

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: P624186

Luminaire Tested: **EPH-VN-03-E-735-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624186
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: EPHESUS
Catalog Number: EPH-VN-03-E-735-U-77
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
Nema 7 distribution lens
Light Source: (48) 3500K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

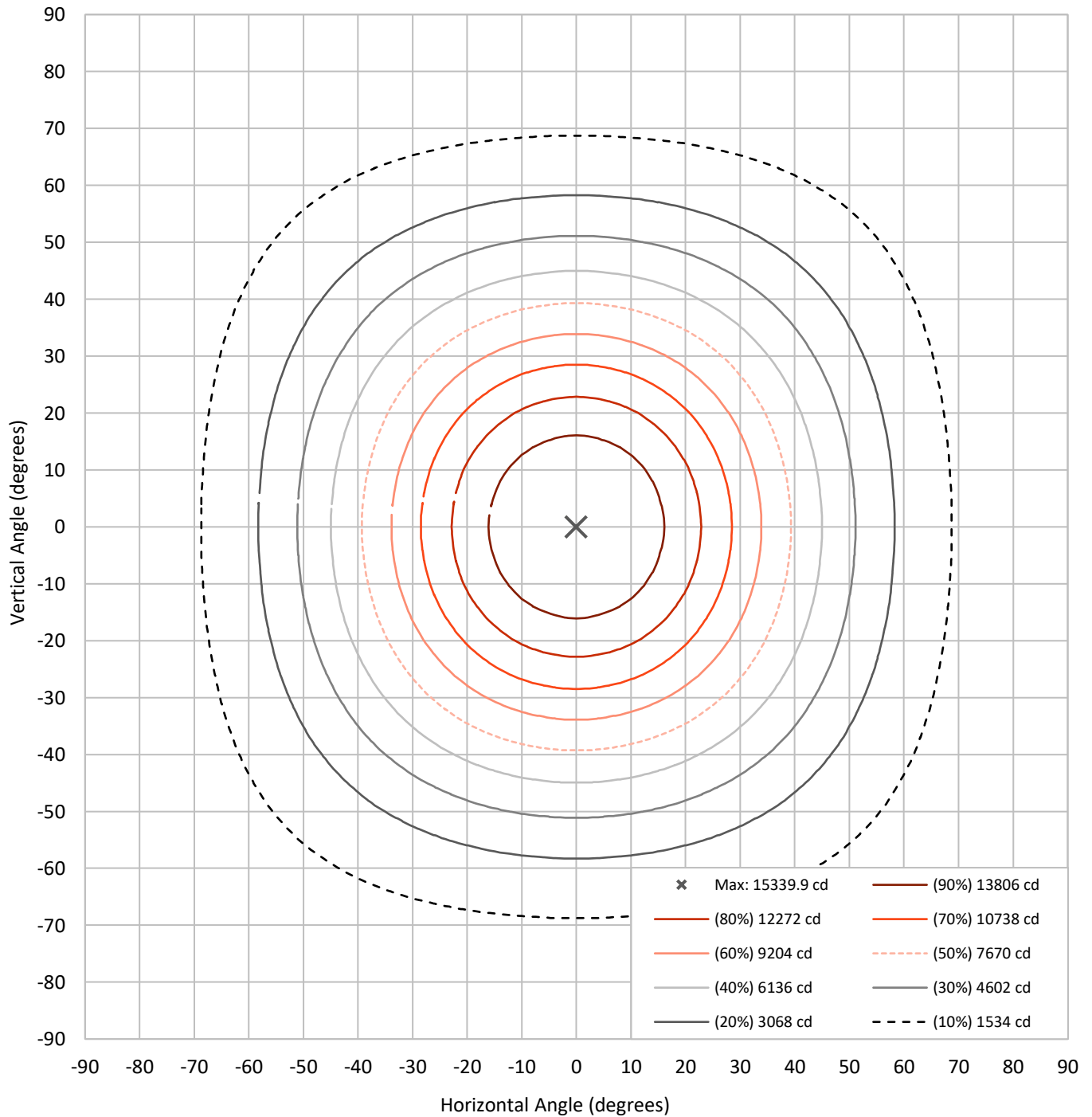
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	27619.8 lumens	Max Intensity:	15339.9 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	119.0 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	11950.8 lumens	Field Lumens:	19569.1 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%

Input Watts (W): 232.1
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: P624186
CATALOG NUMBER: EPH-VN-03-E-735-U-77

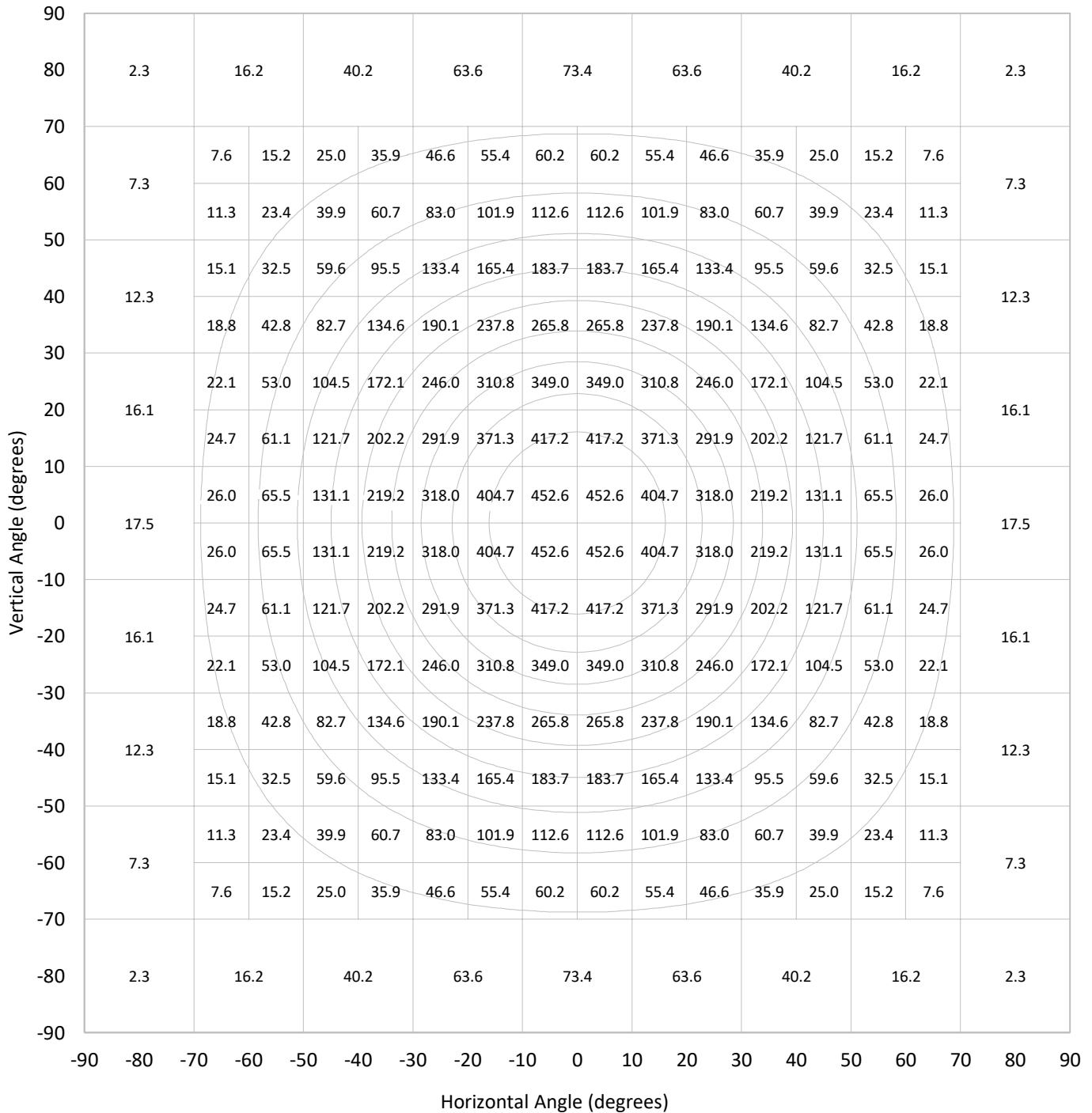
Iso-Candela Plot





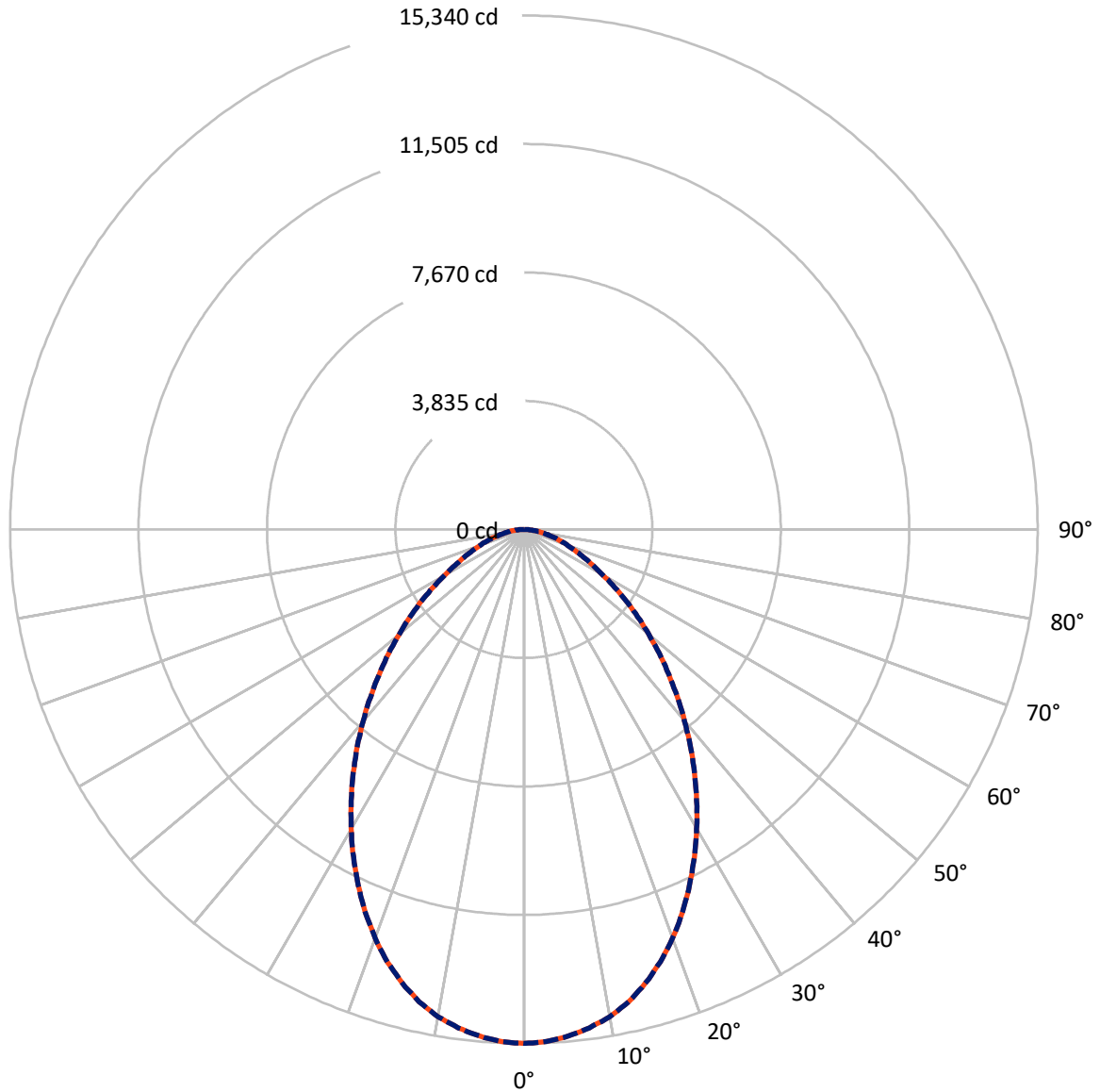
REPORT NUMBER: P624186
 CATALOG NUMBER: EPH-VN-03-E-735-U-77

Lumen Table



REPORT NUMBER: P624186
CATALOG NUMBER: EPH-VN-03-E-735-U-77

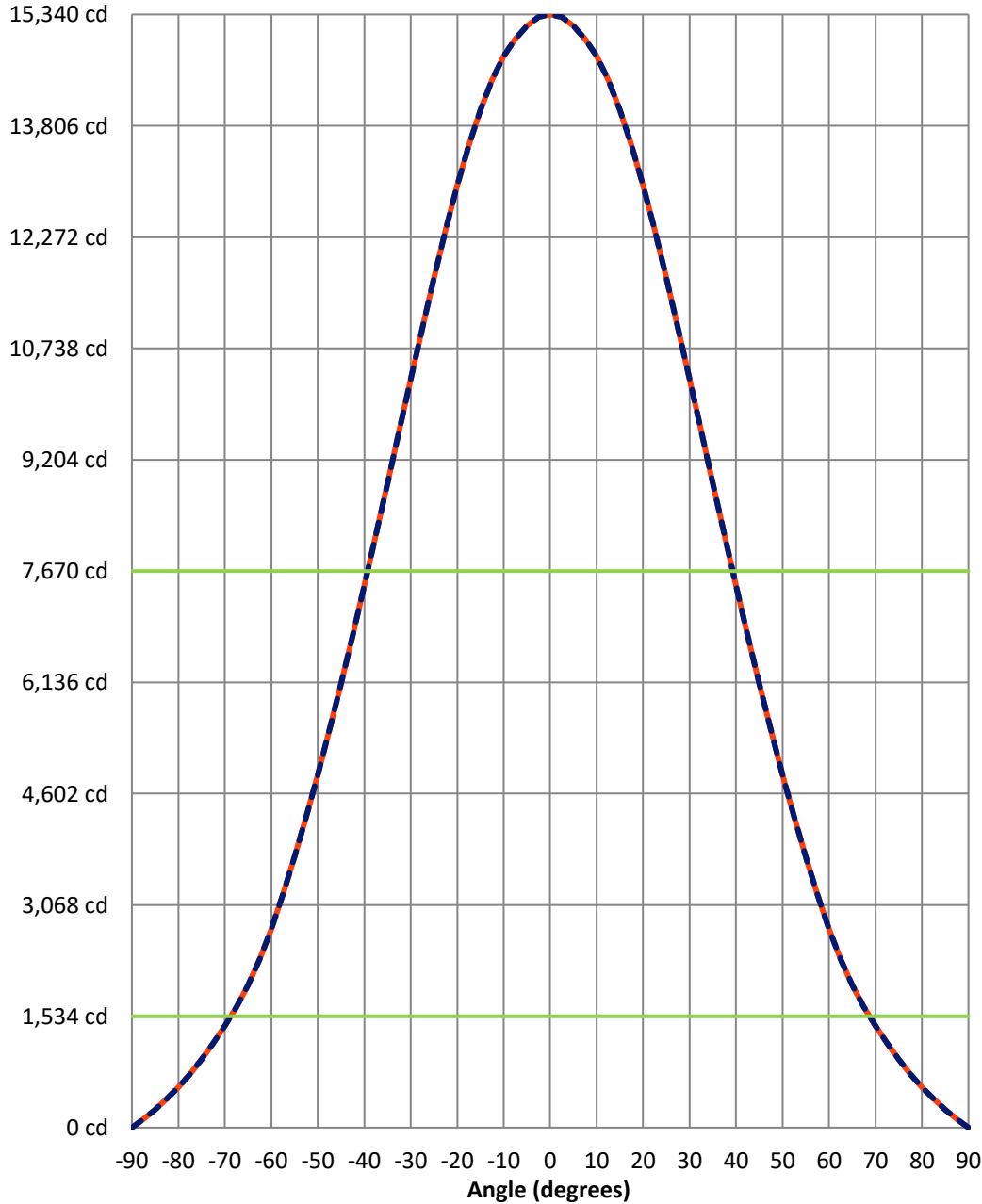
Luminous Intensity Polar Plot



— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg

REPORT NUMBER: P624186
 CATALOG NUMBER: EPH-VN-03-E-735-U-77

Luminous Intensity Plot



Beam:
 H Angle: 78.6°
 V Angle: 78.6°
 Lumens: 11950.8
 Efficiency: 43.3%

Field:
 H Angle: 137.5°
 V Angle: 137.5°
 Lumens: 19569.1
 Efficiency: 70.9%

Spill:
 Lumens: 8050.8
 Efficiency: 29.1%

- Vertical Distribution through 0-Deg
- - - Horizontal Distribution through 0-Deg



REPORT NUMBER: P624186
 CATALOG NUMBER: EPH-VN-03-E-735-U-77

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°	118.1	118.1	118.1	118.1	118.1	118.1	118.1	112.3	112.3	109.4	106.5
85°	247.6	247.6	247.6	247.6	247.6	241.9	239.0	236.1	233.3	227.5	224.6
82.5°	397.4	397.4	397.4	397.4	391.6	385.9	383.0	377.2	371.5	362.8	354.2
80°	555.8	555.8	555.8	555.8	547.1	541.4	532.7	527.0	518.3	506.8	495.3
77.5°	737.2	737.2	737.2	728.6	722.8	714.2	705.5	694.0	682.5	668.1	650.8
75°	941.6	941.6	941.6	930.1	921.5	912.8	898.5	884.1	866.8	846.6	823.6
72.5°	1163.4	1163.4	1163.4	1149.0	1140.3	1125.9	1108.7	1088.5	1068.3	1042.4	1013.6
70°	1402.4	1402.4	1402.4	1385.1	1370.7	1356.3	1333.3	1310.2	1281.4	1252.6	1218.1
67.5°	1661.6	1661.6	1661.6	1641.4	1624.1	1604.0	1578.0	1549.3	1514.7	1474.4	1434.1
65°	1963.9	1963.9	1952.4	1935.1	1915.0	1886.2	1854.5	1814.2	1771.0	1719.2	1664.4
62.5°	2321.0	2321.0	2303.7	2283.6	2257.6	2220.2	2177.0	2125.2	2064.7	1998.5	1932.2
60°	2735.7	2735.7	2715.5	2689.6	2652.2	2606.1	2548.5	2482.3	2407.4	2323.9	2243.2
57.5°	3213.7	3213.7	3187.8	3153.2	3107.1	3049.5	2977.6	2894.0	2799.0	2695.4	2594.6
55°	3732.0	3732.0	3700.3	3660.0	3605.3	3536.2	3449.8	3351.9	3236.7	3118.7	2989.1
52.5°	4282.0	4282.0	4244.6	4198.5	4135.2	4054.5	3956.6	3841.5	3709.0	3570.8	3418.1
50°	4860.8	4860.8	4817.7	4765.8	4693.8	4598.8	4486.5	4354.0	4207.2	4045.9	3870.2
47.5°	5480.0	5480.0	5431.0	5370.5	5284.2	5174.7	5042.3	4889.6	4722.6	4541.2	4342.5
45°	6116.4	6116.4	6061.7	5992.5	5897.5	5773.7	5626.8	5480.0	5266.9	5056.7	4826.3
42.5°	6778.7	6778.7	6715.3	6637.6	6528.2	6392.8	6225.8	6035.7	5825.5	5589.4	5338.9
40°	7466.9	7466.9	7394.9	7305.7	7184.7	7029.2	6842.0	6629.0	6392.8	6130.8	5854.3
37.5°	8169.6	8169.6	8088.9	7991.0	7855.7	7682.9	7472.7	7236.6	6971.6	6680.8	6375.5
35°	8878.0	8878.0	8788.7	8682.1	8532.4	8342.3	8114.9	7852.8	7559.1	7242.3	6899.6
32.5°	9600.7	9600.7	9502.8	9381.9	9212.0	9001.8	8751.3	8466.2	8169.6	7801.0	7426.6
30°	10314.9	10314.9	10208.4	10075.9	9894.5	9664.1	9390.5	9076.7	8728.2	8351.0	7947.8
27.5°	11017.5	10988.7	10899.5	10758.4	10559.7	10314.9	10018.3	9678.5	9301.3	8886.6	8454.6
25°	11708.7	11677.0	11579.1	11423.6	11210.5	10942.7	10623.0	10260.2	9854.2	9416.5	8944.2
22.5°	12371.0	12336.4	12232.7	12065.7	11838.2	11547.4	11204.7	10816.0	10384.0	9914.6	9416.5
20°	12984.3	12946.9	12840.4	12664.7	12428.6	12120.4	11757.6	11340.1	10879.3	10384.0	9854.2
17.5°	13537.2	13499.8	13387.5	13206.1	12984.3	12641.7	12267.3	11826.7	11340.1	10816.0	10260.2
15°	14023.9	13983.6	13868.4	13687.0	13433.6	13111.0	12716.5	12267.3	11757.6	11204.7	10623.0
12.5°	14438.6	14398.2	14280.2	14098.8	13836.7	13514.2	13111.0	12641.7	12120.4	11547.4	10942.7
10°	14766.8	14726.5	14614.2	14441.4	14170.8	13836.7	13433.6	12984.3	12428.6	11838.2	11210.5
7.5°	15003.0	14965.5	14861.9	14689.1	14441.4	14098.8	13687.0	13206.1	12664.7	12065.7	11423.6
5°	15181.5	15138.3	15034.6	14861.9	14614.2	14280.2	13868.4	13387.5	12840.4	12232.7	11579.1
2.5°	15305.3	15253.5	15138.3	14965.5	14726.5	14398.2	13983.6	13499.8	12946.9	12336.4	11677.0
0°	15339.9	15305.3	15181.5	15003.0	14766.8	14438.6	14023.9	13537.2	12984.3	12371.0	11708.7



REPORT NUMBER: P624186
 CATALOG NUMBER: EPH-VN-03-E-735-U-77

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°	103.7	103.7	100.8	97.9	95.0	89.3	86.4	83.5	80.6	74.9	72.0
85°	218.9	213.1	207.3	201.6	192.9	187.2	178.5	172.8	164.1	155.5	146.9
82.5°	345.6	336.9	325.4	316.8	305.2	290.8	279.3	264.9	250.5	239.0	224.6
80°	483.8	469.4	455.0	440.6	423.3	406.0	388.8	371.5	351.3	331.2	311.0
77.5°	633.5	613.4	593.2	570.2	550.0	527.0	503.9	480.9	455.0	429.1	403.2
75°	800.5	774.6	745.8	717.0	691.1	659.4	627.8	596.1	561.5	529.9	495.3
72.5°	982.0	950.3	915.7	881.2	843.7	803.4	763.1	719.9	679.6	639.3	596.1
70°	1177.8	1140.3	1097.1	1054.0	1007.9	958.9	910.0	858.1	806.3	754.5	702.6
67.5°	1388.0	1341.9	1290.1	1238.2	1180.7	1123.1	1065.5	1005.0	941.6	878.3	817.8
65°	1612.6	1555.0	1494.5	1428.3	1362.1	1295.8	1226.7	1154.7	1082.7	1007.9	941.6
62.5°	1863.1	1791.1	1713.4	1632.8	1557.9	1477.3	1402.4	1313.1	1226.7	1143.2	1059.7
60°	2154.0	2058.9	1963.9	1863.1	1768.1	1664.4	1572.3	1474.4	1376.5	1281.4	1183.5
57.5°	2479.4	2358.4	2243.2	2122.3	1995.6	1880.4	1762.3	1644.3	1534.9	1422.5	1316.0
55°	2848.0	2701.1	2557.1	2407.4	2260.5	2116.5	1966.8	1834.3	1699.0	1572.3	1448.5
52.5°	3251.1	3084.1	2905.6	2735.7	2548.5	2370.0	2202.9	2035.9	1877.5	1724.9	1583.8
50°	3683.1	3487.3	3282.8	3075.5	2862.4	2652.2	2450.6	2254.8	2070.5	1891.9	1724.9
47.5°	4132.3	3910.6	3677.3	3441.2	3213.7	2957.4	2715.5	2493.8	2272.0	2070.5	1877.5
45°	4593.0	4342.5	4086.2	3818.4	3550.6	3274.2	3006.4	2735.7	2493.8	2254.8	2035.9
42.5°	5068.2	4786.0	4500.9	4204.3	3907.7	3605.3	3303.0	3006.4	2715.5	2450.6	2202.9
40°	5557.7	5246.7	4921.3	4598.8	4282.0	3936.5	3605.3	3274.2	2957.4	2652.2	2370.0
37.5°	6047.3	5707.5	5356.1	4993.3	4630.5	4282.0	3907.7	3550.6	3213.7	2862.4	2548.5
35°	6539.7	6165.3	5785.2	5390.7	4993.3	4598.8	4204.3	3818.4	3441.2	3075.5	2735.7
32.5°	7035.0	6626.1	6205.6	5785.2	5356.1	4921.3	4500.9	4086.2	3677.3	3282.8	2905.6
30°	7521.6	7078.2	6626.1	6165.3	5707.5	5246.7	4786.0	4342.5	3910.6	3487.3	3084.1
27.5°	7996.8	7521.6	7035.0	6539.7	6047.3	5557.7	5068.2	4593.0	4132.3	3683.1	3251.1
25°	8454.6	7947.8	7426.6	6899.6	6375.5	5854.3	5338.9	4826.3	4342.5	3870.2	3418.1
22.5°	8886.6	8351.0	7801.0	7242.3	6680.8	6130.8	5589.4	5056.7	4541.2	4045.9	3570.8
20°	9301.3	8728.2	8169.6	7559.1	6971.6	6392.8	5825.5	5266.9	4722.6	4207.2	3709.0
17.5°	9678.5	9076.7	8466.2	7852.8	7236.6	6629.0	6035.7	5480.0	4889.6	4354.0	3841.5
15°	10018.3	9390.5	8751.3	8114.9	7472.7	6842.0	6225.8	5626.8	5042.3	4486.5	3956.6
12.5°	10314.9	9664.1	9001.8	8342.3	7682.9	7029.2	6392.8	5773.7	5174.7	4598.8	4054.5
10°	10559.7	9894.5	9212.0	8532.4	7855.7	7184.7	6528.2	5897.5	5284.2	4693.8	4135.2
7.5°	10758.4	10075.9	9381.9	8682.1	7991.0	7305.7	6637.6	5992.5	5370.5	4765.8	4198.5
5°	10899.5	10208.4	9502.8	8788.7	8088.9	7394.9	6715.3	6061.7	5431.0	4817.7	4244.6
2.5°	10988.7	10314.9	9600.7	8878.0	8169.6	7466.9	6778.7	6116.4	5480.0	4860.8	4282.0
0°	11017.5	10314.9	9600.7	8878.0	8169.6	7466.9	6778.7	6116.4	5480.0	4860.8	4282.0



REPORT NUMBER: P624186
 CATALOG NUMBER: EPH-VN-03-E-735-U-77

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°	69.1	63.4	57.6	54.7	49.0	46.1	40.3	34.6	31.7	25.9	20.2
85°	138.2	126.7	118.1	109.4	100.8	89.3	80.6	72.0	60.5	51.8	40.3
82.5°	210.2	195.8	181.4	167.0	152.6	138.2	120.9	106.5	92.1	77.8	60.5
80°	290.8	267.8	247.6	227.5	207.3	187.2	164.1	144.0	120.9	100.8	80.6
77.5°	374.4	348.4	319.6	290.8	262.0	236.1	207.3	181.4	155.5	126.7	100.8
75°	463.6	429.1	397.4	360.0	325.4	288.0	253.4	218.9	187.2	155.5	120.9
72.5°	555.8	512.6	469.4	429.1	385.9	342.7	302.4	259.2	218.9	181.4	144.0
70°	650.8	599.0	547.1	498.2	449.2	397.4	351.3	302.4	253.4	207.3	164.1
67.5°	751.6	691.1	630.6	567.3	512.6	455.0	397.4	342.7	288.0	236.1	187.2
65°	861.0	789.0	714.2	647.9	575.9	512.6	449.2	385.9	325.4	262.0	207.3
62.5°	973.3	889.8	806.3	722.8	647.9	567.3	498.2	429.1	360.0	290.8	227.5
60°	1088.5	993.5	898.5	806.3	714.2	630.6	547.1	469.4	397.4	319.6	247.6
57.5°	1206.6	1100.0	993.5	889.8	789.0	691.1	599.0	512.6	429.1	348.4	267.8
55°	1327.5	1206.6	1088.5	973.3	861.0	751.6	650.8	555.8	463.6	374.4	290.8
52.5°	1448.5	1316.0	1183.5	1059.7	941.6	817.8	702.6	596.1	495.3	403.2	311.0
50°	1572.3	1422.5	1281.4	1143.2	1007.9	878.3	754.5	639.3	529.9	429.1	331.2
47.5°	1699.0	1534.9	1376.5	1226.7	1082.7	941.6	806.3	679.6	561.5	455.0	351.3
45°	1834.3	1644.3	1474.4	1313.1	1154.7	1005.0	858.1	719.9	596.1	480.9	371.5
42.5°	1966.8	1762.3	1572.3	1402.4	1226.7	1065.5	910.0	763.1	627.8	503.9	388.8
40°	2116.5	1880.4	1664.4	1477.3	1295.8	1123.1	958.9	803.4	659.4	527.0	406.0
37.5°	2260.5	1995.6	1768.1	1557.9	1362.1	1180.7	1007.9	843.7	691.1	550.0	423.3
35°	2407.4	2122.3	1863.1	1632.8	1428.3	1238.2	1054.0	881.2	717.0	570.2	440.6
32.5°	2557.1	2243.2	1963.9	1713.4	1494.5	1290.1	1097.1	915.7	745.8	593.2	455.0
30°	2701.1	2358.4	2058.9	1791.1	1555.0	1341.9	1140.3	950.3	774.6	613.4	469.4
27.5°	2848.0	2479.4	2154.0	1863.1	1612.6	1388.0	1177.8	982.0	800.5	633.5	483.8
25°	2989.1	2594.6	2243.2	1932.2	1664.4	1434.1	1218.1	1013.6	823.6	650.8	495.3
22.5°	3118.7	2695.4	2323.9	1998.5	1719.2	1474.4	1252.6	1042.4	846.6	668.1	506.8
20°	3236.7	2799.0	2407.4	2064.7	1771.0	1514.7	1281.4	1068.3	866.8	682.5	518.3
17.5°	3351.9	2894.0	2482.3	2125.2	1814.2	1549.3	1310.2	1088.5	884.1	694.0	527.0
15°	3449.8	2977.6	2548.5	2177.0	1854.5	1578.0	1333.3	1108.7	898.5	705.5	532.7
12.5°	3536.2	3049.5	2606.1	2220.2	1886.2	1604.0	1356.3	1125.9	912.8	714.2	541.4
10°	3605.3	3107.1	2652.2	2257.6	1915.0	1624.1	1370.7	1140.3	921.5	722.8	547.1
7.5°	3660.0	3153.2	2689.6	2283.6	1935.1	1641.4	1385.1	1149.0	930.1	728.6	555.8
5°	3700.3	3187.8	2715.5	2303.7	1952.4	1661.6	1402.4	1163.4	941.6	737.2	555.8
2.5°	3732.0	3213.7	2735.7	2321.0	1963.9	1661.6	1402.4	1163.4	941.6	737.2	555.8
0°	3732.0	3213.7	2735.7	2321.0	1963.9	1661.6	1402.4	1163.4	941.6	737.2	555.8



REPORT NUMBER: P624186
 CATALOG NUMBER: EPH-VN-03-E-735-U-77

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	14.4	11.5	5.8	0.0
85°	31.7	20.2	11.5	0.0
82.5°	46.1	31.7	14.4	0.0
80°	60.5	40.3	20.2	0.0
77.5°	77.8	51.8	25.9	0.0
75°	92.1	60.5	31.7	0.0
72.5°	106.5	72.0	34.6	0.0
70°	120.9	80.6	40.3	0.0
67.5°	138.2	89.3	46.1	0.0
65°	152.6	100.8	49.0	0.0
62.5°	167.0	109.4	54.7	0.0
60°	181.4	118.1	57.6	0.0
57.5°	195.8	126.7	63.4	0.0
55°	210.2	138.2	69.1	0.0
52.5°	224.6	146.9	72.0	0.0
50°	239.0	155.5	74.9	0.0
47.5°	250.5	164.1	80.6	0.0
45°	264.9	172.8	83.5	0.0
42.5°	279.3	178.5	86.4	0.0
40°	290.8	187.2	89.3	0.0
37.5°	305.2	192.9	95.0	0.0
35°	316.8	201.6	97.9	0.0
32.5°	325.4	207.3	100.8	0.0
30°	336.9	213.1	103.7	0.0
27.5°	345.6	218.9	103.7	0.0
25°	354.2	224.6	106.5	0.0
22.5°	362.8	227.5	109.4	0.0
20°	371.5	233.3	112.3	0.0
17.5°	377.2	236.1	112.3	0.0
15°	383.0	239.0	118.1	0.0
12.5°	385.9	241.9	118.1	0.0
10°	391.6	247.6	118.1	0.0
7.5°	397.4	247.6	118.1	0.0
5°	397.4	247.6	118.1	0.0
2.5°	397.4	247.6	118.1	0.0
0°	397.4	247.6	118.1	0.0

(END OF REPORT)