

Appendix A. WIFI6E and PD 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 AA-1 of this report.

System Validation & System Verification

Plot No.	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
S01	6500	23.3	6.184	33.72	6.07	34.5	1.88	-2.26	PASS	PASS	PASS	OFDM	N/A	PASS	Apr. 09, 2021	6500	285.00	30.7	307.00	7.72	1008	7555	1589

Date	Frequency (MHz)	Liquid Temp. (°C)	Conductivity (σ)	Permittivity (ϵ_r)	Conductivity Target (σ)	Permittivity Target (ϵ_r)	Delta (σ) (%)	Delta (ϵ_r) (%)	Band	Channel
Apr. 09, 2021	6025	23.3	5.588	34.389	5.509	33.870	1.42	1.44	UNII-5	15
Apr. 09, 2021	6185	23.3	5.679	34.366	5.698	34.878	-0.37	-1.53	UNII-5	47
Apr. 09, 2021	6345	23.3	6.195	33.925	6.001	34.566	3.25	-1.95	UNII-5	79
Apr. 09, 2021	6505	23.3	6.171	33.718	6.075	34.494	1.50	-2.27	UNII-6	111
Apr. 09, 2021	6665	23.3	6.327	33.080	6.261	34.302	1.07	-3.56	UNII-7	143
Apr. 09, 2021	6825	23.3	6.561	33.145	6.447	34.110	1.72	-2.80	UNII-7	175
Apr. 09, 2021	6985	23.3	6.592	32.745	6.632	33.918	-0.57	-3.41	UNII-8	207

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 [%]
Apr. 09, 2021	30	9454	1016	4	10.0	37.0	36.7	-0.81%