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## SAR Dipole Performance Measurement Report

**EUT Type:** SAR Validation Dipole and Waveguide

**Model Name:** DIP0G750, DIP1G800, DIP1G900

**Brand Name:** SATIMO

**Test Conclusion:** Pass

**Test Date:** 08 July 2022

**Date of Issue:** 11 July 2022

Testing Engineer :

Handwritten signature of Shifan Long in blue ink.

((Shifan. Long))

Technical Manager :

Handwritten signature of Sean She in blue ink.

(Sean she)

Authorized Signatory :

Handwritten signature of Bovey Yang in blue ink.

(Bovey Yang)



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Shenzhen STS Test Services Co., Ltd.

## 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	2022.09.28	2023.09.27
Multi Meter	Keithley	Multi Meter 2000	4050073	2022.09.29	2023.09.28
Signal Generator	Agilent	N5182A	MY50140530	2022.09.28	2023.09.27
Power Amplifier	DESAY	ZHL-42W	9638	2022.10.08	2023.10.07
Power Meter	R&S	NRP	100510	2022.09.28	2023.09.27
Power Sensor	R&S	NRP-Z11	101919	2022.09.28	2023.09.27
Temperature hygrometer	SuWei	SW-108	N/A	2022.09.30	2023.09.29
Thermograph	Elitech	RC-4	S/N EF7176501537	2022.09.30	2023.09.29



## 2. <Justification of the extended calibration>

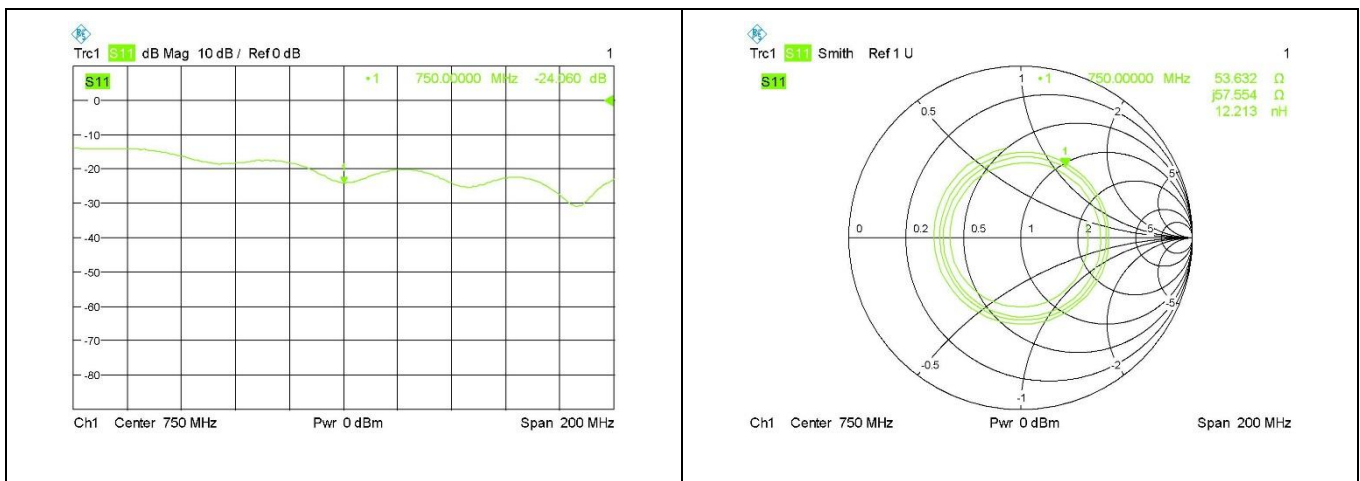
Referring to KDB 865664 D01, if dipoles are verified in return loss < -20dB, (within 20% of prior calibration), and in impedance (within 5 ohm of prior calibration), the annual calibration is not necessary and the calibration interval can be extended.

Head 750 MHz				
Date of Measurement	Return Loss (dB)	Delta (%)	Impedance	Delta(ohm)
2020.07.14	-25.47	-	55.2	-
2021.07.11	-25.98	2.00	54.86	-0.34
2022.07.08	-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



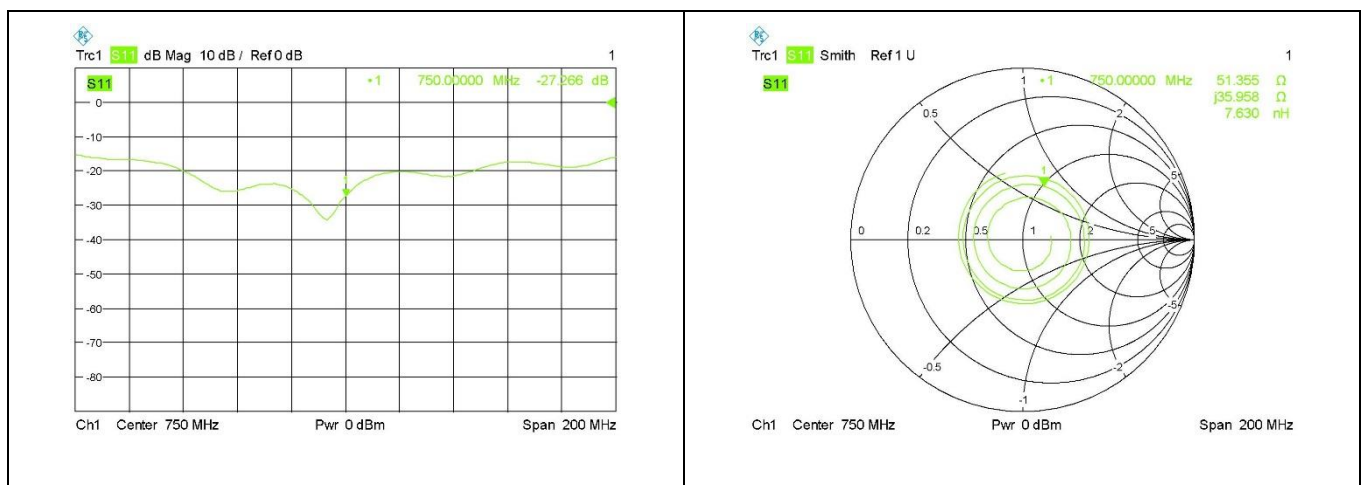


Body 750 MHz				
Date of Measurement	Return Loss (dB)	Delta (%)	Impedance	Delta(ohm)
2020.07.14	-27.25	-	51.4	-
2021.07.11	-26.17	-3.96	51.56	0.16
2022.07.08	-27.27	0.07	51.36	-0.04

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



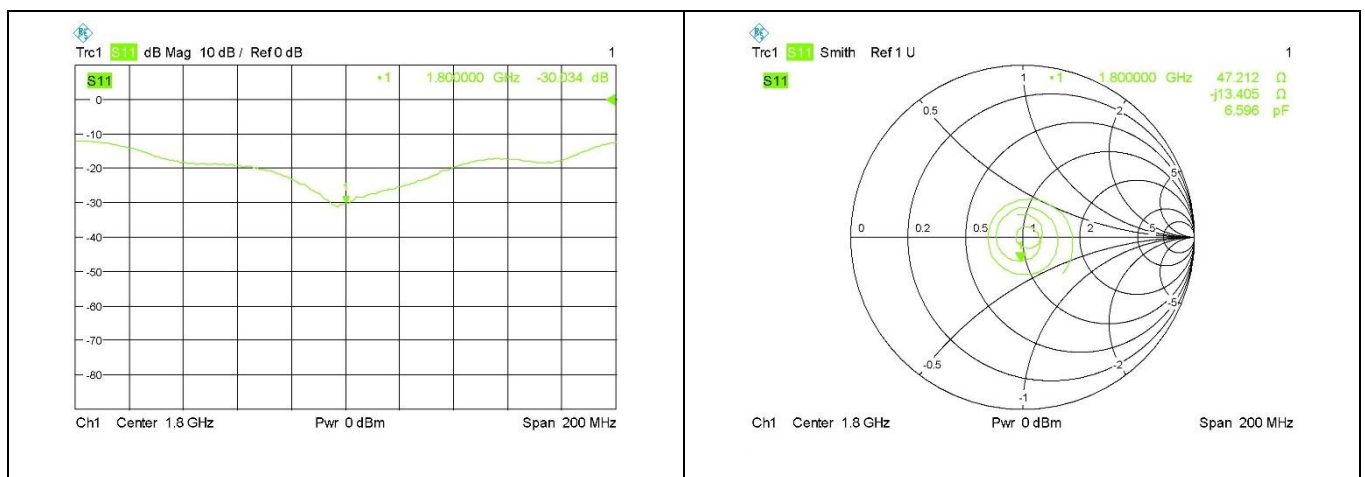


Head 1800 MHz				
Date of Measurement	Return Loss (dB)	Delta (%)	Impedance	Delta(ohm)
2020.07.14	-29.49	-	46.9	-
2021.07.11	-29.08	-1.39	46.36	-0.54
2022.07.08	-30.03	1.83	47.21	0.31

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 1800 MHz



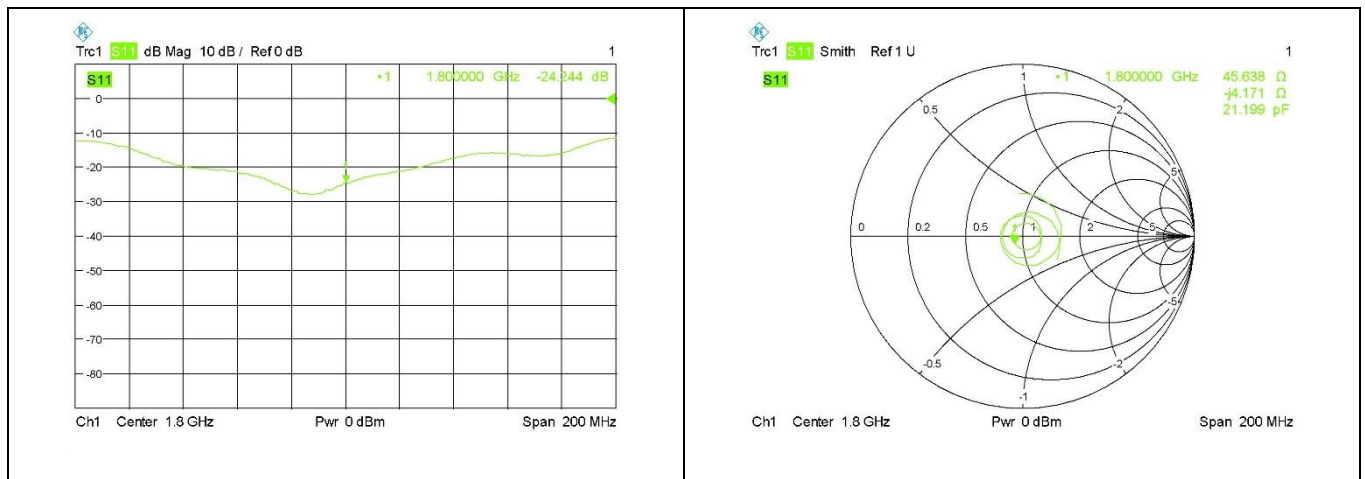


Body 1800 MHz				
Date of Measurement	Return Loss (dB)	Delta (%)	Impedance	Delta(ohm)
2020.07.14	-24.55	-	44.7	-
2021.07.11	-25.54	4.03	45.55	0.85
2022.07.08	-24.24	-1.26	45.64	0.94

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 1800 MHz



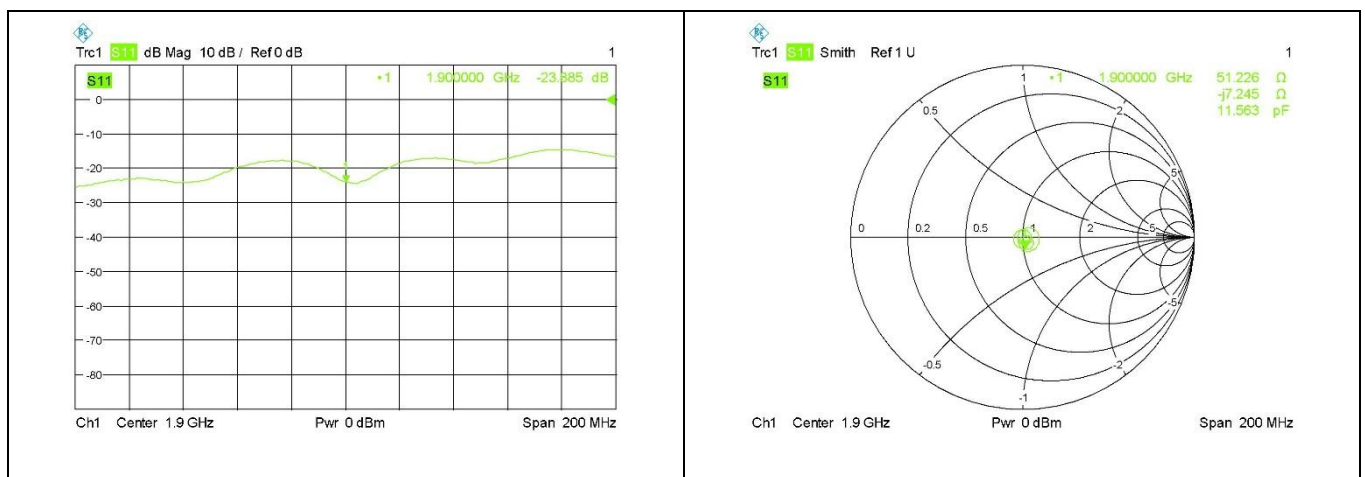


Head 1900 MHz				
Date of Measurement	Return Loss (dB)	Delta (%)	Impedance	Delta(ohm)
2020.07.14	-23.66	-	51.4	-
2021.07.11	-23.62	-0.17	50.73	-0.67
2022.07.08	-23.89	0.97	51.23	-0.17

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 1900 MHz				
Date of Measurement	Return Loss (dB)	Delta (%)	Impedance	Delta(ohm)
2020.07.14	-20.20	-	48.7	-
2021.07.11	-21.12	4.55	47.02	-1.68
2022.07.08	-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

