

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	6/24/2026	22.5	22.6	24.5	1041	7872	1843	0.135	0.457	0.479	4.81%	0.082	0.296	0.291	-1.71%	N/A	N/A	N/A	N/A
Epsilon	750	Head	6/3/2026	21.9	20.8	17	1235	7971	1862	0.417	8.690	8.320	-4.25%	0.275	5.690	5.487	-3.57%	N/A	N/A	N/A	N/A
Epsilon	835	Head	6/3/2026	21.9	20.8	17	44311	7971	1862	0.499	9.820	9.956	1.39%	0.328	6.370	6.544	2.74%	N/A	N/A	N/A	N/A
Delta	835	Head	6/8/2026	21.0	20.2	17	44311	7853	1844	0.490	9.820	9.777	-0.44%	0.324	6.370	6.465	1.49%	N/A	N/A	N/A	N/A
Epsilon	835	Head	6/27/2026	23.7	22.0	17	44311	7971	1862	0.498	9.820	9.936	1.19%	0.327	6.370	6.525	2.43%	N/A	N/A	N/A	N/A
Epsilon	835	Head	6/29/2026	22.8	21.4	17	44311	7971	1862	0.505	9.820	10.076	2.61%	0.331	6.370	6.604	3.68%	N/A	N/A	N/A	N/A
Zeta	1750	Head	6/1/2026	20.8	21.0	17	1205	7969	1933	1.780	36.500	35.516	-2.70%	0.948	19.200	18.915	-1.48%	N/A	N/A	N/A	N/A
Zeta	1750	Head	6/7/2026	21.1	20.0	17	1205	7969	1933	1.750	36.500	34.917	-4.34%	0.940	19.200	18.755	-2.32%	N/A	N/A	N/A	N/A
Gamma	1750	Head	7/6/2026	22.4	22.5	17	1205	7836	1839	1.780	36.500	35.516	-2.70%	0.952	19.200	18.995	-1.07%	N/A	N/A	N/A	N/A
Zeta	1900	Head	6/1/2026	20.8	21.0	17	54252	7969	1933	1.880	39.800	37.511	-5.75%	0.990	21.000	19.753	-5.94%	N/A	N/A	N/A	N/A
Zeta	1900	Head	6/30/2026	24.7	21.1	17	54252	7969	1933	1.900	39.800	37.910	-4.75%	0.996	21.000	19.873	-5.37%	N/A	N/A	N/A	N/A
Gamma	1900	Head	7/6/2026	22.4	22.5	17	54252	7836	1839	1.910	39.800	38.110	-4.25%	1.000	21.000	19.953	-4.99%	N/A	N/A	N/A	N/A
Epsilon	2450	Head	6/29/2026	22.8	21.4	17	1112	7971	1862	2.400	50.600	47.886	-5.36%	1.130	23.700	22.546	-4.87%	N/A	N/A	N/A	N/A
Beta	2600	Head	6/3/2026	21.9	21.9	17	1215	7857	1838	2.700	55.300	53.872	-2.58%	1.220	24.900	24.342	-2.24%	N/A	N/A	N/A	N/A
Beta	2600	Head	6/8/2026	22.4	20.9	17	1215	7857	1838	2.700	55.300	53.872	-2.58%	1.220	24.900	24.342	-2.24%	N/A	N/A	N/A	N/A
Gamma	3500	Head	6/29/2026	22.8	22.3	17	1154	7836	1839	2.970	65.100	59.259	-8.97%	1.130	24.600	22.546	-8.35%	N/A	N/A	N/A	N/A
Gamma	3700	Head	6/29/2026	22.8	22.3	17	1130	7836	1839	3.130	66.600	62.452	-6.23%	1.170	24.500	23.345	-4.72%	N/A	N/A	N/A	N/A
Gamma	3900	Head	6/29/2026	22.8	22.3	17	1101	7836	1839	3.280	70.200	65.445	-6.77%	1.160	24.600	23.145	-5.91%	N/A	N/A	N/A	N/A
Beta	5250	Head	7/6/2026	22.4	22.5	17	1396	7857	1838	3.930	77.900	78.414	0.66%	1.130	22.400	22.546	0.65%	N/A	N/A	N/A	N/A
Beta	5600	Head	7/6/2026	22.4	22.5	17	1396	7857	1838	4.250	81.100	84.799	4.56%	1.200	23.300	23.943	2.76%	N/A	N/A	N/A	N/A
Beta	5750	Head	7/6/2026	22.4	22.5	17	1396	7857	1838	4.070	80.100	81.207	1.38%	1.160	22.800	23.145	1.51%	N/A	N/A	N/A	N/A
Beta	5850	Head	7/6/2026	22.4	22.5	17	1396	7857	1838	4.200	76.900	83.801	8.97%	1.190	22.000	23.744	7.93%	N/A	N/A	N/A	N/A
Gamma	6500	Head	6/22/2026	23.0	21.8	10	1104	7872	1843	2.900	298.000	290.000	-2.68%	0.546	55.000	54.600	-0.73%	13.100	1340.000	1310.000	-2.24%

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)
6/29/2026	9690	10000.0	1074	74.13	37.300	36.300	0.12	37.500	36.500	0.12

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
6/1/2026	Head	21.4	1600	1.19	1.28	-7.02%	40.3	40.3	-0.05%
6/1/2026	Head	21.4	1650	1.22	1.31	-6.96%	40.2	40.2	-0.10%
6/1/2026	Head	21.4	1700	1.25	1.34	-6.78%	40.1	40.2	-0.12%
6/1/2026	Head	21.4	1750	1.28	1.37	-6.76%	40.0	40.1	-0.21%
6/1/2026	Head	21.4	1800	1.31	1.40	-6.70%	39.9	40.0	-0.17%
6/1/2026	Head	21.4	1850	1.34	1.40	-4.57%	39.8	40.0	-0.52%
6/1/2026	Head	21.4	1900	1.36	1.40	-2.92%	39.7	40.0	-0.69%
6/1/2026	Head	21.4	1950	1.39	1.40	-0.70%	39.7	40.0	-0.85%
6/1/2026	Head	21.4	2000	1.42	1.40	1.37%	39.6	40.0	-0.98%
6/1/2026	Head	21.4	2050	1.46	1.44	0.74%	39.5	39.9	-0.94%
6/1/2026	Head	21.4	2100	1.48	1.49	-0.34%	39.5	39.8	-0.93%
6/3/2026	Head	22	2300	1.65	1.67	-1.07%	39.2	39.5	-0.74%
6/3/2026	Head	22	2350	1.68	1.71	-1.64%	39.1	39.4	-0.65%
6/3/2026	Head	22	2400	1.72	1.76	-1.88%	39.0	39.3	-0.62%
6/3/2026	Head	22	2450	1.76	1.80	-2.32%	39.0	39.2	-0.58%
6/3/2026	Head	22	2500	1.80	1.85	-3.11%	38.9	39.1	-0.64%
6/3/2026	Head	22	2550	1.83	1.91	-3.96%	38.8	39.1	-0.69%
6/3/2026	Head	22	2600	1.87	1.96	-4.52%	38.7	39.0	-0.68%
6/3/2026	Head	22	2650	1.91	2.02	-5.17%	38.6	38.9	-0.77%
6/3/2026	Head	22	2700	1.96	2.07	-5.67%	38.6	38.9	-0.81%
6/3/2026	Head	21.1	650	0.83	0.89	-6.57%	44.2	42.5	4.03%
6/3/2026	Head	21.1	700	0.84	0.89	-5.19%	44.0	42.2	4.25%
6/3/2026	Head	21.1	750	0.86	0.89	-3.70%	43.8	41.9	4.54%
6/3/2026	Head	21.1	800	0.88	0.90	-2.13%	43.7	41.7	4.86%
6/3/2026	Head	21.1	850	0.90	0.92	-2.18%	43.6	41.5	5.01%
6/3/2026	Head	21.1	900	0.92	0.97	-5.38%	43.4	41.5	4.58%
6/3/2026	Head	21.1	950	0.93	0.99	-6.05%	43.3	41.4	4.51%
6/7/2026	Head	20.2	1600	1.23	1.28	-4.28%	41.9	40.3	3.97%
6/7/2026	Head	20.2	1650	1.26	1.31	-4.38%	41.8	40.2	3.94%
6/7/2026	Head	20.2	1700	1.28	1.34	-4.35%	41.8	40.2	3.99%
6/7/2026	Head	20.2	1750	1.31	1.37	-4.22%	41.7	40.1	4.01%
6/7/2026	Head	20.2	1800	1.34	1.40	-3.97%	41.6	40.0	4.10%
6/7/2026	Head	20.2	1850	1.38	1.40	-1.53%	41.5	40.0	3.79%
6/7/2026	Head	20.2	1900	1.41	1.40	0.49%	41.4	40.0	3.61%
6/7/2026	Head	20.2	1950	1.44	1.40	3.00%	41.4	40.0	3.40%
6/7/2026	Head	20.2	2000	1.47	1.40	5.27%	41.3	40.0	3.21%
6/7/2026	Head	20.2	2050	1.51	1.44	4.66%	41.2	39.9	3.21%
6/7/2026	Head	20.2	2100	1.54	1.49	3.48%	41.1	39.8	3.19%
6/8/2026	Head	21	2300	1.63	1.67	-2.18%	38.4	39.5	-2.69%
6/8/2026	Head	21	2350	1.66	1.71	-2.70%	38.4	39.4	-2.60%
6/8/2026	Head	21	2400	1.70	1.76	-2.93%	38.3	39.3	-2.57%
6/8/2026	Head	21	2450	1.74	1.80	-3.32%	38.2	39.2	-2.53%
6/8/2026	Head	21	2500	1.78	1.85	-4.01%	38.1	39.1	-2.60%
6/8/2026	Head	21	2550	1.82	1.91	-4.78%	38.0	39.1	-2.67%
6/8/2026	Head	21	2600	1.86	1.96	-5.31%	38.0	39.0	-2.70%
6/8/2026	Head	21	2650	1.90	2.02	-6.02%	37.8	38.9	-2.83%
6/8/2026	Head	21	2700	1.94	2.07	-6.54%	37.8	38.9	-2.88%
6/8/2026	Head	20.8	650	0.83	0.89	-6.20%	45.0	42.5	6.10%
6/8/2026	Head	20.8	700	0.85	0.89	-4.84%	44.9	42.2	6.32%
6/8/2026	Head	20.8	750	0.86	0.89	-3.33%	44.7	41.9	6.61%
6/8/2026	Head	20.8	800	0.88	0.90	-1.72%	44.6	41.7	6.92%
6/8/2026	Head	20.8	850	0.90	0.92	-1.84%	44.5	41.5	7.12%
6/8/2026	Head	20.8	900	0.92	0.97	-4.98%	44.3	41.5	6.68%
6/8/2026	Head	20.8	950	0.94	0.99	-5.65%	44.2	41.4	6.62%
6/22/2026	Head	22.1	5910	5.44	5.39	1.09%	36.5	35.2	3.59%
6/22/2026	Head	22.1	5950	5.49	5.43	1.21%	36.4	35.2	3.43%
6/22/2026	Head	22.1	6000	5.55	5.48	1.29%	36.3	35.1	3.43%
6/22/2026	Head	22.1	6050	5.62	5.54	1.42%	36.2	35.0	3.24%
6/22/2026	Head	22.1	6100	5.68	5.60	1.42%	36.1	35.0	3.24%
6/22/2026	Head	22.1	6150	5.75	5.66	1.65%	36.0	34.9	3.11%
6/22/2026	Head	22.1	6200	5.80	5.72	1.52%	35.9	34.9	3.08%
6/22/2026	Head	22.1	6250	5.88	5.78	1.74%	35.8	34.8	2.97%
6/22/2026	Head	22.1	6500	6.17	6.07	1.69%	35.4	34.5	2.65%
6/22/2026	Head	22.1	6750	6.49	6.36	2.02%	35.0	34.2	2.26%
6/22/2026	Head	22.1	7000	6.79	6.65	2.09%	34.6	33.9	2.07%
6/22/2026	Head	22.1	7250	7.13	6.95	2.60%	34.1	33.6	1.56%
6/22/2026	Head	22.1	7950	8.01	7.78	2.97%	33.0	32.8	0.67%
6/22/2026	Head	22.1	8000	8.05	7.84	2.73%	33.0	32.7	0.82%
6/24/2026	Head	22.8	10	0.77	0.75	2.42%	54.1	55.0	-1.61%
6/24/2026	Head	22.8	15	0.77	0.75	2.42%	53.9	55.0	-1.96%
6/27/2026	Head	22.1	650	0.82	0.89	-6.87%	45.6	42.5	7.45%
6/27/2026	Head	22.1	700	0.84	0.89	-5.74%	45.4	42.2	7.67%
6/27/2026	Head	22.1	750	0.86	0.89	-4.16%	45.3	41.9	8.00%
6/27/2026	Head	22.1	800	0.87	0.90	-2.77%	45.2	41.7	8.37%
6/27/2026	Head	22.1	850	0.89	0.92	-2.66%	45.0	41.5	8.54%
6/27/2026	Head	22.1	900	0.91	0.97	-5.98%	44.9	41.5	8.11%
6/27/2026	Head	22.1	950	0.93	0.99	-6.64%	44.8	41.4	8.07%

Table 4 SAR Tissue Dielectric Parameters (Continued)

Date	Tissue Type	Liquid Temp (°C)	Frequency (MHz)	Conductivity Measured (o)	Conductivity Target (o)	Deviation	Permittivity measured (er)	Permittivity Target (er)	Deviation
6/29/2026	Head	22.5	3300	2.57	2.71	-5.20%	40.7	38.2	6.72%
6/29/2026	Head	22.5	3350	2.61	2.76	-5.25%	40.6	38.1	6.66%
6/29/2026	Head	22.5	3400	2.66	2.81	-5.50%	40.6	38.0	6.63%
6/29/2026	Head	22.5	3450	2.70	2.86	-5.46%	40.5	38.0	6.57%
6/29/2026	Head	22.5	3500	2.75	2.91	-5.62%	40.4	37.9	6.52%
6/29/2026	Head	22.5	3550	2.80	2.96	-5.54%	40.3	37.9	6.50%
6/29/2026	Head	22.5	3600	2.84	3.02	-5.70%	40.2	37.8	6.38%
6/29/2026	Head	22.5	3650	2.89	3.07	-5.65%	40.2	37.8	6.41%
6/29/2026	Head	22.5	3700	2.94	3.12	-5.59%	40.1	37.7	6.30%
6/29/2026	Head	22.5	3750	2.99	3.17	-5.74%	40.0	37.6	6.33%
6/29/2026	Head	22.5	3800	3.04	3.22	-5.58%	39.9	37.6	6.25%
6/29/2026	Head	22.5	3850	3.09	3.27	-5.62%	39.9	37.5	6.25%
6/29/2026	Head	22.5	3900	3.14	3.32	-5.47%	39.8	37.5	6.22%
6/29/2026	Head	22.5	3950	3.19	3.37	-5.44%	39.7	37.4	6.13%
6/29/2026	Head	22.5	3980	3.22	3.41	-5.44%	39.7	37.4	6.01%
6/29/2026	Head	21.6	650	0.82	0.89	-7.37%	45.3	42.5	6.61%
6/29/2026	Head	21.6	700	0.84	0.89	-6.04%	45.1	42.2	6.86%
6/29/2026	Head	21.6	750	0.85	0.89	-4.58%	44.9	41.9	7.14%
6/29/2026	Head	21.6	800	0.87	0.90	-3.06%	44.8	41.7	7.49%
6/29/2026	Head	21.6	850	0.89	0.92	-3.13%	44.7	41.5	7.67%
6/29/2026	Head	21.6	900	0.91	0.97	-6.41%	44.5	41.5	7.23%
6/29/2026	Head	21.6	950	0.92	0.99	-7.15%	44.4	41.4	7.19%
6/29/2026	Head	21.6	2300	1.68	1.67	0.76%	42.2	39.5	6.93%
6/29/2026	Head	21.6	2350	1.71	1.71	0.10%	42.2	39.4	7.10%
6/29/2026	Head	21.6	2400	1.75	1.76	-0.04%	42.1	39.3	7.21%
6/29/2026	Head	21.6	2450	1.79	1.80	-0.30%	42.1	39.2	7.32%
6/29/2026	Head	21.6	2500	1.84	1.85	-0.78%	42.0	39.1	7.29%
6/29/2026	Head	21.6	2550	1.88	1.91	-1.50%	41.9	39.1	7.22%
6/29/2026	Head	21.6	2600	1.93	1.96	-1.92%	41.8	39.0	7.21%
6/29/2026	Head	21.6	2650	1.97	2.02	-2.57%	41.7	38.9	7.10%
6/29/2026	Head	21.6	2700	2.01	2.07	-3.11%	41.6	38.9	7.05%
6/30/2026	Head	21.5	1600	1.23	1.28	-4.53%	42.4	40.3	5.07%
6/30/2026	Head	21.5	1650	1.26	1.31	-4.33%	42.3	40.2	5.09%
6/30/2026	Head	21.5	1700	1.29	1.34	-4.03%	42.2	40.2	5.00%
6/30/2026	Head	21.5	1750	1.32	1.37	-3.95%	42.1	40.1	4.94%
6/30/2026	Head	21.5	1800	1.34	1.40	-4.21%	41.9	40.0	4.87%
6/30/2026	Head	21.5	1850	1.37	1.40	-2.31%	41.9	40.0	4.66%
6/30/2026	Head	21.5	1900	1.39	1.40	-0.56%	41.8	40.0	4.53%
6/30/2026	Head	21.5	1950	1.42	1.40	1.75%	41.8	40.0	4.51%
6/30/2026	Head	21.5	2000	1.46	1.40	4.24%	41.8	40.0	4.42%
6/30/2026	Head	21.5	2050	1.50	1.44	3.86%	41.7	39.9	4.57%
6/30/2026	Head	21.5	2100	1.53	1.49	3.04%	41.6	39.8	4.53%
7/6/2026	Head	22.5	5150	4.44	4.60	-3.49%	37.7	36.0	4.47%
7/6/2026	Head	22.5	5200	4.50	4.66	-3.31%	37.6	36.0	4.38%
7/6/2026	Head	22.5	5250	4.56	4.71	-3.16%	37.5	35.9	4.27%
7/6/2026	Head	22.5	5300	4.61	4.76	-3.04%	37.4	35.9	4.24%
7/6/2026	Head	22.5	5350	4.67	4.81	-2.97%	37.3	35.8	4.11%
7/6/2026	Head	22.5	5500	4.83	4.96	-2.69%	37.1	35.6	3.95%
7/6/2026	Head	22.5	5550	4.89	5.01	-2.54%	37.0	35.6	3.85%
7/6/2026	Head	22.5	5600	4.95	5.07	-2.34%	36.9	35.5	3.78%
7/6/2026	Head	22.5	5650	5.01	5.12	-2.14%	36.8	35.5	3.66%
7/6/2026	Head	22.5	5700	5.07	5.17	-1.98%	36.7	35.4	3.60%
7/6/2026	Head	22.5	5750	5.12	5.22	-1.85%	36.6	35.4	3.56%
7/6/2026	Head	22.5	5800	5.18	5.27	-1.65%	36.5	35.3	3.43%
7/6/2026	Head	22.5	5850	5.24	5.32	-1.58%	36.4	35.3	3.38%
7/6/2026	Head	22.5	5900	5.30	5.38	-1.46%	36.4	35.2	3.27%
7/6/2026	Head	22.5	1600	1.28	1.28	-0.44%	43.2	40.3	7.12%
7/6/2026	Head	22.5	1650	1.30	1.31	-0.65%	43.1	40.2	7.03%
7/6/2026	Head	22.5	1700	1.33	1.34	-0.80%	43.0	40.2	7.13%
7/6/2026	Head	22.5	1750	1.36	1.37	-0.55%	42.9	40.1	7.13%
7/6/2026	Head	22.5	1800	1.39	1.40	-0.48%	42.9	40.0	7.17%
7/6/2026	Head	22.5	1850	1.43	1.40	1.80%	42.7	40.0	6.86%
7/6/2026	Head	22.5	1900	1.45	1.40	3.78%	42.7	40.0	6.71%
7/6/2026	Head	22.5	1950	1.49	1.40	6.40%	42.6	40.0	6.48%
7/6/2026	Head	22.5	2000	1.52	1.40	8.52%	42.5	40.0	6.23%
7/6/2026	Head	22.5	2050	1.55	1.44	7.54%	42.4	39.9	6.28%
7/6/2026	Head	22.5	2100	1.58	1.49	6.20%	42.3	39.8	6.33%

The above measured tissue parameters were used in the DASY software. The DASY software was used to perform interpolation to determine the dielectric parameters at the SAR test device frequencies (per KDB Publication 865664 D01v01r04 and IEEE 1528-2013 6.6.1.2). The tissue parameters listed in the SAR test plots may slightly differ from the table above due to significant digit rounding in the software.

The SAR values were compensated for deviations between the measured and required tissue dielectric properties, as described in IEEE 1528-2013. The SAR values were applied to only scale up the measured SAR values, and not downward, per KDB Publication 865664 D01v04r04.

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 5 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
Epsilon	750	04/20/2026	7971	1862	750	Head	0.881	43.8	PASS	PASS	PASS	N/A	N/A	N/A
Epsilon	835	04/20/2026	7971	1862	835	Head	0.911	43.6	PASS	PASS	PASS	GMSK	PASS	N/A
Delta	835	12/11/2025	7853	1844	835	Head	0.87	42.5	PASS	PASS	PASS	GMSK	PASS	N/A
Zeta	1750	02/12/2026	7969	1933	1750	Head	1.25	38.3	PASS	PASS	PASS	N/A	N/A	N/A
Gamma	1750	06/29/2026	7836	1839	1750	Head	1.36	43.2	PASS	PASS	PASS	N/A	N/A	N/A
Zeta	1900	02/12/2026	7969	1933	1900	Head	1.33	38	PASS	PASS	PASS	GMSK	PASS	N/A
Gamma	1900	06/29/2026	7836	1839	1900	Head	1.43	42.9	PASS	PASS	PASS	GMSK	PASS	N/A
Epsilon	2450	04/20/2026	7971	1862	2450	Head	1.79	38.3	PASS	PASS	PASS	OFDM	N/A	PASS
Beta	2600	01/28/2026	7857	1838	2600	Head	1.89	39	PASS	PASS	PASS	TDD	PASS	N/A
Gamma	3500	06/26/2026	7836	1839	3500	Head	2.76	40.3	PASS	PASS	PASS	TDD	PASS	N/A
Gamma	3700	06/26/2026	7836	1839	3700	Head	2.95	39.9	PASS	PASS	PASS	TDD	PASS	N/A
Gamma	3900	06/29/2026	7836	1839	3900	Head	3.14	39.8	PASS	PASS	PASS	TDD	PASS	N/A
Beta	5250	01/28/2026	7857	1838	5250	Head	4.6	35.2	PASS	PASS	PASS	OFDM	N/A	PASS
Beta	5600	01/29/2026	7857	1838	5600	Head	4.97	34.5	PASS	PASS	PASS	OFDM	N/A	PASS
Beta	5750	01/29/2026	7857	1838	5750	Head	5.16	34.2	PASS	PASS	PASS	OFDM	N/A	PASS
Beta	5850	01/29/2026	7857	1838	5850	Head	5.26	34	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.

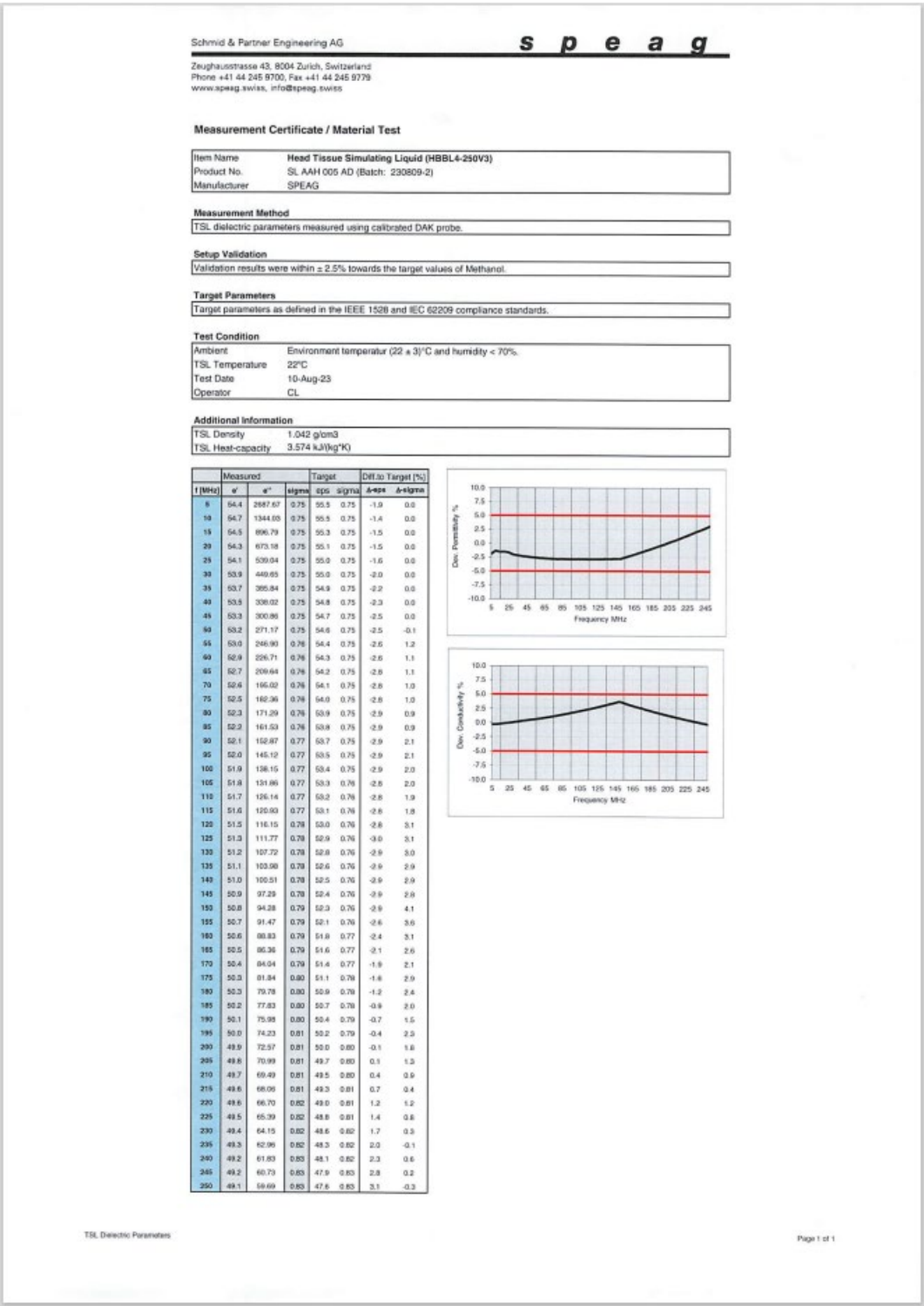


Figure 1 - Head TSL Calibration Certificate Example (4 – 250 MHz)

Measurement Certificate / Material Test

Item Name Head Tissue Simulating Liquid (HBBL600-10000V6)
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

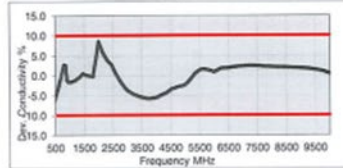
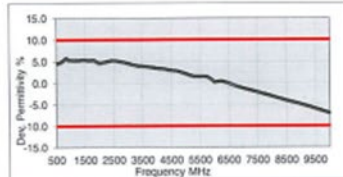
Ambient Condition 22°C ; 30% humidity
TSL Temperature 22°C
Test Date 14-Sep-23
Operator CL

Additional Information

TSL Density
TSL Heat-capacity

Results

f (MHz)	Measured			Target		Diff. to Target [%]	
	ϵ'	ϵ''	σ	ϵ_{ps}	σ_{ps}	$\Delta\epsilon_{ps}$	$\Delta\sigma_{ps}$
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
800	44.0	20.7	0.92	41.7	0.90	5.6	2.5
825	44.0	20.3	0.93	41.6	0.91	5.8	2.6
835	44.0	20.1	0.94	41.5	0.91	5.9	3.1
850	43.9	19.9	0.94	41.5	0.92	5.8	2.6
900	43.8	19.2	0.96	41.5	0.97	5.5	-1.0
1400	42.8	15.2	1.18	40.6	1.18	5.4	0.0
1450	42.7	15.0	1.21	40.5	1.20	5.4	0.8
1600	42.4	14.4	1.29	40.3	1.28	5.2	0.4
1625	42.4	14.4	1.30	40.3	1.30	5.3	0.1
1640	42.4	14.3	1.31	40.3	1.31	5.3	0.3
1650	42.4	14.3	1.31	40.2	1.31	5.4	-0.2
1700	42.3	14.2	1.34	40.2	1.34	5.3	-0.2
1750	42.2	14.1	1.37	40.1	1.37	5.3	-0.1
1800	42.1	14.0	1.40	40.0	1.40	5.3	0.0
1810	42.1	13.9	1.41	40.0	1.40	5.3	0.7
1825	42.1	13.9	1.42	40.0	1.40	5.3	1.4
1850	42.1	13.9	1.43	40.0	1.40	5.3	2.1
1900	42.0	13.8	1.46	40.0	1.40	5.0	4.3
1950	41.9	13.7	1.49	40.0	1.40	4.7	6.4
2000	41.8	13.7	1.52	40.0	1.40	4.5	8.6
2050	41.8	13.6	1.55	39.9	1.44	4.7	7.3
2100	41.7	13.6	1.59	39.8	1.49	4.7	6.8
2150	41.6	13.6	1.62	39.7	1.53	4.7	5.7
2200	41.6	13.5	1.66	39.6	1.58	4.9	5.2
2250	41.5	13.5	1.69	39.5	1.62	4.9	4.2
2300	41.4	13.5	1.73	39.5	1.67	4.9	3.8
2350	41.4	13.5	1.77	39.4	1.71	5.1	3.4
2400	41.3	13.6	1.81	39.3	1.76	5.1	3.1
2450	41.2	13.6	1.85	39.2	1.80	5.1	2.8
2500	41.2	13.6	1.89	39.1	1.85	5.3	1.9
2550	41.1	13.6	1.93	39.1	1.91	5.2	1.1
2600	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	-5.8
5200	36.6	16.0	4.62	36.0	4.66	1.7	-0.8
5250	36.5	16.1	4.69	35.9	4.71	1.6	-0.3
5300	36.4	16.2	4.76	35.9	4.76	1.5	0.1
5500	36.2	16.4	5.03	35.6	4.96	1.5	1.3
5600	36.1	16.5	5.14	35.5	5.07	1.5	1.5
5700	35.9	16.5	5.25	35.4	5.17	1.5	1.6
5800	35.7	16.6	5.34	35.3	5.27	1.2	1.4
6000	35.1	16.5	5.52	35.1	5.48	0.2	0.9
6500	34.4	17.1	6.19	34.5	6.07	-0.1	1.9
7000	33.5	17.5	6.81	33.9	6.65	-1.3	2.4
7500	32.6	17.8	7.41	33.3	7.24	-2.1	2.4
8000	31.7	18.0	8.01	32.7	7.84	-3.1	2.2
8500	30.8	18.2	8.62	32.1	8.45	-4.1	2.0
9000	30.0	18.5	9.24	31.5	9.08	-4.9	1.9
9500	29.1	18.6	9.85	31.0	9.71	-5.9	1.4
10000	28.2	18.7	10.41	30.4	10.36	-7.0	0.5

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