



**SUMMARY TEST DATA
ON
SDLVA-2020-70 Opt 0518 A03
A07-50OHM**

PL26825/1943

| | | | |
|------------|--------------------------------------|--------------|------------------------------------|
| Customer: | | Tested By: | J.Emperador |
| SO No: | | Temperature: | +25°C (Unless Otherwise Specified) |
| Model No: | SDLVA-2020-70 Opt 0518 A03 A07-50OHM | Date: | 10/22/19 |
| Serial No: | PL26825/1943 | Drawing No: | 27610088 |
| | | Rev: | A1 |

| TEST. ITEM NO | PARAMETERS | SPECIFIED VALUE | TEST RESULTS | QA QC |
|---------------|----------------------------|--------------------------------------|-------------------------------|------------|
| 1 | Frequency Range: | 0.5GHz to 18.0GHz | 0.5GHz to 18.0GHz See Plot | PMI QA1 |
| 2 | Frequency Flatness: | ±2.0dB Typ (0.5GHz to 18.0GHz) | ±1.3 dB See Plot | |
| 3 | TSS: | -65dBm Min (8.0 to 18.0GHz) | -65.5 dBm See Plot | |
| 4 | VSWR: | 3.0:1 (0.5 to 18.0GHz @ -20dBm) | In 2.1 :1 See Plot | |
| 5 | Logging Range | -65 dBm to +5 dBm | >-65 to +5 dBm See Plot | |
| 6 | Log Slope | 20mV/dB (±10% Tolerance) | 20.6 mV/dB See Plot | |
| 7 | Log Temperature Stability: | ±1.75dB (0°C to 60°C) | ± 1.54 dB See Plot | |
| 8 | Rise Time (10% to 90%): | 20ns Max | 12.5 ns See Plot | |
| 9 | Recover Time: | 200ns Max (-65 dBm to +5 dBm) | 171 ns See Plot | |
| 10 | Output Power: | +10dBm ±2.5dB Typ | 14.51 dBm See Plot | |
| 11 | Output Video Load: | 50Ω ±10% or as desired | Pass | |
| 12 | Power Supply: | +15V @ 600mA Max -15V @ 200mA Max | 450 mA 97 mA | |

QA/QC Approval:  PMI QA1 Date: 5/26/20



**SUMMARY TEST DATA
ON
SDLVA-2020-70 Opt 0518 A03
A07-50OHM**

PL26825/1943

LOGGING CHARACTERISTICS @+25C

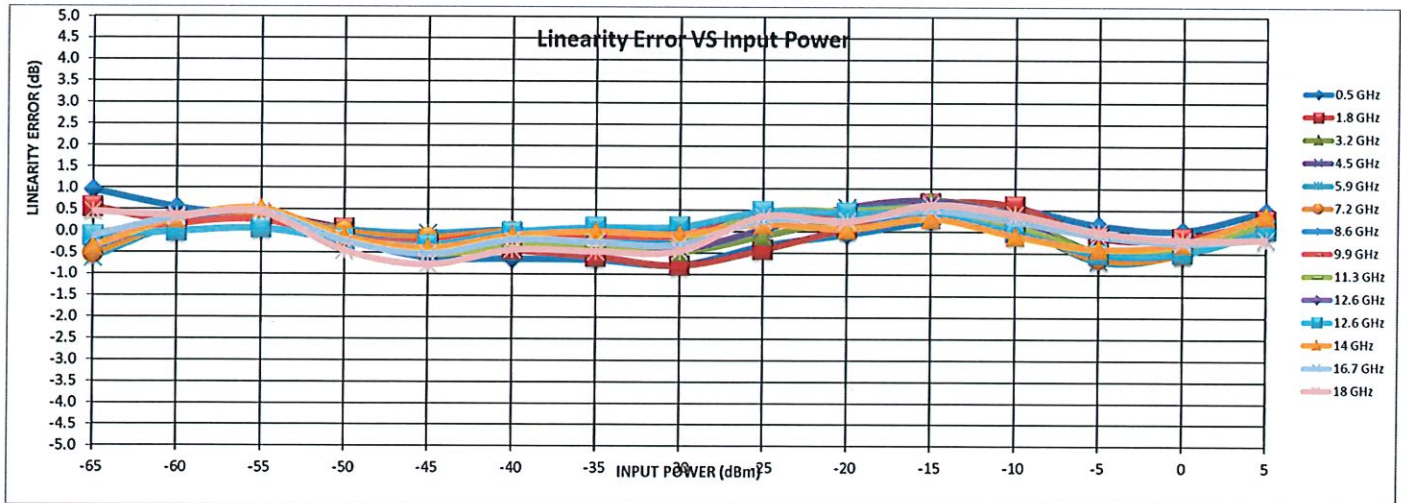
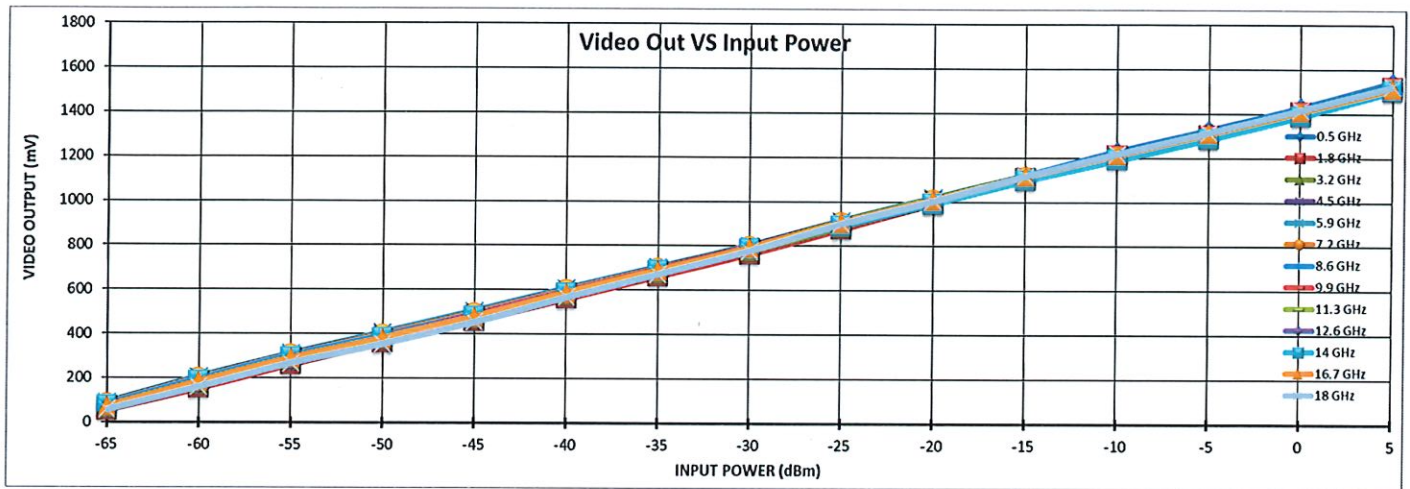
| LOG TRANSFER VS FREQUENCY | | Tuesday, October 22, 2019 | | | | | | | | | | | | | | RF Input Power (dBm) | |
|--|----------------|---------------------------|-------|------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|----------------------|----------------------|
| MODEL: SDLVA-2020-70 OPT. 0518, A03, A07-50OHM | | | | | | | | | | | | | | | | Measured Value (mV) | |
| TESTED BY: J.Emperador | | | | | | | | | | | | | | | | Error (mV) | |
| DATE: 10/22/19 | | | | | | | | | | | | | | | | LINEARITY ERROR (dB) | |
| SERIAL NO: PL26825 | | | | | | | | | | | | | | | | LINEARITY ERROR (dB) | |
| Frequency | | -65 | -60 | -55 | -50 | -45 | -40 | -35 | -30 | -25 | -20 | -15 | -10 | -5 | 0 | 5 | Measured Value (mV) |
| 0.5 GHz | INTERCEPT (mV) | 90 | 186 | 285 | 379 | 475 | 579 | 683 | 785 | 899 | 1009 | 1120 | 1230 | 1327 | 1429 | 1543 | Error (mV) |
| | SLOPE (mV/dB) | 20 | 12 | 6 | -4 | -13 | -13 | -14 | -16 | -7 | -1 | 5 | 11 | 3 | 1 | 10 | LINEARITY ERROR (dB) |
| | | 0.96 | 0.56 | 0.29 | -0.21 | -0.61 | -0.64 | -0.66 | -0.78 | -0.32 | -0.06 | 0.25 | 0.52 | 0.16 | 0.04 | 0.50 | |
| 1.8 GHz | INTERCEPT (mV) | 55 | 153 | 261 | 360 | 457 | 560 | 662 | 763 | 876 | 992 | 1109 | 1213 | 1303 | 1408 | 1522 | Measured Value (mV) |
| | SLOPE (mV/dB) | 12 | 5 | 7 | 1 | -7 | -9 | -12 | -17 | -9 | 2 | 14 | 13 | -3 | -3 | 6 | Error (mV) |
| | | 0.56 | 0.22 | 0.35 | 0.06 | -0.33 | -0.44 | -0.59 | -0.79 | -0.42 | 0.10 | 0.66 | 0.60 | -0.12 | -0.13 | 0.29 | LINEARITY ERROR (dB) |
| 3.2 GHz | INTERCEPT (mV) | 62 | 170 | 278 | 373 | 471 | 576 | 677 | 777 | 888 | 1000 | 1112 | 1207 | 1294 | 1400 | 1513 | Measured Value (mV) |
| | SLOPE (mV/dB) | -1 | 4 | 8 | 0 | -6 | -4 | -6 | -10 | -2 | 7 | 15 | 7 | -9 | -7 | 3 | Error (mV) |
| | | -0.06 | 0.17 | 0.39 | -0.01 | -0.27 | -0.19 | -0.30 | -0.46 | -0.09 | 0.33 | 0.75 | 0.34 | -0.45 | -0.32 | 0.15 | LINEARITY ERROR (dB) |
| 4.5 GHz | INTERCEPT (mV) | 80 | 193 | 299 | 394 | 492 | 595 | 695 | 792 | 903 | 1016 | 1120 | 1214 | 1295 | 1400 | 1514 | Measured Value (mV) |
| | SLOPE (mV/dB) | -8 | 3 | 7 | 1 | -1 | -2 | -3 | -4 | 1 | 12 | 15 | 7 | -13 | -10 | 2 | Error (mV) |
| | | -0.41 | 0.15 | 0.36 | 0.03 | -0.15 | -0.08 | -0.17 | -0.40 | 0.06 | 0.57 | 0.73 | 0.35 | -0.66 | -0.50 | 0.10 | LINEARITY ERROR (dB) |
| 5.9 GHz | INTERCEPT (mV) | 91 | 207 | 311 | 406 | 505 | 607 | 705 | 803 | 915 | 1019 | 1120 | 1213 | 1297 | 1401 | 1514 | Measured Value (mV) |
| | SLOPE (mV/dB) | -13 | 3 | 6 | 1 | -1 | 1 | -2 | -5 | 7 | 10 | 11 | 3 | -13 | -10 | 2 | Error (mV) |
| | | -0.62 | 0.14 | 0.31 | 0.04 | -0.04 | 0.03 | -0.10 | -0.23 | 0.34 | 0.51 | 0.53 | 0.15 | -0.67 | -0.50 | 0.12 | LINEARITY ERROR (dB) |
| 7.2 GHz | INTERCEPT (mV) | 85 | 200 | 305 | 398 | 496 | 600 | 698 | 797 | 909 | 1012 | 1113 | 1207 | 1293 | 1396 | 1512 | Measured Value (mV) |
| | SLOPE (mV/dB) | -11 | 3 | 8 | 0 | -3 | 0 | -3 | -4 | 7 | 9 | 9 | 2 | -12 | -10 | 5 | Error (mV) |
| | | -0.53 | 0.17 | 0.38 | -0.01 | -0.15 | 0.01 | -0.13 | -0.22 | 0.34 | 0.45 | 0.45 | 0.12 | -0.62 | -0.51 | 0.24 | LINEARITY ERROR (dB) |
| 8.8 GHz | INTERCEPT (mV) | 82 | 196 | 302 | 392 | 490 | 595 | 695 | 795 | 907 | 1008 | 1111 | 1207 | 1296 | 1401 | 1514 | Measured Value (mV) |
| | SLOPE (mV/dB) | -8 | 5 | 9 | -2 | -5 | -2 | -3 | -4 | 6 | 6 | 7 | 2 | -10 | -7 | 5 | Error (mV) |
| | | -0.38 | 0.24 | 0.47 | -0.09 | -0.26 | -0.08 | -0.15 | -0.22 | 0.31 | 0.29 | 0.37 | 0.10 | -0.51 | -0.33 | 0.25 | LINEARITY ERROR (dB) |
| 9.9 GHz | INTERCEPT (mV) | 73 | 185 | 290 | 384 | 485 | 592 | 694 | 797 | 910 | 1012 | 1116 | 1212 | 1303 | 1407 | 1519 | Measured Value (mV) |
| | SLOPE (mV/dB) | -6 | 3 | 5 | -3 | -5 | -1 | -2 | -2 | 9 | 8 | 9 | 2 | -10 | -8 | 1 | Error (mV) |
| | | -0.30 | 0.15 | 0.26 | -0.17 | -0.26 | -0.05 | -0.09 | -0.08 | 0.42 | 0.38 | 0.44 | 0.11 | -0.46 | -0.40 | 0.04 | LINEARITY ERROR (dB) |
| 11.3 GHz | INTERCEPT (mV) | 72 | 185 | 292 | 382 | 477 | 584 | 687 | 792 | 910 | 1014 | 1118 | 1213 | 1304 | 1408 | 1524 | Measured Value (mV) |
| | SLOPE (mV/dB) | -3 | 7 | 10 | -3 | -11 | -7 | -7 | -5 | 9 | 10 | 11 | 3 | -9 | -9 | 4 | Error (mV) |
| | | -0.15 | 0.32 | 0.51 | -0.13 | -0.53 | -0.34 | -0.35 | -0.26 | 0.45 | 0.49 | 0.53 | 0.14 | -0.46 | -0.42 | 0.21 | LINEARITY ERROR (dB) |
| 12.6 GHz | INTERCEPT (mV) | 63 | 169 | 274 | 372 | 473 | 583 | 689 | 793 | 904 | 1007 | 1110 | 1205 | 1298 | 1402 | 1517 | Measured Value (mV) |
| | SLOPE (mV/dB) | -3 | 0 | 1 | -4 | -7 | 0 | 2 | 2 | 10 | 9 | 9 | 0 | -10 | -10 | 1 | Error (mV) |
| | | -0.12 | -0.01 | 0.06 | -0.21 | -0.33 | -0.02 | 0.10 | 0.12 | 0.47 | 0.45 | 0.42 | 0.00 | -0.51 | -0.49 | 0.07 | LINEARITY ERROR (dB) |
| 14 GHz | INTERCEPT (mV) | 74 | 188 | 294 | 382 | 478 | 585 | 688 | 788 | 894 | 993 | 1099 | 1192 | 1287 | 1391 | 1505 | Measured Value (mV) |
| | SLOPE (mV/dB) | -7 | 6 | 11 | -3 | -8 | -2 | 0 | -1 | 4 | 1 | 6 | -2 | -8 | -5 | 8 | Error (mV) |
| | | -0.35 | 0.28 | 0.52 | -0.13 | -0.38 | -0.09 | 0.00 | -0.06 | 0.18 | 0.07 | 0.31 | -0.09 | -0.40 | -0.26 | 0.38 | LINEARITY ERROR (dB) |
| 16.7 GHz | INTERCEPT (mV) | 73 | 185 | 291 | 380 | 477 | 587 | 689 | 791 | 906 | 1009 | 1117 | 1215 | 1311 | 1411 | 1516 | Measured Value (mV) |
| | SLOPE (mV/dB) | -2 | 7 | 9 | -5 | -11 | -4 | -5 | -6 | 6 | 6 | 10 | 5 | -2 | -5 | -3 | Error (mV) |
| | | -0.11 | 0.32 | 0.46 | -0.23 | -0.52 | -0.19 | -0.25 | -0.30 | 0.27 | 0.27 | 0.50 | 0.25 | -0.09 | -0.24 | -0.15 | LINEARITY ERROR (dB) |
| 18 GHz | INTERCEPT (mV) | 57 | 161 | 268 | 355 | 454 | 567 | 672 | 778 | 901 | 1004 | 1118 | 1219 | 1316 | 1418 | 1524 | Measured Value (mV) |
| | SLOPE (mV/dB) | 10 | 8 | 9 | -10 | -16 | -9 | -10 | -9 | 8 | 5 | 13 | 9 | 0 | -4 | -4 | Error (mV) |
| | | 0.45 | 0.37 | 0.43 | -0.45 | -0.77 | -0.43 | -0.46 | -0.45 | 0.37 | 0.24 | 0.63 | 0.41 | 0.00 | -0.18 | -0.17 | LINEARITY ERROR (dB) |
| Flatness | | 0.9 | 1.3 | 1.2 | 1.3 | 1.3 | 1.2 | 1.1 | 1 | 1 | 0.7 | 0.5 | 0.9 | 1 | 0.9 | 0.9 | |
| Linearity Max (dB) | | 0.96 | | | | | | | | | | | | | | | |
| Linearity Min (dB) | | -0.79 | | | | | | | | | | | | | | | |
| Average Slope (mV/dB) | | 20.4 | | | | | | | | | | | | | | | |



**SUMMARY TEST DATA
ON
SDLVA-2020-70 Opt 0518 A03
A07-500HM**

PL26825/1943

LOGGING CHARACTERISTICS @25C





SUMMARY TEST DATA ON SDLVA-2020-70 Opt 0518 A03 A07-50OHM

PL26825/1943

LOGGING CHARACTERISTICS @ 0C

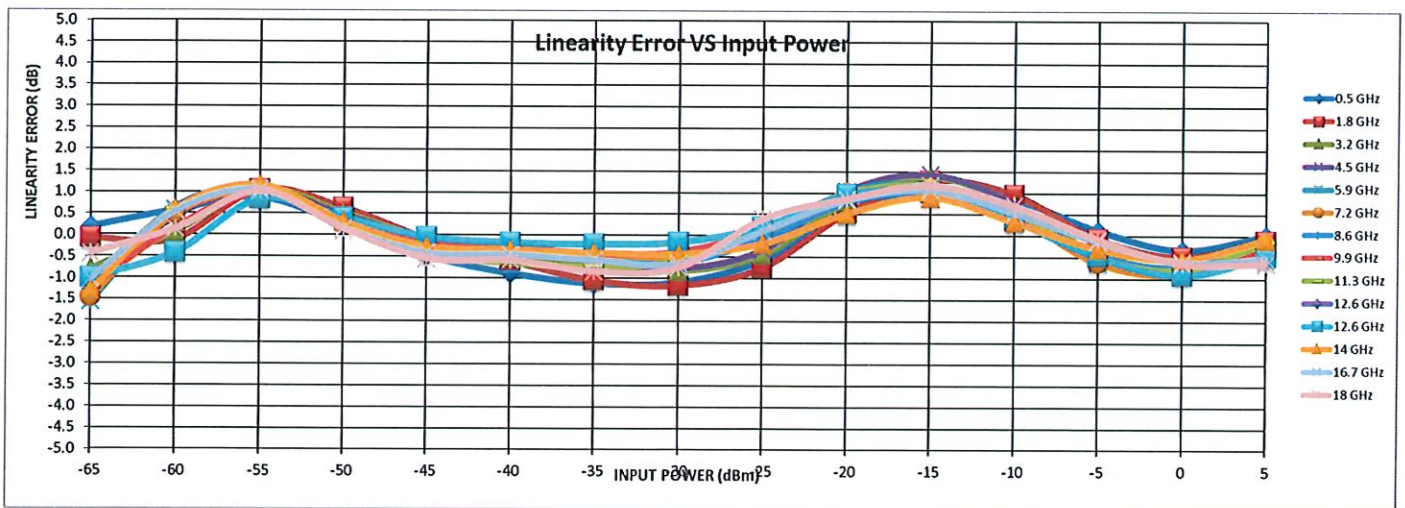
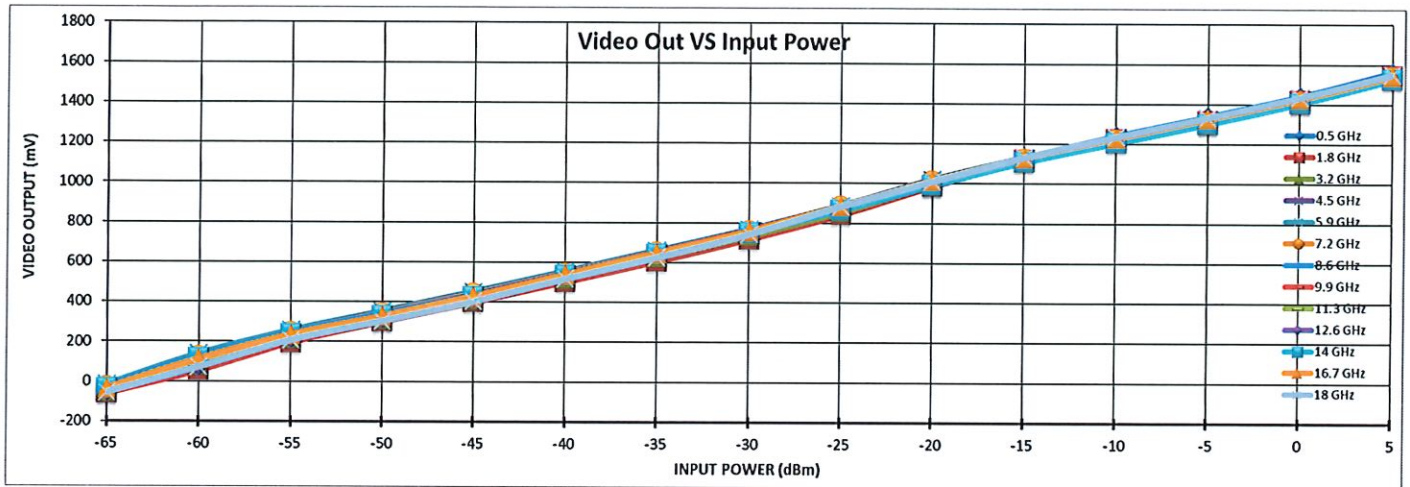
| LOG TRANSFER VS FREQUENCY | | Tuesday, October 22, 2019 | | | | | | | | | | | | | | | | PLANAR MONOLITHICS INDUSTRIES 7311-F GROVE ROAD, FREDERICK, MD 21704 USA TEL: 301-662-5019 FAX: 301-662-1731 URL: WWW.PMI-RF.COM EMAIL: SALES@PMI-RF.COM | |
|--|----------------|---------------------------|-------|------|------|-------|-------|-------|-------|-------|------|------|------|-------|-------|-------|----------------------|--|--|
| MODEL: SDLVA-2020-70 OPT. 0518, A03, A07-50OHM | | | | | | | | | | | | | | | | | | Test Temp: +0C | |
| TESTED BY: J.Emperador | | | | | | | | | | | | | | | | | | | |
| DATE: 10/22/19 | | | | | | | | | | | | | | | | | | | |
| SERIAL NO: PL26825 | | | | | | | | | | | | | | | | | | | |
| Frequency | | -65 | -60 | -55 | -50 | -45 | -40 | -35 | -30 | -25 | -20 | -15 | -10 | -5 | 0 | 5 | RF Input Power (dBm) | | |
| 0.5 GHz | INTERCEPT (mV) | 1447 | | | | | | | | | | | | | | | | Measured Value (mV) | |
| | SLOPE (mV/dB) | 22.7 | | | | | | | | | | | | | | | | Error (mV) | |
| | | -21 | 101 | 221 | 320 | 417 | 521 | 629 | 743 | 868 | 1007 | 1130 | 1240 | 1337 | 1440 | 1561 | LINEARITY ERROR (dB) | | |
| | | 0.19 | 0.58 | 0.87 | 0.24 | -0.48 | -0.88 | -1.12 | -1.09 | -0.57 | 0.57 | 1.00 | 0.85 | 0.13 | -0.32 | 0.02 | | | |
| 1.8 GHz | INTERCEPT (mV) | 1432 | | | | | | | | | | | | | | | | Measured Value (mV) | |
| | SLOPE (mV/dB) | 22.9 | | | | | | | | | | | | | | | | Error (mV) | |
| | | -59 | 55 | 196 | 301 | 399 | 502 | 606 | 718 | 842 | 986 | 1118 | 1225 | 1316 | 1421 | 1544 | LINEARITY ERROR (dB) | | |
| | | -0.08 | -0.10 | 1.05 | 0.63 | -0.09 | -0.59 | -1.05 | -1.16 | -0.75 | 0.63 | 1.30 | 0.97 | -0.06 | -0.48 | -0.11 | | | |
| 3.2 GHz | INTERCEPT (mV) | 1427 | | | | | | | | | | | | | | | | Measured Value (mV) | |
| | SLOPE (mV/dB) | 22.5 | | | | | | | | | | | | | | | | Error (mV) | |
| | | -53 | 79 | 214 | 314 | 413 | 518 | 625 | 734 | 855 | 995 | 1121 | 1219 | 1306 | 1411 | 1535 | LINEARITY ERROR (dB) | | |
| | | -0.80 | 0.07 | 1.07 | 0.51 | -0.09 | -0.42 | -0.66 | -0.82 | -0.44 | 0.78 | 1.38 | 0.74 | -0.39 | -0.73 | -0.21 | | | |
| 4.5 GHz | INTERCEPT (mV) | 1432 | | | | | | | | | | | | | | | | Measured Value (mV) | |
| | SLOPE (mV/dB) | 22.1 | | | | | | | | | | | | | | | | Error (mV) | |
| | | -33 | 115 | 239 | 337 | 435 | 539 | 646 | 762 | 872 | 1013 | 1132 | 1228 | 1309 | 1413 | 1536 | LINEARITY ERROR (dB) | | |
| | | -1.27 | 0.42 | 1.03 | 0.46 | -0.10 | -0.40 | -0.56 | -0.76 | -0.33 | 1.04 | 1.43 | 0.77 | -0.57 | -0.86 | -0.30 | | | |
| 5.9 GHz | INTERCEPT (mV) | 1433 | | | | | | | | | | | | | | | | Measured Value (mV) | |
| | SLOPE (mV/dB) | 21.8 | | | | | | | | | | | | | | | | Error (mV) | |
| | | -16 | 139 | 257 | 353 | 452 | 555 | 660 | 767 | 888 | 1020 | 1132 | 1227 | 1311 | 1415 | 1537 | LINEARITY ERROR (dB) | | |
| | | -1.54 | 0.58 | 1.00 | 0.40 | -0.05 | -0.32 | -0.50 | -0.59 | -0.03 | 1.03 | 1.17 | 0.63 | -0.61 | -0.83 | -0.23 | | | |
| 7.2 GHz | INTERCEPT (mV) | 1431 | | | | | | | | | | | | | | | | Measured Value (mV) | |
| | SLOPE (mV/dB) | 21.9 | | | | | | | | | | | | | | | | Error (mV) | |
| | | -25 | 127 | 248 | 344 | 443 | 547 | 654 | 762 | 885 | 1015 | 1127 | 1223 | 1308 | 1412 | 1537 | LINEARITY ERROR (dB) | | |
| | | -1.45 | 0.48 | 1.01 | 0.39 | -0.10 | -0.35 | -0.47 | -0.54 | 0.07 | 1.01 | 1.12 | 0.50 | -0.62 | -0.88 | -0.17 | | | |
| 8.6 GHz | INTERCEPT (mV) | 1432 | | | | | | | | | | | | | | | | Measured Value (mV) | |
| | SLOPE (mV/dB) | 22 | | | | | | | | | | | | | | | | Error (mV) | |
| | | -25 | 127 | 247 | 340 | 438 | 544 | 650 | 759 | 881 | 1010 | 1125 | 1225 | 1313 | 1417 | 1540 | LINEARITY ERROR (dB) | | |
| | | -1.27 | 0.64 | 1.09 | 0.32 | -0.22 | -0.40 | -0.58 | -0.62 | -0.08 | 0.79 | 1.02 | 0.56 | -0.43 | -0.70 | -0.11 | | | |
| 9.9 GHz | INTERCEPT (mV) | 1441 | | | | | | | | | | | | | | | | Measured Value (mV) | |
| | SLOPE (mV/dB) | 22.4 | | | | | | | | | | | | | | | | Error (mV) | |
| | | -41 | 102 | 232 | 330 | 431 | 540 | 648 | 761 | 884 | 1014 | 1129 | 1227 | 1318 | 1422 | 1545 | LINEARITY ERROR (dB) | | |
| | | -1.23 | 0.16 | 0.97 | 0.35 | -0.13 | -0.26 | -0.43 | -0.38 | 0.12 | 0.93 | 1.07 | 0.45 | -0.48 | -0.83 | -0.33 | | | |
| 11.3 GHz | INTERCEPT (mV) | 1439 | | | | | | | | | | | | | | | | Measured Value (mV) | |
| | SLOPE (mV/dB) | 22.4 | | | | | | | | | | | | | | | | Error (mV) | |
| | | -38 | 110 | 234 | 327 | 423 | 530 | 640 | 755 | 883 | 1014 | 1130 | 1228 | 1317 | 1422 | 1548 | LINEARITY ERROR (dB) | | |
| | | -1.03 | 0.58 | 1.13 | 0.28 | -0.43 | -0.65 | -0.73 | -0.59 | 0.13 | 0.99 | 1.17 | 0.55 | -0.47 | -0.78 | -0.15 | | | |
| 12.6 GHz | INTERCEPT (mV) | 1436 | | | | | | | | | | | | | | | | Measured Value (mV) | |
| | SLOPE (mV/dB) | 22.6 | | | | | | | | | | | | | | | | Error (mV) | |
| | | -53 | 73 | 214 | 317 | 420 | 530 | 642 | 756 | 877 | 1007 | 1121 | 1219 | 1313 | 1416 | 1539 | LINEARITY ERROR (dB) | | |
| | | -1.00 | -0.41 | 0.83 | 0.40 | -0.04 | -0.16 | -0.20 | -0.15 | 0.21 | 0.97 | 1.02 | 0.36 | -0.47 | -0.91 | -0.46 | | | |
| 14 GHz | INTERCEPT (mV) | 1419 | | | | | | | | | | | | | | | | Measured Value (mV) | |
| | SLOPE (mV/dB) | 21.9 | | | | | | | | | | | | | | | | Error (mV) | |
| | | -34 | 117 | 239 | 330 | 427 | 535 | 643 | 762 | 867 | 992 | 1110 | 1207 | 1303 | 1407 | 1527 | LINEARITY ERROR (dB) | | |
| | | -1.30 | 0.59 | 1.16 | 0.31 | -0.26 | -0.33 | -0.41 | -0.43 | -0.18 | 0.52 | 0.90 | 0.33 | -0.29 | -0.54 | -0.07 | | | |
| 16.7 GHz | INTERCEPT (mV) | 1443 | | | | | | | | | | | | | | | | Measured Value (mV) | |
| | SLOPE (mV/dB) | 22.4 | | | | | | | | | | | | | | | | Error (mV) | |
| | | -34 | 113 | 236 | 328 | 427 | 538 | 647 | 757 | 886 | 1014 | 1131 | 1231 | 1328 | 1429 | 1543 | LINEARITY ERROR (dB) | | |
| | | -1.02 | 0.55 | 1.05 | 0.16 | -0.41 | -0.45 | -0.57 | -0.65 | 0.12 | 0.84 | 1.07 | 0.54 | -0.12 | -0.60 | -0.51 | | | |
| 18 GHz | INTERCEPT (mV) | 1450 | | | | | | | | | | | | | | | | Measured Value (mV) | |
| | SLOPE (mV/dB) | 23 | | | | | | | | | | | | | | | | Error (mV) | |
| | | -10 | 74 | 209 | 304 | 403 | 517 | 626 | 743 | 884 | 1010 | 1132 | 1236 | 1333 | 1435 | 1550 | LINEARITY ERROR (dB) | | |
| | | -0.43 | 0.14 | 1.02 | 0.15 | -0.54 | -0.58 | -0.84 | -0.75 | 0.39 | 0.87 | 1.18 | 0.71 | -0.07 | -0.63 | -0.63 | | | |
| Flatness | | 1 | 1.9 | 1.4 | 1.2 | 1.2 | 1.2 | 1.1 | 1 | 0.8 | 0.5 | 0.8 | 0.8 | 0.8 | 0.8 | | | | |
| Linearity Max (dB) | | 1.43 | | | | | | | | | | | | | | | | | |
| Linearity Min (dB) | | -1.54 | | | | | | | | | | | | | | | | | |
| Average Slope (mV/dB) | | 22.3 | | | | | | | | | | | | | | | | | |



**SUMMARY TEST DATA
ON
SDLVA-2020-70 Opt 0518 A03
A07-50OHM**

PL26825/1943

LOGGING CHARACTERISTICS @ 0C





SUMMARY TEST DATA ON SDLVA-2020-70 Opt 0518 A03 A07-500HM

PL26825/1943

LOGGING CHARACTERISTICS @ +60C

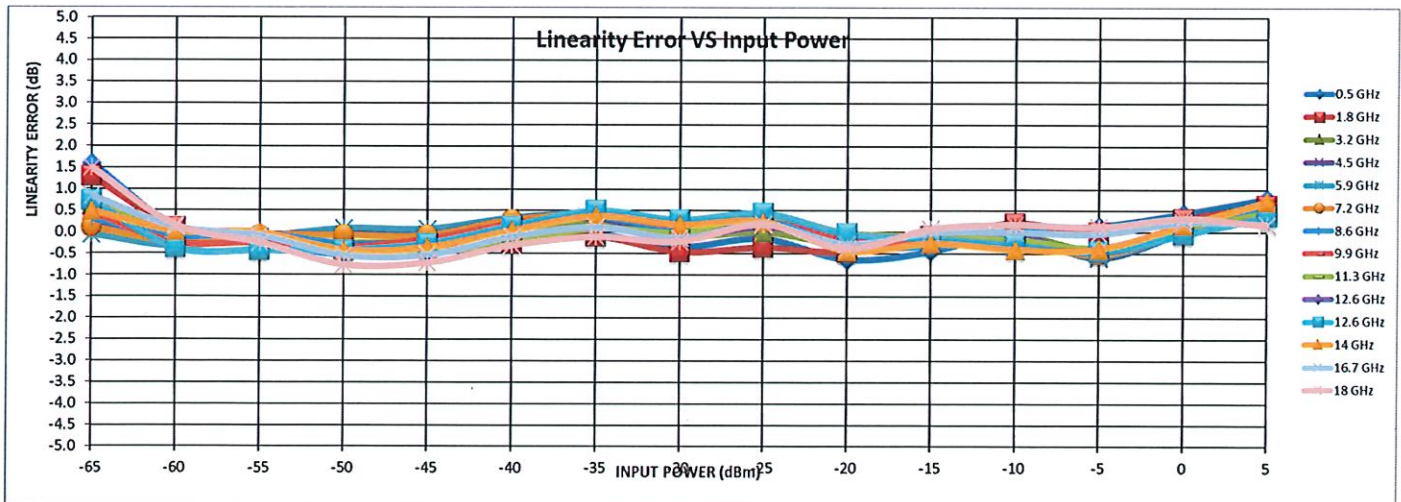
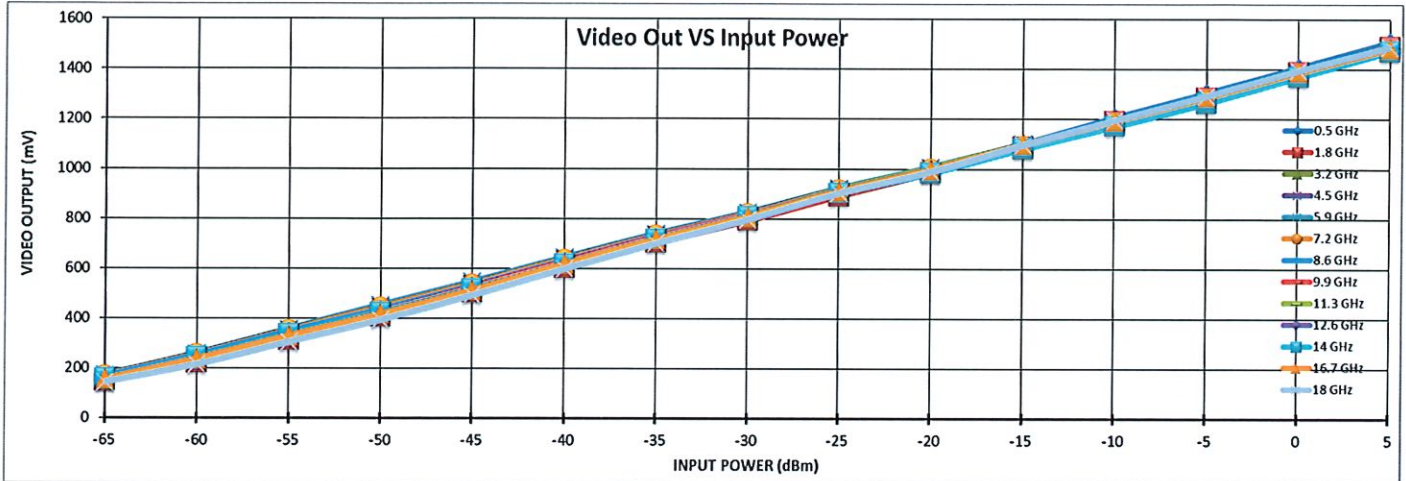
| LOG TRANSFER VS FREQUENCY | | Tuesday, October 22, 2019 | | | | | | | | | | | | | | | | RF Input Power (dBm) | | | | | | | | | | | | | | | | |
|--|----------------|---------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|---|---|---------------------|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|----------------------|------------|
| MODEL: SDLVA-2020-70 OPT. 0518, A03, A07-500HM | | | | | | | | | | | | | | | | | | PLANAR MONOLITHICS INDUSTRIES | | | | | | | | | | | | | | | | |
| TESTED BY: J.Emperador | | | | | | | | | | | | | | | | | | 7311-F GROVE ROAD, FREDERICK, MD 21704 USA | | | | | | | | | | | | | | | | |
| DATE: 10/22/19 | | | | | | | | | | | | | | | | | | TEL: 301-662-5019 FAX: 301-662-1731 | | | | | | | | | | | | | | | | |
| SERIAL NO: PL26825 | | | | | | | | | | | | | | | | | | URL: WWW.PMI-RF.COM | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | EMAIL: SALES@PMI-RF.COM | | | | | | | | | | | | | | | | |
| Frequency | | -65 | -60 | -55 | -50 | -45 | -40 | -35 | -30 | -25 | -20 | -15 | -10 | -5 | 0 | 5 | Measured Value (mV) | Linearity Error (dB) | | | | | | | | | | | | | | | | |
| 0.5 GHz | INTERCEPT (mV) | 1398 | | | | | | | | | | | | | | | | 177 | 245 | 334 | 426 | 522 | 623 | 723 | 814 | 914 | 1001 | 1101 | 1207 | 1305 | 1407 | 1510 | Measured Value (mV) | 177 |
| | SLOPE (mV/dB) | 19.3 | | | | | | | | | | | | | | | | 31 | 2 | -5 | -10 | -10 | -5 | -1 | -7 | -3 | -12 | -8 | 1 | 3 | 9 | 15 | Error (mV) | 19.3 |
| | | | | | | | | | | | | | | | | | | 1.59 | 0.12 | -0.26 | -0.53 | -0.50 | -0.25 | -0.06 | -0.34 | -0.15 | -0.63 | -0.44 | 0.06 | 0.15 | 0.44 | 0.79 | LINEARITY ERROR (dB) | 1.59 |
| 1.8 GHz | INTERCEPT (mV) | 1384 | | | | | | | | | | | | | | | | 148 | 222 | 313 | 408 | 505 | 603 | 703 | 793 | 892 | 987 | 1091 | 1194 | 1287 | 1390 | 1493 | Measured Value (mV) | 148 |
| | SLOPE (mV/dB) | 19.4 | | | | | | | | | | | | | | | | 25 | 2 | -4 | -6 | -6 | -5 | -2 | -9 | -7 | -9 | -2 | 4 | 0 | 6 | 12 | Error (mV) | 19.4 |
| | | | | | | | | | | | | | | | | | | 1.28 | 0.10 | -0.21 | -0.31 | -0.31 | -0.26 | -0.10 | -0.46 | -0.36 | -0.46 | -0.10 | 0.22 | 0.01 | 0.32 | 0.63 | LINEARITY ERROR (dB) | 1.28 |
| 3.2 GHz | INTERCEPT (mV) | 1380 | | | | | | | | | | | | | | | | 154 | 236 | 329 | 423 | 519 | 619 | 718 | 807 | 904 | 984 | 1094 | 1189 | 1277 | 1382 | 1485 | Measured Value (mV) | 154 |
| | SLOPE (mV/dB) | 19 | | | | | | | | | | | | | | | | 12 | -1 | -4 | -5 | -4 | 1 | 5 | -2 | 0 | -5 | 0 | 0 | -8 | 2 | 10 | Error (mV) | 19 |
| | | | | | | | | | | | | | | | | | | 0.62 | -0.07 | -0.19 | -0.25 | -0.21 | 0.04 | 0.24 | -0.09 | 0.01 | -0.27 | -0.02 | -0.03 | -0.40 | 0.11 | 0.52 | LINEARITY ERROR (dB) | 0.62 |
| 4.5 GHz | INTERCEPT (mV) | 1384 | | | | | | | | | | | | | | | | 168 | 254 | 349 | 444 | 538 | 637 | 733 | 819 | 917 | 1006 | 1101 | 1196 | 1279 | 1384 | 1487 | Measured Value (mV) | 168 |
| | SLOPE (mV/dB) | 18.8 | | | | | | | | | | | | | | | | 4 | -4 | -2 | -1 | -1 | 6 | 8 | 1 | 5 | -2 | -3 | -1 | 0 | -11 | 0 | 9 | Error (mV) |
| | | | | | | | | | | | | | | | | | | 0.23 | -0.19 | -0.13 | -0.07 | -0.06 | 0.21 | 0.32 | -0.10 | 0.12 | -0.13 | -0.07 | -0.01 | -0.59 | 0.00 | 0.49 | LINEARITY ERROR (dB) | 0.23 |
| 5.9 GHz | INTERCEPT (mV) | 1384 | | | | | | | | | | | | | | | | 172 | 260 | 357 | 454 | 547 | 645 | 740 | 826 | 923 | 1008 | 1101 | 1195 | 1281 | 1384 | 1485 | Measured Value (mV) | 172 |
| | SLOPE (mV/dB) | 18.6 | | | | | | | | | | | | | | | | -1 | -6 | -2 | 2 | 1 | 6 | 8 | 1 | 5 | -4 | -4 | -3 | -10 | 0 | 8 | Error (mV) | 18.6 |
| | | | | | | | | | | | | | | | | | | -0.05 | -0.33 | -0.12 | 0.08 | 0.07 | 0.33 | 0.43 | 0.04 | 0.25 | -0.19 | -0.20 | -0.16 | -0.54 | -0.01 | 0.41 | LINEARITY ERROR (dB) | -0.05 |
| 7.2 GHz | INTERCEPT (mV) | 1376 | | | | | | | | | | | | | | | | 169 | 256 | 352 | 445 | 538 | 638 | 733 | 820 | 917 | 1001 | 1093 | 1187 | 1275 | 1378 | 1481 | Measured Value (mV) | 169 |
| | SLOPE (mV/dB) | 18.6 | | | | | | | | | | | | | | | | 2 | -4 | -1 | -1 | -2 | 5 | 7 | 1 | 5 | -4 | -5 | -4 | -9 | 0 | 10 | Error (mV) | 18.6 |
| | | | | | | | | | | | | | | | | | | 0.11 | -0.22 | -0.07 | -0.07 | -0.08 | 0.29 | 0.39 | 0.06 | 0.27 | -0.22 | -0.28 | -0.23 | -0.51 | 0.02 | 0.55 | LINEARITY ERROR (dB) | 0.11 |
| 8.6 GHz | INTERCEPT (mV) | 1378 | | | | | | | | | | | | | | | | 166 | 252 | 347 | 436 | 531 | 632 | 729 | 817 | 915 | 997 | 1091 | 1186 | 1277 | 1380 | 1482 | Measured Value (mV) | 166 |
| | SLOPE (mV/dB) | 18.7 | | | | | | | | | | | | | | | | 6 | -2 | -1 | -5 | -4 | 3 | 7 | 1 | 5 | -6 | -6 | -5 | -7 | 2 | 10 | Error (mV) | 18.7 |
| | | | | | | | | | | | | | | | | | | 0.31 | -0.10 | -0.03 | -0.28 | -0.21 | 0.18 | 0.36 | 0.06 | 0.29 | -0.33 | -0.31 | -0.24 | -0.38 | 0.11 | 0.56 | LINEARITY ERROR (dB) | 0.31 |
| 9.9 GHz | INTERCEPT (mV) | 1385 | | | | | | | | | | | | | | | | 156 | 238 | 333 | 426 | 525 | 627 | 726 | 817 | 917 | 1001 | 1095 | 1190 | 1283 | 1386 | 1485 | Measured Value (mV) | 156 |
| | SLOPE (mV/dB) | 19 | | | | | | | | | | | | | | | | 9 | -5 | -5 | -7 | -3 | 4 | 7 | 3 | 8 | -3 | -4 | -4 | -7 | 1 | 6 | Error (mV) | 19 |
| | | | | | | | | | | | | | | | | | | 0.45 | -0.24 | -0.25 | -0.37 | -0.17 | 0.19 | 0.39 | 0.17 | 0.42 | -0.16 | -0.23 | -0.24 | -0.35 | 0.06 | 0.31 | LINEARITY ERROR (dB) | 0.45 |
| 11.3 GHz | INTERCEPT (mV) | 1387 | | | | | | | | | | | | | | | | 158 | 242 | 335 | 424 | 518 | 619 | 720 | 814 | 917 | 1005 | 1099 | 1193 | 1285 | 1389 | 1492 | Measured Value (mV) | 158 |
| | SLOPE (mV/dB) | 19.1 | | | | | | | | | | | | | | | | 13 | 1 | -1 | -8 | -9 | -4 | 2 | 0 | 7 | 0 | -2 | -3 | -7 | 2 | 9 | Error (mV) | 19.1 |
| | | | | | | | | | | | | | | | | | | 0.68 | 0.07 | -0.06 | -0.41 | -0.49 | -0.20 | 0.08 | 0.00 | 0.39 | -0.01 | -0.09 | -0.17 | -0.36 | 0.08 | 0.47 | LINEARITY ERROR (dB) | 0.68 |
| 12.6 GHz | INTERCEPT (mV) | 1384 | | | | | | | | | | | | | | | | 149 | 224 | 319 | 416 | 514 | 618 | 721 | 813 | 912 | 999 | 1093 | 1186 | 1279 | 1383 | 1487 | Measured Value (mV) | 149 |
| | SLOPE (mV/dB) | 19.2 | | | | | | | | | | | | | | | | 14 | -7 | -8 | -8 | -5 | 3 | 10 | 6 | 8 | -1 | -3 | -6 | -9 | -1 | 7 | Error (mV) | 19.2 |
| | | | | | | | | | | | | | | | | | | 0.72 | -0.37 | -0.43 | -0.43 | -0.28 | 0.14 | 0.80 | 0.29 | 0.44 | -0.03 | -0.14 | -0.29 | -0.45 | -0.04 | 0.37 | LINEARITY ERROR (dB) | 0.72 |
| 14 GHz | INTERCEPT (mV) | 1368 | | | | | | | | | | | | | | | | 159 | 244 | 337 | 423 | 518 | 619 | 719 | 809 | 904 | 985 | 1082 | 1173 | 1267 | 1371 | 1475 | Measured Value (mV) | 159 |
| | SLOPE (mV/dB) | 18.7 | | | | | | | | | | | | | | | | 9 | 0 | 0 | -8 | -7 | 1 | 7 | 3 | 5 | -8 | -5 | -7 | -7 | 3 | 14 | Error (mV) | 18.7 |
| | | | | | | | | | | | | | | | | | | 0.49 | 0.03 | -0.01 | -0.42 | -0.35 | 0.04 | 0.37 | 0.18 | 0.25 | -0.43 | -0.25 | -0.40 | -0.38 | 0.17 | 0.72 | LINEARITY ERROR (dB) | 0.49 |
| 16.7 GHz | INTERCEPT (mV) | 1385 | | | | | | | | | | | | | | | | 156 | 238 | 330 | 417 | 513 | 617 | 717 | 808 | 910 | 997 | 1098 | 1194 | 1289 | 1390 | 1485 | Measured Value (mV) | 156 |
| | SLOPE (mV/dB) | 19.2 | | | | | | | | | | | | | | | | 16 | 2 | -2 | -10 | -10 | -2 | 2 | -3 | 4 | -5 | 0 | 0 | -1 | 5 | 4 | Error (mV) | 19.2 |
| | | | | | | | | | | | | | | | | | | 0.84 | 0.12 | -0.08 | -0.54 | -0.53 | -0.10 | 0.12 | -0.14 | 0.19 | -0.27 | 0.00 | 0.01 | -0.03 | 0.24 | 0.20 | LINEARITY ERROR (dB) | 0.84 |
| 18 GHz | INTERCEPT (mV) | 1390 | | | | | | | | | | | | | | | | 144 | 216 | 306 | 394 | 493 | 599 | 701 | 797 | 903 | 990 | 1097 | 1197 | 1294 | 1396 | 1491 | Measured Value (mV) | 144 |
| | SLOPE (mV/dB) | 19.6 | | | | | | | | | | | | | | | | 29 | 3 | -5 | -15 | -14 | -6 | -2 | -4 | 4 | -7 | 2 | 4 | 2 | 6 | 3 | Error (mV) | 19.6 |
| | | | | | | | | | | | | | | | | | | 1.49 | 0.16 | -0.25 | -0.76 | -0.71 | -0.31 | -0.11 | -0.21 | 0.19 | -0.37 | 0.08 | 0.18 | 0.13 | 0.33 | 0.17 | LINEARITY ERROR (dB) | 1.49 |
| Flatness | | 0.9 | | | | | | | | | | | | | | | | 1.2 | 1.4 | 1.6 | 1.4 | 1.2 | 1 | 0.9 | 0.8 | 0.6 | 0.5 | 0.9 | 1 | 1 | 0.9 | | | |
| Linearity Max.(dB) | | 1.59 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Linearity Min.(dB) | | -0.76 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Average Slope (mV/dB) | | 19.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



**SUMMARY TEST DATA
ON
SDLVA-2020-70 Opt 0518 A03
A07-50OHM**

PL26825/1943

LOGGING CHARACTERISTICS @ +60C





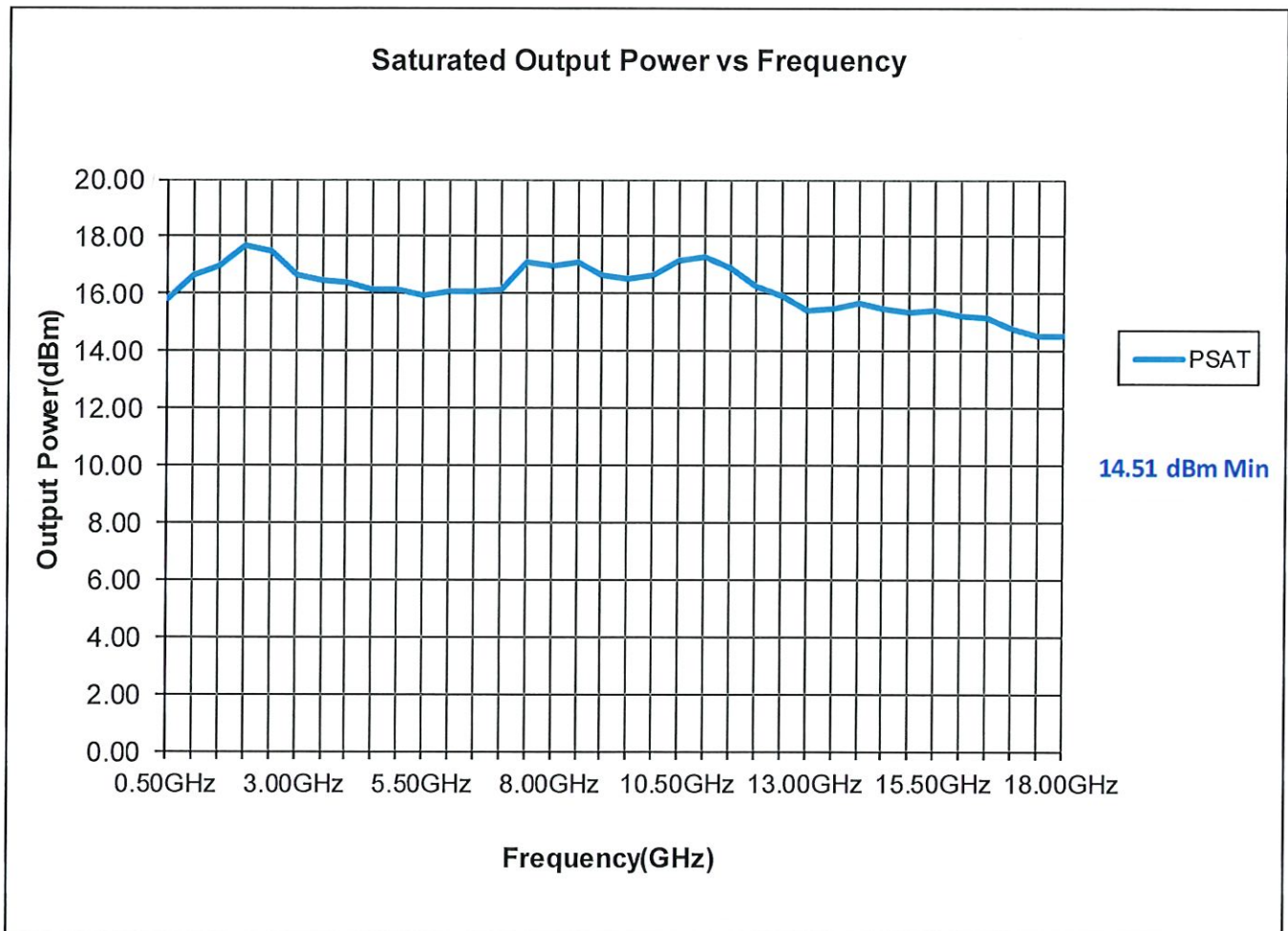
**SUMMARY TEST DATA
ON
SDLVA-2020-70 Opt 0518 A03
A07-50OHM**

PL26825/1943

P-Sat

**MODEL: SDLVA-2020-70 OPT. 0518, A03, A07-50OHM
TESTED BY: J.Emperador
DATE: 10/21/19
SERIAL NO: PL26825**

Test Temp: 25C





**SUMMARY TEST DATA
ON
SDLVA-2020-70 Opt 0518 A03
A07-50OHM**

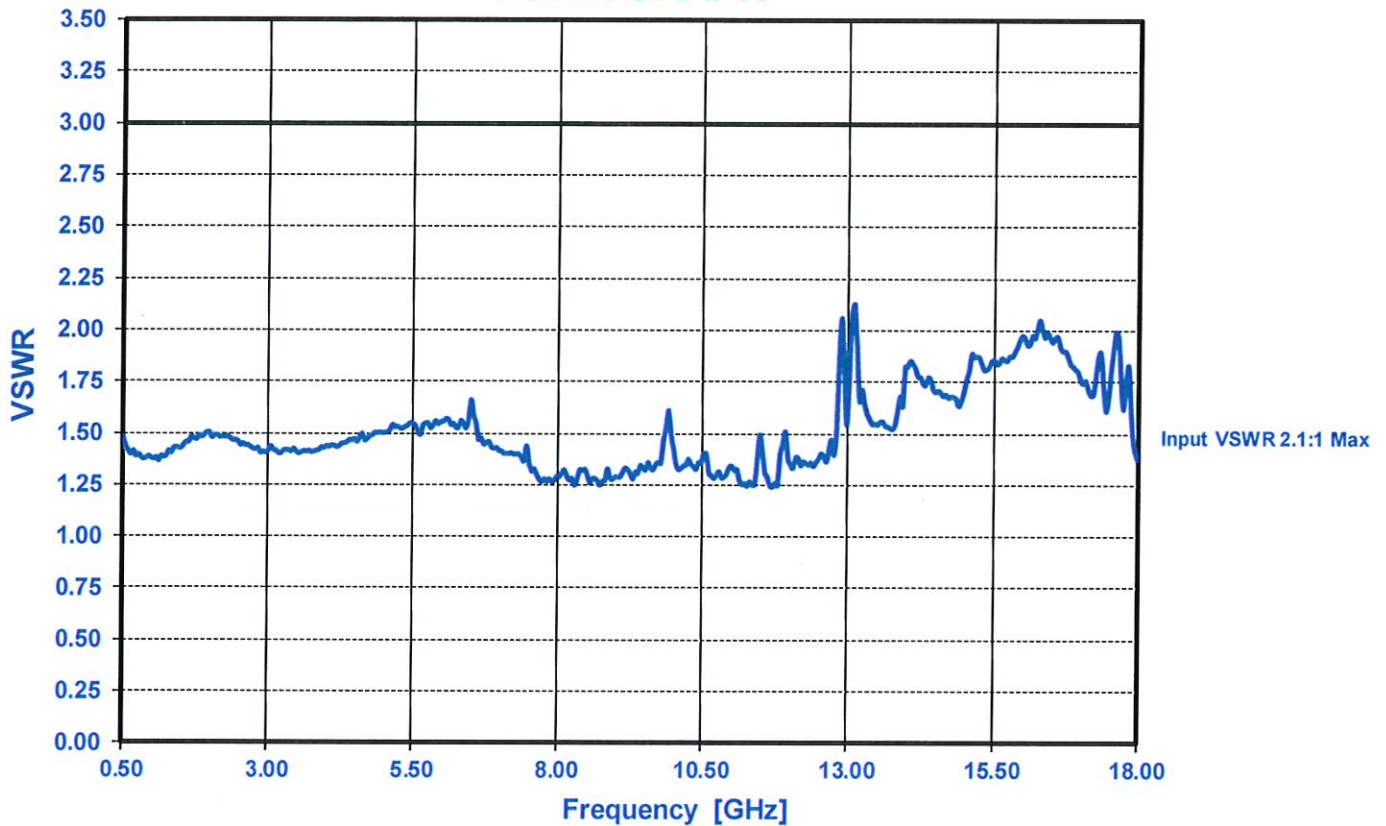
PL26825/1943

INPUT VSWR

Model Number: SDLVA-2020-70 OPT. 0518
Serial Number: PL26825

Temperature: +25C

VSWR GRAPH

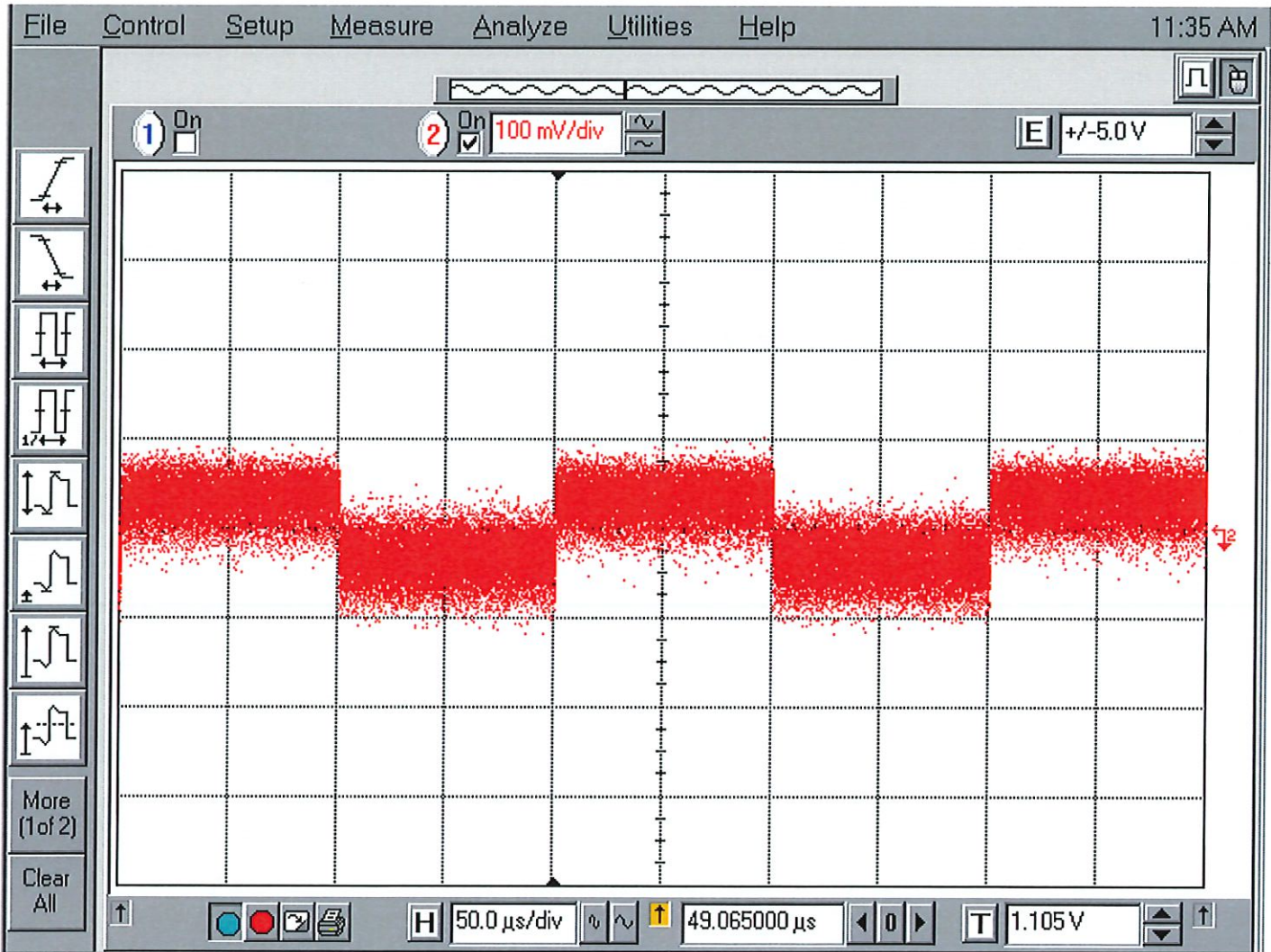




**SUMMARY TEST DATA
ON
SDLVA-2020-70 Opt 0518 A03
A07-500HM**

PL26825/1943

TSS @ -65.5dBm

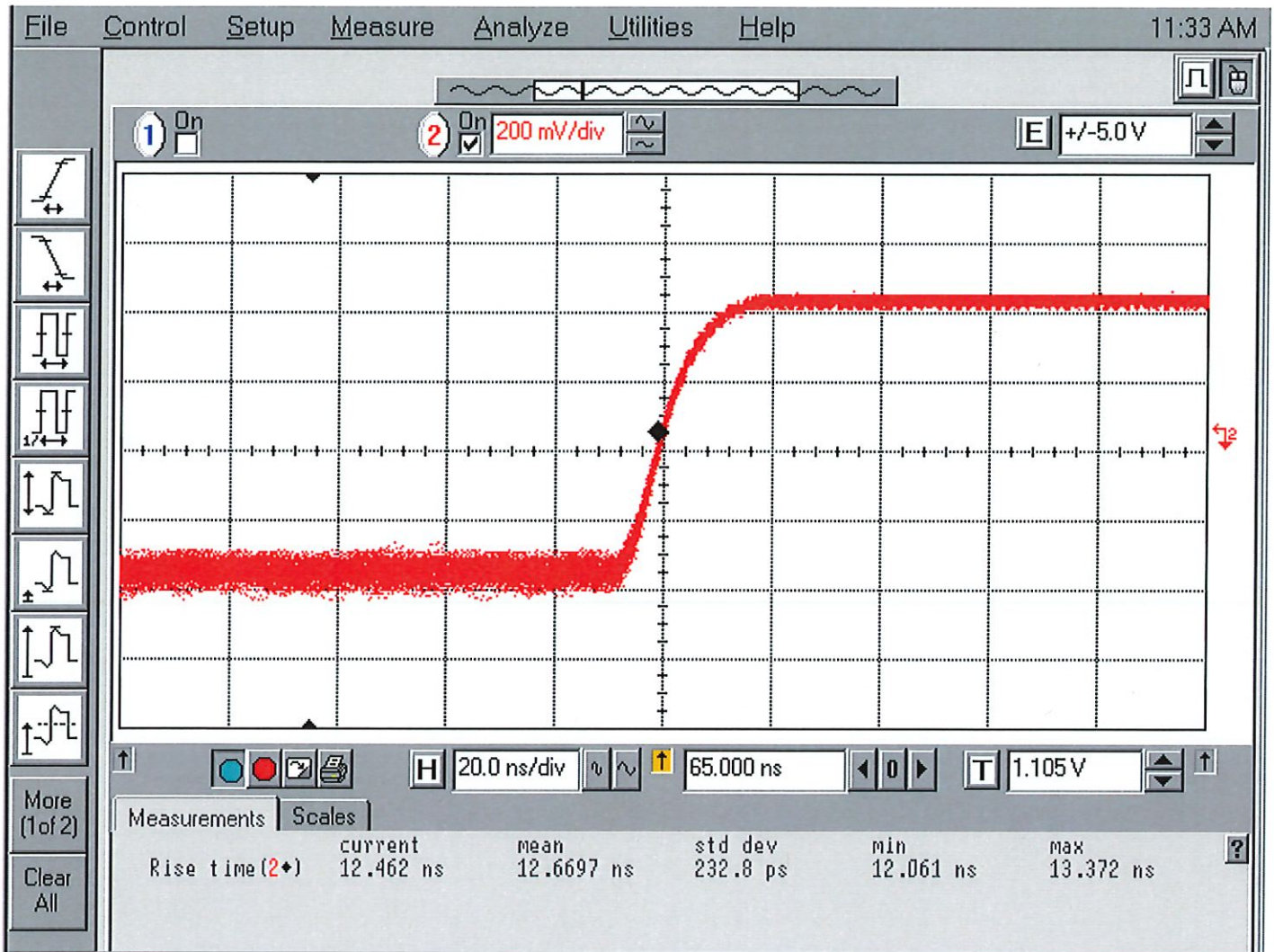




**SUMMARY TEST DATA
ON
SDLVA-2020-70 Opt 0518 A03
A07-50OHM**

PL26825/1943

Rise Time @ 12.5 ns





**SUMMARY TEST DATA
ON
SDLVA-2020-70 Opt 0518 A03
A07-50OHM**

PL26825/1943

Recovery Time @ 171 ns

