

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: P628560

Luminaire Tested: **EPH-VN-08-D-730-U-LAM**

Issue Date: 01/11/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P628560  
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-730-U-LAM  
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/  
LAMBERTIAN distribution lens  
Light Source: (128) 3000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

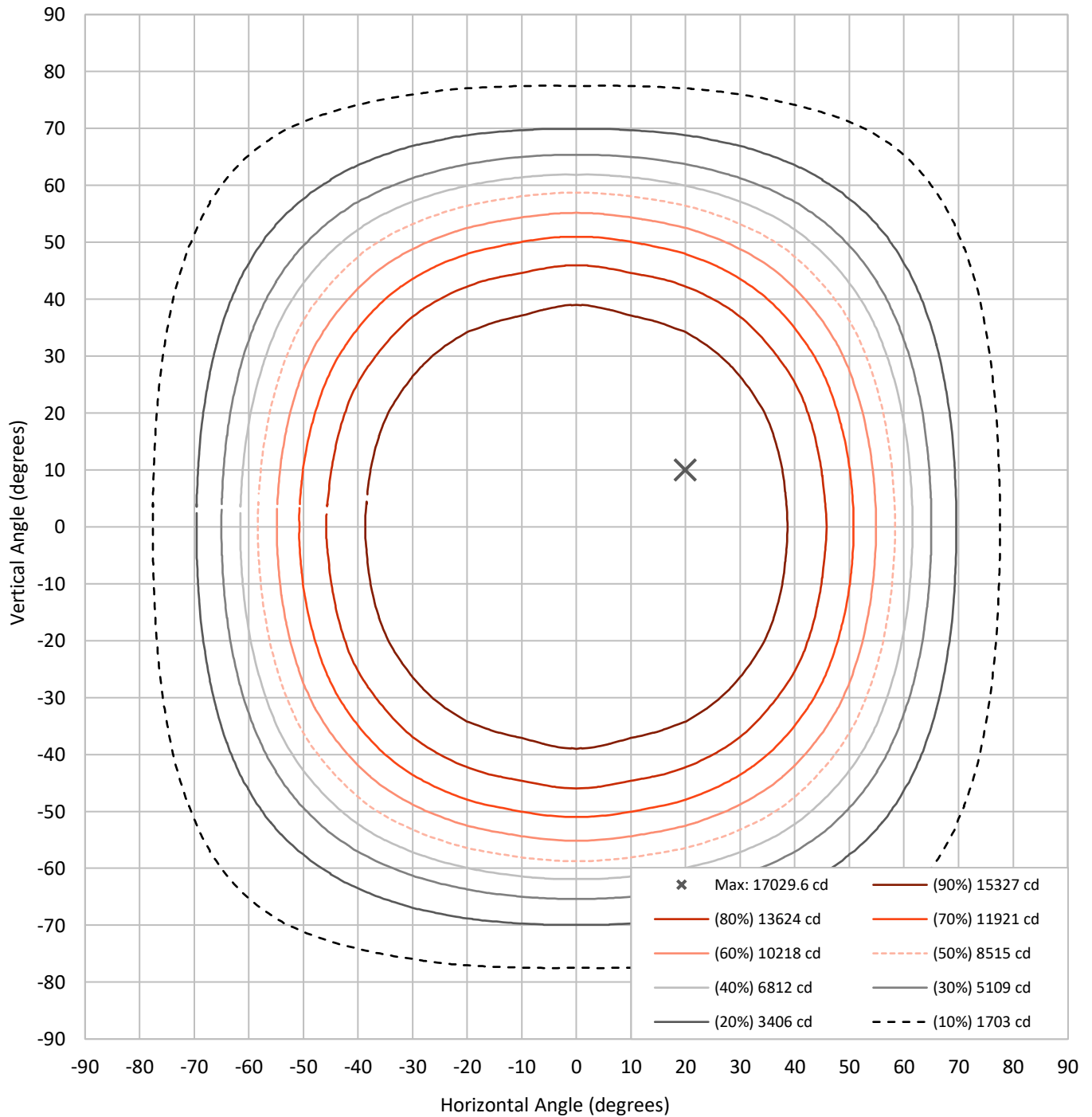
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	52244.6 lumens	Max Intensity:	17029.6 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	107.0 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	32058.4 lumens	Field Lumens:	38432.5 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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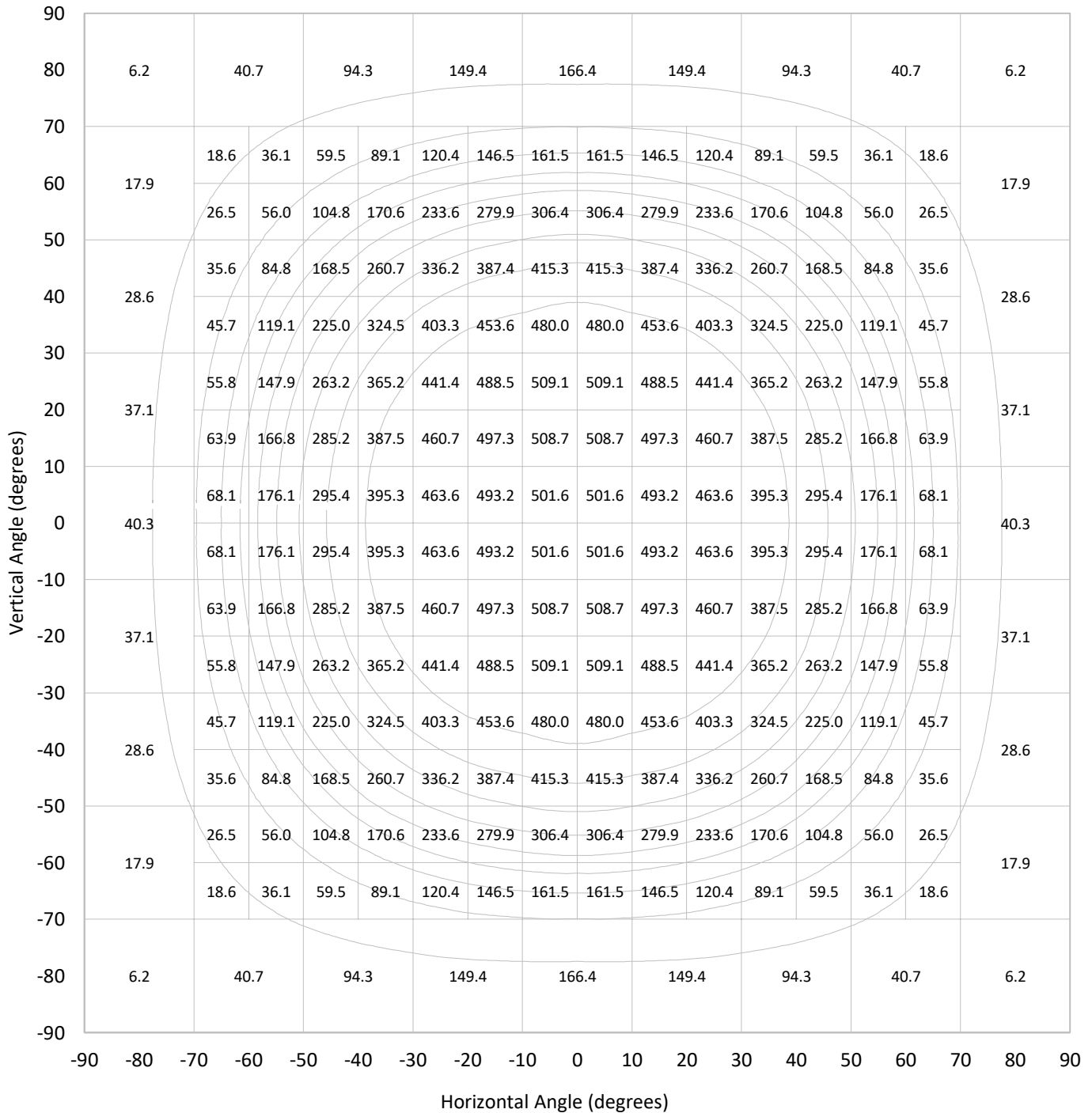
### Iso-Candela Plot





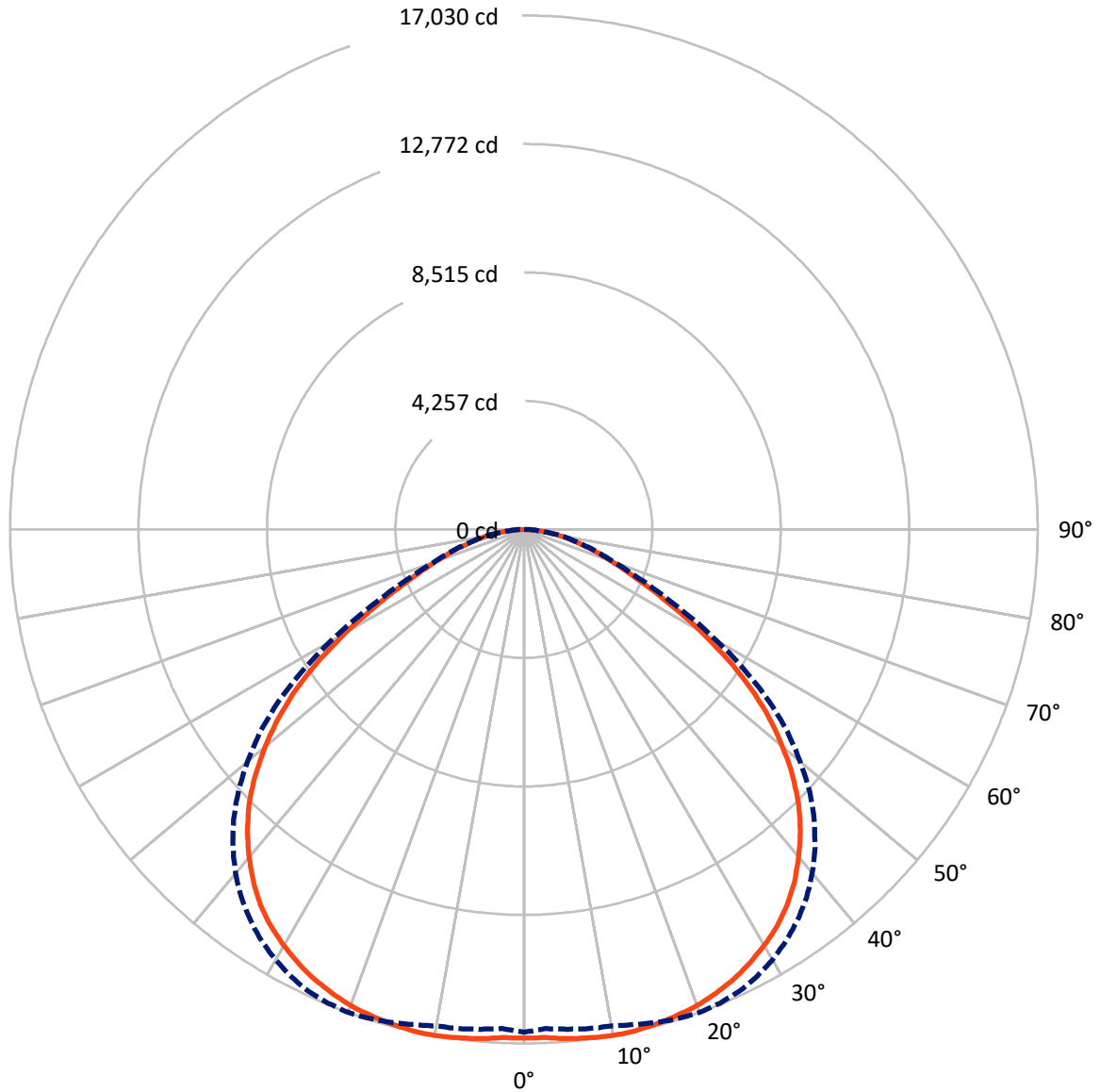
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### Lumen Table



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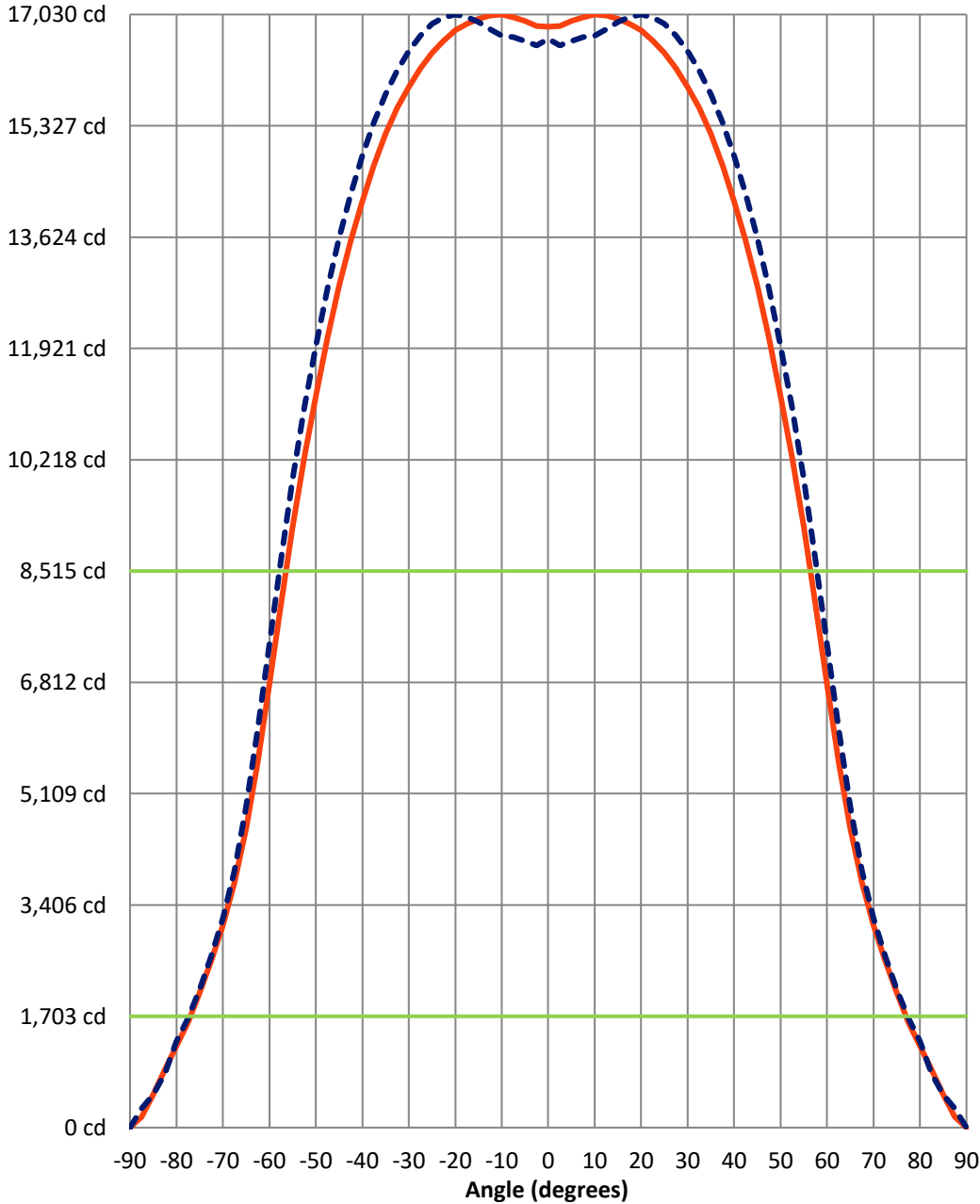
### Luminous Intensity Polar Plot



— 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: 32058.4  
 Efficiency: 61.4%

**Field:**  
 H Angle: 154.7°  
 V Angle: 154°  
 Lumens: 38432.5  
 Efficiency: 73.6%

**Spill:**  
 Lumens: 13812.1  
 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°	137.4	148.4	153.9	159.4	164.9	170.4	175.9	170.4	164.9	164.9	159.4
85°	368.3	379.3	384.8	423.3	461.7	483.7	511.2	505.7	505.7	500.2	494.7
82.5°	736.6	769.6	797.1	835.5	857.5	890.5	912.5	896.0	885.0	863.0	846.5
80°	1308.3	1319.3	1324.8	1330.3	1302.8	1297.3	1286.3	1269.8	1247.8	1220.3	1192.8
77.5°	1665.6	1676.6	1687.6	1676.6	1671.1	1665.6	1649.1	1632.6	1610.6	1588.6	1555.6
75°	2204.3	2204.3	2204.3	2187.8	2176.8	2160.3	2132.8	2105.3	2066.9	2022.9	1973.4
72.5°	2776.0	2770.5	2765.0	2732.0	2704.5	2671.5	2633.1	2600.1	2556.1	2506.6	2440.7
70°	3375.1	3386.1	3391.6	3347.7	3314.7	3270.7	3221.2	3160.8	3094.8	3023.3	2929.9
67.5°	4199.7	4188.7	4177.7	4117.2	4073.3	4012.8	3941.3	3853.4	3754.4	3644.5	3512.6
65°	5222.1	5238.6	5205.6	5145.2	5062.7	4963.8	4853.8	4727.4	4579.0	4414.1	4227.2
62.5°	6459.0	6486.4	6448.0	6371.0	6266.6	6134.6	5980.7	5799.3	5595.9	5365.1	5134.2
60°	7866.2	7860.7	7789.2	7684.8	7547.4	7382.4	7212.0	7014.1	6783.3	6513.9	6233.6
57.5°	9158.0	9147.0	9059.0	8954.6	8817.2	8641.3	8459.9	8251.0	8009.1	7723.3	7398.9
55°	10317.8	10306.8	10218.9	10108.9	9966.0	9790.1	9625.2	9427.3	9191.0	8888.6	8542.3
52.5°	11345.8	11351.3	11274.3	11153.4	10999.5	10829.1	10669.6	10471.8	10246.4	9944.0	9608.7
50°	12291.3	12285.8	12203.3	12093.4	11950.4	11785.5	11626.1	11428.2	11191.9	10900.5	10576.2
47.5°	13170.8	13159.8	13066.3	12945.4	12797.0	12654.1	12505.6	12329.7	12082.4	11791.0	11466.7
45°	13907.4	13885.4	13791.9	13676.5	13533.6	13407.1	13275.2	13143.3	12879.4	12610.1	12302.2
42.5°	14539.5	14534.0	14440.6	14325.1	14182.2	14072.3	13951.3	13786.4	13566.6	13319.2	13016.9
40°	15144.2	15100.2	15006.8	14896.8	14764.9	14671.4	14550.5	14385.6	14171.2	13929.4	13638.0
37.5°	15594.9	15600.4	15501.5	15380.6	15265.1	15177.2	15067.2	14913.3	14726.4	14490.0	14198.7
35°	16023.7	15996.2	15913.8	15809.3	15704.9	15605.9	15490.5	15358.6	15204.7	14984.8	14709.9
32.5°	16304.0	16342.5	16243.6	16133.6	16073.2	15996.2	15875.3	15737.9	15600.4	15380.6	15133.2
30°	16611.9	16578.9	16501.9	16408.5	16364.5	16315.0	16210.6	16078.7	15919.3	15721.4	15490.5
27.5°	16826.3	16809.8	16716.3	16628.4	16606.4	16562.4	16480.0	16364.5	16205.1	16012.7	15798.3
25°	16919.7	16930.7	16842.8	16793.3	16793.3	16765.8	16699.8	16600.9	16441.5	16265.6	16056.7
22.5°	16963.7	16952.7	16892.2	16881.2	16908.7	16886.7	16859.2	16771.3	16628.4	16485.4	16309.5
20°	16991.2	16914.2	16859.2	16903.2	16936.2	16930.7	16908.7	16853.7	16787.8	16666.8	16512.9
17.5°	16930.7	16881.2	16815.3	16881.2	16952.7	16958.2	16936.2	16903.2	16886.7	16809.8	16672.3
15°	16782.3	16743.8	16754.8	16820.8	16903.2	16930.7	16947.2	16985.7	16963.7	16903.2	16782.3
12.5°	16683.3	16633.9	16683.3	16749.3	16793.3	16809.8	16941.7	17013.2	17013.2	16958.2	16881.2
10°	16655.9	16556.9	16622.9	16683.3	16705.3	16804.3	16914.2	16991.2	17029.6	16985.7	16886.7
7.5°	16600.9	16534.9	16562.4	16589.9	16716.3	16787.8	16848.2	16930.7	16985.7	16980.2	16892.2
5°	16573.4	16490.9	16501.9	16617.4	16705.3	16754.8	16776.8	16848.2	16930.7	16947.2	16881.2
2.5°	16501.9	16463.5	16545.9	16556.9	16622.9	16661.4	16683.3	16749.3	16853.7	16892.2	16864.7
0°	16463.5	16408.5	16353.5	16397.5	16507.4	16589.9	16622.9	16721.8	16842.8	16881.2	16820.8



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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°	153.9	148.4	142.9	137.4	142.9	142.9	142.9	137.4	142.9	137.4	137.4
85°	478.2	456.2	439.8	417.8	395.8	379.3	357.3	335.3	329.8	324.3	313.3
82.5°	824.5	797.1	769.6	736.6	703.6	665.1	626.7	582.7	571.7	560.7	544.2
80°	1159.9	1121.4	1082.9	1044.4	1011.4	973.0	929.0	879.5	846.5	819.1	786.1
77.5°	1511.7	1456.7	1401.7	1335.8	1297.3	1258.8	1214.8	1165.4	1115.9	1071.9	1022.4
75°	1912.9	1852.5	1797.5	1731.5	1660.1	1588.6	1517.2	1451.2	1379.7	1313.8	1247.8
72.5°	2358.2	2270.3	2182.3	2099.8	2011.9	1923.9	1830.5	1742.5	1654.6	1566.6	1473.2
70°	2825.4	2715.5	2605.6	2495.6	2380.2	2264.8	2154.8	2044.9	1934.9	1819.5	1715.1
67.5°	3375.1	3248.7	3105.8	2951.9	2781.5	2633.1	2490.1	2358.2	2226.3	2094.4	1962.4
65°	4062.3	3886.4	3694.0	3485.1	3287.2	3089.3	2880.4	2682.5	2528.6	2374.7	2226.3
62.5°	4908.8	4661.4	4392.1	4122.7	3880.9	3622.5	3380.6	3122.3	2880.4	2660.5	2479.1
60°	5920.2	5584.9	5255.1	4908.8	4573.5	4221.7	3913.9	3595.0	3292.7	3023.3	2759.5
57.5°	7036.1	6645.9	6250.1	5826.8	5370.6	4958.3	4540.5	4122.7	3765.4	3408.1	3111.3
55°	8168.5	7756.2	7311.0	6832.7	6332.5	5804.8	5238.6	4771.4	4282.1	3864.4	3479.6
52.5°	9245.9	8817.2	8355.4	7915.7	7316.5	6711.8	6090.7	5475.0	4903.3	4370.1	3902.9
50°	10207.9	9790.1	9344.9	8833.6	8278.5	7635.3	6942.7	6250.1	5573.9	4947.3	4364.6
47.5°	11087.4	10680.6	10235.4	9724.2	9218.4	8503.8	7805.7	7041.6	6288.5	5568.4	4886.8
45°	11912.0	11499.7	11037.9	10548.7	9966.0	9328.4	8608.3	7838.7	7030.6	6222.6	5436.5
42.5°	12659.5	12247.3	11780.0	11274.3	10697.1	10065.0	9366.9	8591.8	7778.2	6898.7	6035.7
40°	13313.7	12912.4	12461.7	11933.9	11395.2	10730.1	10043.0	9306.4	8465.4	7580.3	6629.4
37.5°	13885.4	13511.6	13066.3	12544.1	11972.4	11378.8	10669.6	9933.0	9174.5	8212.5	7239.5
35°	14391.1	14044.8	13588.5	13093.8	12533.1	11906.5	11241.3	10521.2	9702.2	8800.7	7855.2
32.5°	14830.9	14479.1	14061.3	13566.6	13022.3	12434.2	11752.5	11026.9	10251.9	9333.9	8305.9
30°	15204.7	14863.8	14468.1	14000.8	13478.6	12895.9	12230.8	11499.7	10708.1	9795.6	8778.7
27.5°	15529.0	15204.7	14819.9	14385.6	13885.4	13324.7	12654.1	11917.5	11109.4	10229.9	9212.9
25°	15809.3	15496.0	15138.7	14726.4	14231.7	13682.0	13049.8	12280.3	11472.2	10587.2	9581.2
22.5°	16062.2	15759.8	15402.5	15001.3	14550.5	14000.8	13363.2	12599.1	11780.0	10906.0	9916.6
20°	16287.6	16007.2	15655.4	15243.1	14792.4	14237.2	13605.0	12879.4	12054.9	11197.4	10218.9
17.5°	16469.0	16221.6	15869.8	15435.5	14984.8	14446.1	13830.4	13165.3	12291.3	11444.7	10471.8
15°	16595.4	16353.5	16034.7	15594.9	15155.2	14622.0	14006.3	13319.2	12505.6	11642.6	10680.6
12.5°	16683.3	16425.0	16128.1	15721.4	15281.6	14753.9	14154.7	13478.6	12687.0	11818.5	10862.0
10°	16705.3	16469.0	16172.1	15809.3	15380.6	14869.3	14281.2	13610.5	12835.5	11955.9	11010.5
7.5°	16716.3	16490.9	16221.6	15875.3	15452.0	14957.3	14374.6	13715.0	12945.4	12071.4	11120.4
5°	16710.8	16496.4	16254.6	15919.3	15496.0	15006.8	14435.1	13786.4	13022.3	12148.3	11202.8
2.5°	16694.3	16501.9	16276.6	15952.2	15545.5	15061.7	14495.5	13868.9	13104.8	12214.3	11268.8
0°	16738.3	16573.4	16287.6	15941.2	15556.5	15061.7	14490.0	13879.9	13115.8	12208.8	11263.3





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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°	137.4	131.9	131.9	126.4	120.9	115.4	104.4	98.9	88.0	71.5	55.0
85°	296.8	280.3	263.9	252.9	241.9	230.9	214.4	197.9	175.9	142.9	109.9
82.5°	522.2	489.2	456.2	417.8	384.8	351.8	324.3	296.8	263.9	214.4	164.9
80°	747.6	698.1	648.6	593.7	544.2	489.2	439.8	395.8	351.8	285.8	219.9
77.5°	973.0	907.0	835.5	769.6	698.1	626.7	555.2	494.7	428.8	351.8	274.8
75°	1181.9	1104.9	1038.9	945.5	857.5	764.1	670.6	588.2	505.7	412.3	329.8
72.5°	1390.7	1291.8	1198.3	1110.4	1011.4	896.0	791.6	687.1	582.7	472.7	373.8
70°	1599.6	1478.7	1363.3	1258.8	1148.9	1033.4	907.0	786.1	659.6	527.7	412.3
67.5°	1814.0	1676.6	1544.7	1412.7	1286.3	1154.4	1022.4	885.0	736.6	582.7	456.2
65°	2050.4	1880.0	1720.6	1572.1	1423.7	1280.8	1132.4	984.0	819.1	643.1	494.7
62.5°	2286.7	2099.8	1912.9	1726.1	1561.1	1401.7	1242.3	1077.4	896.0	709.1	533.2
60°	2539.6	2325.2	2110.8	1902.0	1698.6	1522.7	1346.8	1170.9	978.5	769.6	571.7
57.5°	2820.0	2561.6	2319.7	2083.4	1852.5	1643.6	1451.2	1264.3	1049.9	830.0	615.7
55°	3138.8	2820.0	2534.1	2270.3	2017.4	1764.5	1555.6	1363.3	1132.4	890.5	665.1
52.5°	3474.1	3105.8	2759.5	2462.6	2193.3	1907.5	1654.6	1440.2	1214.8	951.0	709.1
50°	3864.4	3397.1	3012.3	2649.5	2347.2	2050.4	1759.0	1528.2	1297.3	1022.4	753.1
47.5°	4265.7	3748.9	3265.2	2869.4	2512.1	2187.8	1880.0	1605.1	1374.2	1088.4	797.1
45°	4732.9	4084.3	3551.1	3083.8	2671.5	2330.7	2000.9	1687.6	1440.2	1154.4	841.0
42.5°	5183.7	4480.0	3847.9	3320.2	2852.9	2468.1	2110.8	1775.5	1506.2	1220.3	879.5
40°	5716.9	4875.8	4133.7	3545.6	3034.3	2600.1	2220.8	1869.0	1566.6	1280.8	918.0
37.5°	6228.1	5277.1	4480.0	3792.9	3210.2	2732.0	2330.7	1956.9	1621.6	1341.3	967.5
35°	6733.8	5722.4	4809.9	4023.8	3391.6	2880.4	2440.7	2039.4	1676.6	1390.7	1011.4
32.5°	7217.5	6140.1	5145.2	4282.1	3589.5	3017.8	2539.6	2116.3	1731.5	1434.7	1055.4
30°	7668.3	6535.9	5475.0	4546.0	3770.9	3144.3	2633.1	2193.3	1797.5	1473.2	1099.4
27.5°	8080.6	6920.7	5804.8	4793.4	3941.3	3259.7	2732.0	2264.8	1852.5	1511.7	1137.9
25°	8454.4	7267.0	6107.1	5018.7	4095.3	3386.1	2825.4	2336.2	1902.0	1544.7	1170.9
22.5°	8806.2	7585.8	6382.0	5244.1	4282.1	3512.6	2913.4	2402.2	1951.4	1577.6	1203.8
20°	9114.0	7877.2	6645.9	5469.5	4447.1	3628.0	2990.4	2462.6	1995.4	1599.6	1236.8
17.5°	9361.4	8135.5	6882.2	5667.4	4590.0	3727.0	3056.3	2517.6	2033.9	1627.1	1258.8
15°	9581.2	8355.4	7080.1	5837.8	4716.4	3809.4	3116.8	2561.6	2066.9	1643.6	1286.3
12.5°	9768.1	8542.3	7250.5	5986.2	4826.4	3880.9	3166.3	2594.6	2094.4	1660.1	1302.8
10°	9922.1	8690.7	7393.4	6101.6	4914.3	3935.8	3204.7	2627.6	2116.3	1676.6	1319.3
7.5°	10037.5	8800.7	7497.9	6200.6	4985.8	3974.3	3237.7	2649.5	2138.3	1687.6	1346.8
5°	10125.4	8894.1	7580.3	6266.6	5040.7	4029.3	3276.2	2677.0	2160.3	1698.6	1346.8
2.5°	10191.4	8971.1	7646.3	6321.5	5084.7	4018.3	3276.2	2671.5	2160.3	1698.6	1341.3
0°	10180.4	8976.6	7640.8	6321.5	5084.7	4007.3	3276.2	2666.0	2160.3	1698.6	1341.3



REPORT NUMBER: P628560  
 CATALOG NUMBER: EPH-VN-08-D-730-U-LAM

**CANDELA DISTRIBUTION (continued):**

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	38.5	27.5	11.0	0.0
85°	82.5	55.0	27.5	0.0
82.5°	120.9	77.0	38.5	0.0
80°	159.4	104.4	49.5	0.0
77.5°	203.4	131.9	66.0	0.0
75°	241.9	153.9	77.0	0.0
72.5°	280.3	181.4	88.0	0.0
70°	313.3	203.4	98.9	0.0
67.5°	346.3	230.9	115.4	0.0
65°	373.8	252.9	126.4	0.0
62.5°	395.8	280.3	137.4	0.0
60°	423.3	302.3	148.4	0.0
57.5°	445.3	318.8	159.4	0.0
55°	467.2	329.8	170.4	0.0
52.5°	489.2	346.3	181.4	0.0
50°	511.2	362.8	192.4	0.0
47.5°	533.2	373.8	197.9	0.0
45°	566.2	390.3	208.9	0.0
42.5°	593.7	401.3	219.9	0.0
40°	621.2	412.3	225.4	0.0
37.5°	648.6	423.3	236.4	0.0
35°	676.1	434.3	241.9	0.0
32.5°	698.1	445.3	247.4	0.0
30°	720.1	456.2	252.9	0.0
27.5°	742.1	461.7	258.4	0.0
25°	758.6	472.7	263.9	0.0
22.5°	775.1	478.2	269.4	0.0
20°	786.1	483.7	274.8	0.0
17.5°	802.6	489.2	280.3	0.0
15°	808.1	494.7	291.3	0.0
12.5°	819.1	500.2	291.3	0.0
10°	824.5	505.7	291.3	0.0
7.5°	835.5	505.7	291.3	0.0
5°	830.0	505.7	291.3	0.0
2.5°	830.0	505.7	291.3	0.0
0°	824.5	505.7	291.3	0.0

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