



Calibration Laboratory Cert: 5518.01

ISO/IEC 17025:2017 and ANSI/NCSL Z540.1-1994 Accredited Calibration Certificate

Customer Address: Rental unit

Certificate: A24110901DR

Product: Solid State Amplifier
 Manufacturer: Amplifier Research
 Model: 25S1G4AM3
 Serial: 329825

Notes: Amplifier Range 800MHz to 4200MHz
 Power: 25 Watts
 CSV Files available upon request

Date of Report: 11/9/2024
 Date of Calibration: 11/9/2024
 Next Calibration:

The next calibration date is defined by the equipment user/owner. We recommend recalibration annually.

The above instrument was tested and found to be within the manufacturer's specification. The results of the tests performed are held on file at The EMC Shop. The calibration was carried out in accordance with the general requirements of ISO/IEC 17025-2017, IEC 61000-4-6 using laboratory standards which are traceable to the SI International System of Quantities through the National Institute of Standards and Technology (NIST), and or other Accredited bodies except where none exist. Tests are carried out in environmental conditions controlled to the extent appropriate to the instrument's specification. This certificate shall not be reproduced except in full without the written approval of the laboratory. The uncertainty results meet the requirements of the ISO/IEC 17025-2017 standard and ILAC Doc.P14.

Ambient Conditions of Laboratory

Temperature (°C): 22
 Relative Humidity (%): 35

Technician: Dan Raines

Technician Signature:



Calibration Equipment				
Model	Description	Serial Number	Certificate #	Due Date
ZNB 8	Network Analyzer	103153	5000-309120570	11/12/2025
ZV-Z21	Cal Kit	100800	584251 D-K-15195-01-00	1/26/2025

Calibration method used: IEC 61000-4-6

VSWR measurements made are not accredited

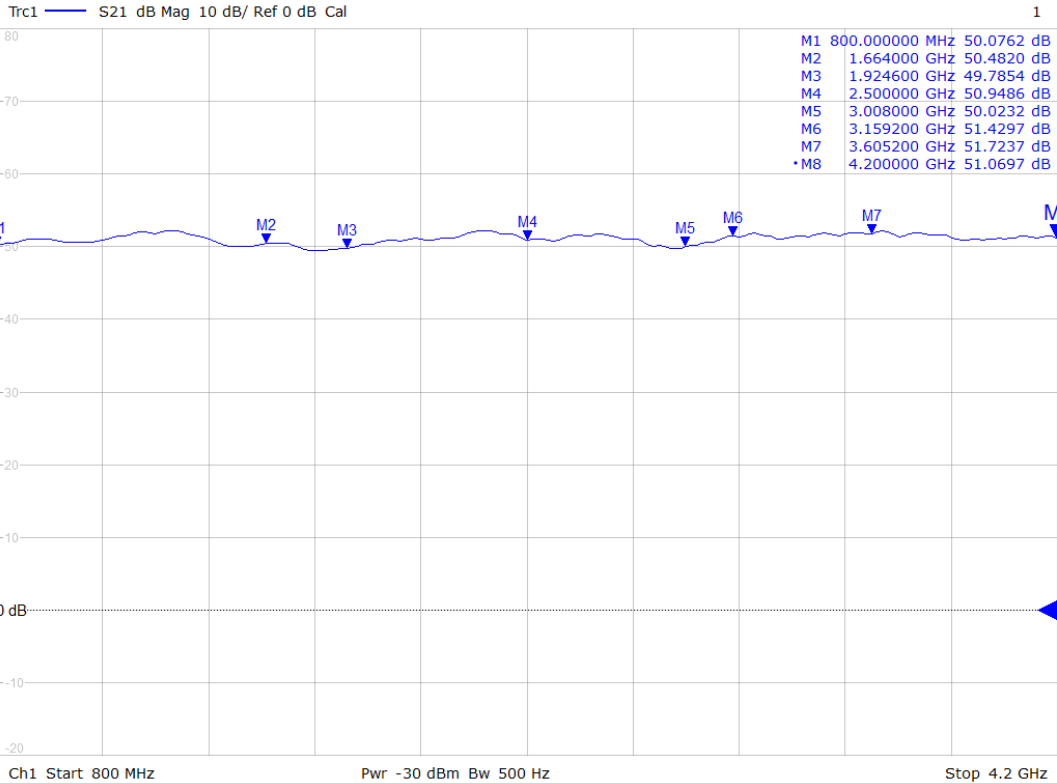
Condition as found:	IN tolerance
Condition as left:	IN tolerance

Measuring Uncertainties	
Insertion Loss	± 0.2 dB
RF Power Level	± 0.3 dB
Power Amplifier Gain Linearity	± 0.44 dB

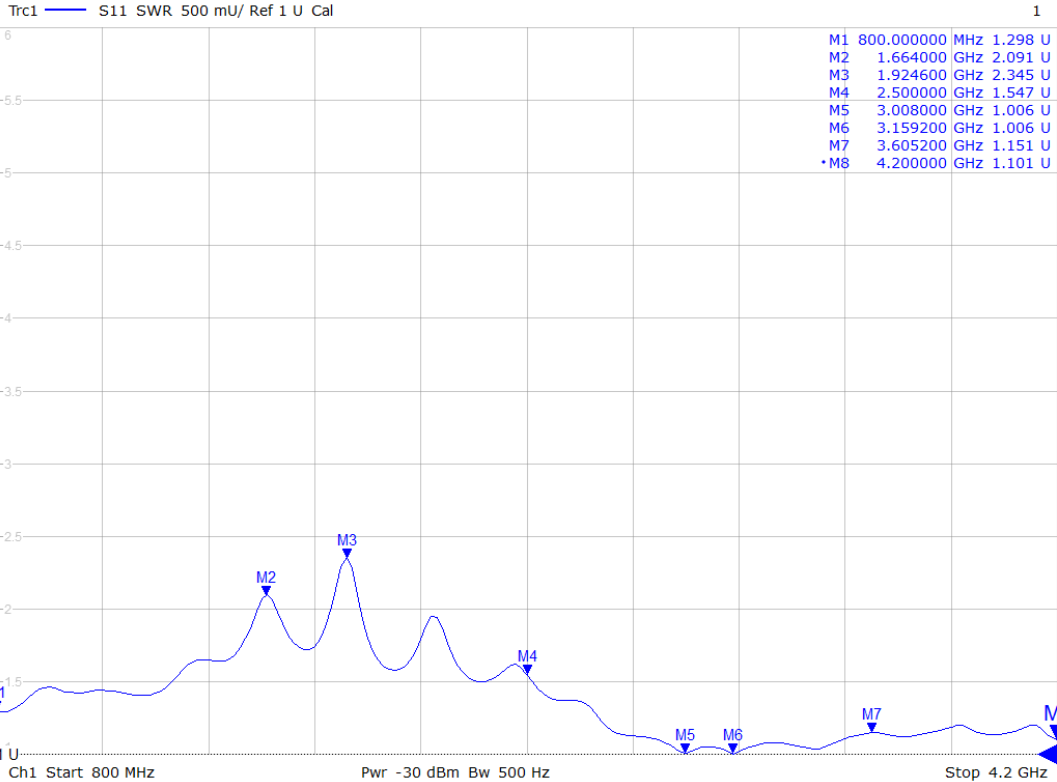
The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k such that the coverage probability corresponds to approximately 95%



Gain Through Band 800MHz to 4200MHz

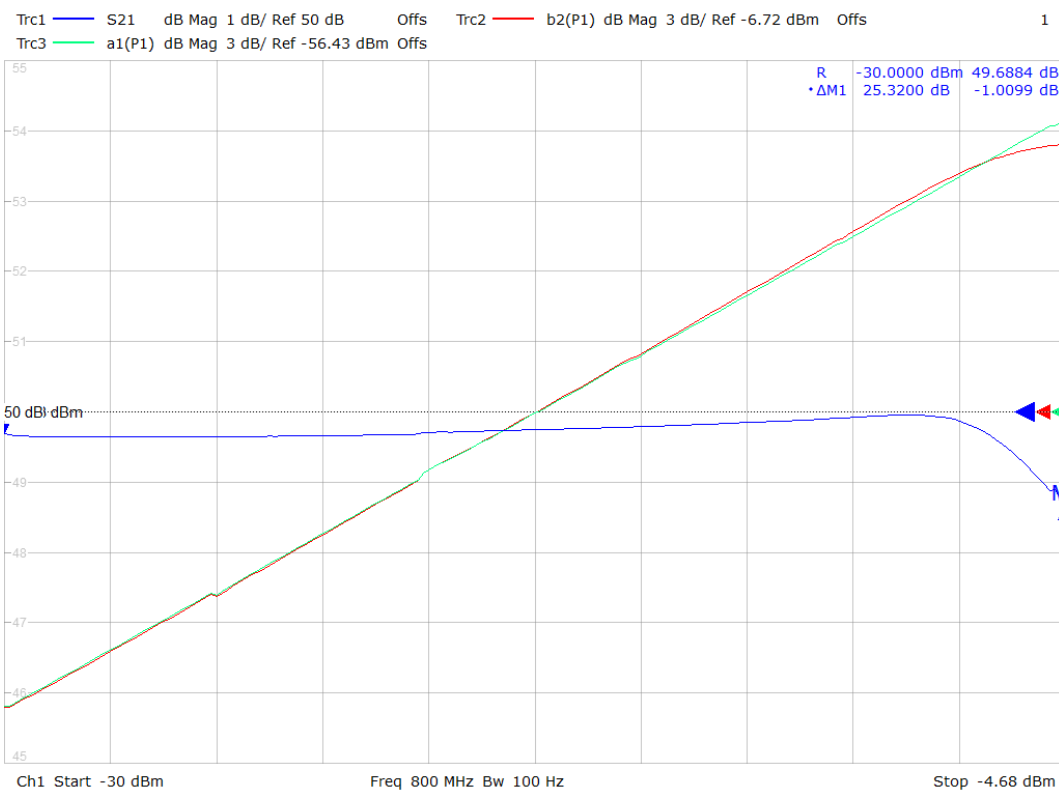


VSWR on Amplifier Input

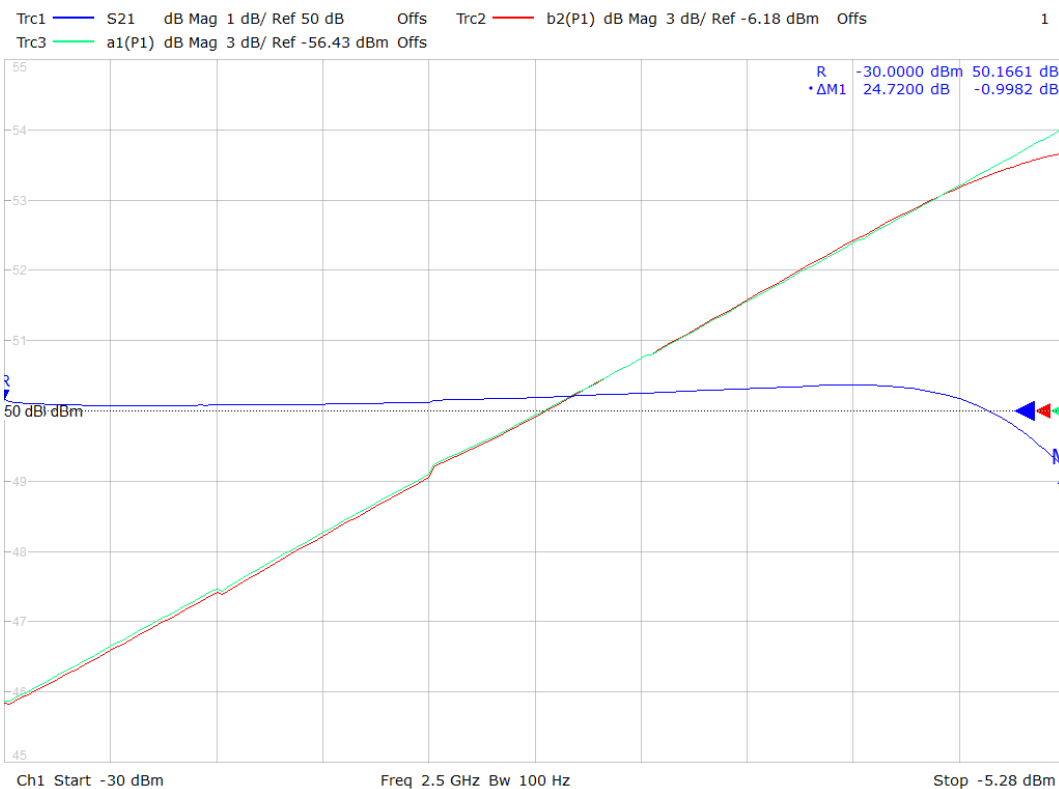




P1dB at 800MHz = -4.68dBm input power w/ +48.69dB gain

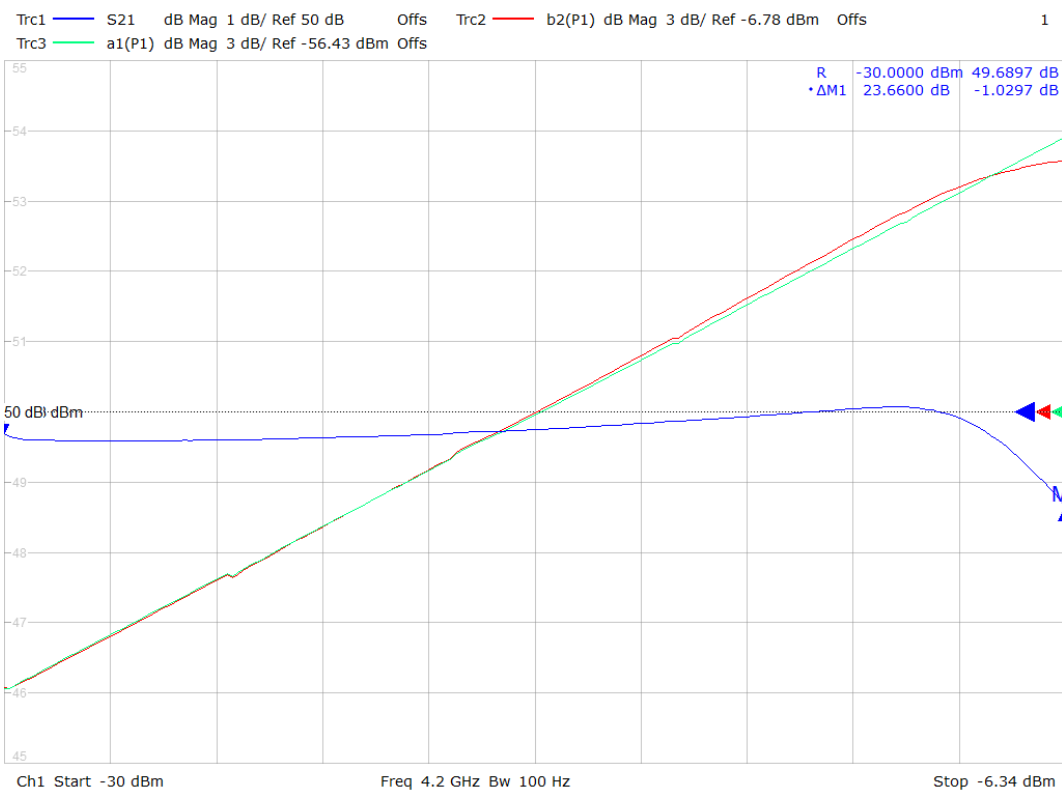


P1dB at 2500MHz = -5.28dBm input power w/ +49.17dB gain





P1dB at 4200MHz = -6.34 dBm input power w/ +48.67dB gain



Frequency (Hz)	GAIN (dBm)	VSWR (U)
800000000	50.08	1.30
817000000	50.28	1.29
834000000	50.43	1.29
851000000	50.54	1.31
868000000	50.67	1.33
885000000	50.87	1.36
902000000	50.98	1.39
919000000	50.98	1.42
936000000	51.03	1.45
953000000	51.06	1.46
970000000	50.98	1.46
987000000	50.89	1.46
1004000000	50.71	1.44
1021000000	50.61	1.43
1038000000	50.59	1.42
1055000000	50.58	1.42
1072000000	50.55	1.42
1089000000	50.62	1.43
1106000000	50.66	1.44
1123000000	50.77	1.44
1140000000	50.89	1.44
1157000000	51.08	1.44
1174000000	51.28	1.43
1191000000	51.42	1.43
1208000000	51.48	1.42
1225000000	51.64	1.42
1242000000	51.88	1.41
1259000000	52.07	1.40
1276000000	52.00	1.40
1293000000	51.83	1.41
1310000000	51.81	1.42
1327000000	52.01	1.44
1344000000	52.18	1.47
1361000000	52.22	1.50
1378000000	52.13	1.54
1395000000	51.99	1.58
1412000000	51.81	1.61
1429000000	51.66	1.64

1446000000	51.51	1.65
1463000000	51.28	1.65
1480000000	51.01	1.65
1497000000	50.74	1.64
1514000000	50.46	1.64
1531000000	50.20	1.64
1548000000	50.03	1.66
1565000000	50.00	1.69
1582000000	50.04	1.73
1599000000	50.05	1.80
1616000000	50.05	1.89
1633000000	50.16	1.98
1650000000	50.37	2.07
1667000000	50.51	2.10
1684000000	50.49	2.06
1701000000	50.43	1.98
1718000000	50.43	1.90
1735000000	50.44	1.82
1752000000	50.19	1.77
1769000000	49.85	1.73
1786000000	49.59	1.72
1803000000	49.48	1.72
1820000000	49.48	1.74
1837000000	49.48	1.79
1854000000	49.47	1.87
1871000000	49.55	1.99
1888000000	49.68	2.14
1905000000	49.72	2.29
1922000000	49.77	2.36
1939000000	49.88	2.28
1956000000	50.11	2.10
1973000000	50.26	1.93
1990000000	50.32	1.80
2007000000	50.37	1.71
2024000000	50.54	1.65
2041000000	50.78	1.61
2058000000	50.89	1.58
2075000000	50.88	1.58
2092000000	50.80	1.59
2109000000	50.89	1.61
2126000000	51.05	1.65
2143000000	51.16	1.71
2160000000	51.04	1.79
2177000000	50.89	1.88

2194000000	50.85	1.95
2211000000	50.99	1.94
2228000000	51.15	1.87
2245000000	51.15	1.77
2262000000	51.15	1.67
2279000000	51.32	1.60
2296000000	51.66	1.56
2313000000	51.95	1.53
2330000000	52.04	1.51
2347000000	52.11	1.50
2364000000	52.16	1.50
2381000000	52.13	1.51
2398000000	51.97	1.53
2415000000	51.79	1.56
2432000000	51.71	1.59
2449000000	51.75	1.61
2466000000	51.58	1.62
2483000000	51.21	1.59
2500000000	50.95	1.55
2517000000	50.99	1.50
2534000000	51.10	1.45
2551000000	51.05	1.42
2568000000	50.97	1.40
2585000000	50.79	1.38
2602000000	50.90	1.37
2619000000	51.23	1.37
2636000000	51.51	1.37
2653000000	51.62	1.37
2670000000	51.54	1.36
2687000000	51.42	1.35
2704000000	51.49	1.32
2721000000	51.76	1.28
2738000000	51.72	1.23
2755000000	51.67	1.19
2772000000	51.50	1.16
2789000000	51.29	1.14
2806000000	51.07	1.13
2823000000	51.01	1.13
2840000000	51.09	1.13
2857000000	50.98	1.12
2874000000	50.61	1.12
2891000000	50.22	1.11
2908000000	50.03	1.11
2925000000	50.20	1.10

2942000000	50.05	1.08
2959000000	49.75	1.06
2976000000	49.71	1.04
2993000000	49.79	1.02
3010000000	50.05	1.00
3027000000	50.17	1.02
3044000000	50.24	1.04
3061000000	50.44	1.05
3078000000	50.61	1.05
3095000000	50.58	1.05
3112000000	50.85	1.05
3129000000	51.19	1.03
3146000000	51.47	1.02
3163000000	51.42	1.00
3180000000	51.35	1.02
3197000000	51.50	1.04
3214000000	51.75	1.05
3231000000	51.82	1.06
3248000000	51.68	1.07
3265000000	51.53	1.08
3282000000	51.44	1.08
3299000000	51.09	1.08
3316000000	51.04	1.08
3333000000	51.16	1.07
3350000000	51.33	1.07
3367000000	51.53	1.06
3384000000	51.40	1.05
3401000000	51.36	1.04
3418000000	51.64	1.03
3435000000	51.76	1.04
3452000000	51.86	1.05
3469000000	51.75	1.06
3486000000	51.57	1.08
3503000000	51.52	1.09
3520000000	51.70	1.11
3537000000	51.85	1.12
3554000000	51.96	1.13
3571000000	51.90	1.14
3588000000	51.79	1.15
3605000000	51.72	1.15
3622000000	52.02	1.15
3639000000	52.25	1.14
3656000000	52.11	1.14
3673000000	51.79	1.13

3690000000	51.39	1.12
3707000000	51.52	1.12
3724000000	51.69	1.12
3741000000	51.87	1.13
3758000000	51.91	1.13
3775000000	51.73	1.14
3792000000	51.57	1.15
3809000000	51.64	1.16
3826000000	51.66	1.17
3843000000	51.55	1.18
3860000000	51.25	1.19
3877000000	51.01	1.20
3894000000	50.85	1.20
3911000000	50.96	1.19
3928000000	51.05	1.17
3945000000	51.03	1.15
3962000000	50.95	1.14
3979000000	50.99	1.14
3996000000	51.07	1.13
4013000000	51.16	1.14
4030000000	51.10	1.14
4047000000	51.12	1.15
4064000000	51.21	1.16
4081000000	51.48	1.17
4098000000	51.53	1.18
4115000000	51.37	1.20
4132000000	51.18	1.20
4149000000	51.26	1.17
4166000000	51.41	1.14
4183000000	51.49	1.12
4200000000	51.07	1.10