



**SUMMARY TEST DATA
ON
SDLVA-6G18G-CD-2-OPT218**

PL37920/2239

Customer: _____ Tested By: RCombs
SO No: _____ Temperature: +25° C
Model No: SDLVA-6G18G-CD-2-OPT218 Date: 10/18/2022
Serial No: PL37920/2239 Drawing No: 27623906 Rev: A1

| TEST ITEM NO. | PARAMETERS | SPECIFIED VALUE | TEST RESULTS | QA QC |
|---------------|----------------|--|---------------------------------|------------|
| 1 | Frequency: | 2.0 GHz – 18.0 GHz | 2.0 GHz – 18.0 GHz See Plots | PMI QA2 |
| 2 | Flatness: | ± 2.0 dB Maximum | ±1.6 dB 25°C See Plots | |
| 3 | TSS: | -70 dBm Minimum | -72 dBm | |
| 4 | VSWR: | 2.0:1 (Input) | 1.6:1 (Input) | |
| 5 | Power Input: | +17 dBm CW Maximum | Pass | |
| 6 | RF Out: | +13 dBm ±3 dB Typical | 10.65 dBm Avg. | |
| 7 | Log Slope: | 25 mV/dB (±10%) 50Ω | 25.4 mV/dB See Plots | |
| 8 | Log Range: | -70 to +5 dBm | -70 to +5 dBm See Plots | |
| 9 | Log Linearity: | ±2.5 dB (-40°C - +85°C) | ±1.7 dB See Plots | |
| 10 | Pulse Range: | 30 ns to CW | Pass | |
| 11 | Rise Time: | 10 ns (6 ns Typical) | 7.5 ns | |
| 12 | Recovery Time: | 60 ns Typical | 55.3 ns | |
| 13 | DC Supply: | +15V or +12V @ 350 mA -15V or -12V @ 180 mA | +12V @ 267 mA -12V @ 96 mA | PMI QA2 |

QA/QC Approval: _____

PMI
QA2

Date: 10/27/2022



SUMMARY TEST DATA ON SDLVA-6G18G-CD-2-OPT218

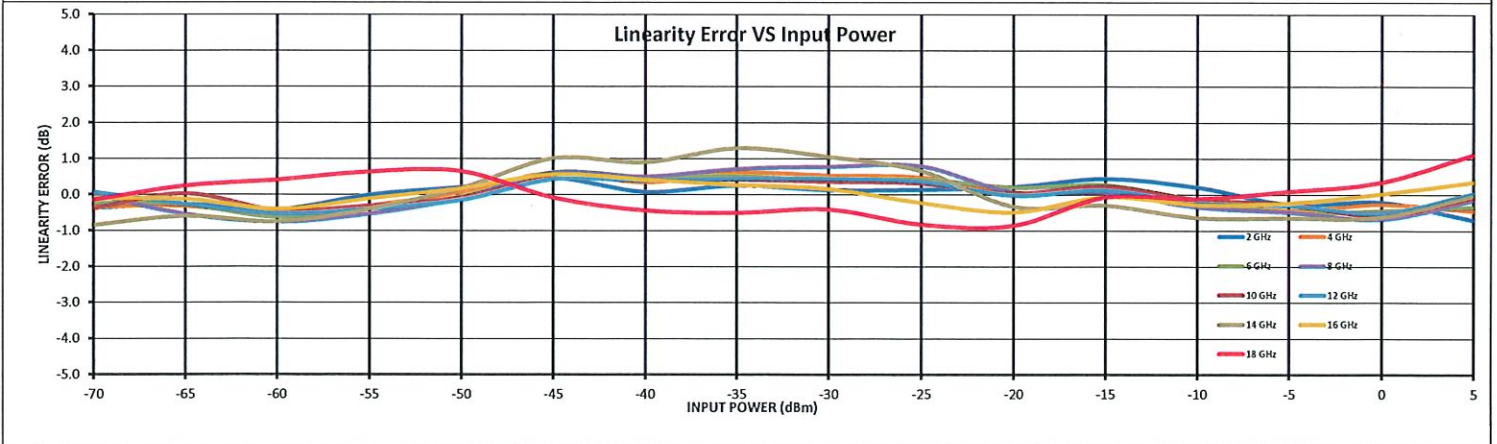
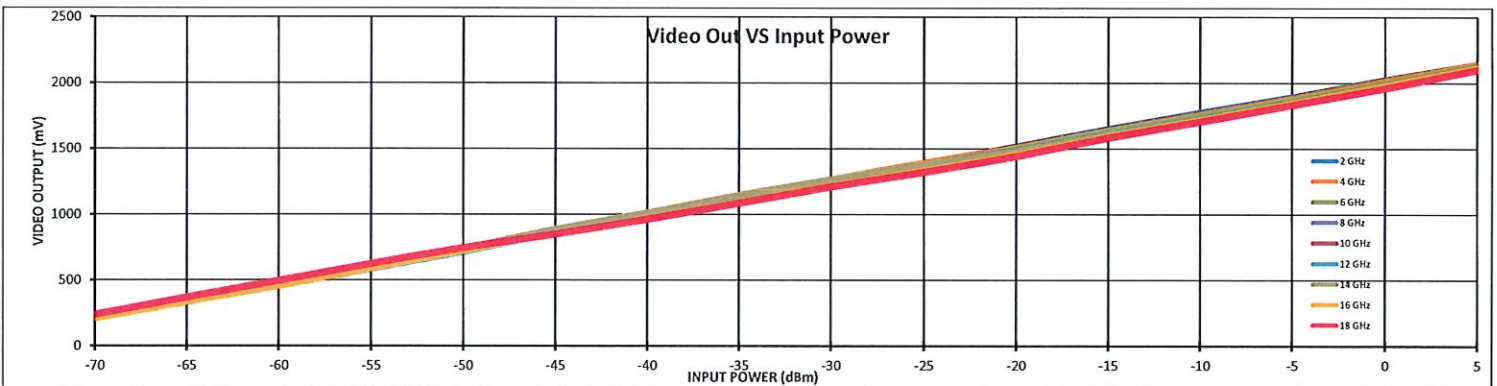
PL37920/2239

Model: SDLVA-6G18G-CD-2-OPT218
 Serial No: PL37920/2239
 Date: 10/18/2022
 Tested By: RCombs
 Test Temp: +25°C

Log Transfer Over Frequency +25°C



| Frequency | INTERCEPT (mV) | SLOPE (mV/dB) | LIN. ERR. (dB) | RF Input Power (dBm) | Measured Value (mV) | Error (mV) | LINEARITY ERROR (dB) | | | | | | | | | | | | | |
|------------------------|----------------|---------------|----------------|----------------------|---------------------|------------|----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------------|
| 2 GHz | 2035 | 25.9 | 0.7 | -70 | 211 | -10 | -0.37 | | | | | | | | | | | | | |
| | | | | -65 | 343 | -7 | -0.27 | | | | | | | | | | | | | |
| | | | | -60 | 469 | -11 | -0.42 | | | | | | | | | | | | | |
| | | | | -55 | 609 | 0 | 0.01 | | | | | | | | | | | | | |
| | | | | -50 | 745 | 6 | 0.22 | | | | | | | | | | | | | |
| | | | | -45 | 881 | 12 | 0.47 | | | | | | | | | | | | | |
| | | | | -40 | 1000 | 2 | 0.08 | | | | | | | | | | | | | |
| | | | | -35 | 1135 | 7 | 0.26 | | | | | | | | | | | | | |
| 4 GHz | 2030 | 25.8 | 0.6 | -70 | 217 | -9 | -0.34 | | | | | | | | | | | | | |
| | | | | -65 | 346 | -8 | -0.32 | | | | | | | | | | | | | |
| | | | | -60 | 469 | -14 | -0.56 | | | | | | | | | | | | | |
| | | | | -55 | 604 | -8 | 0.07 | | | | | | | | | | | | | |
| | | | | -50 | 743 | 2 | 0.61 | | | | | | | | | | | | | |
| | | | | -45 | 885 | 16 | 0.34 | | | | | | | | | | | | | |
| | | | | -40 | 1007 | 9 | 0.61 | | | | | | | | | | | | | |
| | | | | -35 | 1143 | 14 | 0.53 | | | | | | | | | | | | | |
| 6 GHz | 2019 | 25.9 | 0.6 | -70 | 201 | -6 | -0.23 | | | | | | | | | | | | | |
| | | | | -65 | 330 | -7 | -0.28 | | | | | | | | | | | | | |
| | | | | -60 | 450 | -16 | -0.62 | | | | | | | | | | | | | |
| | | | | -55 | 585 | -10 | -0.39 | | | | | | | | | | | | | |
| | | | | -50 | 724 | -1 | -0.05 | | | | | | | | | | | | | |
| | | | | -45 | 870 | 16 | 0.62 | | | | | | | | | | | | | |
| | | | | -40 | 996 | 13 | 0.80 | | | | | | | | | | | | | |
| | | | | -35 | 1127 | 13 | 0.82 | | | | | | | | | | | | | |
| 8 GHz | 1995 | 25.2 | 0.8 | -70 | 229 | 0 | 0.01 | | | | | | | | | | | | | |
| | | | | -65 | 341 | -14 | -0.54 | | | | | | | | | | | | | |
| | | | | -60 | 462 | -19 | -0.75 | | | | | | | | | | | | | |
| | | | | -55 | 594 | -13 | -0.53 | | | | | | | | | | | | | |
| | | | | -50 | 731 | -2 | -0.09 | | | | | | | | | | | | | |
| | | | | -45 | 875 | 15 | 0.61 | | | | | | | | | | | | | |
| | | | | -40 | 998 | 13 | 0.50 | | | | | | | | | | | | | |
| | | | | -35 | 1130 | 18 | 0.72 | | | | | | | | | | | | | |
| 10 GHz | 1989 | 25.2 | 0.6 | -70 | 215 | -10 | -0.39 | | | | | | | | | | | | | |
| | | | | -65 | 351 | -11 | 0.03 | | | | | | | | | | | | | |
| | | | | -60 | 466 | -8 | -0.43 | | | | | | | | | | | | | |
| | | | | -55 | 595 | -2 | -0.08 | | | | | | | | | | | | | |
| | | | | -50 | 727 | 12 | 0.48 | | | | | | | | | | | | | |
| | | | | -45 | 867 | 10 | 0.39 | | | | | | | | | | | | | |
| | | | | -40 | 991 | 11 | 0.42 | | | | | | | | | | | | | |
| | | | | -35 | 1117 | 9 | 0.36 | | | | | | | | | | | | | |
| 12 GHz | 1987 | 25.3 | 0.5 | -70 | 222 | 2 | 0.08 | | | | | | | | | | | | | |
| | | | | -65 | 340 | -7 | -0.26 | | | | | | | | | | | | | |
| | | | | -60 | 459 | -13 | -0.53 | | | | | | | | | | | | | |
| | | | | -55 | 589 | -10 | -0.39 | | | | | | | | | | | | | |
| | | | | -50 | 721 | -4 | -0.14 | | | | | | | | | | | | | |
| | | | | -45 | 862 | 11 | 0.44 | | | | | | | | | | | | | |
| | | | | -40 | 987 | 10 | 0.39 | | | | | | | | | | | | | |
| | | | | -35 | 1115 | 11 | 0.45 | | | | | | | | | | | | | |
| 14 GHz | 1991 | 25.1 | 1.3 | -70 | 215 | -21 | -0.85 | | | | | | | | | | | | | |
| | | | | -65 | 347 | -15 | -0.59 | | | | | | | | | | | | | |
| | | | | -60 | 468 | -19 | -0.75 | | | | | | | | | | | | | |
| | | | | -55 | 602 | -10 | -0.39 | | | | | | | | | | | | | |
| | | | | -50 | 742 | 5 | 0.19 | | | | | | | | | | | | | |
| | | | | -45 | 888 | 25 | 1.01 | | | | | | | | | | | | | |
| | | | | -40 | 1011 | 23 | 0.90 | | | | | | | | | | | | | |
| | | | | -35 | 1146 | 32 | 1.29 | | | | | | | | | | | | | |
| 16 GHz | 1990 | 25.6 | 0.6 | -70 | 198 | -3 | -0.11 | | | | | | | | | | | | | |
| | | | | -65 | 326 | -3 | -0.12 | | | | | | | | | | | | | |
| | | | | -60 | 447 | -10 | -0.40 | | | | | | | | | | | | | |
| | | | | -55 | 582 | -3 | 0.18 | | | | | | | | | | | | | |
| | | | | -50 | 717 | 5 | 0.57 | | | | | | | | | | | | | |
| | | | | -45 | 855 | 14 | 0.43 | | | | | | | | | | | | | |
| | | | | -40 | 979 | 11 | 0.27 | | | | | | | | | | | | | |
| | | | | -35 | 1103 | 7 | 0.16 | | | | | | | | | | | | | |
| 18 GHz | 1953 | 24.5 | 1.1 | -70 | 237 | -4 | -0.15 | | | | | | | | | | | | | |
| | | | | -65 | 369 | 6 | 0.24 | | | | | | | | | | | | | |
| | | | | -60 | 495 | 10 | 0.41 | | | | | | | | | | | | | |
| | | | | -55 | 623 | 16 | 0.64 | | | | | | | | | | | | | |
| | | | | -50 | 746 | 16 | 0.65 | | | | | | | | | | | | | |
| | | | | -45 | 850 | -2 | -0.08 | | | | | | | | | | | | | |
| | | | | -40 | 964 | -11 | -0.44 | | | | | | | | | | | | | |
| | | | | -35 | 1084 | -12 | -0.51 | | | | | | | | | | | | | |
| Avg. Slope: 25.4 mV/dB | | | | 0.8 | 0.9 | 1 | 0.8 | 0.6 | 0.7 | 0.9 | 1.2 | 1.2 | 1.5 | 1.6 | 1.5 | 1.5 | 1.3 | 1.4 | 0.9 | Flatness dB: ±1.6 dB |





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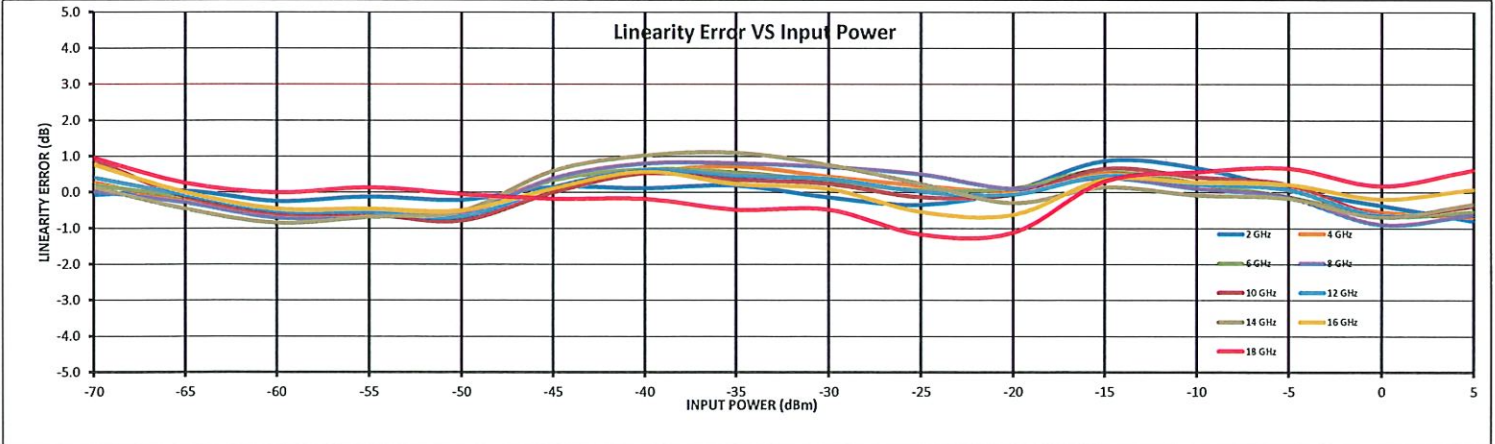
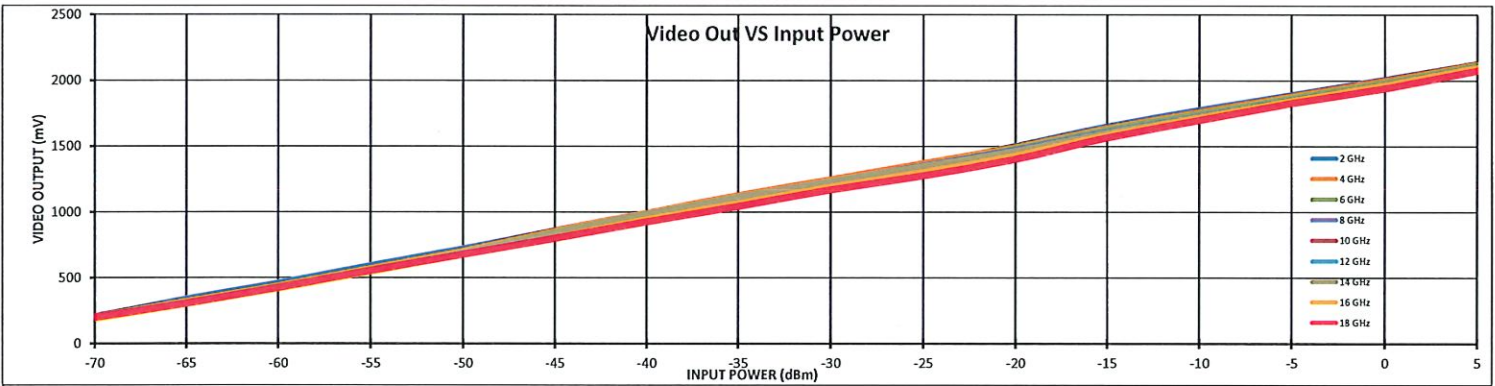
PL37920/2239

Log Transfer Over Frequency +85°C



Model: SDLVA-6G18G-CD-2-OPT218
Serial No: PL37920/2239
Date: 10/18/2022
Tested By: RCombs
Test Temp: +85°C

| Frequency | INTERCEPT (mV) | SLOPE (mV/dB) | LIN. ERR. (dB) | RF Input Power (dBm) | | | | | | | | | | | | | | | | |
|------------------------|---------------------|---------------|----------------|----------------------|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|--------------------|
| 2 GHz | 2023 | 25.8 | 0.9 | -70 | -65 | -60 | -55 | -50 | -45 | -40 | -35 | -30 | -25 | -20 | -15 | -10 | -5 | 0 | 5 | |
| | Measured Value (mV) | | | | | | | | | | | | | | | | | | | |
| | ERROR (mV) | | | | | | | | | | | | | | | | | | | |
| LINEARITY ERROR (dB) | | | | | | | | | | | | | | | | | | | | |
| 4 GHz | 2019 | 25.9 | 0.7 | 212 | 328 | 447 | 578 | 710 | 863 | 998 | 1131 | 1253 | 1376 | 1502 | 1645 | 1767 | 1886 | 2005 | 2131 | |
| | Measured Value (mV) | | | | | | | | | | | | | | | | | | | |
| | ERROR (mV) | | | | | | | | | | | | | | | | | | | |
| LINEARITY ERROR (dB) | | | | | | | | | | | | | | | | | | | | |
| 6 GHz | 2008 | 25.9 | 0.7 | 197 | 318 | 436 | 566 | 697 | 849 | 987 | 1114 | 1237 | 1361 | 1492 | 1635 | 1755 | 1875 | 1991 | 2123 | |
| | Measured Value (mV) | | | | | | | | | | | | | | | | | | | |
| | ERROR (mV) | | | | | | | | | | | | | | | | | | | |
| LINEARITY ERROR (dB) | | | | | | | | | | | | | | | | | | | | |
| 8 GHz | 1988 | 25.6 | 0.9 | 199 | 319 | 436 | 565 | 694 | 847 | 986 | 1114 | 1239 | 1362 | 1479 | 1615 | 1735 | 1857 | 1965 | 2100 | |
| | Measured Value (mV) | | | | | | | | | | | | | | | | | | | |
| | ERROR (mV) | | | | | | | | | | | | | | | | | | | |
| LINEARITY ERROR (dB) | | | | | | | | | | | | | | | | | | | | |
| 10 GHz | 1977 | 25.6 | 0.9 | 214 | 315 | 431 | 558 | 681 | 829 | 970 | 1093 | 1218 | 1336 | 1465 | 1611 | 1733 | 1855 | 1961 | 2095 | |
| | Measured Value (mV) | | | | | | | | | | | | | | | | | | | |
| | ERROR (mV) | | | | | | | | | | | | | | | | | | | |
| LINEARITY ERROR (dB) | | | | | | | | | | | | | | | | | | | | |
| 12 GHz | 1977 | 25.6 | 0.7 | 199 | 314 | 430 | 557 | 682 | 831 | 971 | 1095 | 1220 | 1339 | 1465 | 1606 | 1728 | 1852 | 1961 | 2097 | |
| | Measured Value (mV) | | | | | | | | | | | | | | | | | | | |
| | ERROR (mV) | | | | | | | | | | | | | | | | | | | |
| LINEARITY ERROR (dB) | | | | | | | | | | | | | | | | | | | | |
| 14 GHz | 1980 | 25.5 | 1.1 | 202 | 314 | 431 | 562 | 694 | 849 | 988 | 1117 | 1236 | 1350 | 1463 | 1602 | 1723 | 1848 | 1962 | 2099 | |
| | Measured Value (mV) | | | | | | | | | | | | | | | | | | | |
| | ERROR (mV) | | | | | | | | | | | | | | | | | | | |
| LINEARITY ERROR (dB) | | | | | | | | | | | | | | | | | | | | |
| 16 GHz | 1979 | 26.0 | 0.8 | 182 | 292 | 409 | 539 | 668 | 814 | 956 | 1077 | 1203 | 1316 | 1444 | 1599 | 1727 | 1855 | 1974 | 2111 | |
| | Measured Value (mV) | | | | | | | | | | | | | | | | | | | |
| | ERROR (mV) | | | | | | | | | | | | | | | | | | | |
| LINEARITY ERROR (dB) | | | | | | | | | | | | | | | | | | | | |
| 18 GHz | 1936 | 25.1 | 1.2 | 200 | 308 | 427 | 557 | 678 | 800 | 926 | 1044 | 1170 | 1278 | 1405 | 1567 | 1699 | 1827 | 1941 | 2078 | |
| | Measured Value (mV) | | | | | | | | | | | | | | | | | | | |
| | ERROR (mV) | | | | | | | | | | | | | | | | | | | |
| LINEARITY ERROR (dB) | | | | | | | | | | | | | | | | | | | | |
| Avg. Slope: 25.7 mV/dB | | | | 0.6 | 1 | 1.1 | 1.2 | 1.1 | 1.3 | 1.4 | 1.7 | 1.6 | 1.9 | 2 | 1.8 | 1.6 | 1.3 | 1.4 | 1.1 | Flatness dB: ±2 dB |





SUMMARY TEST DATA ON SDLVA-6G18G-CD-2-OPT218

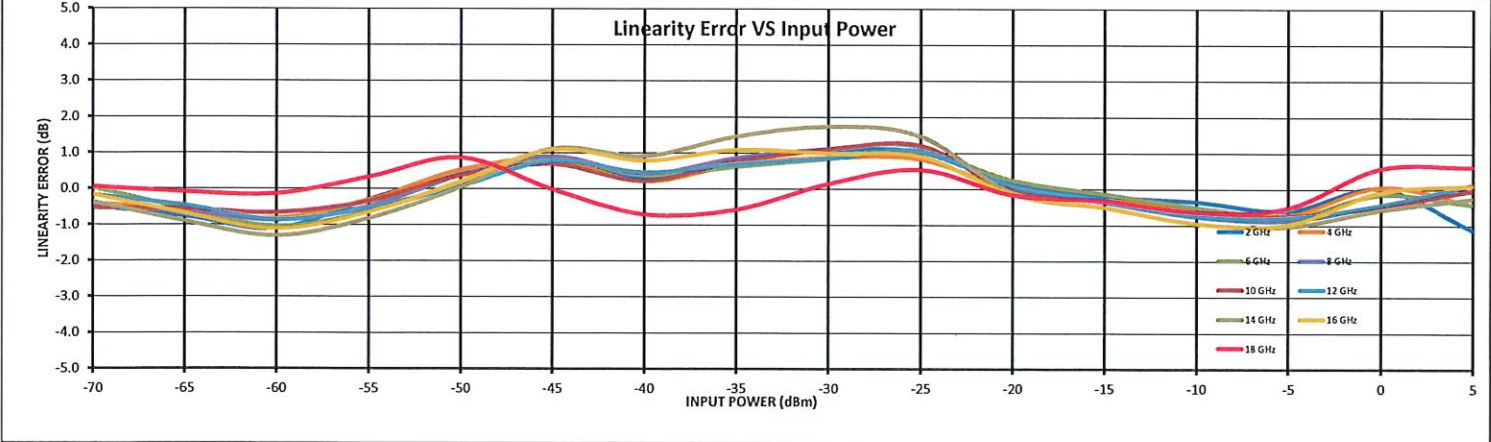
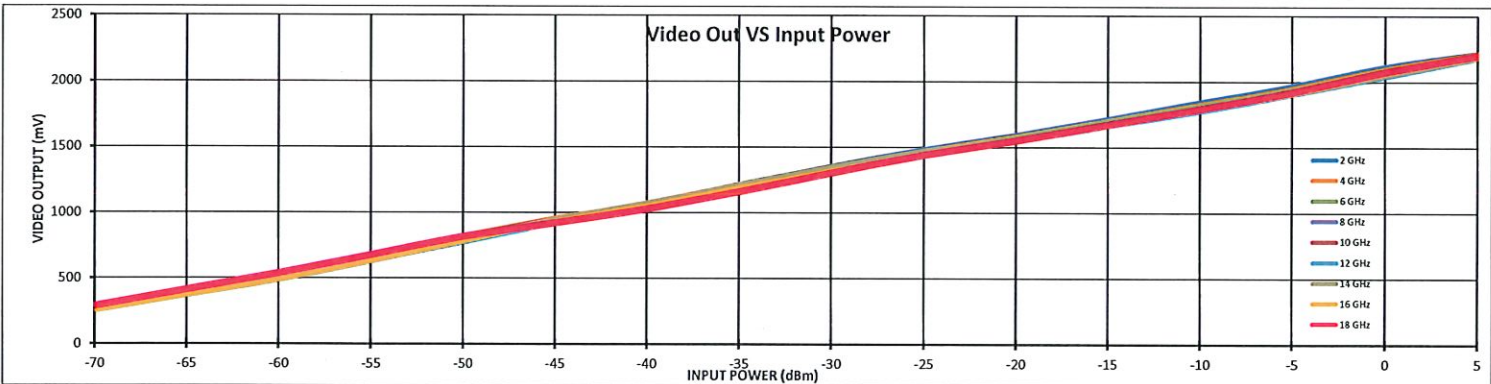
PL37920/2239

Log Transfer Over Frequency -40°C



Model: SDLVA-6G18G-CD-2-OPT218
Serial No: PL37920/2239
Date: 10/18/2022
Tested By: RCombs
Test Temp: -40°C

| Frequency | INTERCEPT (mV) | SLOPE (mV/dB) | LIN. ERR. (dB) | -70 | -65 | -60 | -55 | -50 | -45 | -40 | -35 | -30 | -25 | -20 | -15 | -10 | -5 | 0 | 5 | RF Input Power (dBm) |
|------------------------|----------------|---------------|----------------|-------|-------|-------|-------|------|-------|-------|-------|------|------|-------|-------|-------|-------|-------|-------|----------------------|
| 2 GHz | 2117 | 25.4 | 1.1 | 258 | 383 | 506 | 659 | 810 | 954 | 1070 | 1217 | 1354 | 1485 | 1594 | 1716 | 1844 | 1970 | 2118 | 2219 | Measured Value (mV) |
| | | | | -13 | -20 | -29 | -8 | 12 | 24 | 8 | 23 | 29 | 27 | 4 | -5 | -9 | -15 | 1 | -30 | ERROR (mV) |
| | | | | -0.48 | -0.75 | -1.10 | -0.30 | 0.46 | 0.90 | 0.30 | 0.87 | 1.09 | 1.04 | 0.17 | -0.19 | -0.34 | -0.58 | 0.03 | -1.12 | LINEARITY ERROR (dB) |
| 4 GHz | 2098 | 25.9 | 0.9 | 277 | 401 | 525 | 667 | 818 | 955 | 1068 | 1210 | 1345 | 1473 | 1581 | 1703 | 1826 | 1950 | 2100 | 2216 | Measured Value (mV) |
| | | | | -10 | -15 | -21 | -8 | 14 | 21 | 5 | 18 | 23 | 21 | 0 | -7 | -13 | -18 | 2 | -11 | ERROR (mV) |
| | | | | -0.40 | -0.58 | -0.82 | -0.31 | 0.53 | 0.82 | 0.21 | 0.69 | 0.88 | 0.83 | 0.02 | -0.28 | -0.51 | -0.71 | 0.07 | -0.42 | LINEARITY ERROR (dB) |
| 6 GHz | 2092 | 26.2 | 1.0 | 259 | 374 | 492 | 634 | 785 | 935 | 1054 | 1191 | 1328 | 1464 | 1574 | 1695 | 1817 | 1940 | 2088 | 2212 | Measured Value (mV) |
| | | | | 1 | -14 | -27 | -17 | 4 | 22 | 10 | 16 | 22 | 27 | 7 | -3 | -13 | -21 | -4 | -11 | ERROR (mV) |
| | | | | 0.04 | -0.55 | -1.04 | -0.64 | 0.14 | 0.84 | 0.38 | 0.62 | 0.85 | 1.04 | 0.25 | -0.12 | -0.50 | -0.78 | -0.14 | -0.42 | LINEARITY ERROR (dB) |
| 8 GHz | 2070 | 25.5 | 1.2 | 273 | 397 | 519 | 656 | 805 | 946 | 1061 | 1200 | 1334 | 1463 | 1560 | 1678 | 1796 | 1920 | 2059 | 2196 | Measured Value (mV) |
| | | | | -13 | -16 | -22 | -12 | 10 | 23 | 11 | 22 | 29 | 30 | 0 | -9 | -19 | -22 | -11 | -1 | ERROR (mV) |
| | | | | -0.49 | -0.62 | -0.87 | -0.48 | 0.38 | 0.90 | 0.43 | 0.87 | 1.13 | 1.19 | -0.02 | -0.35 | -0.76 | -0.86 | -0.42 | -0.03 | LINEARITY ERROR (dB) |
| 10 GHz | 2063 | 25.1 | 1.2 | 291 | 416 | 539 | 672 | 816 | 950 | 1064 | 1203 | 1337 | 1466 | 1560 | 1679 | 1795 | 1919 | 2052 | 2189 | Measured Value (mV) |
| | | | | -13 | -14 | -17 | -9 | 9 | 17 | 6 | 19 | 28 | 30 | -1 | -8 | -17 | -19 | -12 | 0 | ERROR (mV) |
| | | | | -0.53 | -0.56 | -0.67 | -0.35 | 0.36 | 0.69 | 0.22 | 0.76 | 1.11 | 1.21 | -0.05 | -0.31 | -0.67 | -0.74 | -0.47 | -0.01 | LINEARITY ERROR (dB) |
| 12 GHz | 2060 | 25.6 | 1.1 | 264 | 385 | 502 | 639 | 782 | 928 | 1048 | 1182 | 1315 | 1448 | 1551 | 1669 | 1785 | 1912 | 2050 | 2192 | Measured Value (mV) |
| | | | | -4 | -11 | -22 | -14 | 2 | 20 | 12 | 18 | 22 | 28 | 2 | -7 | -19 | -20 | -11 | 4 | ERROR (mV) |
| | | | | -0.16 | -0.45 | -0.86 | -0.53 | 0.08 | 0.79 | 0.47 | 0.70 | 0.87 | 1.08 | 0.09 | -0.28 | -0.73 | -0.78 | -0.42 | 0.14 | LINEARITY ERROR (dB) |
| 14 GHz | 2072 | 25.7 | 1.7 | 262 | 377 | 495 | 636 | 787 | 943 | 1066 | 1209 | 1345 | 1467 | 1555 | 1673 | 1791 | 1917 | 2058 | 2194 | Measured Value (mV) |
| | | | | -9 | -23 | -34 | -21 | 1 | 29 | 24 | 38 | 45 | 38 | -3 | -13 | -24 | -26 | -15 | -6 | ERROR (mV) |
| | | | | -0.36 | -0.90 | -1.30 | -0.82 | 0.05 | 1.12 | 0.91 | 1.47 | 1.74 | 1.48 | -0.10 | -0.50 | -0.95 | -1.03 | -0.57 | -0.26 | LINEARITY ERROR (dB) |
| 16 GHz | 2076 | 25.9 | 1.1 | 255 | 371 | 490 | 631 | 783 | 936 | 1058 | 1196 | 1323 | 1450 | 1553 | 1674 | 1791 | 1921 | 2074 | 2208 | Measured Value (mV) |
| | | | | -4 | -17 | -29 | -17 | 5 | 28 | 21 | 28 | 26 | 24 | -4 | -13 | -25 | -25 | -2 | 3 | ERROR (mV) |
| | | | | -0.16 | -0.67 | -1.11 | -0.65 | 0.21 | 1.10 | 0.79 | 1.09 | 1.00 | 0.91 | -0.14 | -0.49 | -0.95 | -0.97 | -0.07 | 0.11 | LINEARITY ERROR (dB) |
| 18 GHz | 2061 | 25.3 | 0.867 | 288 | 412 | 537 | 675 | 816 | 920 | 1030 | 1160 | 1305 | 1441 | 1550 | 1673 | 1792 | 1922 | 2076 | 2204 | Measured Value (mV) |
| | | | | 1 | -2 | -4 | 8 | 22 | 0 | -18 | -15 | 4 | 14 | -4 | -8 | -16 | -13 | 15 | 16 | ERROR (mV) |
| | | | | 0.06 | -0.09 | -0.14 | 0.32 | 0.87 | -0.01 | -0.71 | -0.57 | 0.15 | 0.54 | -0.16 | -0.32 | -0.63 | -0.51 | 0.58 | 0.63 | LINEARITY ERROR (dB) |
| Avg. Slope: 25.7 mV/dB | | | | 0.7 | 0.9 | 1 | 0.9 | 0.7 | 0.7 | 0.8 | 1.1 | 1 | 0.8 | 0.8 | 0.9 | 1.1 | 1.1 | 1.3 | 0.6 | Flatness dB: ±1.3 dB |

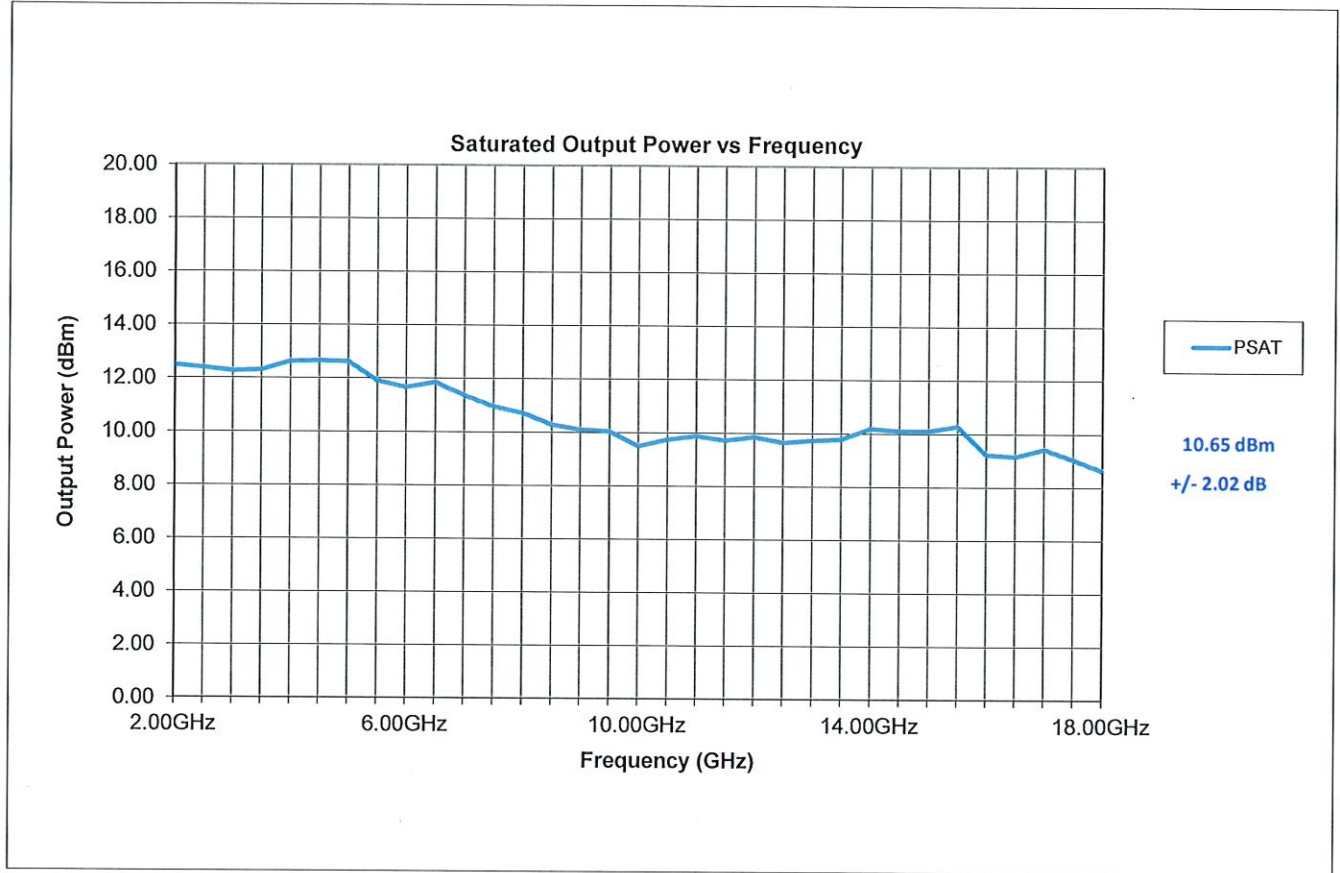




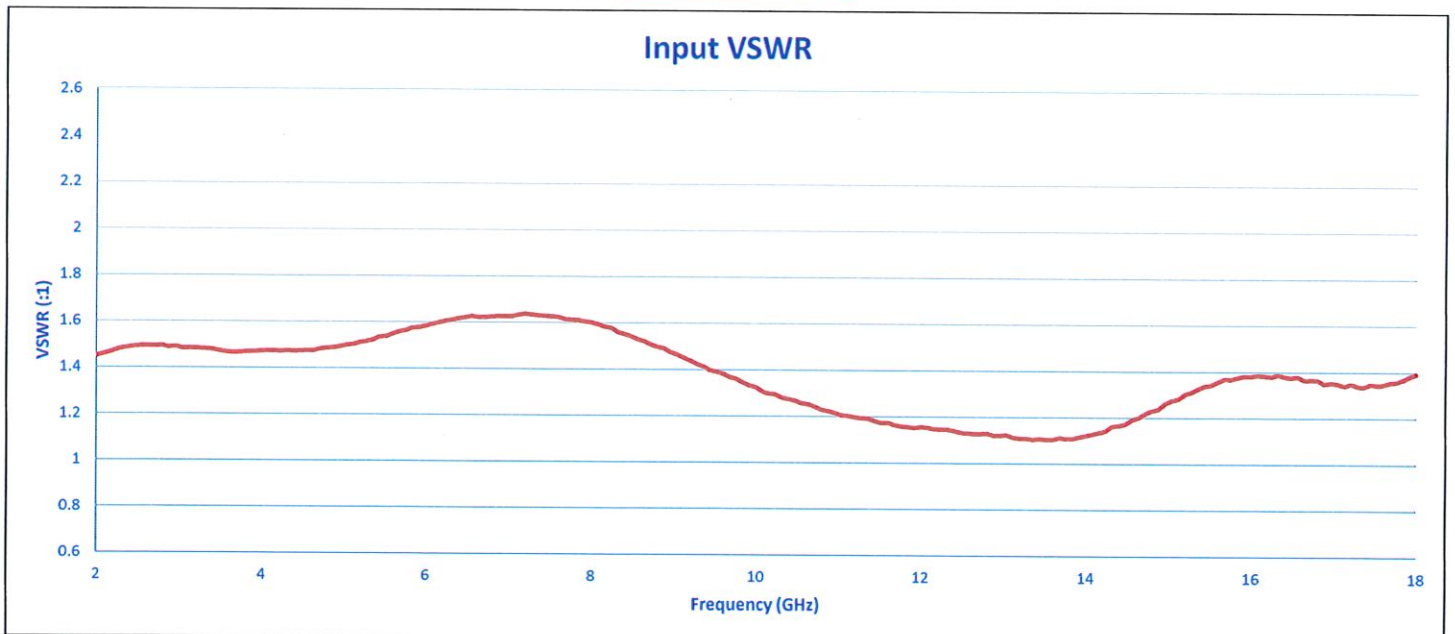
SUMMARY TEST DATA ON SDLVA-6G18G-CD-2-OPT218

PL37920/2239

PSAT



INPUT VSWR

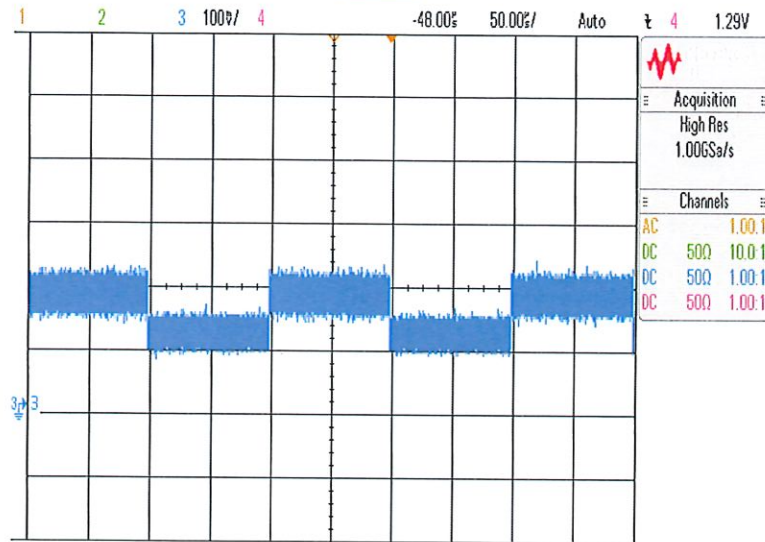




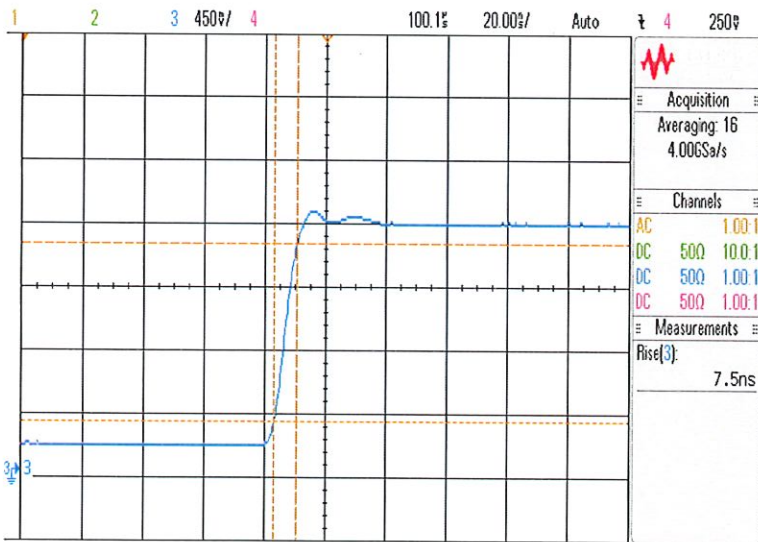
SUMMARY TEST DATA ON SDLVA-6G18G-CD-2-OPT218

PL37920/2239

TSS



Rise Time



Fall Time

