

Table 14.2-13: SAR Values (LTE Band5 - Head)

Ambient Temperature: 22.9°C						Liquid Temperature: 22.5°C						
Frequency		Mode	Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
20450	829	1RB_High	Left	Touch	/	24.43	25	0.218	0.25	0.279	0.32	0.08
20450	829	1RB_High	Left	Tilt	/	24.43	25	0.155	0.18	0.199	0.23	0.03
20450	829	1RB_High	Right	Touch	Fig.13	24.43	25	0.233	0.27	0.302	0.34	0.02
20450	829	1RB_High	Right	Tilt	/	24.43	25	0.172	0.20	0.218	0.25	-0.09
20450	829	25RB_Low	Left	Touch	/	23.36	24	0.174	0.20	0.224	0.26	0.12
20450	829	25RB_Low	Left	Tilt	/	23.36	24	0.115	0.13	0.147	0.17	0.08
20450	829	25RB_Low	Right	Touch	/	23.36	24	0.188	0.22	0.245	0.28	0.01
20450	829	25RB_Low	Right	Tilt	/	23.36	24	0.128	0.15	0.163	0.19	0.13
20450	829	1RB_High	Right	Touch	B1	24.43	25	0.189	0.22	0.250	0.29	-0.04

Note1: The LTE mode is QPSK_10MHz.

Table 14.2-14: SAR Values (LTE Band5 - Body)

Ambient Temperature: 22.9°C						Liquid Temperature: 22.5°C					
Frequency		Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
20450	829	1RB_High	Front	/	24.43	25	0.268	0.31	0.340	0.39	0.07
20450	829	1RB_High	Rear	Fig.14	24.43	25	0.394	0.45	0.514	0.59	-0.02
20450	829	1RB_High	Left	/	24.43	25	0.182	0.21	0.258	0.29	-0.03
20450	829	1RB_High	Right	/	24.43	25	0.265	0.30	0.377	0.43	0.12
20450	829	1RB_High	Bottom	/	24.43	25	0.033	0.04	0.051	0.06	-0.07
20450	829	25RB_Low	Front	/	23.36	24	0.218	0.25	0.286	0.33	0.03
20450	829	25RB_Low	Rear	/	23.36	24	0.329	0.38	0.430	0.50	0.01
20450	829	25RB_Low	Left	/	23.36	24	0.112	0.13	0.160	0.19	0.19
20450	829	25RB_Low	Right	/	23.36	24	0.182	0.21	0.258	0.30	0.03
20450	829	25RB_Low	Bottom	/	23.36	24	0.015	0.02	0.023	0.03	0.07
20450	829	1RB_High	Rear	B1	24.43	25	0.331	0.38	0.474	0.54	-0.01

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK_10MHz.

Table 14.2-15: SAR Values (LTE Band7 - Head)

Frequency		Mode	Side	Test Position	Figure No./ Note	Ambient Temperature: 22.9°C		Liquid Temperature: 22.5°C		Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz					Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)			
20850	2510	1RB_Low	Left	Touch	/	21.93	22.5	0.046	0.05	0.088	0.10	0.09
20850	2510	1RB_Low	Left	Tilt	/	21.93	22.5	0.030	0.03	0.066	0.08	-0.02
20850	2510	1RB_Low	Right	Touch	Fig.15	21.93	22.5	0.131	0.15	0.268	0.31	0.09
20850	2510	1RB_Low	Right	Tilt	/	21.93	22.5	0.025	0.03	0.048	0.05	0.11
21100	2535	50RB_Low	Left	Touch	/	20.96	21.5	0.032	0.04	0.061	0.07	0.18
21100	2535	50RB_Low	Left	Tilt	/	20.96	21.5	0.020	0.02	0.032	0.04	0.04
21100	2535	50RB_Low	Right	Touch	/	20.96	21.5	0.081	0.09	0.171	0.19	0.08
21100	2535	50RB_Low	Right	Tilt	/	20.96	21.5	0.010	0.01	0.016	0.02	0.05
20850	2510	1RB_Low	Right	Touch	B1	21.93	21.5	0.121	0.11	0.247	0.22	-0.01

Note1: The LTE mode is QPSK_20MHz.

Table 14.2-16: SAR Values (LTE Band7 - Body)

Frequency		Mode	Test Position	Figure No./ Note	Ambient Temperature: 22.9°C		Liquid Temperature: 22.5°C		Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz				Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)			
20850	2510	1RB_Low	Front	/	21.93	22.5	0.333	0.38	0.664	0.76	0.08
21350	2560	1RB_Low	Rear	/	21.85	22.5	0.320	0.37	0.723	0.84	0.06
21100	2535	1RB_Low	Rear	/	21.88	22.5	0.307	0.35	0.700	0.81	-0.08
20850	2510	1RB_Low	Rear	Fig.16	21.93	22.5	0.352	0.40	0.763	0.87	-0.09
20850	2510	1RB_Low	Left	/	21.93	22.5	0.037	0.04	0.070	0.08	0.11
20850	2510	1RB_Low	Right	/	21.93	22.5	0.090	0.10	0.169	0.19	0.17
20850	2510	1RB_Low	Bottom	/	21.93	22.5	0.291	0.33	0.586	0.67	-0.03
21100	2535	50RB_Low	Front	/	20.96	21.5	0.217	0.25	0.434	0.49	0.08
21100	2535	50RB_Low	Rear	/	20.96	21.5	0.229	0.26	0.504	0.57	0.06
21100	2535	50RB_Low	Left	/	20.96	21.5	0.028	0.03	0.054	0.06	-0.09
21100	2535	50RB_Low	Right	/	20.96	21.5	0.057	0.06	0.110	0.12	0.14
21100	2535	50RB_Low	Bottom	/	20.96	21.5	0.219	0.25	0.449	0.51	0.08
20850	2510	100RB	Rear	/	20.90	21.5	0.236	0.27	0.518	0.59	0.03
20850	2510	1RB_Low	Rear	B1	21.93	22.5	0.318	0.36	0.663	0.76	0.01

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK_20MHz.

Table 14.2-17: SAR Values (LTE Band17 - Head)

Frequency		Mode	Side	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Ambient Temperature: 22.9 °C		Liquid Temperature: 22.5 °C		Power Drift (dB)
Ch.	MHz							Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	
23790	710	1RB_High	Left	Touch	Fig.17	23.72	24.5	0.180	0.22	0.229	0.27	0.16
23790	710	1RB_High	Left	Tilt	/	23.72	24.5	0.140	0.17	0.176	0.21	0.12
23790	710	1RB_High	Right	Touch	/	23.72	24.5	0.169	0.20	0.218	0.26	0.07
23790	710	1RB_High	Right	Tilt	/	23.72	24.5	0.158	0.19	0.195	0.23	-0.03
23800	711	25RB_Low	Left	Touch	/	22.61	23.5	0.114	0.14	0.146	0.18	0.08
23800	711	25RB_Low	Left	Tilt	/	22.61	23.5	0.078	0.10	0.099	0.12	0.06
23800	711	25RB_Low	Right	Touch	/	22.61	23.5	0.113	0.14	0.145	0.18	-0.09
23800	711	25RB_Low	Right	Tilt	/	22.61	23.5	0.104	0.13	0.130	0.16	0.19
23790	710	1RB_High	Left	Touch	B1	23.72	24.5	0.153	0.18	0.209	0.25	-0.03

Note1: The LTE mode is QPSK_10MHz.

Table 14.2-18: SAR Values (LTE Band17 - Body)

Frequency		Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Ambient Temperature: 22.9 °C		Liquid Temperature: 22.5 °C		Power Drift (dB)
Ch.	MHz						Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	
23790	710	1RB_High	Front	/	23.72	24.5	0.277	0.33	0.351	0.42	0.04
23790	710	1RB_High	Rear	Fig.18	23.72	24.5	0.384	0.46	0.493	0.59	-0.06
23790	710	1RB_High	Left	/	23.72	24.5	0.235	0.28	0.327	0.39	0.01
23790	710	1RB_High	Right	/	23.72	24.5	0.250	0.30	0.343	0.41	0.15
23790	710	1RB_High	Bottom	/	23.72	24.5	0.023	0.03	0.038	0.05	-0.09
23800	711	25RB_Low	Front	/	22.61	23.5	0.168	0.21	0.215	0.26	0.04
23800	711	25RB_Low	Rear	/	22.61	23.5	0.289	0.35	0.376	0.46	0.07
23800	711	25RB_Low	Left	/	22.61	23.5	0.174	0.21	0.239	0.29	0.16
23800	711	25RB_Low	Right	/	22.61	23.5	0.184	0.23	0.255	0.31	0.02
23800	711	25RB_Low	Bottom	/	22.61	23.5	0.020	0.02	0.032	0.04	0.01
23790	710	1RB_High	Rear	B1	23.72	24.5	0.361	0.43	0.462	0.55	0.19

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK_10MHz.

Table 14.2-19: SAR Values (LTE band66 - Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °C						
Frequency		Mode	Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
132572	1770	1RB_High	Left	Touch	/	22.81	23.5	0.149	0.17	0.238	0.28	0.05
132572	1770	1RB_High	Left	Tilt	/	22.81	23.5	0.090	0.11	0.147	0.17	0.12
132572	1770	1RB_High	Right	Touch	Fig.19	22.81	23.5	0.177	0.21	0.277	0.32	-0.13
132572	1770	1RB_High	Right	Tilt	/	22.81	23.5	0.092	0.11	0.148	0.17	-0.07
132572	1770	50RB_Low	Left	Touch	/	21.72	22.5	0.102	0.12	0.162	0.19	0.02
132572	1770	50RB_Low	Left	Tilt	/	21.72	22.5	0.064	0.08	0.105	0.13	0.18
132572	1770	50RB_Low	Right	Touch	/	21.72	22.5	0.110	0.13	0.181	0.22	0.06
132572	1770	50RB_Low	Right	Tilt	/	21.72	22.5	0.053	0.06	0.084	0.10	0.01
132572	1770	1RB_High	Right	Touch	B1	22.81	23.5	0.152	0.18	0.238	0.28	0.19

Note1: The LTE mode is QPSK_20MHz.

Table 14.2-20: SAR Values (LTE band66 - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °C					
Frequency		Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
132572	1770	1RB_High	Front	/	22.81	23.5	0.211	0.25	0.368	0.43	0.04
132572	1770	1RB_High	Rear	/	22.81	23.5	0.268	0.31	0.509	0.60	-0.09
132572	1770	1RB_High	Left	/	22.81	23.5	0.037	0.04	0.059	0.07	0.12
132572	1770	1RB_High	Right	/	22.81	23.5	0.076	0.09	0.122	0.14	0.04
132572	1770	1RB_High	Bottom	Fig.20	22.81	23.5	0.331	0.39	0.604	0.71	0.19
132572	1770	50RB_Low	Front	/	21.72	22.5	0.182	0.22	0.249	0.30	0.08
132572	1770	50RB_Low	Rear	/	21.72	22.5	0.243	0.29	0.453	0.54	0.14
132572	1770	50RB_Low	Left	/	21.72	22.5	0.034	0.04	0.056	0.07	0.17
132572	1770	50RB_Low	Right	/	21.72	22.5	0.056	0.07	0.092	0.11	0.02
132572	1770	50RB_Low	Bottom	/	21.72	22.5	0.28	0.34	0.512	0.61	0.07
132572	1770	1RB_High	Bottom	B1	22.81	23.5	0.308	0.36	0.583	0.68	0.11

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK_20MHz.

14.3 SAR results for Standard procedure

There is zoom scan measurement to be added for the highest measured SAR in each exposure configuration/band.

Table 14.3-1: SAR Values (GSM 850 MHz Band - Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °C					
Frequency		Side	Test Position	Figure No./Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
251	848.8	Right	Touch	Fig.1	31.97	32.5	0.437	0.49	0.571	0.65	0.18

Note: the head SAR of GSM850 is tested with GPRS (2Txslots) mode because of VoIP.

Table 14.3-2: SAR Values (GSM 850 MHz Band - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °C					
Frequency		Mode (number of timeslots)	Test Position	Figure No./Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
190	836.6	GPRS (2)	Rear	Fig.2	31.96	32.5	0.633	0.72	0.824	0.93	-0.06

Note: The distance between the EUT and the phantom bottom is 10mm.

Table 14.3-3: SAR Values (GSM 1900 MHz Band - Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °C					
Frequency		Side	Test Position	Figure No./Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
810	1909.8	Left	Touch	Fig.3	29.25	29.5	0.256	0.27	0.425	0.45	0.06

Note: the head SAR of GSM1900 is tested with GPRS (2Txslots) mode because of VoIP.

Table 14.3-4: SAR Values (GSM 1900 MHz Band - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °C					
Frequency		Mode (number of timeslots)	Test Position	Figure No./Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
512	1850.2	GPRS (2)	Bottom	Fig.4	28.95	29.5	0.551	0.63	1.02	1.16	-0.01

Note: The distance between the EUT and the phantom bottom is 10mm.

Table 14.3-5: SAR Values (WCDMA 850 MHz Band - Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °C					
Frequency		Side	Test Position	Figure No./Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
4233	846.6	Right	Touch	Fig.5	23.54	24.5	0.243	0.30	0.317	0.40	0.17

Table 14.3-6: SAR Values (WCDMA 850 MHz Band - Body)

Frequency		Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Ambient Temperature: 22.9 °C		Liquid Temperature: 22.5 °C		Power Drift (dB)
Ch.	MHz					Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	
4132	826.4	Rear	Fig.6	23.61	24.5	0.314	0.39	0.410	0.50	0.10

Note: The distance between the EUT and the phantom bottom is 10mm.

Table 14.3-7: SAR Values (WCDMA 1700 MHz Band - Head)

Frequency		Side	Test Position	Figure No./Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Ambient Temperature: 22.9 °C		Liquid Temperature: 22.5 °C		Power Drift (dB)
Ch.	MHz						Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	
1738	1752.6	Right	Touch	Fig.7	23.52	24	0.175	0.20	0.277	0.31	0.08

Table 14.3-8: SAR Values (WCDMA 1700 MHz Band - Body)

Frequency		Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Ambient Temperature: 22.9 °C		Liquid Temperature: 22.5 °C		Power Drift (dB)
Ch.	MHz					Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	
1537	1712.4	Bottom	Fig.8	23.53	24	0.529	0.59	0.934	1.04	0.01

Note1: The distance between the EUT and the phantom bottom is 10mm.

Table 14.3-9: SAR Values (WCDMA 1900 MHz Band - Head)

Frequency		Side	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Ambient Temperature: 22.9 °C		Liquid Temperature: 22.5 °C		Power Drift (dB)
Ch.	MHz						Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	
9800	1880	Left	Touch	Fig.9	22.37	23.5	0.201	0.26	0.333	0.43	0.00

Table 14.1-10: SAR Values (WCDMA 1900 MHz Band - Body)

Frequency		Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Ambient Temperature: 22.9 °C		Liquid Temperature: 22.5 °C		Power Drift (dB)
Ch.	MHz					Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	
9662	1852.4	Bottom	Fig.10	22.44	23.5	0.503	0.64	0.936	1.19	0.07

Note1: The distance between the EUT and the phantom bottom is 10mm.

Table 14.3-11: SAR Values (LTE Band2 - Head)

Ambient Temperature: 22.9°C						Liquid Temperature: 22.5°C						
Frequency		Mode	Side	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
18700	1860	1RB_Low	Right	Touch	Fig.11	23.33	24	0.249	0.29	0.403	0.47	0.12

Note1: The LTE mode is QPSK_20MHz.

Table 14.3-12: SAR Values (LTE Band2 - Body)

Ambient Temperature: 22.9°C						Liquid Temperature: 22.5°C					
Frequency		Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
18700	1860	1RB_Low	Bottom	Fig.12	23.33	24	0.537	0.63	0.998	1.16	0.06

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK_20MHz.

Table 14.3-13: SAR Values (LTE Band5 - Head)

Ambient Temperature: 22.9°C						Liquid Temperature: 22.5°C						
Frequency		Mode	Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
20450	829	1RB_High	Right	Touch	Fig.13	24.43	25	0.233	0.27	0.302	0.34	0.02

Note1: The LTE mode is QPSK_10MHz.

Table 14.3-14: SAR Values (LTE Band5 - Body)

Ambient Temperature: 22.9°C						Liquid Temperature: 22.5°C					
Frequency		Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
20450	829	1RB_High	Rear	Fig.14	24.43	25	0.394	0.45	0.514	0.59	-0.02

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK_10MHz.

Table 14.3-15: SAR Values (LTE Band7 - Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °C						
Frequency		Mode	Side	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
20850	2510	1RB_Low	Right	Touch	Fig.15	21.93	22.5	0.131	0.15	0.268	0.31	0.09

Note1: The LTE mode is QPSK_20MHz.

Table 14.3-16: SAR Values (LTE Band7 - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °C					
Frequency		Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
20850	2510	1RB_Low	Rear	Fig.16	21.93	22.5	0.352	0.40	0.763	0.87	-0.09

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK_20MHz.

Table 14.3-17: SAR Values (LTE Band17 - Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °C						
Frequency		Mode	Side	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
23790	710	1RB_High	Left	Touch	Fig.17	23.72	24.5	0.180	0.22	0.229	0.27	0.16

Note1: The LTE mode is QPSK_10MHz.

Table 14.3-18: SAR Values (LTE Band17 - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °C					
Frequency		Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
23790	710	1RB_High	Rear	Fig.18	23.72	24.5	0.384	0.46	0.493	0.59	-0.06
23790	710	1RB_High	Rear	B1	23.72	24.5	0.361	0.43	0.462	0.55	0.19

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK_10MHz.

Table 14.3-19: SAR Values (LTE band66 - Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C						
Frequency		Mode	Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz											
132572	1770	1RB_High	Right	Touch	Fig.19	22.81	23.5	0.177	0.21	0.277	0.32	-0.13

Note1: The LTE mode is QPSK_20MHz.

Table 14.3-20: SAR Values (LTE band66 - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Mode	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										
132572	1770	1RB_High	Bottom	Fig.20	22.81	23.5	0.331	0.39	0.604	0.71	0.19

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK_20MHz.

14.4 WLAN Evaluation for 2.4G

According to the KDB248227 D01, SAR is measured for 2.4GHz 802.11b DSSS using the initial test position procedure.

Head Evaluation

Table 14.4-1: SAR Values (WLAN - Head)– 802.11b (Fast SAR)

Frequency		Side	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Ambient Temperature: 22.9°C		Liquid Temperature: 22.5°C		Power Drift (dB)
MHz	Ch.						Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g)(W/kg)	
2462	11	Left	Touch	/	16.72	17	0.355	0.38	0.751	0.80	0.02
2462	11	Left	Tilt	/	16.72	17	0.227	0.24	0.438	0.47	0.01
2462	11	Right	Touch	/	16.72	17	0.153	0.16	0.288	0.31	0.08
2462	11	Right	Tilt	/	16.72	17	0.125	0.13	0.253	0.27	0.05

As shown above table, the initial test position for head is “Left Touch”. So the head SAR of WLAN is presented as below:

Table 14.4-2: SAR Values (WLAN - Head)– 802.11b (Full SAR)

Frequency		Side	Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Ambient Temperature: 22.9°C		Liquid Temperature: 22.5°C		Power Drift (dB)
MHz	Ch.						Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g)(W/kg)	
2462	11	Left	Touch	/	16.72	17	0.364	0.39	0.814	0.87	0.02
2462	11	Left	Tilt	/	16.72	17	0.228	0.24	0.510	0.54	0.01
2437	6	Left	Touch	Fig.21	16.69	17	0.370	0.40	0.822	0.88	0.08

Note1: When the reported SAR of the initial test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position using subsequent highest estimated 1-g SAR conditions determined by area scans, on the highest maximum output power channel, until the reported SAR is \leq 0.8 W/kg.

Note2: For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel until the reported SAR is \leq 1.2 W/kg or all required channels are tested.

According to the KDB248227 D01, The reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit. The scaled reported SAR is presented as below.

Table 14.4-3: SAR Values (WLAN - Head) – 802.11b (Scaled Reported SAR)

Frequency		Side	Test Position	Ambient Temperature: 22.9°C		Liquid Temperature: 22.5°C	
MHz	Ch.			Actual duty factor	maximum duty factor	Reported SAR (1g)(W/kg)	Scaled reported SAR (1g)(W/kg)
2437	6	Left	Touch	98.76%	100%	0.88	0.89
2462	11	Right	Touch	98.76%	100%	0.31	0.31

SAR is not required for OFDM because the 802.11b adjusted SAR \leq 1.2 W/kg.

Body Evaluation

Table 14.4-4: SAR Values (WLAN - Body)– 802.11b (Fast SAR)

Frequency		Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Ambient Temperature: 22.9 °C		Liquid Temperature: 22.5 °C		Power Drift (dB)
MHz	Ch.					Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g)(W/kg)	
2462	11	Front	/	16.72	17	0.052	0.06	0.097	0.10	0.05
2462	11	Rear	/	16.72	17	0.064	0.07	0.125	0.13	-0.07
2462	11	Right	/	16.72	17	0.048	0.05	0.093	0.10	0.07
2462	11	Top	/	16.72	17	0.020	0.02	0.037	0.04	0.08

As shown above table, the initial test position for body is “Rear”. So the body SAR of WLAN is presented as below:

Table 14.4-5: SAR Values (WLAN - Body)– 802.11b (Full SAR)

Frequency		Test Position	Figure No./ Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Ambient Temperature: 22.9 °C		Liquid Temperature: 22.5 °C		Power Drift (dB)
MHz	Ch.					Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g)(W/kg)	
2462	11	Rear	Fig.22	16.72	17	0.064	0.07	0.130	0.14	-0.07

Note1: When the reported SAR of the initial test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position using subsequent highest estimated 1-g SAR conditions determined by area scans, on the highest maximum output power channel, until the reported SAR is ≤ 0.8 W/kg.

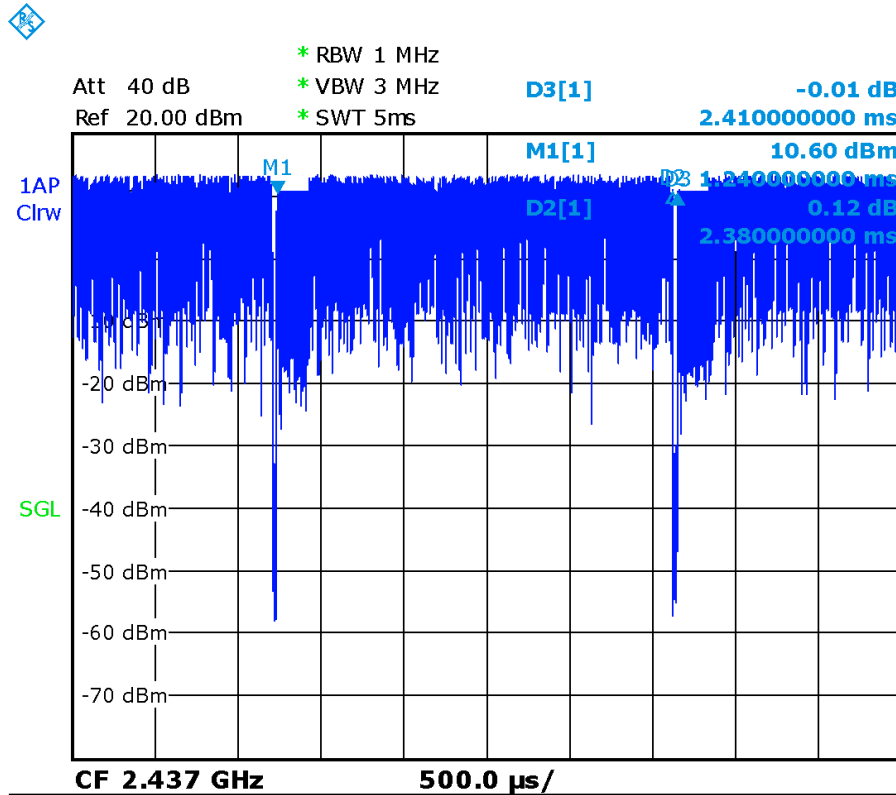
Note2: For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.

According to the KDB248227 D01, The reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit. The scaled reported SAR is presented as below.

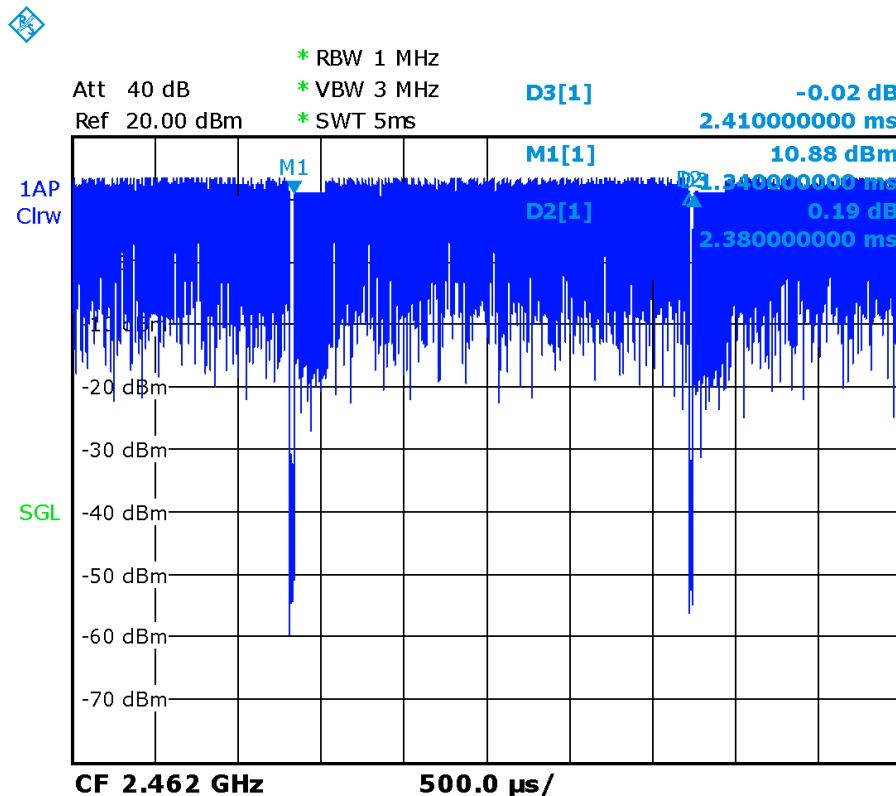
Table 14.4-6: SAR Values (WLAN - Body) – 802.11b (Scaled Reported SAR)

Frequency		Test Position	Ambient Temperature: 22.9 °C		Liquid Temperature: 22.5 °C	
MHz	Ch.		Actual duty factor	maximum duty factor	Reported SAR (1g)(W/kg)	Scaled reported SAR (1g)(W/kg)
2462	11	Rear	98.76%	100%	0.14	0.14

SAR is not required for OFDM because the 802.11b adjusted SAR ≤ 1.2 W/kg.



Picture 14.1 Duty factor plot for CH6



Picture 14.2 Duty factor plot for CH11

15 SAR Measurement Variability

SAR measurement variability must be assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media are required for SAR measurements in a frequency band, the variability measurement procedures should be applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium.

The following procedures are applied to determine if repeated measurements are required.

- 1) Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg; steps 2) through 4) do not apply.
- 2) When the original highest measured SAR is ≥ 0.80 W/kg, repeat that measurement once.
- 3) Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is ≥ 1.45 W/kg ($\sim 10\%$ from the 1-g SAR limit).
- 4) Perform a third repeated measurement only if the original, first or second repeated measurement is ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20 .

Table 15.1: SAR Measurement Variability for Body GSM850 (1g)

Frequency		Test Position	Spacing (mm)	Original SAR (W/kg)	First Repeated SAR (W/kg)	The Ratio	Second Repeated SAR (W/kg)
Ch.	MHz						
190	836.6	Rear	10	0.824	0.815	1.01	/

Table 15.2: SAR Measurement Variability for Body PCS1900 (1g)

Frequency		Test Position	Spacing (mm)	Original SAR (W/kg)	First Repeated SAR (W/kg)	The Ratio	Second Repeated SAR (W/kg)
Ch.	MHz						
512	1850.2	Bottom	10	1.02	1	1.02	/

Table 15.3: SAR Measurement Variability for Body W1700 (1g)

Frequency		Test Position	Spacing (mm)	Original SAR (W/kg)	First Repeated SAR (W/kg)	The Ratio	Second Repeated SAR (W/kg)
Ch.	MHz						
1537	1712.4	Bottom	10	0.934	0.921	1.01	/

Table 15.4: SAR Measurement Variability for Body W1900 (1g)

Frequency		Test Position	Spacing (mm)	Original SAR (W/kg)	First Repeated SAR (W/kg)	The Ratio	Second Repeated SAR (W/kg)
Ch.	MHz						
9662	1852.4	Bottom	10	0.936	0.929	1.01	/

Table 15.5: SAR Measurement Variability for Body LTE B2 (1g)

Frequency		Mode	Test Position	Spacing (mm)	Original SAR (W/kg)	First Repeated SAR (W/kg)	The Ratio	Second Repeated SAR (W/kg)
Ch.	MHz							
18700	1860	1RB_Low	Bottom	10	0.998	0.987	1.01	/

16 Measurement Uncertainty

16.1 Measurement Uncertainty for Normal SAR Tests (300MHz~3GHz)

No.	Error Description	Type	Uncertainty value	Probably Distribution	Div.	(Ci) 1g	(Ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)	Degree of freedom
Measurement system										
1	Probe calibration	B	6.0	N	1	1	1	6.0	6.0	∞
2	Isotropy	B	4.7	R	$\sqrt{3}$	0.7	0.7	1.9	1.9	∞
3	Boundary effect	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
4	Linearity	B	4.7	R	$\sqrt{3}$	1	1	2.7	2.7	∞
5	Detection limit	B	1.0	N	1	1	1	0.6	0.6	∞
6	Readout electronics	B	0.3	R	$\sqrt{3}$	1	1	0.3	0.3	∞
7	Response time	B	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	∞
8	Integration time	B	2.6	R	$\sqrt{3}$	1	1	1.5	1.5	∞
9	RF ambient conditions-noise	B	0	R	$\sqrt{3}$	1	1	0	0	∞
10	RF ambient conditions-reflection	B	0	R	$\sqrt{3}$	1	1	0	0	∞
11	Probe positioned mech. restrictions	B	0.4	R	$\sqrt{3}$	1	1	0.2	0.2	∞
12	Probe positioning with respect to phantom shell	B	2.9	R	$\sqrt{3}$	1	1	1.7	1.7	∞
13	Post-processing	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
Test sample related										
14	Test sample positioning	A	3.3	N	1	1	1	3.3	3.3	71
15	Device holder uncertainty	A	3.4	N	1	1	1	3.4	3.4	5
16	Drift of output power	B	5.0	R	$\sqrt{3}$	1	1	2.9	2.9	∞
Phantom and set-up										
17	Phantom uncertainty	B	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	∞
18	Liquid conductivity (target)	B	5.0	R	$\sqrt{3}$	0.64	0.43	1.8	1.2	∞
19	Liquid conductivity (meas.)	A	2.06	N	1	0.64	0.43	1.32	0.89	43
20	Liquid permittivity (target)	B	5.0	R	$\sqrt{3}$	0.6	0.49	1.7	1.4	∞
21	Liquid permittivity (meas.)	A	1.6	N	1	0.6	0.49	1.0	0.8	521

Combined standard uncertainty	$u_c = \sqrt{\sum_{i=1}^{21} c_i^2 u_i^2}$					9.55	9.43	257
Expanded uncertainty (confidence interval of 95 %)	$u_e = 2u_c$					19.1	18.9	

16.2 Measurement Uncertainty for Normal SAR Tests (3~6GHz)

No.	Error Description	Type	Uncertainty value	Probably Distribution	Div.	(Ci) 1g	(Ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)	Degree of freedom
Measurement system										
1	Probe calibration	B	6.55	N	1	1	1	6.55	6.55	∞
2	Isotropy	B	4.7	R	$\sqrt{3}$	0.7	0.7	1.9	1.9	∞
3	Boundary effect	B	2.0	R	$\sqrt{3}$	1	1	1.2	1.2	∞
4	Linearity	B	4.7	R	$\sqrt{3}$	1	1	2.7	2.7	∞
5	Detection limit	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
6	Readout electronics	B	0.3	R	$\sqrt{3}$	1	1	0.3	0.3	∞
7	Response time	B	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	∞
8	Integration time	B	2.6	R	$\sqrt{3}$	1	1	1.5	1.5	∞
9	RF ambient conditions-noise	B	0	R	$\sqrt{3}$	1	1	0	0	∞
10	RFambient conditions-reflection	B	0	R	$\sqrt{3}$	1	1	0	0	∞
11	Probe positioned mech. restrictions	B	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	∞
12	Probe positioning with respect to phantom shell	B	6.7	R	$\sqrt{3}$	1	1	3.9	3.9	∞
13	Post-processing	B	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	∞
Test sample related										
14	Test sample positioning	A	3.3	N	1	1	1	3.3	3.3	71
15	Device holder uncertainty	A	3.4	N	1	1	1	3.4	3.4	5
16	Drift of output power	B	5.0	R	$\sqrt{3}$	1	1	2.9	2.9	∞
Phantom and set-up										
17	Phantom uncertainty	B	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	∞
18	Liquid conductivity (target)	B	5.0	R	$\sqrt{3}$	0.64	0.43	1.8	1.2	∞
19	Liquid conductivity (meas.)	A	2.06	N	1	0.64	0.43	1.32	0.89	43
20	Liquid permittivity	B	5.0	R	$\sqrt{3}$	0.6	0.49	1.7	1.4	∞

	(target)									
21	Liquid permittivity (meas.)	A	1.6	N	1	0.6	0.49	1.0	0.8	521
Combined standard uncertainty		$u_c = \sqrt{\sum_{i=1}^{21} c_i^2 u_i^2}$						10.7	10.6	257
Expanded uncertainty (confidence interval of 95 %)		$u_e = 2u_c$						21.4	21.1	

16.3 Measurement Uncertainty for Fast SAR Tests (300MHz~3GHz)

No.	Error Description	Type	Uncertainty value	Probably Distribution	Div.	(Ci) 1g	(Ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)	Degree of freedom
Measurement system										
1	Probe calibration	B	6.0	N	1	1	1	6.0	6.0	∞
2	Isotropy	B	4.7	R	$\sqrt{3}$	0.7	0.7	1.9	1.9	∞
3	Boundary effect	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
4	Linearity	B	4.7	R	$\sqrt{3}$	1	1	2.7	2.7	∞
5	Detection limit	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
6	Readout electronics	B	0.3	R	$\sqrt{3}$	1	1	0.3	0.3	∞
7	Response time	B	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	∞
8	Integration time	B	2.6	R	$\sqrt{3}$	1	1	1.5	1.5	∞
9	RF ambient conditions-noise	B	0	R	$\sqrt{3}$	1	1	0	0	∞
10	RFambient conditions-reflection	B	0	R	$\sqrt{3}$	1	1	0	0	∞
11	Probe positioned mech. Restrictions	B	0.4	R	$\sqrt{3}$	1	1	0.2	0.2	∞
12	Probe positioning with respect to phantom shell	B	2.9	R	$\sqrt{3}$	1	1	1.7	1.7	∞
13	Post-processing	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
14	Fast SAR z-Approximation	B	7.0	R	$\sqrt{3}$	1	1	4.0	4.0	∞
Test sample related										
15	Test sample positioning	A	3.3	N	1	1	1	3.3	3.3	71
16	Device holder uncertainty	A	3.4	N	1	1	1	3.4	3.4	5
17	Drift of output power	B	5.0	R	$\sqrt{3}$	1	1	2.9	2.9	∞
Phantom and set-up										
18	Phantom uncertainty	B	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	∞

19	Liquid conductivity (target)	B	5.0	R	$\sqrt{3}$	0.64	0.43	1.8	1.2	∞
20	Liquid conductivity (meas.)	A	2.06	N	1	0.64	0.43	1.32	0.89	43
21	Liquid permittivity (target)	B	5.0	R	$\sqrt{3}$	0.6	0.49	1.7	1.4	∞
22	Liquid permittivity (meas.)	A	1.6	N	1	0.6	0.49	1.0	0.8	521
Combined standard uncertainty		$u_c = \sqrt{\sum_{i=1}^{22} c_i^2 u_i^2}$						10.4	10.3	257
Expanded uncertainty (confidence interval of 95 %)		$u_e = 2u_c$						20.8	20.6	

16.4 Measurement Uncertainty for Fast SAR Tests (3~6GHz)

No.	Error Description	Type	Uncertainty value	Probably Distribution	Div.	(Ci) 1g	(Ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)	Degree of freedom
Measurement system										
1	Probe calibration	B	6.55	N	1	1	1	6.55	6.55	∞
2	Isotropy	B	4.7	R	$\sqrt{3}$	0.7	0.7	1.9	1.9	∞
3	Boundary effect	B	2.0	R	$\sqrt{3}$	1	1	1.2	1.2	∞
4	Linearity	B	4.7	R	$\sqrt{3}$	1	1	2.7	2.7	∞
5	Detection limit	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
6	Readout electronics	B	0.3	R	$\sqrt{3}$	1	1	0.3	0.3	∞
7	Response time	B	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	∞
8	Integration time	B	2.6	R	$\sqrt{3}$	1	1	1.5	1.5	∞
9	RF ambient conditions-noise	B	0	R	$\sqrt{3}$	1	1	0	0	∞
10	RFambient conditions-reflection	B	0	R	$\sqrt{3}$	1	1	0	0	∞
11	Probe positioned mech. Restrictions	B	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	∞
12	Probe positioning with respect to phantom shell	B	6.7	R	$\sqrt{3}$	1	1	3.9	3.9	∞
13	Post-processing	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
14	Fast SAR z-Approximation	B	14.0	R	$\sqrt{3}$	1	1	8.1	8.1	∞
Test sample related										
15	Test sample positioning	A	3.3	N	1	1	1	3.3	3.3	71
16	Device holder	A	3.4	N	1	1	1	3.4	3.4	5

	uncertainty									
17	Drift of output power	B	5.0	R	$\sqrt{3}$	1	1	2.9	2.9	∞
Phantom and set-up										
18	Phantom uncertainty	B	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	∞
19	Liquid conductivity (target)	B	5.0	R	$\sqrt{3}$	0.64	0.43	1.8	1.2	∞
20	Liquid conductivity (meas.)	A	2.06	N	1	0.64	0.43	1.32	0.89	43
21	Liquid permittivity (target)	B	5.0	R	$\sqrt{3}$	0.6	0.49	1.7	1.4	∞
22	Liquid permittivity (meas.)	A	1.6	N	1	0.6	0.49	1.0	0.8	521
Combined standard uncertainty		$u_c = \sqrt{\sum_{i=1}^{22} c_i^2 u_i^2}$						13.5	13.4	257
Expanded uncertainty (confidence interval of 95 %)		$u_e = 2u_c$						27.0	26.8	

17 MAIN TEST INSTRUMENTS

Table 17.1: List of Main Instruments

No.	Name	Type	Serial Number	Calibration Date	Valid Period
01	Network analyzer	E5071C	MY46110673	January 24, 2018	One year
02	Power meter	NRVD	102083	November 01, 2017	One year
03	Power sensor	NRV-Z5	100542		
04	Signal Generator	E4438C	MY49071430	January 2, 2018	One Year
05	Amplifier	60S1G4	0331848	No Calibration Requested	
06	BTS	E5515C	MY50263375	January 23, 2018	One year
07	BTS	CMW500	149646	October 31, 2017	One year
08	E-field Probe	SPEAG EX3DV4	7464	September 12, 2017	One year
09	DAE	SPEAG DAE4	1525	October 2, 2017	One year
10	Dipole Validation Kit	SPEAG D750V3	1017	July 19, 2017	One year
11	Dipole Validation Kit	SPEAG D835V2	4d069	July 19, 2017	One year
12	Dipole Validation Kit	SPEAG D1750V2	1003	July 21, 2017	One year
13	Dipole Validation Kit	SPEAG D1900V2	5d101	July 26, 2017	One year
14	Dipole Validation Kit	SPEAG D2450V2	853	July 21, 2017	One year
15	Dipole Validation Kit	SPEAG D2600V2	1012	July 21, 2017	One year

END OF REPORT BODY

ANNEX A Graph Results

850 Right Cheek High

Date: 2018-3-30

Electronics: DAE4 Sn1525

Medium: Head 850 MHz

Medium parameters used: $f = 848.8$ MHz; $\sigma = 0.912$ mho/m; $\epsilon_r = 41.72$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: GSM 850 GPRS Frequency: 848.8 MHz Duty Cycle: 1:4

Probe: EX3DV4 – SN7464 ConvF(10.28, 10.28, 10.28)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

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

Reference Value = 7.825 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.721 W/kg

SAR(1 g) = 0.571 W/kg; SAR(10 g) = 0.437 W/kg

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

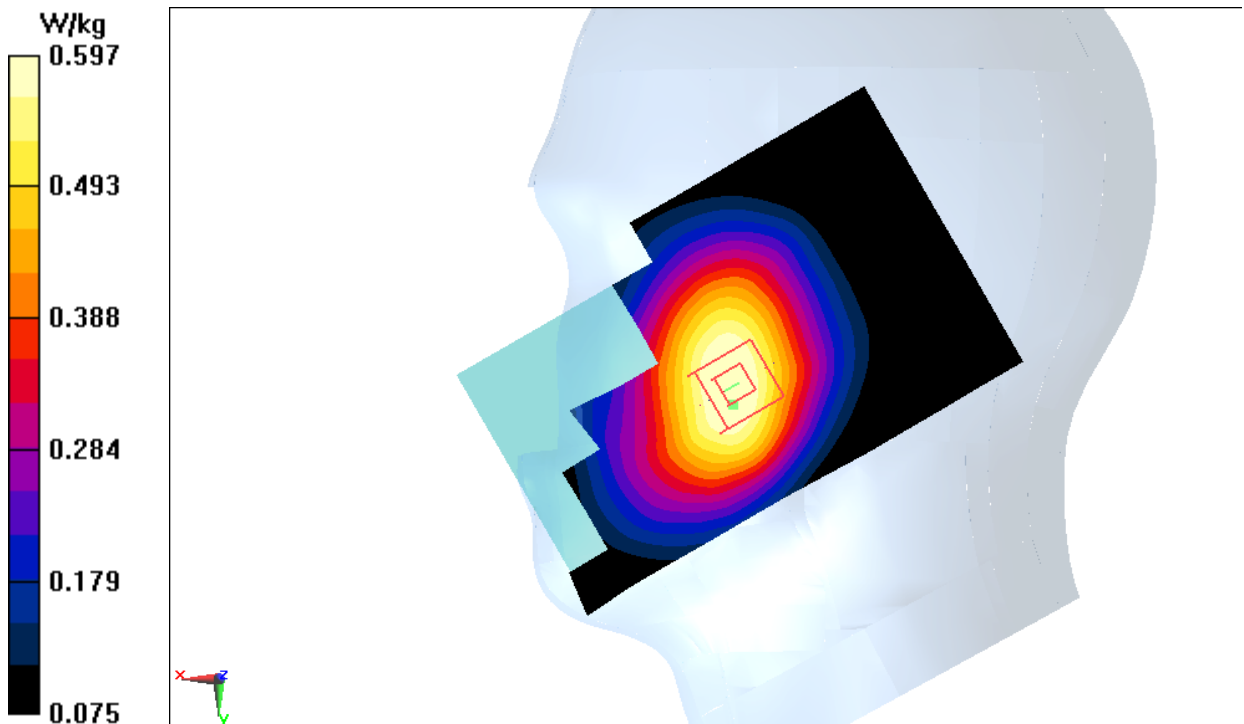


Fig.1 850MHz

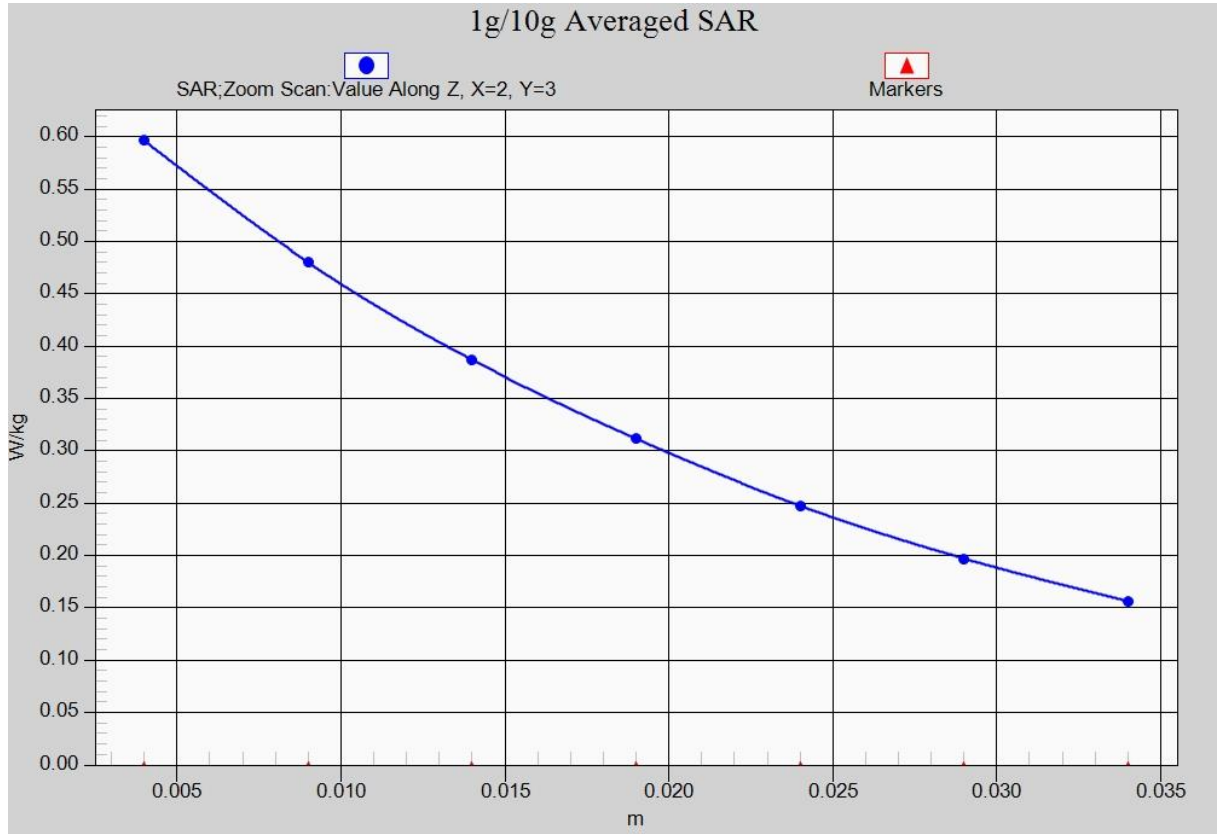


Fig. 1-1 Z-Scan at power reference point (850 MHz)

850 Body Rear Middle

Date: 2018-3-30

Electronics: DAE4 Sn1525

Medium: Body 850 MHz

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.969$ mho/m; $\epsilon_r = 56.01$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: GSM 850 GPRS Frequency: 824.2 MHz Duty Cycle: 1:4

Probe: EX3DV4 – SN7464 ConvF(10.21, 10.21, 10.21)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.895 W/kg

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

Reference Value = 30.54 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 1.03 W/kg

SAR(1 g) = 0.824 W/kg; SAR(10 g) = 0.633 W/kg

Maximum value of SAR (measured) = 0.861 W/kg

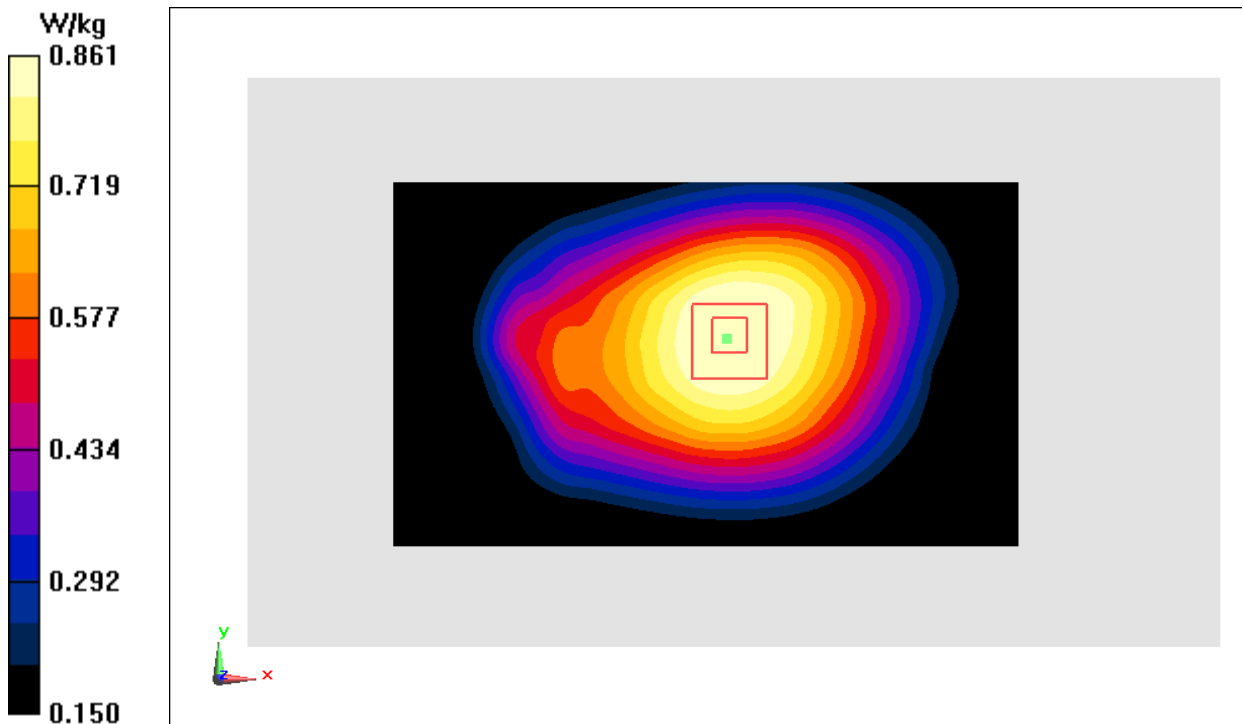


Fig.2 850 MHz

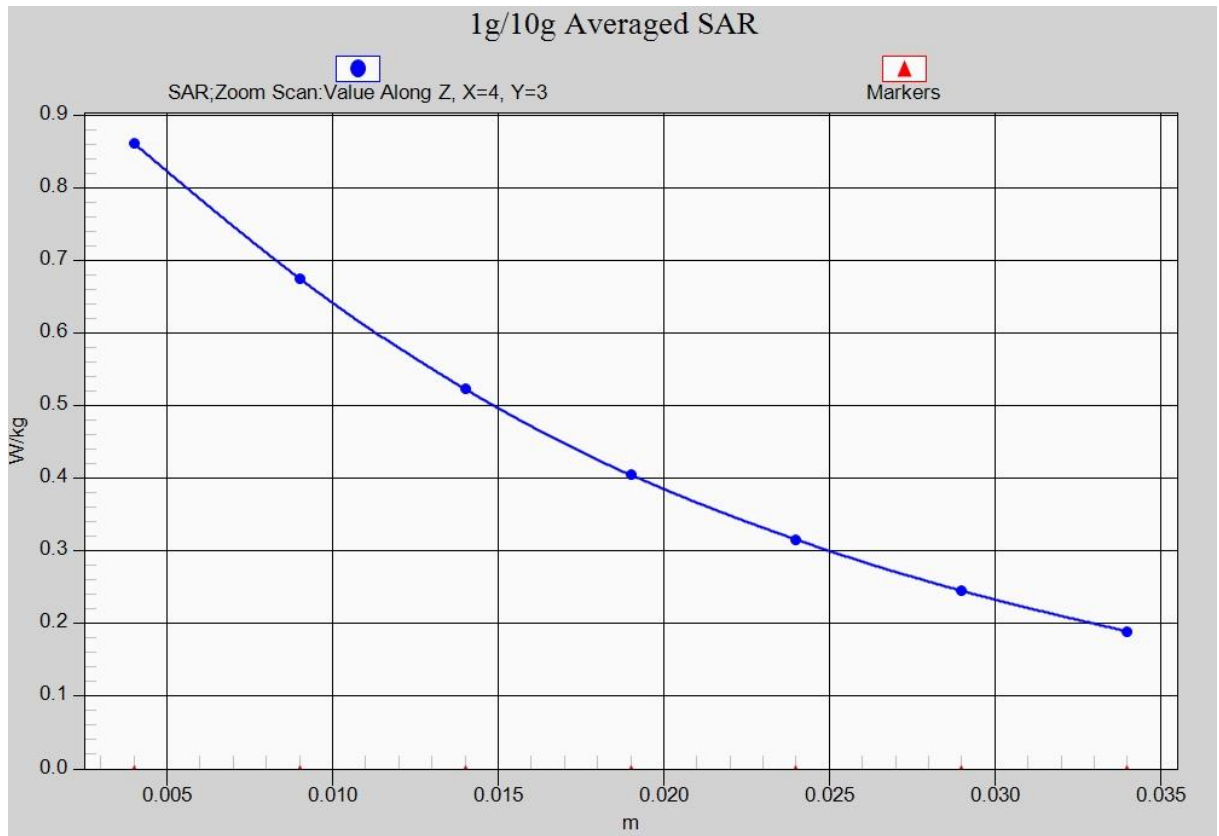


Fig. 2-1 Z-Scan at power reference point (850 MHz)

1900 Left Cheek High

Date: 2018-3-29

Electronics: DAE4 Sn1525

Medium: Head 1900 MHz

Medium parameters used (interpolated): $f = 1909.8$ MHz; $\sigma = 1.452$ mho/m; $\epsilon_r = 40.39$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz Frequency: 1909.8 MHz Duty Cycle: 1:4

Probe: EX3DV4- SN7464 ConvF(8.39, 8.39, 8.39)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.526 W/kg

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

Reference Value = 2.671 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.693 W/kg

SAR(1 g) = 0.425 W/kg; SAR(10 g) = 0.256 W/kg

Maximum value of SAR (measured) = 0.459 W/kg

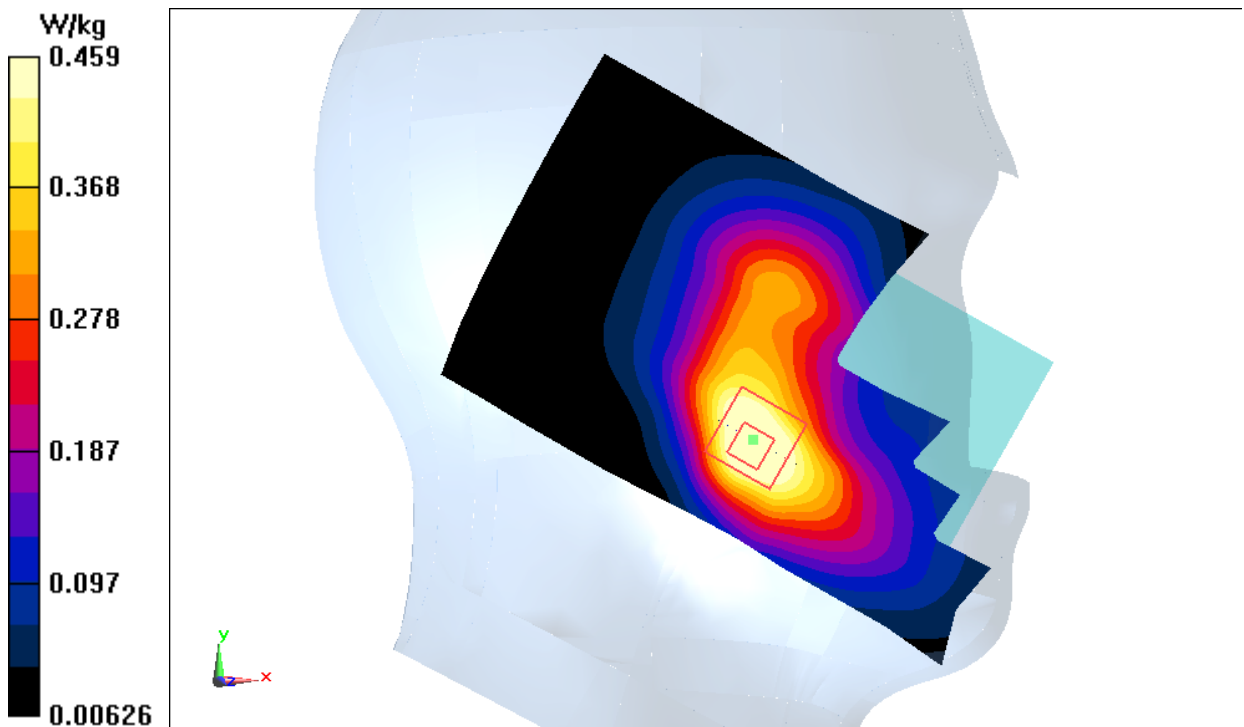


Fig.3 1900 MHz

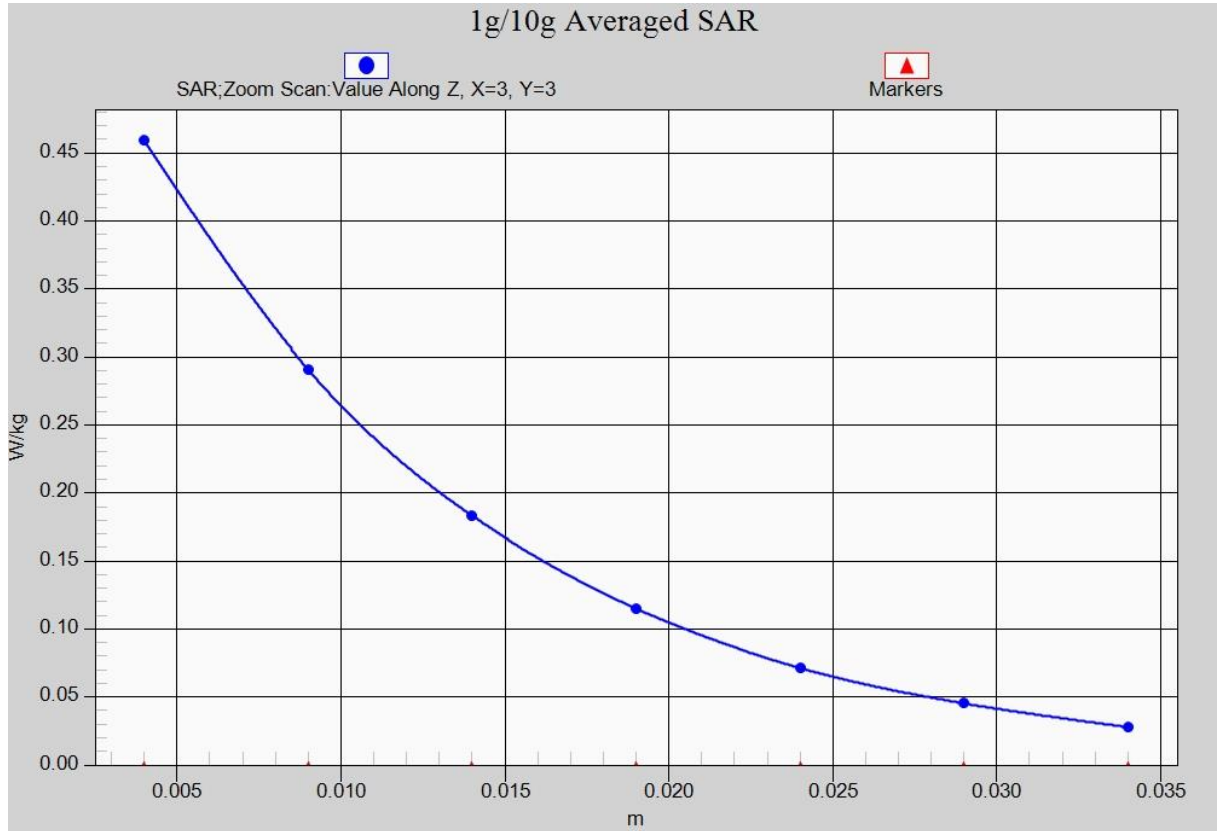


Fig. 3-1 Z-Scan at power reference point (1900 MHz)

1900 Body Bottom Low

Date: 2018-3-29

Electronics: DAE4 Sn1525

Medium: Body 1900 MHz

Medium parameters used: $f = 1850.2$ MHz; $\sigma = 1.515$ mho/m; $\epsilon_r = 52.83$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz GPRS Frequency: 1850.2 MHz Duty Cycle: 1:4

Probe: EX3DV4– SN7464 ConvF(8.32, 8.32, 8.32)

Area Scan (31x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.26 W/kg

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

Reference Value = 21.79 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.68 W/kg

SAR(1 g) = 1.02 W/kg; SAR(10 g) = 0.551 W/kg

Maximum value of SAR (measured) = 1.15 W/kg

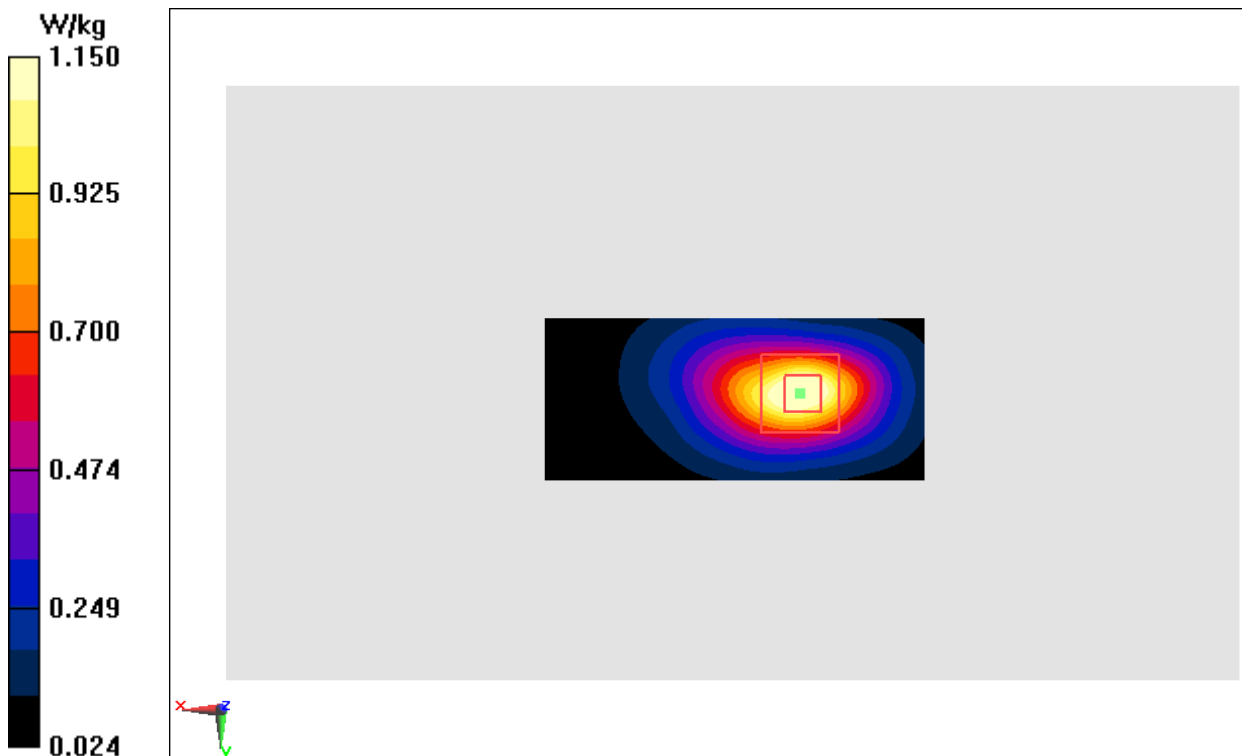


Fig.4 1900 MHz

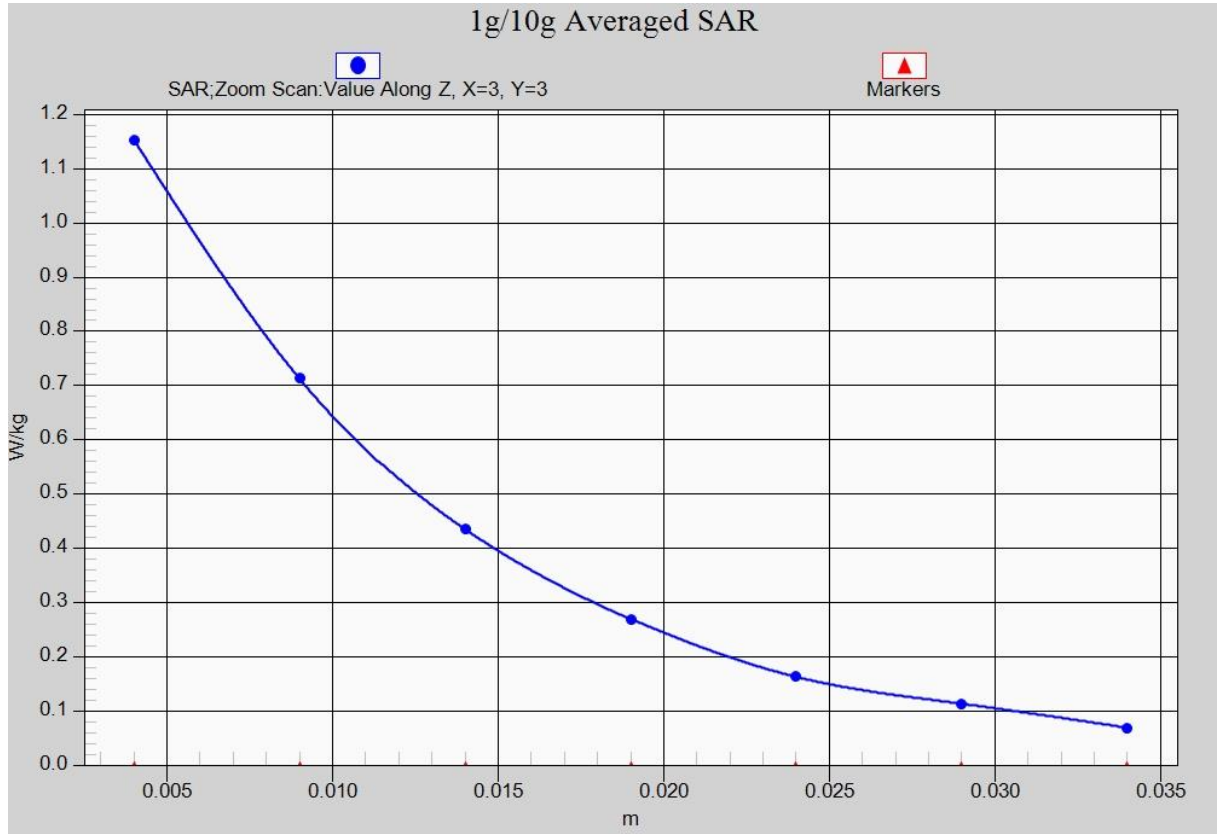


Fig. 4-1 Z-Scan at power reference point (1900 MHz)

WCDMA 850 Right Cheek High

Date: 2018-3-30

Electronics: DAE4 Sn1525

Medium: Head 850 MHz

Medium parameters used (interpolated): $f = 846.6$ MHz; $\sigma = 0.909$ mho/m; $\epsilon_r = 41.725$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: WCDMA; Frequency: 846.6 MHz; Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(10.28, 10.28, 10.28)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.349 W/kg

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

Reference Value = 5.793 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 0.400 W/kg

SAR(1 g) = 0.317 W/kg; SAR(10 g) = 0.243 W/kg

Maximum value of SAR (measured) = 0.331 W/kg

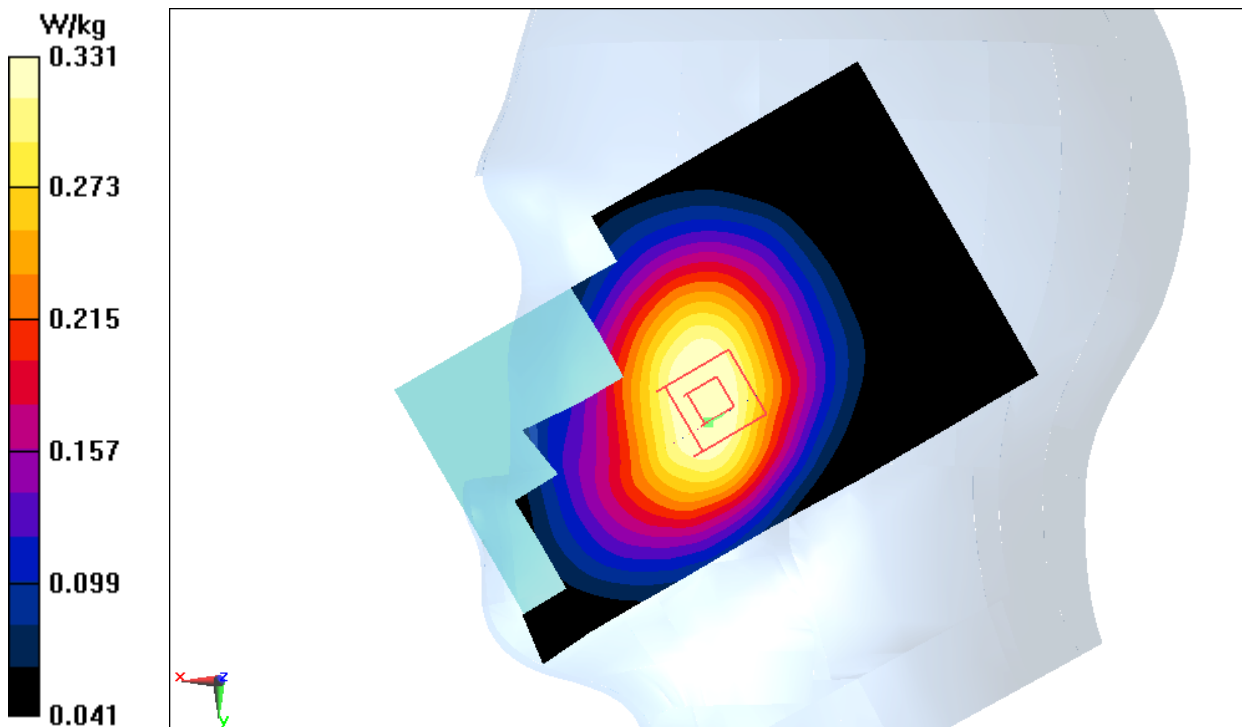


Fig.5 WCDMA 850

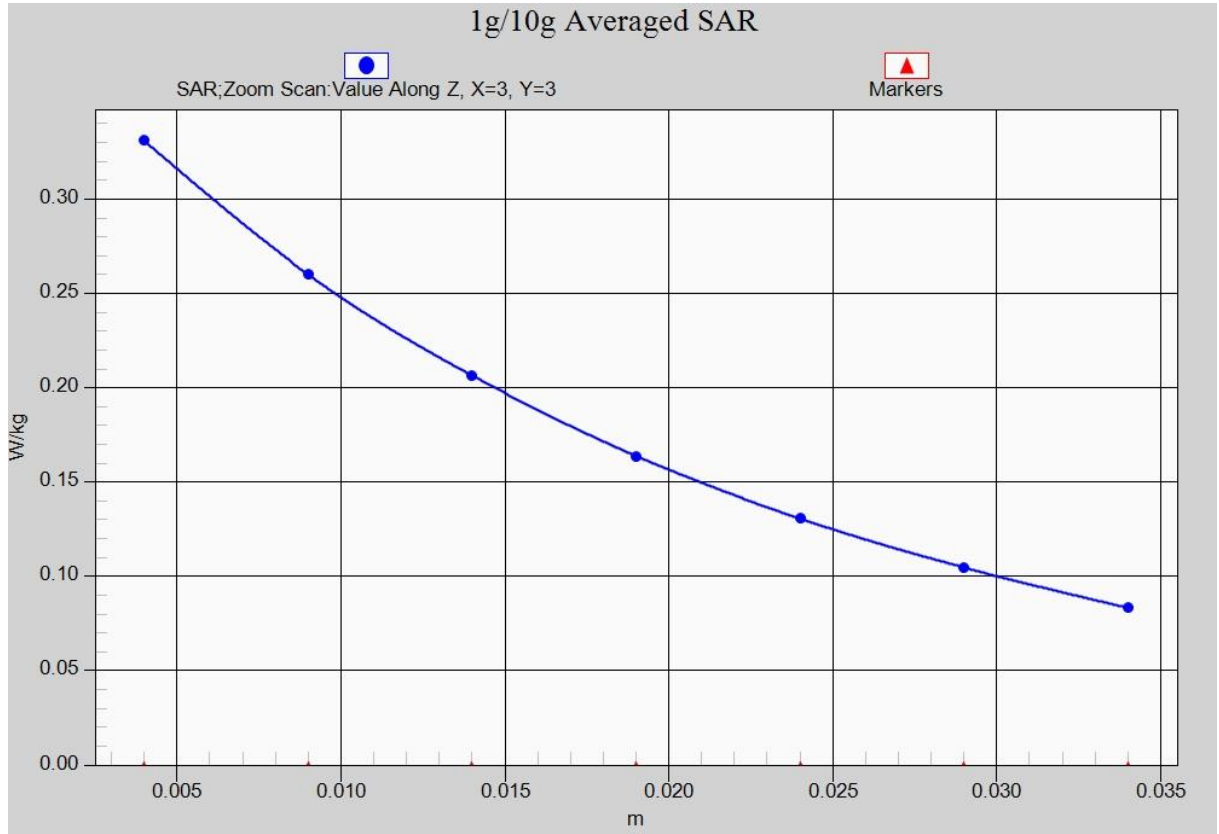


Fig. 5-1 Z-Scan at power reference point (850 MHz)

WCDMA 850 Body Rear Low

Date: 2018-3-30

Electronics: DAE4 Sn1525

Medium: Body 850 MHz

Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.962$ mho/m; $\epsilon_r = 56.066$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: WCDMA; Frequency: 826.4 MHz; Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(10.21, 10.21, 10.21)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

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

Reference Value = 21.23 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 0.512 W/kg

SAR(1 g) = 0.410 W/kg; SAR(10 g) = 0.314 W/kg

Maximum value of SAR (measured) = 0.429 W/kg

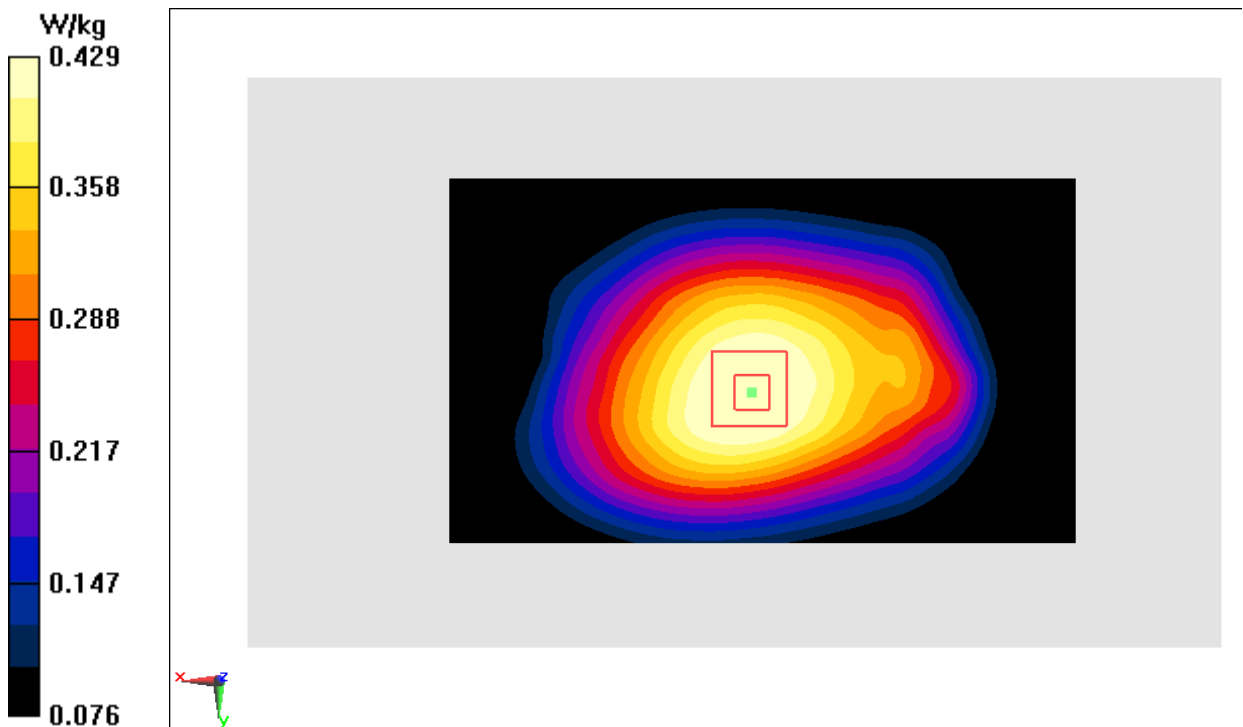


Fig.6 WCDMA 850

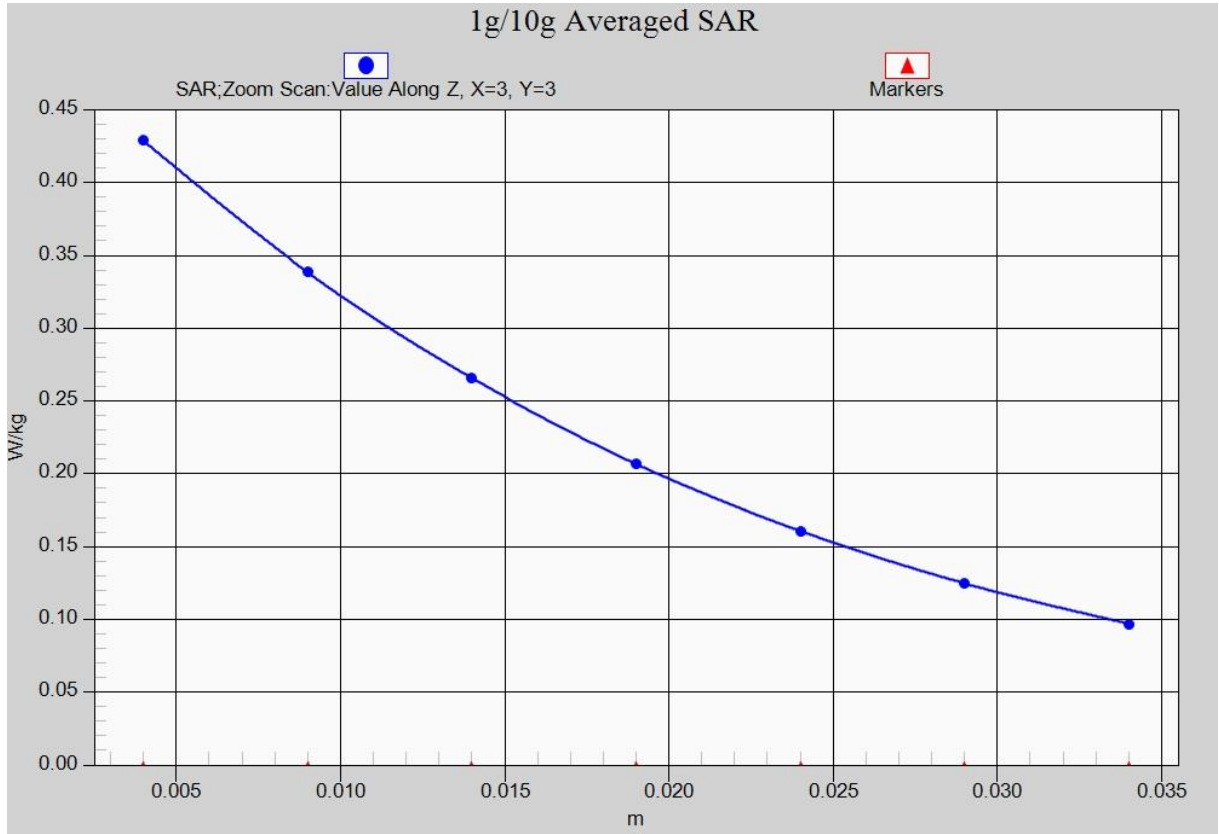


Fig. 6-1 Z-Scan at power reference point (WCDMA850)

WCDMA 1700 Right Cheek High

Date: 2018-3-31

Electronics: DAE4 Sn1525

Medium: Head 1750 MHz

Medium parameters used (interpolated): $f = 1752.6$ MHz; $\sigma = 1.34$ mho/m; $\epsilon_r = 40.567$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: WCDMA 1750 Frequency: 1752.6 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN7464 ConvF(8.70, 8.70, 8.70)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

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

Reference Value = 6.027 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.415 W/kg

SAR(1 g) = 0.277 W/kg; SAR(10 g) = 0.175 W/kg

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

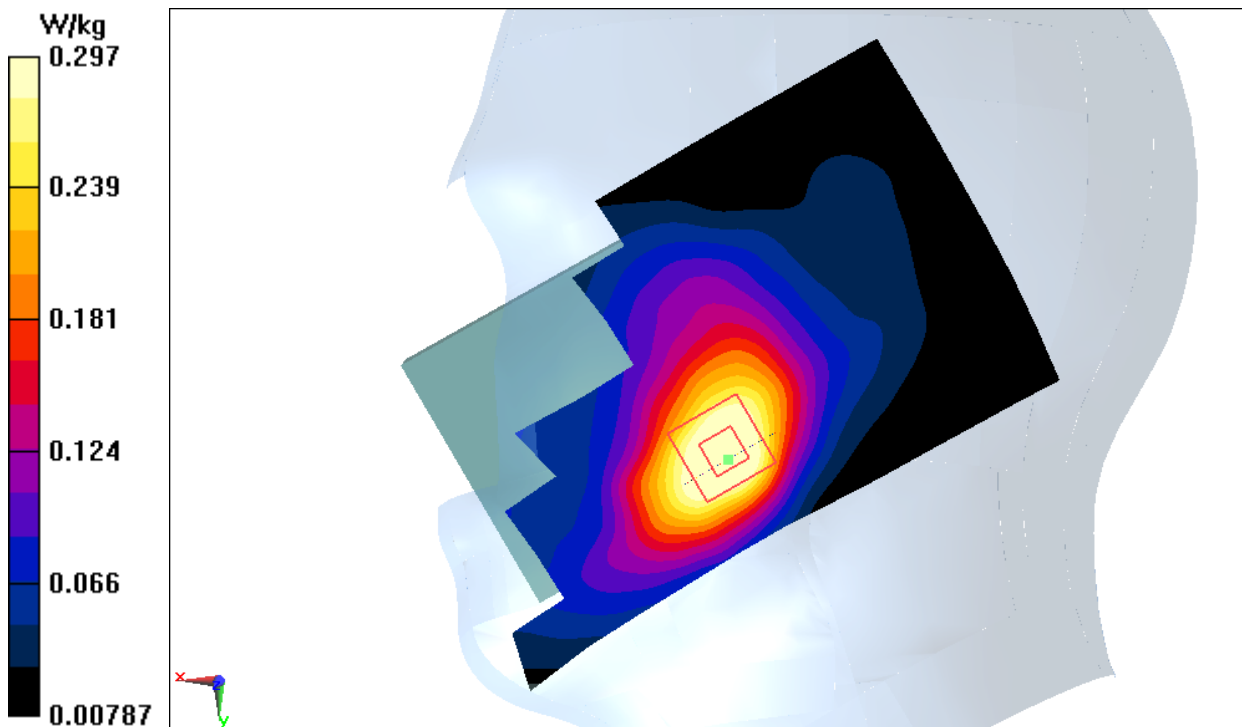


Fig.7 WCDMA1700

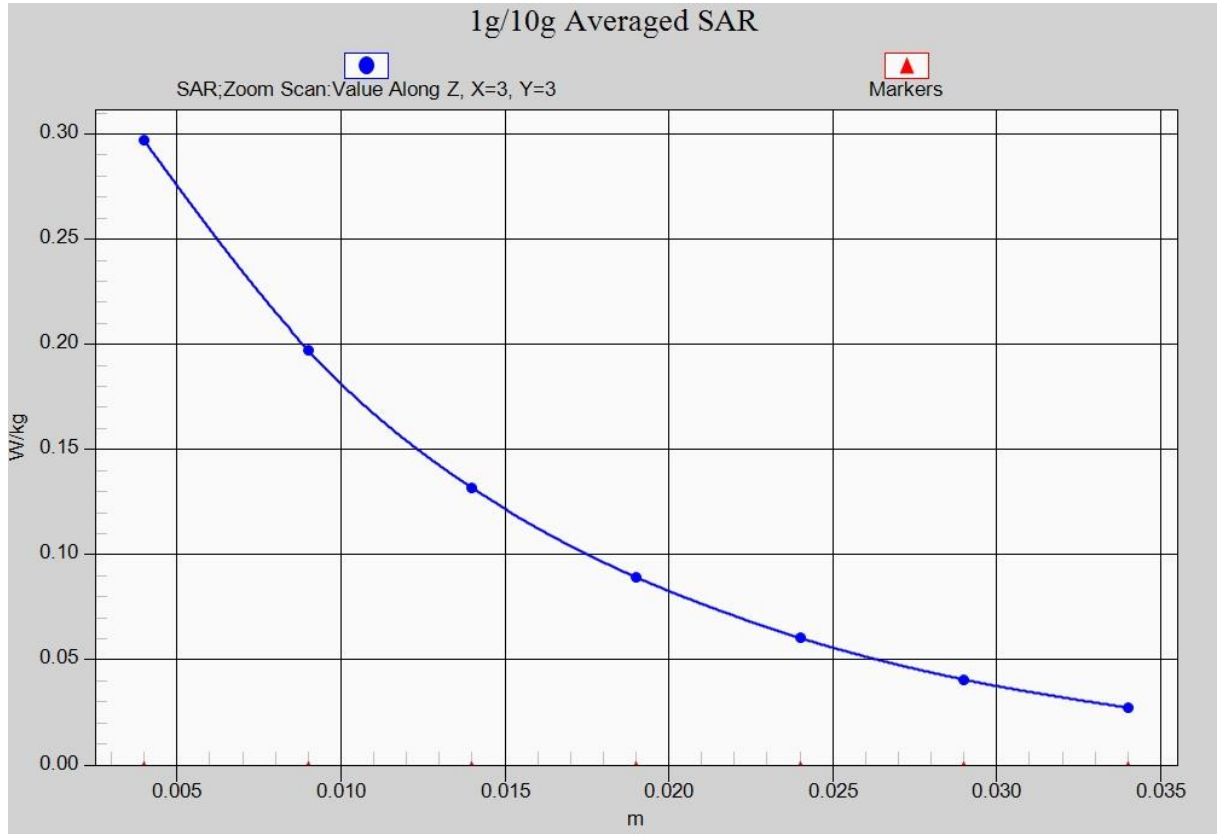


Fig. 7-1 Z-Scan at power reference point (WCDMA1700)

WCDMA 1700 Body Bottom Low

Date: 2018-3-31

Electronics: DAE4 Sn1525

Medium: Body 1750 MHz

Medium parameters used (interpolated): $f = 1712.4$ MHz; $\sigma = 1.481$ mho/m; $\epsilon_r = 53.828$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: WCDMA 1900 Frequency: 1712.4 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN7464 ConvF(8.60, 8.60, 8.60)

Area Scan (31x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

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

Reference Value = 25.20 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.52 W/kg

SAR(1 g) = 0.934 W/kg; SAR(10 g) = 0.529 W/kg

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

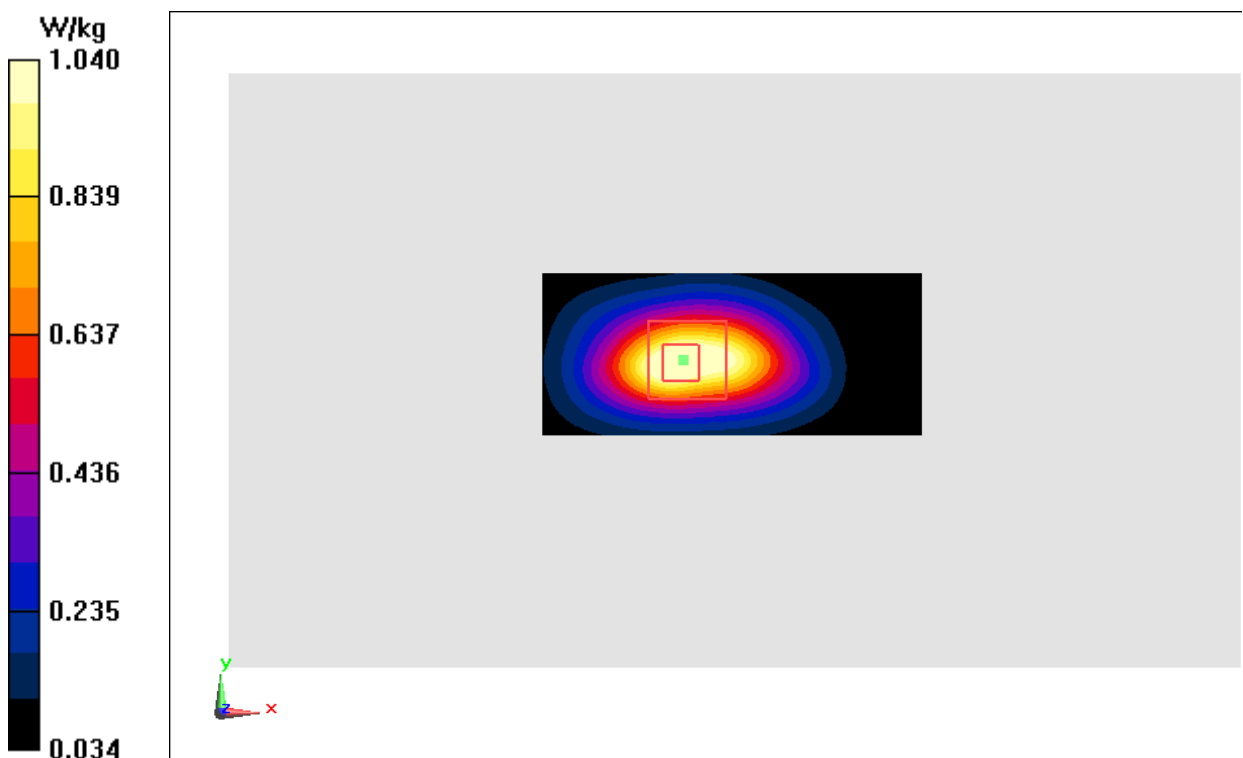


Fig.8 WCDMA1700

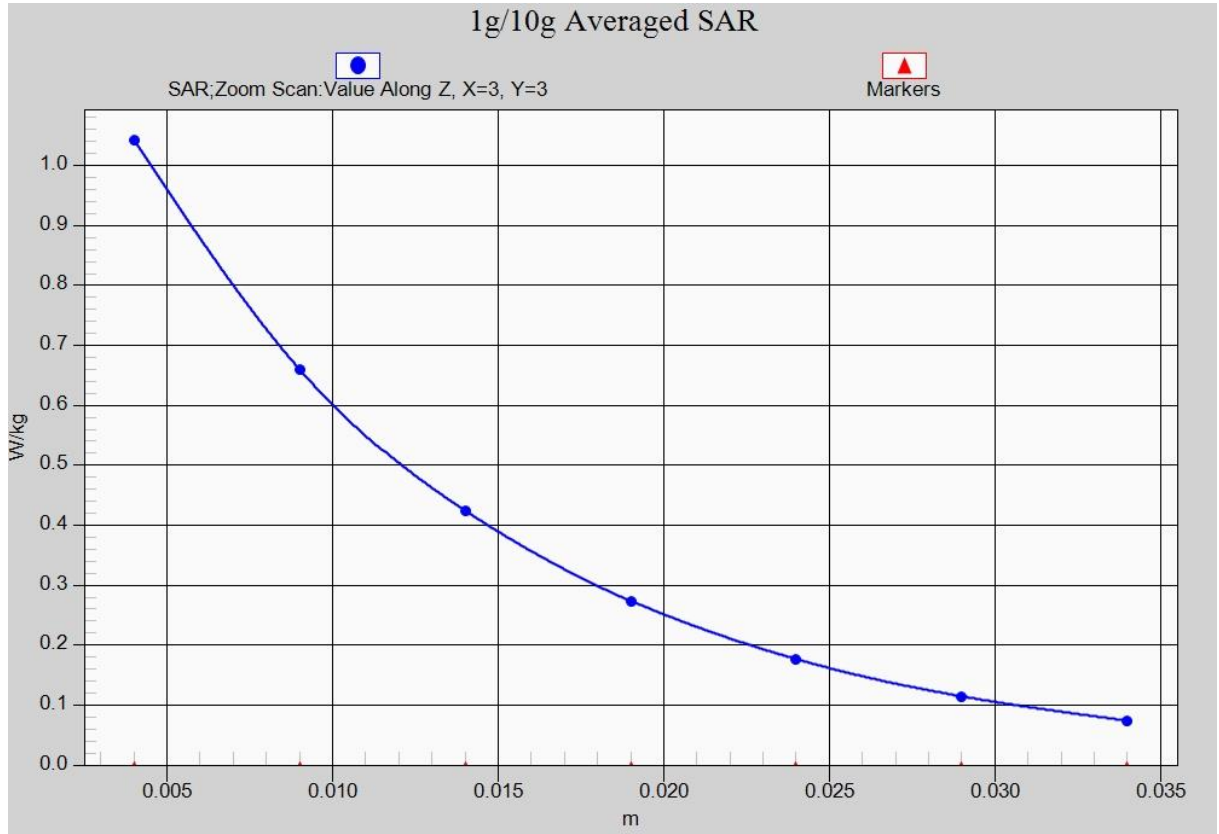


Fig. 8-1 Z-Scan at power reference point (WCDMA1700)

WCDMA 1900 Left Cheek Middle

Date: 2018-3-29

Electronics: DAE4 Sn1525

Medium: Head 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.438$ mho/m; $\epsilon_r = 40.926$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: WCDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN7464 ConvF(8.39, 8.39, 8.39)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.405 W/kg

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

Reference Value = 2.228 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.535 W/kg

SAR(1 g) = 0.333 W/kg; SAR(10 g) = 0.201 W/kg

Maximum value of SAR (measured) = 0.360 W/kg

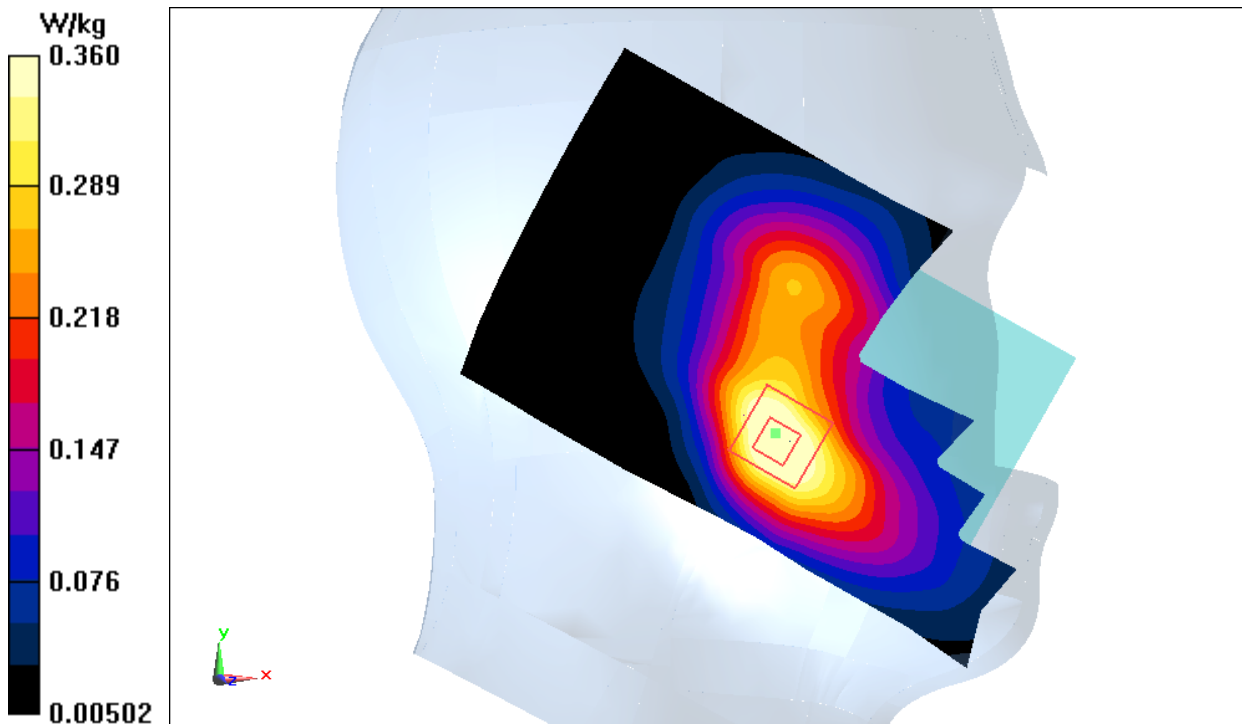


Fig.9 WCDMA1900

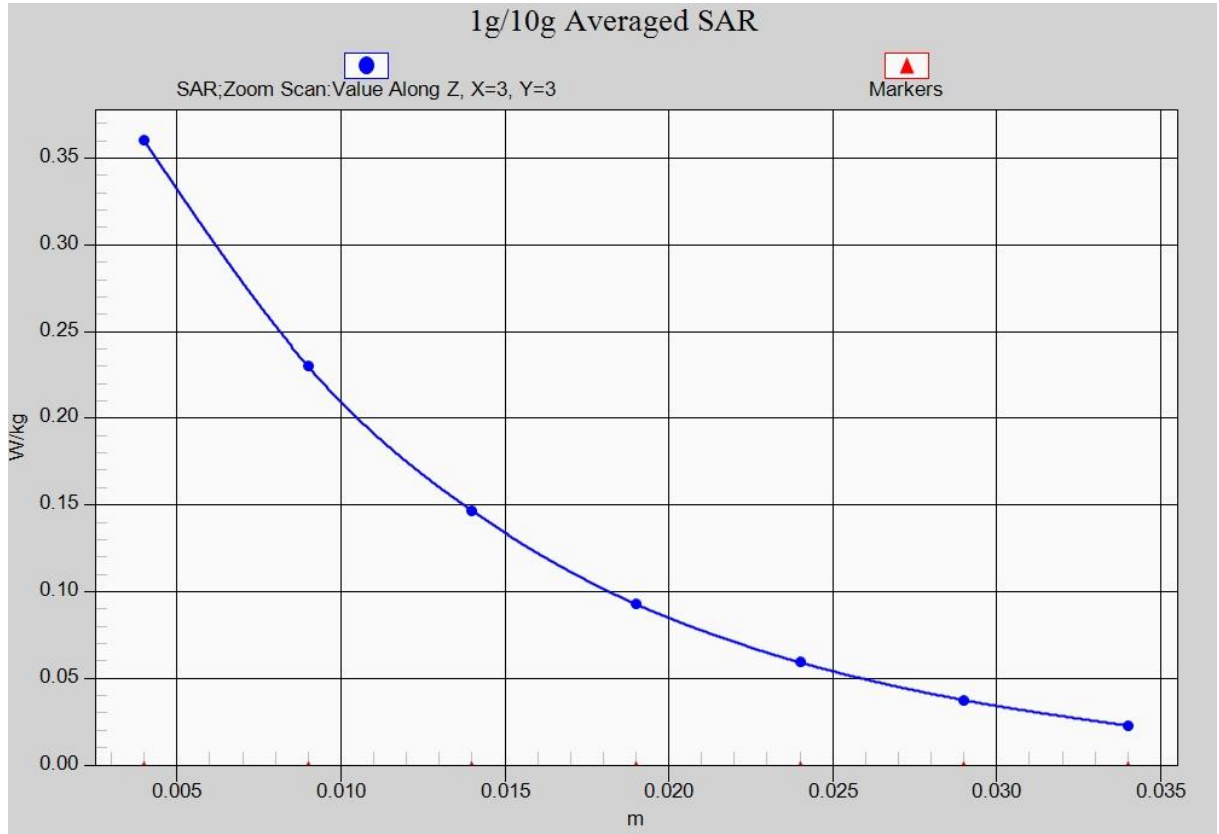


Fig. 9-1 Z-Scan at power reference point (WCDMA1900)

WCDMA 1900 Body Bottom Low

Date: 2018-3-29

Electronics: DAE4 Sn1525

Medium: Body 1900 MHz

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.501$ mho/m; $\epsilon_r = 53.18$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: WCDMA 1900 Frequency: 1852.4 MHz Duty Cycle: 1:1

Probe: EX3DV4- SN7464 ConvF(8.32, 8.32, 8.32)

Area Scan (31x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.15 W/kg

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

Reference Value = 20.81 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 1.57 W/kg

SAR(1 g) = 0.936 W/kg; SAR(10 g) = 0.503 W/kg

Maximum value of SAR (measured) = 1.05 W/kg

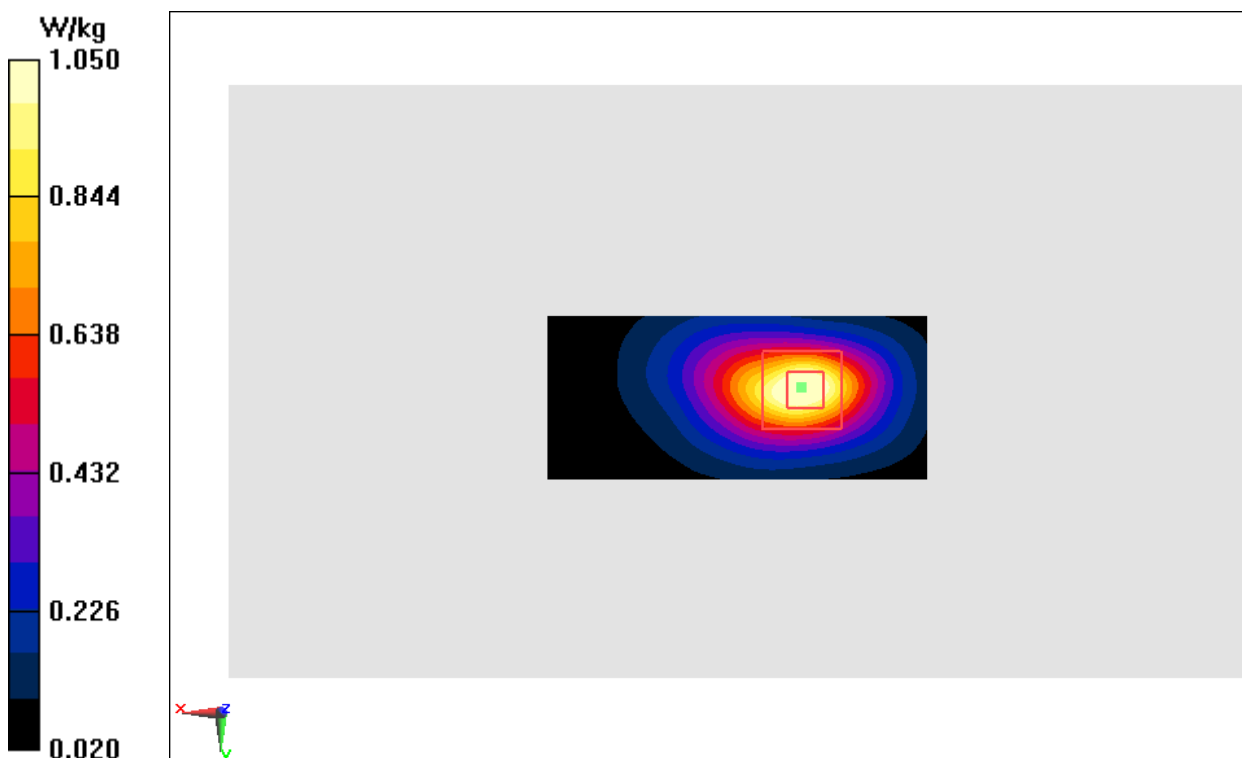


Fig.10 WCDMA1900

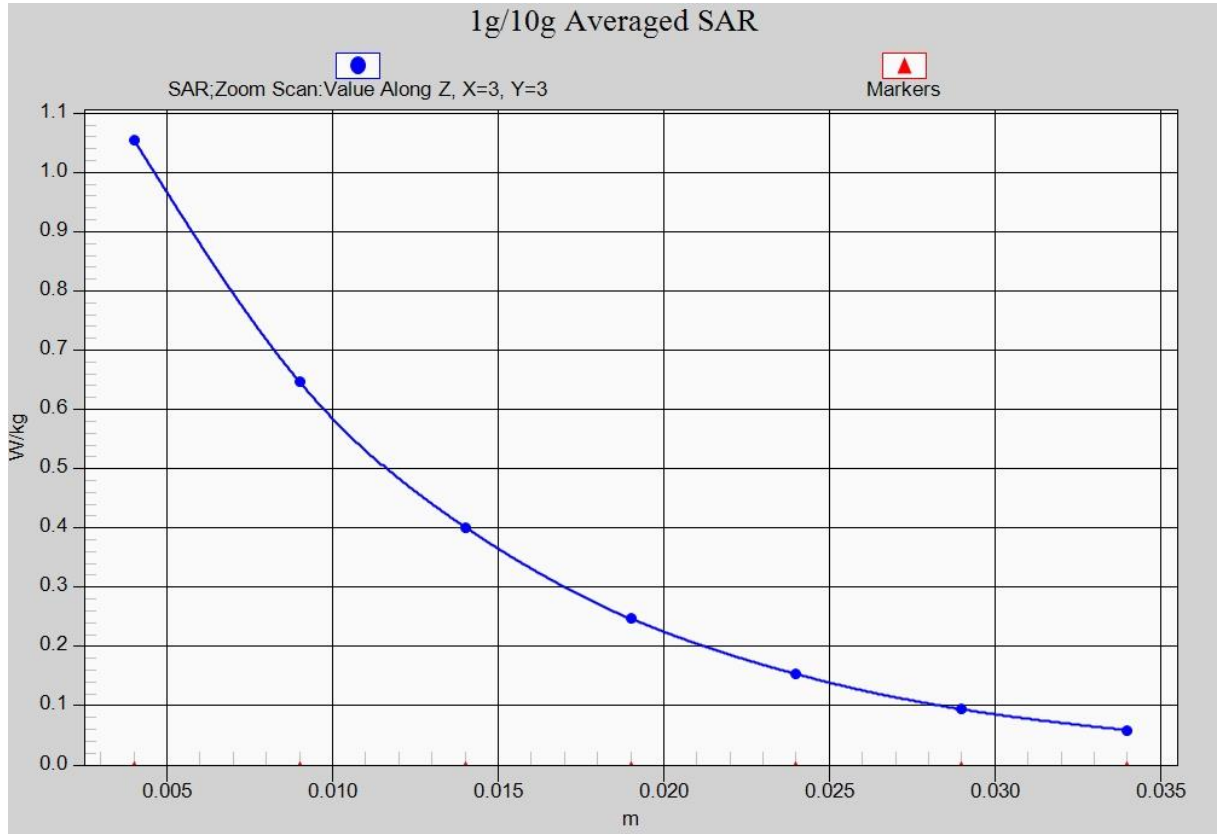


Fig. 10-1 Z-Scan at power reference point (WCDMA1900)

LTE Band2 Right Cheek Low with QPSK_20M_1RB_Low

Date: 2018-3-29

Electronics: DAE4 Sn1525

Medium: Head 1900 MHz

Medium parameters used: $f = 1860$ MHz; $\sigma = 1.367$ mho/m; $\epsilon_r = 40.79$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: LTE Band2 Frequency: 1860 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN7464 ConvF(8.39, 8.39, 8.39)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.487 W/kg

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

Reference Value = 5.148 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.625 W/kg

SAR(1 g) = 0.403 W/kg; SAR(10 g) = 0.249 W/kg

Maximum value of SAR (measured) = 0.436 W/kg

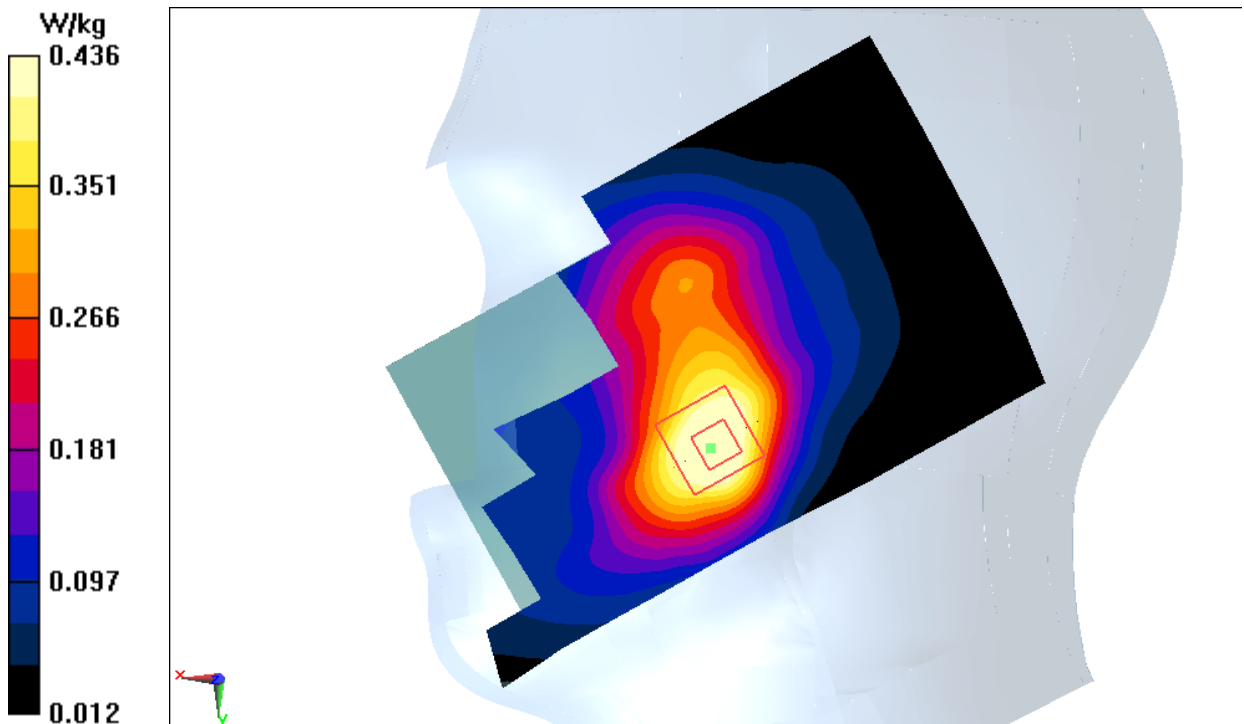


Fig.11 LTE Band2

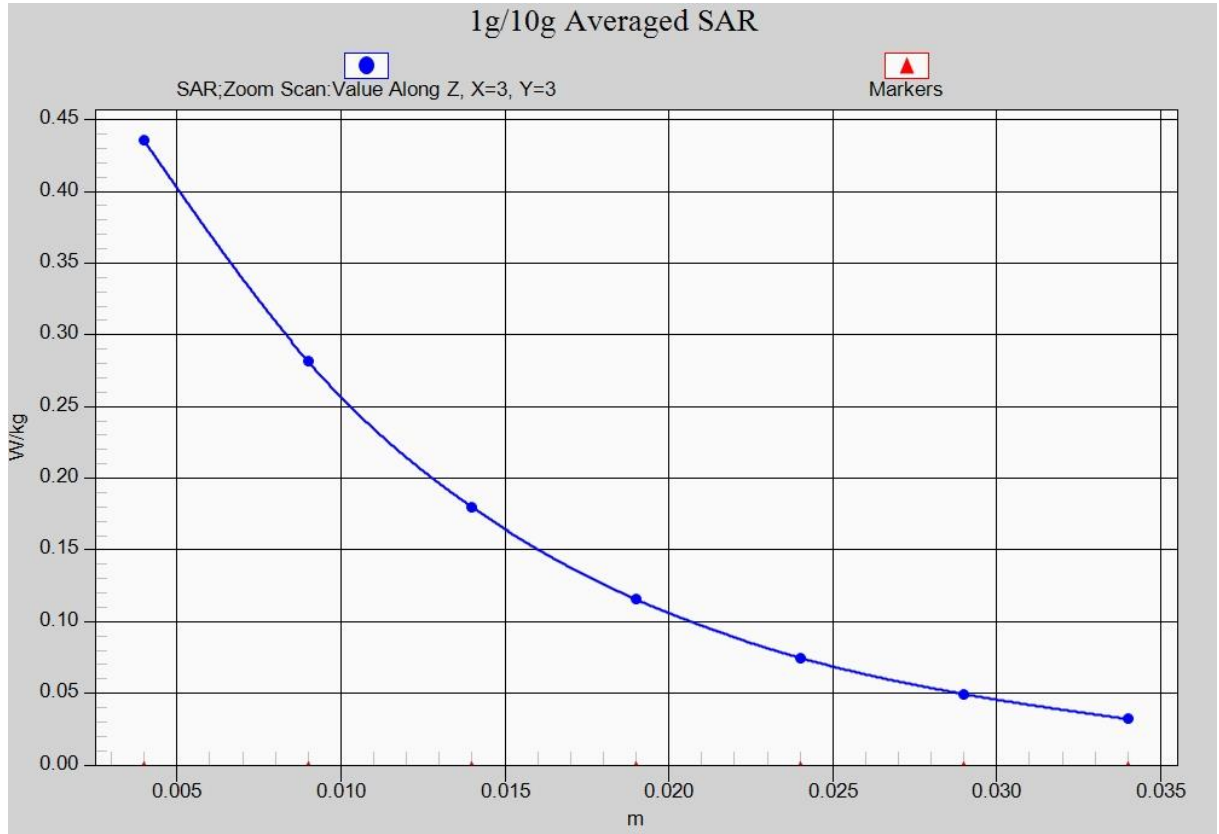


Fig. 11-1 Z-Scan at power reference point (LTE Band2)

LTE Band2 Body Bottom Low with QPSK_20M_1RB_Low

Date: 2018-3-29

Electronics: DAE4 Sn1525

Medium: Body 1900 MHz

Medium parameters used: $f = 1860$ MHz; $\sigma = 1.468$ mho/m; $\epsilon_r = 52.83$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: LTE Band2 Frequency: 1860 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN7464 ConvF(8.32, 8.32, 8.32)

Area Scan (131x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.21 W/kg

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

Reference Value = 22.84 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 1.68 W/kg

SAR(1 g) = 0.998 W/kg; SAR(10 g) = 0.537 W/kg

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

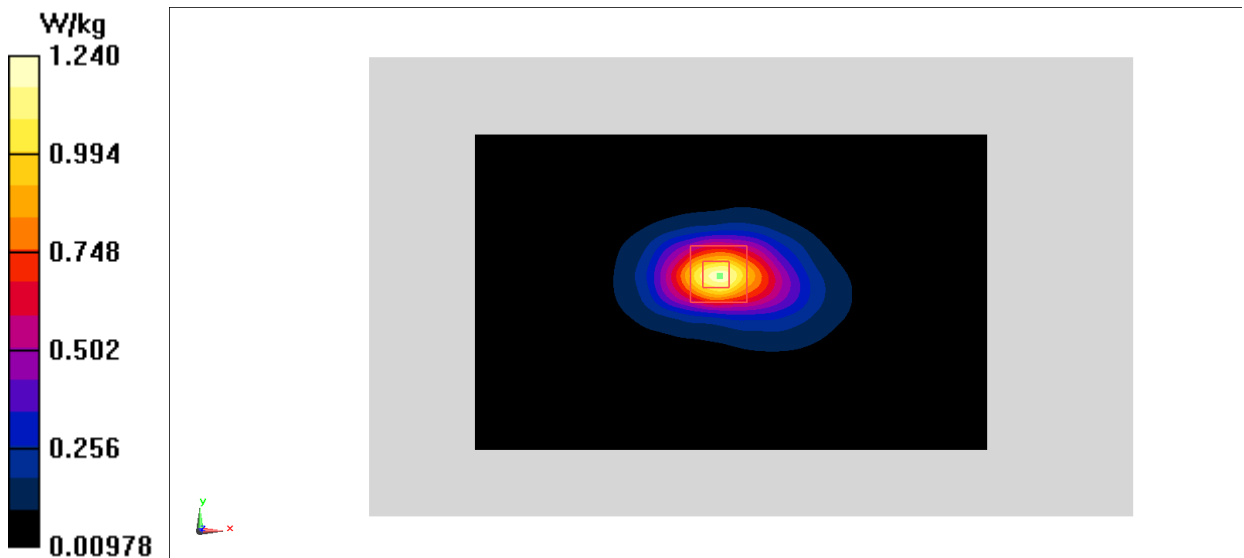


Fig.12 LTE Band2

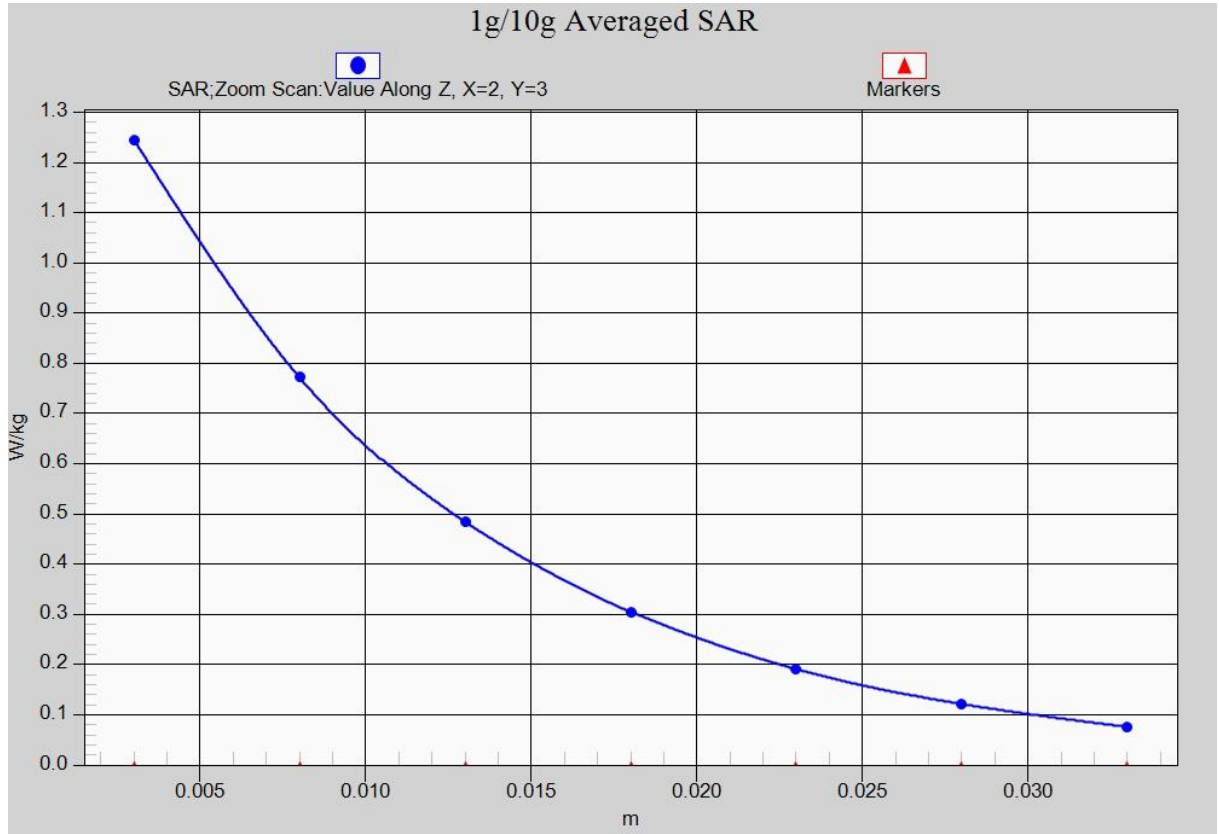


Fig. 12-1 Z-Scan at power reference point (LTE Band2)

LTE Band5 Right Cheek Low with QPSK_10M_1RB_High

Date: 2018-3-30

Electronics: DAE4 Sn1525

Medium: Head 850 MHz

Medium parameters used (interpolated): $f = 829$ MHz; $\sigma = 0.904$ mho/m; $\epsilon_r = 41.851$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: LTE Band5 Frequency: 829 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7464 ConvF(10.28, 10.28, 10.28)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.327 W/kg

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

Reference Value = 6.550 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.372 W/kg

SAR(1 g) = 0.302 W/kg; SAR(10 g) = 0.233 W/kg

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

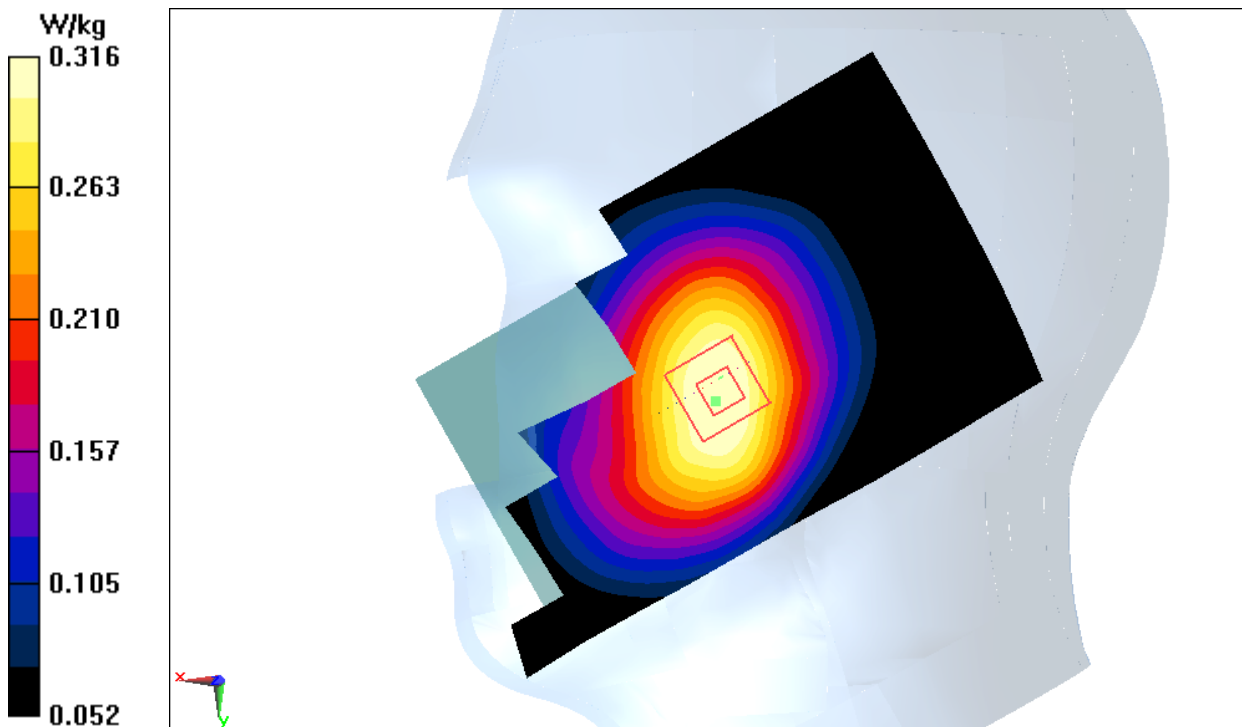


Fig.13 LTE Band5

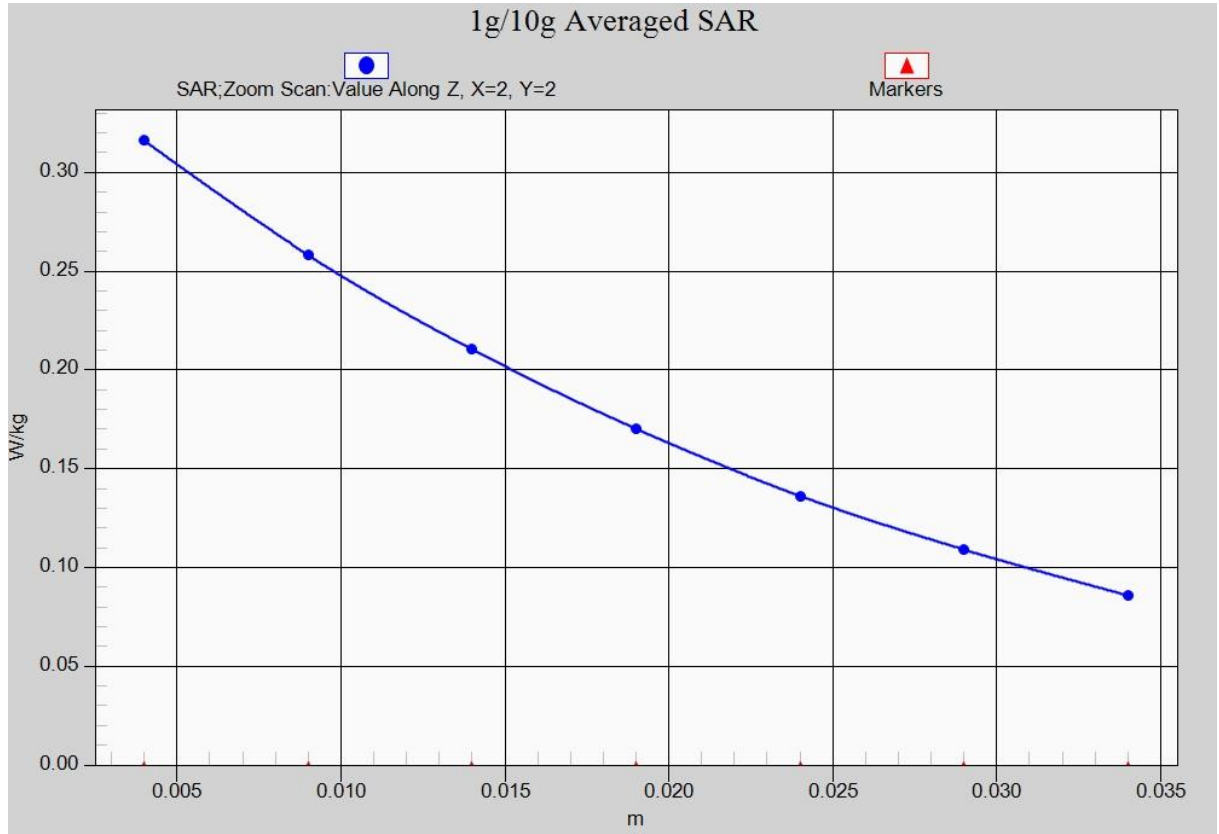


Fig. 13-1 Z-Scan at power reference point (LTE Band5)

LTE Band5 Body Rear Low with QPSK_10M_1RB_High

Date: 2018-3-30

Electronics: DAE4 Sn1525

Medium: Body 850 MHz

Medium parameters used (interpolated): $f = 829$ MHz; $\sigma = 1.003$ mho/m; $\epsilon_r = 55.694$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: LTE Band5 Frequency: 829 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7464 ConvF(10.21, 10.21, 10.21)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.566 W/kg

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

Reference Value = 24.02 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.640 W/kg

SAR(1 g) = 0.514 W/kg; SAR(10 g) = 0.394 W/kg

Maximum value of SAR (measured) = 0.540 W/kg

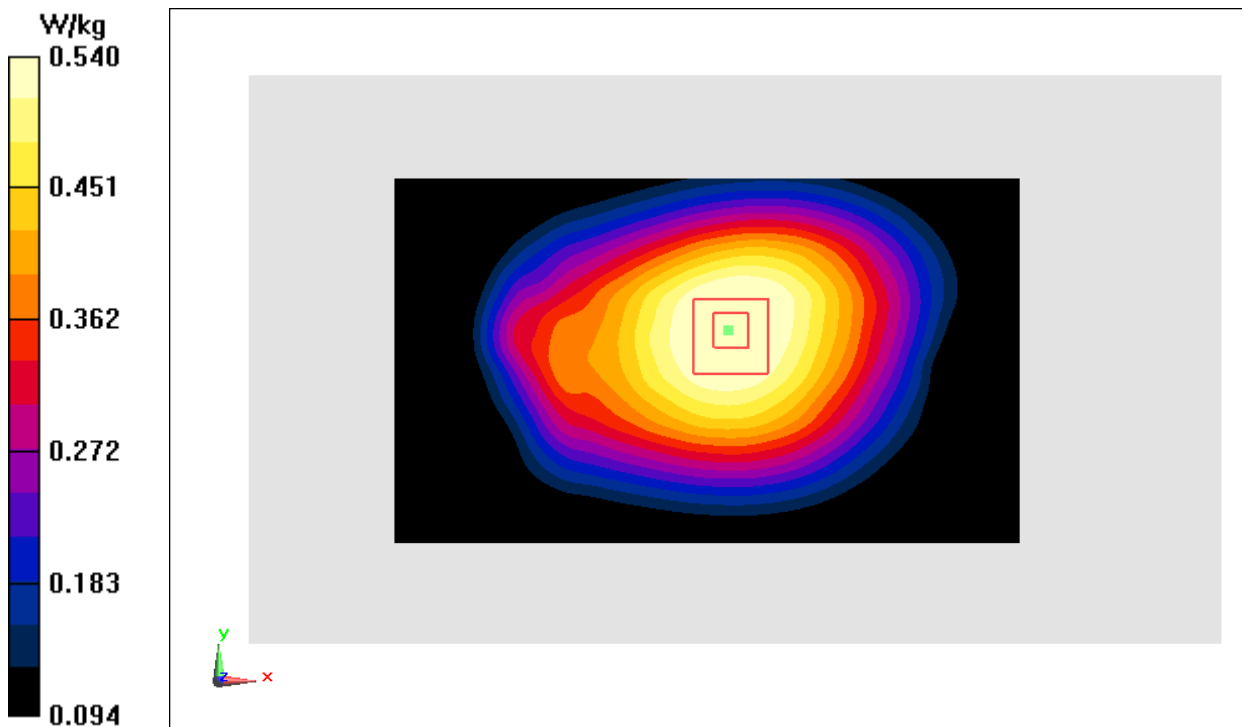


Fig.14 LTE Band5

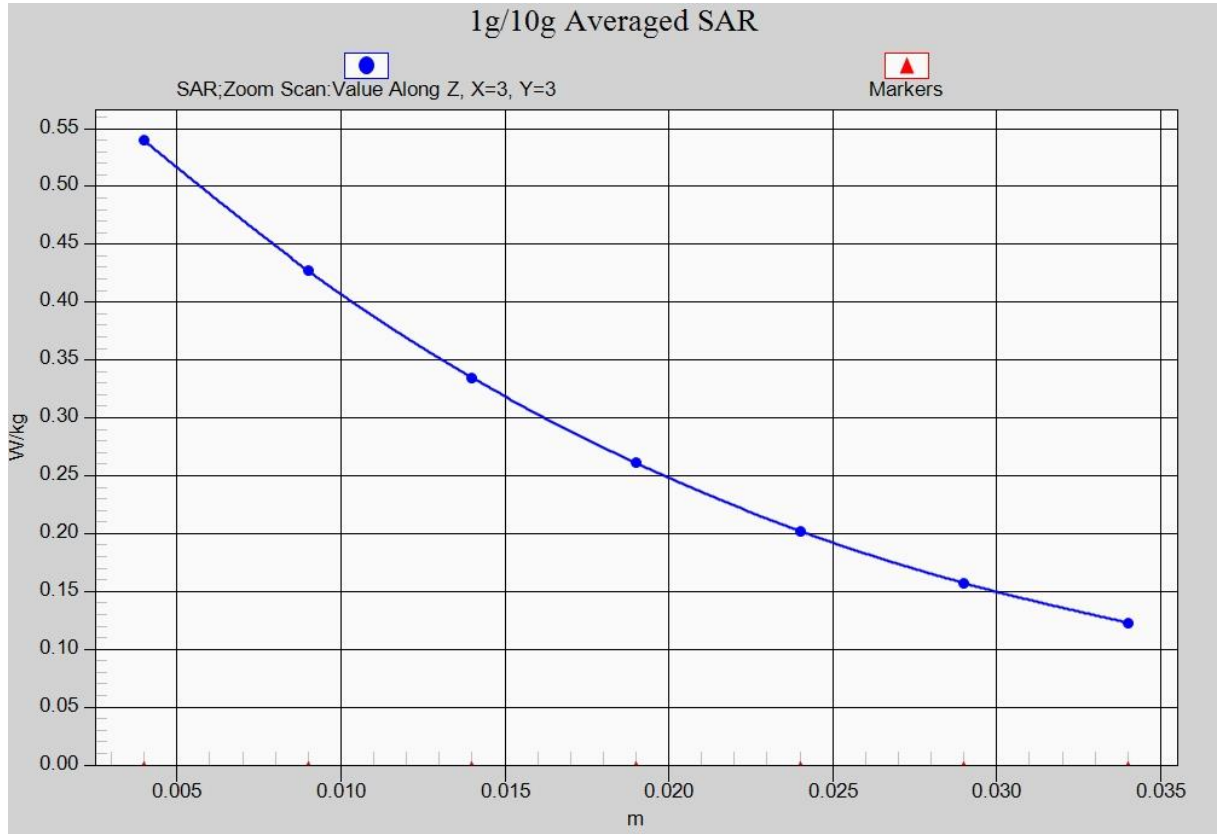


Fig. 14-1 Z-Scan at power reference point (LTE Band5)

LTE Band7 Right Cheek Low with QPSK_20M_1RB_Low

Date: 2018-4-1

Electronics: DAE4 Sn1525

Medium: Head 2600 MHz

Medium parameters used: $f = 2510$ MHz; $\sigma = 1.925$ mho/m; $\epsilon_r = 38.52$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: LTE Band7 Frequency: 2510 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN7464 ConvF(7.76, 7.76, 7.76)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

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

Reference Value = 5.219 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.547 W/kg

SAR(1 g) = 0.268 W/kg; SAR(10 g) = 0.131 W/kg

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

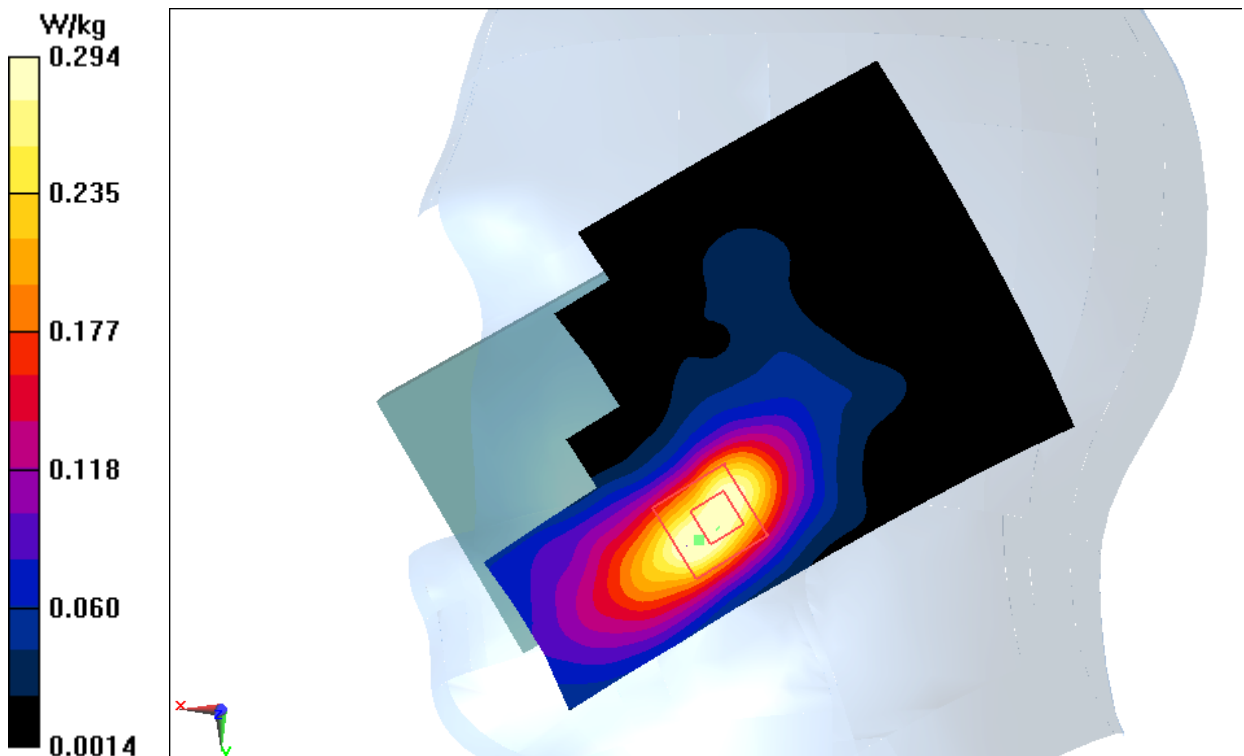


Fig.15 LTE Band7

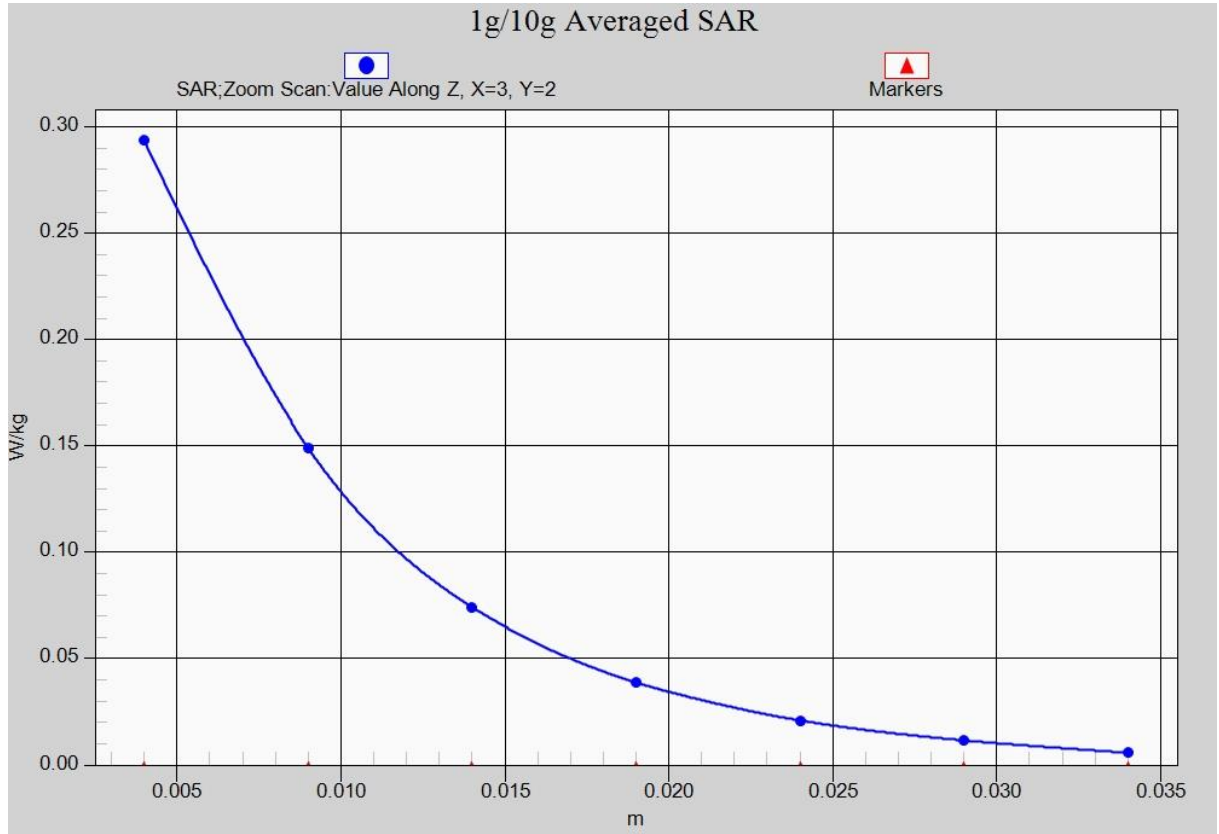


Fig. 15-1 Z-Scan at power reference point (LTE Band7)

LTE Band7 Body Rear Low with QPSK_20M_1RB Low

Date: 2018-4-1

Electronics: DAE4 Sn1525

Medium: Body 2600 MHz

Medium parameters used: $f = 2510$ MHz; $\sigma = 2.095$ mho/m; $\epsilon_r = 51.85$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: LTE Band7 Frequency: 2510 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN7464 ConvF(7.84, 7.84, 7.84)

Area Scan (81x151x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

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

Reference Value = 4.527 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 1.50 W/kg

SAR(1 g) = 0.763 W/kg; SAR(10 g) = 0.352 W/kg

Maximum value of SAR (measured) = 0.854 W/kg

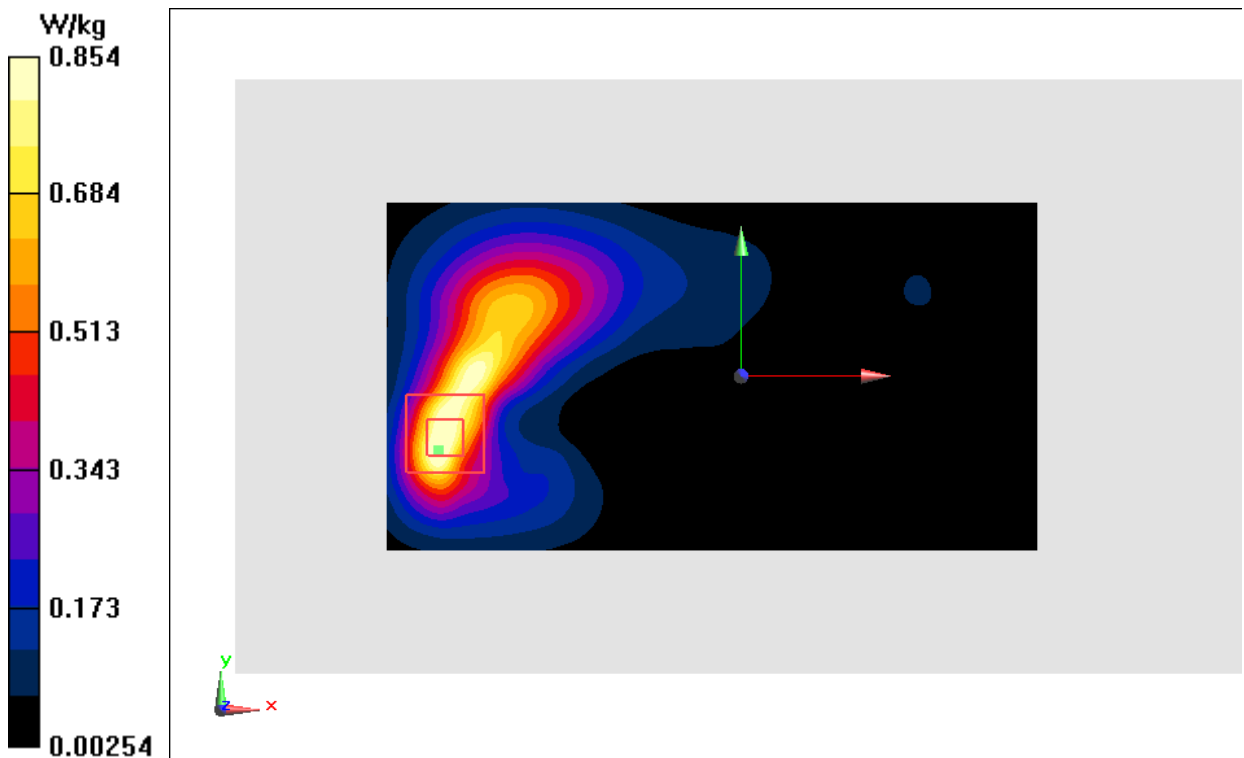


Fig.16 LTE Band7

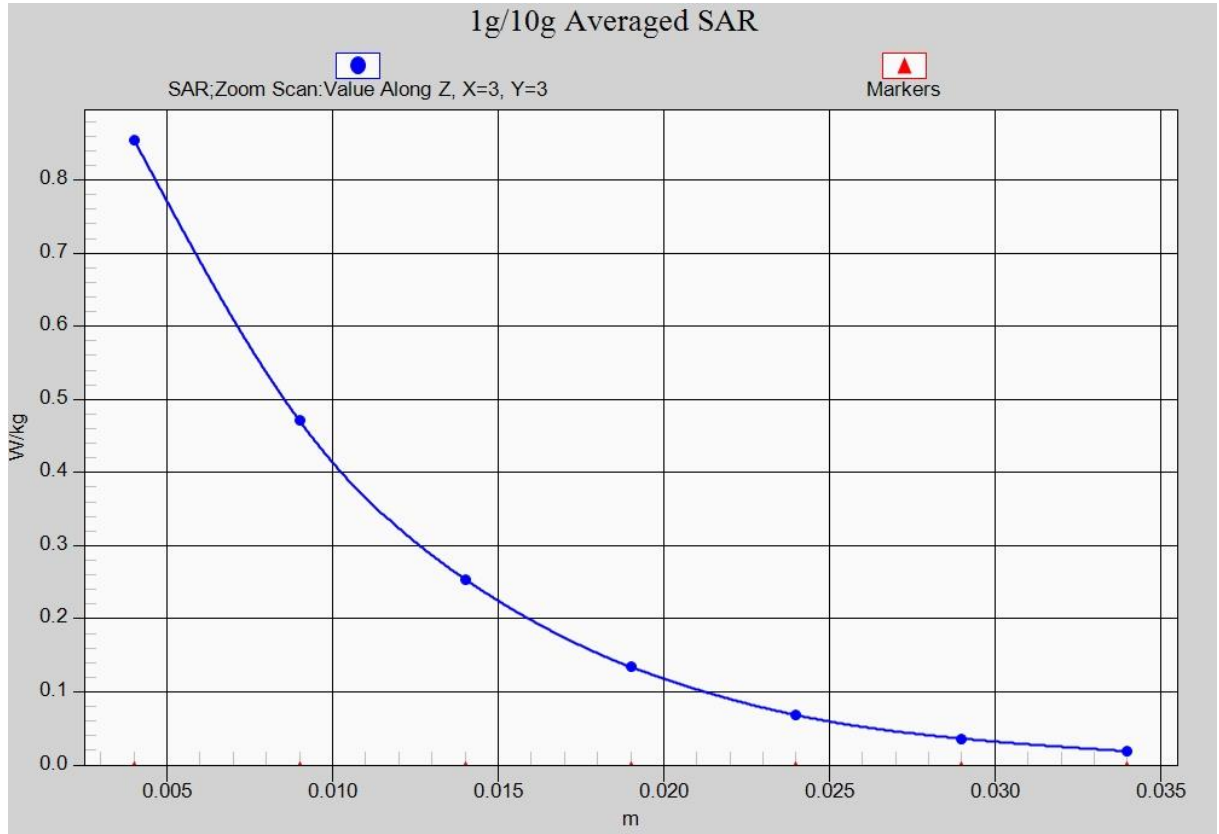


Fig. 16-1 Z-Scan at power reference point (LTE Band7)

LTE Band17 Left Cheek Middle with QPSK_10M_1RB_High

Date: 2018-4-1

Electronics: DAE4 Sn1525

Medium: Head750 MHz

Medium parameters used: $f = 710$ MHz; $\sigma = 0.848$ mho/m; $\epsilon_r = 42.873$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: LTE Band17 Frequency: 710 MHz Duty Cycle: 1:1

Probe: EX3DV4- SN7464 ConvF(10.57, 10.57, 10.57)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.250 W/kg

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

Reference Value = 6.152 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 0.277 W/kg

SAR(1 g) = 0.229 W/kg; SAR(10 g) = 0.180 W/kg

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

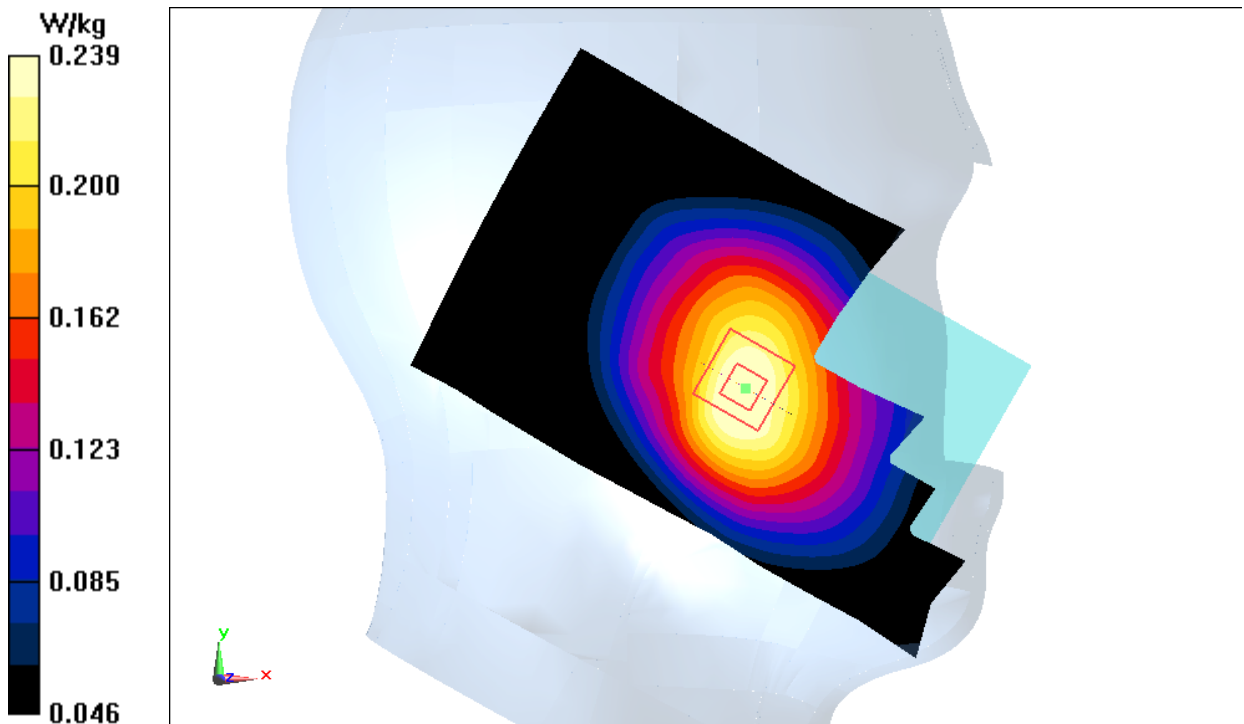


Fig.17 LTE Band17

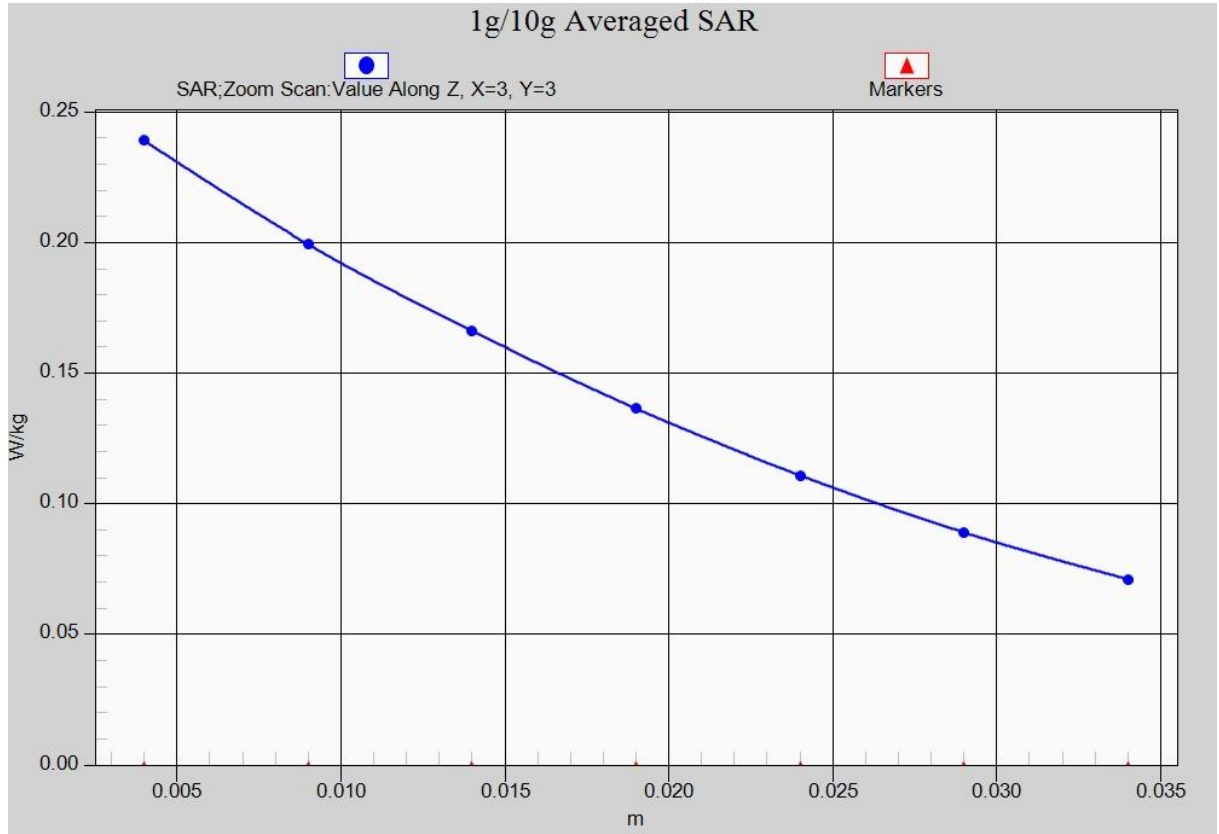


Fig. 17-1 Z-Scan at power reference point (LTE Band17)

LTE Band17 Body Rear Middle with QPSK_10M_1RB_High

Date: 2018-4-1

Electronics: DAE4 Sn1525

Medium: Body750 MHz

Medium parameters used: $f = 710$ MHz; $\sigma = 0.915$ mho/m; $\epsilon_r = 56.662$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: LTE Band17 Frequency: 710 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN7464 ConvF(10.63, 10.63, 10.63)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.538 W/kg

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

Reference Value = 24.54 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.606 W/kg

SAR(1 g) = 0.493 W/kg; SAR(10 g) = 0.384 W/kg

Maximum value of SAR (measured) = 0.515 W/kg

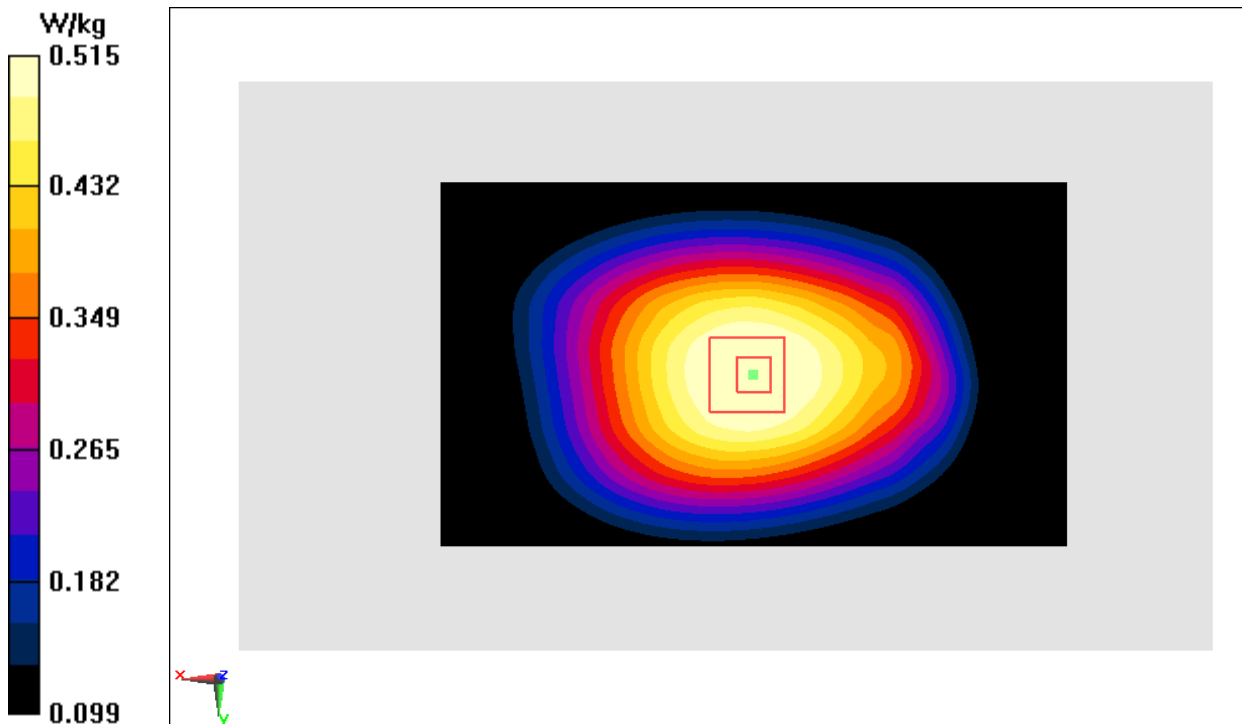


Fig.18 LTE Band17

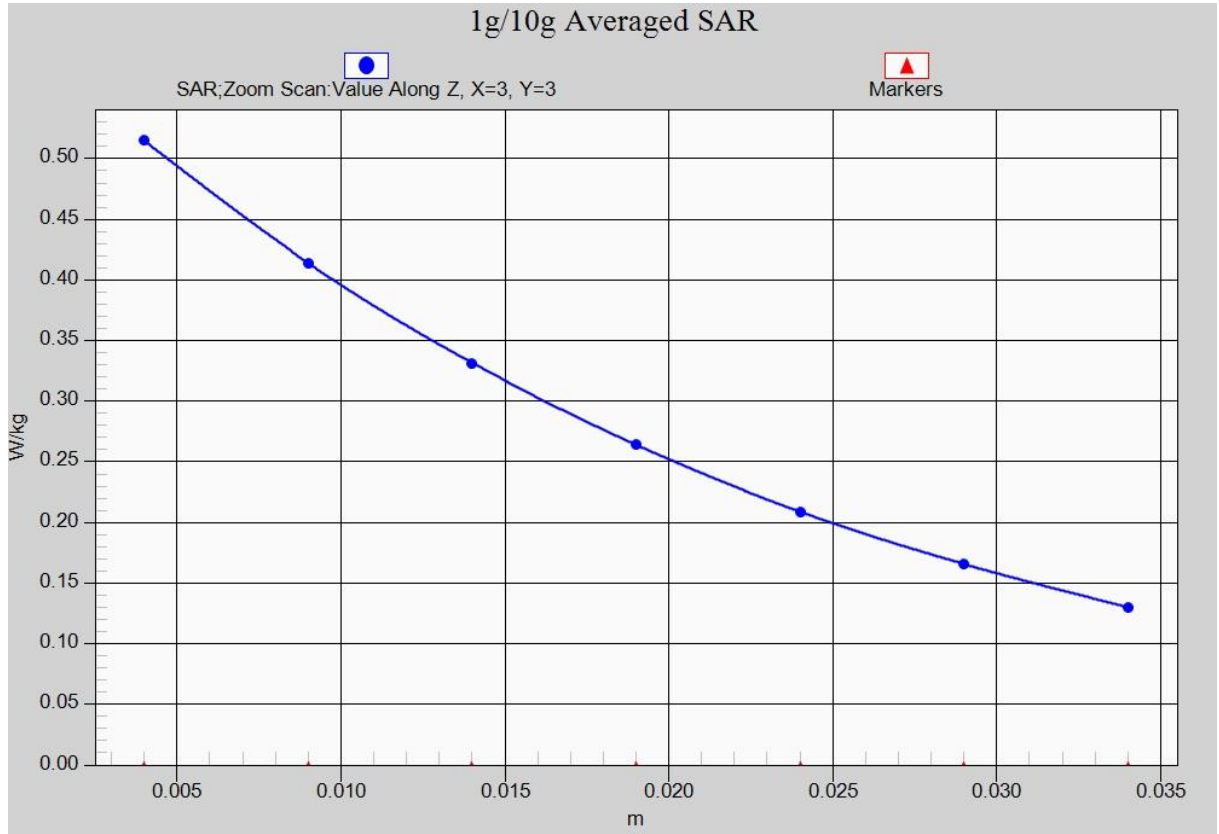


Fig. 18-1 Z-Scan at power reference point (LTE Band17)

LTE Band66 Right Cheek High with QPSK_20M_1RB_High

Date: 2018-3-31

Electronics: DAE4 Sn1525

Medium: Head 1750 MHz

Medium parameters used $f = 1770$ MHz; $\sigma = 1.433$ mho/m; $\epsilon_r = 40.355$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: LTE Band66 Frequency: 1720 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(8.70, 8.70, 8.70)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.349 W/kg

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

Reference Value = 5.870 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 0.414 W/kg

SAR(1 g) = 0.277 W/kg; SAR(10 g) = 0.177 W/kg

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

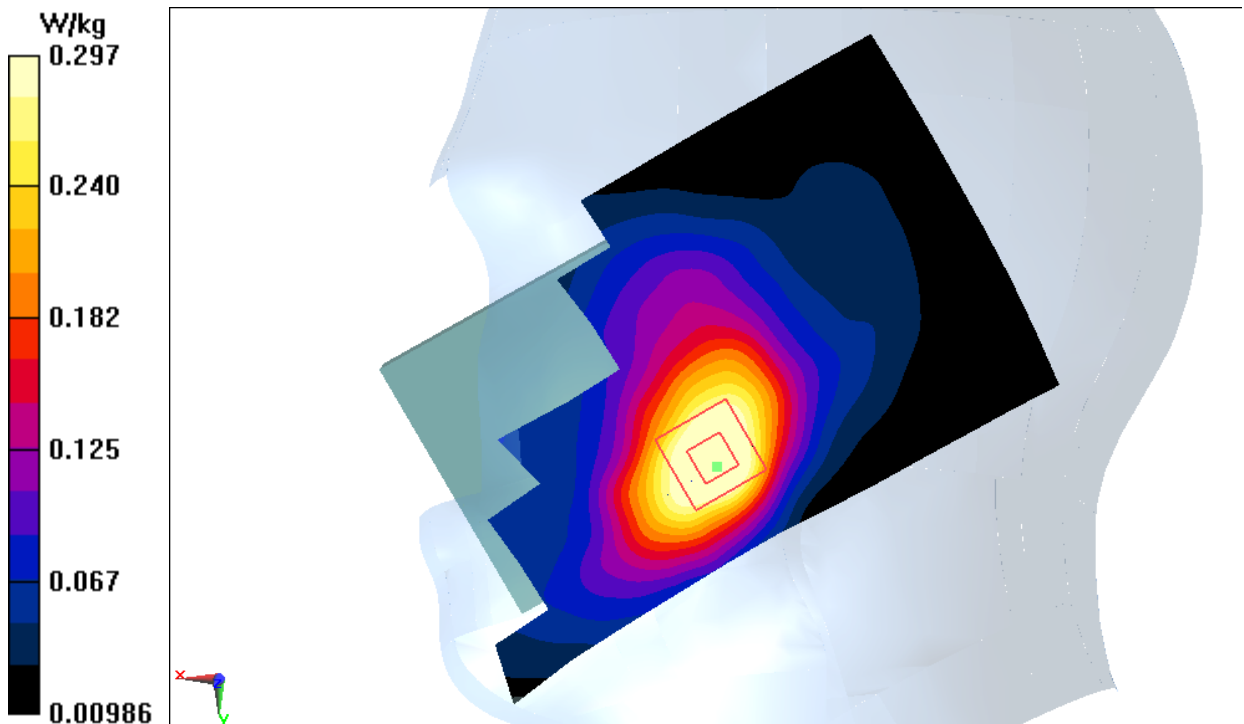


Fig.19 LTE Band66

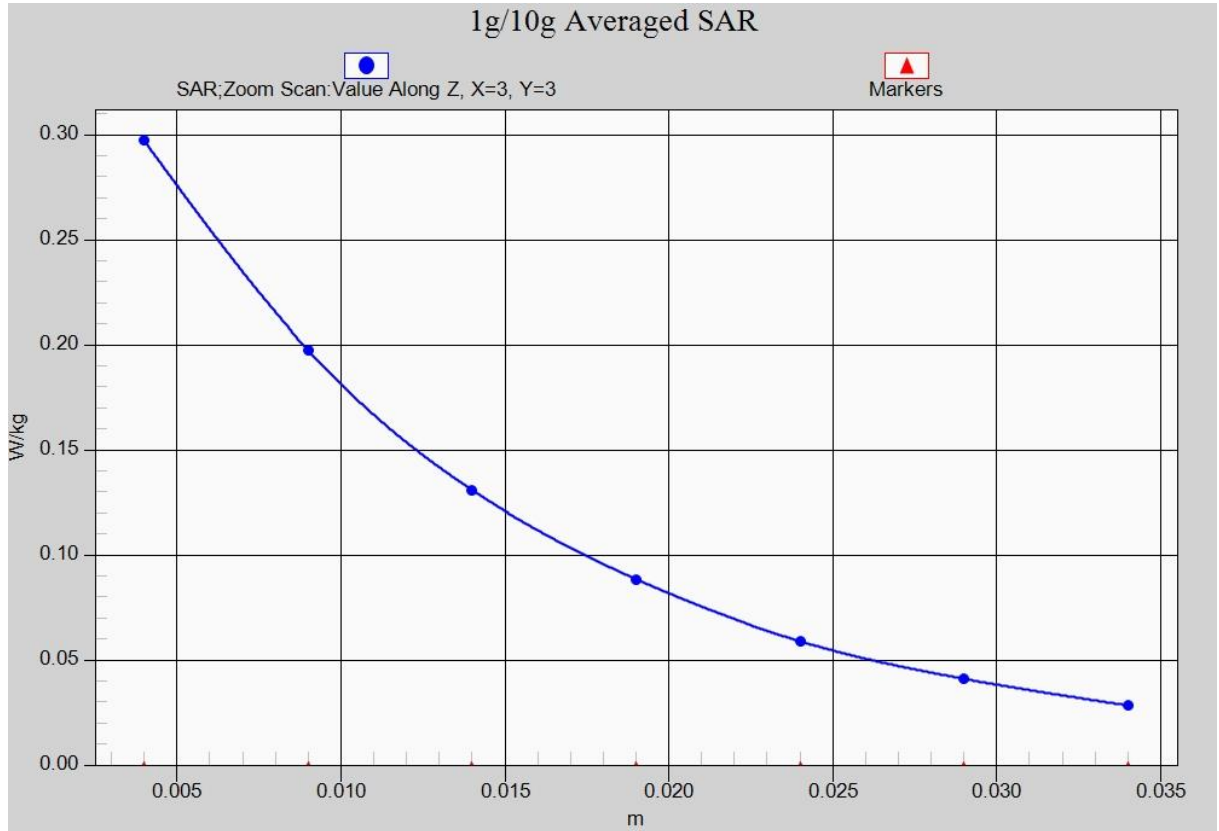


Fig. 19-1 Z-Scan at power reference point (LTE Band66)

LTE Band66 Body Bottom High with QPSK_20M_1RB_High

Date: 2018-3-31

Electronics: DAE4 Sn1525

Medium: Body 1750 MHz

Medium parameters used: $f = 1770$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 53.544$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: LTE Band66 Frequency: 1770 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(8.60, 8.60, 8.60)

Area Scan (131x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.753 W/kg

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

Reference Value = 20.39 V/m; Power Drift = 0.19 dB

Peak SAR (extrapolated) = 1.01 W/kg

SAR(1 g) = 0.604 W/kg; SAR(10 g) = 0.331 W/kg

Maximum value of SAR (measured) = 0.744 W/kg

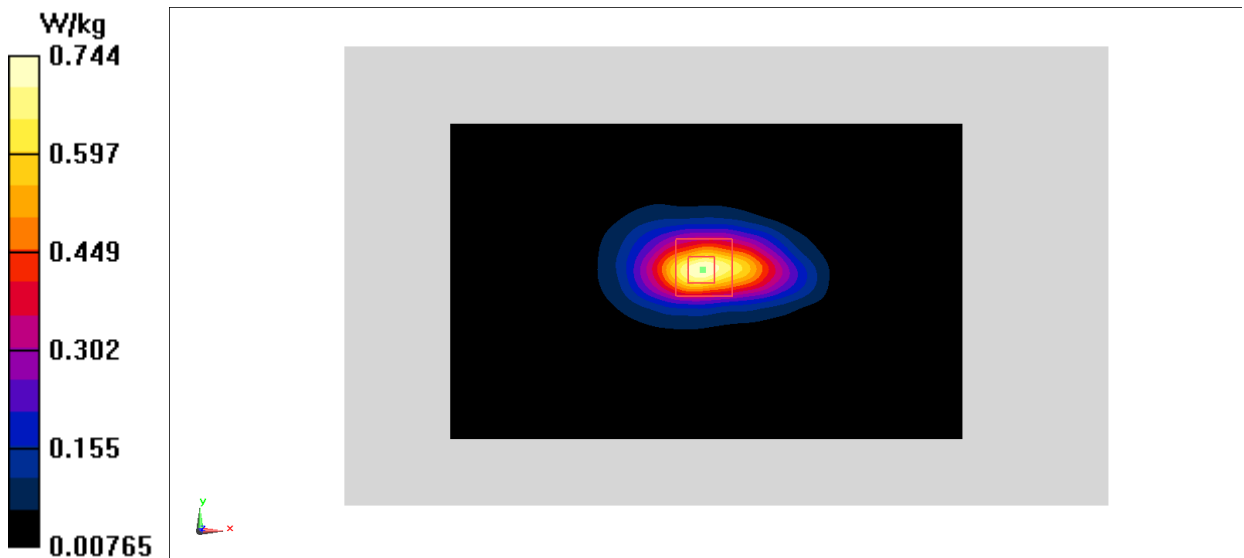


Fig.20 LTE Band66

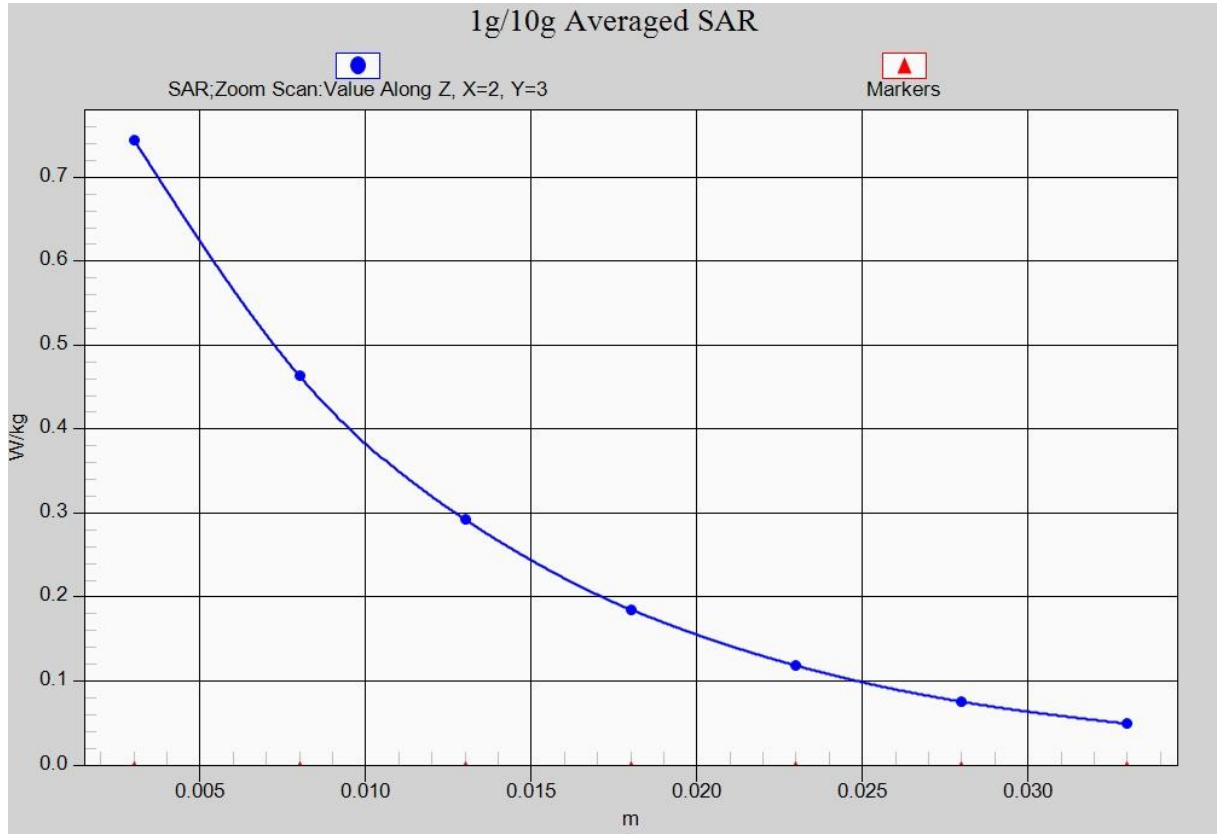


Fig. 20-1 Z-Scan at power reference point (LTE Band66)

Wifi 802.11b Left Cheek Channel 6

Date: 2018-4-1

Electronics: DAE4 Sn1525

Medium: Head 2450 MHz

Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 1.799$ mho/m; $\epsilon_r = 38.97$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: WLAN 2450 Frequency: 2437 MHz Duty Cycle: 1:1

Probe: EX3DV4- SN7464 ConvF(7.89, 7.89, 7.89)

Area Scan (91x161x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.05 W/kg

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

Reference Value = 6.381 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 1.81 W/kg

SAR(1 g) = 0.822 W/kg; SAR(10 g) = 0.370 W/kg

Maximum value of SAR (measured) = 1.08 W/kg

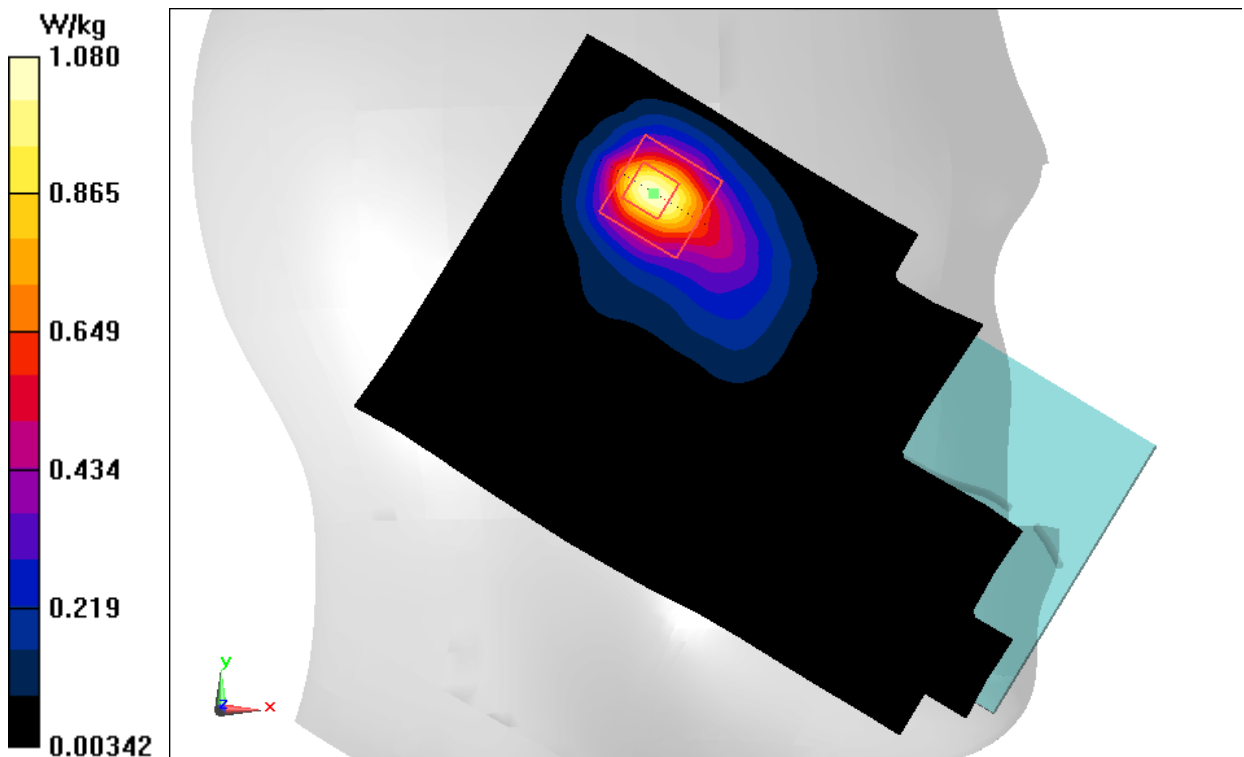


Fig.21 2450 MHz

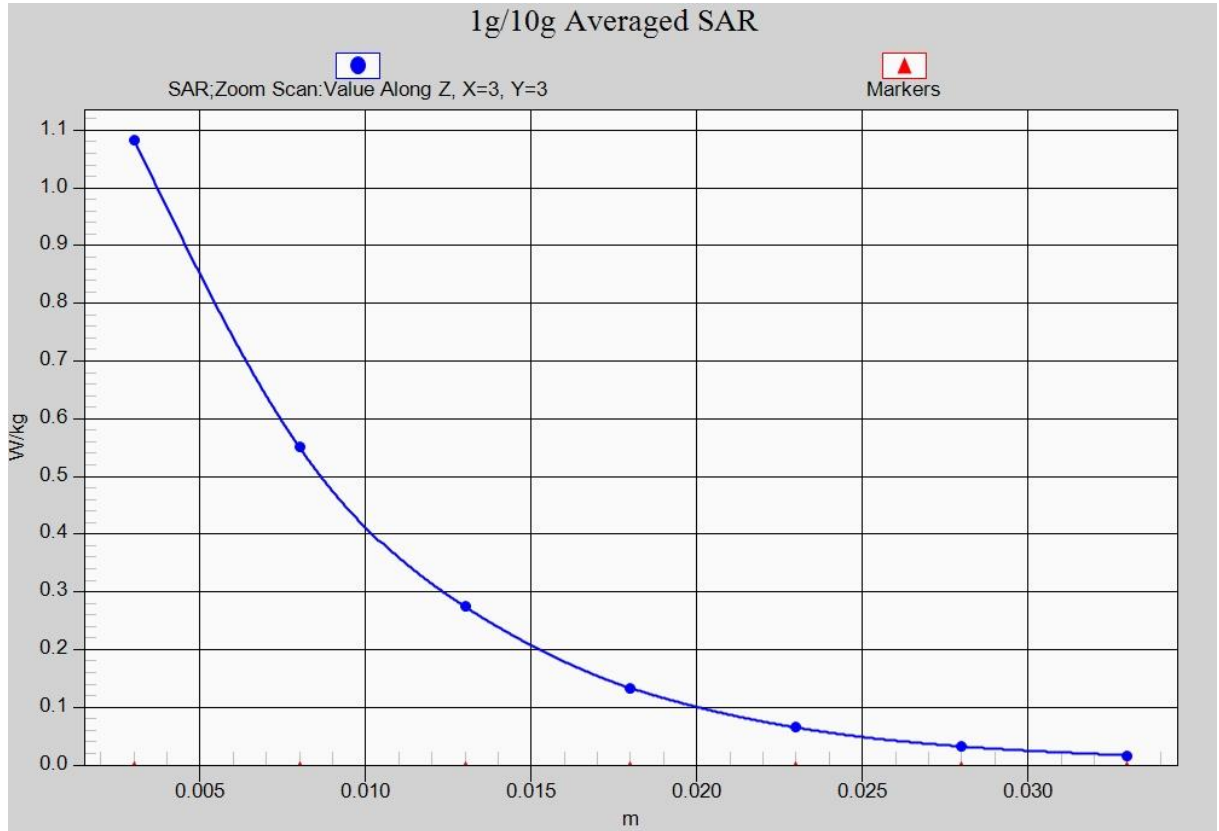


Fig. 21-1 Z-Scan at power reference point (2450 MHz)

Wifi 802.11b Body Rear Channel 11

Date: 2018-4-1

Electronics: DAE4 Sn1525

Medium: Body 2450 MHz

Medium parameters used (interpolated): $f = 2462$ MHz; $\sigma = 1.989$ mho/m; $\epsilon_r = 52.12$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: WLAN 2450 Frequency: 2462 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(8.09, 8.09, 8.09)

Area Scan (151x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.165 W/kg

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

Reference Value = 4.505 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.256 W/kg

SAR(1 g) = 0.130 W/kg; SAR(10 g) = 0.064 W/kg

Maximum value of SAR (measured) = 0.168 W/kg

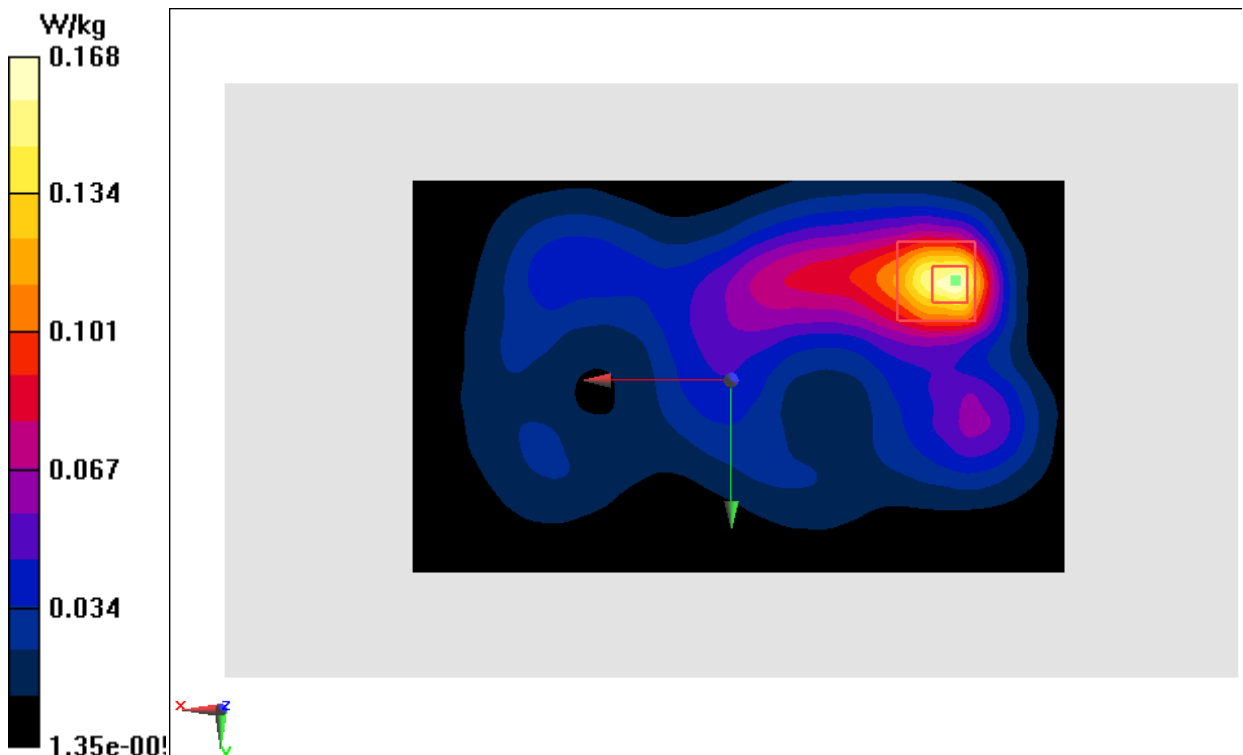


Fig.22 2450 MHz

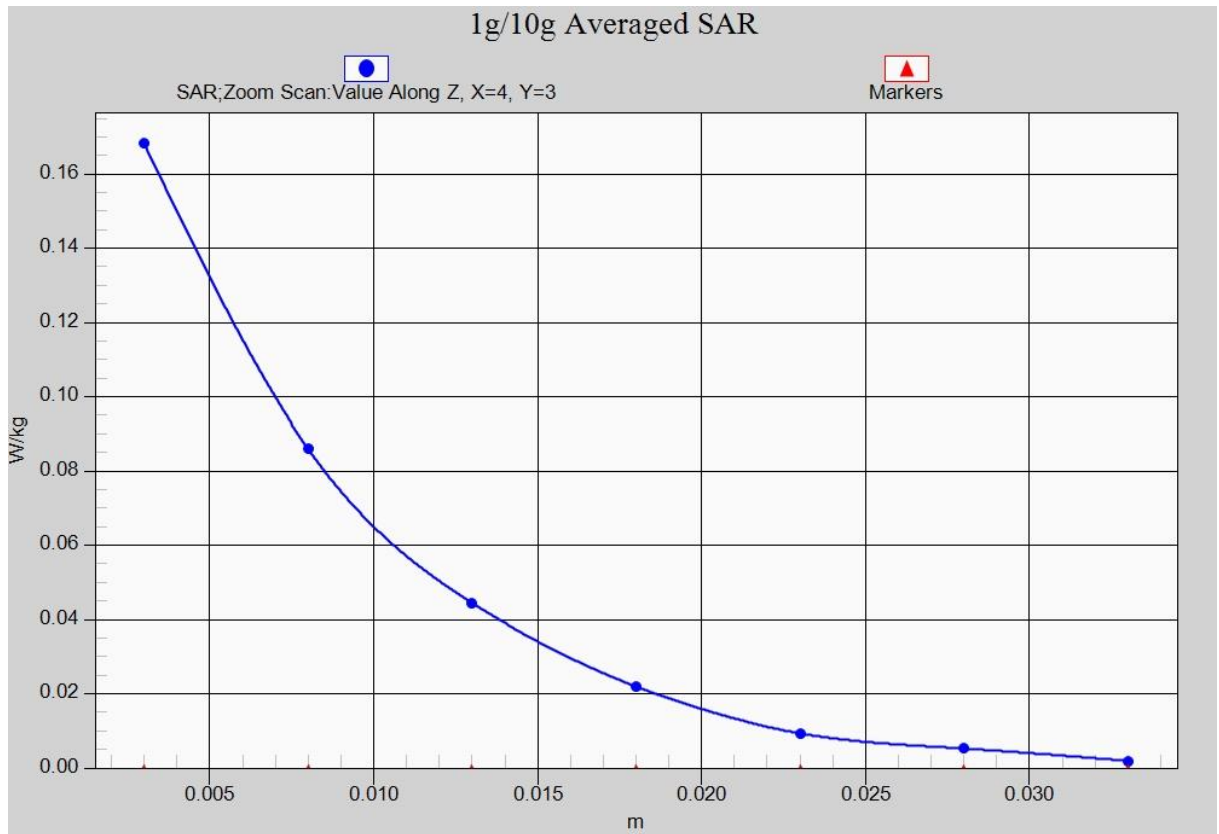


Fig. 22-1 Z-Scan at power reference point (2450 MHz)

ANNEX B System Verification Results

750MHz

Date: 2018-4-1

Electronics: DAE4 Sn1525

Medium: Head 750 MHz

Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.886 \text{ mho/m}$; $\epsilon_r = 42.31$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: CW Frequency: 750 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(10.57, 10.57, 10.57)

System Validation /Area Scan (81x191x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 49.217 V/m ; Power Drift = -0.07 dB

Fast SAR: SAR(1 g) = 2.07 W/kg ; SAR(10 g) = 1.40 W/kg

Maximum value of SAR (interpolated) = 2.20 W/kg

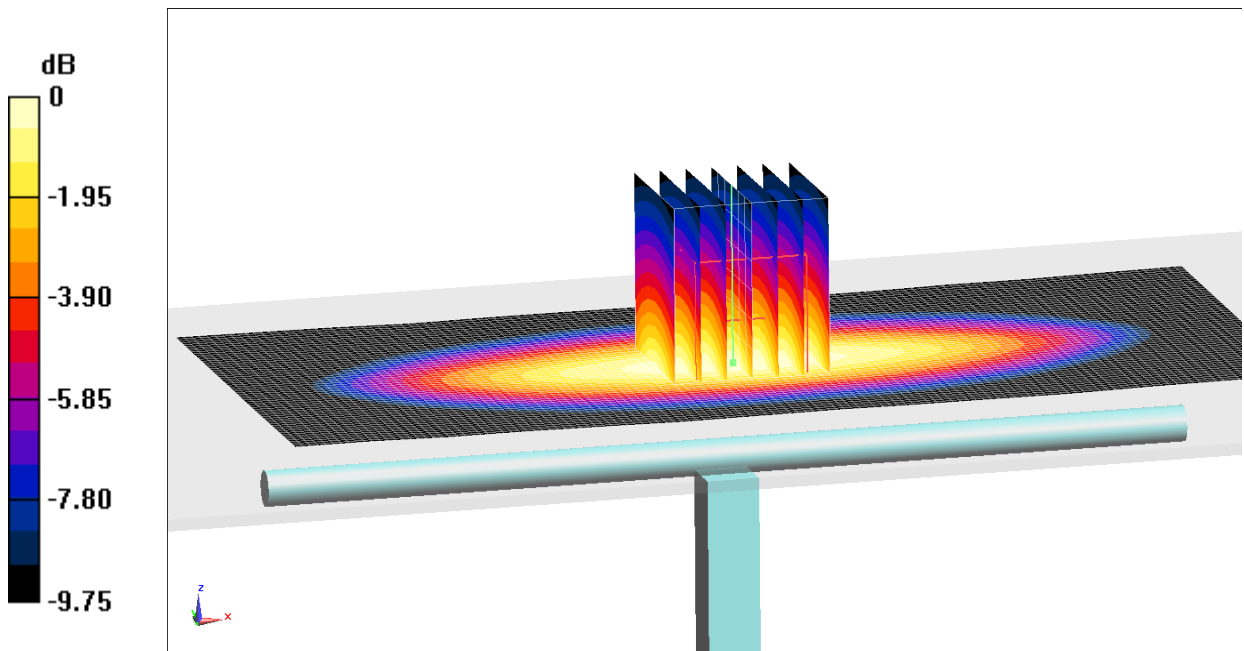
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 49.217 V/m ; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 2.84 W/kg

SAR(1 g) = 2.05 W/kg ; SAR(10 g) = 1.38 W/kg

Maximum value of SAR (measured) = 2.18 W/kg



0 dB = 2.18 W/kg = 3.38 dB W/kg

Fig.B.1 validation 750MHz 250mW

750MHz

Date: 2018-4-1

Electronics: DAE4 Sn1525

Medium: Body750 MHz

Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.944 \text{ mho/m}$; $\epsilon_r = 56.42$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: CW Frequency: 750 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(10.63, 10.63, 10.63)

System Validation/Area Scan (81x191x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 51.669 V/m ; Power Drift = -0.05 dB

Fast SAR: SAR(1 g) = 2.16 W/kg; SAR(10 g) = 1.42 W/kg

Maximum value of SAR (interpolated) = 2.41 W/kg

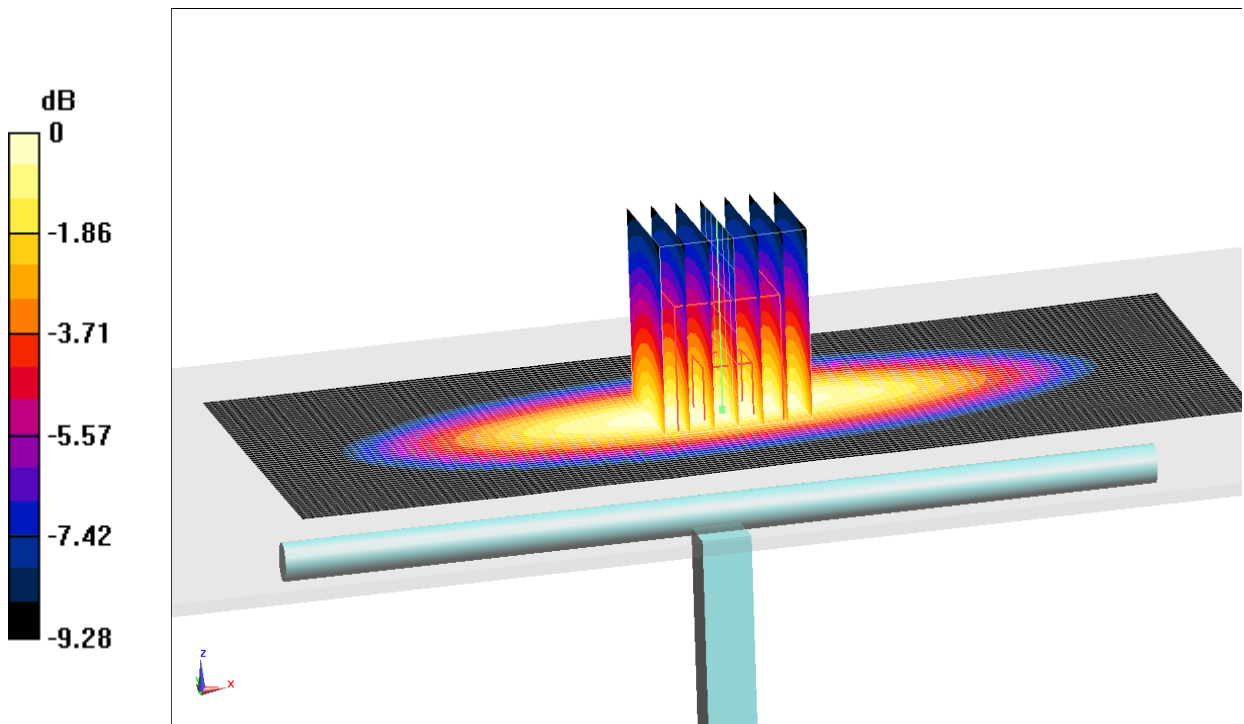
System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 51.669 V/m ; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 3.06 W/kg

SAR(1 g) = 2.19 W/kg; SAR(10 g) = 1.44 W/kg

Maximum value of SAR (measured) = 2.43 W/kg



0 dB = $2.43 \text{ W/kg} = 3.86 \text{ dB W/kg}$

Fig.B.2 validation 750MHz 250mW

835MHz

Date: 2018-3-30

Electronics: DAE4 Sn1525

Medium: Head 850 MHz

Medium parameters used: $f = 835$ MHz; $\sigma = 0.908$ S/m; $\epsilon_r = 41.76$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: CW Frequency: 835 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(10.28, 10.28, 10.28)

System Validation/Area Scan (61x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 54.82 V/m; Power Drift = 0.04 dB

Fast SAR: SAR(1 g) = 2.41 W/kg; SAR(10 g) = 1.55 W/kg

Maximum value of SAR (interpolated) = 2.60 W/kg

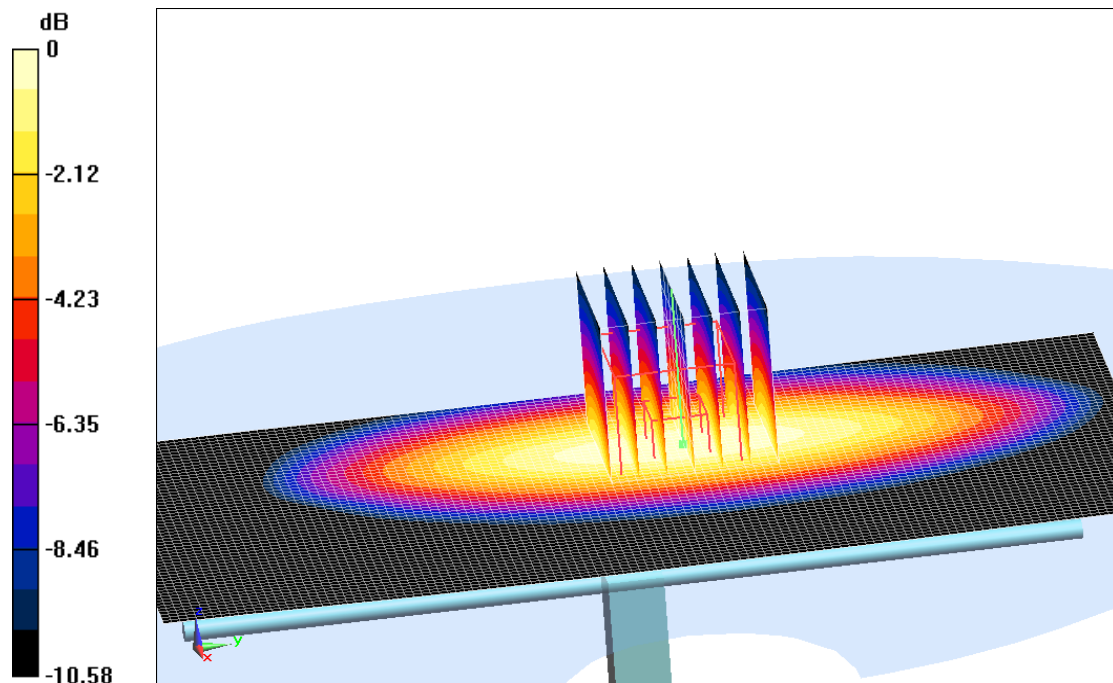
System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 54.82 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 3.14 W/kg

SAR(1 g) = 2.37 W/kg; SAR(10 g) = 1.53 W/kg

Maximum value of SAR (measured) = 2.57 W/kg



0 dB = 2.57 W/kg = 4.00 dBW/kg

Fig.B.3 validation 835MHz 250mW

835MHz

Date: 2018-3-30

Electronics: DAE4 Sn1525

Medium: Body 850 MHz

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.979 \text{ S/m}$; $\epsilon_r = 55.91$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: CW Frequency: 835 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(10.21, 10.21, 10.21)

System Validation /Area Scan (61x121x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 52.95 V/m ; Power Drift = -0.04 dB

Fast SAR: SAR(1 g) = 2.38 W/kg ; SAR(10 g) = 1.56 W/kg

Maximum value of SAR (interpolated) = 2.72 W/kg

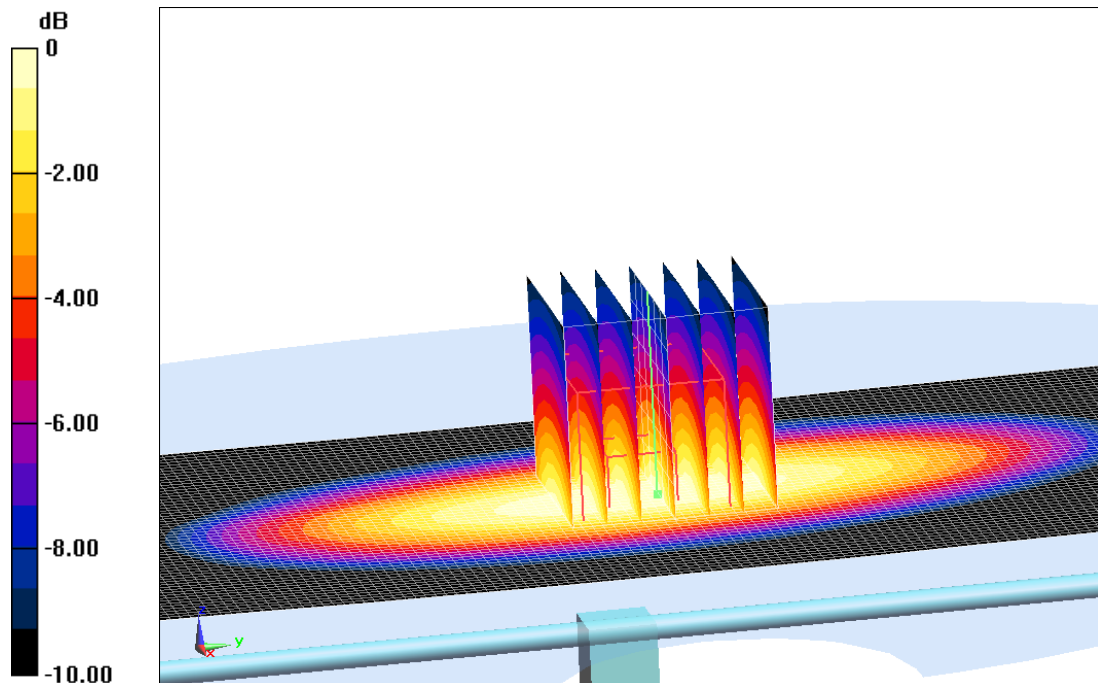
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 52.95 V/m ; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 3.19 W/kg

SAR(1 g) = 2.43 W/kg ; SAR(10 g) = 1.59 W/kg

Maximum value of SAR (measured) = 2.76 W/kg



0 dB = 2.76 W/kg = 4.41 dBW/kg

Fig.B.4 validation 835MHz 250mW

1750MHz

Date: 2018-3-31

Electronics: DAE4 Sn1525

Medium: Head 1750 MHz

Medium parameters used: $f=1750$ MHz; $\sigma = 1.421$ mho/m; $\epsilon_r = 40.41$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: CW Frequency: 1750 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(8.70, 8.70, 8.70)

System Validation/Area Scan (81x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 89.61 V/m; Power Drift = 0.06 dB

Fast SAR: SAR(1 g) = 9.08 W/kg; SAR(10 g) = 4.80 W/kg

Maximum value of SAR (interpolated) = 10.0 W/kg

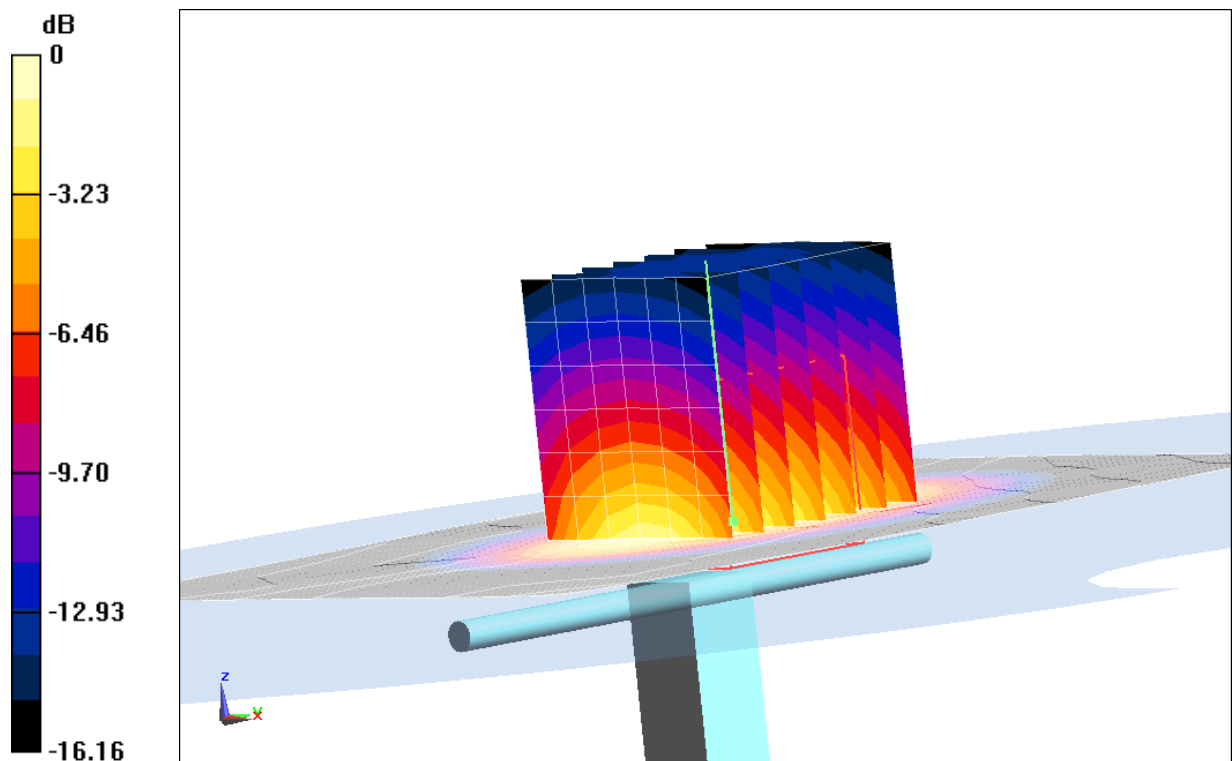
System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 89.61 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 15.59 W/kg

SAR(1 g) = 9.18 W/kg; SAR(10 g) = 4.88 W/kg

Maximum value of SAR (measured) = 10.1 W/kg



0 dB = 10.1 W/kg = 10.04 dB W/kg

Fig.B.5 validation 1750MHz 250mW

1750MHz

Date: 2018-3-31

Electronics: DAE4 Sn1525

Medium: Body 1750 MHz

Medium parameters used: $f=1750$ MHz; $\sigma = 1.506$ mho/m; $\epsilon_r = 53.72$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: CW Frequency: 1750 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(8.60, 8.60, 8.60)

System Validation/Area Scan (81x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 95.17 V/m; Power Drift = -0.03 dB

Fast SAR: SAR(1 g) = 9.51 W/kg; SAR(10 g) = 5.07 W/kg

Maximum value of SAR (interpolated) = 10.4 W/kg

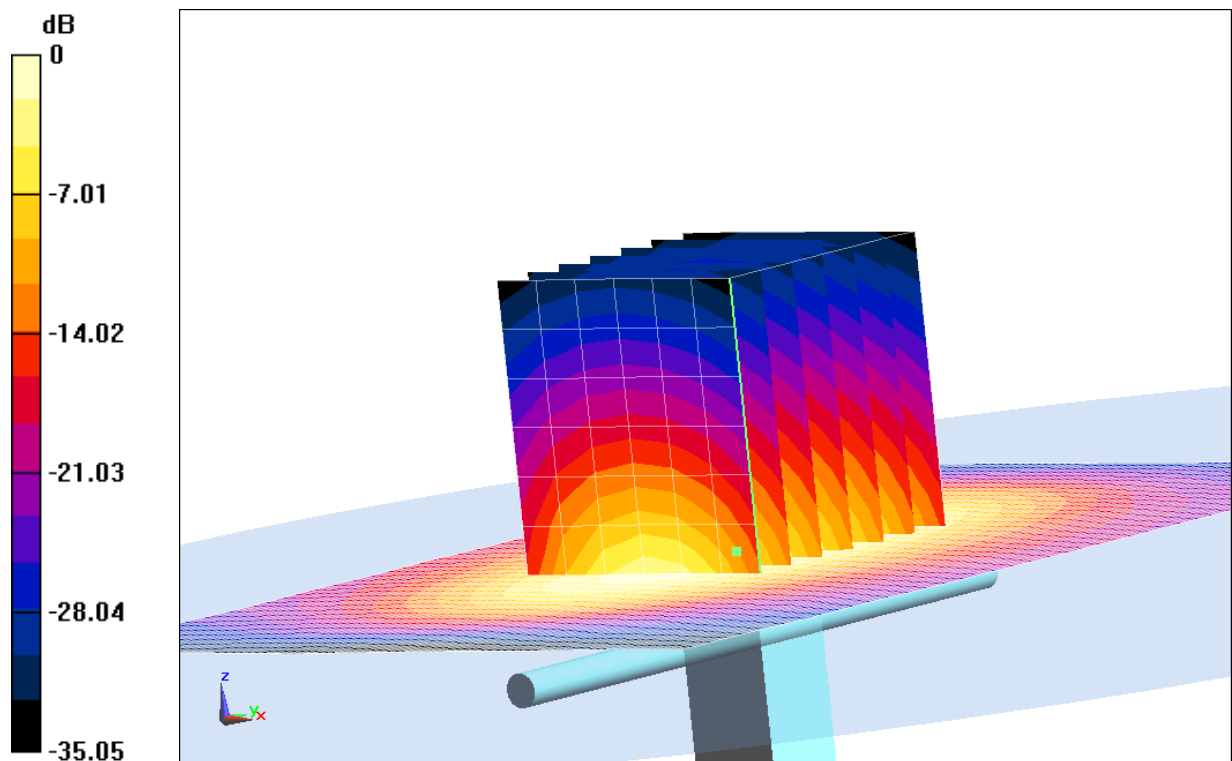
System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 95.17 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 15.54 W/kg

SAR(1 g) = 9.42 W/kg; SAR(10 g) = 4.99 W/kg

Maximum value of SAR (measured) = 10.3 W/kg



0 dB = 10.3 W/kg = 10.13 dB W/kg

Fig.B.6 validation 1750MHz 250mW

1900MHz

Date: 2018-3-29

Electronics: DAE4 Sn1525

Medium: Head 1900 MHz

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.411$ mho/m; $\epsilon_r = 40.61$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: CW Frequency: 1900 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF (8.39, 8.39, 8.39)

System Validation /Area Scan(61x81x1):Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 92.19 V/m; Power Drift = 0.05 dB

SAR(1 g) = 10.4 W/kg; SAR(10 g) = 5.52 W/kg

Maximum value of SAR (interpolated) = 12.6 W/kg

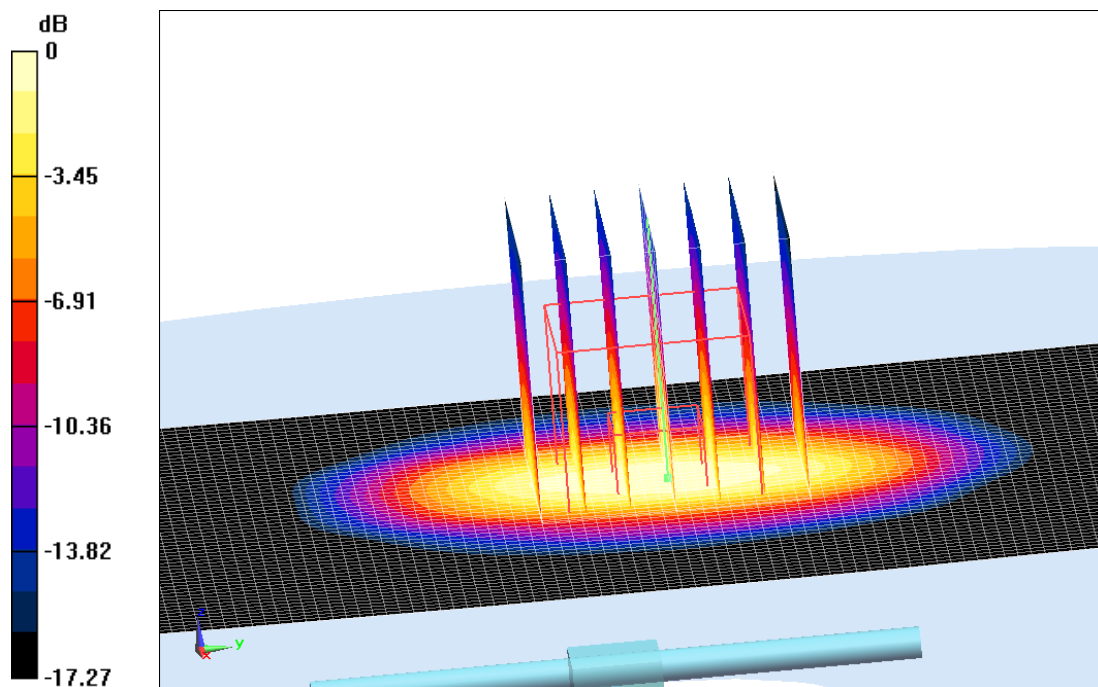
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 92.19 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 18.05 W/kg

SAR(1 g) = 10.2 W/kg; SAR(10 g) = 5.38 W/kg

Maximum value of SAR (measured) = 12.4 W/kg



0 dB = 12.4 W/kg = 10.93 dBW/kg

Fig.B.7 validation 1900MHz 250mW

1900MHz

Date: 2018-3-29

Electronics: DAE4 Sn1525

Medium: Body 1900 MHz

Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.527 \text{ S/m}$; $\epsilon_r = 52.71$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: CW Frequency: 1900 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(8.32, 8.32, 8.32)

System Validation/Area Scan (81x121x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 94.27 V/m ; Power Drift = -0.03 dB

Fast SAR: SAR(1 g) = 10.5 W/kg ; SAR(10 g) = 5.58 W/kg

Maximum value of SAR (interpolated) = 12.5 W/kg

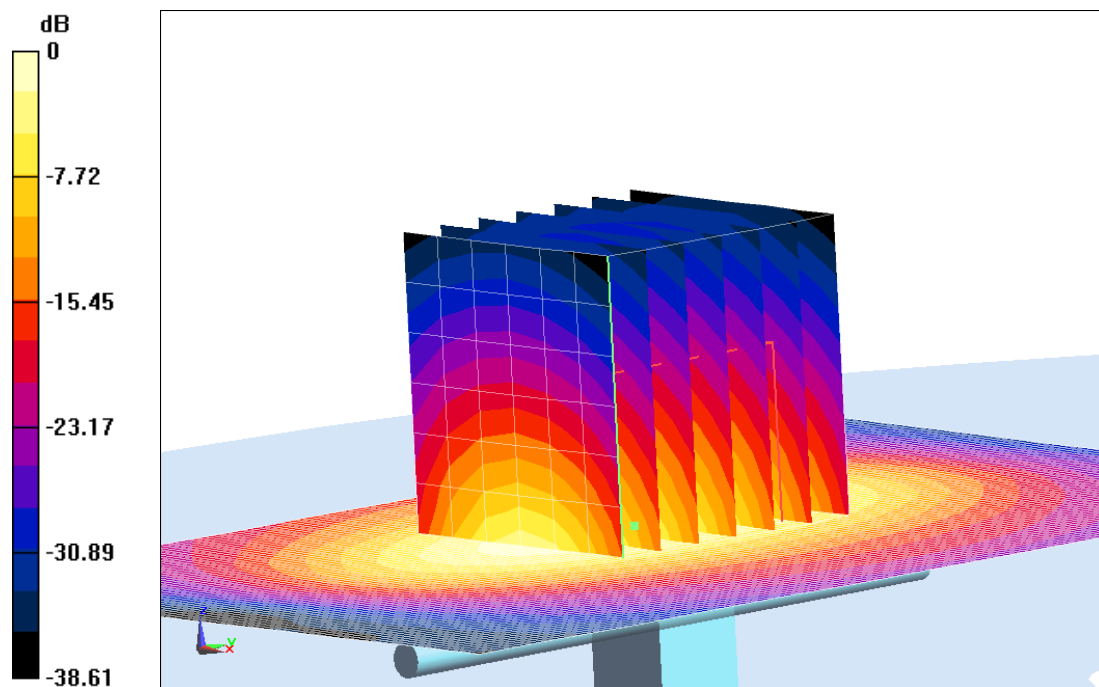
System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 94.27 V/m ; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 19.18 W/kg

SAR(1 g) = 10.4 W/kg ; SAR(10 g) = 5.49 W/kg

Maximum value of SAR (measured) = 12.4 W/kg



$0 \text{ dB} = 12.4 \text{ W/kg} = 10.93 \text{ dB W/kg}$

Fig.B.8 validation 1900MHz 250mW