7
0°	17832.1	17772.6	17713.0	17760.7	17879.7	17969.0	18004.8	18111.9	18242.9	18284.6	18219.1



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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°	166.7	160.8	154.8	148.8	154.8	154.8	154.8	148.8	154.8	148.8	148.8
85°	518.0	494.2	476.3	452.5	428.7	410.8	387.0	363.2	357.2	351.3	339.4
82.5°	893.1	863.3	833.6	797.8	762.1	720.4	678.8	631.1	619.2	607.3	589.4
80°	1256.3	1214.6	1172.9	1131.3	1095.5	1053.9	1006.2	952.6	916.9	887.1	851.4
77.5°	1637.3	1577.8	1518.3	1446.8	1405.1	1363.5	1315.8	1262.2	1208.7	1161.0	1107.4
75°	2072.0	2006.5	1946.9	1875.5	1798.1	1720.7	1643.3	1571.8	1494.4	1423.0	1351.5
72.5°	2554.2	2459.0	2363.7	2274.4	2179.1	2083.9	1982.7	1887.4	1792.1	1696.9	1595.7
70°	3060.3	2941.3	2822.2	2703.1	2578.1	2453.0	2334.0	2214.9	2095.8	1970.8	1857.6
67.5°	3655.7	3518.8	3364.0	3197.3	3012.7	2851.9	2697.1	2554.2	2411.4	2268.5	2125.6
65°	4400.0	4209.4	4001.1	3774.8	3560.5	3346.1	3119.9	2905.5	2738.8	2572.1	2411.4
62.5°	5316.9	5049.0	4757.2	4465.5	4203.5	3923.7	3661.7	3381.8	3119.9	2881.7	2685.2
60°	6412.4	6049.2	5692.0	5316.9	4953.7	4572.6	4239.2	3893.9	3566.4	3274.7	2988.9
57.5°	7621.1	7198.3	6769.6	6311.2	5817.0	5370.5	4918.0	4465.5	4078.5	3691.5	3369.9
55°	8847.6	8401.0	7918.8	7400.8	6859.0	6287.4	5674.1	5168.0	4638.1	4185.6	3768.9
52.5°	10014.6	9550.1	9050.0	8573.7	7924.7	7269.8	6597.0	5930.1	5310.9	4733.4	4227.3
50°	11056.5	10604.0	10121.7	9568.0	8966.7	8270.0	7519.8	6769.6	6037.3	5358.6	4727.4
47.5°	12009.1	11568.5	11086.3	10532.5	9984.8	9210.8	8454.6	7627.0	6811.3	6031.4	5293.1
45°	12902.2	12455.7	11955.5	11425.6	10794.5	10103.9	9323.9	8490.3	7615.1	6739.9	5888.5
42.5°	13712.0	13265.4	12759.3	12211.6	11586.4	10901.7	10145.5	9306.0	8424.8	7472.2	6537.4
40°	14420.5	13985.8	13497.6	12926.0	12342.6	11622.1	10877.9	10080.0	9169.1	8210.5	7180.5
37.5°	15039.7	14634.8	14152.6	13586.9	12967.7	12324.7	11556.6	10758.8	9937.2	8895.2	7841.4
35°	15587.5	15212.4	14718.2	14182.3	13575.0	12896.3	12175.8	11395.9	10508.7	9532.3	8508.2
32.5°	16063.8	15682.7	15230.2	14694.4	14104.9	13467.9	12729.6	11943.6	11104.1	10109.8	8996.4
30°	16468.6	16099.5	15670.8	15164.7	14599.1	13968.0	13247.6	12455.7	11598.3	10610.0	9508.5
27.5°	16819.9	16468.6	16051.9	15581.5	15039.7	14432.4	13706.0	12908.2	12032.9	11080.3	9978.8
25°	17123.6	16784.2	16397.2	15950.7	15414.8	14819.4	14134.7	13301.1	12425.9	11467.3	10377.7
22.5°	17397.5	17070.0	16683.0	16248.3	15760.1	15164.7	14474.1	13646.5	12759.3	11812.7	10740.9
20°	17641.6	17337.9	16956.9	16510.3	16022.1	15420.7	14736.0	13950.1	13057.0	12128.2	11068.4
17.5°	17838.1	17570.1	17189.1	16718.7	16230.5	15647.0	14980.2	14259.7	13313.0	12396.1	11342.3
15°	17975.0	17713.0	17367.7	16891.4	16415.1	15837.5	15170.7	14426.4	13545.3	12610.5	11568.5
12.5°	18070.3	17790.4	17468.9	17028.3	16552.0	15980.4	15331.4	14599.1	13741.7	12801.0	11765.0
10°	18094.1	17838.1	17516.5	17123.6	16659.2	16105.5	15468.4	14742.0	13902.5	12949.9	11925.8
7.5°	18106.0	17861.9	17570.1	17195.0	16736.6	16200.7	15569.6	14855.1	14021.6	13074.9	12044.9
5°	18100.0	17867.8	17605.9	17242.7	16784.2	16254.3	15635.1	14932.5	14104.9	13158.2	12134.2
2.5°	18082.2	17873.8	17629.7	17278.4	16837.8	16313.8	15700.6	15021.8	14194.2	13229.7	12205.6
0°	18129.8	17951.2	17641.6	17266.5	16849.7	16313.8	15694.6	15033.7	14206.1	13223.7	12199.7



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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°	148.8	142.9	142.9	136.9	131.0	125.0	113.1	107.2	95.3	77.4	59.5
85°	321.5	303.7	285.8	273.9	262.0	250.1	232.2	214.3	190.5	154.8	119.1
82.5°	565.6	529.9	494.2	452.5	416.8	381.1	351.3	321.5	285.8	232.2	178.6
80°	809.7	756.2	702.6	643.0	589.4	529.9	476.3	428.7	381.1	309.6	238.2
77.5°	1053.9	982.4	905.0	833.6	756.2	678.8	601.3	535.9	464.4	381.1	297.7
75°	1280.1	1196.7	1125.3	1024.1	928.8	827.6	726.4	637.1	547.8	446.5	357.2
72.5°	1506.4	1399.2	1298.0	1202.7	1095.5	970.5	857.4	744.2	631.1	512.0	404.9
70°	1732.6	1601.6	1476.6	1363.5	1244.4	1119.3	982.4	851.4	714.5	571.6	446.5
67.5°	1964.8	1816.0	1673.1	1530.2	1393.2	1250.3	1107.4	958.6	797.8	631.1	494.2
65°	2220.8	2036.3	1863.6	1702.8	1542.1	1387.3	1226.5	1065.8	887.1	696.6	535.9
62.5°	2476.8	2274.4	2072.0	1869.5	1690.9	1518.3	1345.6	1167.0	970.5	768.1	577.5
60°	2750.7	2518.5	2286.3	2060.1	1839.8	1649.2	1458.7	1268.2	1059.8	833.6	619.2
57.5°	3054.4	2774.5	2512.6	2256.5	2006.5	1780.2	1571.8	1369.4	1137.2	899.0	666.8
55°	3399.7	3054.4	2744.8	2459.0	2185.1	1911.2	1685.0	1476.6	1226.5	964.5	720.4
52.5°	3762.9	3364.0	2988.9	2667.4	2375.6	2066.0	1792.1	1559.9	1315.8	1030.0	768.1
50°	4185.6	3679.5	3262.8	2869.8	2542.3	2220.8	1905.3	1655.2	1405.1	1107.4	815.7
47.5°	4620.3	4060.6	3536.7	3108.0	2721.0	2369.7	2036.3	1738.6	1488.5	1178.9	863.3
45°	5126.4	4423.8	3846.3	3340.2	2893.6	2524.5	2167.2	1827.9	1559.9	1250.3	911.0
42.5°	5614.6	4852.5	4167.8	3596.2	3090.1	2673.3	2286.3	1923.1	1631.4	1321.8	952.6
40°	6192.1	5281.2	4477.4	3840.3	3286.6	2816.2	2405.4	2024.3	1696.9	1387.3	994.3
37.5°	6745.8	5715.8	4852.5	4108.2	3477.1	2959.1	2524.5	2119.6	1756.4	1452.8	1047.9
35°	7293.6	6198.1	5209.7	4358.3	3673.6	3119.9	2643.6	2208.9	1816.0	1506.4	1095.5
32.5°	7817.5	6650.6	5572.9	4638.1	3887.9	3268.7	2750.7	2292.3	1875.5	1554.0	1143.2
30°	8305.8	7079.3	5930.1	4923.9	4084.4	3405.7	2851.9	2375.6	1946.9	1595.7	1190.8
27.5°	8752.3	7496.0	6287.4	5191.9	4269.0	3530.7	2959.1	2453.0	2006.5	1637.3	1232.5
25°	9157.2	7871.1	6614.8	5436.0	4435.7	3667.6	3060.3	2530.4	2060.1	1673.1	1268.2
22.5°	9538.2	8216.5	6912.5	5680.1	4638.1	3804.6	3155.6	2601.9	2113.7	1708.8	1303.9
20°	9871.7	8532.0	7198.3	5924.2	4816.8	3929.6	3239.0	2667.4	2161.3	1732.6	1339.6
17.5°	10139.6	8811.9	7454.4	6138.5	4971.6	4036.8	3310.4	2726.9	2203.0	1762.4	1363.5
15°	10377.7	9050.0	7668.7	6323.1	5108.5	4126.1	3375.9	2774.5	2238.7	1780.2	1393.2
12.5°	10580.2	9252.4	7853.3	6483.9	5227.6	4203.5	3429.5	2810.3	2268.5	1798.1	1411.1
10°	10746.9	9413.2	8008.1	6608.9	5322.8	4263.0	3471.2	2846.0	2292.3	1816.0	1428.9
7.5°	10871.9	9532.3	8121.2	6716.1	5400.2	4304.7	3506.9	2869.8	2316.1	1827.9	1458.7
5°	10967.2	9633.5	8210.5	6787.5	5459.8	4364.3	3548.6	2899.6	2339.9	1839.8	1458.7
2.5°	11038.6	9716.9	8282.0	6847.1	5507.4	4352.3	3548.6	2893.6	2339.9	1839.8	1452.8
0°	11026.7	9722.8	8276.0	6847.1	5507.4	4340.4	3548.6	2887.7	2339.9	1839.8	1452.8



REPORT NUMBER: P628566
 CATALOG NUMBER: EPH-VN-08-D-735-U-LAM

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	41.7	29.8	11.9	0.0
85°	89.3	59.5	29.8	0.0
82.5°	131.0	83.4	41.7	0.0
80°	172.7	113.1	53.6	0.0
77.5°	220.3	142.9	71.4	0.0
75°	262.0	166.7	83.4	0.0
72.5°	303.7	196.5	95.3	0.0
70°	339.4	220.3	107.2	0.0
67.5°	375.1	250.1	125.0	0.0
65°	404.9	273.9	136.9	0.0
62.5°	428.7	303.7	148.8	0.0
60°	458.5	327.5	160.8	0.0
57.5°	482.3	345.3	172.7	0.0
55°	506.1	357.2	184.6	0.0
52.5°	529.9	375.1	196.5	0.0
50°	553.7	393.0	208.4	0.0
47.5°	577.5	404.9	214.3	0.0
45°	613.3	422.7	226.3	0.0
42.5°	643.0	434.6	238.2	0.0
40°	672.8	446.5	244.1	0.0
37.5°	702.6	458.5	256.0	0.0
35°	732.3	470.4	262.0	0.0
32.5°	756.2	482.3	267.9	0.0
30°	780.0	494.2	273.9	0.0
27.5°	803.8	500.1	279.8	0.0
25°	821.6	512.0	285.8	0.0
22.5°	839.5	518.0	291.7	0.0
20°	851.4	523.9	297.7	0.0
17.5°	869.3	529.9	303.7	0.0
15°	875.2	535.9	315.6	0.0
12.5°	887.1	541.8	315.6	0.0
10°	893.1	547.8	315.6	0.0
7.5°	905.0	547.8	315.6	0.0
5°	899.0	547.8	315.6	0.0
2.5°	899.0	547.8	315.6	0.0
0°	893.1	547.8	315.6	0.0

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