

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: P624080

Luminaire Tested: **EPH-VN-06-E-735-U-44**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624080
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-735-U-44
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
Nema 4 distribution lens
Light Source: (96) 3500K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	4H x 4V
Luminaire Lumens:	54188.6 lumens	Max Intensity:	175221.6 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	116.7 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')		

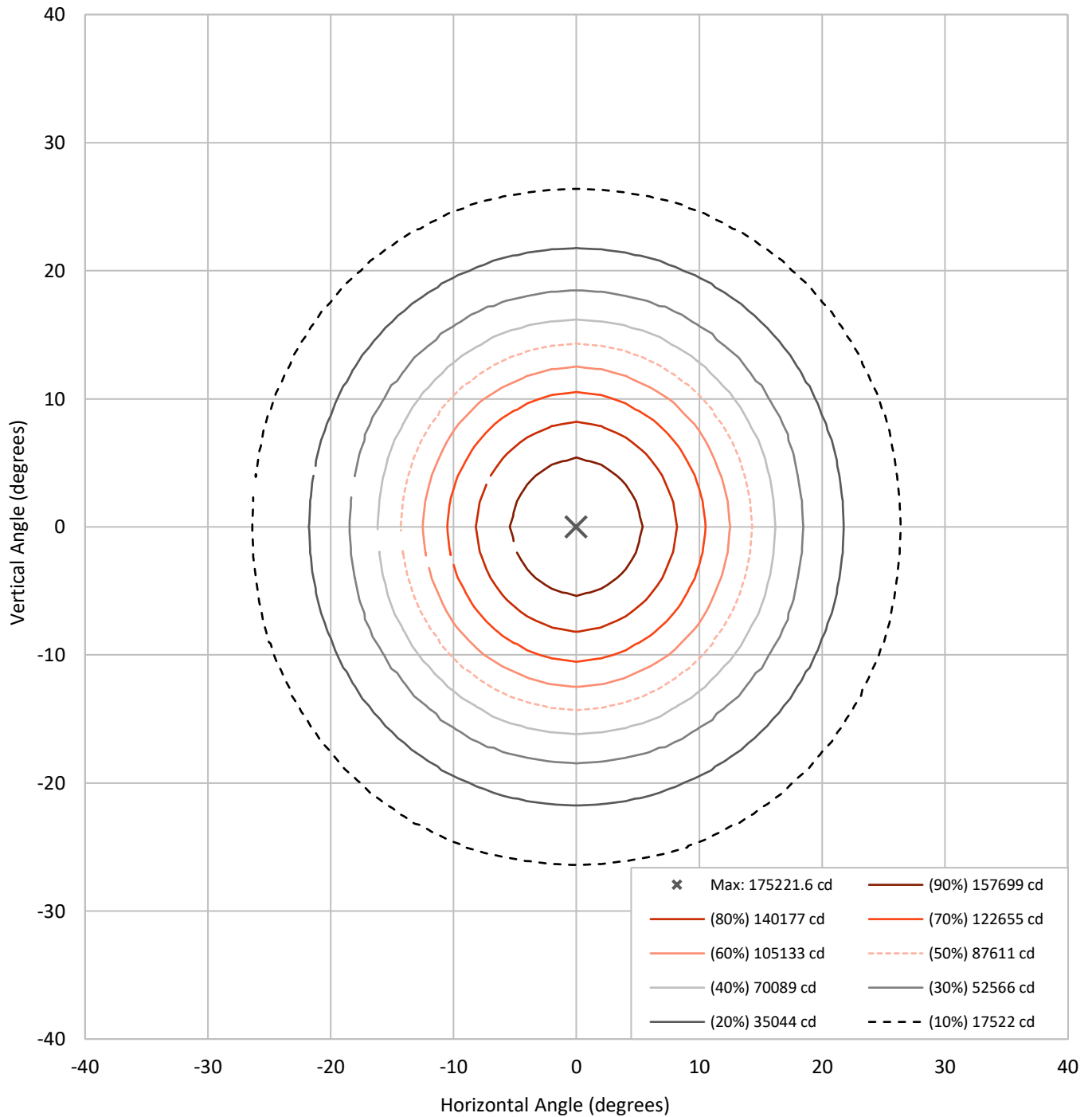
Beam Angle (50%):	28.6°H x 28.6°V	Field Angle (10%):	52.7°H x 52.7°V
Beam Lumens:	19552.3 lumens	Field Lumens:	33016.7 lumens
Beam Efficiency:	36.1%	Field Efficiency:	60.9%

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



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Iso-Candela Plot





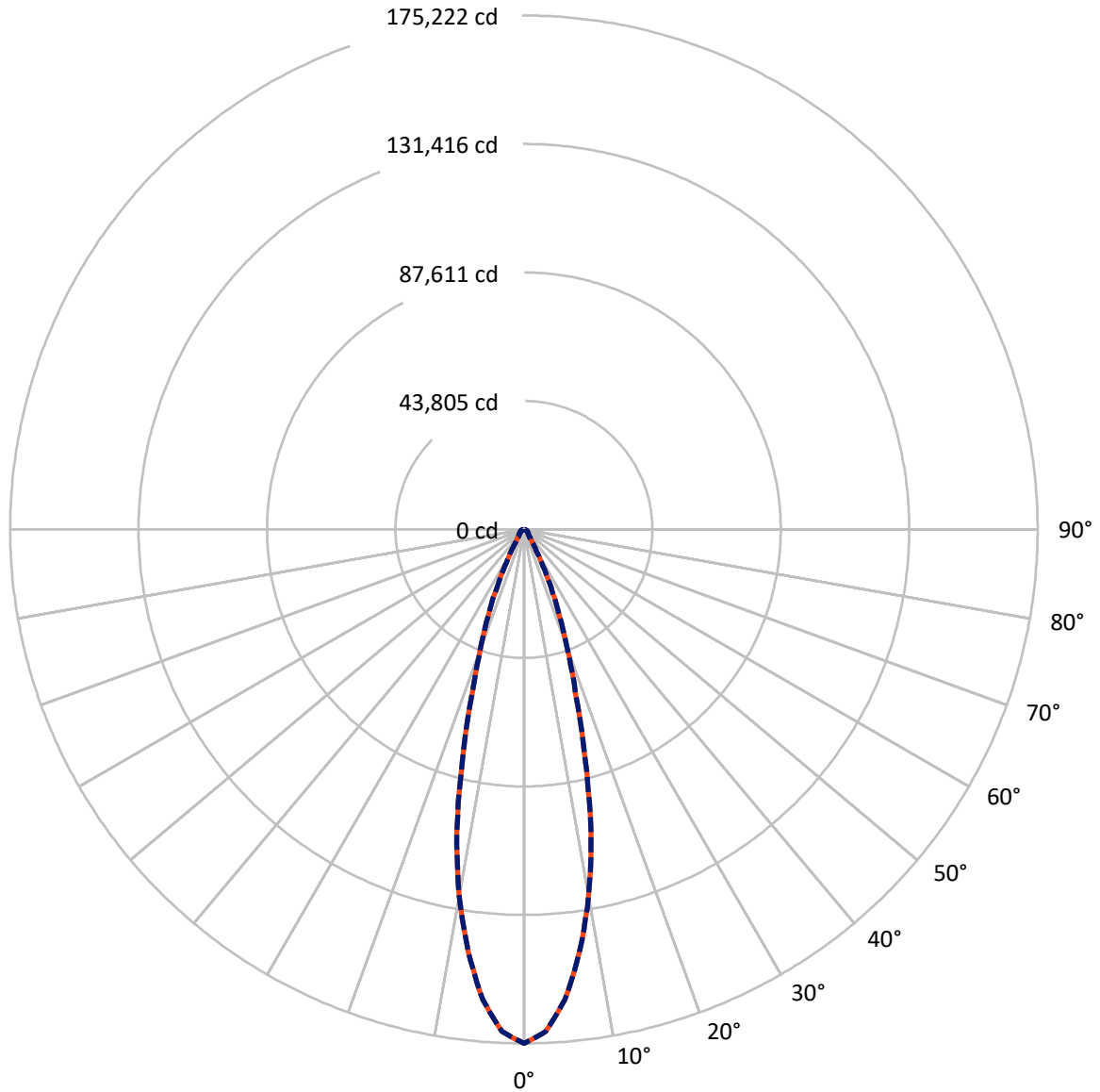
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Lumen Table

90	1.3	9.2	23.3	37.3	43.0	37.3	23.3	9.2	1.3							
80	1.3	9.2	23.3	37.3	43.0	37.3	23.3	9.2	1.3							
70	4.2	4.4	9.0	14.8	20.8	26.2	30.2	32.4	32.4	30.2	26.2	20.8	14.8	9.0	4.4	4.2
60		6.7	13.7	22.0	30.4	37.8	43.4	46.4	46.4	43.4	37.8	30.4	22.0	13.7	6.7	
50	7.2	9.0	17.9	28.3	38.8	49.3	58.8	64.8	64.8	58.8	49.3	38.8	28.3	17.9	9.0	7.2
40		10.9	21.4	33.5	48.1	68.5	100.0	133.2	133.2	100.0	68.5	48.1	33.5	21.4	10.9	
30	9.5	12.4	24.0	38.5	62.1	130.0	356.5	645.7	645.7	356.5	130.0	62.1	38.5	24.0	12.4	9.5
20		13.4	25.9	43.2	85.4	336.5	1157.3	2232.5	2232.5	1157.3	336.5	85.4	43.2	25.9	13.4	
10	10.3	13.9	26.9	46.2	110.6	592.8	2172.0	4282.0	4282.0	2172.0	592.8	110.6	46.2	26.9	13.9	10.3
0		13.9	26.9	46.2	110.6	592.8	2172.0	4282.0	4282.0	2172.0	592.8	110.6	46.2	26.9	13.9	
-10	9.5	13.4	25.9	43.2	85.4	336.5	1157.3	2232.5	2232.5	1157.3	336.5	85.4	43.2	25.9	13.4	9.5
-20		12.4	24.0	38.5	62.1	130.0	356.5	645.7	645.7	356.5	130.0	62.1	38.5	24.0	12.4	
-30	7.2	10.9	21.4	33.5	48.1	68.5	100.0	133.2	133.2	100.0	68.5	48.1	33.5	21.4	10.9	7.2
-40		9.0	17.9	28.3	38.8	49.3	58.8	64.8	64.8	58.8	49.3	38.8	28.3	17.9	9.0	
-50	4.2	6.7	13.7	22.0	30.4	37.8	43.4	46.4	46.4	43.4	37.8	30.4	22.0	13.7	6.7	4.2
-60		4.4	9.0	14.8	20.8	26.2	30.2	32.4	32.4	30.2	26.2	20.8	14.8	9.0	4.4	
-70	1.3	9.2	23.3	37.3	43.0	37.3	23.3	9.2	1.3							
-80		1.3	9.2	23.3	37.3	43.0	37.3	23.3	9.2	1.3						
-90	1.3	9.2	23.3	37.3	43.0	37.3	23.3	9.2	1.3							

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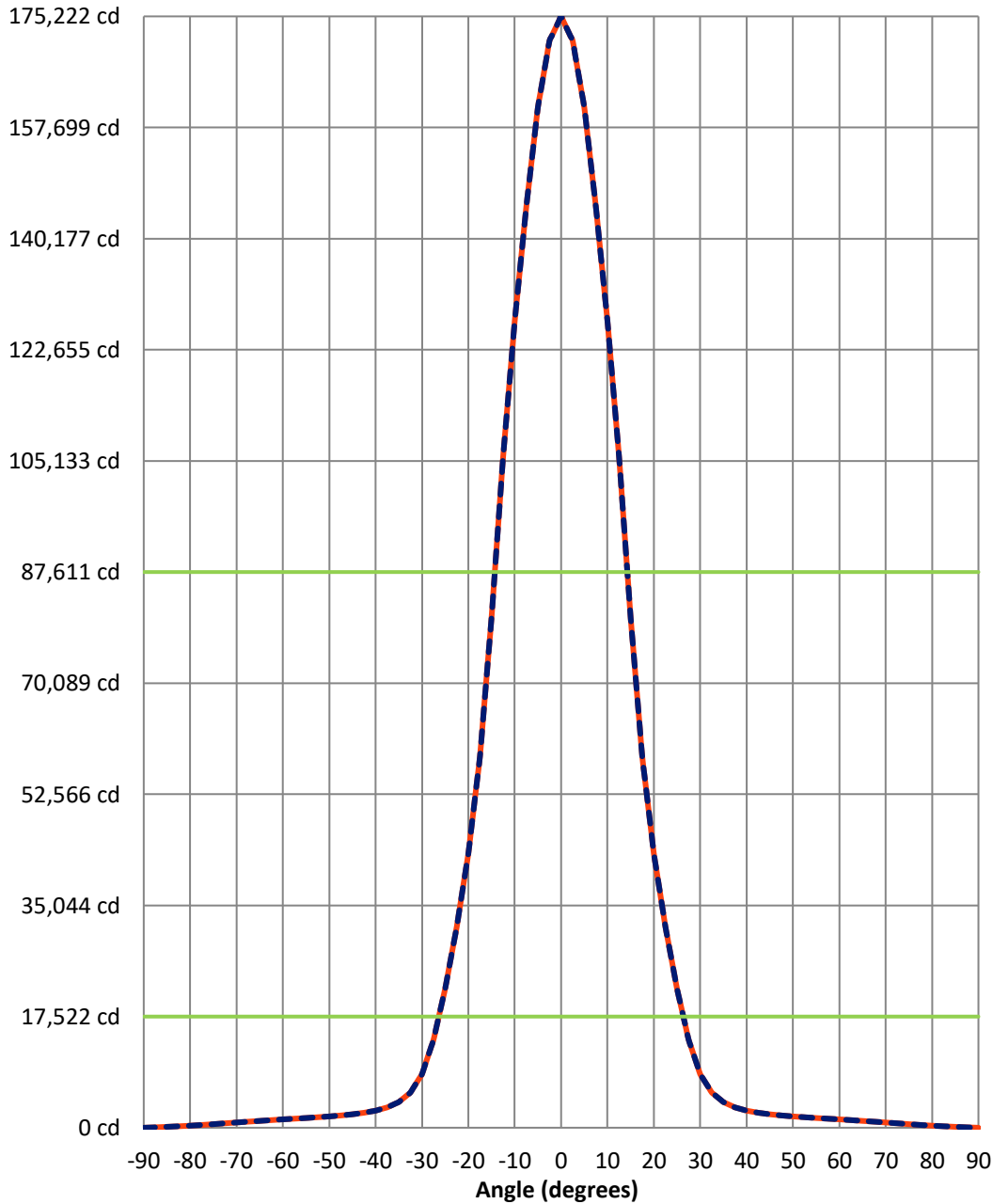
Luminous Intensity Polar Plot



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

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Luminous Intensity Plot



Beam:
 H Angle: 28.6°
 V Angle: 28.6°
 Lumens: 19552.3
 Efficiency: 36.1%

Field:
 H Angle: 52.7°
 V Angle: 52.7°
 Lumens: 33016.7
 Efficiency: 60.9%

Spill:
 Lumens: 21171.9
 Efficiency: 39.1%

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



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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°	62.1	62.1	62.1	62.1	62.1	62.1	62.1	56.5	56.5	56.5	56.5
85°	141.2	141.2	141.2	141.2	141.2	135.6	135.6	135.6	129.9	129.9	124.3
82.5°	226.0	226.0	226.0	226.0	220.3	220.3	214.7	214.7	209.0	209.0	203.4
80°	322.0	322.0	322.0	322.0	316.4	310.7	310.7	305.1	299.4	293.8	288.1
77.5°	435.0	435.0	435.0	429.4	423.7	423.7	418.1	406.8	401.1	389.8	384.2
75°	559.3	559.3	559.3	553.7	548.0	542.4	531.1	525.4	514.1	502.8	485.9
72.5°	694.9	694.9	694.9	689.3	678.0	672.3	661.0	649.7	638.4	621.5	604.5
70°	824.9	824.9	824.9	813.6	807.9	796.6	785.3	774.0	757.1	740.1	723.2
67.5°	954.8	954.8	954.8	943.5	937.9	926.6	915.3	898.3	881.4	858.8	841.8
65°	1073.5	1073.5	1067.8	1062.2	1056.5	1045.2	1028.3	1017.0	1000.0	977.4	954.8
62.5°	1197.7	1197.7	1192.1	1186.4	1175.1	1163.8	1146.9	1130.0	1107.4	1084.8	1062.2
60°	1322.0	1322.0	1316.4	1310.7	1299.4	1282.5	1265.5	1248.6	1226.0	1197.7	1169.5
57.5°	1423.7	1423.7	1418.1	1412.4	1401.1	1389.8	1372.9	1355.9	1333.3	1310.7	1276.8
55°	1531.1	1531.1	1525.4	1514.1	1502.8	1491.5	1474.6	1452.0	1429.4	1401.1	1378.5
52.5°	1655.4	1655.4	1649.7	1638.4	1621.5	1604.5	1581.9	1553.7	1525.4	1497.2	1463.3
50°	1779.7	1779.7	1768.4	1757.1	1745.8	1723.2	1700.6	1672.3	1638.4	1604.5	1565.0
47.5°	1932.2	1932.2	1920.9	1904.0	1881.4	1858.8	1824.9	1785.3	1751.4	1711.9	1666.7
45°	2118.7	2118.7	2101.7	2084.8	2056.5	2017.0	1977.4	1932.2	1881.4	1830.5	1774.0
42.5°	2361.6	2361.6	2339.0	2310.8	2271.2	2220.4	2158.2	2096.1	2033.9	1966.1	1898.3
40°	2689.3	2689.3	2655.4	2615.8	2553.7	2480.2	2389.8	2305.1	2220.4	2124.3	2039.6
37.5°	3203.4	3203.4	3146.9	3073.5	2971.8	2847.5	2694.9	2581.9	2452.0	2327.7	2214.7
35°	4045.2	4045.2	3943.5	3813.6	3632.8	3406.8	3163.9	2971.8	2757.1	2581.9	2418.1
32.5°	5542.4	5542.4	5339.0	5084.8	4740.1	4299.5	3892.7	3553.7	3203.4	2932.2	2672.3
30°	8440.7	8440.7	8005.7	7469.0	6728.9	5802.3	5107.4	4457.7	3864.4	3418.1	3039.6
27.5°	13881.5	13655.5	12977.5	11864.5	10339.1	8440.7	7231.7	5858.8	4920.9	4067.8	3542.4
25°	21915.4	21542.5	20423.9	18599.0	16113.1	13293.9	10824.9	8220.4	6576.3	5158.2	4180.8
22.5°	31678.2	31164.1	29644.3	27164.0	23802.4	20051.0	16056.6	12310.8	8977.5	6819.3	5158.2
20°	43237.6	42548.3	40508.8	37198.0	32746.0	27971.9	22638.6	17621.6	12813.6	8977.5	6576.3
17.5°	58497.6	57446.7	54356.3	49384.5	43237.6	36802.5	30135.8	23661.2	17621.6	12310.8	8220.4
15°	80435.6	78661.6	73475.1	65237.7	55667.1	46695.2	38192.4	30135.8	22638.6	16056.6	10824.9
12.5°	105797.3	103328.4	96181.5	85034.5	72028.7	57842.2	46695.2	36802.5	27971.9	20051.0	13293.9
10°	127164.7	124560.2	117176.0	105995.1	89503.4	72028.7	55667.1	43237.6	32746.0	23802.4	16113.1
7.5°	145215.7	142300.4	134339.9	122108.2	105995.1	85034.5	65237.7	49384.5	37198.0	27164.0	18599.0
5°	160893.8	157198.8	147933.2	134339.9	117176.0	96181.5	73475.1	54356.3	40508.8	29644.3	20423.9
2.5°	171368.4	167029.4	157198.8	142300.4	124560.2	103328.4	78661.6	57446.7	42548.3	31164.1	21542.5
0°	175221.6	171368.4	160893.8	145215.7	127164.7	105797.3	80435.6	58497.6	43237.6	31678.2	21915.4



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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°	56.5	56.5	50.8	50.8	50.8	45.2	45.2	45.2	39.5	39.5	39.5
85°	124.3	118.6	118.6	113.0	107.3	101.7	101.7	96.0	90.4	84.7	79.1
82.5°	197.7	192.1	186.4	180.8	175.1	163.8	158.2	152.5	141.2	135.6	129.9
80°	276.8	271.2	259.9	254.2	242.9	231.6	220.3	209.0	197.7	186.4	175.1
77.5°	372.9	355.9	344.6	333.3	316.4	305.1	288.1	276.8	259.9	242.9	226.0
75°	474.6	457.6	440.7	423.7	406.8	384.2	367.2	344.6	327.7	305.1	288.1
72.5°	587.6	565.0	542.4	519.8	497.2	474.6	452.0	423.7	401.1	372.9	344.6
70°	700.6	678.0	655.4	627.1	598.9	570.6	542.4	508.5	480.2	446.3	412.4
67.5°	819.2	791.0	762.7	734.5	706.2	672.3	632.8	598.9	559.3	519.8	485.9
65°	932.2	904.0	870.1	836.2	802.3	768.4	728.8	689.3	644.1	598.9	559.3
62.5°	1033.9	1005.7	977.4	937.9	904.0	864.4	824.9	774.0	728.8	683.6	632.8
60°	1141.3	1107.4	1073.5	1033.9	994.4	954.8	909.6	858.8	813.6	757.1	706.2
57.5°	1242.9	1209.0	1169.5	1130.0	1084.8	1039.6	994.4	943.5	892.7	836.2	779.7
55°	1344.6	1310.7	1271.2	1226.0	1175.1	1124.3	1073.5	1022.6	971.8	909.6	847.5
52.5°	1429.4	1395.5	1355.9	1322.0	1265.5	1214.7	1158.2	1096.1	1039.6	977.4	915.3
50°	1519.8	1480.2	1435.0	1395.5	1350.3	1299.4	1237.3	1175.1	1107.4	1045.2	977.4
47.5°	1621.5	1570.6	1519.8	1468.9	1423.7	1367.2	1316.4	1248.6	1180.8	1107.4	1039.6
45°	1723.2	1666.7	1610.2	1548.0	1491.5	1435.0	1378.5	1322.0	1248.6	1175.1	1096.1
42.5°	1830.5	1762.7	1700.6	1638.4	1570.6	1502.8	1440.7	1378.5	1316.4	1237.3	1158.2
40°	1954.8	1875.7	1796.6	1723.2	1655.4	1576.3	1502.8	1435.0	1367.2	1299.4	1214.7
37.5°	2096.1	2000.0	1904.0	1813.6	1728.8	1655.4	1570.6	1491.5	1423.7	1350.3	1265.5
35°	2276.9	2135.6	2022.6	1909.6	1813.6	1723.2	1638.4	1548.0	1468.9	1395.5	1322.0
32.5°	2480.2	2305.1	2152.6	2022.6	1904.0	1796.6	1700.6	1610.2	1519.8	1435.0	1355.9
30°	2728.8	2502.8	2305.1	2135.6	2000.0	1875.7	1762.7	1666.7	1570.6	1480.2	1395.5
27.5°	3079.1	2728.8	2480.2	2276.9	2096.1	1954.8	1830.5	1723.2	1621.5	1519.8	1429.4
25°	3542.4	3039.6	2672.3	2418.1	2214.7	2039.6	1898.3	1774.0	1666.7	1565.0	1463.3
22.5°	4067.8	3418.1	2932.2	2581.9	2327.7	2124.3	1966.1	1830.5	1711.9	1604.5	1497.2
20°	4920.9	3864.4	3203.4	2757.1	2452.0	2220.4	2033.9	1881.4	1751.4	1638.4	1525.4
17.5°	5858.8	4457.7	3553.7	2971.8	2581.9	2305.1	2096.1	1932.2	1785.3	1672.3	1553.7
15°	7231.7	5107.4	3892.7	3163.9	2694.9	2389.8	2158.2	1977.4	1824.9	1700.6	1581.9
12.5°	8440.7	5802.3	4299.5	3406.8	2847.5	2480.2	2220.4	2017.0	1858.8	1723.2	1604.5
10°	10339.1	6728.9	4740.1	3632.8	2971.8	2553.7	2271.2	2056.5	1881.4	1745.8	1621.5
7.5°	11864.5	7469.0	5084.8	3813.6	3073.5	2615.8	2310.8	2084.8	1904.0	1757.1	1638.4
5°	12977.5	8005.7	5339.0	3943.5	3146.9	2655.4	2339.0	2101.7	1920.9	1768.4	1649.7
2.5°	13655.5	8440.7	5542.4	4045.2	3203.4	2689.3	2361.6	2118.7	1932.2	1779.7	1655.4
0°	13881.5	8440.7	5542.4	4045.2	3203.4	2689.3	2361.6	2118.7	1932.2	1779.7	1655.4



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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°	33.9	33.9	28.2	28.2	28.2	22.6	22.6	16.9	16.9	11.3	11.3
85°	73.4	67.8	62.1	56.5	50.8	45.2	45.2	39.5	33.9	28.2	22.6
82.5°	118.6	113.0	101.7	90.4	84.7	73.4	62.1	56.5	50.8	39.5	33.9
80°	163.8	152.5	141.2	129.9	118.6	101.7	90.4	79.1	62.1	50.8	45.2
77.5°	214.7	197.7	180.8	163.8	146.9	135.6	118.6	101.7	84.7	67.8	50.8
75°	265.5	242.9	226.0	203.4	186.4	163.8	141.2	124.3	107.3	84.7	62.1
72.5°	322.0	293.8	271.2	242.9	220.3	197.7	169.5	146.9	124.3	101.7	79.1
70°	384.2	350.3	316.4	288.1	259.9	226.0	197.7	169.5	141.2	118.6	90.4
67.5°	446.3	406.8	367.2	327.7	293.8	259.9	226.0	197.7	163.8	135.6	101.7
65°	508.5	463.3	423.7	378.5	333.3	293.8	259.9	220.3	186.4	146.9	118.6
62.5°	576.3	525.4	474.6	423.7	378.5	327.7	288.1	242.9	203.4	163.8	129.9
60°	649.7	593.2	531.1	474.6	423.7	367.2	316.4	271.2	226.0	180.8	141.2
57.5°	717.5	655.4	593.2	525.4	463.3	406.8	350.3	293.8	242.9	197.7	152.5
55°	785.3	717.5	649.7	576.3	508.5	446.3	384.2	322.0	265.5	214.7	163.8
52.5°	847.5	779.7	706.2	632.8	559.3	485.9	412.4	344.6	288.1	226.0	175.1
50°	909.6	836.2	757.1	683.6	598.9	519.8	446.3	372.9	305.1	242.9	186.4
47.5°	971.8	892.7	813.6	728.8	644.1	559.3	480.2	401.1	327.7	259.9	197.7
45°	1022.6	943.5	858.8	774.0	689.3	598.9	508.5	423.7	344.6	276.8	209.0
42.5°	1073.5	994.4	909.6	824.9	728.8	632.8	542.4	452.0	367.2	288.1	220.3
40°	1124.3	1039.6	954.8	864.4	768.4	672.3	570.6	474.6	384.2	305.1	231.6
37.5°	1175.1	1084.8	994.4	904.0	802.3	706.2	598.9	497.2	406.8	316.4	242.9
35°	1226.0	1130.0	1033.9	937.9	836.2	734.5	627.1	519.8	423.7	333.3	254.2
32.5°	1271.2	1169.5	1073.5	977.4	870.1	762.7	655.4	542.4	440.7	344.6	259.9
30°	1310.7	1209.0	1107.4	1005.7	904.0	791.0	678.0	565.0	457.6	355.9	271.2
27.5°	1344.6	1242.9	1141.3	1033.9	932.2	819.2	700.6	587.6	474.6	372.9	276.8
25°	1378.5	1276.8	1169.5	1062.2	954.8	841.8	723.2	604.5	485.9	384.2	288.1
22.5°	1401.1	1310.7	1197.7	1084.8	977.4	858.8	740.1	621.5	502.8	389.8	293.8
20°	1429.4	1333.3	1226.0	1107.4	1000.0	881.4	757.1	638.4	514.1	401.1	299.4
17.5°	1452.0	1355.9	1248.6	1130.0	1017.0	898.3	774.0	649.7	525.4	406.8	305.1
15°	1474.6	1372.9	1265.5	1146.9	1028.3	915.3	785.3	661.0	531.1	418.1	310.7
12.5°	1491.5	1389.8	1282.5	1163.8	1045.2	926.6	796.6	672.3	542.4	423.7	310.7
10°	1502.8	1401.1	1299.4	1175.1	1056.5	937.9	807.9	678.0	548.0	423.7	316.4
7.5°	1514.1	1412.4	1310.7	1186.4	1062.2	943.5	813.6	689.3	553.7	429.4	322.0
5°	1525.4	1418.1	1316.4	1192.1	1067.8	954.8	824.9	694.9	559.3	435.0	322.0
2.5°	1531.1	1423.7	1322.0	1197.7	1073.5	954.8	824.9	694.9	559.3	435.0	322.0
0°	1531.1	1423.7	1322.0	1197.7	1073.5	954.8	824.9	694.9	559.3	435.0	322.0



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 CATALOG NUMBER: EPH-VN-06-E-735-U-44

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	5.6	5.6	0.0	0.0
85°	16.9	11.3	5.6	0.0
82.5°	22.6	16.9	5.6	0.0
80°	33.9	22.6	11.3	0.0
77.5°	39.5	28.2	11.3	0.0
75°	50.8	33.9	16.9	0.0
72.5°	56.5	39.5	16.9	0.0
70°	62.1	45.2	22.6	0.0
67.5°	73.4	45.2	22.6	0.0
65°	84.7	50.8	28.2	0.0
62.5°	90.4	56.5	28.2	0.0
60°	101.7	62.1	28.2	0.0
57.5°	113.0	67.8	33.9	0.0
55°	118.6	73.4	33.9	0.0
52.5°	129.9	79.1	39.5	0.0
50°	135.6	84.7	39.5	0.0
47.5°	141.2	90.4	39.5	0.0
45°	152.5	96.0	45.2	0.0
42.5°	158.2	101.7	45.2	0.0
40°	163.8	101.7	45.2	0.0
37.5°	175.1	107.3	50.8	0.0
35°	180.8	113.0	50.8	0.0
32.5°	186.4	118.6	50.8	0.0
30°	192.1	118.6	56.5	0.0
27.5°	197.7	124.3	56.5	0.0
25°	203.4	124.3	56.5	0.0
22.5°	209.0	129.9	56.5	0.0
20°	209.0	129.9	56.5	0.0
17.5°	214.7	135.6	56.5	0.0
15°	214.7	135.6	62.1	0.0
12.5°	220.3	135.6	62.1	0.0
10°	220.3	141.2	62.1	0.0
7.5°	226.0	141.2	62.1	0.0
5°	226.0	141.2	62.1	0.0
2.5°	226.0	141.2	62.1	0.0
0°	226.0	141.2	62.1	0.0

(END OF REPORT)