

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: P624216

Luminaire Tested: **EPH-VN-03-E-935-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624216
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-935-U-77
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
Nema 7 distribution lens
Light Source: (48) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

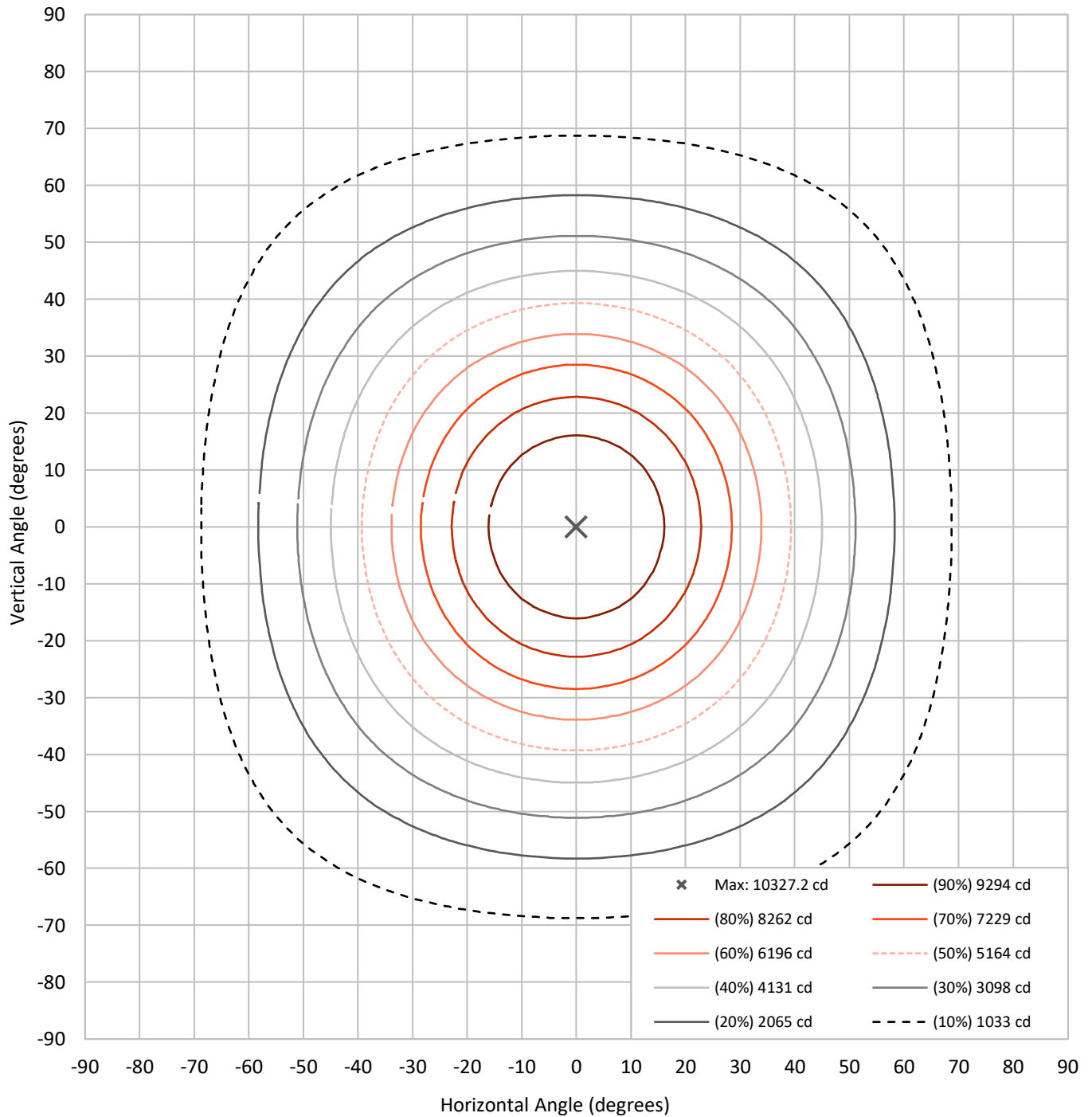
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	18594.3 lumens	Max Intensity:	10327.2 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	80.1 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	8045.6 lumens	Field Lumens:	13174.3 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: P624216
CATALOG NUMBER: EPH-VN-03-E-935-U-77

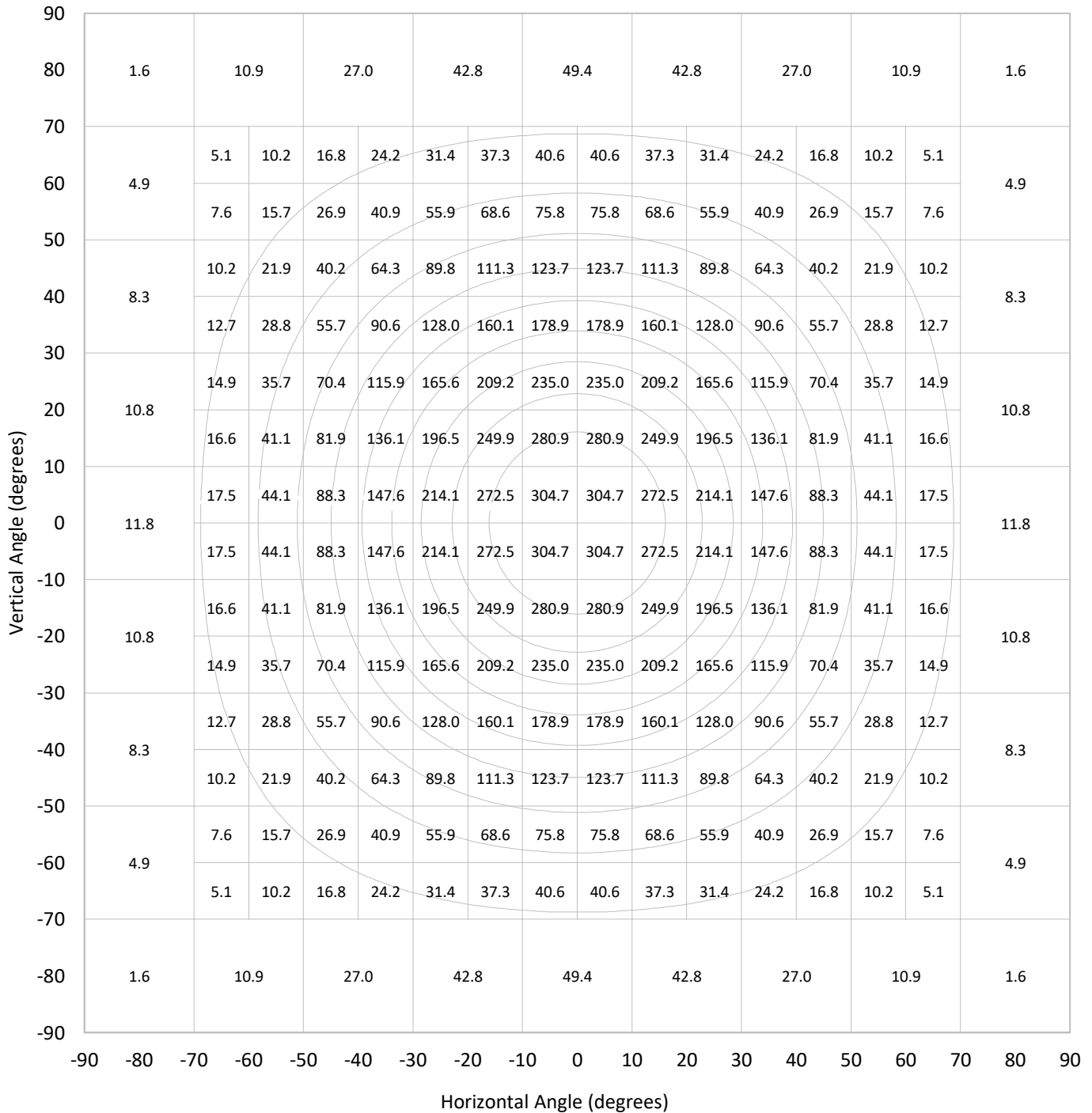
Iso-Candela Plot





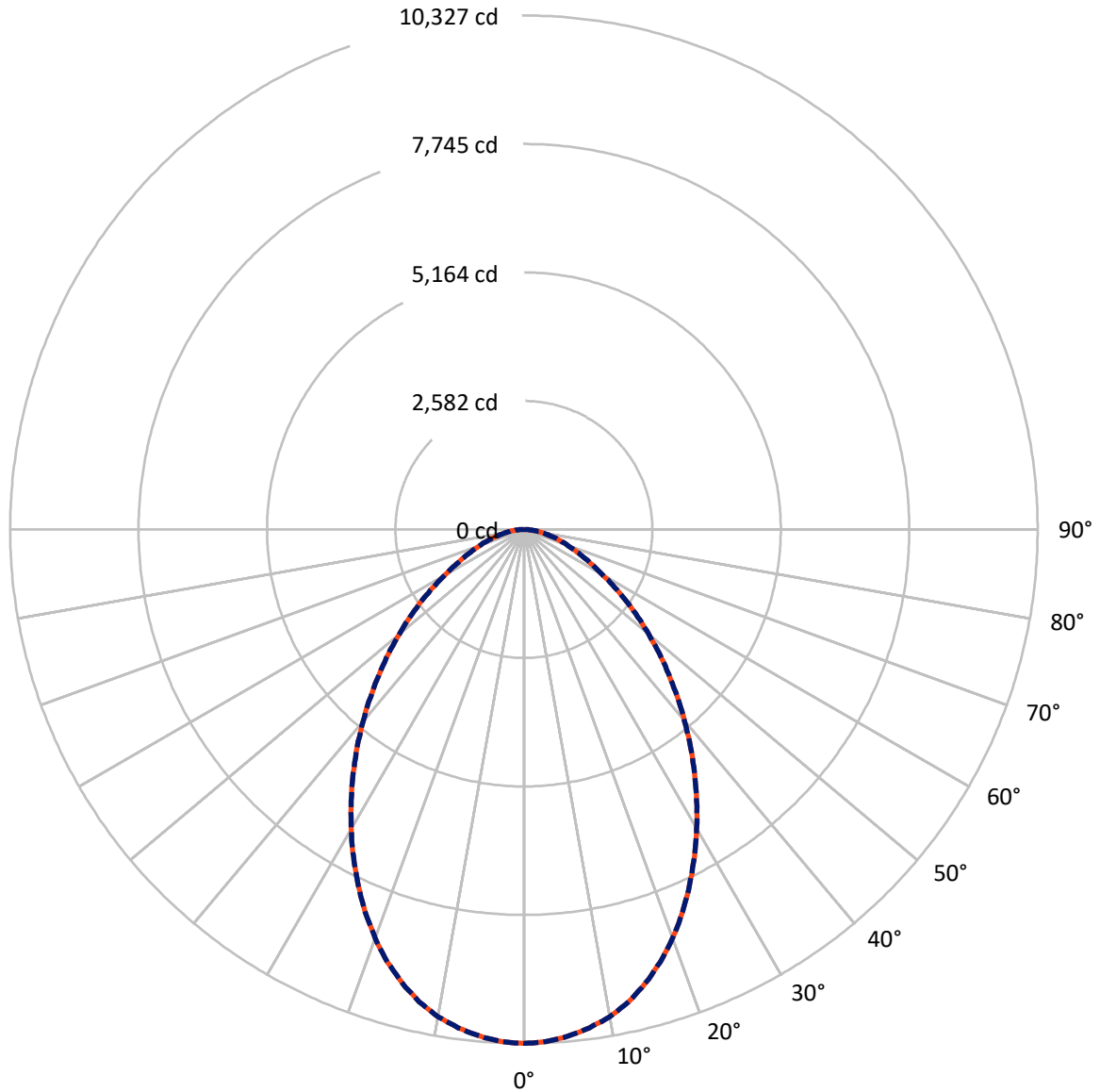
REPORT NUMBER: P624216
 CATALOG NUMBER: EPH-VN-03-E-935-U-77

Lumen Table



REPORT NUMBER: P624216
CATALOG NUMBER: EPH-VN-03-E-935-U-77

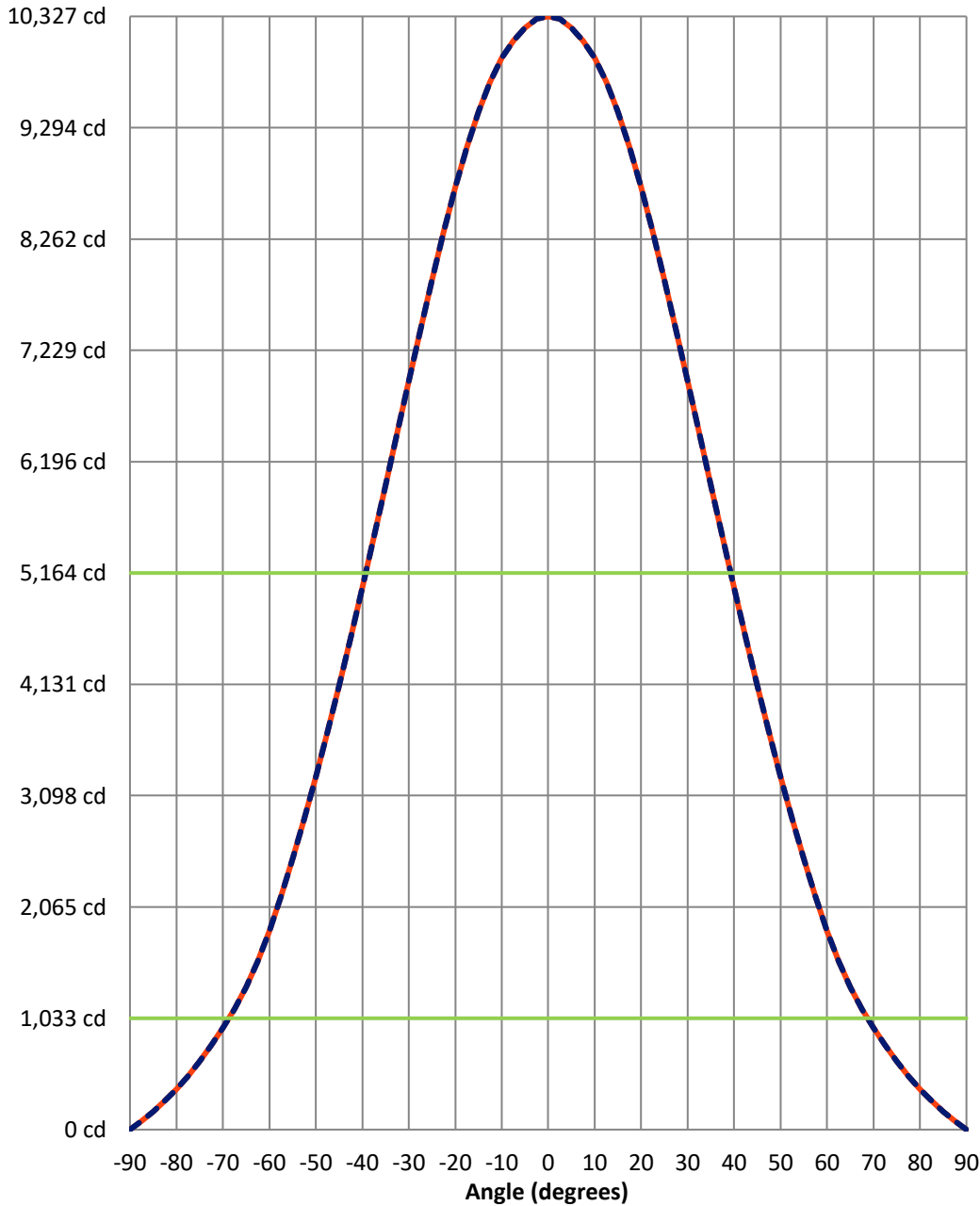
Luminous Intensity Polar Plot



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

REPORT NUMBER: P624216
 CATALOG NUMBER: EPH-VN-03-E-935-U-77

Luminous Intensity Plot



Beam:
 H Angle: 78.6°
 V Angle: 78.6°
 Lumens: 8045.6
 Efficiency: 43.3%

Field:
 H Angle: 137.5°
 V Angle: 137.5°
 Lumens: 13174.3
 Efficiency: 70.9%

Spill:
 Lumens: 5420
 Efficiency: 29.1%

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



REPORT NUMBER: P624216
 CATALOG NUMBER: EPH-VN-03-E-935-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°	79.5	79.5	79.5	79.5	79.5	79.5	79.5	75.6	75.6	73.7	71.7
85°	166.7	166.7	166.7	166.7	166.7	162.8	160.9	159.0	157.0	153.2	151.2
82.5°	267.5	267.5	267.5	267.5	263.7	259.8	257.8	254.0	250.1	244.3	238.5
80°	374.2	374.2	374.2	374.2	368.3	364.5	358.6	354.8	349.0	341.2	333.4
77.5°	496.3	496.3	496.3	490.5	486.6	480.8	475.0	467.2	459.5	449.8	438.1
75°	633.9	633.9	633.9	626.2	620.4	614.6	604.9	595.2	583.5	570.0	554.5
72.5°	783.2	783.2	783.2	773.5	767.7	758.0	746.4	732.8	719.2	701.8	682.4
70°	944.1	944.1	944.1	932.5	922.8	913.1	897.6	882.1	862.7	843.3	820.0
67.5°	1118.6	1118.6	1118.6	1105.0	1093.4	1079.8	1062.4	1043.0	1019.7	992.6	965.4
65°	1322.2	1322.2	1314.4	1302.8	1289.2	1269.8	1248.5	1221.3	1192.3	1157.4	1120.5
62.5°	1562.5	1562.5	1550.9	1537.3	1519.9	1494.7	1465.6	1430.7	1390.0	1345.4	1300.8
60°	1841.7	1841.7	1828.1	1810.7	1785.5	1754.5	1715.7	1671.1	1620.7	1564.5	1510.2
57.5°	2163.5	2163.5	2146.1	2122.8	2091.8	2053.0	2004.6	1948.3	1884.4	1814.6	1746.7
55°	2512.5	2512.5	2491.2	2464.0	2427.2	2380.7	2322.5	2256.6	2179.0	2099.6	2012.3
52.5°	2882.8	2882.8	2857.6	2826.5	2783.9	2729.6	2663.7	2586.2	2497.0	2403.9	2301.2
50°	3272.4	3272.4	3243.4	3208.5	3160.0	3096.0	3020.4	2931.2	2832.4	2723.8	2605.5
47.5°	3689.2	3689.2	3656.3	3615.6	3557.4	3483.7	3394.6	3291.8	3179.4	3057.2	2923.5
45°	4117.7	4117.7	4080.9	4034.3	3970.3	3887.0	3788.1	3689.2	3545.8	3404.3	3249.2
42.5°	4563.6	4563.6	4520.9	4468.6	4394.9	4303.8	4191.4	4063.4	3921.9	3762.9	3594.3
40°	5026.9	5026.9	4978.4	4918.3	4836.9	4732.2	4606.2	4462.8	4303.8	4127.4	3941.3
37.5°	5499.9	5499.9	5445.7	5379.7	5288.6	5172.3	5030.8	4871.8	4693.5	4497.7	4292.2
35°	5976.8	5976.8	5916.7	5845.0	5744.2	5616.3	5463.1	5286.7	5088.9	4875.7	4645.0
32.5°	6463.4	6463.4	6397.5	6316.1	6201.7	6060.2	5891.5	5699.6	5499.9	5251.8	4999.8
30°	6944.2	6944.2	6872.5	6783.3	6661.2	6506.1	6321.9	6110.6	5876.0	5622.1	5350.7
27.5°	7417.3	7397.9	7337.8	7242.8	7109.0	6944.2	6744.6	6515.8	6261.8	5982.7	5691.9
25°	7882.5	7861.2	7795.3	7690.6	7547.1	7366.9	7151.7	6907.4	6634.0	6339.4	6021.4
22.5°	8328.4	8305.2	8235.4	8122.9	7969.8	7774.0	7543.3	7281.6	6990.8	6674.8	6339.4
20°	8741.4	8716.2	8644.4	8526.2	8367.2	8159.8	7915.5	7634.4	7324.2	6990.8	6634.0
17.5°	9113.6	9088.4	9012.8	8890.6	8741.4	8510.7	8258.6	7962.0	7634.4	7281.6	6907.4
15°	9441.2	9414.1	9336.5	9214.4	9043.8	8826.7	8561.1	8258.6	7915.5	7543.3	7151.7
12.5°	9720.4	9693.2	9613.7	9491.6	9315.2	9098.1	8826.7	8510.7	8159.8	7774.0	7366.9
10°	9941.4	9914.2	9838.6	9722.3	9540.1	9315.2	9043.8	8741.4	8367.2	7969.8	7547.1
7.5°	10100.3	10075.1	10005.4	9889.0	9722.3	9491.6	9214.4	8890.6	8526.2	8122.9	7690.6
5°	10220.5	10191.5	10121.7	10005.4	9838.6	9613.7	9336.5	9012.8	8644.4	8235.4	7795.3
2.5°	10303.9	10269.0	10191.5	10075.1	9914.2	9693.2	9414.1	9088.4	8716.2	8305.2	7861.2
0°	10327.2	10303.9	10220.5	10100.3	9941.4	9720.4	9441.2	9113.6	8741.4	8328.4	7882.5



REPORT NUMBER: P624216
 CATALOG NUMBER: EPH-VN-03-E-935-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°	69.8	69.8	67.9	65.9	64.0	60.1	58.2	56.2	54.3	50.4	48.5
85°	147.3	143.5	139.6	135.7	129.9	126.0	120.2	116.3	110.5	104.7	98.9
82.5°	232.6	226.8	219.1	213.3	205.5	195.8	188.0	178.4	168.7	160.9	151.2
80°	325.7	316.0	306.3	296.6	285.0	273.3	261.7	250.1	236.5	222.9	209.4
77.5°	426.5	412.9	399.4	383.9	370.3	354.8	339.3	323.8	306.3	288.9	271.4
75°	538.9	521.5	502.1	482.7	465.3	443.9	422.6	401.3	378.0	356.7	333.4
72.5°	661.1	639.8	616.5	593.2	568.0	540.9	513.7	484.7	457.5	430.4	401.3
70°	792.9	767.7	738.6	709.5	678.5	645.6	612.6	577.7	542.8	507.9	473.0
67.5°	934.4	903.4	868.5	833.6	794.8	756.1	717.3	676.6	633.9	591.3	550.6
65°	1085.6	1046.9	1006.2	961.6	917.0	872.4	825.9	777.4	728.9	678.5	633.9
62.5°	1254.3	1205.8	1153.5	1099.2	1048.8	994.5	944.1	884.0	825.9	769.6	713.4
60°	1450.1	1386.1	1322.2	1254.3	1190.3	1120.5	1058.5	992.6	926.7	862.7	796.8
57.5°	1669.2	1587.8	1510.2	1428.8	1343.5	1265.9	1186.5	1107.0	1033.3	957.7	886.0
55°	1917.3	1818.5	1721.5	1620.7	1521.8	1424.9	1324.1	1234.9	1143.8	1058.5	975.1
52.5°	2188.7	2076.3	1956.1	1841.7	1715.7	1595.5	1483.1	1370.6	1264.0	1161.2	1066.3
50°	2479.5	2347.7	2210.1	2070.5	1927.0	1785.5	1649.8	1518.0	1393.9	1273.7	1161.2
47.5°	2782.0	2632.7	2475.7	2316.7	2163.5	1991.0	1828.1	1678.9	1529.6	1393.9	1264.0
45°	3092.1	2923.5	2750.9	2570.6	2390.4	2204.2	2023.9	1841.7	1678.9	1518.0	1370.6
42.5°	3412.0	3222.0	3030.1	2830.4	2630.7	2427.2	2223.6	2023.9	1828.1	1649.8	1483.1
40°	3741.6	3532.2	3313.1	3096.0	2882.8	2650.1	2427.2	2204.2	1991.0	1785.5	1595.5
37.5°	4071.2	3842.4	3605.9	3361.6	3117.3	2882.8	2630.7	2390.4	2163.5	1927.0	1715.7
35°	4402.7	4150.6	3894.7	3629.1	3361.6	3096.0	2830.4	2570.6	2316.7	2070.5	1841.7
32.5°	4736.1	4460.8	4177.8	3894.7	3605.9	3313.1	3030.1	2750.9	2475.7	2210.1	1956.1
30°	5063.7	4765.2	4460.8	4150.6	3842.4	3532.2	3222.0	2923.5	2632.7	2347.7	2076.3
27.5°	5383.6	5063.7	4736.1	4402.7	4071.2	3741.6	3412.0	3092.1	2782.0	2479.5	2188.7
25°	5691.9	5350.7	4999.8	4645.0	4292.2	3941.3	3594.3	3249.2	2923.5	2605.5	2301.2
22.5°	5982.7	5622.1	5251.8	4875.7	4497.7	4127.4	3762.9	3404.3	3057.2	2723.8	2403.9
20°	6261.8	5876.0	5499.9	5088.9	4693.5	4303.8	3921.9	3545.8	3179.4	2832.4	2497.0
17.5°	6515.8	6110.6	5699.6	5286.7	4871.8	4462.8	4063.4	3689.2	3291.8	2931.2	2586.2
15°	6744.6	6321.9	5891.5	5463.1	5030.8	4606.2	4191.4	3788.1	3394.6	3020.4	2663.7
12.5°	6944.2	6506.1	6060.2	5616.3	5172.3	4732.2	4303.8	3887.0	3483.7	3096.0	2729.6
10°	7109.0	6661.2	6201.7	5744.2	5288.6	4836.9	4394.9	3970.3	3557.4	3160.0	2783.9
7.5°	7242.8	6783.3	6316.1	5845.0	5379.7	4918.3	4468.6	4034.3	3615.6	3208.5	2826.5
5°	7337.8	6872.5	6397.5	5916.7	5445.7	4978.4	4520.9	4080.9	3656.3	3243.4	2857.6
2.5°	7397.9	6944.2	6463.4	5976.8	5499.9	5026.9	4563.6	4117.7	3689.2	3272.4	2882.8
0°	7417.3	6944.2	6463.4	5976.8	5499.9	5026.9	4563.6	4117.7	3689.2	3272.4	2882.8



REPORT NUMBER: P624216
 CATALOG NUMBER: EPH-VN-03-E-935-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°	46.5	42.7	38.8	36.8	33.0	31.0	27.1	23.3	21.3	17.4	13.6
85°	93.1	85.3	79.5	73.7	67.9	60.1	54.3	48.5	40.7	34.9	27.1
82.5°	141.5	131.8	122.1	112.4	102.7	93.1	81.4	71.7	62.0	52.3	40.7
80°	195.8	180.3	166.7	153.2	139.6	126.0	110.5	96.9	81.4	67.9	54.3
77.5°	252.0	234.6	215.2	195.8	176.4	159.0	139.6	122.1	104.7	85.3	67.9
75°	312.1	288.9	267.5	242.3	219.1	193.9	170.6	147.3	126.0	104.7	81.4
72.5°	374.2	345.1	316.0	288.9	259.8	230.7	203.6	174.5	147.3	122.1	96.9
70°	438.1	403.2	368.3	335.4	302.4	267.5	236.5	203.6	170.6	139.6	110.5
67.5°	506.0	465.3	424.6	381.9	345.1	306.3	267.5	230.7	193.9	159.0	126.0
65°	579.7	531.2	480.8	436.2	387.7	345.1	302.4	259.8	219.1	176.4	139.6
62.5°	655.3	599.0	542.8	486.6	436.2	381.9	335.4	288.9	242.3	195.8	153.2
60°	732.8	668.8	604.9	542.8	480.8	424.6	368.3	316.0	267.5	215.2	166.7
57.5°	812.3	740.6	668.8	599.0	531.2	465.3	403.2	345.1	288.9	234.6	180.3
55°	893.7	812.3	732.8	655.3	579.7	506.0	438.1	374.2	312.1	252.0	195.8
52.5°	975.1	886.0	796.8	713.4	633.9	550.6	473.0	401.3	333.4	271.4	209.4
50°	1058.5	957.7	862.7	769.6	678.5	591.3	507.9	430.4	356.7	288.9	222.9
47.5°	1143.8	1033.3	926.7	825.9	728.9	633.9	542.8	457.5	378.0	306.3	236.5
45°	1234.9	1107.0	992.6	884.0	777.4	676.6	577.7	484.7	401.3	323.8	250.1
42.5°	1324.1	1186.5	1058.5	944.1	825.9	717.3	612.6	513.7	422.6	339.3	261.7
40°	1424.9	1265.9	1120.5	994.5	872.4	756.1	645.6	540.9	443.9	354.8	273.3
37.5°	1521.8	1343.5	1190.3	1048.8	917.0	794.8	678.5	568.0	465.3	370.3	285.0
35°	1620.7	1428.8	1254.3	1099.2	961.6	833.6	709.5	593.2	482.7	383.9	296.6
32.5°	1721.5	1510.2	1322.2	1153.5	1006.2	868.5	738.6	616.5	502.1	399.4	306.3
30°	1818.5	1587.8	1386.1	1205.8	1046.9	903.4	767.7	639.8	521.5	412.9	316.0
27.5°	1917.3	1669.2	1450.1	1254.3	1085.6	934.4	792.9	661.1	538.9	426.5	325.7
25°	2012.3	1746.7	1510.2	1300.8	1120.5	965.4	820.0	682.4	554.5	438.1	333.4
22.5°	2099.6	1814.6	1564.5	1345.4	1157.4	992.6	843.3	701.8	570.0	449.8	341.2
20°	2179.0	1884.4	1620.7	1390.0	1192.3	1019.7	862.7	719.2	583.5	459.5	349.0
17.5°	2256.6	1948.3	1671.1	1430.7	1221.3	1043.0	882.1	732.8	595.2	467.2	354.8
15°	2322.5	2004.6	1715.7	1465.6	1248.5	1062.4	897.6	746.4	604.9	475.0	358.6
12.5°	2380.7	2053.0	1754.5	1494.7	1269.8	1079.8	913.1	758.0	614.6	480.8	364.5
10°	2427.2	2091.8	1785.5	1519.9	1289.2	1093.4	922.8	767.7	620.4	486.6	368.3
7.5°	2464.0	2122.8	1810.7	1537.3	1302.8	1105.0	932.5	773.5	626.2	490.5	374.2
5°	2491.2	2146.1	1828.1	1550.9	1314.4	1118.6	944.1	783.2	633.9	496.3	374.2
2.5°	2512.5	2163.5	1841.7	1562.5	1322.2	1118.6	944.1	783.2	633.9	496.3	374.2
0°	2512.5	2163.5	1841.7	1562.5	1322.2	1118.6	944.1	783.2	633.9	496.3	374.2



REPORT NUMBER: P624216
 CATALOG NUMBER: EPH-VN-03-E-935-U-77

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	9.7	7.8	3.9	0.0
85°	21.3	13.6	7.8	0.0
82.5°	31.0	21.3	9.7	0.0
80°	40.7	27.1	13.6	0.0
77.5°	52.3	34.9	17.4	0.0
75°	62.0	40.7	21.3	0.0
72.5°	71.7	48.5	23.3	0.0
70°	81.4	54.3	27.1	0.0
67.5°	93.1	60.1	31.0	0.0
65°	102.7	67.9	33.0	0.0
62.5°	112.4	73.7	36.8	0.0
60°	122.1	79.5	38.8	0.0
57.5°	131.8	85.3	42.7	0.0
55°	141.5	93.1	46.5	0.0
52.5°	151.2	98.9	48.5	0.0
50°	160.9	104.7	50.4	0.0
47.5°	168.7	110.5	54.3	0.0
45°	178.4	116.3	56.2	0.0
42.5°	188.0	120.2	58.2	0.0
40°	195.8	126.0	60.1	0.0
37.5°	205.5	129.9	64.0	0.0
35°	213.3	135.7	65.9	0.0
32.5°	219.1	139.6	67.9	0.0
30°	226.8	143.5	69.8	0.0
27.5°	232.6	147.3	69.8	0.0
25°	238.5	151.2	71.7	0.0
22.5°	244.3	153.2	73.7	0.0
20°	250.1	157.0	75.6	0.0
17.5°	254.0	159.0	75.6	0.0
15°	257.8	160.9	79.5	0.0
12.5°	259.8	162.8	79.5	0.0
10°	263.7	166.7	79.5	0.0
7.5°	267.5	166.7	79.5	0.0
5°	267.5	166.7	79.5	0.0
2.5°	267.5	166.7	79.5	0.0
0°	267.5	166.7	79.5	0.0

(END OF REPORT)