

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: P624227

Luminaire Tested: **EPH-VN-08-E-940-U-77**

Issue Date: 11/2/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P624227  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 11/2/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: EPHESUS  
Catalog Number: EPH-VN-08-E-940-U-77  
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/  
Nema 7 distribution lens  
Light Source: (128) 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

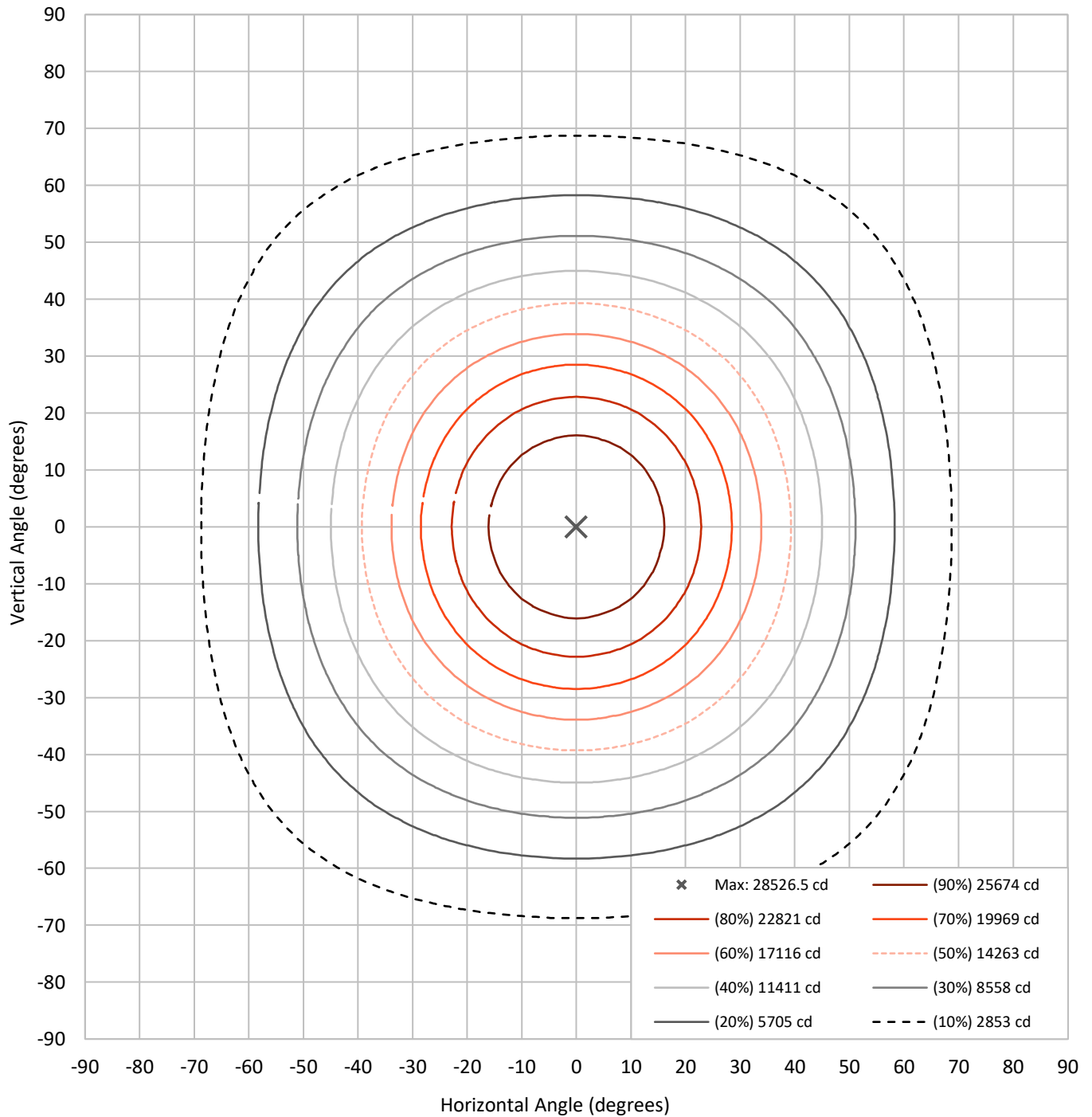
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	51362.6 lumens	Max Intensity:	28526.5 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	81.9 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	22224.1 lumens	Field Lumens:	36391.2 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%

Input Watts (W): 626.8  
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



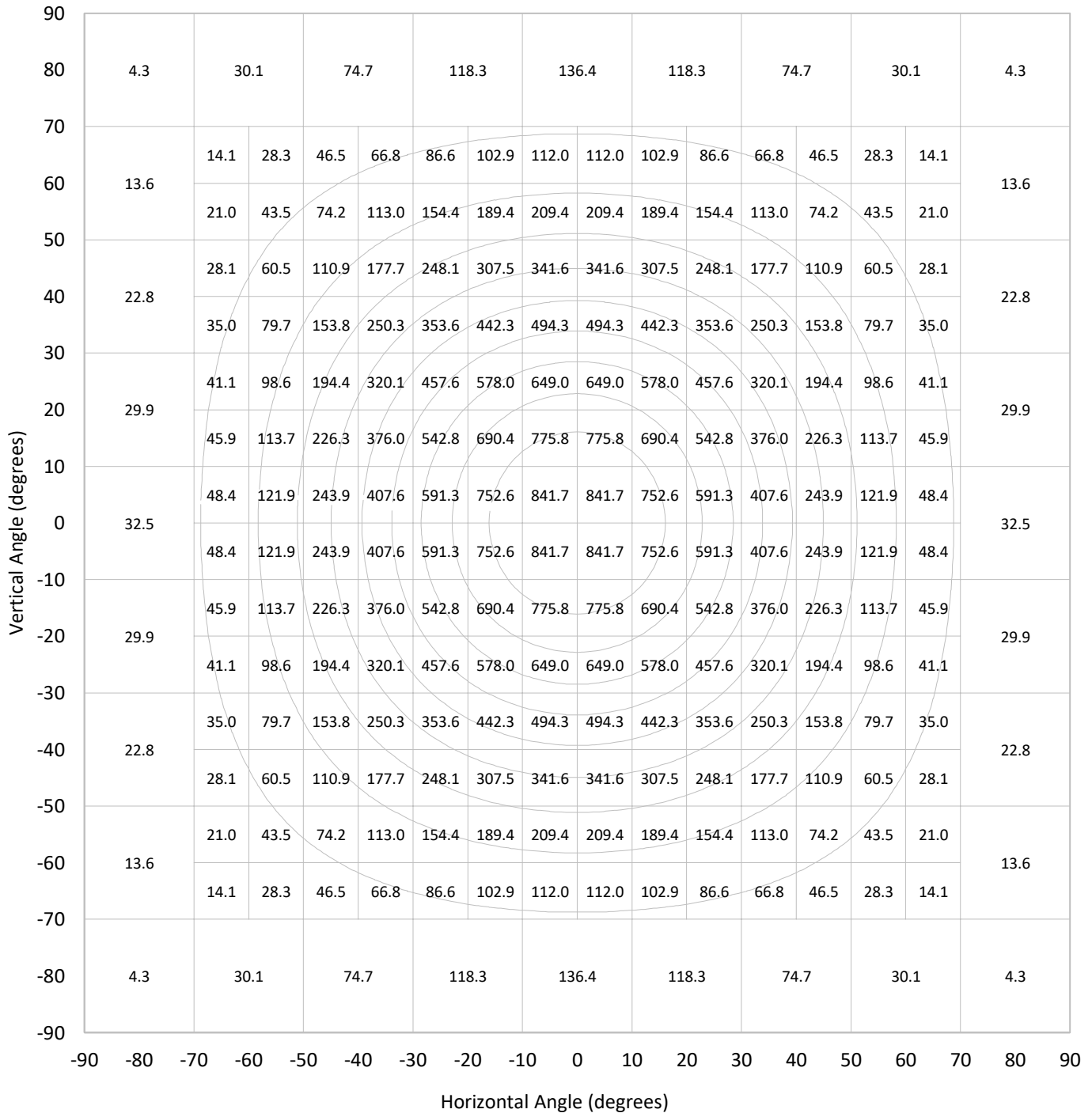
REPORT NUMBER: P624227  
CATALOG NUMBER: EPH-VN-08-E-940-U-77

### Iso-Candela Plot



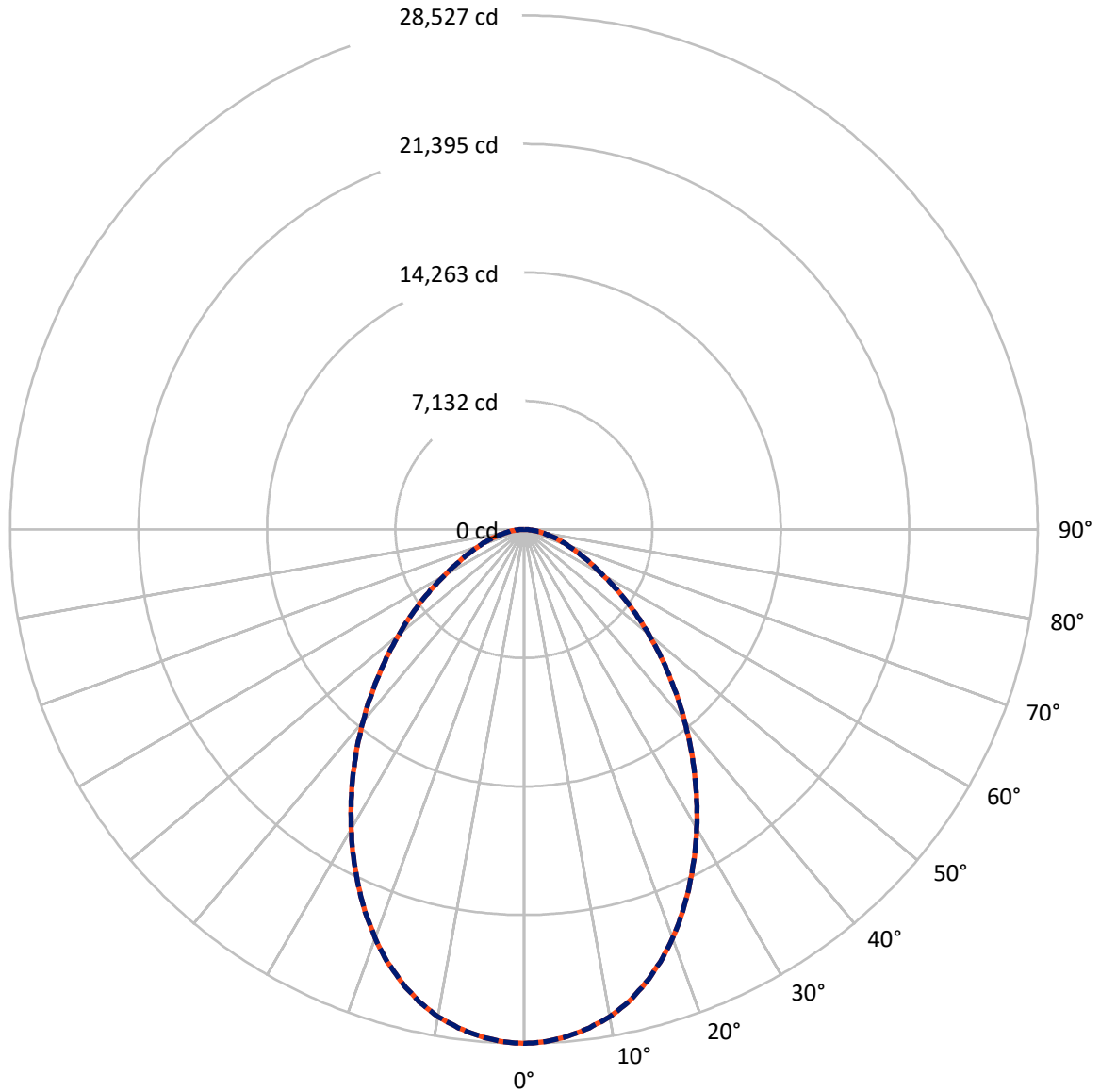
REPORT NUMBER: P624227  
 CATALOG NUMBER: EPH-VN-08-E-940-U-77

### Lumen Table



REPORT NUMBER: P624227  
CATALOG NUMBER: EPH-VN-08-E-940-U-77

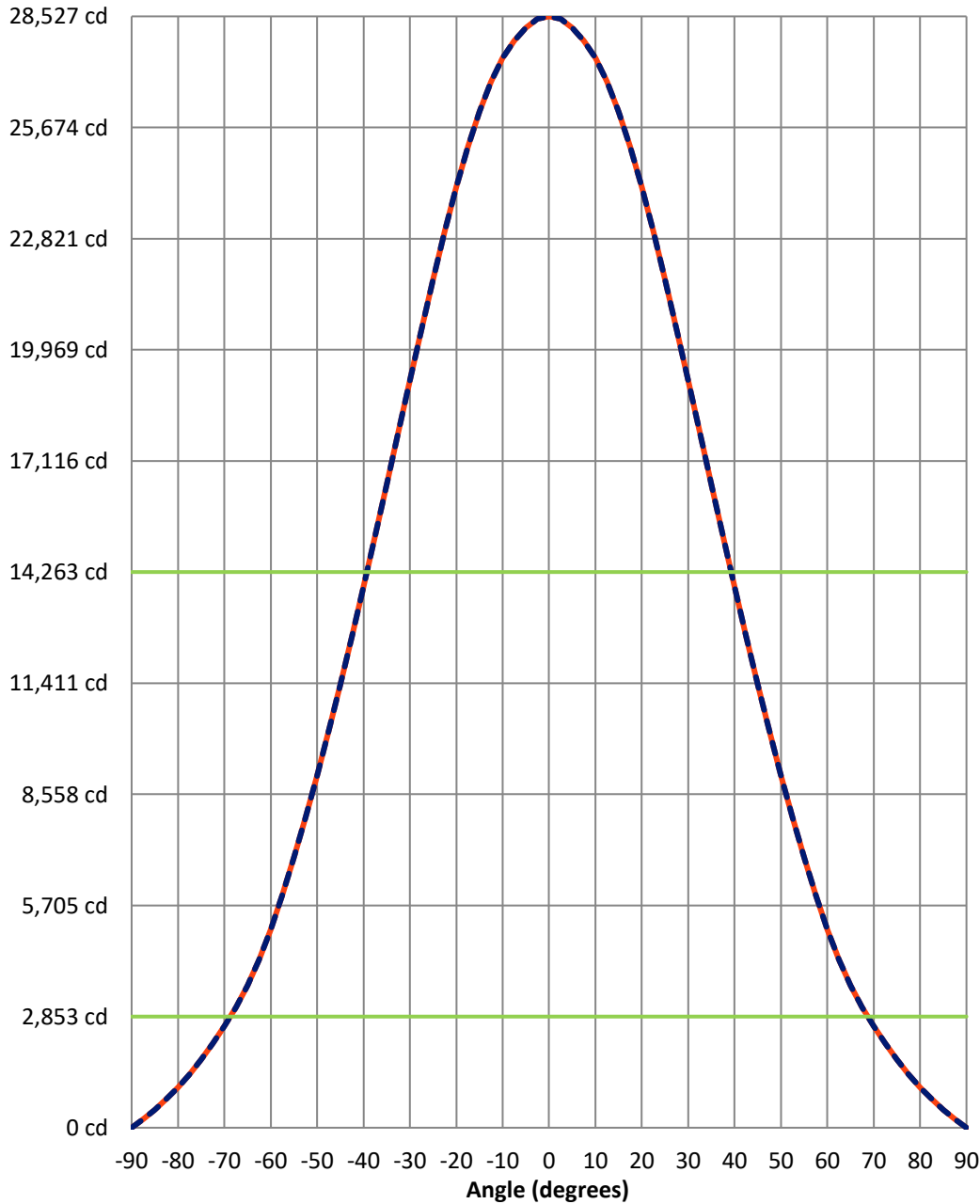
### Luminous Intensity Polar Plot



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

REPORT NUMBER: P624227  
 CATALOG NUMBER: EPH-VN-08-E-940-U-77

### Luminous Intensity Plot



**Beam:**  
 H Angle: 78.6°  
 V Angle: 78.6°  
 Lumens: 22224.1  
 Efficiency: 43.3%

**Field:**  
 H Angle: 137.5°  
 V Angle: 137.5°  
 Lumens: 36391.2  
 Efficiency: 70.9%

**Spill:**  
 Lumens: 14971.4  
 Efficiency: 29.1%

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



REPORT NUMBER: P624227  
 CATALOG NUMBER: EPH-VN-08-E-940-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°	219.6	219.6	219.6	219.6	219.6	219.6	219.6	208.8	208.8	203.5	198.1
85°	460.5	460.5	460.5	460.5	460.5	449.8	444.5	439.1	433.8	423.1	417.7
82.5°	739.0	739.0	739.0	739.0	728.3	717.6	712.2	701.5	690.8	674.7	658.7
80°	1033.5	1033.5	1033.5	1033.5	1017.5	1006.8	990.7	980.0	963.9	942.5	921.1
77.5°	1370.9	1370.9	1370.9	1354.8	1344.1	1328.1	1312.0	1290.6	1269.2	1242.4	1210.2
75°	1751.1	1751.1	1751.1	1729.7	1713.6	1697.6	1670.8	1644.0	1611.9	1574.4	1531.6
72.5°	2163.5	2163.5	2163.5	2136.7	2120.6	2093.8	2061.7	2024.2	1986.7	1938.5	1885.0
70°	2607.9	2607.9	2607.9	2575.8	2549.0	2522.2	2479.4	2436.6	2383.0	2329.5	2265.2
67.5°	3089.9	3089.9	3089.9	3052.4	3020.3	2982.8	2934.6	2881.0	2816.8	2741.8	2666.8
65°	3652.2	3652.2	3630.7	3598.6	3561.1	3507.6	3448.7	3373.7	3293.4	3197.0	3095.2
62.5°	4316.2	4316.2	4284.1	4246.6	4198.4	4128.8	4048.4	3952.1	3839.6	3716.4	3593.3
60°	5087.3	5087.3	5049.8	5001.6	4932.0	4846.3	4739.2	4616.1	4476.8	4321.6	4171.6
57.5°	5976.3	5976.3	5928.1	5863.8	5778.1	5671.0	5537.2	5381.9	5205.1	5012.4	4824.9
55°	6940.2	6940.2	6881.3	6806.3	6704.6	6576.0	6415.4	6233.3	6019.1	5799.6	5558.6
52.5°	7963.0	7963.0	7893.4	7807.7	7689.9	7540.0	7357.9	7143.7	6897.3	6640.3	6356.5
50°	9039.4	9039.4	8959.1	8862.7	8728.8	8552.1	8343.2	8096.9	7823.8	7523.9	7197.2
47.5°	10190.7	10190.7	10099.7	9987.2	9826.6	9623.1	9376.7	9092.9	8782.3	8445.0	8075.5
45°	11374.2	11374.2	11272.4	11143.9	10967.2	10736.9	10463.8	10190.7	9794.4	9403.5	8975.1
42.5°	12605.9	12605.9	12488.1	12343.5	12140.0	11888.3	11577.7	11224.3	10833.3	10394.2	9928.3
40°	13885.7	13885.7	13751.9	13585.8	13360.9	13071.8	12723.7	12327.4	11888.3	11401.0	10886.9
37.5°	15192.4	15192.4	15042.4	14860.4	14608.7	14287.4	13896.4	13457.3	12964.7	12423.8	11856.2
35°	16509.7	16509.7	16343.7	16145.6	15867.1	15513.7	15090.6	14603.3	14057.1	13468.0	12830.8
32.5°	17853.8	17853.8	17671.8	17446.9	17130.9	16740.0	16274.1	15743.9	15192.4	14506.9	13810.8
30°	19181.9	19181.9	18983.8	18737.4	18400.1	17971.7	17462.9	16879.2	16231.3	15529.7	14780.0
27.5°	20488.5	20435.0	20269.0	20006.6	19637.1	19181.9	18630.3	17998.4	17296.9	16525.8	15722.5
25°	21773.8	21714.9	21532.8	21243.6	20847.3	20349.3	19754.9	19080.2	18325.1	17511.1	16632.9
22.5°	23005.4	22941.2	22748.4	22437.8	22014.7	21473.9	20836.6	20113.7	19310.4	18437.5	17511.1
20°	24146.1	24076.5	23878.3	23551.7	23112.5	22539.5	21864.8	21088.3	20231.5	19310.4	18325.1
17.5°	25174.2	25104.6	24895.8	24558.4	24146.1	23508.8	22812.7	21993.3	21088.3	20113.7	19080.2
15°	26079.3	26004.3	25790.1	25452.7	24981.5	24381.7	23648.0	22812.7	21864.8	20836.6	19754.9
12.5°	26850.4	26775.4	26555.9	26218.5	25731.2	25131.4	24381.7	23508.8	22539.5	21473.9	20349.3
10°	27460.9	27385.9	27177.0	26855.7	26352.4	25731.2	24981.5	24146.1	23112.5	22014.7	20847.3
7.5°	27900.0	27830.4	27637.6	27316.3	26855.7	26218.5	25452.7	24558.4	23551.7	22437.8	21243.6
5°	28232.0	28151.7	27958.9	27637.6	27177.0	26555.9	25790.1	24895.8	23878.3	22748.4	21532.8
2.5°	28462.3	28365.9	28151.7	27830.4	27385.9	26775.4	26004.3	25104.6	24076.5	22941.2	21714.9
0°	28526.5	28462.3	28232.0	27900.0	27460.9	26850.4	26079.3	25174.2	24146.1	23005.4	21773.8



REPORT NUMBER: P624227  
 CATALOG NUMBER: EPH-VN-08-E-940-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°	192.8	192.8	187.4	182.1	176.7	166.0	160.7	155.3	149.9	139.2	133.9
85°	407.0	396.3	385.6	374.9	358.8	348.1	332.0	321.3	305.2	289.2	273.1
82.5°	642.6	626.5	605.1	589.1	567.6	540.9	519.4	492.7	465.9	444.5	417.7
80°	899.7	872.9	846.1	819.3	787.2	755.1	722.9	690.8	653.3	615.8	578.3
77.5°	1178.1	1140.6	1103.1	1060.3	1022.8	980.0	937.1	894.3	846.1	797.9	749.7
75°	1488.7	1440.5	1387.0	1333.4	1285.2	1226.3	1167.4	1108.5	1044.2	985.3	921.1
72.5°	1826.1	1767.2	1702.9	1638.7	1569.0	1494.1	1419.1	1338.8	1263.8	1188.8	1108.5
70°	2190.2	2120.6	2040.3	1960.0	1874.3	1783.2	1692.2	1595.8	1499.4	1403.0	1306.6
67.5°	2581.1	2495.5	2399.1	2302.7	2195.6	2088.5	1981.4	1868.9	1751.1	1633.3	1520.8
65°	2998.8	2891.7	2779.3	2656.1	2533.0	2409.8	2281.3	2147.4	2013.5	1874.3	1751.1
62.5°	3464.7	3330.9	3186.3	3036.3	2897.1	2747.2	2607.9	2441.9	2281.3	2126.0	1970.7
60°	4005.6	3828.9	3652.2	3464.7	3288.0	3095.2	2923.9	2741.8	2559.7	2383.0	2200.9
57.5°	4610.7	4385.8	4171.6	3946.7	3711.1	3496.9	3277.3	3057.8	2854.3	2645.4	2447.3
55°	5296.2	5023.1	4755.3	4476.8	4203.7	3936.0	3657.5	3411.2	3159.5	2923.9	2693.6
52.5°	6045.9	5735.3	5403.3	5087.3	4739.2	4407.2	4096.6	3786.0	3491.5	3207.7	2945.3
50°	6849.2	6485.0	6104.8	5719.2	5323.0	4932.0	4557.2	4193.0	3850.3	3518.3	3207.7
47.5°	7684.5	7272.2	6838.4	6399.3	5976.3	5499.7	5049.8	4637.5	4225.2	3850.3	3491.5
45°	8541.4	8075.5	7598.9	7100.8	6602.8	6088.7	5590.7	5087.3	4637.5	4193.0	3786.0
42.5°	9424.9	8900.1	8370.0	7818.4	7266.8	6704.6	6142.3	5590.7	5049.8	4557.2	4096.6
40°	10335.3	9757.0	9151.8	8552.1	7963.0	7320.4	6704.6	6088.7	5499.7	4932.0	4407.2
37.5°	11245.7	10613.8	9960.5	9285.7	8611.0	7963.0	7266.8	6602.8	5976.3	5323.0	4739.2
35°	12161.4	11465.2	10758.4	10024.7	9285.7	8552.1	7818.4	7100.8	6399.3	5719.2	5087.3
32.5°	13082.5	12322.0	11540.2	10758.4	9960.5	9151.8	8370.0	7598.9	6838.4	6104.8	5403.3
30°	13987.5	13162.8	12322.0	11465.2	10613.8	9757.0	8900.1	8075.5	7272.2	6485.0	5735.3
27.5°	14871.1	13987.5	13082.5	12161.4	11245.7	10335.3	9424.9	8541.4	7684.5	6849.2	6045.9
25°	15722.5	14780.0	13810.8	12830.8	11856.2	10886.9	9928.3	8975.1	8075.5	7197.2	6356.5
22.5°	16525.8	15529.7	14506.9	13468.0	12423.8	11401.0	10394.2	9403.5	8445.0	7523.9	6640.3
20°	17296.9	16231.3	15192.4	14057.1	12964.7	11888.3	10833.3	9794.4	8782.3	7823.8	6897.3
17.5°	17998.4	16879.2	15743.9	14603.3	13457.3	12327.4	11224.3	10190.7	9092.9	8096.9	7143.7
15°	18630.3	17462.9	16274.1	15090.6	13896.4	12723.7	11577.7	10463.8	9376.7	8343.2	7357.9
12.5°	19181.9	17971.7	16740.0	15513.7	14287.4	13071.8	11888.3	10736.9	9623.1	8552.1	7540.0
10°	19637.1	18400.1	17130.9	15867.1	14608.7	13360.9	12140.0	10967.2	9826.6	8728.8	7689.9
7.5°	20006.6	18737.4	17446.9	16145.6	14860.4	13585.8	12343.5	11143.9	9987.2	8862.7	7807.7
5°	20269.0	18983.8	17671.8	16343.7	15042.4	13751.9	12488.1	11272.4	10099.7	8959.1	7893.4
2.5°	20435.0	19181.9	17853.8	16509.7	15192.4	13885.7	12605.9	11374.2	10190.7	9039.4	7963.0
0°	20488.5	19181.9	17853.8	16509.7	15192.4	13885.7	12605.9	11374.2	10190.7	9039.4	7963.0





REPORT NUMBER: P624227

CATALOG NUMBER: EPH-VN-08-E-940-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°	128.5	117.8	107.1	101.7	91.0	85.7	75.0	64.3	58.9	48.2	37.5
85°	257.0	235.6	219.6	203.5	187.4	166.0	149.9	133.9	112.5	96.4	75.0
82.5°	390.9	364.1	337.4	310.6	283.8	257.0	224.9	198.1	171.4	144.6	112.5
80°	540.9	498.0	460.5	423.1	385.6	348.1	305.2	267.8	224.9	187.4	149.9
77.5°	696.2	648.0	594.4	540.9	487.3	439.1	385.6	337.4	289.2	235.6	187.4
75°	862.2	797.9	739.0	669.4	605.1	535.5	471.2	407.0	348.1	289.2	224.9
72.5°	1033.5	953.2	872.9	797.9	717.6	637.3	562.3	482.0	407.0	337.4	267.8
70°	1210.2	1113.9	1017.5	926.4	835.4	739.0	653.3	562.3	471.2	385.6	305.2
67.5°	1397.7	1285.2	1172.8	1055.0	953.2	846.1	739.0	637.3	535.5	439.1	348.1
65°	1601.2	1467.3	1328.1	1204.9	1071.0	953.2	835.4	717.6	605.1	487.3	385.6
62.5°	1810.0	1654.7	1499.4	1344.1	1204.9	1055.0	926.4	797.9	669.4	540.9	423.1
60°	2024.2	1847.5	1670.8	1499.4	1328.1	1172.8	1017.5	872.9	739.0	594.4	460.5
57.5°	2243.8	2045.6	1847.5	1654.7	1467.3	1285.2	1113.9	953.2	797.9	648.0	498.0
55°	2468.7	2243.8	2024.2	1810.0	1601.2	1397.7	1210.2	1033.5	862.2	696.2	540.9
52.5°	2693.6	2447.3	2200.9	1970.7	1751.1	1520.8	1306.6	1108.5	921.1	749.7	578.3
50°	2923.9	2645.4	2383.0	2126.0	1874.3	1633.3	1403.0	1188.8	985.3	797.9	615.8
47.5°	3159.5	2854.3	2559.7	2281.3	2013.5	1751.1	1499.4	1263.8	1044.2	846.1	653.3
45°	3411.2	3057.8	2741.8	2441.9	2147.4	1868.9	1595.8	1338.8	1108.5	894.3	690.8
42.5°	3657.5	3277.3	2923.9	2607.9	2281.3	1981.4	1692.2	1419.1	1167.4	937.1	722.9
40°	3936.0	3496.9	3095.2	2747.2	2409.8	2088.5	1783.2	1494.1	1226.3	980.0	755.1
37.5°	4203.7	3711.1	3288.0	2897.1	2533.0	2195.6	1874.3	1569.0	1285.2	1022.8	787.2
35°	4476.8	3946.7	3464.7	3036.3	2656.1	2302.7	1960.0	1638.7	1333.4	1060.3	819.3
32.5°	4755.3	4171.6	3652.2	3186.3	2779.3	2399.1	2040.3	1702.9	1387.0	1103.1	846.1
30°	5023.1	4385.8	3828.9	3330.9	2891.7	2495.5	2120.6	1767.2	1440.5	1140.6	872.9
27.5°	5296.2	4610.7	4005.6	3464.7	2998.8	2581.1	2190.2	1826.1	1488.7	1178.1	899.7
25°	5558.6	4824.9	4171.6	3593.3	3095.2	2666.8	2265.2	1885.0	1531.6	1210.2	921.1
22.5°	5799.6	5012.4	4321.6	3716.4	3197.0	2741.8	2329.5	1938.5	1574.4	1242.4	942.5
20°	6019.1	5205.1	4476.8	3839.6	3293.4	2816.8	2383.0	1986.7	1611.9	1269.2	963.9
17.5°	6233.3	5381.9	4616.1	3952.1	3373.7	2881.0	2436.6	2024.2	1644.0	1290.6	980.0
15°	6415.4	5537.2	4739.2	4048.4	3448.7	2934.6	2479.4	2061.7	1670.8	1312.0	990.7
12.5°	6576.0	5671.0	4846.3	4128.8	3507.6	2982.8	2522.2	2093.8	1697.6	1328.1	1006.8
10°	6704.6	5778.1	4932.0	4198.4	3561.1	3020.3	2549.0	2120.6	1713.6	1344.1	1017.5
7.5°	6806.3	5863.8	5001.6	4246.6	3598.6	3052.4	2575.8	2136.7	1729.7	1354.8	1033.5
5°	6881.3	5928.1	5049.8	4284.1	3630.7	3089.9	2607.9	2163.5	1751.1	1370.9	1033.5
2.5°	6940.2	5976.3	5087.3	4316.2	3652.2	3089.9	2607.9	2163.5	1751.1	1370.9	1033.5
0°	6940.2	5976.3	5087.3	4316.2	3652.2	3089.9	2607.9	2163.5	1751.1	1370.9	1033.5



REPORT NUMBER: P624227  
 CATALOG NUMBER: EPH-VN-08-E-940-U-77

**CANDELA DISTRIBUTION (continued):**

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	26.8	21.4	10.7	0.0
85°	58.9	37.5	21.4	0.0
82.5°	85.7	58.9	26.8	0.0
80°	112.5	75.0	37.5	0.0
77.5°	144.6	96.4	48.2	0.0
75°	171.4	112.5	58.9	0.0
72.5°	198.1	133.9	64.3	0.0
70°	224.9	149.9	75.0	0.0
67.5°	257.0	166.0	85.7	0.0
65°	283.8	187.4	91.0	0.0
62.5°	310.6	203.5	101.7	0.0
60°	337.4	219.6	107.1	0.0
57.5°	364.1	235.6	117.8	0.0
55°	390.9	257.0	128.5	0.0
52.5°	417.7	273.1	133.9	0.0
50°	444.5	289.2	139.2	0.0
47.5°	465.9	305.2	149.9	0.0
45°	492.7	321.3	155.3	0.0
42.5°	519.4	332.0	160.7	0.0
40°	540.9	348.1	166.0	0.0
37.5°	567.6	358.8	176.7	0.0
35°	589.1	374.9	182.1	0.0
32.5°	605.1	385.6	187.4	0.0
30°	626.5	396.3	192.8	0.0
27.5°	642.6	407.0	192.8	0.0
25°	658.7	417.7	198.1	0.0
22.5°	674.7	423.1	203.5	0.0
20°	690.8	433.8	208.8	0.0
17.5°	701.5	439.1	208.8	0.0
15°	712.2	444.5	219.6	0.0
12.5°	717.6	449.8	219.6	0.0
10°	728.3	460.5	219.6	0.0
7.5°	739.0	460.5	219.6	0.0
5°	739.0	460.5	219.6	0.0
2.5°	739.0	460.5	219.6	0.0
0°	739.0	460.5	219.6	0.0

(END OF REPORT)