

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: P628557

Luminaire Tested: **EPH-VN-04-E-730-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628557
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: EPHESUS
Catalog Number: EPH-VN-04-E-730-U-LAM
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
LAMBERTIAN distribution lens
Light Source: (64) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

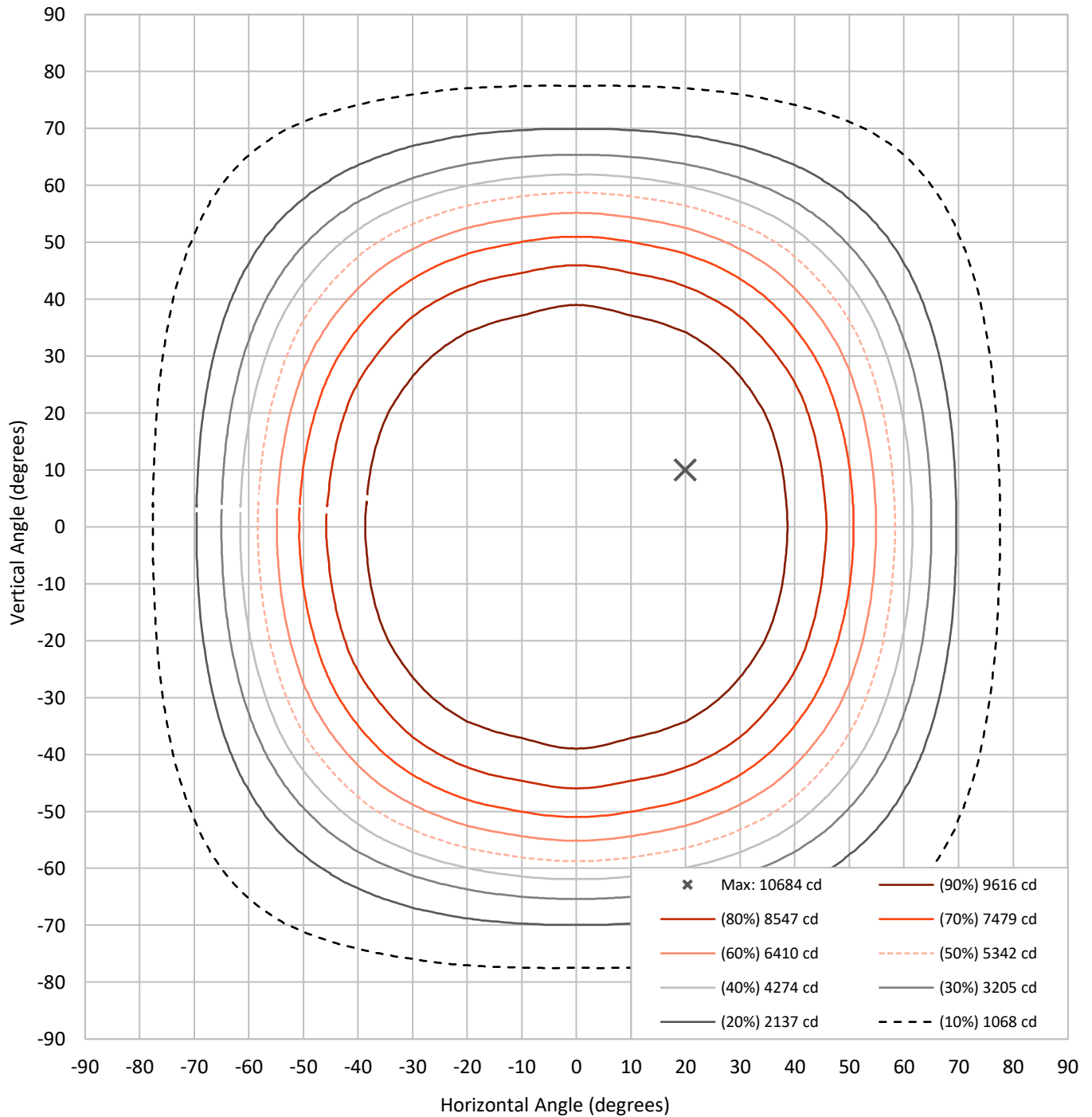
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	32777 lumens	Max Intensity:	10684 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	107.9 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 0.5' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	20112.6 lumens	Field Lumens:	24111.6 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

Input Watts (W): 303.8
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



REPORT NUMBER: P628557
CATALOG NUMBER: EPH-VN-04-E-730-U-LAM

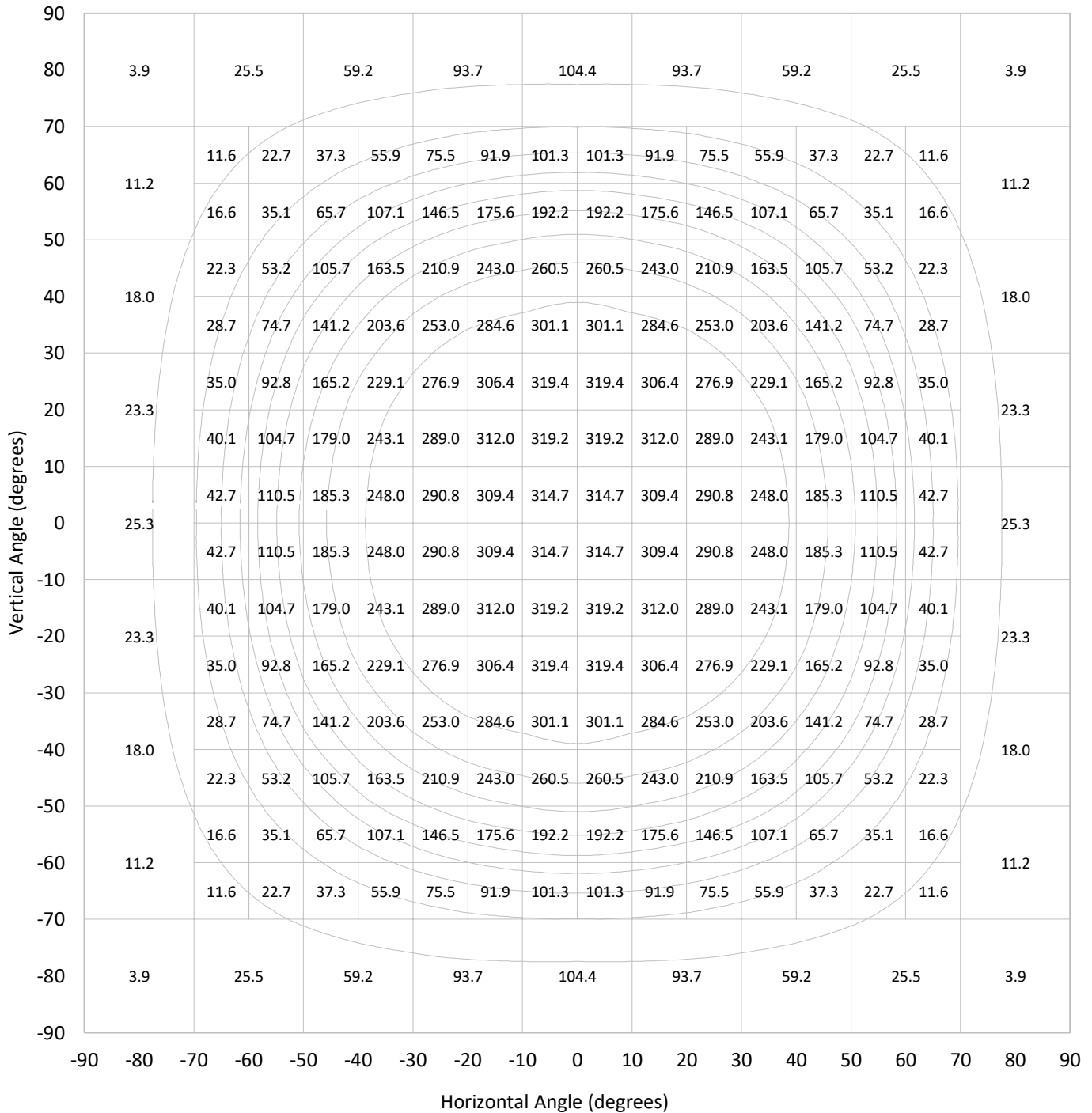
Iso-Candela Plot





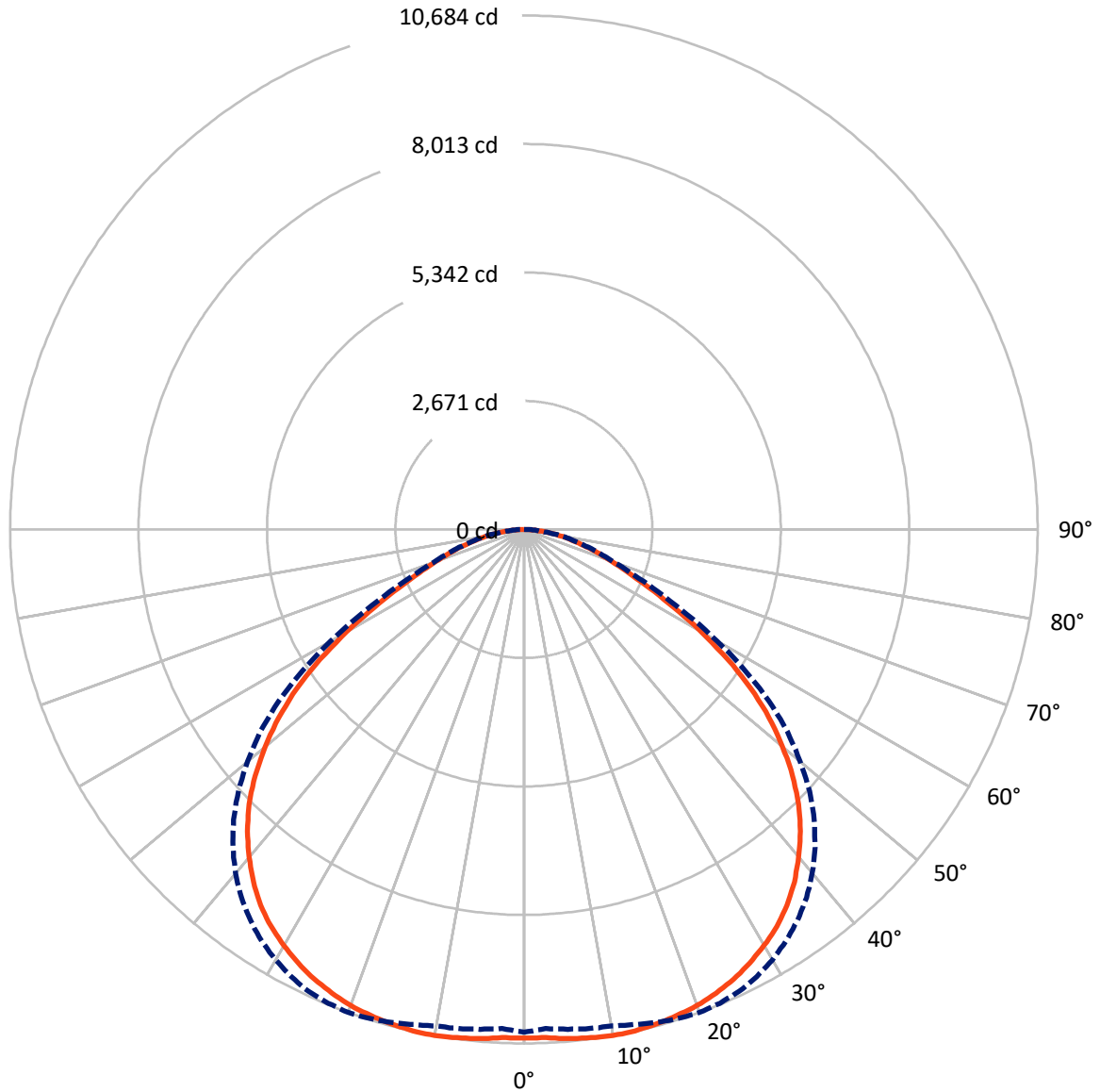
REPORT NUMBER: P628557
 CATALOG NUMBER: EPH-VN-04-E-730-U-LAM

Lumen Table



REPORT NUMBER: P628557
CATALOG NUMBER: EPH-VN-04-E-730-U-LAM

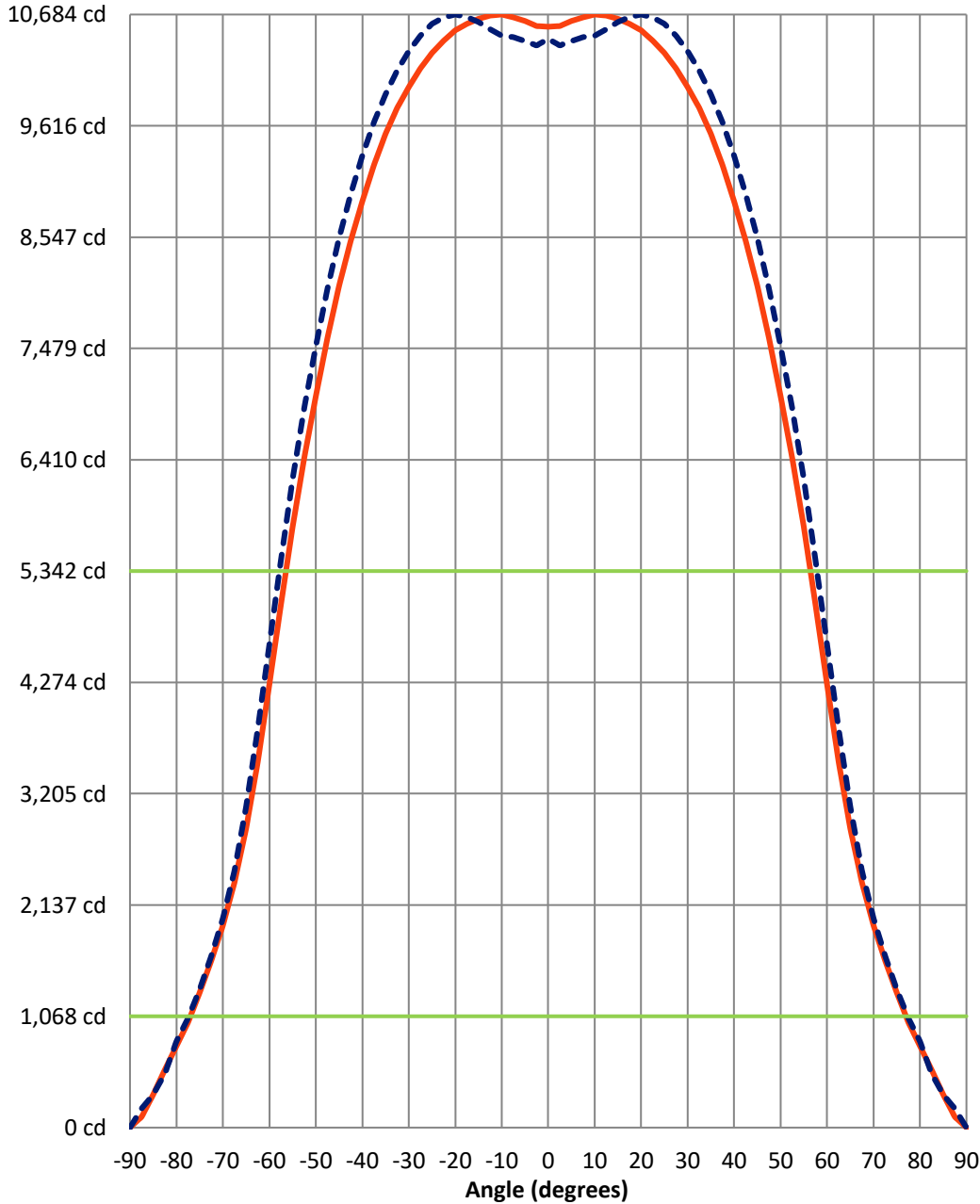
Luminous Intensity Polar Plot



— Vertical Distribution Through 20-Deg - - - Horizontal Distribution Through 10-Deg

REPORT NUMBER: P628557
 CATALOG NUMBER: EPH-VN-04-E-730-U-LAM

Luminous Intensity Plot



Beam:
 H Angle: 115.7°
 V Angle: 112.9°
 Lumens: 20112.6
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 24111.6
 Efficiency: 73.6%

Spill:
 Lumens: 8665.4
 Efficiency: 26.4%

- Vertical Distribution through 20-Deg
- - - Horizontal Distribution through 10-Deg



REPORT NUMBER: P628557
 CATALOG NUMBER: EPH-VN-04-E-730-U-LAM

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°	86.2	93.1	96.6	100.0	103.5	106.9	110.4	106.9	103.5	103.5	100.0
85°	231.1	238.0	241.4	265.5	289.7	303.5	320.7	317.3	317.3	313.8	310.4
82.5°	462.1	482.8	500.1	524.2	538.0	558.7	572.5	562.1	555.2	541.4	531.1
80°	820.8	827.7	831.1	834.6	817.3	813.9	807.0	796.6	782.8	765.6	748.4
77.5°	1044.9	1051.8	1058.7	1051.8	1048.4	1044.9	1034.6	1024.3	1010.5	996.7	976.0
75°	1382.9	1382.9	1382.9	1372.6	1365.7	1355.3	1338.1	1320.8	1296.7	1269.1	1238.1
72.5°	1741.6	1738.1	1734.7	1714.0	1696.7	1676.1	1651.9	1631.2	1603.6	1572.6	1531.2
70°	2117.5	2124.4	2127.8	2100.2	2079.5	2052.0	2020.9	1983.0	1941.6	1896.8	1838.1
67.5°	2634.8	2627.9	2621.0	2583.1	2555.5	2517.5	2472.7	2417.5	2355.4	2286.5	2203.7
65°	3276.2	3286.6	3265.9	3228.0	3176.2	3114.1	3045.2	2965.9	2872.7	2769.3	2652.0
62.5°	4052.2	4069.4	4045.3	3997.0	3931.5	3848.7	3752.2	3638.3	3510.7	3365.9	3221.1
60°	4935.0	4931.6	4886.8	4821.2	4735.0	4631.6	4524.7	4400.5	4255.7	4086.7	3910.8
57.5°	5745.5	5738.6	5683.4	5617.9	5531.7	5421.3	5307.5	5176.5	5024.7	4845.4	4641.9
55°	6473.1	6466.3	6411.1	6342.1	6252.4	6142.1	6038.6	5914.5	5766.2	5576.5	5359.2
52.5°	7118.1	7121.5	7073.2	6997.3	6900.8	6793.9	6693.9	6569.7	6428.3	6238.6	6028.3
50°	7711.2	7707.8	7656.0	7587.1	7497.4	7393.9	7293.9	7169.8	7021.5	6838.7	6635.2
47.5°	8263.0	8256.1	8197.5	8121.6	8028.5	7938.8	7845.7	7735.4	7580.2	7397.4	7193.9
45°	8725.1	8711.3	8652.7	8580.3	8490.6	8411.3	8328.5	8245.8	8080.2	7911.2	7718.1
42.5°	9121.7	9118.3	9059.6	8987.2	8897.6	8828.6	8752.7	8649.3	8511.3	8356.1	8166.4
40°	9501.1	9473.5	9414.9	9345.9	9263.1	9204.5	9128.6	9025.2	8890.7	8738.9	8556.1
37.5°	9783.9	9787.3	9725.2	9649.4	9577.0	9521.8	9452.8	9356.2	9239.0	9090.7	8907.9
35°	10052.9	10035.6	9983.9	9918.4	9852.8	9790.8	9718.3	9635.6	9539.0	9401.1	9228.6
32.5°	10228.7	10252.9	10190.8	10121.8	10083.9	10035.6	9959.8	9873.5	9787.3	9649.4	9494.2
30°	10421.9	10401.2	10352.9	10294.3	10266.7	10235.6	10170.1	10087.4	9987.3	9863.2	9718.3
27.5°	10556.4	10546.0	10487.4	10432.2	10418.4	10390.8	10339.1	10266.7	10166.7	10046.0	9911.5
25°	10615.0	10621.9	10566.7	10535.7	10535.7	10518.4	10477.1	10415.0	10315.0	10204.6	10073.6
22.5°	10642.6	10635.7	10597.8	10590.9	10608.1	10594.3	10577.1	10521.9	10432.2	10342.6	10232.2
20°	10659.8	10611.6	10577.1	10604.7	10625.3	10621.9	10608.1	10573.6	10532.2	10456.4	10359.8
17.5°	10621.9	10590.9	10549.5	10590.9	10635.7	10639.1	10625.3	10604.7	10594.3	10546.0	10459.8
15°	10528.8	10504.6	10511.5	10552.9	10604.7	10621.9	10632.2	10656.4	10642.6	10604.7	10528.8
12.5°	10466.7	10435.7	10466.7	10508.1	10535.7	10546.0	10628.8	10673.6	10673.6	10639.1	10590.9
10°	10449.5	10387.4	10428.8	10466.7	10480.5	10542.6	10611.6	10659.8	10684.0	10656.4	10594.3
7.5°	10415.0	10373.6	10390.8	10408.1	10487.4	10532.2	10570.2	10621.9	10656.4	10652.9	10597.8
5°	10397.7	10346.0	10352.9	10425.3	10480.5	10511.5	10525.3	10570.2	10621.9	10632.2	10590.9
2.5°	10352.9	10328.8	10380.5	10387.4	10428.8	10452.9	10466.7	10508.1	10573.6	10597.8	10580.5
0°	10328.8	10294.3	10259.8	10287.4	10356.3	10408.1	10428.8	10490.8	10566.7	10590.9	10552.9



REPORT NUMBER: P628557
 CATALOG NUMBER: EPH-VN-04-E-730-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°	96.6	93.1	89.7	86.2	89.7	89.7	89.7	86.2	89.7	86.2	86.2
85°	300.0	286.2	275.9	262.1	248.3	238.0	224.2	210.4	206.9	203.5	196.6
82.5°	517.3	500.1	482.8	462.1	441.4	417.3	393.1	365.6	358.7	351.8	341.4
80°	727.7	703.5	679.4	655.2	634.6	610.4	582.8	551.8	531.1	513.9	493.2
77.5°	948.4	913.9	879.4	838.0	813.9	789.7	762.2	731.1	700.1	672.5	641.5
75°	1200.1	1162.2	1127.7	1086.3	1041.5	996.7	951.8	910.4	865.6	824.2	782.8
72.5°	1479.5	1424.3	1369.1	1317.4	1262.2	1207.0	1148.4	1093.2	1038.0	982.9	924.2
70°	1772.6	1703.6	1634.7	1565.7	1493.3	1420.9	1351.9	1282.9	1213.9	1141.5	1076.0
67.5°	2117.5	2038.2	1948.5	1851.9	1745.0	1651.9	1562.2	1479.5	1396.7	1313.9	1231.2
65°	2548.6	2438.2	2317.5	2186.5	2062.3	1938.2	1807.1	1682.9	1586.4	1489.8	1396.7
62.5°	3079.7	2924.5	2755.5	2586.5	2434.8	2272.7	2120.9	1958.8	1807.1	1669.2	1555.3
60°	3714.2	3503.8	3296.9	3079.7	2869.3	2648.6	2455.5	2255.4	2065.8	1896.8	1731.2
57.5°	4414.3	4169.4	3921.1	3655.6	3369.3	3110.7	2848.6	2586.5	2362.3	2138.2	1951.9
55°	5124.7	4866.1	4586.7	4286.7	3972.9	3641.8	3286.6	2993.4	2686.5	2424.4	2183.0
52.5°	5800.7	5531.7	5242.0	4966.1	4590.2	4210.8	3821.1	3434.9	3076.2	2741.7	2448.6
50°	6404.2	6142.1	5862.7	5542.0	5193.7	4790.2	4355.7	3921.1	3496.9	3103.8	2738.2
47.5°	6956.0	6700.8	6421.4	6100.7	5783.4	5335.1	4897.1	4417.7	3945.3	3493.5	3065.9
45°	7473.3	7214.6	6924.9	6618.0	6252.4	5852.4	5400.6	4917.8	4410.8	3903.9	3410.7
42.5°	7942.3	7683.6	7390.5	7073.2	6711.1	6314.5	5876.5	5390.3	4879.9	4328.1	3786.6
40°	8352.7	8100.9	7818.1	7487.1	7149.1	6731.8	6300.7	5838.6	5310.9	4755.7	4159.1
37.5°	8711.3	8476.8	8197.5	7869.9	7511.2	7138.7	6693.9	6231.7	5755.8	5152.3	4541.9
35°	9028.6	8811.3	8525.1	8214.7	7863.0	7469.8	7052.5	6600.7	6086.9	5521.3	4928.1
32.5°	9304.5	9083.8	8821.7	8511.3	8169.9	7800.9	7373.3	6918.0	6431.8	5855.8	5210.9
30°	9539.0	9325.2	9076.9	8783.8	8456.1	8090.6	7673.3	7214.6	6718.0	6145.5	5507.5
27.5°	9742.5	9539.0	9297.6	9025.2	8711.3	8359.6	7938.8	7476.7	6969.8	6418.0	5780.0
25°	9918.4	9721.8	9497.6	9239.0	8928.6	8583.7	8187.1	7704.3	7197.4	6642.1	6011.0
22.5°	10077.0	9887.3	9663.2	9411.4	9128.6	8783.8	8383.7	7904.3	7390.5	6842.2	6221.4
20°	10218.4	10042.5	9821.8	9563.2	9280.4	8932.0	8535.5	8080.2	7562.9	7024.9	6411.1
17.5°	10332.2	10177.0	9956.3	9683.9	9401.1	9063.1	8676.8	8259.6	7711.2	7180.1	6569.7
15°	10411.5	10259.8	10059.8	9783.9	9508.0	9173.5	8787.2	8356.1	7845.7	7304.3	6700.8
12.5°	10466.7	10304.6	10118.4	9863.2	9587.3	9256.2	8880.3	8456.1	7959.5	7414.6	6814.6
10°	10480.5	10332.2	10146.0	9918.4	9649.4	9328.6	8959.6	8538.9	8052.6	7500.9	6907.7
7.5°	10487.4	10346.0	10177.0	9959.8	9694.2	9383.8	9018.3	8604.4	8121.6	7573.3	6976.7
5°	10483.9	10349.5	10197.7	9987.3	9721.8	9414.9	9056.2	8649.3	8169.9	7621.6	7028.4
2.5°	10473.6	10352.9	10211.5	10008.0	9752.8	9449.3	9094.1	8701.0	8221.6	7662.9	7069.8
0°	10501.2	10397.7	10218.4	10001.1	9759.7	9449.3	9090.7	8707.9	8228.5	7659.5	7066.3



REPORT NUMBER: P628557
 CATALOG NUMBER: EPH-VN-04-E-730-U-LAM

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°	86.2	82.8	82.8	79.3	75.9	72.4	65.5	62.1	55.2	44.8	34.5
85°	186.2	175.9	165.5	158.6	151.7	144.8	134.5	124.2	110.4	89.7	69.0
82.5°	327.6	306.9	286.2	262.1	241.4	220.7	203.5	186.2	165.5	134.5	103.5
80°	469.0	438.0	406.9	372.5	341.4	306.9	275.9	248.3	220.7	179.3	137.9
77.5°	610.4	569.0	524.2	482.8	438.0	393.1	348.3	310.4	269.0	220.7	172.4
75°	741.5	693.2	651.8	593.2	538.0	479.4	420.7	369.0	317.3	258.7	206.9
72.5°	872.5	810.4	751.8	696.6	634.6	562.1	496.6	431.1	365.6	296.6	234.5
70°	1003.6	927.7	855.3	789.7	720.8	648.3	569.0	493.2	413.8	331.1	258.7
67.5°	1138.1	1051.8	969.1	886.3	807.0	724.2	641.5	555.2	462.1	365.6	286.2
65°	1286.4	1179.4	1079.4	986.3	893.2	803.5	710.4	617.3	513.9	403.5	310.4
62.5°	1434.6	1317.4	1200.1	1082.9	979.4	879.4	779.4	675.9	562.1	444.9	334.5
60°	1593.3	1458.8	1324.3	1193.2	1065.6	955.3	844.9	734.6	613.9	482.8	358.7
57.5°	1769.2	1607.1	1455.3	1307.0	1162.2	1031.2	910.4	793.2	658.7	520.7	386.3
55°	1969.2	1769.2	1589.8	1424.3	1265.7	1107.0	976.0	855.3	710.4	558.7	417.3
52.5°	2179.6	1948.5	1731.2	1545.0	1376.0	1196.7	1038.0	903.6	762.2	596.6	444.9
50°	2424.4	2131.3	1889.9	1662.3	1472.6	1286.4	1103.6	958.7	813.9	641.5	472.5
47.5°	2676.2	2352.0	2048.5	1800.2	1576.0	1372.6	1179.4	1007.0	862.2	682.8	500.1
45°	2969.3	2562.4	2227.8	1934.7	1676.1	1462.2	1255.3	1058.7	903.6	724.2	527.6
42.5°	3252.1	2810.7	2414.1	2083.0	1789.9	1548.5	1324.3	1113.9	944.9	765.6	551.8
40°	3586.6	3059.0	2593.4	2224.4	1903.7	1631.2	1393.3	1172.5	982.9	803.5	575.9
37.5°	3907.3	3310.7	2810.7	2379.6	2014.0	1714.0	1462.2	1227.7	1017.4	841.5	607.0
35°	4224.6	3590.1	3017.6	2524.4	2127.8	1807.1	1531.2	1279.5	1051.8	872.5	634.6
32.5°	4528.1	3852.2	3228.0	2686.5	2252.0	1893.3	1593.3	1327.7	1086.3	900.1	662.1
30°	4810.9	4100.5	3434.9	2852.0	2365.8	1972.6	1651.9	1376.0	1127.7	924.2	689.7
27.5°	5069.5	4341.9	3641.8	3007.2	2472.7	2045.1	1714.0	1420.9	1162.2	948.4	713.9
25°	5304.1	4559.1	3831.5	3148.6	2569.3	2124.4	1772.6	1465.7	1193.2	969.1	734.6
22.5°	5524.8	4759.2	4003.9	3290.0	2686.5	2203.7	1827.8	1507.1	1224.3	989.8	755.3
20°	5717.9	4941.9	4169.4	3431.4	2790.0	2276.1	1876.1	1545.0	1251.9	1003.6	776.0
17.5°	5873.1	5104.0	4317.7	3555.6	2879.6	2338.2	1917.5	1579.5	1276.0	1020.8	789.7
15°	6011.0	5242.0	4441.9	3662.5	2959.0	2389.9	1955.4	1607.1	1296.7	1031.2	807.0
12.5°	6128.3	5359.2	4548.8	3755.6	3027.9	2434.8	1986.4	1627.8	1313.9	1041.5	817.3
10°	6224.8	5452.3	4638.5	3828.0	3083.1	2469.2	2010.6	1648.5	1327.7	1051.8	827.7
7.5°	6297.3	5521.3	4704.0	3890.1	3127.9	2493.4	2031.3	1662.3	1341.5	1058.7	844.9
5°	6352.4	5579.9	4755.7	3931.5	3162.4	2527.9	2055.4	1679.5	1355.3	1065.6	844.9
2.5°	6393.8	5628.2	4797.1	3966.0	3190.0	2521.0	2055.4	1676.1	1355.3	1065.6	841.5
0°	6386.9	5631.7	4793.6	3966.0	3190.0	2514.1	2055.4	1672.6	1355.3	1065.6	841.5



REPORT NUMBER: P628557
 CATALOG NUMBER: EPH-VN-04-E-730-U-LAM

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	24.1	17.2	6.9	0.0
85°	51.7	34.5	17.2	0.0
82.5°	75.9	48.3	24.1	0.0
80°	100.0	65.5	31.0	0.0
77.5°	127.6	82.8	41.4	0.0
75°	151.7	96.6	48.3	0.0
72.5°	175.9	113.8	55.2	0.0
70°	196.6	127.6	62.1	0.0
67.5°	217.3	144.8	72.4	0.0
65°	234.5	158.6	79.3	0.0
62.5°	248.3	175.9	86.2	0.0
60°	265.5	189.7	93.1	0.0
57.5°	279.3	200.0	100.0	0.0
55°	293.1	206.9	106.9	0.0
52.5°	306.9	217.3	113.8	0.0
50°	320.7	227.6	120.7	0.0
47.5°	334.5	234.5	124.2	0.0
45°	355.2	244.9	131.0	0.0
42.5°	372.5	251.8	137.9	0.0
40°	389.7	258.7	141.4	0.0
37.5°	406.9	265.5	148.3	0.0
35°	424.2	272.4	151.7	0.0
32.5°	438.0	279.3	155.2	0.0
30°	451.8	286.2	158.6	0.0
27.5°	465.6	289.7	162.1	0.0
25°	475.9	296.6	165.5	0.0
22.5°	486.3	300.0	169.0	0.0
20°	493.2	303.5	172.4	0.0
17.5°	503.5	306.9	175.9	0.0
15°	507.0	310.4	182.8	0.0
12.5°	513.9	313.8	182.8	0.0
10°	517.3	317.3	182.8	0.0
7.5°	524.2	317.3	182.8	0.0
5°	520.7	317.3	182.8	0.0
2.5°	520.7	317.3	182.8	0.0
0°	517.3	317.3	182.8	0.0

(END OF REPORT)