

Appendix B: Tissue Stimulating Liquids, System Checks and System Validation

B.1. SAR System Check

Prior to SAR assessment, the system is verified to $\pm 10\%$ of the SAR measurement on the reference dipole at the time of calibration by the calibration facility. Full system validation status and result summary can be found in Section B.4.

Table 1 System Check Results (SAR)

System	Frequency (MHz)	Tissue Type	Date	Amb. Temp. (°C)	Tissue Temp (°C)	Input Power (dBm)	Verification Source SN	Probe SN	DAE SN	Measured 1g SAR (W/Kg)	1W Target 1g SAR (W/Kg)	1W Normalized 1g SAR (W/Kg)	1g SAR Deviation	Measured 10g SAR (W/Kg)	1W Target 10g SAR (W/Kg)	1W Normalized 10g SAR (W/Kg)	10g SAR Deviation	Measured APD 4 cm ² (W/m ²)	1W target APD 4cm ² (W/m ²)	1W Normalized APD 4cm ² (W/m ²)	APD 4cm ² Deviation
Gamma	13	Head	11/24/2025	22.8	22.2	24.5	1041	7872	1843	0.124	0.457	0.440	-3.73%	0.076	0.296	0.270	-8.90%	N/A	N/A	N/A	N/A
Delta	750	Head	10/13/2025	23.4	22.4	17	1235	7853	1844	0.438	8.690	8.739	0.57%	0.289	5.690	5.766	1.34%	N/A	N/A	N/A	N/A
Delta	750	Head	10/15/2025	23.1	21.1	17	1235	7853	1844	0.419	8.690	8.360	-3.80%	0.277	5.690	5.527	-2.87%	N/A	N/A	N/A	N/A
Gamma	750	Head	11/30/2025	20.9	21.9	17	1235	7872	1843	0.440	8.690	8.779	1.03%	0.281	5.690	5.607	-1.46%	N/A	N/A	N/A	N/A
Delta	835	Head	10/13/2025	23.4	22.4	17	4d311	7853	1844	0.502	9.820	10.016	2.00%	0.329	6.370	6.564	3.05%	N/A	N/A	N/A	N/A
Delta	835	Head	10/15/2025	23.1	21.1	17	4d311	7853	1844	0.499	9.820	9.956	1.39%	0.327	6.370	6.525	2.43%	N/A	N/A	N/A	N/A
Delta	835	Head	10/19/2025	22.5	21.9	17	4d311	7853	1844	0.513	9.820	10.236	4.23%	0.336	6.370	6.704	5.24%	N/A	N/A	N/A	N/A
Delta	835	Head	10/22/2025	21.9	19.7	17	4d311	7853	1844	0.496	9.820	9.897	0.78%	0.323	6.370	6.445	1.17%	N/A	N/A	N/A	N/A
Gamma	835	Head	12/03/2025	22.8	21.1	17	4d311	7872	1843	0.507	9.820	10.116	3.01%	0.332	6.370	6.624	3.99%	N/A	N/A	N/A	N/A
Delta	835	Head	12/12/2025	21.1	20.4	17	4d311	7853	1844	0.507	9.820	10.116	3.01%	0.336	6.370	6.704	5.24%	N/A	N/A	N/A	N/A
Gamma	1750	Head	10/13/2025	22.8	21.6	17	1205	7872	1843	1.840	36.500	36.713	0.58%	0.987	19.200	19.693	2.57%	N/A	N/A	N/A	N/A
Alpha	1750	Head	10/29/2025	22.8	21.2	17	1205	7836	1839	1.720	36.500	34.319	-5.98%	0.927	19.200	18.496	-3.67%	N/A	N/A	N/A	N/A
Alpha	1750	Head	11/09/2025	23.1	21.9	17	1205	7836	1839	1.760	36.500	35.117	-3.79%	0.938	19.200	18.716	-2.52%	N/A	N/A	N/A	N/A
Alpha	1750	Head	11/12/2025	23.7	21.6	17	1205	7836	1839	1.730	36.500	34.518	-5.43%	0.927	19.200	18.496	-3.67%	N/A	N/A	N/A	N/A
Gamma	1900	Head	10/13/2025	22.8	21.6	17	5d252	7872	1843	2.020	39.800	40.304	1.27%	1.050	21.000	20.950	-0.24%	N/A	N/A	N/A	N/A
Delta	1900	Head	11/02/2025	22.2	21.1	17	5d252	7857	1862	2.010	39.800	40.105	0.77%	1.040	21.000	20.751	-1.19%	N/A	N/A	N/A	N/A
Delta	1900	Head	11/05/2025	22.5	21.6	17	5d252	7857	1862	2.010	39.800	40.105	0.77%	1.050	21.000	20.950	-0.24%	N/A	N/A	N/A	N/A
Beta	2450	Head	10/21/2025	21.9	21.5	17	1112	7859	1905	2.560	50.600	51.079	0.95%	1.200	23.700	23.943	1.03%	N/A	N/A	N/A	N/A
Beta	2450	Head	10/27/2025	24.3	22.7	17	1112	7859	1905	2.360	50.600	47.088	-6.94%	1.110	23.700	22.147	-6.55%	N/A	N/A	N/A	N/A
Gamma	2450	Head	11/07/2025	22.6	21.7	17	1112	7872	1843	2.670	50.600	53.274	5.28%	1.240	23.700	24.741	4.39%	N/A	N/A	N/A	N/A
Beta	2450	Head	12/08/2025	22.8	20.8	17	1112	7859	1905	2.430	50.600	48.485	-4.18%	1.150	23.700	22.946	-3.18%	N/A	N/A	N/A	N/A
Beta	2600	Head	10/13/2025	22.8	22.4	17	1215	7859	1905	2.550	55.300	50.879	-7.99%	1.160	24.900	23.145	-7.05%	N/A	N/A	N/A	N/A
Beta	2600	Head	10/19/2025	22.5	22.1	17	1215	7859	1905	2.600	55.300	51.877	-6.19%	1.190	24.900	23.744	-4.64%	N/A	N/A	N/A	N/A
Beta	2600	Head	12/08/2025	22.8	20.8	17	1215	7859	1905	2.560	55.300	51.079	-7.63%	1.170	24.900	23.345	-6.25%	N/A	N/A	N/A	N/A
Gamma	5250	Head	10/19/2025	22.5	22.0	17	1396	7872	1843	3.990	77.900	79.611	2.20%	1.140	22.400	22.746	1.54%	N/A	N/A	N/A	N/A
Gamma	5250	Head	10/28/2025	22.0	21.3	17	1396	7872	1843	4.230	77.900	84.400	8.34%	1.210	22.400	24.143	7.78%	N/A	N/A	N/A	N/A
Gamma	5250	Head	11/02/2025	22.0	21.4	17	1396	7872	1843	4.030	77.900	80.409	3.22%	1.150	22.400	22.946	2.44%	N/A	N/A	N/A	N/A
Gamma	5250	Head	11/05/2025	22.8	21.5	17	1396	7872	1843	4.080	77.900	81.407	4.50%	1.160	22.400	23.145	3.33%	N/A	N/A	N/A	N/A
Gamma	5600	Head	10/19/2025	22.5	22.0	17	1396	7872	1843	4.190	81.100	83.601	3.08%	1.180	23.300	23.544	1.05%	N/A	N/A	N/A	N/A
Gamma	5600	Head	10/28/2025	22.0	21.3	17	1396	7872	1843	4.280	81.100	85.397	5.30%	1.210	23.300	24.143	3.62%	N/A	N/A	N/A	N/A
Gamma	5600	Head	11/02/2025	22.0	21.4	17	1396	7872	1843	4.300	81.100	85.796	5.79%	1.220	23.300	24.342	4.47%	N/A	N/A	N/A	N/A
Gamma	5600	Head	11/05/2025	22.8	21.5	17	1396	7872	1843	4.140	81.100	82.604	1.85%	1.170	23.300	23.345	0.19%	N/A	N/A	N/A	N/A
Gamma	5750	Head	10/19/2025	22.5	22.0	17	1396	7872	1843	4.000	80.100	79.810	-0.36%	1.140	22.800	22.746	-0.24%	N/A	N/A	N/A	N/A
Gamma	5750	Head	10/28/2025	22.0	21.3	17	1396	7872	1843	4.130	80.100	82.404	2.88%	1.170	22.800	23.345	2.39%	N/A	N/A	N/A	N/A
Gamma	5750	Head	11/02/2025	22.0	21.4	17	1396	7872	1843	4.040	80.100	80.609	0.63%	1.150	22.800	22.946	0.64%	N/A	N/A	N/A	N/A
Gamma	5750	Head	11/05/2025	22.8	21.5	17	1396	7872	1843	3.840	80.100	76.618	-4.35%	1.100	22.800	21.948	-3.74%	N/A	N/A	N/A	N/A
Gamma	5850	Head	10/19/2025	22.5	22.0	17	1396	7872	1843	4.150	76.900	82.803	7.68%	1.170	22.000	23.345	6.11%	N/A	N/A	N/A	N/A
Gamma	5850	Head	10/28/2025	22.0	21.3	17	1396	7872	1843	4.130	76.900	82.404	7.16%	1.170	22.000	23.345	6.11%	N/A	N/A	N/A	N/A
Gamma	5850	Head	11/02/2025	22.0	21.4	17	1396	7872	1843	4.210	76.900	84.001	9.23%	1.190	22.000	23.744	7.93%	N/A	N/A	N/A	N/A
Gamma	5850	Head	11/05/2025	22.8	21.5	17	1396	7872	1843	4.070	76.900	81.207	5.60%	1.140	22.000	22.746	3.39%	N/A	N/A	N/A	N/A
Beta	6500	Head	11/05/2025	22.8	20.0	10	1104	7859	1905	2.950	298.000	295.000	-1.01%	0.566	55.000	56.600	2.91%	13.700	1340.000	1370.000	2.24%
Gamma	6500	Head	11/10/2025	22.5	21.8	10	1104	7872	1843	2.750	298.000	275.000	-7.72%	0.543	55.000	54.300	-1.27%	12.900	1340.000	1290.000	-3.73%
Beta	6500	Head	11/21/2025	22.5	21.8	10	1104	7859	1905	3.060	298.000	306.000	2.68%	0.576	55.000	57.600	4.73%	13.800	1340.000	1380.000	2.99%

B.2. Power Density System Check

The system was verified to be within ± 0.66 dB of the power density targets on the calibration certificate according to the test system specification in the user's manual and calibration facility recommendation. The 0.66 dB deviation threshold represents the expanded uncertainty for system performance checks using SPEAG's mmWave verification sources.

The measured power density distribution of verification source was also confirmed through visual inspection to have no noticeable differences, both spatially (shape) and numerically (level) from the distribution provided by the manufacturer, per November 2017 TCBC Workshop Notes.

Table 2 System Check Results (Power Density)

Date	Probe SN	Frequency (MHz)	Source SN	Prad (mW)	Measured Normal psPD (W/m ²)	Target Normal psPD (W/m ²)	Deviation Normal psPD (dB)	Measured Total psPD (W/m ²)	Target Total psPD (W/m ²)	Deviation Total psPD (dB)
11/16/2025	9690	10000.0	1074	93.3	54.0	53.7	0.02	54.5	54.0	0.04
11/23/2025	9690	10000.0	1074	93.3	53.4	53.7	-0.02	53.7	54.0	-0.02
11/28/2025	9690	10000.0	1074	93.3	53.4	53.7	-0.02	53.6	54.0	-0.03

B.3. Dielectric Parameters of the TSL

Table 3 SAR Tissue Dielectric Parameters

Date	Tissue Type	Liquid Temp (°C)	Frequency (MHz)	Conductivity Measured (σ)	Conductivity Target (σ)	Deviation	Permittivity measured (εr)	Permittivity Target (εr)	Deviation
10/13/2025	Head	22.3	2300	1.74	1.67	4.49%	39.4	39.5	-0.11%
10/13/2025	Head	22.3	2350	1.78	1.71	3.90%	39.4	39.4	-0.05%
10/13/2025	Head	22.3	2400	1.82	1.76	3.60%	39.3	39.3	-0.05%
10/13/2025	Head	22.3	2450	1.86	1.80	3.13%	39.2	39.2	-0.05%
10/13/2025	Head	22.3	2500	1.90	1.85	2.27%	39.1	39.1	-0.15%
10/13/2025	Head	22.3	2550	1.93	1.91	1.28%	39.0	39.1	-0.22%
10/13/2025	Head	22.3	2600	1.98	1.96	0.61%	38.9	39.0	-0.23%
10/13/2025	Head	22.3	2650	2.02	2.02	-0.16%	38.8	38.9	-0.32%
10/13/2025	Head	22.3	2700	2.06	2.07	-0.69%	38.7	38.9	-0.35%
10/13/2025	Head	22	1600	1.29	1.28	0.49%	42.4	40.3	5.16%
10/13/2025	Head	22	1650	1.32	1.31	0.53%	42.3	40.2	5.06%
10/13/2025	Head	22	1700	1.35	1.34	0.54%	42.2	40.2	5.04%
10/13/2025	Head	22	1750	1.38	1.37	0.58%	42.1	40.1	5.01%
10/13/2025	Head	22	1800	1.41	1.40	0.66%	42.0	40.0	5.06%
10/13/2025	Head	22	1850	1.44	1.40	3.08%	41.9	40.0	4.76%
10/13/2025	Head	22	1900	1.47	1.40	4.97%	41.8	40.0	4.54%
10/13/2025	Head	22	1950	1.50	1.40	7.45%	41.7	40.0	4.36%
10/13/2025	Head	22	2000	1.53	1.40	9.61%	41.7	40.0	4.14%
10/13/2025	Head	22	2050	1.57	1.44	8.91%	41.6	39.9	4.21%
10/13/2025	Head	22	2100	1.60	1.49	7.68%	41.5	39.8	4.20%
10/13/2025	Head	22.2	650	0.86	0.89	-2.71%	45.0	42.5	5.92%
10/13/2025	Head	22.2	700	0.88	0.89	-1.21%	44.8	42.2	6.15%
10/13/2025	Head	22.2	750	0.90	0.89	0.31%	44.6	41.9	6.38%
10/13/2025	Head	22.2	800	0.91	0.90	1.77%	44.5	41.7	6.73%
10/13/2025	Head	22.2	850	0.93	0.92	1.84%	44.4	41.5	6.92%
10/13/2025	Head	22.2	900	0.95	0.97	-1.71%	44.2	41.5	6.41%
10/13/2025	Head	22.2	950	0.97	0.99	-2.36%	44.1	41.4	6.42%
10/15/2025	Head	21.1	650	0.85	0.89	-3.91%	43.9	42.5	3.45%
10/15/2025	Head	21.1	700	0.87	0.89	-2.38%	43.7	42.2	3.60%
10/15/2025	Head	21.1	750	0.88	0.89	-1.01%	43.6	41.9	3.95%
10/15/2025	Head	21.1	800	0.90	0.90	0.85%	43.4	41.7	4.20%
10/15/2025	Head	21.1	850	0.92	0.92	0.72%	43.3	41.5	4.40%
10/15/2025	Head	21.1	900	0.94	0.97	-2.58%	43.1	41.5	3.88%
10/15/2025	Head	21.1	950	0.96	0.99	-3.33%	43.0	41.4	3.84%
10/19/2025	Head	22.1	2300	1.77	1.67	6.23%	41.1	39.5	4.25%
10/19/2025	Head	22.1	2350	1.81	1.71	5.58%	41.1	39.4	4.31%
10/19/2025	Head	22.1	2400	1.85	1.76	5.26%	41.0	39.3	4.31%
10/19/2025	Head	22.1	2450	1.89	1.80	4.75%	40.9	39.2	4.33%
10/19/2025	Head	22.1	2500	1.93	1.85	3.91%	40.8	39.1	4.27%
10/19/2025	Head	22.1	2550	1.96	1.91	2.92%	40.7	39.1	4.20%
10/19/2025	Head	22.1	2600	2.01	1.96	2.29%	40.6	39.0	4.19%
10/19/2025	Head	22.1	2650	2.05	2.02	1.55%	40.5	38.9	4.10%
10/19/2025	Head	22.1	2700	2.09	2.07	1.05%	40.5	38.9	4.08%
10/19/2025	Head	21.9	650	0.84	0.89	-5.11%	43.0	42.5	1.23%
10/19/2025	Head	21.9	700	0.86	0.89	-3.72%	42.8	42.2	1.40%
10/19/2025	Head	21.9	750	0.87	0.89	-2.15%	42.6	41.9	1.60%
10/19/2025	Head	21.9	800	0.89	0.90	-0.76%	42.5	41.7	1.87%
10/19/2025	Head	21.9	850	0.91	0.92	-0.76%	42.4	41.5	2.08%
10/19/2025	Head	21.9	900	0.93	0.97	-4.05%	42.2	41.5	1.61%
10/19/2025	Head	21.9	950	0.95	0.99	-4.76%	42.1	41.4	1.58%
10/19/2025	Head	22	5150	4.38	4.60	-4.82%	33.4	36.0	-7.44%
10/19/2025	Head	22	5200	4.43	4.66	-4.73%	33.3	36.0	-7.57%
10/19/2025	Head	22	5250	4.49	4.71	-4.63%	33.2	35.9	-7.66%
10/19/2025	Head	22	5300	4.54	4.76	-4.63%	33.1	35.9	-7.78%
10/19/2025	Head	22	5350	4.59	4.81	-4.54%	33.0	35.8	-7.90%
10/19/2025	Head	22	5500	4.74	4.96	-4.47%	32.7	35.6	-8.16%
10/19/2025	Head	22	5550	4.79	5.01	-4.37%	32.6	35.6	-8.26%
10/19/2025	Head	22	5600	4.85	5.07	-4.27%	32.6	35.5	-8.37%
10/19/2025	Head	22	5650	4.90	5.12	-4.14%	32.5	35.5	-8.50%
10/19/2025	Head	22	5700	4.96	5.17	-4.06%	32.4	35.4	-8.60%
10/19/2025	Head	22	5750	5.01	5.22	-3.99%	32.3	35.4	-8.69%
10/19/2025	Head	22	5800	5.07	5.27	-3.84%	32.2	35.3	-8.80%
10/19/2025	Head	22	5850	5.12	5.32	-3.90%	32.1	35.3	-8.92%
10/19/2025	Head	22	5900	5.17	5.38	-3.77%	32.0	35.2	-9.01%
10/21/2025	Head	21.5	2300	1.77	1.67	5.96%	41.4	39.5	4.96%
10/21/2025	Head	21.5	2350	1.82	1.71	6.27%	41.3	39.4	4.79%
10/21/2025	Head	21.5	2400	1.88	1.76	6.91%	41.1	39.3	4.57%
10/21/2025	Head	21.5	2450	1.93	1.80	7.41%	40.9	39.2	4.35%
10/21/2025	Head	21.5	2500	1.99	1.85	7.51%	40.7	39.1	4.02%
10/21/2025	Head	21.5	2550	2.05	1.91	7.37%	40.5	39.1	3.66%
10/21/2025	Head	21.5	2600	2.11	1.96	7.42%	40.3	39.0	3.36%
10/21/2025	Head	21.5	2650	2.17	2.02	7.28%	40.1	38.9	2.97%
10/21/2025	Head	21.5	2700	2.22	2.07	7.29%	39.9	38.9	2.69%
10/22/2025	Head	19.7	650	0.83	0.89	-6.36%	43.1	42.5	1.42%
10/22/2025	Head	19.7	700	0.84	0.89	-5.06%	42.9	42.2	1.62%
10/22/2025	Head	19.7	750	0.86	0.89	-3.35%	42.7	41.9	1.84%
10/22/2025	Head	19.7	800	0.88	0.90	-1.94%	42.6	41.7	2.15%
10/22/2025	Head	19.7	850	0.90	0.92	-1.82%	42.5	41.5	2.36%
10/22/2025	Head	19.7	900	0.92	0.97	-4.94%	42.3	41.5	1.90%
10/22/2025	Head	19.7	950	0.94	0.99	-5.52%	42.2	41.4	1.85%
10/27/2025	Head	22.7	2300	1.64	1.67	-1.46%	38.9	39.5	-1.40%
10/27/2025	Head	22.7	2350	1.69	1.71	-1.06%	38.7	39.4	-1.65%
10/27/2025	Head	22.7	2400	1.75	1.76	-0.55%	38.5	39.3	-1.97%
10/27/2025	Head	22.7	2450	1.80	1.80	-0.27%	38.3	39.2	-2.25%
10/27/2025	Head	22.7	2500	1.85	1.85	-0.44%	38.1	39.1	-2.63%
10/27/2025	Head	22.7	2550	1.90	1.91	-0.67%	37.9	39.1	-2.96%
10/27/2025	Head	22.7	2600	1.95	1.96	-0.67%	37.7	39.0	-3.26%
10/27/2025	Head	22.7	2650	2.00	2.02	-0.78%	37.5	38.9	-3.63%
10/27/2025	Head	22.7	2700	2.06	2.07	-0.76%	37.3	38.9	-3.98%
10/28/2025	Head	21.3	5150	4.47	4.60	-2.86%	33.6	36.0	-6.87%
10/28/2025	Head	21.3	5200	4.52	4.66	-2.84%	33.5	36.0	-7.00%
10/28/2025	Head	21.3	5250	4.58	4.71	-2.67%	33.4	35.9	-7.13%
10/28/2025	Head	21.3	5300	4.63	4.76	-2.71%	33.3	35.9	-7.22%
10/28/2025	Head	21.3	5350	4.69	4.81	-2.55%	33.2	35.8	-7.39%
10/28/2025	Head	21.3	5500	4.84	4.96	-2.50%	32.9	35.6	-7.66%
10/28/2025	Head	21.3	5550	4.89	5.01	-2.38%	32.8	35.6	-7.81%
10/28/2025	Head	21.3	5600	4.95	5.07	-2.29%	32.7	35.5	-7.91%
10/28/2025	Head	21.3	5650	5.01	5.12	-2.15%	32.6	35.5	-8.07%
10/28/2025	Head	21.3	5700	5.06	5.17	-2.07%	32.5	35.4	-8.17%
10/28/2025	Head	21.3	5750	5.11	5.22	-2.01%	32.4	35.4	-8.28%
10/28/2025	Head	21.3	5800	5.17	5.27	-1.82%	32.3	35.3	-8.42%
10/28/2025	Head	21.3	5850	5.22	5.32	-1.94%	32.2	35.3	-8.52%
10/28/2025	Head	21.3	5900	5.28	5.38	-1.78%	32.2	35.2	-8.66%

Table 4 SAR Tissue Dielectric Parameters (Continued)

Date	Tissue Type	Liquid Temp (°C)	Frequency(MHz)	Conductivity Measured (σ)	Conductivity Target (σ)	Deviation	Permittivity measured (ϵ_r)	Permittivity Target (ϵ_r)	Deviation
10/28/2025	Head	21.6	5150	4.49	4.60	-2.49%	34.1	36.0	-5.34%
10/28/2025	Head	21.6	5200	4.55	4.66	-2.34%	34.0	36.0	-5.46%
10/28/2025	Head	21.6	5250	4.60	4.71	-2.21%	33.9	35.9	-5.59%
10/28/2025	Head	21.6	5300	4.66	4.76	-2.11%	33.8	35.9	-5.66%
10/28/2025	Head	21.6	5350	4.71	4.81	-1.99%	33.7	35.8	-5.83%
10/28/2025	Head	21.6	5500	4.88	4.96	-1.74%	33.5	35.6	-6.12%
10/28/2025	Head	21.6	5550	4.93	5.01	-1.64%	33.4	35.6	-6.24%
10/28/2025	Head	21.6	5600	4.99	5.07	-1.45%	33.3	35.5	-6.37%
10/28/2025	Head	21.6	5650	5.05	5.12	-1.29%	33.2	35.5	-6.49%
10/28/2025	Head	21.6	5700	5.11	5.17	-1.15%	33.1	35.4	-6.63%
10/28/2025	Head	21.6	5750	5.17	5.22	-1.01%	33.0	35.4	-6.70%
10/28/2025	Head	21.6	5800	5.23	5.27	-0.82%	32.9	35.3	-6.86%
10/28/2025	Head	21.6	5850	5.28	5.32	-0.81%	32.8	35.3	-6.95%
10/28/2025	Head	21.6	5900	5.34	5.38	-0.69%	32.7	35.2	-7.10%
10/29/2025	Head	21.2	1600	1.25	1.28	-2.88%	40.6	40.3	0.63%
10/29/2025	Head	21.2	1650	1.28	1.31	-2.83%	40.5	40.2	0.58%
10/29/2025	Head	21.2	1700	1.31	1.34	-2.65%	40.4	40.2	0.59%
10/29/2025	Head	21.2	1750	1.34	1.37	-2.50%	40.3	40.1	0.53%
10/29/2025	Head	21.2	1800	1.36	1.40	-2.56%	40.2	40.0	0.56%
10/29/2025	Head	21.2	1850	1.40	1.40	-0.24%	40.1	40.0	0.32%
10/29/2025	Head	21.2	1900	1.42	1.40	1.66%	40.1	40.0	0.17%
10/29/2025	Head	21.2	1950	1.46	1.40	4.22%	40.0	40.0	0.01%
10/29/2025	Head	21.2	2000	1.49	1.40	6.39%	39.9	40.0	-0.19%
10/29/2025	Head	21.2	2050	1.53	1.44	5.84%	39.9	39.9	-0.13%
10/29/2025	Head	21.2	2100	1.56	1.49	4.67%	39.8	39.8	-0.16%
11/2/2025	Head	21.4	5150	4.42	4.60	-3.98%	33.9	36.0	-5.81%
11/2/2025	Head	21.4	5200	4.48	4.66	-3.81%	33.9	36.0	-5.77%
11/2/2025	Head	21.4	5250	4.52	4.71	-3.88%	33.8	35.9	-6.03%
11/2/2025	Head	21.4	5300	4.58	4.76	-3.63%	33.7	35.9	-5.97%
11/2/2025	Head	21.4	5350	4.63	4.81	-3.73%	33.6	35.8	-6.22%
11/2/2025	Head	21.4	5500	4.79	4.96	-3.40%	33.4	35.6	-6.43%
11/2/2025	Head	21.4	5550	4.83	5.01	-3.59%	33.3	35.6	-6.54%
11/2/2025	Head	21.4	5600	4.90	5.07	-3.24%	33.2	35.5	-6.68%
11/2/2025	Head	21.4	5650	4.95	5.12	-3.30%	33.1	35.5	-6.73%
11/2/2025	Head	21.4	5700	5.01	5.17	-3.05%	33.0	35.4	-6.94%
11/2/2025	Head	21.4	5750	5.06	5.22	-3.07%	32.9	35.4	-6.90%
11/2/2025	Head	21.4	5800	5.12	5.27	-2.87%	32.8	35.3	-7.18%
11/2/2025	Head	21.4	5850	5.17	5.32	-2.90%	32.7	35.3	-7.12%
11/2/2025	Head	21.4	5900	5.22	5.38	-2.89%	32.6	35.2	-7.40%
11/2/2025	Head	21.1	1600	1.27	1.28	-1.39%	40.1	40.3	-0.52%
11/2/2025	Head	21.1	1650	1.29	1.31	-1.55%	40.0	40.2	-0.62%
11/2/2025	Head	21.1	1700	1.32	1.34	-1.56%	39.9	40.2	-0.61%
11/2/2025	Head	21.1	1750	1.35	1.37	-1.52%	39.8	40.1	-0.66%
11/2/2025	Head	21.1	1800	1.38	1.40	-1.43%	39.8	40.0	-0.60%
11/2/2025	Head	21.1	1850	1.41	1.40	1.01%	39.6	40.0	-0.90%
11/2/2025	Head	21.1	1900	1.44	1.40	3.09%	39.5	40.0	-1.13%
11/2/2025	Head	21.1	1950	1.48	1.40	5.85%	39.4	40.0	-1.40%
11/2/2025	Head	21.1	2000	1.51	1.40	7.70%	39.3	40.0	-1.67%
11/2/2025	Head	21.1	2050	1.54	1.44	6.86%	39.2	39.9	-1.67%
11/2/2025	Head	21.1	2100	1.57	1.49	5.57%	39.2	39.8	-1.69%
11/6/2025	Head	21.6	1600	1.26	1.28	-1.87%	39.2	40.3	-2.83%
11/6/2025	Head	21.6	1650	1.29	1.31	-2.09%	39.1	40.2	-2.90%
11/6/2025	Head	21.6	1700	1.31	1.34	-2.12%	39.0	40.2	-2.87%
11/6/2025	Head	21.6	1750	1.34	1.37	-1.96%	38.9	40.1	-2.88%
11/6/2025	Head	21.6	1800	1.37	1.40	-1.79%	38.8	40.0	-2.88%
11/6/2025	Head	21.6	1850	1.41	1.40	0.51%	38.7	40.0	-3.22%
11/6/2025	Head	21.6	1900	1.43	1.40	2.35%	38.6	40.0	-3.42%
11/6/2025	Head	21.6	1950	1.47	1.40	4.80%	38.6	40.0	-3.62%
11/6/2025	Head	21.6	2000	1.50	1.40	6.85%	38.5	40.0	-3.85%
11/6/2025	Head	21.6	2050	1.53	1.44	6.14%	38.4	39.9	-3.82%
11/6/2025	Head	21.6	2100	1.56	1.49	4.94%	38.3	39.8	-3.87%
11/6/2025	Head	22.3	5150	4.30	4.60	-6.68%	33.1	36.0	-8.11%
11/6/2025	Head	22.3	5200	4.35	4.66	-6.66%	33.0	36.0	-8.21%
11/6/2025	Head	22.3	5250	4.40	4.71	-6.59%	32.9	35.9	-8.34%
11/6/2025	Head	22.3	5300	4.44	4.76	-6.61%	32.9	35.9	-8.38%
11/6/2025	Head	22.3	5350	4.50	4.81	-6.52%	32.8	35.8	-8.53%
11/6/2025	Head	22.3	5500	4.64	4.96	-6.56%	32.5	35.6	-8.76%
11/6/2025	Head	22.3	5550	4.69	5.01	-6.45%	32.4	35.6	-8.85%
11/6/2025	Head	22.3	5600	4.74	5.07	-6.41%	32.3	35.5	-8.95%
11/6/2025	Head	22.3	5650	4.80	5.12	-6.26%	32.3	35.5	-9.06%
11/6/2025	Head	22.3	5700	4.84	5.17	-6.25%	32.2	35.4	-9.15%
11/6/2025	Head	22.3	5750	4.90	5.22	-6.14%	32.1	35.4	-9.21%
11/6/2025	Head	22.3	5800	4.95	5.27	-6.06%	32.0	35.3	-9.35%
11/6/2025	Head	22.3	5850	5.00	5.32	-6.12%	31.9	35.3	-9.42%
11/6/2025	Head	22.3	5900	5.05	5.38	-6.06%	31.8	35.2	-9.53%
11/6/2025	Head	21.5	5150	4.40	4.60	-4.48%	34.2	36.0	-5.12%
11/6/2025	Head	21.5	5200	4.45	4.66	-4.37%	34.1	36.0	-5.23%
11/6/2025	Head	21.5	5250	4.50	4.71	-4.35%	34.0	35.9	-5.35%
11/6/2025	Head	21.5	5300	4.55	4.76	-4.31%	33.9	35.9	-5.42%
11/6/2025	Head	21.5	5350	4.60	4.81	-4.26%	33.8	35.8	-5.56%
11/6/2025	Head	21.5	5500	4.75	4.96	-4.21%	33.6	35.6	-5.81%
11/6/2025	Head	21.5	5550	4.81	5.01	-4.13%	33.5	35.6	-5.90%
11/6/2025	Head	21.5	5600	4.86	5.07	-4.03%	33.4	35.5	-6.01%
11/6/2025	Head	21.5	5650	4.92	5.12	-3.91%	33.3	35.5	-6.13%
11/6/2025	Head	21.5	5700	4.97	5.17	-3.85%	33.2	35.4	-6.21%
11/6/2025	Head	21.5	5750	5.02	5.22	-3.76%	33.1	35.4	-6.29%
11/6/2025	Head	21.5	5800	5.08	5.27	-3.65%	33.0	35.3	-6.42%
11/6/2025	Head	21.5	5850	5.13	5.32	-3.69%	33.0	35.3	-6.49%
11/6/2025	Head	21.5	5900	5.18	5.38	-3.62%	32.9	35.2	-6.61%
11/6/2025	Head	21.5	5150	4.40	4.60	-4.48%	34.2	36.0	-5.12%
11/6/2025	Head	21.5	5200	4.45	4.66	-4.37%	34.1	36.0	-5.23%
11/6/2025	Head	21.5	5250	4.50	4.71	-4.35%	34.0	35.9	-5.35%
11/6/2025	Head	21.5	5300	4.55	4.76	-4.31%	33.9	35.9	-5.42%
11/6/2025	Head	21.5	5350	4.60	4.81	-4.26%	33.8	35.8	-5.56%
11/6/2025	Head	21.5	5500	4.75	4.96	-4.21%	33.6	35.6	-5.81%
11/6/2025	Head	21.5	5550	4.81	5.01	-4.13%	33.5	35.6	-5.90%
11/6/2025	Head	21.5	5600	4.86	5.07	-4.03%	33.4	35.5	-6.01%
11/6/2025	Head	21.5	5650	4.92	5.12	-3.91%	33.3	35.5	-6.13%
11/6/2025	Head	21.5	5700	4.97	5.17	-3.85%	33.2	35.4	-6.21%
11/6/2025	Head	21.5	5750	5.02	5.22	-3.76%	33.1	35.4	-6.29%
11/6/2025	Head	21.5	5800	5.08	5.27	-3.65%	33.0	35.3	-6.42%
11/6/2025	Head	21.5	5850	5.13	5.32	-3.69%	33.0	35.3	-6.49%
11/6/2025	Head	21.5	5900	5.18	5.38	-3.62%	32.9	35.2	-6.61%

Table 5 SAR Tissue Dielectric Parameters (Continued)

Date	Tissue Type	Liquid Temp (°C)	Frequency (MHz)	Conductivity Measured (σ)	Conductivity Target (σ)	Deviation	Permittivity Measured (ε')	Permittivity Target (ε')	Deviation
11/5/2025	Head	20	5510	5.53	5.39	2.64%	34.4	35.2	-2.32%
11/5/2025	Head	20	5550	5.48	5.43	2.87%	34.3	35.2	-2.38%
11/5/2025	Head	20	5600	5.63	5.48	2.67%	34.2	35.1	-2.48%
11/5/2025	Head	20	5650	5.70	5.54	2.89%	34.1	35.0	-2.62%
11/5/2025	Head	20	5700	5.66	5.76	-2.37%	34.0	35.0	-2.78%
11/5/2025	Head	20	5750	5.83	5.66	3.10%	33.9	34.9	-2.85%
11/5/2025	Head	20	5790	5.48	5.72	-2.62%	33.8	34.9	-2.91%
11/5/2025	Head	20	5850	5.79	5.69	3.09%	33.8	34.8	-2.89%
11/5/2025	Head	20	5900	6.25	6.07	2.92%	33.3	34.5	-3.42%
11/5/2025	Head	20	5750	6.55	6.36	2.97%	32.8	34.2	-4.01%
11/5/2025	Head	20	7000	6.85	6.65	2.94%	32.5	33.9	-4.28%
11/5/2025	Head	20	7250	7.17	6.95	3.22%	32.0	33.6	-4.87%
11/5/2025	Head	20	7500	8.01	7.78	2.98%	30.8	32.6	-6.09%
11/5/2025	Head	20	8000	8.95	7.84	3.18%	30.6	32.7	-6.95%
11/5/2025	Head	20	5510	5.58	5.39	3.62%	34.8	35.2	-1.04%
11/5/2025	Head	20	5550	5.63	5.43	3.73%	34.7	35.2	-1.10%
11/5/2025	Head	20	5600	5.68	5.48	3.70%	34.7	35.1	-1.20%
11/5/2025	Head	20	5650	5.76	5.54	3.91%	34.5	35.0	-1.40%
11/5/2025	Head	20	5700	5.81	5.60	3.80%	34.5	35.0	-1.44%
11/5/2025	Head	20	5750	5.88	5.66	4.00%	34.4	34.9	-1.51%
11/5/2025	Head	20	5800	5.94	5.72	3.83%	34.3	34.9	-1.67%
11/5/2025	Head	20	5850	6.00	5.78	3.97%	34.2	34.8	-1.79%
11/5/2025	Head	20	5900	6.07	6.07	3.83%	33.7	34.5	-2.29%
11/5/2025	Head	20	5750	6.61	6.36	3.87%	33.2	34.2	-2.85%
11/5/2025	Head	20	7000	6.80	6.65	3.72%	32.8	33.9	-3.20%
11/5/2025	Head	20	7250	6.95	6.85	3.06%	32.3	33.6	-3.88%
11/5/2025	Head	20	7500	8.06	7.79	3.51%	31.0	32.9	-5.25%
11/5/2025	Head	20	8000	8.13	7.84	3.65%	31.0	32.7	-5.07%
11/7/2025	Head	21.7	2000	1.72	1.67	3.00%	38.4	39.1	-0.82%
11/7/2025	Head	21.7	2250	1.76	1.71	2.82%	38.4	39.4	-0.94%
11/7/2025	Head	21.7	2400	1.80	1.70	2.51%	38.3	39.3	-0.95%
11/7/2025	Head	21.7	2450	1.84	1.85	-2.07%	38.2	39.2	-0.11%
11/7/2025	Head	21.7	2500	1.88	1.85	1.51%	38.2	39.1	-0.94%
11/7/2025	Head	21.7	2550	1.92	1.91	0.40%	38.1	39.1	-0.93%
11/7/2025	Head	21.7	2600	1.96	1.96	-0.19%	38.0	39.0	-0.64%
11/7/2025	Head	21.7	2650	2.00	2.02	-0.96%	38.9	39.9	-0.15%
11/7/2025	Head	21.7	2700	2.04	2.07	-1.49%	38.8	38.9	-0.19%
11/8/2025	Head	22.1	1500	1.26	1.26	-1.67%	40.9	40.1	1.51%
11/8/2025	Head	22.1	1550	1.29	1.31	-1.96%	40.8	40.2	1.45%
11/8/2025	Head	22.1	1700	1.32	1.34	-1.98%	40.7	40.2	1.39%
11/8/2025	Head	22.1	1750	1.34	1.37	-2.12%	40.6	40.1	1.31%
11/8/2025	Head	22.1	1800	1.37	1.40	-2.30%	40.6	40.6	0.00%
11/8/2025	Head	22.1	1850	1.40	1.40	-0.62%	40.5	40.0	1.17%
11/8/2025	Head	22.1	1900	1.43	1.40	1.84%	40.4	40.0	1.04%
11/8/2025	Head	22.1	1950	1.45	1.45	4.54%	39.3	40.0	-0.88%
11/8/2025	Head	22.1	2000	1.49	1.40	6.46%	40.3	40.0	0.69%
11/8/2025	Head	22.1	2050	1.53	1.44	6.18%	40.2	39.5	0.72%
11/8/2025	Head	22.1	2100	1.56	1.44	7.44%	40.1	39.8	0.76%
11/8/2025	Head	21.9	1850	1.23	1.28	-3.94%	40.1	40.3	-0.54%
11/8/2025	Head	21.9	1900	1.26	1.31	-3.99%	40.0	40.2	-0.63%
11/8/2025	Head	21.9	1950	1.29	1.34	-4.01%	39.9	40.2	-0.69%
11/8/2025	Head	21.9	1750	1.31	1.37	-4.14%	39.8	40.1	-0.70%
11/8/2025	Head	21.9	1800	1.34	1.40	-4.11%	39.7	40.0	-0.70%
11/8/2025	Head	21.9	1850	1.37	1.40	-2.11%	39.6	40.0	-0.91%
11/8/2025	Head	21.9	1900	1.40	1.40	-0.34%	39.6	40.0	-1.11%
11/8/2025	Head	21.9	1950	1.43	1.40	2.19%	39.5	40.0	-1.30%
11/8/2025	Head	21.9	2000	1.45	1.40	3.11%	39.4	40.0	-1.50%
11/8/2025	Head	21.9	2050	1.50	1.44	3.67%	39.3	39.9	-1.43%
11/8/2025	Head	21.9	2100	1.53	1.48	2.68%	39.2	39.8	-1.44%
11/10/2025	Head	21.8	5510	5.60	5.43	3.10%	37.2	38.2	-4.08%
11/10/2025	Head	21.8	5550	5.65	5.43	4.07%	37.2	38.2	-5.91%
11/10/2025	Head	21.8	5600	5.71	5.48	4.14%	37.2	38.1	-5.90%
11/10/2025	Head	21.8	5650	5.77	5.54	4.24%	37.0	38.0	-6.72%
11/10/2025	Head	21.8	5700	5.84	5.65	4.27%	37.0	38.0	-7.72%
11/10/2025	Head	21.8	5750	5.90	5.66	4.37%	36.9	34.8	5.58%
11/10/2025	Head	21.8	5800	5.96	5.72	4.30%	36.8	34.9	5.56%
11/10/2025	Head	21.8	5850	6.03	5.78	4.41%	36.7	34.8	5.47%
11/10/2025	Head	21.8	5900	6.13	6.07	0.24%	36.3	34.5	5.13%
11/10/2025	Head	21.8	5950	6.26	6.26	0.00%	36.3	34.2	4.78%
11/10/2025	Head	21.8	6000	6.36	6.36	0.00%	36.4	34.9	4.56%
11/10/2025	Head	21.8	7000	6.94	6.65	4.38%	35.4	33.9	4.56%
11/10/2025	Head	21.8	7250	7.26	6.95	4.48%	35.0	33.6	4.03%
11/10/2025	Head	21.8	7500	8.15	7.78	4.71%	33.7	32.8	2.68%
11/10/2025	Head	21.8	8000	8.20	7.84	4.57%	33.8	32.9	2.24%
11/12/2025	Head	21.6	1600	1.25	1.28	-2.29%	39.5	40.3	-1.97%
11/12/2025	Head	21.6	1650	1.28	1.31	-2.29%	39.4	40.2	-2.04%
11/12/2025	Head	21.6	1700	1.31	1.34	-2.41%	39.3	40.2	-2.04%
11/12/2025	Head	21.6	1750	1.34	1.37	-2.29%	39.2	40.1	-2.16%
11/12/2025	Head	21.6	1800	1.37	1.40	-2.29%	39.2	40.0	-2.29%
11/12/2025	Head	21.6	1850	1.39	1.40	-0.39%	39.1	40.0	-2.37%
11/12/2025	Head	21.6	1900	1.42	1.40	1.52%	39.0	40.0	-2.48%
11/12/2025	Head	21.6	1950	1.45	1.40	3.60%	38.9	40.0	-2.84%
11/12/2025	Head	21.6	2000	1.48	1.45	3.62%	38.9	40.0	-2.81%
11/12/2025	Head	21.6	2050	1.52	1.44	5.11%	38.8	39.9	-2.76%
11/12/2025	Head	21.6	2100	1.55	1.46	3.92%	38.7	39.6	-2.79%
11/12/2025	Head	21.8	5510	5.71	5.43	5.11%	38.9	39.2	-0.89%
11/12/2025	Head	21.8	5550	5.66	5.43	4.24%	38.8	39.2	-4.79%
11/12/2025	Head	21.8	5600	5.71	5.48	4.27%	38.8	39.1	-4.72%
11/12/2025	Head	21.8	5650	5.76	5.54	4.09%	38.6	39.6	-4.56%
11/12/2025	Head	21.8	5700	5.85	5.60	4.42%	38.6	39.0	-4.52%
11/12/2025	Head	21.8	5750	5.92	5.66	4.64%	38.4	34.9	4.37%
11/12/2025	Head	21.8	5800	5.77	5.72	0.83%	38.4	34.9	4.37%
11/12/2025	Head	21.8	5850	6.05	5.78	4.74%	38.3	34.8	4.20%
11/12/2025	Head	21.8	5900	6.06	6.07	-0.17%	38.8	34.5	3.78%
11/12/2025	Head	21.8	5950	6.36	6.26	1.59%	38.3	34.2	3.20%
11/12/2025	Head	21.8	6000	6.99	6.65	5.11%	34.9	33.9	2.96%
11/12/2025	Head	21.8	7250	7.33	6.95	5.59%	34.4	33.6	2.36%
11/12/2025	Head	21.8	7500	7.82	7.40	5.70%	33.1	32.9	0.64%
11/12/2025	Head	21.8	8000	8.28	7.84	5.58%	33.1	32.7	1.20%
11/24/2025	Head	22.2	15	0.71	0.75	-5.69%	50.8	55.0	-7.68%
11/30/2025	Head	21.9	650	0.75	0.75	-0.00%	41.9	55.0	-6.64%
11/30/2025	Head	21.9	650	0.84	0.89	-5.38%	45.4	42.5	6.81%
11/30/2025	Head	21.9	700	0.85	0.89	-3.89%	45.2	42.2	7.07%
11/30/2025	Head	21.9	750	0.87	0.89	-2.39%	45.0	41.9	2.90%
11/30/2025	Head	21.9	800	0.89	0.90	-0.91%	44.9	41.7	7.63%
11/30/2025	Head	21.9	850	0.91	0.92	-0.82%	44.8	41.5	7.84%
11/30/2025	Head	21.9	900	0.93	0.97	-4.19%	44.5	41.5	0.00%
11/30/2025	Head	21.9	950	0.95	0.99	-4.89%	44.5	41.4	7.33%
12/3/2025	Head	21.5	650	0.85	0.89	-3.59%	44.5	42.5	4.89%
12/3/2025	Head	21.5	700	0.87	0.89	-2.36%	44.3	42.2	5.08%
12/3/2025	Head	21.5	750	0.89	0.89	-0.48%	44.2	41.9	5.25%
12/3/2025	Head	21.5	800	0.91	0.90	1.01%	44.0	41.7	5.59%
12/3/2025	Head	21.5	850	0.93	0.92	1.02%	43.9	41.5	5.52%
12/3/2025	Head	21.5	900	0.95	0.97	-2.38%	43.7	41.5	5.35%
12/3/2025	Head	21.5	950	0.96	0.99	-2.90%	43.6	41.4	5.32%
12/6/2025	Head	20.8	2200	1.75	1.67	4.86%	42.5	39.1	8.02%
12/6/2025	Head	20.8	2300	1.79	1.71	4.62%	42.5	39.4	7.96%
12/6/2025	Head	20.8	2400	1.83	1.70	4.19%	42.5	39.3	8.05%
12/6/2025	Head	20.8	2450	1.86	1.85	0.22%	42.4	39.2	8.18%
12/6/2025	Head	20.8	2500	1.92	1.85	3.79%	42.3	39.1	7.97%
12/6/2025	Head	20.8	2550	1.96	1.91	2.58%	42.2	39.1	7.98%
12/6/2025	Head	20.8	2600	2.01	1.96	2.25%	42.1	39.0	7.96%
12/6/2025	Head	20.8	2650	2.05	2.02	1.57%	42.0	38.9	7.82%
12/6/2025	Head	20.8	2700	2.09	2.07	0.92%	41.9	38.9	7.82%
12/12/2025	Head	20.4	650	0.80	0.85	-5.13%	43.1	42.5	1.40%
12/12/2025	Head	20.4	700	0.82	0.89	-7.78%	42.8	42.2	1.58%
12/12/2025	Head</								

B.4. FCC System Validation

Per FCC KDB Publication 865664 D02 Section 2.3 a) states “SAR system validation status and system verification results should be documented in a separate section of the SAR report, or as an attachment, to confirm measurement accuracy.”

The SAR systems used for evaluating 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 D01 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.

Per FCC KDB 865664 D02, “the validation status should be documented according to the validation date(s), measurement frequencies, SAR probes, calibrated signal type(s) and tissue dielectric parameters.” A tabulated summary of the system validation status is provided accordingly:

Table 6 System Validation

System	Frequency (MHz)	Date	Probe	DAE	Probe CalF		Cond. (σ)	Perm (ϵ_r)	CW Validation			Mod Validation		
					Freq (MHz)	Tissue Type			Sensitivity	Probe Linearity	Probe Isotropy	Mod Type	Duty Factor	PAR
Gamma	13	11/14/2025	7872	1843	13	Head	0.695	52	PASS	PASS	PASS	N/A	N/A	N/A
Delta	750	12/02/2025	7853	1844	750	Head	0.872	41.83	PASS	PASS	PASS	N/A	N/A	N/A
Gamma	750	08/27/2025	7872	1843	750	Head	0.9	42.2	PASS	PASS	PASS	N/A	N/A	N/A
Delta	835	12/11/2025	7853	1844	835	Head	0.87	42.5	PASS	PASS	PASS	GMSK	PASS	N/A
Gamma	835	08/27/2025	7872	1843	835	Head	0.93	41.9	PASS	PASS	PASS	GMSK	PASS	N/A
Gamma	1750	08/28/2025	7872	1843	1750	Head	1.358	42.595	PASS	PASS	PASS	N/A	N/A	N/A
Alpha	1750	10/30/2025	7836	1839	1750	Head	1.34	40.3	PASS	PASS	PASS	N/A	N/A	N/A
Gamma	1900	08/28/2025	7872	1843	1900	Head	1.44	42.3	PASS	PASS	PASS	GMSK	PASS	N/A
Delta	1900	10/30/2025	7857	1862	1900	Head	1.46	41.91	PASS	PASS	PASS	GMSK	PASS	N/A
Beta	2450	05/21/2025	7859	1905	2450	Head	1.72	37.8	PASS	PASS	PASS	OFDM	N/A	PASS
Gamma	2450	08/22/2025	7872	1843	2450	Head	1.824	39.432	PASS	PASS	PASS	OFDM	N/A	PASS
Beta	2600	05/28/2025	7859	1905	2600	Head	1.97	39.2	PASS	PASS	PASS	TDD	PASS	N/A
Gamma	5250	08/25/2025	7872	1843	5250	Head	4.53	34.7	PASS	PASS	PASS	OFDM	N/A	PASS
Gamma	5600	08/26/2025	7872	1843	5600	Head	4.971	33.989	PASS	PASS	PASS	OFDM	N/A	PASS
Gamma	5750	08/26/2025	7872	1843	5750	Head	5.141	33.717	PASS	PASS	PASS	OFDM	N/A	PASS
Gamma	5850	08/26/2025	7872	1843	5850	Head	5.2	33.6	PASS	PASS	PASS	OFDM	N/A	PASS
Beta	6500	11/05/2025	7859	1905	6500	Head	6.302	33.709	PASS	PASS	PASS	OFDM	N/A	PASS
Gamma	6500	09/19/2025	7872	1843	6500	Head	5.99	32.2	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 D01 for scenarios when CW probe calibrations are used with other signal types.

SAR systems were additionally validated for modulated signals with a periodic duty cycle or with a high PAR (peak to average ratio) >5 dB, such as OFDM according to FCC KDB Publication 865664 D01 v01r04.

B.5. Sample TSL Compositions

TSL recipes are proprietary to SPEAG. Since the composition is approximate to the actual liquids utilized, the manufacturer data sheets are provided below.

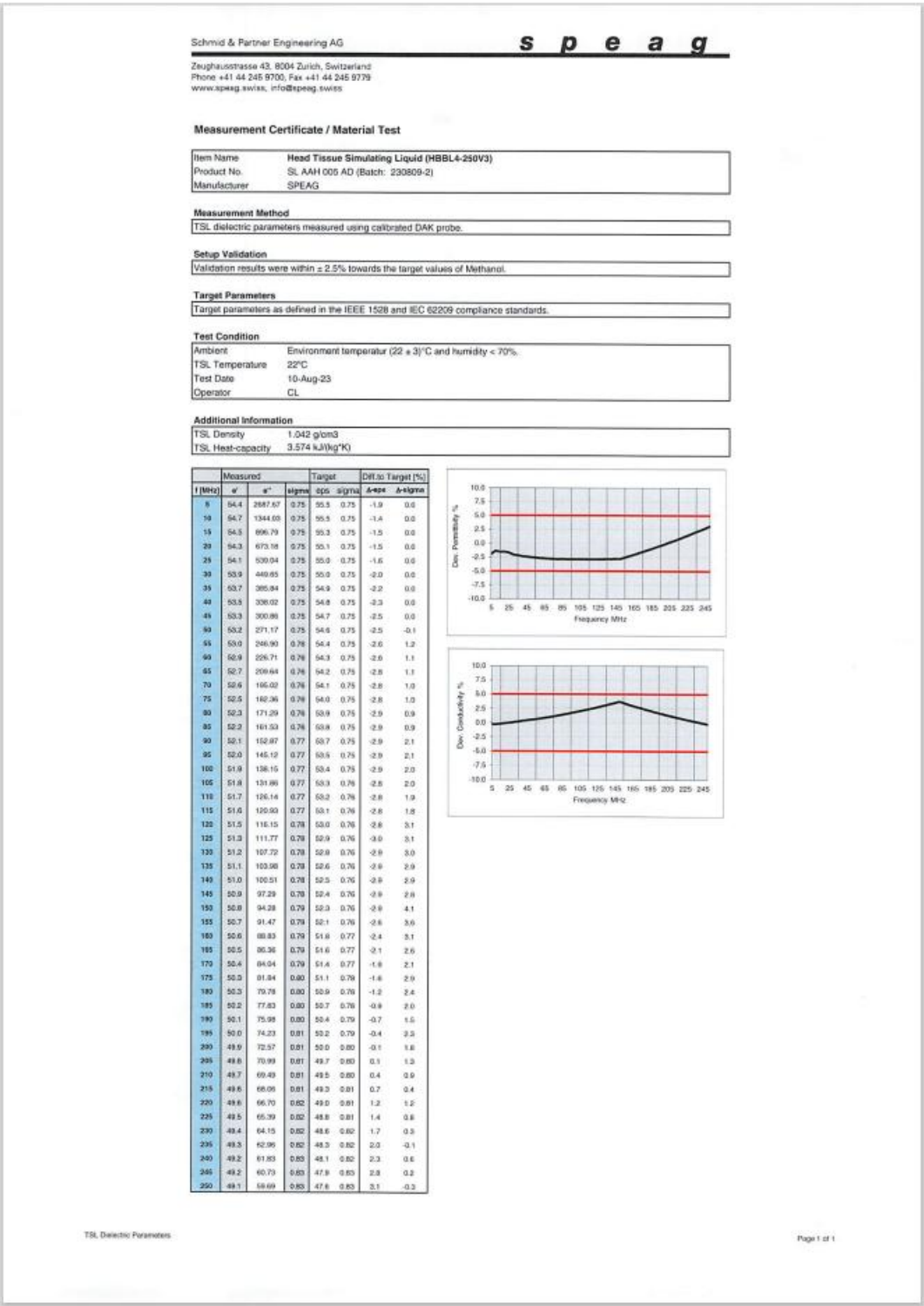


Figure 1 - Head TSL Calibration Certificate Example (4 – 250 MHz)

Measurement Certificate / Material Test

Item Name	Head Tissue Simulating Liquid (HBL600-10000V6)
Product No.	SL AAH U16 BC (Batch: 230912-5)
Manufacturer	SPEAG

Measurement Method

TSL dielectric parameters measured using calibrated DAK probe.

Target Parameters

Target parameters as defined in the IEEE 1528 and IEC 62209 compliance standards.

Test Condition

Ambient Condition 22°C ; 30% humidity

TSL Temperature 22°C

Test Date 14-Sep-23

Operator CL

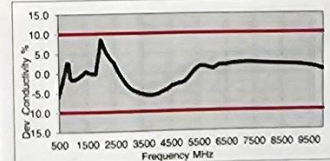
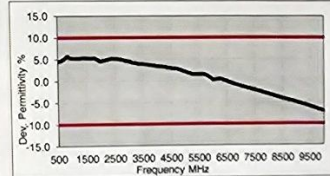
Additional Information

TSL Density

TSL Heat-capacity

Results

f [MHz]	Measured			Target		Diff. to Target [%]	
	e'	e''	sigma	eps	sigma	Δ-eps	Δ-sigma
600	44.7	25.6	0.86	42.7	0.88	4.6	-2.5
750	44.2	21.7	0.90	41.9	0.89	5.4	0.7
900	44.0	20.7	0.92	41.7	0.90	5.6	2.5
1050	44.0	20.3	0.93	41.6	0.91	5.8	2.6
1200	44.0	20.1	0.94	41.5	0.91	5.9	3.1
1350	43.9	19.9	0.94	41.5	0.92	5.8	2.6
1500	43.8	19.2	0.96	41.5	0.97	5.5	-1.0
1650	42.8	15.2	1.18	40.6	1.18	5.4	0.0
1800	42.7	15.0	1.21	40.5	1.20	5.4	0.8
1950	42.4	14.4	1.29	40.3	1.28	5.2	0.4
2100	42.4	14.4	1.30	40.3	1.30	5.3	0.1
2250	42.4	14.3	1.31	40.3	1.31	5.3	0.3
2400	42.4	14.3	1.31	40.2	1.31	5.4	-0.2
2550	42.3	14.2	1.34	40.2	1.34	5.3	-0.2
2700	42.2	14.1	1.37	40.1	1.37	5.3	-0.1
2850	42.1	14.0	1.40	40.0	1.40	5.3	0.0
3000	42.1	13.9	1.41	40.0	1.40	5.3	0.7
3150	42.1	13.9	1.42	40.0	1.40	5.3	1.4
3300	42.1	13.9	1.43	40.0	1.40	5.3	2.1
3450	42.0	13.8	1.46	40.0	1.40	5.0	4.3
3600	41.9	13.7	1.49	40.0	1.40	4.7	6.4
3750	41.8	13.7	1.52	40.0	1.40	4.5	8.6
3900	41.8	13.6	1.55	39.9	1.44	4.7	7.3
4050	41.7	13.6	1.59	39.8	1.49	4.7	6.8
4200	41.6	13.6	1.62	39.7	1.53	4.7	5.7
4350	41.6	13.5	1.66	39.6	1.58	4.9	5.2
4500	41.5	13.5	1.69	39.6	1.62	4.9	4.2
4650	41.4	13.5	1.73	39.5	1.67	4.9	3.8
4800	41.4	13.5	1.77	39.4	1.71	5.1	3.4
4950	41.3	13.6	1.81	39.3	1.76	5.1	3.1
5100	41.2	13.6	1.85	39.2	1.80	5.1	2.8
5250	41.2	13.6	1.89	39.1	1.85	5.3	1.9
5400	41.1	13.6	1.93	39.1	1.91	5.2	1.1
5550	41.0	13.6	1.97	39.0	1.96	5.1	0.3



3500	39.4	14.1	2.75	37.9	2.91	3.9	-5.5
3700	39.1	14.3	2.94	37.7	3.12	3.7	-0.8
3900	38.6	16.0	4.62	36.0	4.66	1.7	-0.8
4100	36.5	16.1	4.69	35.9	4.71	1.6	-0.3
4300	36.4	16.2	4.78	35.9	4.78	1.5	0.1
4500	36.2	16.4	5.03	35.6	4.96	1.5	1.3
4700	36.1	16.5	5.14	35.5	5.07	1.5	1.5
4900	35.9	16.5	5.25	35.4	5.17	1.2	1.4
5100	35.7	16.6	5.34	35.3	5.27	1.2	1.4
5300	35.1	16.5	5.52	35.1	5.48	0.2	0.9
5500	34.4	17.1	6.19	34.5	6.07	-0.1	1.9
5700	33.5	17.5	6.81	33.9	6.65	-1.3	2.4
5900	32.6	17.8	7.41	33.3	7.24	-2.1	2.4
6100	31.7	18.0	8.01	32.7	7.84	-3.1	2.2
6300	30.8	18.2	8.62	32.1	8.45	-4.1	2.0
6500	30.0	18.5	9.24	31.5	9.08	-4.9	1.9
6700	29.1	18.6	9.85	31.0	9.71	-5.9	1.4
6900	28.2	18.7	10.41	30.4	10.36	-7.0	0.5

TSL Dielectric Parameters

Figure 2 - Head TSL Calibration Certificate Example (600 – 10000 MHz)