



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

Report No.: ZR/2020/3001007
Page : 179 of 185

State 24	0.050	State 24	0.154	State 24	0.051
State 25	0.122	State 25	0.050	State 25	0.067
State 26	0.120	State 26	0.113	State 26	0.115
State 27	0.080	State 27	0.104	State 27	0.159
State 28	0.125	State 28	0.044	State 28	0.062
State 29	0.130	State 29	0.182	State 29	0.069
State 30	0.110	State 30	0.074	State 30	0.188
State 31	0.115	State 31	0.062	State 31	0.068
State 32	0.080	State 32	0.084	State 32	0.071
State 33	0.118	State 33	0.071	State 33	0.180
State 34	0.095	State 34	0.069	State 34	0.074
State 35	0.096	State 35	0.070	State 35	0.094
State 36	0.095	State 36	0.052	State 36	0.050
State 37	0.142	State 37	0.069	State 37	0.062
State 38	0.128	State 38	0.139	State 38	0.059
State 39	0.079	State 39	0.115	State 39	0.088
State 40	0.108	State 40	0.056	State 40	0.060
State 41	0.132	State 41	0.105	State 41	0.132
State 42	0.128	State 42	0.158	State 42	0.107
State 43	0.050	State 43	0.079	State 43	0.074
State 44	0.081	State 44	0.079	State 44	0.093
State 45	0.116	State 45	0.166	State 45	0.177
State 46	0.062	State 46	0.162	State 46	0.037
State 47	0.060	State 47	0.110	State 47	0.126
State 48	0.054	State 48	0.170	State 48	0.080
State 49	0.113	State 49	0.136	State 49	0.083
State 50	0.107	State 50	0.182	State 50	0.078
State 51	0.057	State 51	0.070	State 51	0.129
State 52	0.095	State 52	0.175	State 52	0.038
State 53	0.075	State 53	0.080	State 53	0.161
State 54	0.064	State 54	0.139	State 54	0.112
State 55	0.085	State 55	0.201	State 55	0.168
State 56	0.067	State 56	0.066	State 56	0.180
State 57	0.062	State 57	0.088	State 57	0.111
State 58	0.062	State 58	0.134	State 58	0.136
State 59	0.087	State 59	0.147	State 59	0.104
State 60	0.057	State 60	0.056	State 60	0.056
State 61	0.052	State 61	0.192	State 61	0.051
State 62	0.113	State 62	0.141	State 62	0.101
State 63	0.121	State 63	0.091	State 63	0.056
State 64	0.056	State 64	0.151	State 64	0.069
State 65	0.099	State 65	0.100	State 65	0.148
State 66	0.063	State 66	0.060	State 66	0.070
State 67	0.124	State 67	0.135	State 67	0.091
State 68	0.076	State 68	0.176	State 68	0.173
State 69	0.124	State 69	0.136	State 69	0.069
State 70	0.105	State 70	0.146	State 70	0.057
State 71	0.106	State 71	0.093	State 71	0.142
State 72	0.052	State 72	0.119	State 72	0.084
State 73	0.131	State 73	0.169	State 73	0.107
State 74	0.071	State 74	0.154	State 74	0.130
State 75	0.127	State 75	0.078	State 75	0.067
State 76	0.102	State 76	0.092	State 76	0.041
State 77	0.065	State 77	0.115	State 77	0.154
State 78	0.107	State 78	0.079	State 78	0.160
State 79	0.086	State 79	0.089	State 79	0.048
State 80	0.109	State 80	0.110	State 80	0.115
State 81	0.124	State 81	0.114	State 81	0.071
State 82	0.051	State 82	0.098	State 82	0.082
State 83	0.068	State 83	0.107	State 83	0.163
State 84	0.104	State 84	0.114	State 84	0.137
State 85	0.056	State 85	0.110	State 85	0.052
State 86	0.104	State 86	0.104	State 86	0.116
State 87	0.091	State 87	0.105	State 87	0.095



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 Laboratory

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

Member of the SGS Group (SGS SA)



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

Report No.: ZR/2020/3001007
Page : 180 of 185

State 88	0.110	State 88	0.098	State 88	0.074
State 89	0.054	State 89	0.123	State 89	0.116
State 90	0.085	State 90	0.156	State 90	0.053
State 91	0.046	State 91	0.108	State 91	0.076
State 92	0.075	State 92	0.098	State 92	0.121
State 93	0.131	State 93	0.137	State 93	0.076
State 94	0.056	State 94	0.093	State 94	0.049
State 95	0.058	State 95	0.087	State 95	0.095
State 96	0.068	State 96	0.056	State 96	0.136
State 97	0.062	State 97	0.091	State 97	0.062
State 98	0.102	State 98	0.151	State 98	0.146
State 99	0.125	State 99	0.075	State 99	0.066
State 100	0.084	State 100	0.096	State 100	0.052
State 101	0.091	State 101	0.164	State 101	0.123
State 102	0.087	State 102	0.151	State 102	0.122
State 103	0.051	State 103	0.093	State 103	0.035
State 104	0.083	State 104	0.107	State 104	0.181
State 105	0.065	State 105	0.053	State 105	0.081
State 106	0.062	State 106	0.102	State 106	0.077
State 107	0.107	State 107	0.171	State 107	0.069
State 108	0.087	State 108	0.122	State 108	0.089
State 109	0.046	State 109	0.048	State 109	0.042
State 110	0.058	State 110	0.138	State 110	0.162
State 111	0.071	State 111	0.131	State 111	0.173
State 112	0.052	State 112	0.054	State 112	0.090
State 113	0.130	State 113	0.067	State 113	0.087
State 114	0.107	State 114	0.077	State 114	0.126
State 115	0.047	State 115	0.054	State 115	0.091
State 116	0.084	State 116	0.096	State 116	0.145
State 117	0.105	State 117	0.081	State 117	0.057
State 118	0.044	State 118	0.049	State 118	0.083
State 119	0.110	State 119	0.069	State 119	0.107
State 120	0.097	State 120	0.072	State 120	0.084
State 121	0.039	State 121	0.046	State 121	0.076
State 122	0.129	State 122	0.162	State 122	0.165
State 123	0.088	State 123	0.089	State 123	0.053
State 124	0.061	State 124	0.039	State 124	0.083
State 125	0.091	State 125	0.132	State 125	0.166
State 126	0.111	State 126	0.063	State 126	0.058
State 127	0.052	State 127	0.050	State 127	0.061
State 128	0.115	State 128	0.101	State 128	0.088
State 129	0.052	State 129	0.165	State 129	0.146
State 130	0.033	State 130	0.061	State 130	0.067
State 131	0.097	State 131	0.051	State 131	0.125
State 132	0.082	State 132	0.117	State 132	0.114
State 133	0.036	State 133	0.033	State 133	0.078
State 134	0.093	State 134	0.130	State 134	0.162
State 135	0.099	State 135	0.143	State 135	0.138
State 136	0.045	State 136	0.046	State 136	0.090
State 137	0.091	State 137	0.163	State 137	0.128
State 138	0.085	State 138	0.134	State 138	0.095
State 139	0.038	State 139	0.042	State 139	0.061
State 140	0.065	State 140	0.137	State 140	0.123
State 141	0.116	State 141	0.092	State 141	0.161
State 142	0.046	State 142	0.049	State 142	0.090
State 143	0.086	State 143	0.070	State 143	0.150
State 144	0.082	State 144	0.110	State 144	0.116



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 Laboratory

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

Member of the SGS Group (SGS SA)



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

Report No.: ZR/2020/3001007
Page : 181 of 185

Hotspot SAR Data					
GSM850 Ant0		WCDMA Band V Ant0		LTE Band 5 Ant0	
GPRS 4TS		RMC		QPSK 10MHz 1RB_0	
Test Position	Back side 10mm	Test Position	Back side 10mm	Test Position	Back side 10mm
Test ch./Freq.	190/836.6	Test ch./Freq.	4182/836.4	Test ch./Freq.	20600/844
Measured 1g SAR (W/kg)	0.394	Measured 1g SAR (W/kg)	0.498	Measured 1g SAR (W/kg)	0.458
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 55)	0.345	Auto-tune (State 43)	0.456	Auto-tune (State 58)	0.391
State 1	0.160	State 1	0.150	State 1	0.178
State 2	0.213	State 2	0.204	State 2	0.225
State 3	0.280	State 3	0.286	State 3	0.143
State 4	0.235	State 4	0.242	State 4	0.121
State 5	0.188	State 5	0.291	State 5	0.205
State 6	0.241	State 6	0.131	State 6	0.253
State 7	0.201	State 7	0.141	State 7	0.118
State 8	0.210	State 8	0.176	State 8	0.178
State 9	0.239	State 9	0.253	State 9	0.113
State 10	0.178	State 10	0.210	State 10	0.105
State 11	0.206	State 11	0.256	State 11	0.255
State 12	0.200	State 12	0.130	State 12	0.163
State 13	0.134	State 13	0.297	State 13	0.124
State 14	0.225	State 14	0.156	State 14	0.268
State 15	0.175	State 15	0.277	State 15	0.095
State 16	0.223	State 16	0.276	State 16	0.122
State 17	0.277	State 17	0.180	State 17	0.135
State 18	0.266	State 18	0.160	State 18	0.112
State 19	0.193	State 19	0.264	State 19	0.126
State 20	0.203	State 20	0.256	State 20	0.088
State 21	0.153	State 21	0.256	State 21	0.216
State 22	0.162	State 22	0.361	State 22	0.115
State 23	0.286	State 23	0.256	State 23	0.177
State 24	0.167	State 24	0.222	State 24	0.138
State 25	0.241	State 25	0.162	State 25	0.099
State 26	0.185	State 26	0.284	State 26	0.136
State 27	0.219	State 27	0.216	State 27	0.257
State 28	0.234	State 28	0.198	State 28	0.095
State 29	0.239	State 29	0.286	State 29	0.178
State 30	0.265	State 30	0.165	State 30	0.270
State 31	0.149	State 31	0.252	State 31	0.104
State 32	0.200	State 32	0.214	State 32	0.084
State 33	0.204	State 33	0.237	State 33	0.243
State 34	0.151	State 34	0.215	State 34	0.132
State 35	0.150	State 35	0.177	State 35	0.175
State 36	0.213	State 36	0.119	State 36	0.148
State 37	0.197	State 37	0.301	State 37	0.118
State 38	0.158	State 38	0.247	State 38	0.186
State 39	0.285	State 39	0.229	State 39	0.255
State 40	0.201	State 40	0.325	State 40	0.132
State 41	0.194	State 41	0.177	State 41	0.106
State 42	0.252	State 42	0.248	State 42	0.219
State 43	0.135	State 43	0.451	State 43	0.280
State 44	0.255	State 44	0.167	State 44	0.258
State 45	0.287	State 45	0.139	State 45	0.151



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) 26710594 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



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

Report No.: ZR/2020/3001007
Page : 182 of 185

State 46	0.218	State 46	0.303	State 46	0.269
State 47	0.166	State 47	0.126	State 47	0.236
State 48	0.220	State 48	0.240	State 48	0.265
State 49	0.230	State 49	0.318	State 49	0.295
State 50	0.161	State 50	0.245	State 50	0.253
State 51	0.189	State 51	0.225	State 51	0.241
State 52	0.141	State 52	0.326	State 52	0.281
State 53	0.239	State 53	0.205	State 53	0.210
State 54	0.276	State 54	0.287	State 54	0.249
State 55	0.336	State 55	0.399	State 55	0.237
State 56	0.200	State 56	0.177	State 56	0.073
State 57	0.272	State 57	0.290	State 57	0.062
State 58	0.171	State 58	0.321	State 58	0.387
State 59	0.214	State 59	0.222	State 59	0.141
State 60	0.232	State 60	0.150	State 60	0.212
State 61	0.206	State 61	0.363	State 61	0.248
State 62	0.228	State 62	0.120	State 62	0.146
State 63	0.187	State 63	0.287	State 63	0.120
State 64	0.239	State 64	0.289	State 64	0.307
State 65	0.287	State 65	0.175	State 65	0.166
State 66	0.249	State 66	0.284	State 66	0.111
State 67	0.201	State 67	0.337	State 67	0.277
State 68	0.225	State 68	0.212	State 68	0.131
State 69	0.287	State 69	0.174	State 69	0.210
State 70	0.138	State 70	0.265	State 70	0.294
State 71	0.290	State 71	0.240	State 71	0.093
State 72	0.180	State 72	0.241	State 72	0.123
State 73	0.225	State 73	0.285	State 73	0.256
State 74	0.197	State 74	0.182	State 74	0.160
State 75	0.156	State 75	0.130	State 75	0.146
State 76	0.229	State 76	0.180	State 76	0.118
State 77	0.162	State 77	0.227	State 77	0.222
State 78	0.158	State 78	0.218	State 78	0.186
State 79	0.234	State 79	0.154	State 79	0.091
State 80	0.243	State 80	0.237	State 80	0.092
State 81	0.234	State 81	0.170	State 81	0.094
State 82	0.147	State 82	0.162	State 82	0.130
State 83	0.269	State 83	0.243	State 83	0.183
State 84	0.236	State 84	0.180	State 84	0.153
State 85	0.199	State 85	0.159	State 85	0.044
State 86	0.171	State 86	0.224	State 86	0.217
State 87	0.164	State 87	0.286	State 87	0.112
State 88	0.192	State 88	0.198	State 88	0.144
State 89	0.237	State 89	0.284	State 89	0.192
State 90	0.169	State 90	0.163	State 90	0.170
State 91	0.123	State 91	0.108	State 91	0.157
State 92	0.234	State 92	0.285	State 92	0.231
State 93	0.169	State 93	0.270	State 93	0.225
State 94	0.235	State 94	0.127	State 94	0.180
State 95	0.184	State 95	0.275	State 95	0.136
State 96	0.282	State 96	0.126	State 96	0.164
State 97	0.138	State 97	0.181	State 97	0.109
State 98	0.168	State 98	0.206	State 98	0.187
State 99	0.261	State 99	0.122	State 99	0.150
State 100	0.167	State 100	0.208	State 100	0.093



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
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



State 101	0.200	State 101	0.249	State 101	0.220
State 102	0.251	State 102	0.264	State 102	0.141
State 103	0.122	State 103	0.111	State 103	0.180
State 104	0.224	State 104	0.241	State 104	0.207
State 105	0.245	State 105	0.119	State 105	0.127
State 106	0.141	State 106	0.143	State 106	0.197
State 107	0.179	State 107	0.202	State 107	0.184
State 108	0.175	State 108	0.263	State 108	0.103
State 109	0.176	State 109	0.100	State 109	0.071
State 110	0.173	State 110	0.165	State 110	0.224
State 111	0.151	State 111	0.247	State 111	0.084
State 112	0.159	State 112	0.097	State 112	0.051
State 113	0.181	State 113	0.241	State 113	0.182
State 114	0.226	State 114	0.148	State 114	0.180
State 115	0.197	State 115	0.093	State 115	0.069
State 116	0.278	State 116	0.176	State 116	0.204
State 117	0.213	State 117	0.207	State 117	0.196
State 118	0.158	State 118	0.072	State 118	0.075
State 119	0.244	State 119	0.228	State 119	0.225
State 120	0.243	State 120	0.223	State 120	0.142
State 121	0.141	State 121	0.073	State 121	0.074
State 122	0.160	State 122	0.184	State 122	0.269
State 123	0.281	State 123	0.118	State 123	0.071
State 124	0.199	State 124	0.072	State 124	0.047
State 125	0.242	State 125	0.215	State 125	0.147
State 126	0.221	State 126	0.192	State 126	0.076
State 127	0.234	State 127	0.072	State 127	0.075
State 128	0.262	State 128	0.135	State 128	0.226
State 129	0.157	State 129	0.124	State 129	0.152
State 130	0.157	State 130	0.074	State 130	0.063
State 131	0.234	State 131	0.215	State 131	0.174
State 132	0.231	State 132	0.232	State 132	0.089
State 133	0.207	State 133	0.095	State 133	0.061
State 134	0.170	State 134	0.128	State 134	0.142
State 135	0.245	State 135	0.227	State 135	0.153
State 136	0.152	State 136	0.085	State 136	0.047
State 137	0.156	State 137	0.127	State 137	0.268
State 138	0.239	State 138	0.171	State 138	0.223
State 139	0.210	State 139	0.075	State 139	0.050
State 140	0.158	State 140	0.193	State 140	0.201
State 141	0.252	State 141	0.134	State 141	0.064
State 142	0.232	State 142	0.112	State 142	0.072
State 143	0.260	State 143	0.237	State 143	0.257
State 144	0.188	State 144	0.229	State 144	0.209



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 Laboratory

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



10 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 2	1913	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
☒	E-Field Probe	SPEAG	EX3DV4	3923	2019-10-22	2020-10-21
☒	E-Field Probe	SPEAG	EX3DV4	3748	2019-06-19	2020-06-18
☒	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	MY46523590	2019-04-12	2020-04-11
☒	Dielectric Probe Kit	Agilent	85070E	US01440210	NCR	NCR
☒	Universal Radio Communication Tester	R&S	CMU200	123090	2019-06-25	2020-06-24
☒	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	2019-04-12	2020-04-11
☒	Preamplifier	Mini-Circuits	ZHL-42W	15542	NCR	NCR
☒	Preamplifier	Compliance Directions Systems Inc.	AMP28-3W	073501433	NCR	NCR
☒	Power Meter	Agilent	E4416A	GB41292095	2019-04-12	2020-04-11
☒	Power Sensor	Agilent	8481H	MY41091234	2019-04-12	2020-04-11
☒	Power Sensor	R&S	NRP-Z92	100025	2019-04-12	2020-04-11
☒	Attenuator	SHX	TS2-3dB	30704	NCR	NCR
☒	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



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.sgsgroup.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



☒	DC POWER SUPPLY	SAKO	SK1730SL5A	NA	NCR	NCR
☒	Speed reading thermometer	MingGao	T809	NA	2019-04-15	2020-04-14
☒	Humidity and Temperature Indicator	KIMTOKA	KIMTOKA	NA	2019-04-15	2020-04-14

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

11 Calibration certificate

Please see the Appendix C

12 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 Inspection & Testing Services Laboratory

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.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



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: $f = 835 \text{ MHz}$; $\sigma = 0.887 \text{ S/m}$; $\epsilon_r = 40.83$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(8.76, 8.76, 8.76); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Body/d=15mm, Pin=250mW/Area Scan (8x13x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (measured) = 3.00 W/kg

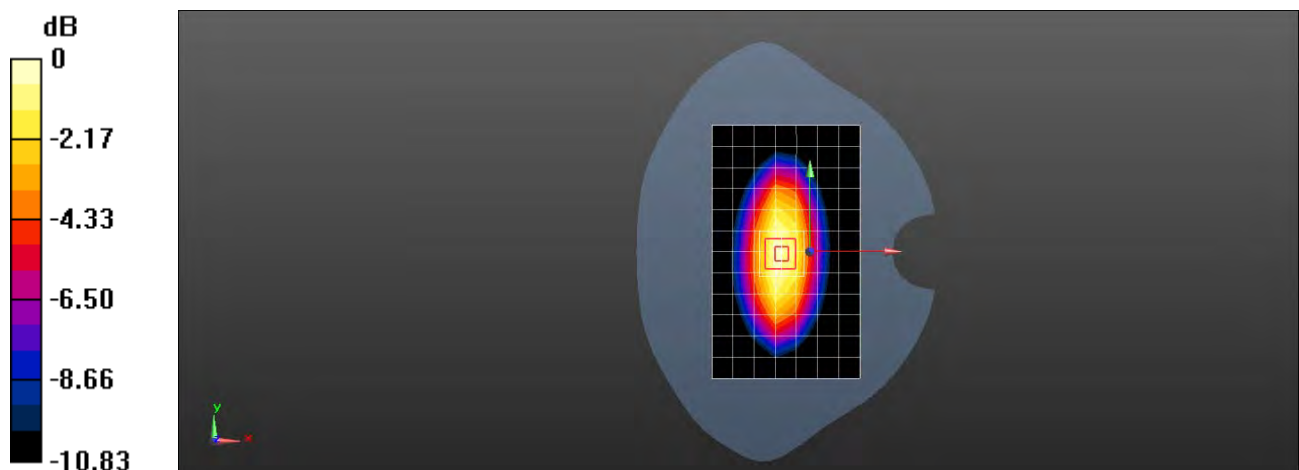
Body/d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 53.68 V/m ; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 3.82 W/kg

SAR(1 g) = 2.44 W/kg ; SAR(10 g) = 1.6 W/kg

Maximum value of SAR (measured) = 3.18 W/kg



0 dB = 3.18 W/kg = 5.02 dBW/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: $f = 835 \text{ MHz}$; $\sigma = 0.89 \text{ S/m}$; $\epsilon_r = 40.972$; $\rho = 1000$

kg/m^3

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(8.76, 8.76, 8.76); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Body/d=15mm, Pin=250mW/Area Scan (8x13x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (measured) = 3.01 W/kg

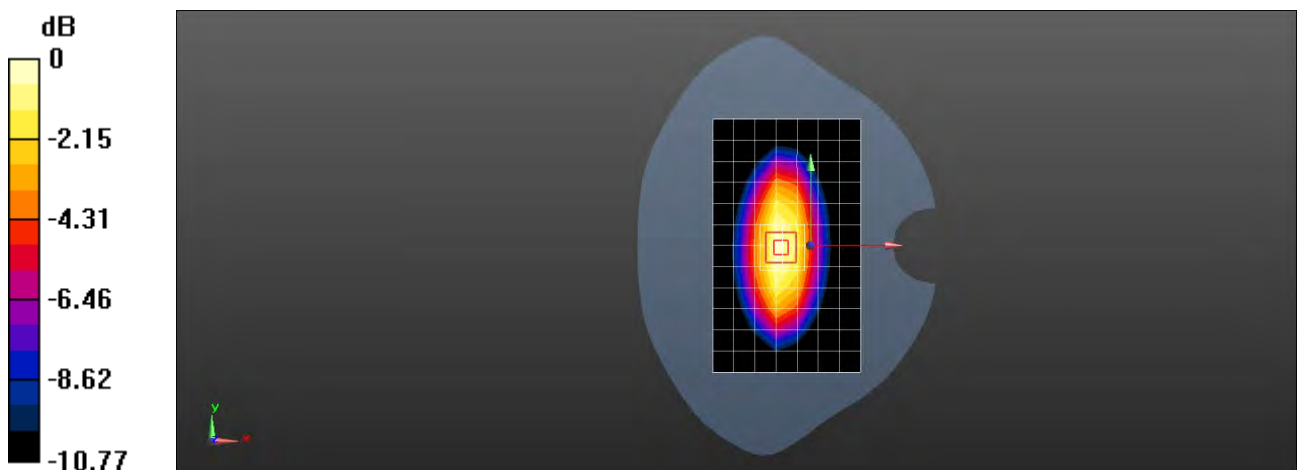
Body/d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 53.85 V/m ; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 3.80 W/kg

SAR(1 g) = 2.47 W/kg ; SAR(10 g) = 1.61 W/kg

Maximum value of SAR (measured) = 3.17 W/kg



0 dB = 3.17 W/kg = 5.01 dBW/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; $\sigma = 1.318$ S/m; $\epsilon_r = 40.413$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.6, 7.6, 7.6); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Body/d=10mm, Pin=250mW/Area Scan (7x10x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 13.7 W/kg

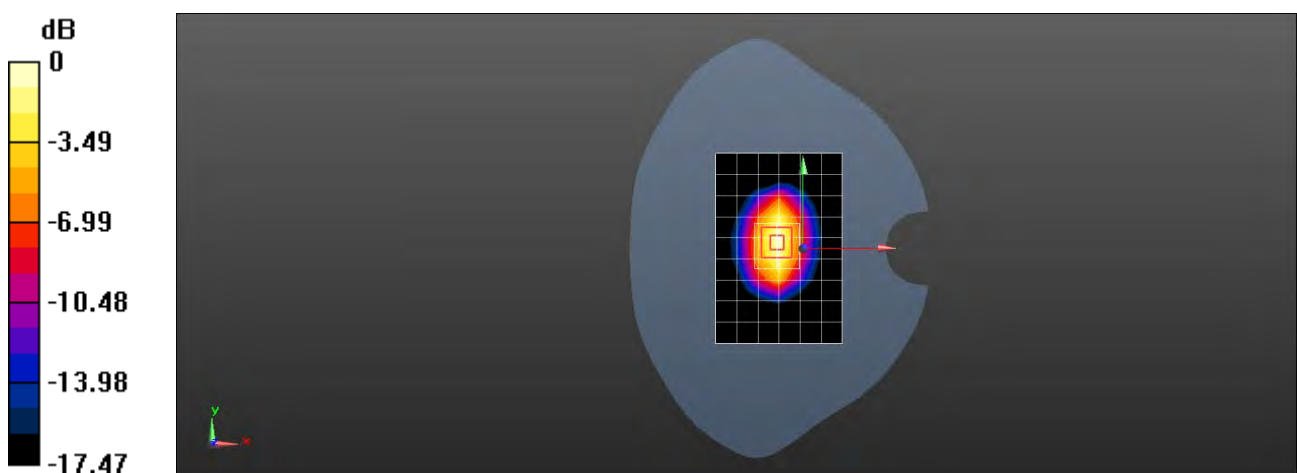
Body/d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 85.86 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 16.9 W/kg

SAR(1 g) = 9.16 W/kg; SAR(10 g) = 4.87 W/kg

Maximum value of SAR (measured) = 14.1 W/kg



0 dB = 14.1 W/kg = 11.49 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; $\sigma = 1.362$ S/m; $\epsilon_r = 40.029$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.31, 7.31, 7.31); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Body/d=10mm, Pin=250mW/Area Scan (8x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 9.50 W/kg

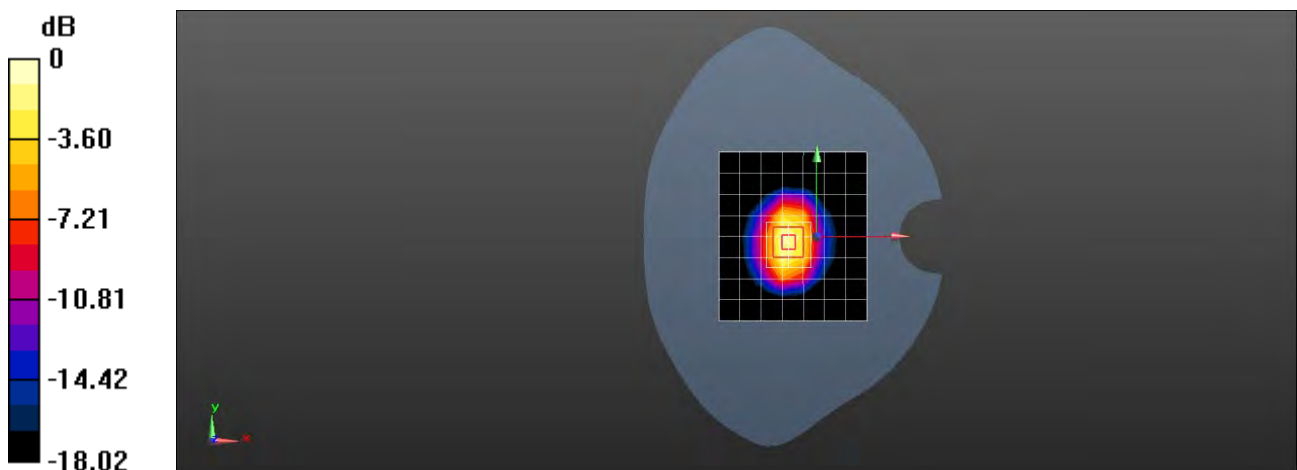
Body/d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 88.89 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 18.7 W/kg

SAR(1 g) = 10.1 W/kg; SAR(10 g) = 5.21 W/kg

Maximum value of SAR (measured) = 11.3 W/kg



0 dB = 11.3 W/kg = 10.53 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; $\sigma = 1.425$ S/m; $\epsilon_r = 41.471$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.31, 7.31, 7.31); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Body/d=10mm, Pin=250mW/Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 11.1 W/kg

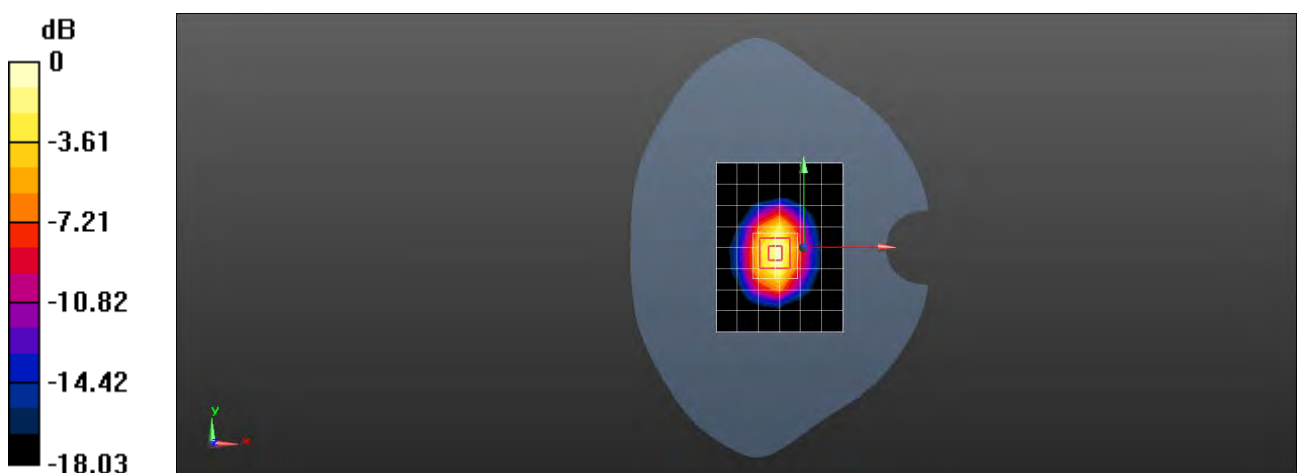
Body/d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 88.64 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 19.5 W/kg

SAR(1 g) = 10.58 W/kg; SAR(10 g) = 5.43 W/kg

Maximum value of SAR (measured) = 11.8 W/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; $\sigma = 1.797$ S/m; $\epsilon_r = 40.32$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(6.98, 6.98, 6.98); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Body/d=10mm, Pin=250mW/Area Scan (9x15x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 20.5 W/kg

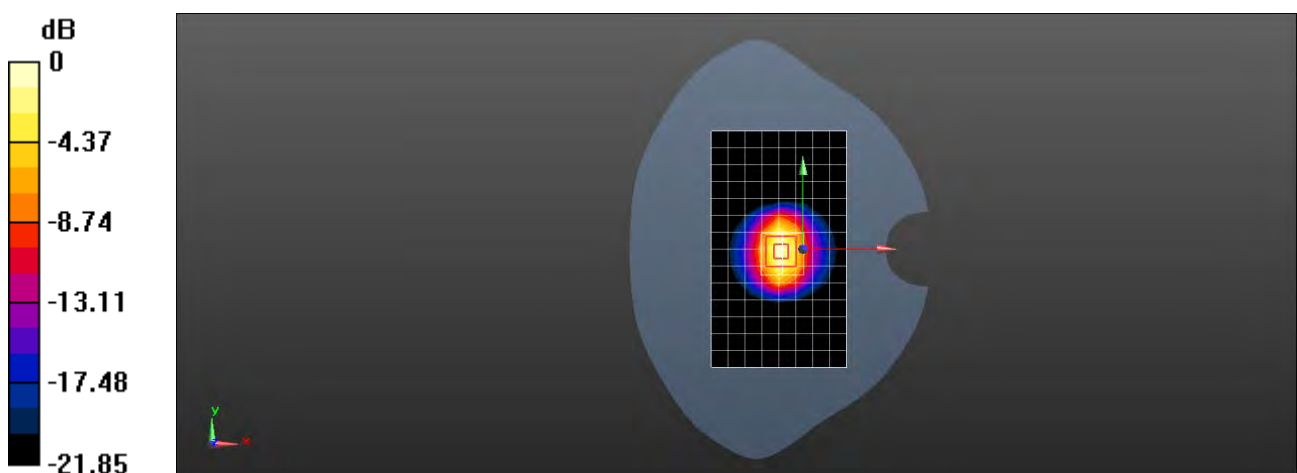
Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 90.35 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 25.7 W/kg

SAR(1 g) = 12.9 W/kg; SAR(10 g) = 6.07 W/kg

Maximum value of SAR (measured) = 20.9 W/kg



0 dB = 20.9 W/kg = 13.20 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; $\sigma = 1.826$ S/m; $\epsilon_r = 39.901$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(6.98, 6.98, 6.98); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Body/d=10mm, Pin=250mW/Area Scan (9x10x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 20.0 W/kg

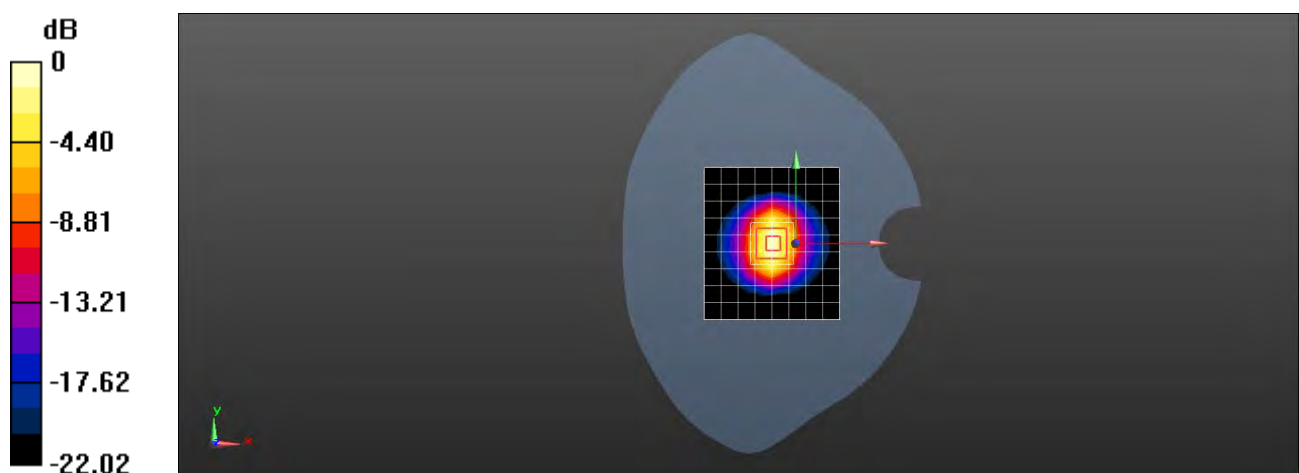
Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 89.82 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 26.5 W/kg

SAR(1 g) = 12.7 W/kg; SAR(10 g) = 5.89 W/kg

Maximum value of SAR (measured) = 21.2 W/kg



0 dB = 21.2 W/kg = 13.26 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; $\sigma = 1.996$ S/m; $\epsilon_r = 40.206$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(6.7, 6.7, 6.7); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Body/d=10mm, Pin=250mW/Area Scan (9x10x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 21.5 W/kg

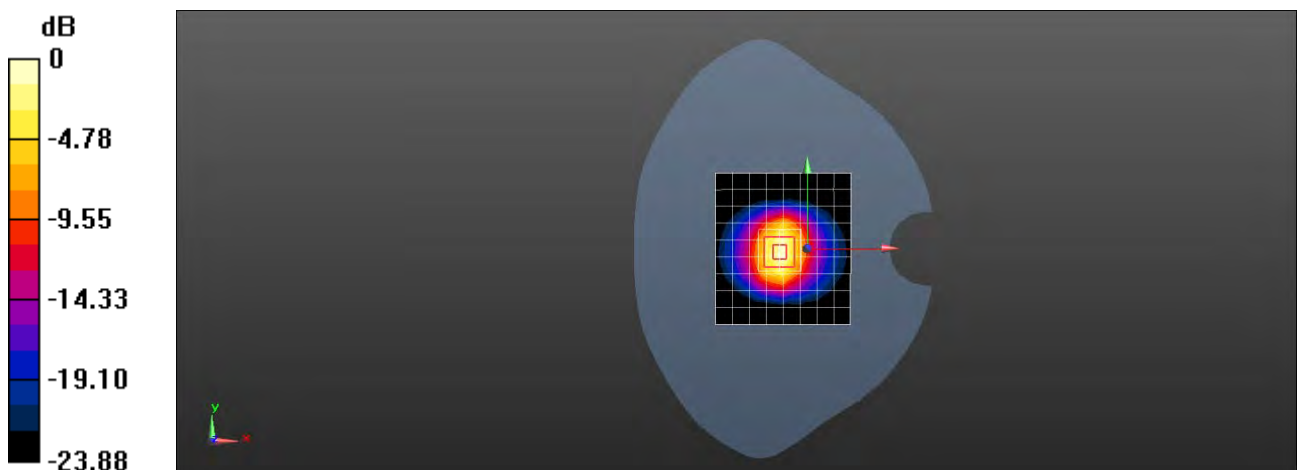
Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 86.89 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 29.8 W/kg

SAR(1 g) = 13.8 W/kg; SAR(10 g) = 6.15 W/kg

Maximum value of SAR (measured) = 23.8 W/kg



0 dB = 23.8 W/kg = 13.77 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; $\sigma = 1.962$ S/m; $\epsilon_r = 37.691$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(6.7, 6.7, 6.7); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Body/d=10mm, Pin=250mW/Area Scan (9x15x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 22.6 W/kg

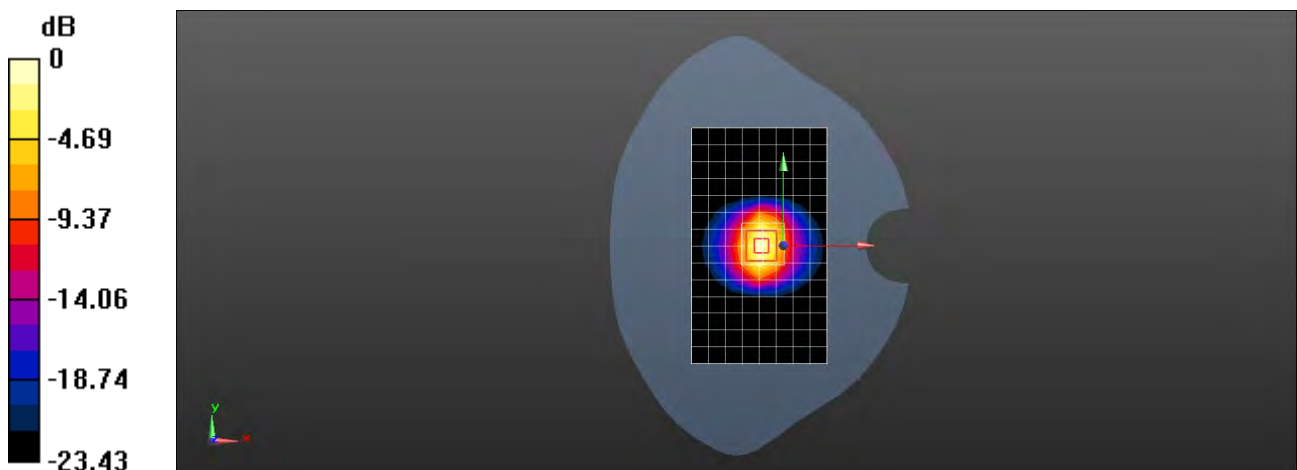
Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 89.57 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 28.9 W/kg

SAR(1 g) = 13.9 W/kg; SAR(10 g) = 6.21 W/kg

Maximum value of SAR (measured) = 23.5 W/kg



0 dB = 23.5 W/kg = 13.71 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; $\sigma = 1.988$ S/m; $\epsilon_r = 40.297$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(6.7, 6.7, 6.7); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Body/d=10mm, Pin=250mW/Area Scan (9x15x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 24.0 W/kg

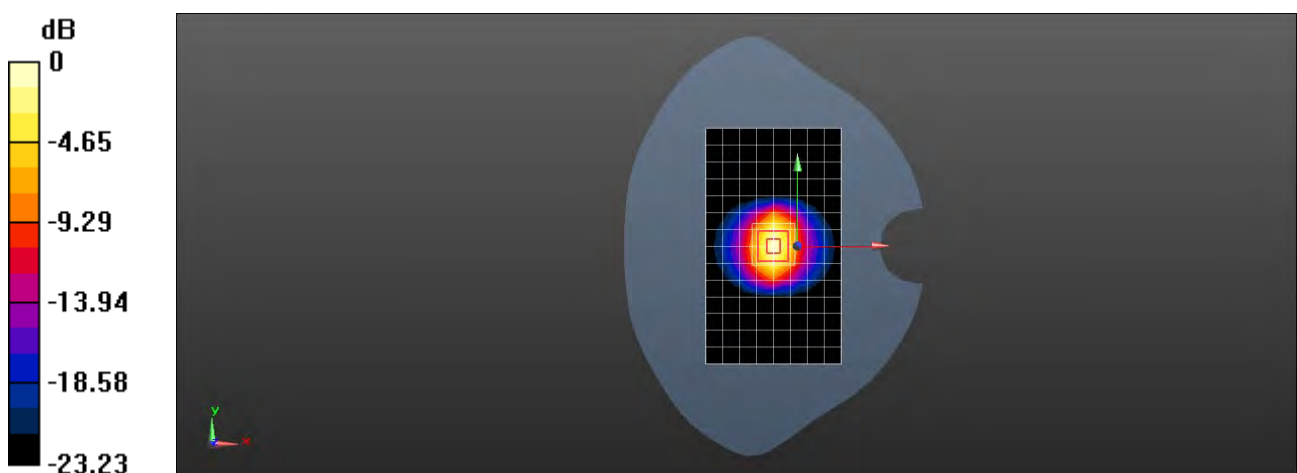
Body/d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 91.26 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 29.4 W/kg

SAR(1 g) = 14.1 W/kg; SAR(10 g) = 6.31 W/kg

Maximum value of SAR (measured) = 23.9 W/kg



0 dB = 23.9 W/kg = 13.78 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; $\sigma = 4.675$ S/m; $\epsilon_r = 36.73$; $\rho = 1000$ 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 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 19.1 W/kg

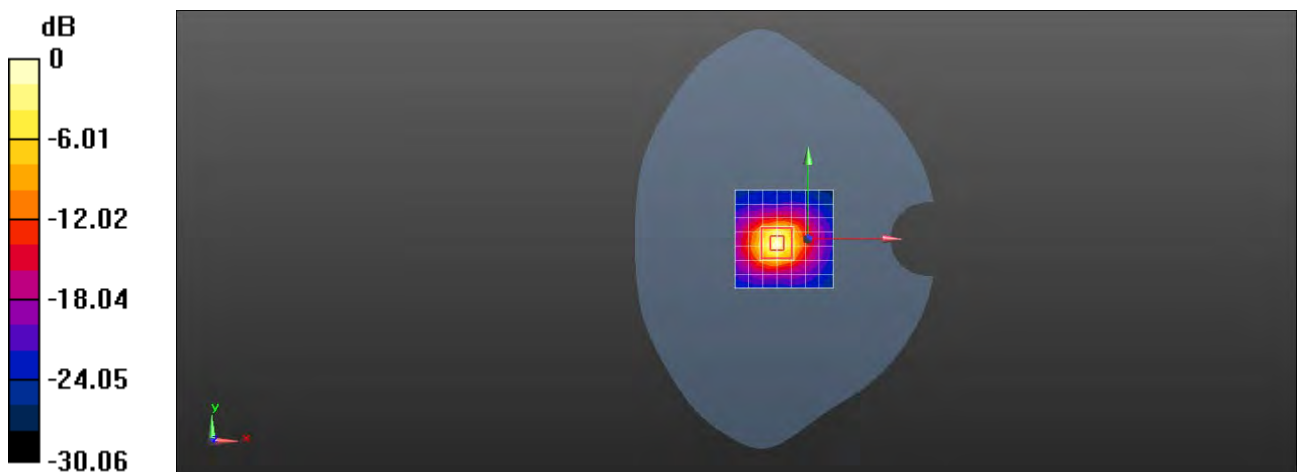
Body/d=10mm, Pin=100mW, f=5250 MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 58.28 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 32.1 W/kg

SAR(1 g) = 7.89 W/kg; SAR(10 g) = 2.27 W/kg

Maximum value of SAR (measured) = 20.2 W/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; $\sigma = 5.059$ S/m; $\epsilon_r = 35.778$; $\rho = 1000$ 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 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

$dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 18.0 W/kg

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

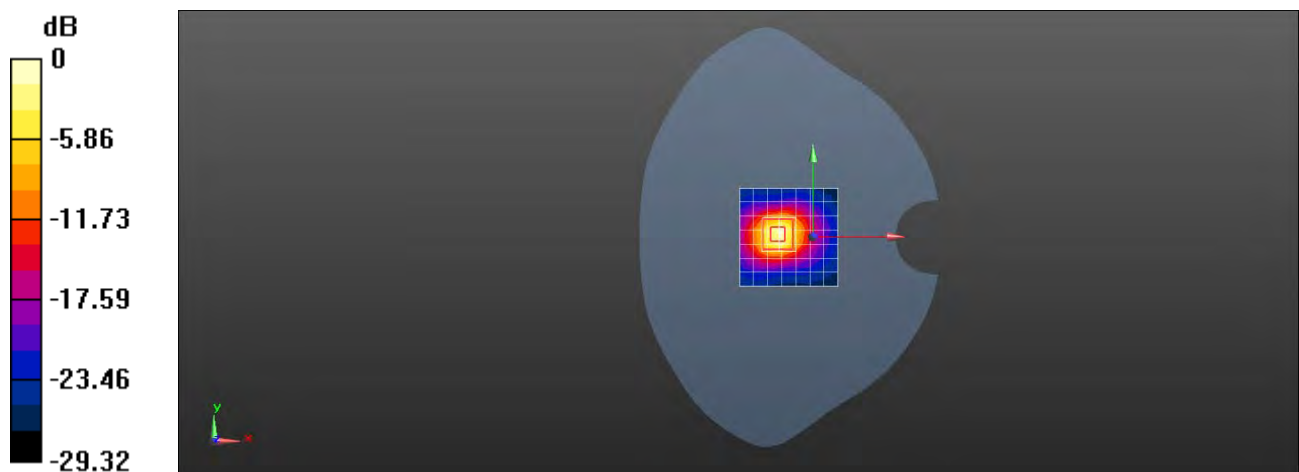
grid: $dx=4$ mm, $dy=4$ mm, $dz=2$ mm

Reference Value = 49.86 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 36.4 W/kg

SAR(1 g) = 8.4 W/kg; SAR(10 g) = 2.4 W/kg

Maximum value of SAR (measured) = 21.8 W/kg



0 dB = 21.8 W/kg = 13.38 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; $\sigma = 5.229$ S/m; $\epsilon_r = 35.414$; $\rho = 1000$ 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 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 15.2 W/kg

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

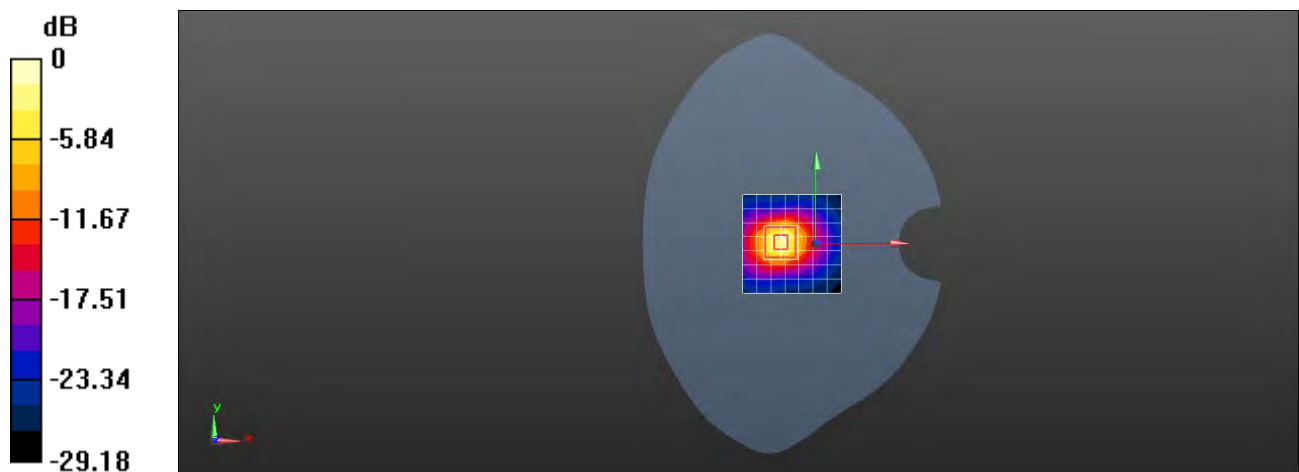
grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 45.88 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 34.5 W/kg

SAR(1 g) = 7.77 W/kg; SAR(10 g) = 2.21 W/kg

Maximum value of SAR (measured) = 20.6 W/kg



0 dB = 20.6 W/kg = 13.14 dBW/kg



System Validation

Per FCC KDB 865664 D02, SAR system verification is required to confirm measurement accuracy. The SAR systems (including SAR probes, system components and software versions) used for this device were validated against its performance specifications prior to the SAR measurements. Reference dipoles are used with the required tissue-equivalent media for system validation, according to the procedures outlined in FCC KDB 865664 D01 and IEEE 1528-2013. Since SAR probe calibrations are frequency dependent, each probe calibration point must be validated at a frequency within the valid frequency range of the probe calibration point, using the system that normally operates with the probe for routine SAR measurements and according to the required tissue-equivalent media. a tabulated summary of the system validation status, measurement frequencies, SAR probes, calibrated signal type(s) and tissue dielectric parameters has been included.

Table of SAR System validation summary:

Frequency (MHz)	Date	Probe SN	Probe Type	Probe CAL POINT		PERM (ϵ_r)	COND (σ)	CW Validation			MOD.VALIDATION		
								Sensitivity	Probe Linearity	Probe Isotropy	Modulation	DUTY. FACTORE	PAR
750	2019/11/05	3923	EX3DV4	750	Head	42.815	0.891	PASS	PASS	PASS	N/A	N/A	N/A
835	2019/11/05	3923	EX3DV4	835	Head	42.206	0.905	PASS	PASS	PASS	GMSK	PASS	N/A
1750	2019/11/05	3923	EX3DV4	1750	Head	40.521	1.372	PASS	PASS	PASS	N/A	N/A	N/A
1900	2019/11/05	3923	EX3DV4	1900	Head	41.160	1.409	PASS	PASS	PASS	GMSK	PASS	N/A
2450	2019/11/05	3923	EX3DV4	2450	Head	39.810	1.813	PASS	PASS	PASS	OFDM	PASS	N/A
2600	2019/11/05	3923	EX3DV4	2600	Head	38.905	1.957	PASS	PASS	PASS	TDD	PASS	N/A
5250	2019/11/05	3923	EX3DV4	5250	Head	36.173	4.738	PASS	PASS	PASS	OFDM	PASS	N/A
5600	2019/11/05	3923	EX3DV4	5600	Head	35.232	5.116	PASS	PASS	PASS	OFDM	PASS	N/A
5750	2019/11/05	3923	EX3DV4	5750	Head	34.984	5.298	PASS	PASS	PASS	OFDM	PASS	N/A
750	2019/06/28	3748	EX3DV4	750	Head	42.653	0.898	PASS	PASS	PASS	N/A	N/A	N/A
835	2019/06/28	3748	EX3DV4	835	Head	41.876	0.903	PASS	PASS	PASS	GMSK	PASS	N/A
1750	2019/06/28	3748	EX3DV4	1750	Head	40.832	1.379	PASS	PASS	PASS	N/A	N/A	N/A
1900	2019/06/28	3748	EX3DV4	1900	Head	41.287	1.415	PASS	PASS	PASS	GMSK	PASS	N/A
2450	2019/06/28	3748	EX3DV4	2450	Head	39.591	1.807	PASS	PASS	PASS	OFDM	PASS	N/A
2600	2019/06/28	3748	EX3DV4	2600	Head	39.374	1.993	PASS	PASS	PASS	TDD	PASS	N/A
5250	2019/06/28	3748	EX3DV4	5250	Head	36.480	4.751	PASS	PASS	PASS	OFDM	PASS	N/A
5600	2019/06/28	3748	EX3DV4	5600	Head	35.375	5.194	PASS	PASS	PASS	OFDM	PASS	N/A
5750	2019/06/28	3748	EX3DV4	5750	Head	35.081	5.316	PASS	PASS	PASS	OFDM	PASS	N/A

NOTE: While the probes have been calibrated for both CW and modulated signals, all measurements were performed using communication systems calibrated for CW signals only. Modulations in the table above represent test configurations for which the measurement system has been validated per FCC KDB Publication 865664D01 for scenarios when CW probe calibrations are used with other signal types. SAR systems were validated for modulated signals with a periodic duty cycle, such as GMSK, or with a high peak to average ratio (>5dB), such as OFDM according to KDB 865664.

Appendix B

Detailed Test Results

1. GSM
GSM 850 for Head & Body
GSM 1900 for Head & Body
2. WCDMA
WCDMA Band 2 for Head & Body
WCDMA Band 4 for Head & Body
WCDMA Band 5 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 38 for Head & Body
LTE Band 41 for Head & Body
4.WIFI
WIFI 2.4G for Head & Body
WIFI 5G for Head & Body
5.Blutetooth
Bluetooth for Head & Body

Test Laboratory: SGS-SAR Lab

M2004J11G GSM 850 GSM 190CH Right cheek Ant0

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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

Medium: HSL835; Medium parameters used: $f = 837$ MHz; $\sigma = 0.888$ S/m; $\epsilon_r = 40.818$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(8.76, 8.76, 8.76); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 0.220 W/kg

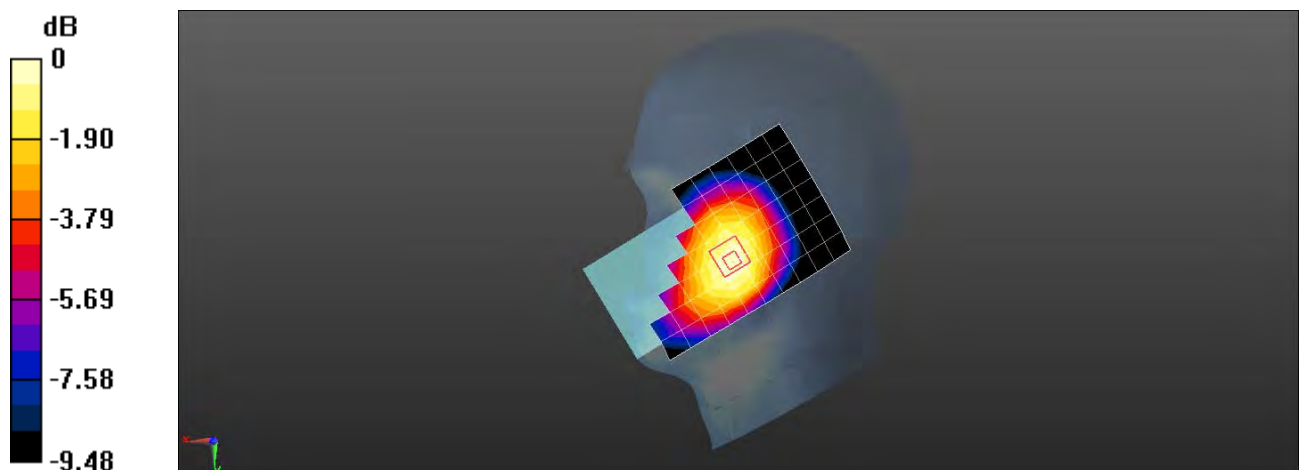
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.489 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.258 W/kg

SAR(1 g) = 0.199 W/kg; SAR(10 g) = 0.153 W/kg

Maximum value of SAR (measured) = 0.231 W/kg



0 dB = 0.231 W/kg = -6.36 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G GSM 850 GSM 190CH Back side 15mm Ant0

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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

Medium: HSL835; Medium parameters used: $f = 837$ MHz; $\sigma = 0.888$ S/m; $\epsilon_r = 40.818$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(8.76, 8.76, 8.76); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 0.238 W/kg

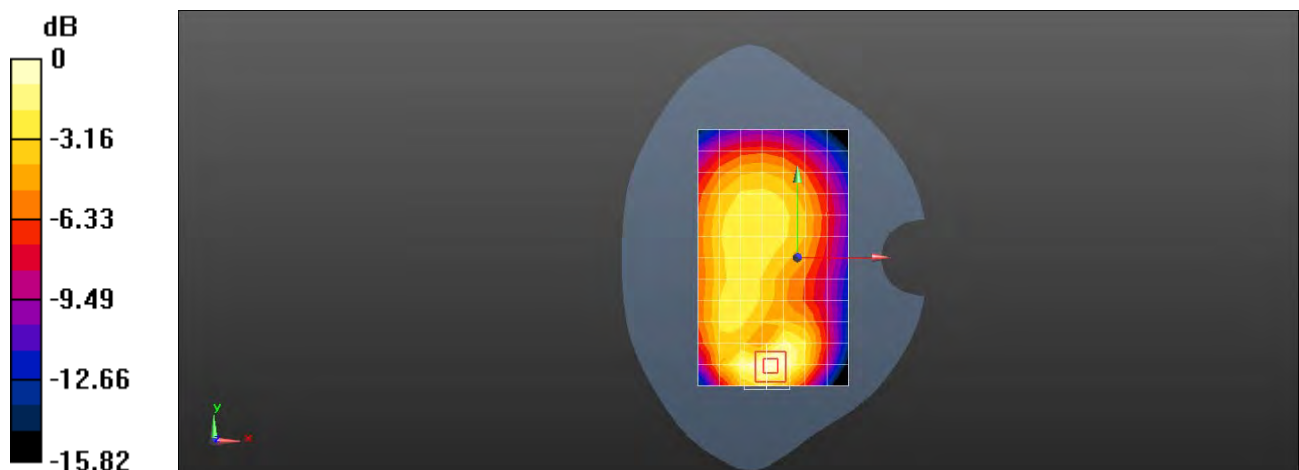
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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

Peak SAR (extrapolated) = 0.293 W/kg

SAR(1 g) = 0.180 W/kg; SAR(10 g) = 0.108 W/kg

Maximum value of SAR (measured) = 0.236 W/kg



0 dB = 0.236 W/kg = -6.27 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G GSM 850 GPRS 4TS 190CH Back side 10mm Ant0

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

Communication System: UID 0, GPRS/EGPRS Mode(4up) Communication System (0); Frequency: 836.6 MHz; Duty Cycle: 1:2.075

Medium: HSL835; Medium parameters used: $f = 837$ MHz; $\sigma = 0.888$ S/m; $\epsilon_r = 40.818$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(8.76, 8.76, 8.76); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (8x13x1): Measurement grid: $dx=15$ mm, $dy=15$ mm
Maximum value of SAR (measured) = 0.564 W/kg

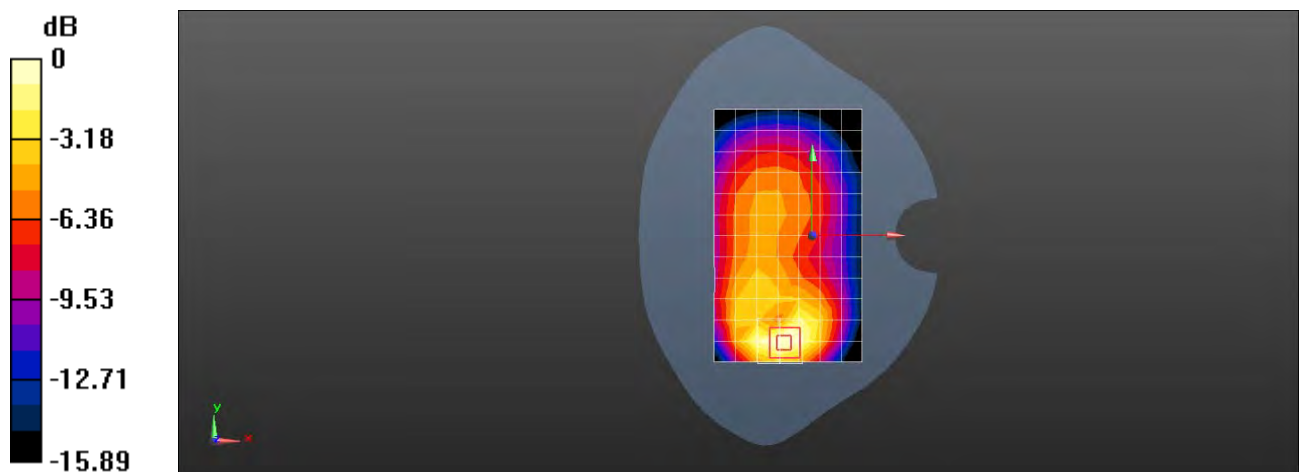
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 11.69 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.677 W/kg

SAR(1 g) = 0.394 W/kg; SAR(10 g) = 0.226 W/kg

Maximum value of SAR (measured) = 0.530 W/kg



0 dB = 0.530 W/kg = -2.76 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G GSM 850 GSM 190CH Left cheek Ant1

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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

Medium: HSL835; Medium parameters used: $f = 837$ MHz; $\sigma = 0.892$ S/m; $\epsilon_r = 40.958$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(8.76, 8.76, 8.76); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 0.642 W/kg

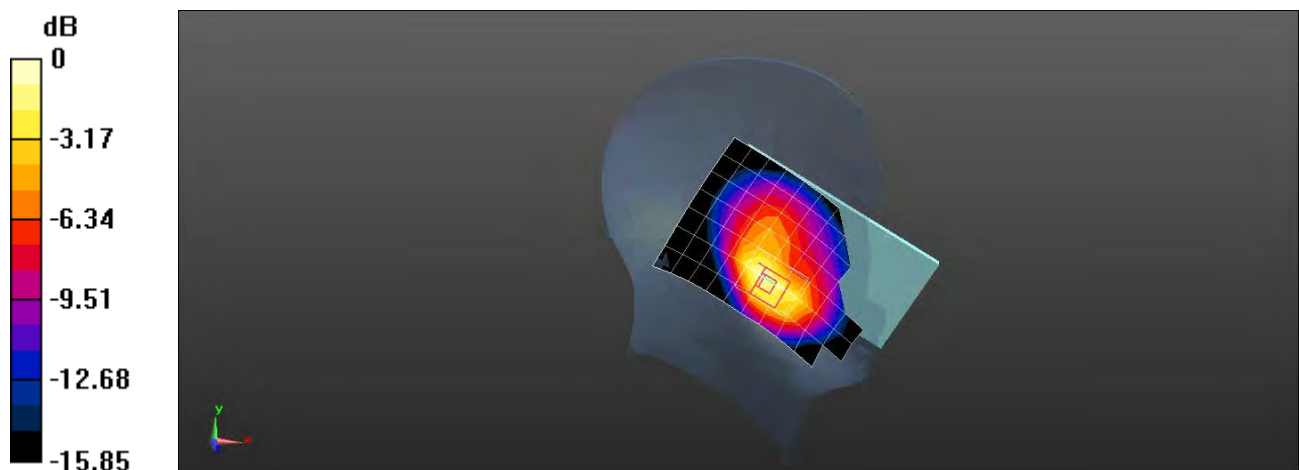
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.640 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.922 W/kg

SAR(1 g) = 0.487 W/kg; SAR(10 g) = 0.273 W/kg

Maximum value of SAR (measured) = 0.694 W/kg



0 dB = 0.694 W/kg = -1.59 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G GSM 850 GSM 190CH Front side 15mm Ant1

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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

Medium: HSL835; Medium parameters used: $f = 837$ MHz; $\sigma = 0.892$ S/m; $\epsilon_r = 40.958$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(8.76, 8.76, 8.76); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 0.159 W/kg

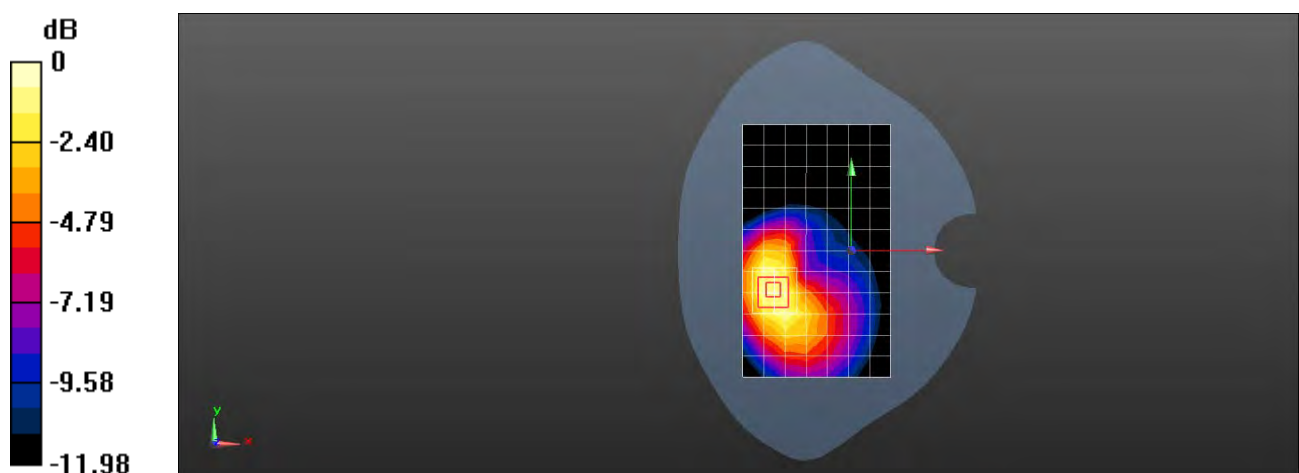
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.543 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.225 W/kg

SAR(1 g) = 0.144 W/kg; SAR(10 g) = 0.092 W/kg

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



0 dB = 0.187 W/kg = -7.28 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G GSM 850 GPRS 4TS 190CH Left side 10mm Ant1

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

Communication System: UID 0, GPRS/EGPRS Mode(4up) Communication System (0); Frequency: 836.6 MHz; Duty Cycle: 1:2.075

Medium: HSL835; Medium parameters used: $f = 837$ MHz; $\sigma = 0.892$ S/m; $\epsilon_r = 40.958$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(8.76, 8.76, 8.76); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (5x13x1): Measurement grid: $dx=15$ mm, $dy=15$ mm
Maximum value of SAR (measured) = 0.585 W/kg

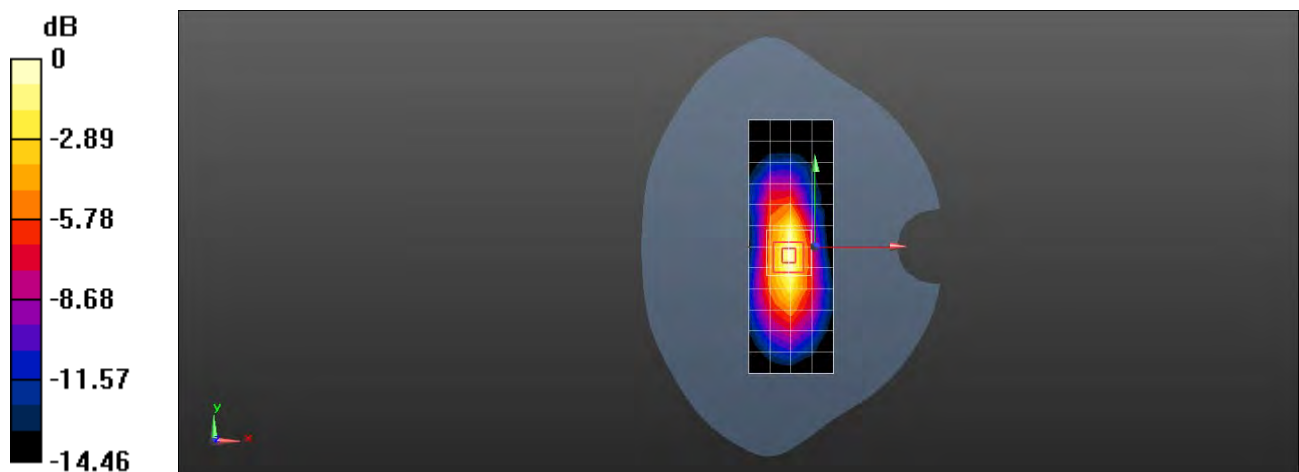
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 23.03 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.782 W/kg

SAR(1 g) = 0.430 W/kg; SAR(10 g) = 0.240 W/kg

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



0 dB = 0.614 W/kg = -2.12 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G GSM 1900 GSM 661CH Right titled Ant2

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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

Medium: HSL1900; Medium parameters used: $f = 1880$ MHz; $\sigma = 1.408$ S/m; $\epsilon_r = 41.51$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.31, 7.31, 7.31); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 0.0823 W/kg

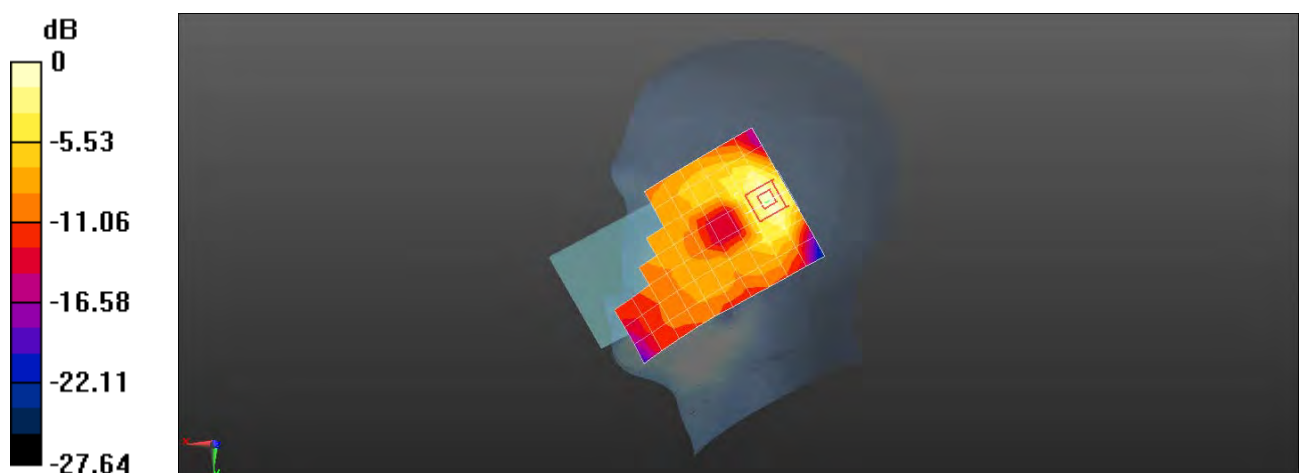
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.033 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.110 W/kg

SAR(1 g) = 0.062 W/kg; SAR(10 g) = 0.033 W/kg

Maximum value of SAR (measured) = 0.0873 W/kg



0 dB = 0.0873 W/kg = -10.59 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G GSM 1900 GSM 661CH Back side 15mm Ant2

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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

Medium: HSL1900; Medium parameters used: $f = 1880$ MHz; $\sigma = 1.408$ S/m; $\epsilon_r = 41.51$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.31, 7.31, 7.31); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 0.202 W/kg

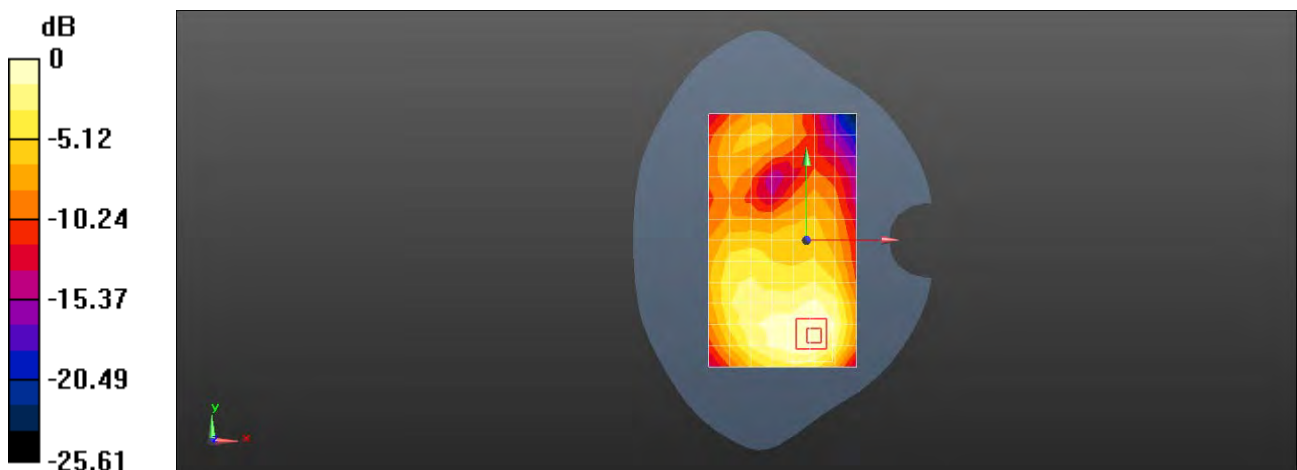
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.473 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.256 W/kg

SAR(1 g) = 0.155 W/kg; SAR(10 g) = 0.092 W/kg

Maximum value of SAR (measured) = 0.205 W/kg



0 dB = 0.205 W/kg = -6.88 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G GSM 1900 GPRS 4TS 661CH Bottom side 10mm Ant2

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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

Medium: HSL1900; Medium parameters used: $f = 1880$ MHz; $\sigma = 1.408$ S/m; $\epsilon_r = 41.51$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.31, 7.31, 7.31); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (5x7x1): Measurement grid: $dx=15$ mm, $dy=15$ mm
Maximum value of SAR (measured) = 0.548 W/kg

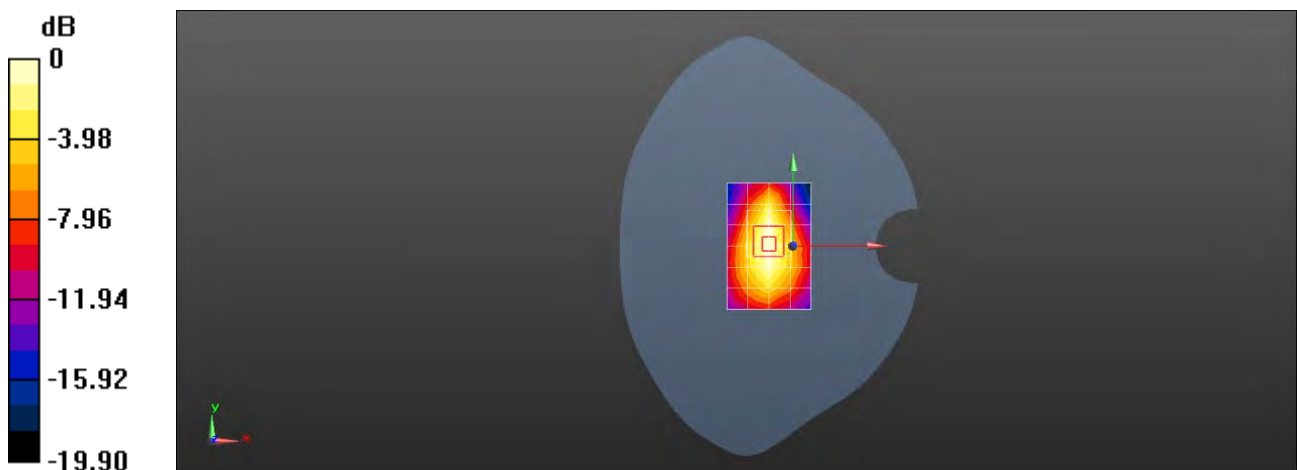
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 17.97 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.681 W/kg

SAR(1 g) = 0.387 W/kg; SAR(10 g) = 0.211 W/kg

Maximum value of SAR (measured) = 0.535 W/kg



Test Laboratory: SGS-SAR Lab

M2004J11G GSM 1900 GSM 661CH Right cheek Ant4

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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

Medium: HSL1900; Medium parameters used: $f = 1880$ MHz; $\sigma = 1.408$ S/m; $\epsilon_r = 41.51$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.31, 7.31, 7.31); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (8x14x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.864 W/kg

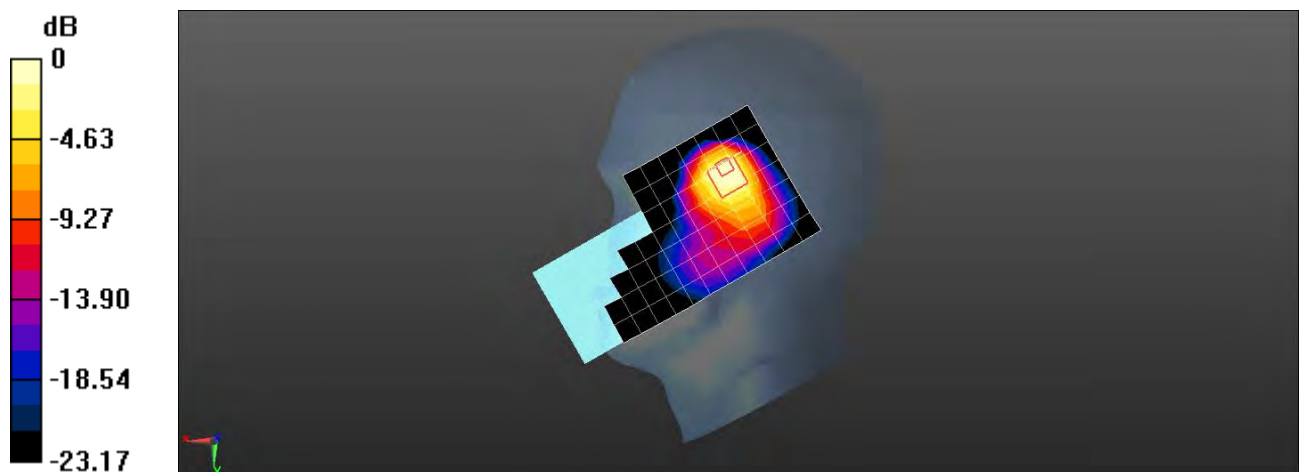
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

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

Peak SAR (extrapolated) = 1.34 W/kg

SAR(1 g) = 0.553 W/kg; SAR(10 g) = 0.302 W/kg

Maximum value of SAR (measured) = 0.911 W/kg



0 dB = 0.911 W/kg = -0.40 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G GSM 1900 GSM 661CH Back side 15mm Ant4

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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

Medium: HSL1900; Medium parameters used: $f = 1880$ MHz; $\sigma = 1.408$ S/m; $\epsilon_r = 41.51$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.31, 7.31, 7.31); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

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

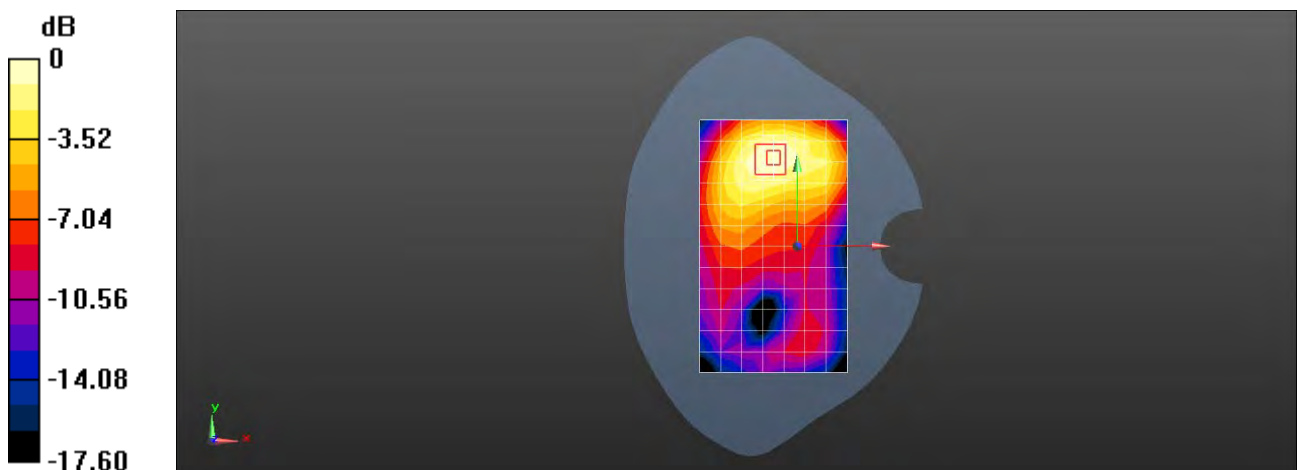
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.206 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.230 W/kg

SAR(1 g) = 0.147 W/kg; SAR(10 g) = 0.091 W/kg

Maximum value of SAR (measured) = 0.191 W/kg



Test Laboratory: SGS-SAR Lab

M2004J11G GSM 1900 GPRS 4TS 661CH Top side 10mm Ant4

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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

Medium: HSL1900; Medium parameters used: $f = 1880$ MHz; $\sigma = 1.408$ S/m; $\epsilon_r = 41.51$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.31, 7.31, 7.31); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 0.287 W/kg

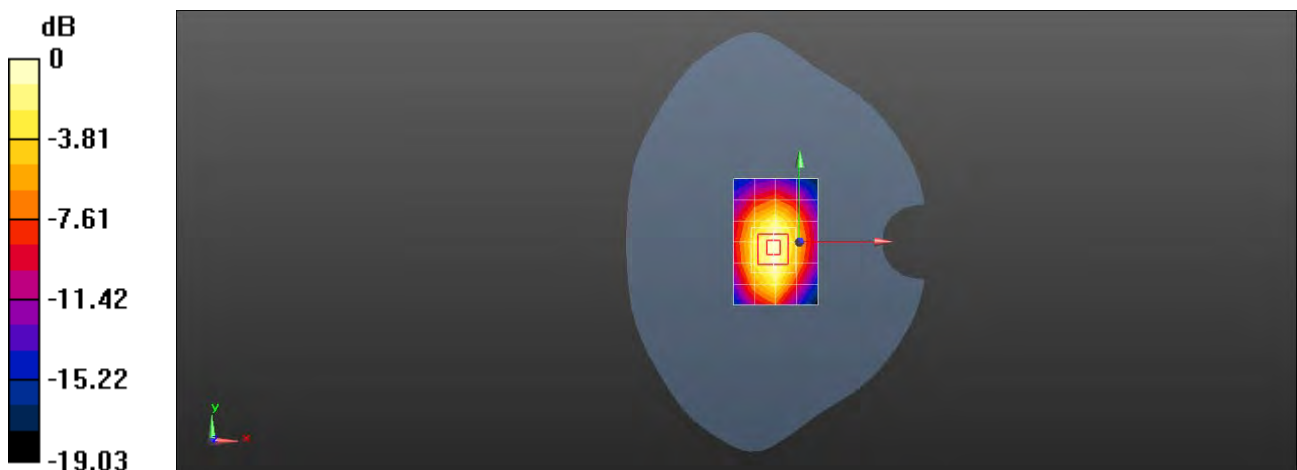
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 12.93 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 0.359 W/kg

SAR(1 g) = 0.213 W/kg; SAR(10 g) = 0.121 W/kg

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



0 dB = 0.290 W/kg = -5.38 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G WCDMA Band II 9400CH Right cheek Ant2

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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

Medium: HSL1900; Medium parameters used: $f = 1880$ MHz; $\sigma = 1.408$ S/m; $\epsilon_r = 41.51$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.31, 7.31, 7.31); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

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

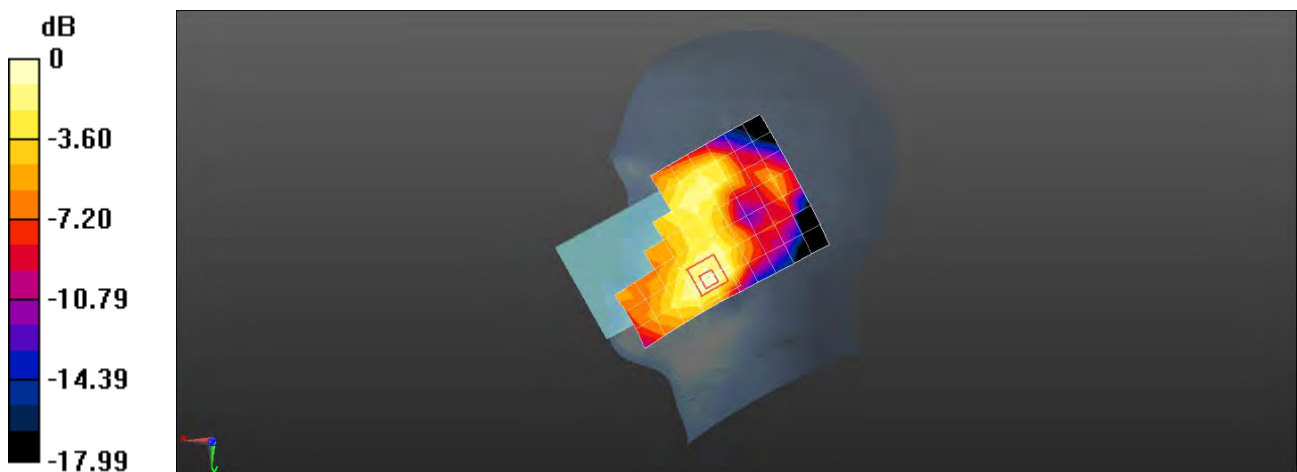
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.648 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.226 W/kg

SAR(1 g) = 0.151 W/kg; SAR(10 g) = 0.094 W/kg

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



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

Test Laboratory: SGS-SAR Lab

M2004J11G WCDMA Band II 9400CH Back side 15mm Ant2

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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

Medium: HSL1900; Medium parameters used: $f = 1880$ MHz; $\sigma = 1.408$ S/m; $\epsilon_r = 41.51$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.31, 7.31, 7.31); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 0.497 W/kg

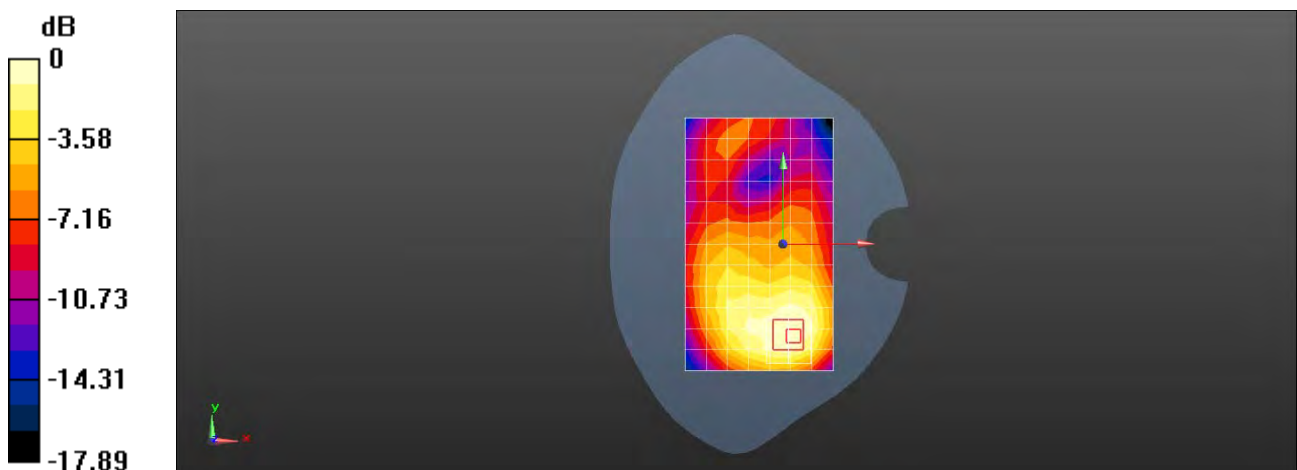
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.287 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.635 W/kg

SAR(1 g) = 0.389 W/kg; SAR(10 g) = 0.238 W/kg

Maximum value of SAR (measured) = 0.507 W/kg



0 dB = 0.507 W/kg = -2.95 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G WCDMA Band II 9400CH Bottom side 10mm Ant2

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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

Medium: HSL1900; Medium parameters used: $f = 1880$ MHz; $\sigma = 1.408$ S/m; $\epsilon_r = 41.51$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.31, 7.31, 7.31); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (5x7x1): Measurement grid: $dx=15$ mm, $dy=15$ mm
Maximum value of SAR (measured) = 0.950 W/kg

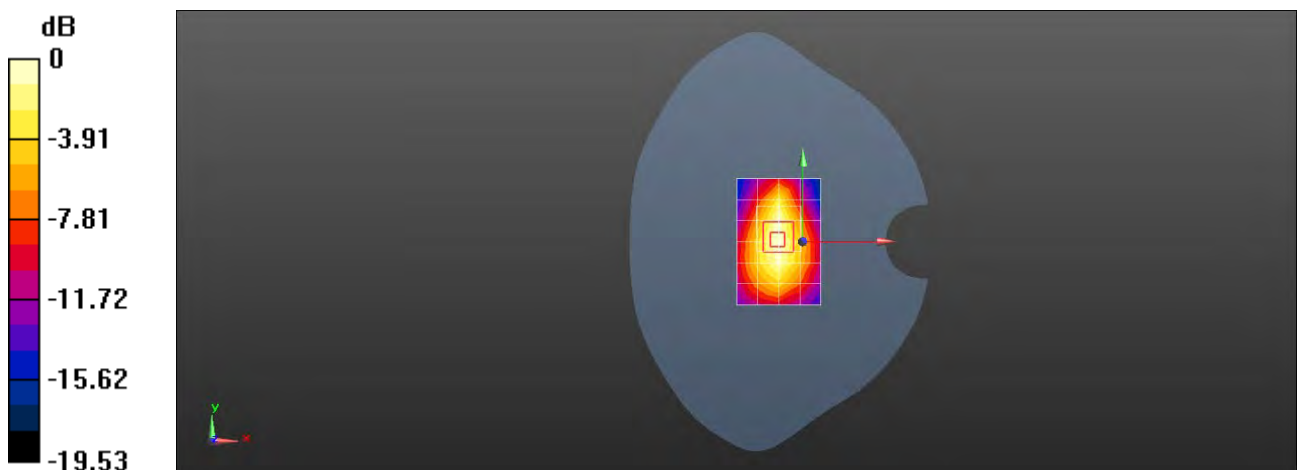
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 23.47 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.21 W/kg

SAR(1 g) = 0.693 W/kg; SAR(10 g) = 0.379 W/kg

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



0 dB = 0.956 W/kg = -0.20 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G WCDMA Band II 9400CH Bottom side 0mm Ant2

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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

Medium: HSL1900; Medium parameters used: $f = 1880$ MHz; $\sigma = 1.408$ S/m; $\epsilon_r = 41.51$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.31, 7.31, 7.31); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (5x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 8.00 W/kg

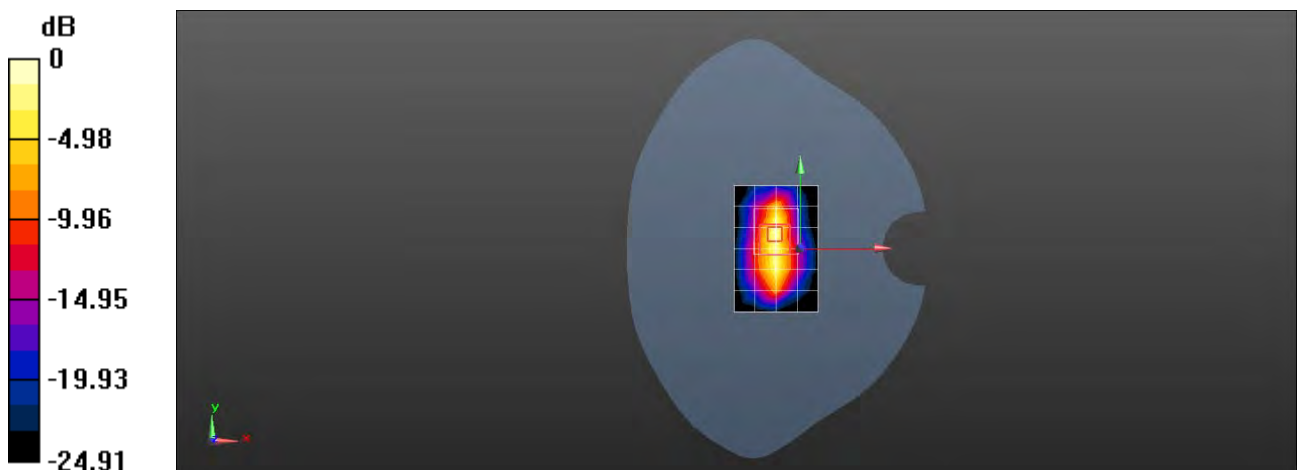
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 57.45 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 13.2 W/kg

SAR(1 g) = 4.62 W/kg; SAR(10 g) = 1.88 W/kg

Maximum value of SAR (measured) = 9.23 W/kg



Test Laboratory: SGS-SAR Lab

M2004J11G WCDMA Band II 9400CH Right cheek Ant4

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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

Medium: HSL1900; Medium parameters used: $f = 1880$ MHz; $\sigma = 1.408$ S/m; $\epsilon_r = 41.51$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.31, 7.31, 7.31); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 0.698 W/kg

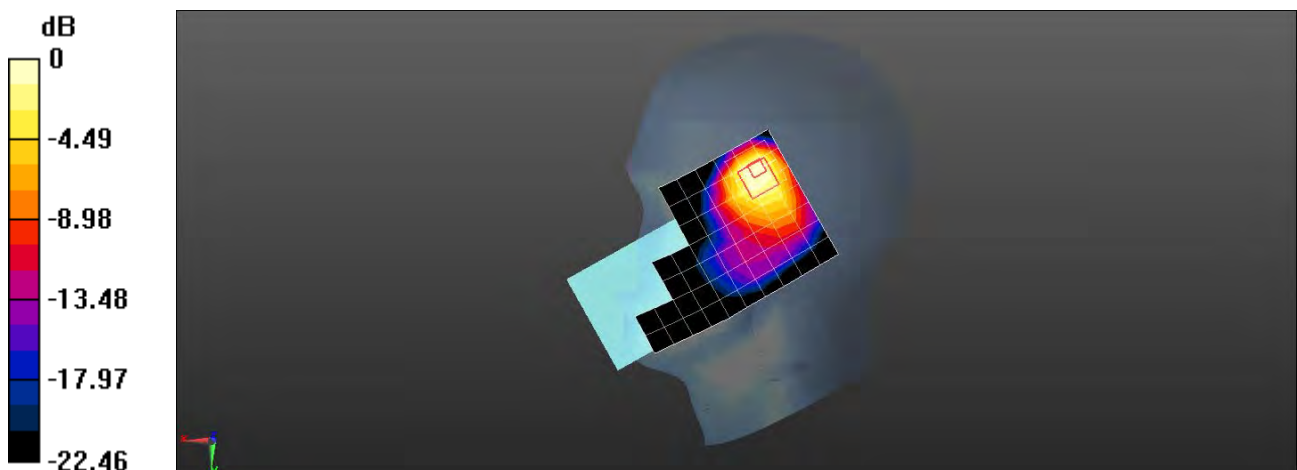
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.717 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 1.20 W/kg

SAR(1 g) = 0.521 W/kg; SAR(10 g) = 0.277 W/kg

Maximum value of SAR (measured) = 0.783 W/kg



0 dB = 0.783 W/kg = -1.06 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G WCDMA Band II 9400CH Front side 15mm Ant4

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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

Medium: HSL1900; Medium parameters used: $f = 1880$ MHz; $\sigma = 1.408$ S/m; $\epsilon_r = 41.51$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.31, 7.31, 7.31); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (8x13x1): Measurement grid: $dx=15$ mm, $dy=15$ mm
Maximum value of SAR (measured) = 0.296 W/kg

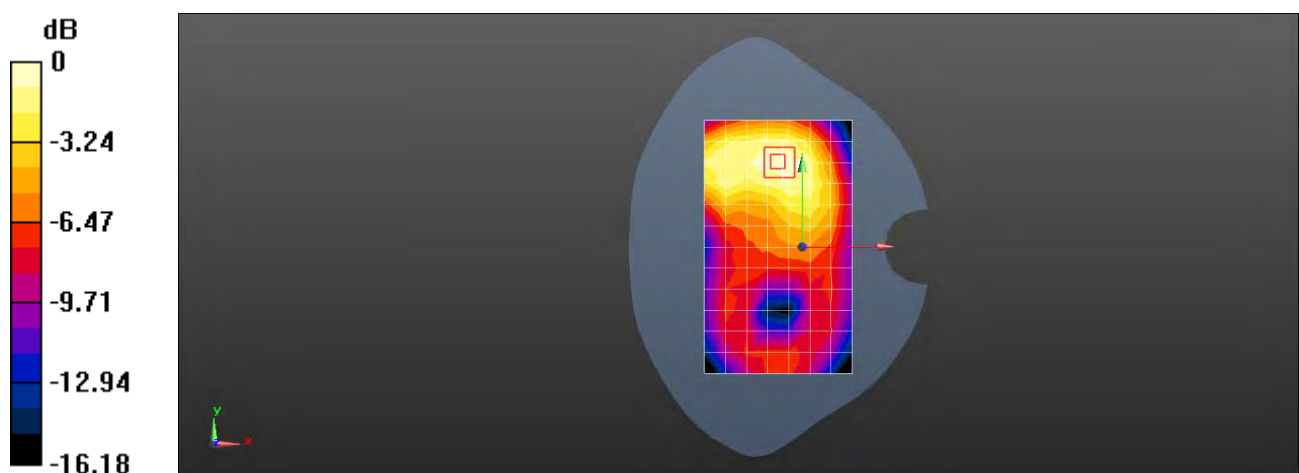
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 6.794 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.365 W/kg

SAR(1 g) = 0.234 W/kg; SAR(10 g) = 0.146 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

M2004J11G WCDMA Band II 9400CH Top side 10mm Ant4

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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

Medium: HSL1900; Medium parameters used: $f = 1880$ MHz; $\sigma = 1.408$ S/m; $\epsilon_r = 41.51$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.31, 7.31, 7.31); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (5x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.299 W/kg

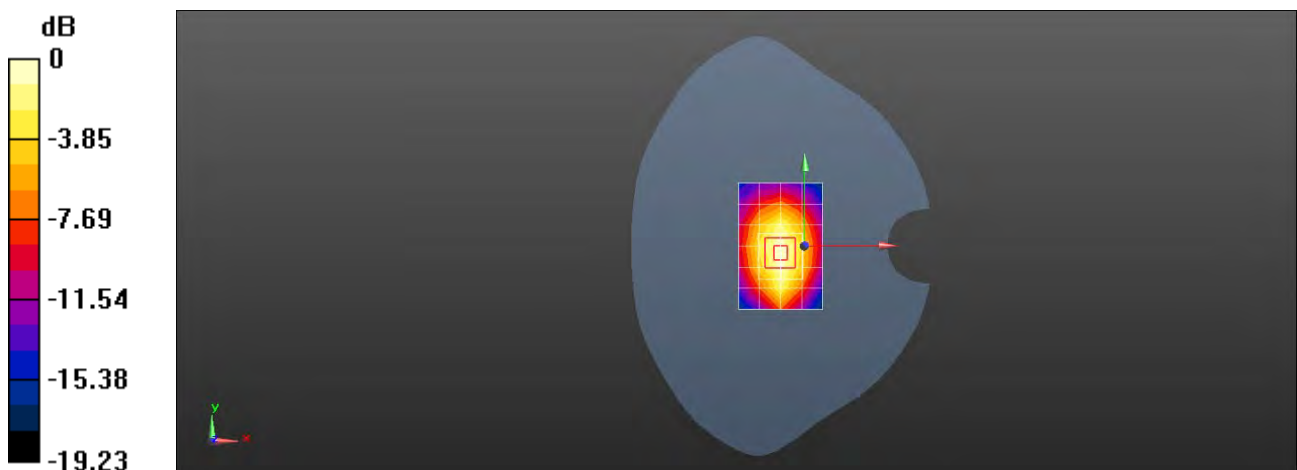
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.18 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.379 W/kg

SAR(1 g) = 0.225 W/kg; SAR(10 g) = 0.127 W/kg

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



0 dB = 0.304 W/kg = -5.17 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G WCDMA Band IV 1412CH Right cheek Ant2

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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; $\sigma = 1.301$ S/m; $\epsilon_r = 40.466$; $\rho = 1000$ kg/m³
Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.6, 7.6, 7.6); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

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

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

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

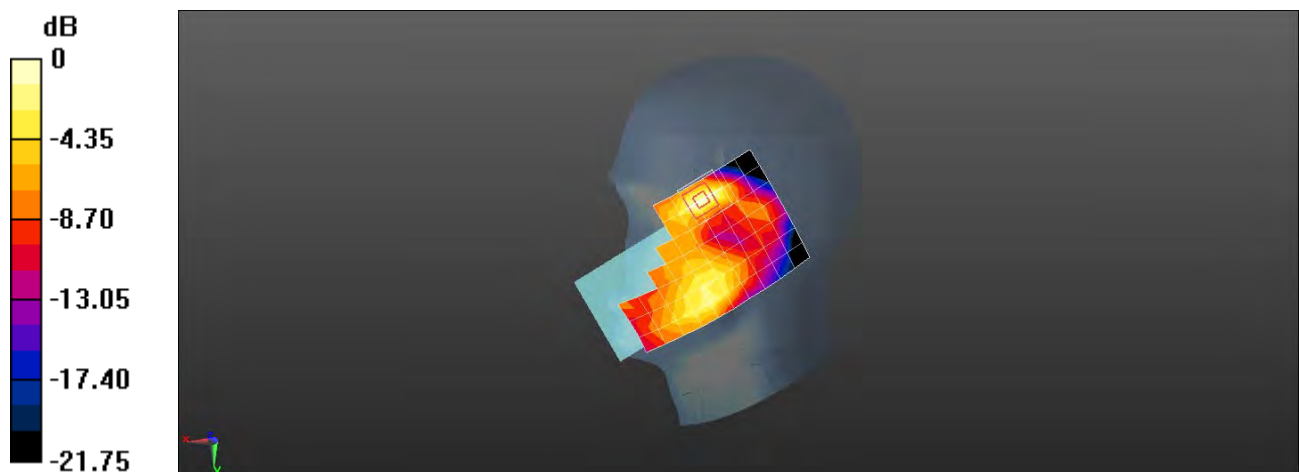
Reference Value = 5.577 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.341 W/kg

SAR(1 g) = 0.184 W/kg; SAR(10 g) = 0.090 W/kg

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

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



0 dB = 0.270 W/kg = -5.69 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G WCDMA Band IV 1412CH Back side 15mm Ant2

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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; $\sigma = 1.301$ S/m; $\epsilon_r = 40.466$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.6, 7.6, 7.6); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

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

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

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

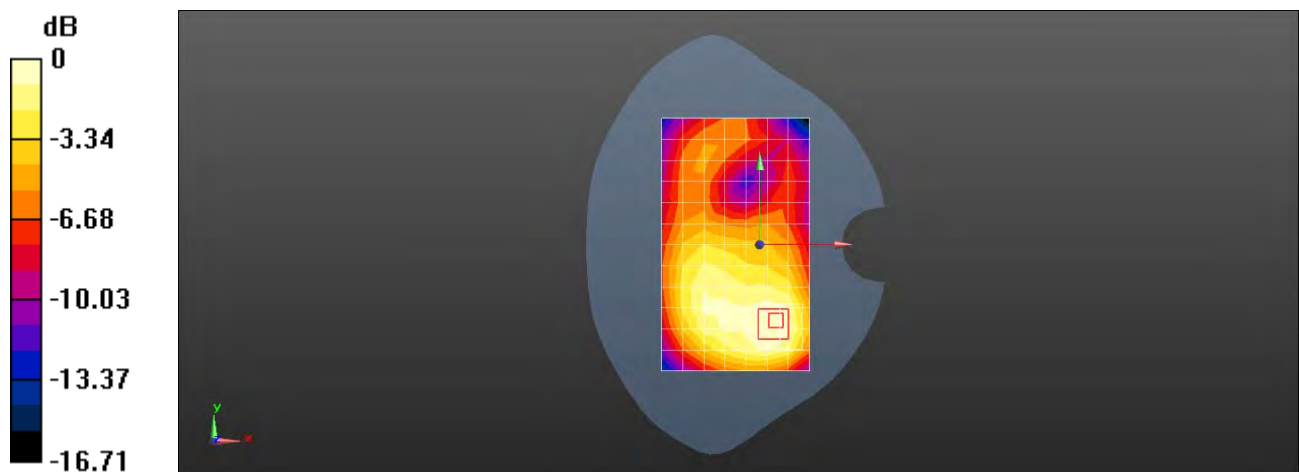
Reference Value = 9.510 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.401 W/kg

SAR(1 g) = 0.253 W/kg; SAR(10 g) = 0.158 W/kg

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

Maximum value of SAR (measured) = 0.325 W/kg



0 dB = 0.325 W/kg = -4.88 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G WCDMA Band IV 1513CH Bottom side 10mm Ant2

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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; $\sigma = 1.321$ S/m; $\epsilon_r = 40.406$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.6, 7.6, 7.6); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

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

Maximum value of SAR (measured) = 0.876 W/kg

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

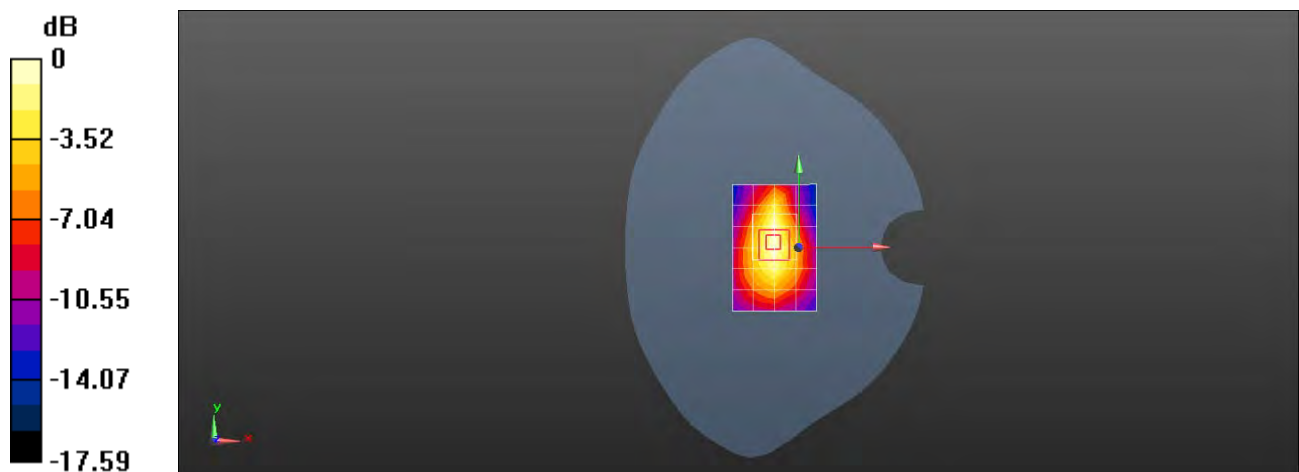
Reference Value = 23.25 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.13 W/kg

SAR(1 g) = 0.653 W/kg; SAR(10 g) = 0.364 W/kg

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

Maximum value of SAR (measured) = 0.903 W/kg



0 dB = 0.903 W/kg = -0.44 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G WCDMA Band IV 1412CH Right cheek Ant4

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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; $\sigma = 1.301$ S/m; $\epsilon_r = 40.466$; $\rho = 1000$ kg/m³
Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.6, 7.6, 7.6); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

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

Maximum value of SAR (measured) = 0.610 W/kg

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

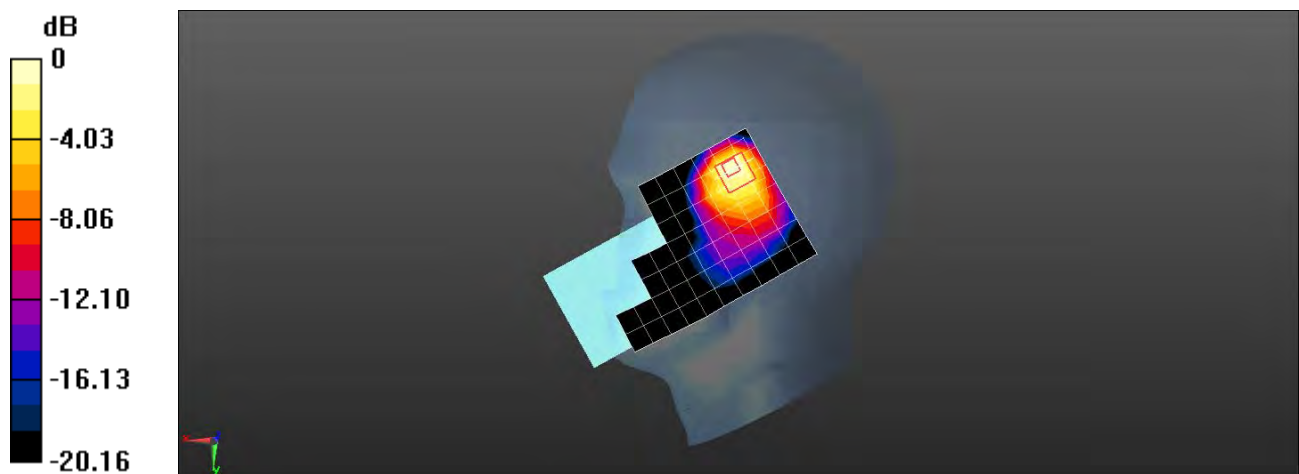
Reference Value = 9.212 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 1.18 W/kg

SAR(1 g) = 0.499 W/kg; SAR(10 g) = 0.254 W/kg

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

Maximum value of SAR (measured) = 0.774 W/kg



0 dB = 0.774 W/kg = -1.11 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G WCDMA Band IV 1412CH Back side 15mm Ant4

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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; $\sigma = 1.301$ S/m; $\epsilon_r = 40.466$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.6, 7.6, 7.6); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

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

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

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

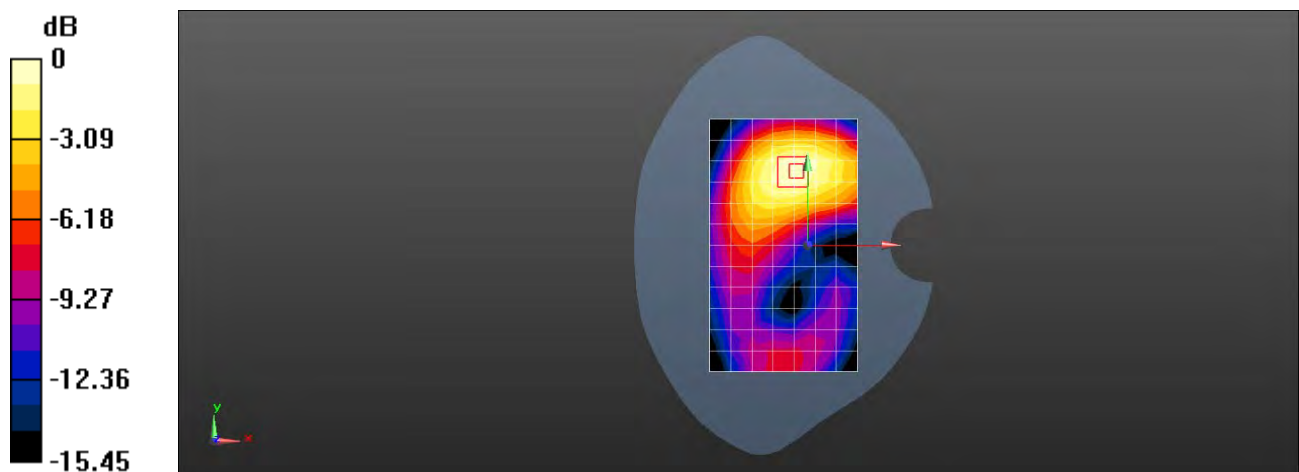
Reference Value = 6.050 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.506 W/kg

SAR(1 g) = 0.337 W/kg; SAR(10 g) = 0.215 W/kg

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

Maximum value of SAR (measured) = 0.425 W/kg



0 dB = 0.425 W/kg = -3.72 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G WCDMA Band IV 1412CH Top side 10mm Ant4

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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; $\sigma = 1.301$ S/m; $\epsilon_r = 40.466$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.6, 7.6, 7.6); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

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

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

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

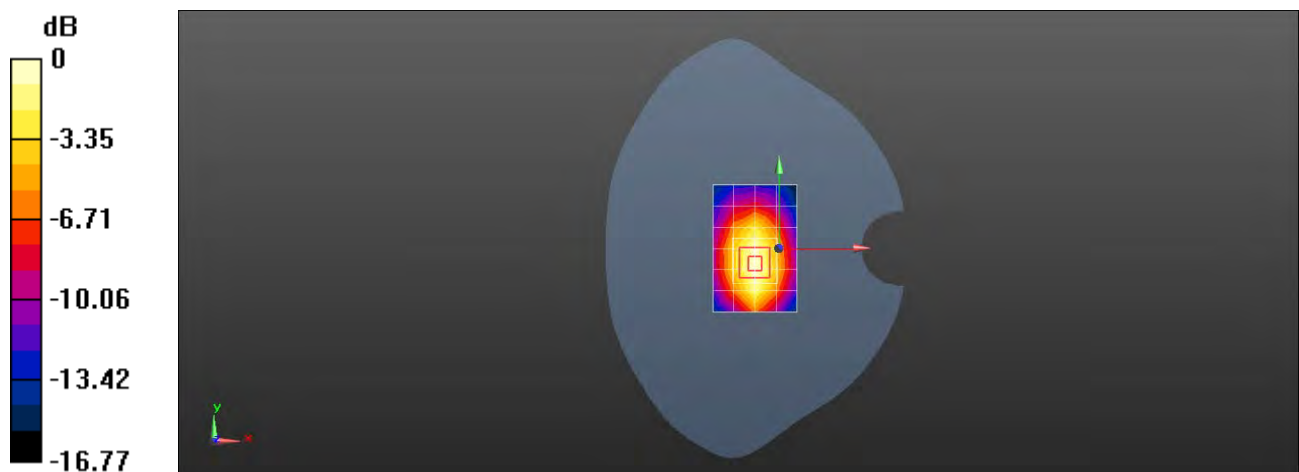
Reference Value = 11.03 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.258 W/kg

SAR(1 g) = 0.160 W/kg; SAR(10 g) = 0.093 W/kg

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

Maximum value of SAR (measured) = 0.213 W/kg



0 dB = 0.213 W/kg = -6.72 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G WCDMA Band V 4182CH Right cheek Ant0

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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; $\sigma = 0.887$ S/m; $\epsilon_r = 40.821$; $\rho = 1000$ kg/m³
Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(8.76, 8.76, 8.76); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

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

Maximum value of SAR (measured) = 0.239 W/kg

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

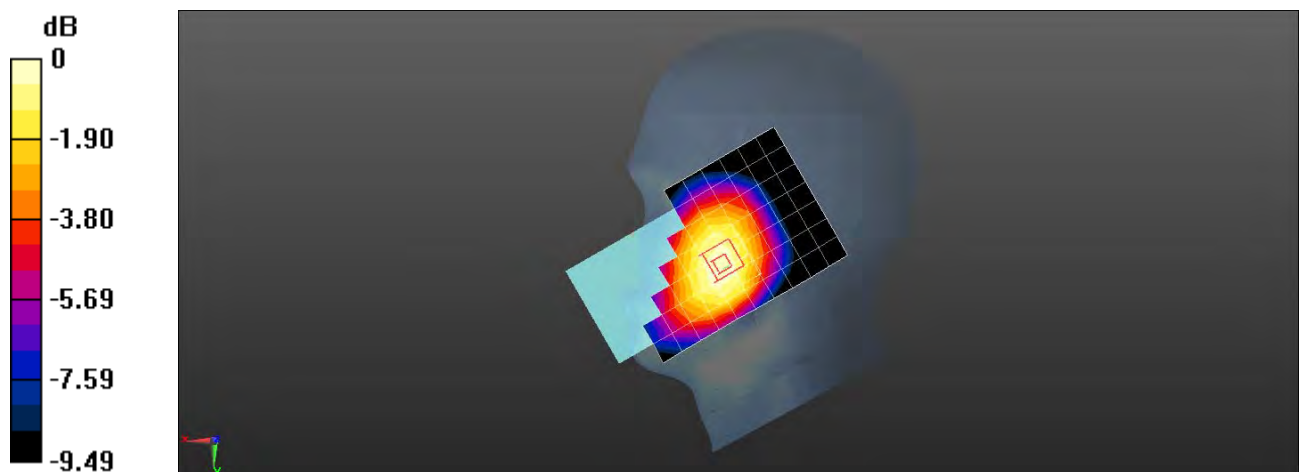
Reference Value = 3.783 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 0.275 W/kg

SAR(1 g) = 0.212 W/kg; SAR(10 g) = 0.163 W/kg

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

Maximum value of SAR (measured) = 0.246 W/kg



Test Laboratory: SGS-SAR Lab

M2004J11G WCDMA Band V 4182CH Back side 15mm Ant0

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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; $\sigma = 0.887$ S/m; $\epsilon_r = 40.821$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(8.76, 8.76, 8.76); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

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

Maximum value of SAR (measured) = 0.318 W/kg

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

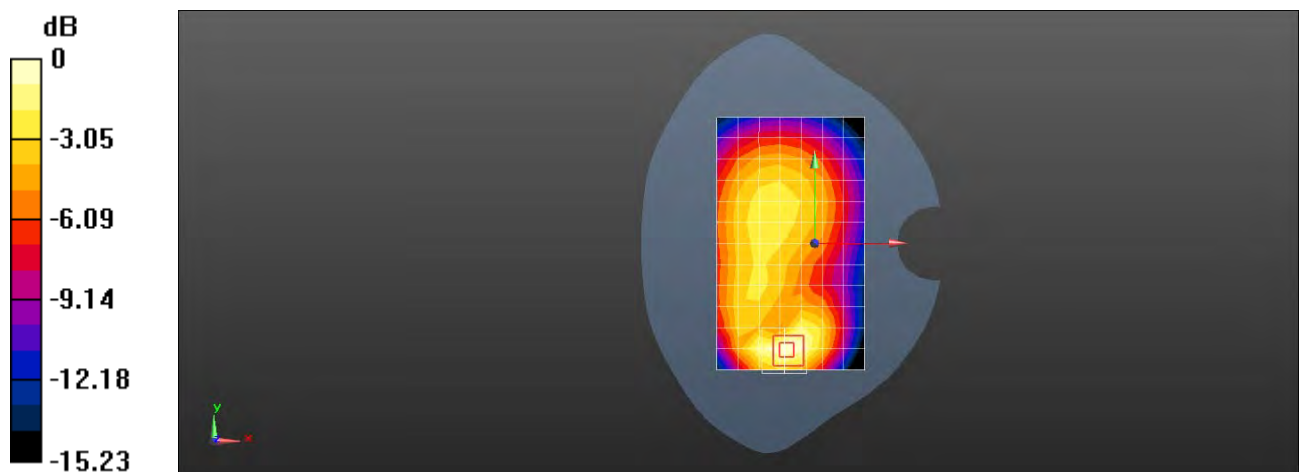
Reference Value = 12.20 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.399 W/kg

SAR(1 g) = 0.242 W/kg; SAR(10 g) = 0.145 W/kg

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

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



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

Test Laboratory: SGS-SAR Lab

M2004J11G WCDMA Band V 4182CH Back side 10mm Ant0

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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; $\sigma = 0.887$ S/m; $\epsilon_r = 40.821$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(8.76, 8.76, 8.76); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

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

Maximum value of SAR (measured) = 0.684 W/kg

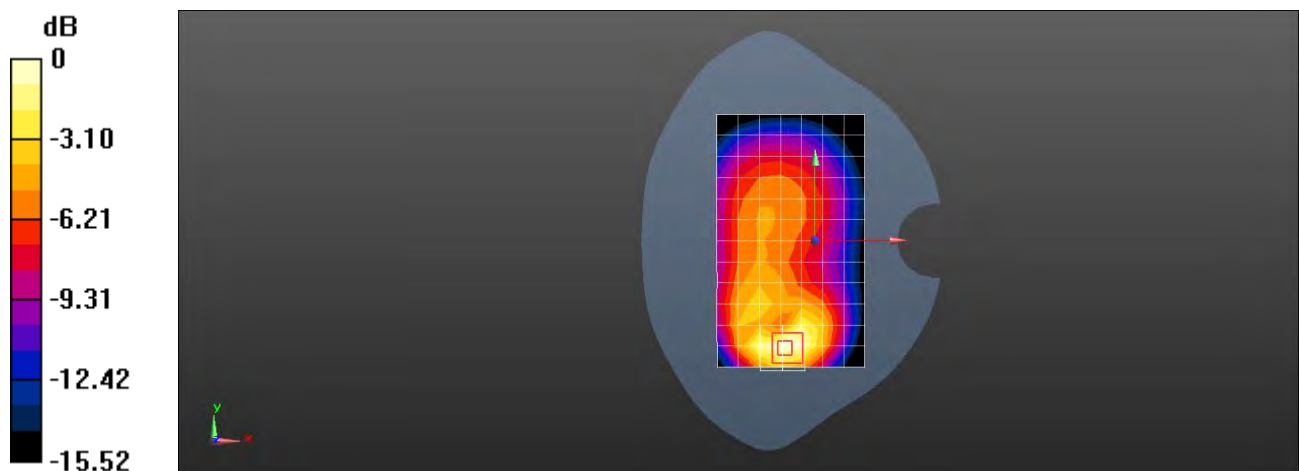
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.30 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.872 W/kg

SAR(1 g) = 0.498 W/kg; SAR(10 g) = 0.285 W/kg

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



Test Laboratory: SGS-SAR Lab

M2004J11G WCDMA Band V 4182CH Left cheek Ant1

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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; $\sigma = 0.891$ S/m; $\epsilon_r = 40.962$; $\rho = 1000$ kg/m³
Phantom section: Left Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(8.76, 8.76, 8.76); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

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

Maximum value of SAR (measured) = 0.623 W/kg

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

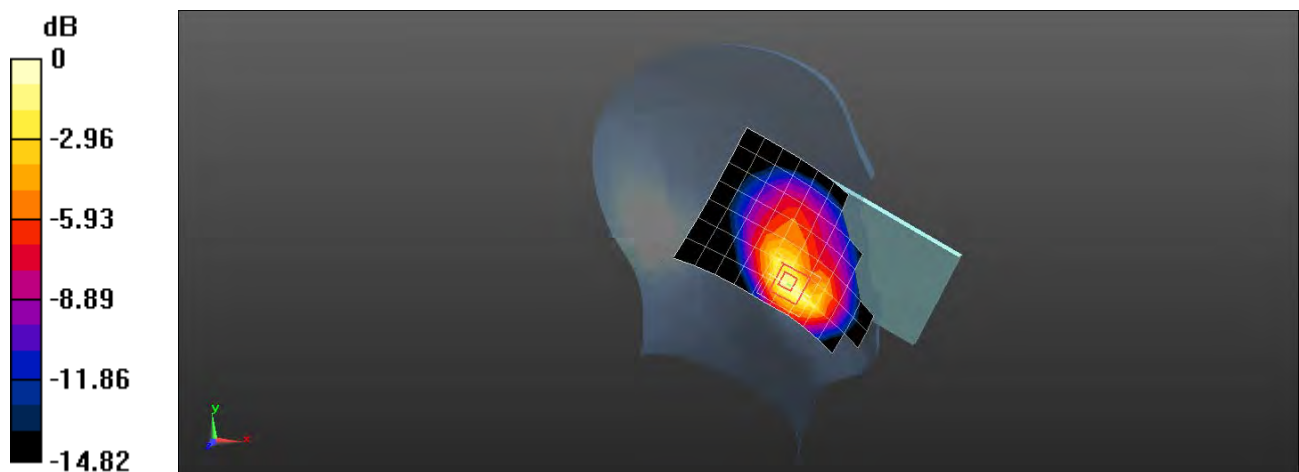
Reference Value = 5.864 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.03 W/kg

SAR(1 g) = 0.563 W/kg; SAR(10 g) = 0.320 W/kg

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

Maximum value of SAR (measured) = 0.785 W/kg



0 dB = 0.785 W/kg = -1.05 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G WCDMA Band V 4182CH Front side 15mm Ant1

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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; $\sigma = 0.891$ S/m; $\epsilon_r = 40.962$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(8.76, 8.76, 8.76); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

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

Maximum value of SAR (measured) = 0.179 W/kg

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

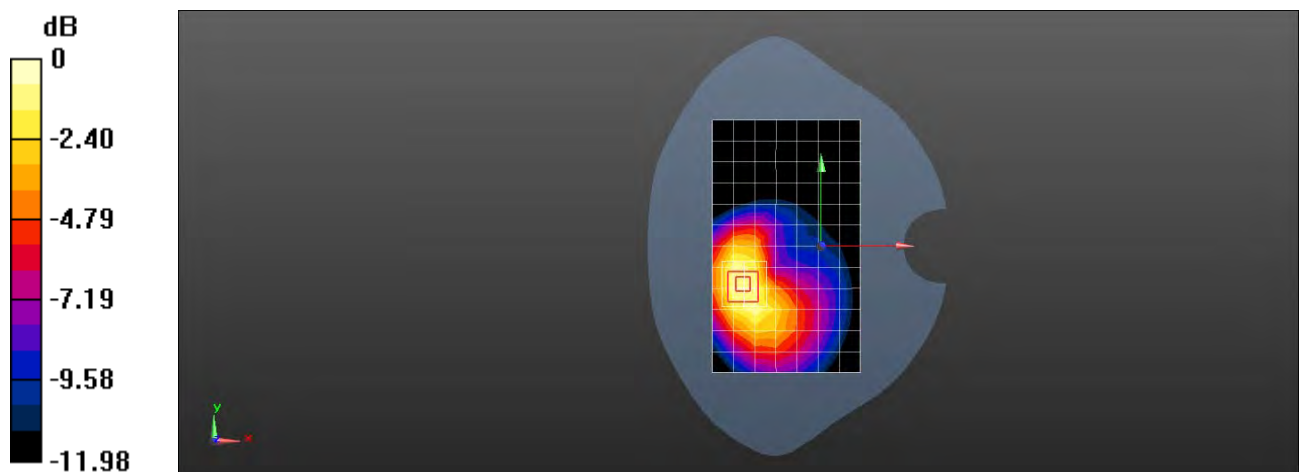
Reference Value = 4.841 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.257 W/kg

SAR(1 g) = 0.163 W/kg; SAR(10 g) = 0.104 W/kg

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

Maximum value of SAR (measured) = 0.213 W/kg



Test Laboratory: SGS-SAR Lab

M2004J11G WCDMA Band V 4182CH Left side 10mm Ant1

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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; $\sigma = 0.891$ S/m; $\epsilon_r = 40.962$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(8.76, 8.76, 8.76); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

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

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

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

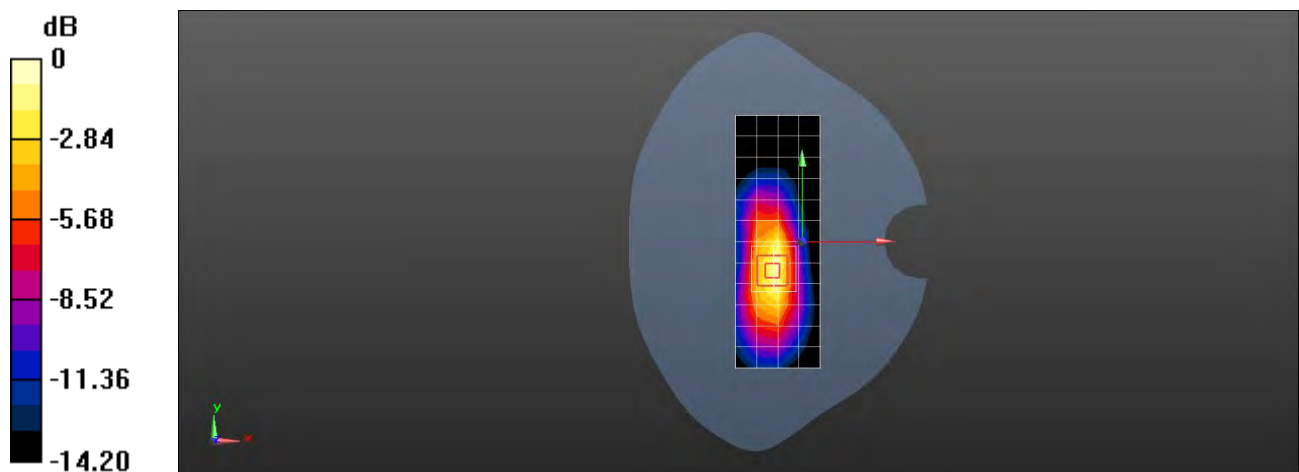
Reference Value = 20.32 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.996 W/kg

SAR(1 g) = 0.539 W/kg; SAR(10 g) = 0.299 W/kg

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

Maximum value of SAR (measured) = 0.765 W/kg



0 dB = 0.765 W/kg = -1.16 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G LTE Band 2 QPSK 20M 1RB50 18900CH Right cheek Ant2

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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

Medium: HSL1900; Medium parameters used: $f = 1880$ MHz; $\sigma = 1.38$ S/m; $\epsilon_r = 40.072$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.31, 7.31, 7.31); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 0.0994 W/kg

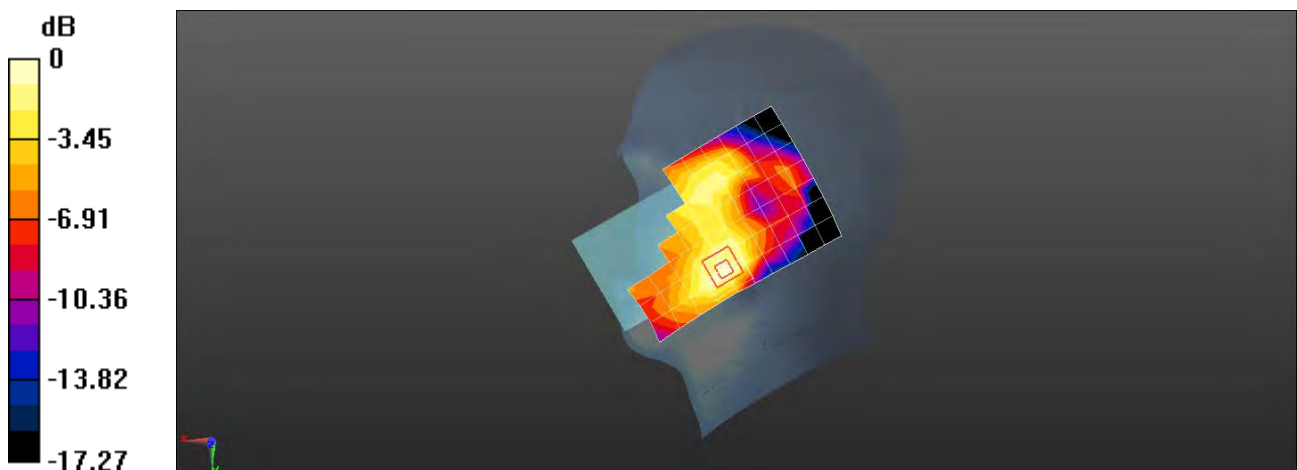
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.044 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.122 W/kg

SAR(1 g) = 0.080 W/kg; SAR(10 g) = 0.049 W/kg

Maximum value of SAR (measured) = 0.103 W/kg



0 dB = 0.103 W/kg = -9.87 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G LTE Band 2 QPSK 20M 1RB50 18900CH Back side 15mm Ant2

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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

Medium: HSL1900; Medium parameters used: $f = 1880$ MHz; $\sigma = 1.38$ S/m; $\epsilon_r = 40.072$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.31, 7.31, 7.31); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

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

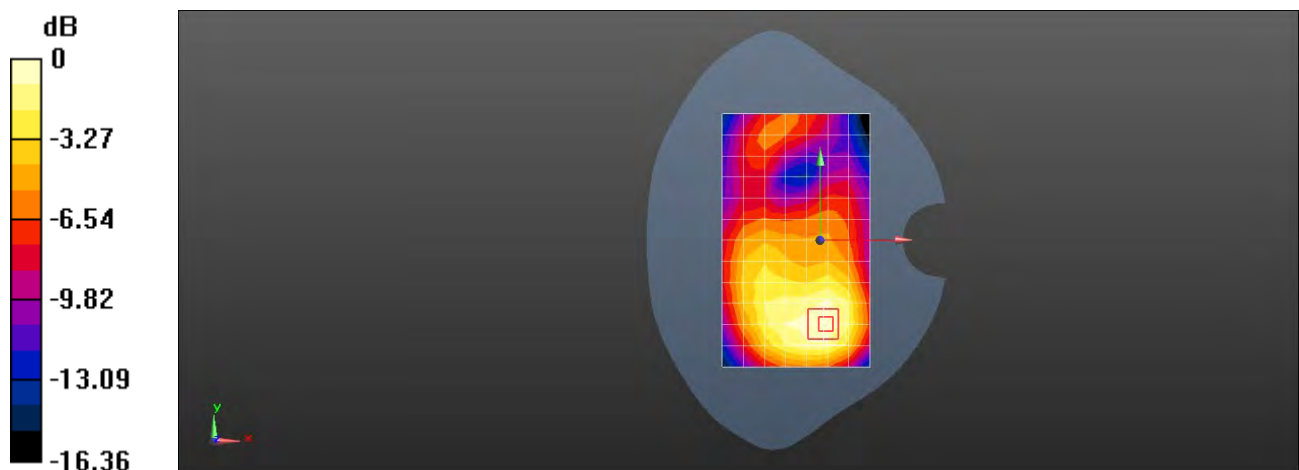
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.860 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.318 W/kg

SAR(1 g) = 0.196 W/kg; SAR(10 g) = 0.119 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

M2004J11G LTE Band 2 QPSK 20M 1RB0 18700CH Bottom side 10mm Ant2

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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

Medium: HSL1900; Medium parameters used: $f = 1860$ MHz; $\sigma = 1.364$ S/m; $\epsilon_r = 40.12$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.31, 7.31, 7.31); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (5x7x1): Measurement grid: $dx=15$ mm, $dy=15$ mm
Maximum value of SAR (measured) = 1.00 W/kg

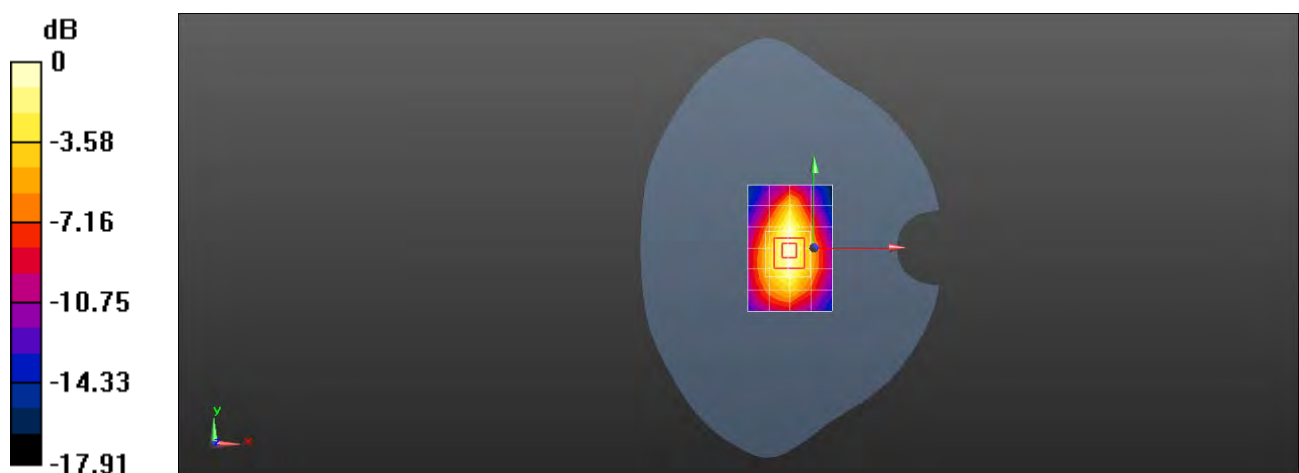
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 24.26 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.25 W/kg

SAR(1 g) = 0.724 W/kg; SAR(10 g) = 0.403 W/kg

Maximum value of SAR (measured) = 0.989 W/kg



0 dB = 0.989 W/kg = -0.05 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G LTE Band 2 QPSK 20M 50RB50 19100CH Right cheek Ant4

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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

Medium: HSL1900; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.362$ S/m; $\epsilon_r = 40.029$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.31, 7.31, 7.31); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 0.882 W/kg

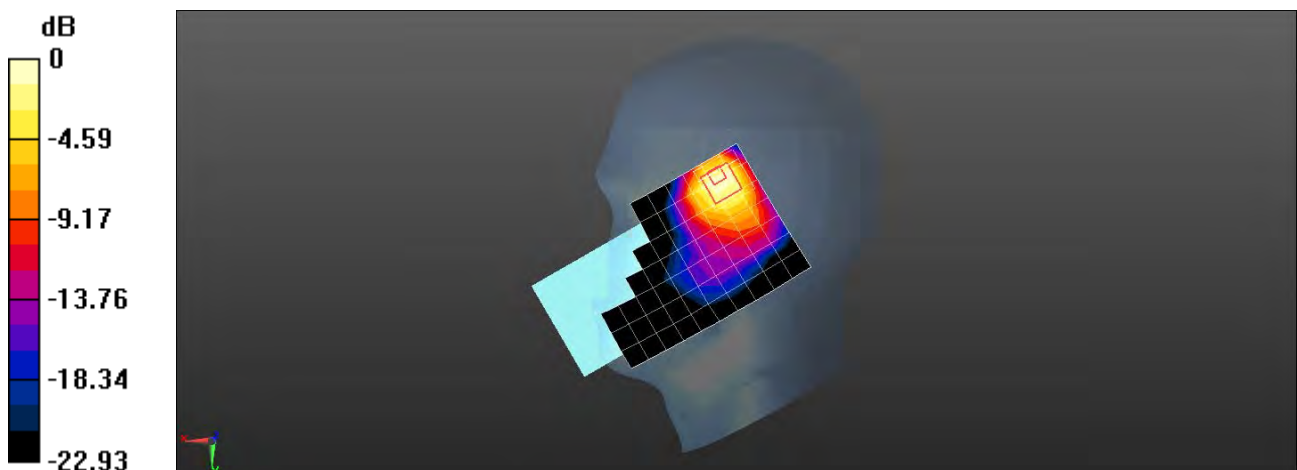
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.452 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.37 W/kg

SAR(1 g) = 0.549 W/kg; SAR(10 g) = 0.288 W/kg

Maximum value of SAR (measured) = 0.927 W/kg



0 dB = 0.927 W/kg = -0.33 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G LTE Band 2 QPSK 20M 1RB99 19100CH Back side 15mm Ant4

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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

Medium: HSL1900; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.362$ S/m; $\epsilon_r = 40.029$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.31, 7.31, 7.31); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 0.294 W/kg

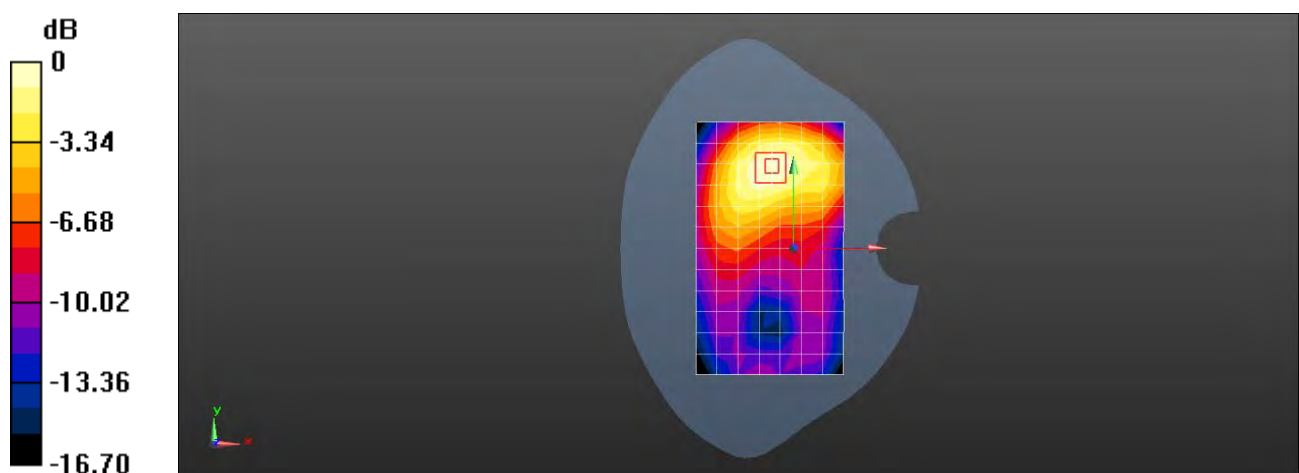
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.248 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 0.360 W/kg

SAR(1 g) = 0.229 W/kg; SAR(10 g) = 0.142 W/kg

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



Test Laboratory: SGS-SAR Lab

M2004J11G LTE Band 2 QPSK 20M 50RB50 19100CH Top side 10mm Ant4

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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

Medium: HSL1900; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.362$ S/m; $\epsilon_r = 40.029$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.31, 7.31, 7.31); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 0.291 W/kg

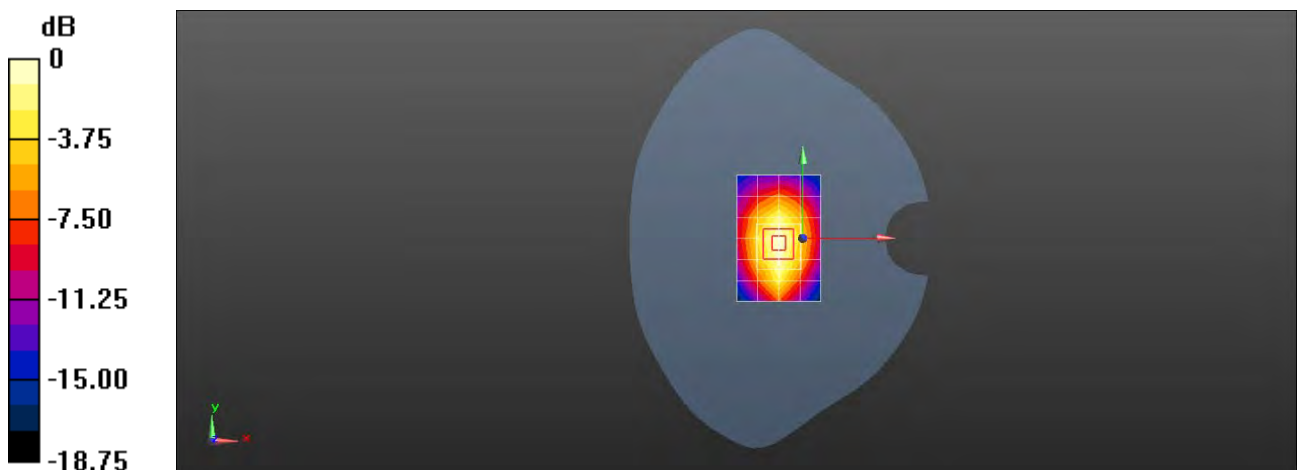
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.25 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.371 W/kg

SAR(1 g) = 0.218 W/kg; SAR(10 g) = 0.122 W/kg

Maximum value of SAR (measured) = 0.296 W/kg



0 dB = 0.296 W/kg = -5.29 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G LTE Band 4 QPSK 20M 1RB50 20050CH Right cheek Ant2

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

Communication System: UID 0, LTE Band 4; Frequency: 1720 MHz; Duty Cycle: 1:1

Medium: HSL1750; Medium parameters used: $f = 1720$ MHz; $\sigma = 1.29$ S/m; $\epsilon_r = 40.509$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.6, 7.6, 7.6); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

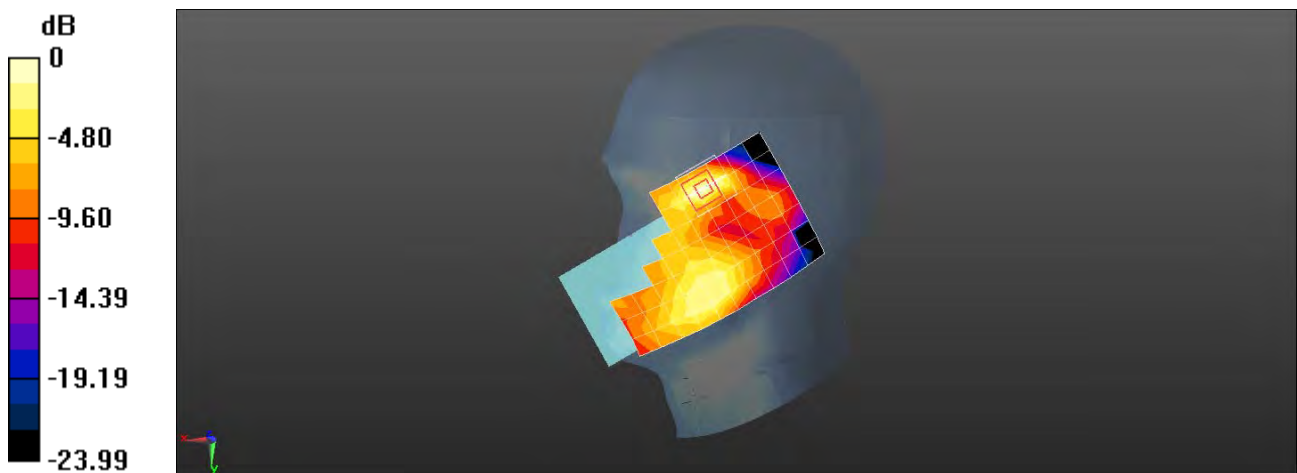
Maximum value of SAR (measured) = 0.194 W/kg

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

Reference Value = 4.437 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.247 W/kg

SAR(1 g) = 0.132 W/kg; SAR(10 g) = 0.064 W/kg



0 dB = 0.194 W/kg = -7.12 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G LTE Band 4 QPSK 20M 1RB50 20050CH Back side 15mm Ant2

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

Communication System: UID 0, LTE Band 4; Frequency: 1720 MHz; Duty Cycle: 1:1

Medium: HSL1750; Medium parameters used: $f = 1720$ MHz; $\sigma = 1.29$ S/m; $\epsilon_r = 40.509$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.6, 7.6, 7.6); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 0.266 W/kg

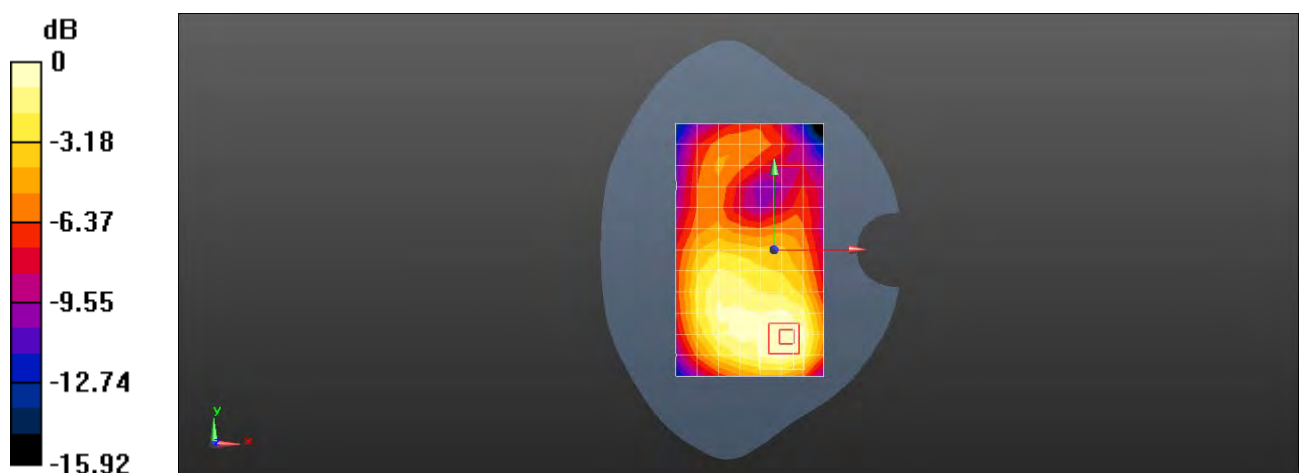
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.643 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.331 W/kg

SAR(1 g) = 0.211 W/kg; SAR(10 g) = 0.132 W/kg

Maximum value of SAR (measured) = 0.269 W/kg



0 dB = 0.269 W/kg = -5.70 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G LTE Band 4 QPSK 20M 1RB0 20175CH Bottom side 10mm Ant2

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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; $\sigma = 1.301$ S/m; $\epsilon_r = 40.465$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.6, 7.6, 7.6); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

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

Maximum value of SAR (measured) = 0.985 W/kg

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

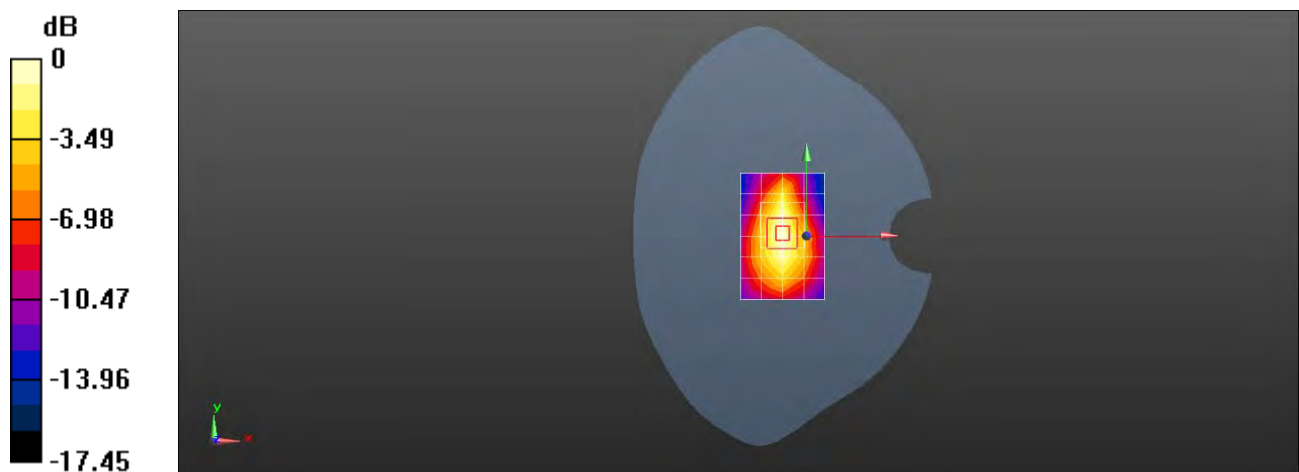
Reference Value = 24.81 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 1.25 W/kg

SAR(1 g) = 0.729 W/kg; SAR(10 g) = 0.409 W/kg

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

Maximum value of SAR (measured) = 0.993 W/kg



0 dB = 0.993 W/kg = -0.03 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G LTE Band 4 QPSK 20M 1RB0 20300CH Right cheek Ant4

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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

Medium: HSL1750; Medium parameters used: $f = 1745$ MHz; $\sigma = 1.313$ S/m; $\epsilon_r = 40.426$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.6, 7.6, 7.6); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 1.22 W/kg

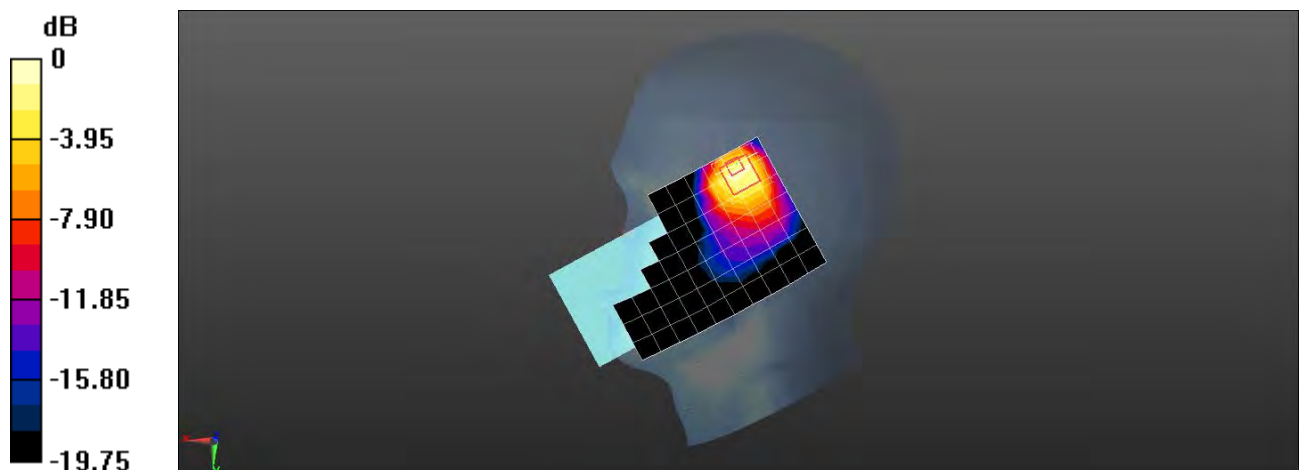
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.00 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.97 W/kg

SAR(1 g) = 0.809 W/kg; SAR(10 g) = 0.411 W/kg

Maximum value of SAR (measured) = 1.37 W/kg



0 dB = 1.37 W/kg = 1.37 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G LTE Band 4 QPSK 20M 1RB0 20175CH Back side 15mm Ant4

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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; $\sigma = 1.301$ S/m; $\epsilon_r = 40.465$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.6, 7.6, 7.6); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

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

Maximum value of SAR (measured) = 0.383 W/kg

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

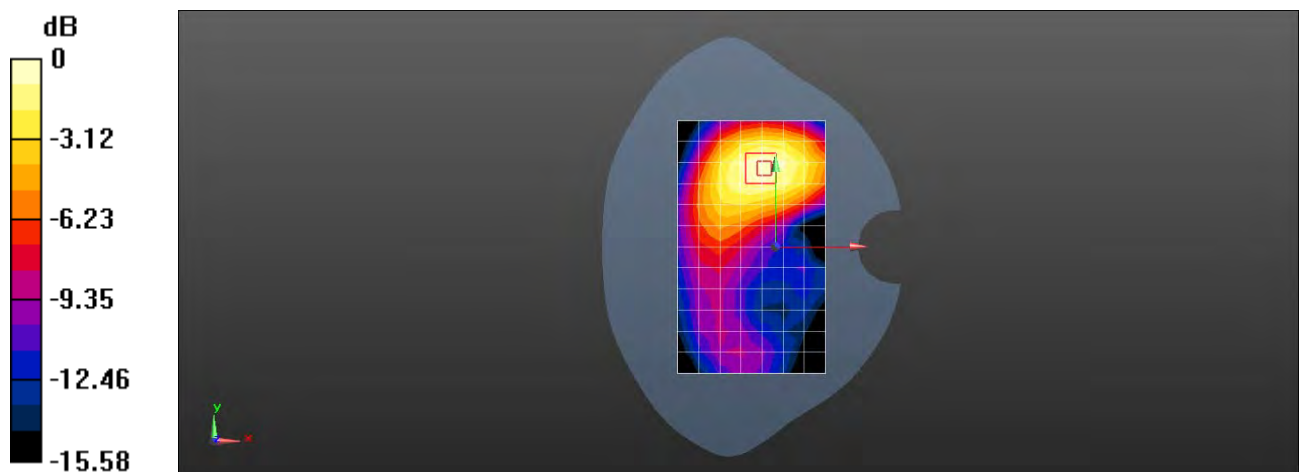
Reference Value = 5.648 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.461 W/kg

SAR(1 g) = 0.306 W/kg; SAR(10 g) = 0.195 W/kg

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

Maximum value of SAR (measured) = 0.388 W/kg



0 dB = 0.388 W/kg = -4.11 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G LTE Band 4 QPSK 20M 1RB0 20175CH Top side 10mm Ant4

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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; $\sigma = 1.301$ S/m; $\epsilon_r = 40.465$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(7.6, 7.6, 7.6); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 8; Type: SAM; Serial: 1063
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

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

Maximum value of SAR (measured) = 0.286 W/kg

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

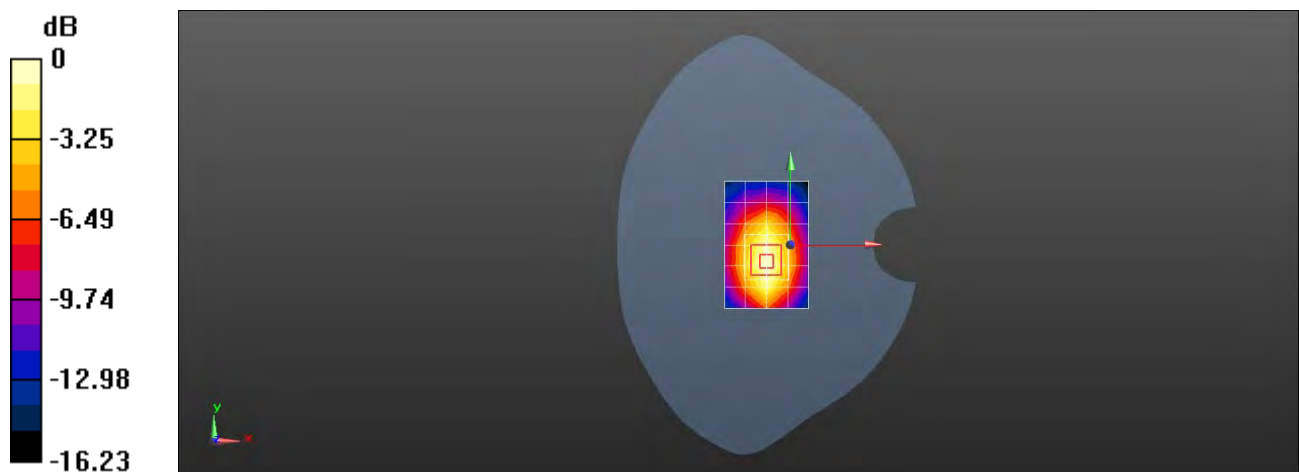
Reference Value = 12.71 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.351 W/kg

SAR(1 g) = 0.217 W/kg; SAR(10 g) = 0.127 W/kg

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

Maximum value of SAR (measured) = 0.289 W/kg



0 dB = 0.289 W/kg = -5.39 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G LTE Band 5 QPSK 10M 1RB0 20600CH Right cheek Ant0

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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

Medium: HSL835; Medium parameters used: $f = 844 \text{ MHz}$; $\sigma = 0.892 \text{ S/m}$; $\epsilon_r = 40.774$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(8.76, 8.76, 8.76); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 0.214 W/kg

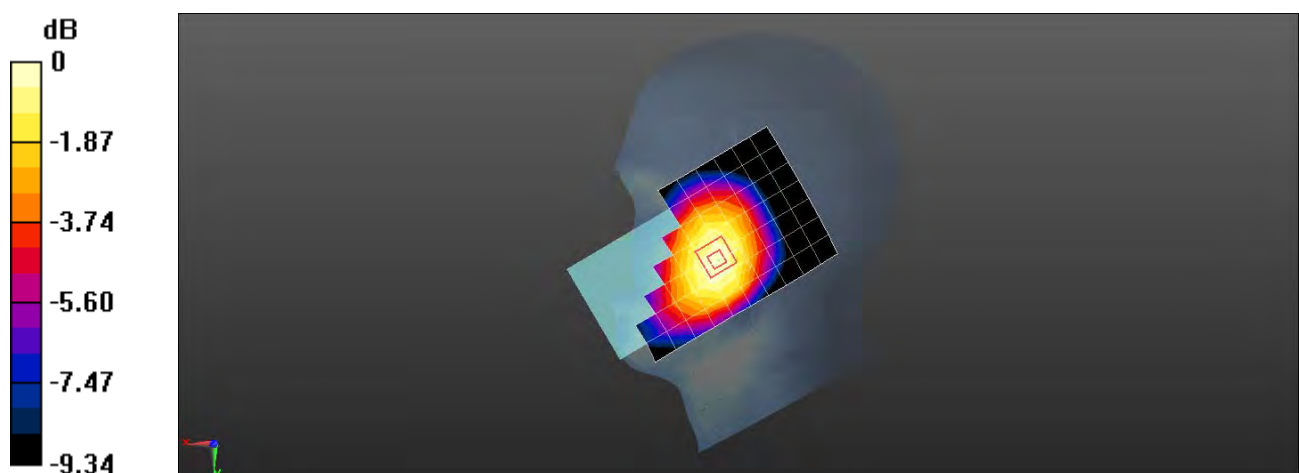
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 3.398 V/m ; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.244 W/kg

SAR(1 g) = 0.190 W/kg ; SAR(10 g) = 0.145 W/kg

Maximum value of SAR (measured) = 0.219 W/kg



$0 \text{ dB} = 0.219 \text{ W/kg} = -6.60 \text{ dBW/kg}$

Test Laboratory: SGS-SAR Lab

M2004J11G LTE Band 5 QPSK 10M 1RB0 20600CH Back side 15mm Ant0

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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

Medium: HSL835; Medium parameters used: $f = 844 \text{ MHz}$; $\sigma = 0.892 \text{ S/m}$; $\epsilon_r = 40.774$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(8.76, 8.76, 8.76); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 0.303 W/kg

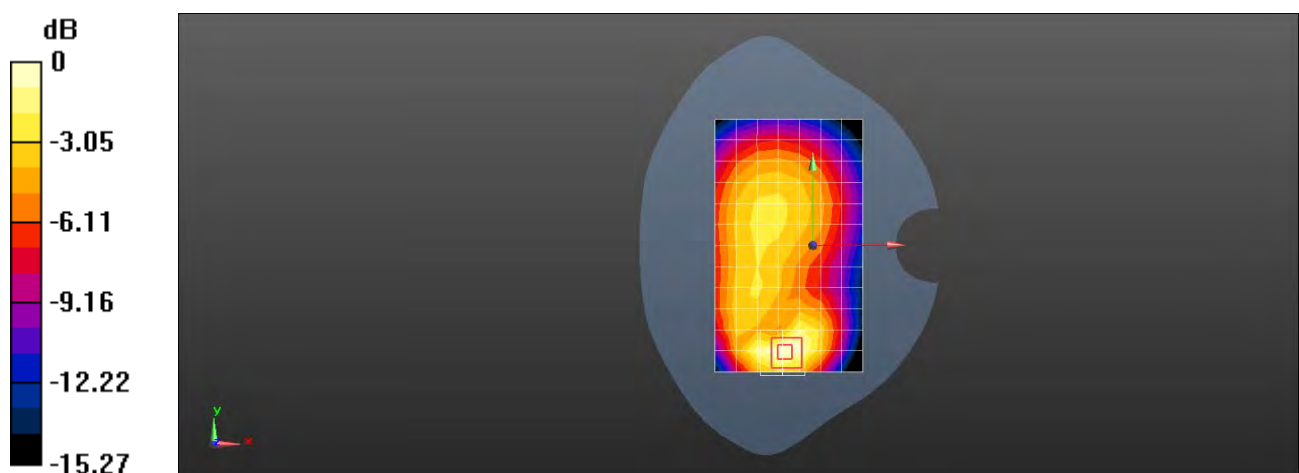
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 11.52 V/m ; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 0.378 W/kg

SAR(1 g) = 0.230 W/kg ; SAR(10 g) = 0.137 W/kg

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



$0 \text{ dB} = 0.305 \text{ W/kg} = -5.16 \text{ dBW/kg}$

Test Laboratory: SGS-SAR Lab

M2004J11G LTE Band 5 QPSK 10M 1RB0 20600CH Back side 10mm Ant0

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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

Medium: HSL835; Medium parameters used: $f = 844 \text{ MHz}$; $\sigma = 0.892 \text{ S/m}$; $\epsilon_r = 40.774$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(8.76, 8.76, 8.76); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 0.630 W/kg

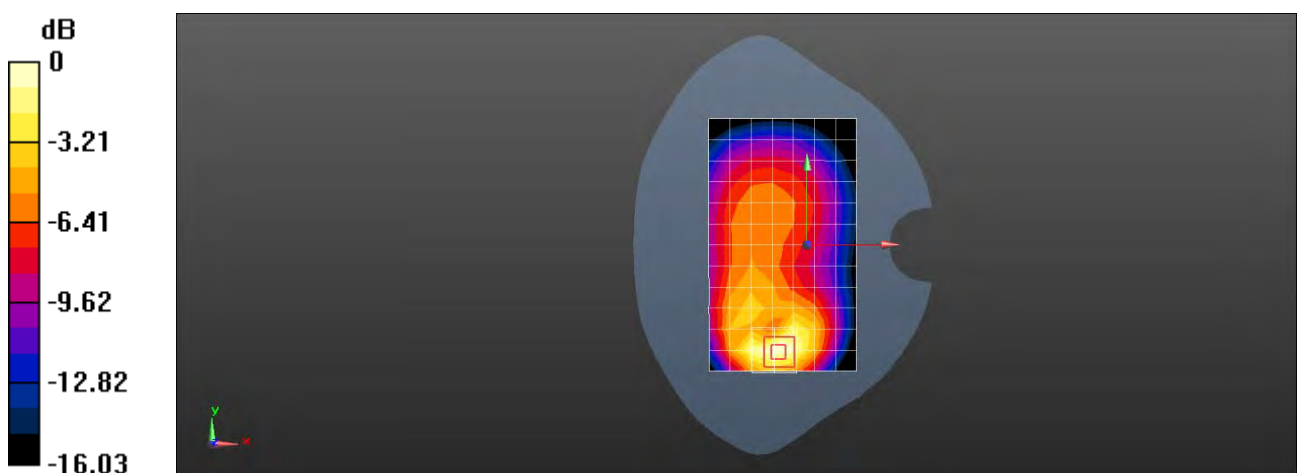
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 12.25 V/m ; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.811 W/kg

SAR(1 g) = 0.458 W/kg ; SAR(10 g) = 0.260 W/kg

Maximum value of SAR (measured) = 0.635 W/kg



Test Laboratory: SGS-SAR Lab

M2004J11G LTE Band 5 QPSK 10M 1RB0 20600CH Left cheek Ant1

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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

Medium: HSL835; Medium parameters used: $f = 844 \text{ MHz}$; $\sigma = 0.896 \text{ S/m}$; $\epsilon_r = 40.914$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(8.76, 8.76, 8.76); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 0.592 W/kg

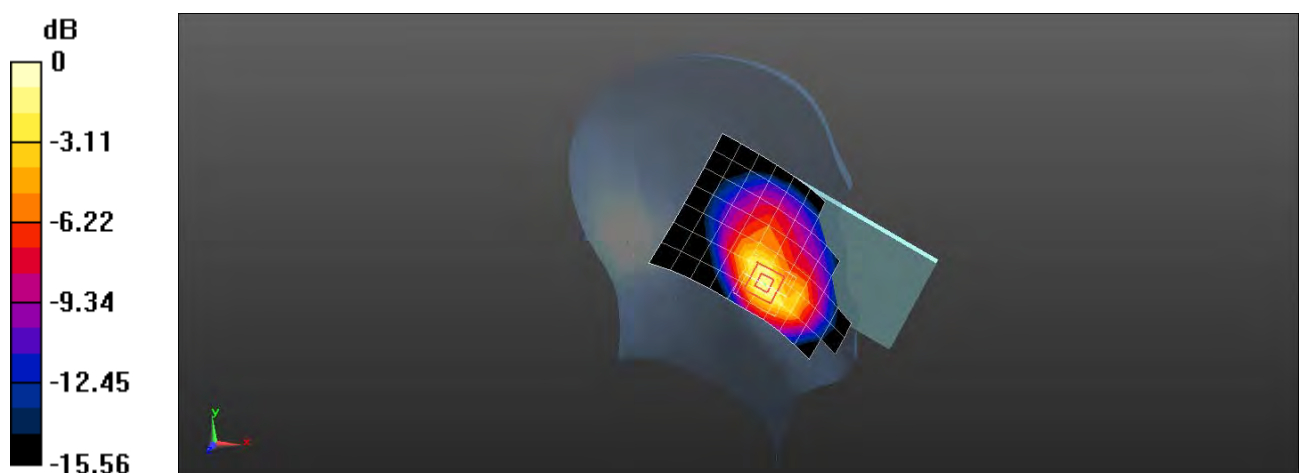
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 5.728 V/m ; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.14 W/kg

SAR(1 g) = 0.590 W/kg ; SAR(10 g) = 0.327 W/kg

Maximum value of SAR (measured) = 0.857 W/kg



0 dB = 0.857 W/kg = -0.67 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G LTE Band 5 QPSK 10M 1RB0 20600CH Front side 15mm Ant1

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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

Medium: HSL835; Medium parameters used: $f = 844 \text{ MHz}$; $\sigma = 0.896 \text{ S/m}$; $\epsilon_r = 40.914$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(8.76, 8.76, 8.76); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 0.182 W/kg

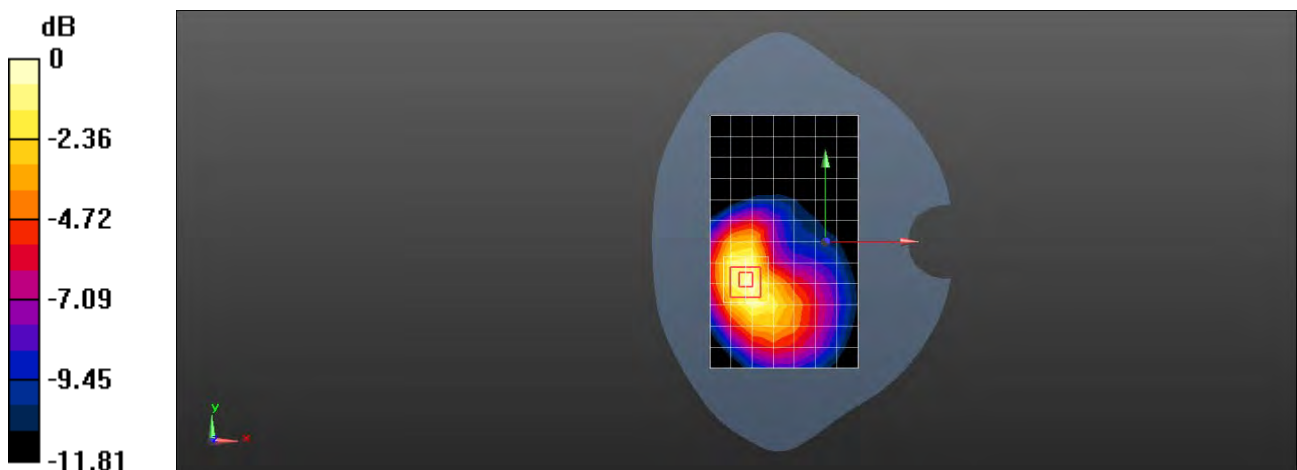
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 4.540 V/m ; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 0.229 W/kg

SAR(1 g) = 0.146 W/kg ; SAR(10 g) = 0.094 W/kg

Maximum value of SAR (measured) = 0.190 W/kg



0 dB = 0.190 W/kg = -7.21 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G LTE Band 5 QPSK 10M 1RB0 20600CH Left side 10mm Ant1

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

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

Medium: HSL835; Medium parameters used: $f = 844 \text{ MHz}$; $\sigma = 0.896 \text{ S/m}$; $\epsilon_r = 40.914$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(8.76, 8.76, 8.76); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (5x13x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.642 W/kg

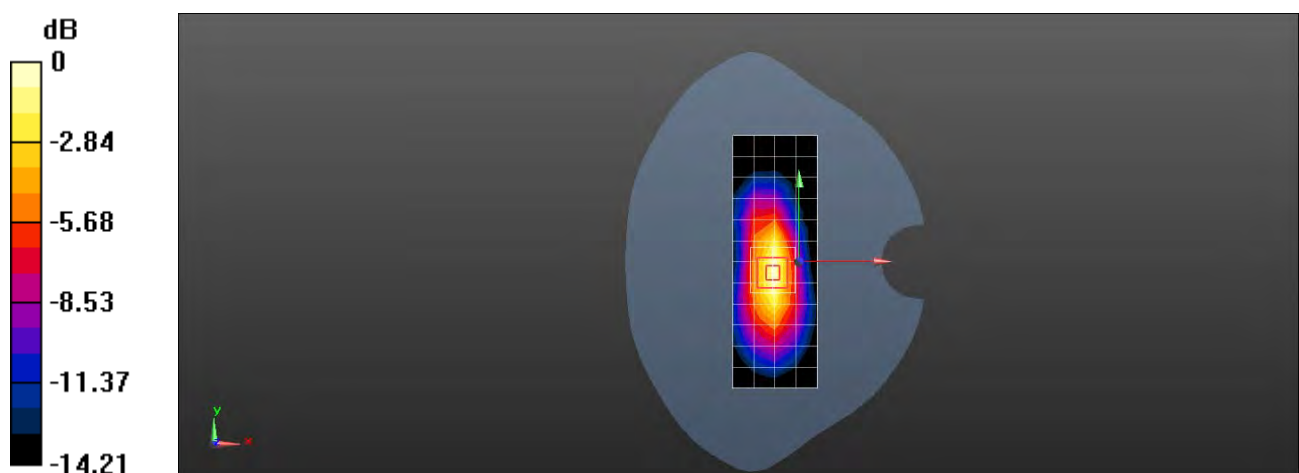
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 23.52 V/m ; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.879 W/kg

SAR(1 g) = 0.480 W/kg ; SAR(10 g) = 0.267 W/kg

Maximum value of SAR (measured) = 0.686 W/kg



0 dB = 0.686 W/kg = -1.64 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G LTE Band 7 20M QPSK 1RB0 21350CH Left cheek Ant2

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

Communication System: UID 0, LTE Band 7 20MHz; Frequency: 2560 MHz; Duty Cycle: 1:1

Medium: HSL2600; Medium parameters used: $f = 2560$ MHz; $\sigma = 1.923$ S/m; $\epsilon_r = 37.774$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(6.7, 6.7, 6.7); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (10x16x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.171 W/kg

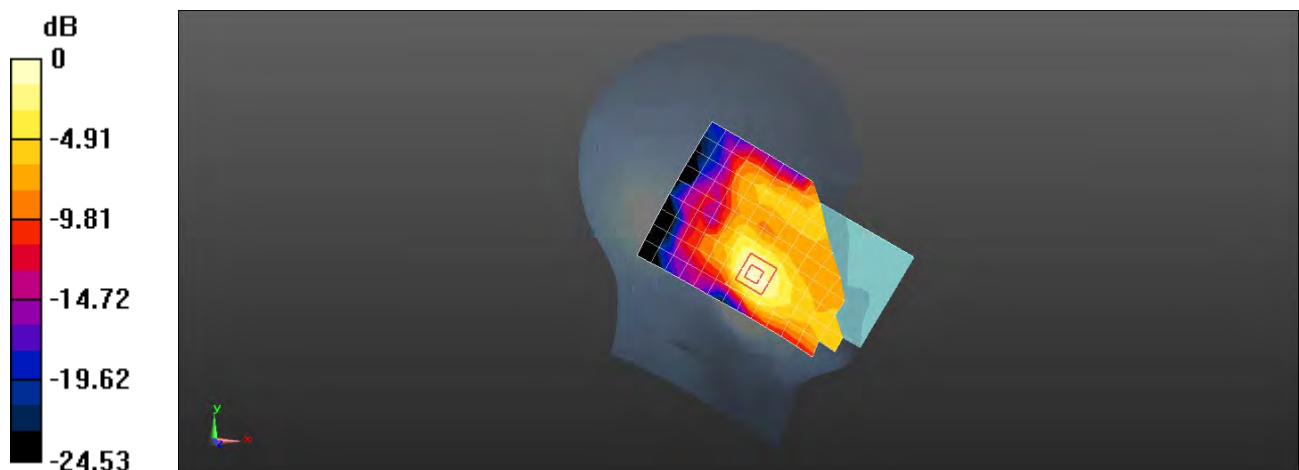
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.801 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.224 W/kg

SAR(1 g) = 0.129 W/kg; SAR(10 g) = 0.069 W/kg

Maximum value of SAR (measured) = 0.179 W/kg



0 dB = 0.179 W/kg = -7.47 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G LTE Band 7 20M QPSK 1RB0 21350CH Back side 15mm Ant2

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

Communication System: UID 0, LTE Band 7 20MHz; Frequency: 2560 MHz; Duty Cycle: 1:1

Medium: HSL2600; Medium parameters used: $f = 2560$ MHz; $\sigma = 1.923$ S/m; $\epsilon_r = 37.774$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(6.7, 6.7, 6.7); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 0.399 W/kg

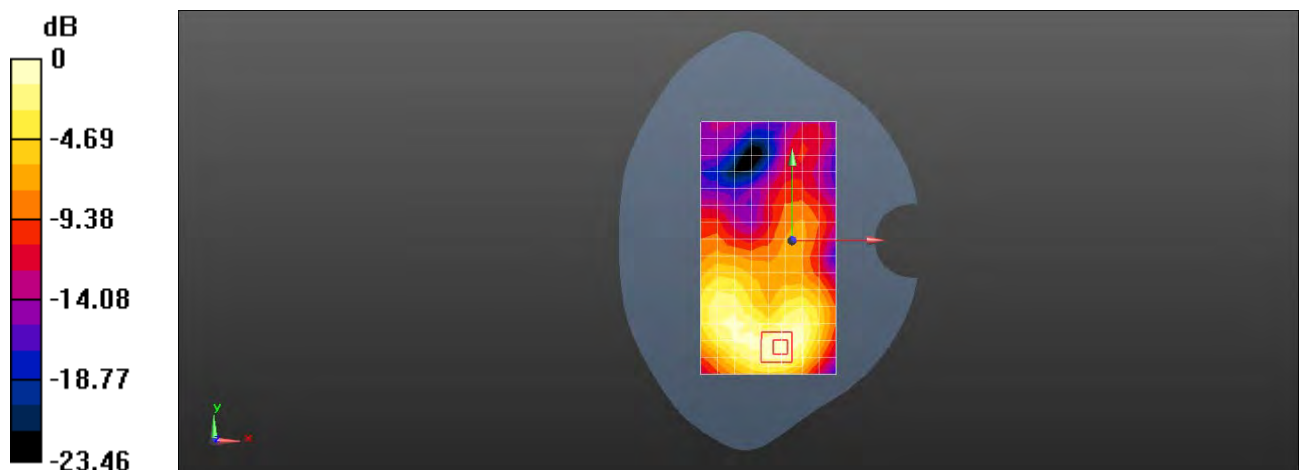
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.114 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.536 W/kg

SAR(1 g) = 0.291 W/kg; SAR(10 g) = 0.155 W/kg

Maximum value of SAR (measured) = 0.413 W/kg



0 dB = 0.413 W/kg = -3.84 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G LTE Band 7 20M QPSK 1RB0 21350CH Bottom side 10mm Ant2

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

Communication System: UID 0, LTE Band 7 20MHz; Frequency: 2560 MHz; Duty Cycle: 1:1

Medium: HSL2600; Medium parameters used: $f = 2560$ MHz; $\sigma = 1.923$ S/m; $\epsilon_r = 37.774$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(6.7, 6.7, 6.7); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (6x9x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.704 W/kg

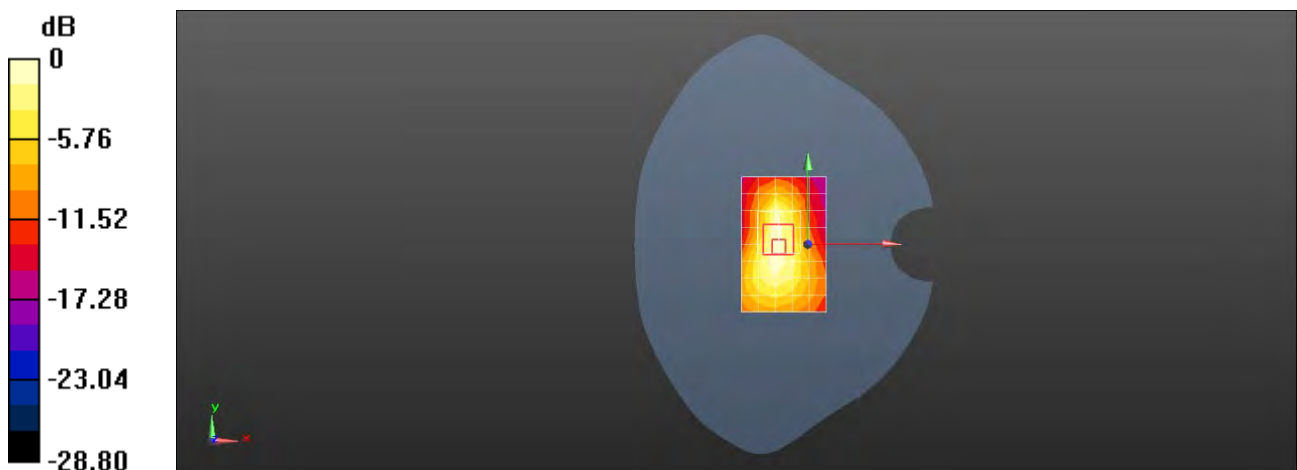
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.47 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 1.00 W/kg

SAR(1 g) = 0.488 W/kg; SAR(10 g) = 0.238 W/kg

Maximum value of SAR (measured) = 0.746 W/kg



0 dB = 0.746 W/kg = -1.27 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G LTE Band 7 20M QPSK 50RB0 20850CH Right cheek Ant4

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

Communication System: UID 0, LTE Band 7 20MHz; Frequency: 2510 MHz; Duty Cycle: 1:1

Medium: HSL2600; Medium parameters used: $f = 2510$ MHz; $\sigma = 1.856$ S/m; $\epsilon_r = 37.965$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(6.7, 6.7, 6.7); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

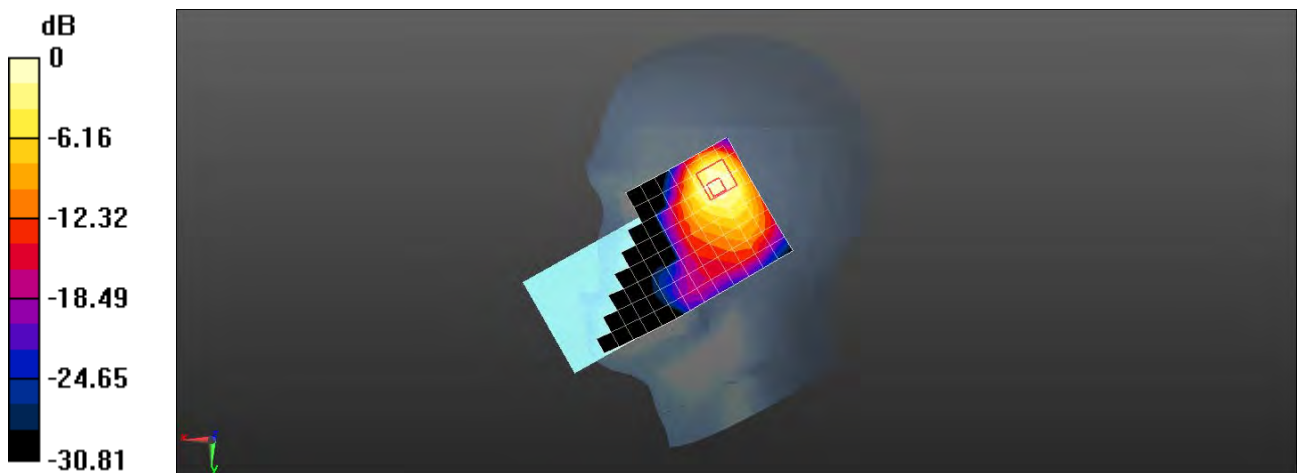
Maximum value of SAR (measured) = 1.24 W/kg

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

Reference Value = 11.48 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.67 W/kg

SAR(1 g) = 0.809 W/kg; SAR(10 g) = 0.400 W/kg



0 dB = 1.24 W/kg = 0.93 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G LTE Band 7 20M QPSK 1RB0 21350CH Back side 15mm Ant4

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

Communication System: UID 0, LTE Band 7 20MHz; Frequency: 2560 MHz; Duty Cycle: 1:1

Medium: HSL2600; Medium parameters used: $f = 2560$ MHz; $\sigma = 1.923$ S/m; $\epsilon_r = 37.774$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(6.7, 6.7, 6.7); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 0.203 W/kg

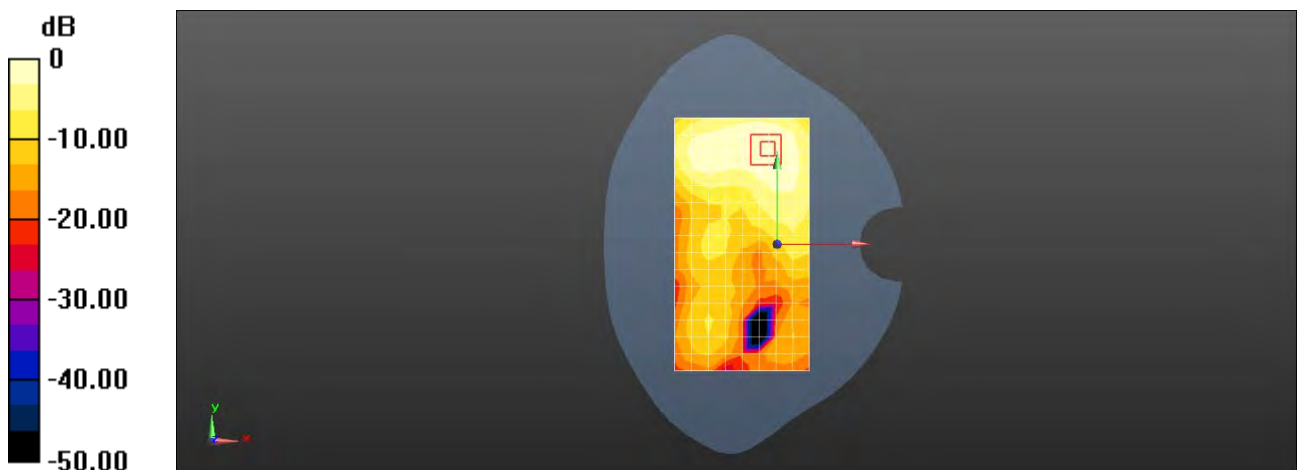
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.377 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.269 W/kg

SAR(1 g) = 0.153 W/kg; SAR(10 g) = 0.087 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

M2004J11G LTE Band 7 20M QPSK 1RB0 21350CH Top side 10mm Ant4

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

Communication System: UID 0, LTE Band 7 20MHz; Frequency: 2560 MHz; Duty Cycle: 1:1

Medium: HSL2600; Medium parameters used: $f = 2560$ MHz; $\sigma = 1.923$ S/m; $\epsilon_r = 37.774$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(6.7, 6.7, 6.7); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (6x9x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.448 W/kg

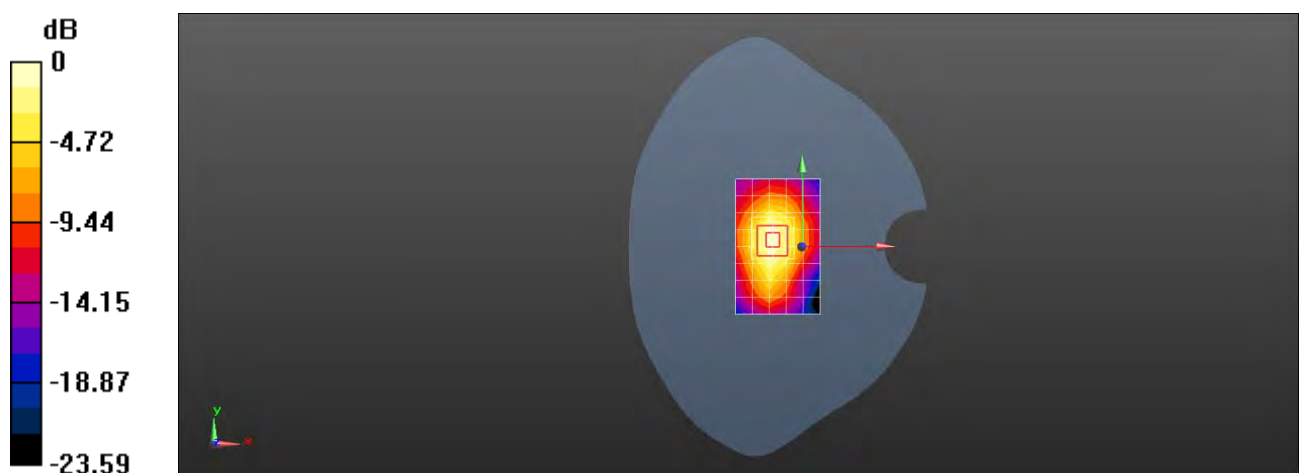
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.86 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.620 W/kg

SAR(1 g) = 0.332 W/kg; SAR(10 g) = 0.168 W/kg

Maximum value of SAR (measured) = 0.477 W/kg



0 dB = 0.477 W/kg = -3.21 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G LTE Band 38 20M QPSK 1RB0 37850CH Left cheek Ant2

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

Communication System: UID 0, LTE Band 38 20MHz; Frequency: 2580 MHz; Duty Cycle: 1:1.579

Medium: HSL2600; Medium parameters used: $f = 2580$ MHz; $\sigma = 1.965$ S/m; $\epsilon_r = 40.29$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(6.7, 6.7, 6.7); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (10x16x1): Measurement grid: $dx=12$ mm, $dy=12$ mm
Maximum value of SAR (measured) = 0.0940 W/kg

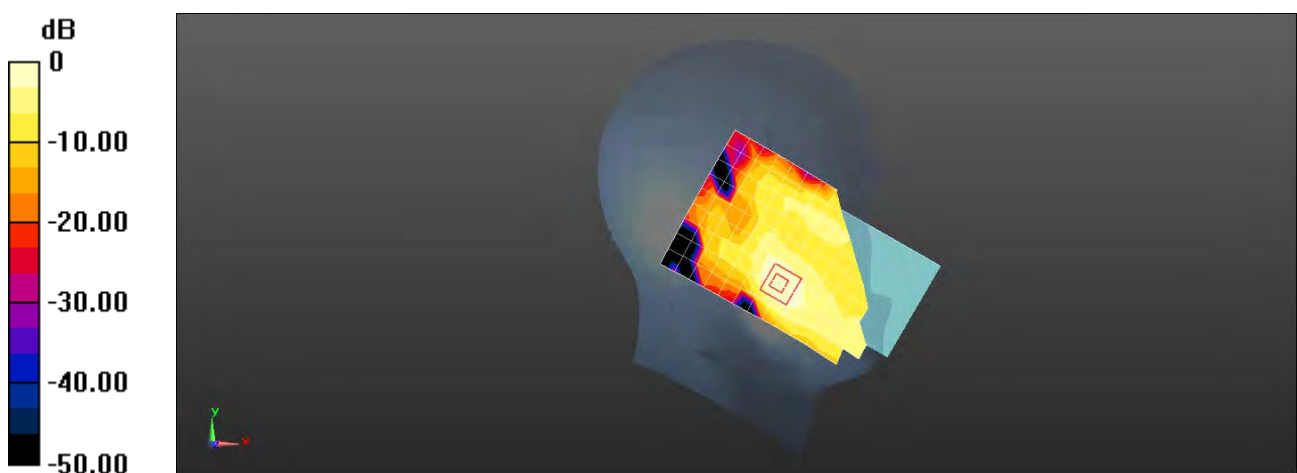
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 1.385 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.123 W/kg

SAR(1 g) = 0.071 W/kg; SAR(10 g) = 0.038 W/kg

Maximum value of SAR (measured) = 0.0986 W/kg



0 dB = 0.0986 W/kg = -10.06 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G LTE Band 38 20M QPSK 1RB0 37850CH Back side 15mm Ant2

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

Communication System: UID 0, LTE Band 38 20MHz; Frequency: 2580 MHz; Duty Cycle: 1:1.579

Medium: HSL2600; Medium parameters used: $f = 2580$ MHz; $\sigma = 1.965$ S/m; $\epsilon_r = 40.29$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(6.7, 6.7, 6.7); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 0.218 W/kg

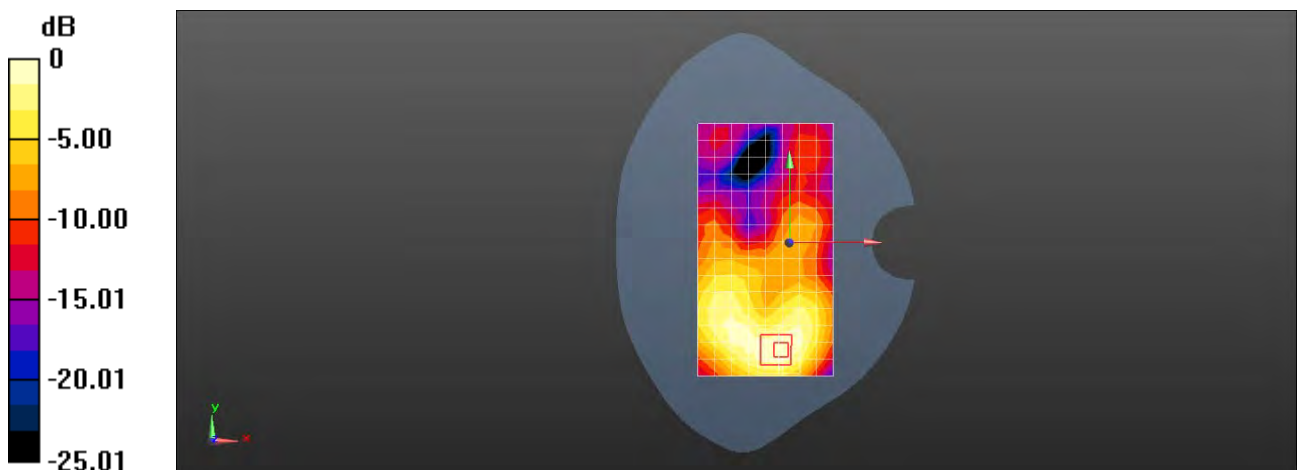
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.630 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.320 W/kg

SAR(1 g) = 0.174 W/kg; SAR(10 g) = 0.094 W/kg

Maximum value of SAR (measured) = 0.245 W/kg



0 dB = 0.245 W/kg = -6.11 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G LTE Band 38 20M QPSK 1RB0 37850CH Bottom side 10mm Ant2

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

Communication System: UID 0, LTE Band 38 20MHz; Frequency: 2580 MHz; Duty Cycle: 1:1.579

Medium: HSL2600; Medium parameters used: $f = 2580$ MHz; $\sigma = 1.965$ S/m; $\epsilon_r = 40.29$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(6.7, 6.7, 6.7); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (6x9x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.684 W/kg

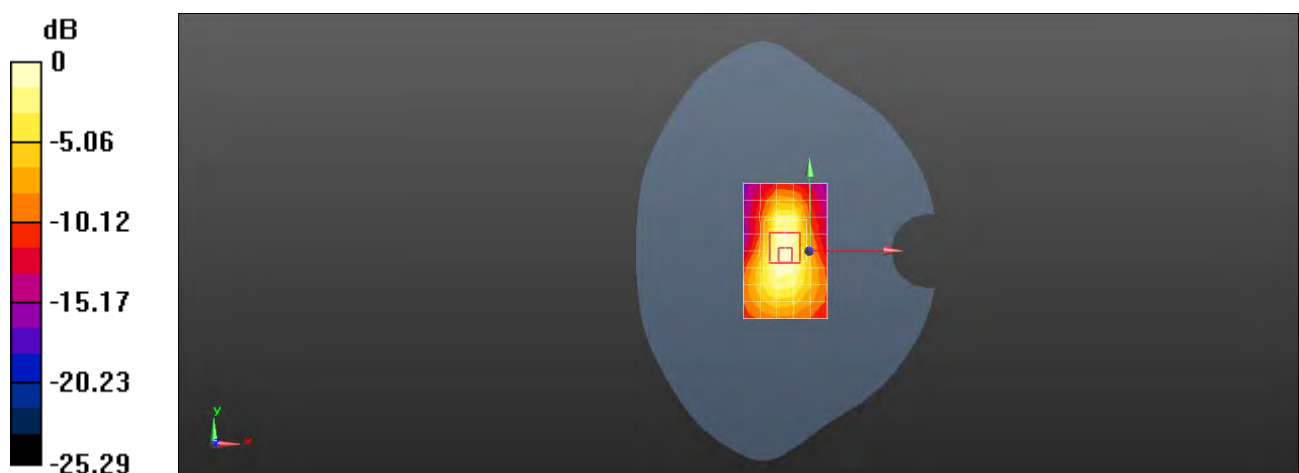
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.84 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 1.10 W/kg

SAR(1 g) = 0.560 W/kg; SAR(10 g) = 0.274 W/kg

Maximum value of SAR (measured) = 0.823 W/kg



Test Laboratory: SGS-SAR Lab

M2004J11G LTE Band 38 20M QPSK 1RB0 37850CH Right cheek Ant4

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

Communication System: UID 0, LTE Band 38 20MHz; Frequency: 2580 MHz; Duty Cycle: 1:1.579

Medium: HSL2600; Medium parameters used: $f = 2580$ MHz; $\sigma = 1.965$ S/m; $\epsilon_r = 40.29$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(6.7, 6.7, 6.7); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 1.01 W/kg

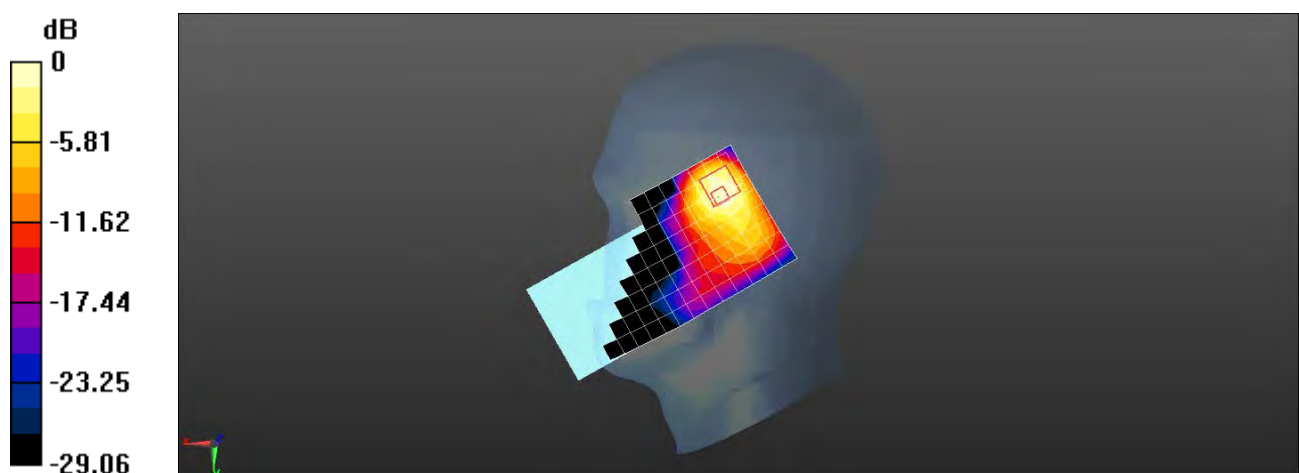
Configuration/Head/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 10.59 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.44 W/kg

SAR(1 g) = 0.665 W/kg; SAR(10 g) = 0.327 W/kg

Maximum value of SAR (measured) = 1.02 W/kg



0 dB = 1.02 W/kg = 0.09 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G LTE Band 38 20M QPSK 1RB0 38000CH Front side 15mm Ant4

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

Communication System: UID 0, LTE Band 38 20MHz; Frequency: 2595 MHz; Duty Cycle: 1:1.579

Medium: HSL2600; Medium parameters used: $f = 2595$ MHz; $\sigma = 1.994$ S/m; $\epsilon_r = 40.236$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(6.7, 6.7, 6.7); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 0.200 W/kg

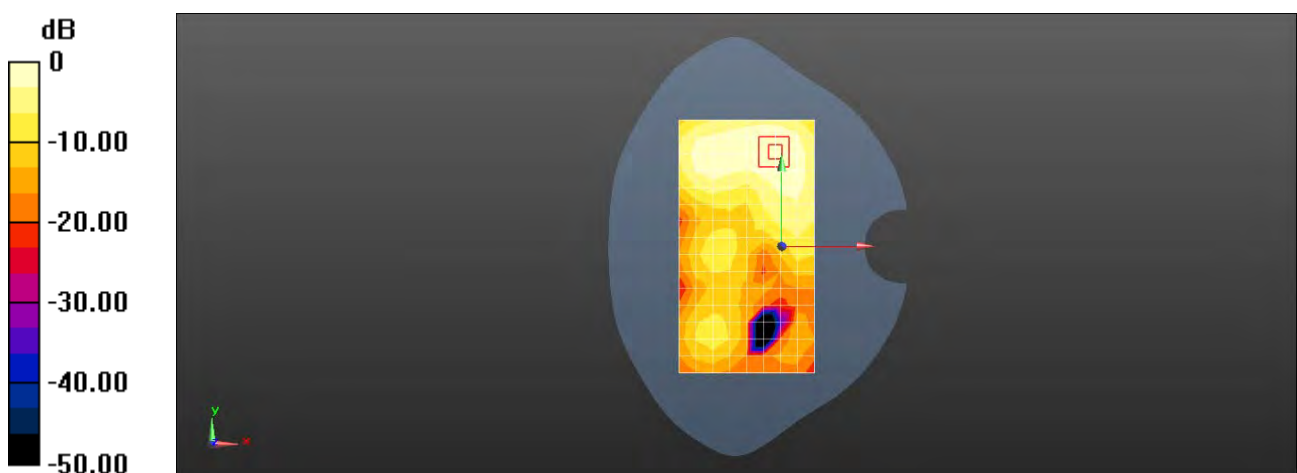
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.331 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.263 W/kg

SAR(1 g) = 0.148 W/kg; SAR(10 g) = 0.083 W/kg

Maximum value of SAR (measured) = 0.204 W/kg



0 dB = 0.204 W/kg = -6.90 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G LTE Band 38 20M QPSK 50RB25 37850CH Top side 10mm Ant4

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

Communication System: UID 0, LTE Band 38 20MHz; Frequency: 2580 MHz; Duty Cycle: 1:1.579

Medium: HSL2600; Medium parameters used: $f = 2580$ MHz; $\sigma = 1.965$ S/m; $\epsilon_r = 40.29$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(6.7, 6.7, 6.7); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (6x9x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.405 W/kg

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

Reference Value = 12.20 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.585 W/kg

SAR(1 g) = 0.309 W/kg; SAR(10 g) = 0.155 W/kg

Maximum value of SAR (measured) = 0.447 W/kg



0 dB = 0.447 W/kg = -3.50 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G LTE Band 41 20M QPSK 1RB0 41490CH Left cheek Ant2

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

Communication System: UID 0, LTE Band 41 20MHz; Frequency: 2680 MHz; Duty Cycle: 1:1.579

Medium: HSL2600; Medium parameters used: $f = 2680$ MHz; $\sigma = 2.088$ S/m; $\epsilon_r = 39.914$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(6.7, 6.7, 6.7); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (10x16x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.0955 W/kg

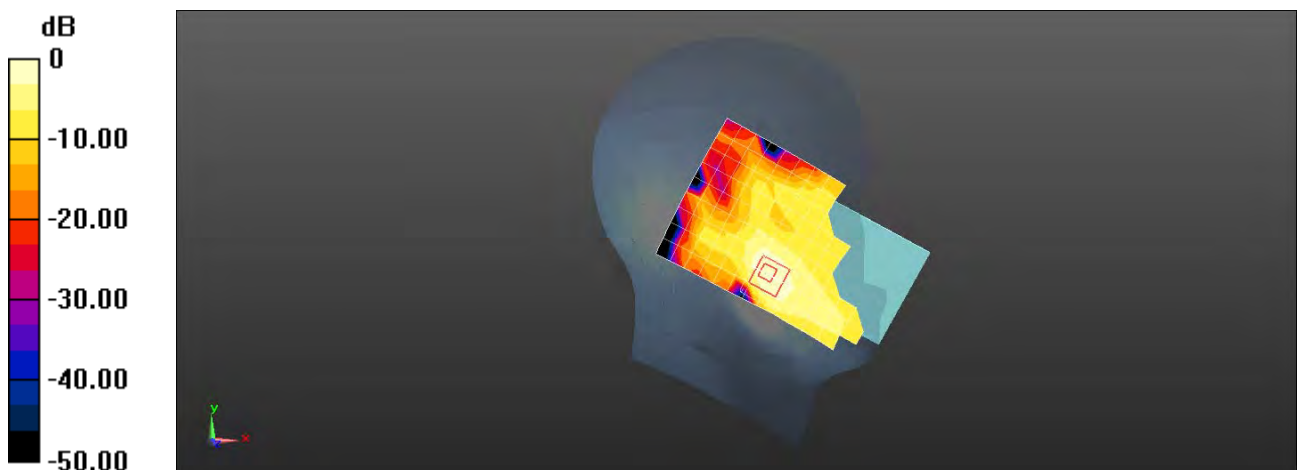
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.255 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.129 W/kg

SAR(1 g) = 0.070 W/kg; SAR(10 g) = 0.035 W/kg

Maximum value of SAR (measured) = 0.100 W/kg



0 dB = 0.100 W/kg = -10.00 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G LTE Band 41 20M QPSK 1RB0 41490CH Back side 15mm Ant2

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

Communication System: UID 0, LTE Band 41 20MHz; Frequency: 2680 MHz; Duty Cycle: 1:1.579

Medium: HSL2600; Medium parameters used: $f = 2680$ MHz; $\sigma = 2.088$ S/m; $\epsilon_r = 39.914$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(6.7, 6.7, 6.7); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 0.224 W/kg

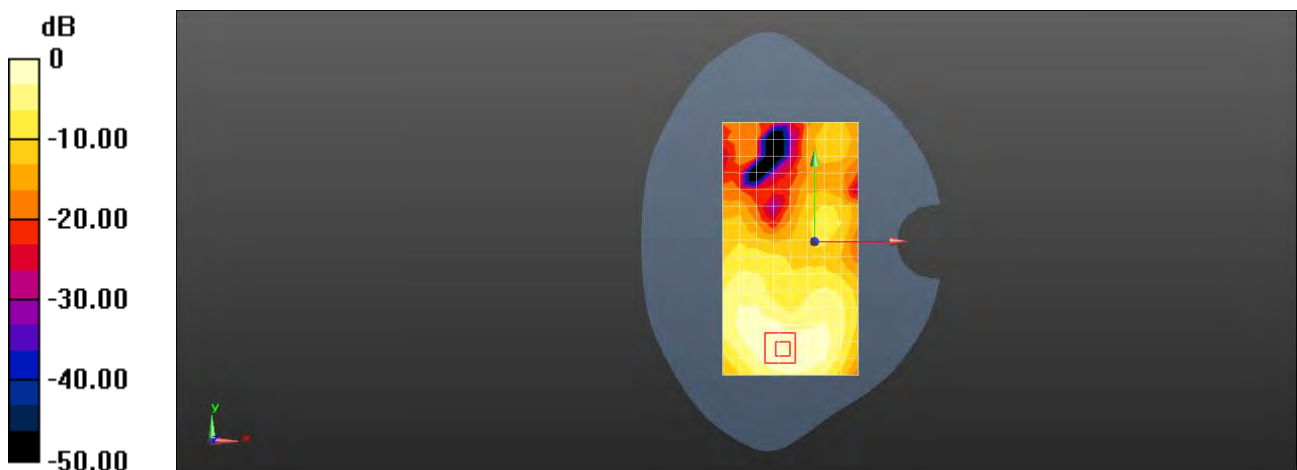
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.036 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.305 W/kg

SAR(1 g) = 0.165 W/kg; SAR(10 g) = 0.089 W/kg

Maximum value of SAR (measured) = 0.233 W/kg



0 dB = 0.233 W/kg = -6.33 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G LTE Band 41 20M QPSK 1RB0 41490CH Bottom side 10mm Ant2

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

Communication System: UID 0, LTE Band 41 20MHz; Frequency: 2680 MHz; Duty Cycle: 1:1.579

Medium: HSL2600; Medium parameters used: $f = 2680$ MHz; $\sigma = 2.088$ S/m; $\epsilon_r = 39.914$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(6.7, 6.7, 6.7); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (6x10x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.847 W/kg

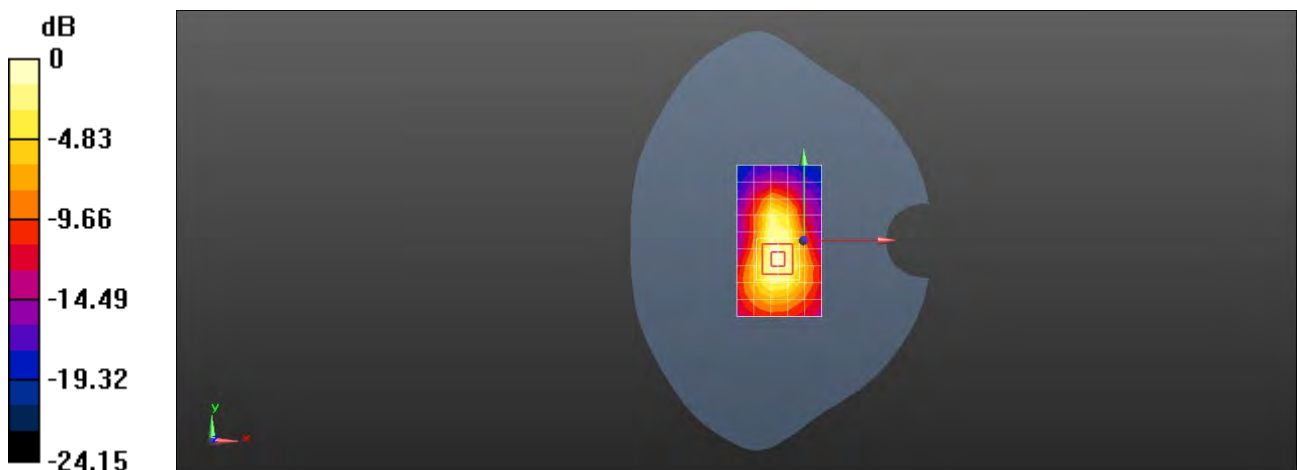
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.00 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.37 W/kg

SAR(1 g) = 0.700 W/kg; SAR(10 g) = 0.341 W/kg

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



0 dB = 1.04 W/kg = 0.17 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G LTE Band 41 20M QPSK 50RB25 40185CH Right cheek Ant4

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

Communication System: UID 0, LTE Band 41 20MHz; Frequency: 2549.5 MHz; Duty Cycle: 1:1.579

Medium: HSL2600; Medium parameters used (interpolated): $f = 2549.5$ MHz; $\sigma = 1.938$ S/m; $\epsilon_r = 40.387$; $\rho = 1000$ kg/m³
Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(6.7, 6.7, 6.7); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

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

Maximum value of SAR (measured) = 1.19 W/kg

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

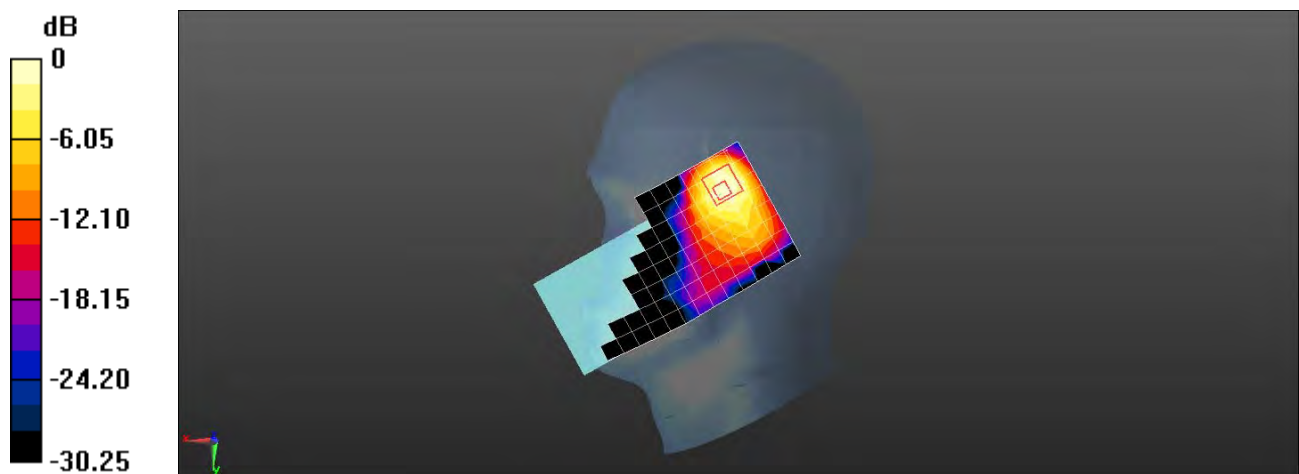
Reference Value = 10.64 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 1.81 W/kg

SAR(1 g) = 0.840 W/kg; SAR(10 g) = 0.419 W/kg

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

Maximum value of SAR (measured) = 1.26 W/kg



0 dB = 1.26 W/kg = 1.00 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G LTE Band 41 20M QPSK 1RB0 39750CH Front side 15mm Ant4

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

Communication System: UID 0, LTE Band 41 20MHz; Frequency: 2506 MHz; Duty Cycle: 1:1.579

Medium: HSL2600; Medium parameters used: $f = 2506$ MHz; $\sigma = 1.889$ S/m; $\epsilon_r = 40.543$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(6.7, 6.7, 6.7); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 0.170 W/kg

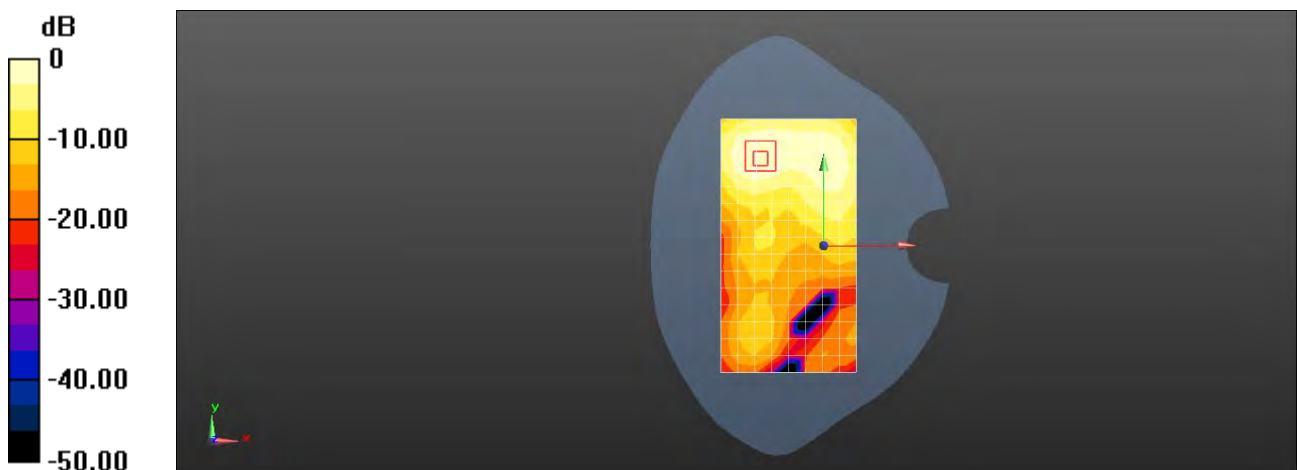
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.724 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.241 W/kg

SAR(1 g) = 0.129 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

M2004J11G LTE Band 41 20M QPSK 50RB25 39750CH Top side 10mm Ant4

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

Communication System: UID 0, LTE Band 41 20MHz; Frequency: 2506 MHz; Duty Cycle: 1:1.579

Medium: HSL2600; Medium parameters used: $f = 2506$ MHz; $\sigma = 1.889$ S/m; $\epsilon_r = 40.543$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(6.7, 6.7, 6.7); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (6x9x1): Measurement grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (measured) = 0.351 W/kg

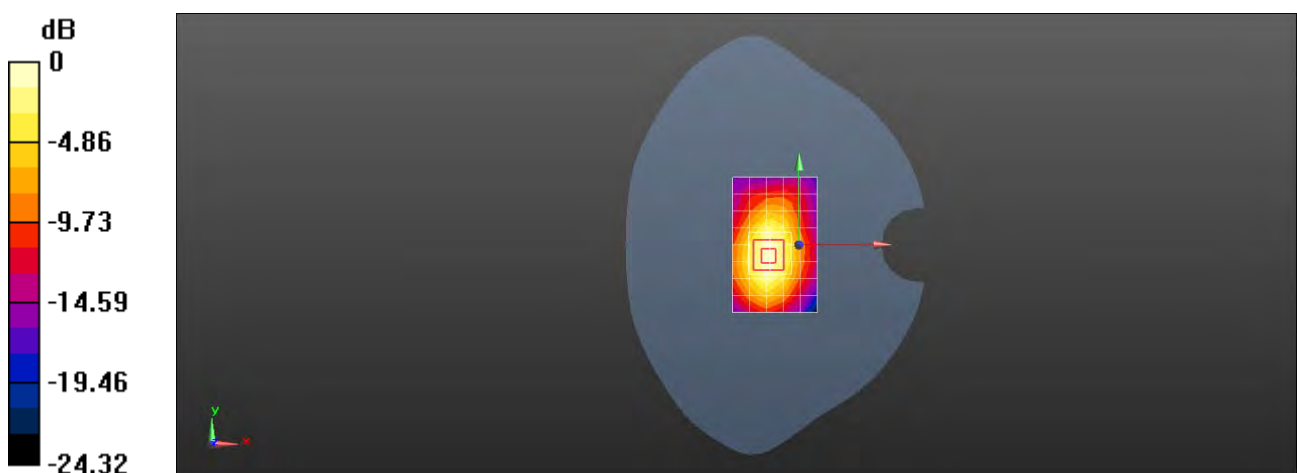
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 11.24 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.469 W/kg

SAR(1 g) = 0.254 W/kg; SAR(10 g) = 0.130 W/kg

Maximum value of SAR (measured) = 0.359 W/kg



0 dB = 0.359 W/kg = -4.45 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G 2.4G WIFI 802.11b 6CH Left cheek Ant5

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

Communication System: UID 0, WIFI 2.4G; Frequency: 2437 MHz; Duty Cycle: 1:1.01

Medium: HSL2450; Medium parameters used: $f = 2437$ MHz; $\sigma = 1.782$ S/m; $\epsilon_r = 40.347$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(6.98, 6.98, 6.98); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

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

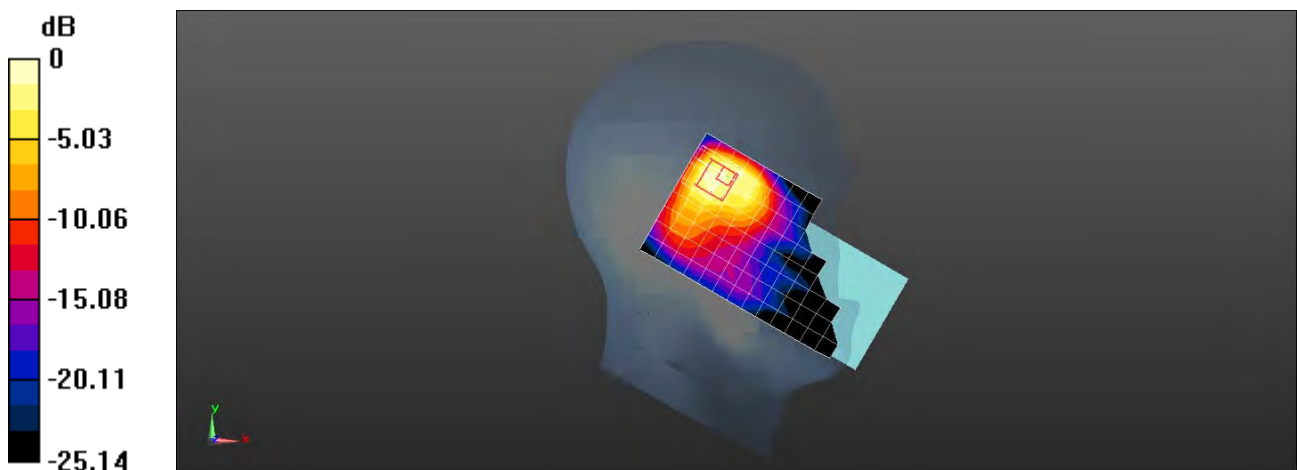
Configuration/Head/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.50 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.78 W/kg

SAR(1 g) = 0.829 W/kg; SAR(10 g) = 0.439 W/kg

Maximum value of SAR (measured) = 1.27 W/kg



0 dB = 1.27 W/kg = 1.04 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G 2.4G WIFI 802.11b 6CH Back side 15mm Ant5

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

Communication System: UID 0, WIFI 2.4G; Frequency: 2437 MHz; Duty Cycle: 1:1.01

Medium: HSL2450; Medium parameters used: $f = 2437$ MHz; $\sigma = 1.782$ S/m; $\epsilon_r = 40.347$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(6.98, 6.98, 6.98); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

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

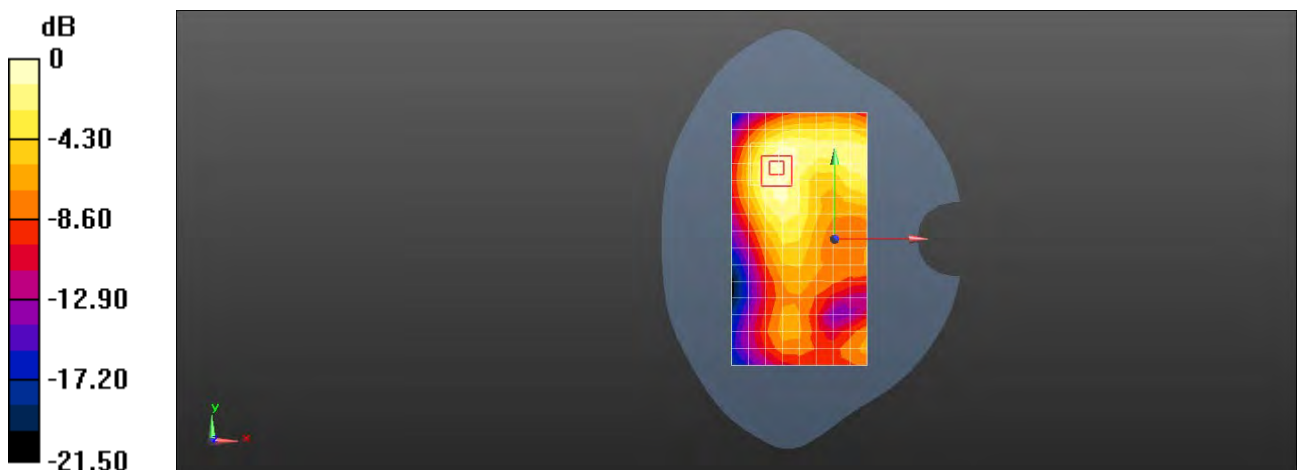
Configuration/Head/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.286 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 0.415 W/kg

SAR(1 g) = 0.227 W/kg; SAR(10 g) = 0.124 W/kg

Maximum value of SAR (measured) = 0.320 W/kg



0 dB = 0.320 W/kg = -4.95 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G 2.4G WIFI 802.11b 6CH Top side 10mm Ant5

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

Communication System: UID 0, WIFI 2.4G; Frequency: 2437 MHz; Duty Cycle: 1:1.01

Medium: HSL2450; Medium parameters used: $f = 2437$ MHz; $\sigma = 1.782$ S/m; $\epsilon_r = 40.347$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(6.98, 6.98, 6.98); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2020-03-03
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (6x9x1): Measurement grid: dx=12mm, dy=12mm

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

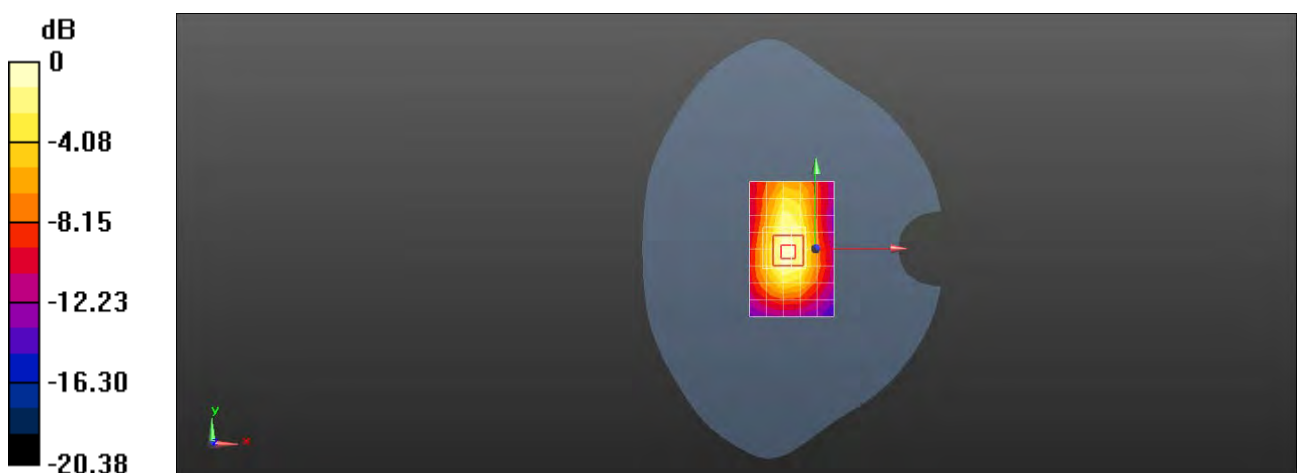
Configuration/Head/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.78 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.856 W/kg

SAR(1 g) = 0.466 W/kg; SAR(10 g) = 0.244 W/kg

Maximum value of SAR (measured) = 0.642 W/kg



0 dB = 0.642 W/kg = -1.92 dBW/kg

Test Laboratory: The name of your organization

M2002J9G WIFI5G 802.11AC 20M 116CH Left cheek MIMO

DUT: M2004J11G; Type: Mobile phone; Serial: dbd8dde

Communication System: UID 0, WI-FI(5GHz) (0); Frequency: 5580 MHz;Duty Cycle: 1:1.012

Medium: HSL5000;Medium parameters used: $f = 5580$ MHz; $\sigma = 5.057$ S/m; $\epsilon_r = 35.822$; $\rho = 1000$ kg/m³

Phantom section: Left 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 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (11x20x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.29 W/kg

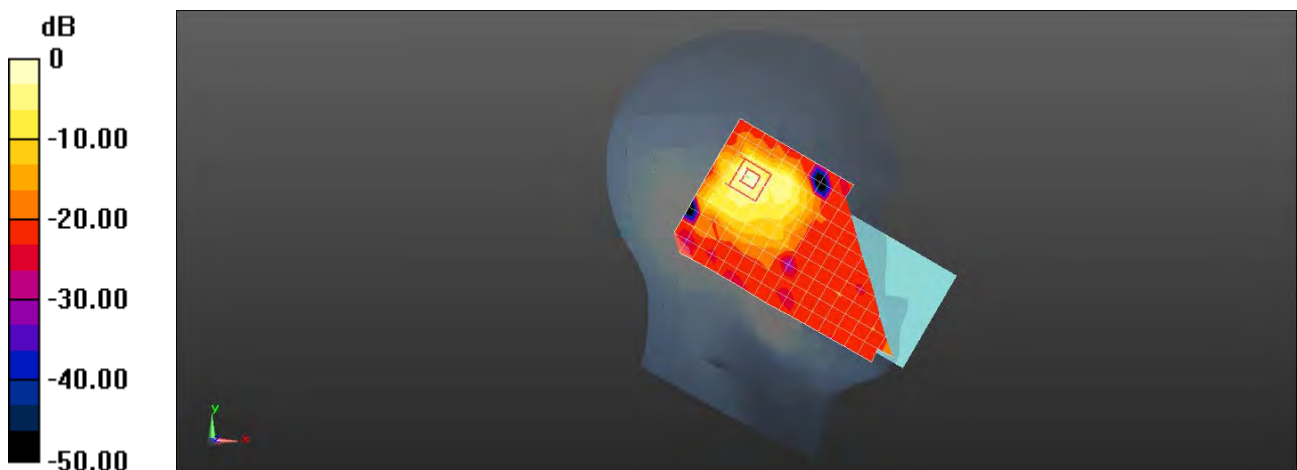
Configuration/Body/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 5.771 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 3.66 W/kg

SAR(1 g) = 0.758 W/kg; SAR(10 g) = 0.230 W/kg

Maximum value of SAR (measured) = 1.74 W/kg



0 dB = 1.74 W/kg = 2.41 dBW/kg

Test Laboratory: The name of your organization

M2002J9G WIFI5G 802.11AC 20M 116CH Back side 15mm MIMO

DUT: M2004J11G; Type: Mobile phone; Serial: dbd8dde

Communication System: UID 0, WI-FI(5GHz) (0); Frequency: 5580 MHz;Duty Cycle: 1:1.012

Medium: HSL5000;Medium parameters used: $f = 5580$ MHz; $\sigma = 5.057$ S/m; $\epsilon_r = 35.822$; $\rho = 1000$ 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 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (11x19x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.667 W/kg

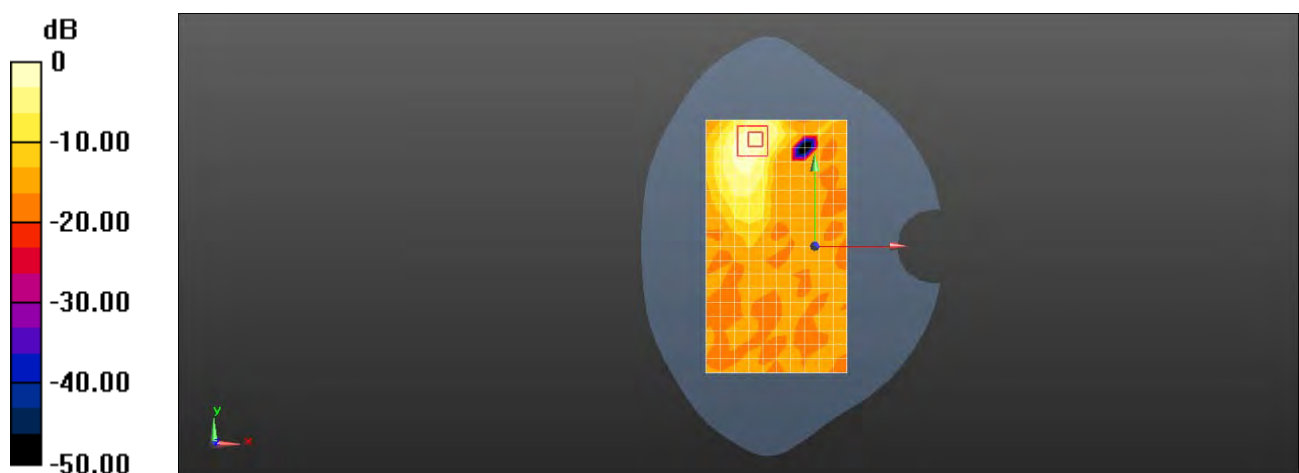
Configuration/Body/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.292 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 3.92 W/kg

SAR(1 g) = 0.333 W/kg; SAR(10 g) = 0.120 W/kg

Maximum value of SAR (measured) = 0.696 W/kg



0 dB = 0.696 W/kg = -1.57 dBW/kg

Test Laboratory: The name of your organization

M2002J9G WIFI5G 802.11AC 20M 157CH Right side 10mm MIMO

DUT: M2004J11G; Type: Mobile phone; Serial: dbd8dde

Communication System: UID 0, WI-FI(5GHz) (0); Frequency: 5785 MHz;Duty Cycle: 1:1.012

Medium: HSL5000;Medium parameters used: $f = 5785 \text{ MHz}$; $\sigma = 5.241 \text{ S/m}$; $\epsilon_r = 35.283$; $\rho = 1000 \text{ kg/m}^3$

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 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x19x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 1.09 W/kg

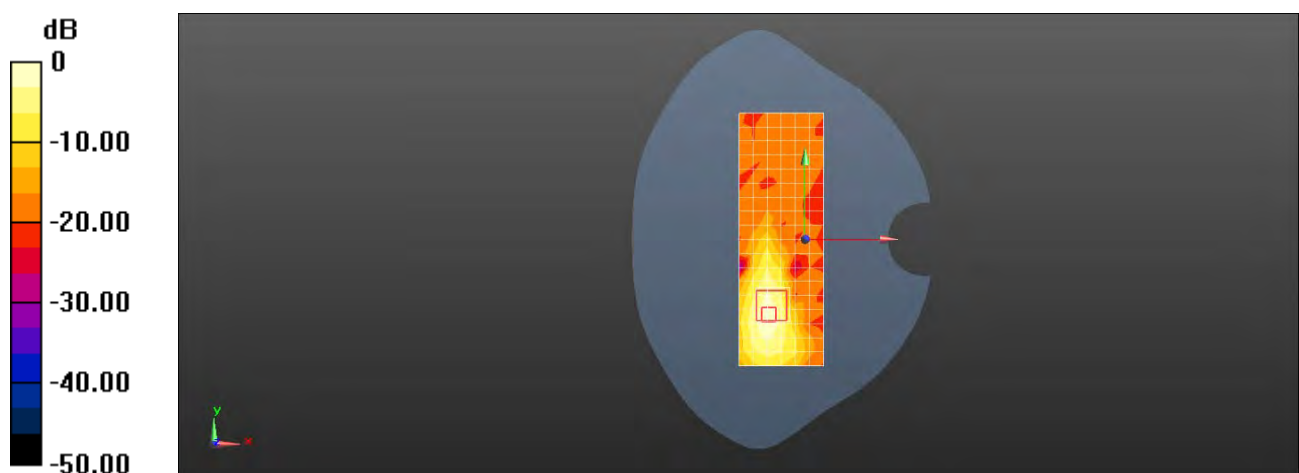
Configuration/Body/Zoom Scan (7x7x12)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 1.529 V/m ; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 2.70 W/kg

SAR(1 g) = 0.571 W/kg ; SAR(10 g) = 0.170 W/kg

Maximum value of SAR (measured) = 1.31 W/kg



0 dB = 1.31 W/kg = 1.17 dBW/kg

Test Laboratory: SGS-SAR Lab

M2002J9G WIFI5G 802.11AC 20M 64CH Right side 0mm MIMO

DUT: M2004J11G; Type: Mobile phone; Serial: dbd8dde

Communication System: UID 0, WI-FI(5GHz) (0); Frequency: 5320 MHz;Duty Cycle: 1:1.012

Medium: HSL5000;Medium parameters used: $f = 5320$ MHz; $\sigma = 4.758$ S/m; $\epsilon_r = 36.481$; $\rho = 1000$ 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 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (6x19x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 18.5 W/kg

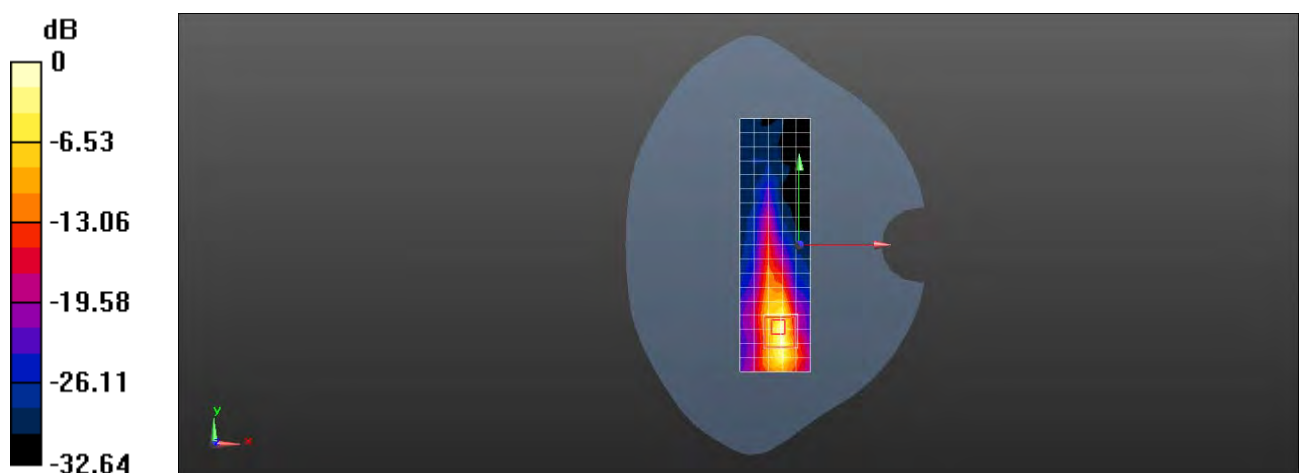
Configuration/Body/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 7.659 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 49.7 W/kg

SAR(1 g) = 7.57 W/kg; SAR(10 g) = 1.94 W/kg

Maximum value of SAR (measured) = 22.1 W/kg



0 dB = 22.1 W/kg = 13.44 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G Bluetooth 39CH Left cheek Ant5

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

Communication System: UID 0, Bluetooth; Frequency: 2441 MHz; Duty Cycle: 1:1.302

Medium: HSL2450; Medium parameters used: $f = 2441$ MHz; $\sigma = 1.813$ S/m; $\epsilon_r = 39.931$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(6.98, 6.98, 6.98); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 0.452 W/kg

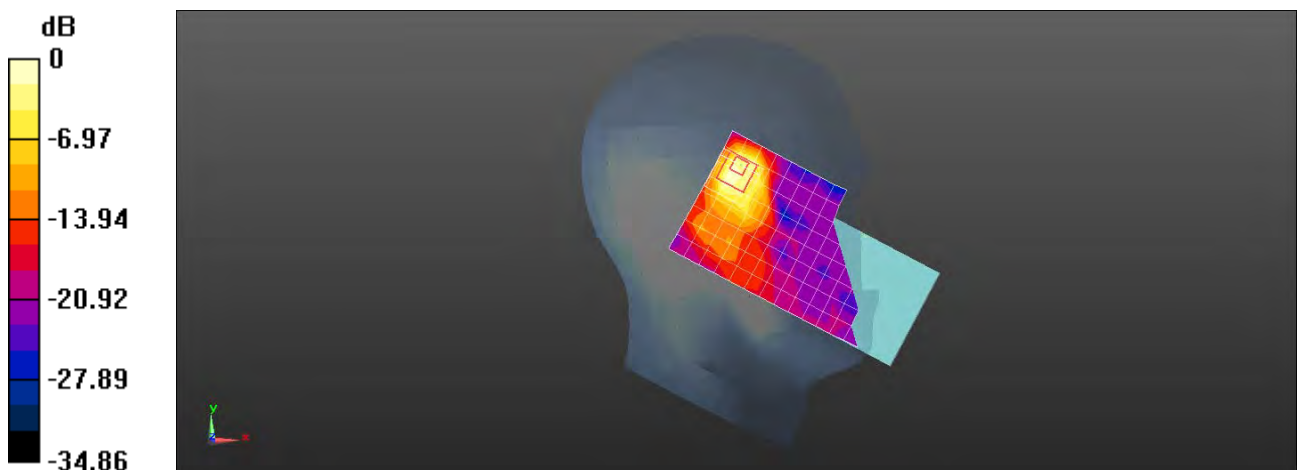
Configuration/Head/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.032 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.786 W/kg

SAR(1 g) = 0.292 W/kg; SAR(10 g) = 0.106 W/kg

Maximum value of SAR (measured) = 0.535 W/kg



0 dB = 0.535 W/kg = -2.72 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G Bluetooth 39CH Back side 15mm Ant5

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

Communication System: UID 0, Bluetooth; Frequency: 2441 MHz; Duty Cycle: 1:1.302

Medium: HSL2450; Medium parameters used: $f = 2441$ MHz; $\sigma = 1.813$ S/m; $\epsilon_r = 39.931$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(6.98, 6.98, 6.98); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 0.0583 W/kg

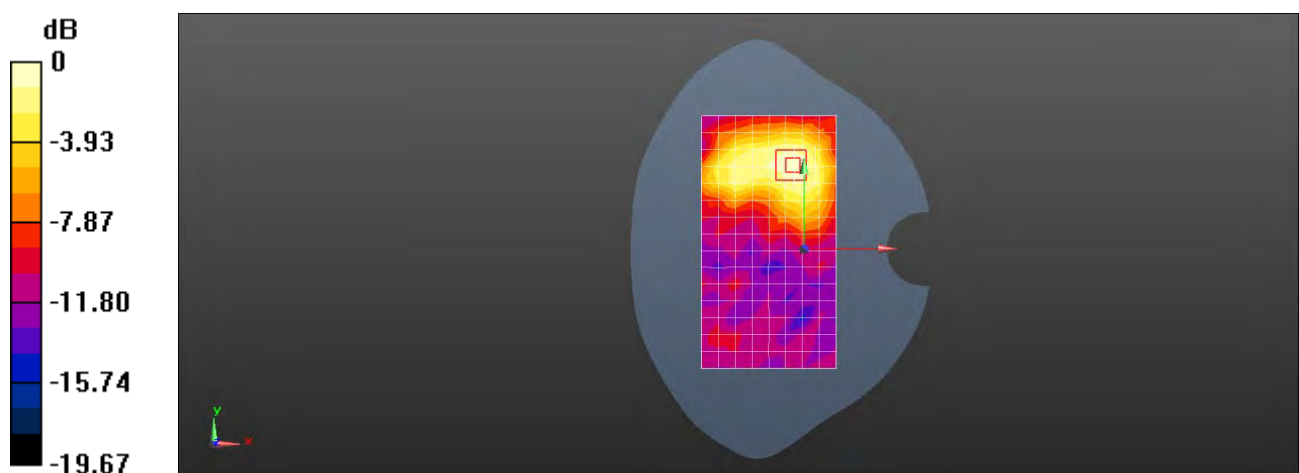
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.332 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.0810 W/kg

SAR(1 g) = 0.044 W/kg; SAR(10 g) = 0.025 W/kg

Maximum value of SAR (measured) = 0.0612 W/kg



0 dB = 0.0612 W/kg = -12.13 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G Bluetooth 39CH Back side 10mm Ant5

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

Communication System: UID 0, Bluetooth; Frequency: 2441 MHz; Duty Cycle: 1:1.302

Medium: HSL2450; Medium parameters used: $f = 2441$ MHz; $\sigma = 1.813$ S/m; $\epsilon_r = 39.931$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(6.98, 6.98, 6.98); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (10x16x1): Measurement grid: $dx=12$ mm, $dy=12$ mm
Maximum value of SAR (measured) = 0.0943 W/kg

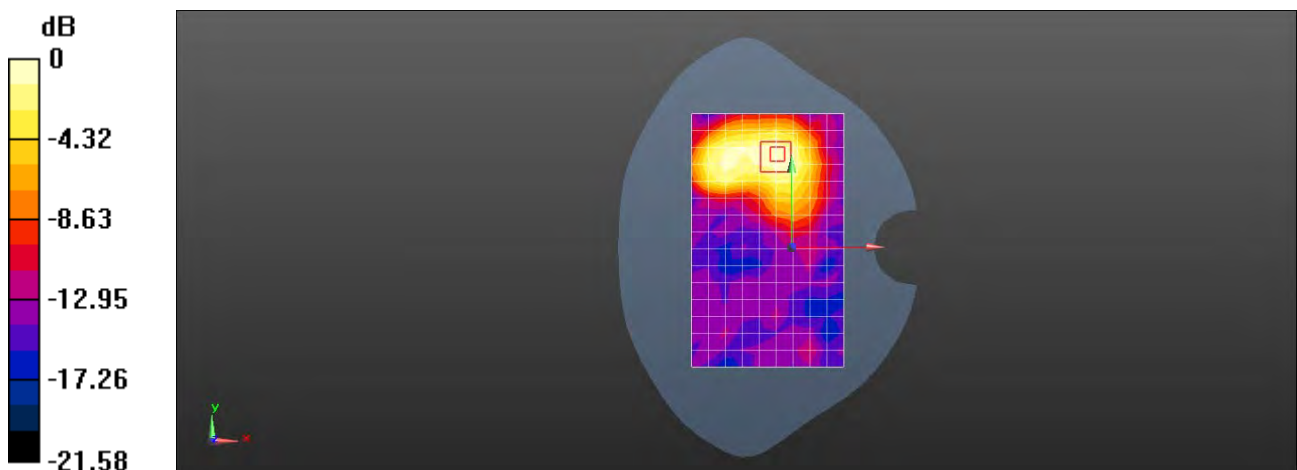
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 1.343 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.134 W/kg

SAR(1 g) = 0.075 W/kg; SAR(10 g) = 0.041 W/kg

Maximum value of SAR (measured) = 0.104 W/kg



0 dB = 0.104 W/kg = -9.83 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G Bluetooth 39CH Left cheek Ant6

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

Communication System: UID 0, Bluetooth; Frequency: 2441 MHz; Duty Cycle: 1:1.302

Medium: HSL2450; Medium parameters used: $f = 2441$ MHz; $\sigma = 1.813$ S/m; $\epsilon_r = 39.931$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(6.98, 6.98, 6.98); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 0.335 W/kg

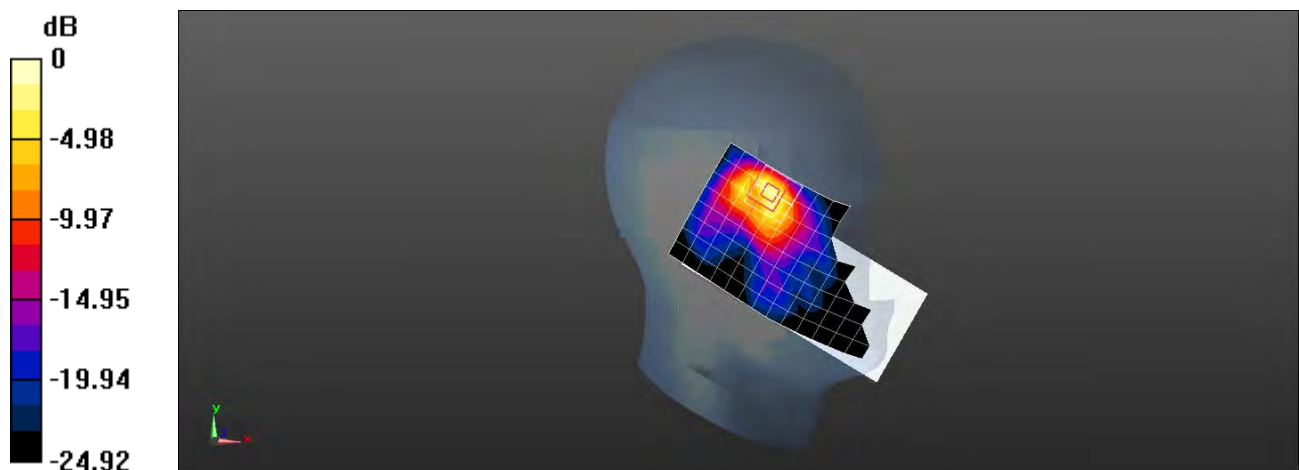
Configuration/Head/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.677 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.737 W/kg

SAR(1 g) = 0.275 W/kg; SAR(10 g) = 0.113 W/kg

Maximum value of SAR (measured) = 0.496 W/kg



0 dB = 0.496 W/kg = -3.05 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G Bluetooth 39CH Back side 15mm Ant6

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

Communication System: UID 0, Bluetooth; Frequency: 2441 MHz; Duty Cycle: 1:1.302

Medium: HSL2450; Medium parameters used: $f = 2441$ MHz; $\sigma = 1.813$ S/m; $\epsilon_r = 39.931$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(6.98, 6.98, 6.98); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 0.0397 W/kg

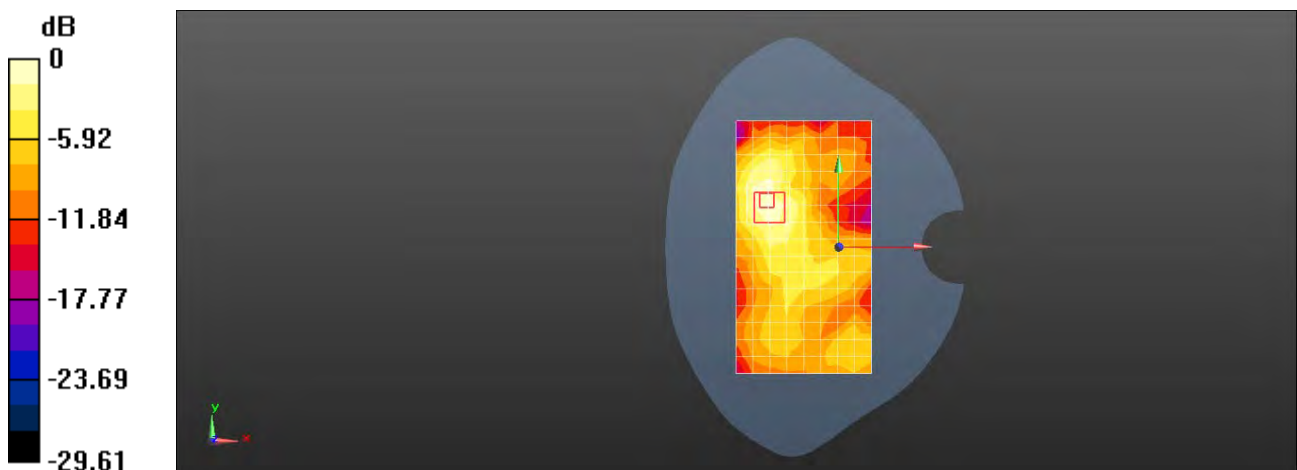
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.917 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.0530 W/kg

SAR(1 g) = 0.028 W/kg; SAR(10 g) = 0.015 W/kg

Maximum value of SAR (measured) = 0.0394 W/kg



0 dB = 0.0394 W/kg = -14.05 dBW/kg

Test Laboratory: SGS-SAR Lab

M2004J11G Bluetooth 39CH Back side 10mm Ant6

DUT: M2004J11G; Type: Mobile phone; Serial: aa52d736

Communication System: UID 0, Bluetooth; Frequency: 2441 MHz; Duty Cycle: 1:1.302

Medium: HSL2450; Medium parameters used: $f = 2441$ MHz; $\sigma = 1.813$ S/m; $\epsilon_r = 39.931$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3748; ConvF(6.98, 6.98, 6.98); Calibrated: 2019-06-19;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1267; Calibrated: 2019-12-17
- Phantom: SAM 7; Type: SAM; Serial: 1027
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 0.0684 W/kg

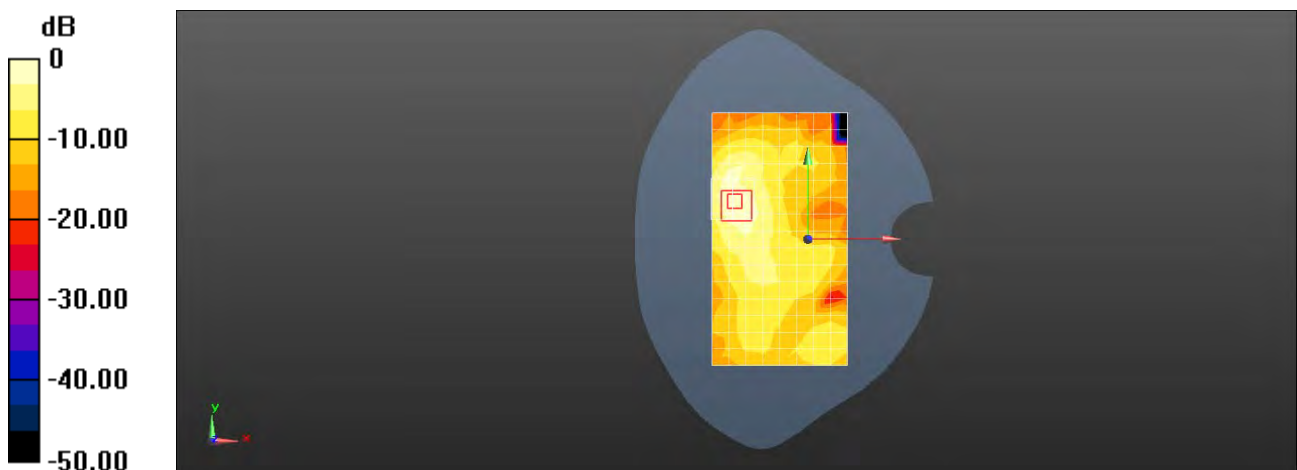
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 2.152 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.0930 W/kg

SAR(1 g) = 0.050 W/kg; SAR(10 g) = 0.026 W/kg

Maximum value of SAR (measured) = 0.0715 W/kg



0 dB = 0.0715 W/kg = -11.46 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)
3. Probe
EX3DV4-SN 3748(2019-06-19)
EX3DV4-SN 3923 (2019-10-22)



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

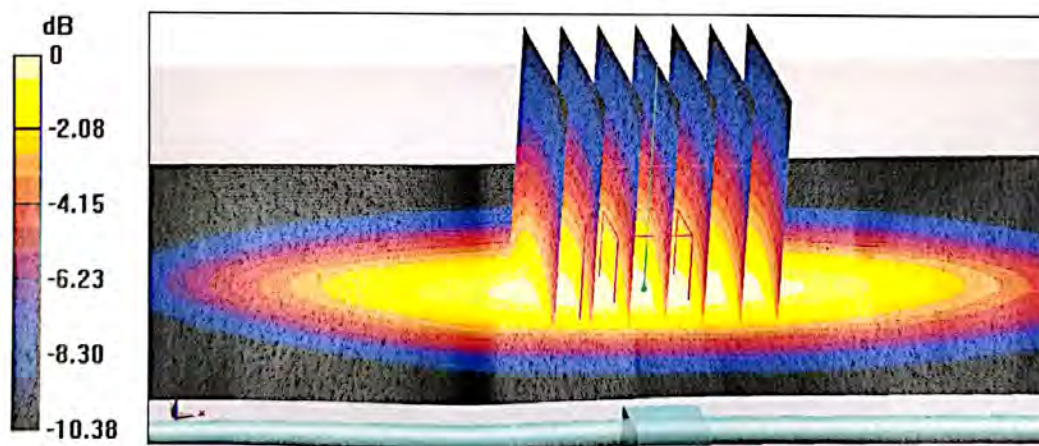
Peak SAR (extrapolated) = 3.58 W/kg

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



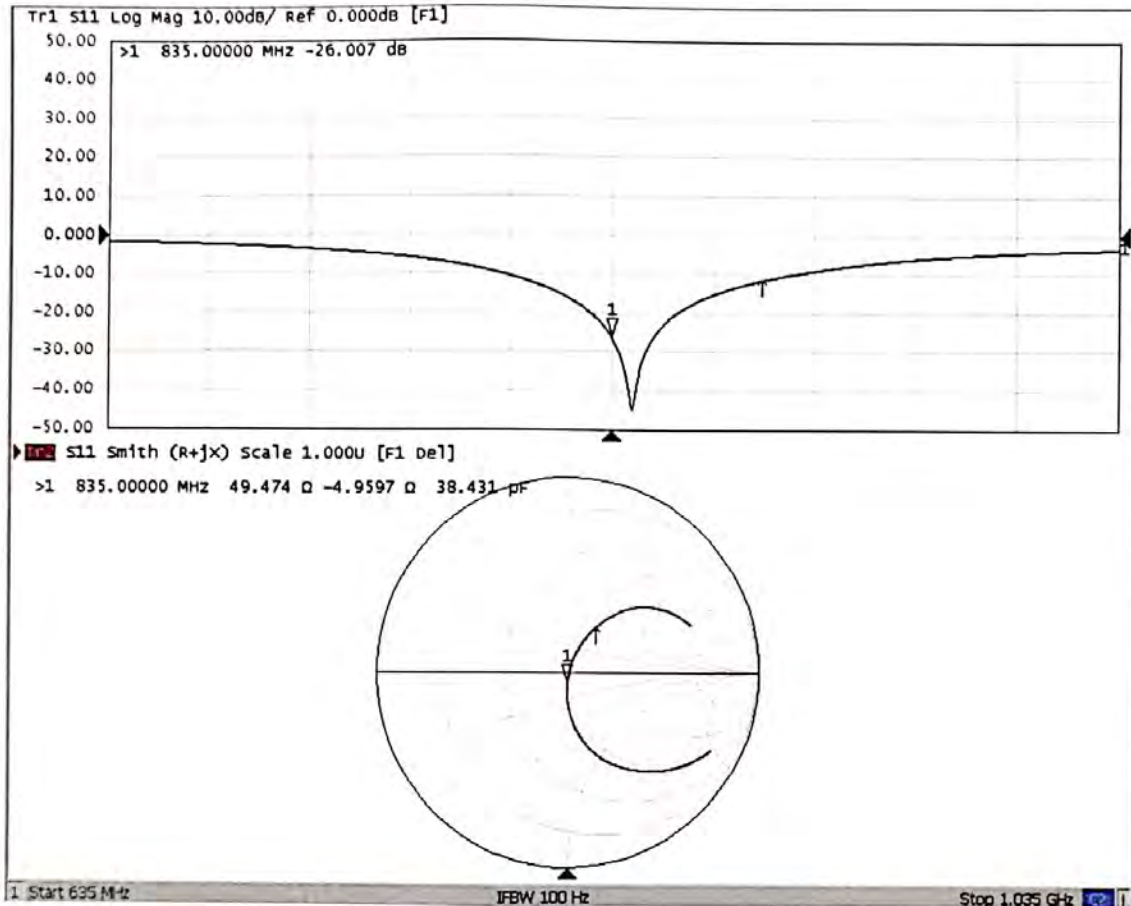
0 dB = 3.18 W/kg = 5.02 dBW/kg



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
-----------------	-------



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:

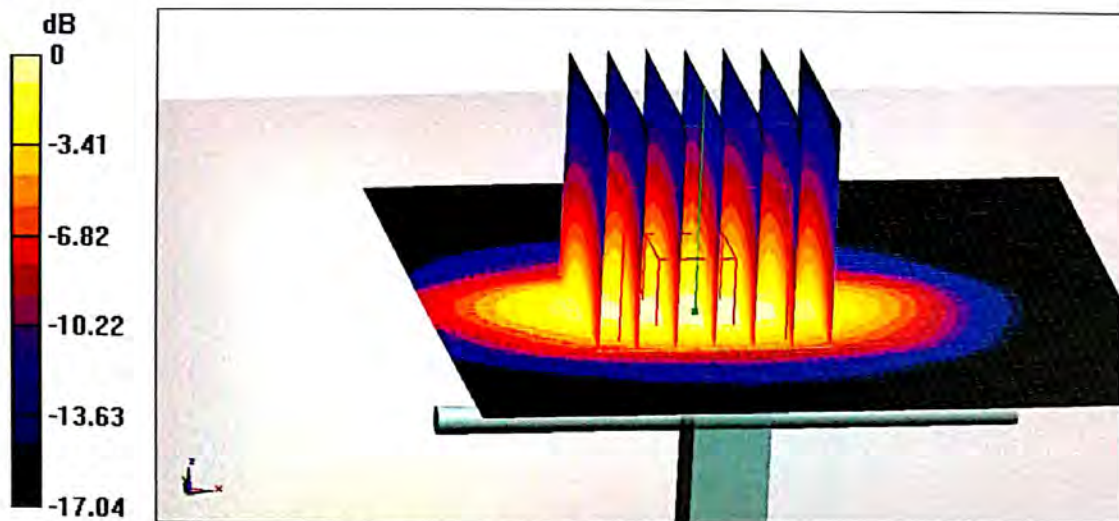
$dx=5$ mm, $dy=5$ mm, $dz=5$ mm

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

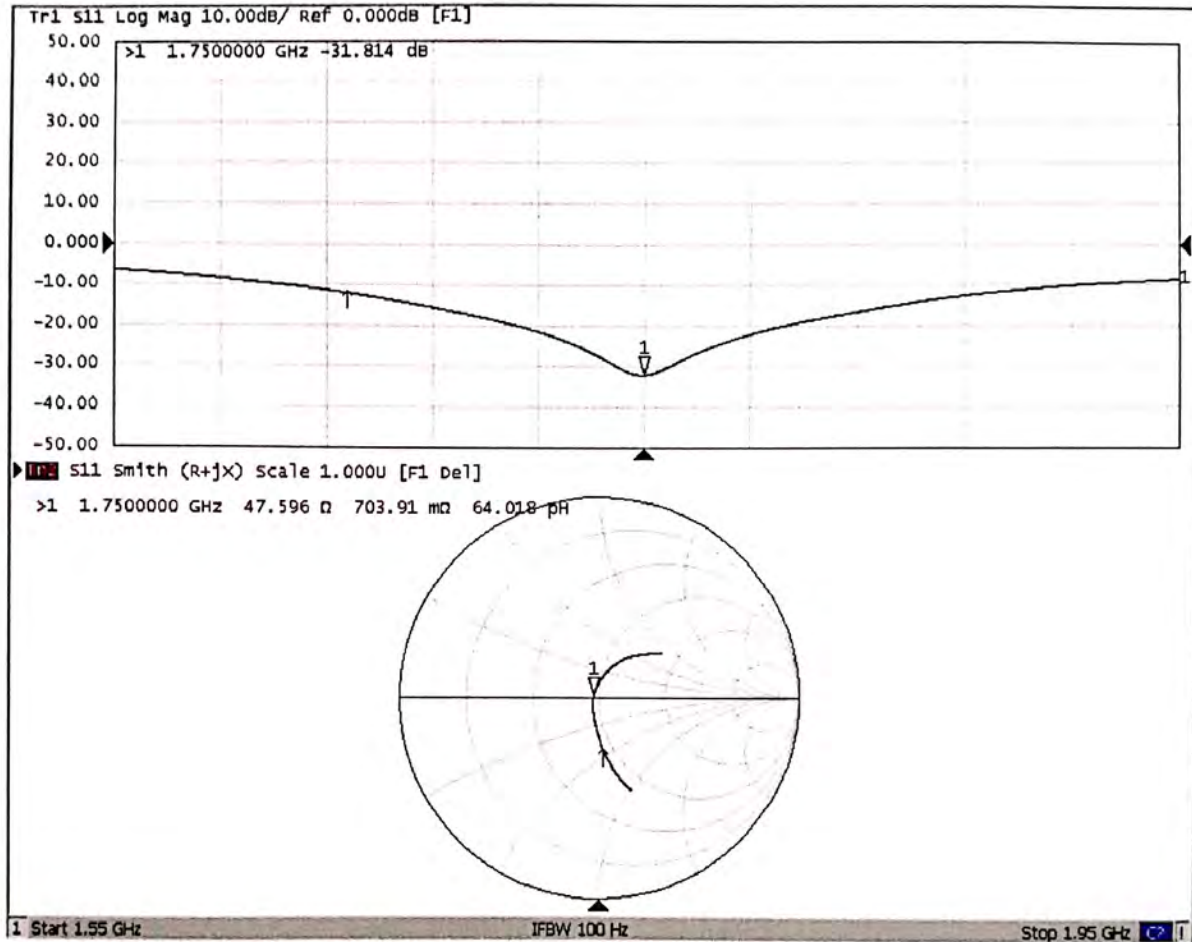
Maximum value of SAR (measured) = 14.2 W/kg



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:

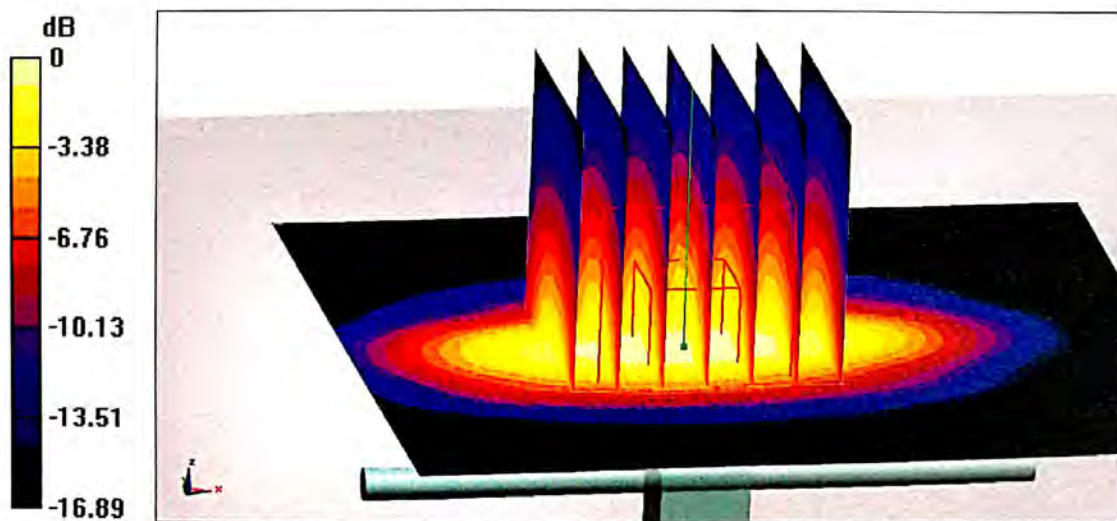
$dx=5$ mm, $dy=5$ mm, $dz=5$ mm

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

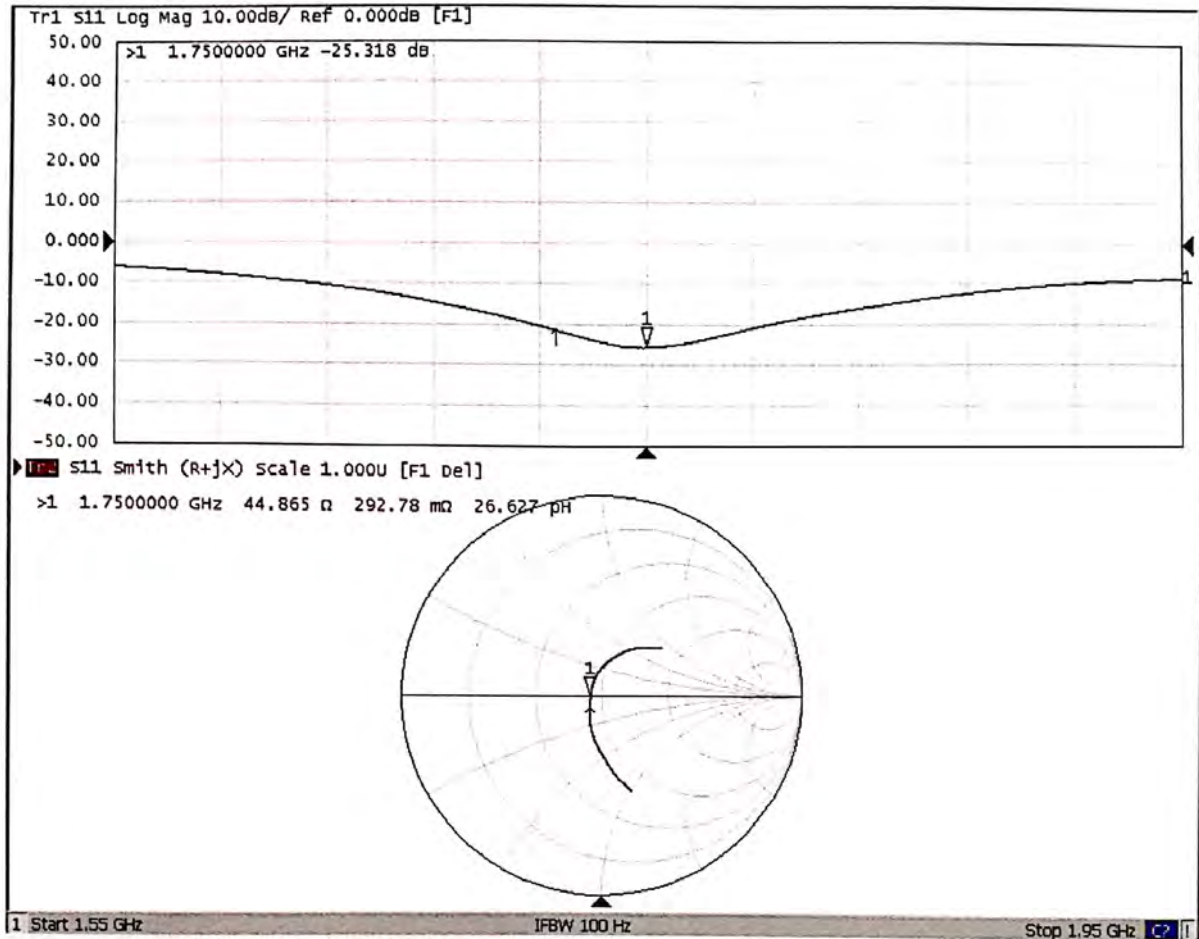


0 dB = 14.6 W/kg = 11.64 dBW/kg



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

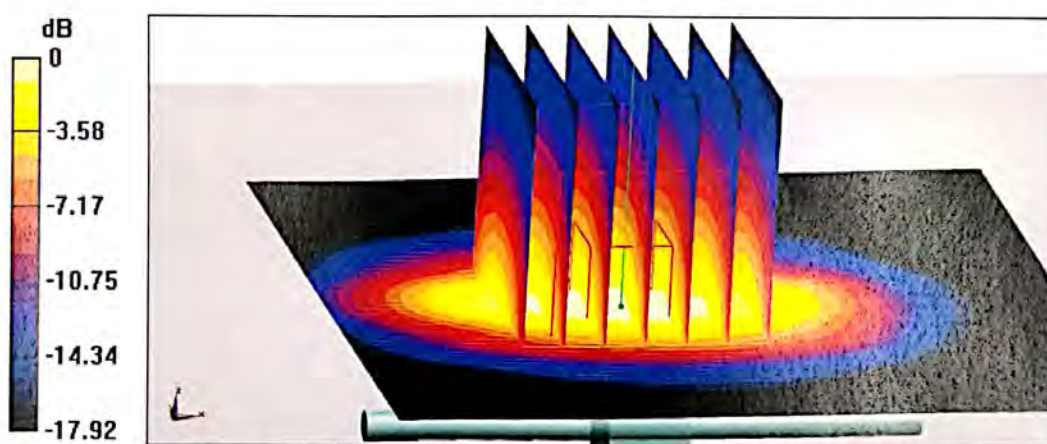
Peak SAR (extrapolated) = 18.8 W/kg

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



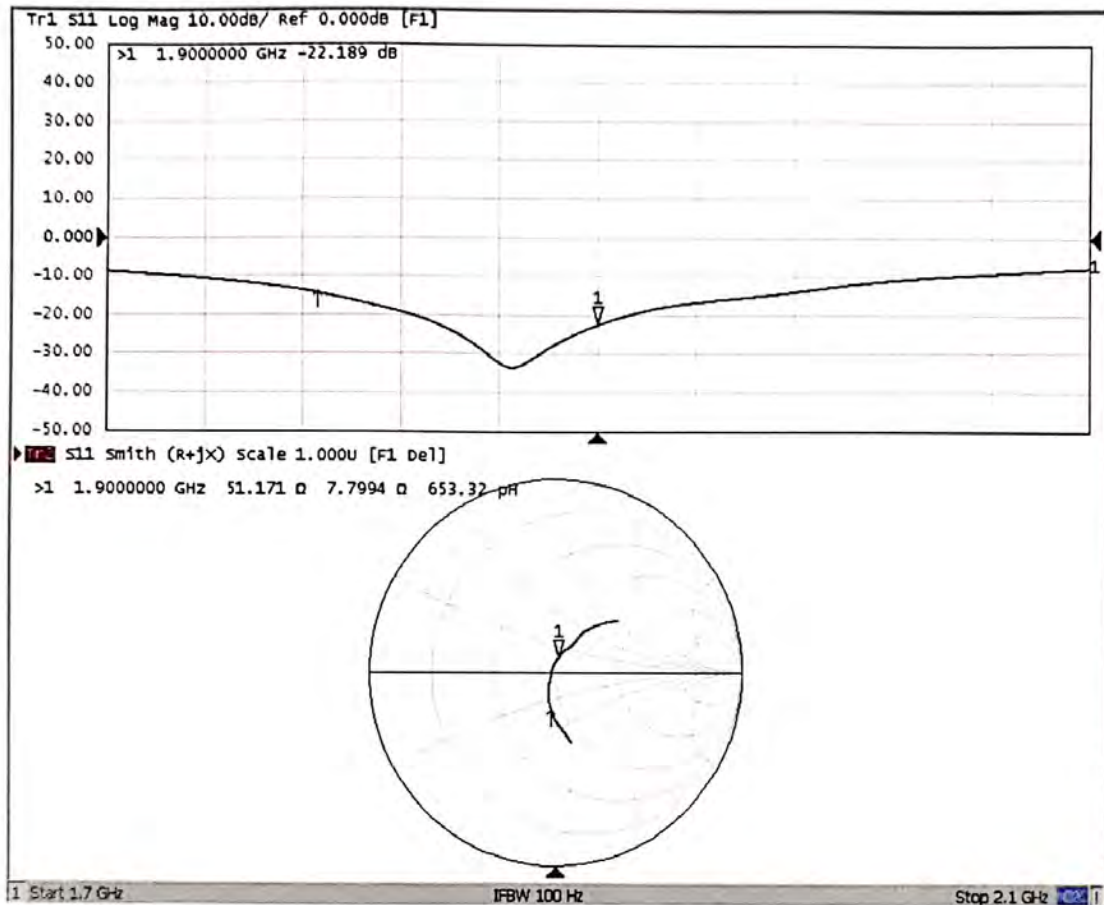
0 dB = 15.5 W/kg = 11.90 dBW/kg



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

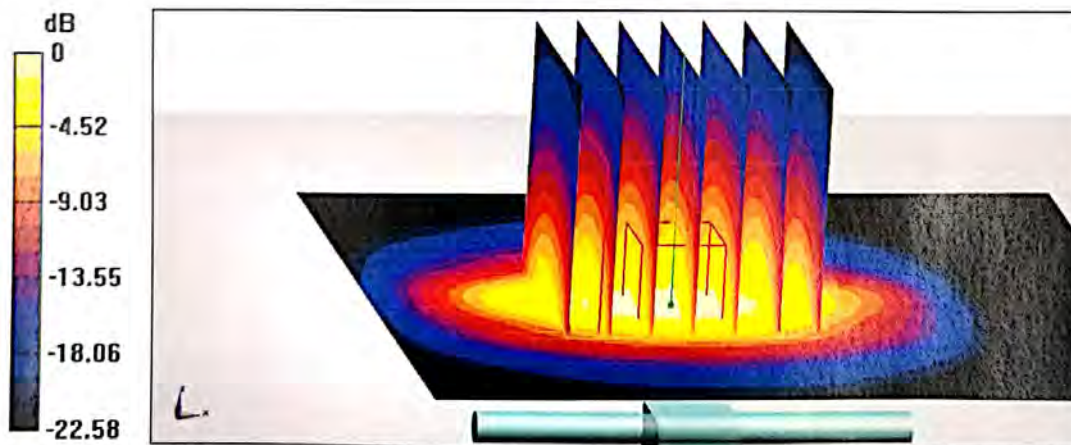
Peak SAR (extrapolated) = 27.3 W/kg

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

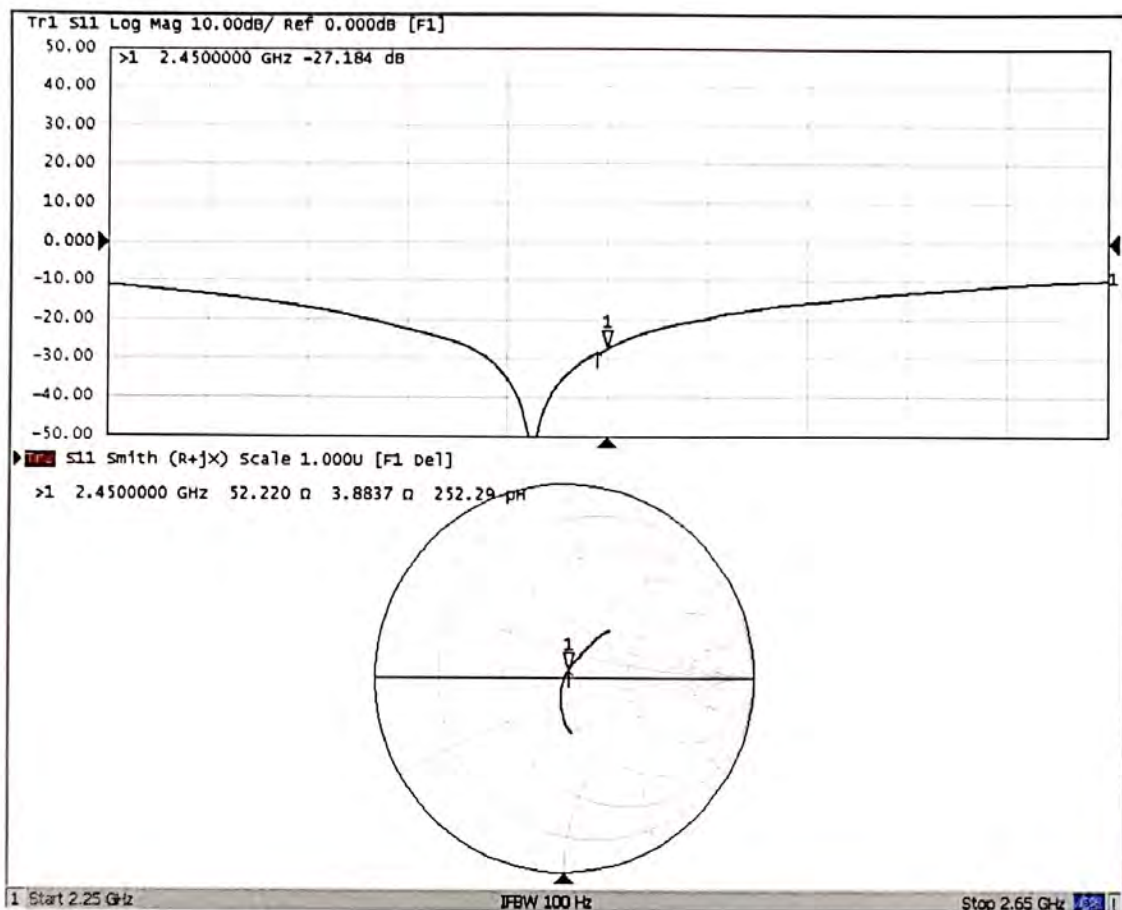
Tel: +86-10-62304633-2079

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%.