

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: P624200

Luminaire Tested: **EPH-VN-06-E-750-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624200
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-750-U-77
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
Nema 7 distribution lens
Light Source: (96) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

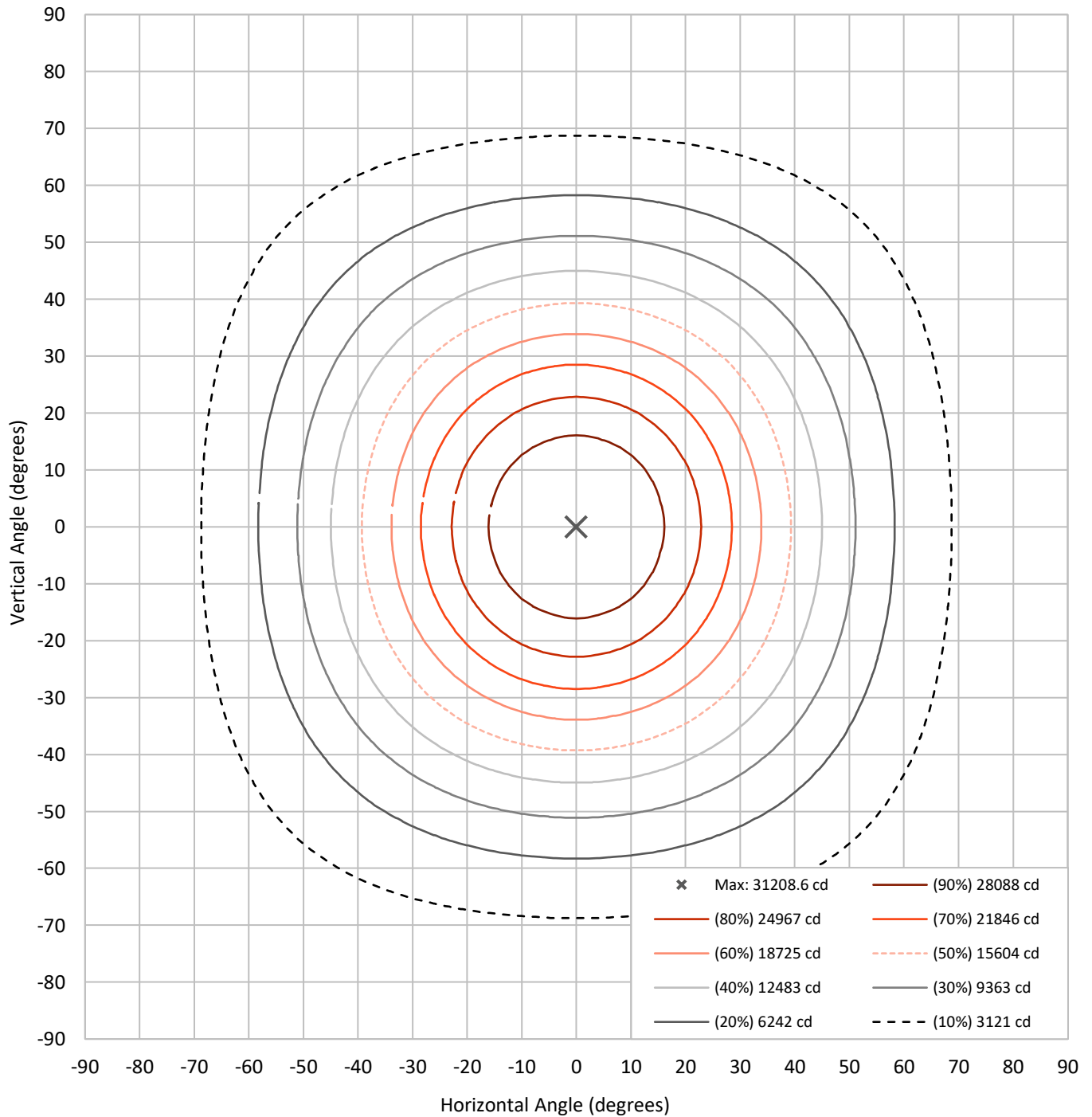
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	56191.7 lumens	Max Intensity:	31208.6 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	121.1 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	24313.6 lumens	Field Lumens:	39812.7 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



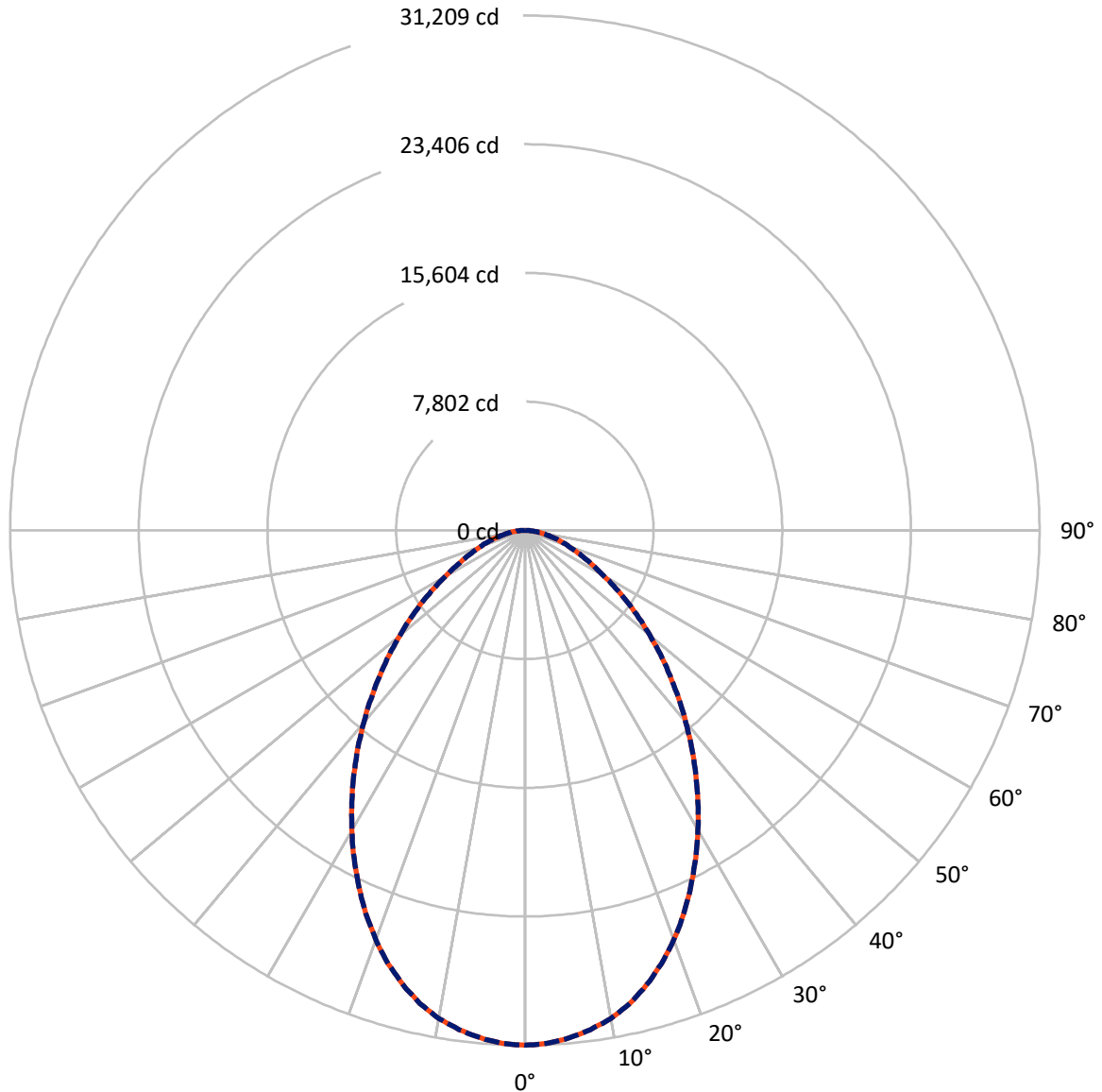
REPORT NUMBER: P624200
CATALOG NUMBER: EPH-VN-06-E-750-U-77

Iso-Candela Plot



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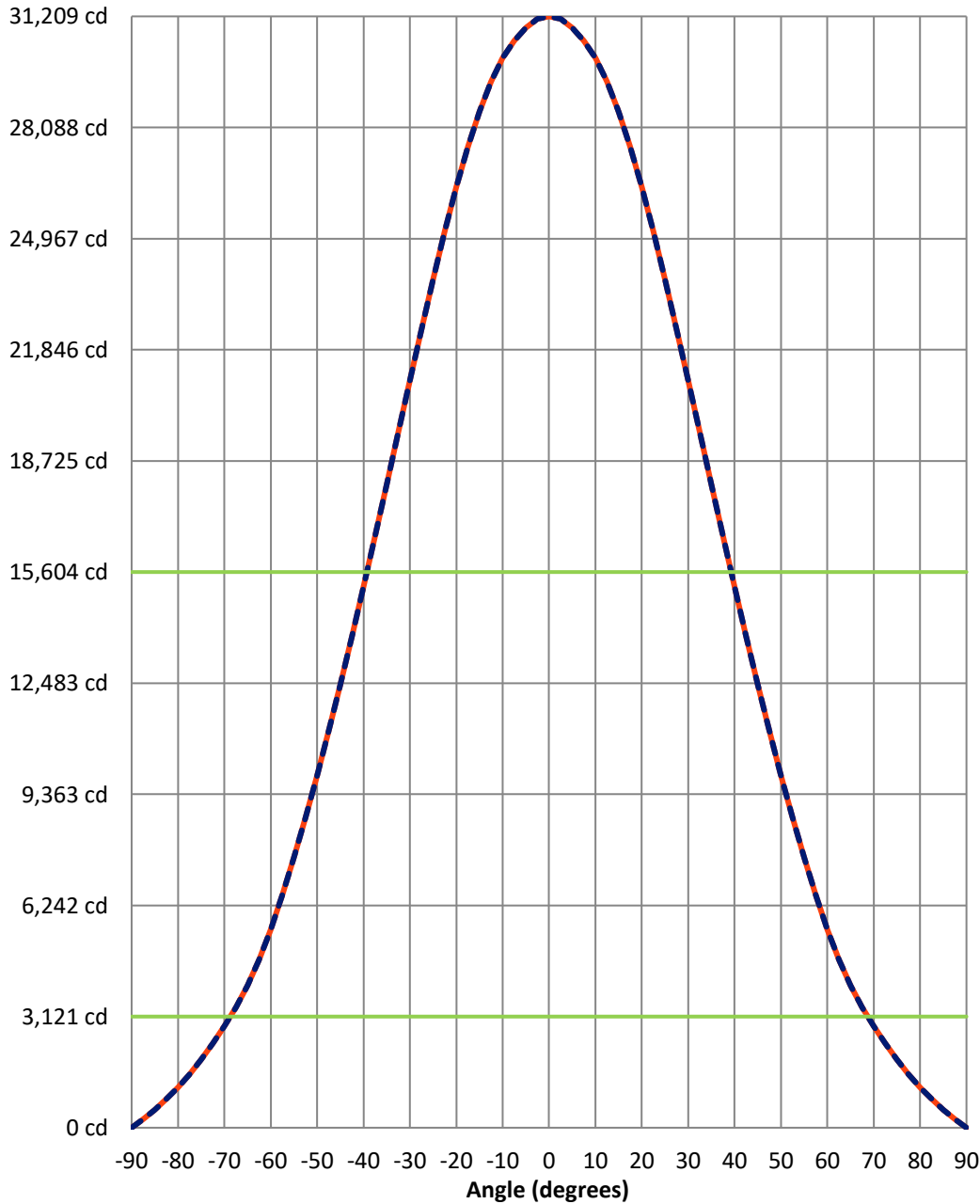
Luminous Intensity Polar Plot



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

REPORT NUMBER: P624200
 CATALOG NUMBER: EPH-VN-06-E-750-U-77

Luminous Intensity Plot



Beam:
 H Angle: 78.6°
 V Angle: 78.6°
 Lumens: 24313.6
 Efficiency: 43.3%

Field:
 H Angle: 137.5°
 V Angle: 137.5°
 Lumens: 39812.7
 Efficiency: 70.9%

Spill:
 Lumens: 16379
 Efficiency: 29.1%

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



REPORT NUMBER: P624200
 CATALOG NUMBER: EPH-VN-06-E-750-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°	240.2	240.2	240.2	240.2	240.2	240.2	240.2	228.5	228.5	222.6	216.8
85°	503.8	503.8	503.8	503.8	503.8	492.1	486.3	480.4	474.5	462.8	457.0
82.5°	808.5	808.5	808.5	808.5	796.8	785.0	779.2	767.5	755.8	738.2	720.6
80°	1130.7	1130.7	1130.7	1130.7	1113.1	1101.4	1083.8	1072.1	1054.5	1031.1	1007.7
77.5°	1499.8	1499.8	1499.8	1482.2	1470.5	1452.9	1435.3	1411.9	1388.5	1359.2	1324.0
75°	1915.7	1915.7	1915.7	1892.3	1874.7	1857.2	1827.9	1798.6	1763.4	1722.4	1675.5
72.5°	2366.9	2366.9	2366.9	2337.6	2320.0	2290.7	2255.5	2214.5	2173.5	2120.8	2062.2
70°	2853.1	2853.1	2853.1	2818.0	2788.7	2759.4	2712.5	2665.6	2607.1	2548.5	2478.2
67.5°	3380.4	3380.4	3380.4	3339.4	3304.2	3263.2	3210.5	3151.9	3081.6	2999.6	2917.6
65°	3995.5	3995.5	3972.1	3937.0	3895.9	3837.4	3772.9	3690.9	3603.0	3497.6	3386.2
62.5°	4722.0	4722.0	4686.8	4645.8	4593.1	4517.0	4429.1	4323.6	4200.6	4065.8	3931.1
60°	5565.6	5565.6	5524.6	5471.9	5395.7	5302.0	5184.8	5050.1	4897.8	4727.9	4563.8
57.5°	6538.2	6538.2	6485.4	6415.1	6321.4	6204.2	6057.8	5887.9	5694.5	5483.6	5278.6
55°	7592.7	7592.7	7528.3	7446.2	7334.9	7194.3	7018.6	6819.4	6585.0	6344.8	6081.2
52.5°	8711.7	8711.7	8635.5	8541.8	8412.9	8248.9	8049.7	7815.3	7545.8	7264.6	6954.1
50°	9889.3	9889.3	9801.4	9695.9	9549.5	9356.1	9127.6	8858.1	8559.4	8231.3	7873.9
47.5°	11148.8	11148.8	11049.2	10926.2	10750.5	10527.8	10258.3	9947.8	9608.0	9239.0	8834.7
45°	12443.6	12443.6	12332.3	12191.7	11998.3	11746.4	11447.6	11148.8	10715.3	10287.6	9818.9
42.5°	13791.1	13791.1	13662.2	13504.0	13281.4	13006.0	12666.2	12279.5	11851.9	11371.5	10861.8
40°	15191.3	15191.3	15044.8	14863.2	14617.1	14300.7	13919.9	13486.4	13006.0	12472.9	11910.5
37.5°	16620.7	16620.7	16456.7	16257.5	15982.2	15630.6	15203.0	14722.6	14183.6	13591.9	12970.9
35°	18061.9	18061.9	17880.3	17663.6	17358.9	16972.3	16509.4	15976.3	15378.7	14734.3	14037.1
32.5°	19532.4	19532.4	19333.3	19087.2	18741.5	18313.9	17804.2	17224.2	16620.7	15870.8	15109.2
30°	20985.4	20985.4	20768.6	20499.1	20130.0	19661.3	19104.8	18466.2	17757.3	16989.8	16169.6
27.5°	22414.9	22356.3	22174.7	21887.6	21483.3	20985.4	20381.9	19690.6	18923.2	18079.5	17200.7
25°	23820.9	23756.5	23557.3	23240.9	22807.4	22262.5	21612.2	20874.1	20048.0	19157.5	18196.7
22.5°	25168.4	25098.1	24887.2	24547.4	24084.5	23492.8	22795.7	22004.8	21126.0	20171.0	19157.5
20°	26416.3	26340.1	26123.3	25766.0	25285.6	24658.7	23920.5	23071.0	22133.6	21126.0	20048.0
17.5°	27541.1	27464.9	27236.5	26867.4	26416.3	25719.1	24957.5	24061.1	23071.0	22004.8	20874.1
15°	28531.2	28449.2	28214.8	27845.7	27330.2	26674.0	25871.4	24957.5	23920.5	22795.7	21612.2
12.5°	29374.8	29292.8	29052.6	28683.5	28150.4	27494.2	26674.0	25719.1	24658.7	23492.8	22262.5
10°	30042.7	29960.7	29732.2	29380.7	28830.0	28150.4	27330.2	26416.3	25285.6	24084.5	22807.4
7.5°	30523.1	30446.9	30236.0	29884.5	29380.7	28683.5	27845.7	26867.4	25766.0	24547.4	23240.9
5°	30886.3	30798.5	30587.6	30236.0	29732.2	29052.6	28214.8	27236.5	26123.3	24887.2	23557.3
2.5°	31138.3	31032.8	30798.5	30446.9	29960.7	29292.8	28449.2	27464.9	26340.1	25098.1	23756.5
0°	31208.6	31138.3	30886.3	30523.1	30042.7	29374.8	28531.2	27541.1	26416.3	25168.4	23820.9



REPORT NUMBER: P624200
 CATALOG NUMBER: EPH-VN-06-E-750-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°	210.9	210.9	205.0	199.2	193.3	181.6	175.8	169.9	164.0	152.3	146.5
85°	445.3	433.5	421.8	410.1	392.5	380.8	363.2	351.5	333.9	316.4	298.8
82.5°	703.0	685.5	662.0	644.4	621.0	591.7	568.3	539.0	509.7	486.3	457.0
80°	984.2	954.9	925.7	896.4	861.2	826.1	790.9	755.8	714.7	673.7	632.7
77.5°	1288.9	1247.9	1206.9	1160.0	1119.0	1072.1	1025.2	978.4	925.7	872.9	820.2
75°	1628.7	1576.0	1517.4	1458.8	1406.1	1341.6	1277.2	1212.7	1142.4	1078.0	1007.7
72.5°	1997.8	1933.3	1863.0	1792.7	1716.6	1634.5	1552.5	1464.6	1382.6	1300.6	1212.7
70°	2396.2	2320.0	2232.1	2144.2	2050.5	1950.9	1851.3	1745.9	1640.4	1534.9	1429.5
67.5°	2823.8	2730.1	2624.6	2519.2	2402.0	2284.8	2167.7	2044.6	1915.7	1786.9	1663.8
65°	3280.8	3163.6	3040.6	2905.8	2771.1	2636.4	2495.7	2349.3	2202.8	2050.5	1915.7
62.5°	3790.5	3644.0	3485.8	3321.8	3169.5	3005.4	2853.1	2671.5	2495.7	2325.8	2156.0
60°	4382.2	4188.9	3995.5	3790.5	3597.2	3386.2	3198.8	2999.6	2800.4	2607.1	2407.9
57.5°	5044.2	4798.2	4563.8	4317.8	4060.0	3825.6	3585.4	3345.2	3122.6	2894.1	2677.4
55°	5794.1	5495.3	5202.4	4897.8	4599.0	4306.0	4001.4	3731.9	3456.6	3198.8	2946.9
52.5°	6614.3	6274.5	5911.3	5565.6	5184.8	4821.6	4481.8	4142.0	3819.8	3509.3	3222.2
50°	7493.1	7094.7	6678.8	6256.9	5823.4	5395.7	4985.6	4587.3	4212.3	3849.1	3509.3
47.5°	8407.0	7955.9	7481.4	7001.0	6538.2	6016.7	5524.6	5073.5	4622.4	4212.3	3819.8
45°	9344.4	8834.7	8313.3	7768.5	7223.6	6661.2	6116.3	5565.6	5073.5	4587.3	4142.0
42.5°	10311.1	9736.9	9156.9	8553.5	7950.1	7334.9	6719.8	6116.3	5524.6	4985.6	4481.8
40°	11307.0	10674.3	10012.3	9356.1	8711.7	8008.7	7334.9	6661.2	6016.7	5395.7	4821.6
37.5°	12303.0	11611.7	10896.9	10158.7	9420.6	8711.7	7950.1	7223.6	6538.2	5823.4	5184.8
35°	13304.8	12543.2	11769.9	10967.2	10158.7	9356.1	8553.5	7768.5	7001.0	6256.9	5565.6
32.5°	14312.5	13480.6	12625.2	11769.9	10896.9	10012.3	9156.9	8313.3	7481.4	6678.8	5911.3
30°	15302.6	14400.3	13480.6	12543.2	11611.7	10674.3	9736.9	8834.7	7955.9	7094.7	6274.5
27.5°	16269.2	15302.6	14312.5	13304.8	12303.0	11307.0	10311.1	9344.4	8407.0	7493.1	6614.3
25°	17200.7	16169.6	15109.2	14037.1	12970.9	11910.5	10861.8	9818.9	8834.7	7873.9	6954.1
22.5°	18079.5	16989.8	15870.8	14734.3	13591.9	12472.9	11371.5	10287.6	9239.0	8231.3	7264.6
20°	18923.2	17757.3	16620.7	15378.7	14183.6	13006.0	11851.9	10715.3	9608.0	8559.4	7545.8
17.5°	19690.6	18466.2	17224.2	15976.3	14722.6	13486.4	12279.5	11148.8	9947.8	8858.1	7815.3
15°	20381.9	19104.8	17804.2	16509.4	15203.0	13919.9	12666.2	11447.6	10258.3	9127.6	8049.7
12.5°	20985.4	19661.3	18313.9	16972.3	15630.6	14300.7	13006.0	11746.4	10527.8	9356.1	8248.9
10°	21483.3	20130.0	18741.5	17358.9	15982.2	14617.1	13281.4	11998.3	10750.5	9549.5	8412.9
7.5°	21887.6	20499.1	19087.2	17663.6	16257.5	14863.2	13504.0	12191.7	10926.2	9695.9	8541.8
5°	22174.7	20768.6	19333.3	17880.3	16456.7	15044.8	13662.2	12332.3	11049.2	9801.4	8635.5
2.5°	22356.3	20985.4	19532.4	18061.9	16620.7	15191.3	13791.1	12443.6	11148.8	9889.3	8711.7
0°	22414.9	20985.4	19532.4	18061.9	16620.7	15191.3	13791.1	12443.6	11148.8	9889.3	8711.7



REPORT NUMBER: P624200
 CATALOG NUMBER: EPH-VN-06-E-750-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°	140.6	128.9	117.2	111.3	99.6	93.7	82.0	70.3	64.4	52.7	41.0
85°	281.2	257.8	240.2	222.6	205.0	181.6	164.0	146.5	123.0	105.5	82.0
82.5°	427.7	398.4	369.1	339.8	310.5	281.2	246.1	216.8	187.5	158.2	123.0
80°	591.7	544.8	503.8	462.8	421.8	380.8	333.9	292.9	246.1	205.0	164.0
77.5°	761.6	708.9	650.3	591.7	533.1	480.4	421.8	369.1	316.4	257.8	205.0
75°	943.2	872.9	808.5	732.3	662.0	585.9	515.6	445.3	380.8	316.4	246.1
72.5°	1130.7	1042.8	954.9	872.9	785.0	697.2	615.1	527.3	445.3	369.1	292.9
70°	1324.0	1218.6	1113.1	1013.5	913.9	808.5	714.7	615.1	515.6	421.8	333.9
67.5°	1529.1	1406.1	1283.0	1154.1	1042.8	925.7	808.5	697.2	585.9	480.4	380.8
65°	1751.7	1605.2	1452.9	1318.2	1171.7	1042.8	913.9	785.0	662.0	533.1	421.8
62.5°	1980.2	1810.3	1640.4	1470.5	1318.2	1154.1	1013.5	872.9	732.3	591.7	462.8
60°	2214.5	2021.2	1827.9	1640.4	1452.9	1283.0	1113.1	954.9	808.5	650.3	503.8
57.5°	2454.7	2238.0	2021.2	1810.3	1605.2	1406.1	1218.6	1042.8	872.9	708.9	544.8
55°	2700.8	2454.7	2214.5	1980.2	1751.7	1529.1	1324.0	1130.7	943.2	761.6	591.7
52.5°	2946.9	2677.4	2407.9	2156.0	1915.7	1663.8	1429.5	1212.7	1007.7	820.2	632.7
50°	3198.8	2894.1	2607.1	2325.8	2050.5	1786.9	1534.9	1300.6	1078.0	872.9	673.7
47.5°	3456.6	3122.6	2800.4	2495.7	2202.8	1915.7	1640.4	1382.6	1142.4	925.7	714.7
45°	3731.9	3345.2	2999.6	2671.5	2349.3	2044.6	1745.9	1464.6	1212.7	978.4	755.8
42.5°	4001.4	3585.4	3198.8	2853.1	2495.7	2167.7	1851.3	1552.5	1277.2	1025.2	790.9
40°	4306.0	3825.6	3386.2	3005.4	2636.4	2284.8	1950.9	1634.5	1341.6	1072.1	826.1
37.5°	4599.0	4060.0	3597.2	3169.5	2771.1	2402.0	2050.5	1716.6	1406.1	1119.0	861.2
35°	4897.8	4317.8	3790.5	3321.8	2905.8	2519.2	2144.2	1792.7	1458.8	1160.0	896.4
32.5°	5202.4	4563.8	3995.5	3485.8	3040.6	2624.6	2232.1	1863.0	1517.4	1206.9	925.7
30°	5495.3	4798.2	4188.9	3644.0	3163.6	2730.1	2320.0	1933.3	1576.0	1247.9	954.9
27.5°	5794.1	5044.2	4382.2	3790.5	3280.8	2823.8	2396.2	1997.8	1628.7	1288.9	984.2
25°	6081.2	5278.6	4563.8	3931.1	3386.2	2917.6	2478.2	2062.2	1675.5	1324.0	1007.7
22.5°	6344.8	5483.6	4727.9	4065.8	3497.6	2999.6	2548.5	2120.8	1722.4	1359.2	1031.1
20°	6585.0	5694.5	4897.8	4200.6	3603.0	3081.6	2607.1	2173.5	1763.4	1388.5	1054.5
17.5°	6819.4	5887.9	5050.1	4323.6	3690.9	3151.9	2665.6	2214.5	1798.6	1411.9	1072.1
15°	7018.6	6057.8	5184.8	4429.1	3772.9	3210.5	2712.5	2255.5	1827.9	1435.3	1083.8
12.5°	7194.3	6204.2	5302.0	4517.0	3837.4	3263.2	2759.4	2290.7	1857.2	1452.9	1101.4
10°	7334.9	6321.4	5395.7	4593.1	3895.9	3304.2	2788.7	2320.0	1874.7	1470.5	1113.1
7.5°	7446.2	6415.1	5471.9	4645.8	3937.0	3339.4	2818.0	2337.6	1892.3	1482.2	1130.7
5°	7528.3	6485.4	5524.6	4686.8	3972.1	3380.4	2853.1	2366.9	1915.7	1499.8	1130.7
2.5°	7592.7	6538.2	5565.6	4722.0	3995.5	3380.4	2853.1	2366.9	1915.7	1499.8	1130.7
0°	7592.7	6538.2	5565.6	4722.0	3995.5	3380.4	2853.1	2366.9	1915.7	1499.8	1130.7



REPORT NUMBER: P624200
 CATALOG NUMBER: EPH-VN-06-E-750-U-77

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	29.3	23.4	11.7	0.0
85°	64.4	41.0	23.4	0.0
82.5°	93.7	64.4	29.3	0.0
80°	123.0	82.0	41.0	0.0
77.5°	158.2	105.5	52.7	0.0
75°	187.5	123.0	64.4	0.0
72.5°	216.8	146.5	70.3	0.0
70°	246.1	164.0	82.0	0.0
67.5°	281.2	181.6	93.7	0.0
65°	310.5	205.0	99.6	0.0
62.5°	339.8	222.6	111.3	0.0
60°	369.1	240.2	117.2	0.0
57.5°	398.4	257.8	128.9	0.0
55°	427.7	281.2	140.6	0.0
52.5°	457.0	298.8	146.5	0.0
50°	486.3	316.4	152.3	0.0
47.5°	509.7	333.9	164.0	0.0
45°	539.0	351.5	169.9	0.0
42.5°	568.3	363.2	175.8	0.0
40°	591.7	380.8	181.6	0.0
37.5°	621.0	392.5	193.3	0.0
35°	644.4	410.1	199.2	0.0
32.5°	662.0	421.8	205.0	0.0
30°	685.5	433.5	210.9	0.0
27.5°	703.0	445.3	210.9	0.0
25°	720.6	457.0	216.8	0.0
22.5°	738.2	462.8	222.6	0.0
20°	755.8	474.5	228.5	0.0
17.5°	767.5	480.4	228.5	0.0
15°	779.2	486.3	240.2	0.0
12.5°	785.0	492.1	240.2	0.0
10°	796.8	503.8	240.2	0.0
7.5°	808.5	503.8	240.2	0.0
5°	808.5	503.8	240.2	0.0
2.5°	808.5	503.8	240.2	0.0
0°	808.5	503.8	240.2	0.0

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