APPENDIX E: SAR SYSTEM VALIDATION

Per FCC KDB Publication 865664 D02v01r02, SAR system validation status should be documented to confirm measurement accuracy. The SAR systems (including SAR probes, system components and software versions) used for this device were validated against its performance specifications prior to the SAR measurements. Reference dipoles were used with the required tissue- equivalent media for system validation, according to the procedures outlined in FCC KDB Publication 865664 D01v01r04 and IEEE 1528-2013. Since SAR probe calibrations are frequency dependent, each probe calibration point was validated at a frequency within the valid frequency range of the probe calibration point, using the system that normally operates with the probe for routine SAR measurements and according to the required tissue-equivalent media.

A tabulated summary of the system validation status including the validation date(s), measurement frequencies, SAR probes and tissue dielectric parameters has been included.

Table H-1
SAR System Validation Summary – 1g

SAR System	Freq. (MHz)	Date	Probe SN	Probe Cal Point		Cond. (σ)	Perm. (εr)	CW VALIDATION			MOD. VALIDATION		
								SENSITIVITY	PROBE LINEARITY	PROBE ISOTROPY	MOD. TYPE	DUTY FACTOR	PAR
P	2600	01/19/2022	7410	2600	Head	1.990	38.359	PASS	PASS	PASS	TDD	PASS	N/A
L	3700	10/13/2021	7670	3700	Head	2.881	38.022	PASS	PASS	PASS	TDD	PASS	N/A
L	3900	10/13/2021	7670	3900	Head	2.975	37.851	PASS	PASS	PASS	TDD	PASS	N/A
S	2600	01/25/2022	7552	2600	Body	2.147	51.997	PASS	PASS	PASS	TDD	PASS	N/A
L	3700	10/13/2021	7670	3700	Body	3.637	50.037	PASS	PASS	PASS	TDD	PASS	N/A
L	3900	10/13/2021	7670	3900	Body	3.873	49.714	PASS	PASS	PASS	TDD	PASS	N/A

Table H-2
SAR System Validation Summary – 10g

SAR System	Freq. (MHz)	Date	Probe SN	Probe Cal Point		Cond. (σ)	Perm. (εr)	CW VALIDATION			MOD. VALIDATION		
								SENSITIVITY	PROBE LINEARITY	PROBE ISOTROPY	MOD. TYPE	DUTY FACTOR	PAR
L	3700	BODY	44726	22	21	0.100	1018.000	7670	2.38	22.5	23.8	0.0578	1681
L	3900	BODY	44726	22	21	0.100	1073.000	7670	2.17	22	21.7	-0.0136	1681

NOTE: The probes have been calibrated for both CW and modulated signals. Modulations in the table above represent test configurations for which the measurement system has been validated per FCC KDB Publication 865664 D01v01r04 for scenarios when CW probe calibrations are used with other signal types. SAR systems were validated for modulated signals with a periodic duty cycle, such as GMSK, or with a high peak to average ratio (>5 dB), such as OFDM according to FCC KDB Publication 865664 D01v01r04