

40620	2593	100RB	Bottom	/	22.51	24	0.299	0.42	0.701	0.99	0.01
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Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK_20MHz.

Table 14.1-44: SAR Values (LTE Band41 PC2 - Body)

Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C											
Frequency		Mode	Test Position	Figure No.	Conducted Power (dBm)	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										
41490	2680	1RB_Low	Front	/	27.87	28	0.105	0.11	0.212	0.22	0.04
41490	2680	1RB_Low	Rear	Fig.38	27.87	28	0.15	0.15	0.305	0.31	0.13
40620	2593	50RB_Mid	Front	/	26.04	27	0.103	0.13	0.209	0.26	-0.14
40620	2593	50RB_Mid	Rear	/	26.04	27	0.132	0.16	0.251	0.30	-0.15

Note1: The distance between the EUT and the phantom bottom is 15mm.

Note2: The LTE mode is QPSK_20MHz.

Table 14.1-45: SAR Values (LTE Band41 PC2 - Limb)

Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C											
Frequency		Mode	Test Position	Figure No.	Conducted Power (dBm)	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										
41490	2680	1RB_Low	Bottom	/	27.87	28	1.17	1.20	3.57	3.67	-0.15

Note1: The distance between the EUT and the phantom bottom is 0mm.

Note2: The LTE mode is QPSK_20MHz.

Table 14.1-46: 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											
132072	1720	1RB-Low	Left	Touch	/	22.65	24	0.058	0.08	0.104	0.14	0.11
132072	1720	1RB-Low	Left	Tilt	/	22.65	24	0.052	0.07	0.094	0.13	0.15
132072	1720	1RB-Low	Right	Touch	Fig.39	22.65	24	0.088	0.12	0.166	0.23	-0.12
132072	1720	1RB-Low	Right	Tilt	/	22.65	24	0.072	0.10	0.138	0.19	-0.05
132072	1720	50RB-Low	Left	Touch	/	22.65	23	0.047	0.05	0.084	0.09	-0.08
132072	1720	50RB-Low	Left	Tilt	/	22.65	23	0.041	0.04	0.076	0.08	0.16
132072	1720	50RB-Low	Right	Touch	/	22.65	23	0.065	0.07	0.123	0.13	-0.07
132072	1720	50RB-Low	Right	Tilt	/	22.65	23	0.052	0.06	0.099	0.11	-0.15

Note1: The LTE mode is QPSK_20MHz.

Table 14.1-47: SAR Values (LTE Band66 - Body)

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										
Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C											
132072	1720	1RB_Low	Front	/	19.12	19.5	0.15	0.16	0.26	0.28	0.13
132072	1720	1RB_Low	Rear	/	19.12	19.5	0.161	0.18	0.282	0.31	0.10
132072	1720	1RB_Low	Left	/	19.12	19.5	0.054	0.06	0.092	0.10	-0.09
132072	1720	1RB_Low	Right	/	19.12	19.5	0.034	0.04	0.054	0.06	-0.12
132072	1720	1RB_Low	Bottom	Fig.40	19.12	19.5	0.19	0.21	0.356	0.39	-0.19
132072	1720	50RB_Low	Front	/	19.08	19.5	0.14	0.15	0.248	0.27	-0.15
132072	1720	50RB_Low	Rear	/	19.08	19.5	0.166	0.18	0.291	0.32	0.08
132072	1720	50RB_Low	Left	/	19.08	19.5	0.052	0.06	0.088	0.10	0.13
132072	1720	50RB_Low	Right	/	19.08	19.5	0.026	0.03	0.054	0.06	-0.11
132072	1720	50RB_Low	Bottom	/	19.08	19.5	0.188	0.21	0.353	0.39	-0.04

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

Note2: The LTE mode is QPSK_20MHz.

Table 14.1-48: SAR Values (LTE Band66 - Body)

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										
Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C											
132072	1720	1RB_Low	Front	/	22.65	24	0.185	0.25	0.321	0.44	0.04
132072	1720	1RB_Low	Rear	Fig.41	22.65	24	0.206	0.28	0.343	0.47	0.07
132072	1720	50RB_Low	Front	/	22.65	23	0.142	0.15	0.248	0.27	0.11
132072	1720	50RB_Low	Rear	/	22.65	23	0.167	0.18	0.276	0.30	0.01

Note1: The distance between the EUT and the phantom bottom is 15mm

Note2: The LTE mode is QPSK_20MHz.

Table 14.1-49: SAR Values (LTE Band71 - Head)

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											
Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C												
133372	688	1RB_High	Left	Touch	Fig.42	23.04	24	0.216	0.27	0.35	0.44	0.05
133372	688	1RB_High	Left	Tilt	/	23.04	24	0.18	0.22	0.337	0.42	0.16
133372	688	1RB_High	Right	Touch	/	23.04	24	0.195	0.24	0.305	0.38	0.13
133372	688	1RB_High	Right	Tilt	/	23.04	24	0.169	0.21	0.299	0.37	0.08
133372	688	50RB_High	Left	Touch	/	21.98	23	0.179	0.23	0.292	0.37	-0.15

133372	688	50RB_High	Left	Tilt	/	21.98	23	0.147	0.19	0.275	0.35	0.16
133372	688	50RB_High	Right	Touch	/	21.98	23	0.161	0.20	0.251	0.32	-0.13
133372	688	50RB_High	Right	Tilt	/	21.98	23	0.139	0.18	0.245	0.31	0.02

Note1: The LTE mode is QPSK_20MHz.

Table 14.1-50: SAR Values (LTE Band71 - Body)

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											
		Ambient Temperature: 22.9 °C				Liquid Temperature: 22.5 °C						
133372	688	1RB_High	Front	/	23.04	24	0.092	0.11	0.121	0.15	-0.09	
133372	688	1RB_High	Rear	/	23.04	24	0.105	0.13	0.137	0.17	-0.09	
133372	688	1RB_High	Left	/	23.04	24	0.086	0.11	0.122	0.15	0.12	
133372	688	1RB_High	Right	Fig.43	23.04	24	0.133	0.17	0.189	0.24	0.07	
133372	688	1RB_High	Top	/	23.04	24	0.051	0.06	0.092	0.11	-0.04	
133372	688	50RB_High	Front	/	21.98	23	0.077	0.10	0.101	0.13	-0.03	
133372	688	50RB_High	Rear	/	21.98	23	0.089	0.11	0.114	0.14	-0.12	
133372	688	50RB_High	Left	/	21.98	23	0.073	0.09	0.102	0.13	0.06	
133372	688	50RB_High	Right	/	21.98	23	0.11	0.14	0.157	0.20	-0.15	
133372	688	50RB_High	Top	/	21.98	23	0.041	0.05	0.074	0.09	-0.16	

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

Note2: The LTE mode is QPSK_20MHz.

14.2 SAR results for Standard procedure

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

Table 14.2-1: SAR Values (GSM 850 MHz Band - Head)

Ambient Temperature: 22.9 °C					Liquid Temperature: 22.5 °C						
Frequency		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										
128	824.2	Right	Touch	Fig.1	30.49	30.5	0.102	0.10	0.13	0.13	0.15

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

Table 14.2-2: 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.	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										
128	824.2	GPRS (2)	Rear	Fig.2	30.49	30.5	0.17	0.17	0.307	0.31	0.09

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

Table 14.2-3: SAR Values (GSM 1900 MHz Band - Head)

Ambient Temperature: 22.9 °C					Liquid Temperature: 22.5 °C						
Frequency		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										
661	1880	Right	Touch	Fig.3	23.67	25	0.002	0.00	0.005	0.01	0.00

Note: the head SAR of GSM1900 is tested with GPRS (4Txslots) mode because of VoIP.

Table 14.2-4: SAR Values (WCDMA 1900 MHz Band - Body)

Ambient Temperature: 22.9 °C					Liquid Temperature: 22.5 °C					
Frequency		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									
9538	1907.6	Bottom	Fig.7	20.20	21	0.403	0.48	0.769	0.92	0.14

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

Table 14.2-5: SAR Values (WCDMA 1700 MHz Band - Head)

Ambient Temperature: 22.9 °C					Liquid Temperature: 22.5 °C						
Frequency		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										
1412	1732.4	Right	Touch	Fig.9	22.92	24	0.104	0.13	0.167	0.21	0.12

Table 14.2-6: SAR Values (WCDMA 1700 MHz Band - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °C				
Frequency		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)
1513	1752.6	Bottom	Fig.10	20.11	21	0.225	0.28	0.427	0.52	0.18

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

Table 14.2-7: SAR Values (WCDMA 850 MHz Band - Head)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °C					
Frequency		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										
4132	826.4	Right	Tilt	Fig.12	22.95	24	0.236	0.30	0.429	0.55	-0.12

Table 14.2-8: SAR Values (WCDMA 850 MHz Band - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °C				
Frequency		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									
4132	826.4	Rear	Fig.13	22.95	24	0.119	0.15	0.184	0.23	0.04

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

Table 14.2-9: SAR Values (CDMA BC0 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										
384	836.52	Left	Touch	Fig.14	24.16	25	0.466	0.57	0.685	0.83	0.02

Table 14.2-10: SAR Values (CDMA BC0 Band - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °C				
Frequency		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									
1013	824.7	Front	Fig.15	23.92	25	0.198	0.25	0.258	0.33	0.01

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

Table 14.2-11: SAR Values (CDMA BC1 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	Measured SAR(10g)	Reported SAR(10g)(W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
Ch.	MHz										

						(dBm)	(W/kg)				
1175	1908.75	Right	Touch	Fig.16	24.09	25	0.032	0.04	0.05	0.06	0.17

Table 14.2-12: SAR Values (CDMA BC1 Band - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		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										
1175	1908.75	Bottom	Fig.17	21.32	22	0.304	0.36	0.582	0.68	-0.16	

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

Table 14.2-13: SAR Values (CDMA BC1 Band - Body)

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		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										
1175	1908.75	Bottom	Fig.17	21.32	22	0.304	0.36	0.582	0.68	-0.16	

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

Table 14.2-14: SAR Values (CDMA BC10 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										
580	820.5	Right	Touch	Fig.19	24.45	25	0.548	0.62	0.869	0.99	0.13

Table 14.2-15: SAR Values (LTE Band7 - 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											
21350	2560	1RB_Mid	Left	Touch	Fig.21	22.27	23.5	0.036	0.05	0.063	0.08	0.18

Note1: The LTE mode is QPSK_20MHz.

Table 14.2-16: SAR Values (LTE Band7 - 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										
21350	2560	50RB_Mid	Bottom	Fig.22	17.87	18.5	0.468	0.54	1.02	1.18	-0.14

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 Band12 - Head)

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											
23060	704	1RB-Low	Left	Touch	Fig.24	23.07	23.5	0.288	0.32	0.472	0.52	-0.08

Note1: The LTE mode is QPSK_10MHz.

Table 14.2-18: SAR Values (LTE Band12 - Body)

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										
23060	704	1RB_Low	Right	Fig.25	23.07	23.5	0.091	0.10	0.13	0.14	0.00

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 Band13 - Head)

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											
23230	782	1RB-High	Right	Touch	Fig.26	23.25	24	0.086	0.10	0.111	0.13	0.19

Note1: The LTE mode is QPSK_10MHz.

Table 14.2-20: SAR Values (LTE Band13 - Body)

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										
23230	782	1RB_High	Rear	Fig.27	23.25	24	0.143	0.17	0.258	0.31	-0.09

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

Note2: The LTE mode is QPSK_10MHz.

Table 14.2-21: SAR Values (LTE Band25 - Head)

Frequency	Mode	Side	Test	Figure	Conduct	tune-up	Measur	Reported	Measur	Reporte	Powe
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Ch.	MHz			Position	No.	Conducted Power (dBm)	Power (dBm)	Measured SAR(10g) (W/kg)	SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
26365	1882.5	1RB_High	Right	Tilt	Fig.28	23.55	24	0.041	0.05	0.076	0.08	-0.13

Note1: The LTE mode is QPSK_20MHz.

Table 14.2-22: SAR Values (LTE Band25 - Body)

Frequency		Mode	Test Position	Figure No.	Conducted Power (dBm)	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											
		Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C										
26365	1882.5	50RB_Mid	Bottom	Fig.29	19.02	19.5	0.273	0.30	0.526	0.59	0.16	

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

Note2: The LTE mode is QPSK_20MHz.

Table 14.2-23: SAR Values (LTE Band26 - Head)

Frequency		Mode	Side	Test Position	Figure No.	Conducted Power (dBm)	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											
		Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C										
26775	822.5	1RB-Low	Left	Touch	Fig.31	22.67	24	0.471	0.64	0.751	1.02	-0.14

Note1: The LTE mode is QPSK_15MHz.

Table 14.2-24: SAR Values (LTE Band26 - Body)

Frequency		Mode	Test Position	Figure No.	Conducted Power (dBm)	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											
		Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C										
26775	822.5	1RB_High	Rear	Fig.32	22.67	24	0.099	0.13	0.153	0.21	0.01	

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

Note2: The LTE mode is QPSK_15MHz.

Table 14.2-25: SAR Values (LTE Band41 PC3 - Head)

Frequency		Mode	Side	Test Position	Figure No.	Conducted Power (dBm)	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											
		Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C										
40620	2593	1RB-Low	Left	Touch	Fig.33	23.98	24	0.027	0.03	0.069	0.07	-0.11

Note1: The LTE mode is QPSK_20MHz.

Table 14.2-26: SAR Values (LTE Band41 PC3- Body)

Frequency		Mode	Test	Figure	Conduct	tune-up	Measure	Reported	Measure	Reporte	Powe	
Ch.	MHz											
		Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C										

Ch.	MHz		Position	No.	Conducted Power (dBm)	Power (dBm)	Measured SAR(10g) (W/kg)	SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
40185	2549.5	1RB_Mid	Bottom	Fig.34	19.79	20.3	0.534	0.60	1.19	1.34	-0.09

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

Note6: The LTE mode is QPSK_20MHz.

Table 14.2-27: SAR Values (LTE Band41 PC3- Body)

Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C											
Frequency		Mode	Test Position	Figure No.	Conducted Power (dBm)	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										
40620	2593	1RB_Low	Rear	Fig.35	23.98	24	0.219	0.22	0.446	0.45	-0.14

Note1: The distance between the EUT and the phantom bottom is 15mm.

Note2: The LTE mode is QPSK_20MHz.

Table 14.2-28: SAR Values (LTE Band41 PC2 - Head)

Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C												
Frequency		Mode	Side	Test Position	Figure No.	Conducted Power (dBm)	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											
40620	2593	50RB-Middle	Left	Touch	Fig.36	26.04	27	0.041	0.05	0.071	0.09	0.15

Note1: The LTE mode is QPSK_20MHz.

Table 14.2-29: SAR Values (LTE Band41 PC2 - Body)

Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C											
Frequency		Mode	Test Position	Figure No.	Conducted Power (dBm)	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										
41490	2680	1RB_Low	Bottom	Fig.37	23.22	24	0.392	0.47	0.885	1.06	-0.13

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

Note2: The LTE mode is QPSK_20MHz.

Table 14.2-30: SAR Values (LTE Band41 PC2 - Body)

Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C											
Frequency		Mode	Test Position	Figure No.	Conducted Power (dBm)	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										
41490	2680	1RB_Low	Rear	Fig.38	27.87	28	0.15	0.15	0.305	0.31	0.13

Note1: The distance between the EUT and the phantom bottom is 15mm.

Note2: The LTE mode is QPSK_20MHz.

Table 14.2-31: SAR Values (LTE Band66 - Head)

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											
132072	1720	1RB-Low	Right	Touch	Fig.39	22.65	24	0.088	0.12	0.166	0.23	-0.12

Note1: The LTE mode is QPSK_20MHz.

Table 14.2-32: SAR Values (LTE Band66 - Body)

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										
132072	1720	1RB_Low	Bottom	Fig.40	19.12	19.5	0.19	0.21	0.356	0.39	-0.19

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

Note2: The LTE mode is QPSK_20MHz.

Table 14.2-33: SAR Values (LTE Band66 - Body)

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										
132072	1720	1RB_Low	Rear	Fig.41	22.65	24	0.206	0.28	0.343	0.47	0.07

Table 14.2-34: SAR Values (LTE Band71 - Head)

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											
133372	688	1RB_High	Left	Touch	Fig.42	23.04	24	0.216	0.27	0.35	0.44	0.05

Note1: The LTE mode is QPSK_20MHz.

Table 14.2-35: SAR Values (LTE Band71 - Body)

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										
133372	688	1RB_High	Right	Fig.43	23.04	24	0.133	0.17	0.189	0.24	0.07

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

Note2: The LTE mode is QPSK_20MHz.

14.3 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 14.3-1: SAR Values (WLAN - Head)– 802.11b (Fast SAR)

Frequency		Side	Test Position	Figure No.	Ambient Temperature: 22.9 °C		Liquid Temperature: 22.5°C		Measured SAR(1g) (W/kg)	Reported SAR(1g)(W/kg)	Power Drift (dB)
MHz	Ch.				Conducte d Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)			
2412	1	Left	Touch	/	16.9	17.5	0.094	0.11	0.166	0.19	-0.06
2412	1	Left	Tilt	/	16.9	17.5	0.115	0.13	0.235	0.27	0.06
2412	1	Right	Touch	/	16.9	17.5	0.221	0.25	0.441	0.51	0.19
2412	1	Right	Tilt	/	16.9	17.5	0.183	0.21	0.358	0.41	-0.01

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

Table 14.3-2: SAR Values (WLAN - Head)– 802.11b (Full SAR)

Frequency		Side	Test Position	Figure No.	Ambient Temperature: 22.9 °C		Liquid Temperature: 22.5°C		Measured SAR(1g) (W/kg)	Reported SAR(1g)(W/kg)	Power Drift (dB)
MHz	Ch.				Conducte d Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)			
2412	1	Right	Touch	Fig.44	16.9	17.5	0.196	0.23	0.379	0.44	0.19
2412	1	Right	Tilt	/	16.9	17.5	0.167	0.19	0.333	0.38	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 \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 14.3-3: SAR Values (WLAN - Head) – 802.11b (Scaled Reported SAR)

Frequency		Side	Test Position	Ambient Temperature: 22.9 °C		Liquid Temperature: 22.5°C		Reported SAR (1g)(W/kg)	Scaled reported SAR (1g)(W/kg)
MHz	Ch.			Actual duty factor	maximum duty factor				
2412	1	Right	Touch	99.16%	100%	0.44	0.44		

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

Body Evaluation
Table 14.3-4: SAR Values (WLAN - Body)– 802.11b (Fast SAR)

Frequency		Test Position	Figure No.	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)	
2412	1	Front	/	21.47	22.4	0.097	0.12	0.179	0.22	0.14
2412	1	Rear	/	21.47	22.4	0.2	0.25	0.412	0.51	-0.05
2412	1	Right	/	21.47	22.4	0.112	0.14	0.23	0.28	0.06
2412	1	Top	/	21.47	22.4	0.137	0.17	0.264	0.33	-0.01

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

Table 14.3-5: SAR Values (WLAN - Body)– 802.11b (Full SAR)

Frequency		Test Position	Figure No.	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)	
2412	1	Rear	Fig.45	21.47	22.4	0.186	0.23	0.383	0.47	-0.05
2412	1	Top	/	21.47	22.4	0.163	0.20	0.306	0.38	0.04

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.

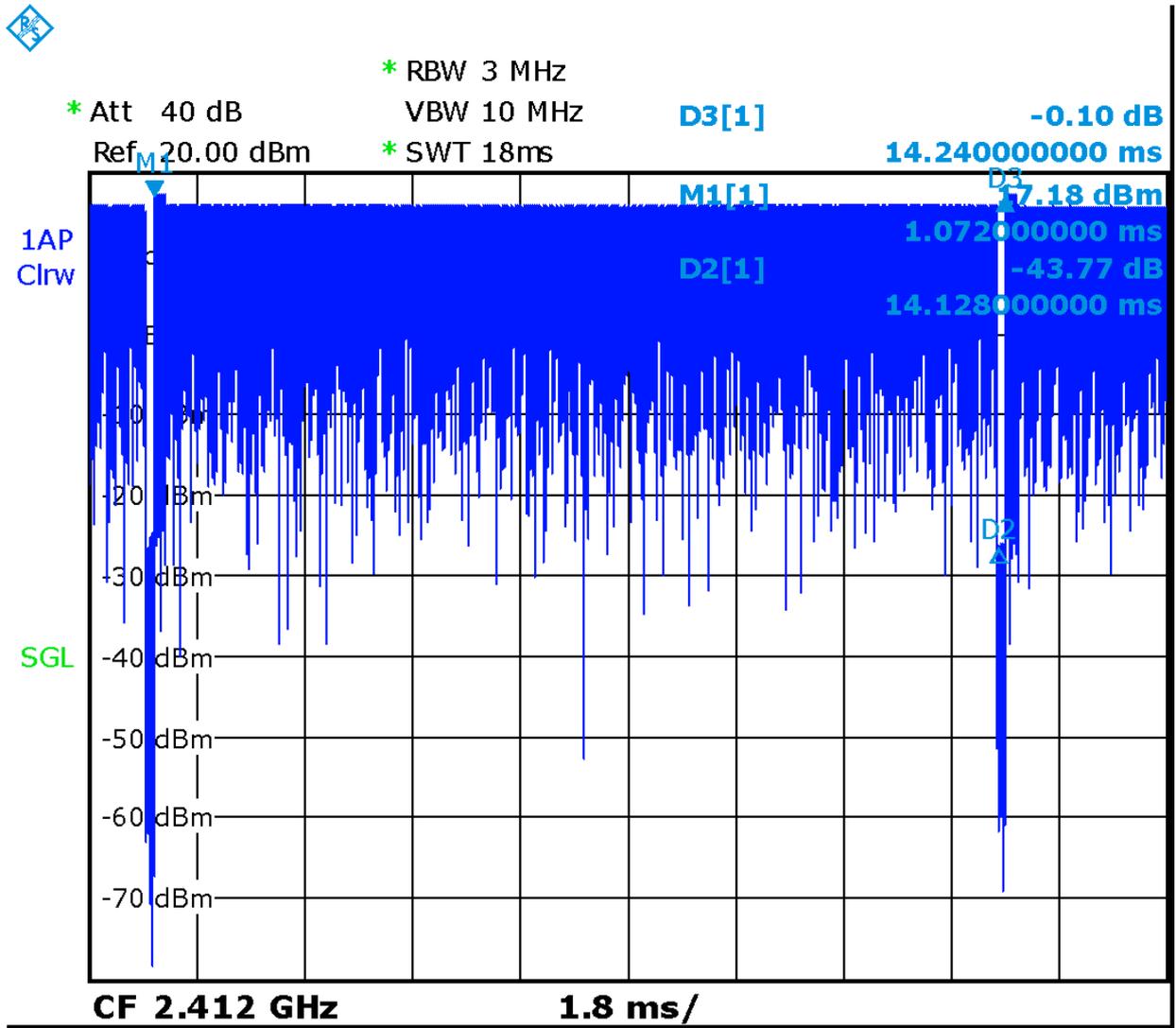
Note2: For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel until the reported SAR is \leq 1.2 W/kg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

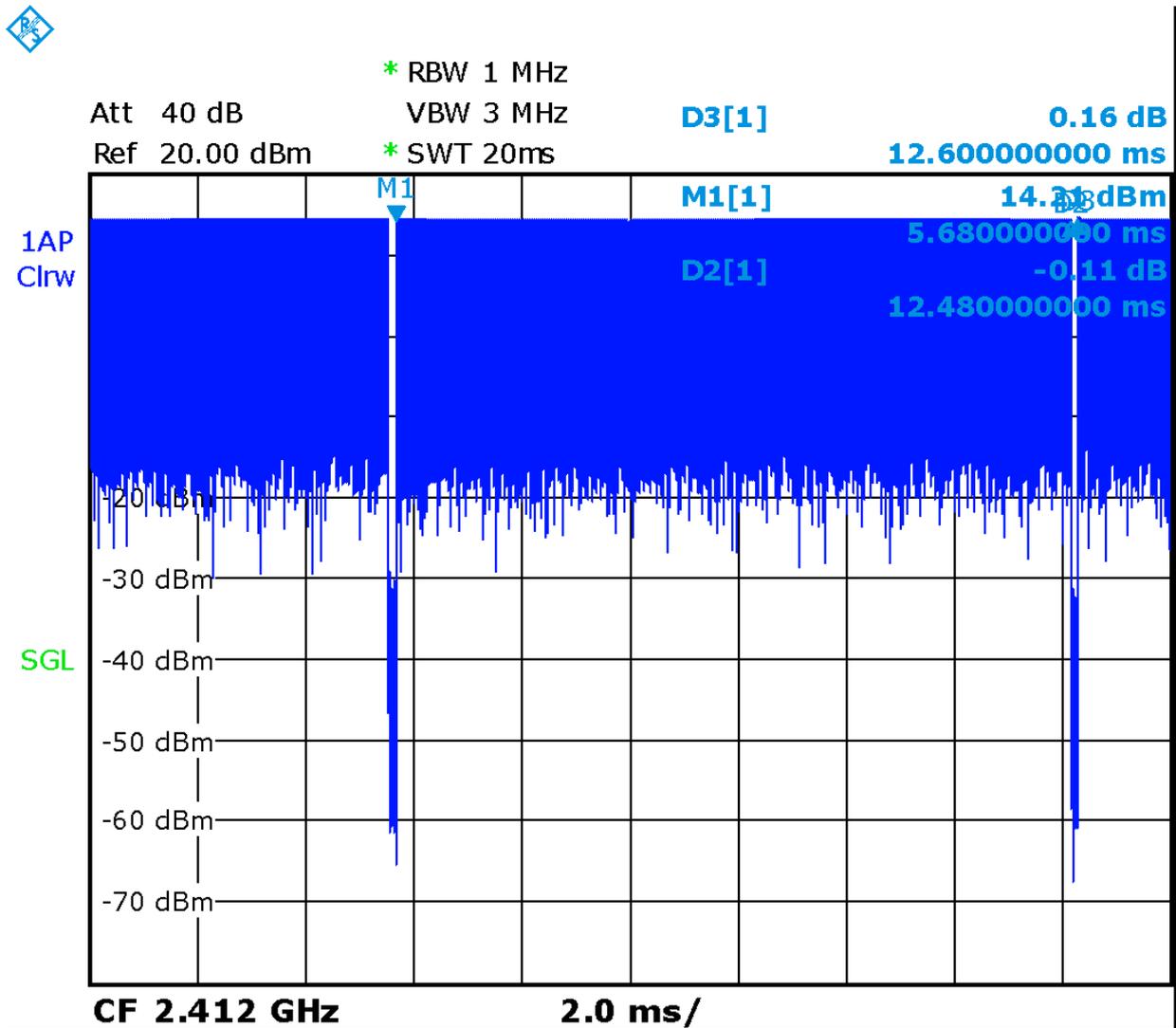
Table 14.3-6: SAR Values (WLAN - Body) – 802.11b (Scaled Reported SAR)

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)
2412	1	Rear	99.45%	100%	0.47	0.47

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



Picture 14.1-a Duty factor plot head



Picture 14.1-b Duty factor plot body

14.4 WLAN Evaluation For 5G

Table 14.4-1: OFDM mode specified maximum output power of WLAN antenna

802.11 mode	a	g	n		ac			
Ch. BW(MHz)	20	20	20	40	20	40	80	160
U-NII-1	X		X	X	X	X	X	
U-NII-2A	X		X	X	X	X	X	
U-NII-2C	X		X	X	X	X	X	
U-NII-3	X		X	X	X	X	X	
§ 15.247 (5.8 GHz)								

X: maximum(conducted) output power(mW), including tolerance, specified for production units

Table 14.4-2: Maximum output power specified of WLAN antenna -Lower power

802.11 mode	a	g	n		ac			
Ch. BW(MHz)	20	20	20	40	20	40	80	160
U-NII-1	28		25	25	25	25	25	
U-NII-2A	28		20	20	20	20	20	
U-NII-2C	35		25	25	25	25	25	
U-NII-3	41		32	32	32	32	32	
§ 15.247 (5.8 GHz)								

- The maximum output power specified for production units is the same for all channels, modulations and data rates in each channel bandwidth configuration of the 802.11a/g/n/ac modes.
- The blue highlighted cells represent highest output configurations in each standalone or aggregated frequency band, with tune-up tolerance included.

Table 14.4-2: Maximum output power specified of WLAN antenna 5g Normal power

802.11 mode	a	g	n		ac			
Ch. BW(MHz)	20	20	20	40	20	40	80	160
U-NII-1	74		71	71	66	63	50	
U-NII-2A	74		71	71	66	63	50	
U-NII-2C	74		71	71	66	63	50	
U-NII-3	74		71	71	66	63	40	
§ 15.247 (5.8 GHz)								

- The maximum output power specified for production units is the same for all channels, modulations and data rates in each channel bandwidth configuration of the 802.11a/g/n/ac modes.
- The blue highlighted cells represent highest output configurations in each standalone or aggregated frequency band, with tune-up tolerance included.

Table 14.4-4: Maximum output power measured of WLAN antenna, for the applicable OFDM configurations according to the default power measurement procedures for selection initial test configurations –Head (Lower power)

802.11 mode	a	n		ac		
BW(MHz)	20	20	40	20	40	80
U-NII-1	36/40/44/48 22/23/22/21	36/40/44/48 Lower power	38/46 Lower power	36/40/44/48 Lower power	38/46 Lower power	42 Lower power
U-NII-2A	52/56/60/64 22/20/17/17	52/56/60/64 Lower power	54/62 Lower power	52/56/60/64 Lower power	54/62 Lower power	58 Lower power
U-NII-2C	100/104/108/112/116/120/124/128/132/136/140/144/ 19/22/28/33/32/30/25/22/21/24/30/34	100/104/108/112/116/120/124/128/132/136/140/144 Lower power	102/110/118/126/134/142 Lower power	100/104/108/112/116/120/124/128/132/136/140/144 Lower power	102/110/118/126/134/142 Lower power	106/122/138 Lower power

U-NII-3	149 /153/157/16 1/165 39 /37/33/28/27	149/153/157/1 61/165 Lower power	151/159 Lower power	149/153/157/16 1/165 Lower power	151/159 Lower power	155 Lower power
<ul style="list-style-type: none"> ● The bold numbers is the maximum output measured power (mW). ● Channels with measured maximum power within 0.25dB are considered to have the same measured output. ● Channels selected for initial test configuration are highlighted in yellow. 						

Table 14.4-5: Maximum output power measured of WLAN antenna, for the applicable OFDM configurations according to the default power measurement procedures for selection initial test configurations –Body (Normal power)

802.11 mode	a	n		ac		
BW(MHz)	20	20	40	20	40	80
U-NII-1	36 /40/44/48 56/52/54/52	36/40/44/48 Lower power	38/46 Lower power	36/40/44/48 Lower power	38/46 Lower power	42 Lower power
U-NII-2A	52 /56/60/64 67 /63/56/52	52/56/60/64 Lower power	54/62 Lower power	52/56/60/64 Lower power	54/62 Lower power	58 Lower power
U-NII-2C	100/104/108/11 2/116/120/124/ 128/132/ 136 /14 0/144 47/56/52/55/60/ 57/53/60/60/ 64 / 55/59/	100/104/108/1 12/116/120/12 4/128/132/136 /140/144 Lower power	102/110/118/1 26/134/142 Lower power	100/104/108/11 2/116/120/124/ 128/132/136/14 0/144 Lower power	102/110/118/12 6/134/142 Lower power	106/122/138 Lower power
U-NII-3	149/ 153 /157/16 1/165 61/ 67 /62/49/48	149/153/157/1 61/165 Lower power	151/159 Lower power	149/153/157/16 1/165 Lower power	151/159 Lower power	155 Lower power
<ul style="list-style-type: none"> ● The bold numbers is the maximum output measured power (mW). ● Channels with measured maximum power within 0.25dB are considered to have the same measured output. ● Channels selected for initial test configuration are highlighted in yellow. 						

Table 14.4-6: Reported SAR of initial test configuration for Low power Head

802.11 mode	a	n		ac		
BW(MHz)	20	20	40	20	40	80
U-NII-1	36/40/44/48 UNII-2A exclusion applied	36/40/44/48	38/46	36/40/44/48	38/46	42
U-NII-2A	52 /56/60/64 0.20	52/56/60/64	54/62	52/56/60/64	54/62	58
U-NII-2C	100/104/108/112/116/120/ 124/128/132/136/140/ 144 0.33	100/104/108 /112/116/120 /124/128/13	102/110/118/1 26/134/142	100/104/108/11 2/116/120/124/ 128/132/136/14	102/110/118/1 26/134/142	106/122/ 138

		2/136/140/1 44		0/144		
U-NII-3	149/153/157/161/165 0.33	149/153/157 /161/165	151/159	149/153/157/16 1/165	151/159	155
Highest measured output power channel tested initially are in yellow highlight .						

Table 14.4-6: Reported SAR of initial test configuration for Normal power Body

802.11 mode	a	n		ac		
BW(MHz)	20	20	40	20	40	80
U-NII-1	36/40/44/48 UNII-2A exclusion applied	36/40/44/4 8	38/46	36/40/44/48	38/46	42
U-NII-2A	52/56/60/64 0.50	52/56/60/6 4	54/62	52/56/60/64	54/62	58
U-NII-2C	100/104/108/112/116/120/ 124/128/132/136/140/144 0.55	100/104/10 8/112/116/ 120/124/12 8/132/136/ 140/144	102/110/118/1 26/134/142	100/104/108/11 2/116/120/124/ 128/132/136/14 0/144	102/110/118/1 26/134/142	106/122/ 138
U-NII-3	149/153/157/161/165 0.69	149/153/15 7/161/165	151/159	149/153/157/16 1/165	151/159	155
Highest measured output power channel tested initially are in yellow highlight .						

Table 14.4-7: SAR Values (WLAN 5G - Head)

Frequency		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										
52	5260	Left	Touch	/	13.40	14.3	0.045	0.045	0.06	0.23	0.06
52	5260	Left	Touch	/	13.40	14.3	0.022	0.022	0.03	0.10	0.03
52	5260	Right	Touch	/	13.40	14.3	0.011	0.011	0.01	0.05	-0.12
52	5260	Right	Touch	/	13.40	14.3	0.006	0.006	0.01	0.03	0.04
144	5720	Left	Touch	Fig.46	15.29	15.5	0.105	0.11	0.319	0.33	0.05
144	5720	Left	Tilt	/	15.29	15.5	0.047	0.05	0.13	0.14	-0.01
144	5720	Right	Touch	/	15.29	15.5	0.046	0.05	0.13	0.14	-0.03
144	5720	Right	Tilt	/	15.29	15.5	0.02	0.02	0.057	0.06	0.07
149	5745	Left	Touch	/	15.94	16.1	0.111	0.12	0.317	0.33	-0.06
149	5745	Left	Tilt	/	15.94	16.1	0.064	0.07	0.172	0.18	0.09
149	5745	Right	Touch	/	15.94	16.1	0.026	0.03	0.069	0.07	-0.05
149	5745	Right	Tilt	/	15.94	16.1	0.02	0.02	0.055	0.06	-0.10

Table 14.4-8: SAR Values (WLAN 5G - Body)

Frequency		Test Position	Figure No.	Conducted Power	Max. tune-up Power (dBm)	Measured SAR(10g)	Reported SAR(10g)(Measured SAR(1g)	Reported SAR(1g)	Power Drift
Ch.	MHz									

				(dBm)		(W/kg)	W/kg)	(W/kg)	(W/kg)	(dB)
52	5260	Front	/	18.28	18.7	0.028	0.03	0.07	0.08	0.01
52	5260	Rear	/	18.28	18.7	0.145	0.16	0.416	0.46	0.05
52	5260	Right	/	18.28	18.7	0.164	0.18	0.452	0.50	-0.13
52	5260	Top	/	18.28	18.7	0.035	0.04	0.082	0.09	-0.02
136	5680	Front	/	18.08	18.7	0.047	0.05	0.118	0.14	0.02
136	5680	Rear	/	18.08	18.7	0.12	0.14	0.303	0.35	0.07
136	5680	Right	/	18.08	18.7	0.179	0.21	0.474	0.55	0.08
136	5680	Top	/	18.08	18.7	<0.01	<0.01	<0.01	<0.01	/
153	5765	Front	/	18.26	18.7	0.059	0.07	0.146	0.16	0.06
153	5765	Rear	/	18.26	18.7	0.177	0.20	0.496	0.55	0.01
153	5765	Right	Fig.47	18.26	18.7	0.214	0.24	0.619	0.69	-0.04
153	5765	Top	/	18.26	18.7	0.073	0.08	0.172	0.19	0.03

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

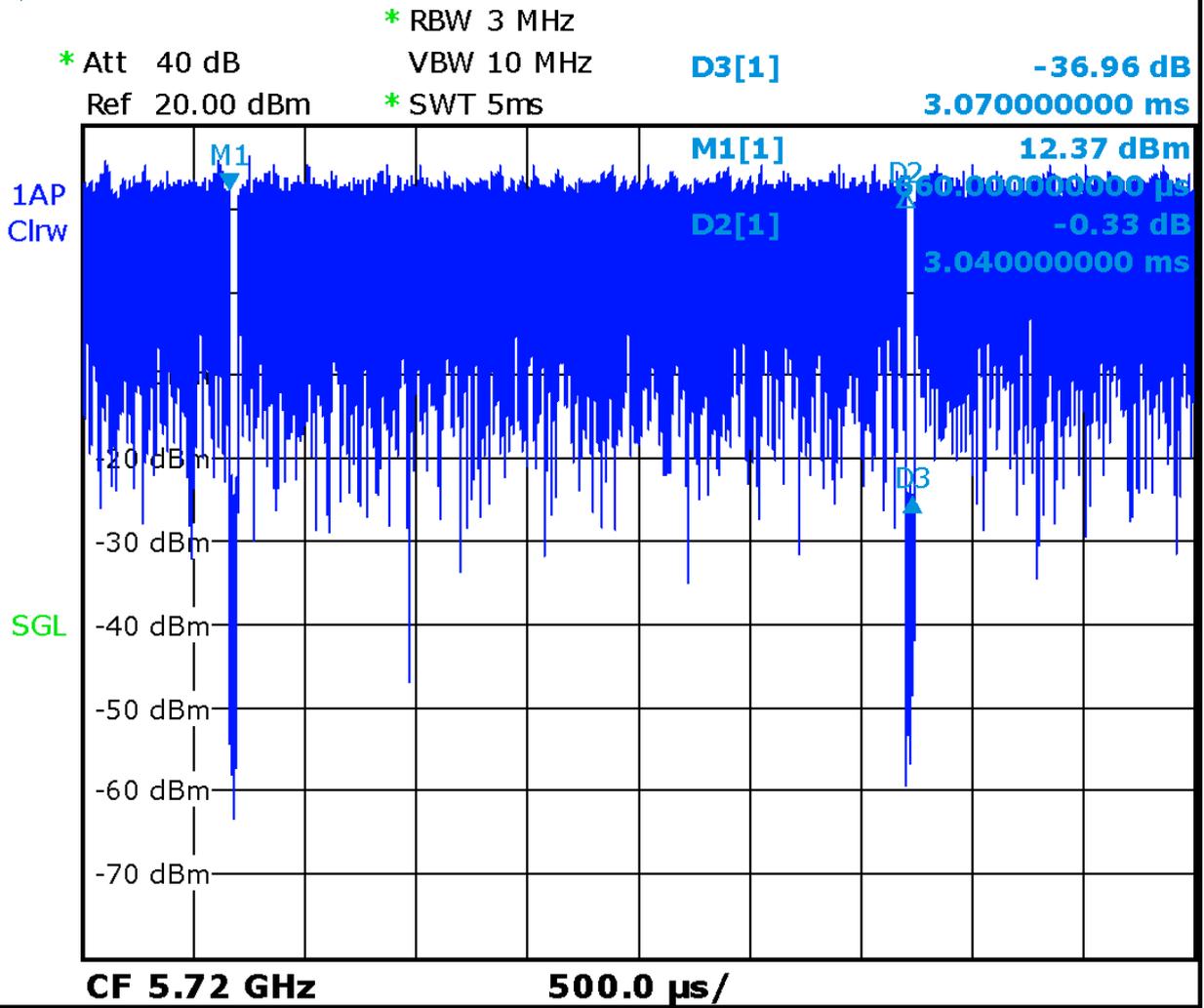
According to the KDB248227 D01, The reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit. The scaled reported SAR is presented as below.

Table 14.4-9: SAR Values (WLAN 5G - Head) (Scaled Reported SAR)

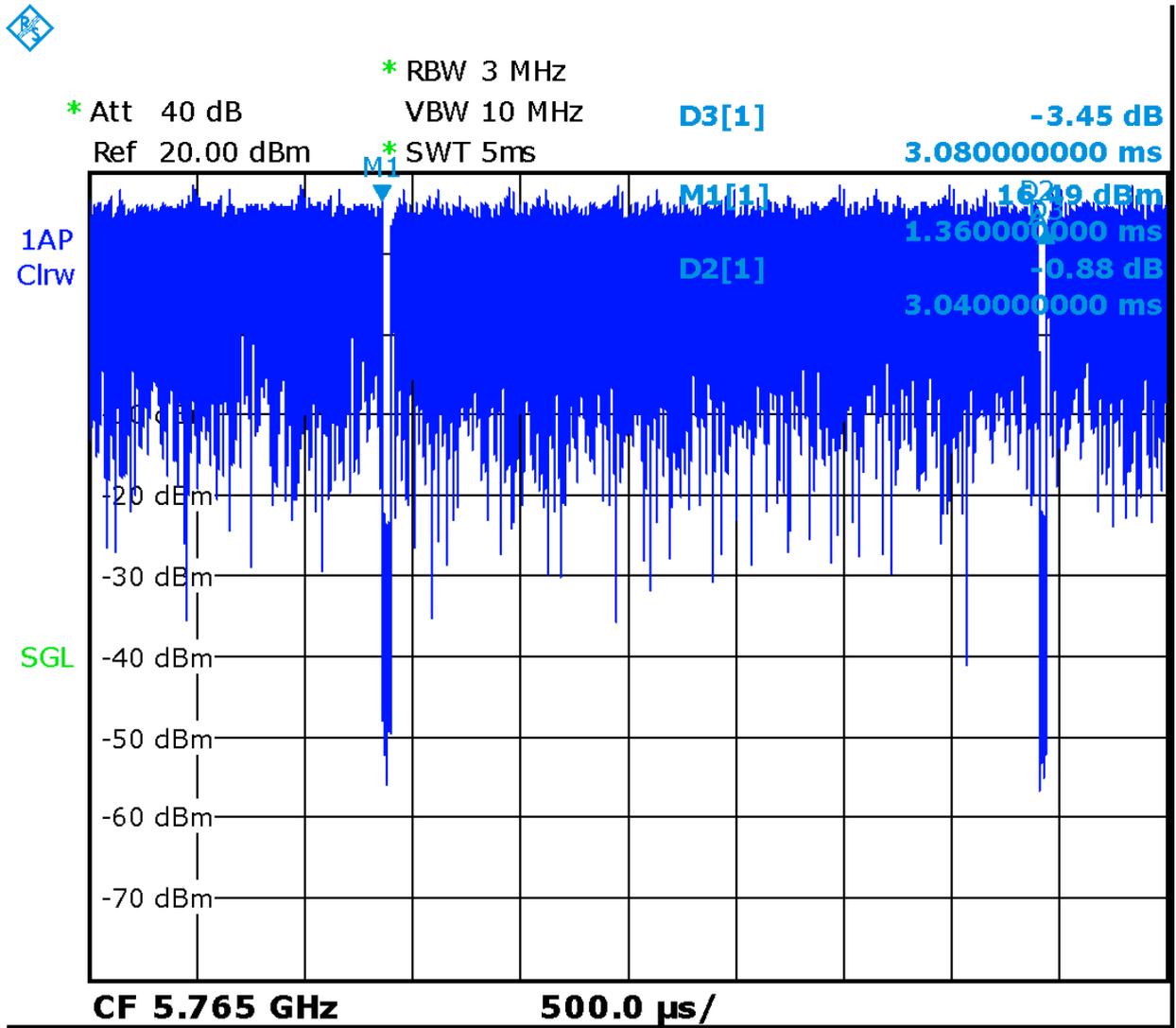
Frequency		Side	Test Position	Actual duty factor	maximum duty factor	Reported SAR (1g) (W/kg)	Scaled reported SAR (1g) (W/kg)
Ch.	MHz						
144	5720	Left	Touch	99.02%	100%	0.33	0.33

Table 14.4-10 SAR Values (WLAN 5G - Body) (Scaled Reported SAR)

Frequency		Test Position	Distance (mm)	Actual duty factor	maximum duty factor	Reported SAR (1g) (W/kg)	Scaled reported SAR (1g) (W/kg)
Ch.	MHz						
153	5765	Right	10	98.70%	100%	0.69	0.70



Picture 14.2 The plot of duty factor for Head



Picture 14.3 The plot of duty factor for Body

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 CDMA BC10 Band - Head(1g)

Frequency		Side	Test Position	Original SAR (W/kg)	First Repeated SAR (W/kg)	The Ratio	Second Repeated SAR (W/kg)
Ch.	MHz						
580	820.5	Right	Cheek	0.869	0.861	1.01	/

Table 15.2: SAR Measurement Variability for Body LTEB7 (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							
21350	2560	50RB_Mid	Bottom	10	1.02	0.987	1.03	/

Table 15.3: SAR Measurement Variability for Body LTEB41(PC3) (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							
40185	2549.5	1RB_Mid	Bottom	10	1.19	1.17	1.02	/

Table 15.4: SAR Measurement Variability for Body LTEB41(PC2) (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							
41490	2680	1RB_Low	Bottom	10	0.885	0.867	1.02	/

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 (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		$u_c = \sqrt{\sum_{i=1}^{21} c_i^2 u_i^2}$						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 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		$u_c = \sqrt{\sum_{i=1}^{22} c_i^2 u_i^2}$						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	N5239A	MY55491241	June 10, 2019	One year
02	Power meter	NRP2	106277	September 4, 2019	One year
03	Power sensor	NRP8S	104291		
04	Signal Generator	E4438C	MG3700A	June 18, 2019	One Year
05	Amplifier	60S1G4	0331848	No Calibration Requested	
06	BTS	CMW500	166370	June 27, 2019	One year
07	E-field Probe	SPEAG EX3DV4	3617	Jan 30, 2020	One year
08	DAE	SPEAG DAE4	1289	April 11,2019	One year
09	Dipole Validation Kit	SPEAG D750V3	1017	July 18,2019	One year
10	Dipole Validation Kit	SPEAG D835V2	4d069	July 18,2019	One year
11	Dipole Validation Kit	SPEAG D1750V2	1003	July 16,2019	One year
12	Dipole Validation Kit	SPEAG D1900V2	5d101	July 17,2019	One year
13	Dipole Validation Kit	SPEAG D2450V2	853	July 17,2019	One year
14	Dipole Validation Kit	SPEAG D2600V2	1012	July 17,2019	One year
15	Dipole Validation Kit	SPEAG D5GHzV2	1060	July 22, 2019	One year

END OF REPORT BODY

ANNEX A Graph Results

GSM850_CH128 Right Cheek

Date: 5/13/2020

Electronics: DAE4 Sn777

Medium: head 835 MHz

Medium parameters used: $f = 824.2\text{MHz}$; $\sigma = 0.874\text{ mho/m}$; $\epsilon_r = 41.46$; $\rho = 1000\text{ kg/m}^3$

Ambient Temperature: 22.5°C , Liquid Temperature: 22.3°C

Communication System: GSM850 824.2 Duty Cycle: 1:4

Probe: EX3DV4 – SN3617 ConvF(9.66,9.66,9.66)

Area Scan (71x121x1): Interpolated grid: $dx=1.000\text{ mm}$, $dy=1.000\text{ mm}$

Maximum value of SAR (interpolated) = 0.135 W/kg

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

Reference Value = 2.98 V/m ; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 0.167 W/kg

SAR(1 g) = 0.13 W/kg ; SAR(10 g) = 0.102 W/kg

Maximum value of SAR (measured) = 0.135W/kg

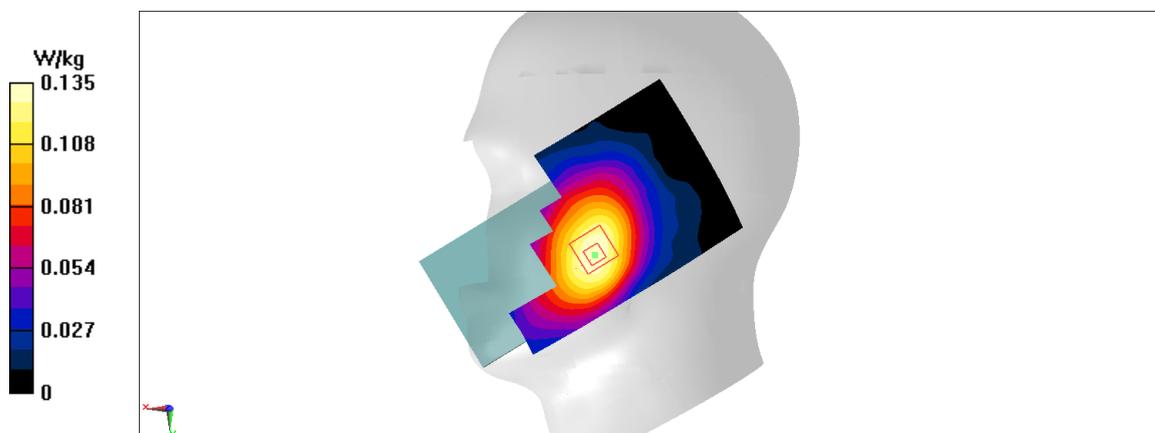


Fig .1

GSM850_CH128 Rear GPRS 10mm

Date: 5/13/2020

Electronics: DAE4 Sn777

Medium: body 835 MHz

Medium parameters used: $f = 824.2\text{MHz}$; $\sigma = 0.874\text{ mho/m}$; $\epsilon_r = 41.46$; $\rho = 1000\text{ kg/m}^3$

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: GSM850 824.2 Duty Cycle: 1:4

Probe: EX3DV4 – SN3617 ConvF(9.66,9.66,9.66)

Area Scan (71x121x1): Interpolated grid: $dx=1.000\text{ mm}$, $dy=1.000\text{ mm}$

Maximum value of SAR (interpolated) = 0.434 W/kg

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

Reference Value = 14.9 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.539 W/kg

SAR(1 g) = 0.307 W/kg; SAR(10 g) = 0.17 W/kg

Maximum value of SAR (measured) = 0.434 W/kg

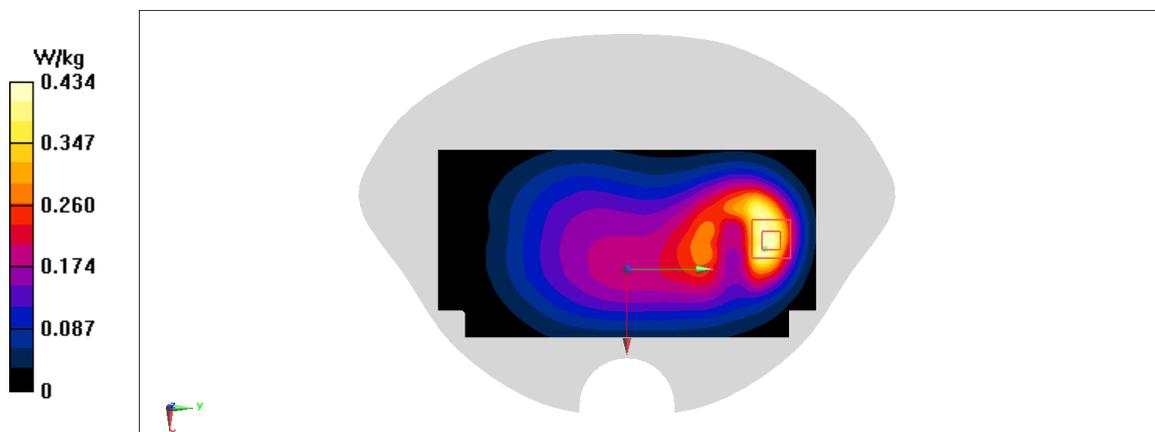


Fig .2

PCS1900_CH661 Right Cheek

Date: 5/15/2020

Electronics: DAE4 Sn777

Medium: head 1900 MHz

Medium parameters used: $f = 1880\text{MHz}$; $\sigma = 1.363\text{ mho/m}$; $\epsilon_r = 39.35$; $\rho = 1000\text{ kg/m}^3$ Ambient Temperature: 22.5°C , Liquid Temperature: 22.3°C

Communication System: PCS1900 1880 Duty Cycle: 1:2

Probe: EX3DV4 – SN3617 ConvF(8.14,8.14,8.14)

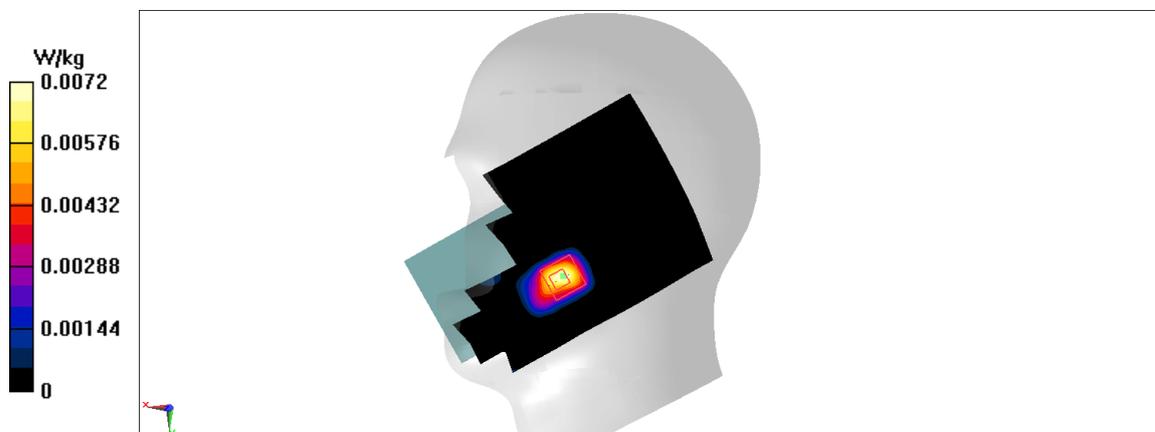
Area Scan (71x121x1): Interpolated grid: $dx=1.000\text{ mm}$, $dy=1.000\text{ mm}$ Maximum value of SAR (interpolated) = 0.0072 W/kg **Zoom Scan (7x7x7)/Cube 0:** Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$ Reference Value = 0 V/m ; Power Drift = 0 dB Peak SAR (extrapolated) = 0.015 W/kg **SAR(1 g) = 0.005 W/kg ; SAR(10 g) = 0.002 W/kg** Maximum value of SAR (measured) = 0.0072 W/kg 

Fig .3

PCS1900_CH810 Bottom Edge GPRS 10mm

Date: 5/15/2020

Electronics: DAE4 Sn777

Medium: body 1900 MHz

Medium parameters used: $f = 1909.8\text{MHz}$; $\sigma = 1.392\text{ mho/m}$; $\epsilon_r = 39.32$; $\rho = 1000\text{ kg/m}^3$

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: PCS1900 1909.8 Duty Cycle: 1:2.67

Probe: EX3DV4 – SN3617 ConvF(8.14,8.14,8.14)

Area Scan (71x121x1): Interpolated grid: $dx=1.000\text{ mm}$, $dy=1.000\text{ mm}$

Maximum value of SAR (interpolated) = 0.569 W/kg

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

Reference Value = 0 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.711 W/kg

SAR(1 g) = 0.393 W/kg; SAR(10 g) = 0.203 W/kg

Maximum value of SAR (measured) = 0.569 W/kg

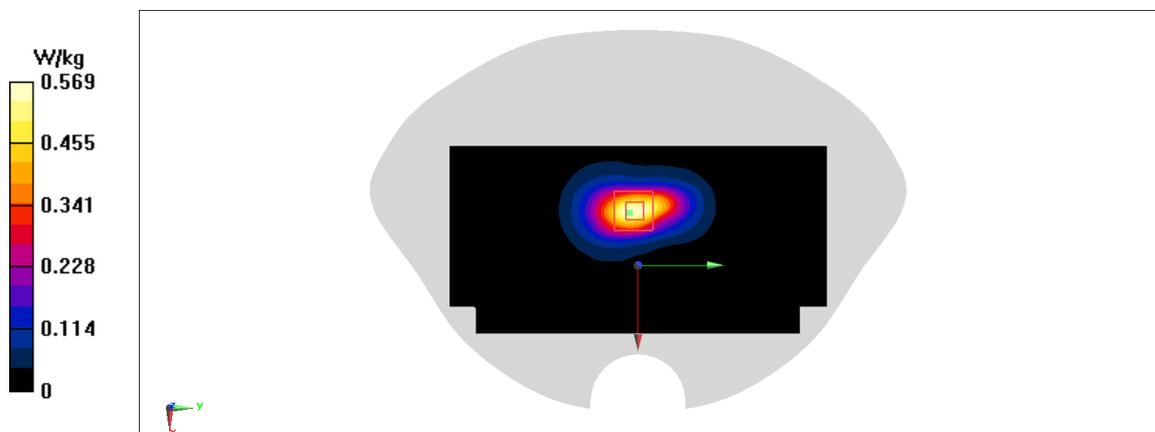


Fig .4

PCS1900_CH810 Rear GPRS 15mm

Date: 5/15/2020

Electronics: DAE4 Sn777

Medium: body 1900 MHz

Medium parameters used: $f = 1909.8$; $\sigma = 1.392$ mho/m; $\epsilon_r = 39.32$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: PCS1900 1909.8 Duty Cycle: 1:2

Probe: EX3DV4 – SN3617 ConvF(8.14,8.14,8.14)

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

Maximum value of SAR (interpolated) = 0.131 W/kg

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

Reference Value = 4.636 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.153 W/kg

SAR(1 g) = 0.091 W/kg; SAR(10 g) = 0.053 W/kg

Maximum value of SAR (measured) = 0.131 W/kg

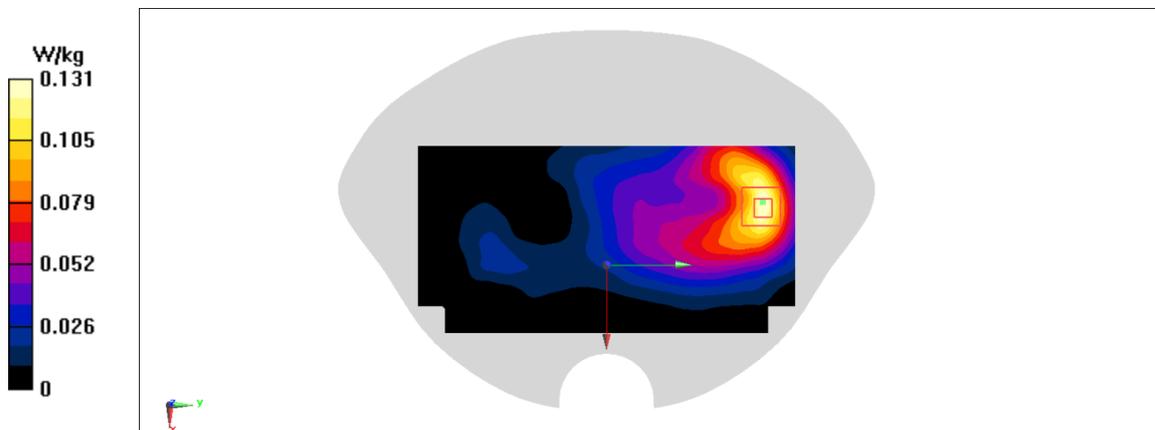


Fig .5

WCDMA1900-BII_CH9262 Right Tilt

Date: 5/15/2020

Electronics: DAE4 Sn777

Medium: head 1900 MHz

Medium parameters used: $f = 1852.4\text{MHz}$; $\sigma = 1.336\text{ mho/m}$; $\epsilon_r = 39.39$; $\rho = 1000\text{ kg/m}^3$

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: WCDMA1900-BII 1852.4 Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(8.14,8.14,8.14)

Area Scan (71x121x1): Interpolated grid: $dx=1.000\text{ mm}$, $dy=1.000\text{ mm}$

Maximum value of SAR (interpolated) = 0.139 W/kg

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

Reference Value = 5.517 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 0.151 W/kg

SAR(1 g) = 0.086 W/kg; SAR(10 g) = 0.047 W/kg

Maximum value of SAR (measured) = 0.0964 W/kg

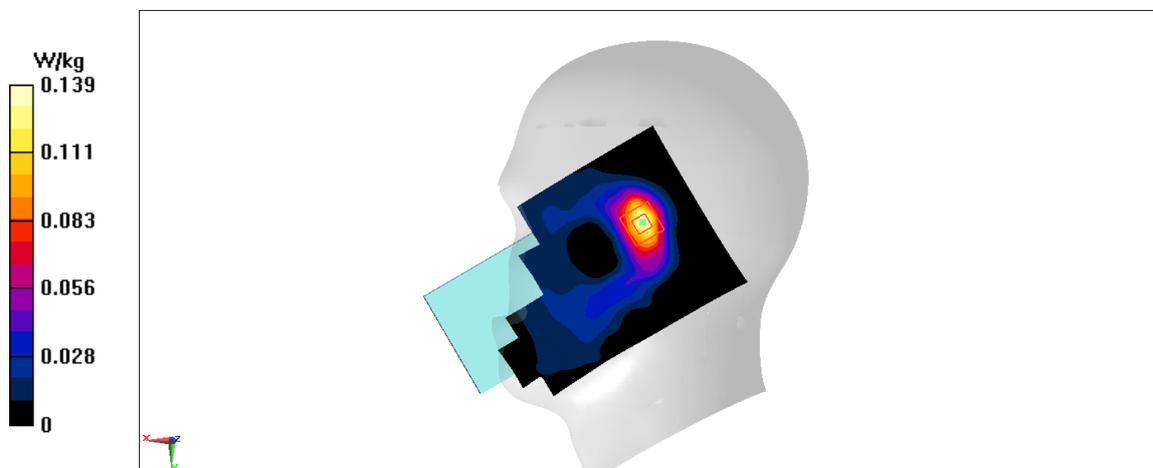


Fig .6

WCDMA1900-BII_CH9538 Bottom Edge 10mm

Date: 5/15/2020

Electronics: DAE4 Sn777

Medium: body 1900 MHz

Medium parameters used: $f = 1907.6\text{MHz}$; $\sigma = 1.39\text{ mho/m}$; $\epsilon_r = 39.32$; $\rho = 1000\text{ kg/m}^3$

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: WCDMA1900-BII 1907.6 Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(8.14,8.14,8.14)

Area Scan (71x121x1): Interpolated grid: $dx=1.000\text{ mm}$, $dy=1.000\text{ mm}$

Maximum value of SAR (interpolated) = 1.12 W/kg

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

Reference Value = 20.45 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 1.36 W/kg

SAR(1 g) = 0.769 W/kg; SAR(10 g) = 0.403 W/kg

Maximum value of SAR (measured) = 0.862 W/kg

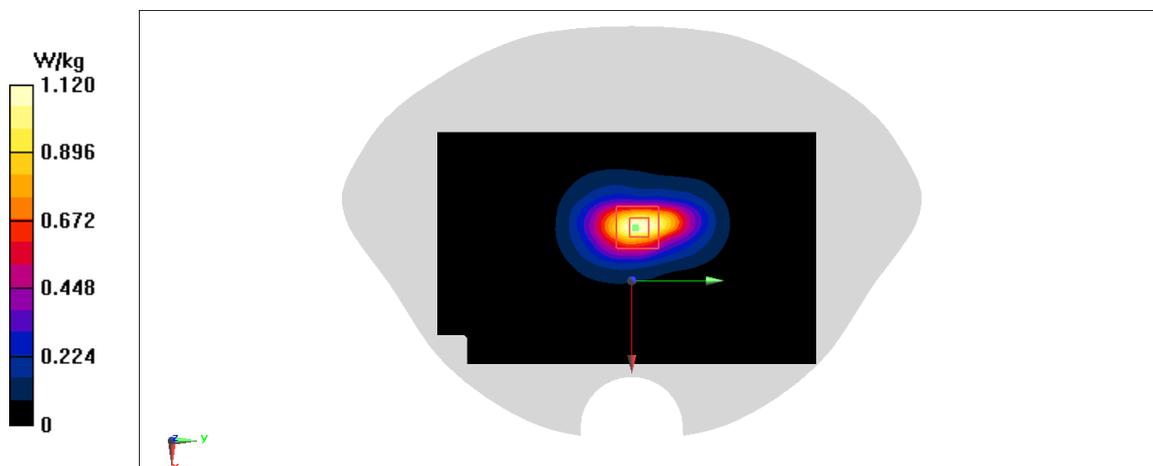


Fig.7

WCDMA1900-BII_CH9538 Rear 15mm

Date: 5/15/2020

Electronics: DAE4 Sn777

Medium: body 1900 MHz

Medium parameters used: $f = 1907.6$; $\sigma = 1.39\text{mho/m}$; $\epsilon_r = 39.32$; $\rho = 1000\text{ kg/m}^3$

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: WCDMA1900-BII 1907.6 Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(8.14,8.14,8.14)

Area Scan (71x121x1): Interpolated grid: $dx=1.000\text{ mm}$, $dy=1.000\text{ mm}$

Maximum value of SAR (interpolated) = 0.333 W/kg

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

Reference Value = 8.799 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.365 W/kg

SAR(1 g) = 0.215 W/kg; SAR(10 g) = 0.125 W/kg

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

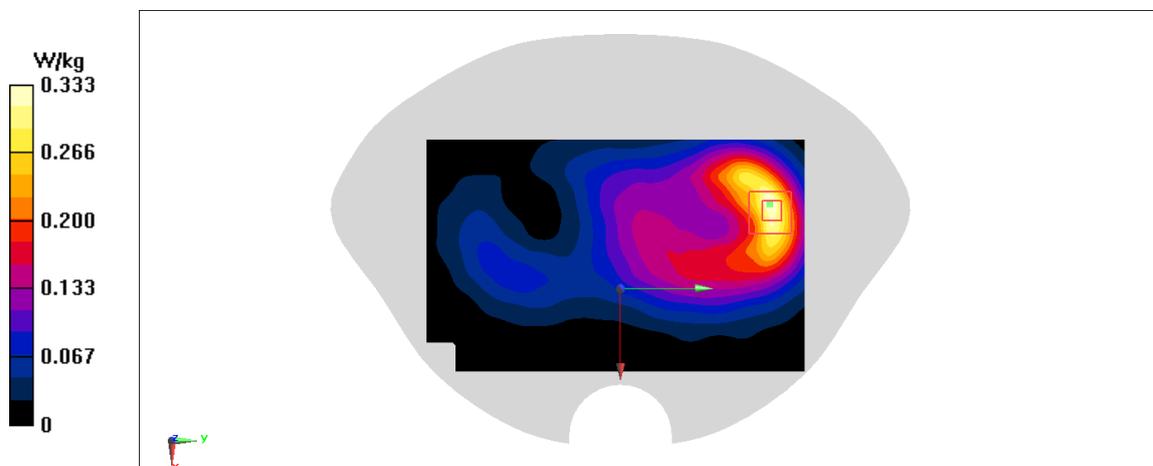


Fig .8

WCDMA1700 _CH1312 Right Cheek

Date: 5/14/2020

Electronics: DAE4 Sn777

Medium: head 1750 MHz

Medium parameters used: $f = 1712.4\text{MHz}$; $\sigma = 1.338\text{ mho/m}$; $\epsilon_r = 39.49$; $\rho = 1000\text{ kg/m}^3$

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: WCDMA1700-BIV 1712.4 Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(8.41,8.41,8.41)

Area Scan (71x121x1): Interpolated grid: $dx=1.000\text{ mm}$, $dy=1.000\text{ mm}$

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

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

Reference Value = 5.482 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.249 W/kg

SAR(1 g) = 0.167 W/kg; SAR(10 g) = 0.104 W/kg

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

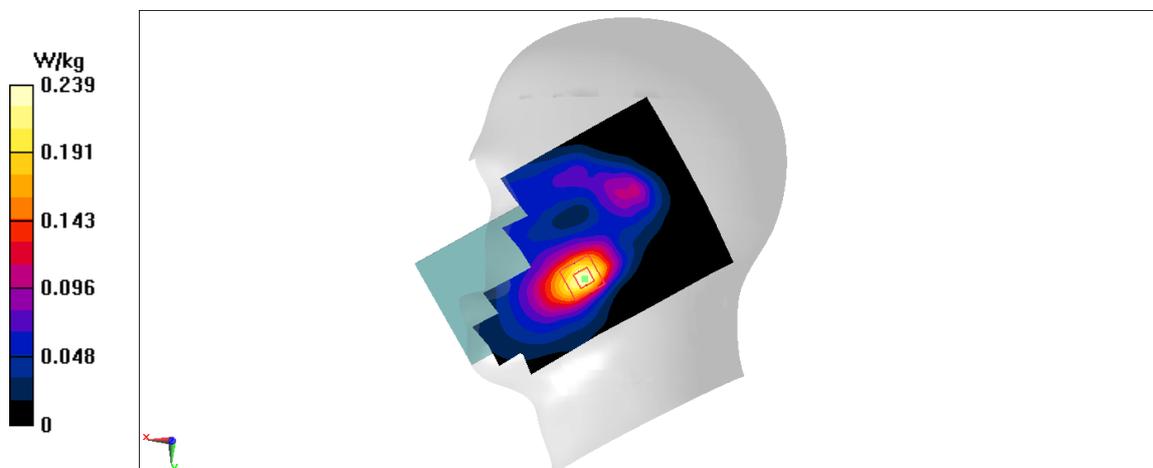


Fig .9

WCDMA1700 _CH1513 Bottom Edge 10mm

Date: 5/14/2020

Electronics: DAE4 Sn777

Medium: body 1750 MHz

Medium parameters used: $f = 1752.6\text{MHz}$; $\sigma = 1.377\text{ mho/m}$; $\epsilon_r = 39.44$; $\rho = 1000\text{ kg/m}^3$

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: WCDMA1700-BIV 1752.6 Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(8.41,8.41,8.41)

Area Scan (71x121x1): Interpolated grid: $dx=1.000\text{ mm}$, $dy=1.000\text{ mm}$

Maximum value of SAR (interpolated) = 0.596 W/kg

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

Reference Value = 16.08 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.753 W/kg

SAR(1 g) = 0.427 W/kg; SAR(10 g) = 0.225 W/kg

Maximum value of SAR (measured) = 0.473 W/kg

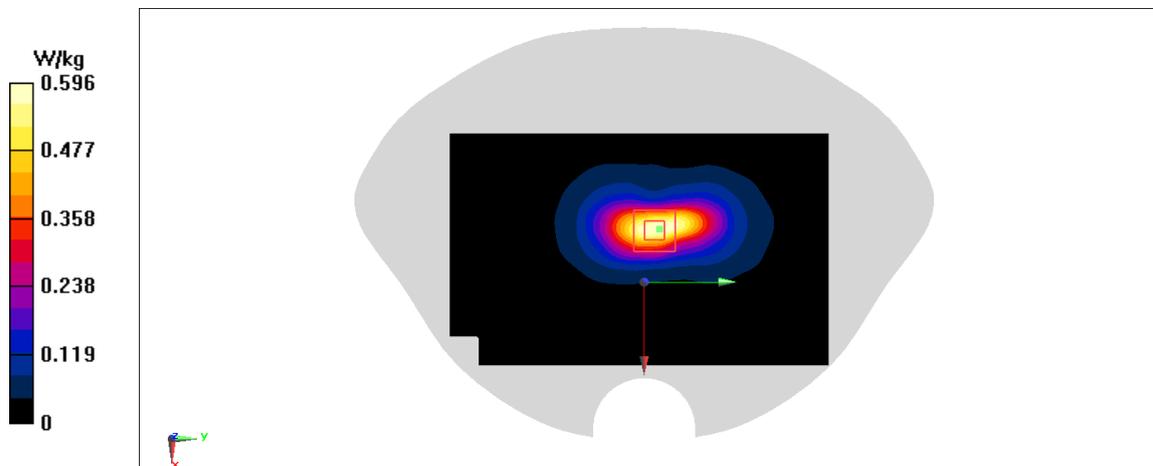


Fig .10

WCDMA1700_CH1412 Rear 15mm

Date: 5/14/2020

Electronics: DAE4 Sn777

Medium: body 1750 MHz

Medium parameters used: $f = 1732.5$; $\sigma = 1.358$ mho/m; $\epsilon_r = 39.46$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: WCDMA1700-BIV 1732.5 Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(8.41,8.41,8.41)

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

Maximum value of SAR (interpolated) = 0.292 W/kg

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

Reference Value = 8.24 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.333 W/kg

SAR(1 g) = 0.199 W/kg; SAR(10 g) = 0.114 W/kg

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

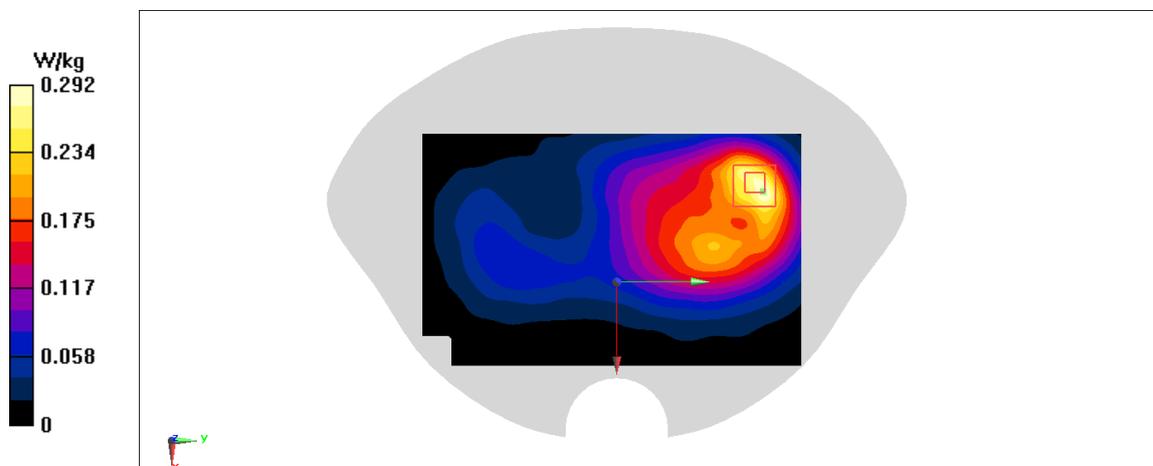


Fig .11

WCDMA850 _CH4132 Right Tilt

Date: 5/13/2020

Electronics: DAE4 Sn777

Medium: head 835 MHz

Medium parameters used: $f = 826.4\text{MHz}$; $\sigma = 0.875\text{ mho/m}$; $\epsilon_r = 41.46$; $\rho = 1000\text{ kg/m}^3$

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: WCDMA850-BV 826.4 Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(9.66,9.66,9.66)

Area Scan (71x121x1): Interpolated grid: $dx=1.000\text{ mm}$, $dy=1.000\text{ mm}$

Maximum value of SAR (interpolated) = 0.471 W/kg

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

Reference Value = 23.08 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.915 W/kg

SAR(1 g) = 0.429 W/kg; SAR(10 g) = 0.236 W/kg

Maximum value of SAR (measured) = 0.471 W/kg

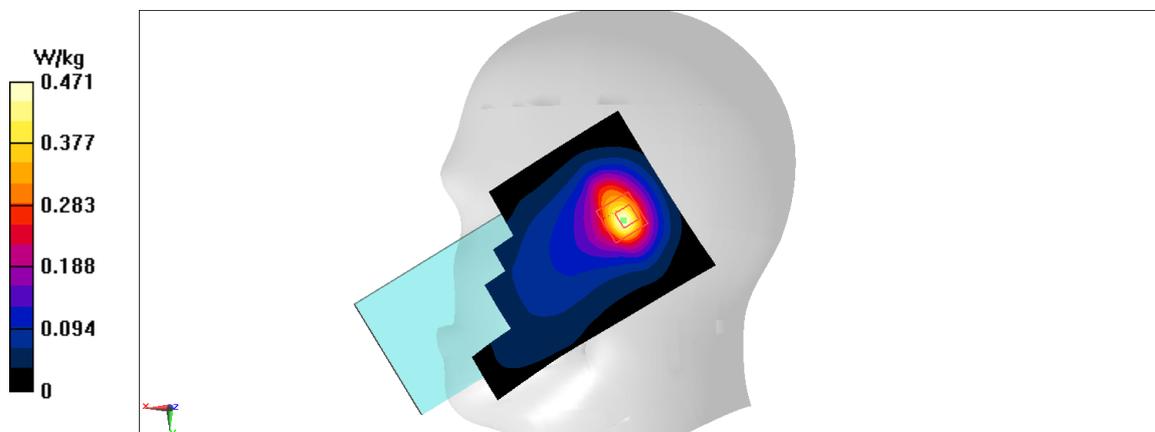


Fig .12

WCDMA850-BV_CH4132 Rear 10mm

Date: 5/13/2020

Electronics: DAE4 Sn777

Medium: body 835 MHz

Medium parameters used: $f = 826.4\text{MHz}$; $\sigma = 0.875\text{ mho/m}$; $\epsilon_r = 41.46$; $\rho = 1000\text{ kg/m}^3$

Ambient Temperature: 22.5°C , Liquid Temperature: 22.3°C

Communication System: WCDMA850-BV 826.4 Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(9.66,9.66,9.66)

Area Scan (71x121x1): Interpolated grid: $dx=1.000\text{ mm}$, $dy=1.000\text{ mm}$

Maximum value of SAR (interpolated) = 0.253 W/kg

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

Reference Value = 16.22 V/m ; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.275 W/kg

SAR(1 g) = 0.184 W/kg ; SAR(10 g) = 0.119 W/kg

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

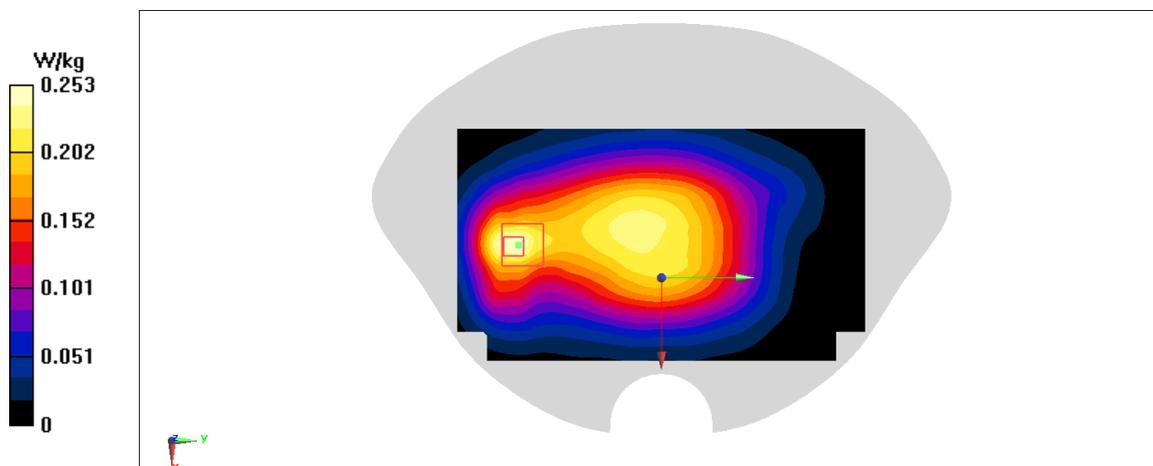


Fig.13

CDMA800-BC0_CH384 Left Cheek

Date: 5/13/2020

Electronics: DAE4 Sn777

Medium: head 835 MHz

Medium parameters used: $f = 836.52\text{MHz}$; $\sigma = 0.886\text{ mho/m}$; $\epsilon_r = 41.45$; $\rho = 1000\text{ kg/m}^3$

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: CDMA800-BC0 836.52 Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(9.66,9.66,9.66)

Area Scan (71x121x1): Interpolated grid: $dx=1.000\text{ mm}$, $dy=1.000\text{ mm}$

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

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

Reference Value = 32.02 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.12 W/kg

SAR(1 g) = 0.685 W/kg; SAR(10 g) = 0.466 W/kg

Maximum value of SAR (measured) = 1.010 W/kg

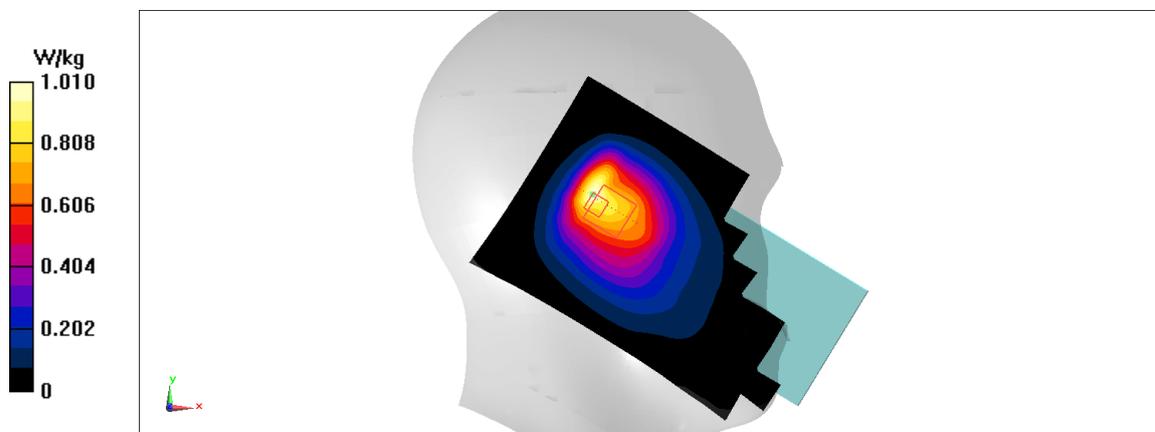


Fig .14

CDMA800-BC0_CH1013 Front 10mm

Date: 5/13/2020

Electronics: DAE4 Sn777

Medium: body 835 MHz

Medium parameters used: $f = 824.7\text{MHz}$; $\sigma = 0.874\text{ mho/m}$; $\epsilon_r = 41.46$; $\rho = 1000\text{ kg/m}^3$

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: CDMA800-BC0 824.7 Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(9.66,9.66,9.66)

Area Scan (71x121x1): Interpolated grid: $dx=1.000\text{ mm}$, $dy=1.000\text{ mm}$

Maximum value of SAR (interpolated) = 0.314 W/kg

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

Reference Value = 18.44 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.349 W/kg

SAR(1 g) = 0.258 W/kg; SAR(10 g) = 0.198 W/kg

Maximum value of SAR (measured) = 0.314W/kg

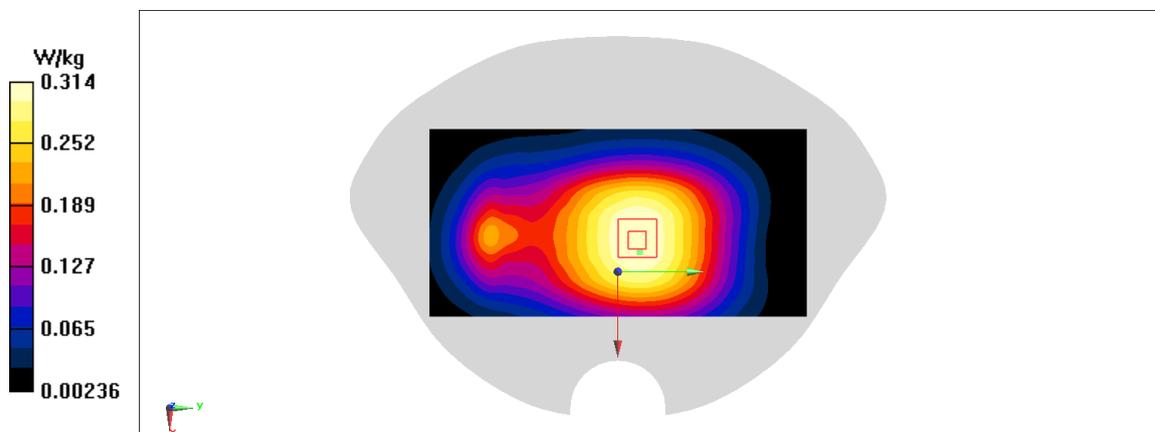


Fig .15

CDMA1900 _CH1175 Right Cheek

Date: 5/15/2020

Electronics: DAE4 Sn777

Medium: head 1900 MHz

Medium parameters used: $f = 1908.75\text{MHz}$; $\sigma = 1.391 \text{ mho/m}$; $\epsilon_r = 39.32$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: CDMA1900-BC1 1908.75 Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(8.14,8.14,8.14)

Area Scan (71x121x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.0722 W/kg

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

Reference Value = 2.022 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 0.08 W/kg

SAR(1 g) = 0.05 W/kg; SAR(10 g) = 0.032 W/kg

Maximum value of SAR (measured) = 0.072 W/kg

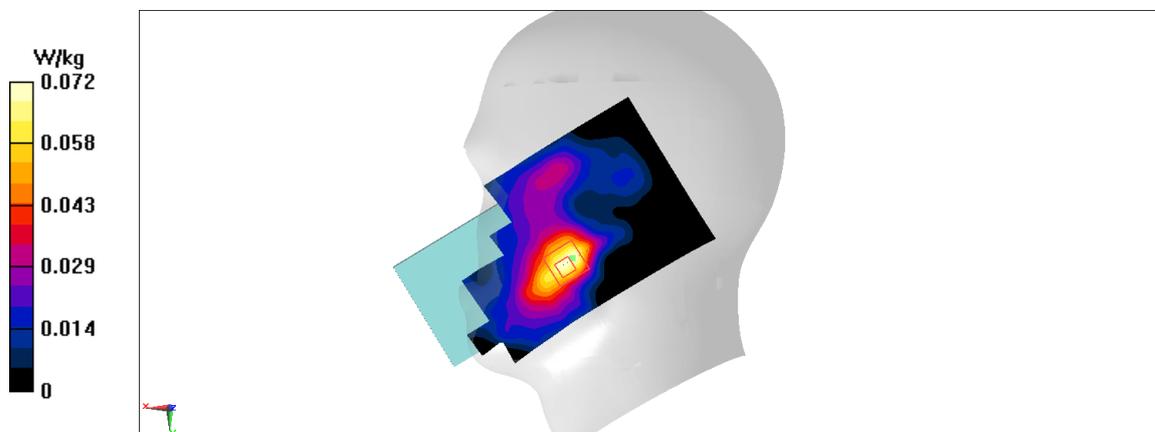


Fig .16

CDMA1900-BC1_CH1175 Bottom Edge 10mm

Date: 5/15/2020

Electronics: DAE4 Sn777

Medium: body 1900 MHz

Medium parameters used: $f = 1908.75\text{MHz}$; $\sigma = 1.391 \text{ mho/m}$; $\epsilon_r = 39.32$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: CDMA1900-BC1 1908.75 Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(8.14,8.14,8.14)

Area Scan (71x121x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.869 W/kg

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

Reference Value = 24.14 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 1.06 W/kg

SAR(1 g) = 0.582 W/kg; SAR(10 g) = 0.304 W/kg

Maximum value of SAR (measured) = 0.894 W/kg

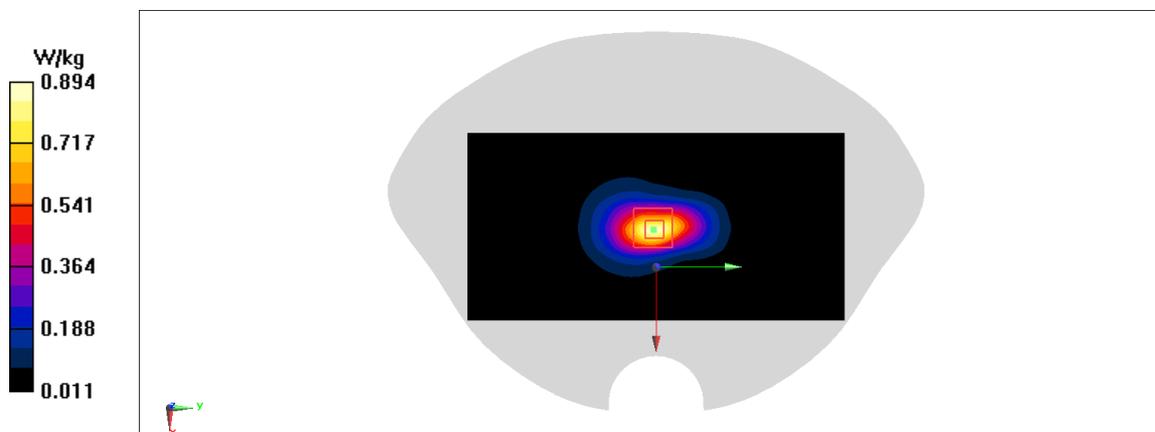


Fig.17

CDMA1900-BC1_CH1175 Rear 15mm

Date: 5/15/2020

Electronics: DAE4 Sn777

Medium: body 1900 MHz

Medium parameters used: $f = 1908.75$; $\sigma = 1.391$ mho/m; $\epsilon_r = 39.32$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: CDMA1900-BC1 1908.75 Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(8.14,8.14,8.14)

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

Maximum value of SAR (interpolated) = 0.512 W/kg

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

Reference Value = 10.23 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 0.598 W/kg

SAR(1 g) = 0.355 W/kg; SAR(10 g) = 0.207 W/kg

Maximum value of SAR (measured) = 0.512 W/kg

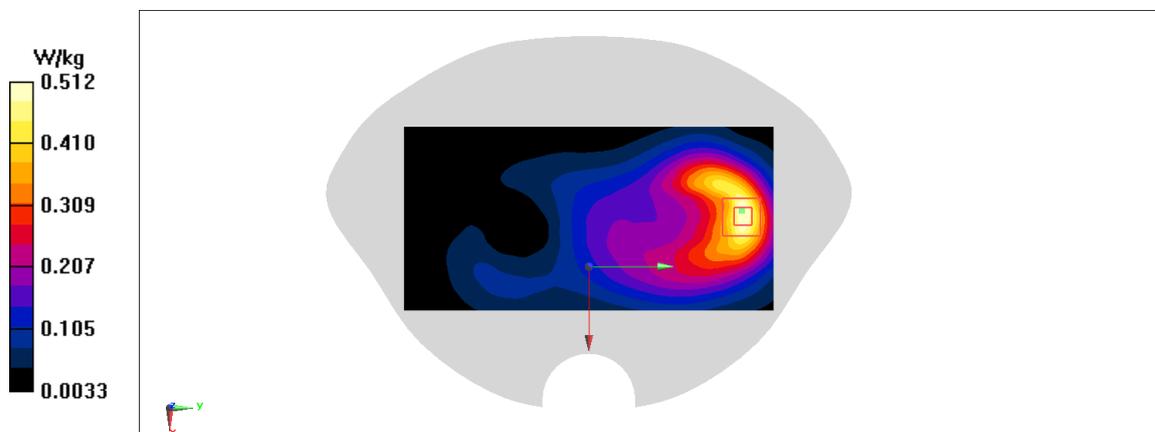


Fig .18

CDMA800-BC10_CH580 Right Cheek

Date: 5/13/2020

Electronics: DAE4 Sn777

Medium: head 835 MHz

Medium parameters used: $f = 820.5\text{MHz}$; $\sigma = 0.87\text{ mho/m}$; $\epsilon_r = 41.47$; $\rho = 1000\text{ kg/m}^3$

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: CDMA800-BC10 820.5 Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(9.66,9.66,9.66)

Area Scan (71x121x1): Interpolated grid: $dx=1.000\text{ mm}$, $dy=1.000\text{ mm}$

Maximum value of SAR (interpolated) = 1.1 W/kg

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

Reference Value = 27.97 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 1.63 W/kg

SAR(1 g) = 0.869 W/kg; SAR(10 g) = 0.548 W/kg

Maximum value of SAR (measured) = 1.33 W/kg

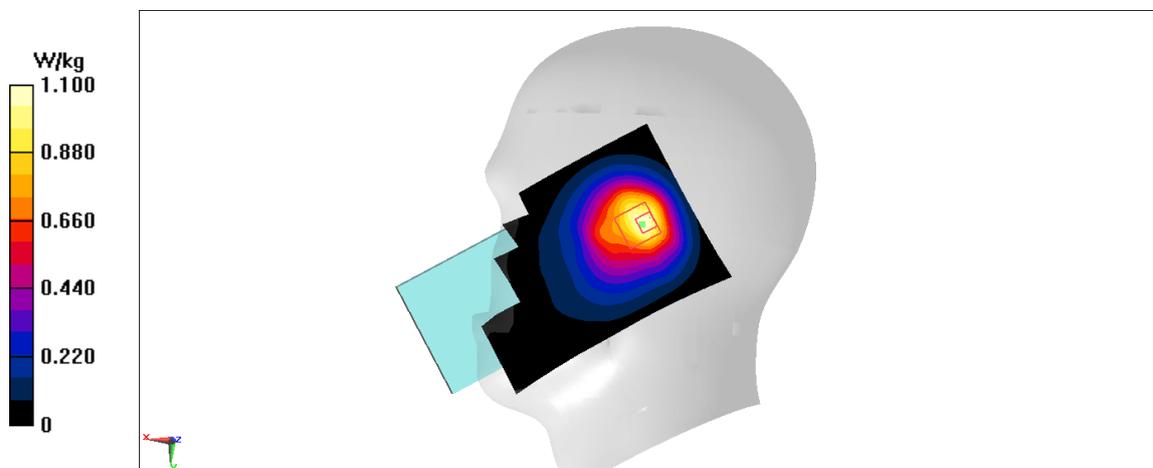


Fig .19

CDMA800-BC10_CH684 Front 10mm

Date: 5/13/2020

Electronics: DAE4 Sn777

Medium: body 835 MHz

Medium parameters used: $f = 823.1\text{MHz}$; $\sigma = 0.873\text{ mho/m}$; $\epsilon_r = 41.46$; $\rho = 1000\text{ kg/m}^3$

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: CDMA800-BC10 823.1 Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(9.66,9.66,9.66)

Area Scan (71x121x1): Interpolated grid: $dx=1.000\text{ mm}$, $dy=1.000\text{ mm}$

Maximum value of SAR (interpolated) = 0.27 W/kg

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

Reference Value = 15.45 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.298 W/kg

SAR(1 g) = 0.222 W/kg; SAR(10 g) = 0.17 W/kg

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

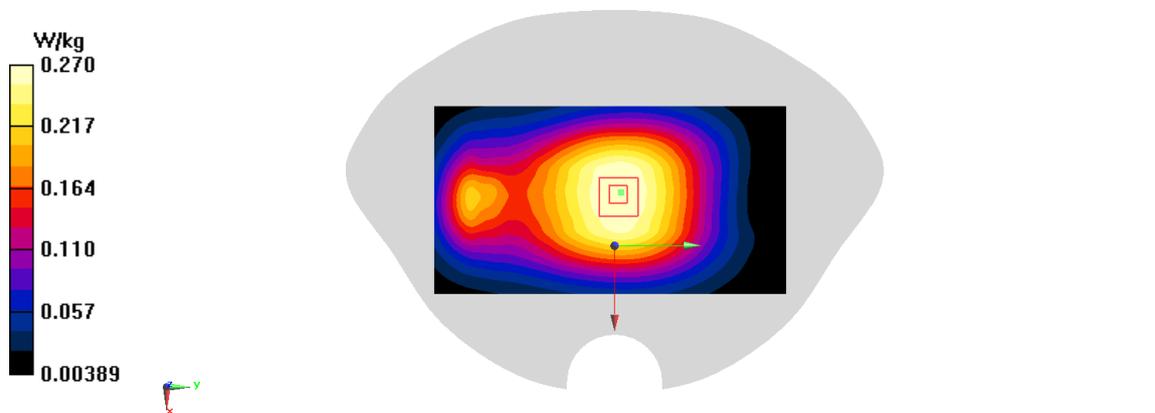


Fig .20

LTE2500-FDD7_CH21350 Left Cheek1RB-Middle

Date: 5/18/2020

Electronics: DAE4 Sn777

Medium: head 2600 MHz

Medium parameters used: $f = 2560$ MHz; $\sigma = 1.918$ mho/m; $\epsilon_r = 38.51$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE2500-FDD7 2560 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(7.52,7.52,7.52)

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

Maximum value of SAR (interpolated) = 0.0914 W/kg

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

Reference Value = 1.196 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.114 W/kg

SAR(1 g) = 0.063 W/kg; SAR(10 g) = 0.036 W/kg

Maximum value of SAR (measured) = 0.091 W/kg

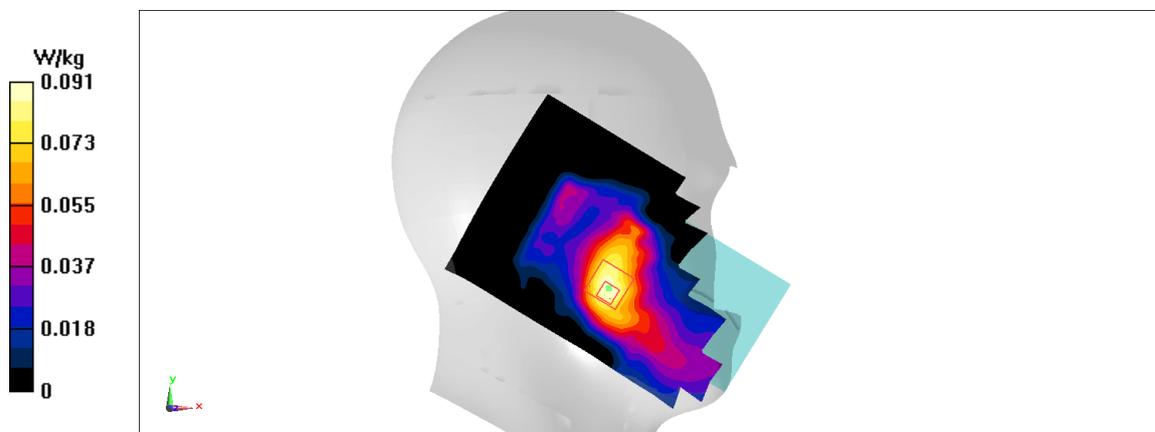


Fig .21

LTEFDD7_CH21350 Bottom Edge 10mm

Date: 5/18/2020

Electronics: DAE4 Sn777

Medium: body 2600 MHz

Medium parameters used: $f = 2560$ MHz; $\sigma = 1.918$ mho/m; $\epsilon_r = 38.51$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE2500-FDD7 2560 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(7.52,7.52,7.52)

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

Maximum value of SAR (interpolated) = 1.95 W/kg

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

Reference Value = 29.8 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 2.18 W/kg

SAR(1 g) = 1.02 W/kg; SAR(10 g) = 0.468 W/kg

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

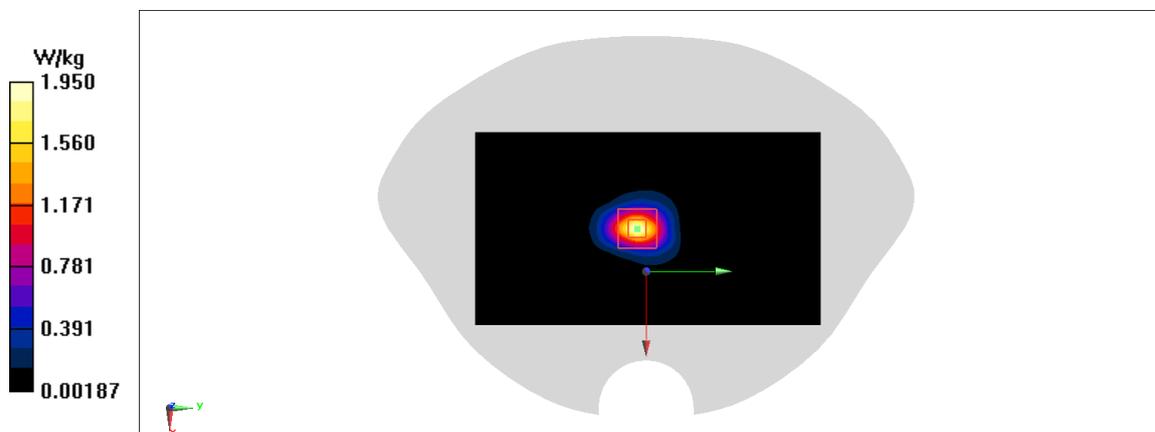


Fig .22

LTE-FDD7_CH21350 1RB-Middle Rear 15mm

Date: 5/18/2020

Electronics: DAE4 Sn777

Medium: body 2600 MHz

Medium parameters used: $f = 2560$ MHz; $\sigma = 1.918$ mho/m; $\epsilon_r = 38.51$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE2500-FDD7 2560 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(7.52,7.52,7.52)

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

Maximum value of SAR (interpolated) = 0.537 W/kg

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

Reference Value = 4.269 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 0.658 W/kg

SAR(1 g) = 0.334 W/kg; SAR(10 g) = 0.164 W/kg

Maximum value of SAR (measured) = 0.537 W/kg

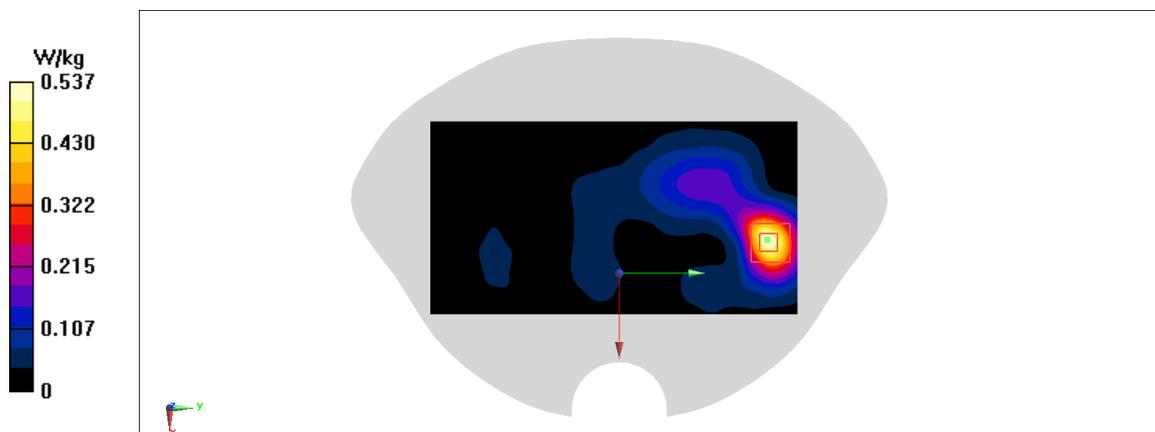


Fig .23

LTE700-FDD12_CH23060 Left Cheek

Date: 5/12/2020

Electronics: DAE4 Sn777

Medium: head 750 MHz

Medium parameters used: $f = 704 \text{ MHz}$; $\sigma = 0.853 \text{ mho/m}$; $\epsilon_r = 42.13$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE700-FDD12 704 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(10.07,10.07,10.07)

Area Scan (71x121x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

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

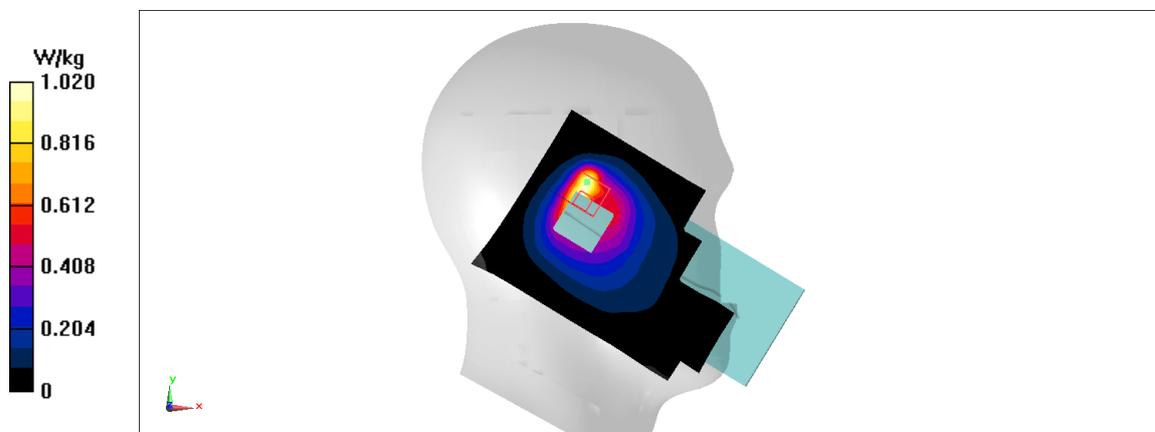
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 29.74 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.847 W/kg

SAR(1 g) = 0.472 W/kg; SAR(10 g) = 0.288 W/kg

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

**Fig .24**

LTE700-FDD12_CH23060 1RB-Low Right Edge 10mm

Date: 5/12/2020

Electronics: DAE4 Sn777

Medium: body 750 MHz

Medium parameters used: $f = 704 \text{ MHz}$; $\sigma = 0.853 \text{ mho/m}$; $\epsilon_r = 42.13$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.5°C , Liquid Temperature: 22.3°C

Communication System: LTE700-FDD12 704 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(10.07,10.07,10.07)

Area Scan (71x121x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.177 W/kg

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

Reference Value = 14.47 V/m ; Power Drift = 0 dB

Peak SAR (extrapolated) = 0.181 W/kg

SAR(1 g) = 0.13 W/kg ; SAR(10 g) = 0.091 W/kg

Maximum value of SAR (measured) = 0.177W/kg

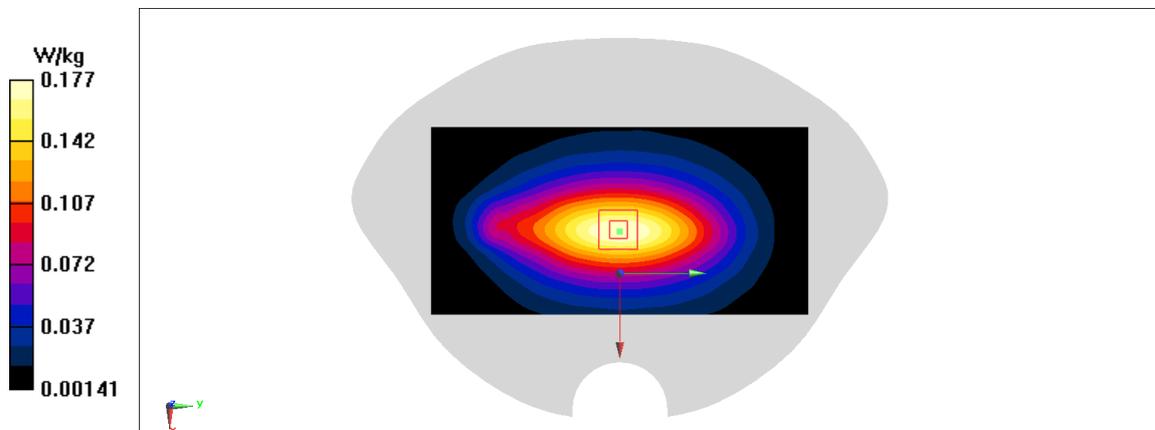


Fig .25

LTE750-FDD13_CH23230 Right Cheek1RB-High

Date: 5/12/2020

Electronics: DAE4 Sn777

Medium: head 750 MHz

Medium parameters used: $f = 782$ MHz; $\sigma = 0.927$ mho/m; $\epsilon_r = 42.03$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE750-FDD13 782 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(10.07,10.07,10.07)

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

Maximum value of SAR (interpolated) = 0.134 W/kg

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

Reference Value = 2.531 V/m; Power Drift = 0.19 dB

Peak SAR (extrapolated) = 0.138 W/kg

SAR(1 g) = 0.111 W/kg; SAR(10 g) = 0.086 W/kg

Maximum value of SAR (measured) = 0.134 W/kg

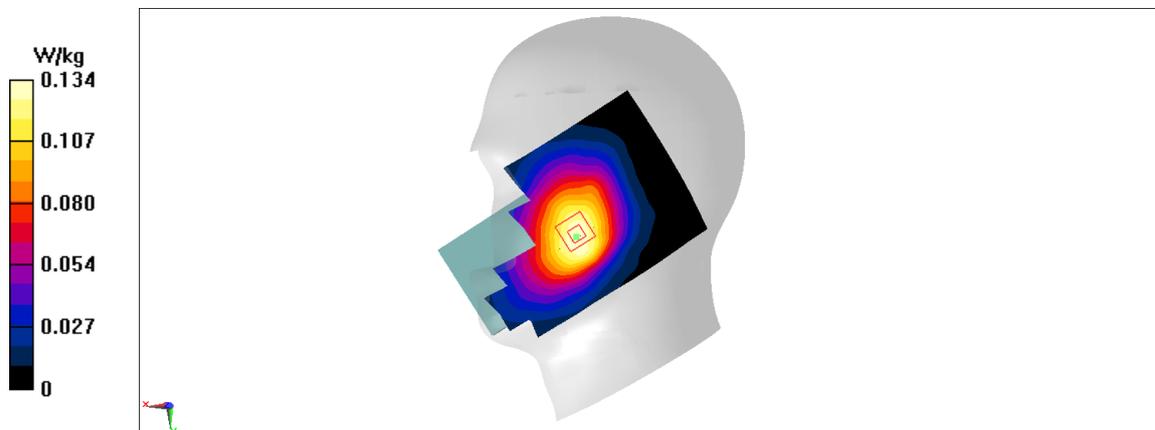


Fig .26

LTE750-FDD13_CH23230 1RB-High Rear 10mm

Date: 5/12/2020

Electronics: DAE4 Sn777

Medium: body 750 MHz

Medium parameters used: $f = 782 \text{ MHz}$; $\sigma = 0.927 \text{ mho/m}$; $\epsilon_r = 42.03$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE750-FDD13 782 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(10.07,10.07,10.07)

Area Scan (71x121x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.422 W/kg

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

Reference Value = 16.35 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.469 W/kg

SAR(1 g) = 0.258 W/kg; SAR(10 g) = 0.143 W/kg

Maximum value of SAR (measured) = 0.422W/kg

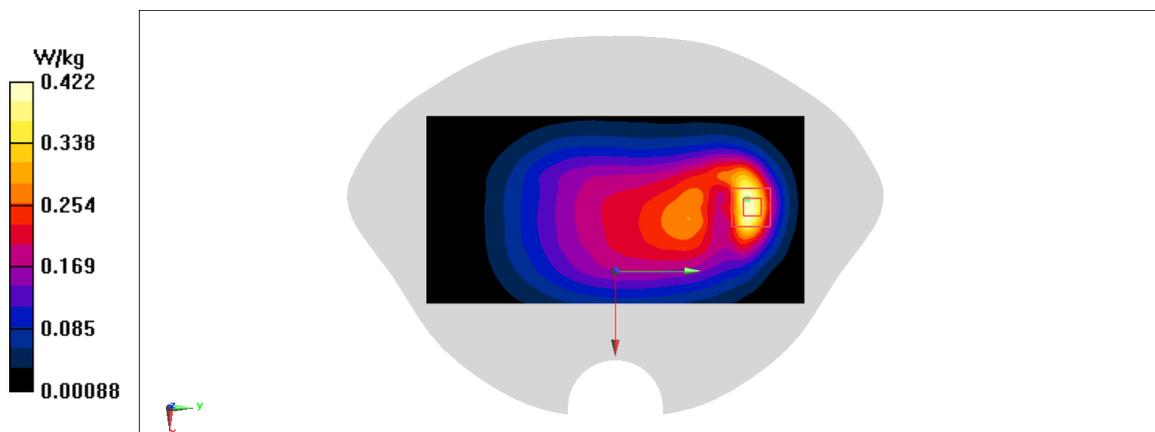


Fig .27

LTE1900-FDD25_CH26365 Right Tilt 1RB-High

Date: 5/15/2020

Electronics: DAE4 Sn777

Medium: head 1900 MHz

Medium parameters used: $f = 1882.5$ MHz; $\sigma = 1.365$ mho/m; $\epsilon_r = 39.35$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE1900-FDD25 1882.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(8.14,8.14,8.14)

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

Maximum value of SAR (interpolated) = 0.129 W/kg

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

Reference Value = 5.811 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 0.138 W/kg

SAR(1 g) = 0.076 W/kg; SAR(10 g) = 0.041 W/kg

Maximum value of SAR (measured) = 0.0855 W/kg

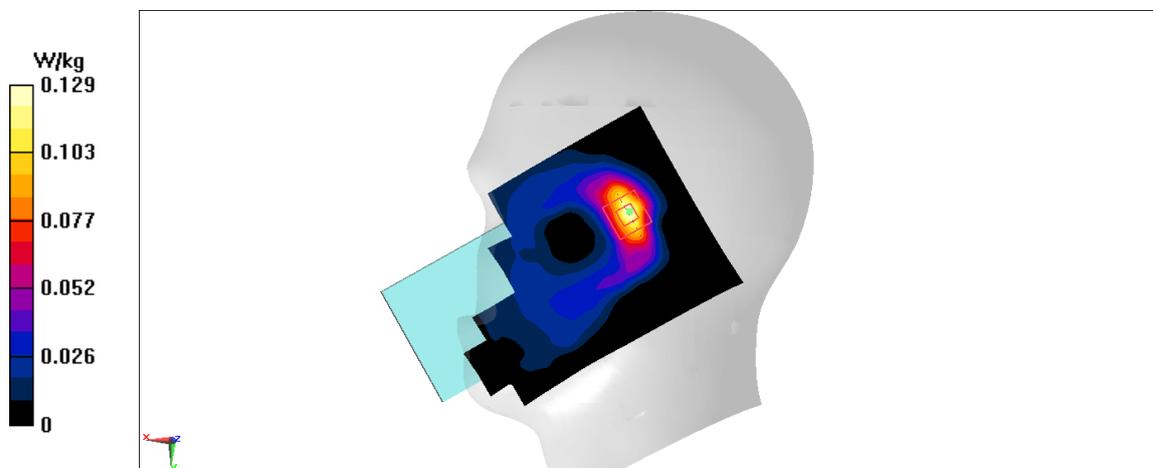


Fig .28

LTE1900-FDD25_CH26365 50RB-Middle Bottom Edge 10mm

Date: 5/15/2020

Electronics: DAE4 Sn777

Medium: body 1900 MHz

Medium parameters used: $f = 1882.5$ MHz; $\sigma = 1.365$ mho/m; $\epsilon_r = 39.35$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE1900-FDD25 1882.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(8.14,8.14,8.14)

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

Maximum value of SAR (interpolated) = 0.766 W/kg

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

Reference Value = 14.01 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 0.945 W/kg

SAR(1 g) = 0.526 W/kg; SAR(10 g) = 0.273 W/kg

Maximum value of SAR (measured) = 0.588 W/kg

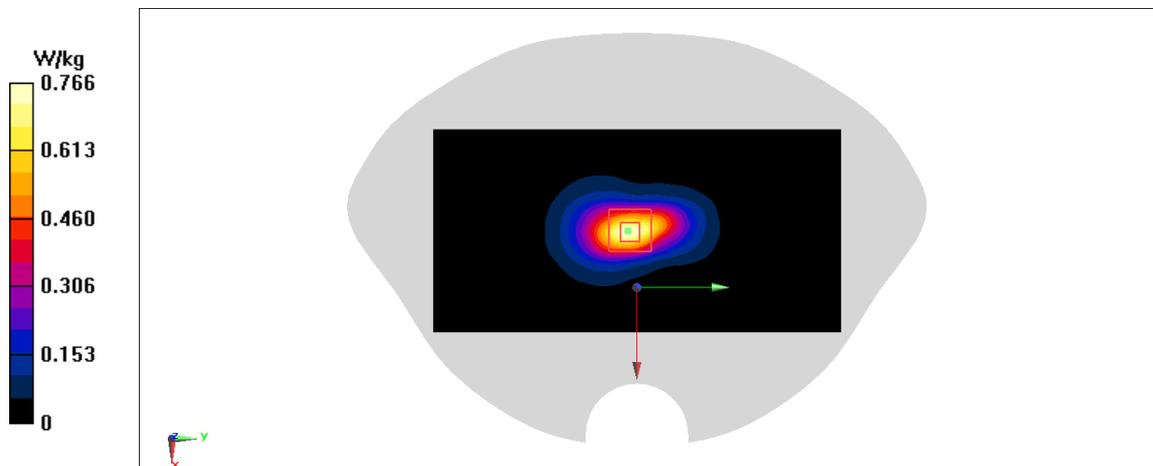


Fig .29

LTE1900-FDD25_CH26365 1RB-High Rear 15mm

Date: 5/15/2020

Electronics: DAE4 Sn777

Medium: body 1900 MHz

Medium parameters used: $f = 1882.5$ MHz; $\sigma = 1.365$ mho/m; $\epsilon_r = 39.35$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE1900-FDD25 1882.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(8.14,8.14,8.14)

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

Maximum value of SAR (interpolated) = 0.173 W/kg

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

Reference Value = 5.929 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.206 W/kg

SAR(1 g) = 0.125 W/kg; SAR(10 g) = 0.073 W/kg

Maximum value of SAR (measured) = 0.133 W/kg

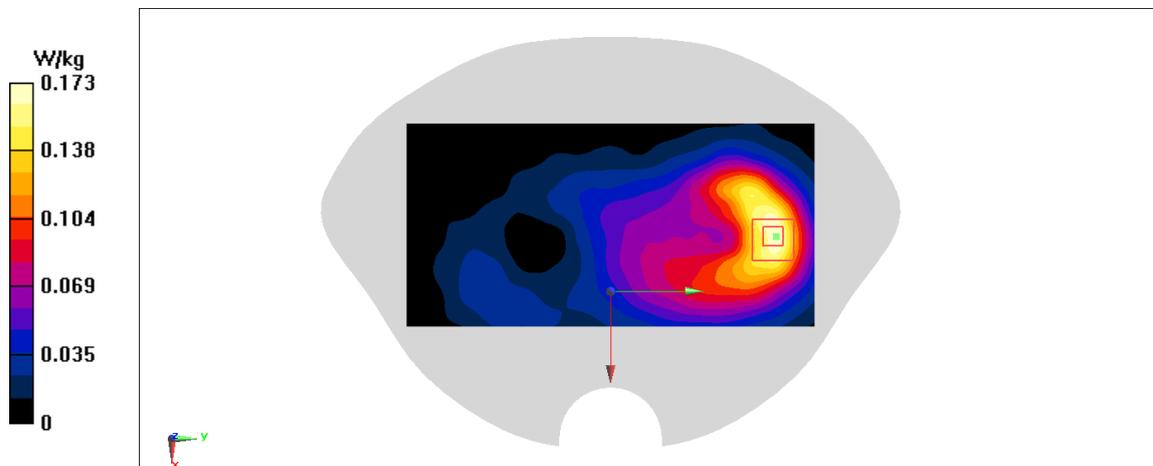


Fig .30

LTE850-FDD26_CH26775 Left Cheek 1RB-Low

Date: 5/13/2020

Electronics: DAE4 Sn777

Medium: head 835 MHz

Medium parameters used: $f = 822.5$ MHz; $\sigma = 0.872$ mho/m; $\epsilon_r = 41.47$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE850-FDD26 822.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(9.66,9.66,9.66)

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

Maximum value of SAR (interpolated) = 1.46 W/kg

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

Reference Value = 34.52 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 1.2 W/kg

SAR(1 g) = 0.751 W/kg; SAR(10 g) = 0.471 W/kg

Maximum value of SAR (measured) = 0.77 W/kg

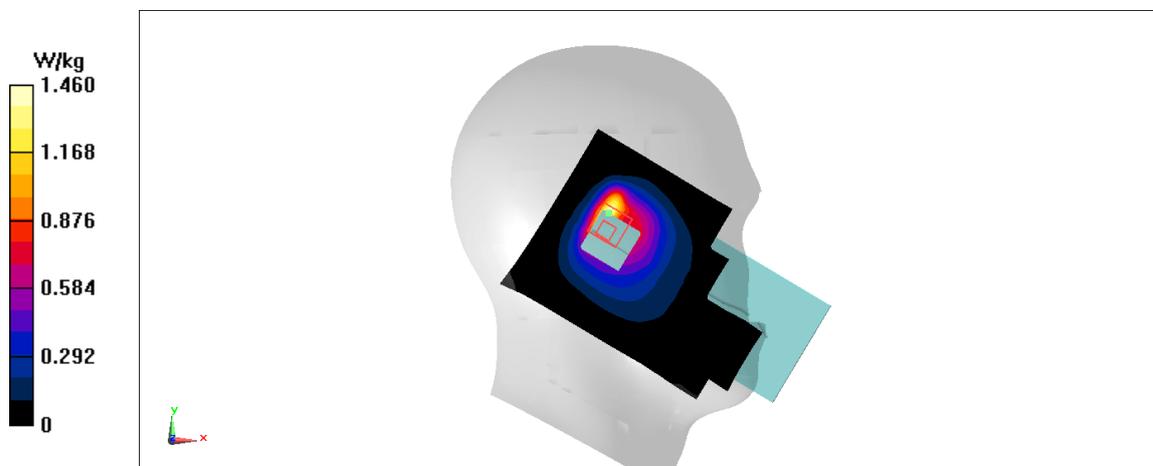


Fig .31

LTE850-FDD26_CH26775 1RB-Low Rear 10mm

Date: 5/13/2020

Electronics: DAE4 Sn777

Medium: body 835 MHz

Medium parameters used: $f = 822.5$ MHz; $\sigma = 0.872$ mho/m; $\epsilon_r = 41.47$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE850-FDD26 822.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(9.66,9.66,9.66)

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

Maximum value of SAR (interpolated) = 0.2 W/kg

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

Reference Value = 14.71 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.227 W/kg

SAR(1 g) = 0.153 W/kg; SAR(10 g) = 0.099 W/kg

Maximum value of SAR (measured) = 0.16 W/kg

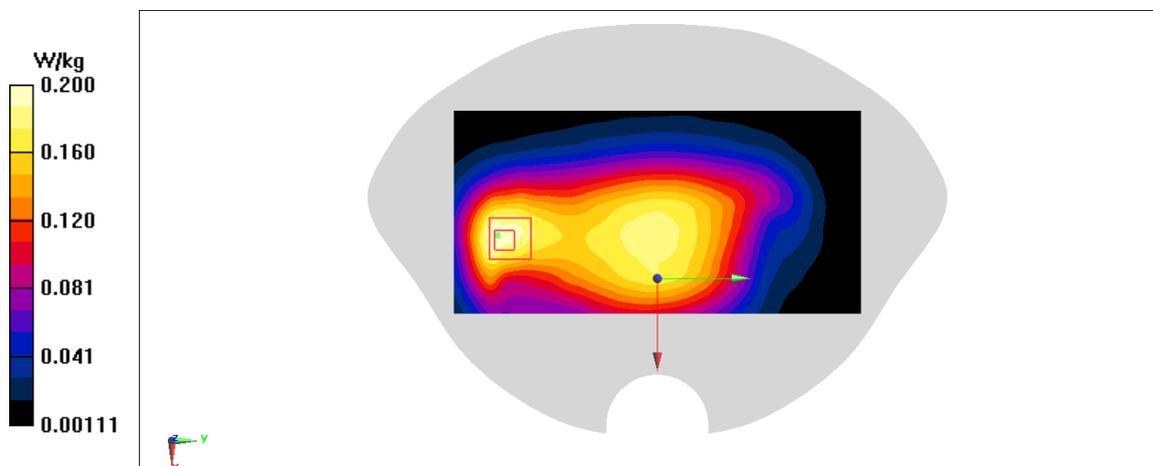


Fig .32

LTEB41(PC3)_CH40620 Left Cheek

Date: 5/17/2020

Electronics: DAE4 Sn777

Medium: head 2600 MHz

Medium parameters used: $f = 2593\text{MHz}$; $\sigma = 1.953\text{ mho/m}$; $\epsilon_r = 38.5$; $\rho = 1000\text{ kg/m}^3$

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: Max 2593MHz MHz Duty Cycle: 1:1.58

Probe: EX3DV4 – SN3617 ConvF(7.52,7.52,7.52)

Configuration/Head LTE Band41 Channel40620 Left Cheek/Area Scan (101x171x1):Interpolated grid: $dx=1.000\text{ mm}$, $dy=1.000\text{ mm}$

Maximum value of SAR (interpolated) = 0.119 W/kg

Configuration/Head LTE Band41 Channel40620 Left Cheek/Zoom Scan (7x7x7)/Cube 0:Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 2.946 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.122 W/kg

SAR(1 g) = 0.069 W/kg; SAR(10 g) = 0.027 W/kg

Maximum value of SAR (measured) = 0.0791 W/kg

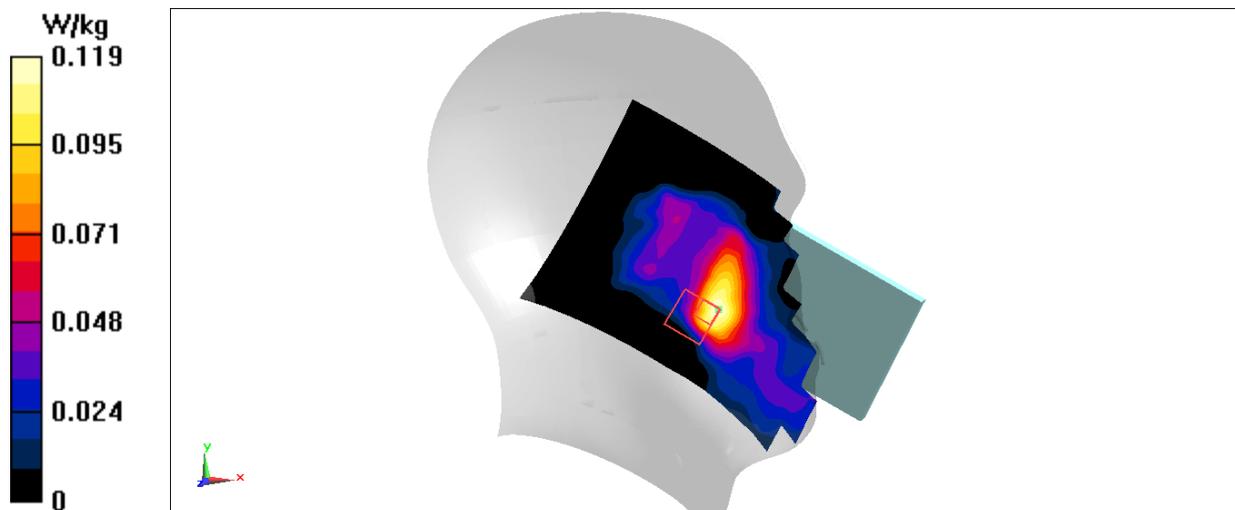


Fig .33

LTEB41(PC3)_CH40180 Bottom 10mm

Date: 5/17/2020

Electronics: DAE4 Sn777

Medium: head 2600 MHz

Medium parameters used: $f = 2549.5\text{MHz}$; $\sigma = 1.908 \text{ mho/m}$; $\epsilon_r = 38.55$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: Max 2549.5MHz Duty Cycle: 1:1.58

Probe: EX3DV4 – SN3617 ConvF(7.52,7.52,7.52)

Area Scan (91x161x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 2.05 W/kg

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

Reference Value = 13.69 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 2.44 W/kg

SAR(1 g) = 1.19 W/kg; SAR(10 g) = 0.534 W/kg

Maximum value of SAR (measured) = 1.95 W/kg

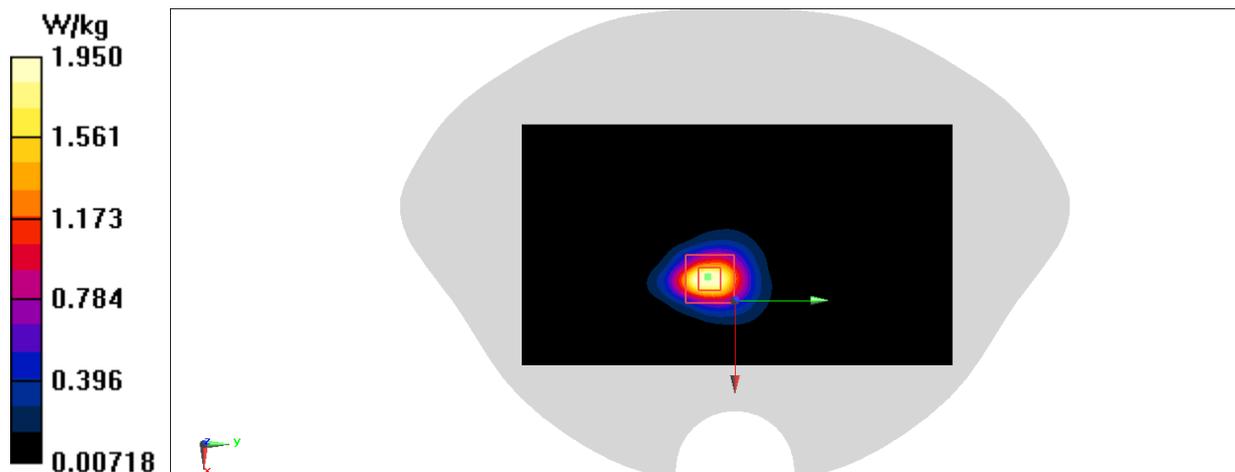


Fig .34

LTEB41(PC3)_Body Rear 15mm

Date: 5/17/2020

Electronics: DAE4 Sn777

Medium: head 2600 MHz

Medium parameters used: $f = 2593\text{MHz}$; $\sigma = 1.953\text{ mho/m}$; $\epsilon_r = 38.5$; $\rho = 1000\text{ kg/m}^3$

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: Max 2593MHz MHz Duty Cycle: 1:1.58

Probe: EX3DV4 – SN3617 ConvF(7.52,7.52,7.52)

Area Scan (81x161x1): Interpolated grid: $dx=1.000\text{ mm}$, $dy=1.000\text{ mm}$

Maximum value of SAR (interpolated) = 0.709 W/kg

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

Reference Value = 4.510 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 0.861 W/kg

SAR(1 g) = 0.446 W/kg; SAR(10 g) = 0.219 W/kg

Maximum value of SAR (measured) = 0.707 W/kg

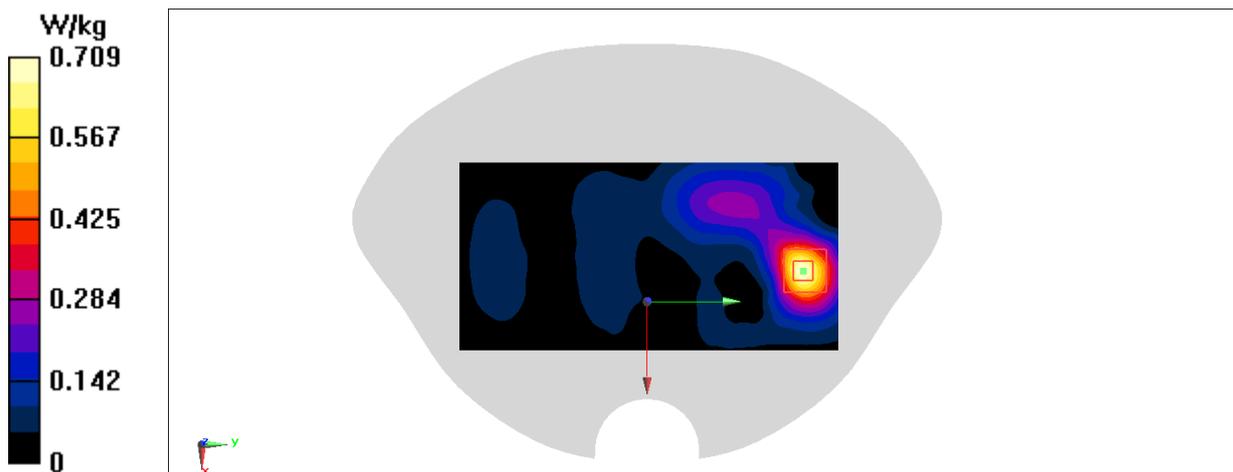


Fig .35

LTEB41(PC2)-Left Cheek

Date: 5/17/2020

Electronics: DAE4 Sn777

Medium: head 2600 MHz

Medium parameters used: $f = 2593\text{MHz}$; $\sigma = 1.953\text{ mho/m}$; $\epsilon_r = 38.5$; $\rho = 1000\text{ kg/m}^3$

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: Max 2593MHz Duty Cycle: 1:1.58

Probe: EX3DV4 – SN3617 ConvF(7.52,7.52,7.52)

Area Scan (81x161x1): Interpolated grid: $dx=1.000\text{ mm}$, $dy=1.000\text{ mm}$

Maximum value of SAR (interpolated) = 0.101 W/kg

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

Reference Value = 0.6820 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 0.119 W/kg

SAR(1 g) = 0.071 W/kg; SAR(10 g) = 0.041 W/kg

Maximum value of SAR (measured) = 0.101 W/kg

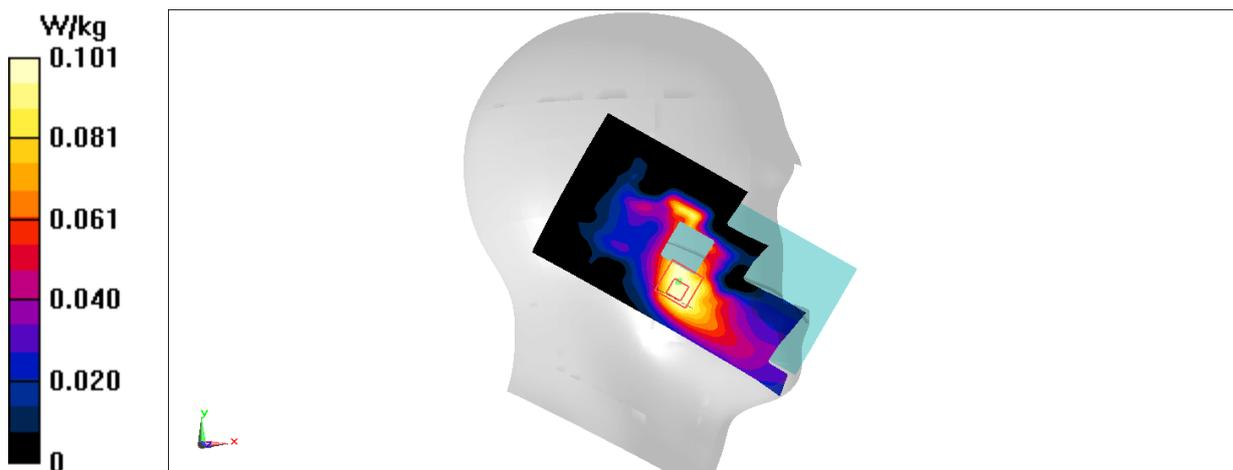


Fig .36

LTEB41(PC2)-Bottom 10mm

Date: 5/17/2020

Electronics: DAE4 Sn777

Medium: head 2600 MHz

Medium parameters used: $f = 2680\text{MHz}$; $\sigma = 2.15\text{ mho/m}$; $\epsilon_r = 38.304$; $\rho = 1000\text{ kg/m}^3$ Ambient Temperature: 22.5°C , Liquid Temperature: 22.3°C Communication System: Max 2680MHz Duty Cycle: 1:1.58

Probe: EX3DV4 – SN3617 ConvF(7.52,7.52,7.52)

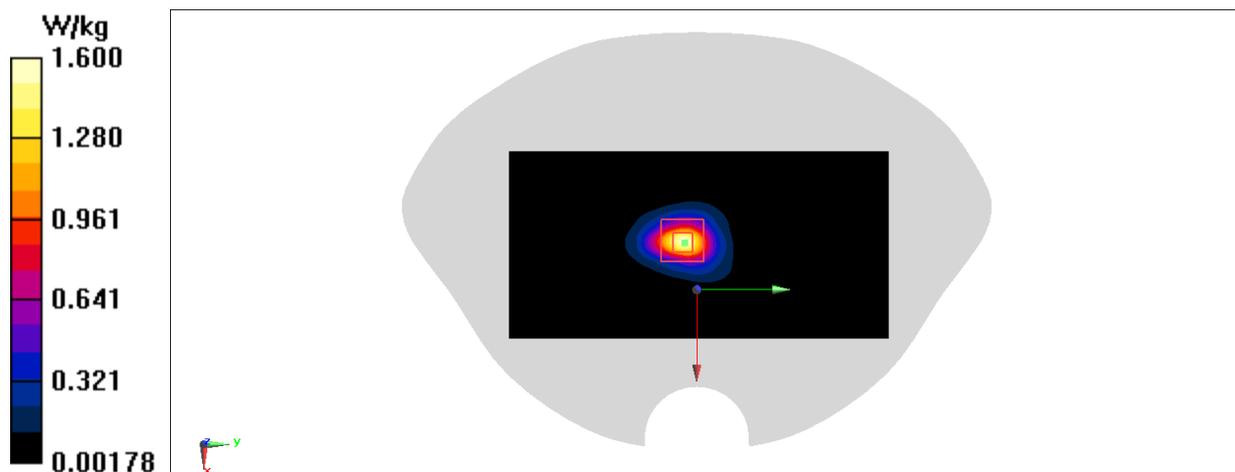
Area Scan (81x161x1): Interpolated grid: $dx=1.200\text{ mm}$, $dy=1.200\text{ mm}$ Maximum value of SAR (interpolated) = 1.60 W/kg **Zoom Scan (7x7x7)/Cube 0:** Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$ Reference Value = 26.73 V/m ; Power Drift = -0.13 dB Peak SAR (extrapolated) = 1.83 W/kg **SAR(1 g) = 0.885 W/kg ; SAR(10 g) = 0.392 W/kg** Maximum value of SAR (measured) = 1.47 W/kg 

Fig .37

LTEB41(PC2)-Rear 15mm

Date: 5/17/2020

Electronics: DAE4 Sn777

Medium: head 2600 MHz

Medium parameters used: $f = 2680\text{MHz}$; $\sigma = 2.15\text{ mho/m}$; $\epsilon_r = 38.304$; $\rho = 1000\text{ kg/m}^3$

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: Max 2680MHz MHz Duty Cycle: 1:1.58

Probe: EX3DV4 – SN3617 ConvF(7.52,7.52,7.52)

Area Scan (81x161x1): Interpolated grid: $dx=1.000\text{ mm}$, $dy=1.000\text{ mm}$

Maximum value of SAR (interpolated) = 0.509 W/kg

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

Reference Value = 3.552 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.589 W/kg

SAR(1 g) = 0.305 W/kg; SAR(10 g) = 0.150 W/kg

Maximum value of SAR (measured) = 0.479 W/kg

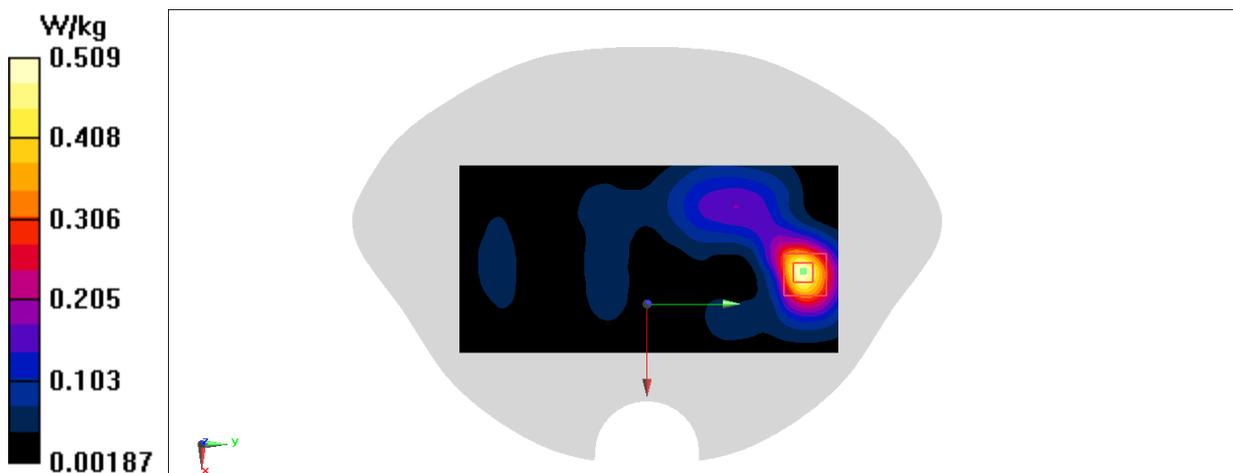


Fig .38

LTE1700-FDD66_CH132072 Right Cheek 1RB-Low

Date: 5/14/2020

Electronics: DAE4 Sn777

Medium: head 1750 MHz

Medium parameters used: $f = 1720\text{MHz}$; $\sigma = 1.344\text{ mho/m}$; $\epsilon_r = 39.48$; $\rho = 1000\text{ kg/m}^3$

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE1700-FDD66 1720 Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(8.41,8.41,8.41)

Area Scan (71x121x1): Interpolated grid: $dx=1.000\text{ mm}$, $dy=1.000\text{ mm}$

Maximum value of SAR (interpolated) = 0.267 W/kg

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

Reference Value = 6.564 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.257 W/kg

SAR(1 g) = 0.166 W/kg; SAR(10 g) = 0.088 W/kg

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

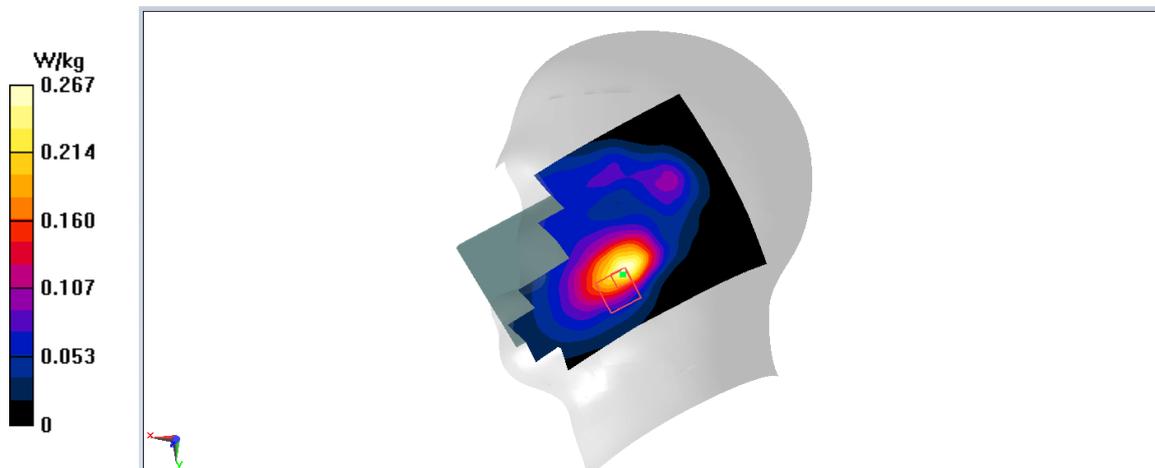


Fig .39

LTE1700-FDD66_CH132072 1RB-Low Bottom Edge 10mm

Date: 5/14/2020

Electronics: DAE4 Sn777

Medium: body 1750 MHz

Medium parameters used: $f = 1720\text{MHz}$; $\sigma = 1.344\text{ mho/m}$; $\epsilon_r = 39.48$; $\rho = 1000\text{ kg/m}^3$

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE1700-FDD66 2680 Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(8.41,8.41,8.41)

Area Scan (71x121x1): Interpolated grid: $dx=1.000\text{ mm}$, $dy=1.000\text{ mm}$

Maximum value of SAR (interpolated) = 0.498 W/kg

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

Reference Value = 19.77 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 0.619 W/kg

SAR(1 g) = 0.356 W/kg; SAR(10 g) = 0.19 W/kg

Maximum value of SAR (measured) = 0.407 W/kg

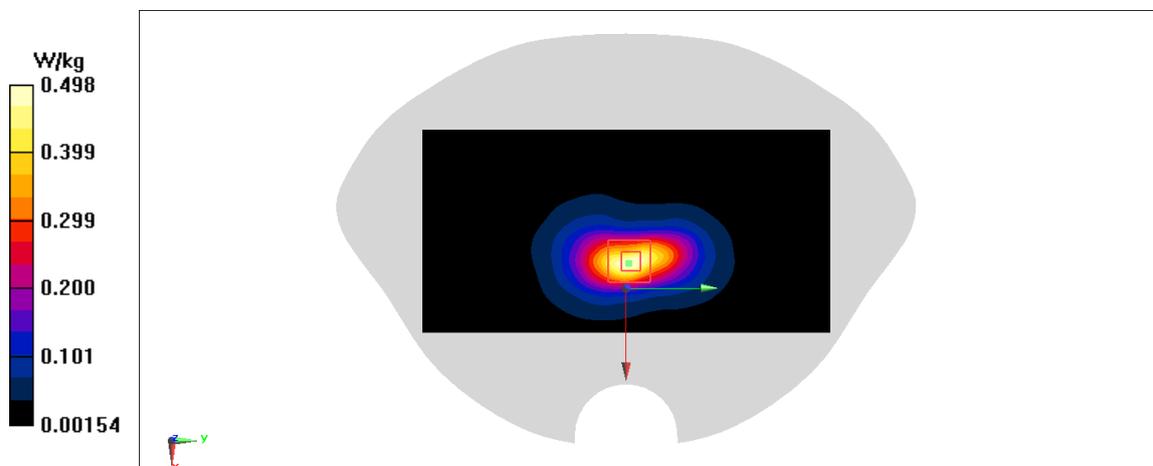


Fig .40

LTE1700-FDD66_CH132072 1RB-Low Rear 15mm

Date: 5/14/2020

Electronics: DAE4 Sn777

Medium: body 1750 MHz

Medium parameters used: $f = 1720\text{MHz}$; $\sigma = 1.344\text{ mho/m}$; $\epsilon_r = 39.48$; $\rho = 1000\text{ kg/m}^3$

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE1700-FDD66 2680 Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(8.41,8.41,8.41)

Area Scan (71x121x1): Interpolated grid: $dx=1.000\text{ mm}$, $dy=1.000\text{ mm}$

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

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

Reference Value = 7.794 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.559 W/kg

SAR(1 g) = 0.343 W/kg; SAR(10 g) = 0.206 W/kg

Maximum value of SAR (measured) = 0.376 W/kg

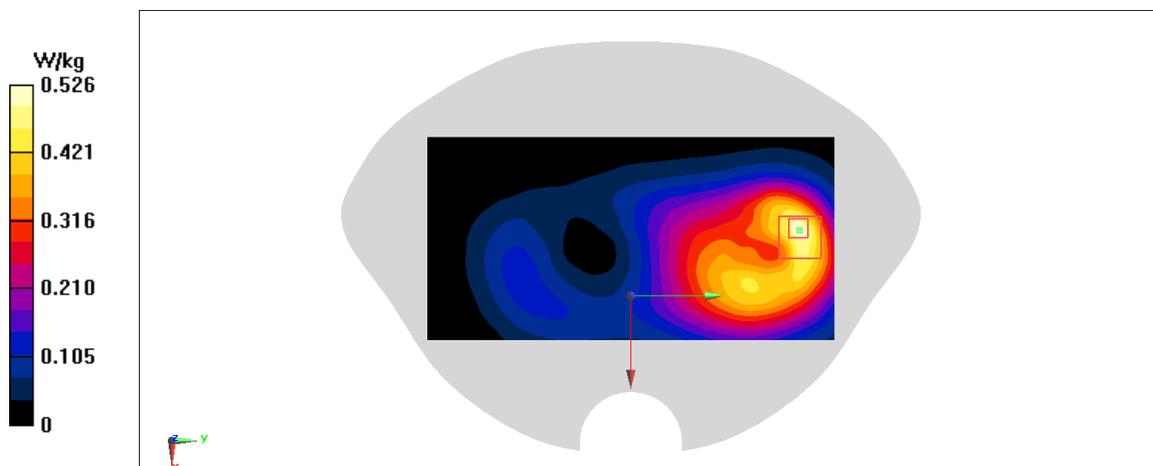


Fig .41

LTE700-FDD71_CH133372 Left Cheek1RB-High

Date: 5/12/2020

Electronics: DAE4 Sn777

Medium: head 750 MHz

Medium parameters used: $f = 688\text{MHz}$; $\sigma = 0.852\text{ mho/m}$; $\epsilon_r = 42.21$; $\rho = 1000\text{ kg/m}^3$ Ambient Temperature: 22.5°C , Liquid Temperature: 22.3°C

Communication System: LTE700-FDD71 2680 Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(10.07,10.07,10.07)

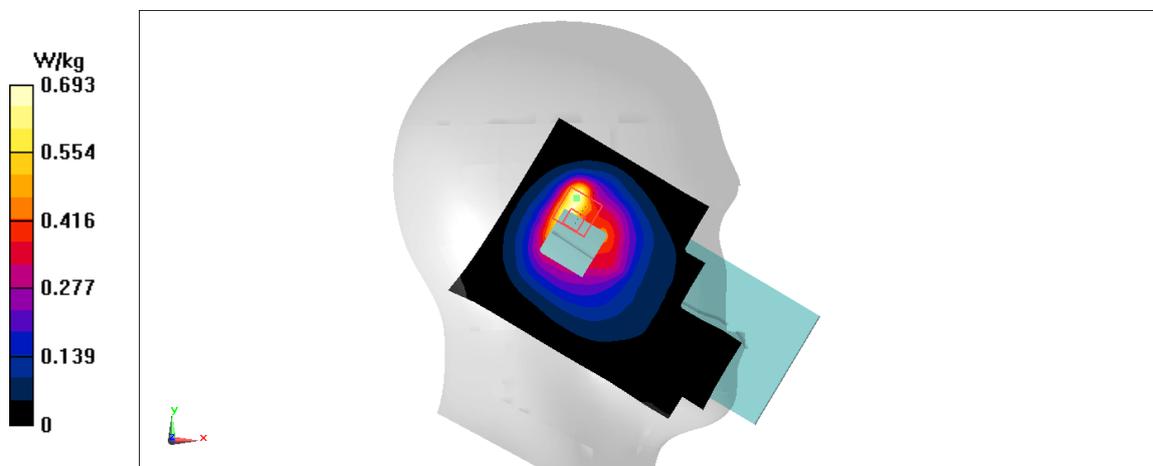
Area Scan (71x121x1): Interpolated grid: $dx=1.000\text{ mm}$, $dy=1.000\text{ mm}$ Maximum value of SAR (interpolated) = 0.693 W/kg **Zoom Scan (7x7x7)/Cube 0:** Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$ Reference Value = 25.86 V/m ; Power Drift = 0.05 dB Peak SAR (extrapolated) = 0.575 W/kg **SAR(1 g) = 0.35 W/kg ; SAR(10 g) = 0.216 W/kg** Maximum value of SAR (measured) = 0.382 W/kg 

Fig .42

LTE700-FDD71_CH133372 1RB-High Right Edge 10mm

Date: 5/12/2020

Electronics: DAE4 Sn777

Medium: body 750 MHz

Medium parameters used: $f = 688\text{MHz}$; $\sigma = 0.852\text{ mho/m}$; $\epsilon_r = 42.21$; $\rho = 1000\text{ kg/m}^3$

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE700-FDD71 2680 Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(10.07,10.07,10.07)

Area Scan (71x121x1): Interpolated grid: $dx=1.000\text{ mm}$, $dy=1.000\text{ mm}$

Maximum value of SAR (interpolated) = 0.254 W/kg

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

Reference Value = 16.13 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.262 W/kg

SAR(1 g) = 0.189 W/kg; SAR(10 g) = 0.133 W/kg

Maximum value of SAR (measured) = 0.201 W/kg

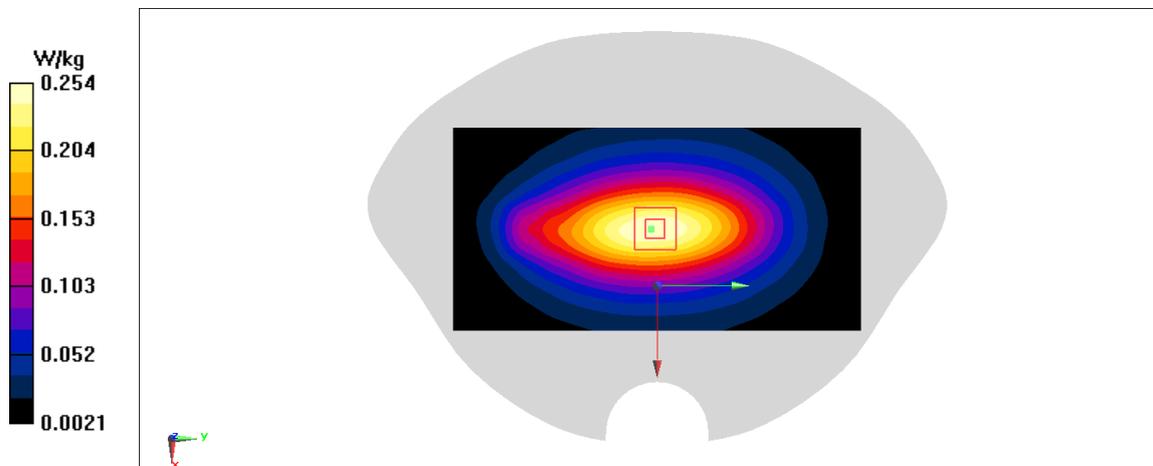


Fig .43

WLAN2450_CH1 Right Cheek

Date: 5/17/2020

Electronics: DAE4 Sn777

Medium: head 2450 MHz

Medium parameters used: $f = 2412\text{MHz}$; $\sigma = 1.764\text{ mho/m}$; $\epsilon_r = 38.63$; $\rho = 1000\text{ kg/m}^3$

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: WLAN2450 2412 Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(7.65,7.65,7.65)

Area Scan (71x121x1): Interpolated grid: $dx=1.000\text{ mm}$, $dy=1.000\text{ mm}$

Maximum value of SAR (interpolated) = 0.716 W/kg

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

Reference Value = 8.163 V/m; Power Drift = 0.19 dB

Peak SAR (extrapolated) = 0.815 W/kg

SAR(1 g) = 0.379 W/kg; SAR(10 g) = 0.196 W/kg

Maximum value of SAR (measured) = 0.716 W/kg

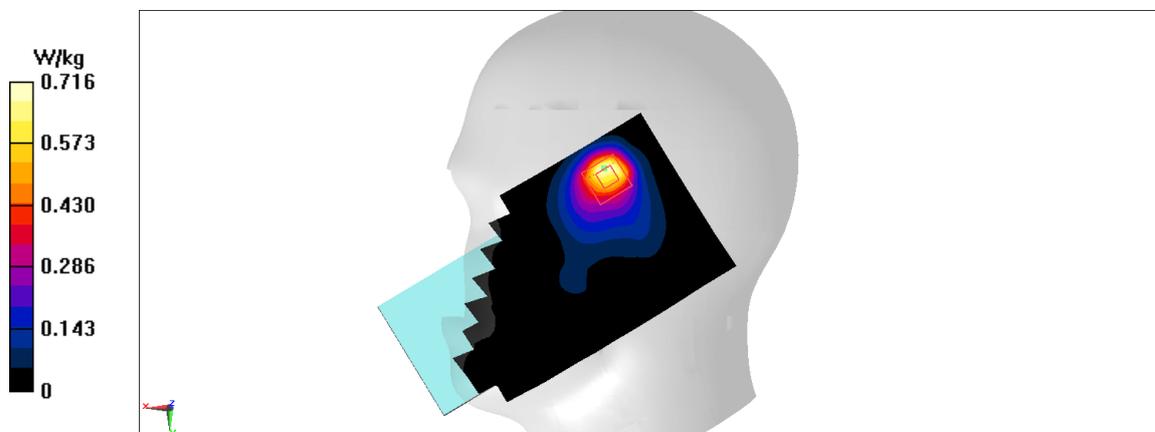


Fig .44

WLAN2450_CH1 Rear 10mm

Date: 5/17/2020

Electronics: DAE4 Sn777

Medium: body 2450 MHz

Medium parameters used: $f = 2412\text{MHz}$; $\sigma = 1.764\text{ mho/m}$; $\epsilon_r = 38.63$; $\rho = 1000\text{ kg/m}^3$

Ambient Temperature: 22.5°C , Liquid Temperature: 22.3°C

Communication System: WLAN2450 2412 Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(7.65,7.65,7.65)

Area Scan (71x121x1): Interpolated grid: $dx=1.000\text{ mm}$, $dy=1.000\text{ mm}$

Maximum value of SAR (interpolated) = 0.689 W/kg

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

Reference Value = 6.474 V/m ; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.802 W/kg

SAR(1 g) = 0.38 W/kg ; SAR(10 g) = 0.186 W/kg

Maximum value of SAR (measured) = 0.689 W/kg

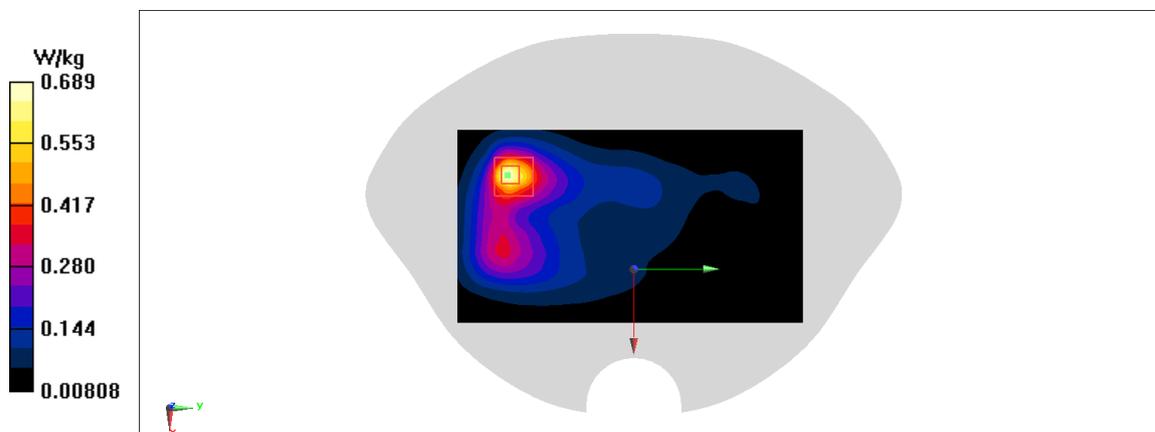


Fig. 45

WLAN5G_CH144 Left Cheek

Date: 6/7/2020

Electronics: DAE4 Sn777

Medium: Head 5GHz

Medium parameters used: $f = 5720\text{MHz}$; $\sigma = 5.216 \text{ mho/m}$; $\epsilon_r = 36.064$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: WLAN5GHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(5.10,5.10,5.10)

Area Scan (111x191x1): Interpolated grid: $dx=1.200 \text{ mm}$, $dy=1.200 \text{ mm}$

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

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 5.167 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 1.58 W/kg

SAR(1 g) = 0.319 W/kg; SAR(10 g) = 0.105 W/kg

Smallest distance from peaks to all points 3 dB below = 5.2 mm

Maximum value of SAR (measured) = 0.866 W/kg

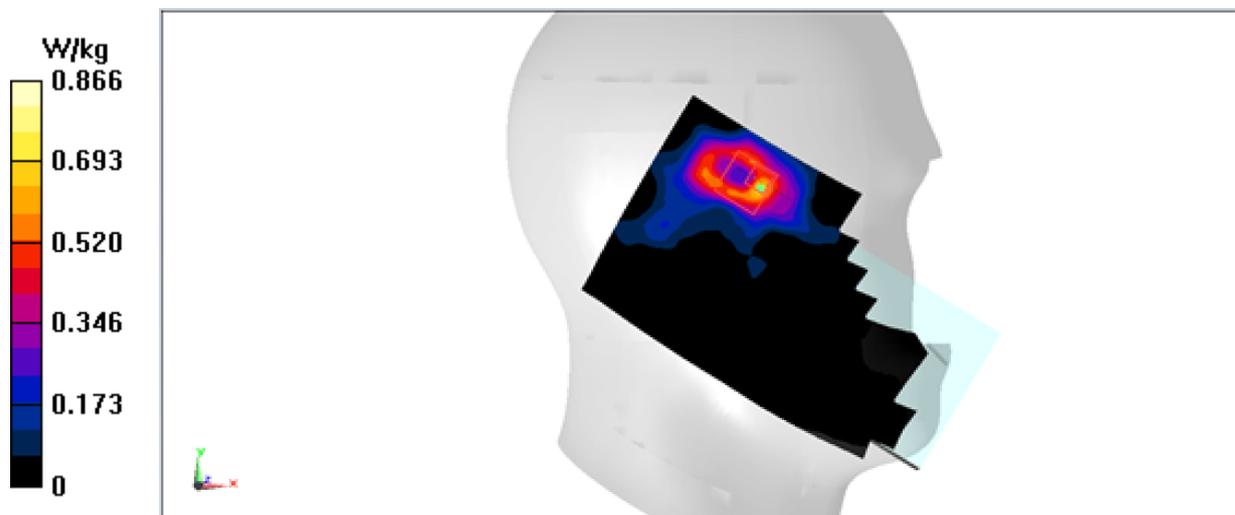


Fig. 46

WLAN5G_CH153 Right 10mm

Date: 6/7/2020

Electronics: DAE4 Sn777

Medium: body 5GHz

Medium parameters used: $f = 5765$ MHz ; $\sigma = 5.261$ mho/m; $\epsilon_r = 35.992$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: WLAN5GHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3617 ConvF(5.10,5.10,5.10)

Area Scan (101x191x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 1.48 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 7.495 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 2.69 W/kg

SAR(1 g) = 0.619 W/kg; SAR(10 g) = 0.214 W/kg

Smallest distance from peaks to all points 3 dB below = 7.5 mm

Maximum value of SAR (measured) = 1.47 W/kg

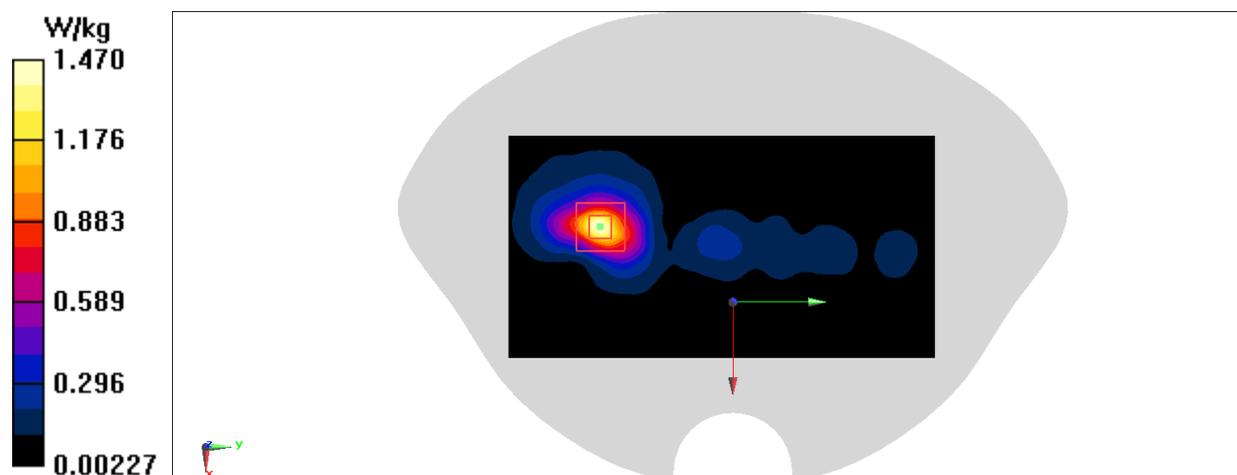


Fig. 47



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

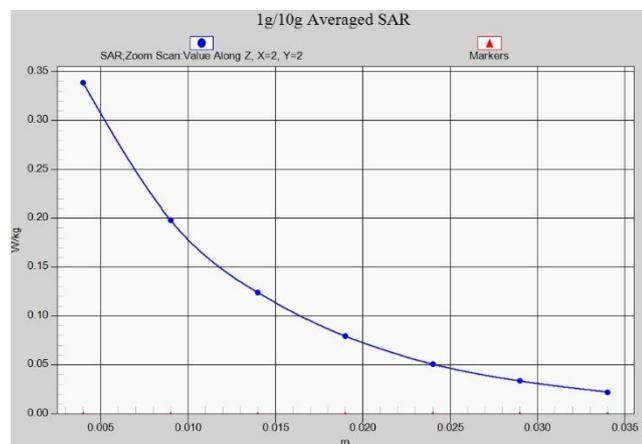


Fig. 1-2 Z-Scan at power reference point (850 MHz)

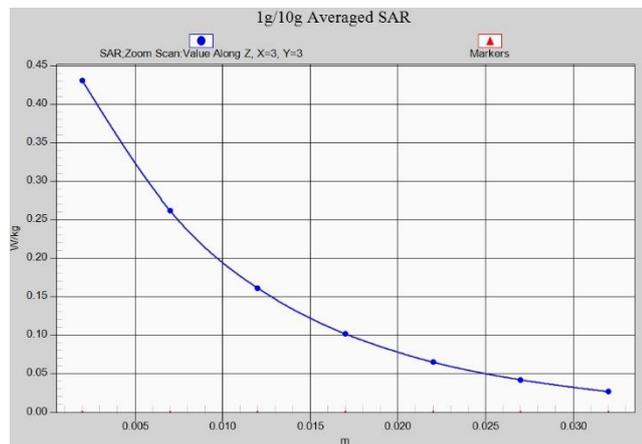


Fig. 1-3 Z-Scan at power reference point (1900 MHz)

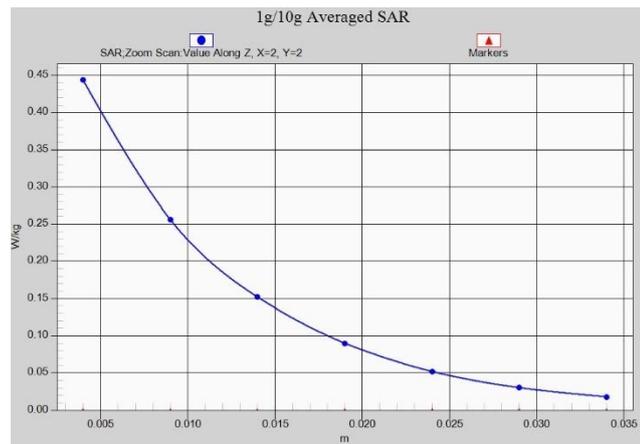


Fig. 1-4 Z-Scan at power reference point (1900 MHz)

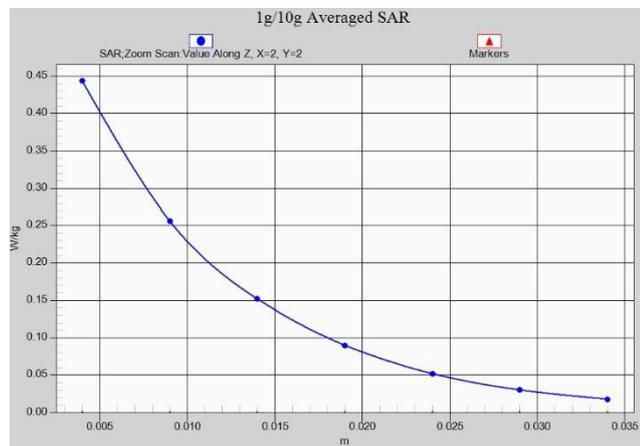


Fig. 1-5 Z-Scan at power reference point (1900 MHz)

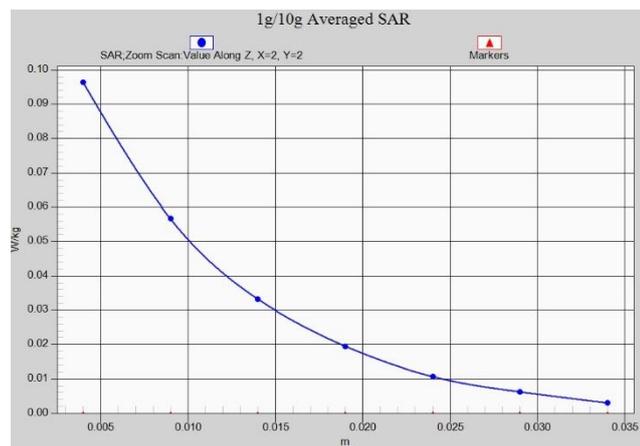


Fig. 1-6 Z-Scan at power reference point (WCDMA1900)

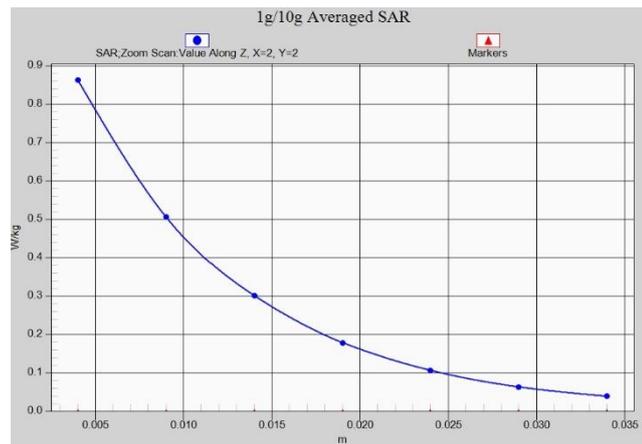


Fig. 1-7 Z-Scan at power reference point (WCDMA1900)

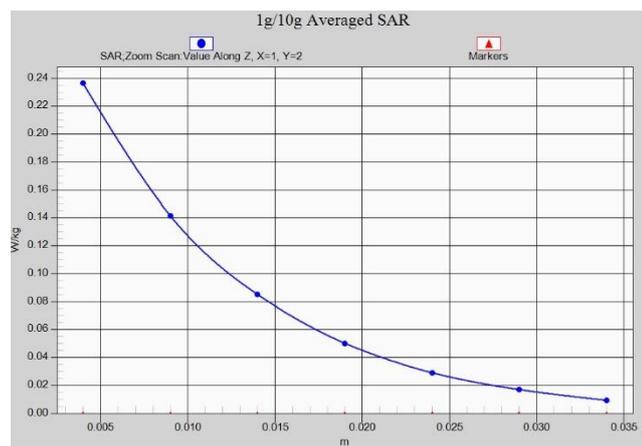


Fig. 1-8 Z-Scan at power reference point (WCDMA1900)

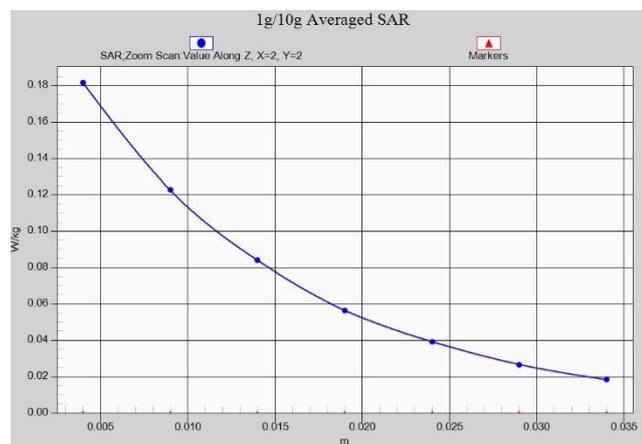


Fig. 1-9 Z-Scan at power reference point (WCDMA1700)

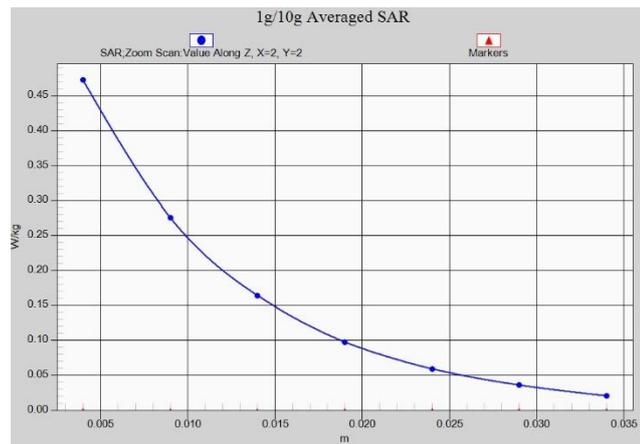


Fig. 1-10 Z-Scan at power reference point (WCDMA1700)

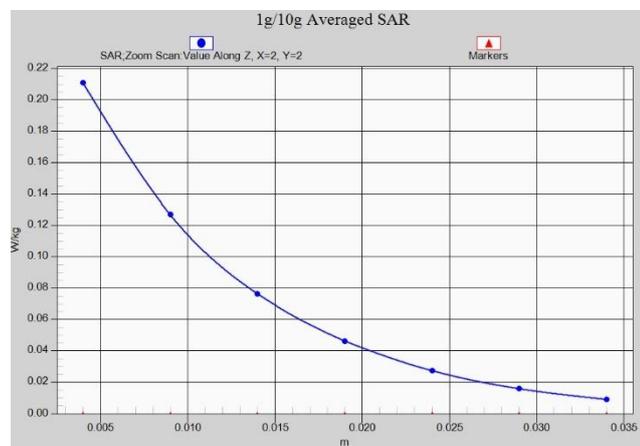


Fig. 1-11 Z-Scan at power reference point (WCDMA1700)

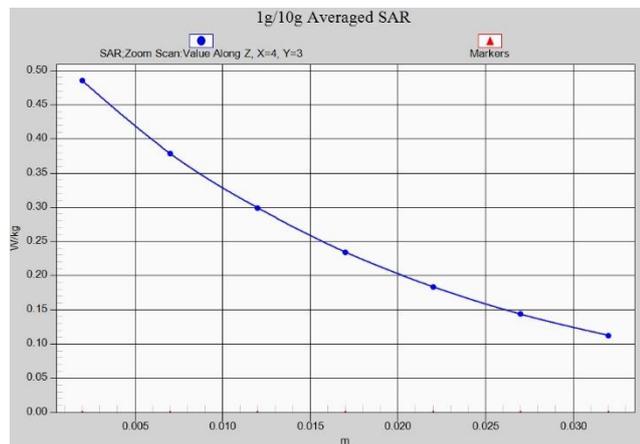


Fig. 1-12 Z-Scan at power reference point (WCDMA850)

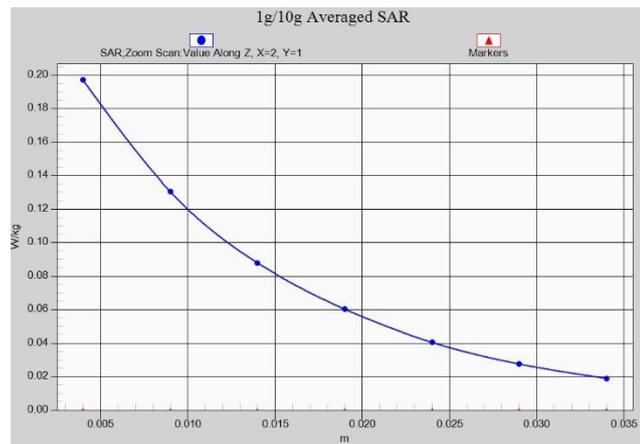


Fig. 1-13Z-Scan at power reference point (WCDMA850)

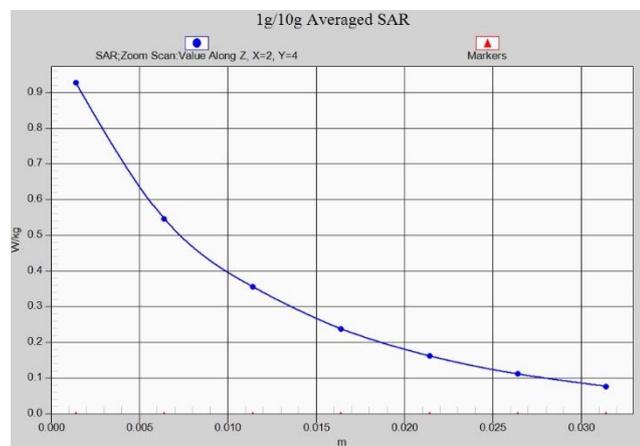


Fig. 1-14 Z-Scan at power reference point (CDMA BC0)

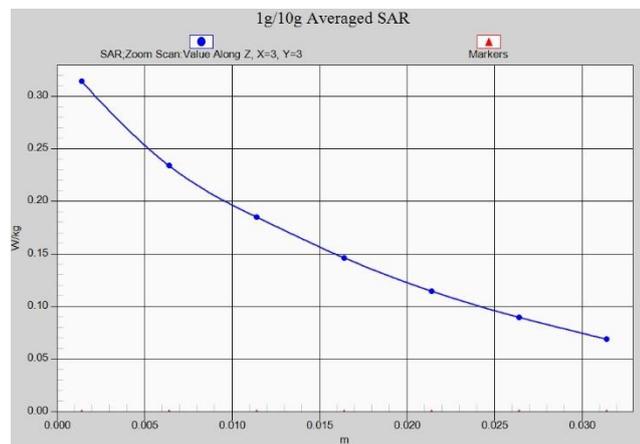


Fig. 1-15 Z-Scan at power reference point (CDMA BC0)

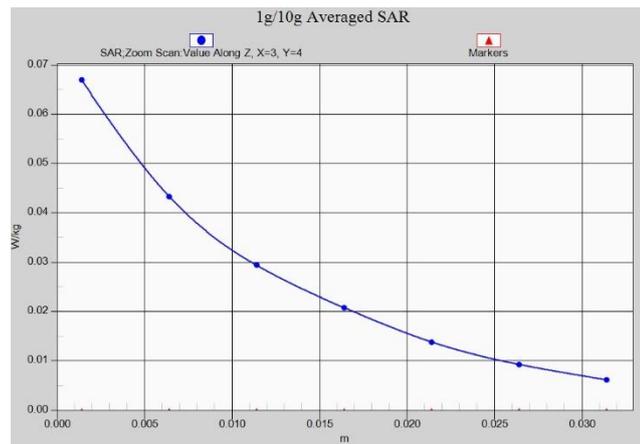


Fig. 1-16 Z-Scan at power reference point (CDMA BC1)

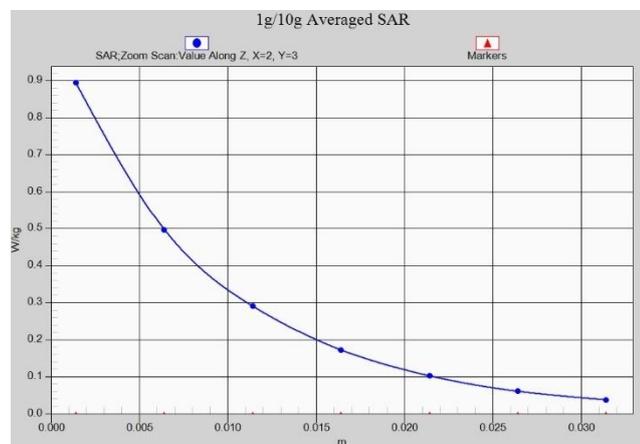


Fig. 1-17 Z-Scan at power reference point (CDMA BC1)



Fig. 1-18 Z-Scan at power reference point (CDMA BC1)

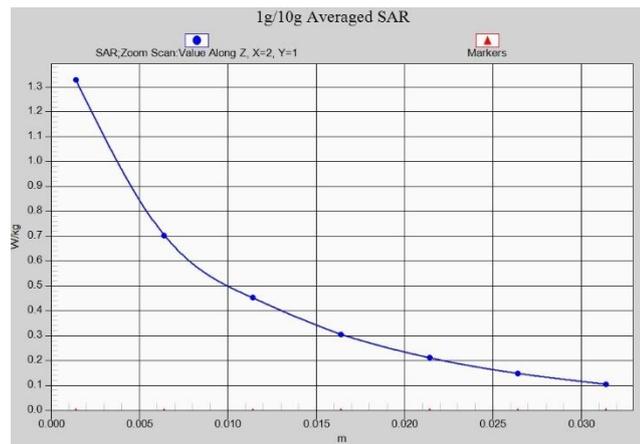


Fig. 1-19Z-Scan at power reference point (CDMA BC10)

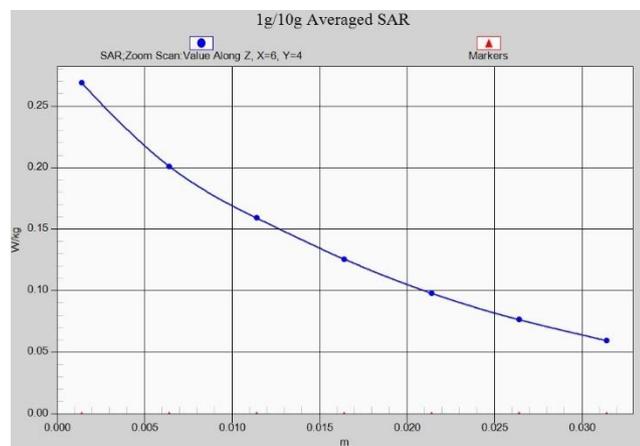


Fig. 1-20 Z-Scan at power reference point (CDMA BC10)

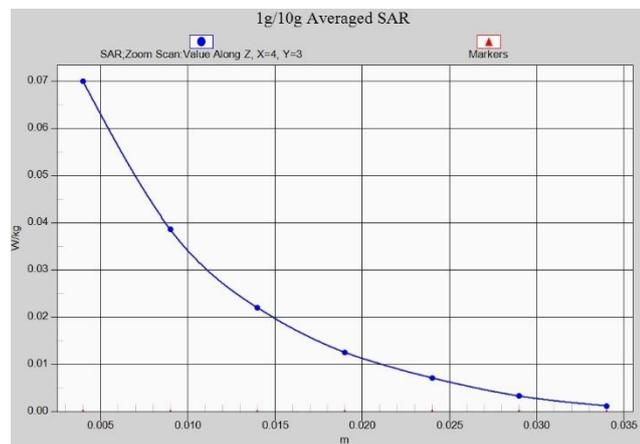


Fig. 1-21 Z-Scan at power reference point (LTEB7)

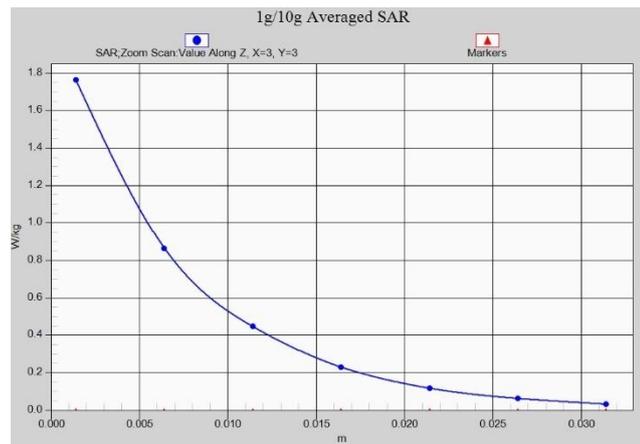


Fig. 1-22 Z-Scan at power reference point (LTEB7)



Fig. 1-23 Z-Scan at power reference point (LTEB7)



Fig. 1-24 Z-Scan at power reference point (LTEB12)

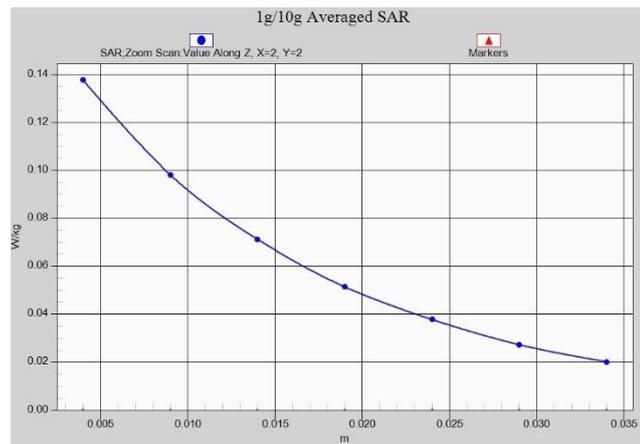


Fig. 1-25 Z-Scan at power reference point (LTEB12)



Fig. 1-26 Z-Scan at power reference point (LTEB13)

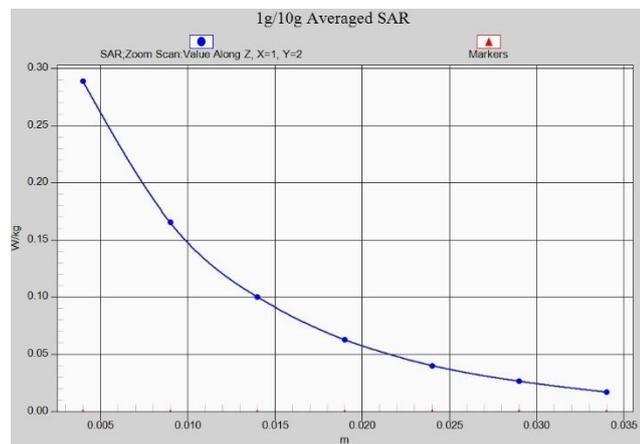


Fig. 1-27 Z-Scan at power reference point (LTEB13)