

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: P628579

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

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628579
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-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

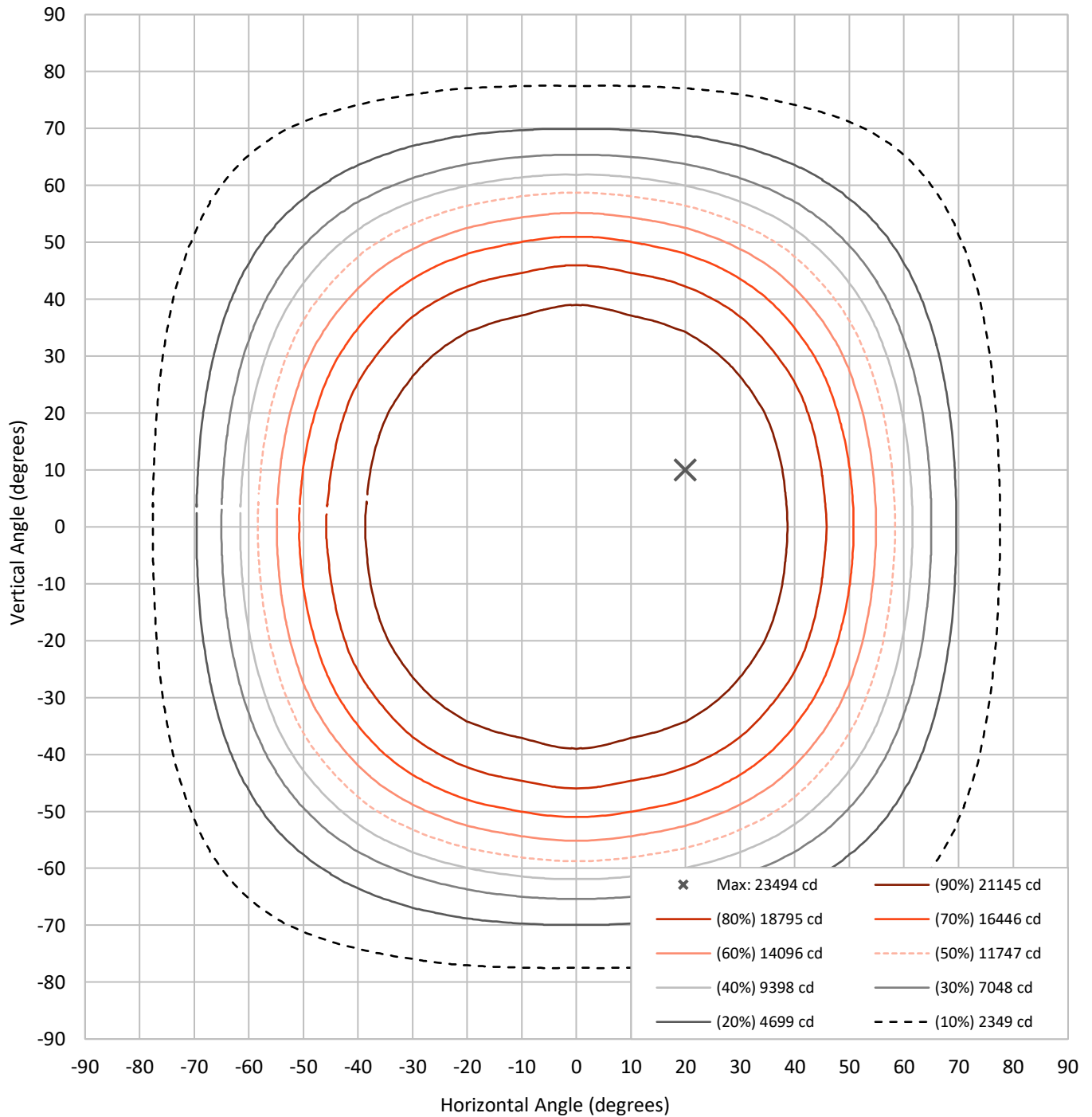
Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	72076.4 lumens	Max Intensity:	23494 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	115.0 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:	44227.6 lumens	Field Lumens:	53021.3 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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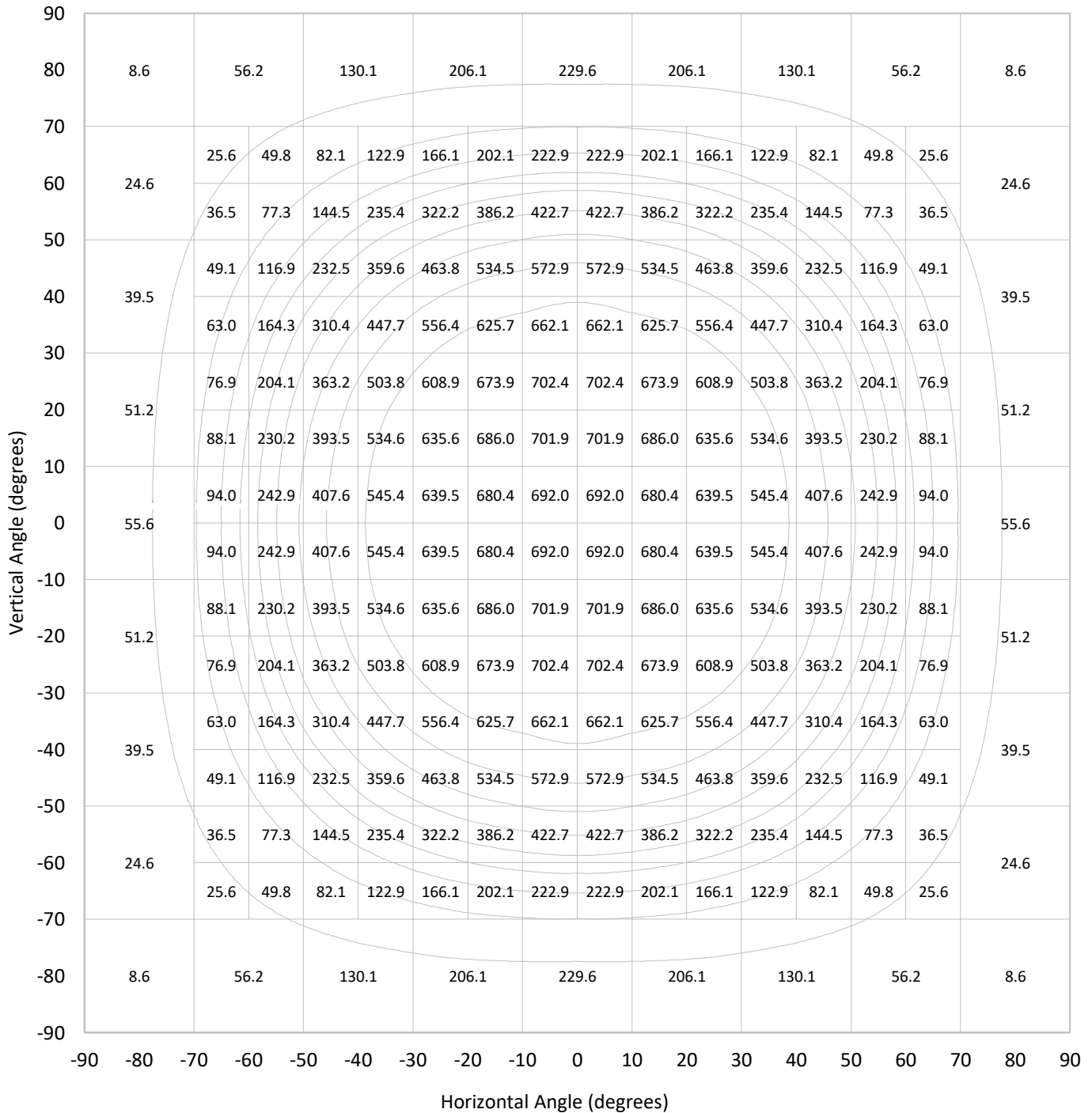
Iso-Candela Plot





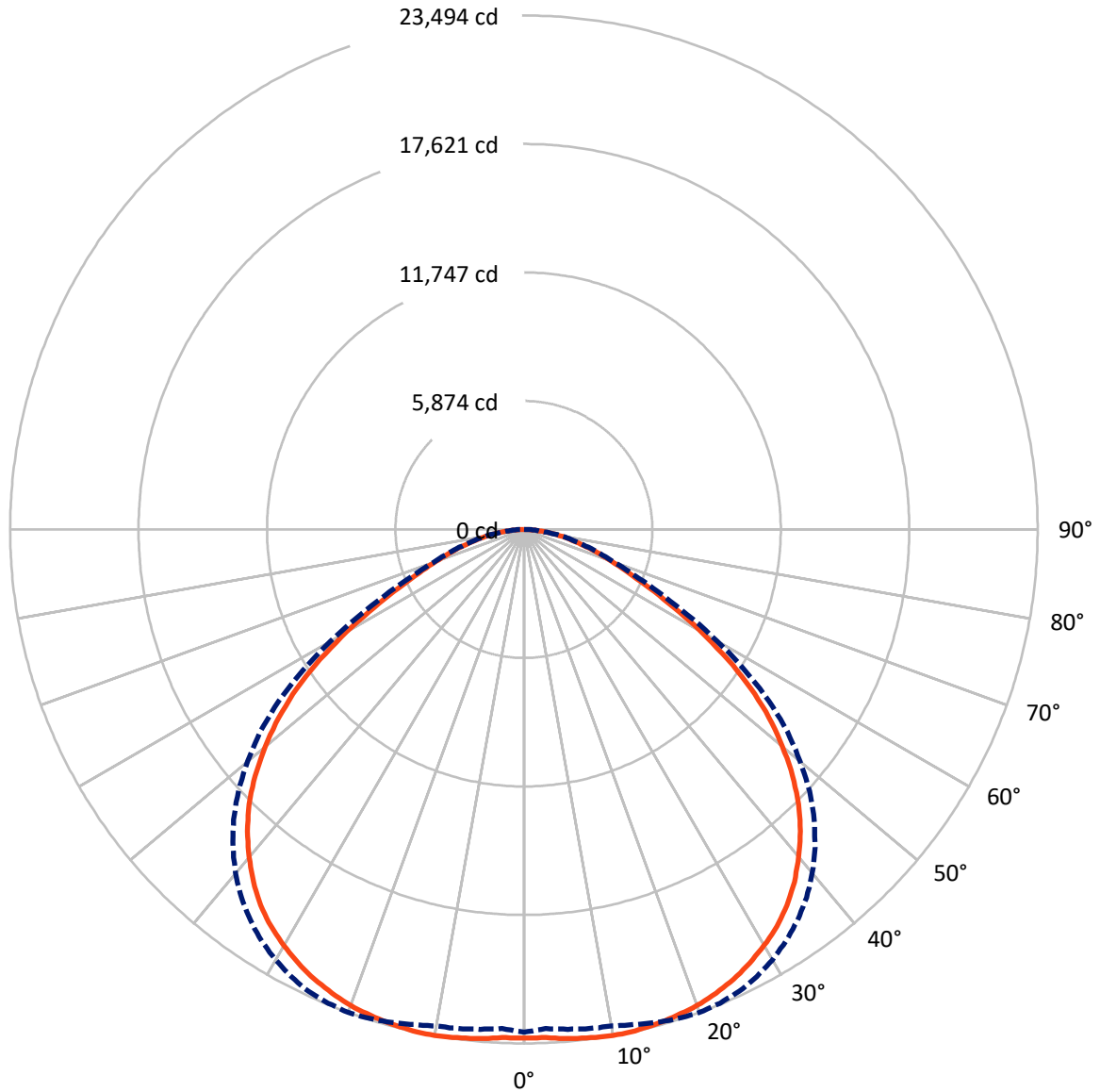
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Lumen Table



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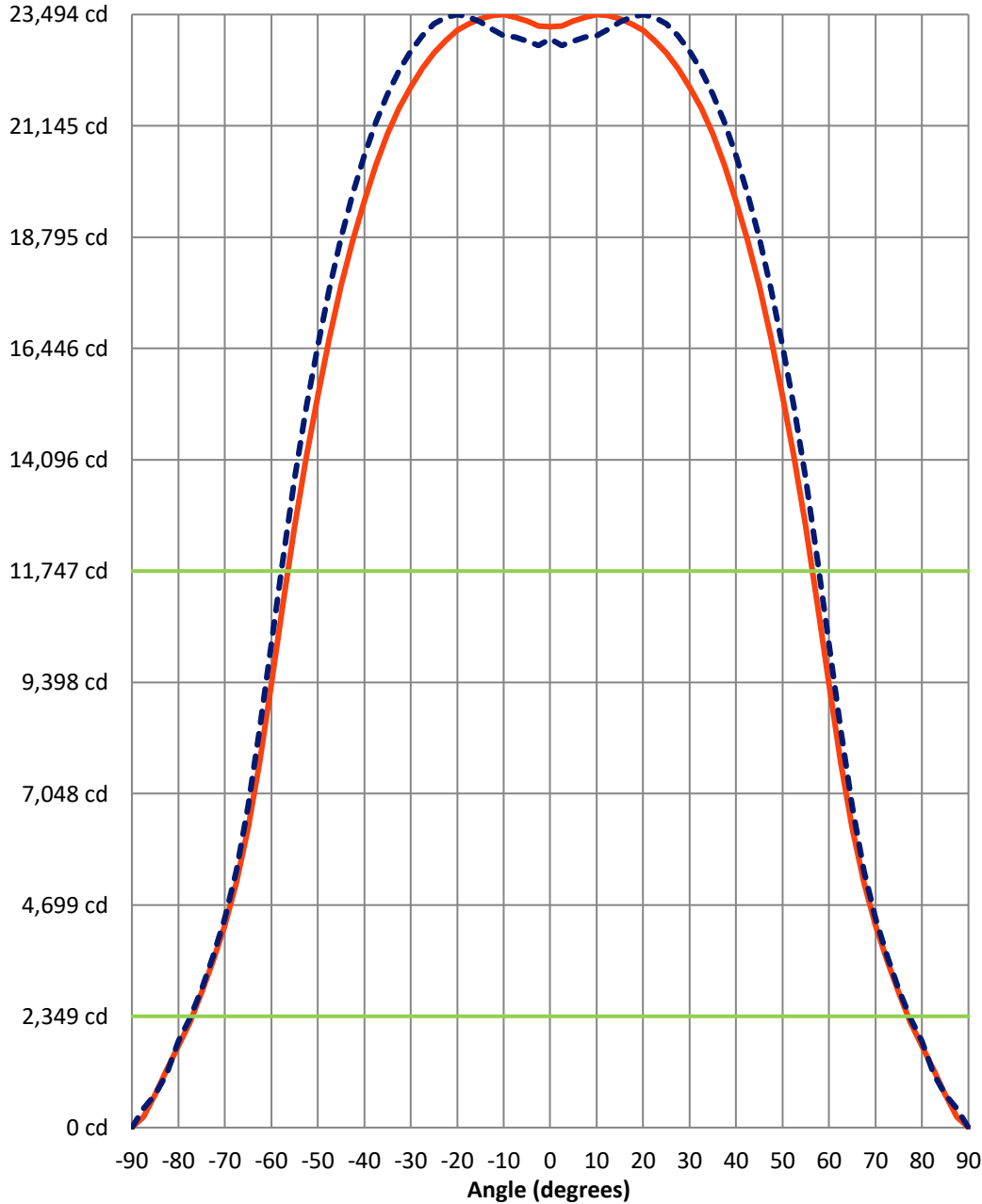
Luminous Intensity Polar Plot



— 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: 44227.6
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 53021.3
 Efficiency: 73.6%

Spill:
 Lumens: 19055.1
 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°	189.6	204.8	212.3	219.9	227.5	235.1	242.7	235.1	227.5	227.5	219.9
85°	508.1	523.3	530.9	583.9	637.0	667.4	705.3	697.7	697.7	690.1	682.5
82.5°	1016.2	1061.7	1099.6	1152.7	1183.0	1228.5	1258.9	1236.1	1221.0	1190.6	1167.9
80°	1804.9	1820.1	1827.6	1835.2	1797.3	1789.7	1774.6	1751.8	1721.5	1683.6	1645.6
77.5°	2297.8	2313.0	2328.2	2313.0	2305.4	2297.8	2275.1	2252.3	2222.0	2191.7	2146.2
75°	3041.0	3041.0	3041.0	3018.3	3003.1	2980.4	2942.4	2904.5	2851.4	2790.8	2722.5
72.5°	3829.7	3822.1	3814.6	3769.1	3731.1	3685.6	3632.5	3587.0	3526.4	3458.1	3367.1
70°	4656.3	4671.5	4679.1	4618.4	4572.9	4512.2	4444.0	4360.6	4269.6	4171.0	4042.1
67.5°	5793.9	5778.7	5763.5	5680.1	5619.5	5536.0	5437.4	5316.1	5179.6	5027.9	4845.9
65°	7204.4	7227.2	7181.7	7098.3	6984.5	6848.0	6696.3	6521.9	6317.1	6089.6	5831.8
62.5°	8910.7	8948.7	8895.6	8789.4	8645.3	8463.3	8251.0	8000.7	7720.1	7401.6	7083.1
60°	10852.1	10844.6	10746.0	10601.9	10412.3	10184.8	9949.7	9676.7	9358.2	8986.6	8599.8
57.5°	12634.3	12619.1	12497.8	12353.7	12164.1	11921.4	11671.2	11383.0	11049.3	10655.0	10207.5
55°	14234.4	14219.3	14097.9	13946.3	13749.1	13506.4	13278.9	13005.9	12679.8	12262.7	11784.9
52.5°	15652.6	15660.1	15554.0	15387.1	15174.8	14939.7	14719.8	14446.8	14135.8	13718.7	13256.1
50°	16956.9	16949.4	16835.6	16683.9	16486.8	16259.3	16039.3	15766.3	15440.2	15038.3	14590.9
47.5°	18170.3	18155.2	18026.2	17859.4	17654.6	17457.5	17252.7	17010.0	16668.8	16266.8	15819.4
45°	19186.5	19156.2	19027.3	18868.0	18670.8	18496.4	18314.4	18132.4	17768.4	17396.8	16972.1
42.5°	20058.6	20051.1	19922.1	19762.9	19565.7	19414.0	19247.2	19019.7	18716.3	18375.1	17958.0
40°	20892.8	20832.2	20703.2	20551.6	20369.6	20240.6	20073.8	19846.3	19550.5	19216.9	18814.9
37.5°	21514.7	21522.3	21385.8	21218.9	21059.7	20938.3	20786.7	20574.3	20316.5	19990.4	19588.5
35°	22106.2	22068.3	21954.5	21810.5	21666.4	21529.9	21370.6	21188.6	20976.3	20672.9	20293.7
32.5°	22493.0	22546.1	22409.6	22257.9	22174.5	22068.3	21901.5	21711.9	21522.3	21218.9	20877.7
30°	22917.7	22872.2	22766.0	22637.1	22576.4	22508.1	22364.1	22182.1	21962.1	21689.1	21370.6
27.5°	23213.4	23190.7	23061.7	22940.4	22910.1	22849.4	22735.7	22576.4	22356.5	22091.0	21795.3
25°	23342.3	23357.5	23236.2	23167.9	23167.9	23130.0	23039.0	22902.5	22682.6	22439.9	22151.7
22.5°	23403.0	23387.8	23304.4	23289.3	23327.2	23296.8	23258.9	23137.6	22940.4	22743.2	22500.6
20°	23440.9	23334.8	23258.9	23319.6	23365.1	23357.5	23327.2	23251.3	23160.3	22993.5	22781.2
17.5°	23357.5	23289.3	23198.3	23289.3	23387.8	23395.4	23365.1	23319.6	23296.8	23190.7	23001.1
15°	23152.8	23099.7	23114.8	23205.8	23319.6	23357.5	23380.3	23433.3	23403.0	23319.6	23152.8
12.5°	23016.2	22948.0	23016.2	23107.3	23167.9	23190.7	23372.7	23471.3	23471.3	23395.4	23289.3
10°	22978.3	22841.8	22932.8	23016.2	23046.6	23183.1	23334.8	23440.9	23494.0	23433.3	23296.8
7.5°	22902.5	22811.5	22849.4	22887.3	23061.7	23160.3	23243.8	23357.5	23433.3	23425.8	23304.4
5°	22864.6	22750.8	22766.0	22925.2	23046.6	23114.8	23145.2	23243.8	23357.5	23380.3	23289.3
2.5°	22766.0	22712.9	22826.7	22841.8	22932.8	22985.9	23016.2	23107.3	23251.3	23304.4	23266.5
0°	22712.9	22637.1	22561.2	22621.9	22773.6	22887.3	22932.8	23069.3	23236.2	23289.3	23205.8



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 CATALOG NUMBER: EPH-VN-08-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°	212.3	204.8	197.2	189.6	197.2	197.2	197.2	189.6	197.2	189.6	189.6
85°	659.8	629.4	606.7	576.4	546.0	523.3	492.9	462.6	455.0	447.4	432.3
82.5°	1137.5	1099.6	1061.7	1016.2	970.7	917.6	864.5	803.9	788.7	773.5	750.8
80°	1600.1	1547.1	1494.0	1440.9	1395.4	1342.3	1281.6	1213.4	1167.9	1130.0	1084.5
77.5°	2085.5	2009.7	1933.8	1842.8	1789.7	1736.6	1676.0	1607.7	1539.5	1478.8	1410.6
75°	2639.1	2555.7	2479.8	2388.8	2290.2	2191.7	2093.1	2002.1	1903.5	1812.5	1721.5
72.5°	3253.4	3132.0	3010.7	2896.9	2775.6	2654.3	2525.3	2404.0	2282.7	2161.3	2032.4
70°	3898.0	3746.3	3594.6	3443.0	3283.7	3124.4	2972.8	2821.1	2669.4	2510.2	2366.1
67.5°	4656.3	4481.9	4284.7	4072.4	3837.3	3632.5	3435.4	3253.4	3071.4	2889.4	2707.3
65°	5604.3	5361.6	5096.2	4808.0	4535.0	4262.0	3973.8	3700.8	3488.5	3276.1	3071.4
62.5°	6772.2	6430.9	6059.3	5687.7	5354.0	4997.6	4663.9	4307.5	3973.8	3670.5	3420.2
60°	8167.5	7704.9	7249.9	6772.2	6309.6	5824.2	5399.5	4959.7	4542.6	4171.0	3807.0
57.5°	9707.0	9168.6	8622.6	8038.6	7409.2	6840.4	6264.1	5687.7	5194.8	4701.8	4292.3
55°	11269.2	10700.5	10086.2	9426.4	8736.3	8008.3	7227.2	6582.6	5907.6	5331.3	4800.4
52.5°	12755.6	12164.1	11527.1	10920.4	10093.8	9259.6	8402.6	7553.3	6764.6	6029.0	5384.4
50°	14082.8	13506.4	12892.1	12186.9	11420.9	10533.6	9578.1	8622.6	7689.8	6825.2	6021.4
47.5°	15296.1	14734.9	14120.7	13415.4	12717.7	11731.8	10768.7	9714.6	8675.6	7682.2	6741.8
45°	16433.7	15864.9	15227.9	14552.9	13749.1	12869.4	11875.9	10814.2	9699.4	8584.6	7500.2
42.5°	17465.0	16896.3	16251.7	15554.0	14757.7	13885.6	12922.5	11853.2	10730.8	9517.4	8326.8
40°	18367.5	17813.9	17192.0	16464.0	15720.8	14803.2	13855.3	12839.0	11678.8	10457.8	9145.8
37.5°	19156.2	18640.5	18026.2	17305.8	16517.1	15698.1	14719.8	13703.6	12657.0	11329.9	9987.6
35°	19853.9	19376.1	18746.7	18064.2	17290.6	16426.1	15508.5	14515.0	13385.1	12141.4	10837.0
32.5°	20460.6	19975.2	19398.9	18716.3	17965.6	17154.1	16213.8	15212.7	14143.4	12877.0	11458.8
30°	20976.3	20506.1	19960.1	19315.4	18595.0	17791.1	16873.5	15864.9	14772.9	13514.0	12111.0
27.5°	21423.7	20976.3	20445.4	19846.3	19156.2	18382.7	17457.5	16441.3	15326.5	14113.1	12710.1
25°	21810.5	21378.2	20885.3	20316.5	19634.0	18875.6	18003.5	16941.8	15827.0	14606.0	13218.2
22.5°	22159.3	21742.2	21249.3	20695.7	20073.8	19315.4	18435.7	17381.6	16251.7	15045.9	13680.8
20°	22470.2	22083.5	21598.1	21029.3	20407.5	19641.5	18769.4	17768.4	16630.9	15447.8	14097.9
17.5°	22720.5	22379.2	21893.9	21294.8	20672.9	19929.7	19080.4	18162.7	16956.9	15789.1	14446.8
15°	22894.9	22561.2	22121.4	21514.7	20908.0	20172.4	19323.0	18375.1	17252.7	16062.1	14734.9
12.5°	23016.2	22659.8	22250.3	21689.1	21082.4	20354.4	19527.8	18595.0	17503.0	16304.8	14985.2
10°	23046.6	22720.5	22311.0	21810.5	21218.9	20513.7	19702.2	18777.0	17707.7	16494.3	15190.0
7.5°	23061.7	22750.8	22379.2	21901.5	21317.5	20635.0	19831.1	18921.1	17859.4	16653.6	15341.6
5°	23054.2	22758.4	22424.7	21962.1	21378.2	20703.2	19914.6	19019.7	17965.6	16759.8	15455.4
2.5°	23031.4	22766.0	22455.1	22007.6	21446.4	20779.1	19998.0	19133.4	18079.3	16850.8	15546.4
0°	23092.1	22864.6	22470.2	21992.5	21461.6	20779.1	19990.4	19148.6	18094.5	16843.2	15538.8



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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°	189.6	182.0	182.0	174.4	166.8	159.3	144.1	136.5	121.3	98.6	75.8
85°	409.5	386.8	364.0	348.8	333.7	318.5	295.8	273.0	242.7	197.2	151.7
82.5°	720.4	674.9	629.4	576.4	530.9	485.4	447.4	409.5	364.0	295.8	227.5
80°	1031.4	963.1	894.9	819.0	750.8	674.9	606.7	546.0	485.4	394.3	303.3
77.5°	1342.3	1251.3	1152.7	1061.7	963.1	864.5	765.9	682.5	591.5	485.4	379.2
75°	1630.5	1524.3	1433.3	1304.4	1183.0	1054.1	925.2	811.4	697.7	568.8	455.0
72.5°	1918.7	1782.1	1653.2	1531.9	1395.4	1236.1	1092.0	948.0	803.9	652.2	515.7
70°	2206.8	2040.0	1880.7	1736.6	1585.0	1425.7	1251.3	1084.5	910.0	728.0	568.8
67.5°	2502.6	2313.0	2131.0	1949.0	1774.6	1592.6	1410.6	1221.0	1016.2	803.9	629.4
65°	2828.7	2593.6	2373.7	2168.9	1964.2	1767.0	1562.2	1357.5	1130.0	887.3	682.5
62.5°	3154.8	2896.9	2639.1	2381.3	2153.7	1933.8	1713.9	1486.4	1236.1	978.3	735.6
60°	3503.6	3207.9	2912.1	2623.9	2343.3	2100.7	1858.0	1615.3	1349.9	1061.7	788.7
57.5°	3890.4	3534.0	3200.3	2874.2	2555.7	2267.5	2002.1	1744.2	1448.5	1145.1	849.4
55°	4330.2	3890.4	3496.0	3132.0	2783.2	2434.3	2146.2	1880.7	1562.2	1228.5	917.6
52.5°	4792.8	4284.7	3807.0	3397.5	3025.9	2631.5	2282.7	1986.9	1676.0	1312.0	978.3
50°	5331.3	4686.7	4155.8	3655.3	3238.2	2828.7	2426.8	2108.2	1789.7	1410.6	1039.0
47.5°	5884.9	5172.0	4504.7	3958.6	3465.7	3018.3	2593.6	2214.4	1895.9	1501.6	1099.6
45°	6529.5	5634.6	4899.0	4254.4	3685.6	3215.4	2760.4	2328.2	1986.9	1592.6	1160.3
42.5°	7151.3	6180.6	5308.5	4580.5	3935.9	3405.0	2912.1	2449.5	2077.9	1683.6	1213.4
40°	7887.0	6726.7	5702.9	4891.4	4186.2	3587.0	3063.8	2578.4	2161.3	1767.0	1266.5
37.5°	8592.2	7280.3	6180.6	5232.7	4428.8	3769.1	3215.4	2699.8	2237.2	1850.4	1334.7
35°	9289.9	7894.5	6635.7	5551.2	4679.1	3973.8	3367.1	2813.5	2313.0	1918.7	1395.4
32.5°	9957.3	8470.9	7098.3	5907.6	4952.1	4163.4	3503.6	2919.7	2388.8	1979.3	1456.1
30°	10579.1	9016.9	7553.3	6271.6	5202.4	4337.8	3632.5	3025.9	2479.8	2032.4	1516.7
27.5°	11147.9	9547.8	8008.3	6612.9	5437.4	4497.1	3769.1	3124.4	2555.7	2085.5	1569.8
25°	11663.6	10025.5	8425.4	6923.8	5649.8	4671.5	3898.0	3223.0	2623.9	2131.0	1615.3
22.5°	12148.9	10465.4	8804.6	7234.8	5907.6	4845.9	4019.3	3314.0	2692.2	2176.5	1660.8
20°	12573.6	10867.3	9168.6	7545.7	6135.1	5005.2	4125.5	3397.5	2752.8	2206.8	1706.3
17.5°	12914.9	11223.7	9494.7	7818.7	6332.3	5141.7	4216.5	3473.3	2805.9	2244.7	1736.6
15°	13218.2	11527.1	9767.7	8053.8	6506.7	5255.4	4299.9	3534.0	2851.4	2267.5	1774.6
12.5°	13476.1	11784.9	10002.8	8258.5	6658.4	5354.0	4368.2	3579.5	2889.4	2290.2	1797.3
10°	13688.4	11989.7	10200.0	8417.8	6779.7	5429.9	4421.2	3625.0	2919.7	2313.0	1820.1
7.5°	13847.7	12141.4	10344.0	8554.3	6878.3	5482.9	4466.7	3655.3	2950.0	2328.2	1858.0
5°	13969.0	12270.3	10457.8	8645.3	6954.2	5558.8	4519.8	3693.2	2980.4	2343.3	1858.0
2.5°	14060.0	12376.4	10548.8	8721.1	7014.8	5543.6	4519.8	3685.6	2980.4	2343.3	1850.4
0°	14044.8	12384.0	10541.2	8721.1	7014.8	5528.4	4519.8	3678.0	2980.4	2343.3	1850.4



REPORT NUMBER: P628579
 CATALOG NUMBER: EPH-VN-08-E-750-U-LAM

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	53.1	37.9	15.2	0.0
85°	113.8	75.8	37.9	0.0
82.5°	166.8	106.2	53.1	0.0
80°	219.9	144.1	68.3	0.0
77.5°	280.6	182.0	91.0	0.0
75°	333.7	212.3	106.2	0.0
72.5°	386.8	250.3	121.3	0.0
70°	432.3	280.6	136.5	0.0
67.5°	477.8	318.5	159.3	0.0
65°	515.7	348.8	174.4	0.0
62.5°	546.0	386.8	189.6	0.0
60°	583.9	417.1	204.8	0.0
57.5°	614.3	439.8	219.9	0.0
55°	644.6	455.0	235.1	0.0
52.5°	674.9	477.8	250.3	0.0
50°	705.3	500.5	265.4	0.0
47.5°	735.6	515.7	273.0	0.0
45°	781.1	538.4	288.2	0.0
42.5°	819.0	553.6	303.3	0.0
40°	856.9	568.8	310.9	0.0
37.5°	894.9	583.9	326.1	0.0
35°	932.8	599.1	333.7	0.0
32.5°	963.1	614.3	341.3	0.0
30°	993.5	629.4	348.8	0.0
27.5°	1023.8	637.0	356.4	0.0
25°	1046.5	652.2	364.0	0.0
22.5°	1069.3	659.8	371.6	0.0
20°	1084.5	667.4	379.2	0.0
17.5°	1107.2	674.9	386.8	0.0
15°	1114.8	682.5	401.9	0.0
12.5°	1130.0	690.1	401.9	0.0
10°	1137.5	697.7	401.9	0.0
7.5°	1152.7	697.7	401.9	0.0
5°	1145.1	697.7	401.9	0.0
2.5°	1145.1	697.7	401.9	0.0
0°	1137.5	697.7	401.9	0.0

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