

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: P628570

Luminaire Tested: **EPH-VN-06-E-740-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628570
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: EPHESUS
Catalog Number: EPH-VN-06-E-740-U-LAM
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
LAMBERTIAN distribution lens
Light Source: (96) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

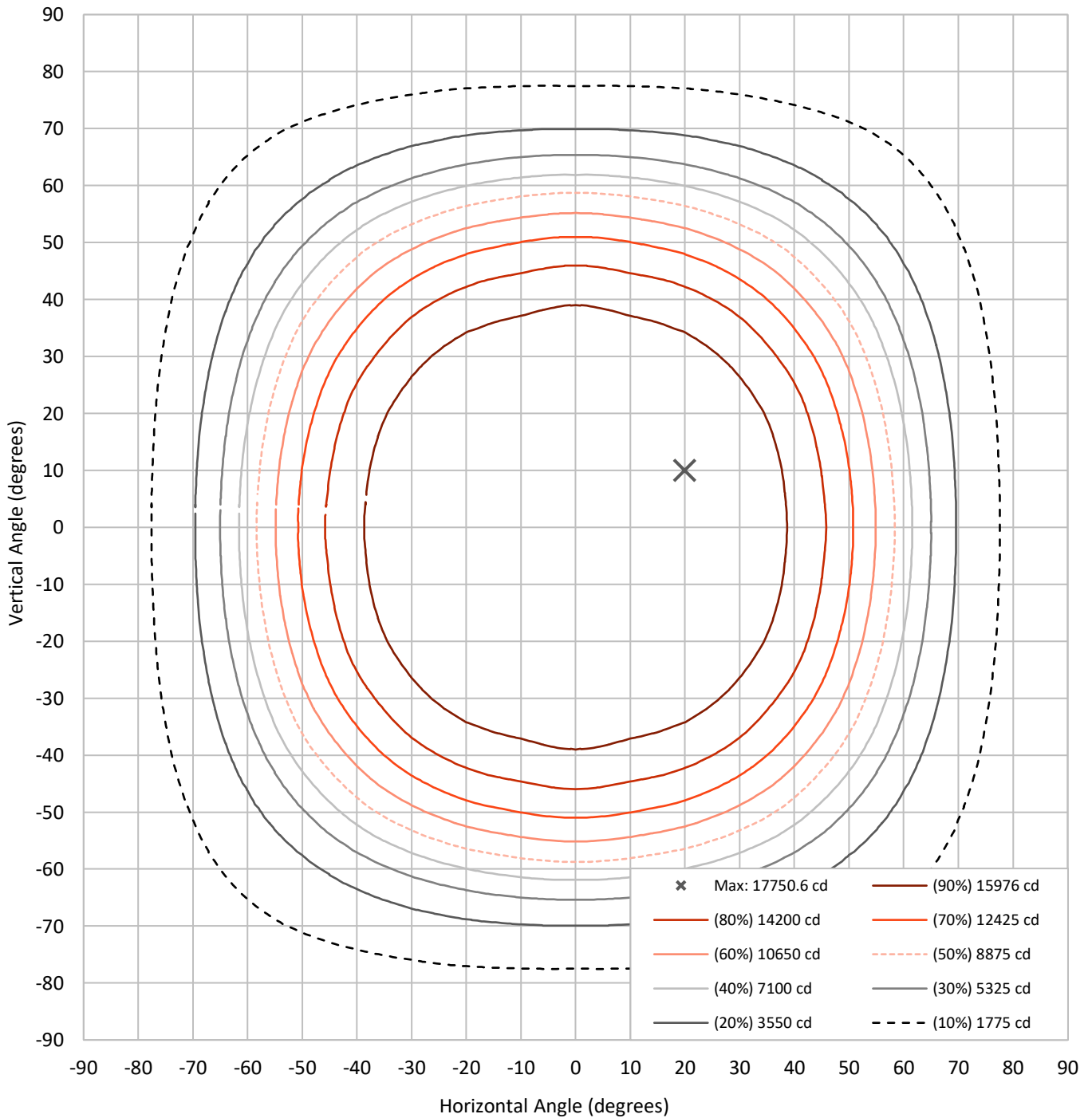
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	54456.5 lumens	Max Intensity:	17750.6 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	117.3 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	33415.6 lumens	Field Lumens:	40059.6 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

Input Watts (W): 464.2
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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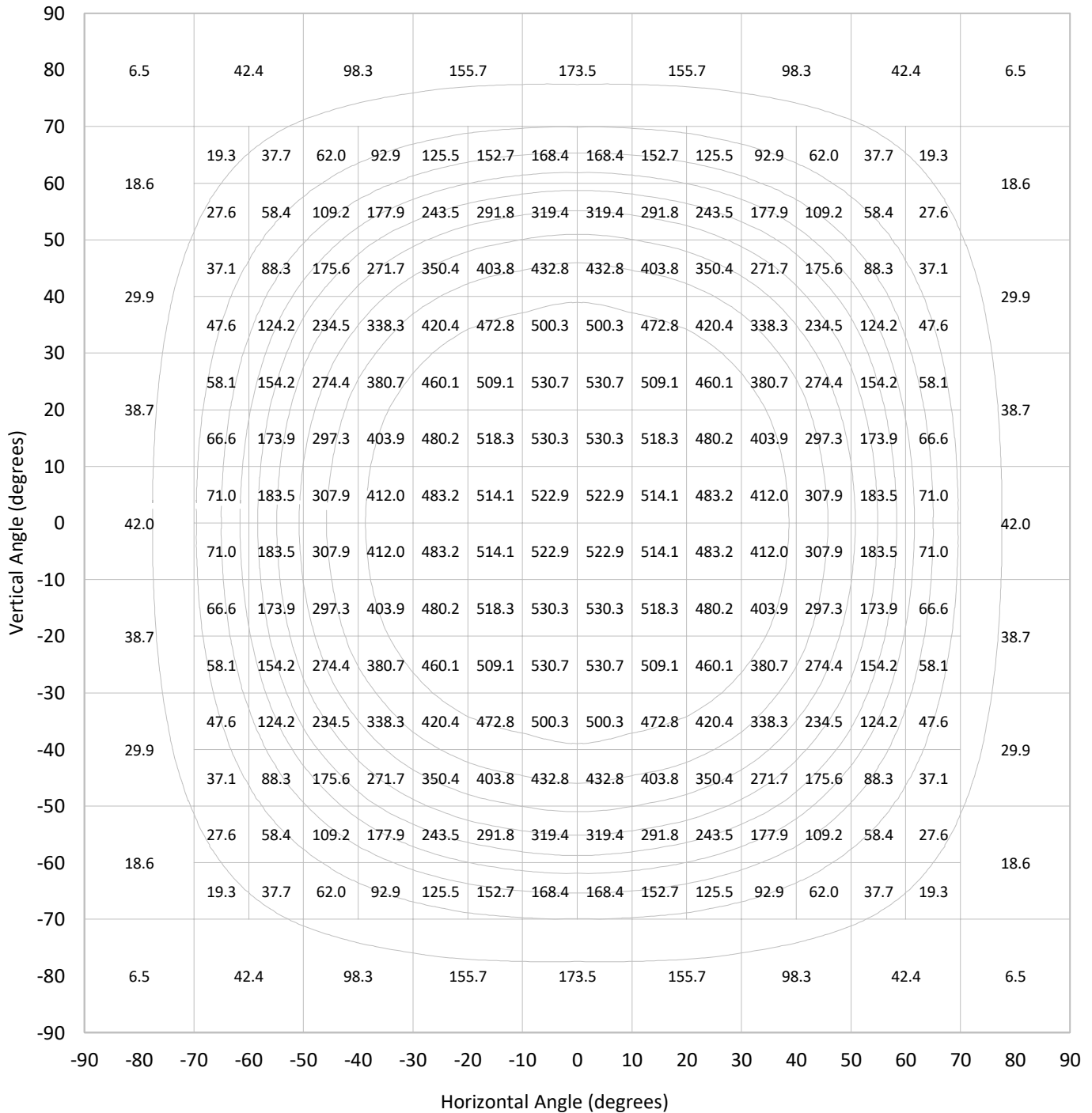
Iso-Candela Plot





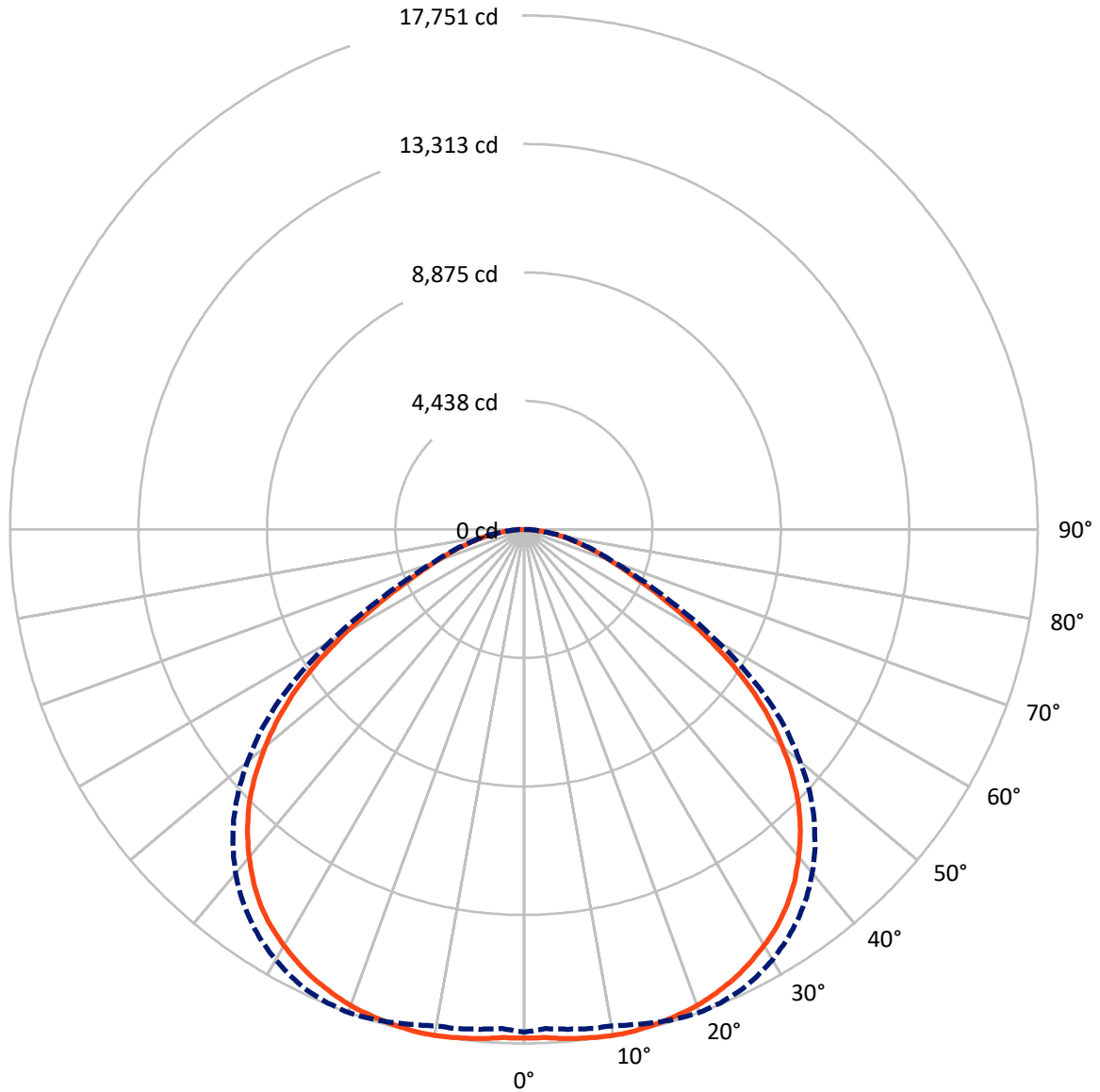
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Lumen Table



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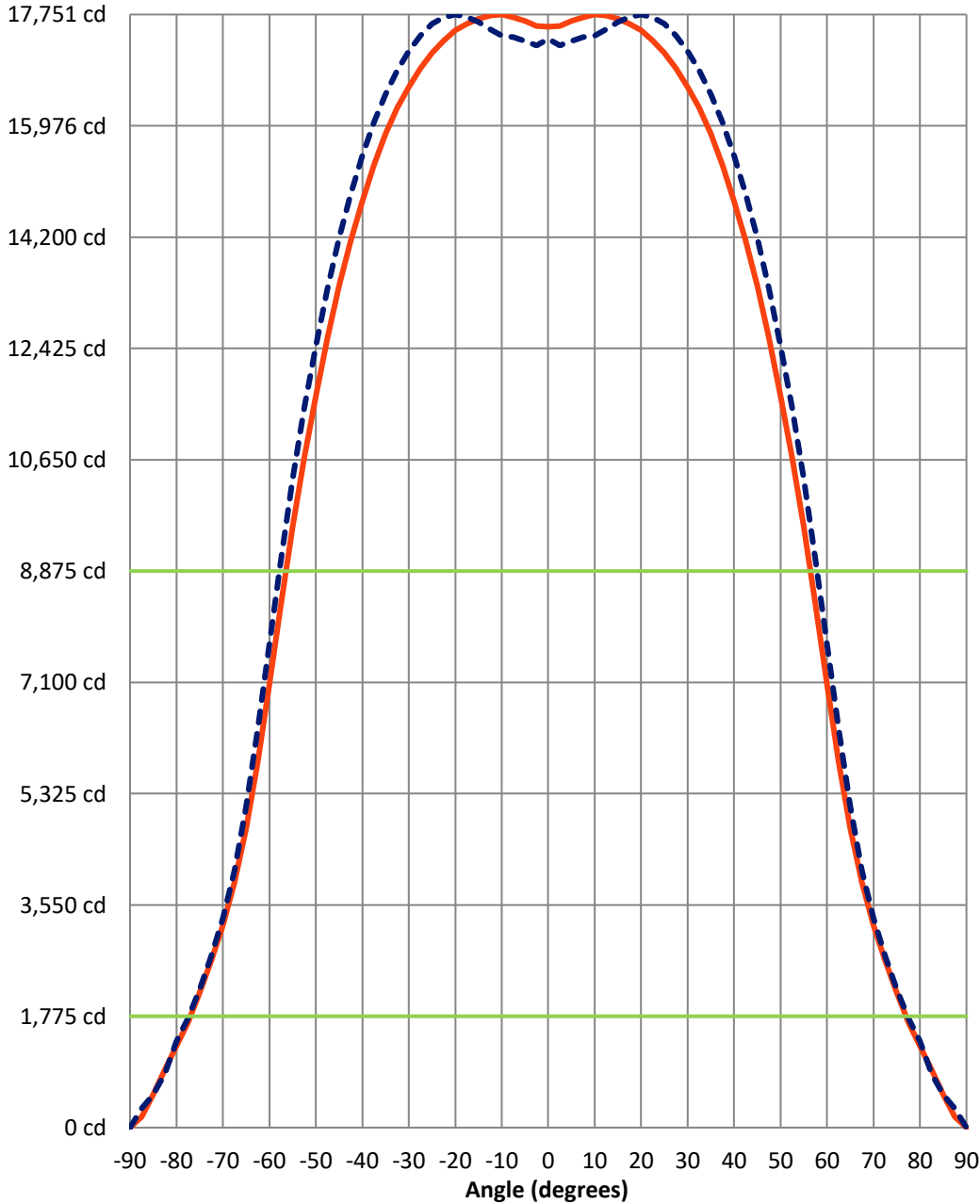
Luminous Intensity Polar Plot



— 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: 33415.6
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 40059.6
 Efficiency: 73.6%

Spill:
 Lumens: 14396.8
 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°	143.2	154.7	160.4	166.2	171.9	177.6	183.4	177.6	171.9	171.9	166.2
85°	383.9	395.3	401.1	441.2	481.3	504.2	532.9	527.1	527.1	521.4	515.7
82.5°	767.8	802.2	830.8	870.9	893.8	928.2	951.1	933.9	922.5	899.6	882.4
80°	1363.7	1375.1	1380.9	1386.6	1357.9	1352.2	1340.8	1323.6	1300.6	1272.0	1243.3
77.5°	1736.1	1747.6	1759.0	1747.6	1741.8	1736.1	1718.9	1701.7	1678.8	1655.9	1621.5
75°	2297.6	2297.6	2297.6	2280.4	2269.0	2251.8	2223.1	2194.5	2154.4	2108.5	2057.0
72.5°	2893.5	2887.8	2882.0	2847.7	2819.0	2784.6	2744.5	2710.2	2664.3	2612.7	2544.0
70°	3518.0	3529.5	3535.2	3489.4	3455.0	3409.2	3357.6	3294.6	3225.8	3151.3	3053.9
67.5°	4377.5	4366.0	4354.6	4291.5	4245.7	4182.7	4108.2	4016.5	3913.4	3798.8	3661.3
65°	5443.2	5460.4	5426.0	5363.0	5277.1	5173.9	5059.3	4927.5	4772.8	4601.0	4406.1
62.5°	6732.4	6761.1	6720.9	6640.7	6531.9	6394.4	6233.9	6044.8	5832.8	5592.2	5351.5
60°	8199.2	8193.5	8119.0	8010.1	7866.9	7695.0	7517.4	7311.1	7070.5	6789.7	6497.5
57.5°	9545.7	9534.2	9442.6	9333.7	9190.4	9007.1	8818.0	8600.3	8348.2	8050.2	7712.2
55°	10754.7	10743.2	10651.5	10536.9	10388.0	10204.6	10032.7	9826.4	9580.1	9264.9	8904.0
52.5°	11826.1	11831.8	11751.6	11625.6	11465.1	11287.5	11121.4	10915.1	10680.2	10365.0	10015.5
50°	12811.6	12805.9	12719.9	12605.4	12456.4	12284.5	12118.3	11912.1	11665.7	11362.0	11024.0
47.5°	13728.4	13716.9	13619.5	13493.5	13338.8	13189.8	13035.1	12851.7	12593.9	12290.2	11952.2
45°	14496.2	14473.2	14375.8	14255.5	14106.5	13974.8	13837.2	13699.7	13424.7	13143.9	12823.1
42.5°	15155.1	15149.3	15051.9	14931.6	14782.6	14668.0	14542.0	14370.1	14140.9	13883.1	13567.9
40°	15785.3	15739.5	15642.1	15527.5	15390.0	15292.6	15166.5	14994.6	14771.2	14519.1	14215.4
37.5°	16255.2	16260.9	16157.8	16031.7	15911.4	15819.7	15705.1	15544.7	15349.9	15103.5	14799.8
35°	16702.1	16673.4	16587.5	16478.6	16369.8	16266.6	16146.3	16008.8	15848.4	15619.2	15332.7
32.5°	16994.3	17034.4	16931.3	16816.7	16753.7	16673.4	16547.4	16404.1	16260.9	16031.7	15773.9
30°	17315.2	17280.8	17200.6	17103.2	17057.3	17005.8	16896.9	16759.4	16593.2	16387.0	16146.3
27.5°	17538.6	17521.4	17424.0	17332.4	17309.4	17263.6	17177.7	17057.3	16891.2	16690.6	16467.2
25°	17636.0	17647.5	17555.8	17504.2	17504.2	17475.6	17406.8	17303.7	17137.5	16954.2	16736.5
22.5°	17681.9	17670.4	17607.4	17595.9	17624.6	17601.7	17573.0	17481.3	17332.4	17183.4	17000.0
20°	17710.5	17630.3	17573.0	17618.8	17653.2	17647.5	17624.6	17567.3	17498.5	17372.5	17212.0
17.5°	17647.5	17595.9	17527.2	17595.9	17670.4	17676.1	17653.2	17618.8	17601.7	17521.4	17378.2
15°	17492.8	17452.7	17464.1	17532.9	17618.8	17647.5	17664.7	17704.8	17681.9	17618.8	17492.8
12.5°	17389.7	17338.1	17389.7	17458.4	17504.2	17521.4	17659.0	17733.4	17733.4	17676.1	17595.9
10°	17361.0	17257.9	17326.6	17389.7	17412.6	17515.7	17630.3	17710.5	17750.6	17704.8	17601.7
7.5°	17303.7	17235.0	17263.6	17292.2	17424.0	17498.5	17561.5	17647.5	17704.8	17699.1	17607.4
5°	17275.1	17189.1	17200.6	17320.9	17412.6	17464.1	17487.1	17561.5	17647.5	17664.7	17595.9
2.5°	17200.6	17160.5	17246.4	17257.9	17326.6	17366.7	17389.7	17458.4	17567.3	17607.4	17578.7
0°	17160.5	17103.2	17045.9	17091.7	17206.3	17292.2	17326.6	17429.8	17555.8	17595.9	17532.9



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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°	160.4	154.7	149.0	143.2	149.0	149.0	149.0	143.2	149.0	143.2	143.2
85°	498.5	475.6	458.4	435.5	412.5	395.3	372.4	349.5	343.8	338.1	326.6
82.5°	859.5	830.8	802.2	767.8	733.4	693.3	653.2	607.3	595.9	584.4	567.2
80°	1209.0	1168.9	1128.8	1088.6	1054.3	1014.2	968.3	916.8	882.4	853.7	819.3
77.5°	1575.7	1518.4	1461.1	1392.3	1352.2	1312.1	1266.3	1214.7	1163.1	1117.3	1065.7
75°	1993.9	1930.9	1873.6	1804.9	1730.4	1655.9	1581.4	1512.6	1438.2	1369.4	1300.6
72.5°	2458.0	2366.4	2274.7	2188.7	2097.1	2005.4	1908.0	1816.3	1724.6	1633.0	1535.6
70°	2945.1	2830.5	2715.9	2601.3	2481.0	2360.6	2246.0	2131.5	2016.9	1896.5	1787.7
67.5°	3518.0	3386.3	3237.3	3076.9	2899.2	2744.5	2595.6	2458.0	2320.5	2183.0	2045.5
65°	4234.3	4050.9	3850.4	3632.6	3426.4	3220.1	3002.4	2796.1	2635.7	2475.2	2320.5
62.5°	5116.6	4858.8	4578.0	4297.3	4045.2	3775.9	3523.8	3254.5	3002.4	2773.2	2584.1
60°	6170.9	5821.4	5477.6	5116.6	4767.1	4400.4	4079.5	3747.2	3432.1	3151.3	2876.3
57.5°	7334.0	6927.2	6514.7	6073.5	5597.9	5168.2	4732.7	4297.3	3924.8	3552.4	3243.0
55°	8514.3	8084.6	7620.5	7122.0	6600.6	6050.6	5460.4	4973.4	4463.4	4028.0	3626.9
52.5°	9637.4	9190.4	8709.2	8250.8	7626.2	6996.0	6348.5	5706.8	5110.9	4555.1	4068.1
50°	10640.1	10204.6	9740.5	9207.6	8628.9	7958.6	7236.6	6514.7	5809.9	5156.7	4549.4
47.5°	11556.8	11132.8	10668.7	10135.8	9608.7	8863.9	8136.2	7339.8	6554.8	5804.2	5093.7
45°	12416.3	11986.5	11505.2	10995.3	10388.0	9723.3	8972.7	8170.6	7328.3	6486.0	5666.7
42.5°	13195.5	12765.8	12278.8	11751.6	11150.0	10491.1	9763.4	8955.5	8107.5	7190.8	6291.2
40°	13877.3	13459.1	12989.2	12439.2	11877.7	11184.4	10468.2	9700.4	8823.7	7901.3	6910.0
37.5°	14473.2	14083.6	13619.5	13075.2	12479.3	11860.5	11121.4	10353.6	9562.9	8560.2	7546.0
35°	15000.4	14639.4	14163.8	13648.2	13063.7	12410.5	11717.2	10966.7	10112.9	9173.3	8187.7
32.5°	15458.7	15092.0	14656.6	14140.9	13573.7	12960.6	12250.1	11493.8	10685.9	9729.0	8657.6
30°	15848.4	15493.1	15080.6	14593.6	14049.2	13441.9	12748.6	11986.5	11161.5	10210.3	9150.3
27.5°	16186.4	15848.4	15447.3	14994.6	14473.2	13888.8	13189.8	12422.0	11579.7	10663.0	9603.0
25°	16478.6	16152.0	15779.6	15349.9	14834.2	14261.2	13602.3	12800.2	11957.9	11035.4	9986.9
22.5°	16742.2	16427.1	16054.6	15636.4	15166.5	14593.6	13928.9	13132.5	12278.8	11367.7	10336.4
20°	16977.1	16684.9	16318.2	15888.5	15418.6	14839.9	14181.0	13424.7	12565.2	11671.4	10651.5
17.5°	17166.2	16908.4	16541.7	16089.0	15619.2	15057.7	14415.9	13722.6	12811.6	11929.2	10915.1
15°	17298.0	17045.9	16713.5	16255.2	15796.8	15241.0	14599.3	13883.1	13035.1	12135.5	11132.8
12.5°	17389.7	17120.4	16811.0	16387.0	15928.6	15378.5	14754.0	14049.2	13224.2	12318.9	11321.9
10°	17412.6	17166.2	16856.8	16478.6	16031.7	15498.9	14885.8	14186.7	13378.9	12462.1	11476.6
7.5°	17424.0	17189.1	16908.4	16547.4	16106.2	15590.5	14983.2	14295.6	13493.5	12582.4	11591.2
5°	17418.3	17194.8	16942.7	16593.2	16152.0	15642.1	15046.2	14370.1	13573.7	12662.6	11677.1
2.5°	17401.1	17200.6	16965.7	16627.6	16203.6	15699.4	15109.2	14456.0	13659.6	12731.4	11745.9
0°	17447.0	17275.1	16977.1	16616.1	16215.1	15699.4	15103.5	14467.5	13671.1	12725.7	11740.2



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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°	143.2	137.5	137.5	131.8	126.1	120.3	108.9	103.1	91.7	74.5	57.3
85°	309.4	292.2	275.0	263.6	252.1	240.6	223.5	206.3	183.4	149.0	114.6
82.5°	544.3	509.9	475.6	435.5	401.1	366.7	338.1	309.4	275.0	223.5	171.9
80°	779.2	727.7	676.1	618.8	567.2	509.9	458.4	412.5	366.7	297.9	229.2
77.5°	1014.2	945.4	870.9	802.2	727.7	653.2	578.7	515.7	446.9	366.7	286.5
75°	1231.9	1151.7	1082.9	985.5	893.8	796.4	699.0	613.1	527.1	429.7	343.8
72.5°	1449.6	1346.5	1249.1	1157.4	1054.3	933.9	825.1	716.2	607.3	492.8	389.6
70°	1667.3	1541.3	1421.0	1312.1	1197.5	1077.2	945.4	819.3	687.6	550.1	429.7
67.5°	1890.8	1747.6	1610.0	1472.5	1340.8	1203.2	1065.7	922.5	767.8	607.3	475.6
65°	2137.2	1959.6	1793.4	1638.7	1484.0	1335.0	1180.3	1025.6	853.7	670.4	515.7
62.5°	2383.6	2188.7	1993.9	1799.1	1627.2	1461.1	1294.9	1123.0	933.9	739.1	555.8
60°	2647.1	2423.7	2200.2	1982.5	1770.5	1587.1	1403.8	1220.4	1019.9	802.2	595.9
57.5°	2939.3	2670.0	2417.9	2171.6	1930.9	1713.2	1512.6	1317.8	1094.4	865.2	641.7
55°	3271.7	2939.3	2641.4	2366.4	2102.8	1839.2	1621.5	1421.0	1180.3	928.2	693.3
52.5°	3621.2	3237.3	2876.3	2566.9	2286.2	1988.2	1724.6	1501.2	1266.3	991.2	739.1
50°	4028.0	3541.0	3139.9	2761.7	2446.6	2137.2	1833.5	1592.9	1352.2	1065.7	785.0
47.5°	4446.3	3907.7	3403.4	2990.9	2618.5	2280.4	1959.6	1673.1	1432.4	1134.5	830.8
45°	4933.3	4257.2	3701.4	3214.4	2784.6	2429.4	2085.6	1759.0	1501.2	1203.2	876.6
42.5°	5403.1	4669.7	4010.8	3460.7	2973.7	2572.6	2200.2	1850.7	1569.9	1272.0	916.8
40°	5958.9	5082.2	4308.7	3695.7	3162.8	2710.2	2314.8	1948.1	1633.0	1335.0	956.9
37.5°	6491.8	5500.5	4669.7	3953.5	3346.1	2847.7	2429.4	2039.8	1690.3	1398.0	1008.4
35°	7018.9	5964.6	5013.5	4194.1	3535.2	3002.4	2544.0	2125.7	1747.6	1449.6	1054.3
32.5°	7523.1	6400.1	5363.0	4463.4	3741.5	3145.6	2647.1	2205.9	1804.9	1495.5	1100.1
30°	7992.9	6812.6	5706.8	4738.5	3930.6	3277.4	2744.5	2286.2	1873.6	1535.6	1145.9
27.5°	8422.7	7213.7	6050.6	4996.3	4108.2	3397.7	2847.7	2360.6	1930.9	1575.7	1186.0
25°	8812.3	7574.7	6365.7	5231.2	4268.6	3529.5	2945.1	2435.1	1982.5	1610.0	1220.4
22.5°	9179.0	7907.0	6652.2	5466.1	4463.4	3661.3	3036.7	2503.9	2034.0	1644.4	1254.8
20°	9499.9	8210.7	6927.2	5701.1	4635.3	3781.6	3117.0	2566.9	2079.9	1667.3	1289.2
17.5°	9757.7	8480.0	7173.6	5907.3	4784.3	3884.7	3185.7	2624.2	2120.0	1696.0	1312.1
15°	9986.9	8709.2	7379.9	6084.9	4916.1	3970.7	3248.7	2670.0	2154.4	1713.2	1340.8
12.5°	10181.7	8904.0	7557.5	6239.6	5030.7	4045.2	3300.3	2704.4	2183.0	1730.4	1357.9
10°	10342.1	9058.7	7706.5	6360.0	5122.4	4102.5	3340.4	2738.8	2205.9	1747.6	1375.1
7.5°	10462.4	9173.3	7815.3	6463.1	5196.8	4142.6	3374.8	2761.7	2228.9	1759.0	1403.8
5°	10554.1	9270.7	7901.3	6531.9	5254.1	4199.9	3414.9	2790.4	2251.8	1770.5	1403.8
2.5°	10622.9	9350.9	7970.0	6589.2	5300.0	4188.4	3414.9	2784.6	2251.8	1770.5	1398.0
0°	10611.4	9356.6	7964.3	6589.2	5300.0	4177.0	3414.9	2778.9	2251.8	1770.5	1398.0



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 CATALOG NUMBER: EPH-VN-06-E-740-U-LAM

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	40.1	28.6	11.5	0.0
85°	85.9	57.3	28.6	0.0
82.5°	126.1	80.2	40.1	0.0
80°	166.2	108.9	51.6	0.0
77.5°	212.0	137.5	68.8	0.0
75°	252.1	160.4	80.2	0.0
72.5°	292.2	189.1	91.7	0.0
70°	326.6	212.0	103.1	0.0
67.5°	361.0	240.6	120.3	0.0
65°	389.6	263.6	131.8	0.0
62.5°	412.5	292.2	143.2	0.0
60°	441.2	315.1	154.7	0.0
57.5°	464.1	332.3	166.2	0.0
55°	487.0	343.8	177.6	0.0
52.5°	509.9	361.0	189.1	0.0
50°	532.9	378.2	200.5	0.0
47.5°	555.8	389.6	206.3	0.0
45°	590.2	406.8	217.7	0.0
42.5°	618.8	418.3	229.2	0.0
40°	647.5	429.7	234.9	0.0
37.5°	676.1	441.2	246.4	0.0
35°	704.8	452.6	252.1	0.0
32.5°	727.7	464.1	257.8	0.0
30°	750.6	475.6	263.6	0.0
27.5°	773.5	481.3	269.3	0.0
25°	790.7	492.8	275.0	0.0
22.5°	807.9	498.5	280.8	0.0
20°	819.3	504.2	286.5	0.0
17.5°	836.5	509.9	292.2	0.0
15°	842.3	515.7	303.7	0.0
12.5°	853.7	521.4	303.7	0.0
10°	859.5	527.1	303.7	0.0
7.5°	870.9	527.1	303.7	0.0
5°	865.2	527.1	303.7	0.0
2.5°	865.2	527.1	303.7	0.0
0°	859.5	527.1	303.7	0.0

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