

## I6 Dipole 5G

The information and documentation below are provided to qualify the extended 3-year calibration interval of dipole.

### I6.1 List of Equipment

No.	Name	Type	Serial Number
01	Network analyzer	E5071C	MY46110673
02	Power meter	NRVD	102083
03	Power sensor	NRV-Z5	100542
04	Signal Generator	E4438C	MY49070393
05	Amplifier	60S1G4	0331848
06	E-field Probe	SPEAG EX3DV4	3846
07	DAE	SPEAG DAE4	771
08	Dipole Validation Kit	SPEAG D5GHzV2	1040

### I6.2 Results of Impedance, Return-loss and System validation

#### Dipole 5G - Head

		Year		Deviation	Limit
		2012	2013		
Impedance	Real ( $\Omega$ )	55.3	53.6	-1.7 $\Omega$	Deviation < 5 $\Omega$
	Imaginary ( $\Omega$ )	-2.7	1.3	4.0 $\Omega$	Deviation < 5 $\Omega$
Return-loss (dB)		-24.9	-24.7	0.2dB	Deviate < 0.2dB
System validation	10g	2.35	2.26	-3.83%	Deviation < 10%
	1g	8.23	7.96	-3.28%	Deviation < 10%

#### Dipole 5G - Body

		Year		Deviation	Limit
		2012	2013		
Impedance	Real ( $\Omega$ )	56.6	53.1	-3.5 $\Omega$	Deviation < 5 $\Omega$
	Imaginary ( $\Omega$ )	-1.3	2.4	3.7 $\Omega$	Deviation < 5 $\Omega$
Return-loss (dB)		-24.0	-23.8	0.2dB	Deviate < 0.2dB
System validation	10g	2.06	2.01	-2.43%	Deviation < 10%
	1g	7.44	7.26	-2.42%	Deviation < 10%

According to the above tables, it is not necessary to recalibration the dipoles in 2013.