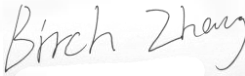




SAR

Dipole Performance Measurement Report

Company Name: BTF Testing Lab (Shenzhen) Co., Ltd.
Address: Plant 101, 201 and 301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Street, Bao'an District, Shenzhen, Guangdong, China
Test System Name: SATIMO
Test System Version: Open SAR V5.3.15.8
Probe: 0125-EPGO-445
Date (s) of performance of tests: 2026-04-23
Date of Issue: 2026-04-24

Tested By: 
Birch Zhang / Tester

Date: 2026-04-24

Reviewed By: 
Amenda Zhong / Project Engineer

Date: 2026-04-24

Approved By: 
Ryan.CJ / EMC Manager

Date: 2026-04-24





Test Equipment List

Description	Manufacturer	Model	Serial No./Version	Cal. Date	Cal. Due
ENA Series Network Analyzer	Agilent	E5071B	MY42301221	2025/10/17	2026/10/16
Mechanical Calibration Kit	PNA	N/A	N/A	2025/10/21	2026/10/20
450MHz Validation Dipole	MVG	SID450	07/22 DIP 0G450-654	2025/05/26	2028/05/25
750MHz Validation Dipole	MVG	SID750	07/22 DIP 0G750-655	2025/05/26	2028/05/25
835MHz Validation Dipole	MVG	SID835	07/22 DIP 0G835-656	2025/05/26	2028/05/25
1800MHz Validation Dipole	MVG	SID1800	07/22 DIP 1G800-657	2025/05/26	2028/05/25
1900MHz Validation Dipole	MVG	SID1900	07/22 DIP 1G900-658	2025/05/26	2028/05/25
2000MHz Validation Dipole	MVG	SID2000	07/22 DIP2G000-659	2025/05/26	2028/05/25
2100MHz Validation Dipole	MVG	SID2100	07/22 DIP2G100-660	2025/05/26	2028/05/25
2300MHz Validation Dipole	MVG	SID2300	07/22 DIP 2G300-661	2025/05/26	2028/05/25
2450MHz Validation Dipole	MVG	SID2450	07/22 DIP 2G450-662	2025/05/26	2028/05/25
2600MHz Validation Dipole	MVG	SID2600	07/22 DIP 2G600-663	2025/05/26	2028/05/25
3500MHz Validation Dipole	MVG	SID3500	07/22 DIP3G500-664	2025/05/26	2028/05/25
3700MHz Validation Dipole	MVG	SID3700	07/22 DIP3G700-665	2025/05/26	2028/05/25
3900MHz Validation Dipole	MVG	SID3900	07/22 DIP3G900-666	2025/05/26	2028/05/25
4200MHz Validation Dipole	MVG	SID4200	07/22 DIP4G200-667	2025/05/26	2028/05/25
4600MHz Validation Dipole	MVG	SID4600	07/22 DIP4G600-668	2025/05/26	2028/05/25
4900MHz Validation Dipole	MVG	SID4900	07/22 DIP4G900-669	2025/05/26	2028/05/25
5200MHz-5800MHz Validation Dipole	MVG	SID5000	07/22 DIP5G000-670	2025/05/26	2028/05/25
Note: For dipole antennas, BTF has adopted 3 years as calibration intervals, and on annual basis, every measurement dipole has been evaluated and is in compliance with the following criteria: 1. There is no physical damage on the dipole; 2. System validation with specific dipole is within 10% of calibrated value; 3. Return-loss in within 20% of calibrated measurement. 4. Impedance (real or imaginary parts) in within 5 Ohms of calibrated measurement.					

SAR Dipole Performance Measurement

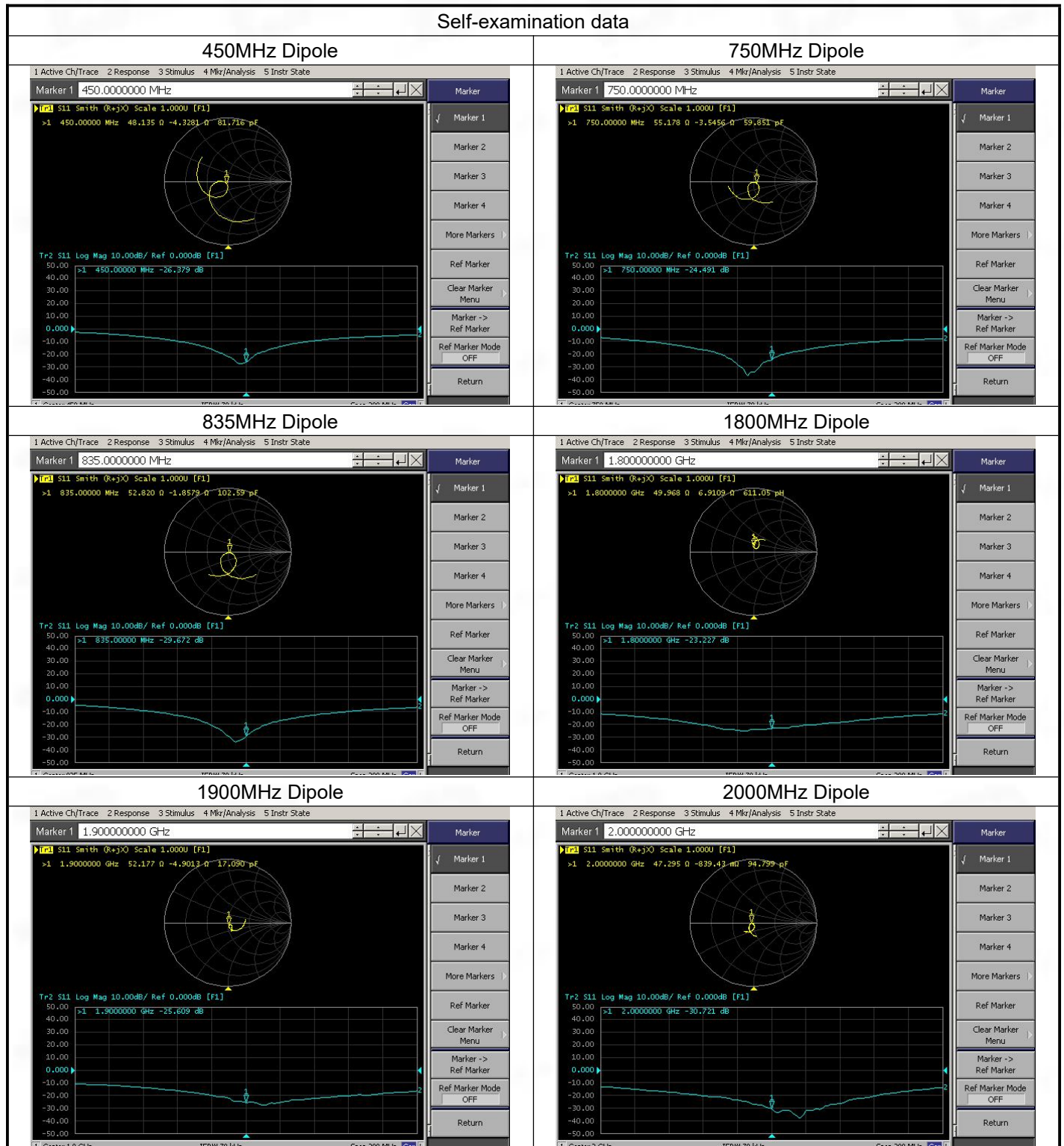
Justification for Extended SAR Dipole Calibrations

Referring to KDB 865664D01V01r04, if dipoles are verified in return loss ($<-20\text{dB}$, within 20% of prior calibration) and in impedance (within 5 ohm of prior calibration), the annual calibration is not necessary and the calibration interval can be extended. While calibration intervals not exceed 3 years.

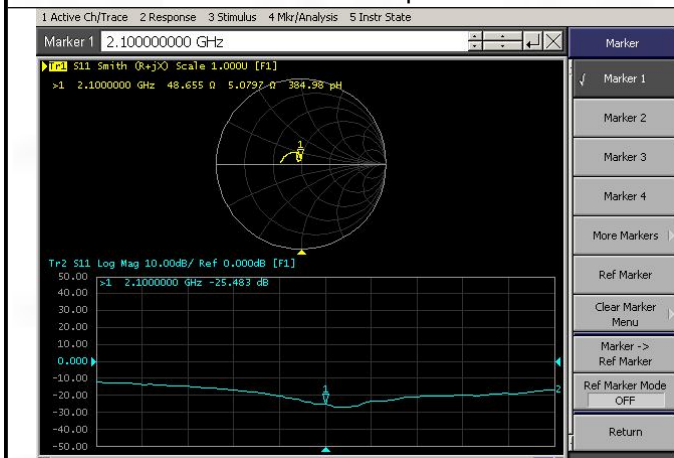
Frequency (MHz)	Return loss(dB)		Impedance(Ω)				error range (%)		Results	Date of Measurement
	measurement	target	measurement		target		Return loss(±20%)	Impedance(±5Ω)	(P/F)	
			real part	imaginary part	real part	imaginary part				
CW450	-26.38	-26.43	48.13	-4.3	48.8	-4.5	0.19%	0.5	P	23/4/2026
CW750	-24.49	-27.92	55.18	-3.6	53.6	+1.4	-12.29%	3.4	P	23/4/2026
CW835	-29.67	-30.97	52.82	-1.9	50.7	-2.7	-4.20%	-3.0	P	23/4/2026
CW1800	-23.23	-26.91	49.97	6.9	50.8	+4.3	-13.7%	-1.8	P	23/4/2026
CW1900	-25.61	-27.04	52.18	-4.9	50.8	-4.3	-5.29%	-0.8	P	23/4/2026
CW2000	-30.72	-28.21	47.30	-0.8	47.9	+2.9	8.90%	4.3	P	23/4/2026
CW2100	-25.48	-25.91	48.66	5.1	48.1	+4.5	-1.66%	-1.2	P	23/4/2026
CW2300	-27.60	-25.23	53.62	-2.4	49.3	+5.3	9.39%	3.4	P	23/4/2026
CW2450	-20.41	-22.28	46.16	8.4	49.2	+7.4	-8.39%	2.0	P	23/4/2026
CW2600	-26.6	-28.70	53.2	3.6	50.0	+3.7	-9.41%	-3.1	P	23/4/2026
CW3500	-23.97	-24.35	56.36	-2.2	56.3	+1.1	-1.56%	3.2	P	23/4/2026
CW3700	-35.99	-31.40	51.43	0.7	47.4	+0.7	14.62%	-4.0	P	23/4/2026
CW3900	-26.48	-26.52	51.55	4.6	53.8	+2.8	0.15%	0.5	P	23/4/2026
CW4200	-25.62	-24.72	55.5	0.14	52.4	+5.3	3.64%	2.0	P	23/4/2026
CW4600	-22.47	-26.69	45.21	5.4	45.9	+1.6	-15.8%	-3.1	P	23/4/2026
CW4900	-31.19	-29.55	48.65	2.4	47.3	1.6	5.55%	-2.2	P	23/4/2026
CW5200	-20.31	-20.10	58.2	-6.5	49.9	+2.4	1.04%	0.6	P	23/4/2026
CW5400	-31.53	-32.19	50.02	2.65	50.4	+1.5	-2.05%	-0.8	P	23/4/2026
CW5600	-26.93	-25.19	48.4	-0.3	48.4	+1.8	6.91%	-4.2	P	23/4/2026
CW5800	-29.28	-27.17	51.3	-3.2	51.1	-1.5	7.77%	-4.9	P	23/4/2026

The return loss is $<-20\text{dB}$, within 20% of prior calibration; the impedance is within 5 ohm of prior calibration. Therefore the verification result should support extended calibration.

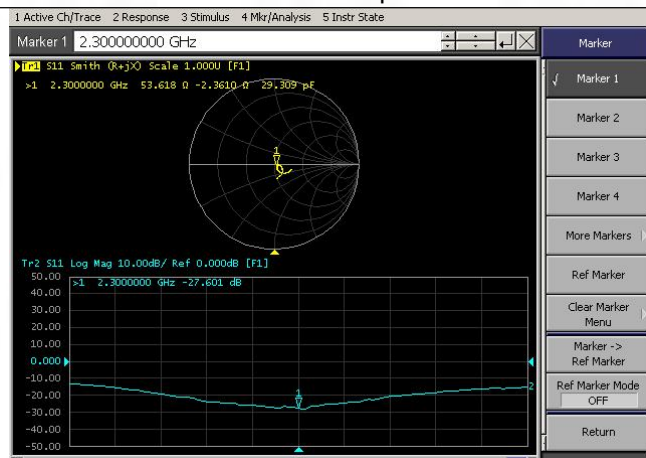
data comparison



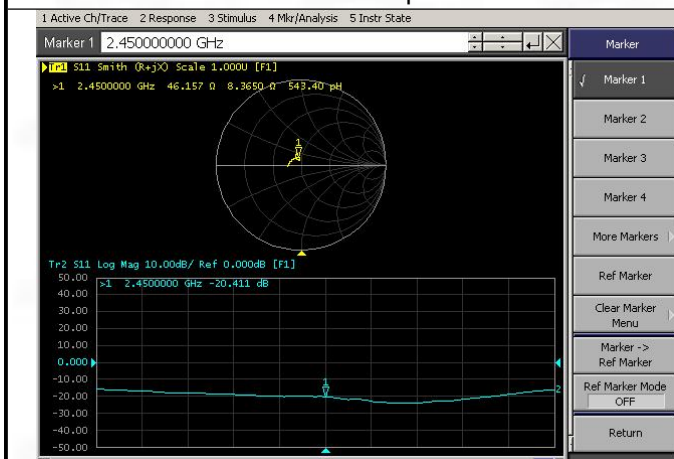
2100MHz Dipole



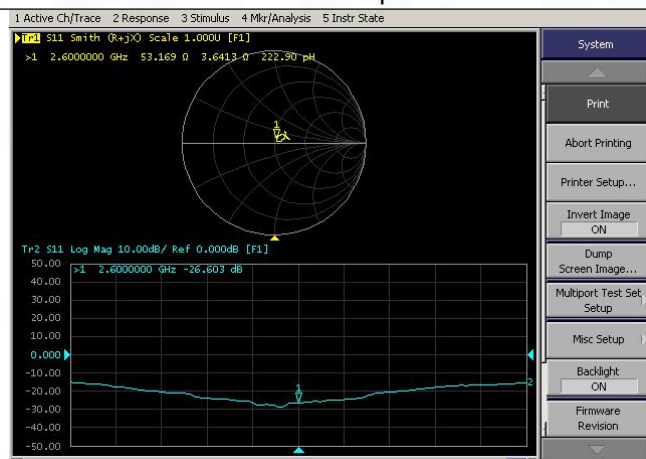
2300MHz Dipole



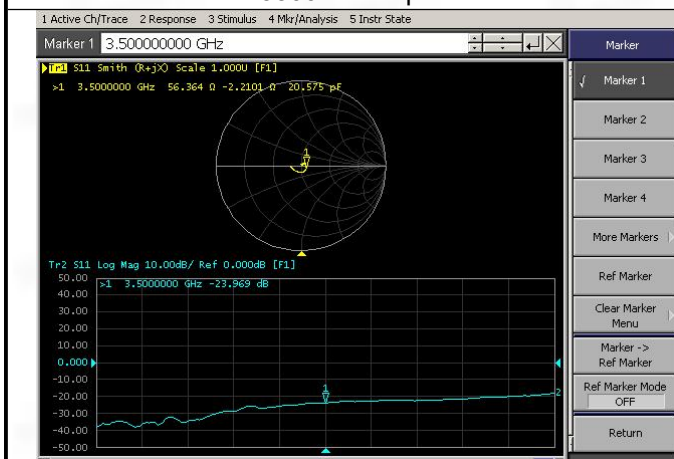
2450MHz Dipole



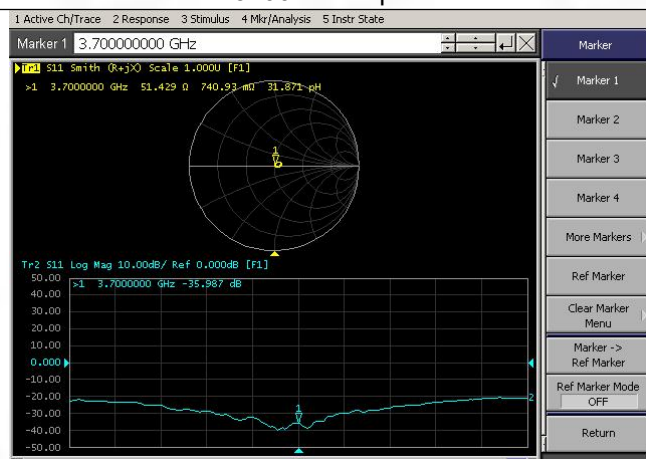
2600MHz Dipole



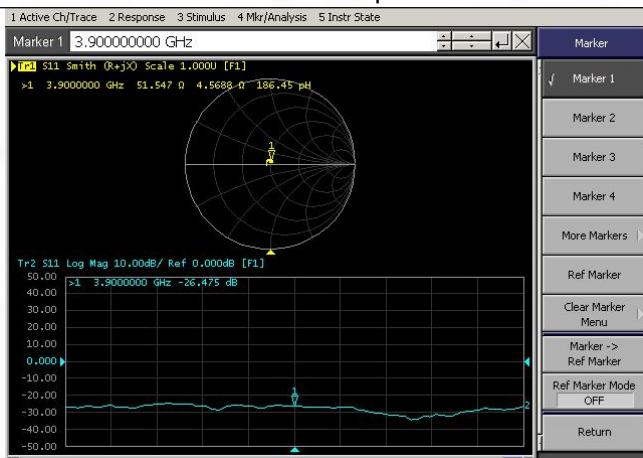
3500MHz Dipole



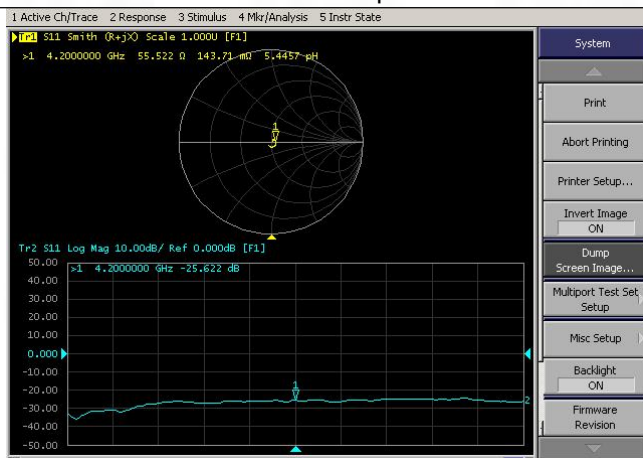
3700MHz Dipole



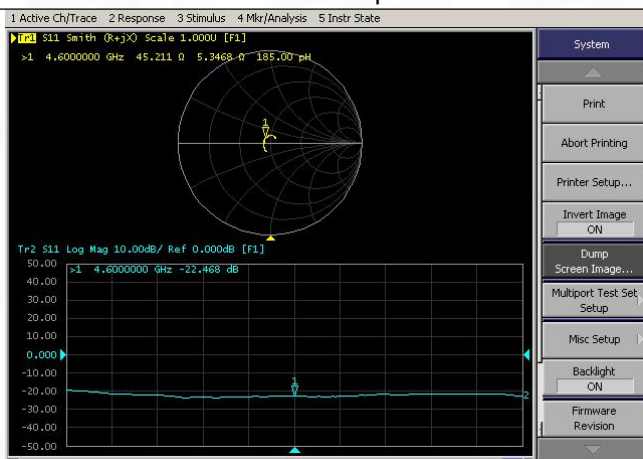
3900MHz Dipole



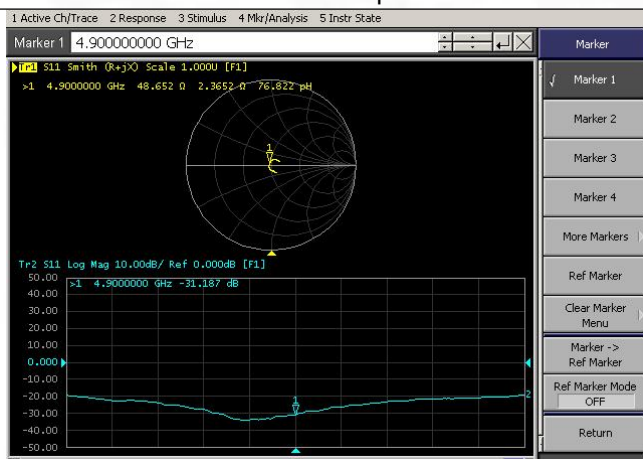
4200MHz Dipole



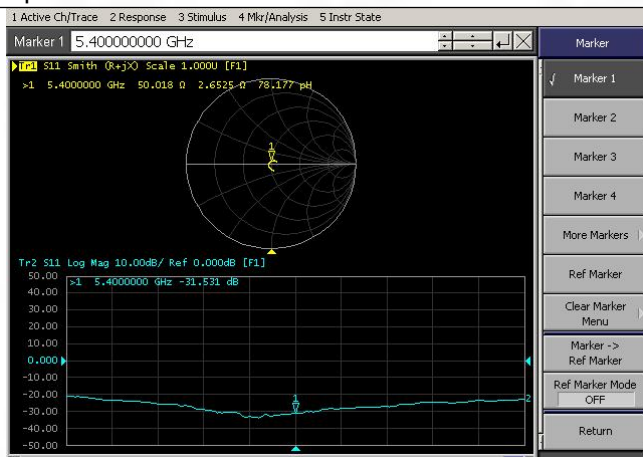
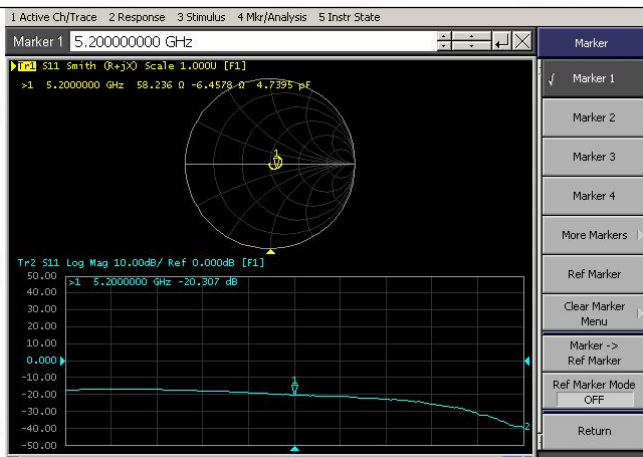
4600MHz Dipole

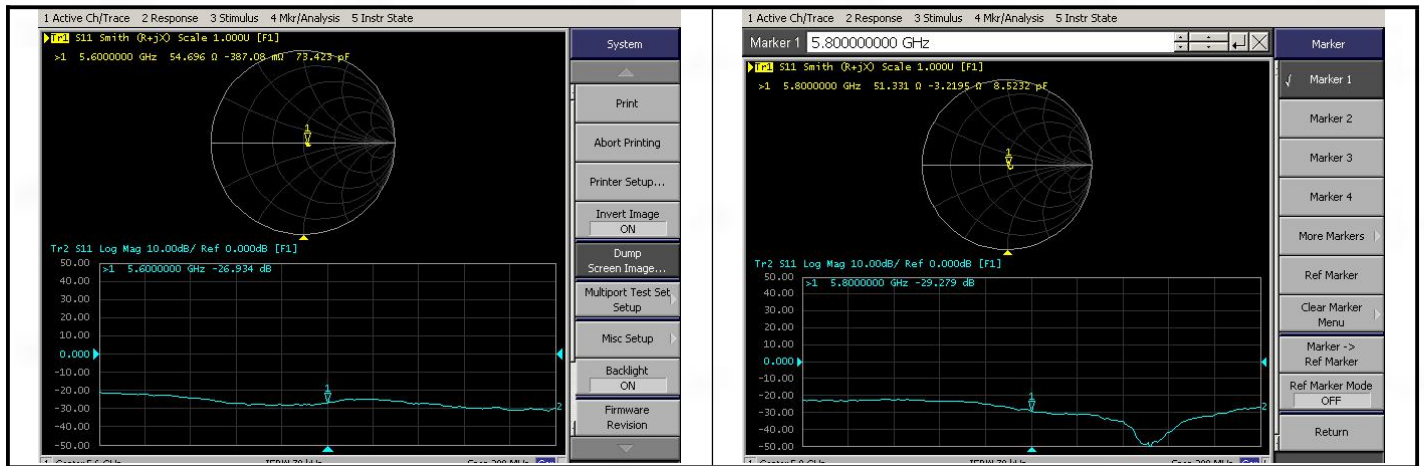


4900MHz Dipole



5000MHz Dipole





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--END OF REPORT--