

Appendix 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 ± 10 % of the target values. Liquid temperature during the SAR testing has kept within ± 2 °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 Appendix A of this report.

Tissue Verification										System Validation					Note		
Plot	Frequency (MHz)	Liquid Temp. (°C)	Conductivity (σ)	Permittivity (ϵ_r)	Targeted Conductivity (σ)	Targeted Permittivity (ϵ_r)	Deviation Conductivity (σ)	Deviation Permittivity (ϵ_r)	Date	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	1.87	39.027	1.8	39.2	3.89	-0.44	Aug. 04, 2021	2450	51.60	2.73	54.60	5.81	737	3650	1277
S02	5250	23.2	4.519	37.125	4.71	35.9	-4.06	3.41	Aug. 04, 2021	5250	80.60	4.28	85.60	6.20	1019	3650	1277
S03	5600	23.4	4.956	34.103	5.07	35.5	-2.25	-3.94	Aug. 05, 2021	5600	82.40	4.24	84.80	2.91	1019	3887	861
S04	5750	23.4	5.106	33.879	5.22	35.4	-2.18	-4.30	Aug. 05, 2021	5750	79.40	3.66	73.20	-7.81	1019	3887	861
S05	2450	23.4	1.829	38.581	1.8	39.2	1.61	-1.58	Aug. 05, 2021	2450	51.60	2.42	48.40	-6.20	737	3887	861
S06	2450	23.4	1.829	38.581	1.8	39.2	1.61	-1.58	Aug. 05, 2021	2450	51.60	2.42	48.40	-6.20	737	3887	861
S07	5250	23.4	4.621	34.556	4.71	35.9	-1.89	-3.74	Aug. 05, 2021	5250	80.60	3.88	77.60	-3.72	1019	3887	861
S08	5600	23.4	4.956	34.103	5.07	35.5	-2.25	-3.94	Aug. 05, 2021	5600	82.40	4.24	84.80	2.91	1019	3887	861
S09	5750	23.4	5.106	33.879	5.22	35.4	-2.18	-4.30	Aug. 05, 2021	5750	79.40	3.66	73.20	-7.81	1019	3887	861
S10	2450	23.4	1.829	38.581	1.8	39.2	1.61	-1.58	Aug. 05, 2021	2450	51.60	2.42	48.40	-6.20	737	3887	861

Tissue Verification										System Validation					Note		
Plot	Frequency (MHz)	Liquid Temp. (°C)	Conductivity (σ)	Permittivity (ϵ_r)	Targeted Conductivity (σ)	Targeted Permittivity (ϵ_r)	Deviation Conductivity (σ)	Deviation Permittivity (ϵ_r)	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
S11	2450	23.3	1.868	37.896	1.8	39.2	3.78	-3.33	Aug. 06, 2021	2450	24.30	1.28	25.60	5.35	737	3650	1277
S12	5250	23.3	4.7	36.799	4.71	35.9	-0.21	2.50	Aug. 06, 2021	5250	22.80	1.12	22.40	-1.75	1019	3650	1277
S13	5600	23.3	5.074	36.37	5.07	35.5	0.08	2.45	Aug. 06, 2021	5600	23.70	1.2	24.00	1.27	1019	3650	1277
S14	5750	23.3	5.121	36.517	5.22	35.4	-1.90	3.16	Aug. 06, 2021	5750	22.80	1.25	25.00	9.65	1019	3650	1277
S15	2450	23.3	1.868	37.896	1.8	39.2	3.78	-3.33	Aug. 06, 2021	2450	24.30	1.28	25.60	5.35	737	3650	1277