



SAR Dipole Performance Measurement Report

EUT Type: SAR Validation Dipole and Waveguide
Model Name: DIP2G450, WGA32
Brand Name: SATIMO
Test Conclusion: Pass
Test Date: 08 July 2022
Date of Issue: 11 July 2022

Testing Engineer : Shi fan-long
((Shifan. Long)

Technical Manager : Sean she
(Sean she)

Authorized Signatory : Bovey Yang
(Bovey Yang)



Any reproduction of this document must be done in full. No single part of this document may be reproduced without permission from STS, All Test Data Presented in this report is only applicable to presented Test sample.



1. Equipment List

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Calibrated Until
PC	Acer	N/A	N/A	N/A	N/A
E-Field Probe	MVG	SSE2	SN 07/21 EPGO352	2022.02.28	2023.02.27
Dielectric Probe Kit	MVG	SCLMP	SN 32/14 OCPG67	2021.11.23	2022.11.22
Phantom1	MVG	SAM	SN 32/14 SAM115	N/A	N/A
Phantom3	MVG	SAM	SN 21/21 ELLI48	N/A	N/A
Attenuator	Agilent	99899	DC-18GHz	N/A	N/A
Directional coupler	Narda	4226-20	3305	N/A	N/A
Network Analyzer	Agilent	8753ES	US38432810	2021.09.29	2022.09.28
Multi Meter	Keithley	Multi Meter 2000	4050073	2021.10.08	2022.10.07
Signal Generator	Agilent	N5182A	MY50140530	2021.09.30	2022.09.29
Power Amplifier	DESAY	ZHL-42W	9638	2021.10.09	2022.10.08
Power Meter	R&S	NRP	100510	2021.09.29	2022.09.28
Power Sensor	R&S	NRP-Z11	101919	2021.09.29	2022.09.28
Temperature hygrometer	SuWei	SW-108	N/A	2021.10.09	2022.10.08
Thermograph	Elitech	RC-4	S/N EF7176501537	2021.10.09	2022.10.08



2. <Justification of the extended calibration>

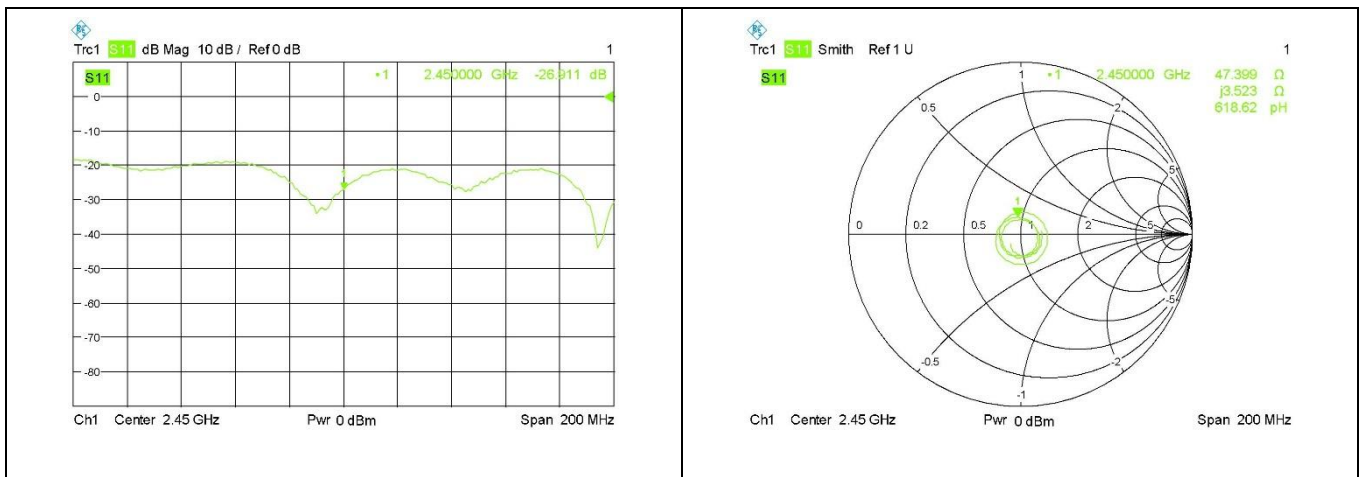
Referring to KDB 865664 D01, if dipoles are verified in return loss <-20dB, (within 20% of prior calibration), and in impedance (within 5 ohm of prior calibration), the annual calibration is not necessary and the calibration interval can be extended.

Head 2450 MHz				
Date of Measurement	Return Loss (dB)	Delta (%)	Impedance	Delta(ohm)
2020.07.14	-26.03	-	46.3	-
2021.07.11	-26.42	1.50	47.25	0.95
2022.07.08	-26.91	3.38	47.40	1.1

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

<Dipole Verification Data>

Head 2450 MHz



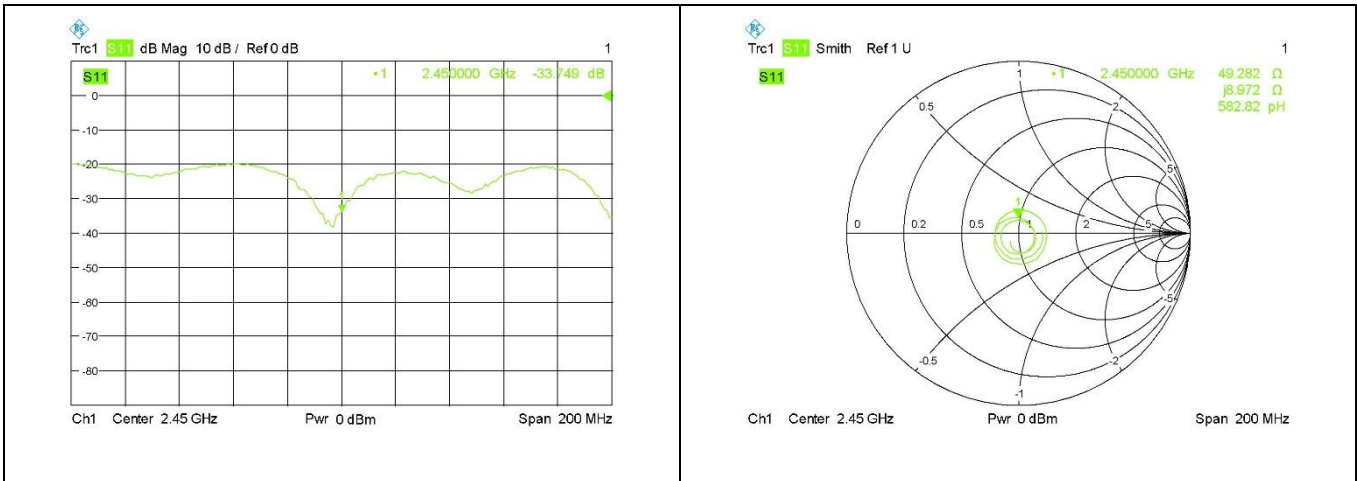


Body 2450 MHz				
Date of Measurement	Return Loss (dB)	Delta (%)	Impedance	Delta(ohm)
2020.07.14	-32.76	-	48.7	-
2021.07.11	-32.55	-0.64	47.25	-1.45
2022.07.08	-33.75	3.02	49.28	0.58

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

<Dipole Verification Data>

Body 2450 MHz



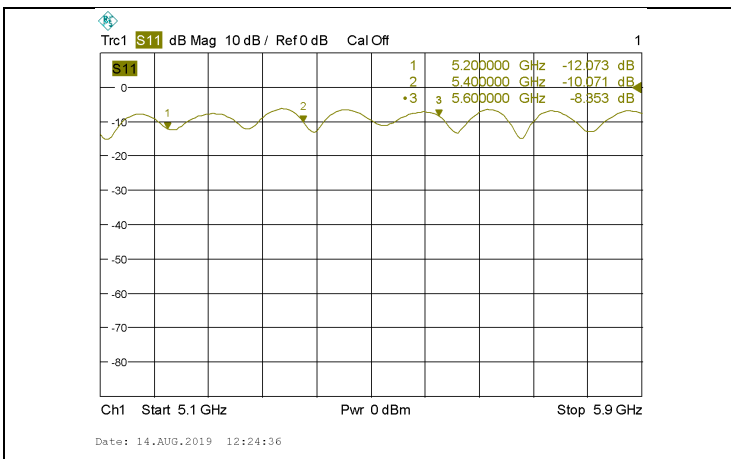


Head 5000 MHz				
Date of Measurement	Return Loss (dB)	Delta (%)	Impedance	Delta(ohm)
2020.07.14	< -8.23	-	-	-
2021.07.11	-13.17	-	-	-
2022.07.08	-12.07	-	-	-

The return loss is <-8dB, within 20% of prior calibration; Therefore the verification result should support extended calibration.

<Dipole Verification Data>

Head 5000MHz





Body 5000 MHz				
Date of Measurement	Return Loss (dB)	Delta (%)	Impedance	Delta(ohm)
2020.07.14	< -13.96	-	-	-
2021.07.11	-14.37	-	-	-
2022.07.08	-15.24	-	-	-

The return loss is <-8dB, within 20% of prior calibration; Therefore the verification result should support extended calibration.

<Dipole Verification Data>

Body 5000MHz

