

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: P624219

Luminaire Tested: **EPH-VN-07-E-935-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624219
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: EPHESUS
Catalog Number: EPH-VN-07-E-935-U-77
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
Nema 7 distribution lens
Light Source: (112) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

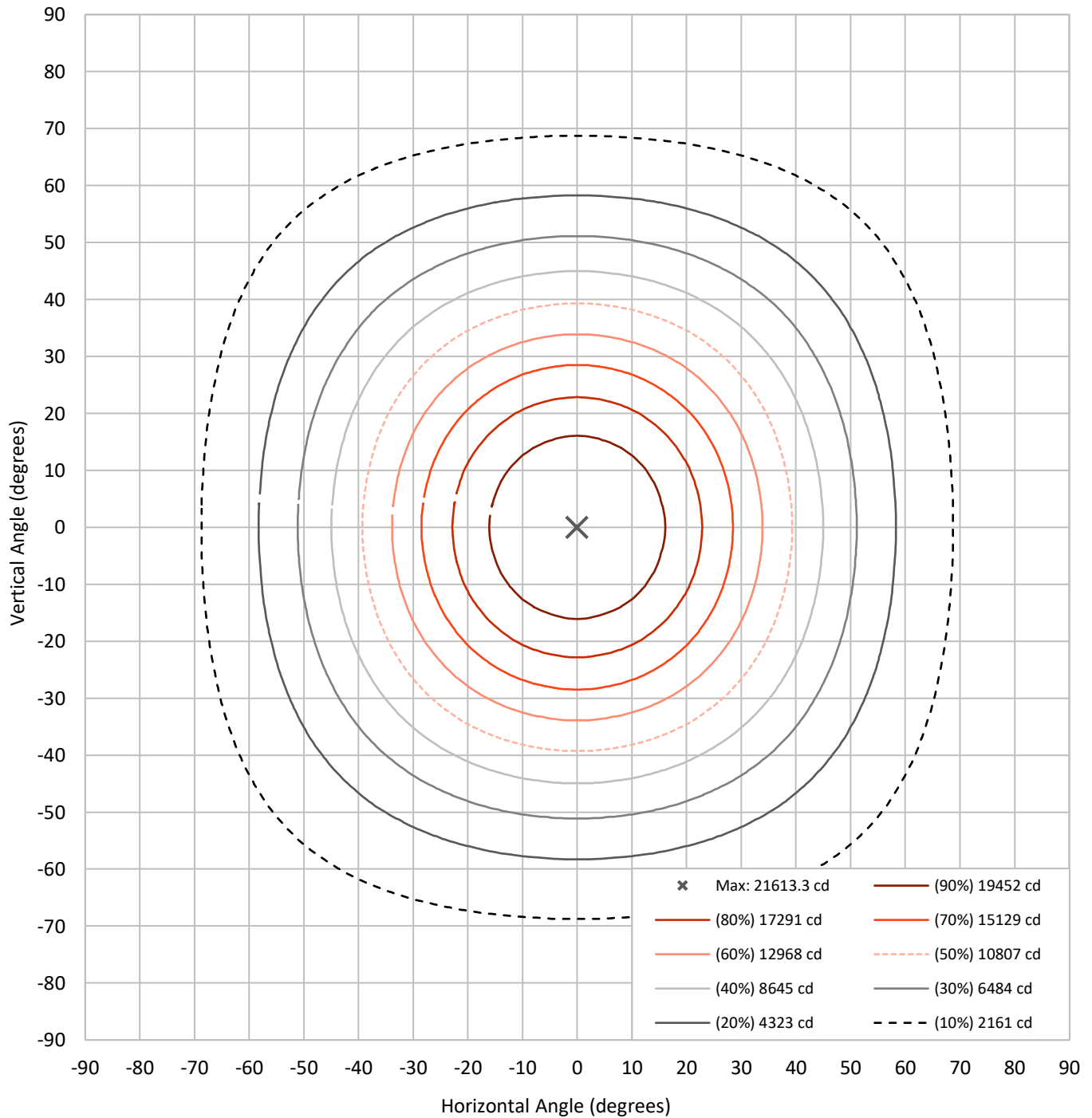
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	38915.2 lumens	Max Intensity:	21613.3 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	73.1 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	16838.2 lumens	Field Lumens:	27572 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%

Input Watts (W): 532.7
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



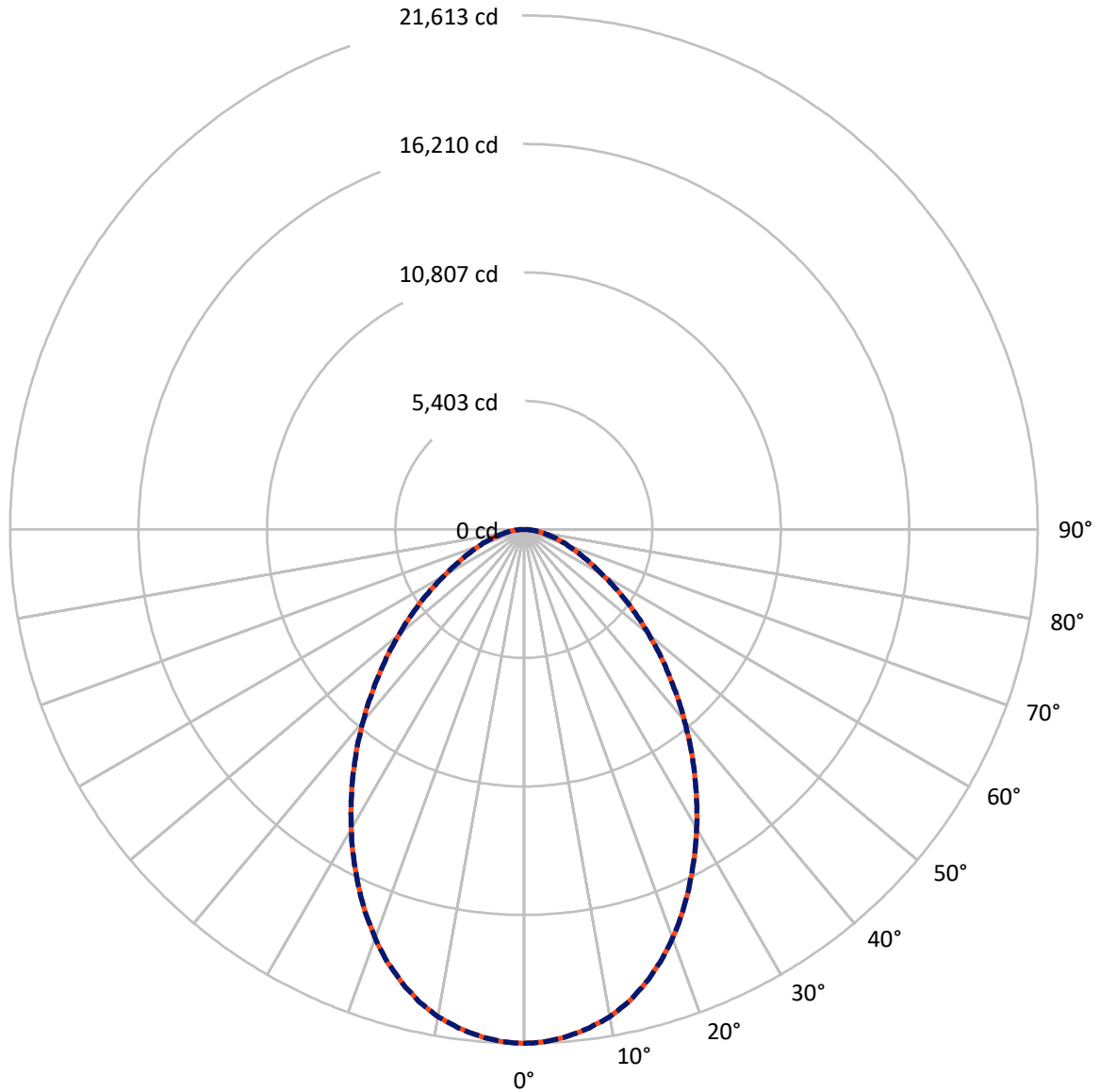
REPORT NUMBER: P624219
CATALOG NUMBER: EPH-VN-07-E-935-U-77

Iso-Candela Plot



REPORT NUMBER: P624219
CATALOG NUMBER: EPH-VN-07-E-935-U-77

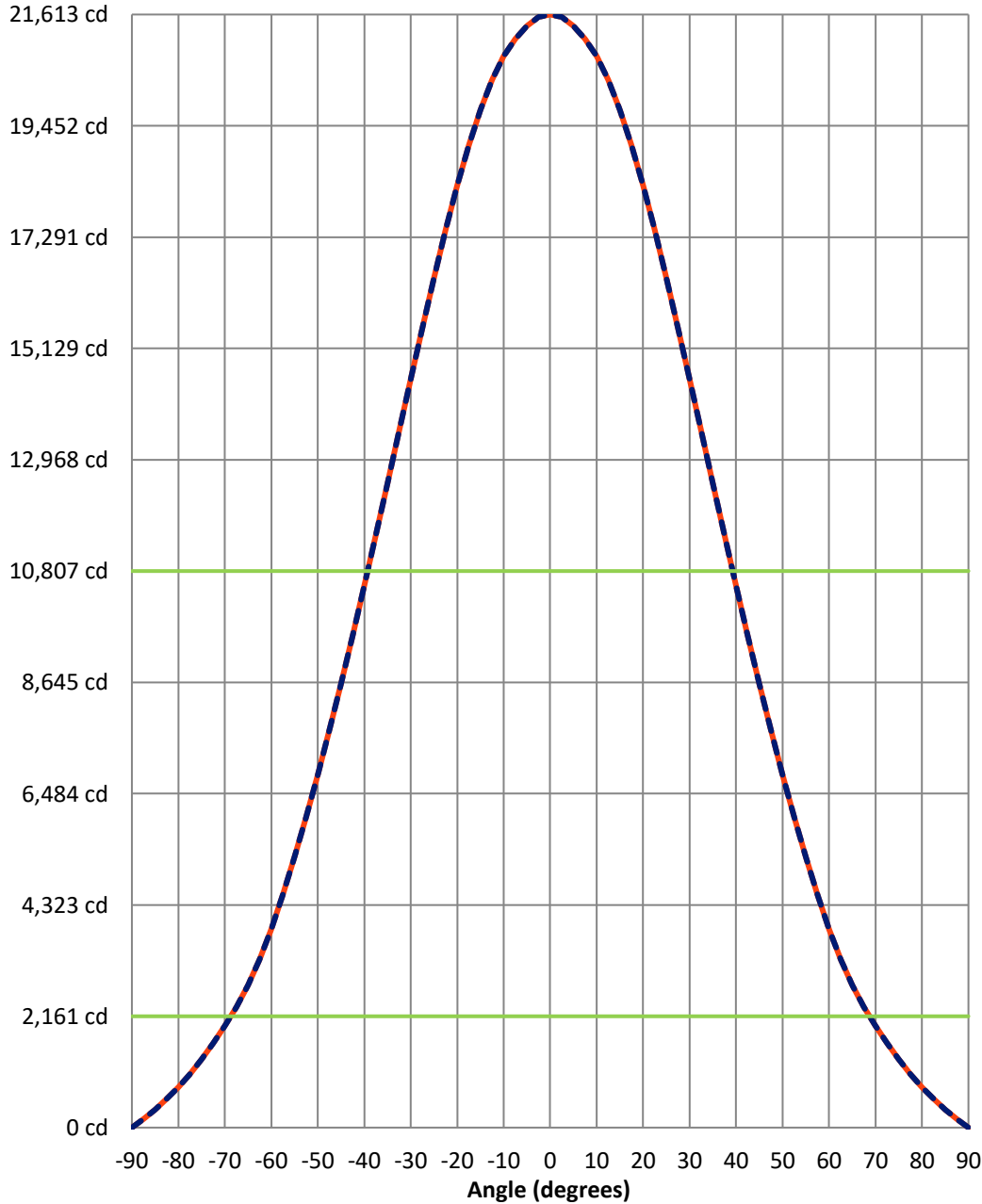
Luminous Intensity Polar Plot



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

REPORT NUMBER: P624219
 CATALOG NUMBER: EPH-VN-07-E-935-U-77

Luminous Intensity Plot



Beam:
 H Angle: 78.6°
 V Angle: 78.6°
 Lumens: 16838.2
 Efficiency: 43.3%

Field:
 H Angle: 137.5°
 V Angle: 137.5°
 Lumens: 27572
 Efficiency: 70.9%

Spill:
 Lumens: 11343.2
 Efficiency: 29.1%

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



REPORT NUMBER: P624219
 CATALOG NUMBER: EPH-VN-07-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°	166.3	166.3	166.3	166.3	166.3	166.3	166.3	158.2	158.2	154.2	150.1
85°	348.9	348.9	348.9	348.9	348.9	340.8	336.8	332.7	328.6	320.5	316.5
82.5°	559.9	559.9	559.9	559.9	551.8	543.7	539.6	531.5	523.4	511.2	499.0
80°	783.1	783.1	783.1	783.1	770.9	762.8	750.6	742.5	730.3	714.1	697.9
77.5°	1038.7	1038.7	1038.7	1026.5	1018.4	1006.2	994.0	977.8	961.6	941.3	917.0
75°	1326.7	1326.7	1326.7	1310.5	1298.3	1286.2	1265.9	1245.6	1221.3	1192.9	1160.4
72.5°	1639.2	1639.2	1639.2	1618.9	1606.7	1586.4	1562.1	1533.7	1505.3	1468.7	1428.2
70°	1975.9	1975.9	1975.9	1951.6	1931.3	1911.0	1878.5	1846.1	1805.5	1764.9	1716.2
67.5°	2341.1	2341.1	2341.1	2312.7	2288.3	2259.9	2223.4	2182.8	2134.1	2077.3	2020.5
65°	2767.1	2767.1	2750.9	2726.5	2698.1	2657.5	2612.9	2556.1	2495.2	2422.2	2345.1
62.5°	3270.2	3270.2	3245.9	3217.5	3180.9	3128.2	3067.3	2994.3	2909.1	2815.8	2722.5
60°	3854.4	3854.4	3826.0	3789.5	3736.8	3671.9	3590.7	3497.4	3391.9	3274.3	3160.6
57.5°	4528.0	4528.0	4491.4	4442.8	4377.8	4296.7	4195.3	4077.6	3943.7	3797.6	3655.6
55°	5258.3	5258.3	5213.7	5156.8	5079.8	4982.4	4860.7	4722.7	4560.4	4394.1	4211.5
52.5°	6033.2	6033.2	5980.5	5915.6	5826.3	5712.7	5574.8	5412.5	5225.8	5031.1	4816.0
50°	6848.7	6848.7	6787.9	6714.9	6613.4	6479.5	6321.3	6134.7	5927.7	5700.5	5453.0
47.5°	7721.1	7721.1	7652.1	7566.9	7445.2	7291.0	7104.4	6889.3	6654.0	6398.4	6118.4
45°	8617.7	8617.7	8540.6	8443.3	8309.4	8134.9	7928.0	7721.1	7420.8	7124.6	6800.1
42.5°	9550.9	9550.9	9461.7	9352.1	9197.9	9007.2	8771.9	8504.1	8207.9	7875.2	7522.3
40°	10520.6	10520.6	10419.2	10293.4	10123.0	9903.9	9640.2	9339.9	9007.2	8638.0	8248.5
37.5°	11510.6	11510.6	11397.0	11259.0	11068.4	10824.9	10528.7	10196.0	9822.8	9413.0	8982.9
35°	12508.7	12508.7	12382.9	12232.8	12021.8	11754.0	11433.5	11064.3	10650.5	10204.1	9721.3
32.5°	13527.1	13527.1	13389.1	13218.7	12979.4	12683.2	12330.2	11928.5	11510.6	10991.3	10463.8
30°	14533.3	14533.3	14383.2	14196.5	13940.9	13616.3	13230.9	12788.7	12297.7	11766.2	11198.2
27.5°	15523.3	15482.7	15356.9	15158.1	14878.2	14533.3	14115.4	13636.6	13105.1	12520.9	11912.3
25°	16497.0	16452.4	16314.5	16095.4	15795.1	15417.8	14967.4	14456.2	13884.1	13267.4	12602.0
22.5°	17430.2	17381.5	17235.5	17000.2	16679.6	16269.8	15787.0	15239.3	14630.7	13969.3	13267.4
20°	18294.4	18241.7	18091.6	17844.1	17511.4	17077.2	16566.0	15977.7	15328.5	14630.7	13884.1
17.5°	19073.4	19020.7	18862.5	18606.8	18294.4	17811.6	17284.2	16663.4	15977.7	15239.3	14456.2
15°	19759.1	19702.3	19540.0	19284.4	18927.4	18473.0	17917.1	17284.2	16566.0	15787.0	14967.4
12.5°	20343.4	20286.6	20120.2	19864.6	19495.4	19041.0	18473.0	17811.6	17077.2	16269.8	15417.8
10°	20805.9	20749.1	20590.9	20347.4	19966.0	19495.4	18927.4	18294.4	17511.4	16679.6	15795.1
7.5°	21138.6	21085.9	20939.8	20696.4	20347.4	19864.6	19284.4	18606.8	17844.1	17000.2	16095.4
5°	21390.2	21329.3	21183.2	20939.8	20590.9	20120.2	19540.0	18862.5	18091.6	17235.5	16314.5
2.5°	21564.6	21491.6	21329.3	21085.9	20749.1	20286.6	19702.3	19020.7	18241.7	17381.5	16452.4
0°	21613.3	21564.6	21390.2	21138.6	20805.9	20343.4	19759.1	19073.4	18294.4	17430.2	16497.0



REPORT NUMBER: P624219
 CATALOG NUMBER: EPH-VN-07-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°	146.1	146.1	142.0	137.9	133.9	125.8	121.7	117.7	113.6	105.5	101.4
85°	308.4	300.2	292.1	284.0	271.8	263.7	251.6	243.4	231.3	219.1	206.9
82.5°	486.9	474.7	458.5	446.3	430.1	409.8	393.6	373.3	353.0	336.8	316.5
80°	681.6	661.3	641.1	620.8	596.4	572.1	547.7	523.4	495.0	466.6	438.2
77.5°	892.6	864.2	835.8	803.3	774.9	742.5	710.0	677.6	641.1	604.5	568.0
75°	1127.9	1091.4	1050.8	1010.3	973.8	929.1	884.5	839.9	791.2	746.5	697.9
72.5°	1383.5	1338.9	1290.2	1241.5	1188.8	1132.0	1075.2	1014.3	957.5	900.7	839.9
70°	1659.4	1606.7	1545.8	1485.0	1420.1	1351.1	1282.1	1209.1	1136.0	1063.0	990.0
67.5°	1955.6	1890.7	1817.7	1744.6	1663.5	1582.4	1501.2	1416.0	1326.7	1237.5	1152.3
65°	2272.1	2191.0	2105.7	2012.4	1919.1	1825.8	1728.4	1627.0	1525.6	1420.1	1326.7
62.5°	2625.1	2523.7	2414.1	2300.5	2195.0	2081.4	1975.9	1850.1	1728.4	1610.8	1493.1
60°	3034.9	2901.0	2767.1	2625.1	2491.2	2345.1	2215.3	2077.3	1939.4	1805.5	1667.6
57.5°	3493.3	3322.9	3160.6	2990.2	2811.7	2649.4	2483.1	2316.7	2162.5	2004.3	1854.2
55°	4012.7	3805.8	3602.9	3391.9	3185.0	2982.1	2771.1	2584.5	2393.8	2215.3	2040.8
52.5°	4580.7	4345.4	4093.8	3854.4	3590.7	3339.2	3103.8	2868.5	2645.4	2430.3	2231.5
50°	5189.3	4913.4	4625.3	4333.2	4033.0	3736.8	3452.8	3176.9	2917.2	2665.7	2430.3
47.5°	5822.2	5509.8	5181.2	4848.5	4528.0	4166.9	3826.0	3513.6	3201.2	2917.2	2645.4
45°	6471.4	6118.4	5757.3	5380.0	5002.7	4613.2	4235.8	3854.4	3513.6	3176.9	2868.5
42.5°	7140.9	6743.3	6341.6	5923.7	5505.8	5079.8	4653.7	4235.8	3826.0	3452.8	3103.8
40°	7830.6	7392.4	6934.0	6479.5	6033.2	5546.3	5079.8	4613.2	4166.9	3736.8	3339.2
37.5°	8520.4	8041.6	7546.6	7035.4	6524.2	6033.2	5505.8	5002.7	4528.0	4033.0	3590.7
35°	9214.2	8686.7	8151.1	7595.3	7035.4	6479.5	5923.7	5380.0	4848.5	4333.2	3854.4
32.5°	9912.0	9335.9	8743.5	8151.1	7546.6	6934.0	6341.6	5757.3	5181.2	4625.3	4093.8
30°	10597.7	9972.9	9335.9	8686.7	8041.6	7392.4	6743.3	6118.4	5509.8	4913.4	4345.4
27.5°	11267.2	10597.7	9912.0	9214.2	8520.4	7830.6	7140.9	6471.4	5822.2	5189.3	4580.7
25°	11912.3	11198.2	10463.8	9721.3	8982.9	8248.5	7522.3	6800.1	6118.4	5453.0	4816.0
22.5°	12520.9	11766.2	10991.3	10204.1	9413.0	8638.0	7875.2	7124.6	6398.4	5700.5	5031.1
20°	13105.1	12297.7	11510.6	10650.5	9822.8	9007.2	8207.9	7420.8	6654.0	5927.7	5225.8
17.5°	13636.6	12788.7	11928.5	11064.3	10196.0	9339.9	8504.1	7721.1	6889.3	6134.7	5412.5
15°	14115.4	13230.9	12330.2	11433.5	10528.7	9640.2	8771.9	7928.0	7104.4	6321.3	5574.8
12.5°	14533.3	13616.3	12683.2	11754.0	10824.9	9903.9	9007.2	8134.9	7291.0	6479.5	5712.7
10°	14878.2	13940.9	12979.4	12021.8	11068.4	10123.0	9197.9	8309.4	7445.2	6613.4	5826.3
7.5°	15158.1	14196.5	13218.7	12232.8	11259.0	10293.4	9352.1	8443.3	7566.9	6714.9	5915.6
5°	15356.9	14383.2	13389.1	12382.9	11397.0	10419.2	9461.7	8540.6	7652.1	6787.9	5980.5
2.5°	15482.7	14533.3	13527.1	12508.7	11510.6	10520.6	9550.9	8617.7	7721.1	6848.7	6033.2
0°	15523.3	14533.3	13527.1	12508.7	11510.6	10520.6	9550.9	8617.7	7721.1	6848.7	6033.2



REPORT NUMBER: P624219
 CATALOG NUMBER: EPH-VN-07-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°	97.4	89.3	81.1	77.1	69.0	64.9	56.8	48.7	44.6	36.5	28.4
85°	194.8	178.5	166.3	154.2	142.0	125.8	113.6	101.4	85.2	73.0	56.8
82.5°	296.2	275.9	255.6	235.3	215.0	194.8	170.4	150.1	129.8	109.5	85.2
80°	409.8	377.3	348.9	320.5	292.1	263.7	231.3	202.9	170.4	142.0	113.6
77.5°	527.5	490.9	450.4	409.8	369.2	332.7	292.1	255.6	219.1	178.5	142.0
75°	653.2	604.5	559.9	507.2	458.5	405.7	357.0	308.4	263.7	219.1	170.4
72.5°	783.1	722.2	661.3	604.5	543.7	482.8	426.0	365.2	308.4	255.6	202.9
70°	917.0	843.9	770.9	701.9	632.9	559.9	495.0	426.0	357.0	292.1	231.3
67.5°	1059.0	973.8	888.6	799.3	722.2	641.1	559.9	482.8	405.7	332.7	263.7
65°	1213.1	1111.7	1006.2	912.9	811.5	722.2	632.9	543.7	458.5	369.2	292.1
62.5°	1371.4	1253.7	1136.0	1018.4	912.9	799.3	701.9	604.5	507.2	409.8	320.5
60°	1533.7	1399.8	1265.9	1136.0	1006.2	888.6	770.9	661.3	559.9	450.4	348.9
57.5°	1700.0	1549.9	1399.8	1253.7	1111.7	973.8	843.9	722.2	604.5	490.9	377.3
55°	1870.4	1700.0	1533.7	1371.4	1213.1	1059.0	917.0	783.1	653.2	527.5	409.8
52.5°	2040.8	1854.2	1667.6	1493.1	1326.7	1152.3	990.0	839.9	697.9	568.0	438.2
50°	2215.3	2004.3	1805.5	1610.8	1420.1	1237.5	1063.0	900.7	746.5	604.5	466.6
47.5°	2393.8	2162.5	1939.4	1728.4	1525.6	1326.7	1136.0	957.5	791.2	641.1	495.0
45°	2584.5	2316.7	2077.3	1850.1	1627.0	1416.0	1209.1	1014.3	839.9	677.6	523.4
42.5°	2771.1	2483.1	2215.3	1975.9	1728.4	1501.2	1282.1	1075.2	884.5	710.0	547.7
40°	2982.1	2649.4	2345.1	2081.4	1825.8	1582.4	1351.1	1132.0	929.1	742.5	572.1
37.5°	3185.0	2811.7	2491.2	2195.0	1919.1	1663.5	1420.1	1188.8	973.8	774.9	596.4
35°	3391.9	2990.2	2625.1	2300.5	2012.4	1744.6	1485.0	1241.5	1010.3	803.3	620.8
32.5°	3602.9	3160.6	2767.1	2414.1	2105.7	1817.7	1545.8	1290.2	1050.8	835.8	641.1
30°	3805.8	3322.9	2901.0	2523.7	2191.0	1890.7	1606.7	1338.9	1091.4	864.2	661.3
27.5°	4012.7	3493.3	3034.9	2625.1	2272.1	1955.6	1659.4	1383.5	1127.9	892.6	681.6
25°	4211.5	3655.6	3160.6	2722.5	2345.1	2020.5	1716.2	1428.2	1160.4	917.0	697.9
22.5°	4394.1	3797.6	3274.3	2815.8	2422.2	2077.3	1764.9	1468.7	1192.9	941.3	714.1
20°	4560.4	3943.7	3391.9	2909.1	2495.2	2134.1	1805.5	1505.3	1221.3	961.6	730.3
17.5°	4722.7	4077.6	3497.4	2994.3	2556.1	2182.8	1846.1	1533.7	1245.6	977.8	742.5
15°	4860.7	4195.3	3590.7	3067.3	2612.9	2223.4	1878.5	1562.1	1265.9	994.0	750.6
12.5°	4982.4	4296.7	3671.9	3128.2	2657.5	2259.9	1911.0	1586.4	1286.2	1006.2	762.8
10°	5079.8	4377.8	3736.8	3180.9	2698.1	2288.3	1931.3	1606.7	1298.3	1018.4	770.9
7.5°	5156.8	4442.8	3789.5	3217.5	2726.5	2312.7	1951.6	1618.9	1310.5	1026.5	783.1
5°	5213.7	4491.4	3826.0	3245.9	2750.9	2341.1	1975.9	1639.2	1326.7	1038.7	783.1
2.5°	5258.3	4528.0	3854.4	3270.2	2767.1	2341.1	1975.9	1639.2	1326.7	1038.7	783.1
0°	5258.3	4528.0	3854.4	3270.2	2767.1	2341.1	1975.9	1639.2	1326.7	1038.7	783.1



REPORT NUMBER: P624219
 CATALOG NUMBER: EPH-VN-07-E-935-U-77

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	20.3	16.2	8.1	0.0
85°	44.6	28.4	16.2	0.0
82.5°	64.9	44.6	20.3	0.0
80°	85.2	56.8	28.4	0.0
77.5°	109.5	73.0	36.5	0.0
75°	129.8	85.2	44.6	0.0
72.5°	150.1	101.4	48.7	0.0
70°	170.4	113.6	56.8	0.0
67.5°	194.8	125.8	64.9	0.0
65°	215.0	142.0	69.0	0.0
62.5°	235.3	154.2	77.1	0.0
60°	255.6	166.3	81.1	0.0
57.5°	275.9	178.5	89.3	0.0
55°	296.2	194.8	97.4	0.0
52.5°	316.5	206.9	101.4	0.0
50°	336.8	219.1	105.5	0.0
47.5°	353.0	231.3	113.6	0.0
45°	373.3	243.4	117.7	0.0
42.5°	393.6	251.6	121.7	0.0
40°	409.8	263.7	125.8	0.0
37.5°	430.1	271.8	133.9	0.0
35°	446.3	284.0	137.9	0.0
32.5°	458.5	292.1	142.0	0.0
30°	474.7	300.2	146.1	0.0
27.5°	486.9	308.4	146.1	0.0
25°	499.0	316.5	150.1	0.0
22.5°	511.2	320.5	154.2	0.0
20°	523.4	328.6	158.2	0.0
17.5°	531.5	332.7	158.2	0.0
15°	539.6	336.8	166.3	0.0
12.5°	543.7	340.8	166.3	0.0
10°	551.8	348.9	166.3	0.0
7.5°	559.9	348.9	166.3	0.0
5°	559.9	348.9	166.3	0.0
2.5°	559.9	348.9	166.3	0.0
0°	559.9	348.9	166.3	0.0

(END OF REPORT)