

APPENDIX G: 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 G-1
SAR System Validation Summary - Head

SAR System	Freq. (MHz)	Date	Probe SN	Probe Cal Point		Cond. (σ)	Perm. (ϵ_r)	CW VALIDATION			MOD. VALIDATION		
								SENSITIVITY	PROBE LINEARITY	PROBE ISOTROPY	MOD. TYPE	DUTY FACTOR	PAR
G	13	06/09/2022	7527	13	Head	0.762	52.537	PASS	PASS	PASS	N/A	N/A	N/A
K4	750	04/15/2022	7637	750	Head	0.873	43.945	PASS	PASS	PASS	N/A	N/A	N/A
K5	750	06/27/2022	7402	750	Head	0.893	41.460	PASS	PASS	PASS	N/A	N/A	N/A
G	750	06/30/2022	7527	750	Head	0.889	42.930	PASS	PASS	PASS	N/A	N/A	N/A
K4	835	04/15/2022	7637	835	Head	0.923	43.560	PASS	PASS	PASS	GMSK	PASS	N/A
P	835	08/08/2022	7409	835	Head	0.919	42.655	PASS	PASS	PASS	GMSK	PASS	N/A
S	1750	08/08/2022	7488	1750	Head	1.351	39.441	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
S	1900	08/08/2022	7488	1900	Head	1.443	39.203	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
S	2300	08/10/2022	7488	2300	Head	1.706	38.683	PASS	PASS	PASS	N/A	N/A	N/A
K2	2450	04/04/2022	7640	2450	Head	1.841	38.698	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
L	2450	08/11/2022	7410	2450	Head	1.862	39.716	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
P	2600	07/12/2022	7409	2600	Head	1.933	39.030	PASS	PASS	PASS	TDD	PASS	N/A
L	2600	08/11/2022	7410	2600	Head	1.987	39.461	PASS	PASS	PASS	TDD	PASS	N/A
K1	2600	08/24/2022	7491	2600	Head	1.943	37.667	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
L	3500	08/02/2022	7410	3500	Head	2.779	36.839	PASS	PASS	PASS	TDD	PASS	N/A
AM7	3700	06/18/2022	7416	3700	Head	3.022	35.958	PASS	PASS	PASS	TDD	PASS	N/A
L	3700	08/02/2022	7410	3700	Head	2.967	36.484	PASS	PASS	PASS	TDD	PASS	N/A
AM7	3900	06/18/2022	7416	3900	Head	3.198	35.716	PASS	PASS	PASS	TDD	PASS	N/A
K3	5250	03/16/2022	7565	5250	Head	4.625	36.172	PASS	PASS	PASS	OFDM	N/A	PASS
K3	5600	03/16/2022	7565	5600	Head	5.018	35.554	PASS	PASS	PASS	OFDM	N/A	PASS
K3	5750	03/16/2022	7565	5750	Head	5.194	35.286	PASS	PASS	PASS	OFDM	N/A	PASS
G	5800	04/04/2022	7527	5800	Head	5.500	34.891	PASS	PASS	PASS	OFDM	N/A	PASS

FCC ID: A3LSMS916U	SAR EVALUATION REPORT	Approved by: Technical Manager
DUT Type: Portable Handset		APPENDIX G: Page 1 of 2

Table G-2
SAR System Validation Summary - Body

SAR System	Freq. (MHz)	Date	Probe SN	Probe Cal Point		Cond. (σ)	Perm. (ϵ_r)	CW VALIDATION			MOD. VALIDATION		
								SENSITIVITY	PROBE LINEARITY	PROBE ISOTROPY	MOD. TYPE	DUTY FACTOR	PAR
K3	750	02/22/2022	7565	750	Body	0.947	55.511	PASS	PASS	PASS	N/A	N/A	N/A
K1	750	08/29/2022	7491	750	Body	0.936	53.526	PASS	PASS	PASS	N/A	N/A	N/A
E	750	09/06/2022	7668	750	Body	0.936	54.436	PASS	PASS	PASS	N/A	N/A	N/A
K3	835	02/22/2022	7565	835	Body	0.981	55.336	PASS	PASS	PASS	GMSK	PASS	N/A
K2	835	03/19/2022	7640	835	Body	1.004	54.002	PASS	PASS	PASS	GMSK	PASS	N/A
I	835	07/01/2022	7660	835	Body	0.953	57.558	PASS	PASS	PASS	GMSK	PASS	N/A
K1	835	08/29/2022	7491	835	Body	0.967	53.325	PASS	PASS	PASS	GMSK	PASS	N/A
D	1750	01/05/2022	7571	1750	Body	1.511	52.181	PASS	PASS	PASS	N/A	N/A	N/A
I	1750	07/01/2022	7660	1750	Body	1.467	53.907	PASS	PASS	PASS	N/A	N/A	N/A
C	1750	08/16/2022	7406	1750	Body	1.460	53.454	PASS	PASS	PASS	N/A	N/A	N/A
J	1900	02/17/2022	7570	1900	Body	1.578	53.899	PASS	PASS	PASS	GMSK	PASS	N/A
O	1900	03/24/2022	7417	1900	Body	1.536	52.790	PASS	PASS	PASS	GMSK	PASS	N/A
E	2300	09/07/2022	7668	2300	Body	1.860	52.160	PASS	PASS	PASS	N/A	N/A	N/A
K3	2450	02/24/2022	7565	2450	Body	2.023	51.983	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
K	2450	08/08/2022	7659	2450	Body	2.003	51.761	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
E	2450	09/07/2022	7668	2450	Body	2.002	51.995	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
K	2600	08/08/2022	7659	2600	Body	2.147	51.553	PASS	PASS	PASS	TDD	PASS	N/A
K5	2600	08/11/2022	7402	2600	Body	2.120	50.287	PASS	PASS	PASS	TDD	PASS	N/A
E	2600	09/07/2022	7668	2600	Body	2.143	51.774	PASS	PASS	PASS	TDD	PASS	N/A
AM4	3500	03/17/2022	3837	3500	Body	3.380	49.947	PASS	PASS	PASS	TDD	PASS	N/A
AM3	3500	04/07/2022	7427	3500	Body	3.430	50.138	PASS	PASS	PASS	TDD	PASS	N/A
L	3500	08/04/2022	7410	3500	Body	3.159	51.062	PASS	PASS	PASS	TDD	PASS	N/A
AM3	3700	04/06/2022	7427	3700	Body	3.650	49.800	PASS	PASS	PASS	TDD	PASS	N/A
L	3700	08/04/2022	7410	3700	Body	3.395	50.732	PASS	PASS	PASS	TDD	PASS	N/A
AM3	3900	04/06/2022	7427	3900	Body	3.890	49.500	PASS	PASS	PASS	TDD	PASS	N/A
K	5250	05/03/2022	7659	5250	Body	5.389	47.450	PASS	PASS	PASS	OFDM	N/A	PASS
K	5600	05/03/2022	7659	5600	Body	5.891	46.819	PASS	PASS	PASS	OFDM	N/A	PASS
K	5750	05/03/2022	7659	5750	Body	6.105	46.554	PASS	PASS	PASS	OFDM	N/A	PASS
K	5800	05/03/2022	7659	5800	Body	6.178	46.433	PASS	PASS	PASS	OFDM	N/A	PASS

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.

FCC ID: A3LSMS916U	SAR EVALUATION REPORT	Approved by: Technical Manager
DUT Type: Portable Handset		APPENDIX G: Page 2 of 2