


APPENDIX E: SAR SYSTEM VALIDATION

FCC ID: 2AXMS-SHOUTSPR1	 element	SAR EVALUATION REPORT	Approved by: Technical Manager
Test Dates: 11/29/2021-02/07/2022	DUT Type: SHOUT sp Handheld Iridium Smartphone		APPENDIX: E Page 1 of 2

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 E-1
SAR System Validation Summary – 1g**

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
AM6	1640	12/06/2021	7416	1640	Head	1.260	39.800	PASS	PASS	PASS	N/A	N/A	N/A
AM6	2450	09/08/2021	7416	2450	Head	1.760	37.500	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
AM6	1640	12/06/2021	7416	1640	Body	1.420	52.700	PASS	PASS	PASS	N/A	N/A	N/A
AM6	2450	08/30/2021	7416	2450	Body	2.030	52.300	PASS	PASS	PASS	OFDM/TDD	PASS	PASS

**Table E-2
SAR System Validation Summary – 10g**

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
AM6	1640	12/06/2021	7416	1640	Body	1.420	52.700	PASS	PASS	PASS	N/A	N/A	N/A
AM6	2450	08/30/2021	7416	2450	Body	2.030	52.300	PASS	PASS	PASS	OFDM/TDD	PASS	PASS

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.

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