



SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: ZR/2020/5002403
Page : 203 of 209

Head Ant5:

Band	Exposure position	SARmax (W/kg)						Summed SAR (1+2)	Summed SAR (1+3)	Summed SAR (1+4)	Summed SAR (1+5)	Summed SAR (1+6)	Summed SAR (4+6)	Summed SAR (5+6)	Summed SAR (1+4+6)	Summed SAR (1+5+6)
		1	2	3	4	5	6									
		Ant5	WiFi 2.4G Ant1(chian0)	WiFi 2.4G MIMO	WiFi 5G Ant7(chian1)	WiFi 5G MIMO	BT									
GSM1900	Left Touch	0.313	0.333	0.426	0.506	0.597	0.175	0.646	0.739	0.819	0.910	0.488	0.681	0.772	0.994	1.085
	Left Tilt	0.142	0.076	0.222	0.429	0.594	0.047	0.218	0.364	0.571	0.736	0.189	0.476	0.641	0.618	0.783
	Right Touch	0.843	0.130	0.139	0.219	0.284	0.076	0.973	0.982	1.062	1.127	0.919	0.295	0.360	1.138	1.203
	Right Tilt	0.203	0.022	0.169	0.180	0.285	0.020	0.225	0.372	0.383	0.488	0.223	0.200	0.305	0.403	0.508
WCDMA Band II	Left Touch	0.259	0.333	0.426	0.506	0.597	0.175	0.592	0.685	0.765	0.856	0.434	0.681	0.772	0.940	1.031
	Left Tilt	0.113	0.076	0.222	0.429	0.594	0.047	0.189	0.335	0.542	0.707	0.160	0.476	0.641	0.589	0.754
	Right Touch	0.792	0.130	0.139	0.219	0.284	0.076	0.922	0.931	1.011	1.076	0.868	0.295	0.360	1.087	1.152
	Right Tilt	0.216	0.022	0.169	0.180	0.285	0.020	0.238	0.385	0.396	0.501	0.236	0.200	0.305	0.416	0.521
WCDMA Band IV	Left Touch	0.225	0.333	0.426	0.506	0.597	0.175	0.558	0.651	0.731	0.822	0.400	0.681	0.772	0.906	0.997
	Left Tilt	0.123	0.076	0.222	0.429	0.594	0.047	0.199	0.345	0.552	0.717	0.170	0.476	0.641	0.599	0.764
	Right Touch	0.907	0.130	0.139	0.219	0.284	0.076	1.037	1.046	1.126	1.191	0.983	0.295	0.360	1.202	1.267
	Right Tilt	0.168	0.022	0.169	0.180	0.285	0.020	0.190	0.337	0.348	0.453	0.188	0.200	0.305	0.368	0.473
LTE Band 2	Left Touch	0.336	0.333	0.426	0.506	0.597	0.175	0.669	0.762	0.842	0.933	0.511	0.681	0.772	1.017	1.108
	Left Tilt	0.104	0.076	0.222	0.429	0.594	0.047	0.180	0.326	0.533	0.698	0.151	0.476	0.641	0.580	0.745
	Right Touch	0.790	0.130	0.139	0.219	0.284	0.076	0.920	0.929	1.009	1.074	0.866	0.295	0.360	1.085	1.150
	Right Tilt	0.131	0.022	0.169	0.180	0.285	0.020	0.153	0.300	0.311	0.416	0.151	0.200	0.305	0.331	0.436
LTE Band 4	Left Touch	0.281	0.333	0.426	0.506	0.597	0.175	0.614	0.707	0.787	0.878	0.456	0.681	0.772	0.962	1.053
	Left Tilt	0.087	0.076	0.222	0.429	0.594	0.047	0.163	0.309	0.516	0.681	0.134	0.476	0.641	0.563	0.728
	Right Touch	0.638	0.130	0.139	0.219	0.284	0.076	0.768	0.777	0.857	0.922	0.714	0.295	0.360	0.933	0.998
	Right Tilt	0.122	0.022	0.169	0.180	0.285	0.020	0.144	0.291	0.302	0.407	0.142	0.200	0.305	0.322	0.427
LTE Band 7	Left Touch	0.169	0.333	0.426	0.506	0.597	0.175	0.502	0.595	0.675	0.766	0.344	0.681	0.772	0.850	0.941
	Left Tilt	0.053	0.076	0.222	0.429	0.594	0.047	0.129	0.275	0.482	0.647	0.100	0.476	0.641	0.529	0.694
	Right Touch	0.512	0.130	0.139	0.219	0.284	0.076	0.642	0.651	0.731	0.796	0.588	0.295	0.360	0.807	0.872
	Right Tilt	0.104	0.022	0.169	0.180	0.285	0.020	0.126	0.273	0.284	0.389	0.124	0.200	0.305	0.304	0.409
LTE Band 38	Left Touch	0.212	0.333	0.426	0.506	0.597	0.175	0.545	0.638	0.718	0.809	0.387	0.681	0.772	0.893	0.984
	Left Tilt	0.073	0.076	0.222	0.429	0.594	0.047	0.149	0.295	0.502	0.667	0.120	0.476	0.641	0.549	0.714
	Right Touch	0.585	0.130	0.139	0.219	0.284	0.076	0.715	0.724	0.804	0.869	0.661	0.295	0.360	0.880	0.945
	Right Tilt	0.128	0.022	0.169	0.180	0.285	0.020	0.150	0.297	0.308	0.413	0.148	0.200	0.305	0.328	0.433
LTE Band 41	Left Touch	0.179	0.333	0.426	0.506	0.597	0.175	0.512	0.605	0.685	0.776	0.354	0.681	0.772	0.860	0.951
	Left Tilt	0.055	0.076	0.222	0.429	0.594	0.047	0.131	0.277	0.484	0.649	0.102	0.476	0.641	0.531	0.696
	Right Touch	0.510	0.130	0.139	0.219	0.284	0.076	0.640	0.649	0.729	0.794	0.586	0.295	0.360	0.805	0.870
	Right Tilt	0.096	0.022	0.169	0.180	0.285	0.020	0.118	0.265	0.276	0.381	0.116	0.200	0.305	0.296	0.401

Head Ant10:

Band	Exposure position	SARmax (W/kg)						Summed SAR (1+2)	Summed SAR (1+3)	Summed SAR (1+4)	Summed SAR (1+5)	Summed SAR (1+6)	Summed SAR (4+6)	Summed SAR (5+6)	Summed SAR (1+4+6)	Summed SAR (1+5+6)
		1	2	3	4	5	6									
		Ant10	WiFi 2.4G Ant1(chian0)	WiFi 2.4G MIMO	WiFi 5G Ant7(chian1)	WiFi 5G MIMO	BT									
GSM1900	Left Touch	0.098	0.333	0.426	0.506	0.597	0.175	0.431	0.524	0.604	0.695	0.273	0.681	0.772	0.779	0.870
	Left Tilt	0.077	0.076	0.222	0.429	0.594	0.047	0.153	0.299	0.506	0.671	0.124	0.476	0.641	0.553	0.718
	Right Touch	0.099	0.130	0.139	0.219	0.284	0.076	0.229	0.238	0.318	0.383	0.175	0.295	0.360	0.394	0.459
	Right Tilt	0.078	0.022	0.169	0.180	0.285	0.020	0.100	0.247	0.258	0.363	0.098	0.200	0.305	0.278	0.383
WCDMA Band II	Left Touch	0.209	0.333	0.426	0.506	0.597	0.175	0.542	0.635	0.715	0.806	0.384	0.681	0.772	0.890	0.981
	Left Tilt	0.190	0.076	0.222	0.429	0.594	0.047	0.266	0.412	0.619	0.784	0.237	0.476	0.641	0.666	0.831
	Right Touch	0.225	0.130	0.139	0.219	0.284	0.076	0.355	0.364	0.444	0.509	0.301	0.295	0.360	0.520	0.585
	Right Tilt	0.233	0.022	0.169	0.180	0.285	0.020	0.255	0.402	0.413	0.518	0.253	0.200	0.305	0.433	0.538
WCDMA Band IV	Left Touch	0.192	0.333	0.426	0.506	0.597	0.175	0.525	0.618	0.698	0.789	0.367	0.681	0.772	0.873	0.964
	Left Tilt	0.163	0.076	0.222	0.429	0.594	0.047	0.239	0.385	0.592	0.757	0.210	0.476	0.641	0.639	0.804
	Right Touch	0.225	0.130	0.139	0.219	0.284	0.076	0.355	0.364	0.444	0.509	0.301	0.295	0.360	0.520	0.585
	Right Tilt	0.228	0.022	0.169	0.180	0.285	0.020	0.250	0.397	0.408	0.513	0.248	0.200	0.305	0.428	0.533
LTE Band 2	Left Touch	0.223	0.333	0.426	0.506	0.597	0.175	0.556	0.649	0.729	0.820	0.398	0.681	0.772	0.904	0.995
	Left Tilt	0.187	0.076	0.222	0.429	0.594	0.047	0.263	0.409	0.616	0.781	0.234	0.476	0.641	0.663	0.828
	Right Touch	0.241	0.130	0.139	0.219	0.284	0.076	0.371	0.380	0.460	0.525	0.317	0.295	0.360	0.536	0.601
	Right Tilt	0.177	0.022	0.169	0.180	0.285	0.020	0.199	0.346	0.357	0.462	0.197	0.200	0.305	0.377	0.482
LTE Band 4	Left Touch	0.201	0.333	0.426	0.506	0.597	0.175	0.534	0.627	0.707	0.798	0.376	0.681	0.772	0.882	0.973
	Left Tilt	0.148	0.076	0.222	0.429	0.594	0.047	0.224	0.370	0.577	0.742	0.195	0.476	0.641	0.624	0.789
	Right Touch	0.202	0.130	0.139	0.219	0.284	0.076	0.332	0.341	0.421	0.486	0.278	0.295	0.360	0.497	0.562
	Right Tilt	0.211	0.022	0.169	0.180	0.285	0.020	0.233	0.380	0.391	0.496	0.231	0.200	0.305	0.411	0.516
LTE Band 7	Left Touch	0.257	0.333	0.426	0.506	0.597	0.175	0.590	0.683	0.763	0.854	0.432	0.681	0.772	0.938	1.029
	Left Tilt	0.105	0.076	0.222	0.429	0.594	0.047	0.181	0.327	0.534	0.699	0.152	0.476	0.641	0.581	0.746
	Right Touch	0.183	0.130	0.139	0.219	0.284	0.076	0.313	0.322	0.402	0.467	0.259	0.295	0.360	0.478	0.543
	Right Tilt	0.068	0.022	0.169	0.180	0.285	0.020	0.090	0.237	0.248	0.353	0.088	0.200	0.305	0.268	0.373
LTE Band 38	Left Touch	0.156	0.333	0.426	0.506	0.597	0.175	0.489	0.582	0.662	0.753	0.331	0.681	0.772	0.837	0.928
	Left Tilt	0.061	0.076	0.222	0.429	0.594	0.047	0.137	0.283	0.490	0.655	0.108	0.476	0.641	0.537	0.702
	Right Touch	0.101	0.130	0.139	0.219	0.284	0.076	0.231	0.240	0.320	0.385	0.177	0.295	0.360	0.396	0.461
	Right Tilt	0.043	0.022	0.169	0.180	0.285	0.020	0.065	0.212	0.223	0.328	0.063	0.200	0.305	0.243	0.348
LTE Band 41	Left Touch	0.200	0.333	0.426	0.506	0.597	0.175	0.533	0.626	0.706	0.797	0.375	0.681	0.772	0.881	0.972
	Left Tilt	0.060	0.076	0.222	0.429	0.594	0.047	0.136	0.282	0.489	0.654	0.107	0.476	0.641	0.536	0.701
	Right Touch	0.116	0.130	0.139	0.219	0.284	0.076	0.246	0.255	0.335	0.400	0.192	0.295	0.360	0.411	0.476
	Right Tilt	0.043	0.022	0.169	0.180	0.285	0.020	0.065	0.212	0.223	0.328	0.063	0.200	0.305	0.243	0.348



Body-worn Ant1:

Band	Exposure position	SARmax (W/kg)						Summed SAR (1+2)	Summed SAR (1+3)	Summed SAR (1+4)	Summed SAR (1+5)	Summed SAR (1+6)	Summed SAR (4+6)	Summed SAR (5+6)	Summed SAR (1+4+6)	Summed SAR (1+5+6)
		1 Ant1	2 WiFi 2.4G Ant1(chian0)	3 WiFi 2.4G MIMO	4 WiFi 5G Ant7(chian1)	5 WiFi 5G MIMO	6 BT									
GSM850	Front	0.178	0.106	0.186	0.243	0.398	0.019	0.284	0.364	0.421	0.576	0.197	0.262	0.417	0.440	0.595
	Back	0.257	0.168	0.231	0.737	0.743	0.020	0.425	0.488	0.994	1.000	0.277	0.757	0.763	1.014	1.020
WCDMA Band V	Front	0.212	0.106	0.186	0.243	0.398	0.019	0.318	0.398	0.455	0.610	0.231	0.262	0.417	0.474	0.629
	Back	0.292	0.168	0.231	0.737	0.743	0.020	0.460	0.523	1.029	1.035	0.312	0.757	0.763	1.049	1.055
LTE Band 5	Front	0.135	0.106	0.186	0.243	0.398	0.019	0.241	0.321	0.378	0.533	0.154	0.262	0.417	0.397	0.552
	Back	0.208	0.168	0.231	0.737	0.743	0.020	0.376	0.439	0.945	0.951	0.228	0.757	0.763	0.965	0.971
LTE Band 26	Front	0.136	0.106	0.186	0.243	0.398	0.019	0.242	0.322	0.379	0.534	0.155	0.262	0.417	0.398	0.553
	Back	0.222	0.168	0.231	0.737	0.743	0.020	0.390	0.453	0.959	0.965	0.242	0.757	0.763	0.979	0.985

Body-worn Ant4:

Band	Exposure position	SARmax (W/kg)						Summed SAR (1+2)	Summed SAR (1+3)	Summed SAR (1+4)	Summed SAR (1+5)	Summed SAR (1+6)	Summed SAR (4+6)	Summed SAR (5+6)	Summed SAR (1+4+6)	Summed SAR (1+5+6)
		1 Ant4	2 WiFi 2.4G Ant1(chian0)	3 WiFi 2.4G MIMO	4 WiFi 5G Ant7(chian1)	5 WiFi 5G MIMO	6 BT									
GSM850	Front	0.191	0.106	0.186	0.243	0.398	0.019	0.297	0.377	0.434	0.589	0.210	0.262	0.417	0.453	0.608
	Back	0.288	0.168	0.231	0.737	0.743	0.020	0.456	0.519	1.025	1.031	0.308	0.757	0.763	1.045	1.051
WCDMA Band V	Front	0.171	0.106	0.186	0.243	0.398	0.019	0.277	0.357	0.414	0.569	0.190	0.262	0.417	0.433	0.588
	Back	0.276	0.168	0.231	0.737	0.743	0.020	0.444	0.507	1.013	1.019	0.296	0.757	0.763	1.033	1.039
LTE Band 5	Front	0.160	0.106	0.186	0.243	0.398	0.019	0.266	0.346	0.403	0.558	0.179	0.262	0.417	0.422	0.577
	Back	0.269	0.168	0.231	0.737	0.743	0.020	0.437	0.500	1.006	1.012	0.289	0.757	0.763	1.026	1.032
LTE Band 26	Front	0.164	0.106	0.186	0.243	0.398	0.019	0.270	0.350	0.407	0.562	0.183	0.262	0.417	0.426	0.581
	Back	0.237	0.168	0.231	0.737	0.743	0.020	0.405	0.468	0.974	0.980	0.257	0.757	0.763	0.994	1.000

Body-worn Ant5:

Band	Exposure position	SARmax (W/kg)						Summed SAR (1+2)	Summed SAR (1+3)	Summed SAR (1+4)	Summed SAR (1+5)	Summed SAR (1+6)	Summed SAR (4+6)	Summed SAR (5+6)	Summed SAR (1+4+6)	Summed SAR (1+5+6)
		1 Ant5	2 WiFi 2.4G Ant1(chian0)	3 WiFi 2.4G MIMO	4 WiFi 5G Ant7(chian1)	5 WiFi 5G MIMO	6 BT									
GSM1900	Front	0.118	0.106	0.186	0.243	0.398	0.019	0.224	0.304	0.361	0.516	0.137	0.262	0.417	0.380	0.535
	Back	0.180	0.168	0.231	0.737	0.743	0.020	0.348	0.411	0.917	0.923	0.200	0.757	0.763	0.937	0.943
WCDMA Band IV	Front	0.176	0.106	0.186	0.243	0.398	0.019	0.282	0.362	0.419	0.574	0.195	0.262	0.417	0.438	0.593
	Back	0.334	0.168	0.231	0.737	0.743	0.020	0.502	0.565	1.071	1.077	0.354	0.757	0.763	1.091	1.097
WCDMA Band II	Front	0.217	0.106	0.186	0.243	0.398	0.019	0.323	0.403	0.460	0.615	0.236	0.262	0.417	0.479	0.634
	Back	0.303	0.168	0.231	0.737	0.743	0.020	0.471	0.534	1.040	1.046	0.323	0.757	0.763	1.060	1.066
LTE Band 2	Front	0.172	0.106	0.186	0.243	0.398	0.019	0.278	0.358	0.415	0.570	0.191	0.262	0.417	0.434	0.589
	Back	0.327	0.168	0.231	0.737	0.743	0.020	0.495	0.558	1.064	1.070	0.347	0.757	0.763	1.084	1.090
LTE Band 4	Front	0.163	0.106	0.186	0.243	0.398	0.019	0.269	0.349	0.406	0.561	0.182	0.262	0.417	0.425	0.580
	Back	0.288	0.168	0.231	0.737	0.743	0.020	0.456	0.519	1.025	1.031	0.308	0.757	0.763	1.045	1.051
LTE Band 7	Front	0.223	0.106	0.186	0.243	0.398	0.019	0.329	0.409	0.466	0.621	0.242	0.262	0.417	0.485	0.640
	Back	0.284	0.168	0.231	0.737	0.743	0.020	0.452	0.515	1.021	1.027	0.304	0.757	0.763	1.041	1.047
LTE Band 38	Front	0.228	0.106	0.186	0.243	0.398	0.019	0.334	0.414	0.471	0.626	0.247	0.262	0.417	0.490	0.645
	Back	0.273	0.168	0.231	0.737	0.743	0.020	0.441	0.504	1.010	1.016	0.293	0.757	0.763	1.030	1.036
LTE Band 41	Front	0.181	0.106	0.186	0.243	0.398	0.019	0.287	0.367	0.424	0.579	0.200	0.262	0.417	0.443	0.598
	Back	0.222	0.168	0.231	0.737	0.743	0.020	0.390	0.453	0.959	0.965	0.242	0.757	0.763	0.979	0.985

Body-worn Ant10:

Band	Exposure position	SARmax (W/kg)						Summed SAR (1+2)	Summed SAR (1+3)	Summed SAR (1+4)	Summed SAR (1+5)	Summed SAR (1+6)	Summed SAR (4+6)	Summed SAR (5+6)	Summed SAR (1+4+6)	Summed SAR (1+5+6)
		1 Ant10	2 WiFi 2.4G Ant1(chian0)	3 WiFi 2.4G MIMO	4 WiFi 5G Ant7(chian1)	5 WiFi 5G MIMO	6 BT									
GSM1900	Front	0.254	0.106	0.186	0.243	0.398	0.019	0.360	0.440	0.497	0.652	0.273	0.262	0.417	0.516	0.671
	Back	0.322	0.168	0.231	0.737	0.743	0.020	0.490	0.553	1.059	1.065	0.342	0.757	0.763	1.079	1.085
WCDMA Band IV	Front	0.421	0.106	0.186	0.243	0.398	0.019	0.527	0.607	0.664	0.819	0.440	0.262	0.417	0.683	0.838
	Back	0.493	0.168	0.231	0.737	0.743	0.020	0.661	0.724	1.230	1.236	0.513	0.757	0.763	1.250	1.256
WCDMA Band II	Front	0.550	0.106	0.186	0.243	0.398	0.019	0.656	0.736	0.793	0.948	0.569	0.262	0.417	0.812	0.967
	Back	0.657	0.168	0.231	0.737	0.743	0.020	0.825	0.888	1.394	1.400	0.677	0.757	0.763	1.414	1.420
LTE Band 2	Front	0.567	0.106	0.186	0.243	0.398	0.019	0.673	0.753	0.810	0.965	0.586	0.262	0.417	0.829	0.984
	Back	0.690	0.168	0.231	0.737	0.743	0.020	0.858	0.921	1.427	1.433	0.710	0.757	0.763	1.447	1.453
LTE Band 4	Front	0.410	0.106	0.186	0.243	0.398	0.019	0.516	0.596	0.653	0.808	0.429	0.262	0.417	0.672	0.827
	Back	0.493	0.168	0.231	0.737	0.743	0.020	0.661	0.724	1.230	1.236	0.513	0.757	0.763	1.250	1.256
LTE Band 7	Front	0.385	0.106	0.186	0.243	0.398	0.019	0.491	0.571	0.628	0.783	0.404	0.262	0.417	0.647	0.802
	Back	0.545	0.168	0.231	0.737	0.743	0.020	0.713	0.776	1.282	1.288	0.565	0.757	0.763	1.302	1.308
LTE Band 38	Front	0.227	0.106	0.186	0.243	0.398	0.019	0.333	0.413	0.470	0.625	0.246	0.262	0.417	0.489	0.644
	Back	0.336	0.168	0.231	0.737	0.743	0.020	0.504	0.567	1.073	1.079	0.356	0.757	0.763	1.093	1.099
LTE Band 41	Front	0.246	0.106	0.186	0.243	0.398	0.019	0.352	0.432	0.489	0.644	0.265	0.262	0.417	0.508	0.663
	Back	0.362	0.168	0.231	0.737	0.743	0.020	0.530	0.593	1.099	1.105	0.382	0.757	0.763	1.119	1.125



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
Shenzhen Branch 中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



Hotspot Ant1:

Band	Exposure position	SARmax (W/kg)						Summed SAR (1+2)	Summed SAR (1+3)	Summed SAR (1+4)	Summed SAR (1+5)	Summed SAR (1+6)	Summed SAR (4+6)	Summed SAR (5+6)	Summed SAR (1+4+6)	Summed SAR (1+5+6)
		1 Ant1	2 WiFi 2.4G Ant1(chian0)	3 WiFi 2.4G MIMO	4 WiFi 5G Ant7(chian1)	5 WiFi 5G MIMO	6 BT									
GSM850	Front	0.328	0.215	0.321	0.395	0.647	0.041	0.543	0.649	0.723	0.975	0.369	0.436	0.688	0.764	1.016
	Back	0.450	0.218	0.295	0.754	0.847	0.051	0.668	0.745	1.204	1.297	0.501	0.805	0.898	1.255	1.348
	Left	0.130	/	/	/	/	/	0.130	0.130	0.130	0.130	0.130	0.000	0.000	0.130	0.130
	Right	0.112	0.353	0.805	0.394	0.996	0.075	0.465	0.917	0.506	1.108	0.187	0.469	1.071	0.581	1.183
	Top	/	0.028	0.246	0.451	0.518	0.009	0.028	0.246	0.451	0.518	0.009	0.460	0.527	0.460	0.527
	Bottom	0.182	/	/	/	/	/	0.182	0.182	0.182	0.182	0.182	0.000	0.000	0.182	0.182
WCDMA Band V	Front	0.396	0.215	0.321	0.395	0.647	0.041	0.611	0.717	0.791	1.043	0.437	0.436	0.688	0.832	1.084
	Back	0.549	0.218	0.295	0.754	0.847	0.051	0.767	0.844	1.303	1.396	0.600	0.805	0.898	1.354	1.447
	Left	0.107	/	/	/	/	/	0.107	0.107	0.107	0.107	0.107	0.000	0.000	0.107	0.107
	Right	0.134	0.353	0.805	0.394	0.996	0.075	0.487	0.939	0.528	1.130	0.209	0.469	1.071	0.603	1.205
	Top	/	0.028	0.246	0.451	0.518	0.009	0.028	0.246	0.451	0.518	0.009	0.460	0.527	0.460	0.527
	Bottom	0.200	/	/	/	/	/	0.200	0.200	0.200	0.200	0.200	0.000	0.000	0.200	0.200
LTE Band 5	Front	0.261	0.215	0.321	0.395	0.647	0.041	0.476	0.582	0.656	0.908	0.302	0.436	0.688	0.697	0.949
	Back	0.392	0.218	0.295	0.754	0.847	0.051	0.610	0.687	1.146	1.239	0.443	0.805	0.898	1.197	1.290
	Left	0.091	/	/	/	/	/	0.091	0.091	0.091	0.091	0.091	0.000	0.000	0.091	0.091
	Right	0.079	0.353	0.805	0.394	0.996	0.075	0.432	0.884	0.473	1.075	0.154	0.469	1.071	0.548	1.150
	Top	/	0.028	0.246	0.451	0.518	0.009	0.028	0.246	0.451	0.518	0.009	0.460	0.527	0.460	0.527
	Bottom	0.145	/	/	/	/	/	0.145	0.145	0.145	0.145	0.145	0.000	0.000	0.145	0.145
LTE Band 26	Front	0.261	0.215	0.321	0.395	0.647	0.041	0.476	0.582	0.656	0.908	0.302	0.436	0.688	0.697	0.949
	Back	0.336	0.218	0.295	0.754	0.847	0.051	0.554	0.631	1.090	1.183	0.387	0.805	0.898	1.141	1.234
	Left	/	/	/	/	/	/	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right	0.092	0.353	0.805	0.394	0.996	0.075	0.445	0.897	0.486	1.088	0.167	0.469	1.071	0.561	1.163
	Top	/	0.028	0.246	0.451	0.518	0.009	0.028	0.246	0.451	0.518	0.009	0.460	0.527	0.460	0.527
	Bottom	0.147	/	/	/	/	/	0.147	0.147	0.147	0.147	0.147	0.000	0.000	0.147	0.147

Hotspot Ant4:

Band	Exposure position	SARmax (W/kg)						Summed SAR (1+2)	Summed SAR (1+3)	Summed SAR (1+4)	Summed SAR (1+5)	Summed SAR (1+6)	Summed SAR (4+6)	Summed SAR (5+6)	Summed SAR (1+4+6)	Summed SAR (1+5+6)
		1 Ant4	2 WiFi 2.4G Ant1(chian0)	3 WiFi 2.4G MIMO	4 WiFi 5G Ant7(chian1)	5 WiFi 5G MIMO	6 BT									
GSM850	Front	0.179	0.215	0.321	0.395	0.647	0.041	0.394	0.500	0.574	0.826	0.220	0.436	0.688	0.615	0.867
	Back	0.193	0.218	0.295	0.754	0.847	0.051	0.411	0.488	0.947	1.040	0.244	0.805	0.898	0.998	1.091
	Left	0.095	/	/	/	/	/	0.095	0.095	0.095	0.095	0.095	0.000	0.000	0.095	0.095
	Right	/	0.353	0.805	0.394	0.996	0.075	0.353	0.805	0.394	0.996	0.075	0.469	1.071	0.469	1.071
	Top	0.228	0.028	0.246	0.451	0.518	0.009	0.256	0.474	0.679	0.746	0.237	0.460	0.527	0.688	0.755
	Bottom	/	/	/	/	/	/	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WCDMA Band V	Front	0.276	0.215	0.321	0.395	0.647	0.041	0.491	0.597	0.671	0.923	0.317	0.436	0.688	0.712	0.964
	Back	0.279	0.218	0.295	0.754	0.847	0.051	0.497	0.574	1.033	1.126	0.330	0.805	0.898	1.084	1.177
	Left	0.162	/	/	/	/	/	0.162	0.162	0.162	0.162	0.162	0.000	0.000	0.162	0.162
	Right	/	0.353	0.805	0.394	0.996	0.075	0.353	0.805	0.394	0.996	0.075	0.469	1.071	0.469	1.071
	Top	0.370	0.028	0.246	0.451	0.518	0.009	0.398	0.616	0.821	0.888	0.379	0.460	0.527	0.830	0.897
	Bottom	/	/	/	/	/	/	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LTE Band 5	Front	0.228	0.215	0.321	0.395	0.647	0.041	0.443	0.549	0.623	0.875	0.269	0.436	0.688	0.664	0.916
	Back	0.232	0.218	0.295	0.754	0.847	0.051	0.450	0.527	0.986	1.079	0.283	0.805	0.898	1.037	1.130
	Left	0.123	/	/	/	/	/	0.123	0.123	0.123	0.123	0.123	0.000	0.000	0.123	0.123
	Right	/	0.353	0.805	0.394	0.996	0.075	0.353	0.805	0.394	0.996	0.075	0.469	1.071	0.469	1.071
	Top	0.323	0.028	0.246	0.451	0.518	0.009	0.351	0.569	0.774	0.841	0.332	0.460	0.527	0.783	0.850
	Bottom	/	/	/	/	/	/	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LTE Band 26	Front	0.209	0.215	0.321	0.395	0.647	0.041	0.424	0.530	0.604	0.856	0.250	0.436	0.688	0.645	0.897
	Back	0.476	0.218	0.295	0.754	0.847	0.051	0.694	0.771	1.230	1.323	0.527	0.805	0.898	1.281	1.374
	Left	0.147	/	/	/	/	/	0.147	0.147	0.147	0.147	0.147	0.000	0.000	0.147	0.147
	Right	/	0.353	0.805	0.394	0.996	0.075	0.353	0.805	0.394	0.996	0.075	0.469	1.071	0.469	1.071
	Top	0.232	0.028	0.246	0.451	0.518	0.009	0.260	0.478	0.683	0.750	0.241	0.460	0.527	0.692	0.759
	Bottom	/	/	/	/	/	/	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



Hotspot Ant5:

Band	Exposure position	SARmax (W/kg)						Summed SAR (1+2)	Summed SAR (1+3)	Summed SAR (1+4)	Summed SAR (1+5)	Summed SAR (1+6)	Summed SAR (4+6)	Summed SAR (5+6)	Summed SAR (1+4+6)	Summed SAR (1+5+6)
		1	2	3	4	5	6									
		Ant5	Ant1(chian0)	WiFi 2.4G MIMO	WiFi 5G Ant7(chian1)	WiFi 5G MIMO	BT									
GSM1900	Front	0.118	0.215	0.321	0.395	0.647	0.041	0.333	0.439	0.513	0.765	0.159	0.436	0.688	0.554	0.806
	Back	0.093	0.218	0.295	0.754	0.847	0.051	0.311	0.388	0.847	0.940	0.144	0.805	0.898	0.898	0.991
	Left	0.353	/	/	/	/	/	0.353	0.353	0.353	0.353	0.353	0.000	0.000	0.353	0.353
	Right	/	0.353	0.805	0.394	0.996	0.075	0.353	0.805	0.394	0.996	0.075	0.469	1.071	0.469	1.071
	Top	/	0.028	0.246	0.451	0.518	0.009	0.028	0.246	0.451	0.518	0.009	0.460	0.527	0.460	0.527
	Bottom	/	/	/	/	/	/	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WCDMA Band II	Front	0.102	0.215	0.321	0.395	0.647	0.041	0.317	0.423	0.497	0.749	0.143	0.436	0.688	0.538	0.790
	Back	0.096	0.218	0.295	0.754	0.847	0.051	0.314	0.391	0.850	0.943	0.147	0.805	0.898	0.901	0.994
	Left	0.258	/	/	/	/	/	0.258	0.258	0.258	0.258	0.258	0.000	0.000	0.258	0.258
	Right	/	0.353	0.805	0.394	0.996	0.075	0.353	0.805	0.394	0.996	0.075	0.469	1.071	0.469	1.071
	Top	/	0.028	0.246	0.451	0.518	0.009	0.028	0.246	0.451	0.518	0.009	0.460	0.527	0.460	0.527
	Bottom	/	/	/	/	/	/	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
WCDMA Band IV	Front	0.109	0.215	0.321	0.395	0.647	0.041	0.324	0.430	0.504	0.756	0.150	0.436	0.688	0.545	0.797
	Back	0.109	0.218	0.295	0.754	0.847	0.051	0.327	0.404	0.863	0.956	0.160	0.805	0.898	0.914	1.007
	Left	0.260	/	/	/	/	/	0.260	0.260	0.260	0.260	0.260	0.000	0.000	0.260	0.260
	Right	/	0.353	0.805	0.394	0.996	0.075	0.353	0.805	0.394	0.996	0.075	0.469	1.071	0.469	1.071
	Top	/	0.028	0.246	0.451	0.518	0.009	0.028	0.246	0.451	0.518	0.009	0.460	0.527	0.460	0.527
	Bottom	/	/	/	/	/	/	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LTE Band 2	Front	0.103	0.215	0.321	0.395	0.647	0.041	0.318	0.424	0.498	0.750	0.144	0.436	0.688	0.539	0.791
	Back	0.084	0.218	0.295	0.754	0.847	0.051	0.302	0.379	0.838	0.931	0.135	0.805	0.898	0.889	0.982
	Left	0.265	/	/	/	/	/	0.265	0.265	0.265	0.265	0.265	0.000	0.000	0.265	0.265
	Right	/	0.353	0.805	0.394	0.996	0.075	0.353	0.805	0.394	0.996	0.075	0.469	1.071	0.469	1.071
	Top	/	0.028	0.246	0.451	0.518	0.009	0.028	0.246	0.451	0.518	0.009	0.460	0.527	0.460	0.527
	Bottom	/	/	/	/	/	/	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LTE Band 4	Front	0.076	0.215	0.321	0.395	0.647	0.041	0.291	0.397	0.471	0.723	0.117	0.436	0.688	0.512	0.764
	Back	0.093	0.218	0.295	0.754	0.847	0.051	0.311	0.388	0.847	0.940	0.144	0.805	0.898	0.898	0.991
	Left	0.186	/	/	/	/	/	0.186	0.186	0.186	0.186	0.186	0.000	0.000	0.186	0.186
	Right	/	0.353	0.805	0.394	0.996	0.075	0.353	0.805	0.394	0.996	0.075	0.469	1.071	0.469	1.071
	Top	/	0.028	0.246	0.451	0.518	0.009	0.028	0.246	0.451	0.518	0.009	0.460	0.527	0.460	0.527
	Bottom	/	/	/	/	/	/	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LTE Band 7	Front	0.088	0.215	0.321	0.395	0.647	0.041	0.303	0.409	0.483	0.735	0.129	0.436	0.688	0.524	0.776
	Back	0.082	0.218	0.295	0.754	0.847	0.051	0.300	0.377	0.836	0.929	0.133	0.805	0.898	0.887	0.980
	Left	0.121	/	/	/	/	/	0.121	0.121	0.121	0.121	0.121	0.000	0.000	0.121	0.121
	Right	/	0.353	0.805	0.394	0.996	0.075	0.353	0.805	0.394	0.996	0.075	0.469	1.071	0.469	1.071
	Top	/	0.028	0.246	0.451	0.518	0.009	0.028	0.246	0.451	0.518	0.009	0.460	0.527	0.460	0.527
	Bottom	/	/	/	/	/	/	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LTE Band 38	Front	0.123	0.215	0.321	0.395	0.647	0.041	0.338	0.444	0.518	0.770	0.164	0.436	0.688	0.559	0.811
	Back	0.129	0.218	0.295	0.754	0.847	0.051	0.347	0.424	0.883	0.976	0.180	0.805	0.898	0.934	1.027
	Left	0.186	/	/	/	/	/	0.186	0.186	0.186	0.186	0.186	0.000	0.000	0.186	0.186
	Right	/	0.353	0.805	0.394	0.996	0.075	0.353	0.805	0.394	0.996	0.075	0.469	1.071	0.469	1.071
	Top	/	0.028	0.246	0.451	0.518	0.009	0.028	0.246	0.451	0.518	0.009	0.460	0.527	0.460	0.527
	Bottom	/	/	/	/	/	/	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LTE Band 41	Front	0.095	0.215	0.321	0.395	0.647	0.041	0.310	0.416	0.490	0.742	0.136	0.436	0.688	0.531	0.783
	Back	0.087	0.218	0.295	0.754	0.847	0.051	0.305	0.382	0.841	0.934	0.138	0.805	0.898	0.892	0.985
	Left	0.158	/	/	/	/	/	0.158	0.158	0.158	0.158	0.158	0.000	0.000	0.158	0.158
	Right	/	0.353	0.805	0.394	0.996	0.075	0.353	0.805	0.394	0.996	0.075	0.469	1.071	0.469	1.071
	Top	/	0.028	0.246	0.451	0.518	0.009	0.028	0.246	0.451	0.518	0.009	0.460	0.527	0.460	0.527
	Bottom	/	/	/	/	/	/	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com.
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgrupp.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: ZR/2020/5002403
Page : 207 of 209

Hotspot Ant10:

Band	Exposure position	SARmax (W/kg)						Summed SAR (1+2)	Summed SAR (1+3)	Summed SAR (1+4)	Summed SAR (1+5)	Summed SAR (1+6)	Summed SAR (4+6)	Summed SAR (5+6)	Summed SAR (1+4+6)	Summed SAR (1+5+6)
		1 Ant10	2 WiFi 2.4G Ant1(chian0)	3 WiFi 2.4G MIMO	4 WiFi 5G Ant7(chian1)	5 WiFi 5G MIMO	6 BT									
GSM1900	Front	0.361	0.215	0.321	0.395	0.647	0.041	0.576	0.682	0.756	1.008	0.402	0.436	0.688	0.797	1.049
	Back	0.408	0.218	0.295	0.754	0.847	0.051	0.626	0.703	1.162	1.255	0.459	0.805	0.898	1.213	1.306
	Left	0.139	/	/	/	/	/	0.139	0.139	0.139	0.139	0.139	0.000	0.000	0.139	0.139
	Right	0.067	0.353	0.805	0.394	0.996	0.075	0.420	0.872	0.461	1.063	0.142	0.469	1.071	0.536	1.138
	Top	/	0.028	0.246	0.451	0.518	0.009	0.028	0.246	0.451	0.518	0.009	0.460	0.527	0.460	0.527
	Bottom	0.616	/	/	/	/	/	0.616	0.616	0.616	0.616	0.616	0.000	0.000	0.616	0.616
WCDMA Band II	Front	0.562	0.215	0.321	0.395	0.647	0.041	0.777	0.883	0.957	1.209	0.603	0.436	0.688	0.998	1.250
	Back	0.651	0.218	0.295	0.754	0.847	0.051	0.869	0.946	1.405	1.498	0.702	0.805	0.898	1.456	1.549
	Left	0.235	/	/	/	/	/	0.235	0.235	0.235	0.235	0.235	0.000	0.000	0.235	0.235
	Right	0.111	0.353	0.805	0.394	0.996	0.075	0.464	0.916	0.505	1.107	0.186	0.469	1.071	0.580	1.182
	Top	/	0.028	0.246	0.451	0.518	0.009	0.028	0.246	0.451	0.518	0.009	0.460	0.527	0.460	0.527
	Bottom	0.971	/	/	/	/	/	0.971	0.971	0.971	0.971	0.971	0.000	0.000	0.971	0.971
WCDMA Band IV	Front	0.637	0.215	0.321	0.395	0.647	0.041	0.852	0.958	1.032	1.284	0.678	0.436	0.688	1.073	1.325
	Back	0.686	0.218	0.295	0.754	0.847	0.051	0.904	0.981	1.440	1.533	0.737	0.805	0.898	1.491	1.584
	Left	0.265	/	/	/	/	/	0.265	0.265	0.265	0.265	0.265	0.000	0.000	0.265	0.265
	Right	0.141	0.353	0.805	0.394	0.996	0.075	0.494	0.946	0.535	1.137	0.216	0.469	1.071	0.610	1.212
	Top	/	0.028	0.246	0.451	0.518	0.009	0.028	0.246	0.451	0.518	0.009	0.460	0.527	0.460	0.527
	Bottom	0.979	/	/	/	/	/	0.979	0.979	0.979	0.979	0.979	0.000	0.000	0.979	0.979
LTE Band 2	Front	0.426	0.215	0.321	0.395	0.647	0.041	0.641	0.747	0.821	1.073	0.467	0.436	0.688	0.862	1.114
	Back	0.485	0.218	0.295	0.754	0.847	0.051	0.703	0.780	1.239	1.332	0.536	0.805	0.898	1.290	1.383
	Left	0.180	/	/	/	/	/	0.180	0.180	0.180	0.180	0.180	0.000	0.000	0.180	0.180
	Right	0.088	0.353	0.805	0.394	0.996	0.075	0.441	0.893	0.482	1.084	0.163	0.469	1.071	0.557	1.159
	Top	/	0.028	0.246	0.451	0.518	0.009	0.028	0.246	0.451	0.518	0.009	0.460	0.527	0.460	0.527
	Bottom	0.790	/	/	/	/	/	0.790	0.790	0.790	0.790	0.790	0.000	0.000	0.790	0.790
LTE Band 4	Front	0.634	0.215	0.321	0.395	0.647	0.041	0.849	0.955	1.029	1.281	0.675	0.436	0.688	1.070	1.322
	Back	0.681	0.218	0.295	0.754	0.847	0.051	0.899	0.976	1.435	1.528	0.732	0.805	0.898	1.486	1.579
	Left	0.264	/	/	/	/	/	0.264	0.264	0.264	0.264	0.264	0.000	0.000	0.264	0.264
	Right	0.139	0.353	0.805	0.394	0.996	0.075	0.492	0.944	0.533	1.135	0.214	0.469	1.071	0.608	1.210
	Top	/	0.028	0.246	0.451	0.518	0.009	0.028	0.246	0.451	0.518	0.009	0.460	0.527	0.460	0.527
	Bottom	0.929	/	/	/	/	/	0.929	0.929	0.929	0.929	0.929	0.000	0.000	0.929	0.929
LTE Band 7	Front	0.324	0.215	0.321	0.395	0.647	0.041	0.539	0.645	0.719	0.971	0.365	0.436	0.688	0.760	1.012
	Back	0.542	0.218	0.295	0.754	0.847	0.051	0.760	0.837	1.296	1.389	0.593	0.805	0.898	1.347	1.440
	Left	0.149	/	/	/	/	/	0.149	0.149	0.149	0.149	0.149	0.000	0.000	0.149	0.149
	Right	0.065	0.353	0.805	0.394	0.996	0.075	0.418	0.870	0.459	1.061	0.140	0.469	1.071	0.534	1.136
	Top	/	0.028	0.246	0.451	0.518	0.009	0.028	0.246	0.451	0.518	0.009	0.460	0.527	0.460	0.527
	Bottom	0.379	/	/	/	/	/	0.379	0.379	0.379	0.379	0.379	0.000	0.000	0.379	0.379
LTE Band 38	Front	0.300	0.215	0.321	0.395	0.647	0.041	0.515	0.621	0.695	0.947	0.341	0.436	0.688	0.736	0.988
	Back	0.523	0.218	0.295	0.754	0.847	0.051	0.741	0.818	1.277	1.370	0.574	0.805	0.898	1.328	1.421
	Left	0.132	/	/	/	/	/	0.132	0.132	0.132	0.132	0.132	0.000	0.000	0.132	0.132
	Right	0.063	0.353	0.805	0.394	0.996	0.075	0.416	0.868	0.457	1.059	0.138	0.469	1.071	0.532	1.134
	Top	/	0.028	0.246	0.451	0.518	0.009	0.028	0.246	0.451	0.518	0.009	0.460	0.527	0.460	0.527
	Bottom	0.374	/	/	/	/	/	0.374	0.374	0.374	0.374	0.374	0.000	0.000	0.374	0.374
LTE Band 41	Front	0.275	0.215	0.321	0.395	0.647	0.041	0.490	0.596	0.670	0.922	0.316	0.436	0.688	0.711	0.963
	Back	0.483	0.218	0.295	0.754	0.847	0.051	0.701	0.778	1.237	1.330	0.534	0.805	0.898	1.288	1.381
	Left	0.126	/	/	/	/	/	0.126	0.126	0.126	0.126	0.126	0.000	0.000	0.126	0.126
	Right	0.075	0.353	0.805	0.394	0.996	0.075	0.428	0.880	0.469	1.071	0.150	0.469	1.071	0.544	1.146
	Top	/	0.028	0.246	0.451	0.518	0.009	0.028	0.246	0.451	0.518	0.009	0.460	0.527	0.460	0.527
	Bottom	0.343	/	/	/	/	/	0.343	0.343	0.343	0.343	0.343	0.000	0.000	0.343	0.343

Product specific 10g SAR Ant1&Ant10:

Test position		Main Antenna SARmax (W/kg)												WiFi/BT Antenna SARmax (W/kg)					Summed SAR (1+2)	Summed SAR (1+3)	Summed SAR (1+4)	Summed SAR (1+5)	Summed SAR (1+6)	Summed SAR (4+6)	Summed SAR (5+6)	Summed SAR (1+4+6)	Summed SAR (1+5+6)				
		GSM850	GSM1900	WCDMA Band II	WCDMA Band IV	WCDMA Band V	LTE Band 2	LTE Band 4	LTE Band 5	LTE Band 7	LTE Band 28	LTE Band 38	LTE Band 41	WiFi 2.4G Ant0	WiFi 2.4G MIMO	WiFi 5G	BT														
Product specific 10g SAR	Front	/	/	/	/	/	1	/	/	/	/	/	2	3	5	6	/	/	/	/	0.966	1.253	0.000	0.966	1.253	0.000	0.966	1.253	0.966	1.253	
	Back	/	/	/	/	/	/	/	/	/	/	/	/	/	1.439	1.986	/	/	/	/	1.439	1.986	0.000	1.439	1.986	0.000	1.439	1.986	1.439	1.986	
	Left	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
	Right	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
	Top	/	/	/	/	/	/	/	/	/	/	/	/	/	/	0.767	2.383	/	/	/	/	0.767	2.383	0.000	0.767	2.383	0.000	0.767	2.383	0.767	2.383
	Bottom	/	/	3.128	2.128	/	3.222	/	/	/	/	/	/	/	/	0.758	0.871	/	/	/	/	0.758	0.871	0.000	0.758	0.871	0.000	0.758	0.871	0.758	0.871

Product specific 10g SAR Ant4&Ant5:

Test position		Main Antenna SARmax (W/kg)												WiFi/BT Antenna SARmax (W/kg)				Summed SAR (1+2)	Summed SAR (1+3)	Summed SAR (1+4)	Summed SAR (1+5)	Summed SAR (1+6)	Summed SAR (4+6)	Summed SAR (5+6)	Summed SAR (1+4+6)	Summed SAR (1+5+6)		
		GSM850	GSM1900	WCDMA Band II	WCDMA Band IV	WCDMA Band V	LTE Band 2	LTE Band 4	LTE Band 5	LTE Band 7	LTE Band 26	LTE Band 38	LTE Band 41	WiFi 2.4G Ant0	WiFi 2.4G MIMO	WiFi 5G MIMO	BT											
Product specific 10g SAR	Front	/	/	/	/	/	1	/	/	/	/	/	2	3	0.966	1.253	/	/	/	/	0.966	1.253	0.000	0.966	1.253	0.966	1.253	
	Back	/	/	/	/	/	/	/	/	/	/	/	/	/	1.439	1.986	/	/	/	/	1.439	1.986	0.000	1.439	1.986	1.439	1.986	
	Left	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
	Right	/	/	/	/	/	/	/	/	/	/	/	/	/	/	0.767	2.383	/	/	/	/	0.767	2.383	0.000	0.767	2.383	0.767	2.383
	Top	/	/	/	/	/	/	/	/	/	/	/	/	/	0.758	0.871	/	/	/	/	0.758	0.871	0.000	0.758	0.871	0.758	0.871	
	Bottom	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this



9 Equipment list

Test Platform		SPEAG DASY5 Professional				
Description		SAR Test System (Frequency range 300MHz-6GHz)				
Software Reference		DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)				
Hardware Reference						
Equipment		Manufacturer	Model	Serial Number	Calibration Date	Due date of calibration
☒	Twin Phantom	SPEAG	SAM 1	1640	NCR	NCR
☒	Twin Phantom	SPEAG	SAM 3	1912	NCR	NCR
☒	Twin Phantom	SPEAG	SAM 7	1027	NCR	NCR
☒	Twin Phantom	SPEAG	SAM 8	1063	NCR	NCR
☒	DAE	SPEAG	DAE4	1267	2019-12-17	2020-12-16
☒	DAE	SPEAG	DAE4	1428	2020-03-03	2021-03-02
☒	DAE	SPEAG	DAE4	896	2019-09-18	2020-09-17
☒	E-Field Probe	SPEAG	EX3DV4	3923	2019-10-22	2020-10-21
☒	E-Field Probe	SPEAG	EX3DV4	3982	2019-09-11	2020-09-10
☒	E-Field Probe	SPEAG	EX3DV4	3793	2020-05-09	2021-05-08
☒	Validation Kits	SPEAG	D835V2	4d105	2019-12-17	2022-12-16
☒	Validation Kits	SPEAG	D1750V2	1149	2019-05-21	2022-05-20
☒	Validation Kits	SPEAG	D1900V2	5d028	2019-12-17	2022-12-16
☒	Validation Kits	SPEAG	D2450V2	733	2019-12-17	2022-12-16
☒	Validation Kits	SPEAG	D2600V2	1125	2019-05-20	2022-05-19
☒	Validation Kits	SPEAG	D5GHzV2	1165	2019-12-20	2022-12-19
☒	Agilent Network Analyzer	Agilent	E5071C	MY46523591	2020-04-16	2021-04-15
☒	Dielectric Probe Kit	Agilent	85070E	US01440210	NCR	NCR
☒	Universal Radio Communication Tester	R&S	CMW500	111637	2020-04-16	2021-04-15
☒	Radio Communication Analyzer	Anritsu	MT8821C	6201502984	2019-06-25	2020-06-24
☒	RF Bi-Directional Coupler	Agilent	86205-60001	MY31400031	NCR	NCR
☒	Signal Generator	Agilent	N5171B	MY53050736	2020-04-15	2021-04-14
☒	Preamplifier	Mini-Circuits	ZHL-42W	15542	NCR	NCR
☒	Preamplifier	Compliance Directions Systems Inc.	AMP28-3W	073501433	NCR	NCR
☒	Power Meter	Agilent	E4416A	GB41292095	2020-04-15	2021-04-14
☒	Power Sensor	Agilent	8481H	MY41091234	2020-04-15	2021-04-14
☒	Power Sensor	R&S	NRP-Z92	100025	2020-04-16	2021-04-15
☒	Attenuator	SHX	TS2-3dB	30704	NCR	NCR



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com
 No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.ssgroup.com.cn
 中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



☒	Coaxial low pass filter	Mini-Circuits	VLF-2500(+)	NA	NCR	NCR
☒	Coaxial low pass filter	Microlab Fxr	LA-F13	NA	NCR	NCR
☒	50 Ω coaxial load	Mini-Circuits	KARN-50+	00850	NCR	NCR
☒	DC POWER SUPPLY	SAKO	SK1730SL5A	NA	NCR	NCR
☒	Speed reading thermometer	MingGao	T809	NA	2020-04-21	2021-04-20
☒	Humidity and Temperature Indicator	KIMTOKA	KIMTOKA	NA	2020-04-21	2021-04-20

Note: All the equipments are within the valid period when the tests are performed.

10 Calibration certificate

Please see the Appendix C

11 Photographs

Please see the Appendix D

Appendix A: Detailed System Check Results

Appendix B: Detailed Test Results

Appendix C: Calibration certificate

Appendix D: Photographs

---END---



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057
中国·深圳·科技园中区M-10栋一号厂房

t (86-755) 26012053 f (86-755) 26710594
邮编: 518057 f (86-755) 26012053 f (86-755) 26710594

www.ssgroup.com.cn
sgs.china@sgs.com



Appendix A

Detailed System Check Results

1. System Performance Check
System Performance Check 835 MHz Head
System Performance Check 1750 MHz Head
System Performance Check 1900 MHz Head
System Performance Check 2450 MHz Head
System Performance Check 2600 MHz Head
System Performance Check 5250 MHz Head
System Performance Check 5600 MHz Head
System Performance Check 5750 MHz Head

Test Laboratory: SGS-SAR Lab

System Performance Check 835 MHz Head

DUT: D835V2; Type: D835V2; Serial: 4d105

Communication System: UID 0, CW (0); Frequency: 835 MHz; Duty Cycle: 1:1

Medium: HSL835; Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.938 \text{ S/m}$; $\epsilon_r = 41.776$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.05, 9.05, 9.05); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Body/d=15mm, Pin=250mW/Area Scan (8x13x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (measured) = 3.15 W/kg

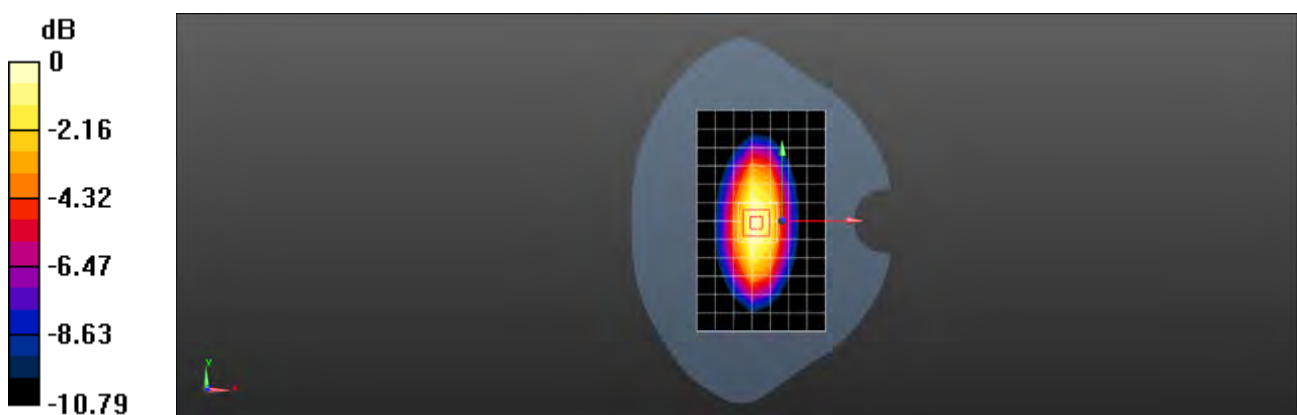
Body/d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 53.74 V/m ; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 4.04 W/kg

SAR(1 g) = 2.62 W/kg ; SAR(10 g) = 1.71 W/kg

Maximum value of SAR (measured) = 3.37 W/kg



Test Laboratory: SGS-SAR Lab

System Performance Check 835 MHz Head

DUT: D835V2; Type: D835V2; Serial: 4d105

Communication System: UID 0, CW (0); Frequency: 835 MHz; Duty Cycle: 1:1

Medium: HSL835; Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.944 \text{ S/m}$; $\epsilon_r = 39.988$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(10.39, 10.39, 10.39); Calibrated: 2019-09-11
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Body/d=15mm, Pin=250mW/Area Scan (7x13x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (measured) = 3.26 W/kg

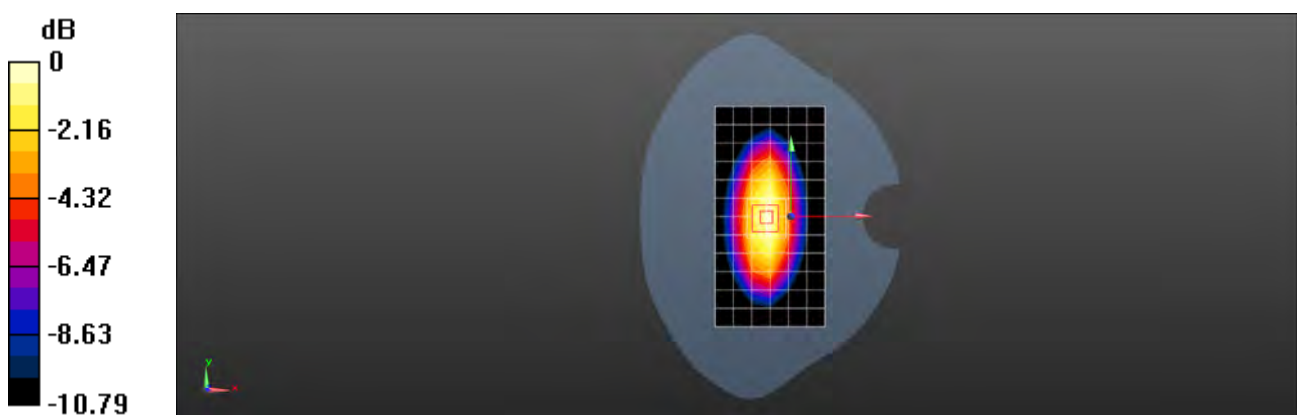
Body/d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 53.41 V/m ; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 4.08 W/kg

SAR(1 g) = 2.63 W/kg ; SAR(10 g) = 1.72 W/kg

Maximum value of SAR (measured) = 3.39 W/kg



Test Laboratory: SGS-SAR Lab

System Performance Check 1750 MHz Head

DUT: D1750V2; Type: D1750V2; Serial: 1149

Communication System: UID 0, CW (0); Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: HSL1750; Medium parameters used: $f = 1750$ MHz; $\sigma = 1.309$ S/m; $\epsilon_r = 40.271$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.81, 7.81, 7.81); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Body/d=10mm, Pin=250mW/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 11.3 W/kg

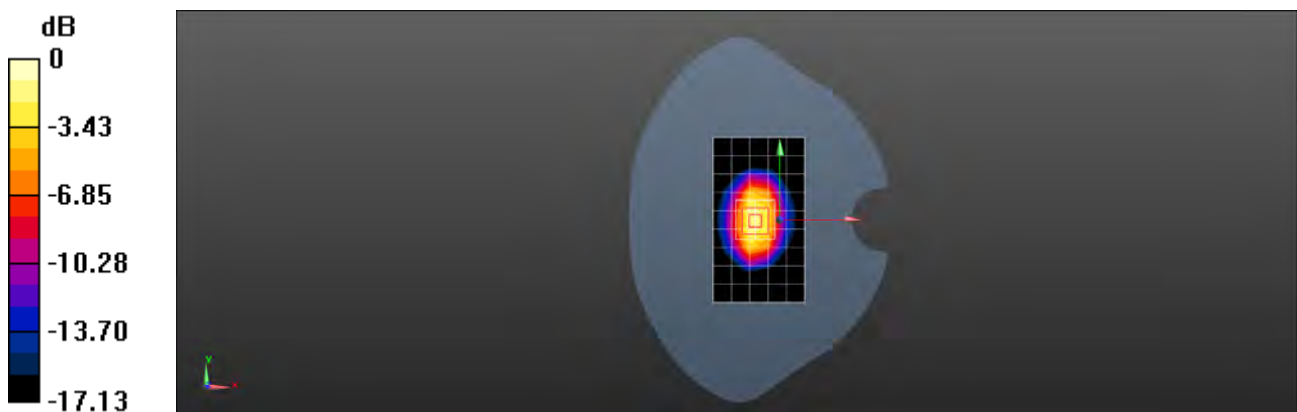
Body/d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 88.03 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 17.4 W/kg

SAR(1 g) = 9.34 W/kg; SAR(10 g) = 4.96 W/kg

Maximum value of SAR (measured) = 14.6 W/kg



0 dB = 14.6 W/kg = 11.64 dBW/kg

Test Laboratory: SGS-SAR Lab

System Performance Check 1900 MHz Head

DUT: D1900V2; Type: D1900V2; Serial: 5d028

Communication System: UID 0, CW (0); Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: HSL1900; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.376$ S/m; $\epsilon_r = 40.173$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.61, 7.61, 7.61); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Body/d=10mm, Pin=250mW/Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 10.7 W/kg

Body/d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 88.67 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 18.8 W/kg

SAR(1 g) = 10.3 W/kg; SAR(10 g) = 5.27 W/kg

Maximum value of SAR (measured) = 11.4 W/kg



0 dB = 11.4 W/kg = 10.57 dBW/kg

Test Laboratory: SGS-SAR Lab

System Performance Check 2450MHz Head

DUT: D2450V2; Type: D2450V2; Serial: 733

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: HSL2450; Medium parameters used: $f = 2450$ MHz; $\sigma = 1.803$ S/m; $\epsilon_r = 39.409$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.87, 7.87, 7.87); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Body/d=10mm, Pin=250mW/Area Scan (9x10x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 21.3 W/kg

Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 90.88 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 27.0 W/kg

SAR(1 g) = 13.5 W/kg; SAR(10 g) = 6.11 W/kg

Maximum value of SAR (measured) = 22.0 W/kg



0 dB = 22.0 W/kg = 13.42 dBW/kg

Test Laboratory: SGS-SAR Lab

System Performance Check 2600MHz Head

DUT: D2600V2; Type: D2600V2; Serial: 1125

Communication System: UID 0, CW (0); Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: HSL2600; Medium parameters used: $f = 2600$ MHz; $\sigma = 1.973$ S/m; $\epsilon_r = 38.869$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.74, 7.74, 7.74); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Body/d=10mm, Pin=250mW/Area Scan (9x15x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 23.8 W/kg

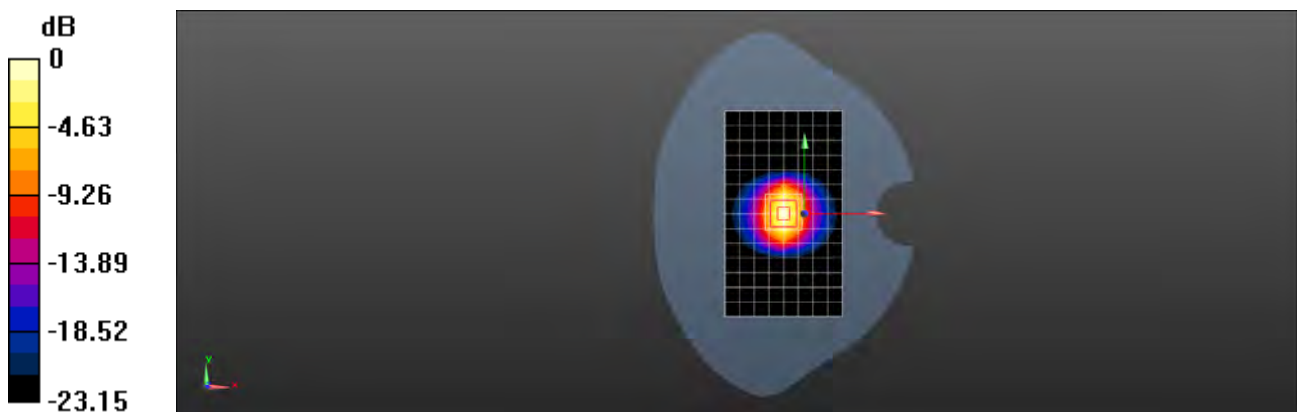
Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 91.21 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 29.1 W/kg

SAR(1 g) = 14.1 W/kg; SAR(10 g) = 6.28 W/kg

Maximum value of SAR (measured) = 23.6 W/kg



0 dB = 23.6 W/kg = 13.73 dBW/kg

Test Laboratory: SGS-SAR Lab

System Performance Check 5.25GHz Head

DUT: D5GHzV2; Type: D5GHzV2; Serial: 1165

Communication System: UID 0, CW (0); Frequency: 5250 MHz; Duty Cycle: 1:1

Medium: HSL5G; Medium parameters used: $f = 5250$ MHz; $\sigma = 4.711$ S/m; $\epsilon_r = 36.654$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(5.34, 5.34, 5.34); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn896; Calibrated: 2019-09-18
- Phantom: SAM 1; Type: SAM; Serial: 1640
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Body/d=10mm, Pin=100mW, f=5250 MHz/Area Scan (8x8x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 19.2 W/kg

Body/d=10mm, Pin=100mW, f=5250 MHz/Zoom Scan (7x7x7)/Cube 0: Measurement

grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 58.28 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 32.3 W/kg

SAR(1 g) = 7.93 W/kg; SAR(10 g) = 2.27 W/kg

Maximum value of SAR (measured) = 20.3 W/kg



0 dB = 20.3 W/kg = 13.07 dBW/kg

Test Laboratory: SGS-SAR Lab

System Performance Check 5.6GHz Head

DUT: D5GHzV2; Type: D5GHzV2; Serial: 1165

Communication System: UID 0, CW (0); Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: HSL5G; Medium parameters used: $f = 5600$ MHz; $\sigma = 5.093$ S/m; $\epsilon_r = 35.786$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(4.9, 4.9, 4.9); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn896; Calibrated: 2019-09-18
- Phantom: SAM 1; Type: SAM; Serial: 1640
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Body/d=10mm, Pin=100mW, f=5600 MHz/Area Scan (8x8x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 18.1 W/kg

Body/d=10mm, Pin=100mW, f=5600 MHz/Zoom Scan (7x7x7)/Cube 0: Measurement

grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 49.86 V/m; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 36.6 W/kg

SAR(1 g) = 8.44 W/kg; SAR(10 g) = 2.40 W/kg

Maximum value of SAR (measured) = 21.9 W/kg



0 dB = 21.9 W/kg = 13.40 dBW/kg

Test Laboratory: SGS-SAR Lab

System Performance Check 5.75GHz Head

DUT: D5GHzV2; Type: D5GHzV2; Serial: 1165

Communication System: UID 0, CW (0); Frequency: 5750 MHz; Duty Cycle: 1:1

Medium: HSL5G; Medium parameters used: $f = 5750$ MHz; $\sigma = 5.286$ S/m; $\epsilon_r = 35.605$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(4.83, 4.83, 4.83); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn896; Calibrated: 2019-09-18
- Phantom: SAM 1; Type: SAM; Serial: 1640
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Body/d=10mm, Pin=100mW, f=5750 MHz/Area Scan (8x8x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 15.4 W/kg

Body/d=10mm, Pin=100mW, f=5750 MHz/Zoom Scan (7x7x7)/Cube 0: Measurement

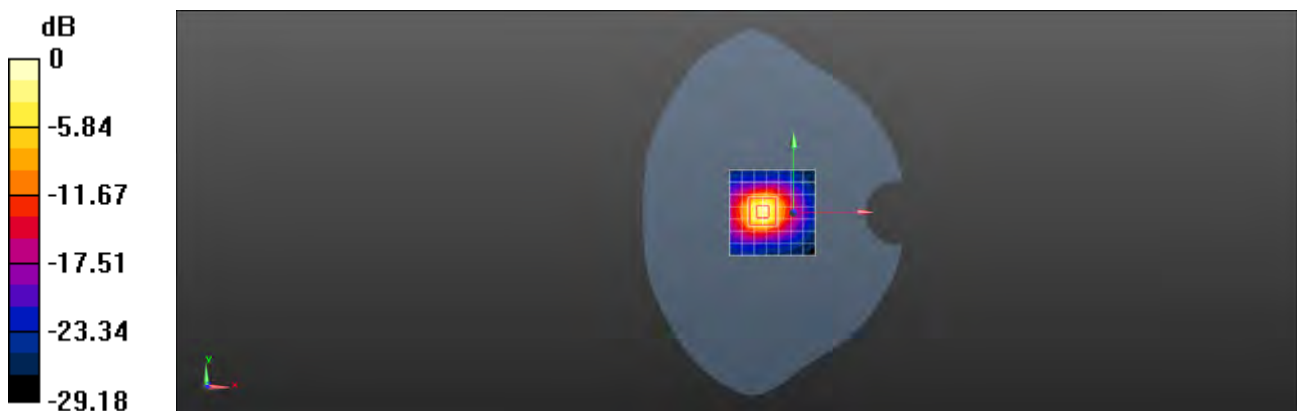
grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 45.88 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 34.9 W/kg

SAR(1 g) = 7.84 W/kg; SAR(10 g) = 2.21 W/kg

Maximum value of SAR (measured) = 20.8 W/kg



0 dB = 20.8 W/kg = 13.18 dBW/kg



Appendix B

Detailed Test Results

1. GSM
GSM850 for Head & Body
GSM1900 for Head & Body
2. WCDMA
WCDMA Band II for Head & Body
WCDMA Band IV for Head & Body
WCDMA Band V for Head & Body
3. LTE
LTE Band 2 for Head & Body
LTE Band 4 for Head & Body
LTE Band 5 for Head & Body
LTE Band 7 for Head & Body
LTE Band 26 for Head & Body
LTE Band 38 for Head & Body
LTE Band 41 for Head & Body
4. WIFI
WIFI 2.4GHz for Head & Body
WIFI 5GHz for Head & Body
5. BT
BT for Head & Body

Test Laboratory: SGS-SAR Lab

M2002J9R GSM850 GSM 190CH Left cheek Ant1

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium: HSL835; Medium parameters used: $f = 837$ MHz; $\sigma = 0.939$ S/m; $\epsilon_r = 41.761$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.05, 9.05, 9.05); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Head/Area Scan (7x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.147 W/kg

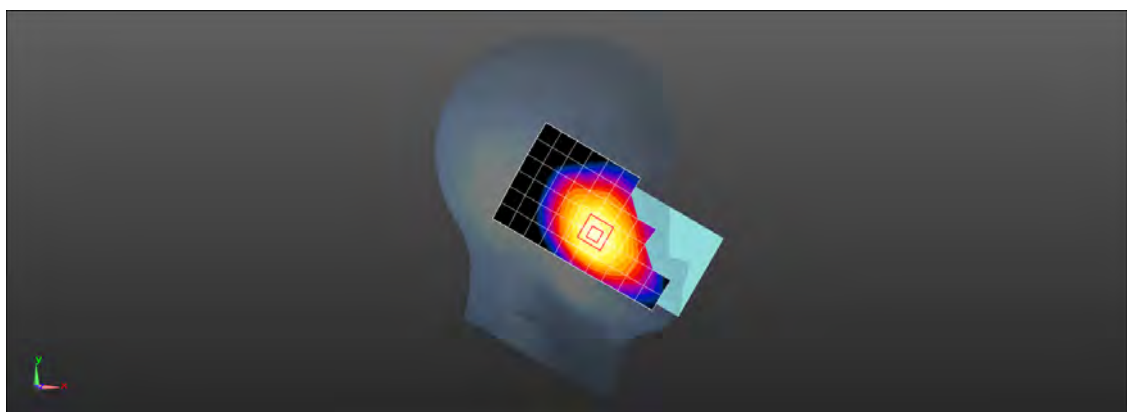
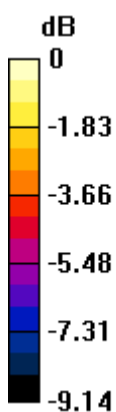
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.584 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.171 W/kg

SAR(1 g) = 0.131 W/kg; SAR(10 g) = 0.100 W/kg

Maximum value of SAR (measured) = 0.152 W/kg



0 dB = 0.152 W/kg = -8.18 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R GSM850 GSM 190CH Back side 15mm Ant1

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium: HSL835; Medium parameters used: $f = 837$ MHz; $\sigma = 0.939$ S/m; $\epsilon_r = 41.761$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.05, 9.05, 9.05); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Head/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.256 W/kg

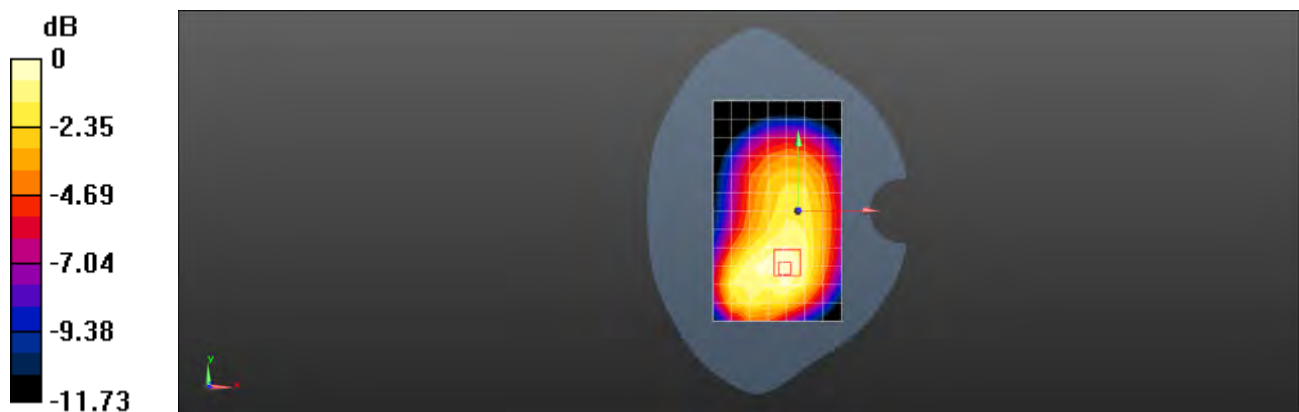
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.38 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.299 W/kg

SAR(1 g) = 0.215 W/kg; SAR(10 g) = 0.154 W/kg

Maximum value of SAR (measured) = 0.259 W/kg



0 dB = 0.259 W/kg = -5.87 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R GSM850 GPRS 4TS 190CH Back side 10mm Ant1

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, GSM 850 4TS; Frequency: 836.6 MHz; Duty Cycle: 1:2.075

Medium: HSL835; Medium parameters used: $f = 837$ MHz; $\sigma = 0.939$ S/m; $\epsilon_r = 41.761$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.05, 9.05, 9.05); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.411 W/kg

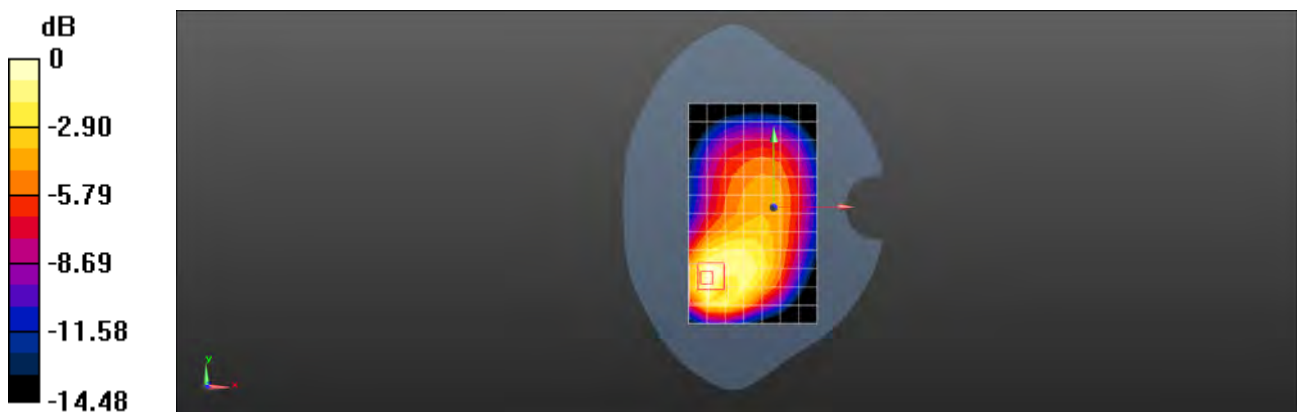
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.36 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.608 W/kg

SAR(1 g) = 0.332 W/kg; SAR(10 g) = 0.196 W/kg

Maximum value of SAR (measured) = 0.461 W/kg



0 dB = 0.461 W/kg = -3.36 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R GSM850 GSM 190CH Right tilted Ant4

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium: HSL835; Medium parameters used: $f = 837$ MHz; $\sigma = 0.939$ S/m; $\epsilon_r = 41.761$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.05, 9.05, 9.05); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Head/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.726 W/kg

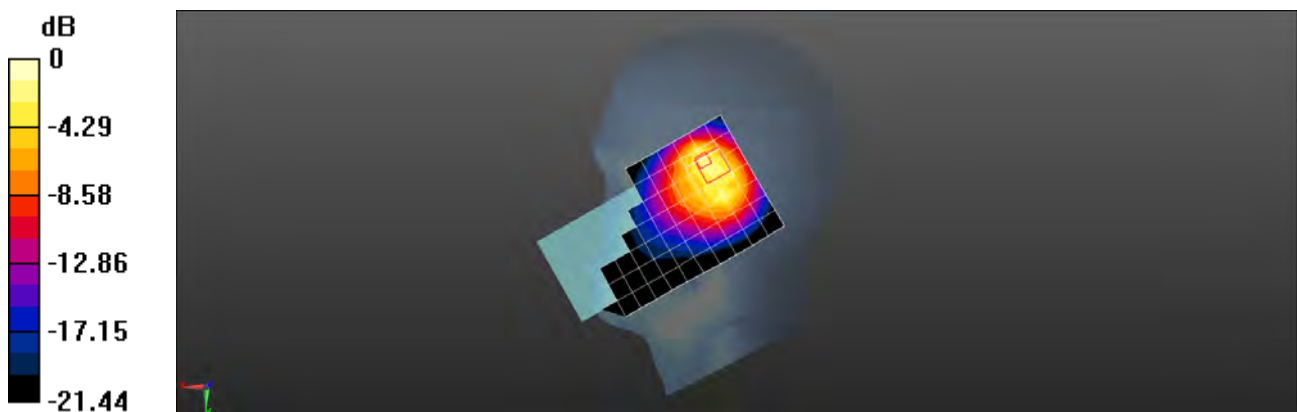
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 22.98 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 1.52 W/kg

SAR(1 g) = 0.509 W/kg; SAR(10 g) = 0.243 W/kg

Maximum value of SAR (measured) = 0.992 W/kg



0 dB = 0.992 W/kg = -0.03 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R GSM850 GSM 190CH Back side 15mm Ant4

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium: HSL835; Medium parameters used: $f = 837$ MHz; $\sigma = 0.939$ S/m; $\epsilon_r = 41.761$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.05, 9.05, 9.05); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.302 W/kg

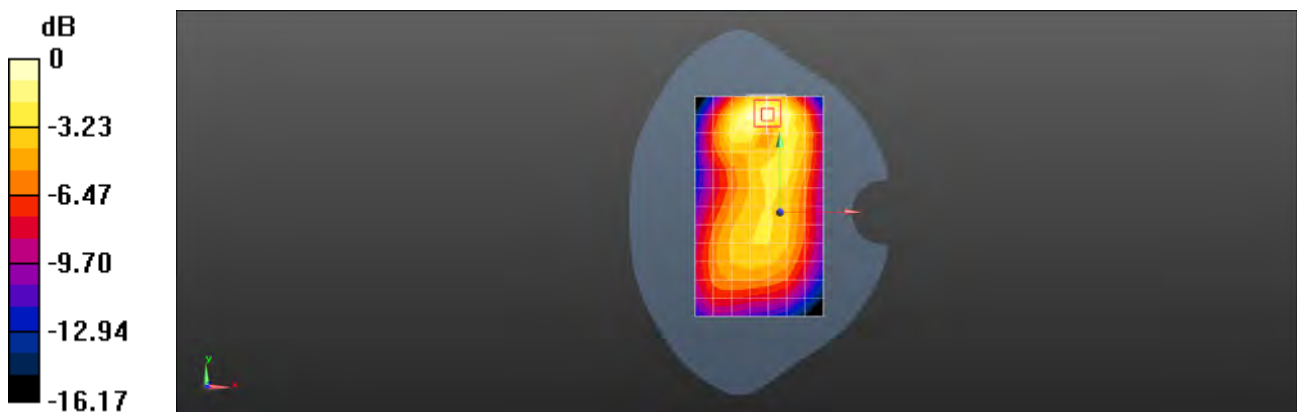
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.70 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.376 W/kg

SAR(1 g) = 0.226 W/kg; SAR(10 g) = 0.134 W/kg

Maximum value of SAR (measured) = 0.302 W/kg



0 dB = 0.302 W/kg = -5.20 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R GSM850 GPRS 4TS 190CH Top side 10mm Ant4

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, GSM 850 4TS; Frequency: 836.6 MHz; Duty Cycle: 1:2.075

Medium: HSL835; Medium parameters used: $f = 837$ MHz; $\sigma = 0.939$ S/m; $\epsilon_r = 41.761$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.05, 9.05, 9.05); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (5x7x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.208 W/kg

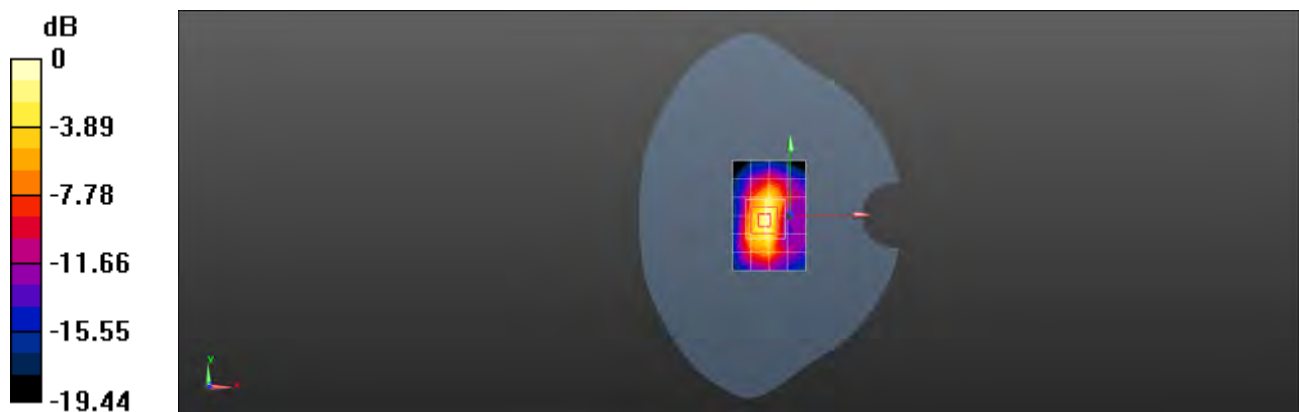
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.64 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.328 W/kg

SAR(1 g) = 0.158 W/kg; SAR(10 g) = 0.075 W/kg

Maximum value of SAR (measured) = 0.241 W/kg



0 dB = 0.241 W/kg = -6.18 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R GSM1900 GSM 661CH Right cheek Ant5

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, GSM 1900 GSM; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium: HSL1900; Medium parameters used: $f = 1880$ MHz; $\sigma = 1.368$ S/m; $\epsilon_r = 40.206$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.61, 7.61, 7.61); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Head/Area Scan (8x13x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.760 W/kg

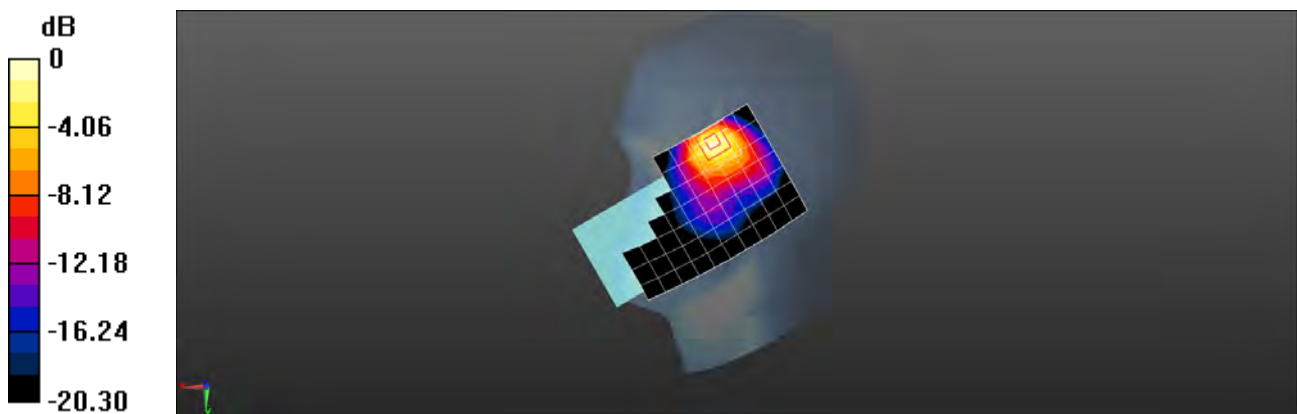
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 6.182 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 1.17 W/kg

SAR(1 g) = 0.539 W/kg; SAR(10 g) = 0.243 W/kg

Maximum value of SAR (measured) = 0.758 W/kg



0 dB = 0.758 W/kg = -1.20 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R GSM1900 GSM 661CH Back side 15mm Ant5

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, GSM 1900 GSM; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium: HSL1900; Medium parameters used: $f = 1880$ MHz; $\sigma = 1.368$ S/m; $\epsilon_r = 40.206$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.61, 7.61, 7.61); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.161 W/kg

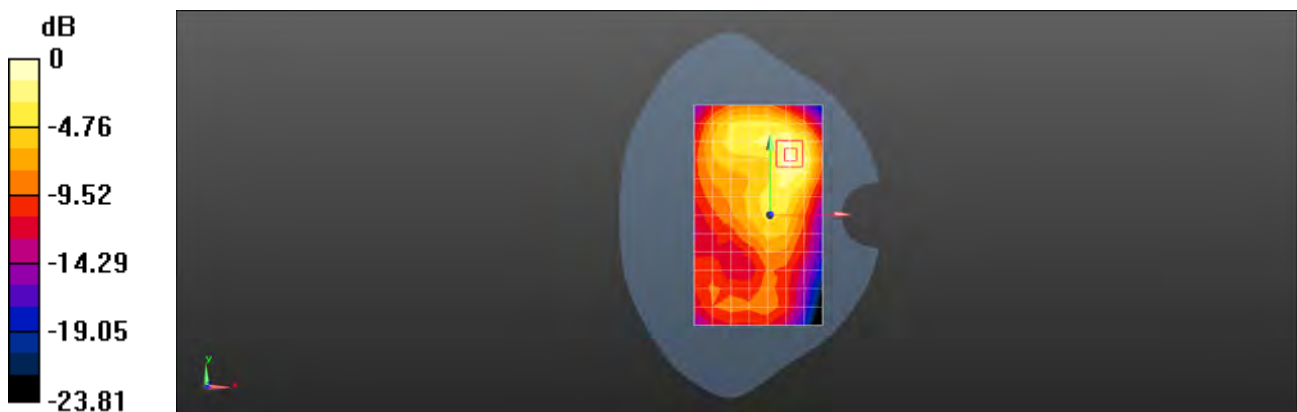
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.122 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.231 W/kg

SAR(1 g) = 0.131 W/kg; SAR(10 g) = 0.070 W/kg

Maximum value of SAR (measured) = 0.183 W/kg



0 dB = 0.183 W/kg = -7.38 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R GSM1900 GPRS 4TS 661CH Left side 10mm Ant5

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, GSM 1900 4TS; Frequency: 1880 MHz; Duty Cycle: 1:2.075

Medium: HSL1900; Medium parameters used: $f = 1880$ MHz; $\sigma = 1.368$ S/m; $\epsilon_r = 40.206$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.61, 7.61, 7.61); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (5x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.184 W/kg

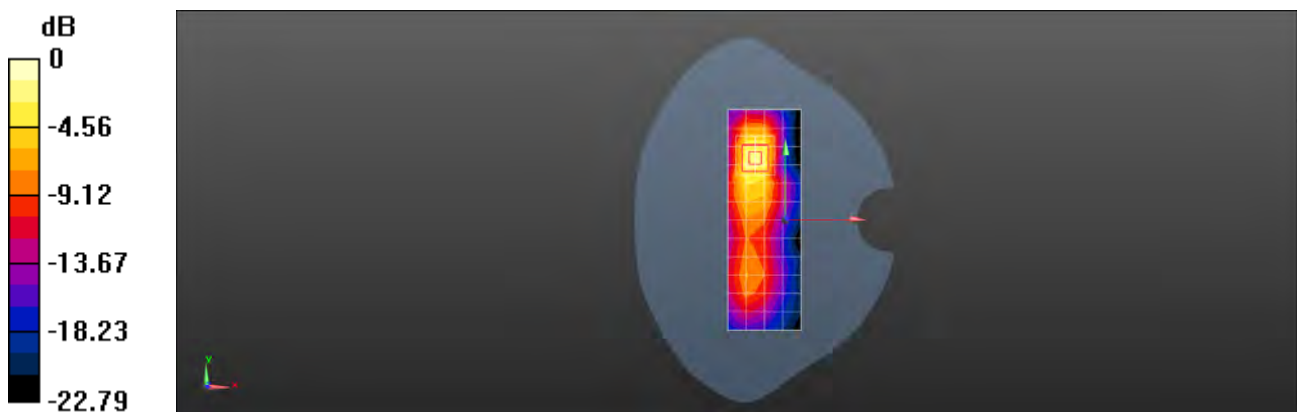
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.827 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.423 W/kg

SAR(1 g) = 0.217 W/kg; SAR(10 g) = 0.102 W/kg

Maximum value of SAR (measured) = 0.328 W/kg



0 dB = 0.328 W/kg = -4.84 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R GSM1900 GSM 661CH Right cheek Ant10

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, GSM 1900 GSM; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium: HSL1900; Medium parameters used: $f = 1880$ MHz; $\sigma = 1.368$ S/m; $\epsilon_r = 40.206$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.61, 7.61, 7.61); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Head/Area Scan (7x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.0804 W/kg

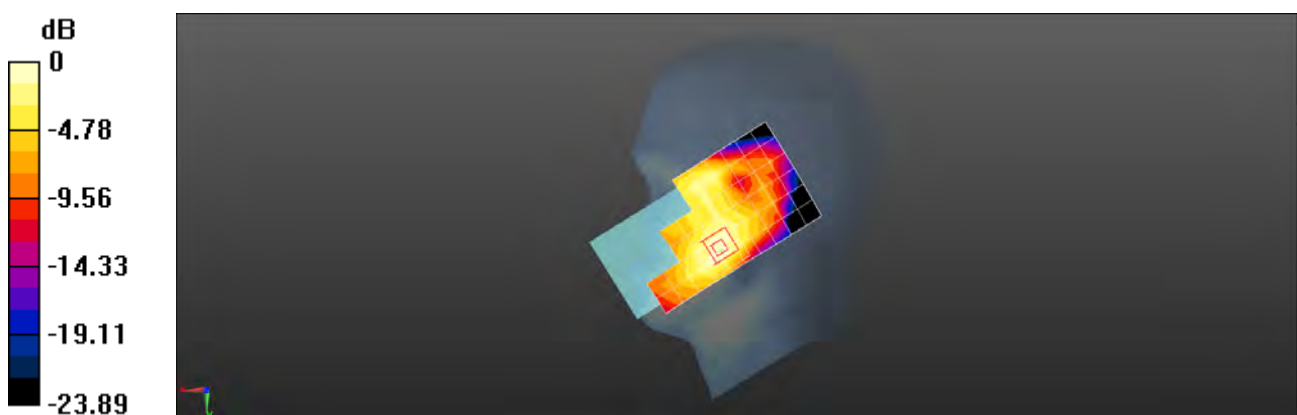
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.164 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.110 W/kg

SAR(1 g) = 0.071 W/kg; SAR(10 g) = 0.043 W/kg

Maximum value of SAR (measured) = 0.0916 W/kg



0 dB = 0.0916 W/kg = -10.38 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R GSM1900 GSM 661CH Back side 15mm Ant10

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, GSM 1900 GSM; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium: HSL1900; Medium parameters used: $f = 1880$ MHz; $\sigma = 1.368$ S/m; $\epsilon_r = 40.206$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.61, 7.61, 7.61); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.297 W/kg

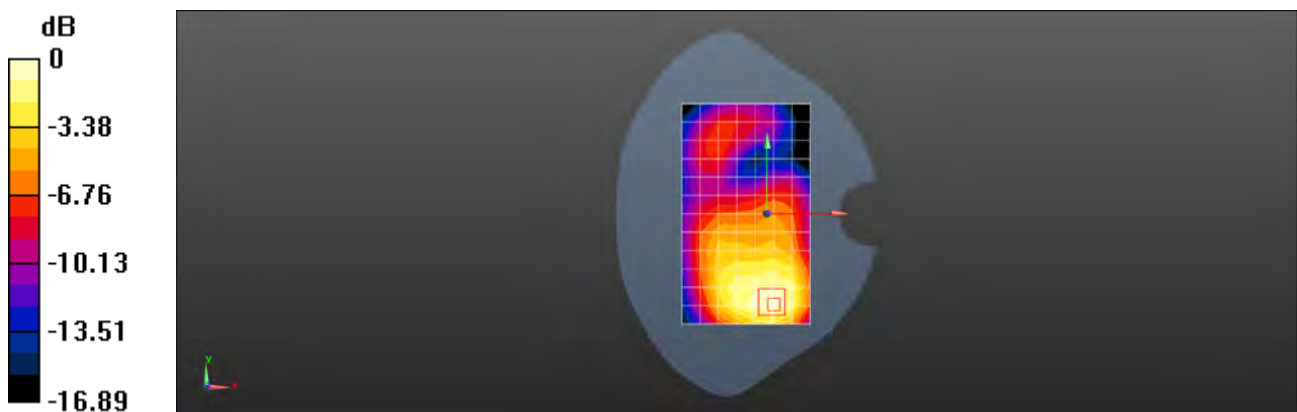
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.454 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.365 W/kg

SAR(1 g) = 0.229 W/kg; SAR(10 g) = 0.137 W/kg

Maximum value of SAR (measured) = 0.297 W/kg



Test Laboratory: SGS-SAR Lab

M2002J9R GSM1900 GPRS 4TS 661CH Bottom side 10mm Ant10

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, GSM 1900 4TS; Frequency: 1880 MHz; Duty Cycle: 1:2.075

Medium: HSL1900; Medium parameters used: $f = 1880$ MHz; $\sigma = 1.368$ S/m; $\epsilon_r = 40.206$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.61, 7.61, 7.61); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (5x7x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.578 W/kg

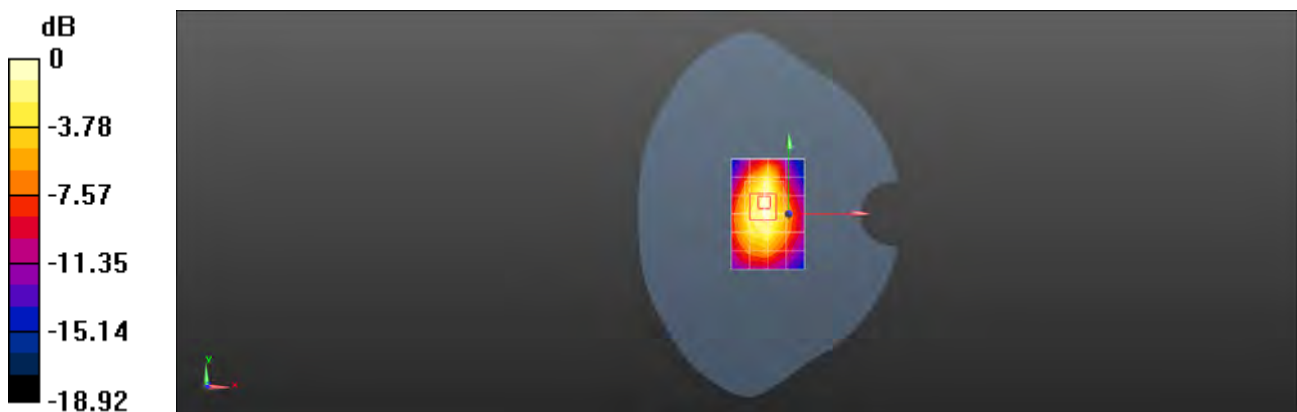
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.99 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.778 W/kg

SAR(1 g) = 0.445 W/kg; SAR(10 g) = 0.244 W/kg

Maximum value of SAR (measured) = 0.622 W/kg



Test Laboratory: SGS-SAR Lab

M2002J9R WCDMA Band II 9400CH Right cheek Ant5

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, WCDMA Band II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL1900; Medium parameters used: $f = 1880$ MHz; $\sigma = 1.368$ S/m; $\epsilon_r = 40.206$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.61, 7.61, 7.61); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Head/Area Scan (8x13x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.959 W/kg

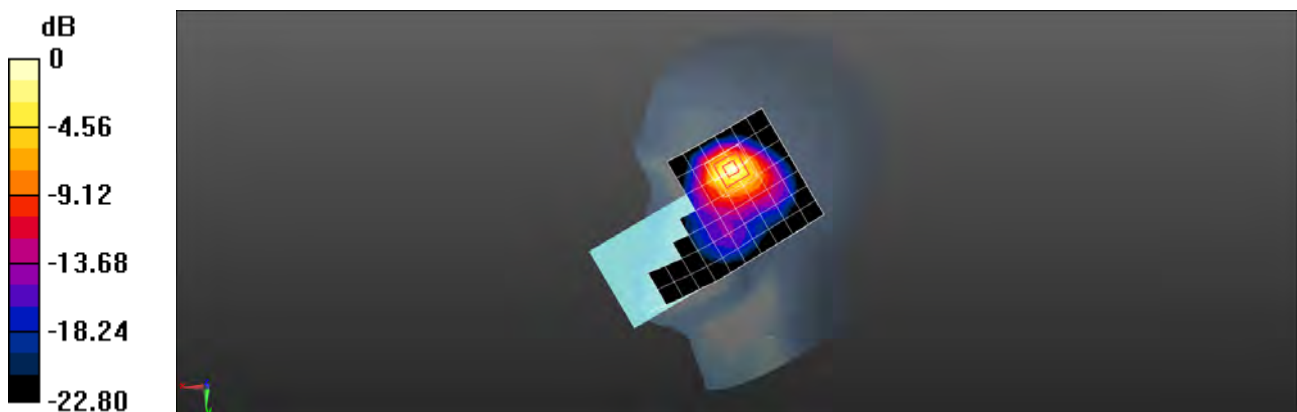
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 5.133 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 1.37 W/kg

SAR(1 g) = 0.580 W/kg; SAR(10 g) = 0.250 W/kg

Maximum value of SAR (measured) = 0.958 W/kg



0 dB = 0.958 W/kg = -0.19 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R WCDMA Band II 9400CH Back side 15mm Ant5

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, WCDMA Band II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL1900; Medium parameters used: $f = 1880$ MHz; $\sigma = 1.368$ S/m; $\epsilon_r = 40.206$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.61, 7.61, 7.61); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.261 W/kg

Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.377 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.383 W/kg

SAR(1 g) = 0.221 W/kg; SAR(10 g) = 0.122 W/kg

Maximum value of SAR (measured) = 0.305 W/kg



0 dB = 0.305 W/kg = -5.16 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R WCDMA Band II 9400CH Left side 10mm Ant5

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, WCDMA Band II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL1900; Medium parameters used: $f = 1880$ MHz; $\sigma = 1.368$ S/m; $\epsilon_r = 40.206$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.61, 7.61, 7.61); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (5x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.223 W/kg

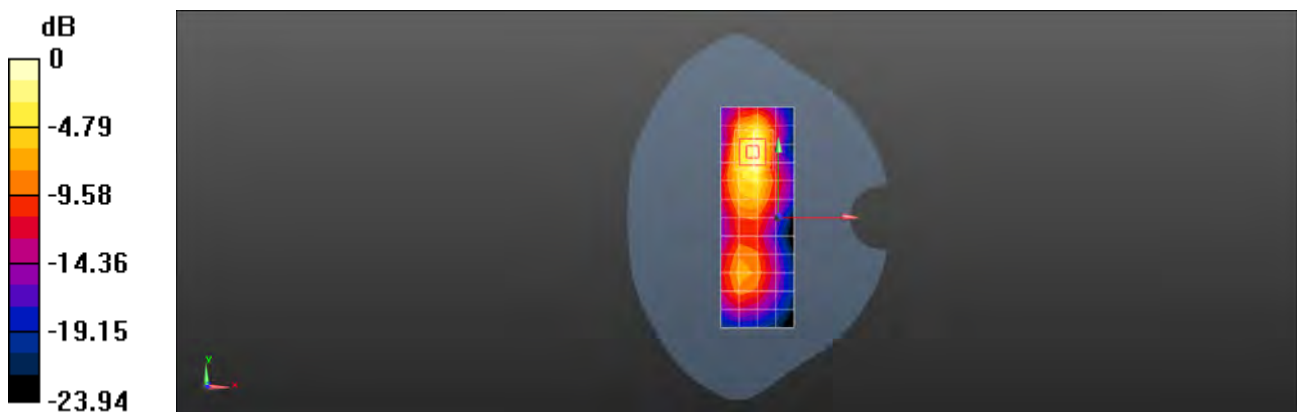
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.301 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.354 W/kg

SAR(1 g) = 0.186 W/kg; SAR(10 g) = 0.089 W/kg

Maximum value of SAR (measured) = 0.275 W/kg



0 dB = 0.275 W/kg = -5.61 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R WCDMA Band II 9400CH Right titled Ant10

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, WCDMA Band II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL1900; Medium parameters used: $f = 1880$ MHz; $\sigma = 1.368$ S/m; $\epsilon_r = 40.206$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.61, 7.61, 7.61); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Head/Area Scan (7x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.193 W/kg

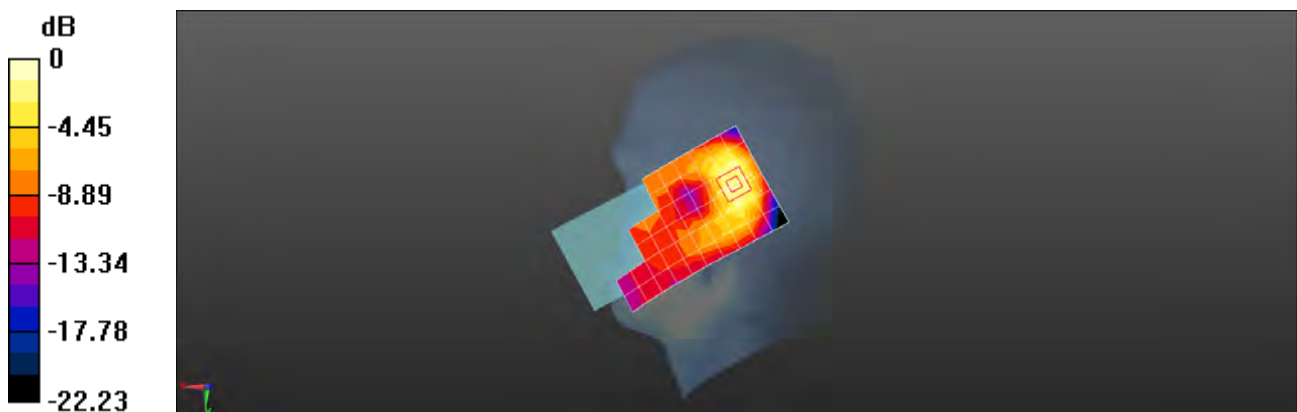
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.45 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.311 W/kg

SAR(1 g) = 0.187 W/kg; SAR(10 g) = 0.105 W/kg

Maximum value of SAR (measured) = 0.257 W/kg



0 dB = 0.257 W/kg = -5.90 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R WCDMA Band II 9400CH Back side 15mm Ant10

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, WCDMA Band II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL1900; Medium parameters used: $f = 1880$ MHz; $\sigma = 1.368$ S/m; $\epsilon_r = 40.206$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.61, 7.61, 7.61); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.673 W/kg

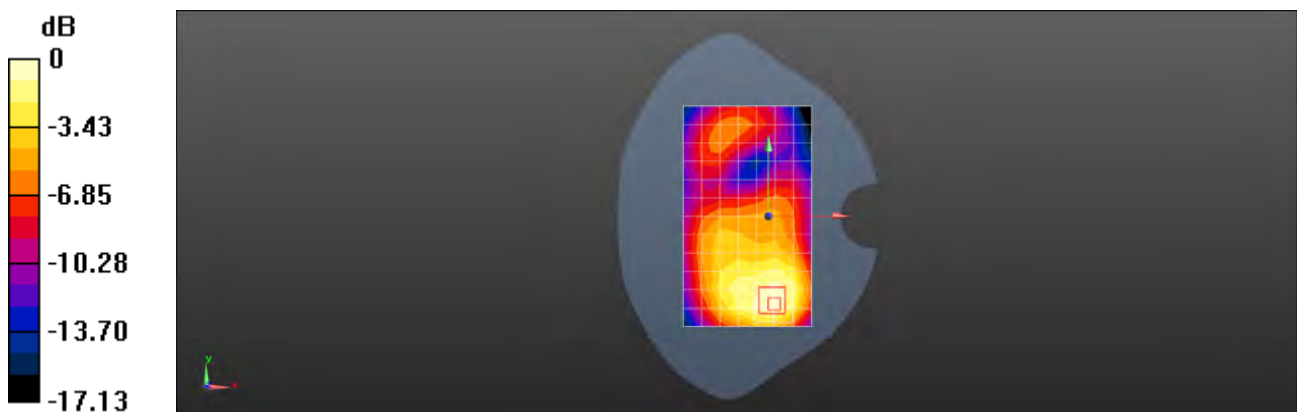
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.17 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.853 W/kg

SAR(1 g) = 0.529 W/kg; SAR(10 g) = 0.319 W/kg

Maximum value of SAR (measured) = 0.700 W/kg



Test Laboratory: SGS-SAR Lab

M2002J9R WCDMA Band II 9400CH Bottom side 10mm Ant10

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, WCDMA Band II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL1900; Medium parameters used: $f = 1880$ MHz; $\sigma = 1.368$ S/m; $\epsilon_r = 40.206$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.61, 7.61, 7.61); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (5x7x1): Measurement grid: $dx=15$ mm, $dy=15$ mm
Maximum value of SAR (measured) = 0.742 W/kg

Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

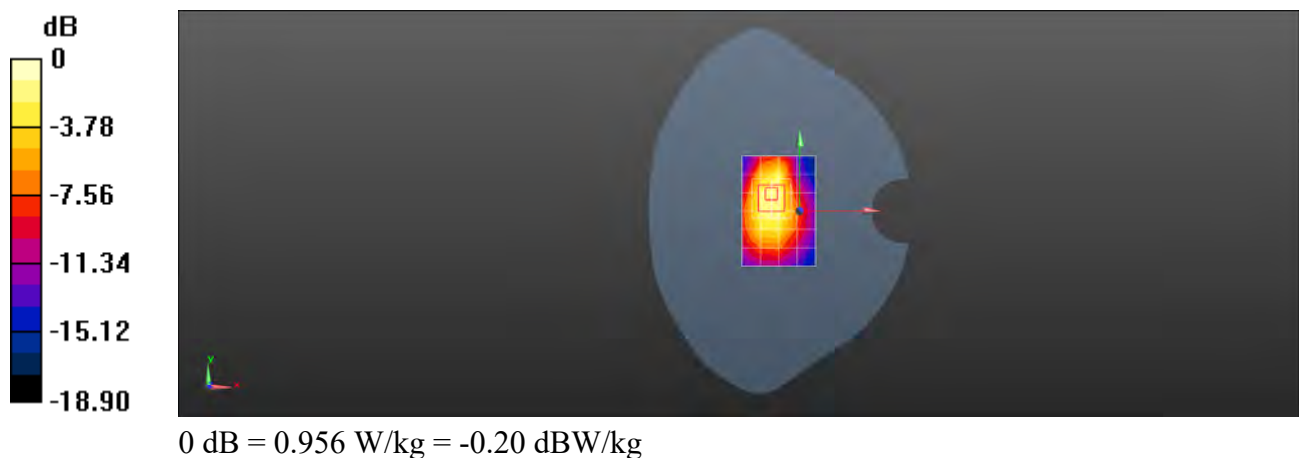
Reference Value = 19.84 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 1.22 W/kg

SAR(1 g) = 0.673 W/kg; SAR(10 g) = 0.354 W/kg

Smallest distance from peaks to all points 3 dB below = 9.6 mm

Maximum value of SAR (measured) = 0.956 W/kg



Test Laboratory: SGS-SAR Lab

M2002J9R WCDMA Band II 9400CH Bottom side 0mm Ant10

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, WCDMA Band II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL1900; Medium parameters used: $f = 1880$ MHz; $\sigma = 1.368$ S/m; $\epsilon_r = 40.206$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.61, 7.61, 7.61); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (5x7x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 9.22 W/kg

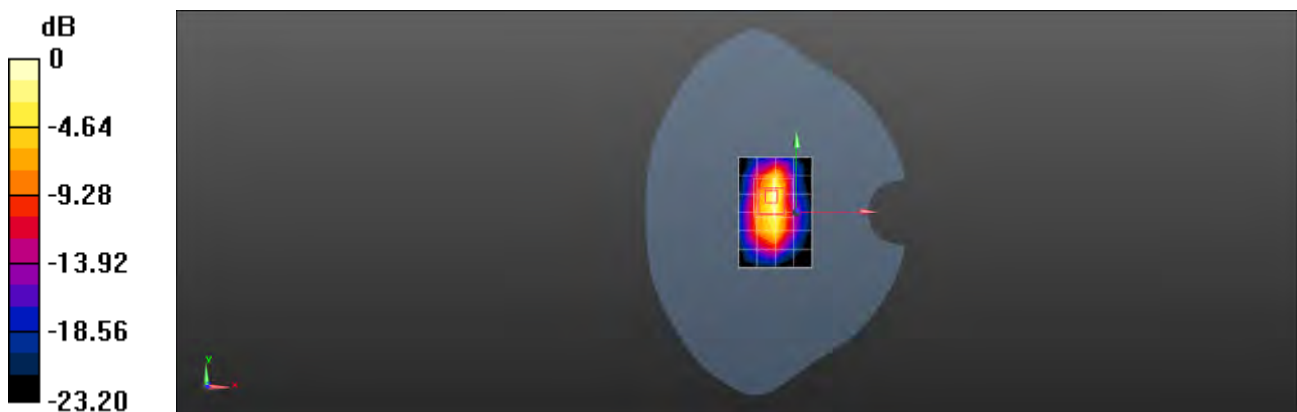
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 60.72 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 15.6 W/kg

SAR(1 g) = 6.1 W/kg; SAR(10 g) = 2.52 W/kg

Maximum value of SAR (measured) = 10.9 W/kg



Test Laboratory: SGS-SAR Lab

M2002J9R WCDMA Band IV 1513CH Right cheek Ant5

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, WCDMA Band IV; Frequency: 1752.4 MHz; Duty Cycle: 1:1

Medium: HSL1750; Medium parameters used (interpolated): $f = 1752.4$ MHz; $\sigma = 1.31$ S/m; $\epsilon_r = 40.269$; $\rho = 1000$ kg/m³
Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.81, 7.81, 7.81); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Head/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.10 W/kg

Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

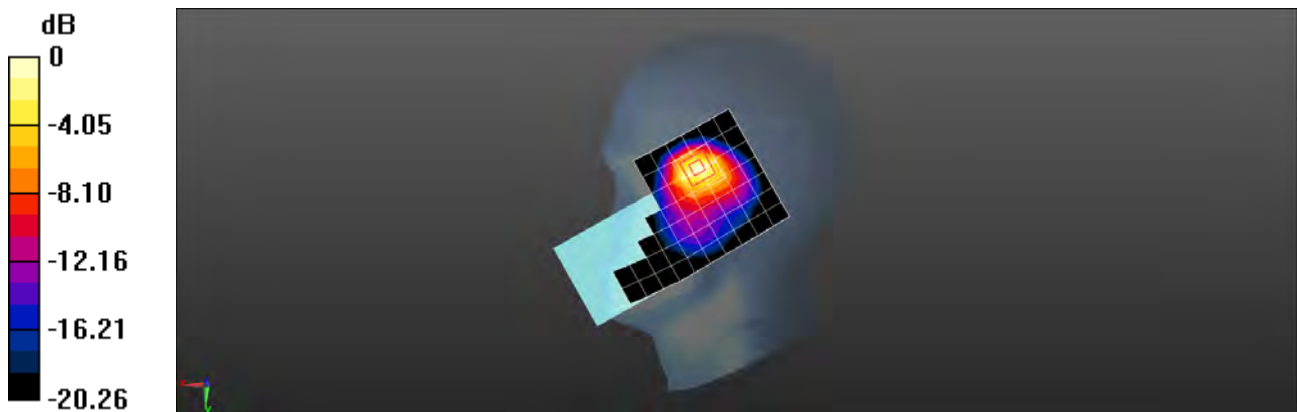
Reference Value = 6.138 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 1.44 W/kg

SAR(1 g) = 0.637 W/kg; SAR(10 g) = 0.286 W/kg

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.982 W/kg



0 dB = 0.982 W/kg = -0.08 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R WCDMA Band IV 1412CH Back side 15mm Ant5

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, WCDMA Band IV; Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium: HSL1750; Medium parameters used (interpolated): $f = 1732.4$ MHz; $\sigma = 1.3$ S/m; $\epsilon_r = 40.279$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.81, 7.81, 7.81); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (7x13x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.343 W/kg

Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

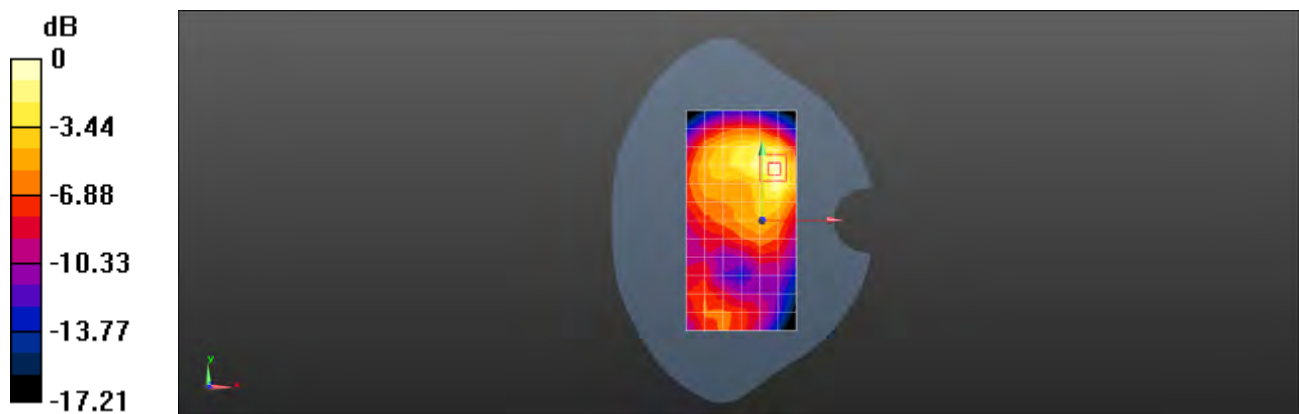
Reference Value = 8.603 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.463 W/kg

SAR(1 g) = 0.270 W/kg; SAR(10 g) = 0.152 W/kg

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.374 W/kg



0 dB = 0.374 W/kg = -4.27 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R WCDMA Band IV 1412CH Left side 10mm Ant5

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, WCDMA Band IV; Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium: HSL1750; Medium parameters used (interpolated): $f = 1732.4$ MHz; $\sigma = 1.3$ S/m; $\epsilon_r = 40.279$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.81, 7.81, 7.81); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (5x13x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.155 W/kg

Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

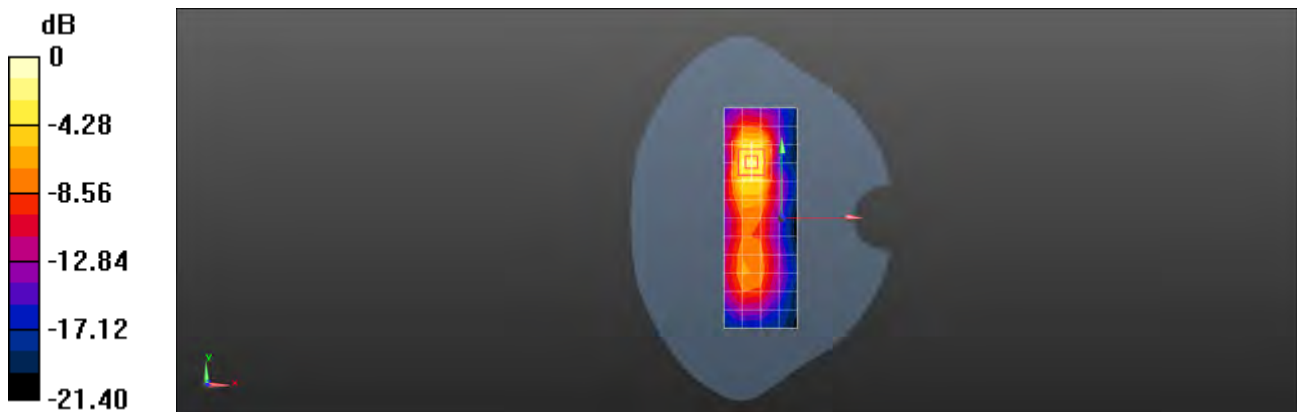
Reference Value = 5.055 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.345 W/kg

SAR(1 g) = 0.184 W/kg; SAR(10 g) = 0.088 W/kg

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.277 W/kg



0 dB = 0.277 W/kg = -5.58 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R WCDMA Band IV 1412CH Right titled Ant10

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, WCDMA Band IV; Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium: HSL1750; Medium parameters used (interpolated): $f = 1732.4$ MHz; $\sigma = 1.3$ S/m; $\epsilon_r = 40.279$; $\rho = 1000$ kg/m³
Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.81, 7.81, 7.81); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Head/Area Scan (7x13x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.187 W/kg

Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

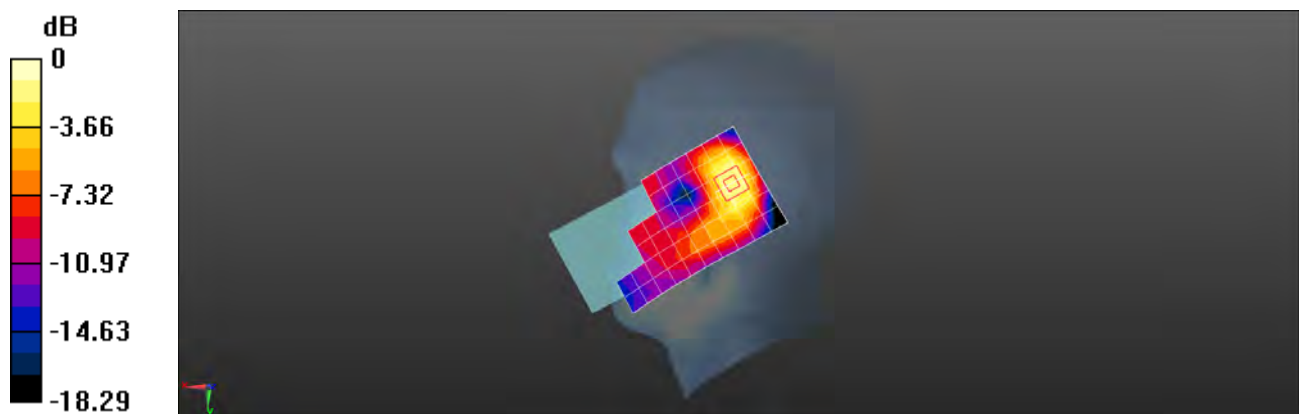
Reference Value = 10.66 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.287 W/kg

SAR(1 g) = 0.181 W/kg; SAR(10 g) = 0.108 W/kg

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.241 W/kg



0 dB = 0.241 W/kg = -6.18 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R WCDMA Band IV 1412CH Back side 15mm Ant10

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, WCDMA Band IV; Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium: HSL1750; Medium parameters used (interpolated): $f = 1732.4$ MHz; $\sigma = 1.3$ S/m; $\epsilon_r = 40.279$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.81, 7.81, 7.81); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.506 W/kg

Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

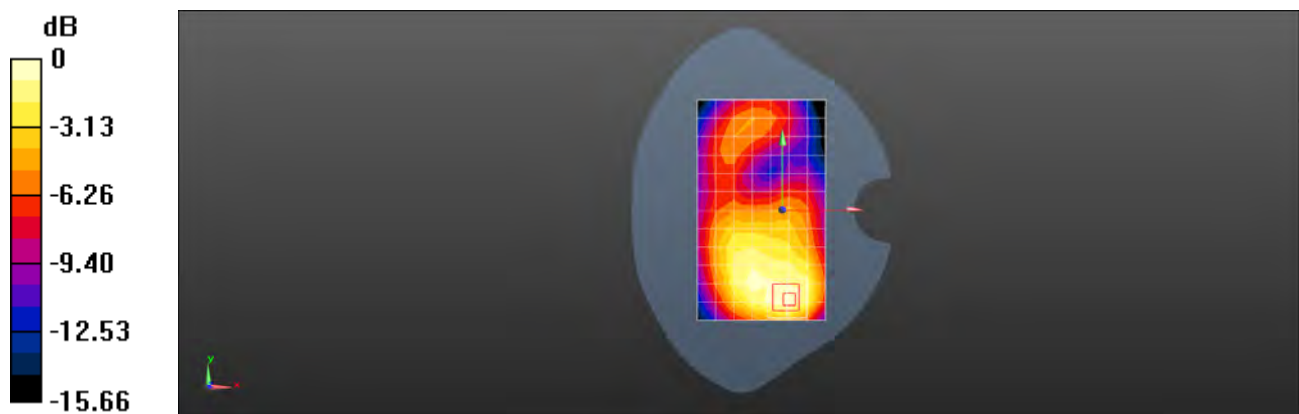
Reference Value = 9.797 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.607 W/kg

SAR(1 g) = 0.393 W/kg; SAR(10 g) = 0.241 W/kg

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.506 W/kg



0 dB = 0.506 W/kg = -2.96 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R WCDMA Band IV 1513CH Bottom side 10mm Ant10

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, WCDMA Band IV; Frequency: 1752.4 MHz; Duty Cycle: 1:1

Medium: HSL1750; Medium parameters used (interpolated): $f = 1752.4$ MHz; $\sigma = 1.31$ S/m; $\epsilon_r = 40.269$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.81, 7.81, 7.81); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (5x7x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.754 W/kg

Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

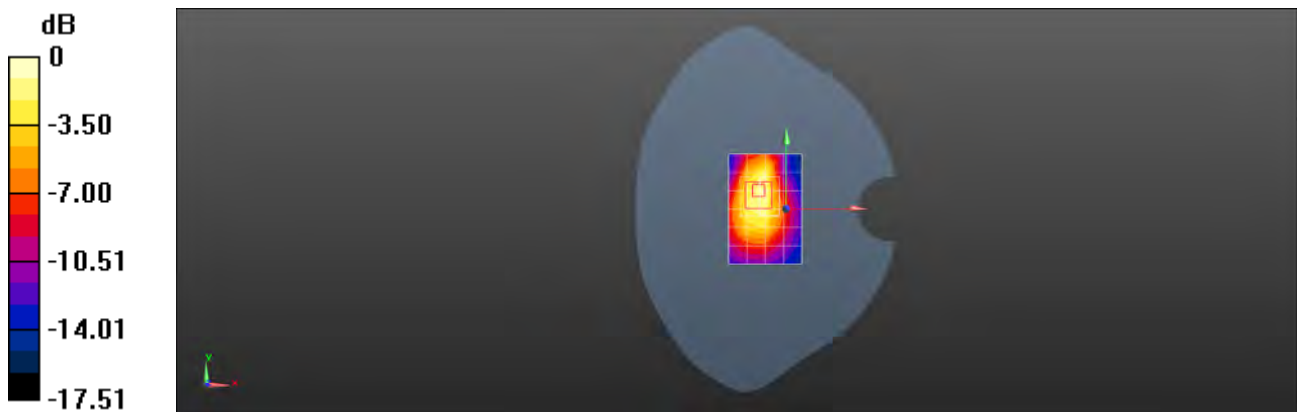
Reference Value = 20.26 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.04 W/kg

SAR(1 g) = 0.591 W/kg; SAR(10 g) = 0.304 W/kg

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.902 W/kg



0 dB = 0.902 W/kg = -0.45 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R WCDMA Band IV 1513CH Bottom side 0mm Ant10

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, WCDMA Band IV; Frequency: 1752.4 MHz; Duty Cycle: 1:1

Medium: HSL1750; Medium parameters used (interpolated): $f = 1752.4$ MHz; $\sigma = 1.31$ S/m; $\epsilon_r = 40.269$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.81, 7.81, 7.81); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (5x7x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 5.58 W/kg

Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

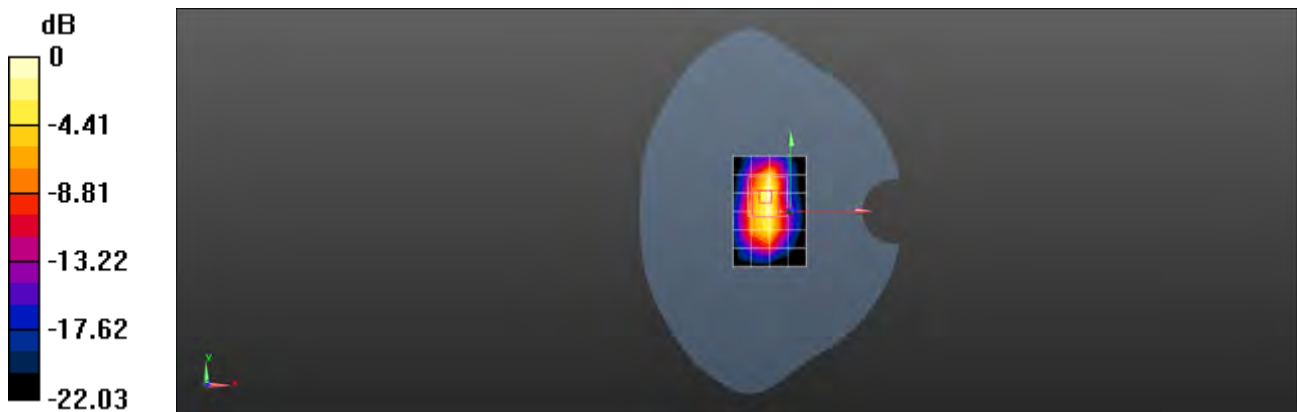
Reference Value = 50.87 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 9.39 W/kg

SAR(1 g) = 3.91 W/kg; SAR(10 g) = 1.72 W/kg

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 6.69 W/kg



0 dB = 6.69 W/kg = 8.25 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R WCDMA Band V 4182CH Left cheek Ant1

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, WCDMA Band V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium: HSL835; Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.939$ S/m; $\epsilon_r = 41.765$; $\rho = 1000$ kg/m³
Phantom section: Left Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.05, 9.05, 9.05); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Head/Area Scan (7x13x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.148 W/kg

Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

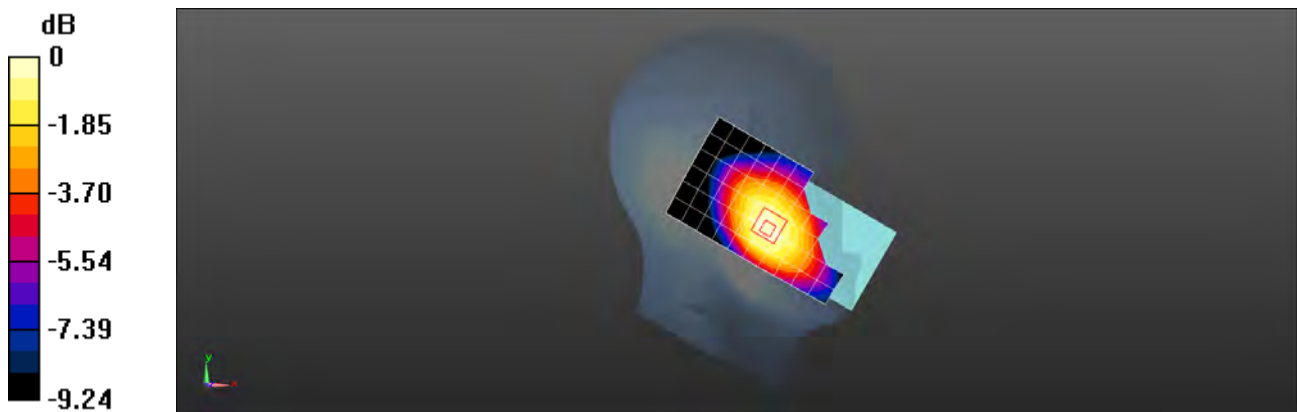
Reference Value = 3.950 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.169 W/kg

SAR(1 g) = 0.132 W/kg; SAR(10 g) = 0.101 W/kg

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.152 W/kg



0 dB = 0.152 W/kg = -8.18 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R WCDMA Band V 4182CH Back side 15mm Ant1

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, WCDMA Band V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium: HSL835; Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.939$ S/m; $\epsilon_r = 41.765$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.05, 9.05, 9.05); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.270 W/kg

Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

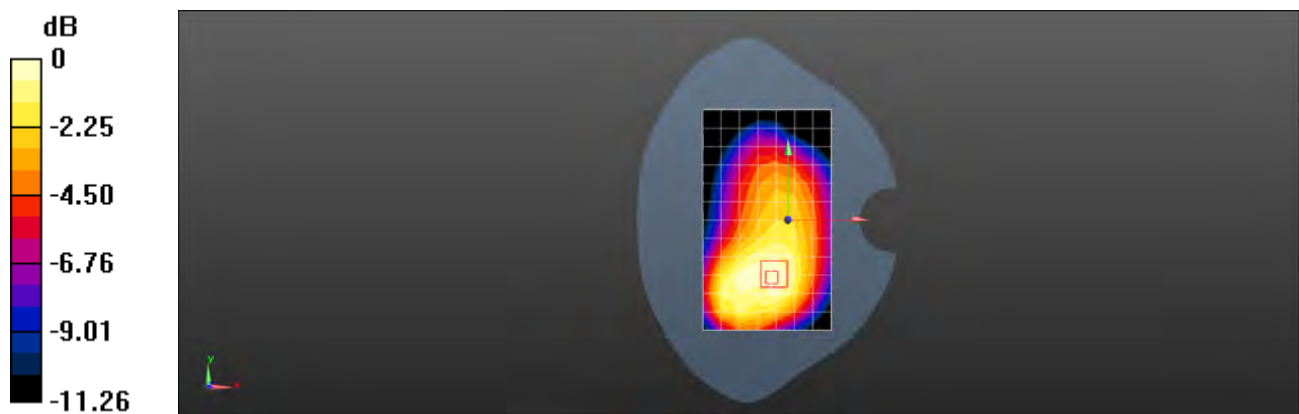
Reference Value = 12.07 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.319 W/kg

SAR(1 g) = 0.229 W/kg; SAR(10 g) = 0.163 W/kg

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.275 W/kg



0 dB = 0.275 W/kg = -5.61 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R WCDMA Band V 4182CH Back side 10mm Ant1

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, WCDMA Band V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium: HSL835; Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.939$ S/m; $\epsilon_r = 41.765$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.05, 9.05, 9.05); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.546 W/kg

Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

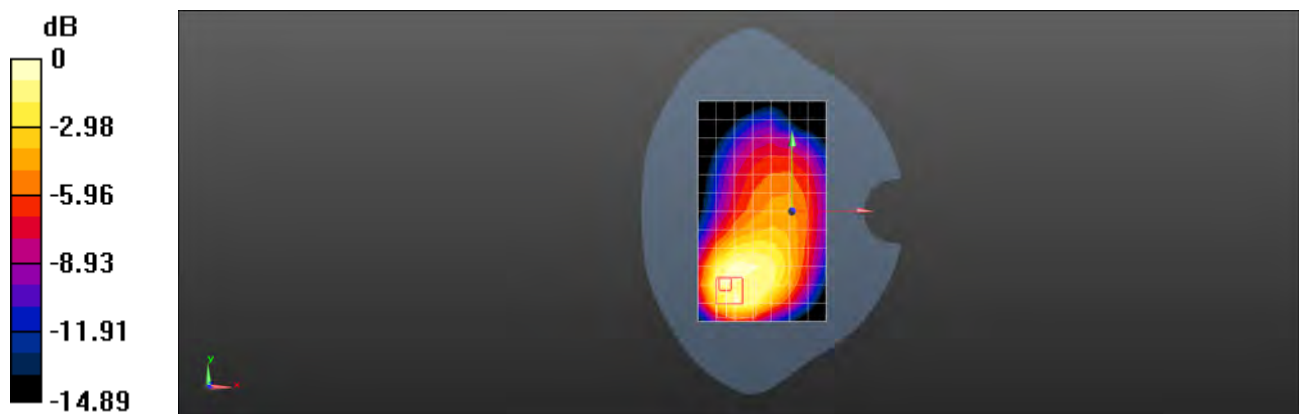
Reference Value = 14.04 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.791 W/kg

SAR(1 g) = 0.430 W/kg; SAR(10 g) = 0.246 W/kg

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.612 W/kg



0 dB = 0.612 W/kg = -2.13 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R WCDMA Band V 4233CH Right cheek Ant4

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, WCDMA Band V; Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium: HSL835; Medium parameters used: $f = 847$ MHz; $\sigma = 0.946$ S/m; $\epsilon_r = 41.684$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.05, 9.05, 9.05); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Head/Area Scan (7x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.23 W/kg

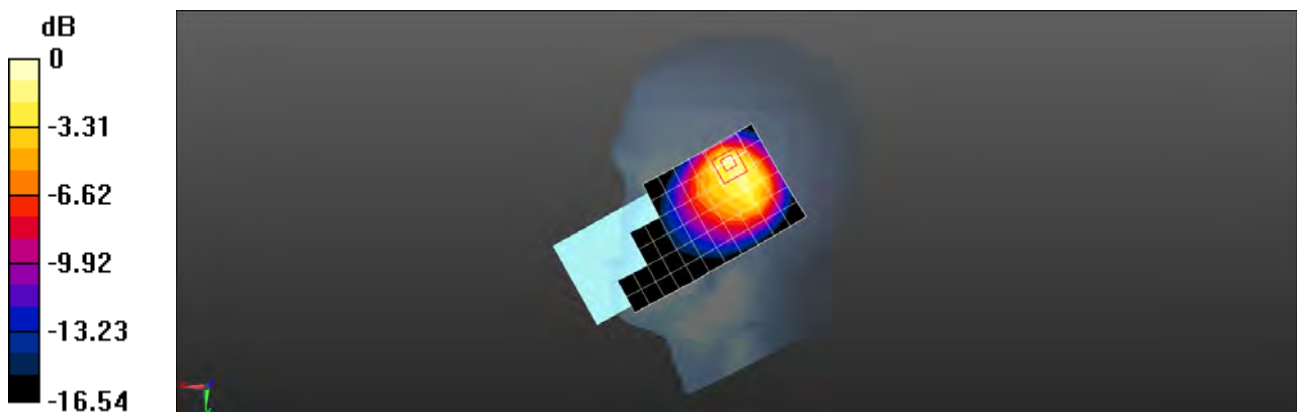
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 26.04 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.98 W/kg

SAR(1 g) = 0.809 W/kg; SAR(10 g) = 0.427 W/kg

Maximum value of SAR (measured) = 1.39 W/kg



0 dB = 1.39 W/kg = 1.43 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R WCDMA Band V 4182CH Back side 15mm Ant4

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, WCDMA Band V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium: HSL835; Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.939$ S/m; $\epsilon_r = 41.765$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.05, 9.05, 9.05); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.317 W/kg

Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

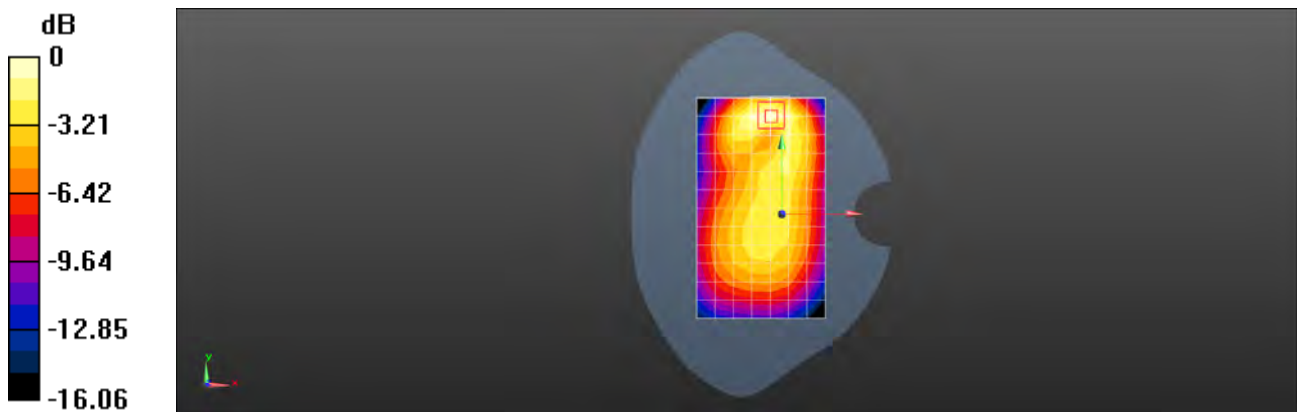
Reference Value = 13.03 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.392 W/kg

SAR(1 g) = 0.236 W/kg; SAR(10 g) = 0.140 W/kg

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.316 W/kg



Test Laboratory: SGS-SAR Lab

M2002J9R WCDMA Band V 4182CH Top side 10mm Ant4

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, WCDMA Band V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium: HSL835; Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.939$ S/m; $\epsilon_r = 41.765$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.05, 9.05, 9.05); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (5x7x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.379 W/kg

Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

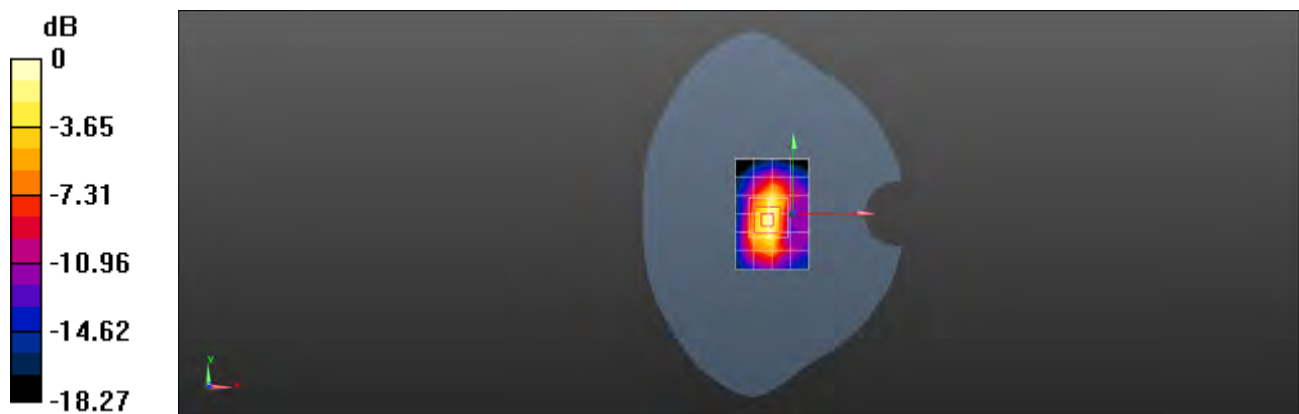
Reference Value = 17.52 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.575 W/kg

SAR(1 g) = 0.284 W/kg; SAR(10 g) = 0.139 W/kg

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.424 W/kg



0 dB = 0.424 W/kg = -3.73 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 2 20M QPSK 50RB50 19100CH Right cheek Ant5

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, LTE Band 2; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: HSL1900; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.376$ S/m; $\epsilon_r = 40.173$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.61, 7.61, 7.61); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Head/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.04 W/kg

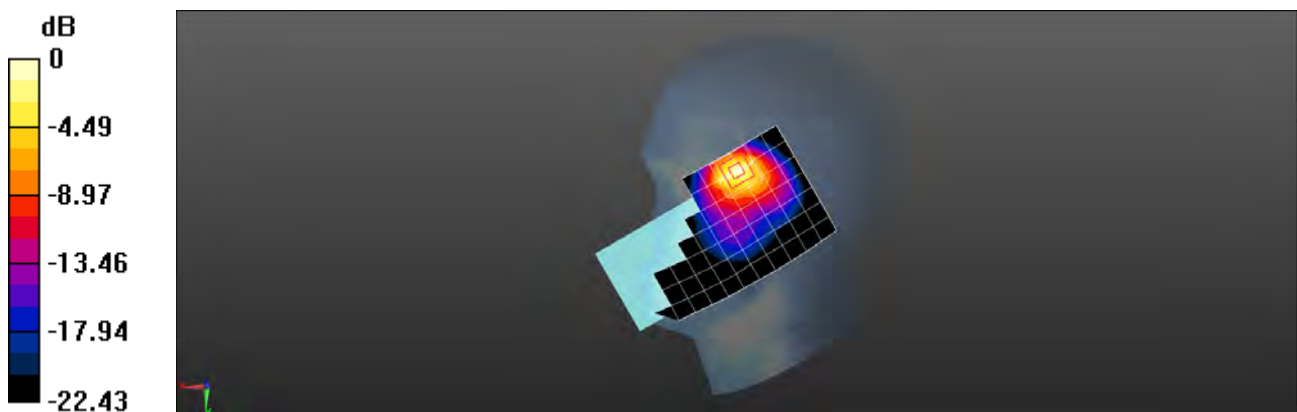
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.379 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 1.46 W/kg

SAR(1 g) = 0.628 W/kg; SAR(10 g) = 0.272 W/kg

Maximum value of SAR (measured) = 1.06 W/kg



0 dB = 1.06 W/kg = 0.25 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 2 20M QPSK 1RB50 18700CH Back side 15mm Ant5

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, LTE Band 2; Frequency: 1860 MHz; Duty Cycle: 1:1

Medium: HSL1900; Medium parameters used: $f = 1860$ MHz; $\sigma = 1.359$ S/m; $\epsilon_r = 40.216$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.61, 7.61, 7.61); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.402 W/kg

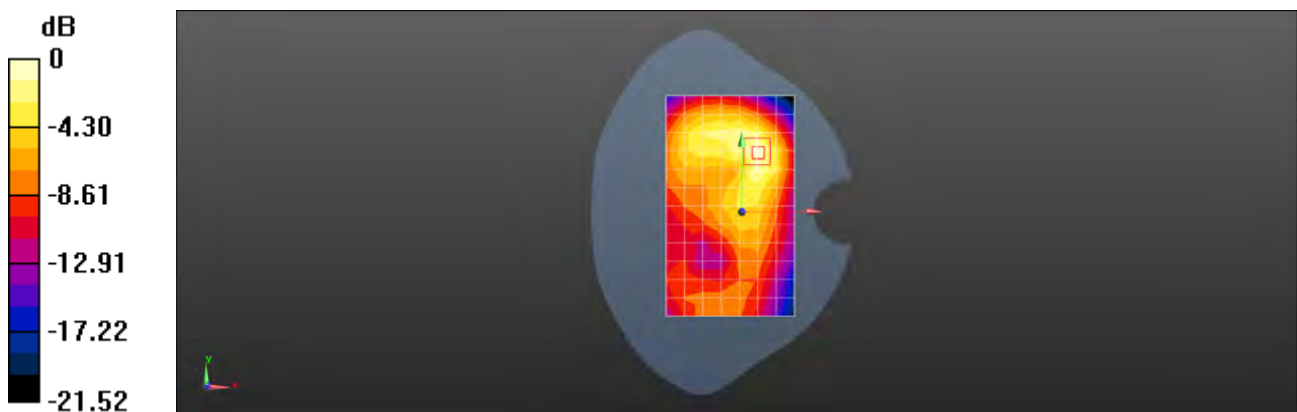
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.005 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.518 W/kg

SAR(1 g) = 0.293 W/kg; SAR(10 g) = 0.158 W/kg

Maximum value of SAR (measured) = 0.411 W/kg



0 dB = 0.411 W/kg = -3.86 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 2 20M QPSK 50RB50 19100CH Left side 10mm Ant5

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, LTE Band 2; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: HSL1900; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.376$ S/m; $\epsilon_r = 40.173$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.61, 7.61, 7.61); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (5x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.186 W/kg

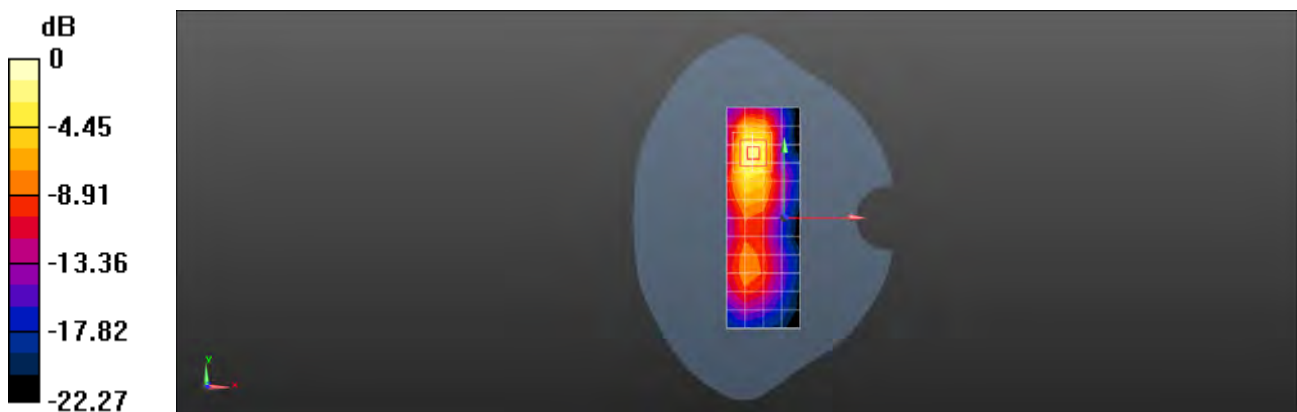
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.486 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.400 W/kg

SAR(1 g) = 0.211 W/kg; SAR(10 g) = 0.100 W/kg

Maximum value of SAR (measured) = 0.315 W/kg



0 dB = 0.315 W/kg = -5.02 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 2 20M QPSK 1RB0 18900CH Right cheek Ant10

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, LTE Band 2; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL1900; Medium parameters used: $f = 1880$ MHz; $\sigma = 1.368$ S/m; $\epsilon_r = 40.206$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.61, 7.61, 7.61); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Head/Area Scan (7x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.196 W/kg

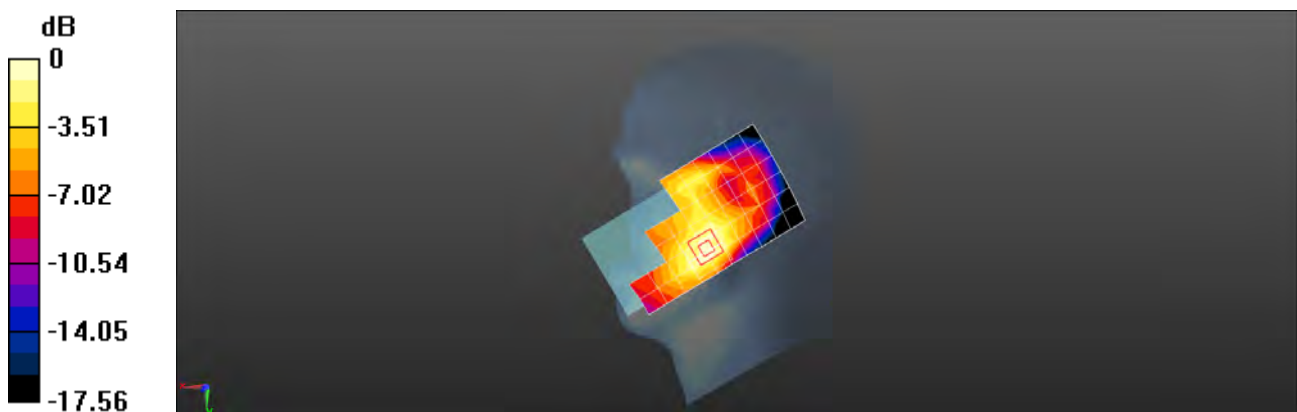
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.353 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.247 W/kg

SAR(1 g) = 0.165 W/kg; SAR(10 g) = 0.103 W/kg

Maximum value of SAR (measured) = 0.209 W/kg



0 dB = 0.209 W/kg = -6.80 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 2 20M QPSK 1RB0 18900CH Back side 15mm Ant10

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, LTE Band 2; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL1900; Medium parameters used: $f = 1880$ MHz; $\sigma = 1.368$ S/m; $\epsilon_r = 40.206$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.61, 7.61, 7.61); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.572 W/kg

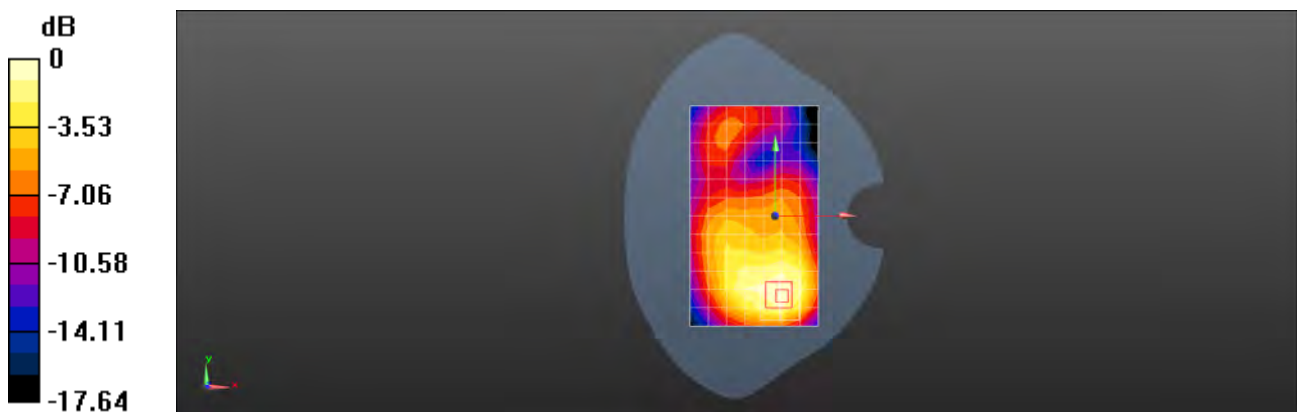
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.48 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.754 W/kg

SAR(1 g) = 0.470 W/kg; SAR(10 g) = 0.283 W/kg

Maximum value of SAR (measured) = 0.614 W/kg



Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 2 20M QPSK 50RB0 18900CH Bottom side 10mm Ant10

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, LTE Band 2; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL1900; Medium parameters used: $f = 1880$ MHz; $\sigma = 1.368$ S/m; $\epsilon_r = 40.206$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.61, 7.61, 7.61); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (5x7x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.597 W/kg

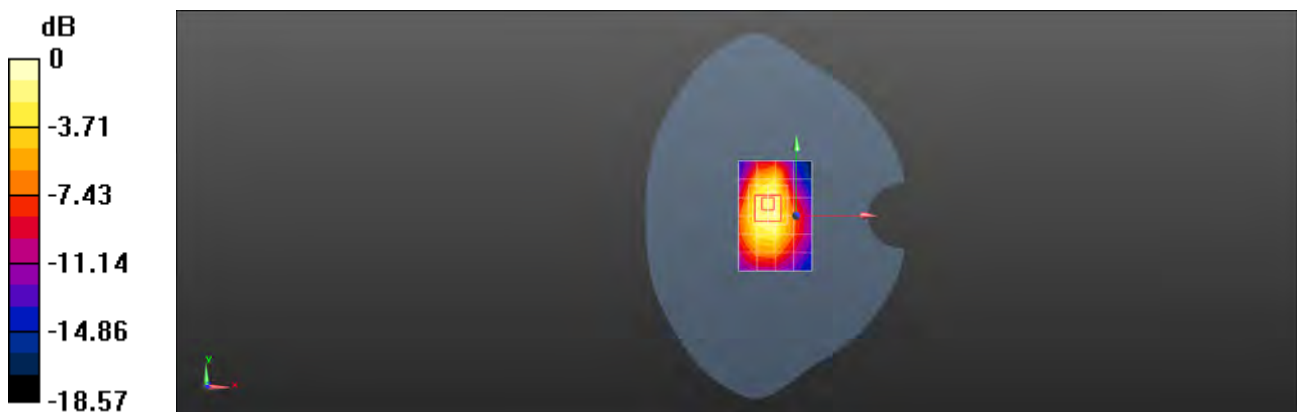
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 18.76 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.972 W/kg

SAR(1 g) = 0.550 W/kg; SAR(10 g) = 0.298 W/kg

Maximum value of SAR (measured) = 0.777 W/kg



0 dB = 0.777 W/kg = -1.10 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 2 20M QPSK 1RB50 19100CH Bottom side 0mm Ant10

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, LTE Band 2; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: HSL1900; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.376$ S/m; $\epsilon_r = 40.173$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.61, 7.61, 7.61); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (5x7x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 8.00 W/kg

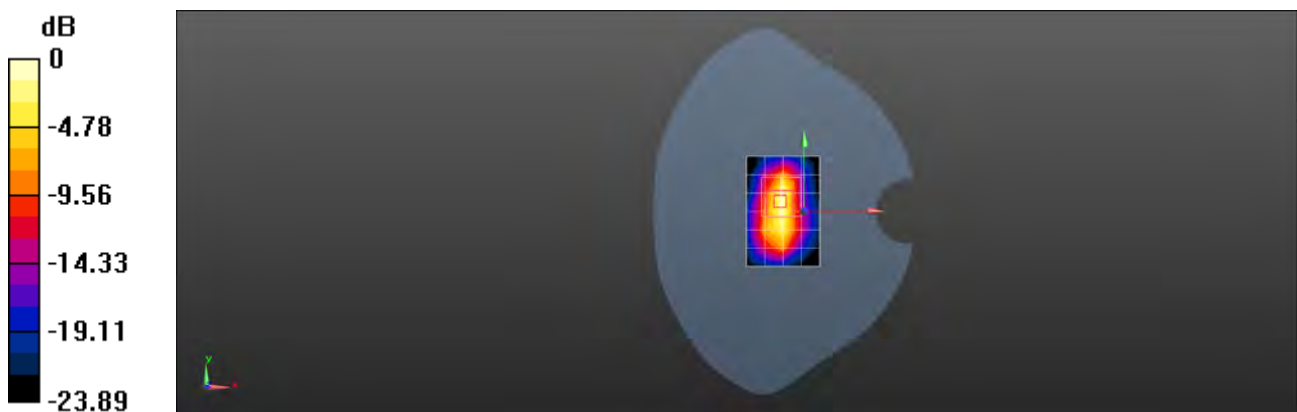
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 58.05 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 12.7 W/kg

SAR(1 g) = 5.22 W/kg; SAR(10 g) = 2.17 W/kg

Maximum value of SAR (measured) = 9.16 W/kg



Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 4 20M QPSK 1RB50 20175CH Right cheek Ant5

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1750; Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.3$ S/m; $\epsilon_r = 40.279$; $\rho = 1000$ kg/m³
Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.81, 7.81, 7.81); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Head/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.825 W/kg

Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

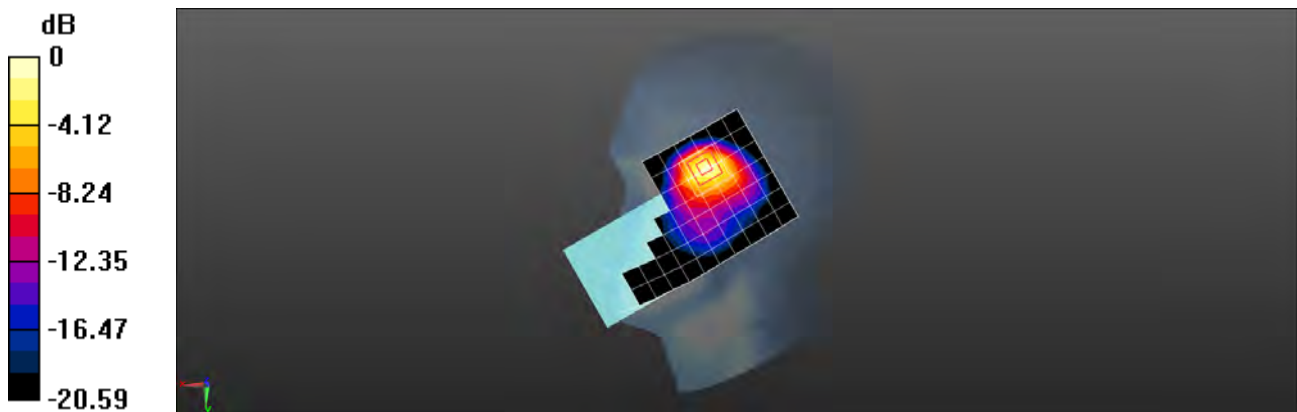
Reference Value = 5.182 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 1.13 W/kg

SAR(1 g) = 0.491 W/kg; SAR(10 g) = 0.219 W/kg

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.772 W/kg



0 dB = 0.772 W/kg = -1.12 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 4 20M QPSK 1RB50 20175CH Back side 15mm Ant5

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1750; Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.3$ S/m; $\epsilon_r = 40.279$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.81, 7.81, 7.81); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.283 W/kg

Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

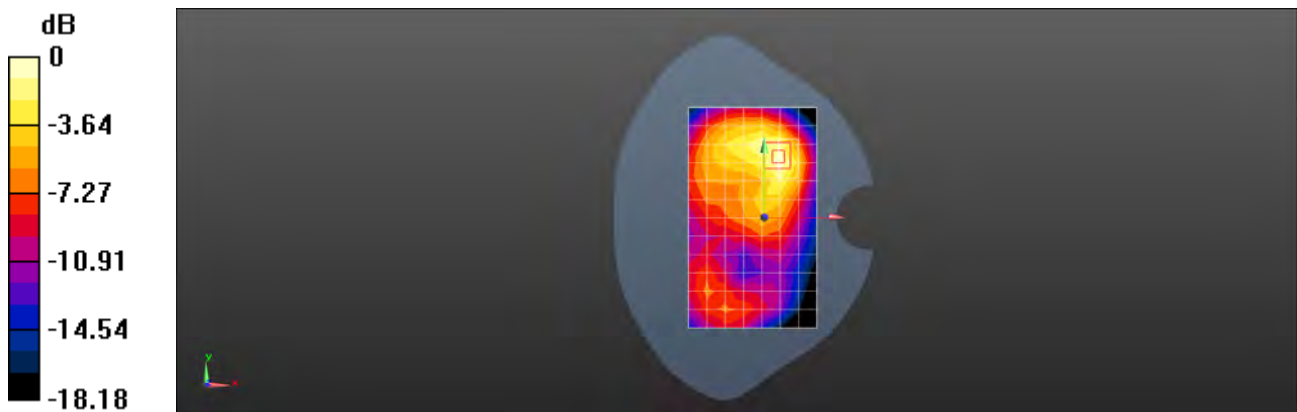
Reference Value = 6.810 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.366 W/kg

SAR(1 g) = 0.213 W/kg; SAR(10 g) = 0.119 W/kg

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.293 W/kg



Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 4 20M QPSK 1RB50 20175CH Left side 10mm Ant5

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1750; Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.3$ S/m; $\epsilon_r = 40.279$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.81, 7.81, 7.81); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (5x13x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.126 W/kg

Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

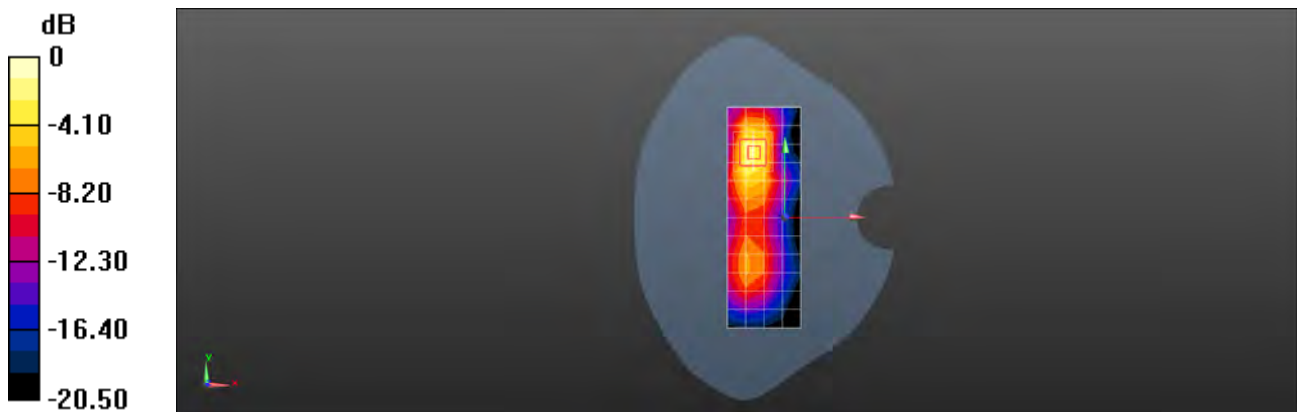
Reference Value = 3.917 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.262 W/kg

SAR(1 g) = 0.143 W/kg; SAR(10 g) = 0.069 W/kg

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.211 W/kg



0 dB = 0.211 W/kg = -6.76 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 4 20M QPSK 1RB50 20175CH Right titled Ant10

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1750; Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.3$ S/m; $\epsilon_r = 40.279$; $\rho = 1000$ kg/m³
Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.81, 7.81, 7.81); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Head/Area Scan (7x13x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.154 W/kg

Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

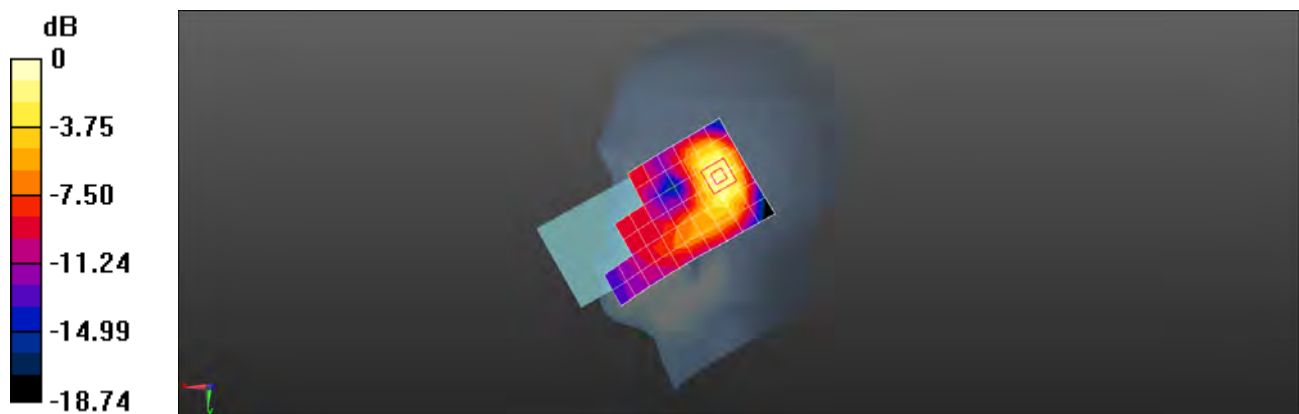
Reference Value = 9.533 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.231 W/kg

SAR(1 g) = 0.144 W/kg; SAR(10 g) = 0.085 W/kg

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.193 W/kg



0 dB = 0.193 W/kg = -7.14 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 4 20M QPSK 1RB50 20175CH Back side 15mm Ant10

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: HSL1750; Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.3$ S/m; $\epsilon_r = 40.279$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.81, 7.81, 7.81); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.432 W/kg

Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

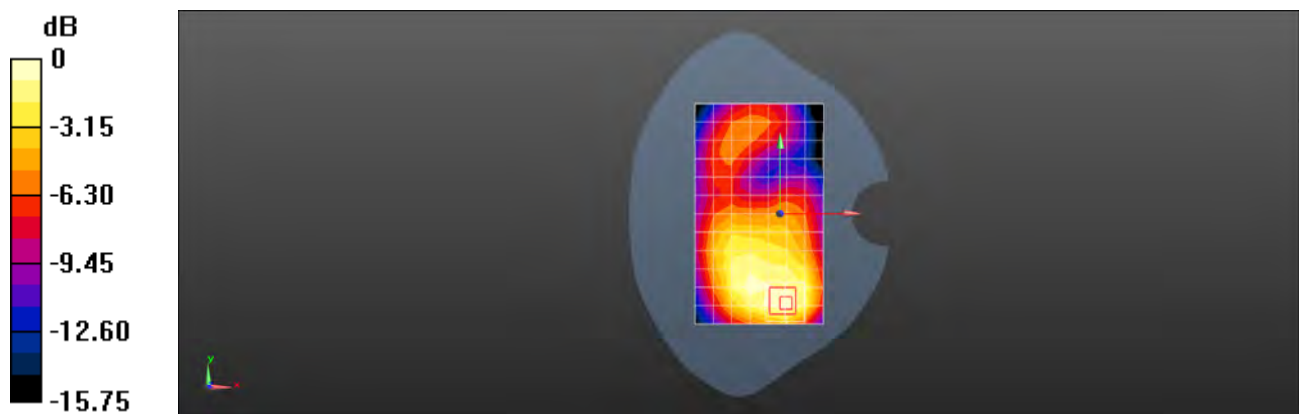
Reference Value = 8.989 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.518 W/kg

SAR(1 g) = 0.336 W/kg; SAR(10 g) = 0.206 W/kg

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.435 W/kg



0 dB = 0.435 W/kg = -3.62 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 4 20M QPSK 50RB25 20300CH Bottom side 10mm Ant10

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, LTE Band 4; Frequency: 1745 MHz; Duty Cycle: 1:1

Medium: HSL1750; Medium parameters used: $f = 1745$ MHz; $\sigma = 1.306$ S/m; $\epsilon_r = 40.273$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(7.81, 7.81, 7.81); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (5x7x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.676 W/kg

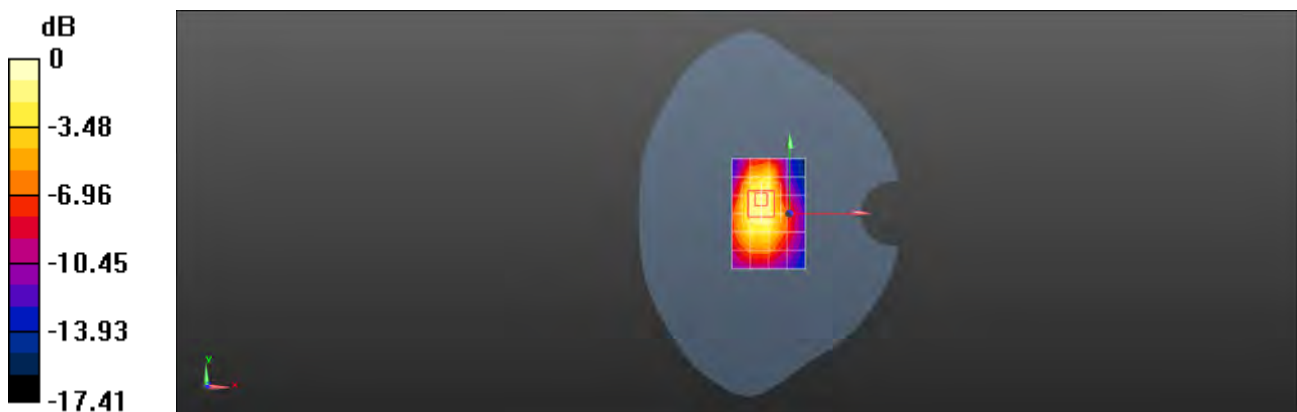
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 20.49 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 1.11 W/kg

SAR(1 g) = 0.644 W/kg; SAR(10 g) = 0.355 W/kg

Maximum value of SAR (measured) = 0.887 W/kg



0 dB = 0.887 W/kg = -0.52 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 5 10M QPSK 1RB0 20450CH Left cheek Ant1

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, LTE Band 5 10MHz; Frequency: 829 MHz; Duty Cycle: 1:1

Medium: HSL835; Medium parameters used: $f = 829$ MHz; $\sigma = 0.934$ S/m; $\epsilon_r = 41.824$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.05, 9.05, 9.05); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Head/Area Scan (7x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.107 W/kg

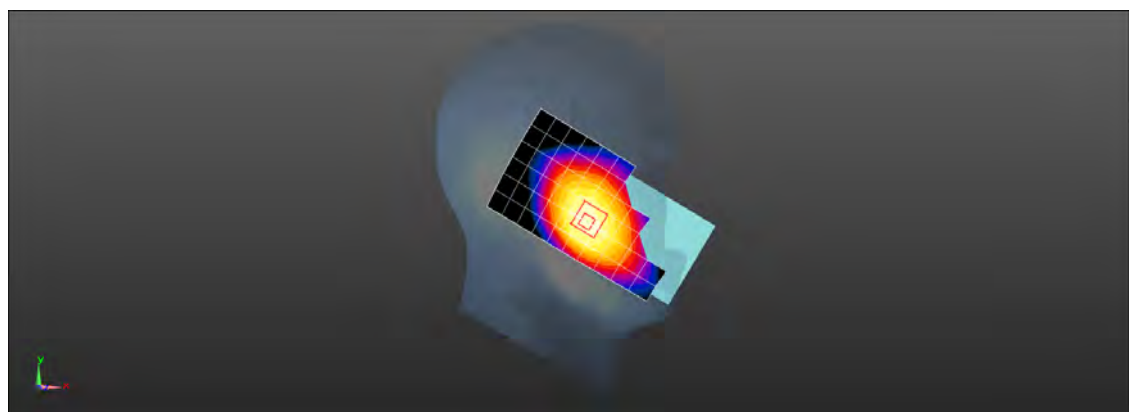
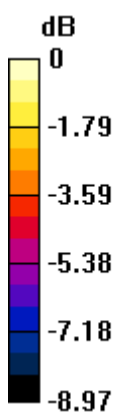
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.704 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.121 W/kg

SAR(1 g) = 0.095 W/kg; SAR(10 g) = 0.073 W/kg

Maximum value of SAR (measured) = 0.109 W/kg



0 dB = 0.109 W/kg = -9.63 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 5 10M QPSK 1RB0 20450CH Back side 15mm Ant1

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, LTE Band 5 10MHz; Frequency: 829 MHz; Duty Cycle: 1:1

Medium: HSL835; Medium parameters used: $f = 829 \text{ MHz}$; $\sigma = 0.934 \text{ S/m}$; $\epsilon_r = 41.824$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.05, 9.05, 9.05); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (8x13x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.197 W/kg

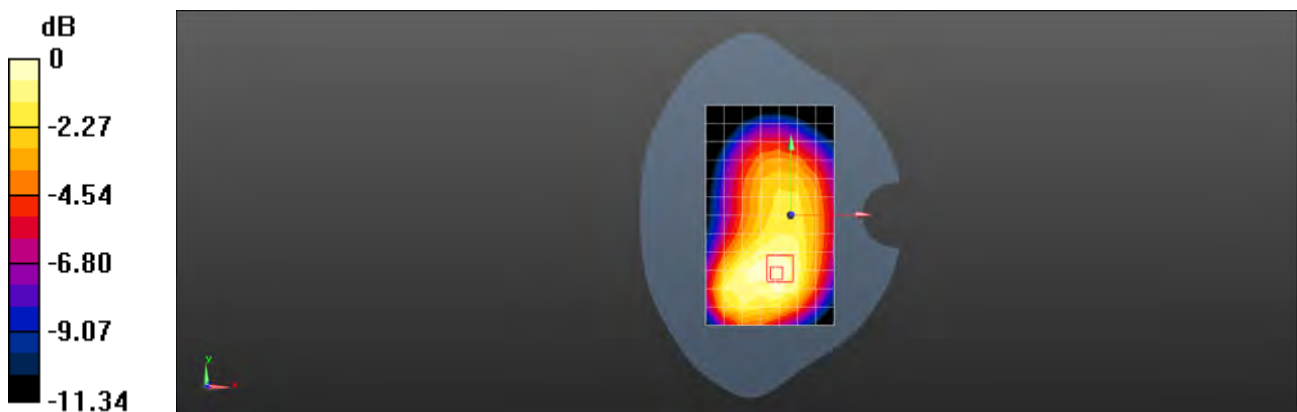
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 10.78 V/m ; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.227 W/kg

SAR(1 g) = 0.165 W/kg ; SAR(10 g) = 0.119 W/kg

Maximum value of SAR (measured) = 0.199 W/kg



Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 5 10M QPSK 1RB0 20450CH Back side 10mm Ant1

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, LTE Band 5 10MHz; Frequency: 829 MHz; Duty Cycle: 1:1

Medium: HSL835; Medium parameters used: $f = 829 \text{ MHz}$; $\sigma = 0.934 \text{ S/m}$; $\epsilon_r = 41.824$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.05, 9.05, 9.05); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (8x13x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.391 W/kg

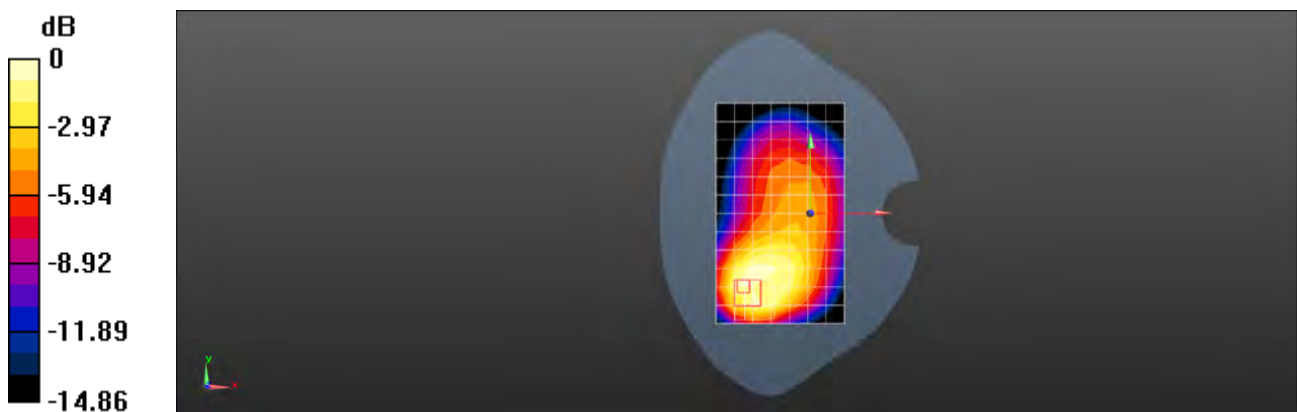
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 12.55 V/m ; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.567 W/kg

SAR(1 g) = 0.311 W/kg ; SAR(10 g) = 0.180 W/kg

Maximum value of SAR (measured) = 0.439 W/kg



Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 5 10M QPSK 25RB0 20600CH Right cheek Ant4

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, LTE Band 5 10MHz; Frequency: 844 MHz; Duty Cycle: 1:1

Medium: HSL835; Medium parameters used: $f = 844 \text{ MHz}$; $\sigma = 0.944 \text{ S/m}$; $\epsilon_r = 41.706$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.05, 9.05, 9.05); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Head/Area Scan (7x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 1.16 W/kg

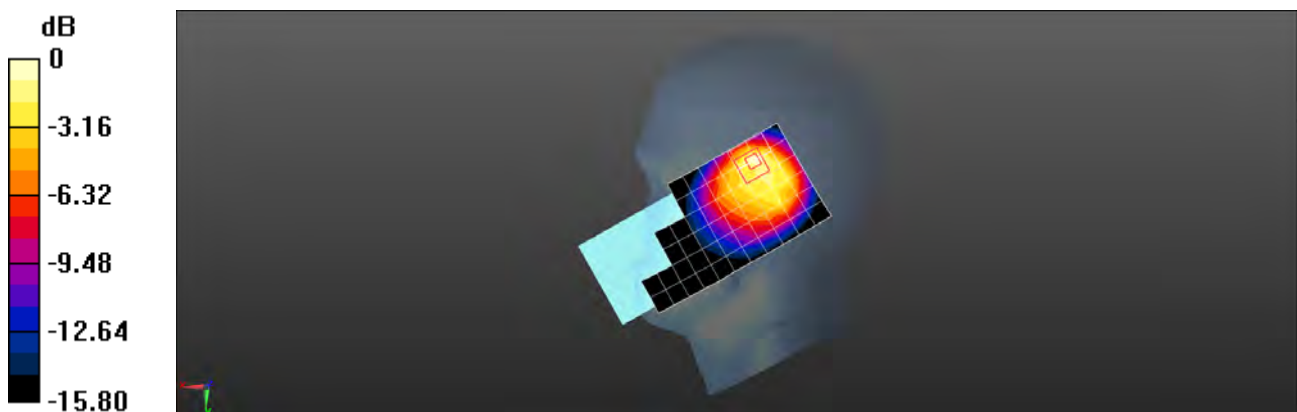
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 23.09 V/m ; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.63 W/kg

SAR(1 g) = 0.722 W/kg ; SAR(10 g) = 0.397 W/kg

Maximum value of SAR (measured) = 1.17 W/kg



0 dB = $1.17 \text{ W/kg} = 0.68 \text{ dBW/kg}$

Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 5 10M QPSK 1RB0 20525CH Back side 15mm Ant4

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, LTE Band 5 10MHz; Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL835; Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.939$ S/m; $\epsilon_r = 41.765$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.05, 9.05, 9.05); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.290 W/kg

Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

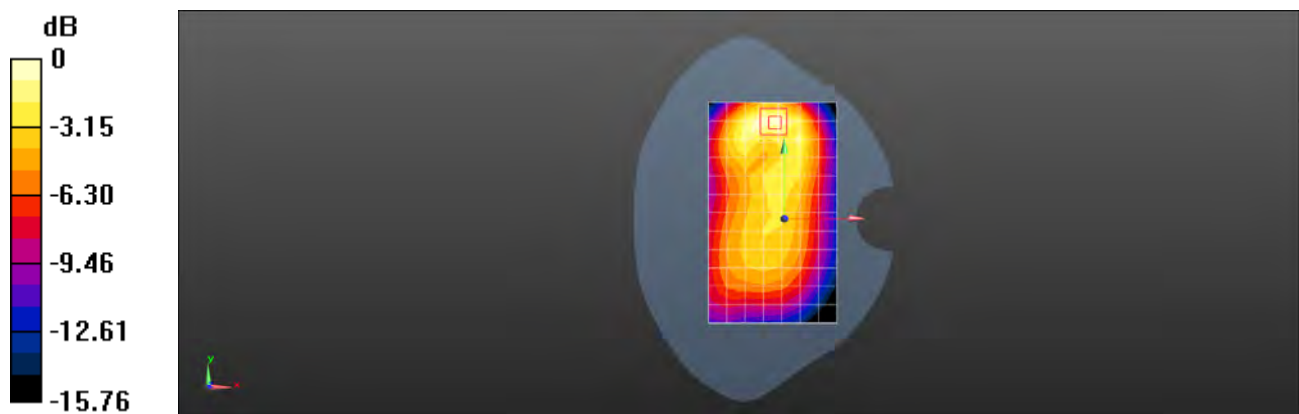
Reference Value = 11.83 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.376 W/kg

SAR(1 g) = 0.226 W/kg; SAR(10 g) = 0.134 W/kg

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.301 W/kg



0 dB = 0.301 W/kg = -5.21 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 5 10M QPSK 25RB25 20450CH Top side 10mm Ant4

DUT: M2002J9R; Type: mobile phone; Serial: 863212050008231

Communication System: UID 0, LTE Band 5 10MHz; Frequency: 829 MHz; Duty Cycle: 1:1

Medium: HSL835; Medium parameters used: $f = 829 \text{ MHz}$; $\sigma = 0.934 \text{ S/m}$; $\epsilon_r = 41.824$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.05, 9.05, 9.05); Calibrated: 2020-05-09
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (5x7x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.304 W/kg

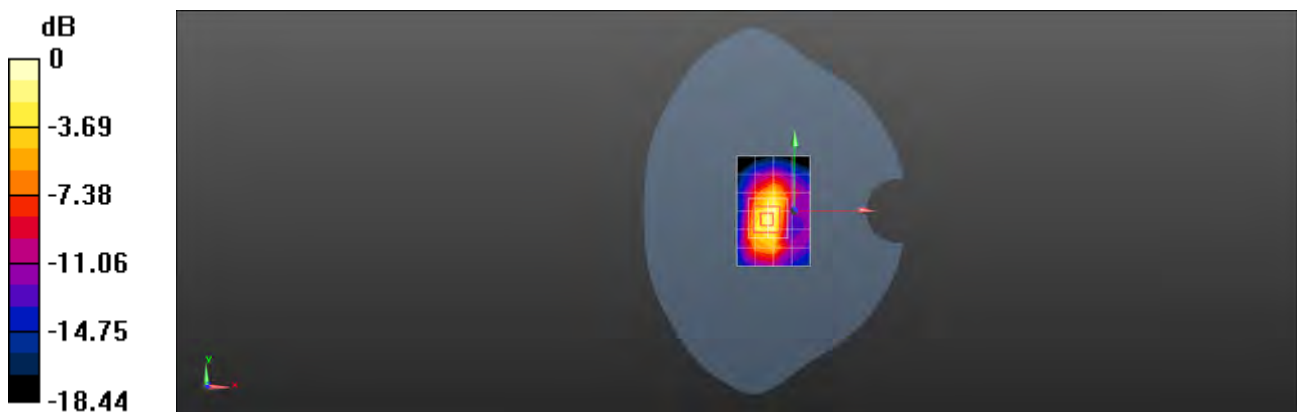
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 15.44 V/m ; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.507 W/kg

SAR(1 g) = 0.249 W/kg ; SAR(10 g) = 0.121 W/kg

Maximum value of SAR (measured) = 0.375 W/kg



0 dB = 0.375 W/kg = -4.26 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 7 20M QPSK 50RB25 20850CH Right cheek Ant5

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050008231

Communication System: UID 0, LTE-FDD BW 20MHz (0); Frequency: 2510 MHz; Duty Cycle: 1:1

Medium: HSL2600; Medium parameters used: $f = 2510$ MHz; $\sigma = 1.872$ S/m; $\epsilon_r = 39.186$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.74, 7.74, 7.74); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Head/Area Scan (9x16x1): Measurement grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (measured) = 0.703 W/kg

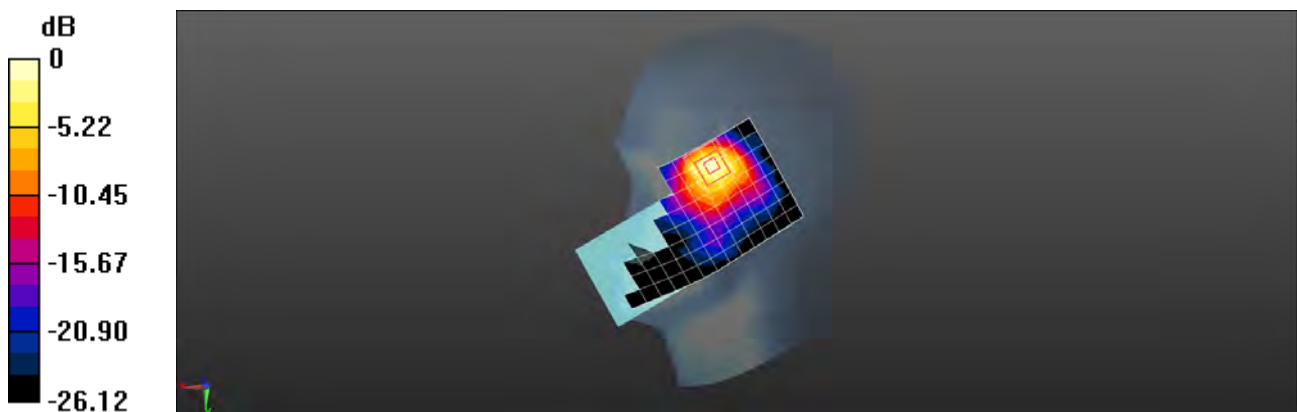
Configuration/Head/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 2.383 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 1.07 W/kg

SAR(1 g) = 0.433 W/kg; SAR(10 g) = 0.188 W/kg

Maximum value of SAR (measured) = 0.806 W/kg



0 dB = 0.806 W/kg = -0.94 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 7 20M QPSK 1RB0 21350CH Back side 15mm Ant5

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050008231

Communication System: UID 0, LTE-FDD BW 20MHz (0); Frequency: 2560 MHz; Duty Cycle: 1:1

Medium: HSL2600; Medium parameters used: $f = 2560$ MHz; $\sigma = 1.931$ S/m; $\epsilon_r = 38.998$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.74, 7.74, 7.74); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (9x16x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.368 W/kg

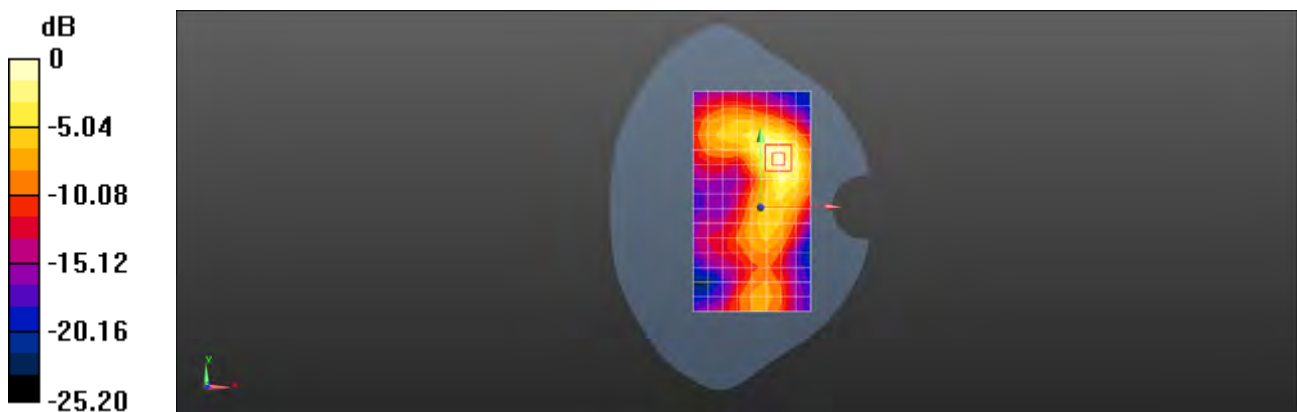
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.818 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.478 W/kg

SAR(1 g) = 0.241 W/kg; SAR(10 g) = 0.120 W/kg

Maximum value of SAR (measured) = 0.389 W/kg



0 dB = 0.389 W/kg = -4.10 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 7 20M QPSK 1RB50 20850CH Left side 10mm Ant5

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050008231

Communication System: UID 0, LTE-FDD BW 20MHz (0); Frequency: 2510 MHz; Duty Cycle: 1:1

Medium: HSL2600; Medium parameters used: $f = 2510$ MHz; $\sigma = 1.872$ S/m; $\epsilon_r = 39.186$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.74, 7.74, 7.74); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (6x16x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.156 W/kg

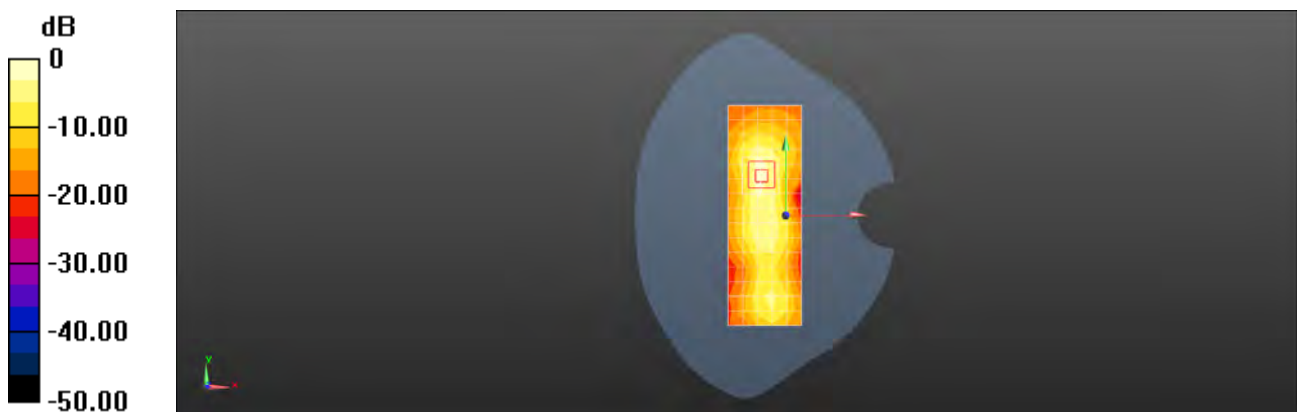
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.585 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.243 W/kg

SAR(1 g) = 0.105 W/kg; SAR(10 g) = 0.042 W/kg

Maximum value of SAR (measured) = 0.188 W/kg



0 dB = 0.188 W/kg = -7.26 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 7 20M QPSK 1RB0 21350CH Left cheek Ant10

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050008231

Communication System: UID 0, LTE-FDD BW 20MHz (0); Frequency: 2560 MHz; Duty Cycle: 1:1

Medium: HSL2600; Medium parameters used: $f = 2560$ MHz; $\sigma = 1.931$ S/m; $\epsilon_r = 38.998$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.74, 7.74, 7.74); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Head/Area Scan (9x16x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.298 W/kg

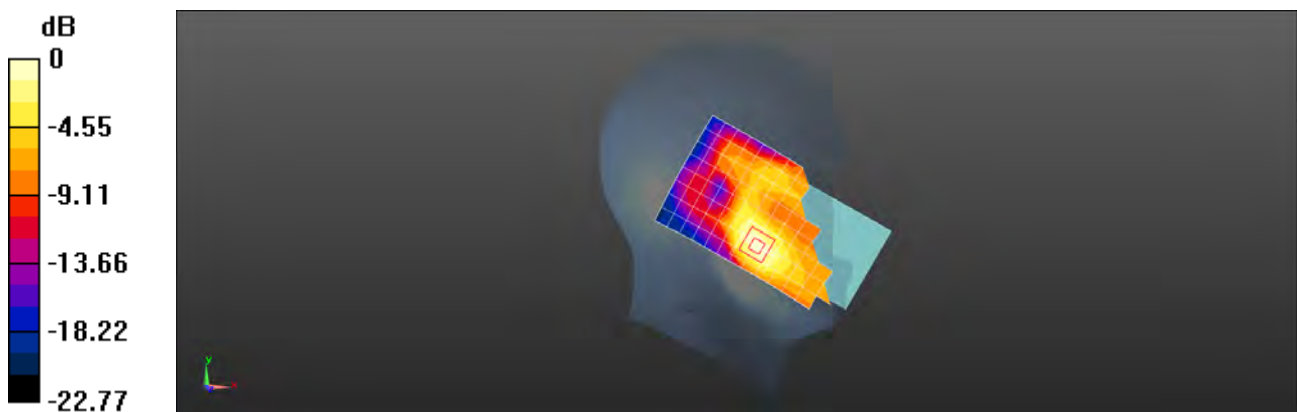
Configuration/Head/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.010 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.387 W/kg

SAR(1 g) = 0.208 W/kg; SAR(10 g) = 0.108 W/kg

Maximum value of SAR (measured) = 0.321 W/kg



0 dB = 0.321 W/kg = -4.93 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 7 20M QPSK 1RB0 21350CH Back side 15mm Ant10

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050008231

Communication System: UID 0, LTE-FDD BW 20MHz (0); Frequency: 2560 MHz; Duty Cycle: 1:1

Medium: HSL2600; Medium parameters used: $f = 2560$ MHz; $\sigma = 1.931$ S/m; $\epsilon_r = 38.998$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.74, 7.74, 7.74); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (9x16x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.662 W/kg

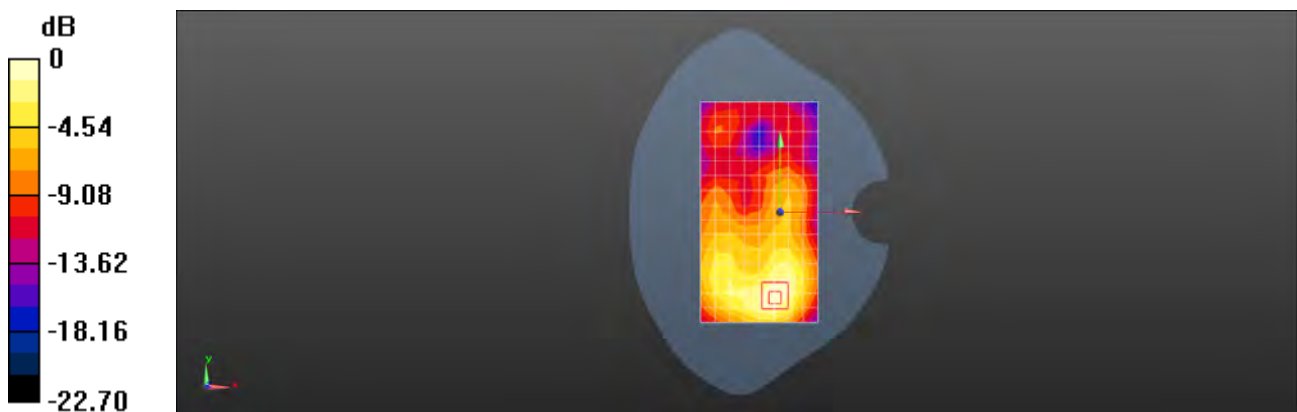
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.910 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.849 W/kg

SAR(1 g) = 0.443 W/kg; SAR(10 g) = 0.237 W/kg

Maximum value of SAR (measured) = 0.701 W/kg



Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 7 20M QPSK 50RB50 20850CH Back side 10mm Ant10

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050008231

Communication System: UID 0, LTE-FDD BW 20MHz (0); Frequency: 2510 MHz; Duty Cycle: 1:1

Medium: HSL2600; Medium parameters used: $f = 2510$ MHz; $\sigma = 1.872$ S/m; $\epsilon_r = 39.186$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.74, 7.74, 7.74); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (9x16x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.621 W/kg

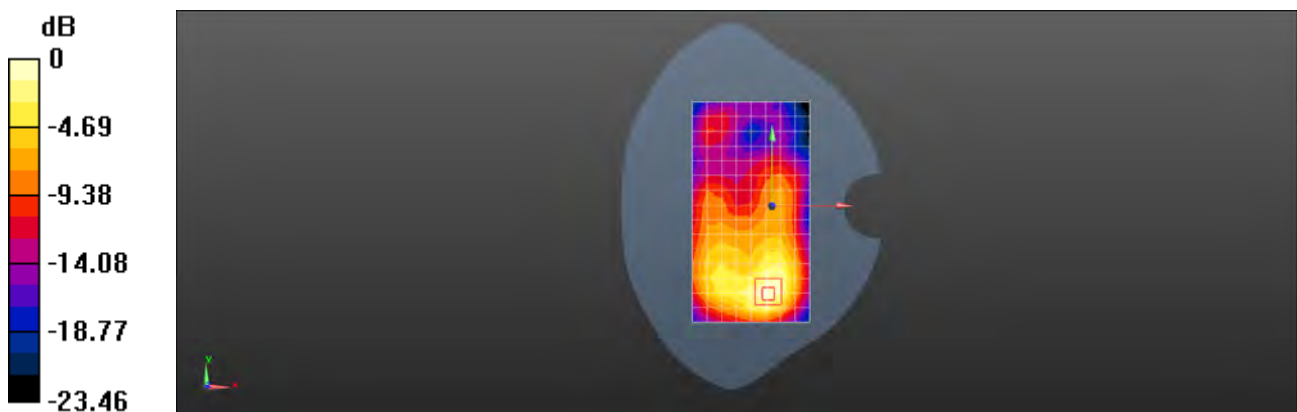
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.597 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.795 W/kg

SAR(1 g) = 0.390 W/kg; SAR(10 g) = 0.192 W/kg

Maximum value of SAR (measured) = 0.623 W/kg



0 dB = 0.623 W/kg = -2.06 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 26 15M QPSK 36RB18 26865CH Left cheek Ant1

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050006573

Communication System: UID 0, LTE Band 26 15MHz; Frequency: 831.5 MHz; Duty Cycle: 1:1

Medium: HSL835; Medium parameters used (interpolated): $f = 831.5$ MHz; $\sigma = 0.947$ S/m; $\epsilon_r = 40.008$; $\rho = 1000$ kg/m³
Phantom section: Left Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(10.39, 10.39, 10.39); Calibrated: 2019-09-11
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Head/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.0752 W/kg

Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

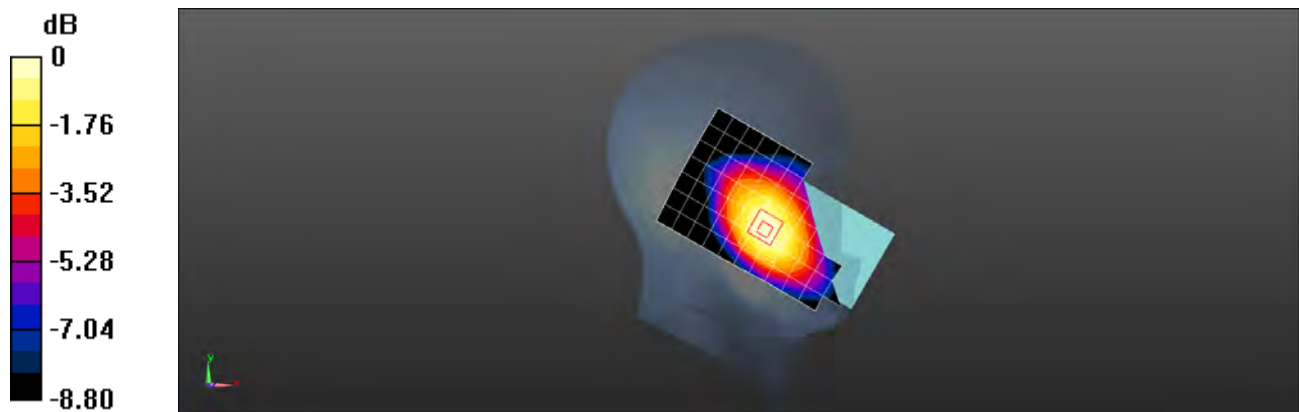
Reference Value = 3.714 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.0840 W/kg

SAR(1 g) = 0.092 W/kg; SAR(10 g) = 0.063 W/kg

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.0763 W/kg



0 dB = 0.0763 W/kg = -11.17 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 26 15M QPSK 36RB18 26865CH Back side 15mm Ant1

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050006573

Communication System: UID 0, LTE Band 26 15MHz; Frequency: 831.5 MHz; Duty Cycle: 1:1

Medium: HSL835; Medium parameters used (interpolated): $f = 831.5$ MHz; $\sigma = 0.947$ S/m; $\epsilon_r = 40.008$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(10.39, 10.39, 10.39); Calibrated: 2019-09-11
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.201 W/kg

Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

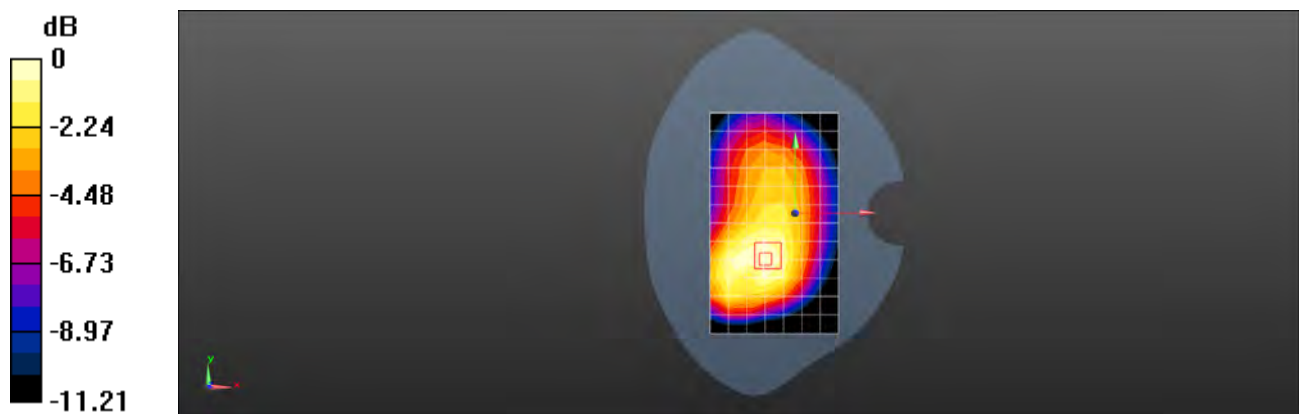
Reference Value = 11.20 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.227 W/kg

SAR(1 g) = 0.169 W/kg; SAR(10 g) = 0.121 W/kg

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.201 W/kg



Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 26 15M QPSK 36RB18 26865CH Back side 10mm Ant1

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050006573

Communication System: UID 0, LTE Band 26 15MHz; Frequency: 831.5 MHz; Duty Cycle: 1:1

Medium: HSL835; Medium parameters used (interpolated): $f = 831.5$ MHz; $\sigma = 0.947$ S/m; $\epsilon_r = 40.008$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(10.39, 10.39, 10.39); Calibrated: 2019-09-11
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.345 W/kg

Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

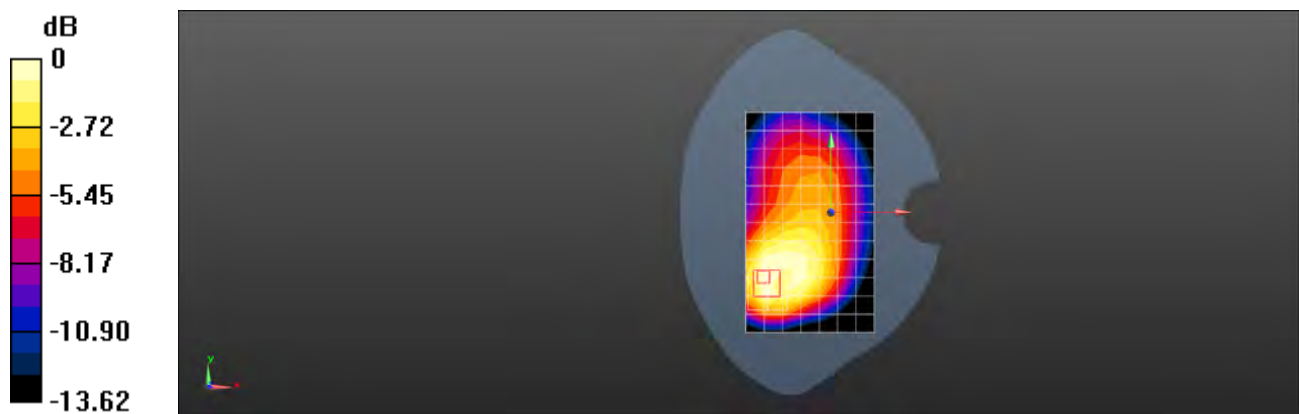
Reference Value = 12.42 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.436 W/kg

SAR(1 g) = 0.256 W/kg; SAR(10 g) = 0.154 W/kg

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.350 W/kg



Test Laboratory: SGS-Lab

M2002J9R LTE Band 26 15M QPSK 36RB18 26865CH Right cheek Ant4

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050006573

Communication System: UID 0, LTE Band 26 15MHz; Frequency: 831.5 MHz; Duty Cycle: 1:1

Medium: HSL835; Medium parameters used (interpolated): $f = 831.5$ MHz; $\sigma = 0.947$ S/m; $\epsilon_r = 40.008$; $\rho = 1000$ kg/m³
Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(10.39, 10.39, 10.39); Calibrated: 2019-09-11
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Head/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.03 W/kg

Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

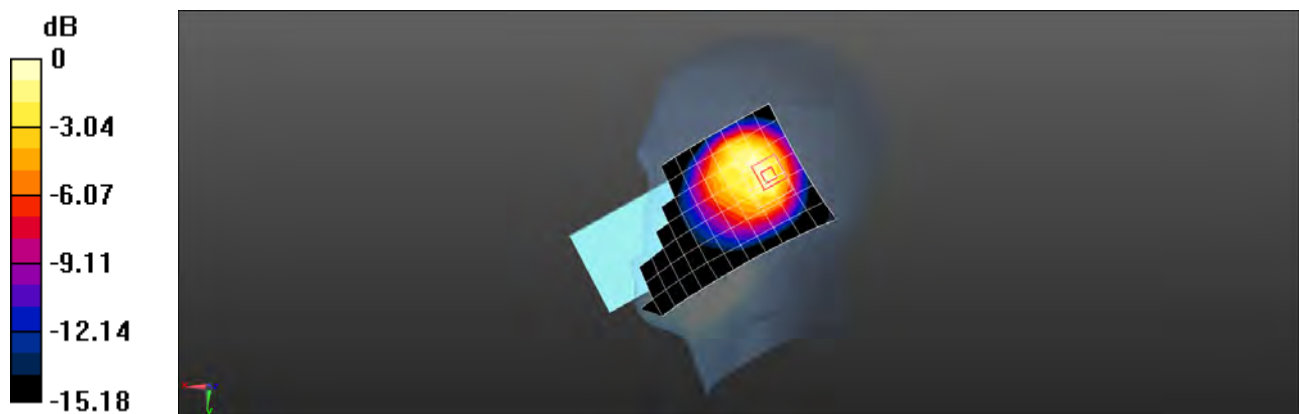
Reference Value = 24.82 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.56 W/kg

SAR(1 g) = 0.743 W/kg; SAR(10 g) = 0.398 W/kg

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.11 W/kg



0 dB = 1.11 W/kg = 0.45 dBW/kg

Test Laboratory: SGS-Lab

M2002J9R LTE Band 26 15M QPSK 36RB39 26865CH Back side 15mm Ant4

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050006573

Communication System: UID 0, LTE Band 26 15MHz; Frequency: 831.5 MHz; Duty Cycle: 1:1

Medium: HSL835; Medium parameters used (interpolated): $f = 831.5$ MHz; $\sigma = 0.947$ S/m; $\epsilon_r = 40.008$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(10.39, 10.39, 10.39); Calibrated: 2019-09-11
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.206 W/kg

Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

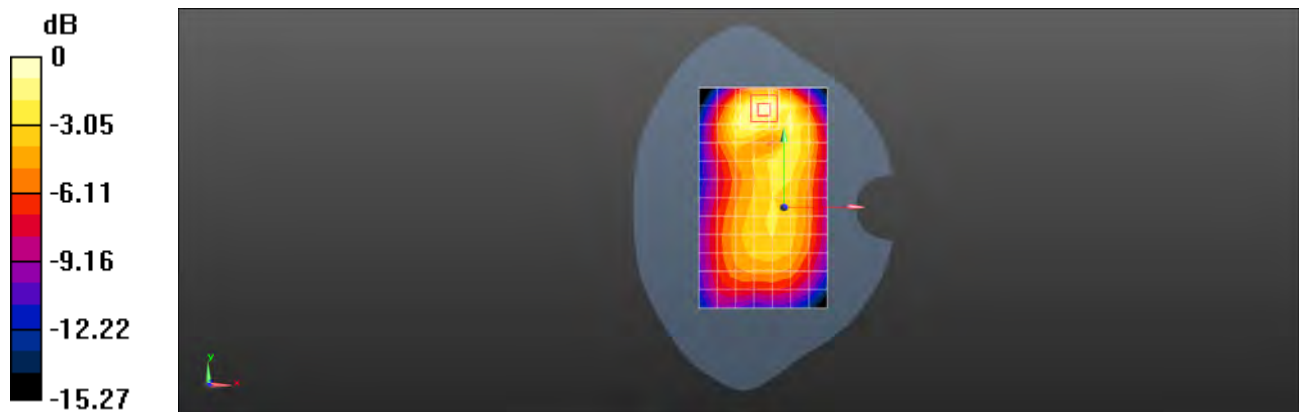
Reference Value = 10.21 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.280 W/kg

SAR(1 g) = 0.170 W/kg; SAR(10 g) = 0.102 W/kg

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.227 W/kg



Test Laboratory: SGS-Lab

M2002J9R LTE Band 26 15M QPSK 36RB39 26865CH Back side 10mm Ant4

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050006573

Communication System: UID 0, LTE Band 26 15MHz; Frequency: 831.5 MHz; Duty Cycle: 1:1

Medium: HSL835; Medium parameters used (interpolated): $f = 831.5$ MHz; $\sigma = 0.947$ S/m; $\epsilon_r = 40.008$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3982; ConvF(10.39, 10.39, 10.39); Calibrated: 2019-09-11
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.428 W/kg

Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

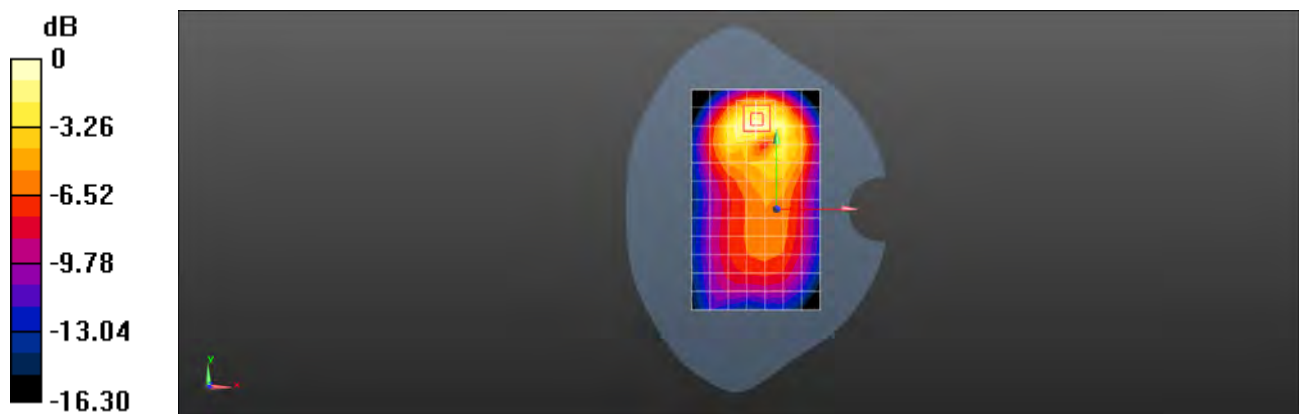
Reference Value = 11.04 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.603 W/kg

SAR(1 g) = 0.342 W/kg; SAR(10 g) = 0.193 W/kg

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.476 W/kg



0 dB = 0.476 W/kg = -3.22 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 38 20M QPSK 1RB0 38150CH Right cheek Ant5

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050008231

Communication System: UID 0, LTE-TDD BW 20MHz (0); Frequency: 2610 MHz; Duty Cycle: 1:1.579

Medium: HSL2600; Medium parameters used: $f = 2610$ MHz; $\sigma = 1.983$ S/m; $\epsilon_r = 38.833$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.74, 7.74, 7.74); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Head/Area Scan (9x16x1): Measurement grid: $dx=12$ mm, $dy=12$ mm
Maximum value of SAR (measured) = 0.770 W/kg

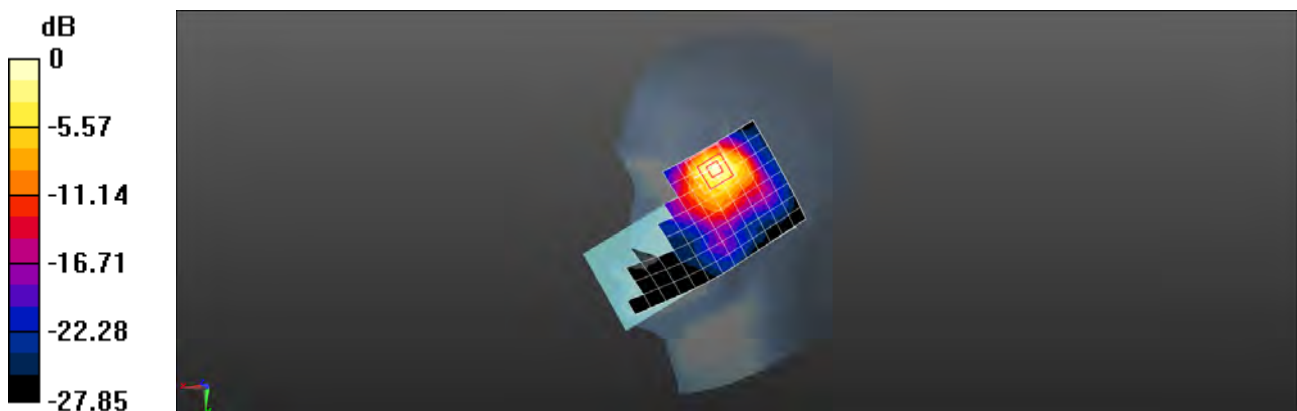
Configuration/Head/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 2.388 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.28 W/kg

SAR(1 g) = 0.507 W/kg; SAR(10 g) = 0.218 W/kg

Maximum value of SAR (measured) = 0.940 W/kg



0 dB = 0.940 W/kg = -0.27 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 38 20M QPSK 1RB0 38000CH Back side 15mm Ant5

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050008231

Communication System: UID 0, LTE-TDD BW 20MHz (0); Frequency: 2595 MHz; Duty Cycle: 1:1.579

Medium: HSL2600; Medium parameters used: $f = 2595$ MHz; $\sigma = 1.964$ S/m; $\epsilon_r = 38.917$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.74, 7.74, 7.74); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (9x16x1): Measurement grid: $dx=12$ mm, $dy=12$ mm
Maximum value of SAR (measured) = 0.332 W/kg

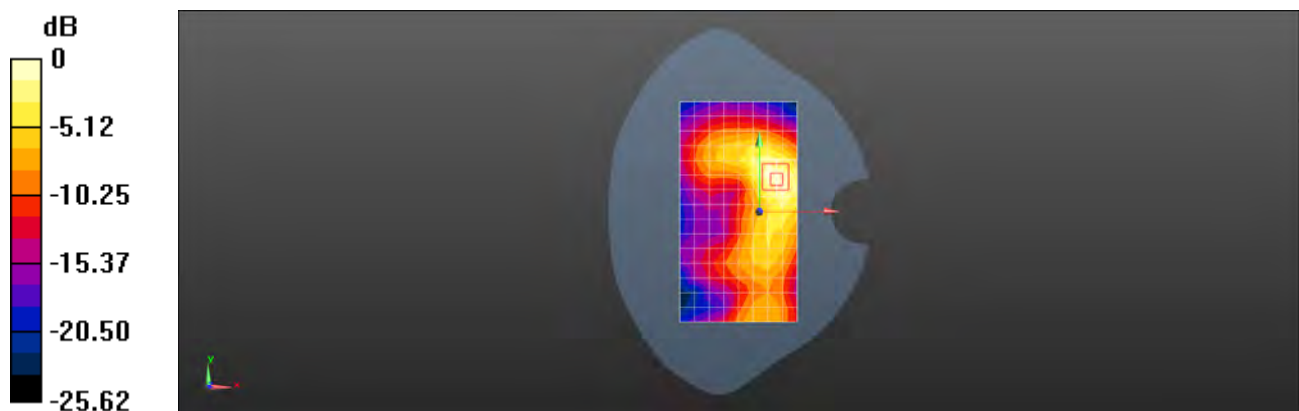
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 3.369 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.459 W/kg

SAR(1 g) = 0.231 W/kg; SAR(10 g) = 0.115 W/kg

Maximum value of SAR (measured) = 0.369 W/kg



0 dB = 0.369 W/kg = -4.33 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 38 20M QPSK 1RB0 38150CH Left side 10mm Ant5

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050008231

Communication System: UID 0, LTE-TDD BW 20MHz (0); Frequency: 2610 MHz; Duty Cycle: 1:1.579

Medium: HSL2600; Medium parameters used: $f = 2610$ MHz; $\sigma = 1.983$ S/m; $\epsilon_r = 38.833$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.74, 7.74, 7.74); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (6x16x1): Measurement grid: $dx=12$ mm, $dy=12$ mm
Maximum value of SAR (measured) = 0.237 W/kg

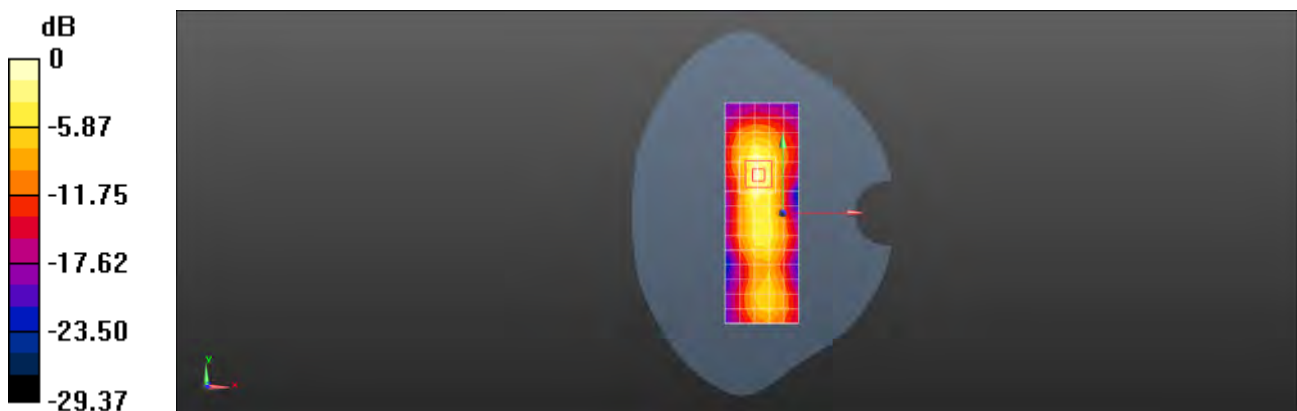
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 6.396 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.374 W/kg

SAR(1 g) = 0.161 W/kg; SAR(10 g) = 0.066 W/kg

Maximum value of SAR (measured) = 0.287 W/kg



0 dB = 0.287 W/kg = -5.42 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 38 20M QPSK 1RB50 38000CH Left cheek Ant10

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050008231

Communication System: UID 0, LTE-TDD BW 20MHz (0); Frequency: 2595 MHz; Duty Cycle: 1:1.579

Medium: HSL2600; Medium parameters used: $f = 2595$ MHz; $\sigma = 1.964$ S/m; $\epsilon_r = 38.917$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.74, 7.74, 7.74); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Head/Area Scan (9x16x1): Measurement grid: $dx=12$ mm, $dy=12$ mm
Maximum value of SAR (measured) = 0.184 W/kg

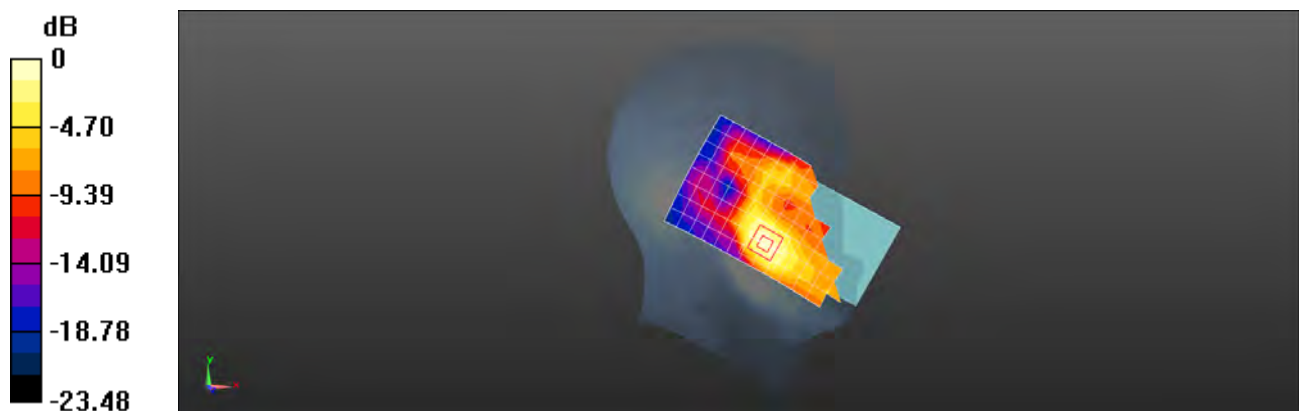
Configuration/Head/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 1.944 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.244 W/kg

SAR(1 g) = 0.125 W/kg; SAR(10 g) = 0.068 W/kg

Maximum value of SAR (measured) = 0.202 W/kg



0 dB = 0.202 W/kg = -6.95 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 38 20M QPSK 1RB50 38000CH Back side 15mm Ant10

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050008231

Communication System: UID 0, LTE-TDD BW 20MHz (0); Frequency: 2595 MHz; Duty Cycle: 1:1.579

Medium: HSL2600; Medium parameters used: $f = 2595$ MHz; $\sigma = 1.964$ S/m; $\epsilon_r = 38.917$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.74, 7.74, 7.74); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (9x16x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.411 W/kg

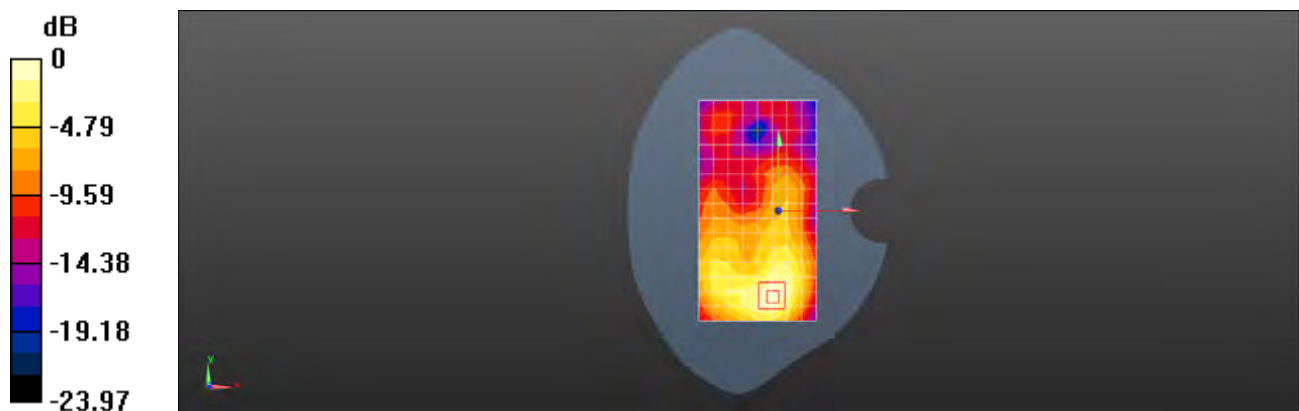
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.235 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.543 W/kg

SAR(1 g) = 0.280 W/kg; SAR(10 g) = 0.145 W/kg

Maximum value of SAR (measured) = 0.440 W/kg



0 dB = 0.440 W/kg = -3.57 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 38 20M QPSK 1RB0 37850CH Back side 10mm Ant10

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050008231

Communication System: UID 0, LTE-TDD BW 20MHz (0); Frequency: 2580 MHz; Duty Cycle: 1:1.579

Medium: HSL2600; Medium parameters used: $f = 2580$ MHz; $\sigma = 1.951$ S/m; $\epsilon_r = 38.962$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.74, 7.74, 7.74); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (9x16x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.618 W/kg

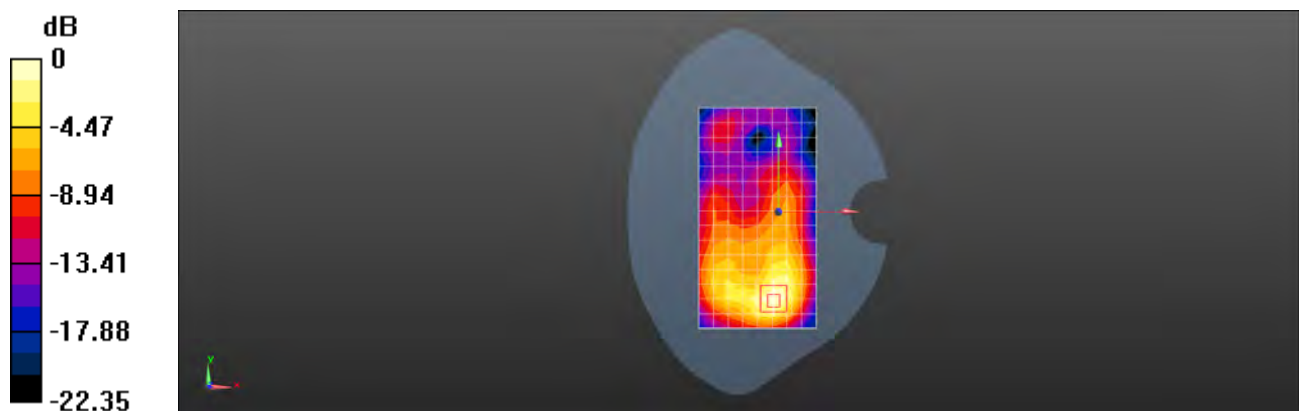
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.158 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.791 W/kg

SAR(1 g) = 0.383 W/kg; SAR(10 g) = 0.186 W/kg

Maximum value of SAR (measured) = 0.617 W/kg



0 dB = 0.617 W/kg = -2.10 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 41 20M QPSK 1RB0 40185CH Right cheek Ant5

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050008231

Communication System: UID 0, LTE-TDD BW 20MHz (0); Frequency: 2549.5 MHz; Duty Cycle: 1:1.579

Medium: HSL2600; Medium parameters used (interpolated): $f = 2549.5$ MHz; $\sigma = 1.912$ S/m; $\epsilon_r = 39.061$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.74, 7.74, 7.74); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Head/Area Scan (9x16x1): Measurement grid: dx=12mm, dy=12mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.653 W/kg

Configuration/Head/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

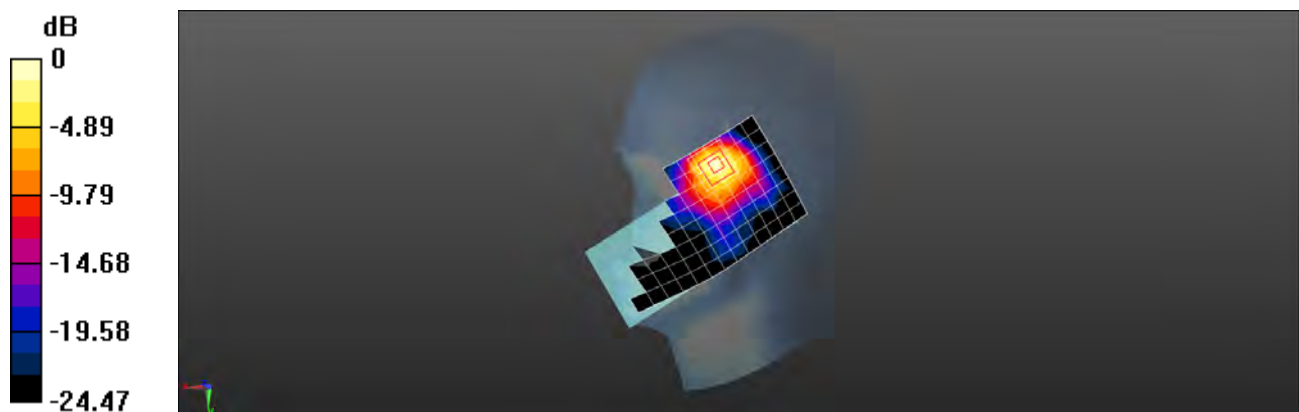
Reference Value = 2.245 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 1.05 W/kg

SAR(1 g) = 0.427 W/kg; SAR(10 g) = 0.186 W/kg

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.776 W/kg



0 dB = 0.776 W/kg = -1.10 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 41 20M QPSK 1RB50 41490CH Back side 15mm Ant5

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050008231

Communication System: UID 0, LTE-TDD BW 20MHz (0); Frequency: 2680 MHz; Duty Cycle: 1:1.579

Medium: HSL2600; Medium parameters used: $f = 2680$ MHz; $\sigma = 2.061$ S/m; $\epsilon_r = 38.565$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.74, 7.74, 7.74); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (9x16x1): Measurement grid: $dx=12$ mm, $dy=12$ mm
Maximum value of SAR (measured) = 0.259 W/kg

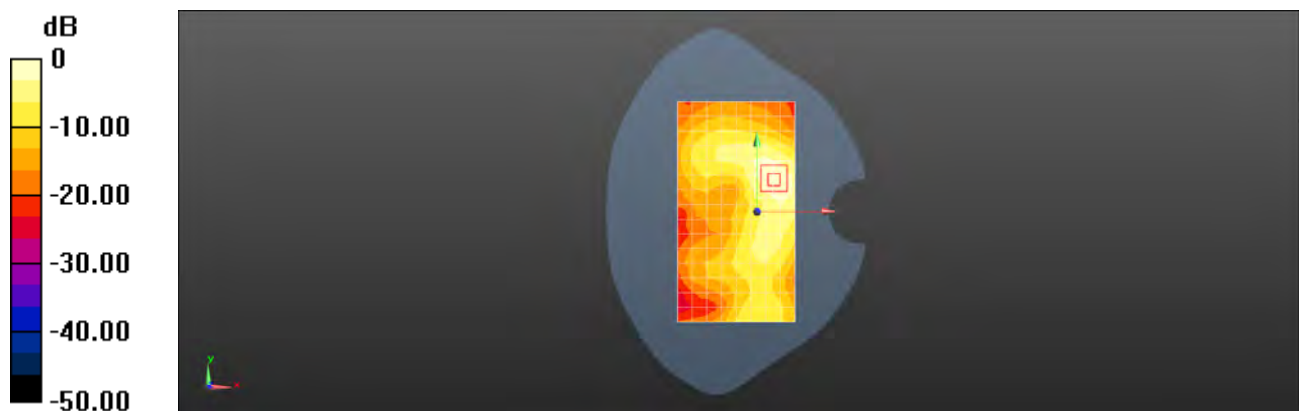
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 2.480 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.376 W/kg

SAR(1 g) = 0.184 W/kg; SAR(10 g) = 0.090 W/kg

Maximum value of SAR (measured) = 0.300 W/kg



0 dB = 0.300 W/kg = -5.23 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 41 20M QPSK 50RB25 41490CH Left side 10mm Ant5

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050008231

Communication System: UID 0, LTE-TDD BW 20MHz (0); Frequency: 2680 MHz; Duty Cycle: 1:1.579

Medium: HSL2600; Medium parameters used: $f = 2680$ MHz; $\sigma = 2.061$ S/m; $\epsilon_r = 38.565$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.74, 7.74, 7.74); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (6x16x1): Measurement grid: $dx=12$ mm, $dy=12$ mm
Maximum value of SAR (measured) = 0.200 W/kg

Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 5.270 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.323 W/kg

SAR(1 g) = 0.136 W/kg; SAR(10 g) = 0.054 W/kg

Maximum value of SAR (measured) = 0.244 W/kg



0 dB = 0.244 W/kg = -6.13 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 41 20M QPSK 1RB0 39750CH Left cheek Ant10

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050008231

Communication System: UID 0, LTE-TDD BW 20MHz (0); Frequency: 2506 MHz; Duty Cycle: 1:1.579

Medium: HSL2600; Medium parameters used: $f = 2506$ MHz; $\sigma = 1.865$ S/m; $\epsilon_r = 39.205$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.74, 7.74, 7.74); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Head/Area Scan (9x16x1): Measurement grid: $dx=12$ mm, $dy=12$ mm
Maximum value of SAR (measured) = 0.178 W/kg

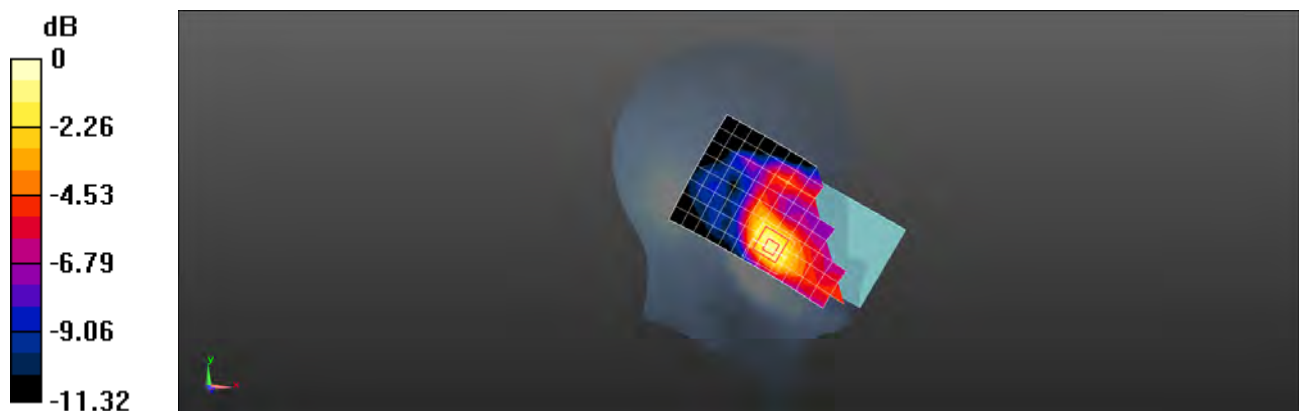
Configuration/Head/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 1.383 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.250 W/kg

SAR(1 g) = 0.145 W/kg; SAR(10 g) = 0.086 W/kg

Maximum value of SAR (measured) = 0.211 W/kg



0 dB = 0.211 W/kg = -6.76 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 41 20M QPSK 1RB0 39750CH Back side 15mm Ant10

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050006573

Communication System: UID 0, LTE-TDD BW 20MHz (0); Frequency: 2506 MHz; Duty Cycle: 1:1.579

Medium: HSL2600; Medium parameters used: $f = 2506$ MHz; $\sigma = 1.865$ S/m; $\epsilon_r = 39.205$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.74, 7.74, 7.74); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (9x16x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.396 W/kg

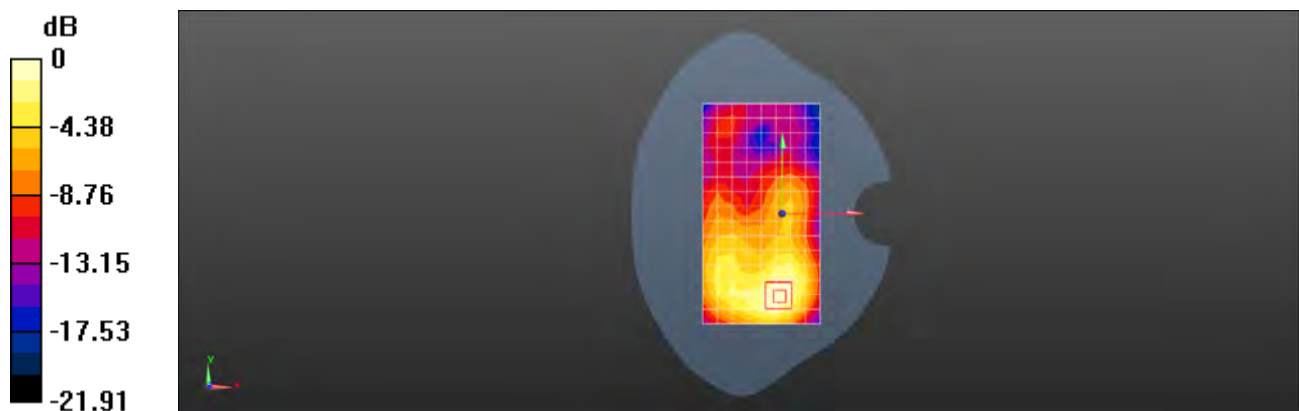
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.812 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.504 W/kg

SAR(1 g) = 0.264 W/kg; SAR(10 g) = 0.140 W/kg

Maximum value of SAR (measured) = 0.408 W/kg



0 dB = 0.408 W/kg = -3.89 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R LTE Band 41 20M QPSK 50RB25 40185CH Back side 10mm Ant10

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050006573

Communication System: UID 0, LTE-TDD BW 20MHz (0); Frequency: 2549.5 MHz; Duty Cycle: 1:1.579

Medium: HSL2600; Medium parameters used (interpolated): $f = 2549.5$ MHz; $\sigma = 1.912$ S/m; $\epsilon_r = 39.061$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.74, 7.74, 7.74); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (9x16x1): Measurement grid: dx=12mm, dy=12mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.483 W/kg

Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

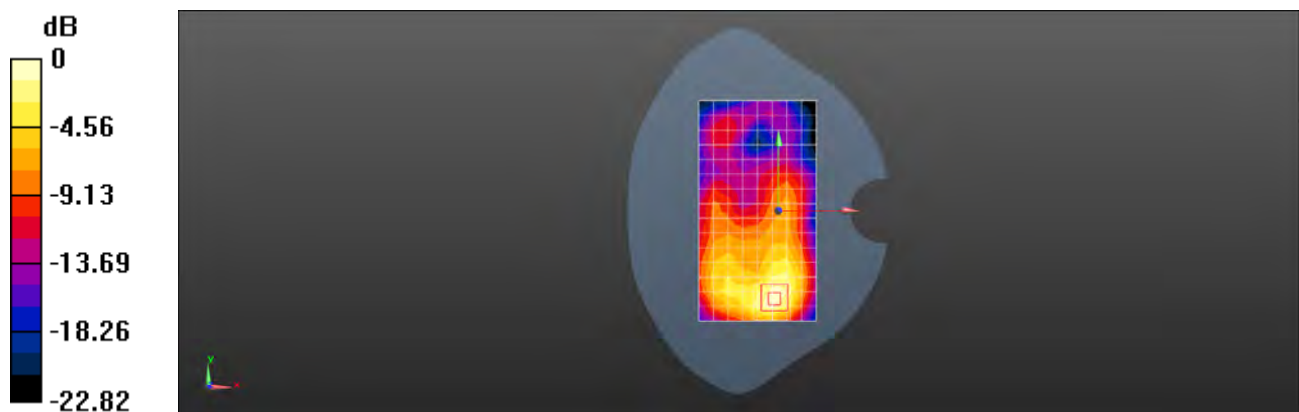
Reference Value = 3.923 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.719 W/kg

SAR(1 g) = 0.346 W/kg; SAR(10 g) = 0.167 W/kg

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.566 W/kg



0 dB = 0.566 W/kg = -2.47 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R WIFI 2.4G 802.11b 6CH Left cheek Ant8

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050006573

Communication System: UID 0, WI-FI(2.4GHz) (0); Frequency: 2437 MHz;Duty Cycle: 1:1.01

Medium: HSL2450;Medium parameters used: $f = 2437$ MHz; $\sigma = 1.787$ S/m; $\epsilon_r = 39.456$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.87, 7.87, 7.87); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Head/Area Scan (9x16x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.407 W/kg

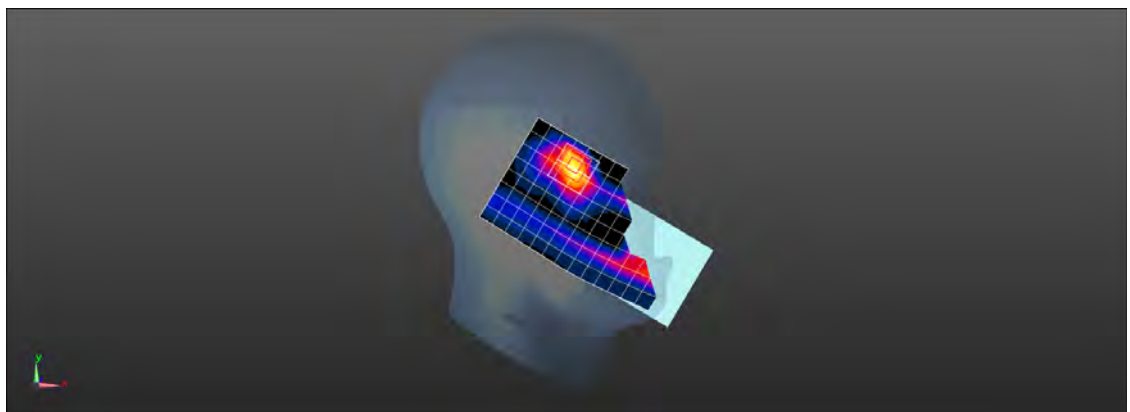
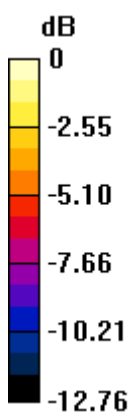
Configuration/Head/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.905 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.705 W/kg

SAR(1 g) = 0.236 W/kg; SAR(10 g) = 0.108 W/kg

Maximum value of SAR (measured) = 0.459 W/kg



0 dB = 0.459 W/kg = -3.38 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R WIFI 2.4G 802.11b 1CH Back side 15mm Ant8

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050006573

Communication System: UID 0, WI-FI(2.4GHz) (0); Frequency: 2412 MHz; Duty Cycle: 1:1.01

Medium: HSL2450; Medium parameters used: $f = 2412$ MHz; $\sigma = 1.764$ S/m; $\epsilon_r = 39.553$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.87, 7.87, 7.87); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (10x16x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.216 W/kg

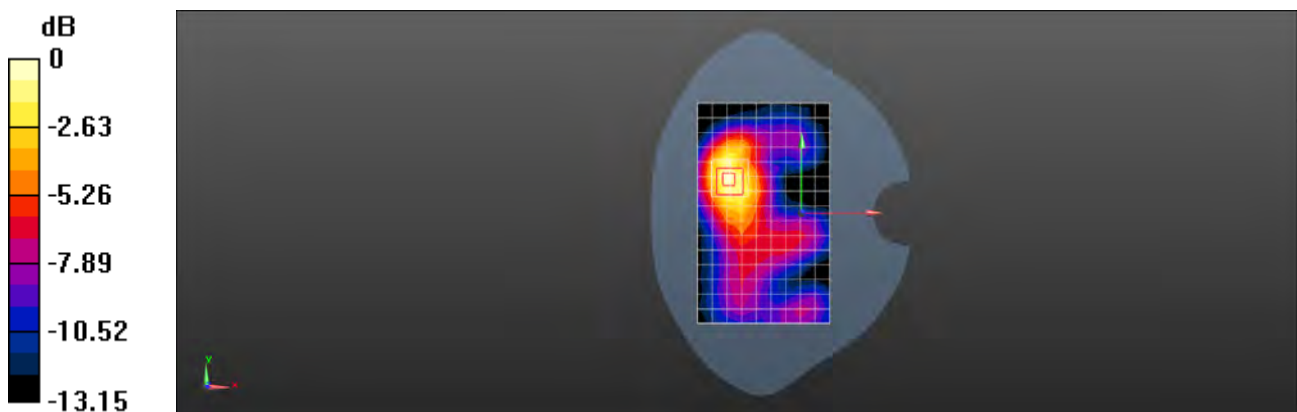
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.460 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 0.28 W/kg

SAR(1 g) = 0.148 W/kg; SAR(10 g) = 0.067 W/kg

Maximum value of SAR (measured) = 0.215 W/kg



0 dB = 0.215 W/kg = -6.68 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R WIFI 2.4G 802.11b 1CH Right side 10mm Ant8

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050006573

Communication System: UID 0, WI-FI(2.4GHz) (0); Frequency: 2412 MHz;Duty Cycle: 1:1.01

Medium: HSL2450;Medium parameters used: $f = 2412$ MHz; $\sigma = 1.764$ S/m; $\epsilon_r = 39.553$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.87, 7.87, 7.87); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (6x16x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.484 W/kg

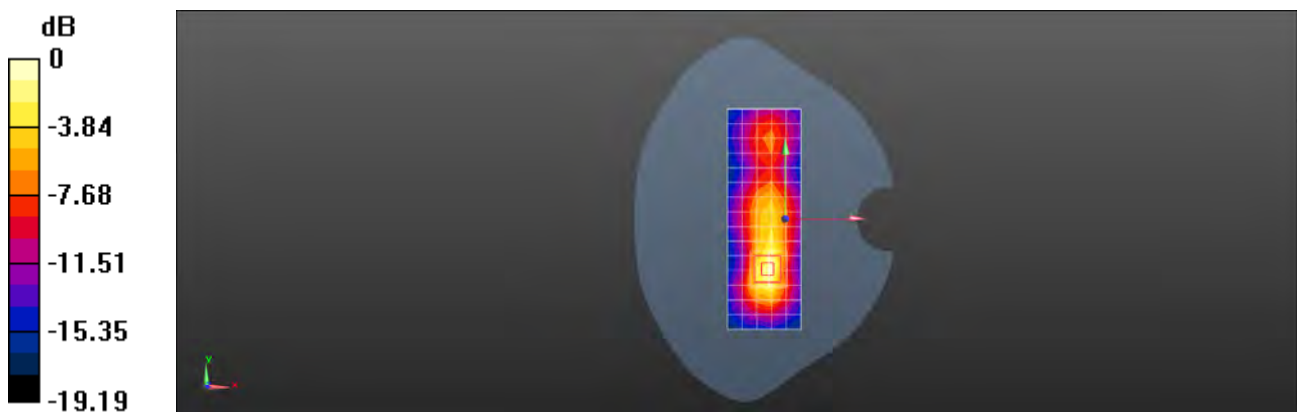
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.501 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.651 W/kg

SAR(1 g) = 0.311 W/kg; SAR(10 g) = 0.135 W/kg

Maximum value of SAR (measured) = 0.496 W/kg



Test Laboratory: SGS-SAR Lab

M2002J9R WIFI 2.4G 802.11b 6CH Left cheek MIMO

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050006573

Communication System: UID 0, WI-FI(2.4GHz) (0); Frequency: 2437 MHz; Duty Cycle: 1:1.015

Medium: HSL2450; Medium parameters used: $f = 2437$ MHz; $\sigma = 1.787$ S/m; $\epsilon_r = 39.456$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.87, 7.87, 7.87); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Head/Area Scan (9x17x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.495 W/kg

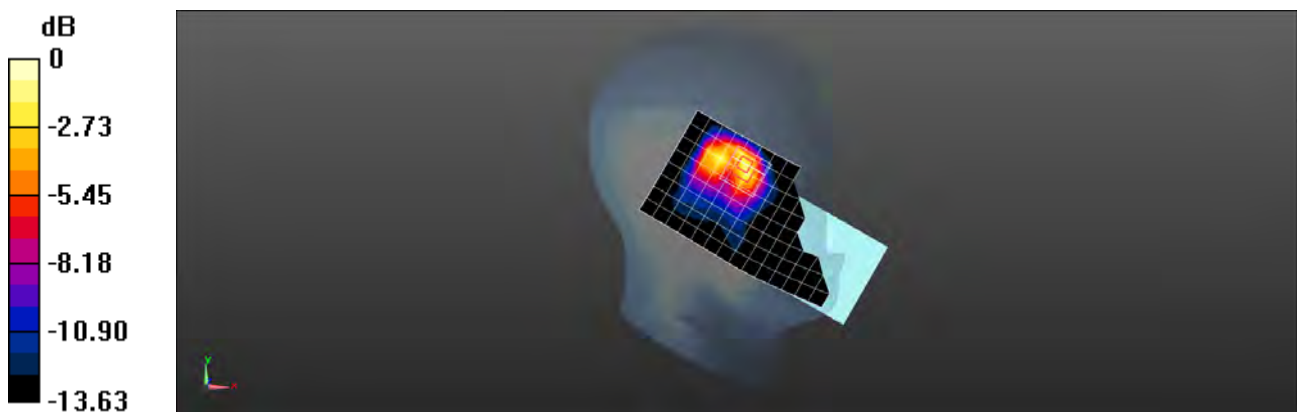
Configuration/Head/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.855 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.813 W/kg

SAR(1 g) = 0.300 W/kg; SAR(10 g) = 0.141 W/kg

Maximum value of SAR (measured) = 0.601 W/kg



0 dB = 0.601 W/kg = -2.21 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R WIFI 2.4G 802.11b 6CH Back side 15mm MIMO

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050006573

Communication System: UID 0, WI-FI(2.4GHz) (0); Frequency: 2437 MHz; Duty Cycle: 1:1.015

Medium: HSL2450; Medium parameters used: $f = 2437$ MHz; $\sigma = 1.787$ S/m; $\epsilon_r = 39.456$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.87, 7.87, 7.87); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (10x16x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.311 W/kg

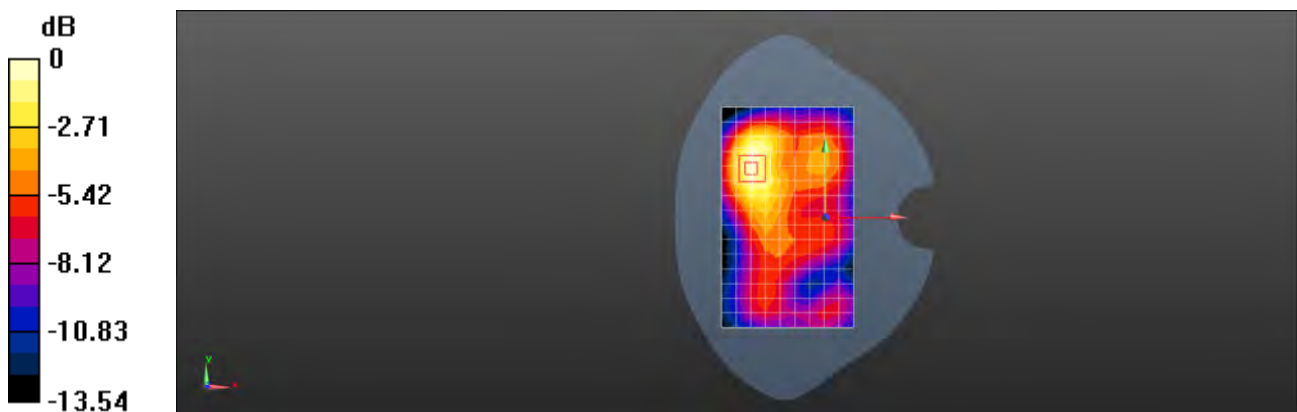
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.689 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.371 W/kg

SAR(1 g) = 0.203 W/kg; SAR(10 g) = 0.109 W/kg

Maximum value of SAR (measured) = 0.308 W/kg



0 dB = 0.308 W/kg = -5.11 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R WIFI 2.4G 802.11b 6CH Right side 10mm MIMO

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050006573

Communication System: UID 0, WI-FI(2.4GHz) (0); Frequency: 2437 MHz; Duty Cycle: 1:1.015

Medium: HSL2450; Medium parameters used: $f = 2437$ MHz; $\sigma = 1.787$ S/m; $\epsilon_r = 39.456$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.87, 7.87, 7.87); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (6x16x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.94 W/kg

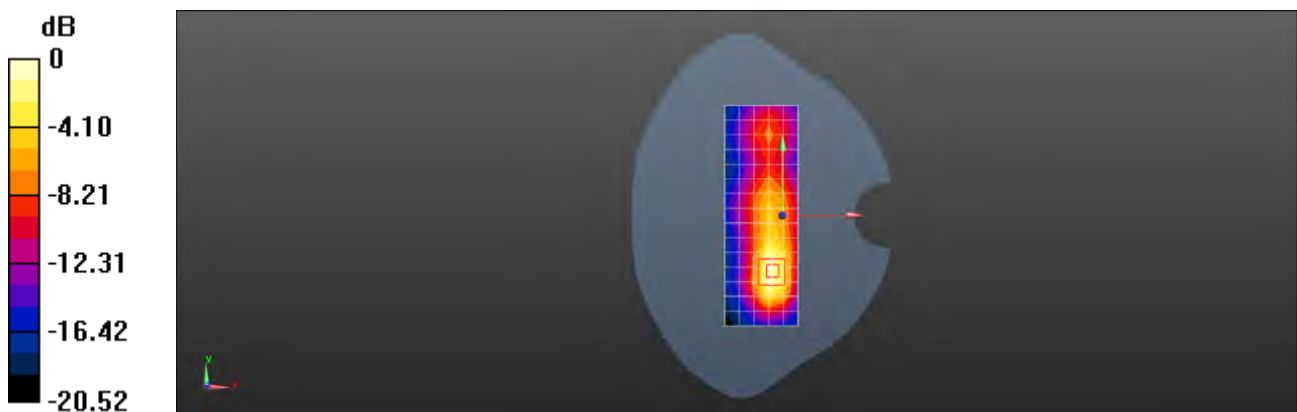
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.65 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 1.01 W/kg

SAR(1 g) = 0.412 W/kg; SAR(10 g) = 0.102 W/kg

Maximum value of SAR (measured) = 0.89 W/kg



0 dB = 0.89 W/kg = -0.51 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R WIFI 5G 802.11a 52CH Left cheek Ant7

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050006573

Communication System: UID 0, WI-FI(5GHz) (0); Frequency: 5260 MHz;Duty Cycle: 1:1.034

Medium: HSL5G;Medium parameters used: $f = 5260$ MHz; $\sigma = 4.729$ S/m; $\epsilon_r = 36.658$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(5.34, 5.34, 5.34); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn896; Calibrated: 2019-09-18
- Phantom: SAM 1; Type: SAM; Serial: 1640
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Head/Area Scan (11x19x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.882 W/kg

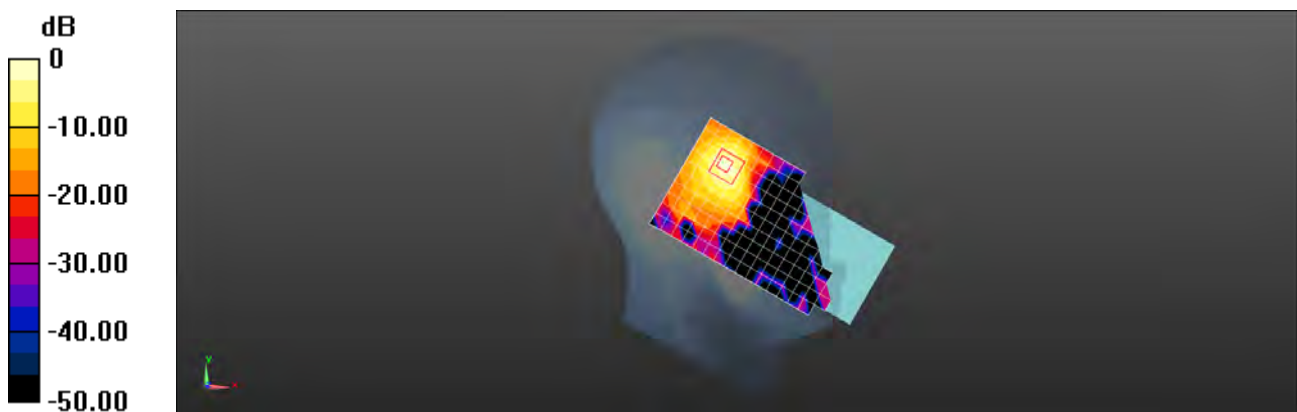
Configuration/Head/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 3.141 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 1.99 W/kg

SAR(1 g) = 0.520 W/kg; SAR(10 g) = 0.166 W/kg

Maximum value of SAR (measured) = 1.00 W/kg



0 dB = 1.00 W/kg = 0.00 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R WIFI 5G 802.11a 120CH Back side 15mm Ant7

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050006573

Communication System: UID 0, WI-FI(5GHz) (0); Frequency: 5600 MHz; Duty Cycle: 1:1.034

Medium: HSL5G; Medium parameters used: $f = 5600$ MHz; $\sigma = 5.093$ S/m; $\epsilon_r = 35.786$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(4.9, 4.9, 4.9); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn896; Calibrated: 2019-09-18
- Phantom: SAM 1; Type: SAM; Serial: 1640
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (11x19x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.533 W/kg

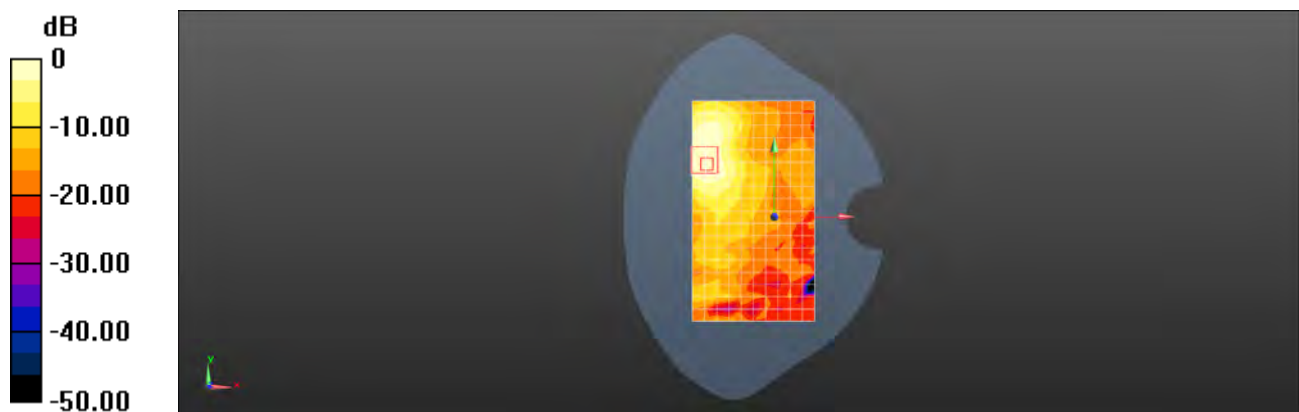
Configuration/Body/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.454 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 1.04 W/kg

SAR(1 g) = 0.295 W/kg; SAR(10 g) = 0.124 W/kg

Maximum value of SAR (measured) = 0.537 W/kg



Test Laboratory: SGS-SAR Lab

M2002J9R WIFI 5G 802.11a 157CH Back side 10mm Ant7

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050006573

Communication System: UID 0, WI-FI(5GHz) (0); Frequency: 5785 MHz;Duty Cycle: 1:1.034

Medium: HSL5G;Medium parameters used: $f = 5785$ MHz; $\sigma = 5.298$ S/m; $\epsilon_r = 35.45$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(4.83, 4.83, 4.83); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn896; Calibrated: 2019-09-18
- Phantom: SAM 1; Type: SAM; Serial: 1640
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Head/Area Scan (11x19x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.640 W/kg

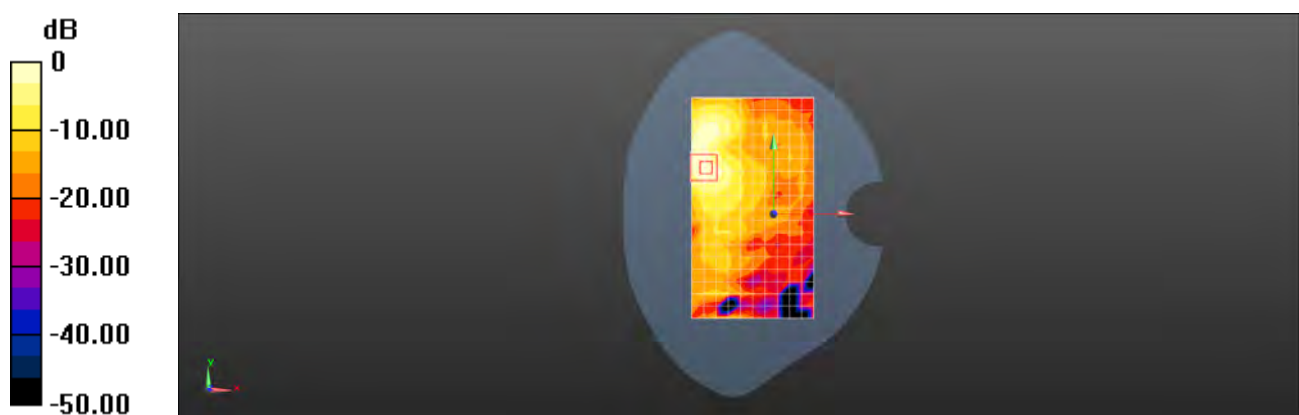
Configuration/Head/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.717 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 1.37 W/kg

SAR(1 g) = 0.373 W/kg; SAR(10 g) = 0.138 W/kg

Maximum value of SAR (measured) = 0.713 W/kg



0 dB = 0.713 W/kg = -1.47 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R WIFI 5G 802.11a 120CH Back side 0mm Ant7

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050006573

Communication System: UID 0, WI-FI(5GHz) (0); Frequency: 5600 MHz;Duty Cycle: 1:1.034

Medium: HSL5G;Medium parameters used: $f = 5600$ MHz; $\sigma = 5.093$ S/m; $\epsilon_r = 35.786$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(4.9, 4.9, 4.9); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn896; Calibrated: 2019-09-18
- Phantom: SAM 1; Type: SAM; Serial: 1640
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Head/Area Scan (11x19x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 3.75 W/kg

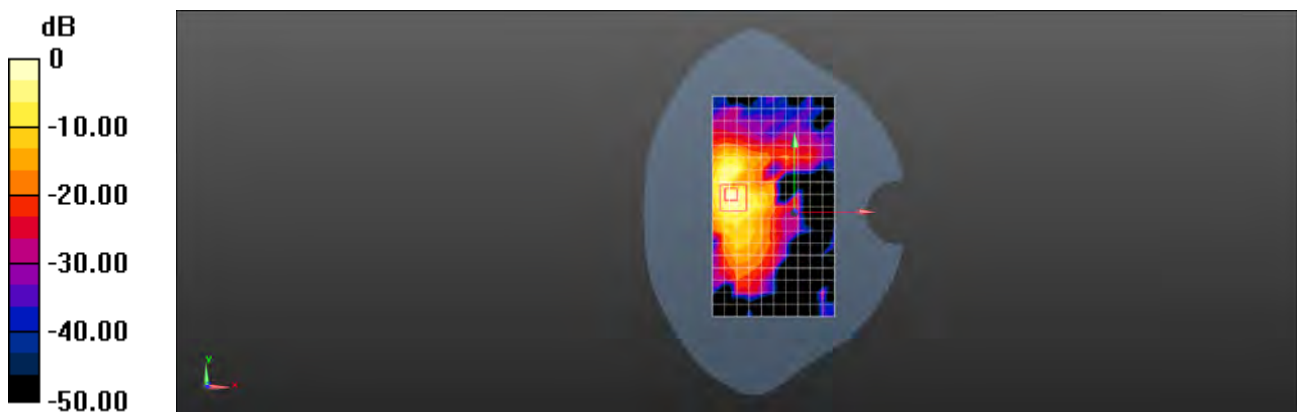
Configuration/Head/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.066 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 10.5 W/kg

SAR(1 g) = 2.22 W/kg; SAR(10 g) = 0.636 W/kg

Maximum value of SAR (measured) = 4.51 W/kg



0 dB = 4.51 W/kg = 6.54 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R WIFI 5G 802.11a 52CH Left cheek MIMO

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050006573

Communication System: UID 0, WI-FI(5GHz) (0); Frequency: 5260 MHz; Duty Cycle: 1:1.025

Medium: HSL5G; Medium parameters used: $f = 5260$ MHz; $\sigma = 4.729$ S/m; $\epsilon_r = 36.658$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(5.34, 5.34, 5.34); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn896; Calibrated: 2019-09-18
- Phantom: SAM 1; Type: SAM; Serial: 1640
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Head/Area Scan (11x19x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 1.19 W/kg

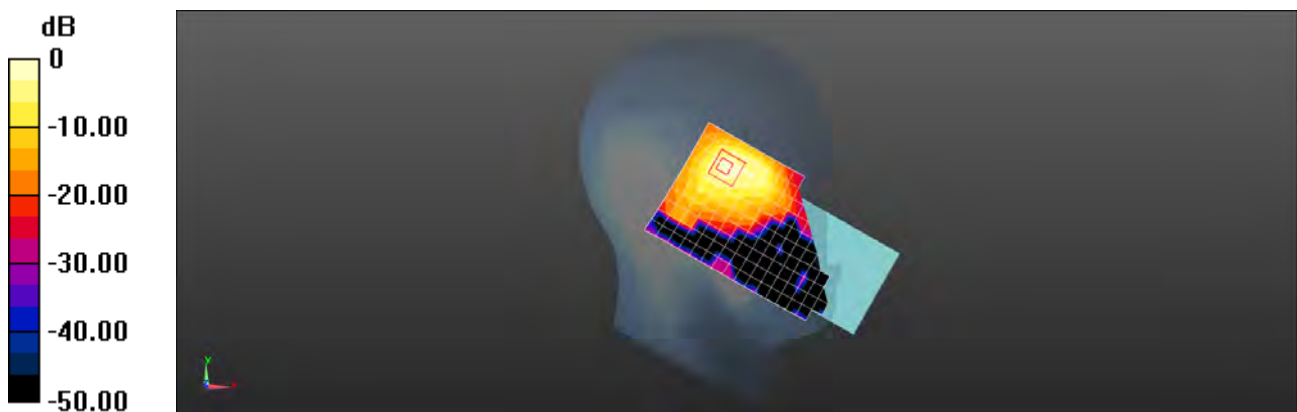
Configuration/Head/Zoom Scan (7x7x12)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 4.423 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 2.39 W/kg

SAR(1 g) = 0.677 W/kg; SAR(10 g) = 0.229 W/kg

Maximum value of SAR (measured) = 1.32 W/kg



0 dB = 1.32 W/kg = 1.21 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R WIFI 5G 802.11a 52CH Back side 15mm MIMO

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050006573

Communication System: UID 0, WI-FI(5GHz) (0); Frequency: 5260 MHz;Duty Cycle: 1:1.025

Medium: HSL5G;Medium parameters used: $f = 5260$ MHz; $\sigma = 4.729$ S/m; $\epsilon_r = 36.658$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(5.34, 5.34, 5.34); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn896; Calibrated: 2019-09-18
- Phantom: SAM 1; Type: SAM; Serial: 1640
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (11x19x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.688 W/kg

Configuration/Body/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.584 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.89 W/kg

SAR(1 g) = 0.433 W/kg; SAR(10 g) = 0.157 W/kg

Maximum value of SAR (measured) = 0.771 W/kg



Test Laboratory: SGS-SAR Lab

M2002J9R WIFI 5G 802.11a 157CH Back side 10mm MIMO

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050006573

Communication System: UID 0, WI-FI(5GHz) (0); Frequency: 5785 MHz; Duty Cycle: 1:1.025

Medium: HSL5G; Medium parameters used: $f = 5785$ MHz; $\sigma = 5.298$ S/m; $\epsilon_r = 35.45$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(4.83, 4.83, 4.83); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn896; Calibrated: 2019-09-18
- Phantom: SAM 1; Type: SAM; Serial: 1640
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (11x19x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.53 W/kg

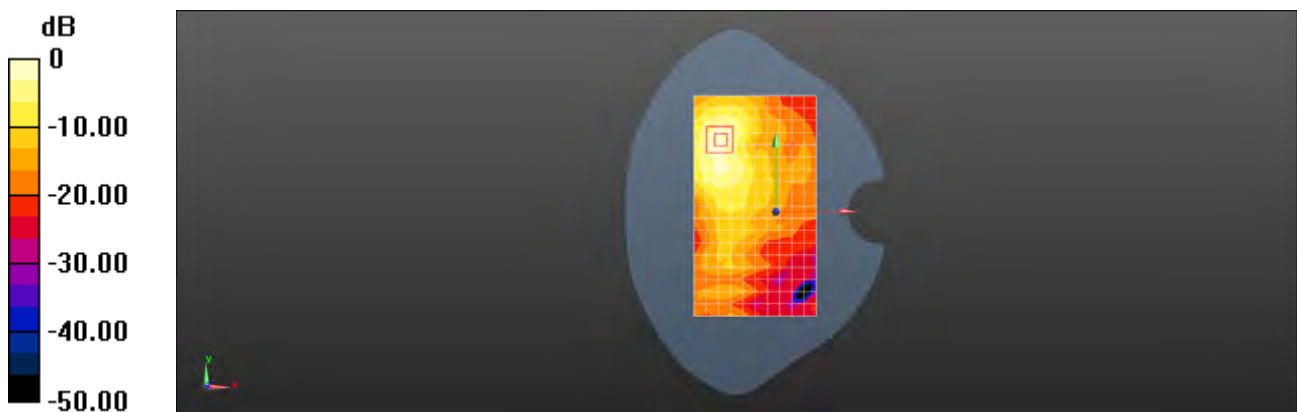
Configuration/Body/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.768 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 3.27 W/kg

SAR(1 g) = 0.851 W/kg; SAR(10 g) = 0.301 W/kg

Maximum value of SAR (measured) = 1.66 W/kg



Test Laboratory: SGS-SAR Lab

M2002J9R WIFI 5G 802.11a 120CH Right side 0mm MIMO

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050006573

Communication System: UID 0, WI-FI(5GHz) (0); Frequency: 5600 MHz; Duty Cycle: 1:1.025

Medium: HSL5G; Medium parameters used: $f = 5600$ MHz; $\sigma = 5.093$ S/m; $\epsilon_r = 35.786$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(4.9, 4.9, 4.9); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn896; Calibrated: 2019-09-18
- Phantom: SAM 1; Type: SAM; Serial: 1640
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Head/Area Scan (6x19x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 13.9 W/kg

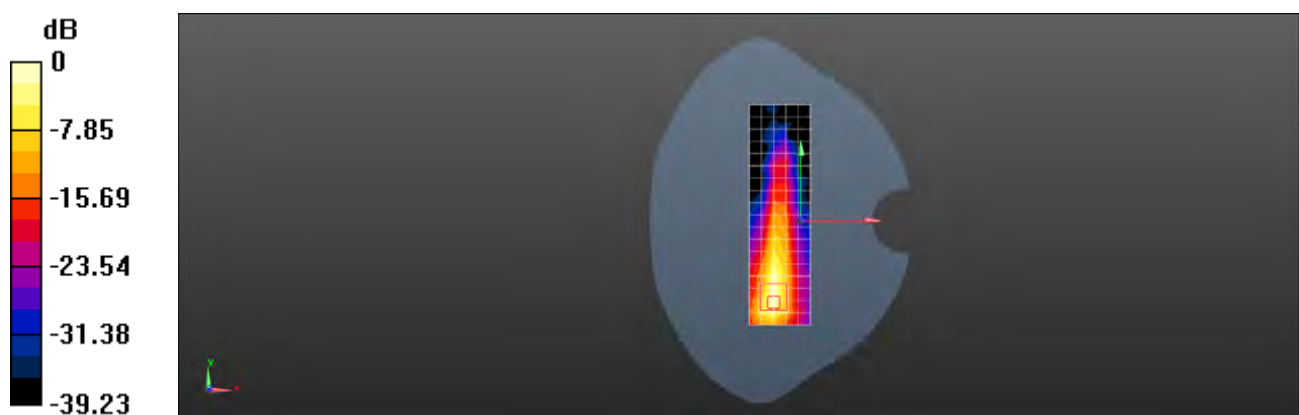
Configuration/Head/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 12.59 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 43.2 W/kg

SAR(1 g) = 6.19 W/kg; SAR(10 g) = 1.83 W/kg

Maximum value of SAR (measured) = 15.0 W/kg



0 dB = 15.0 W/kg = 11.76 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R Bluetooth DH5 39CH Left cheek Ant8

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050006573

Communication System: UID 0, Bluetooth (0); Frequency: 2441 MHz; Duty Cycle: 1:1.301

Medium: HSL2450; Medium parameters used: $f = 2441$ MHz; $\sigma = 1.756$ S/m; $\epsilon_r = 39.429$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.87, 7.87, 7.87); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Head/Area Scan (10x16x1): Measurement grid: $dx=12$ mm, $dy=12$ mm
Maximum value of SAR (measured) = 0.227 W/kg

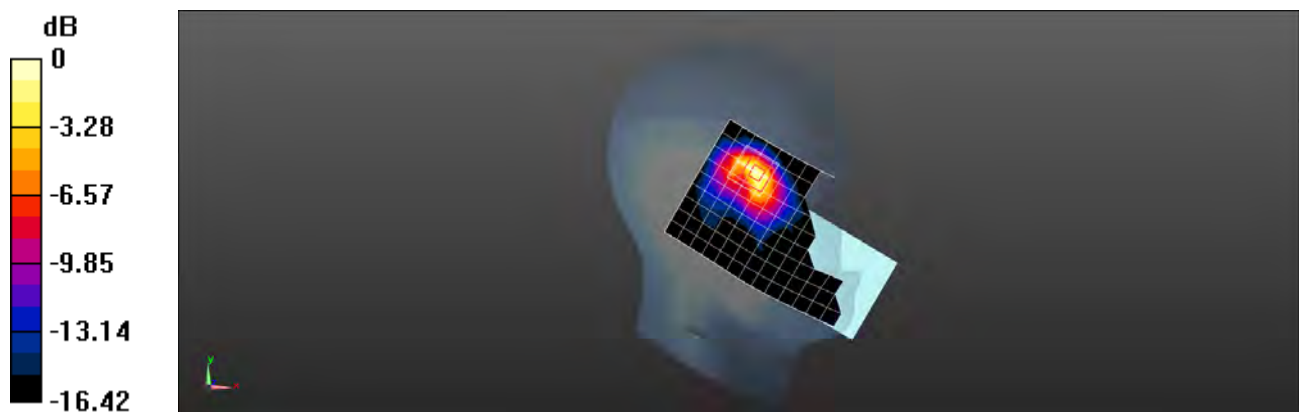
Configuration/Head/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 2.083 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.328 W/kg

SAR(1 g) = 0.121 W/kg; SAR(10 g) = 0.053 W/kg

Maximum value of SAR (measured) = 0.240 W/kg



0 dB = 0.240 W/kg = -6.20 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R Bluetooth DH5 39CH Back side 15mm Ant8

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050006573

Communication System: UID 0, Bluetooth (0); Frequency: 2441 MHz; Duty Cycle: 1:1.301

Medium: HSL2450; Medium parameters used: $f = 2441$ MHz; $\sigma = 1.746$ S/m; $\epsilon_r = 39.429$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.87, 7.87, 7.87); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (9x16x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.0176 W/kg

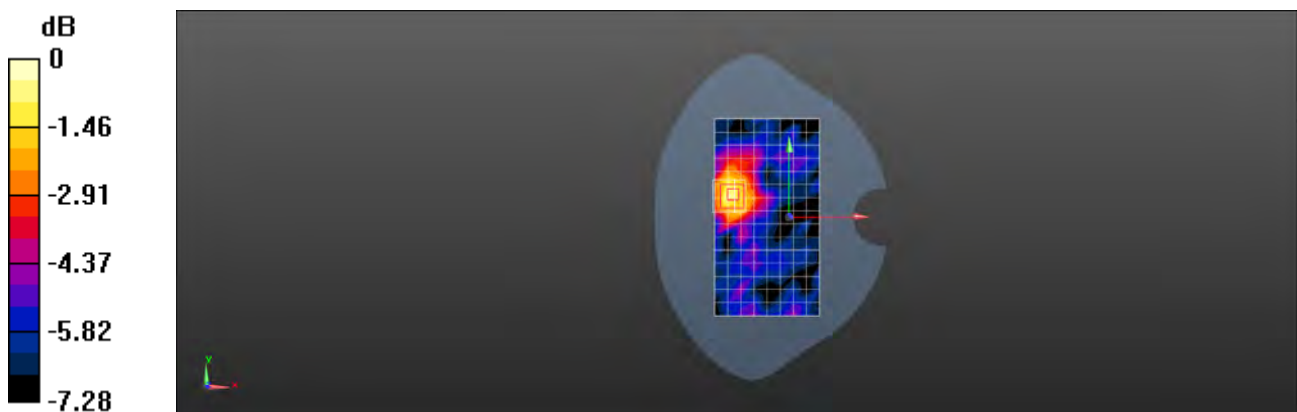
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.564 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.0210 W/kg

SAR(1 g) = 0.013 W/kg; SAR(10 g) = 0.00936 W/kg

Maximum value of SAR (measured) = 0.0183 W/kg



0 dB = 0.0183 W/kg = -17.38 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9R Bluetooth DH5 39CH Right side 10mm Ant8

DUT: M2002J9R; Type: Mobile phone; Serial: 863212050006573

Communication System: UID 0, Bluetooth (0); Frequency: 2441 MHz; Duty Cycle: 1:1.301

Medium: HSL2450; Medium parameters used: $f = 2441$ MHz; $\sigma = 1.756$ S/m; $\epsilon_r = 39.429$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(7.87, 7.87, 7.87); Calibrated: 2019-10-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.10.3(1513); SEMCAD X 14.6.13(7474)

Configuration/Body/Area Scan (6x16x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.0784 W/kg

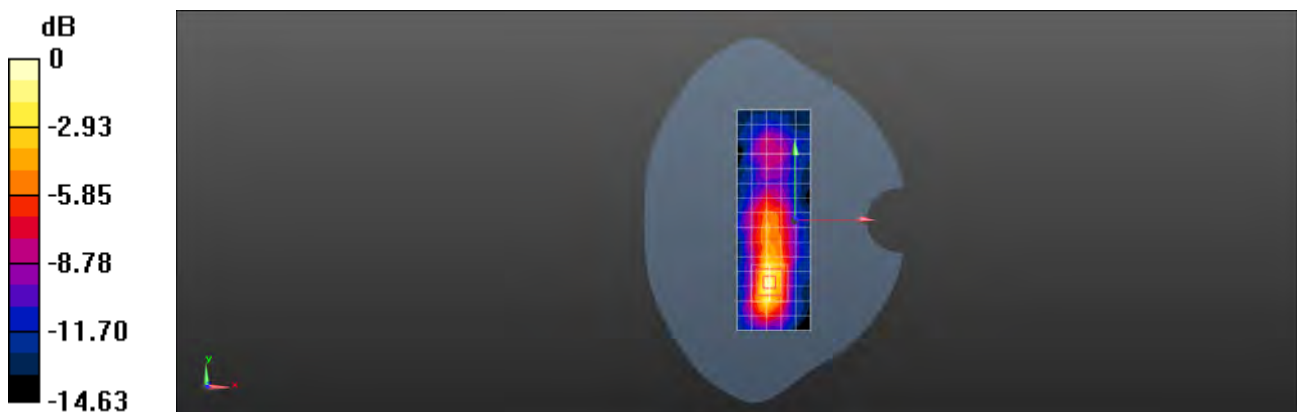
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.663 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.110 W/kg

SAR(1 g) = 0.052 W/kg; SAR(10 g) = 0.025 W/kg

Maximum value of SAR (measured) = 0.0880 W/kg



0 dB = 0.0880 W/kg = -10.56 dBW/kg



Appendix C

Calibration certificate

1. Dipole
D835V2-SN 4d105(2019-12-17)
D1750V2-SN 1149(2019-05-21)
D1900V2-SN 5d028(2019-12-17)
D2450V2-SN 733(2019-12-17)
D2600V2-SN 1125(2019-05-20)
D5GHzV2-SN 1165(2019-12-20)
2. DAE
DAE4-SN 1267(2019-10-22)
DAE4-SN 1428(2020-03-03)
DAE4-SN 896(2019-09-18)
3. Probe
EX3DV4-SN 3982(2019-09-11)
EX3DV4-SN 3923 (2019-10-22)
EX3DV4-SN 3793 (2020-05-09)



In Collaboration with
s p e a g
CALIBRATION LABORATORY



中国认可
国际互认
校准
CALIBRATION
CNAS L0570

Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China
Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504
E-mail: cttl@chinattl.com http://www.chinattl.cn

Client **SGS**

Certificate No: **Z19-60472**

CALIBRATION CERTIFICATE

Object

D835V2 - SN: 4d105

Calibration Procedure(s)

FF-Z11-003-01

Calibration Procedures for dipole validation kits

Calibration date:

December 17, 2019

This calibration Certificate documents the traceability to national standards, which realize the physical units of measurements(SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature(22±3)°C and humidity<70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
Power Meter NRP2	106276	11-Apr-19 (CTTL, No.J19X02605)	Apr-20
Power sensor NRP6A	101369	11-Apr-19 (CTTL, No.J19X02605)	Apr-20
Reference Probe EX3DV4	SN 3617	31-Jan-19(SPEAG,No.EX3-3617_Jan19)	Jan-20
DAE4	SN 1555	22-Aug-19(CTTL-SPEAG,No.Z19-60295)	Aug-20
Secondary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
Signal Generator E4438C	MY49071430	23-Jan-19 (CTTL, No.J19X00336)	Jan-20
NetworkAnalyzer E5071C	MY46110673	24-Jan-19 (CTTL, No.J19X00547)	Jan-20

	Name	Function	Signature
Calibrated by:	Zhao Jing	SAR Test Engineer	
Reviewed by:	Lin Hao	SAR Test Engineer	
Approved by:	Qi Dianyuan	SAR Project Leader	

Issued: December 23, 2019

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.



In Collaboration with

s p e a g
CALIBRATION LABORATORY

Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China
Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504
E-mail: cttl@chinattl.com http://www.chinattl.cn

Glossary:

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORM _{x,y,z}
N/A	not applicable or not measured

Calibration is Performed According to the Following Standards:

- IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- IEC 62209-1, "Measurement procedure for assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices- Part 1: Device used next to the ear (Frequency range of 300MHz to 6GHz)", July 2016
- IEC 62209-2, "Procedure to measure the Specific Absorption Rate (SAR) For wireless communication devices used in close proximity to the human body (frequency range of 30MHz to 6GHz)", March 2010
- KDB865664, SAR Measurement Requirements for 100 MHz to 6 GHz

Additional Documentation:

- DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- Measurement Conditions:** Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL:** The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- Feed Point Impedance and Return Loss:** These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- Electrical Delay:** One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- SAR measured:** SAR measured at the stated antenna input power.
- SAR normalized:** SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters:** The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of Measurement multiplied by the coverage factor $k=2$, which for a normal distribution Corresponds to a coverage probability of approximately 95%.



In Collaboration with

s p e a g
CALIBRATION LABORATORY

Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China
Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504
E-mail: cttl@chinattl.com http://www.chinattl.cn

Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY52	V52.10.3
Extrapolation	Advanced Extrapolation	
Phantom	Triple Flat Phantom 5.1C	
Distance Dipole Center - TSL	15 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	835 MHz $\pm$ 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	41.5	0.90 mho/m
Measured Head TSL parameters	(22.0 $\pm$ 0.2) °C	41.4 $\pm$ 6 %	0.88 mho/m $\pm$ 6 %
Head TSL temperature change during test	<1.0 °C	----	----

SAR result with Head TSL

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	2.37 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	9.64 W/kg $\pm$ 18.8 % (k=2)
SAR averaged over 10 cm ³ (10 g) of Head TSL	Condition	
SAR measured	250 mW input power	1.55 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	6.29 W/kg $\pm$ 18.7 % (k=2)



Appendix (Additional assessments outside the scope of CNAS L0570)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	49.5Ω- 4.96jΩ
Return Loss	- 26.0dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.261 ns
----------------------------------	----------

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
-----------------	-------



Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China
Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504
E-mail: cttl@chinattl.com http://www.chinattl.cn

DASY5 Validation Report for Head TSL

Date: 12.17.2019

Test Laboratory: CTTL, Beijing, China

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 4d105

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 835$ MHz; $\sigma = 0.879$ S/m; $\epsilon_r = 41.4$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3617; ConvF(9.75, 9.75, 9.75) @ 835 MHz; Calibrated: 1/31/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1555; Calibrated: 8/22/2019
- Phantom: MFP_V5.1C ; Type: QD 000 P51CA; Serial: 1062
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole Calibration/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 58.62 V/m; Power Drift = -0.04 dB

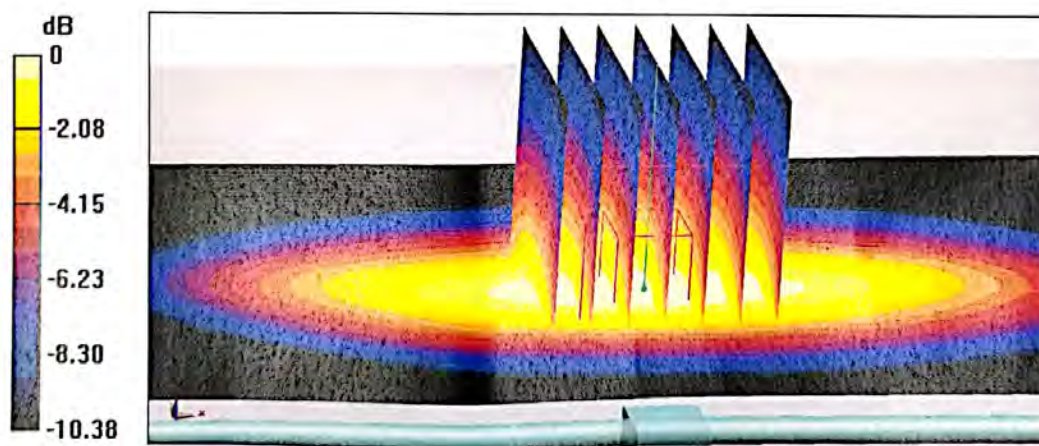
Peak SAR (extrapolated) = 3.58 W/kg

SAR(1 g) = 2.37 W/kg; SAR(10 g) = 1.55 W/kg

Smallest distance from peaks to all points 3 dB below = 19.8 mm

Ratio of SAR at M2 to SAR at M1 = 66.2%

Maximum value of SAR (measured) = 3.18 W/kg



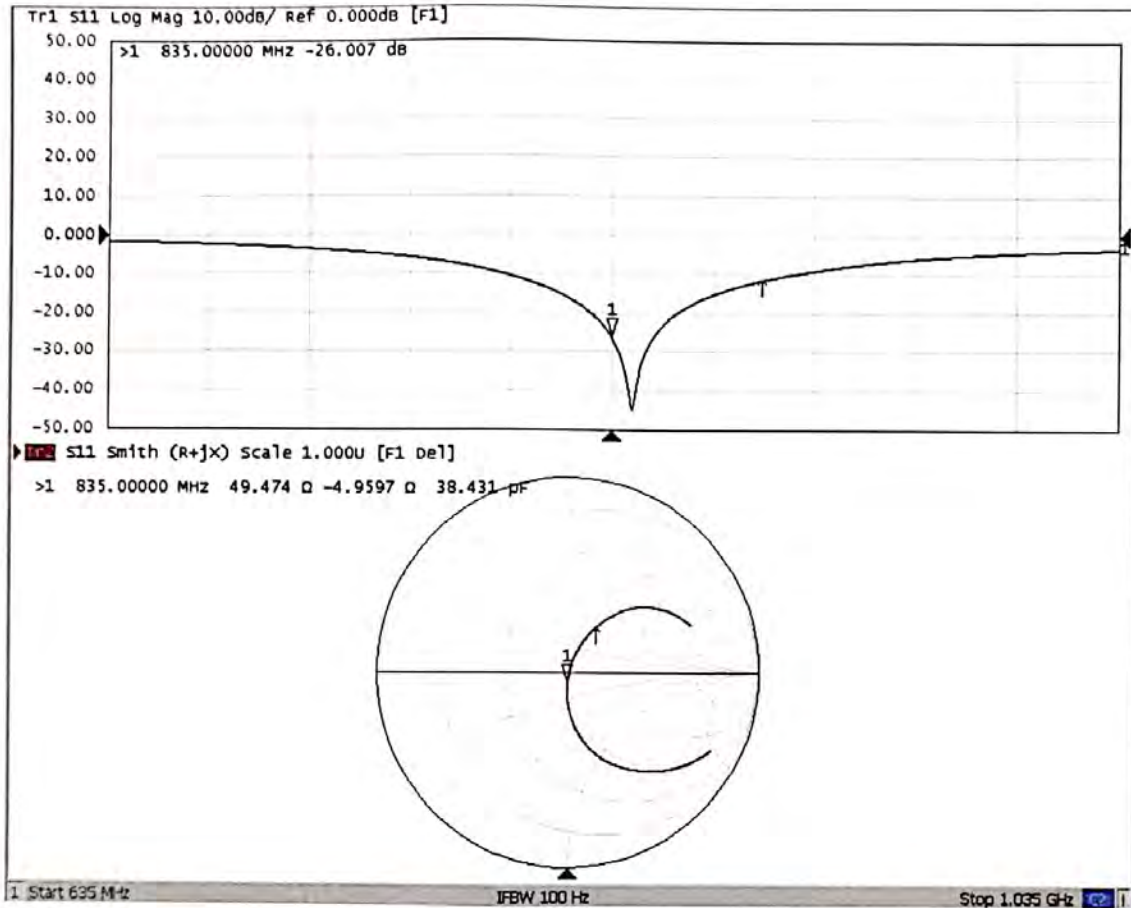
0 dB = 3.18 W/kg = 5.02 dBW/kg



In Collaboration with
s p e a g
CALIBRATION LABORATORY

Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China
Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504
E-mail: cttl@chinattl.com http://www.chinattl.cn

Impedance Measurement Plot for Head TSL





In Collaboration with
s p e a g
CALIBRATION LABORATORY



中国认可
国际互认
校准
CALIBRATION
CNAS L0570

Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China
Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504
E-mail: cttl@chinattl.com http://www.chinattl.cn

Client

SGS

Certificate No: Z19-60153

CALIBRATION CERTIFICATE

Object

D1750V2 - SN: 1149

Calibration Procedure(s)

FF-Z11-003-01

Calibration Procedures for dipole validation kits

Calibration date:

May 21, 2019

This calibration Certificate documents the traceability to national standards, which realize the physical units of measurements(SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature(22±3)°C and humidity<70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
Power Meter NRP2	106277	20-Aug-18 (CTTL, No.J18X06862)	Aug-19
Power sensor NRP8S	104291	20-Aug-18 (CTTL, No.J18X06862)	Aug-19
Reference Probe EX3DV4	SN 3617	31-Jan-19(SPEAG,No.EX3-3617_Jan19)	Jan-20
DAE4	SN 1331	06-Feb-19(SPEAG,No.DAE4-1331_Feb19)	Feb-20
Secondary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
Signal Generator E4438C	MY49071430	23-Jan-19 (CTTL, No.J19X00336)	Jan-20
NetworkAnalyzer E5071C	MY46110673	24-Jan-19 (CTTL, No.J19X00547)	Jan-20

	Name	Function
Calibrated by:	Zhao Jing	SAR Test Engineer
Reviewed by:	Lin Hao	SAR Test Engineer
Approved by:	Qi Dianyuan	SAR Project Leader

Signature

Issued: May 25, 2019

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.



In Collaboration with

s p e a g
CALIBRATION LABORATORY

Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China
Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504
E-mail: cttl@chinattl.com http://www.chinattl.cn

Glossary:

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORM _{x,y,z}
N/A	not applicable or not measured

Calibration is Performed According to the Following Standards:

- IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- IEC 62209-1, "Measurement procedure for assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices- Part 1: Device used next to the ear (Frequency range of 300MHz to 6GHz)", July 2016
- IEC 62209-2, "Procedure to measure the Specific Absorption Rate (SAR) For wireless communication devices used in close proximity to the human body (frequency range of 30MHz to 6GHz)", March 2010
- KDB865664, SAR Measurement Requirements for 100 MHz to 6 GHz

Additional Documentation:

- DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- Measurement Conditions:** Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL:** The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- Feed Point Impedance and Return Loss:** These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- Electrical Delay:** One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- SAR measured:** SAR measured at the stated antenna input power.
- SAR normalized:** SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters:** The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of Measurement multiplied by the coverage factor $k=2$, which for a normal distribution Corresponds to a coverage probability of approximately 95%.



In Collaboration with

s p e a g
CALIBRATION LABORATORY

Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China

Tel: +86-10-62304633-2079

Fax: +86-10-62304633-2504

E-mail: cttl@chinattl.com

http://www.chinattl.cn

Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY52	52.10.2.1495
Extrapolation	Advanced Extrapolation	
Phantom	Triple Flat Phantom 5.1C	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	1750 MHz $\pm$ 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	40.1	1.37 mho/m
Measured Head TSL parameters	(22.0 $\pm$ 0.2) °C	39.8 $\pm$ 6 %	1.38 mho/m $\pm$ 6 %
Head TSL temperature change during test	<1.0 °C	---	---

SAR result with Head TSL

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	9.12 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	36.3 W/kg $\pm$ 18.8 % (k=2)
SAR averaged over 10 cm ³ (10 g) of Head TSL	Condition	
SAR measured	250 mW input power	4.81 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	19.2 W/kg $\pm$ 18.7 % (k=2)

Body TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	53.4	1.49 mho/m
Measured Body TSL parameters	(22.0 $\pm$ 0.2) °C	54.2 $\pm$ 6 %	1.48 mho/m $\pm$ 6 %
Body TSL temperature change during test	<1.0 °C	---	---

SAR result with Body TSL

SAR averaged over 1 cm ³ (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	9.34 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	37.6 W/kg $\pm$ 18.8 % (k=2)
SAR averaged over 10 cm ³ (10 g) of Body TSL	Condition	
SAR measured	250 mW input power	4.90 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	19.7 W/kg $\pm$ 18.7 % (k=2)



In Collaboration with

s p e a g
CALIBRATION LABORATORY

Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China
Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504
E-mail: cttl@chinattl.com http://www.chinattl.cn

Appendix (Additional assessments outside the scope of CNAS L0570)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	47.6Ω+ 0.70 jΩ
Return Loss	- 31.8 dB

Antenna Parameters with Body TSL

Impedance, transformed to feed point	44.9Ω+ 0.29 jΩ
Return Loss	- 25.3 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.082 ns
----------------------------------	----------

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
-----------------	-------



In Collaboration with

s p e a g
CALIBRATION LABORATORY

Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China
Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504
E-mail: ctfl@chinattl.com http://www.chinattl.cn

DASY5 Validation Report for Head TSL

Date: 05.21.2019

Test Laboratory: CTTL, Beijing, China

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: D1750V2 - SN: 1149

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1750$ MHz; $\sigma = 1.379$ S/m; $\epsilon_r = 39.84$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3617; ConvF(8.38, 8.38, 8.38) @ 1750 MHz; Calibrated: 1/31/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1331; Calibrated: 2/6/2019
- Phantom: MFP_V5.1C ; Type: QD 000 P51CA; Serial: 1062
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7450)

System Performance Check/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

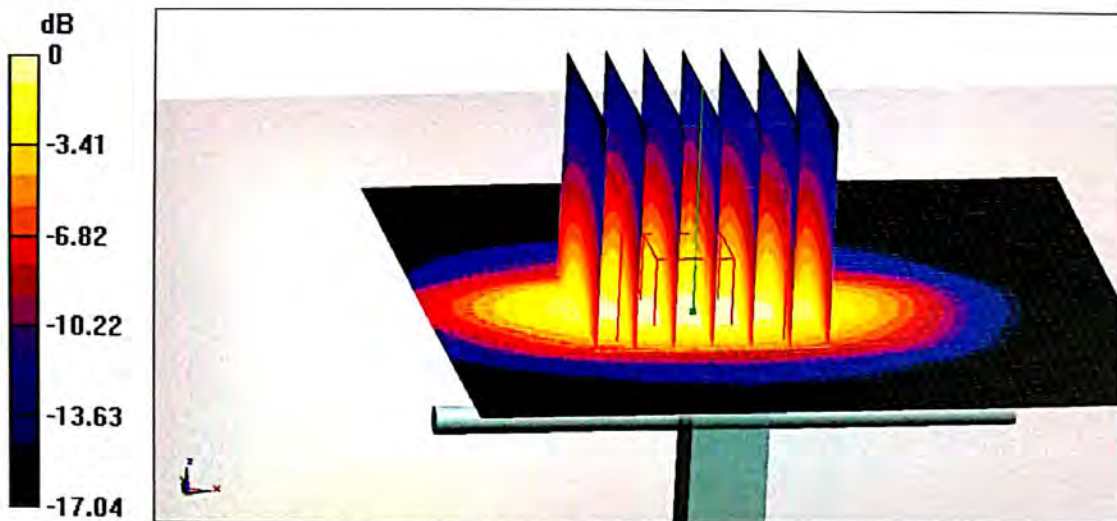
$dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 88.07 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 17.2 W/kg

SAR(1 g) = 9.12 W/kg; SAR(10 g) = 4.81 W/kg

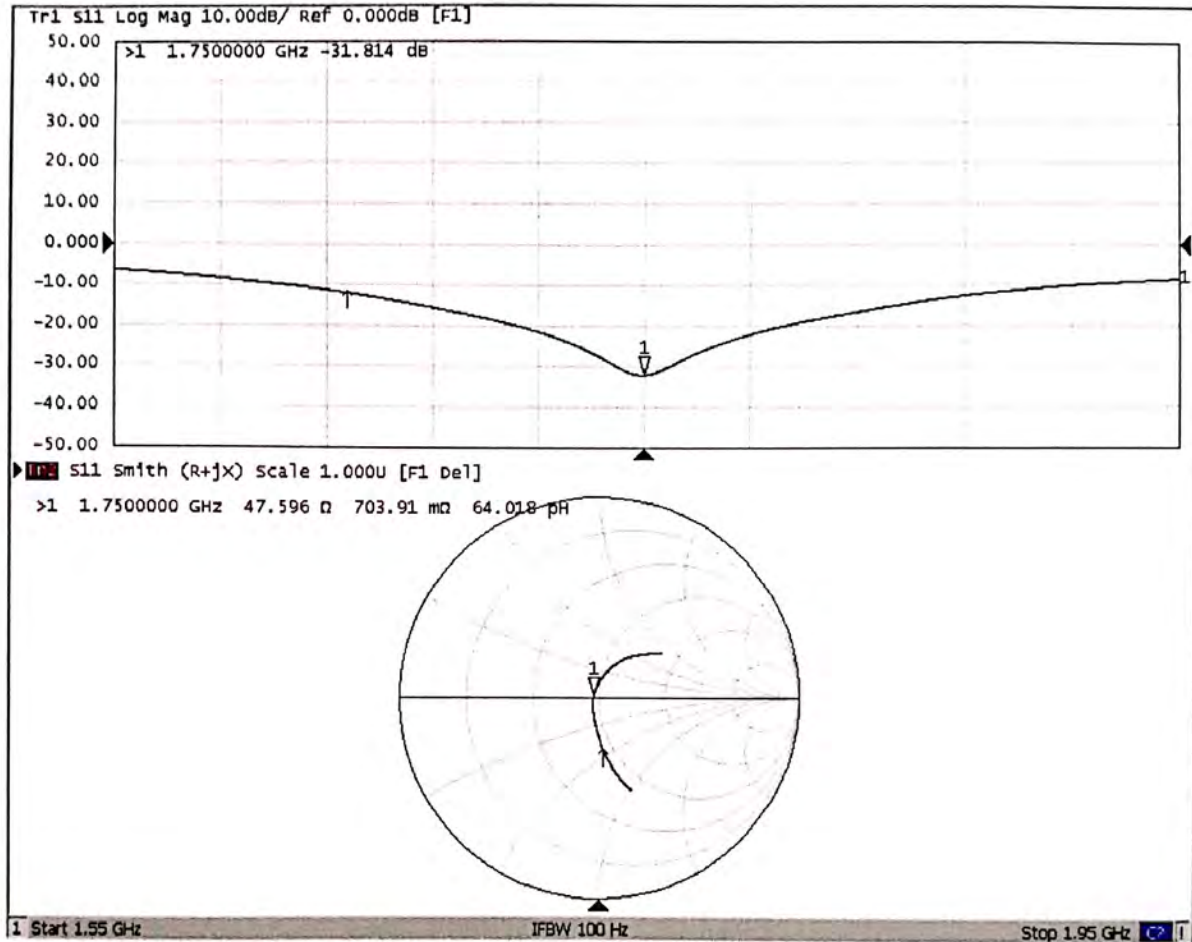
Maximum value of SAR (measured) = 14.2 W/kg



0 dB = 14.2 W/kg = 11.52 dBW/kg



Impedance Measurement Plot for Head TSL





In Collaboration with

s p e a g
CALIBRATION LABORATORY

Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China
Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504
E-mail: cttl@chinattl.com http://www.chinattl.cn

DASY5 Validation Report for Body TSL

Date: 05.21.2019

Test Laboratory: CTTL, Beijing, China

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: D1750V2 - SN: 1149

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1750$ MHz; $\sigma = 1.482$ S/m; $\epsilon_r = 54.22$; $\rho = 1000$ kg/m³

Phantom section: Center Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3617; ConvF(8.03, 8.03, 8.03) @ 1750 MHz; Calibrated: 1/31/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1331; Calibrated: 2/6/2019
- Phantom: MFP_V5.1C ; Type: QD 000 P51CA; Serial: 1062
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7450)

System Performance Check/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

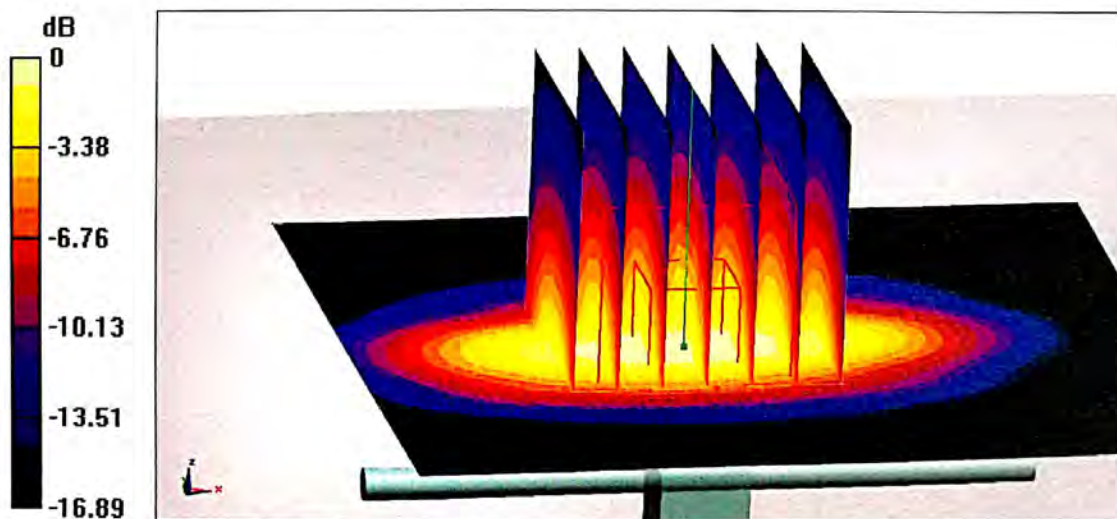
$dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 93.60 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 17.5 W/kg

SAR(1 g) = 9.34 W/kg; SAR(10 g) = 4.9 W/kg

Maximum value of SAR (measured) = 14.6 W/kg

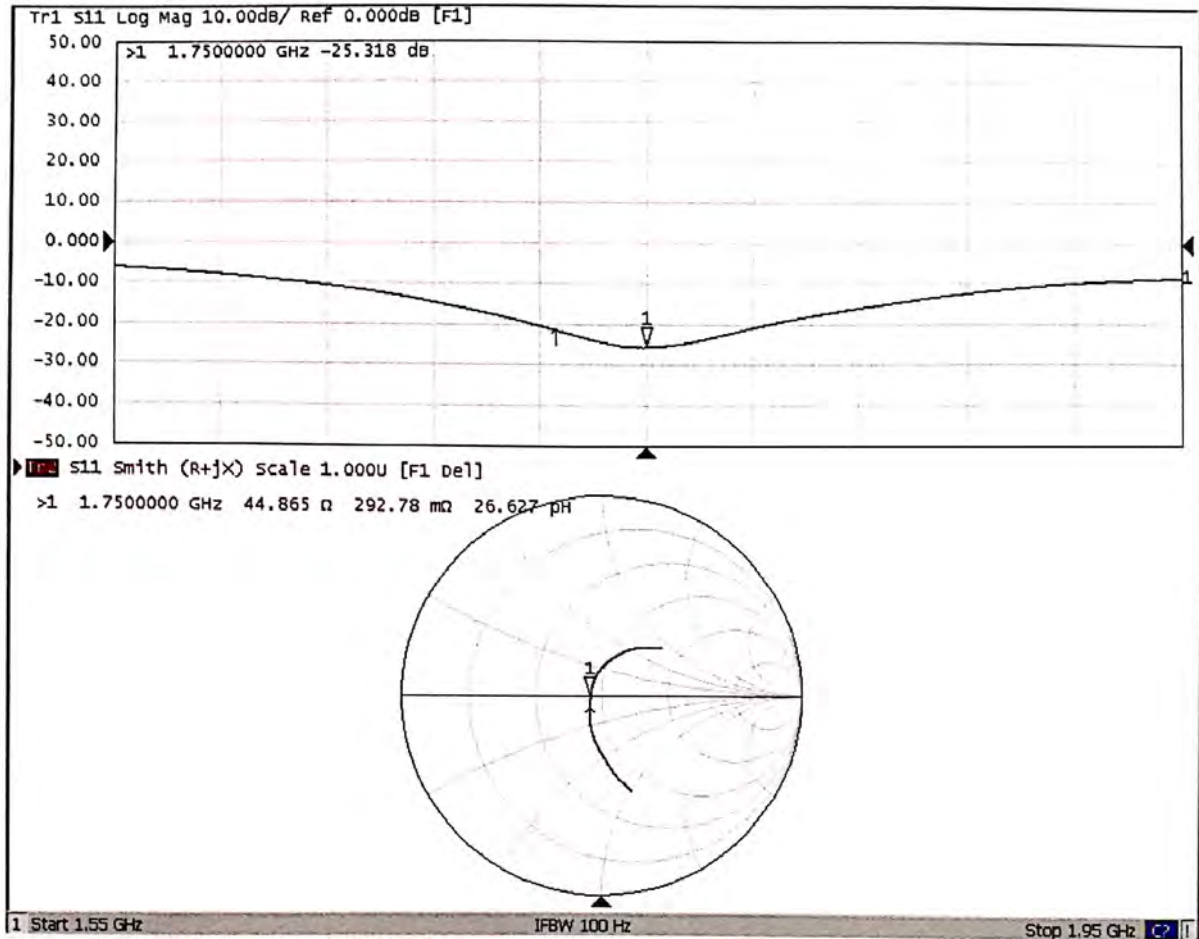


0 dB = 14.6 W/kg = 11.64 dBW/kg



Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China
Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504
E-mail: cttl@chinattl.com http://www.chinattl.cn

Impedance Measurement Plot for Body TSL





In Collaboration with
s p e a g
CALIBRATION LABORATORY



中国认可
国际互认
校准
CALIBRATION
CNAS L0570

Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China
Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504
E-mail: cttl@chinattl.com http://www.chinattl.cn

Client **SGS**

Certificate No: **Z19-60473**

CALIBRATION CERTIFICATE

Object **D1900V2 - SN: 5d028**

Calibration Procedure(s) **FF-Z11-003-01**
Calibration Procedures for dipole validation kits

Calibration date: **December 17, 2019**

This calibration Certificate documents the traceability to national standards, which realize the physical units of measurements(SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature(22 ± 3) $^{\circ}\text{C}$ and humidity<70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
Power Meter NRP2	106276	11-Apr-19 (CTTL, No.J19X02605)	Apr-20
Power sensor NRP6A	101369	11-Apr-19 (CTTL, No.J19X02605)	Apr-20
Reference Probe EX3DV4	SN 3617	31-Jan-19(SPEAG,No.EX3-3617_Jan19)	Jan-20
DAE4	SN 1555	22-Aug-19(CTTL-SPEAG,No.Z19-60295)	Aug-20
Secondary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
Signal Generator E4438C	MY49071430	23-Jan-19 (CTTL, No.J19X00336)	Jan-20
NetworkAnalyzer E5071C	MY46110673	24-Jan-19 (CTTL, No.J19X00547)	Jan-20

	Name	Function	Signature
Calibrated by:	Zhao Jing	SAR Test Engineer	
Reviewed by:	Lin Hao	SAR Test Engineer	
Approved by:	Qi Dianyuan	SAR Project Leader	

Issued: December 23, 2019

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.



In Collaboration with
s p e a g
CALIBRATION LABORATORY

Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China
Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504
E-mail: cttl@chinattl.com http://www.chinattl.cn

lossary:

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORM _{x,y,z}
N/A	not applicable or not measured

Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- b) IEC 62209-1, "Measurement procedure for assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices- Part 1: Device used next to the ear (Frequency range of 300MHz to 6GHz)", July 2016
- c) IEC 62209-2, "Procedure to measure the Specific Absorption Rate (SAR) For wireless communication devices used in close proximity to the human body (frequency range of 30MHz to 6GHz)", March 2010
- d) KDB865664, SAR Measurement Requirements for 100 MHz to 6 GHz

Additional Documentation:

- e) DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- *Measurement Conditions:* Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- *Antenna Parameters with TSL:* The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- *Feed Point Impedance and Return Loss:* These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- *Electrical Delay:* One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- *SAR measured:* SAR measured at the stated antenna input power.
- *SAR normalized:* SAR as measured, normalized to an input power of 1 W at the antenna connector.
- *SAR for nominal TSL parameters:* The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of Measurement multiplied by the coverage factor $k=2$, which for a normal distribution Corresponds to a coverage probability of approximately 95%.



Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY52	V52.10.3
Extrapolation	Advanced Extrapolation	
Phantom	Triple Flat Phantom 5.1C	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	1900 MHz $\pm$ 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	40.0	1.40 mho/m
Measured Head TSL parameters	(22.0 $\pm$ 0.2) °C	40.5 $\pm$ 6 %	1.39 mho/m $\pm$ 6 %
Head TSL temperature change during test	<1.0 °C	----	----

SAR result with Head TSL

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	9.75 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	39.3 W/kg $\pm$ 18.8 % (k=2)
SAR averaged over 10 cm ³ (10 g) of Head TSL	Condition	
SAR measured	250 mW input power	5.02 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	20.2 W/kg $\pm$ 18.7 % (k=2)



Appendix (Additional assessments outside the scope of CNAS L0570)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	51.2Ω+ 7.80jΩ
Return Loss	- 22.2dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.064 ns
----------------------------------	----------

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
-----------------	-------



In Collaboration with
s p e a g
CALIBRATION LABORATORY

Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China
Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504
E-mail: cttl@chinattl.com http://www.chinattl.cn

DASY5 Validation Report for Head TSL

Date: 12.17.2019

Test Laboratory: CTTL, Beijing, China

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN: 5d028

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.387$ S/m; $\epsilon_r = 40.48$; $\rho = 1000$ kg/m³

Phantom section: Center Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3617; ConvF(8.14, 8.14, 8.14) @ 1900 MHz; Calibrated: 1/31/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1555; Calibrated: 8/22/2019
- Phantom: MFP_V5.1C ; Type: QD 000 P51CA; Serial: 1062
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

System Performance Check/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

$dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 97.62 V/m; Power Drift = 0.02 dB

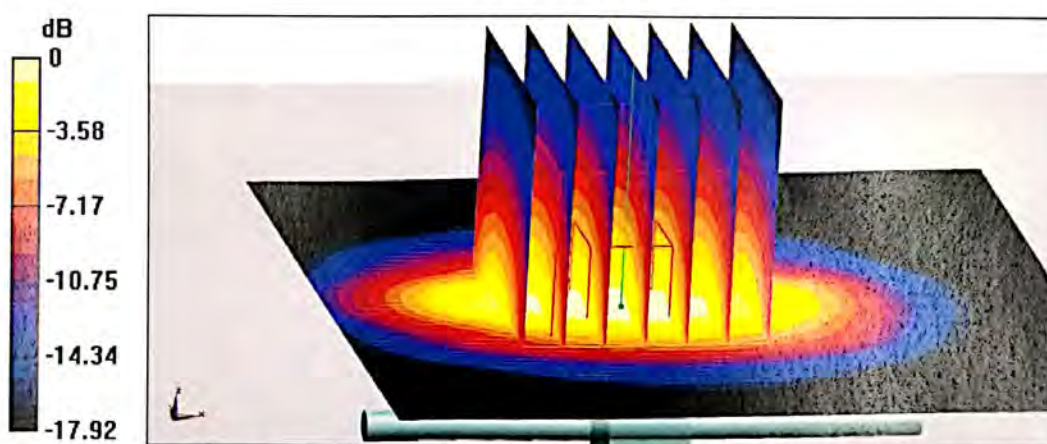
Peak SAR (extrapolated) = 18.8 W/kg

SAR(1 g) = 9.75 W/kg; SAR(10 g) = 5.02 W/kg

Smallest distance from peaks to all points 3 dB below = 9.8 mm

Ratio of SAR at M2 to SAR at M1 = 52.5%

Maximum value of SAR (measured) = 15.5 W/kg



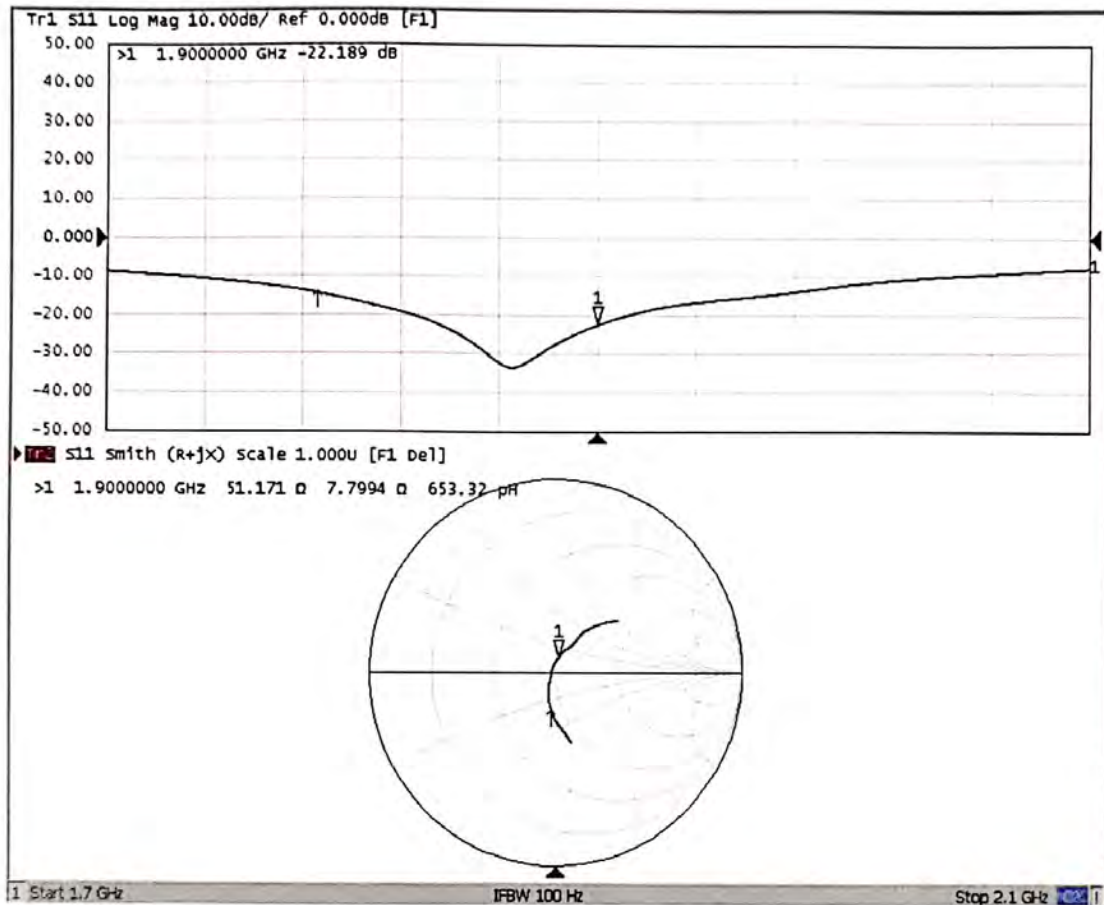
0 dB = 15.5 W/kg = 11.90 dBW/kg



In Collaboration with
s p e a g
CALIBRATION LABORATORY

Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China
Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504
E-mail: cttl@chinattl.com http://www.chinattl.cn

Impedance Measurement Plot for Head TSL





In Collaboration with
s p e a g
CALIBRATION LABORATORY



中国认可
国际互认
校准
CALIBRATION
CNAS L0570

Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China
Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504
E-mail: cttl@chinattl.com http://www.chinattl.cn

Client

SGS

Certificate No: Z19-60474

CALIBRATION CERTIFICATE

Object D2450V2 - SN: 733

Calibration Procedure(s) FF-Z11-003-01
Calibration Procedures for dipole validation kits

Calibration date: December 17, 2019

This calibration Certificate documents the traceability to national standards, which realize the physical units of measurements(SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature(22±3)°C and humidity<70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
Power Meter NRP2	106276	11-Apr-19 (CTTL, No.J19X02605)	Apr-20
Power sensor NRP6A	101369	11-Apr-19 (CTTL, No.J19X02605)	Apr-20
Reference Probe EX3DV4	SN 3617	31-Jan-19(SPEAG,No.EX3-3617_Jan19)	Jan-20
DAE4	SN 1555	22-Aug-19(CTTL-SPEAG,No.Z19-60295)	Aug-20
Secondary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
Signal Generator E4438C	MY49071430	23-Jan-19 (CTTL, No.J19X00336)	Jan-20
NetworkAnalyzer E5071C	MY46110673	24-Jan-19 (CTTL, No.J19X00547)	Jan-20

	Name	Function	Signature
Calibrated by:	Zhao Jing	SAR Test Engineer	
Reviewed by:	Lin Hao	SAR Test Engineer	
Approved by:	Qi Dianyuan	SAR Project Leader	

Issued: December 23, 2019

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.



In Collaboration with

s p e a g
CALIBRATION LABORATORY

Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China
Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504
E-mail: cttl@chinattl.com http://www.chinattl.cn

Glossary:

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORM _{x,y,z}
N/A	not applicable or not measured

Calibration is Performed According to the Following Standards:

- IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- IEC 62209-1, "Measurement procedure for assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices- Part 1: Device used next to the ear (Frequency range of 300MHz to 6GHz)", July 2016
- IEC 62209-2, "Procedure to measure the Specific Absorption Rate (SAR) For wireless communication devices used in close proximity to the human body (frequency range of 30MHz to 6GHz)", March 2010
- KDB865664, SAR Measurement Requirements for 100 MHz to 6 GHz

Additional Documentation:

- DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- Measurement Conditions:** Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL:** The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- Feed Point Impedance and Return Loss:** These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- Electrical Delay:** One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- SAR measured:** SAR measured at the stated antenna input power.
- SAR normalized:** SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters:** The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of Measurement multiplied by the coverage factor $k=2$, which for a normal distribution Corresponds to a coverage probability of approximately 95%.



In Collaboration with

s p e a g
CALIBRATION LABORATORY

Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China
Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504
E-mail: cttl@chinattl.com http://www.chinattl.cn

Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY52	V52.10.3
Extrapolation	Advanced Extrapolation	
Phantom	Triple Flat Phantom 5.1C	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	2450 MHz $\pm$ 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	39.2	1.80 mho/m
Measured Head TSL parameters	(22.0 $\pm$ 0.2) °C	39.0 $\pm$ 6 %	1.77 mho/m $\pm$ 6 %
Head TSL temperature change during test	<1.0 °C	---	---

SAR result with Head TSL

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	12.9 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	51.9 W/kg $\pm$ 18.8 % (k=2)
SAR averaged over 10 cm ³ (10 g) of Head TSL	Condition	
SAR measured	250 mW input power	5.92 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	23.8 W/kg $\pm$ 18.7 % (k=2)



In Collaboration with

s p e a g
CALIBRATION LABORATORY

Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China
Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504
E-mail: cttl@chinattl.com http://www.chinattl.cn

Appendix (Additional assessments outside the scope of CNAS L0570)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	52.2Ω+ 3.88 jΩ
Return Loss	- 27.2dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.018 ns
----------------------------------	----------

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
-----------------	-------



In Collaboration with

s p e a g
CALIBRATION LABORATORY

Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China
Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504
E-mail: cttl@chinattl.com http://www.chinattl.cn

DASY5 Validation Report for Head TSL

Date: 12.17.2019

Test Laboratory: CTTL, Beijing, China

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN: 733

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.772$ S/m; $\epsilon_r = 39.01$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3617; ConvF(7.62, 7.62, 7.62) @ 2450 MHz; Calibrated: 1/31/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1555; Calibrated: 8/22/2019
- Phantom: MFP_V5.1C ; Type: QD 000 P51CA; Serial: 1062
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Dipole Calibration/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 100.5 V/m; Power Drift = -0.07 dB

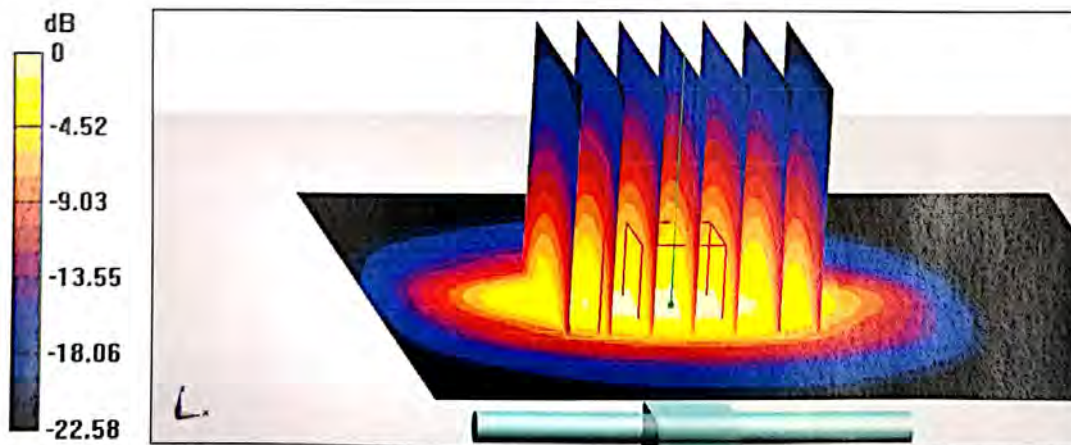
Peak SAR (extrapolated) = 27.3 W/kg

SAR(1 g) = 12.9 W/kg; SAR(10 g) = 5.92 W/kg

Smallest distance from peaks to all points 3 dB below = 9 mm

Ratio of SAR at M2 to SAR at M1 = 47.5%

Maximum value of SAR (measured) = 21.8 W/kg



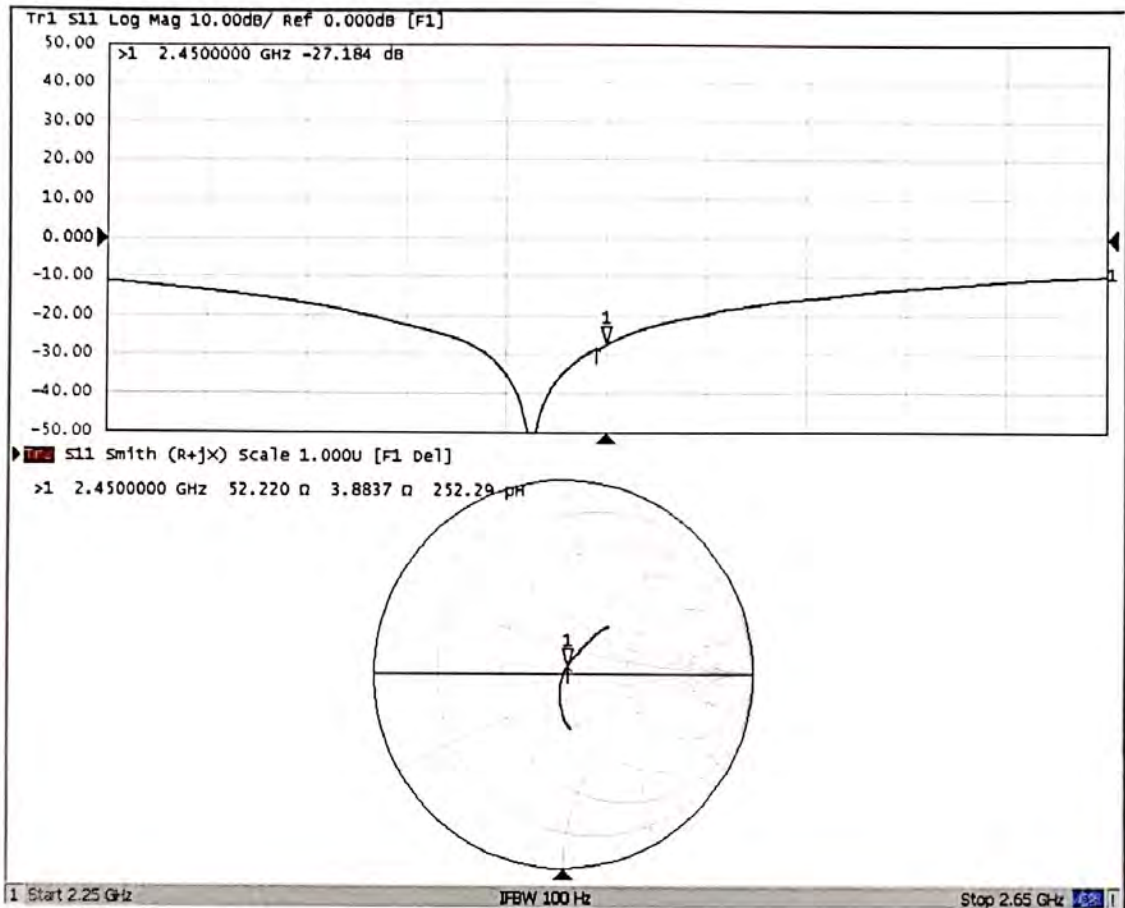
0 dB = 21.8 W/kg = 13.38 dBW/kg



In Collaboration with
s p e a g
CALIBRATION LABORATORY

Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China
Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504
E-mail: cttl@chinattl.com http://www.chinattl.cn

Impedance Measurement Plot for Head TSL





In Collaboration with
s p e a g
CALIBRATION LABORATORY



中国认可
国际互认
校准
CALIBRATION
CNAS L0570

Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China
Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504
E-mail: cttl@chinattl.com http://www.chinattl.cn

Client

SGS

Certificate No: Z19-60155

CALIBRATION CERTIFICATE

Object

D2600V2 - SN: 1125

Calibration Procedure(s)

FF-Z11-003-01

Calibration Procedures for dipole validation kits

Calibration date:

May 20, 2019

This calibration Certificate documents the traceability to national standards, which realize the physical units of measurements(SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature(22±3)°C and humidity<70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
Power Meter NRP2	106277	20-Aug-18 (CTTL, No.J18X06862)	Aug-19
Power sensor NRP8S	104291	20-Aug-18 (CTTL, No.J18X06862)	Aug-19
Reference Probe EX3DV4	SN 3617	31-Jan-19(SPEAG,No.EX3-3617_Jan19)	Jan-20
DAE4	SN 1331	06-Feb-19(SPEAG,No.DAE4-1331_Feb19)	Feb-20
Secondary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
Signal Generator E4438C	MY49071430	23-Jan-19 (CTTL, No.J19X00336)	Jan-20
Network Analyzer E5071C	MY46110673	24-Jan-19 (CTTL, No.J19X00547)	Jan-20

	Name	Function	Signature
Calibrated by:	Zhao Jing	SAR Test Engineer	
Reviewed by:	Lin Hao	SAR Test Engineer	
Approved by:	Qi Dianyuan	SAR Project Leader	

Issued: May 25, 2019

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.



In Collaboration with

s p e a g
CALIBRATION LABORATORY

Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China
Tel: +86-10-62304633-2079 Fax: +86-10-62304633-2504
E-mail: cttl@chinattl.com http://www.chinattl.cn

Glossary:

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORM _{x,y,z}
N/A	not applicable or not measured

Calibration is Performed According to the Following Standards:

- IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- IEC 62209-1, "Measurement procedure for assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices- Part 1: Device used next to the ear (Frequency range of 300MHz to 6GHz)", July 2016
- IEC 62209-2, "Procedure to measure the Specific Absorption Rate (SAR) For wireless communication devices used in close proximity to the human body (frequency range of 30MHz to 6GHz)", March 2010
- KDB865664, SAR Measurement Requirements for 100 MHz to 6 GHz

Additional Documentation:

- DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- Measurement Conditions:** Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL:** The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- Feed Point Impedance and Return Loss:** These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- Electrical Delay:** One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- SAR measured:** SAR measured at the stated antenna input power.
- SAR normalized:** SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters:** The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of Measurement multiplied by the coverage factor $k=2$, which for a normal distribution Corresponds to a coverage probability of approximately 95%.



Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY52	52.10.2.1495
Extrapolation	Advanced Extrapolation	
Phantom	Triple Flat Phantom 5.1C	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	2600 MHz $\pm$ 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	39.0	1.96 mho/m
Measured Head TSL parameters	(22.0 $\pm$ 0.2) °C	38.6 $\pm$ 6 %	1.95 mho/m $\pm$ 6 %
Head TSL temperature change during test	<1.0 °C	----	----

SAR result with Head TSL

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	14.2 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	56.8 W/kg $\pm$ 18.8 % (k=2)
SAR averaged over 10 cm ³ (10 g) of Head TSL	Condition	
SAR measured	250 mW input power	6.22 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	24.9 W/kg $\pm$ 18.7 % (k=2)

Body TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	52.5	2.16 mho/m
Measured Body TSL parameters	(22.0 $\pm$ 0.2) °C	52.9 $\pm$ 6 %	2.17 mho/m $\pm$ 6 %
Body TSL temperature change during test	<1.0 °C	----	----

SAR result with Body TSL

SAR averaged over 1 cm ³ (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	13.5 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	54.0 W/kg $\pm$ 18.8 % (k=2)
SAR averaged over 10 cm ³ (10 g) of Body TSL	Condition	
SAR measured	250 mW input power	5.90 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	23.6 W/kg $\pm$ 18.7 % (k=2)



Appendix(Additional assessments outside the scope of CNAS L0570)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	48.9Ω- 5.00jΩ
Return Loss	- 25.7dB

Antenna Parameters with Body TSL

Impedance, transformed to feed point	46.4Ω- 4.25jΩ
Return Loss	- 24.8dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.020 ns
----------------------------------	----------

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
-----------------	-------