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## SAR Dipole Performance Measurement Report

**EUT Type:** SAR Validation Dipole and Waveguide  
**Model Name:** DIP0G750, DIP0G835, DIP1G800, DIP1G900, D  
DIP2G600,  
**Brand Name:** SATIMO  
**Test Conclusion:** Pass  
**Test Date:** 01 Jul. 2024 & 02 Jul. 2025  
**Date of Issue:** 02 Jul. 2025

Testing Engineer :

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(Xin.Liu)

Technical Manager :

Shi fan-long

(Shifan. Long)

Authorized Signatory :

Bovey Yang

(Bovey Yang)



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| 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 08/21<br>EPGO352 | 2024.09.18       | 2025.09.17       |
| Dielectric Probe Kit      | MVG          | SCLMP               | SN 32/14<br>OCPG67  | 2024.09.18       | 2025.09.17       |
| Phantom1                  | MVG          | SAM                 | SN 32/14<br>SAM115  | N/A              | N/A              |
| Phantom2                  | MVG          | SAM                 | SN 32/14<br>SAM116  | 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          | 2024-09-25       | 2025-09-26       |
| Multi Meter               | Keithley     | Multi Meter<br>2000 | 4050073             | 2024-09-25       | 2025-09-26       |
| Signal Generator          | Agilent      | N5182A              | MY50140530          | 2024-09-25       | 2025-09-26       |
| Power Amplifier           | DESAY        | ZHL-42W             | 9638                | 2024-09-25       | 2025-09-26       |
| Power Meter               | R&S          | NRP                 | 100510              | 2024-09-25       | 2025-09-26       |
| Power Sensor              | R&S          | NRP-Z11             | 101919              | 2024-09-25       | 2025-09-26       |
| Power Sensor              | Keysight     | U2021XA             | MY56280002          | 2024-09-25       | 2025-09-26       |
| Temperature<br>hygrometer | SuWei        | SW-108              | N/A                 | 2024.10.15       | 2025.10.14       |
| Thermograph               | Elitech      | RC-4                | S/N<br>EF7176501537 | 2024.10.15       | 2025.10.14       |



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| Kind of Equipment               | Manufacturer | Type No.          | Serial No.       | Last Calibration | Calibrated Until |
|---------------------------------|--------------|-------------------|------------------|------------------|------------------|
| SAR Test System                 | SATIMO       | N/A               | V5.3.15.11       | N/A              | N/A              |
| Dielectric Probe Kit            | MVG          | SCLMP             | SN 32/14 OCPG67  | 2025.09.15       | 2026.09.14       |
| Antenna                         | MVG          | ANTA3             | SN 07/13 ZNTA52  | N/A              | N/A              |
| Phantom1                        | MVG          | SAM               | SN 32/14 SAM115  | N/A              | N/A              |
| Phantom3                        | MVG          | SAM               | SN 21/21 ELLI48  | N/A              | N/A              |
| Phone holder                    | MVG          | N/A               | SN 32/14 MSH97   | N/A              | N/A              |
| Laptop holder                   | MVG          | N/A               | SN 32/14 LSH29   | N/A              | N/A              |
| Attenuator                      | Agilent      | HXT-10-8-SMA      | 240327017        | 2025-02-22       | 2026-02-21       |
| Directional coupler             | Xi'an Xingbo | XBOH-OA08-20dB    | 211123-4-3       | 2025-02-22       | 2026-02-21       |
| Network Analyzer                | Agilent      | E5071C            | MY46520378       | 2025-09-26       | 2026-09-24       |
| Multi Meter                     | Keithley     | Multi Meter 2000  | 4050073          | 2025-09-22       | 2026-09-21       |
| Signal Generator                | Agilent      | N5182A            | MY50140530       | 2025-09-26       | 2026-09-25       |
| Wireless Communication Test Set | Agilent      | 8960-E5515C       | MY48360751       | 2025-02-22       | 2026-02-21       |
| Wireless Communication Test Set | R&S          | CMW500            | 156324           | 2025-09-25       | 2026-09-24       |
| Power Amplifier                 | DESAY        | WCS-DLNA50M8G50G1 | CSKJLNA231227A   | 2025-09-29       | 2026-09-28       |
| Power Meter                     | R&S          | NRP               | 100510           | 2025-09-25       | 2026-09-24       |
| Power Sensor                    | R&S          | NRP-Z11           | 101919           | 2025-09-25       | 2026-09-24       |
| Power Sensor                    | Keysight     | U2021XA           | MY56280002       | 2025-09-25       | 2026-09-24       |
| Temperature hygrometer          | TOPRIE       | TP502V4-P         | 6700000124198    | 2025.10.09       | 2026.10.08       |
| Thermograph                     | Elitech      | RC-4              | S/N EF7176501537 | 2025.10.17       | 2026.10.16       |



## 2. <Justification of the extended calibration>

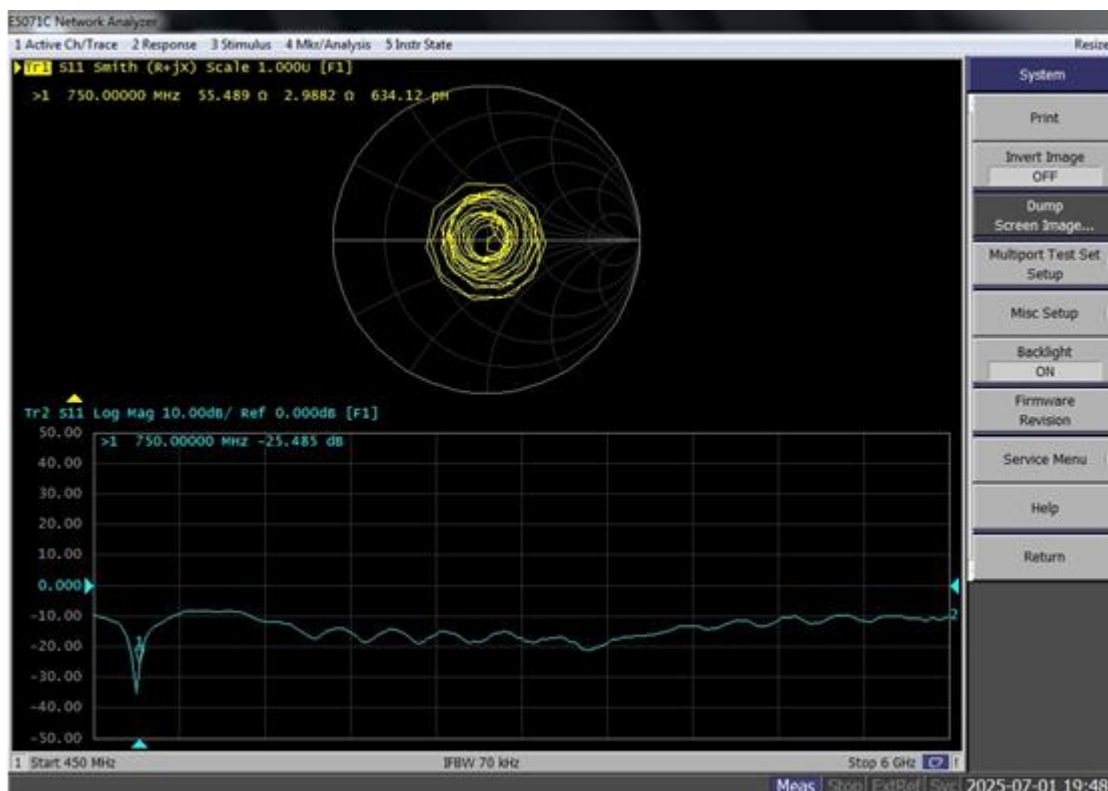
Referring to KDB 865664 D01, if dipoles are verified in return loss  $< -20\text{dB}$ , (within 20% of prior calibration), and in impedance (within 5 ohm of prior calibration), the annual calibration is not necessary and the calibration interval can be extended.

| Head 750 MHz        |                  |           |           |            |
|---------------------|------------------|-----------|-----------|------------|
| Date of Measurement | Return Loss (dB) | Delta (%) | Impedance | Delta(ohm) |
| 2023.07.04          | -25.47           | -         | 55.2      | -          |
| 2024.07.01          | -25.98           | 2.00      | 54.86     | -0.34      |
| 2025.07.01          | -25.49           | 0.08      | 55.49     | 0.029      |

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.

### <Dipole Verification Data>

Head 750 MHz





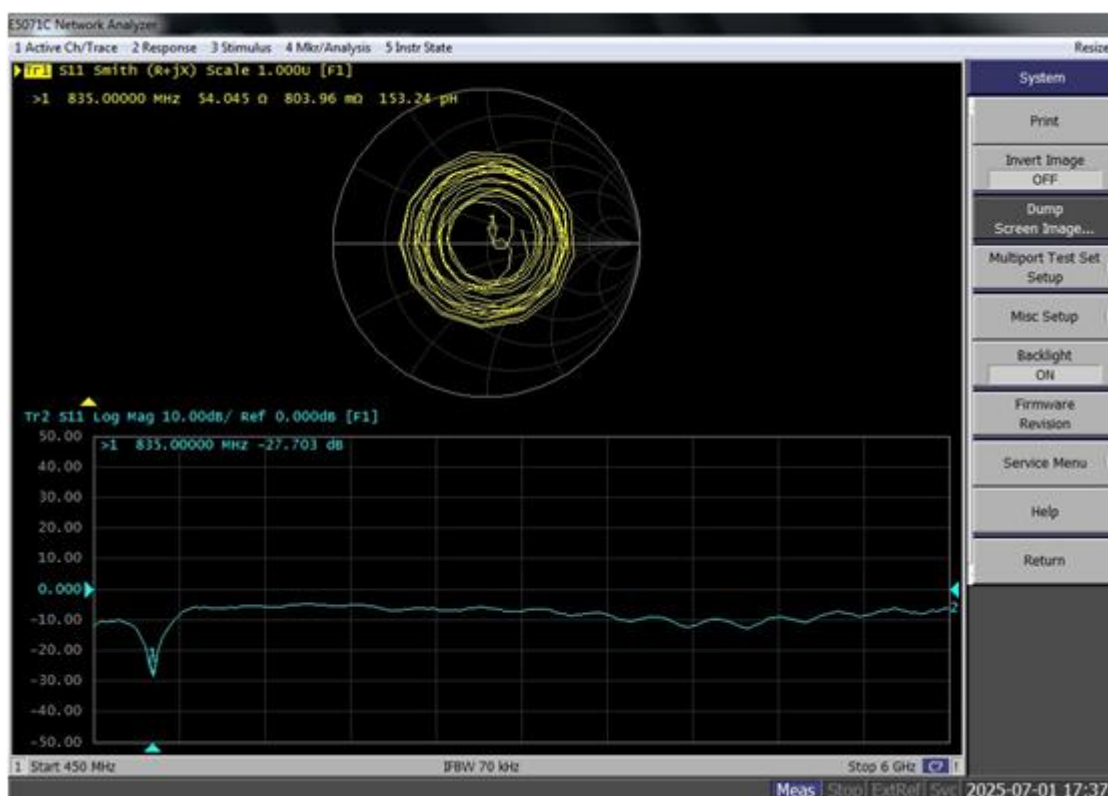
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| Head 835 MHz        |                  |           |           |            |
|---------------------|------------------|-----------|-----------|------------|
| Date of Measurement | Return Loss (dB) | Delta (%) | Impedance | Delta(ohm) |
| 2023.07.04          | -28.13           | -         | 51.4      | -          |
| 2024.07.01          | -28.43           | 1.07      | 52.62     | 1.22       |
| 2025.07.01          | -27.70           | -1.53     | 54.05     | 2.65       |

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



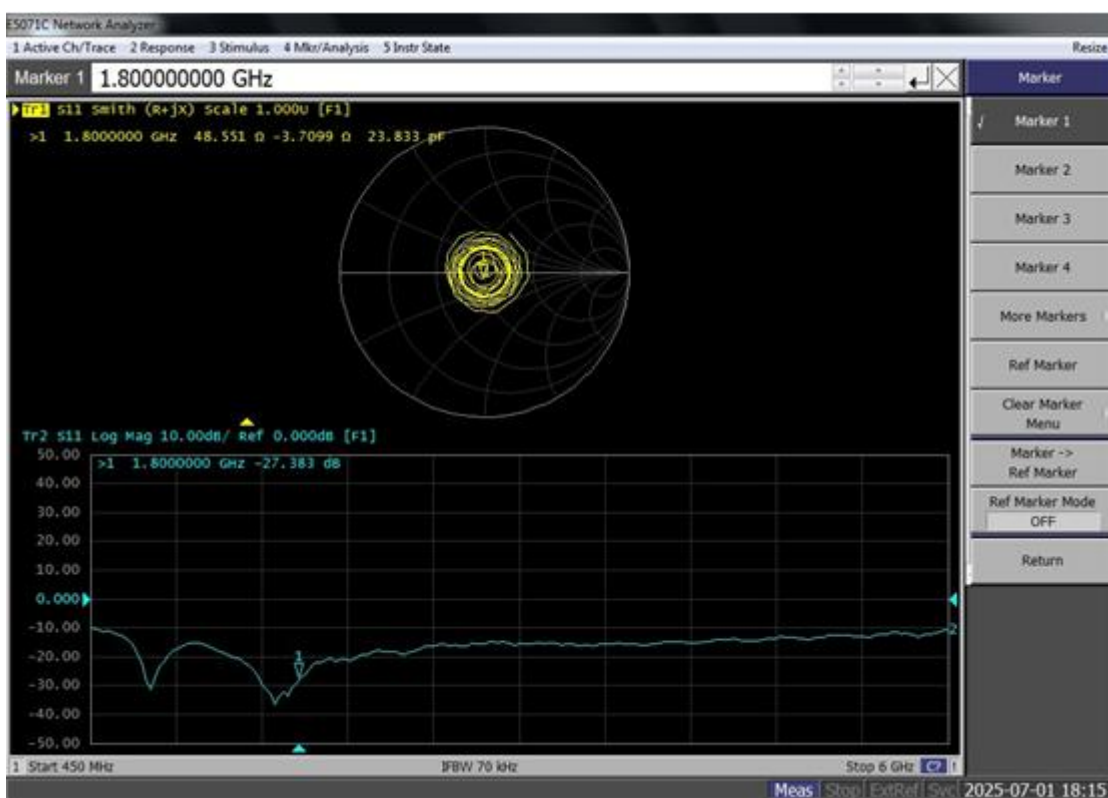


| Head 1800 MHz       |                  |           |           |            |
|---------------------|------------------|-----------|-----------|------------|
| Date of Measurement | Return Loss (dB) | Delta (%) | Impedance | Delta(ohm) |
| 2023.12.20          | -27.38           | /         | 50.2      | /          |
| 2024.12.11          | -27.04           | -1.23     | 48.48     | -1.72      |
| 2025-07-01          | -27.38           | 0         | 48.55     | -1.65      |

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





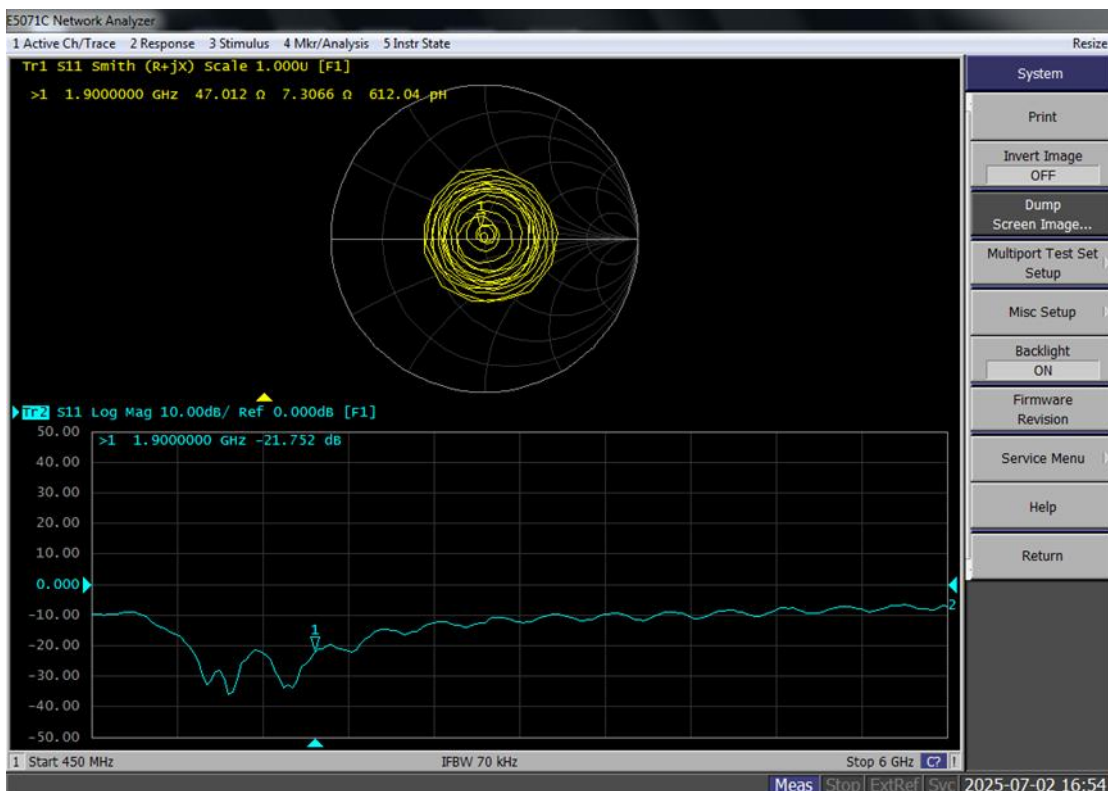
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| Head 1900 MHz       |                  |           |           |            |
|---------------------|------------------|-----------|-----------|------------|
| Date of Measurement | Return Loss (dB) | Delta (%) | Impedance | Delta(ohm) |
| 2023.09-14          | -23.66           | -         | 51.4      | -          |
| 2024.07.01          | -23.62           | -0.17     | 50.73     | -0.67      |
| 2025.07.02          | -21.75           | -8.07     | 47.01     | -4.39      |

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





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| Head 2600 MHz       |                  |           |           |            |
|---------------------|------------------|-----------|-----------|------------|
| Date of Measurement | Return Loss (dB) | Delta (%) | Impedance | Delta(ohm) |
| 2023.07.04          | -34.32           | -         | 50.3      | -          |
| 2024.07.01          | -33.58           | -2.16     | 49.61     | -0.69      |
| 2025.07.03          | -32.91           | -4.11     | 49.19     | -1.11      |

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 2600 MHz

