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## SAR Dipole Performance Measurement Report

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

**Model Name:** DIP 2G450-335, SWG5500

**Brand Name:** MVG

**Test Conclusion:** Pass

**Test Date:** 16 Aug. 2019

**Date of Issue:** 17 Aug. 2019

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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	2018.12.13	2019.12.12
Dielectric Probe Kit	MVG	SCLMP	SN 32/14 OCPG67	2018.12.01	2019.11.30
Phantom1	MVG	SAM	SN 32/14 SAM115	N/A	N/A
Phantom2	MVG	SAM	SN 32/14 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	2019.03.02	2020.03.01
Multi Meter	Keithley	Multi Meter 2000	4050073	2018.10.13	2019.10.12
Signal Generator	Agilent	N5182A	MY50140530	2018.10.16	2019.10.15
Power Amplifier	DESAY	ZHL-42W	9638	2018.10.13	2019.10.12
Power Meter	R&S	NRP	100510	2018.10.26	2019.10.25
Power Sensor	R&S	NRP-Z11	101919	2018.10.13	2019.10.12
Power Sensor	Agilent	E9301A	MY41497725	2018.10.13	2019.10.12
hygrothermograph	MiEO	HH660	N/A	2018.10.15	2019.10.14



## 2.<Justification of the extended calibration>

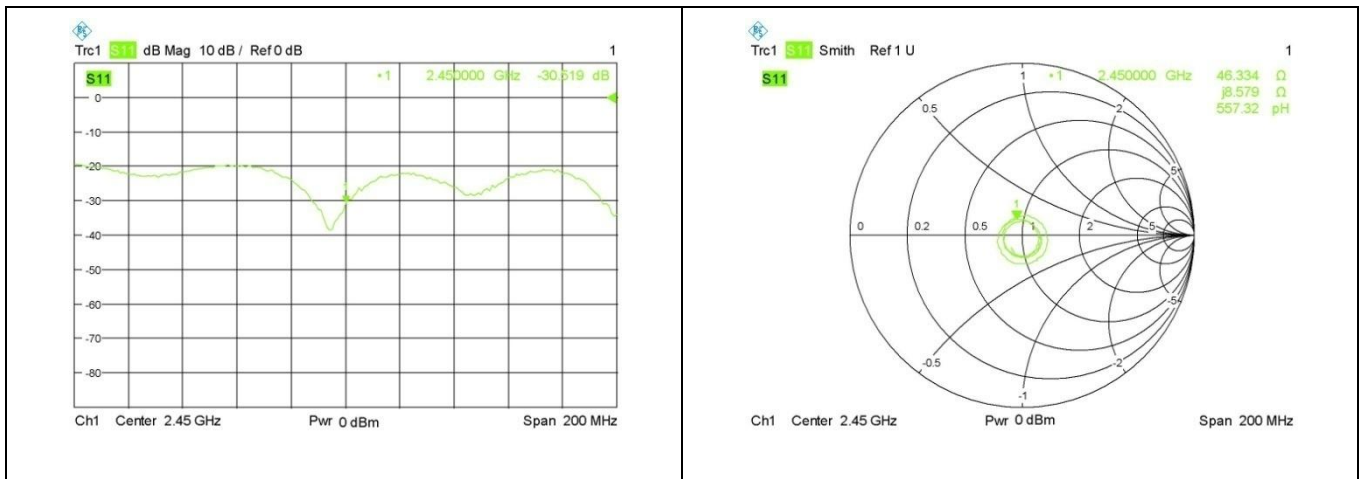
Referring to KDB 865664 D01, if dipoles are verified in return loss<-20dB, (within 20% of prior calibration),and in impedance (within 5 ohm of prior calibration), the annual calibration is not necessary and the calibration interval can be extended.

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
2019.08.16	-30.52	-1.74	46.33	0.72

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





Body 5000 MHz				
Date of Measurement	Return Loss (dB)	Delta (%)	Impedance	Delta(ohm)
2017.08.15	< -13.94	-	-	-
2018.08.16	-14.41	-	-	-
2019.08.16	-14.61	-	-	-

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

<Dipole Verification Data>

Body 5000MHz

