

Annex D. Tissue & System Verification

The measuring results for tissue simulating liquid and system check are shown as below.

Note:

1. For Section 4.3, the dielectric properties of the tissue simulating liquid have been measured within 24 hours before the SAR testing and within $\pm 10\%$ of the target values. Liquid temperature during the SAR testing has kept within $\pm 2^\circ\text{C}$.
2. For Section 4.4, The SAR measurement system was validated according to procedures in KDB 865664 D01. The validation status in tabulated summary is as below.
3. For Section 4.5, Comparing to the reference SAR value provided by SPEAG in dipole calibration certificate, the deviation of system check results is within its specification of 10 %. The result indicates the system check can meet the variation criterion and the plots please refer to Annex A of this report.

Tissue Verification									Validation for CW			Validation for Modulation			Date	System Validation					Note		
Plot No.	Frequency (MHz)	Liquid Temp. (°C)	Conductivity (σ)	Permittivity (ε _r)	Targeted Conductivity (σ)	Targeted Permittivity (ε _r)	Deviation Conductivity (σ)	Deviation Permittivity (ε _r)	Sensitivity Range	Probe Linearity	Probe Isotropy	Modulation Type	Duty Factor	PAR		Frequency (MHz)	Targeted 1g SAR (W/kg)	Measured 1g SAR (W/kg)	Normalized 1g SAR (W/kg)	Deviation (%)	Dipole S/N	Probe S/N	DAE S/N
S01	2450	23.2	1.864	38.07	1.8	39.2	3.56	-2.88	Pass	Pass	Pass	OFDM	N/A	Pass	Aug. 13, 2021	2450	52.70	2.71	54.20	2.85	835	7537	1585
S02	2450	23.2	1.864	38.07	1.8	39.2	3.56	-2.88	Pass	Pass	Pass	OFDM	N/A	Pass	Aug. 13, 2021	2450	52.70	2.71	54.20	2.85	835	7537	1585
S03	2450	23.2	1.864	38.07	1.8	39.2	3.56	-2.88	Pass	Pass	Pass	OFDM	N/A	Pass	Aug. 13, 2021	2450	52.70	2.71	54.20	2.85	835	7537	1585
S04	2450	23.1	1.848	37.854	1.8	39.2	2.67	-3.43	Pass	Pass	Pass	OFDM	N/A	Pass	Aug. 16, 2021	2450	52.70	2.7	54.00	2.47	835	7537	1585

Tissue Verification									Validation for CW			Validation for Modulation			System Validation						Note		
Plot No.	Frequency (MHz)	Liquid Temp. (°C)	Conductivity (σ)	Permittivity (ε)	Targeted Conductivity (σ)	Targeted Permittivity (ε)	Deviation Conductivity (σ)	Deviation Permittivity (ε)	Sensitivity Range	Probe Linearity	Probe Isotropy	Modulation Type	Duty Factor	PAR	Date	Frequency (MHz)	Targeted 10g SAR (W/kg)	Measured 10g SAR (W/kg)	Normalized 10g SAR (W/kg)	Deviation (%)	Dipole S/N	Probe S/N	DAE S/N
S05	2450	23.2	1.864	38.07	1.8	39.2	3.56	-2.88	Pass	Pass	Pass	OFDM	N/A	Pass	Aug. 13, 2021	2450	23.90	1.28	25.60	7.11	835	7537	1585
S06	2450	23.2	1.864	38.07	1.8	39.2	3.56	-2.88	Pass	Pass	Pass	OFDM	N/A	Pass	Aug. 13, 2021	2450	23.90	1.28	25.60	7.11	835	7537	1585
S07	2450	23.2	1.864	38.07	1.8	39.2	3.56	-2.88	Pass	Pass	Pass	OFDM	N/A	Pass	Aug. 13, 2021	2450	23.90	1.28	25.60	7.11	835	7537	1585
S08	2450	23.1	1.848	37.854	1.8	39.2	2.67	-3.43	Pass	Pass	Pass	OFDM	N/A	Pass	Aug. 16, 2021	2450	23.90	1.27	25.40	6.28	835	7537	1585