APPENDIX D: 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 D-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
AM12	750	06/08/2022	7499	750	Head	0.874	43.491	PASS	PASS	PASS	N/A	N/A	N/A
AM14	835	06/10/2022	7674	835	Head	0.931	43.410	PASS	PASS	PASS	GMSK	PASS	N/A
AM8	1750	06/01/2022	7546	1750	Head	1.379	38.927	PASS	PASS	PASS	N/A	N/A	N/A
AM13	1750	06/21/2022	7360	1750	Head	1.404	38.836	PASS	PASS	PASS	N/A	N/A	N/A
AM6	1900	06/08/2022	7532	1900	Head	1.451	40.772	PASS	PASS	PASS	GMSK	PASS	N/A
AM8	2300	05/05/2022	7546	2300	Head	1.680	41.200	PASS	PASS	PASS	N/A	N/A	N/A
AM4	2450	03/11/2022	3837	2450	Head	1.800	39.784	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
AM11	2450	06/08/2022	7420	2450	Head	1.880	39.500	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
AM7	2450	06/08/2022	7416	2450	Head	1.815	38.495	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
AM4	2600	03/25/2022	3837	2600	Head	1.955	39.728	PASS	PASS	PASS	TDD	PASS	N/A
AM11	2600	06/08/2022	7420	2600	Head	2.050	38.900	PASS	PASS	PASS	TDD	PASS	N/A
AM3	3500	04/04/2022	7427	3500	Head	2.940	38.400	PASS	PASS	PASS	TDD	PASS	N/A
AM7	3500	06/18/2022	7416	3500	Head	2.865	36.230	PASS	PASS	PASS	TDD	PASS	N/A
AM4	3700	03/29/2022	3837	3700	Head	2.970	37.600	PASS	PASS	PASS	TDD	PASS	N/A
AM3	3700	04/04/2022	7427	3700	Head	3.120	38.100	PASS	PASS	PASS	TDD	PASS	N/A
AM4	3900	03/29/2022	3837	3900	Head	3.170	37.200	PASS	PASS	PASS	TDD	PASS	N/A
AM9	5250	04/12/2022	7638	5250	Head	4.606	35.527	PASS	PASS	PASS	OFDM	N/A	PASS
AM9	5600	04/12/2022	7638	5600	Head	5.018	34.950	PASS	PASS	PASS	OFDM	N/A	PASS
AM9	5750	04/12/2022	7638	5750	Head	5.190	34.628	PASS	PASS	PASS	OFDM	N/A	PASS

NOTE: While the probes have been calibrated for both CW and modulated signals, all measurements were performed using communication systems calibrated for CW signals only. 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.