



SAR  
Dipole Performance Measurement  
Report

EUT Type: SAR Validation Dipole and Waveguide

Model Name: DIP 2G450-335

Brand Name: SATIMO

Test Conclusion: Pass

Test Date: 16 Aug. 2018

Date of Issue: 17 Aug. 2018

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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          | SSE5                | SN 14/16 EP309     | 2017.12.15       | 2018.12.14       |
| Dielectric Probe Kit | MVG          | SCLMP               | SN 32/14<br>OCPG67 | 2017.12.03       | 2018.12.02       |
| 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      | 8753ES              | US38432810         | 2018.03.08       | 2019.03.07       |
| Multi Meter          | Keithley     | Multi Meter<br>2000 | 4050073            | 2017.10.15       | 2018.10.14       |
| Signal Generator     | Agilent      | N5182A              | MY50140530         | 2017.10.15       | 2018.10.14       |
| Power Amplifier      | DESAY        | ZHL-42W             | 9638               | 2017.10.15       | 2018.10.14       |
| Power Meter          | R&S          | NRP                 | 100510             | 2017.10.15       | 2018.10.14       |
| Power Sensor         | R&S          | NRP-Z11             | 101919             | 2017.10.15       | 2018.10.14       |
| Power Sensor         | Agilent      | E9301A              | MY41497725         | 2017.10.15       | 2018.10.14       |
| hygrothermograph     | MiEO         | HH660               | N/A                | 2017.10.18       | 2018.10.17       |



## 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.

| Body 2450 MHz       |                  |           |           |            |
|---------------------|------------------|-----------|-----------|------------|
| Date of Measurement | Return Loss (dB) | Delta (%) | Impedance | Delta(ohm) |
| 2017.08.15          | -32.75           | -         | 48.8      | -          |
| 2018.08.16          | -31.06           | -5.16     | 45.61     | -3.19      |

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

