

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: P628558

Luminaire Tested: **EPH-VN-06-E-730-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628558
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: EPHESUS
Catalog Number: EPH-VN-06-E-730-U-LAM
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
LAMBERTIAN distribution lens
Light Source: (96) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	49588.1 lumens	Max Intensity:	16163.7 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	106.8 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')		

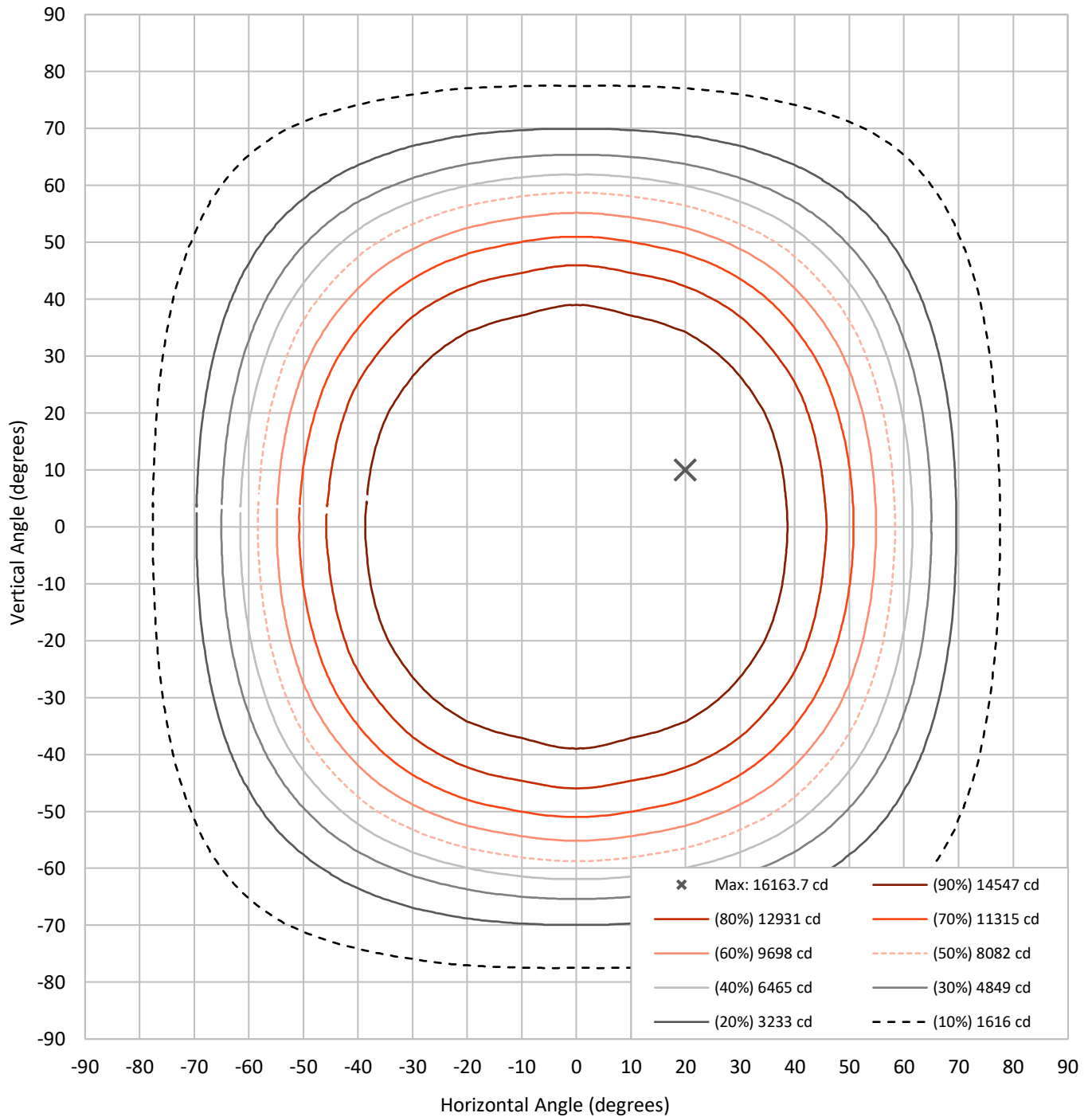
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	30428.3 lumens	Field Lumens:	36478.3 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

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: P628558
CATALOG NUMBER: EPH-VN-06-E-730-U-LAM

Iso-Candela Plot



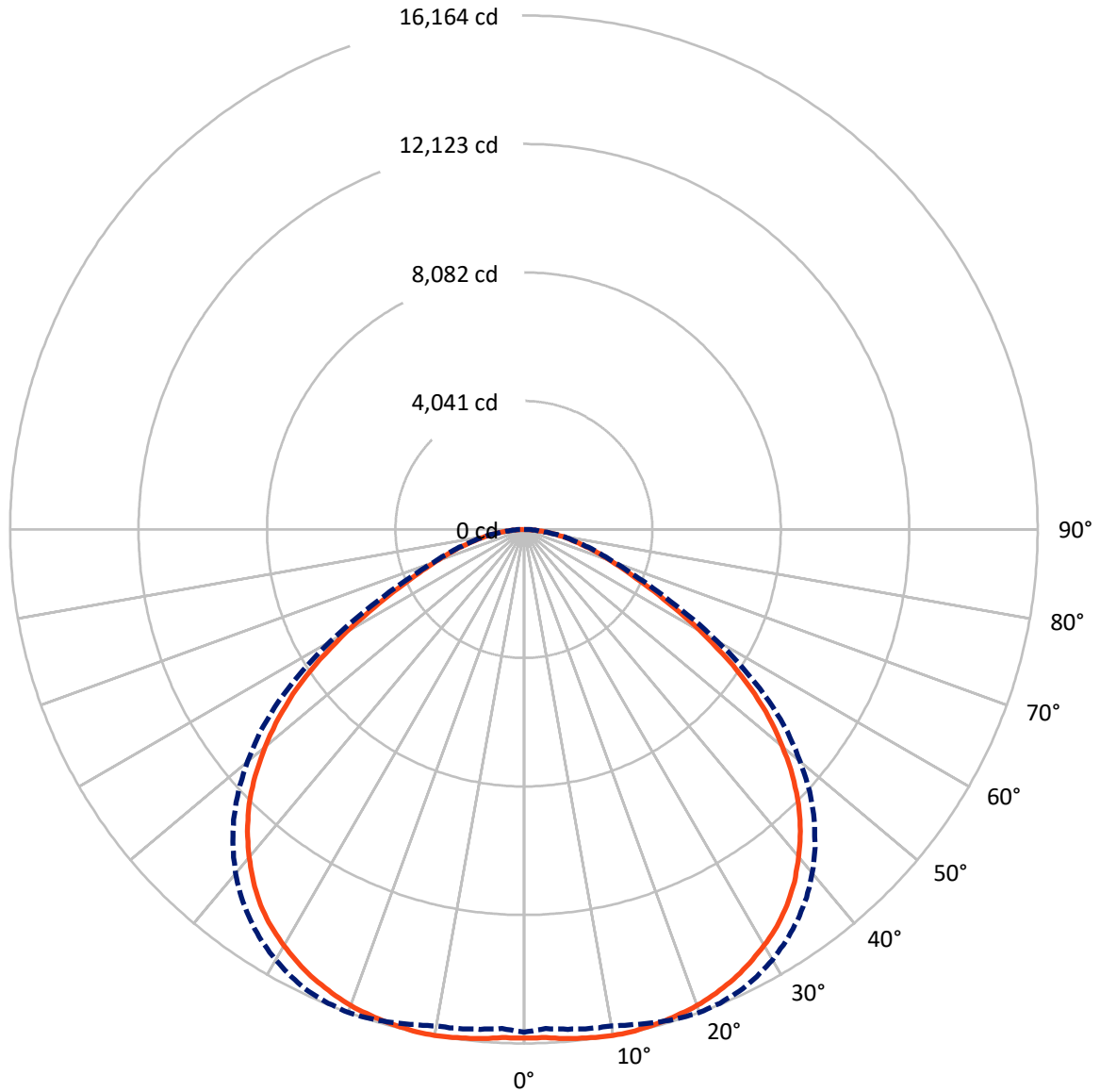
REPORT NUMBER: P628558
 CATALOG NUMBER: EPH-VN-06-E-730-U-LAM

Lumen Table

90																			
80	5.9	38.6	89.5	141.8	158.0	141.8	89.5	38.6	5.9										
70																			
60	17.0	17.6	34.3	56.5	84.6	114.2	139.1	153.3	153.3	139.1	114.2	84.6	56.5	34.3	17.6				
		25.1	53.2	99.4	162.0	221.7	265.7	290.8	290.8	265.7	221.7	162.0	99.4	53.2	25.1				
50																			
40	27.2	33.7	80.4	159.9	247.4	319.1	367.7	394.1	394.1	367.7	319.1	247.4	159.9	80.4	33.7				
		43.3	113.1	213.6	308.0	382.8	430.5	455.5	455.5	430.5	382.8	308.0	213.6	113.1	43.3				
30																			
20	35.2	52.9	140.4	249.9	346.6	418.9	463.6	483.2	483.2	463.6	418.9	346.6	249.9	140.4	52.9				
		60.6	158.3	270.7	367.8	437.3	472.0	482.9	482.9	472.0	437.3	367.8	270.7	158.3	60.6				
10																			
0	38.2	64.7	167.1	280.4	375.2	440.0	468.1	476.1	476.1	468.1	440.0	375.2	280.4	167.1	64.7				
		64.7	167.1	280.4	375.2	440.0	468.1	476.1	476.1	468.1	440.0	375.2	280.4	167.1	64.7				
-10																			
-20	35.2	60.6	158.3	270.7	367.8	437.3	472.0	482.9	482.9	472.0	437.3	367.8	270.7	158.3	60.6				
		52.9	140.4	249.9	346.6	418.9	463.6	483.2	483.2	463.6	418.9	346.6	249.9	140.4	52.9				
-30																			
-40	27.2	43.3	113.1	213.6	308.0	382.8	430.5	455.5	455.5	430.5	382.8	308.0	213.6	113.1	43.3				
		33.7	80.4	159.9	247.4	319.1	367.7	394.1	394.1	367.7	319.1	247.4	159.9	80.4	33.7				
-50																			
-60	17.0	25.1	53.2	99.4	162.0	221.7	265.7	290.8	290.8	265.7	221.7	162.0	99.4	53.2	25.1				
		17.6	34.3	56.5	84.6	114.2	139.1	153.3	153.3	139.1	114.2	84.6	56.5	34.3	17.6				
-70																			
-80	5.9	38.6	89.5	141.8	158.0	141.8	89.5	38.6	5.9										
-90																			
	-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90

REPORT NUMBER: P628558
CATALOG NUMBER: EPH-VN-06-E-730-U-LAM

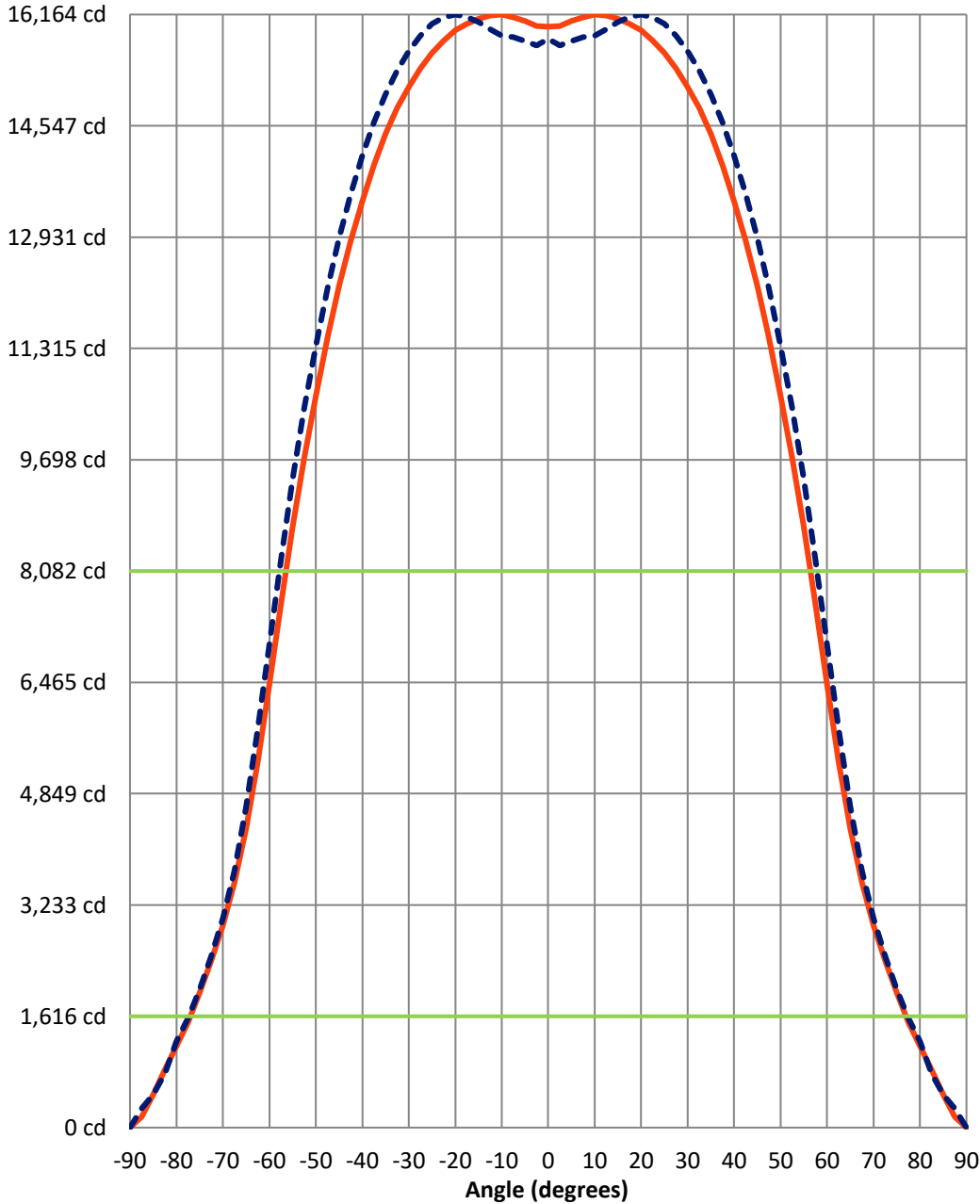
Luminous Intensity Polar Plot



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

REPORT NUMBER: P628558
 CATALOG NUMBER: EPH-VN-06-E-730-U-LAM

Luminous Intensity Plot



Beam:
 H Angle: 115.7°
 V Angle: 112.9°
 Lumens: 30428.3
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 36478.3
 Efficiency: 73.6%

Spill:
 Lumens: 13109.8
 Efficiency: 26.4%

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



REPORT NUMBER: P628558
 CATALOG NUMBER: EPH-VN-06-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°	130.4	140.9	146.1	151.3	156.5	161.7	167.0	161.7	156.5	156.5	151.3
85°	349.6	360.0	365.2	401.7	438.3	459.1	485.2	480.0	480.0	474.8	469.6
82.5°	699.1	730.4	756.5	793.1	813.9	845.2	866.1	850.4	840.0	819.1	803.5
80°	1241.8	1252.2	1257.4	1262.6	1236.5	1231.3	1220.9	1205.2	1184.4	1158.3	1132.2
77.5°	1580.9	1591.3	1601.8	1591.3	1586.1	1580.9	1565.2	1549.6	1528.7	1507.8	1476.5
75°	2092.2	2092.2	2092.2	2076.6	2066.1	2050.5	2024.4	1998.3	1961.8	1920.0	1873.1
72.5°	2634.8	2629.6	2624.4	2593.1	2567.0	2535.7	2499.2	2467.9	2426.1	2379.2	2316.6
70°	3203.5	3214.0	3219.2	3177.4	3146.1	3104.4	3057.4	3000.0	2937.4	2869.6	2780.9
67.5°	3986.1	3975.7	3965.3	3907.9	3866.1	3808.8	3740.9	3657.4	3563.5	3459.2	3334.0
65°	4956.6	4972.2	4940.9	4883.6	4805.3	4711.4	4607.0	4487.0	4346.2	4189.6	4012.2
62.5°	6130.5	6156.6	6120.1	6047.0	5947.9	5822.7	5676.6	5504.4	5311.4	5092.3	4873.1
60°	7466.2	7461.0	7393.2	7294.0	7163.6	7007.1	6845.3	6657.5	6438.4	6182.7	5916.6
57.5°	8692.3	8681.9	8598.4	8499.3	8368.8	8201.9	8029.7	7831.4	7601.9	7330.5	7022.7
55°	9793.2	9782.8	9699.3	9594.9	9459.3	9292.3	9135.8	8948.0	8723.6	8436.6	8107.9
52.5°	10768.9	10774.1	10701.0	10586.2	10440.2	10278.4	10127.1	9939.3	9725.4	9438.4	9120.1
50°	11666.3	11661.0	11582.8	11478.4	11342.8	11186.3	11034.9	10847.1	10622.8	10346.2	10038.4
47.5°	12501.1	12490.6	12401.9	12287.1	12146.3	12010.6	11869.7	11702.8	11468.0	11191.5	10883.6
45°	13200.2	13179.3	13090.6	12981.1	12845.4	12725.4	12600.2	12475.0	12224.5	11968.9	11676.7
42.5°	13800.2	13795.0	13706.3	13596.7	13461.1	13356.7	13241.9	13085.4	12876.7	12641.9	12355.0
40°	14374.1	14332.4	14243.7	14139.3	14014.1	13925.4	13810.6	13654.1	13450.6	13221.1	12944.5
37.5°	14802.0	14807.2	14713.3	14598.5	14488.9	14405.4	14301.1	14155.0	13977.6	13753.2	13476.7
35°	15208.9	15182.8	15104.6	15005.4	14906.3	14812.4	14702.8	14577.6	14431.5	14222.8	13961.9
32.5°	15475.0	15511.5	15417.6	15313.3	15255.9	15182.8	15068.1	14937.6	14807.2	14598.5	14363.7
30°	15767.2	15735.9	15662.8	15574.1	15532.4	15485.4	15386.3	15261.1	15109.8	14922.0	14702.8
27.5°	15970.7	15955.0	15866.3	15782.8	15762.0	15720.2	15642.0	15532.4	15381.1	15198.5	14995.0
25°	16059.4	16069.8	15986.3	15939.4	15939.4	15913.3	15850.7	15756.8	15605.5	15438.5	15240.2
22.5°	16101.1	16090.7	16033.3	16022.8	16048.9	16028.1	16002.0	15918.5	15782.8	15647.2	15480.2
20°	16127.2	16054.2	16002.0	16043.7	16075.0	16069.8	16048.9	15996.8	15934.2	15819.4	15673.3
17.5°	16069.8	16022.8	15960.2	16022.8	16090.7	16095.9	16075.0	16043.7	16028.1	15955.0	15824.6
15°	15928.9	15892.4	15902.8	15965.5	16043.7	16069.8	16085.5	16122.0	16101.1	16043.7	15928.9
12.5°	15835.0	15788.1	15835.0	15897.6	15939.4	15955.0	16080.2	16148.1	16148.1	16095.9	16022.8
10°	15808.9	15715.0	15777.6	15835.0	15855.9	15949.8	16054.2	16127.2	16163.7	16122.0	16028.1
7.5°	15756.8	15694.1	15720.2	15746.3	15866.3	15934.2	15991.5	16069.8	16122.0	16116.8	16033.3
5°	15730.7	15652.4	15662.8	15772.4	15855.9	15902.8	15923.7	15991.5	16069.8	16085.5	16022.8
2.5°	15662.8	15626.3	15704.6	15715.0	15777.6	15814.1	15835.0	15897.6	15996.8	16033.3	16007.2
0°	15626.3	15574.1	15522.0	15563.7	15668.1	15746.3	15777.6	15871.5	15986.3	16022.8	15965.5



REPORT NUMBER: P628558
 CATALOG NUMBER: EPH-VN-06-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°	146.1	140.9	135.7	130.4	135.7	135.7	135.7	130.4	135.7	130.4	130.4
85°	453.9	433.0	417.4	396.5	375.7	360.0	339.1	318.3	313.0	307.8	297.4
82.5°	782.6	756.5	730.4	699.1	667.8	631.3	594.8	553.1	542.6	532.2	516.5
80°	1100.9	1064.4	1027.8	991.3	960.0	923.5	881.8	834.8	803.5	777.4	746.1
77.5°	1434.8	1382.6	1330.5	1267.8	1231.3	1194.8	1153.1	1106.1	1059.1	1017.4	970.4
75°	1815.7	1758.3	1706.1	1643.5	1575.7	1507.8	1440.0	1377.4	1309.6	1247.0	1184.4
72.5°	2238.3	2154.8	2071.3	1993.1	1909.6	1826.1	1737.4	1653.9	1570.5	1487.0	1398.3
70°	2681.8	2577.4	2473.1	2368.7	2259.2	2149.6	2045.2	1940.9	1836.5	1727.0	1627.9
67.5°	3203.5	3083.5	2947.9	2801.8	2640.0	2499.2	2363.5	2238.3	2113.1	1987.9	1862.6
65°	3855.7	3688.8	3506.1	3307.9	3120.0	2932.2	2734.0	2546.1	2400.0	2253.9	2113.1
62.5°	4659.2	4424.4	4168.8	3913.1	3683.5	3438.3	3208.7	2963.5	2734.0	2525.3	2353.1
60°	5619.2	5300.9	4987.9	4659.2	4340.9	4007.0	3714.8	3412.2	3125.3	2869.6	2619.2
57.5°	6678.4	6307.9	5932.3	5530.5	5097.5	4706.2	4309.6	3913.1	3574.0	3234.8	2953.1
55°	7753.2	7361.8	6939.2	6485.3	6010.5	5509.6	4972.2	4528.8	4064.4	3667.9	3302.7
52.5°	8775.8	8368.8	7930.6	7513.2	6944.5	6370.5	5781.0	5196.6	4654.0	4147.9	3704.4
50°	9688.8	9292.3	8869.7	8384.5	7857.5	7247.1	6589.7	5932.3	5290.5	4695.7	4142.7
47.5°	10523.6	10137.5	9714.9	9229.7	8749.7	8071.4	7408.8	6683.6	5968.8	5285.3	4638.3
45°	11306.3	10914.9	10476.7	10012.3	9459.3	8854.0	8170.6	7440.1	6673.1	5906.2	5160.1
42.5°	12015.8	11624.5	11181.0	10701.0	10153.2	9553.2	8890.6	8154.9	7382.7	6547.9	5728.8
40°	12636.7	12255.8	11828.0	11327.1	10815.8	10184.5	9532.3	8833.2	8034.9	7194.9	6292.3
37.5°	13179.3	12824.5	12401.9	11906.3	11363.6	10800.2	10127.1	9428.0	8708.0	7794.9	6871.4
35°	13659.3	13330.6	12897.6	12428.0	11895.8	11301.0	10669.7	9986.2	9208.8	8353.2	7455.8
32.5°	14076.7	13742.8	13346.3	12876.7	12360.2	11801.9	11154.9	10466.2	9730.6	8859.3	7883.6
30°	14431.5	14108.0	13732.4	13288.9	12793.2	12240.2	11608.9	10914.9	10163.6	9297.5	8332.3
27.5°	14739.4	14431.5	14066.3	13654.1	13179.3	12647.1	12010.6	11311.5	10544.5	9709.7	8744.5
25°	15005.4	14708.0	14368.9	13977.6	13508.0	12986.3	12386.3	11655.8	10888.9	10048.8	9094.0
22.5°	15245.4	14958.5	14619.3	14238.5	13810.6	13288.9	12683.7	11958.4	11181.0	10351.5	9412.3
20°	15459.4	15193.3	14859.4	14468.0	14040.2	13513.2	12913.2	12224.5	11441.9	10628.0	9699.3
17.5°	15631.5	15396.8	15062.8	14650.7	14222.8	13711.5	13127.2	12495.8	11666.3	10862.8	9939.3
15°	15751.5	15522.0	15219.4	14802.0	14384.6	13878.5	13294.1	12641.9	11869.7	11050.6	10137.5
12.5°	15835.0	15589.8	15308.1	14922.0	14504.6	14003.7	13435.0	12793.2	12041.9	11217.6	10309.7
10°	15855.9	15631.5	15349.8	15005.4	14598.5	14113.3	13555.0	12918.5	12182.8	11348.0	10450.6
7.5°	15866.3	15652.4	15396.8	15068.1	14666.3	14196.7	13643.7	13017.6	12287.1	11457.6	10554.9
5°	15861.1	15657.6	15428.1	15109.8	14708.0	14243.7	13701.1	13085.4	12360.2	11530.6	10633.2
2.5°	15845.5	15662.8	15448.9	15141.1	14755.0	14295.9	13758.5	13163.7	12438.4	11593.2	10695.8
0°	15887.2	15730.7	15459.4	15130.7	14765.4	14295.9	13753.2	13174.1	12448.9	11588.0	10690.6



REPORT NUMBER: P628558
 CATALOG NUMBER: EPH-VN-06-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°	130.4	125.2	125.2	120.0	114.8	109.6	99.1	93.9	83.5	67.8	52.2
85°	281.7	266.1	250.4	240.0	229.6	219.1	203.5	187.8	167.0	135.7	104.3
82.5°	495.7	464.4	433.0	396.5	365.2	333.9	307.8	281.7	250.4	203.5	156.5
80°	709.6	662.6	615.7	563.5	516.5	464.4	417.4	375.7	333.9	271.3	208.7
77.5°	923.5	860.9	793.1	730.4	662.6	594.8	527.0	469.6	407.0	333.9	260.9
75°	1121.8	1048.7	986.1	897.4	813.9	725.2	636.5	558.3	480.0	391.3	313.0
72.5°	1320.0	1226.1	1137.4	1053.9	960.0	850.4	751.3	652.2	553.1	448.7	354.8
70°	1518.3	1403.5	1293.9	1194.8	1090.5	980.9	860.9	746.1	626.1	500.9	391.3
67.5°	1721.8	1591.3	1466.1	1340.9	1220.9	1095.7	970.4	840.0	699.1	553.1	433.0
65°	1946.1	1784.4	1633.1	1492.2	1351.3	1215.7	1074.8	933.9	777.4	610.4	469.6
62.5°	2170.5	1993.1	1815.7	1638.3	1481.8	1330.5	1179.1	1022.6	850.4	673.1	506.1
60°	2410.5	2207.0	2003.5	1805.2	1612.2	1445.2	1278.3	1111.3	928.7	730.4	542.6
57.5°	2676.6	2431.3	2201.8	1977.4	1758.3	1560.0	1377.4	1200.0	996.5	787.8	584.4
55°	2979.2	2676.6	2405.3	2154.8	1914.8	1674.8	1476.5	1293.9	1074.8	845.2	631.3
52.5°	3297.4	2947.9	2619.2	2337.4	2081.8	1810.5	1570.5	1367.0	1153.1	902.6	673.1
50°	3667.9	3224.4	2859.2	2514.8	2227.9	1946.1	1669.6	1450.5	1231.3	970.4	714.8
47.5°	4048.8	3558.3	3099.2	2723.5	2384.4	2076.6	1784.4	1523.5	1304.4	1033.1	756.5
45°	4492.2	3876.6	3370.5	2927.0	2535.7	2212.2	1899.2	1601.8	1367.0	1095.7	798.3
42.5°	4920.1	4252.2	3652.2	3151.4	2707.9	2342.6	2003.5	1685.2	1429.6	1158.3	834.8
40°	5426.2	4627.9	3923.5	3365.3	2880.0	2467.9	2107.9	1773.9	1487.0	1215.7	871.3
37.5°	5911.4	5008.8	4252.2	3600.1	3047.0	2593.1	2212.2	1857.4	1539.2	1273.1	918.3
35°	6391.4	5431.4	4565.3	3819.2	3219.2	2734.0	2316.6	1935.7	1591.3	1320.0	960.0
32.5°	6850.5	5827.9	4883.6	4064.4	3407.0	2864.4	2410.5	2008.7	1643.5	1361.8	1001.8
30°	7278.4	6203.6	5196.6	4314.8	3579.2	2984.4	2499.2	2081.8	1706.1	1398.3	1043.5
27.5°	7669.7	6568.8	5509.6	4549.6	3740.9	3094.0	2593.1	2149.6	1758.3	1434.8	1080.0
25°	8024.5	6897.5	5796.6	4763.5	3887.0	3214.0	2681.8	2217.4	1805.2	1466.1	1111.3
22.5°	8358.4	7200.1	6057.5	4977.5	4064.4	3334.0	2765.3	2280.0	1852.2	1497.4	1142.6
20°	8650.6	7476.6	6307.9	5191.4	4220.9	3443.5	2838.3	2337.4	1893.9	1518.3	1173.9
17.5°	8885.4	7721.9	6532.3	5379.2	4356.6	3537.4	2900.9	2389.6	1930.5	1544.4	1194.8
15°	9094.0	7930.6	6720.1	5541.0	4476.6	3615.7	2958.3	2431.3	1961.8	1560.0	1220.9
12.5°	9271.4	8107.9	6881.8	5681.8	4580.9	3683.5	3005.3	2462.6	1987.9	1575.7	1236.5
10°	9417.5	8248.8	7017.5	5791.4	4664.4	3735.7	3041.8	2494.0	2008.7	1591.3	1252.2
7.5°	9527.1	8353.2	7116.6	5885.3	4732.2	3772.2	3073.1	2514.8	2029.6	1601.8	1278.3
5°	9610.6	8441.9	7194.9	5947.9	4784.4	3824.4	3109.6	2540.9	2050.5	1612.2	1278.3
2.5°	9673.2	8514.9	7257.5	6000.1	4826.2	3814.0	3109.6	2535.7	2050.5	1612.2	1273.1
0°	9662.8	8520.1	7252.3	6000.1	4826.2	3803.5	3109.6	2530.5	2050.5	1612.2	1273.1



REPORT NUMBER: P628558
 CATALOG NUMBER: EPH-VN-06-E-730-U-LAM

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	36.5	26.1	10.4	0.0
85°	78.3	52.2	26.1	0.0
82.5°	114.8	73.0	36.5	0.0
80°	151.3	99.1	47.0	0.0
77.5°	193.0	125.2	62.6	0.0
75°	229.6	146.1	73.0	0.0
72.5°	266.1	172.2	83.5	0.0
70°	297.4	193.0	93.9	0.0
67.5°	328.7	219.1	109.6	0.0
65°	354.8	240.0	120.0	0.0
62.5°	375.7	266.1	130.4	0.0
60°	401.7	287.0	140.9	0.0
57.5°	422.6	302.6	151.3	0.0
55°	443.5	313.0	161.7	0.0
52.5°	464.4	328.7	172.2	0.0
50°	485.2	344.4	182.6	0.0
47.5°	506.1	354.8	187.8	0.0
45°	537.4	370.4	198.3	0.0
42.5°	563.5	380.9	208.7	0.0
40°	589.6	391.3	213.9	0.0
37.5°	615.7	401.7	224.4	0.0
35°	641.7	412.2	229.6	0.0
32.5°	662.6	422.6	234.8	0.0
30°	683.5	433.0	240.0	0.0
27.5°	704.4	438.3	245.2	0.0
25°	720.0	448.7	250.4	0.0
22.5°	735.7	453.9	255.7	0.0
20°	746.1	459.1	260.9	0.0
17.5°	761.8	464.4	266.1	0.0
15°	767.0	469.6	276.5	0.0
12.5°	777.4	474.8	276.5	0.0
10°	782.6	480.0	276.5	0.0
7.5°	793.1	480.0	276.5	0.0
5°	787.8	480.0	276.5	0.0
2.5°	787.8	480.0	276.5	0.0
0°	782.6	480.0	276.5	0.0

(END OF REPORT)