

Appendix L. WIFI6E System Verification of Result

Tissue Verification

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

Note:

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.

System Validation

The SAR measurement system was validated according to procedures in KDB 865664 D01. The validation status in tabulated summary is as below.

System Verification

Note:

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 AL-1 of this report.

Tissue Verification														System Validation					Note			
Frequency (MHz)	Liquid Temp. (°C)	Conductivity (σ)	Permittivity (εr)	Targeted Conductivity (σ)	Targeted Permittivity (εr)	Deviation Conductivity (σ)	Deviation Permittivity (εr)	Sensitivity Range	Probe Linearity	Probe Isotropy	Modulation Type	Duty Factor	PAR	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
6500	23.3	6.21	33.9	6.07	34.5	2.31	-1.74	Pass	Pass	Pass	OFDM	N/A	Pass	Mar. 22, 2021	6500	285.00	30.7	307.00	7.72	1008	7472	1585
6500	23.3	6.21	33.9	6.07	34.5	2.31	-1.74	Pass	Pass	Pass	OFDM	N/A	Pass	Mar. 22, 2021	6500	285.00	30.7	307.00	7.72	1008	7472	1585
6500	23.3	6.21	33.9	6.07	34.5	2.31	-1.74	Pass	Pass	Pass	OFDM	N/A	Pass	Mar. 22, 2021	6500	285.00	30.7	307.00	7.72	1008	7472	1585
6500	23.3	6.11	34.4	6.07	34.5	0.66	-0.29	Pass	Pass	Pass	OFDM	N/A	Pass	Feb. 02, 2021	6500	285.00	30.8	308.00	8.07	1008	3650	861
6500	23.3	6.11	34.4	6.07	34.5	0.66	-0.29	Pass	Pass	Pass	OFDM	N/A	Pass	Feb. 02, 2021	6500	285.00	30.8	308.00	8.07	1008	3650	861
6500	23.3	6.19	33.7	6.07	34.5	1.98	-2.32	Pass	Pass	Pass	OFDM	N/A	Pass	Mar. 19, 2021	6500	285.00	30.5	305.00	7.02	1008	7472	1585
6500	23.3	6.19	33.7	6.07	34.5	1.98	-2.32	Pass	Pass	Pass	OFDM	N/A	Pass	Mar. 19, 2021	6500	285.00	30.5	305.00	7.02	1008	7472	1585
6500	23.3	6.21	33.9	6.07	34.5	2.31	-1.74	Pass	Pass	Pass	OFDM	N/A	Pass	Mar. 22, 2021	6500	285.00	30.7	307.00	7.72	1008	7472	1585
6500	23.3	6.15	34.2	6.07	34.5	1.32	-0.87	Pass	Pass	Pass	OFDM	N/A	Pass	Feb. 01, 2021	6500	285.00	30.3	303.00	6.32	1008	3650	861
6500	23.3	6.15	34.2	6.07	34.5	1.32	-0.87	Pass	Pass	Pass	OFDM	N/A	Pass	Feb. 01, 2021	6500	285.00	30.3	303.00	6.32	1008	3650	861

Tissue Verification														System Validation					Note			
Frequency (MHz)	Liquid Temp. (°C)	Conductivity (σ)	Permittivity (εr)	Targeted Conductivity (σ)	Targeted Permittivity (εr)	Deviation Conductivity (σ)	Deviation Permittivity (εr)	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
6500	23.3	6.21	33.9	6.07	34.5	2.31	-1.74	Pass	Pass	Pass	OFDM	N/A	Pass	Mar. 19, 2021	6500	52.00	5.65	56.50	8.65	1008	7472	1585
6500	23.3	6.21	33.9	6.07	34.5	2.31	-1.74	Pass	Pass	Pass	OFDM	N/A	Pass	Mar. 19, 2021	6500	52.00	5.65	56.50	8.65	1008	7472	1585
6500	23.3	6.21	33.9	6.07	34.5	2.31	-1.74	Pass	Pass	Pass	OFDM	N/A	Pass	Mar. 19, 2021	6500	52.00	5.65	56.50	8.65	1008	7472	1585
6500	23.3	6.15	34.2	6.07	34.5	1.32	-0.87	Pass	Pass	Pass	OFDM	N/A	Pass	Feb. 01, 2021	6500	52.00	5.52	55.20	6.15	1008	3650	861
6500	23.3	6.15	34.2	6.07	34.5	1.32	-0.87	Pass	Pass	Pass	OFDM	N/A	Pass	Feb. 01, 2021	6500	52.00	5.52	55.20	6.15	1008	3650	861

Verification For Power Density Measurement

Test Date	Frequency [GHz]	mmWave Probe S/N	Verification Source S/N	Averaging Area [cm ²]	Distance [mm]	Target Power Density [W/m ²]	Measured Power Density [W/m ²]	Deviation [%]
Feb. 02, 2021	10	9454	1025	4	10.0	42.7	43.0	0.70%
Feb. 03, 2021	10	9454	1025	4	10.0	42.7	41.8	-2.11%
Feb. 04, 2021	10	9454	1025	4	10.0	42.7	42.6	-0.23%
Mar. 23, 2021	10	9454	1025	4	10.0	42.7	42.5	-0.47%
Jun. 02, 2021	10	9361	1025	4	10.0	42.7	41.4	-3.04%