

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: EPHESUS

Report Number: P574619

Luminaire Tested: **EPH-VN-07-740-U-T2**

Issue Date: 10/19/2021



Test Information

Test Method: LM-79-08
Report Number: P574619
Test Lab: INNOVATION CENTER(G2)
Issue Date: 10/19/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: EPHESUS
Catalog Number: EPH-VN-07-740-U-T2
Description: EPHESUS LUMAVISION – Middle Tier Light Square Luminaire w/ T2 distribution lens
Light Source: (112) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 56383.3 lumens
Efficiency: N/A
Efficacy: 105.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G5

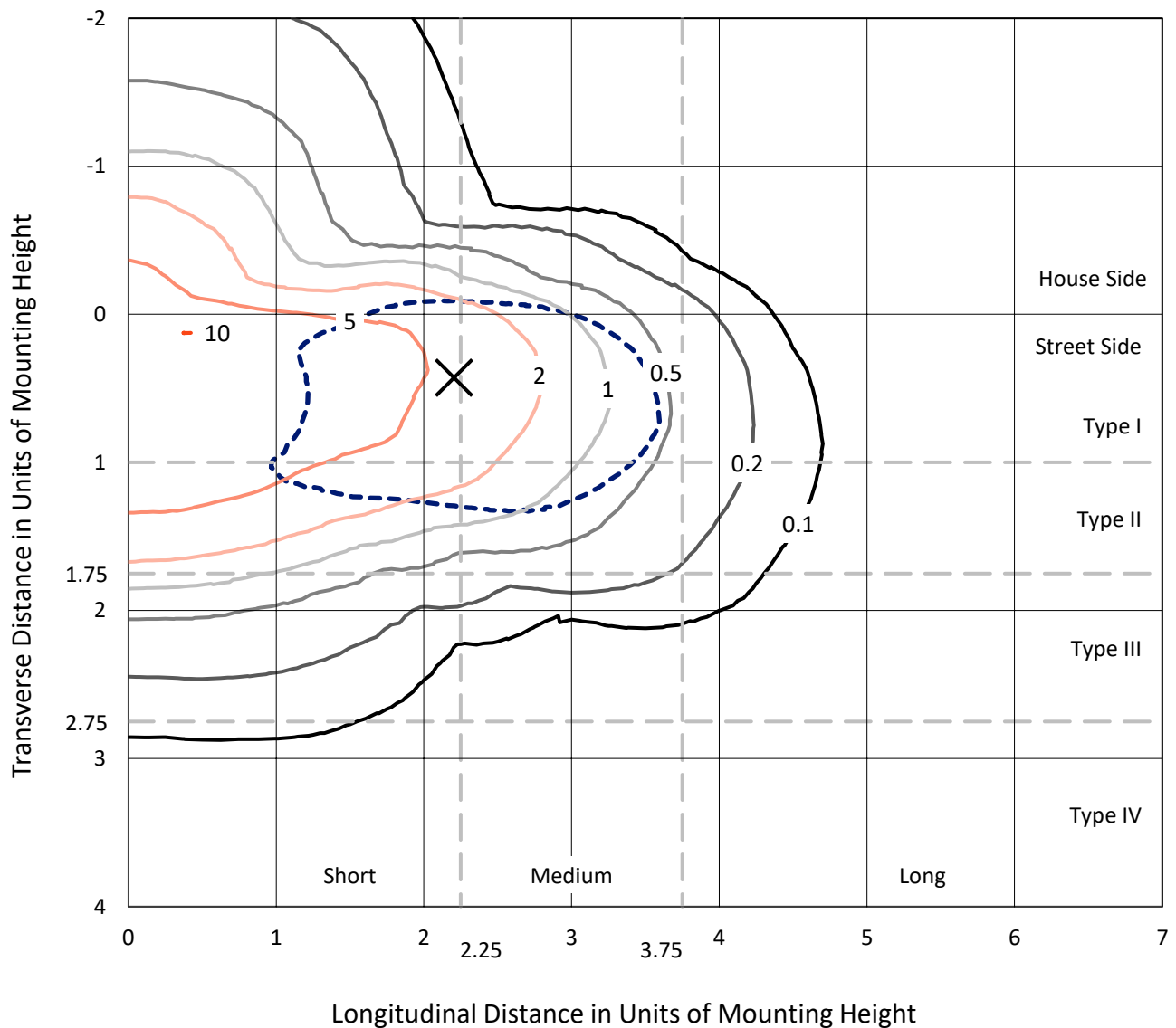
Input Watts (W): 532.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P574619
 CATALOG NUMBER: EPH-VN-07-740-U-T2

Iso-Footcandle Lines of Horizontal Illumination

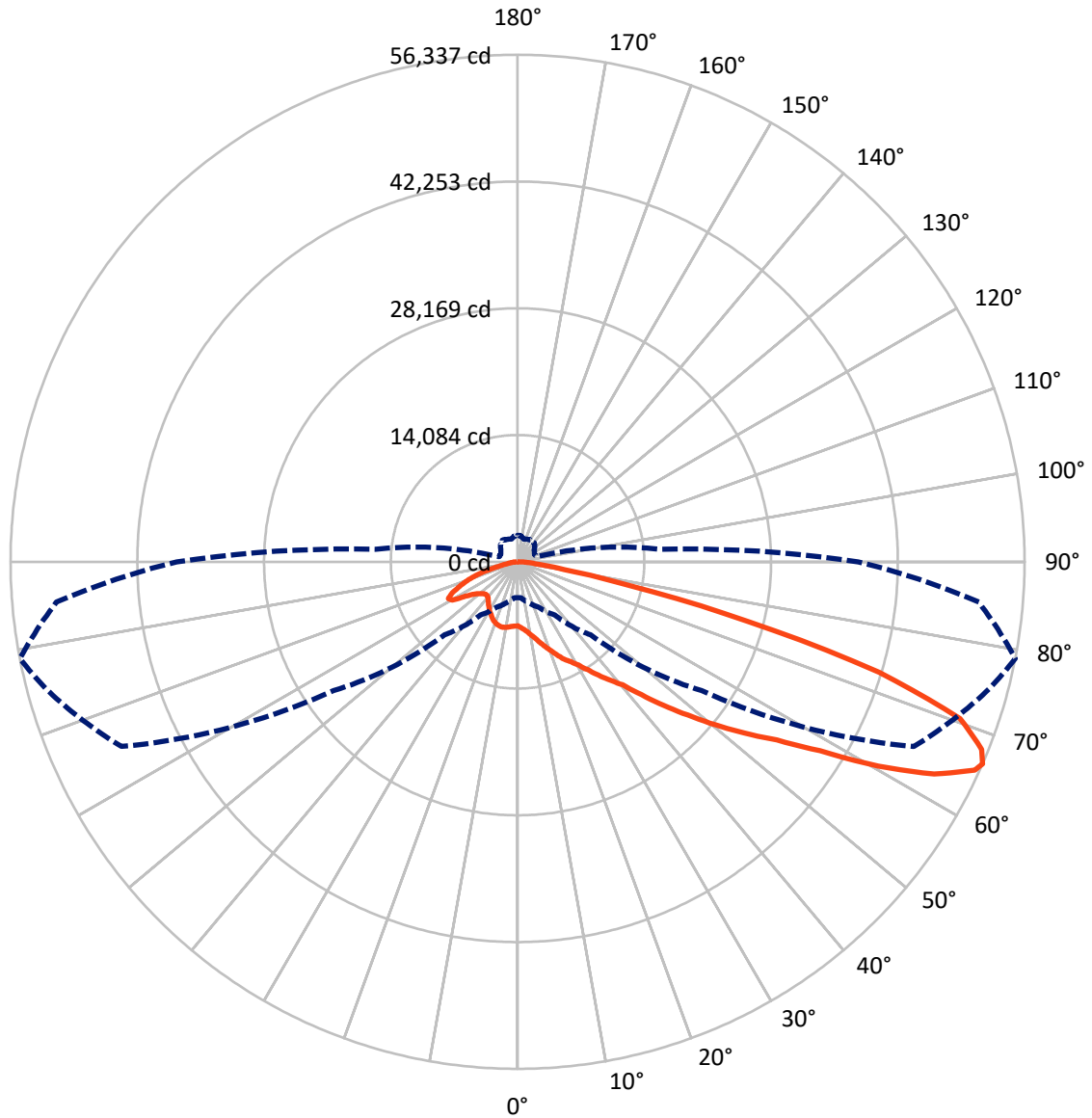
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 10 fc
 Type II - Short - N/A

REPORT NUMBER: P574619
CATALOG NUMBER: EPH-VN-07-740-U-T2

Luminous Intensity Polar Plot



— Vertical Plane Through 79-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

REPORT NUMBER: P574619
 CATALOG NUMBER: EPH-VN-07-740-U-T2

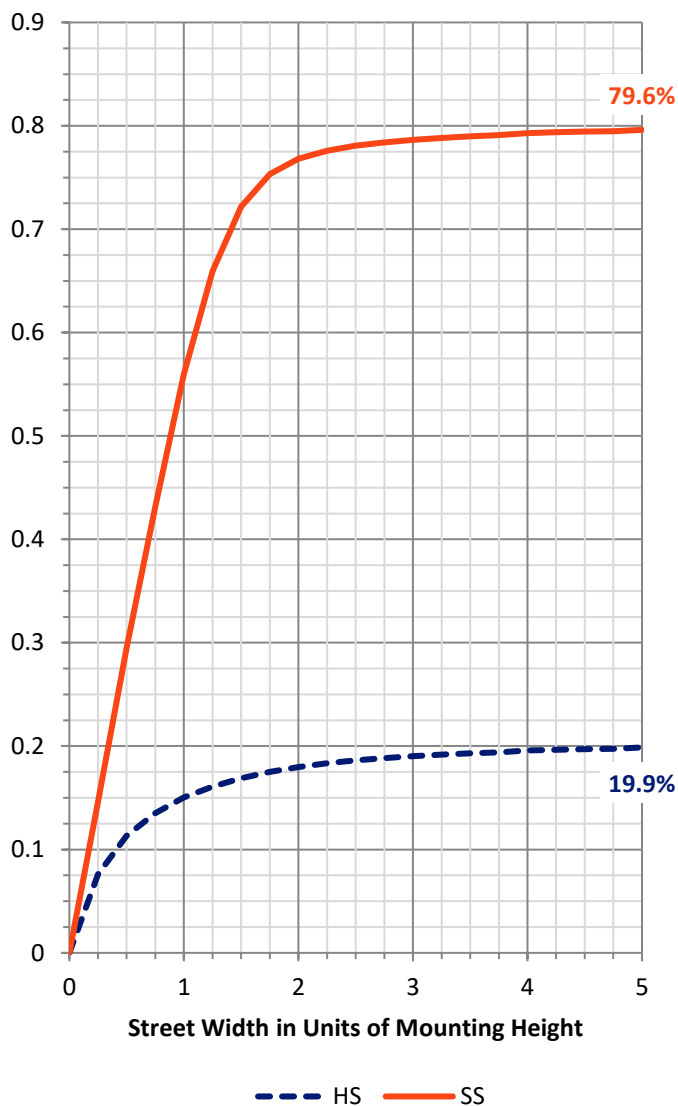
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 11385.8 | 0.0 | 11385.8 |
| | % Fixture | 20.2 | 0.0 | 20.2 |
| Street Side | Lumens | 44997.5 | 0.0 | 44997.5 |
| | % Fixture | 79.8 | 0.0 | 79.8 |
| Total | Lumens | 56383.3 | 0.0 | 56383.3 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 700.1 | 1.2 |
| 10°-20° | 2161.8 | 3.8 |
| 20°-30° | 3710.8 | 6.6 |
| 30°-40° | 5732.4 | 10.2 |
| 40°-50° | 9181.9 | 16.3 |
| 50°-60° | 13709.2 | 24.3 |
| 60°-70° | 14086.2 | 25.0 |
| 70°-80° | 6244.2 | 11.1 |
| 80°-90° | 856.8 | 1.5 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.0 | 0.0 |
| 110°-120° | 0.0 | 0.0 |
| 120°-130° | 0.0 | 0.0 |
| 130°-140° | 0.0 | 0.0 |
| 140°-150° | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-90° | 56383.3 | 100.0 |
| 0°-180° | 56383.3 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P574619

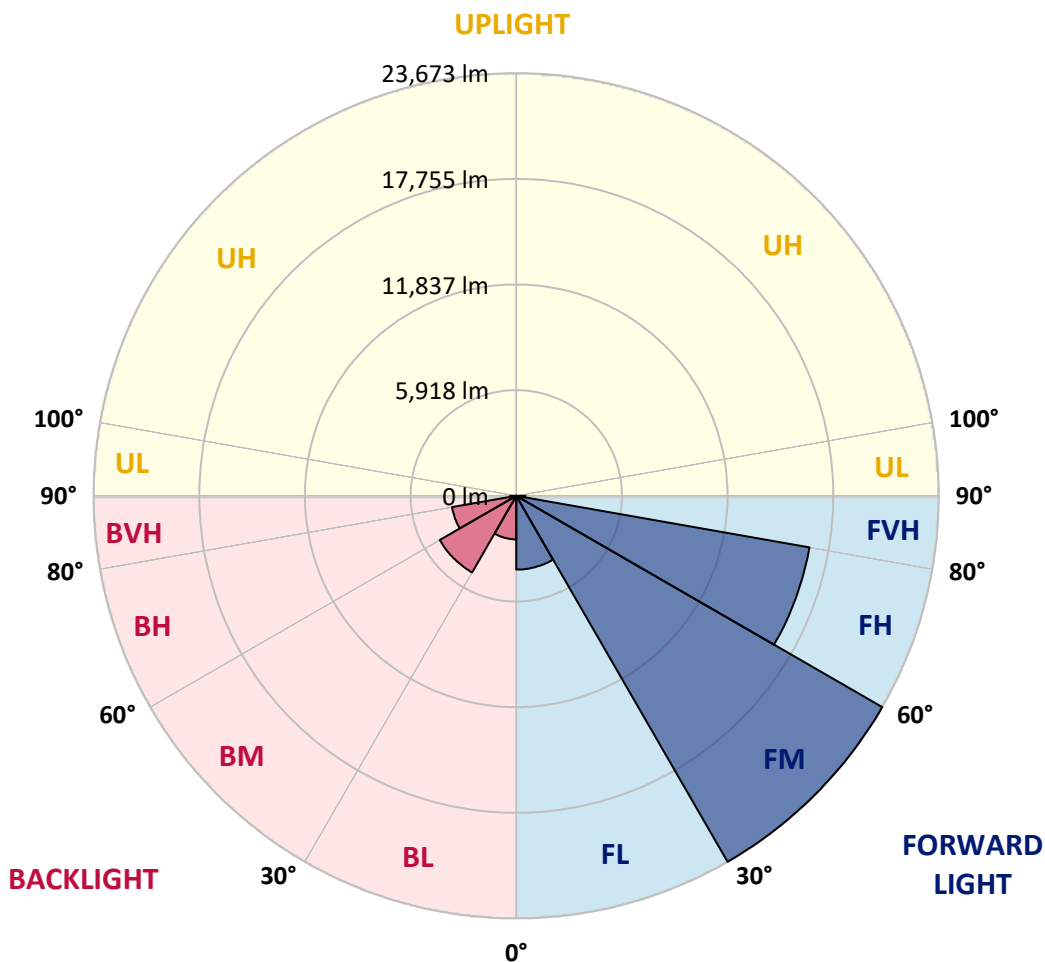
CATALOG NUMBER: EPH-VN-07-740-U-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 4133.3 | 7.3 | | | |
| FM (30°-60°) | 23673.5 | 42.0 | | | |
| FH (60°-80°) | 16676.9 | 29.6 | | | G5 |
| FVH (80°-90°) | 513.9 | 0.9 | | | G4/750 |
| BL (0°-30°) | 2439.4 | 4.3 | B3/2500 | | |
| BM (30°-60°) | 4950.0 | 8.8 | B3/5000 | | |
| BH (60°-80°) | 3653.5 | 6.5 | B4/5000 | | G4/5000 |
| BVH (80°-90°) | 342.9 | 0.6 | | | G3/500 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B4-U0-G5

Type II Short





REPORT NUMBER: P574619
 CATALOG NUMBER: EPH-VN-07-740-U-T2

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 79° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 7119.6 | 7119.6 | 7119.6 | 7119.6 | 7119.6 | 7119.6 | 7119.6 | 7119.6 | 7119.6 | 7119.6 |
| 2.5° | 7572.4 | 7578.6 | 7578.6 | 7553.8 | 7560.0 | 7578.6 | 7510.4 | 7361.5 | 7361.5 | 7336.7 |
| 5° | 8037.5 | 8006.5 | 7963.1 | 7969.3 | 7944.5 | 7944.5 | 7870.1 | 7727.4 | 7603.4 | 7553.8 |
| 7.5° | 8099.5 | 8130.5 | 8124.3 | 8198.8 | 8236.0 | 8236.0 | 8273.2 | 8155.3 | 7969.3 | 7851.5 |
| 10° | 8223.6 | 8142.9 | 8136.7 | 8310.4 | 8366.2 | 8496.4 | 8645.3 | 8583.3 | 8428.2 | 8260.8 |
| 12.5° | 8298.0 | 8347.6 | 8347.6 | 8434.4 | 8564.7 | 8756.9 | 9017.4 | 9135.2 | 8893.4 | 8719.7 |
| 15° | 8409.6 | 8341.4 | 8539.9 | 8614.3 | 8862.3 | 8998.8 | 9370.9 | 9674.8 | 9513.5 | 9302.7 |
| 17.5° | 8459.2 | 8415.8 | 8527.5 | 8663.9 | 9085.6 | 9290.3 | 9743.0 | 10164.7 | 10028.3 | 9891.8 |
| 20° | 8713.5 | 8707.3 | 8756.9 | 8868.6 | 9172.4 | 9575.6 | 10139.9 | 10722.9 | 10772.5 | 10524.4 |
| 22.5° | 9333.7 | 9253.1 | 9253.1 | 9209.6 | 9339.9 | 9755.4 | 10518.2 | 11324.5 | 11547.7 | 11256.2 |
| 25° | 9904.2 | 10015.9 | 9947.7 | 9749.2 | 9699.6 | 9916.7 | 10791.1 | 11963.2 | 12260.9 | 11988.0 |
| 27.5° | 10636.1 | 10673.3 | 10791.1 | 10524.4 | 10183.3 | 10251.5 | 11088.8 | 12322.9 | 12936.9 | 12571.0 |
| 30° | 11690.4 | 11622.1 | 11597.3 | 11299.7 | 10853.1 | 10760.1 | 11429.9 | 12850.1 | 13823.8 | 13309.0 |
| 32.5° | 12403.6 | 12571.0 | 12564.8 | 12155.5 | 11615.9 | 11411.3 | 11851.6 | 13346.2 | 14772.6 | 14295.1 |
| 35° | 13817.6 | 13991.2 | 13854.8 | 13253.2 | 12620.6 | 12211.3 | 12459.4 | 13991.2 | 15858.0 | 15485.9 |
| 37.5° | 15622.3 | 16031.6 | 15740.1 | 14630.0 | 13737.0 | 13290.4 | 13302.8 | 14692.0 | 16968.1 | 16664.2 |
| 40° | 16868.9 | 17420.8 | 17017.7 | 15975.8 | 15026.9 | 14605.2 | 14437.8 | 15523.1 | 18295.3 | 17972.8 |
| 42.5° | 18413.1 | 18872.0 | 18661.2 | 17631.7 | 16521.6 | 16161.8 | 15827.0 | 16912.3 | 20323.2 | 20174.4 |
| 45° | 20100.0 | 20317.0 | 20248.8 | 19597.6 | 18363.5 | 18239.4 | 17501.4 | 18741.8 | 22710.9 | 22773.0 |
| 47.5° | 21669.0 | 21786.9 | 21917.1 | 21445.8 | 20676.7 | 20782.2 | 19430.2 | 20701.6 | 25030.4 | 25439.7 |
| 50° | 22072.1 | 22475.3 | 22779.2 | 23095.4 | 23262.9 | 23976.1 | 21557.4 | 23107.8 | 27697.2 | 28491.0 |
| 52.5° | 21662.8 | 21631.8 | 22555.9 | 23548.2 | 25222.7 | 26717.3 | 24453.6 | 26097.1 | 30053.8 | 31622.9 |
| 55° | 19802.3 | 19740.3 | 21228.7 | 22543.5 | 25811.8 | 28242.9 | 28590.2 | 30078.7 | 32900.5 | 34940.9 |
| 57.5° | 16546.4 | 16161.8 | 17786.7 | 19944.9 | 24534.3 | 28410.4 | 32745.4 | 35989.0 | 37278.9 | 39604.6 |
| 60° | 11119.8 | 10958.6 | 12515.2 | 15088.9 | 19920.1 | 26035.1 | 35232.3 | 43387.7 | 43449.7 | 46066.9 |
| 62.5° | 6846.8 | 6877.8 | 7876.3 | 9805.0 | 13947.8 | 20639.5 | 34159.4 | 49298.0 | 49310.4 | 51933.7 |
| 65° | 4477.7 | 4496.3 | 5302.5 | 6369.2 | 8713.5 | 13997.4 | 28249.1 | 49763.1 | 53385.0 | 55822.3 |
| 66° | 3987.7 | 3993.9 | 4688.5 | 5556.8 | 7218.9 | 11454.7 | 24949.8 | 48553.8 | 54302.8 | 56337.0 |
| 67.5° | 3361.4 | 3442.0 | 4000.2 | 4669.9 | 5631.2 | 8229.8 | 19796.1 | 45056.0 | 53831.5 | 55617.6 |
| 70° | 2629.6 | 2673.0 | 3113.3 | 3795.5 | 4223.4 | 4763.0 | 11764.8 | 36727.0 | 49273.2 | 52169.4 |
| 72.5° | 2108.6 | 2145.8 | 2480.7 | 3082.3 | 3429.6 | 3138.1 | 6406.4 | 26649.1 | 38922.4 | 42010.9 |
| 75° | 1779.9 | 1786.1 | 1947.4 | 2424.9 | 2821.8 | 2356.7 | 3411.0 | 17104.5 | 24974.6 | 26413.4 |
| 77.5° | 1438.8 | 1463.6 | 1575.3 | 1848.1 | 2269.9 | 1854.3 | 2034.2 | 9581.8 | 12540.0 | 12645.4 |
| 80° | 1172.1 | 1184.5 | 1252.8 | 1345.8 | 1730.3 | 1370.6 | 1376.8 | 4676.1 | 5376.9 | 5252.9 |
| 82.5° | 924.1 | 936.5 | 1017.1 | 998.5 | 1271.4 | 979.9 | 855.8 | 2251.2 | 2474.5 | 2424.9 |
| 85° | 520.9 | 520.9 | 800.0 | 800.0 | 806.2 | 620.2 | 520.9 | 1060.5 | 1308.6 | 1221.8 |
| 87.5° | 167.4 | 173.6 | 241.9 | 254.3 | 403.1 | 279.1 | 254.3 | 396.9 | 620.2 | 545.8 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



REPORT NUMBER: P574619

CATALOG NUMBER: EPH-VN-07-740-U-T2

CANDELA DISTRIBUTION (continued):

| 85° | | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° |
|---------|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|
| 7119.6 | 0° | 7119.6 | 7119.6 | 7119.6 | 7119.6 | 7119.6 | 7119.6 | 7119.6 | 7119.6 | 7119.6 | 7119.6 |
| 7293.3 | 2.5° | 7268.5 | 7169.3 | 7125.8 | 6983.2 | 6946.0 | 6853.0 | 6809.6 | 6753.7 | 6735.1 | 6654.5 |
| 7423.5 | 5° | 7324.3 | 7293.3 | 7119.6 | 6939.8 | 6803.4 | 6741.3 | 6648.3 | 6524.3 | 6511.9 | 6400.2 |
| 7721.2 | 7.5° | 7560.0 | 7454.5 | 7150.7 | 6958.4 | 6685.5 | 6530.5 | 6325.8 | 6263.8 | 6183.2 | 6146.0 |
| 8087.1 | 10° | 7925.9 | 7659.2 | 7206.5 | 6722.7 | 6387.8 | 6201.8 | 6052.9 | 6009.5 | 6015.7 | 5990.9 |
| 8453.0 | 12.5° | 8186.4 | 7932.1 | 7113.4 | 6524.3 | 6090.2 | 5910.3 | 5897.9 | 5941.3 | 6009.5 | 5978.5 |
| 8881.0 | 15° | 8558.5 | 8080.9 | 7045.2 | 6195.6 | 5848.3 | 5798.7 | 5792.5 | 5922.7 | 5916.5 | 5916.5 |
| 9457.7 | 17.5° | 8905.8 | 8229.8 | 6797.2 | 5910.3 | 5594.0 | 5631.2 | 5674.6 | 5668.4 | 5730.4 | 5755.3 |
| 9935.3 | 20° | 9346.1 | 8403.4 | 6449.9 | 5625.0 | 5401.8 | 5389.4 | 5383.1 | 5389.4 | 5451.4 | 5488.6 |
| 10474.8 | 22.5° | 9730.6 | 8440.6 | 6158.4 | 5352.1 | 5172.3 | 5122.7 | 5042.1 | 5122.7 | 5091.7 | 5104.1 |
| 11206.6 | 25° | 10065.5 | 8446.8 | 5742.9 | 5147.5 | 4942.8 | 4831.2 | 4769.2 | 4763.0 | 4707.2 | 4701.0 |
| 11622.1 | 27.5° | 10344.6 | 8236.0 | 5376.9 | 4862.2 | 4669.9 | 4564.5 | 4558.3 | 4490.1 | 4347.5 | 4254.4 |
| 12112.1 | 30° | 10561.6 | 8074.7 | 5122.7 | 4614.1 | 4428.1 | 4409.5 | 4353.7 | 4198.6 | 4012.6 | 3894.7 |
| 13017.5 | 32.5° | 10946.1 | 7752.2 | 4775.4 | 4359.9 | 4266.8 | 4242.0 | 4111.8 | 3975.3 | 3801.7 | 3690.1 |
| 13786.6 | 35° | 11231.4 | 7454.5 | 4545.9 | 4142.8 | 4099.4 | 4049.8 | 3938.1 | 3789.3 | 3739.7 | 3714.9 |
| 14611.4 | 37.5° | 11553.9 | 7119.6 | 4266.8 | 3956.7 | 4000.2 | 3907.1 | 3776.9 | 3708.7 | 3882.3 | 3838.9 |
| 15901.4 | 40° | 12068.7 | 6884.0 | 3993.9 | 3845.1 | 3888.5 | 3783.1 | 3615.6 | 3590.8 | 3807.9 | 3652.9 |
| 17557.3 | 42.5° | 13011.3 | 6877.8 | 3826.5 | 3677.7 | 3708.7 | 3628.0 | 3479.2 | 3466.8 | 3553.6 | 3367.6 |
| 19628.6 | 45° | 14183.5 | 7094.8 | 3702.5 | 3553.6 | 3528.8 | 3516.4 | 3466.8 | 3411.0 | 3336.6 | 3094.7 |
| 21935.7 | 47.5° | 15585.1 | 7448.3 | 3677.7 | 3367.6 | 3398.6 | 3504.0 | 3442.0 | 3299.3 | 3107.1 | 2952.0 |
| 24503.2 | 50° | 17284.4 | 8180.2 | 3615.6 | 3231.1 | 3286.9 | 3454.4 | 3404.8 | 3206.3 | 3032.7 | 2933.4 |
| 26853.7 | 52.5° | 19163.5 | 9104.2 | 3535.0 | 3020.3 | 3144.3 | 3411.0 | 3435.8 | 3249.7 | 2995.5 | 2908.6 |
| 30035.2 | 55° | 21377.5 | 10468.6 | 3442.0 | 2790.8 | 2976.9 | 3367.6 | 3435.8 | 3125.7 | 2945.8 | 2945.8 |
| 34891.2 | 57.5° | 25749.8 | 12924.5 | 3249.7 | 2579.9 | 2828.0 | 3286.9 | 3336.6 | 3131.9 | 2952.0 | 2952.0 |
| 42426.4 | 60° | 32162.5 | 16757.2 | 2883.8 | 2418.7 | 2685.4 | 3175.3 | 3262.1 | 3038.9 | 2883.8 | 2921.0 |
| 48628.2 | 62.5° | 37179.7 | 17923.2 | 2573.7 | 2263.7 | 2542.7 | 2970.7 | 3162.9 | 2939.6 | 2803.2 | 2939.6 |
| 51468.6 | 65° | 38252.6 | 16744.8 | 2257.4 | 2096.2 | 2344.3 | 2772.2 | 3020.3 | 2797.0 | 2685.4 | 2952.0 |
| 51431.4 | 66° | 37868.1 | 15827.0 | 2145.8 | 2046.6 | 2257.4 | 2673.0 | 2933.4 | 2747.4 | 2623.4 | 2939.6 |
| 50265.5 | 67.5° | 36156.4 | 14450.2 | 2021.8 | 1941.2 | 2139.6 | 2530.3 | 2834.2 | 2679.2 | 2524.1 | 2902.4 |
| 46023.4 | 70° | 32435.3 | 12254.7 | 1810.9 | 1755.1 | 1972.2 | 2294.7 | 2604.7 | 2505.5 | 2369.1 | 2673.0 |
| 36199.8 | 72.5° | 24980.8 | 9792.6 | 1587.7 | 1593.9 | 1779.9 | 2052.8 | 2375.3 | 2307.1 | 2189.2 | 2344.3 |
| 22177.6 | 75° | 15213.0 | 6257.6 | 1383.0 | 1395.4 | 1550.4 | 1823.3 | 2158.2 | 2108.6 | 1966.0 | 2052.8 |
| 10251.5 | 77.5° | 6741.3 | 3100.9 | 1165.9 | 1190.7 | 1314.8 | 1606.3 | 1879.1 | 1798.5 | 1649.7 | 1668.3 |
| 4167.6 | 80° | 2617.2 | 1469.8 | 948.9 | 979.9 | 1060.5 | 1283.8 | 1556.6 | 1482.2 | 1352.0 | 1327.2 |
| 1916.4 | 82.5° | 1259.0 | 818.6 | 731.8 | 744.2 | 775.2 | 1023.3 | 1339.6 | 1246.6 | 1072.9 | 961.3 |
| 899.3 | 85° | 632.6 | 508.5 | 514.7 | 471.3 | 514.7 | 694.6 | 905.5 | 756.6 | 626.4 | 558.2 |
| 322.5 | 87.5° | 254.3 | 254.3 | 254.3 | 217.1 | 229.5 | 328.7 | 421.7 | 285.3 | 260.5 | 155.0 |
| 0.0 | 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END O



| <u>180°</u> |
|-------------|
| 7119.6 |
| 6728.9 |
| 6387.8 |
| 6226.6 |
| 5953.7 |
| 6021.9 |
| 5910.3 |
| 5798.7 |
| 5457.6 |
| 5141.3 |
| 4701.0 |
| 4266.8 |
| 3894.7 |
| 3671.5 |
| 3733.5 |
| 3857.5 |
| 3615.6 |
| 3311.8 |
| 3032.7 |
| 2921.0 |
| 2914.8 |
| 2896.2 |
| 2933.4 |
| 2927.2 |
| 2914.8 |
| 2952.0 |
| 2964.5 |
| 2945.8 |
| 2846.6 |
| 2573.7 |
| 2282.3 |
| 2021.8 |
| 1655.9 |
| 1314.8 |
| 961.3 |
| 570.6 |
| 155.0 |
| 0.0 |

F REPORT)