

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

System (MI- G 13 K4 75 K1 75 K6 75 K5 83 K1 83 K6 83 S 177 C 177 L 177 K4 175 K3 177 AM8 190 AM1 230 S 230 AM1 244 K3 244 O 244 AM9 245 AM9 245 AM9 245	13	02/28/2023 03/07/2023 07/10/2023 10/11/2023 06/08/2023 07/10/2023 07/10/2023 02/20/2023 03/01/2023 06/30/2023 09/12/2023 09/25/2023	7417 7640 7402 7491 7637 7402 7491 7713 7417 7661 7409	665 1645 1502 1532 1652 1502 1532 1530 665 728	13 750 750 750 835 835 835 1750	Head Head Head Head Head Head Head Head	Cond. (σ) 0.745 0.897 0.871 0.892 0.911 0.897	Perm. (εr) 55.517 42.373 43.590 43.748	PASS PASS PASS	PROBE LINEARITY PASS PASS PASS	PROBE ISOTROPY PASS PASS PASS	MOD. TYPE N/A N/A	DUTY FACTOR N/A N/A	PAR N/A N/A
System (MI- G 13 K4 75 K1 75 K6 75 K5 83 K1 83 K6 83 S 177 C 177 L 177 K4 175 K3 177 AM8 190 AM1 230 S 230 AM1 244 K3 244 O 244 AM9 245 AM9 245 AM9 245	13	02/28/2023 03/07/2023 07/10/2023 10/11/2023 06/08/2023 07/10/2023 10/11/2023 02/20/2023 03/01/2023 06/30/2023 09/25/2023	7417 7640 7402 7491 7637 7402 7491 7713 7417 7661	665 1645 1502 1532 1652 1502 1532 1530 665	13 750 750 750 835 835 835 1750	Head Head Head Head Head	0.745 0.897 0.871 0.892 0.911	(εr) 55.517 42.373 43.590 43.748	PASS PASS PASS	PASS PASS PASS	PASS PASS	N/A N/A	N/A N/A	N/A
K4 75 K1 75 K6 75 K6 83 K1 83 K1 83 K6 83 S 17: G 17: C 17: K4 17: K4 17: K4 17: K4 17: K3 14: AMB 194 AMI 23: AMI 24: K3 24: O 24: AM9 24: S 24:	750	03/07/2023 07/10/2023 10/11/2023 06/08/2023 07/10/2023 10/11/2023 10/11/2023 02/20/2023 03/01/2023 06/30/2023 07/05/2023 09/25/2023	7640 7402 7491 7637 7402 7491 7713 7417	1645 1502 1532 1652 1502 1532 1530 665	750 750 750 835 835 835 1750	Head Head Head Head	0.897 0.871 0.892 0.911	42.373 43.590 43.748	PASS PASS	PASS PASS	PASS	N/A	N/A	
K1 75 K6 75 K6 75 K5 83 K1 83 K6 83 K6 83 K1 17: G 17: L 17: K4 17: K4 17: AM8 19: P 19: AM1 23: S 23: AM1 24: K3 24: O 24: S 24: S 24:	750	07/10/2023 10/11/2023 06/08/2023 07/10/2023 10/11/2023 02/20/2023 03/01/2023 06/30/2023 07/05/2023 09/25/2023	7402 7491 7637 7402 7491 7713 7417	1502 1532 1652 1502 1532 1530 665	750 750 835 835 835 835	Head Head Head Head	0.871 0.892 0.911	43.590 43.748	PASS	PASS				N/A
K6 75 K5 83 K1 83 K6 83 S 17: G 17: L 17: L 17: K4 17: K4 17: AM8 19: P 19: AM1 23: S 24: K3 24: C 24: S 24: S 24:	750 835 835 835 835 835 835 835 835 835 835	10/11/2023 06/08/2023 07/10/2023 10/11/2023 02/20/2023 03/01/2023 06/30/2023 07/05/2023 09/25/2023	7491 7637 7402 7491 7713 7417 7661	1532 1652 1502 1532 1530 665	750 835 835 835 1750	Head Head Head	0.892 0.911	43.748			PASS	NI/A		110/7
K5 83 K1 83 K6 83 S 17: G 17: C 17: K4 17: K4 17: K4 17: K3 17: AMB 19: AMI 23: AMI 24: K3 24: O 24: AM9 24: S 24:	835 835 835 1750 1750 1750 1750 1750 1750 1750 175	06/08/2023 07/10/2023 10/11/2023 02/20/2023 03/01/2023 06/30/2023 07/05/2023 09/25/2023	7637 7402 7491 7713 7417 7661	1652 1502 1532 1530 665	835 835 835 1750	Head Head	0.911		DACC			N/A	N/A	N/A
K1 83 K6 83 S 17' G 17' C 17' L 17' K4 17' K3 17' AM8 190 P 191 AM1 230 S 230 AM1 24' K3 24' O 24' S 24' S 24'	835 835 750 1750 1750 1750 1750 1750 1750 1900	07/10/2023 10/11/2023 02/20/2023 03/01/2023 06/30/2023 07/05/2023 09/25/2023	7402 7491 7713 7417 7661	1502 1532 1530 665	835 835 1750	Head			PASS	PASS	PASS	N/A	N/A	N/A
K6 83 S 17: G 17: C 17: L 17: K4 17: K3 17: AM8 19: P 19: AM1 23: S 23: AM1 24: K3 24: O 24: S 24: S 24:	835 750 1750 1750 1750 1750 1750 1750 1900	10/11/2023 02/20/2023 03/01/2023 06/30/2023 07/05/2023 09/25/2023	7491 7713 7417 7661	1532 1530 665	835 1750		0.897	42.522	PASS	PASS	PASS	GMSK	PASS	N/A
S 175 G 177 C 1775 L 177 K4 175 K3 177 K4 179 AM8 199 P 190 AM1 230 AM1 244 K3 245 O 244 AM9 244 S 245	750 750 750 750 750 750 750 900	02/20/2023 03/01/2023 06/30/2023 07/05/2023 09/25/2023	7713 7417 7661	1530 665	1750	Head		43.370	PASS	PASS	PASS	GMSK	PASS	N/A
G 178 C 178 L 177 K4 177 K3 178 K3 178 AMB 198 P 199 AMI 238 S 230 AMI 248 K3 244 AM9 244 S 248 S 248	750 750 750 750 750 750 900	03/01/2023 06/30/2023 07/05/2023 09/25/2023	7417 7661	665			0.924	43.486	PASS	PASS	PASS	GMSK	PASS	N/A
C 178 L 178 K4 1778 K3 177 AM8 199 P 199 AM1 230 S 230 AM1 248 K3 244 O 244 S 248 S 248	750 750 750 750 900	06/30/2023 07/05/2023 09/25/2023	7661			Head	1.334	38.727	PASS	PASS	PASS	N/A	N/A	N/A
L 178 K4 178 K3 177 AM8 199 P 199 AM1 230 S 230 AM1 248 K3 248 O 248 AM9 244 S 248	750 750 750 900	07/05/2023 09/25/2023		728	1750	Head	1.391	42.032	PASS	PASS	PASS	N/A	N/A	N/A
K4 178 K3 178 K3 178 AM8 190 P 199 AM1 230 S 230 AM1 244 K3 244 AM9 248 S 244	750 750 900	09/25/2023	7409		1750	Head	1.334	38.293	PASS	PASS	PASS	N/A	N/A	N/A
K3 175 AM8 190 P 190 AM1 233 S 233 AM1 245 K3 245 O 245 AM9 245 S 245	750 900			1334	1750	Head	1.313	40.692	PASS	PASS	PASS	N/A	N/A	N/A
AM8 199 P 190 AM1 230 S 230 AM1 244 K3 244 O 244 AM9 244 S 244	900		7640	1645	1750	Head	1.382	38.782	PASS	PASS	PASS	N/A	N/A	N/A
P 199 AM1 230 S 230 AM1 244 K3 244 O 244 AM9 244 S 244		10/12/2023	7558	1364	1750	Head	1.358	42.013	PASS	PASS	PASS	N/A	N/A	N/A
AM1 230 S 230 AM1 244 K3 244 O 244 AM9 244 S 244		03/31/2023	7421	604	1900	Head	1.431	41.278	PASS	PASS	PASS	GMSK	PASS	N/A
S 230 AM1 244 K3 244 O 244 AM9 244 S 244	900	08/03/2023	7659	1407	1900	Head	1.433	38.900	PASS	PASS	PASS	GMSK	PASS	N/A
AM1 245 K3 245 O 245 AM9 245 S 245	2300	11/09/2022	7420	1333	2300	Head	1.710	38.500	PASS	PASS	PASS	N/A	N/A	N/A
K3 244 O 244 AM9 244 S 244	2300	02/20/2023	7713	1530	2300	Head	1.643	38.278	PASS	PASS	PASS	N/A	N/A	N/A
K3 244 O 244 AM9 244 S 244	2450	11/09/2022	7420	1333	2450	Head	1.820	38.300	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
AM9 245 S 245	2450	12/06/2022	7547	1322	2450	Head	1.786	37.965	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
S 245	2450	02/08/2023	7570	1558	2450	Head	1.839	38.743	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
	2450	02/28/2023	7427	1403	2450	Head	1.870	39.800	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
	2450	03/17/2023	7713	1530	2450	Head	1.762	38.757	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
AM1 260	2600	11/09/2022	7420	1333	2600	Head	1.940	38.000	PASS	PASS	PASS	TDD	PASS	N/A
	2600	12/06/2022	7547	1322	2600	Head	1.904	37.727	PASS	PASS	PASS	TDD	PASS	N/A
AM9 260	2600	02/23/2023	7427	1403	2600	Head	2.000	39.000	PASS	PASS	PASS	TDD	PASS	N/A
L 260	2600	07/05/2023	7409	1334	2600	Head	1.902	39.474	PASS	PASS	PASS	TDD	PASS	N/A
AM4 350	3500	01/09/2023	7490	1644	3500	Head	2.921	37.328	PASS	PASS	PASS	TDD	PASS	N/A
AM6 350	3500	05/24/2023	7638	1408	3500	Head	2.794	39.657	PASS	PASS	PASS	TDD	PASS	N/A
L 350	3500	06/27/2023	7409	1334	3500	Head	2.778	39.142	PASS	PASS	PASS	TDD	PASS	N/A
AM4 370	3700	01/09/2023	7490	1644	3700	Head	3.082	37.064	PASS	PASS	PASS	TDD	PASS	N/A
AM6 370	3700	05/25/2023	7638	1408	3700	Head	2.991	39.276	PASS	PASS	PASS	TDD	PASS	N/A
L 370	3700	06/27/2023	7409	1334	3700	Head	2.968	38.811	PASS	PASS	PASS	TDD	PASS	N/A
AM4 390	900	01/23/2023	7490	1644	3900	Head	3.231	37.333	PASS	PASS	PASS	TDD	PASS	N/A
AM6 390	3900	05/25/2023	7638	1408	3900	Head	3.196	38.927	PASS	PASS	PASS	TDD	PASS	N/A
	250	02/16/2023	7570	1558	5250	Head	4.531	35.226	PASS	PASS	PASS	OFDM	N/A	PASS
	250	02/27/2023	7417	665	5250	Head	4.813	36.527	PASS	PASS	PASS	OFDM	N/A	PASS
	600	02/16/2023	7570	1558	5600	Head	4.926	34.639	PASS	PASS	PASS	OFDM	N/A	PASS
	600	02/28/2023	7417	665	5600	Head	5.235	35.880	PASS	PASS	PASS	OFDM	N/A	PASS
	750	02/16/2023	7570	1558	5750	Head	5.077	34.397	PASS	PASS	PASS	OFDM	N/A	PASS
	750	02/28/2023	7417	665	5750	Head	5.419	35.830	PASS	PASS	PASS	OFDM	N/A	PASS
	800	02/20/2023	7570	1558	5850	Head	5.237	33.586	PASS	PASS	PASS	OFDM	N/A	PASS
	800	02/28/2023	7417	665	5850	Head	5.454	35.742	PASS	PASS	PASS	OFDM	N/A	PASS
	500	05/01/2023	7532	501	6500	Head	6.347	33.690	PASS	PASS	PASS	OFDM	N/A	PASS
	5500	06/08/2023	7718	1368	6500	Head	6.086	34.351	PASS	PASS	PASS	OFDM	N/A	PASS
AM7 800		08/07/2023	7532	501	8000	Head	7.805	31.522	PASS	PASS	PASS	N/A	N/A	N/A

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: A3LSMS928U	SAR EVALUATION REPORT	Approved by: Technical Manager
DUT Type: Portable Handset		APPENDIX G: Page 1 of 1