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
P	750	09/10/2020	7308	750	Head	0.904	43.440	PASS	PASS	PASS	N/A	N/A	N/A
E	750	01/13/2021	7571	750	Head	0.907	42.099	PASS	PASS	PASS	N/A	N/A	N/A
G	750	05/20/2021	7357	750	Head	0.923	43.827	PASS	PASS	PASS	N/A	N/A	N/A
E	835	01/13/2021	7571	835	Head	0.939	41.893	PASS	PASS	PASS	GMSK	PASS	N/A
D	835	02/02/2021	3589	835	Head	0.927	41.192	PASS	PASS	PASS	GMSK	PASS	N/A
G	750	05/27/2021	7357	750	Body	0.997	53.630	PASS	PASS	PASS	N/A	N/A	N/A
D	835	01/27/2021	3589	835	Body	0.952	54.166	PASS	PASS	PASS	GMSK	PASS	N/A
H	835	07/04/2021	7409	835	Body	0.938	52.574	PASS	PASS	PASS	GMSK	PASS	N/A

Table D-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
G	750	05/27/2021	7357	750	Body	0.997	53.630	PASS	PASS	PASS	N/A	N/A	N/A
D	835	01/27/2021	3589	835	Body	0.952	54.166	PASS	PASS	PASS	GMSK	PASS	N/A
H	835	07/04/2021	7409	835	Body	0.938	52.574	PASS	PASS	PASS	GMSK	PASS	N/A

NOTE: 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.