SAR
Dipole Performance Measurement Report

EUT Type:	SAR Validation Dipole and Waveguide
Model Name:	DIP0G750, DIP0G835, DIP1G900, DIP2G450
Brand Name:	SATIMO
Test Conclusion:	Pass
Test Date:	01 July 2024
Date of Issue:	01 July 2024

Testing Engineer : Xin Liu

(Xin.Liu)

Technical Manager : Shi fan. long

(Shifan. Long)

Authorized Signatory : Bovey Yang

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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	2024.02.14	2025.02.13
Dielectric Probe Kit	MVG	SCLMP	SN 32/14 OCPG67	2023.10.25	2024.10.24
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	E5071C	MY46520378	2023-09-26	2024-09-25
Multi Meter	Keithley	Multi Meter 2000	4050073	2023-09-26	2024-09-25
Signal Generator	Agilent	ZHL-42W	9638	2023.10.07	2024.10.06
Power Amplifier	DESAY	NRP	100510	2023-09-26	2024-09-25
Power Meter	R&S	NRP-Z11	101919	2023-09-26	2024-09-25
Power Sensor	R&S	U2021XA	MY56280002	2023-09-26	2024-09-25
Temperature hygrometer	SuWei	SW-108	N/A	2023.09.28	2024.09.27
Thermograph	Elitech	RC-4	S/N EF7176501537	2023.10.12	2024.10.11

2. <Justification of the extended calibration>

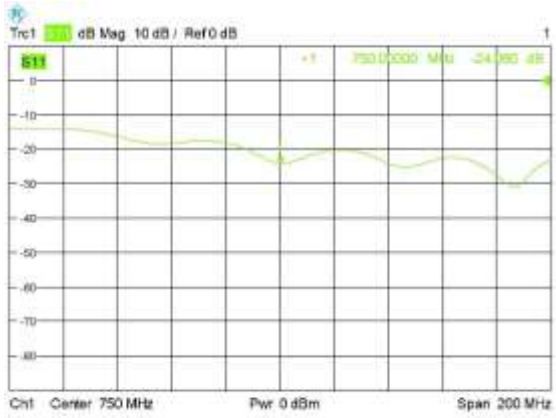
Referring to KDB 865664 D01, if dipoles are verified in return loss<-20dB, (within 20% of prior calibration), and in impedance (within 5 ohm of prior calibration), the annual calibration is not necessary and the calibration interval can be extended.

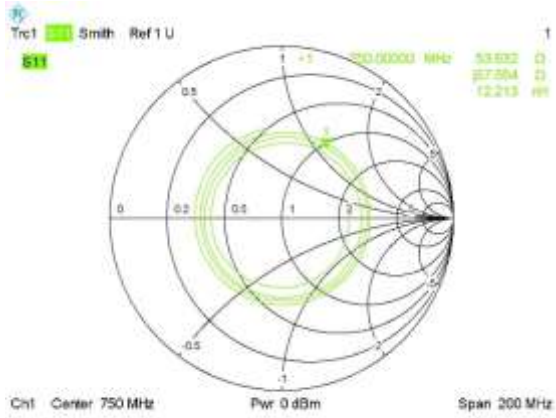
Head 750 MHz				
Date of Measurement	Return Loss (dB)	Delta (%)	Impedance	Delta(ohm)
2023.07.04	-25.47	-	55.2	-
2024.07.01	-24.06	-5.54	53.63	-1.57

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 750 MHz



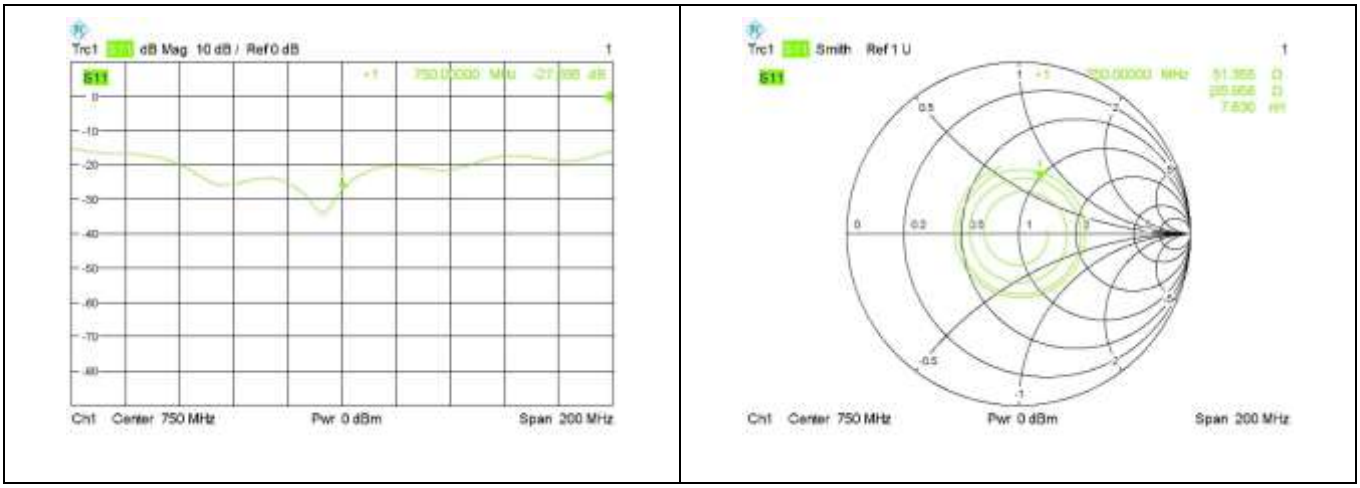


Body 750 MHz				
Date of Measurement	Return Loss (dB)	Delta (%)	Impedance	Delta(ohm)
2023.07.04	-27.25	-	51.4	-
2024.07.01	-27.27	0.07	51.36	-0.04

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 750 MHz

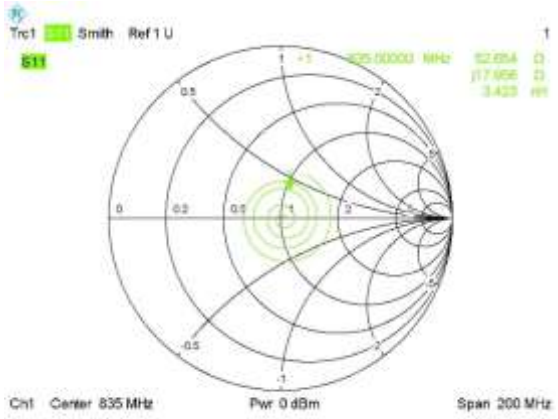


Head 835 MHz				
Date of Measurement	Return Loss (dB)	Delta (%)	Impedance	Delta(ohm)
2023.07.04	-28.13	-	51.4	-
2024.07.01	-28.83	2.49	52.65	1.25

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 835MHz

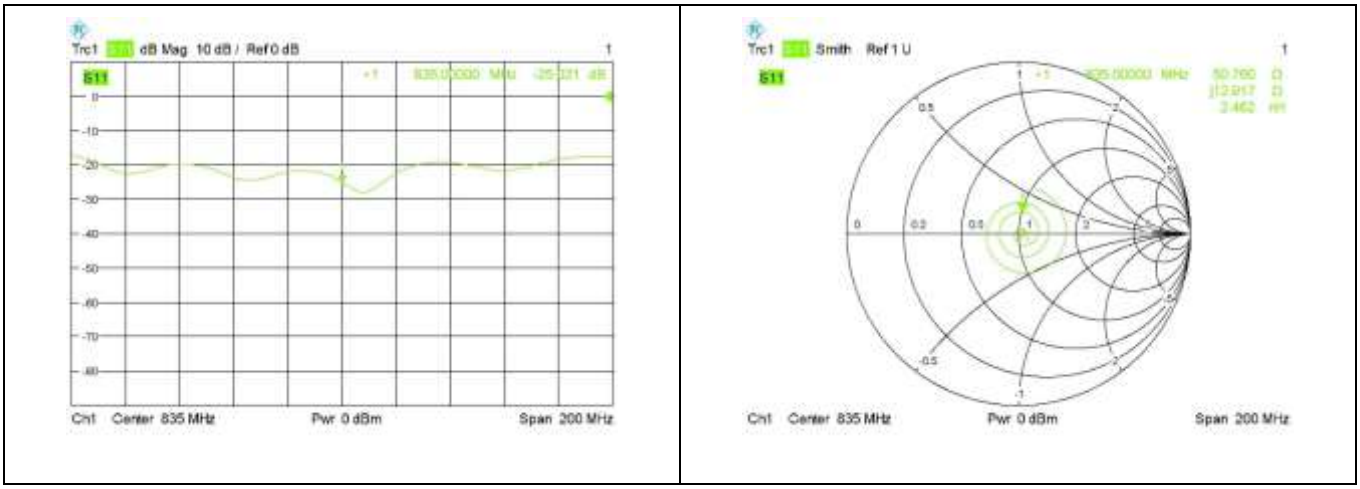


Body 835 MHz				
Date of Measurement	Return Loss (dB)	Delta (%)	Impedance	Delta(ohm)
2023.07.04	-23.88	-	49.2	-
2024.07.01	-25.02	4.77	50.76	1.56

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 835MHz

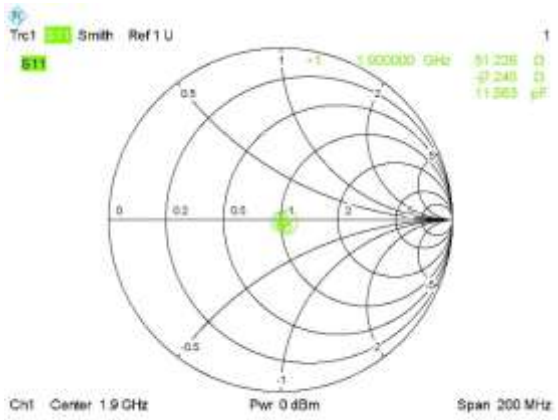


Head 2000 MHz				
Date of Measurement	Return Loss (dB)	Delta (%)	Impedance	Delta(ohm)
2023.07.04	-23.66	-	51.4	-
2024.07.01	-23.89	0.97	51.23	-0.17

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 1900 MHz

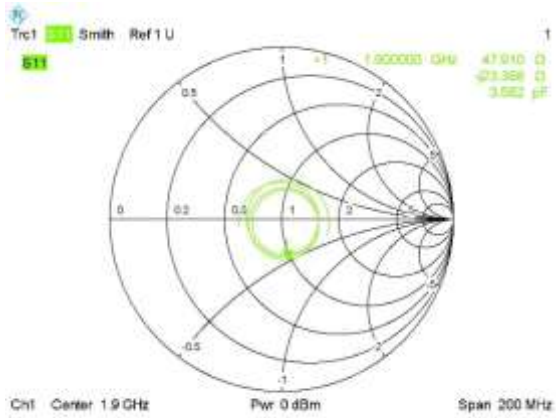


Body 2000 MHz				
Date of Measurement	Return Loss (dB)	Delta (%)	Impedance	Delta(ohm)
2023.07.04	-20.20	-	48.7	-
2024.07.01	-21.93	8.56	47.91	-0.79

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 1900 MHz

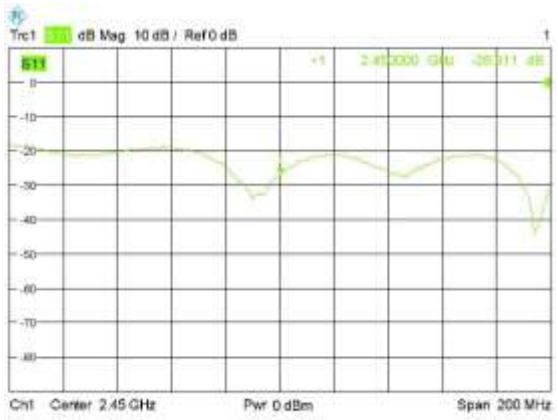


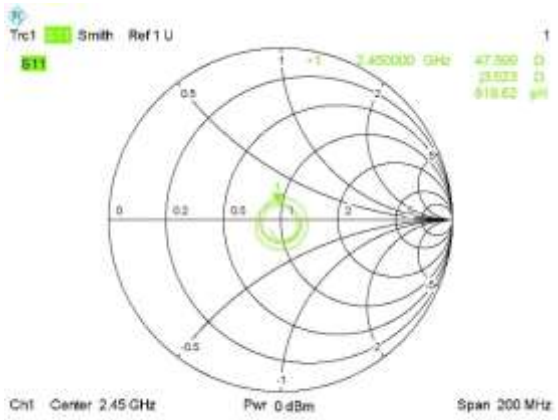
Head 2450 MHz				
Date of Measurement	Return Loss (dB)	Delta (%)	Impedance	Delta(ohm)
2023.07.04	-26.03	-	46.3	-
2024.07.01	-26.91	3.38	47.40	1.1

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)
2023.07.04	-32.76	-	48.7	-
2024.07.01	-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