

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: P624194

Luminaire Tested: **EPH-VN-06-E-740-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624194
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: EPHESUS
Catalog Number: EPH-VN-06-E-740-U-77
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
Nema 7 distribution lens
Light Source: (96) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

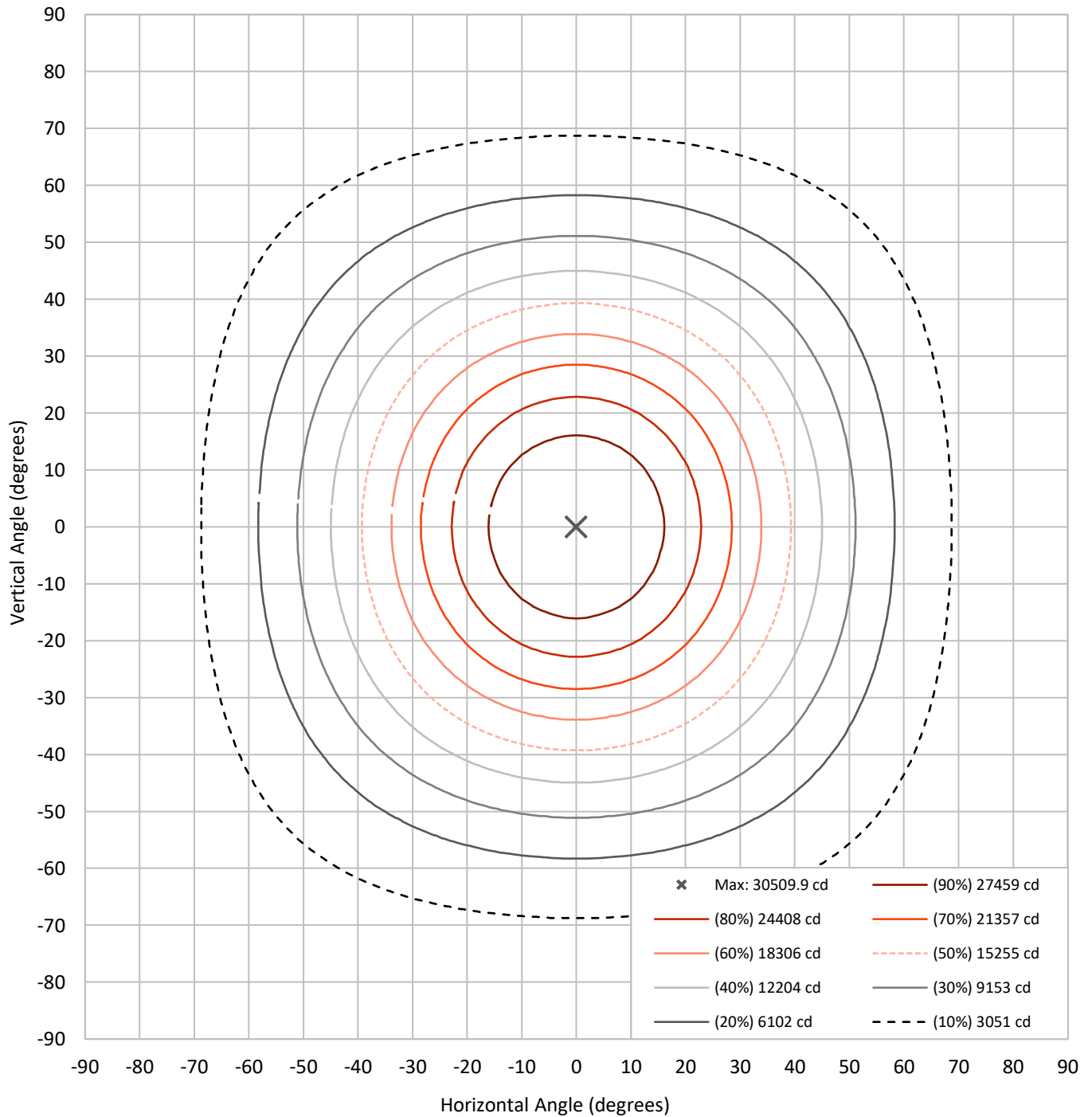
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	54933.7 lumens	Max Intensity:	30509.9 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	118.3 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	23769.3 lumens	Field Lumens:	38921.4 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%

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



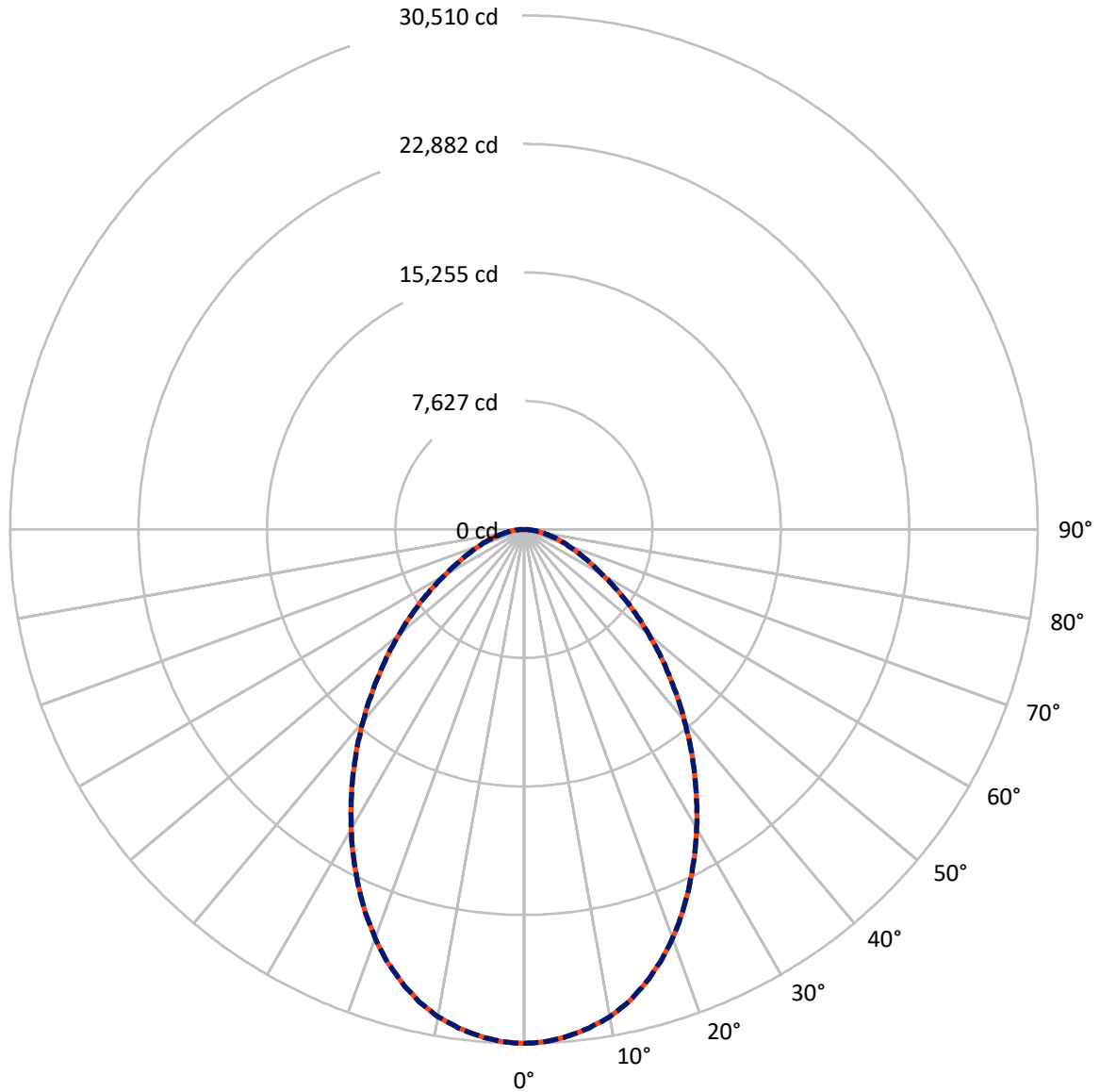
REPORT NUMBER: P624194
CATALOG NUMBER: EPH-VN-06-E-740-U-77

Iso-Candela Plot



REPORT NUMBER: P624194
CATALOG NUMBER: EPH-VN-06-E-740-U-77

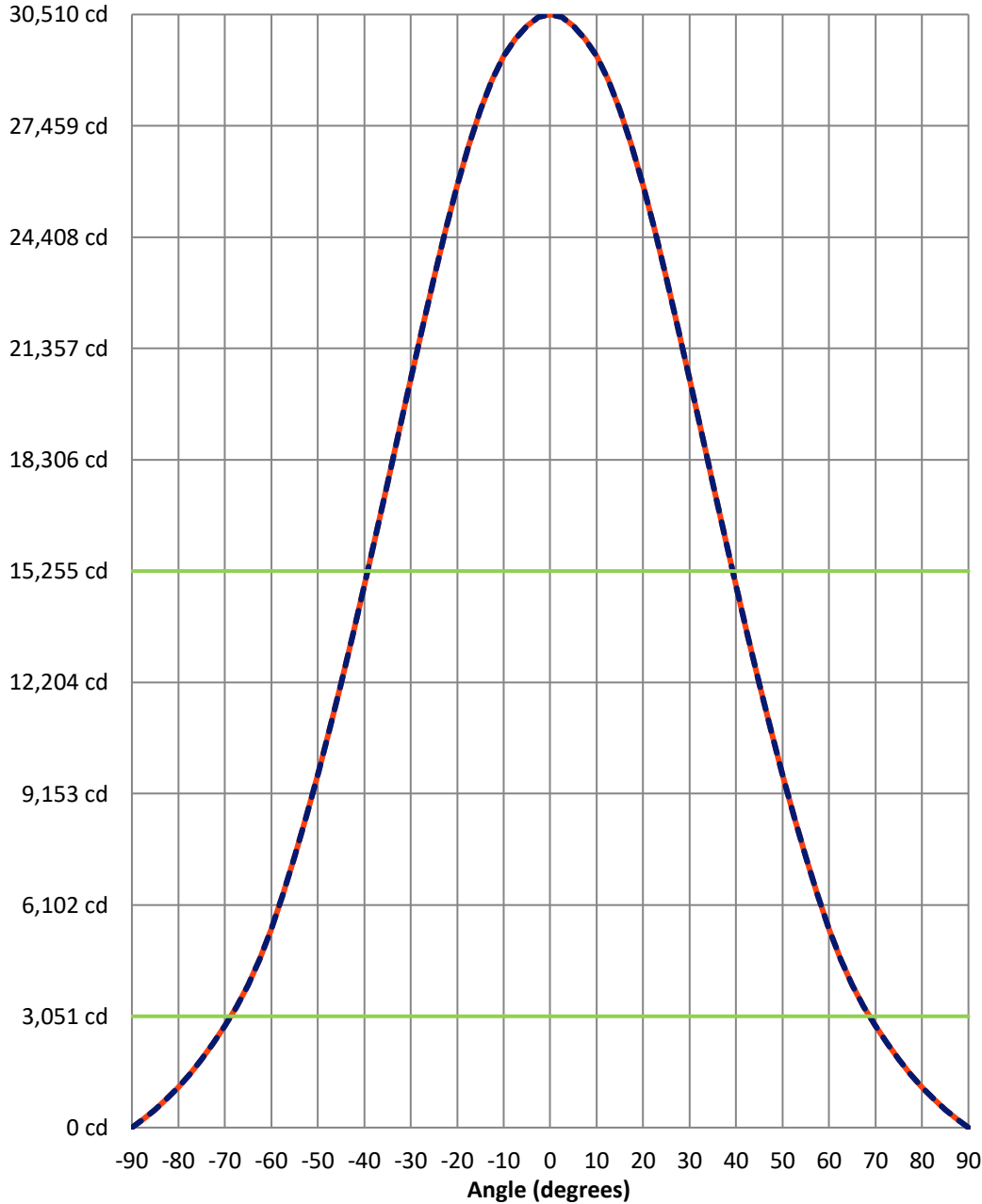
Luminous Intensity Polar Plot



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

REPORT NUMBER: P624194
 CATALOG NUMBER: EPH-VN-06-E-740-U-77

Luminous Intensity Plot



Beam:
 H Angle: 78.6°
 V Angle: 78.6°
 Lumens: 23769.3
 Efficiency: 43.3%

Field:
 H Angle: 137.5°
 V Angle: 137.5°
 Lumens: 38921.4
 Efficiency: 70.9%

Spill:
 Lumens: 16012.3
 Efficiency: 29.1%

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



REPORT NUMBER: P624194
 CATALOG NUMBER: EPH-VN-06-E-740-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°	234.8	234.8	234.8	234.8	234.8	234.8	234.8	223.4	223.4	217.6	211.9
85°	492.6	492.6	492.6	492.6	492.6	481.1	475.4	469.6	463.9	452.5	446.7
82.5°	790.4	790.4	790.4	790.4	778.9	767.5	761.7	750.3	738.8	721.7	704.5
80°	1105.4	1105.4	1105.4	1105.4	1088.2	1076.8	1059.6	1048.1	1030.9	1008.0	985.1
77.5°	1466.2	1466.2	1466.2	1449.0	1437.6	1420.4	1403.2	1380.3	1357.4	1328.8	1294.4
75°	1872.9	1872.9	1872.9	1850.0	1832.8	1815.6	1787.0	1758.3	1723.9	1683.9	1638.0
72.5°	2313.9	2313.9	2313.9	2285.2	2268.1	2239.4	2205.1	2165.0	2124.9	2073.3	2016.0
70°	2789.2	2789.2	2789.2	2754.9	2726.2	2697.6	2651.8	2606.0	2548.7	2491.4	2422.7
67.5°	3304.7	3304.7	3304.7	3264.6	3230.3	3190.2	3138.6	3081.3	3012.6	2932.4	2852.2
65°	3906.1	3906.1	3883.2	3848.8	3808.7	3751.4	3688.4	3608.3	3522.4	3419.3	3310.4
62.5°	4616.3	4616.3	4581.9	4541.8	4490.3	4415.8	4329.9	4226.8	4106.5	3974.8	3843.1
60°	5441.0	5441.0	5400.9	5349.4	5274.9	5183.3	5068.8	4937.0	4788.1	4622.0	4461.6
57.5°	6391.8	6391.8	6340.2	6271.5	6179.9	6065.3	5922.1	5756.0	5567.0	5360.9	5160.4
55°	7422.7	7422.7	7359.7	7279.5	7170.7	7033.3	6861.4	6666.7	6437.6	6202.8	5945.0
52.5°	8516.7	8516.7	8442.2	8350.6	8224.6	8064.2	7869.5	7640.4	7376.9	7102.0	6798.4
50°	9667.9	9667.9	9581.9	9478.9	9335.7	9146.7	8923.3	8659.8	8367.7	8047.0	7697.6
47.5°	10899.3	10899.3	10801.9	10681.6	10509.8	10292.1	10028.7	9725.1	9392.9	9032.1	8636.9
45°	12165.0	12165.0	12056.2	11918.7	11729.7	11483.4	11191.3	10899.3	10475.4	10057.3	9599.1
42.5°	13482.3	13482.3	13356.3	13201.7	12984.0	12714.8	12382.6	12004.6	11586.5	11116.9	10618.6
40°	14851.2	14851.2	14708.0	14530.4	14289.9	13980.6	13608.3	13184.5	12714.8	12193.6	11643.8
37.5°	16248.6	16248.6	16088.3	15893.5	15624.4	15280.7	14862.6	14393.0	13866.0	13287.6	12680.5
35°	17657.6	17657.6	17480.0	17268.1	16970.3	16592.3	16139.8	15618.6	15034.4	14404.4	13722.9
32.5°	19095.2	19095.2	18900.4	18659.9	18322.0	17903.9	17405.6	16838.6	16248.6	15515.5	14771.0
30°	20515.6	20515.6	20303.6	20040.2	19679.4	19221.2	18677.1	18052.8	17359.8	16609.5	15807.6
27.5°	21913.0	21855.8	21678.2	21397.6	21002.4	20515.6	19925.6	19249.8	18499.5	17674.8	16815.7
25°	23287.6	23224.6	23029.9	22720.6	22296.8	21764.1	21128.4	20406.7	19599.2	18728.6	17789.3
22.5°	24604.9	24536.2	24330.0	23997.8	23545.4	22966.9	22285.3	21512.1	20653.0	19719.5	18728.6
20°	25824.9	25750.4	25538.5	25189.1	24719.5	24106.6	23385.0	22554.5	21638.1	20653.0	19599.2
17.5°	26924.5	26850.1	26626.7	26265.9	25824.9	25143.3	24398.7	23522.4	22554.5	21512.1	20406.7
15°	27892.5	27812.3	27583.2	27222.4	26718.3	26076.9	25292.2	24398.7	23385.0	22285.3	21128.4
12.5°	28717.2	28637.0	28402.2	28041.4	27520.2	26878.7	26076.9	25143.3	24106.6	22966.9	21764.1
10°	29370.1	29289.9	29066.6	28722.9	28184.6	27520.2	26718.3	25824.9	24719.5	23545.4	22296.8
7.5°	29839.8	29765.3	29559.1	29215.5	28722.9	28041.4	27222.4	26265.9	25189.1	23997.8	22720.6
5°	30194.9	30109.0	29902.8	29559.1	29066.6	28402.2	27583.2	26626.7	25538.5	24330.0	23029.9
2.5°	30441.2	30338.1	30109.0	29765.3	29289.9	28637.0	27812.3	26850.1	25750.4	24536.2	23224.6
0°	30509.9	30441.2	30194.9	29839.8	29370.1	28717.2	27892.5	26924.5	25824.9	24604.9	23287.6



REPORT NUMBER: P624194
 CATALOG NUMBER: EPH-VN-06-E-740-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°	206.2	206.2	200.5	194.7	189.0	177.5	171.8	166.1	160.4	148.9	143.2
85°	435.3	423.8	412.4	400.9	383.7	372.3	355.1	343.6	326.5	309.3	292.1
82.5°	687.3	670.1	647.2	630.0	607.1	578.5	555.6	526.9	498.3	475.4	446.7
80°	962.2	933.6	904.9	876.3	841.9	807.6	773.2	738.8	698.7	658.7	618.6
77.5°	1260.0	1219.9	1179.8	1134.0	1093.9	1048.1	1002.3	956.5	904.9	853.4	801.8
75°	1592.2	1540.7	1483.4	1426.1	1374.6	1311.6	1248.6	1185.6	1116.8	1053.8	985.1
72.5°	1953.0	1890.0	1821.3	1752.6	1678.1	1597.9	1517.8	1431.9	1351.7	1271.5	1185.6
70°	2342.5	2268.1	2182.1	2096.2	2004.6	1907.2	1809.9	1706.8	1603.7	1500.6	1397.5
67.5°	2760.6	2669.0	2565.9	2462.8	2348.2	2233.7	2119.1	1998.9	1872.9	1746.9	1626.6
65°	3207.3	3092.8	2972.5	2840.8	2709.1	2577.3	2439.9	2296.7	2153.5	2004.6	1872.9
62.5°	3705.6	3562.4	3407.8	3247.4	3098.5	2938.2	2789.2	2611.7	2439.9	2273.8	2107.7
60°	4284.1	4095.1	3906.1	3705.6	3516.6	3310.4	3127.2	2932.4	2737.7	2548.7	2354.0
57.5°	4931.3	4690.7	4461.6	4221.1	3969.1	3740.0	3505.2	3270.3	3052.7	2829.3	2617.4
55°	5664.4	5372.3	5085.9	4788.1	4496.0	4209.6	3911.8	3648.4	3379.2	3127.2	2880.9
52.5°	6466.2	6134.0	5779.0	5441.0	5068.8	4713.7	4381.5	4049.3	3734.3	3430.7	3150.1
50°	7325.3	6935.9	6529.2	6116.9	5693.0	5274.9	4874.0	4484.6	4118.0	3762.9	3430.7
47.5°	8218.8	7777.8	7313.9	6844.2	6391.8	5882.0	5400.9	4959.9	4518.9	4118.0	3734.3
45°	9135.2	8636.9	8127.2	7594.5	7061.9	6512.1	5979.4	5441.0	4959.9	4484.6	4049.3
42.5°	10080.2	9518.9	8951.9	8362.0	7772.1	7170.7	6569.3	5979.4	5400.9	4874.0	4381.5
40°	11053.9	10435.3	9788.1	9146.7	8516.7	7829.4	7170.7	6512.1	5882.0	5274.9	4713.7
37.5°	12027.5	11351.7	10653.0	9931.3	9209.7	8516.7	7772.1	7061.9	6391.8	5693.0	5068.8
35°	13006.9	12262.4	11506.4	10721.7	9931.3	9146.7	8362.0	7594.5	6844.2	6116.9	5441.0
32.5°	13992.0	13178.8	12342.6	11506.4	10653.0	9788.1	8951.9	8127.2	7313.9	6529.2	5779.0
30°	14960.0	14078.0	13178.8	12262.4	11351.7	10435.3	9518.9	8636.9	7777.8	6935.9	6134.0
27.5°	15905.0	14960.0	13992.0	13006.9	12027.5	11053.9	10080.2	9135.2	8218.8	7325.3	6466.2
25°	16815.7	15807.6	14771.0	13722.9	12680.5	11643.8	10618.6	9599.1	8636.9	7697.6	6798.4
22.5°	17674.8	16609.5	15515.5	14404.4	13287.6	12193.6	11116.9	10057.3	9032.1	8047.0	7102.0
20°	18499.5	17359.8	16248.6	15034.4	13866.0	12714.8	11586.5	10475.4	9392.9	8367.7	7376.9
17.5°	19249.8	18052.8	16838.6	15618.6	14393.0	13184.5	12004.6	10899.3	9725.1	8659.8	7640.4
15°	19925.6	18677.1	17405.6	16139.8	14862.6	13608.3	12382.6	11191.3	10028.7	8923.3	7869.5
12.5°	20515.6	19221.2	17903.9	16592.3	15280.7	13980.6	12714.8	11483.4	10292.1	9146.7	8064.2
10°	21002.4	19679.4	18322.0	16970.3	15624.4	14289.9	12984.0	11729.7	10509.8	9335.7	8224.6
7.5°	21397.6	20040.2	18659.9	17268.1	15893.5	14530.4	13201.7	11918.7	10681.6	9478.9	8350.6
5°	21678.2	20303.6	18900.4	17480.0	16088.3	14708.0	13356.3	12056.2	10801.9	9581.9	8442.2
2.5°	21855.8	20515.6	19095.2	17657.6	16248.6	14851.2	13482.3	12165.0	10899.3	9667.9	8516.7
0°	21913.0	20515.6	19095.2	17657.6	16248.6	14851.2	13482.3	12165.0	10899.3	9667.9	8516.7



REPORT NUMBER: P624194
 CATALOG NUMBER: EPH-VN-06-E-740-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°	137.5	126.0	114.5	108.8	97.4	91.6	80.2	68.7	63.0	51.5	40.1
85°	274.9	252.0	234.8	217.6	200.5	177.5	160.4	143.2	120.3	103.1	80.2
82.5°	418.1	389.5	360.8	332.2	303.6	274.9	240.6	211.9	183.3	154.6	120.3
80°	578.5	532.6	492.6	452.5	412.4	372.3	326.5	286.4	240.6	200.5	160.4
77.5°	744.6	693.0	635.7	578.5	521.2	469.6	412.4	360.8	309.3	252.0	200.5
75°	922.1	853.4	790.4	715.9	647.2	572.7	504.0	435.3	372.3	309.3	240.6
72.5°	1105.4	1019.5	933.6	853.4	767.5	681.6	601.4	515.5	435.3	360.8	286.4
70°	1294.4	1191.3	1088.2	990.8	893.5	790.4	698.7	601.4	504.0	412.4	326.5
67.5°	1494.9	1374.6	1254.3	1128.3	1019.5	904.9	790.4	681.6	572.7	469.6	372.3
65°	1712.5	1569.3	1420.4	1288.7	1145.5	1019.5	893.5	767.5	647.2	521.2	412.4
62.5°	1935.9	1769.8	1603.7	1437.6	1288.7	1128.3	990.8	853.4	715.9	578.5	452.5
60°	2165.0	1976.0	1787.0	1603.7	1420.4	1254.3	1088.2	933.6	790.4	635.7	492.6
57.5°	2399.8	2187.9	1976.0	1769.8	1569.3	1374.6	1191.3	1019.5	853.4	693.0	532.6
55°	2640.3	2399.8	2165.0	1935.9	1712.5	1494.9	1294.4	1105.4	922.1	744.6	578.5
52.5°	2880.9	2617.4	2354.0	2107.7	1872.9	1626.6	1397.5	1185.6	985.1	801.8	618.6
50°	3127.2	2829.3	2548.7	2273.8	2004.6	1746.9	1500.6	1271.5	1053.8	853.4	658.7
47.5°	3379.2	3052.7	2737.7	2439.9	2153.5	1872.9	1603.7	1351.7	1116.8	904.9	698.7
45°	3648.4	3270.3	2932.4	2611.7	2296.7	1998.9	1706.8	1431.9	1185.6	956.5	738.8
42.5°	3911.8	3505.2	3127.2	2789.2	2439.9	2119.1	1809.9	1517.8	1248.6	1002.3	773.2
40°	4209.6	3740.0	3310.4	2938.2	2577.3	2233.7	1907.2	1597.9	1311.6	1048.1	807.6
37.5°	4496.0	3969.1	3516.6	3098.5	2709.1	2348.2	2004.6	1678.1	1374.6	1093.9	841.9
35°	4788.1	4221.1	3705.6	3247.4	2840.8	2462.8	2096.2	1752.6	1426.1	1134.0	876.3
32.5°	5085.9	4461.6	3906.1	3407.8	2972.5	2565.9	2182.1	1821.3	1483.4	1179.8	904.9
30°	5372.3	4690.7	4095.1	3562.4	3092.8	2669.0	2268.1	1890.0	1540.7	1219.9	933.6
27.5°	5664.4	4931.3	4284.1	3705.6	3207.3	2760.6	2342.5	1953.0	1592.2	1260.0	962.2
25°	5945.0	5160.4	4461.6	3843.1	3310.4	2852.2	2422.7	2016.0	1638.0	1294.4	985.1
22.5°	6202.8	5360.9	4622.0	3974.8	3419.3	2932.4	2491.4	2073.3	1683.9	1328.8	1008.0
20°	6437.6	5567.0	4788.1	4106.5	3522.4	3012.6	2548.7	2124.9	1723.9	1357.4	1030.9
17.5°	6666.7	5756.0	4937.0	4226.8	3608.3	3081.3	2606.0	2165.0	1758.3	1380.3	1048.1
15°	6861.4	5922.1	5068.8	4329.9	3688.4	3138.6	2651.8	2205.1	1787.0	1403.2	1059.6
12.5°	7033.3	6065.3	5183.3	4415.8	3751.4	3190.2	2697.6	2239.4	1815.6	1420.4	1076.8
10°	7170.7	6179.9	5274.9	4490.3	3808.7	3230.3	2726.2	2268.1	1832.8	1437.6	1088.2
7.5°	7279.5	6271.5	5349.4	4541.8	3848.8	3264.6	2754.9	2285.2	1850.0	1449.0	1105.4
5°	7359.7	6340.2	5400.9	4581.9	3883.2	3304.7	2789.2	2313.9	1872.9	1466.2	1105.4
2.5°	7422.7	6391.8	5441.0	4616.3	3906.1	3304.7	2789.2	2313.9	1872.9	1466.2	1105.4
0°	7422.7	6391.8	5441.0	4616.3	3906.1	3304.7	2789.2	2313.9	1872.9	1466.2	1105.4



REPORT NUMBER: P624194
 CATALOG NUMBER: EPH-VN-06-E-740-U-77

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	28.6	22.9	11.5	0.0
85°	63.0	40.1	22.9	0.0
82.5°	91.6	63.0	28.6	0.0
80°	120.3	80.2	40.1	0.0
77.5°	154.6	103.1	51.5	0.0
75°	183.3	120.3	63.0	0.0
72.5°	211.9	143.2	68.7	0.0
70°	240.6	160.4	80.2	0.0
67.5°	274.9	177.5	91.6	0.0
65°	303.6	200.5	97.4	0.0
62.5°	332.2	217.6	108.8	0.0
60°	360.8	234.8	114.5	0.0
57.5°	389.5	252.0	126.0	0.0
55°	418.1	274.9	137.5	0.0
52.5°	446.7	292.1	143.2	0.0
50°	475.4	309.3	148.9	0.0
47.5°	498.3	326.5	160.4	0.0
45°	526.9	343.6	166.1	0.0
42.5°	555.6	355.1	171.8	0.0
40°	578.5	372.3	177.5	0.0
37.5°	607.1	383.7	189.0	0.0
35°	630.0	400.9	194.7	0.0
32.5°	647.2	412.4	200.5	0.0
30°	670.1	423.8	206.2	0.0
27.5°	687.3	435.3	206.2	0.0
25°	704.5	446.7	211.9	0.0
22.5°	721.7	452.5	217.6	0.0
20°	738.8	463.9	223.4	0.0
17.5°	750.3	469.6	223.4	0.0
15°	761.7	475.4	234.8	0.0
12.5°	767.5	481.1	234.8	0.0
10°	778.9	492.6	234.8	0.0
7.5°	790.4	492.6	234.8	0.0
5°	790.4	492.6	234.8	0.0
2.5°	790.4	492.6	234.8	0.0
0°	790.4	492.6	234.8	0.0

(END OF REPORT)