

Table 14.1-13: SAR Values (LTE Band2 - Head)

			Ambi	ent Temp	erature:	22.4 °C	Liquic	d Temperati	ure: 22.2°C			
Frequ Ch.	MHz	Mode	Side	Test Positio n	Figure No./ Note	Conducte d Power (dBm)	Max. tune- up Power (dBm)	Measure d SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measure d SAR(1g) (W/kg)	Reporte d SAR(1g) (W/kg)	Power Drift (dB)
19100	1900	1RB-High	L	Cheek	Fig.13	23.15	23.5	0.149	0.16	0.234	0.25	0.04
19100	1900	1RB-High	L	Tilt	1	23.15	23.5	0.052	0.06	0.087	0.09	0.09
19100	1900	1RB-High	R	Cheek	/	23.15	23.5	0.093	0.10	0.144	0.16	-0.11
19100	1900	1RB-High	R	Tilt	/	23.15	23.5	0.052	0.06	0.082	0.09	0.16
18900	1880	50RB- High	L	Cheek	1	22.1	22.5	0.132	0.14	0.206	0.23	0.02
18900	1880	50RB- High	L	Tilt	/	22.1	22.5	0.050	0.05	0.082	0.09	-0.09
18900	1880	50RB- High	R	Cheek	1	22.1	22.5	0.084	0.09	0.130	0.14	0.12
18900	1880	50RB- High	R	Tilt	/	22.1	22.5	0.036	0.04	0.058	0.06	0.06

Note1: The LTE mode is QPSK_20MHz.



Table 14.1-14: SAR Values (LTE Band2 - Body) AP ON

			Ambient	Tempera	ature: 22.4 °C	C Liaui	d Tempera	ture: 22.2°C			
Eras::	onov.			Figure	Conducted	Max. tune-	Measured		Measured	Reported	Power
Frequ	ency	Mode	Test	No./	Power	up Power	SAR(10g)	·	SAR(1g)	SAR(1g)	Drift
Ch.	MHz		Position	Note	(dBm)	(dBm)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(dB)
19100	1900	1RB-High	Front	1	21.2	21.5	0.283	0.30	0.538	0.58	0.04
19100	1900	1RB-High	Rear	/	21.2	21.5	0.383	0.41	0.771	0.83	-0.01
18900	1880	1RB-High	Rear	1	21.1	21.5	0.386	0.42	0.785	0.86	-0.04
18700	1860	1RB_Low	Rear	/	20.99	21.5	0.344	0.39	0.778	0.87	0.02
19100	1900	1RB-High	Left	/	21.2	21.5	0.076	0.08	0.128	0.14	-0.09
19100	1900	1RB-High	Bottom	Fig.14	21.2	21.5	0.510	0.55	0.995	1.07	-0.06
18900	1880	1RB-High	Bottom	/	21.1	21.5	0.461	0.51	0.920	1.01	0.04
18700	1860	1RB_Low	Bottom	1	20.99	21.5	0.443	0.50	0.881	0.99	0.12
18900	1880	50RB-High	Front	/	21.12	21.5	0.372	0.41	0.544	0.59	-0.05
19100	1900	50RB-Low	Rear	/	21.07	21.5	0.365	0.40	0.747	0.82	0.02
18900	1880	50RB-High	Rear	/	21.12	21.5	0.372	0.41	0.741	0.81	-0.05
18700	1860	50RB-Mid	Rear	/	20.8	21.5	0.368	0.43	0.740	0.87	0.06
18900	1880	50RB-High	Left	/	21.12	21.5	0.081	0.09	0.136	0.15	-0.06
19100	1900	50RB-Low	Bottom	/	21.07	21.5	0.437	0.48	0.874	0.97	-0.04
18900	1880	50RB-High	Bottom	/	21.12	21.5	0.441	0.48	0.886	0.97	0.01
18700	1860	50RB-Mid	Bottom	/	20.8	21.5	0.426	0.50	0.848	1.00	-0.02
18900	1880	100RB	Rear	/	21.05	21.5	0.383	0.42	0.777	0.86	-0.01
18900	1880	100RB	Bottom	/	21.05	21.5	0.445	0.49	0.889	0.99	-0.07
19100	1900	1RB-High	Rear	D	23.15	23.5	1.89	2.05	3.85	4.17	-0.01
18900	1880	1RB-High	Rear	D	23.12	23.5	1.85	2.02	3.91	4.26	-0.04
18700	1860	1RB_Low	Rear	D	23.05	23.5	1.87	2.08	3.95	4.38	0.02
19100	1900	1RB-High	Bottom	D	23.15	23.5	2.79	3.02	6.95	7.53	-0.06
18900	1880	1RB-High	Bottom	D	23.12	23.5	2.75	3.00	6.82	7.44	0.04
18700	1860	1RB_Low	Bottom	D	23.05	23.5	2.70	3.00	6.69	7.41	0.12
19100	1900	50RB-Low	Bottom	D	22.04	22.5	2.27	2.52	5.65	6.28	-0.04
18900	1880	50RB-High	Bottom	D	22.1	22.5	2.17	2.38	5.38	5.89	0.01
18700	1860	50RB-Mid	Bottom	D	21.79	22.5	2.04	2.40	5.05	5.95	-0.02
18900	1880	100RB	Bottom	D	21.99	22.5	2.26	2.54	5.61	6.31	-0.07

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

Note2: The LTE mode is QPSK_20MHz.

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



Table 14.1-15: SAR Values (LTE Band2 - Body) AP OFF

			Ambient	Tempera	ature: 22.4°C	C Liqui	d Temperat	ture: 22.2°0			
Frequ	encv	Mode	Test	Figure	Conducted	Max. tune-	Measured	Reported	Measured	Reported	Power
11040		Mode	Position	No./	Power	up Power	SAR(10g)	SAR(10g)	SAR(1g)	SAR(1g)	Drift
Ch.	MHz		Position	Note	(dBm)	(dBm)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(dB)
19100	1900	1RB_High	Front	1	23.15	23.5	0.256	0.28	0.428	0.46	0.05
19100	1900	1RB_High	Rear	Fig.15	23.15	23.5	0.327	0.35	0.586	0.64	0.06
18900	1880	50RB_High	Front	/	22.1	22.5	0.212	0.23	0.353	0.39	0.05
18900	1880	50RB_High	Rear	1	22.1	22.5	0.276	0.30	0.477	0.52	0.09

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

Note2: The LTE mode is QPSK_20MHz.

Table 14.1-16: SAR Values(LTE Band4 - Head)

		F	Ambient	Temper	ature: 22	2.4 °C	Liquid	Temperatu	re: 22.2°C			
Freq	uency			Test	Figure	Conduc	Max. tune-	Measure	Reported	Measure	Reporte	Powe
Ch.	MHz	Mode	Side	Positio n	No./ Note	ted Power (dBm)	up Power (dBm)	d SAR(10g) (W/kg)	SAR(10g) (W/kg)	d SAR(1g) (W/kg)	d SAR(1g) (W/kg)	r Drift (dB)
20050	1720	1RB-High	Ш	Cheek	Fig.16	23.85	24	0.191	0.20	0.286	0.30	0.07
20050	1720	1RB-High	Ш	Tilt	1	23.85	24	0.053	0.05	0.080	0.08	0.11
20050	1720	1RB-High	R	Cheek	/	23.85	24	0.154	0.16	0.230	0.24	-0.08
20050	1720	1RB-High	R	Tilt	/	23.85	24	0.041	0.04	0.062	0.06	0.12
20175	1732.5	50RB-Low	L	Cheek	/	22.71	23	0.150	0.16	0.225	0.24	0.04
20175	1732.5	50RB-Low	L	Tilt	/	22.71	23	0.042	0.04	0.063	0.07	0.07
20175	1732.5	50RB-Low	R	Cheek	/	22.71	23	0.122	0.13	0.181	0.19	-0.14
20175	1732.5	50RB-Low	R	Tilt	/	22.71	23	0.032	0.03	0.050	0.05	0.09

Note1: The LTE mode is QPSK_20MHz.



Table 14.1-17: SAR Values (LTE Band4 - Body) AP ON

		P	Ambient Te	emperatur	e: 22.4 °C	Liquid	d Temperat	ure: 22.2°C			
Frequ	uency		Test	Figure	Conducted	Max. tune-up	Measured	Reported	Measured	Reported	Power
Ch.	MHz	Mode	Position	No./Note	Power (dBm)	Power (dBm)	SAR(10g) (W/kg)	SAR(10g) (W/kg)	SAR(1g) (W/kg)	SAR(1g) (W/kg)	Drift (dB)
20050	1720	1RB-High	Front	/	21.73	22	0.290	0.31	0.513	0.55	0.07
20050	1720	1RB-High	Rear	/	21.73	22	0.332	0.35	0.608	0.65	0.01
20050	1720	1RB-High	Left	/	21.73	22	0.099	0.11	0.162	0.17	-0.04
20050	1720	1RB-High	Bottom	Fig.17	21.73	22	0.367	0.39	0.697	0.74	-0.03
20050	1720	50RB_High	Front	/	21.59	22	0.264	0.29	0.468	0.51	-0.07
20050	1720	50RB_High	Rear	/	21.59	22	0.306	0.34	0.556	0.61	0.05
20050	1720	50RB_High	Left	/	21.59	22	0.091	0.10	0.148	0.16	0.03
20050	1720	50RB_High	Bottom	1	21.59	22	0.333	0.37	0.632	0.69	-0.06

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

Note2: The LTE mode is QPSK_20MHz.

Table 14.1-18: SAR Values (LTE Band4 - Body) AP OFF

					,						
		P	Ambient Te	emperatur	e: 22.4 °C	Liquid	d Temperat	ure: 22.2 °C			
Frequ	uency		Teet	Figure	Conducted	Max. tune-up	Measured	Reported	Measured	Reported	Power
Ch.	MHz	Mode	Test Position	No./Note	Power (dBm)	Power (dBm)	SAR(10g) (W/kg)	SAR(10g) (W/kg)	SAR(1g) (W/kg)	SAR(1g) (W/kg)	Drift (dB)
20050	1720	1RB-High	Front	/	23.85	24	0.204	0.21	0.339	0.35	-0.05
20050	1720	1RB-High	Rear	Fig.18	23.85	24	0.234	0.24	0.394	0.41	0.04
20175	1732.5	50RB_Low	Front	/	22.71	23	0.162	0.17	0.270	0.29	0.06
20175	1732.5	50RB_Low	Rear	1	22.71	23	0.186	0.20	0.314	0.34	-0.01

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

Note2: The LTE mode is QPSK_20MHz.

Table 14.1-19: SAR Values (LTE Band5 - Head)

			Ambi	ent Temp	erature:	22.4°C	Liquid	Temperatu	re: 22.2°C			
Frequ	ency			Test	Figur	Conducte	Max. tune-up	Measure d	Reported	Measured	Reporte d	Powe
Ch.	MHz	Mode	Side	Positio n	e No.	d Power (dBm)	Power (dBm)	SAR(10g) (W/kg)	SAR(10g)(W/kg)	SAR(1g) (W/kg)	SAR(1g) (W/kg)	r Drift (dB)
20450	829	1RB-High	L	Cheek	1	23.56	24	0.131	0.14	0.166	0.18	-0.05
20450	829	1RB-High	L	Tilt	/	23.56	24	0.081	0.09	0.100	0.11	0.02
20450	829	1RB-High	R	Cheek	Fig.19	23.56	24	0.131	0.14	0.171	0.19	0.02
20450	829	1RB-High	R	Tilt	/	23.56	24	0.073	0.08	0.091	0.10	0.05
20525	836.5	25RB-Low	L	Cheek	/	22.4	23	0.109	0.13	0.138	0.16	0.1
20525	836.5	25RB-Low	L	Tilt	/	22.4	23	0.068	0.08	0.084	0.10	0.02
20525	836.5	25RB-Low	R	Cheek	1	22.4	23	0.107	0.12	0.140	0.16	0.01
20525	836.5	25RB-Low	R	Tilt	1	22.4	23	0.060	0.07	0.075	0.09	0.08

Note1: The LTE mode is QPSK_10MHz.



Table 14.1-20: SAR Values (LTE Band5 - Body)

			Ambient ⁻	Tempera	nture: 22.5 °C	C Liqui	d Tempera	ture: 22.0°0			
Frequ	encv		Test	Eiguro	Conducted	Max. tune-	Measured	Reported	Measured	Reported	Power
- 1	I	Mode	Position	Figure No.	Power	up Power	SAR(10g)	SAR(10g)	SAR(1g)	SAR(1g)	Drift
Ch.	MHz		Position	NO.	(dBm)	(dBm)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(dB)
20450	829	1RB-High	Front	/	23.56	24	0.132	0.15	0.174	0.19	0.02
20450	829	1RB-High	Rear	Fig.20	23.56	24	0.228	0.25	0.295	0.33	-0.08
20450	829	1RB-High	Left	1	23.56	24	0.084	0.09	0.110	0.12	0.03
20450	829	1RB-High	Bottom	1	23.56	24	0.079	0.09	0.113	0.12	0.03
20525	836.5	25RB-Low	Front	1	22.4	23	0.110	0.13	0.144	0.17	0.01
20525	836.5	25RB-Low	Rear	1	22.4	23	0.186	0.21	0.239	0.27	0.19
20525	836.5	25RB-Low	Left	/	22.4	23	0.070	0.08	0.092	0.11	0.02
20525	836.5	25RB-Low	Bottom	1	22.4	23	0.064	0.07	0.093	0.11	0.02

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

Note2: The LTE mode is QPSK_10MHz.

Table 14.1-21: SAR Values (LTE Band7 - Head)

			Ambi	ent Tem	perature	e: 22.4 °C	Liquid	Temperatur	re: 22.2°C			
Frequ	iency			Test	Figur	Conduct ed	Max.tune-	Measure d	Reported	Measured	Reporte d	Powe
Ch.	MHz	Mode	Side	Positi on	e No./ Note	Power (dBm)	up Power (dBm)	SAR(10g) (W/kg)	SAR(10g)(W/kg)	SAR(1g) (W/kg)	SAR(1g) (W/kg)	r Drift (dB)
21350	2560	1RB-High	L	Cheek	Fig.2 1	22.71	22.8	0.130	0.13	0.246	0.25	-0.07
21350	2560	1RB-High	L	Tilt	1	22.71	22.8	0.039	0.04	0.068	0.07	-0.03
21350	2560	1RB-High	R	Cheek		22.71	22.8	0.064	0.07	0.108	0.11	0.01
21350	2560	1RB-High	R	Tilt	1	22.71	22.8	0.056	0.06	0.105	0.11	0.07
21350	2560	50RB-Low	L	Cheek	1	21.49	21.8	0.103	0.11	0.194	0.21	-0.03
21350	2560	50RB-Low	L	Tilt	1	21.49	21.8	0.034	0.04	0.059	0.06	-0.01
21350	2560	50RB-Low	R	Cheek	1	21.49	21.8	0.052	0.06	0.088	0.09	0.03
21350	2560	50RB-Low	R	Tilt	1	21.49	21.8	0.044	0.05	0.083	0.09	0.02

Note1: The LTE mode is QPSK_20MHz.



Table 14.1-22: SAR Values (LTE Band7 - Body) AP ON

					ature: 22.4 °	C Liquid	d Temperat				
Frequ	ency			Figure	Conducte		Measured	Reported	Measured	Reported	Power
Trequ	СПСУ	Mode	Test	No./	d Power	Max. tune-up	SAR(10g)	SAR(10g)	SAR(1g)	SAR(1g)	Drift
Ch.	MHz		Position	Note	(dBm)	Power (dBm)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(dB)
20850	2510	1RB_High	Front	/	19.1	19.4	0.134	0.14	0.268	0.29	0.09
21350	2560	1RB_Low	Rear	Fig.22	19.02	19.4	0.563	0.61	1.24	1.35	0.01
21100	2535	1RB_High	Rear	/	19.09	19.4	0.553	0.59	1.22	1.31	0.04
20850	2510	1RB_High	Rear	/	19.1	19.4	0.440	0.47	0.972	1.04	0.12
20850	2510	1RB_High	Left	/	19.1	19.4	0.078	0.08	0.142	0.15	-0.09
21350	2560	1RB_Low	Bottom	/	19.02	19.4	0.526	0.57	1.12	1.22	0.07
21100	2535	1RB_High	Bottom	/	19.09	19.4	0.505	0.54	1.07	1.15	0.02
20850	2510	1RB_High	Bottom	/	19.1	19.4	0.428	0.46	0.901	0.97	0.11
20850	2510	50RB-Low	Front	/	19.03	19.4	0.139	0.15	0.278	0.30	0.09
21350	2560	50RB-High	Rear	/	18.92	19.4	0.526	0.59	1.12	1.25	-0.14
21100	2535	50RB-Low	Rear	/	19.01	19.4	0.466	0.51	1.04	1.13	0.15
20850	2510	50RB-Low	Rear	/	19.03	19.4	0.380	0.41	0.797	0.87	0.02
20850	2510	50RB-Low	Left	/	19.03	19.4	0.079	0.09	0.145	0.16	0.07
21350	2560	50RB-High	Bottom	/	18.92	19.4	0.540	0.60	1.19	1.32	0.06
21100	2535	50RB-Low	Bottom	/	19.01	19.4	0.456	0.50	0.963	1.05	-0.06
20850	2510	50RB-Low	Bottom	/	19.03	19.4	0.428	0.47	0.937	1.02	0.18
20850	2510	100RB	Bottom	/	19.05	19.4	0.440	0.48	0.963	1.04	-0.11
20850	2510	100RB	Bottom	/	19.05	19.4	0.390	0.42	0.819	0.89	0.16
21350	2560	1RB_High	Rear	D	22.71	22.8	1.08	1.11	2.39	2.44	0.01
21100	2535	1RB_High	Rear	D	22.61	22.8	1.12	1.17	2.46	2.57	0.04
20850	2510	1RB_High	Rear	D	22.4	22.8	1.10	1.20	2.41	2.64	0.12
21350	2560	1RB_High	Bottom	D	22.71	22.8	0.805	0.82	1.89	1.93	0.07
21100	2535	1RB_High	Bottom	D	22.61	22.8	0.901	0.94	2.11	2.20	0.02
20850	2510	1RB_High	Bottom	D	22.4	22.8	0.974	1.07	2.25	2.46	0.11
21350	2560	50RB-Low	Rear	D	21.49	21.8	0.849	0.91	1.87	2.00	-0.14
21100	2535	50RB-Low	Rear	D	21.43	21.8	0.857	0.93	1.88	2.05	0.15
20850	2510	50RB-High	Rear	D	21.2	21.8	0.886	1.02	1.95	2.23	0.02
21350	2560	50RB-Low	Bottom	D	21.49	21.8	0.674	0.72	1.58	1.70	0.06
21100	2535	50RB-Low	Bottom	D	21.43	21.8	0.707	0.77	1.64	1.78	-0.06
20850	2510	50RB-High	Bottom	D	21.2	21.8	0.813	0.93	1.86	2.14	0.18
20850	2510	100RB	Bottom	D	21.18	21.8	0.672	0.78	1.58	1.82	-0.11
20850	2510	100RB	Bottom	D	21.18	21.8	0.893	1.03	1.97	2.28	0.16

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

Note2: The LTE mode is QPSK_20MHz.

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



Table 14.1-23: SAR Values (LTE Band7 - Body) AP OFF

			Ambient	Tempera	ature: 22.4 °	C Liquio	d Temperat	ure: 22.2°C			
Frequ	iency		Test	Figure	Conducte	Max. tune-up	Measured	Reported	Measured	Reported	Power
Ch.	MHz	Mode	Position	No./ Note	d Power (dBm)	Power (dBm)	SAR(10g) (W/kg)	SAR(10g) (W/kg)	SAR(1g) (W/kg)	SAR(1g) (W/kg)	Drift (dB)
21350	2560	1RB_High	Front / 22.71		22.71	22.8	0.178	0.18	0.347	0.35	0.08
21350	2560	1RB_High	Rear	Fig.23	22.71	22.8	0.584	0.60	1.18	1.20	0.10
21100	2535	1RB_High	Rear	/	22.61	22.8	0.533	0.56	1.11	1.16	0.04
20850	2510	1RB_High	Rear	/	22.4	22.8	0.488	0.54	1.01	1.11	-0.01
21350	2560	50RB_Low	Front	/	21.49	21.8	0.141	0.15	0.274	0.29	0.12
21350	2560	50RB_Low	Rear	/	21.49	21.8	0.430	0.46	0.902	0.97	0.05
21100	2535	50RB_Low	Rear	/	21.43	21.8	0.394	0.43	0.820	0.89	0.17
20850	2510	50RB_ High	Rear	/	21.2	21.8	0.355	0.41	0.736	0.85	-0.09
21350	2560	100RB	Rear	1	21.5	21.8	0.428	0.46	0.897	0.96	0.12

Note1: The distance between the EUT and the phantom bottom is 15mm. Note2: The LTE mode is QPSK_20MHz.

Table 14.1-24: SAR Values (LTE Band12 - Head)

				Table 1	4.1-24. 3	AN Value	5 (LIL D	anu 12 - ne	z au)			
			Ambi	ent Tempe	erature: 2	22.4°C	Liquid	Temperatu	re: 22.2°C			
Frequ	iency	Mada	Cido	Test	Figure	Conduct ed	Max. tune-up	Measured	Reported	Measure d	Reporte d	Power
Ch.	MHz	Mode	Side	Position	No./ Note	Power (dBm)	Power (dBm)	SAR(10g) (W/kg)	SAR(10g)(W/kg)	SAR(1g) (W/kg)	SAR(1g) (W/kg)	Drift (dB)
23095	707.5	1RB-High	L	Cheek	/	23.7	24.5	0.067	0.08	0.090	0.11	0.03
23095	707.5	1RB-High	L	Tilt	/	23.7	24.5	0.048	0.06	0.064	0.08	0.09
23095	707.5	1RB-High	R	Cheek	Fig.24	23.7	24.5	0.086	0.10	0.109	0.13	0.05
23095	707.5	1RB-High	R	Tilt	/	23.7	24.5	0.047	0.06	0.062	0.07	0.01
23060	704	25RB-Mid	L	Cheek	/	22.59	23.5	0.048	0.06	0.064	0.08	0.03
23060	704	25RB-Mid	L	Tilt	/	22.59	23.5	0.024	0.03	0.042	0.05	0.13
23060	704	25RB-Mid	R	Cheek	/	22.59	23.5	0.047	0.06	0.066	0.08	0.02
23060	704	25RB-Mid	R	Tilt	/	22.59	23.5	0.033	0.04	0.044	0.05	0.07

Note1: The LTE mode is QPSK_10MHz.



Table 14.1-25: SAR Values (LTE Band12 - Body)

		P	Ambient Te	mperatu	re: 22.4 °C	Liqui	d Tempera	ture: 22.2°0			
Freque	ency	Mode	Test	Figure	Conducted	Max. tune-up	Measured	Reported	Measured	Reported	Power
Ch.	MHz	mede	Position	No./N ote	Power (dBm)	Power (dBm)	SAR(10g) (W/kg)	SAR(10g) (W/kg)	SAR(1g) (W/kg)	SAR(1g) (W/kg)	Drift (dB)
23095	707.5	1RB-High	Front	1	23.7	24.5	0.116	0.14	0.144	0.17	0.03
23095	707.5	1RB-High	Rear	Fig.25	23.7	24.5	0.211	0.25	0.267	0.32	-0.18
23095	707.5	1RB-High	Left	/	23.7	24.5	0.143	0.17	0.194	0.23	0.01
23095	707.5	1RB-High	Bottom	/	23.7	24.5	0.032	0.04	0.049	0.06	0.01
23060	704	25RB-Mid	Front	/	22.59	23.5	0.088	0.11	0.110	0.14	-0.05
23060	704	25RB-Mid	Rear	/	22.59	23.5	0.160	0.20	0.204	0.25	-0.03
23060	704	25RB-Mid	Left	/	22.59	23.5	0.102	0.13	0.140	0.17	0.03
23060	704	25RB-Mid	Bottom	1	22.59	23.5	0.011	0.01	0.029	0.04	-0.04

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

Note2: The LTE mode is QPSK_10MHz.

Table 14.1-26: SAR Values (LTE Band13 - Head)

			Amb	ient Tempe	rature: 22	.4 °C	Liquid	Temperatu	re: 22.2°C			
Freque	ency		0:1	Test	Figure	Condu cted	Max. tune-up	Measured	Reported	Measure d	Reporte d	Powe
Ch.	MHz	Mode	Side	Position	No./ Note	Power (dBm)	Power (dBm)	SAR(10g) (W/kg)	SAR(10g)(W/kg)	SAR(1g) (W/kg)	SAR(1g) (W/kg)	r Drift (dB)
23230	782	1RB-Mid	Left	Touch	/	23.56	24	0.099	0.11	0.134	0.15	0.04
23230	782	1RB-Mid	Left	Tilt	Fig.26	23.56	24	0.122	0.14	0.158	0.17	-0.02
23230	782	1RB-Mid	Right	Touch	/	23.56	24	0.100	0.11	0.142	0.16	0.18
23230	782	1RB-Mid	Right	Tilt	/	23.56	24	0.069	0.08	0.091	0.10	0.02
23230	782	25RB-Mid	Left	Touch	/	22.34	23	0.078	0.09	0.105	0.12	0.05
23230	782	25RB-Mid	Left	Tilt	/	22.34	23	0.061	0.07	0.082	0.10	0.01
23230	782	25RB-Mid	Right	Touch	1	22.34	23	0.079	0.09	0.111	0.13	-0.09
23230	782	25RB-Mid	Right	Tilt	1	22.34	23	0.056	0.07	0.074	0.09	0.05

Note1: The LTE mode is QPSK_10MHz.



Table 14.1-27: SAR Values (LTE Band13 - Body)

		P	Ambient Te	mperatu	re: 22.4 °C	Liqui	d Tempera	ture: 22.2°0			
Freque	ncy	Mode	Test	Figure	Conducted	Max. tune-up	Measured	Reported	Measured	Reported	Power
	МН	Mode	Position	No./N	Power	Power	SAR(10g)	SAR(10g)	SAR(1g)	SAR(1g)	Drift
Ch.	z			ote	(dBm)	(dBm)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(dB)
23230	782	1RB-Mid	Front	/	23.56	24	0.171	0.19	0.217	0.24	-0.04
23230	782	1RB-Mid	Rear	Fig.27	23.56	24	0.262	0.29	0.336	0.37	0.02
23230	782	1RB-Mid	Left	/	23.56	24	0.165	0.18	0.236	0.26	-0.14
23230	782	1RB-Mid	Bottom	/	23.56	24	0.067	0.07	0.105	0.12	0.08
23230	782	25RB-Mid	Front	/	22.34	23	0.136	0.16	0.172	0.20	0.06
23230	782	25RB-Mid	Rear	/	22.34	23	0.207	0.24	0.266	0.31	0.04
23230	782	25RB-Mid	Left	/	22.34	23	0.131	0.15	0.186	0.22	0.07
23230	782	25RB-Mid	Bottom	1	22.34	23	0.053	0.06	0.084	0.10	0.00

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

Note2: The LTE mode is QPSK_10MHz.

Table 14.1-28: SAR Values (CDMA BC0 - Head)

	idale i iii 20. 67 iii talaas (62 iii) 266 ii isaa)													
			Ambie	ent Tempe	erature: 22	.2°C L	iquid Tempe	erature: 21	.7°C					
Fred	quency		Test	Figure	Conduct ed	Max. tune-	Measured	Reported	Measured	Reported	Power			
Ch.	MHz	Side	Positio n	No.	Power (dBm)	up Power (dBm)	SAR(10g) (W/kg)	SAR(10g)(W/kg)	SAR(1g) (W/kg)	SAR(1g) (W/kg)	Drift (dB)			
384	836.52	L	Cheek	1	24.48	25	0.169	0.19	0.210	0.24	-0.05			
384	836.52	L	Tilt	/	24.48	25	0.107	0.12	0.132	0.15	0.07			
777	848.31	R	Cheek	Fig.28	24.59	25	0.189	0.21	0.246	0.27	0.08			
384	836.52	R	Cheek	1	24.48	25	0.164	0.18	0.213	0.24	0.05			
1013	824.7	R	Cheek	1	24.73	25	0.171	0.18	0.225	0.24	0.09			
384	836.52	R	Tilt	1	24.48	25	0.089	0.10	0.110	0.12	-0.05			

Table 14.1-29: SAR Values (CDMA BC0 - Body)

		Amb	ient Ten	nperature: 22	2.2°C Li	quid Tempe	erature: 21.	7 °C		
Fred	quency	Test	Figure	Conducted Power	Max. tune-up	Measured SAR(10g)	Reported SAR(10g)	Measured SAR(1g)	Reported SAR(1g)	Power Drift
Ch.	MHz	Position	No.	(dBm)	Power (dBm)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(dB)
384	836.52	Front	/	24.45	25	0.143	0.16	0.204	0.23	0.09
777	848.31	Rear	1	24.59	25	0.267	0.29	0.343	0.38	0.16
384	836.52	Rear	Fig.29	24.45	25	0.273	0.31	0.347	0.39	0.10
1013	824.7	Rear	/	24.66	25	0.269	0.29	0.345	0.37	0.02
384	836.52	Left	/	24.45	25	0.097	0.11	0.139	0.16	0.10
384	836.52	Bottom	/	24.45	25	0.083	0.09	0.134	0.15	0.14

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



Table 14.1-30: SAR Values (CDMA BC1 - Head)

			Ambie	ent Temp	perature: 22	2.2°C Li	quid Tempe	rature: 21.	7 °C		
Fred	quency		Test	Figure	Conducte	Max. tune-	Measured	Reported	Measured	Reported	Power
	<u> </u>	Side	Position	No.	d Power	up Power	SAR(10g)	SAR(10g)	SAR(1g)	SAR(1g)	Drift
Ch.	MHz			NO.	(dBm)	(dBm)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(dB)
1175	1908.75	L	Cheek	/	22.9	23	0.111	0.11	0.177	0.18	0.04
600	1880	L	Cheek	/	22.78	23	0.127	0.13	0.201	0.21	0.16
25	1851.25	L	Cheek	Fig.30	22.72	23	0.142	0.15	0.226	0.24	0.01
600	1880	L	Tilt	/	22.78	23	0.047	0.05	0.079	0.08	-0.05
600	1880	R	Cheek	/	22.78	23	0.078	0.08	0.123	0.13	0.11
600	1880	R	Tilt	1	22.78	23	0.035	0.04	0.060	0.06	0.14

Table 14.1-31: SAR Values (CDMA BC1 - Body) - AP ON

	Ambient Temperature: 22.2 °C Liquid Temperature: 21.7 °C											
		Amb	pient Tem	nperature: 22	2.2 °C Li	quid Tempe	erature: 21.	7 °C				
Fre	quency	Test	Figure	Conducted	May tung up	Measured	Reported	Measured	Reported	Power		
				Power	Max. tune-up	SAR(10g)	SAR(10g)	SAR(1g)	SAR(1g)	Drift		
Ch.	MHz	Position	No.	(dBm)	Power (dBm)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(dB)		
600	1880	Front	/	20.62	21	0.303	0.33	0.573	0.63	-0.04		
600	1880	Rear	/	20.62	21	0.383	0.42	0.714	0.78	0.05		
600	1880	Left	/	20.62	21	0.096	0.10	0.162	0.18	-0.02		
1175	1908.75	Bottom	Fig.31	20.7	21	0.489	0.52	0.955	1.02	-0.07		
600	1880	Bottom	1	20.62	21	0.476	0.52	0.924	1.01	0.01		
25	1851.25	Bottom	/	20.72	21	0.471	0.50	0.909	0.97	0.07		
600	1880	Rear	D	22.55	23	1.76	1.95	3.82	4.24	0.05		
1175	1908.75	Bottom	D	22.70	23	2.65	2.84	6.37	6.83	-0.07		
600	1880	Bottom	D	22.55	23	2.38	2.64	6.15	6.82	0.01		
25	1851.25	Bottom	D	22.54	23	2.32	2.58	6.13	6.81	0.07		

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

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

Table 14.1-32: SAR Values (CDMA BC1 - Body) - AP OFF

		Amb	ient Tem	perature: 22	2. 2 °C Li	quid Tempe	erature: 21.	7°C		
Fı	requency	Test	Figure	Conducted	Max. tune-up	Measured	Reported	Measured	Reported	Power
Ch.	MHz	Position	No.	Power (dBm)		SAR(10g) (W/kg)	SAR(10g) (W/kg)	SAR(1g) (W/kg)	SAR(1g) (W/kg)	Drift (dB)
600	1880	Front	1	22.55	23	0.332	0.37	0.457	0.51	0.03
1175	1908.75	Rear	/	22.7	23	0.354	0.38	0.575	0.62	0.01
600	1880	Rear	Fig.32	22.55	23	0.354	0.39	0.596	0.66	0.05
25	1851.25	Rear	1	22.54	23	0.351	0.39	0.586	0.65	0.02

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



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)

			Amb	ient Temp	erature: 22	.4°C Li	quid Temper	ature: 22.2	d°C		
Frequ	uency		T (Figure	Conducte	Max. tune-	Measured	Reported	Measure	Reporte	Power
Ch.	MHz	Side	Test Position	No./Not e	d Power (dBm)	up Power (dBm)	SAR(10g) (W/kg)	SAR(10g)(W/kg)	SAR(1g) (W/kg)	SAR(1g) (W/kg)	Drift (dB)
251	848.8	R	Cheek	Fig.1	32.81	33.3	0.196	0.22	0.257	0.29	0.08

Table 14.2-2: SAR Values (GSM 850 MHz Band - Body)

			Ambie	ent Temper	ature: 22.4 º(C Liq	uid Tempera	ture: 22.2°0	C		
Ch.	quency MHz	Mode (number of timeslots)	Test Position	Figure No./Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
251	848.8	GPRS (2)	Rear	Fig.2	31.95	32	0.476	0.48	0.611	0.62	-0.08

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

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

			Ambier	nt Tempera	ture: 22.4 °C	Lic Lic	quid Tempe	rature: 22.2	2°C		
Fred	quency		Toot	Figure	Conducted	Max.	Measure	Reported	Measure	Reporte	Power
Ch.	MHz	Side	Test Position	Figure No./Note	Power (dBm)	tune-up Power (dBm)	a SAR(10g) (W/kg)	SAR(10g) (W/kg)	SAR(1g) (W/kg)	a SAR(1g) (W/kg)	Drift (dB)
661	1880	L	Cheek	Fig.3	29.64	30.3	0.078	0.09	0.123	0.14	0.08

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

	idate in a moral talles (Com 1000 mile 2 and 2 cuty)													
			Ambier	nt Tempe	erature: 22.4	°C Liqu	ıid Tempera	ture: 22.2°0	3					
Fre	quency	Mode	Test	Figure	Conducted	May tung up	Measured	Reported	Measured	Reported	Power			
		(number of		No./N	Power	Max. tune-up	SAR(10g)	SAR(10g)	SAR(1g)	SAR(1g)	Drift			
Ch.	MHz	timeslots)	Position	ote	(dBm)	Power (dBm)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(dB)			
810	1909.8	GPRS (2)	Bottom	Fig.4	28.46	28.7	0.634	0.67	1.21	1.28	-0.15			

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

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



Table 14.2-5: SAR Values (WCDMA 850 MHz Band - Head)

			Ambie	ent Temper	rature: 22.4 °	C Li	quid Temp	erature: 22.	. 2 °C		
Freq	uency		T4	F :	Conducted	Max.	Measure	Reported	Measured	Reporte	Power
Ch.	MHz	Side	Test Position	Figure No./Note	Power (dBm)	tune-up Power (dBm)	a SAR(10g) (W/kg)	SAR(10g) (W/kg)	SAR(1g) (W/kg)	a SAR(1g) (W/kg)	Drift (dB)
4233	846.6	R	Cheek	Fig.5	23.69	24	0.161	0.17	0.211	0.23	0.03

Table 14.2-6: SAR Values (WCDMA 850 MHz Band - Body)

			Ambient	Temperatur	re: 22.4 °C	Liquid Ter	mperature:	22.2°C		
Frequ	uencv	Toot	Figure	Conducted	May tupo up	Measured	Reported	Measured	Reported	Power
Frequency Ch. MHz	Test Position	No./N	Power	Max. tune-up	SAR(10g)	SAR(10g)	SAR(1g)	SAR(1g)	Drift	
Ch.	MHz	Position	ote	(dBm)	Power (dBm)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(dB)
4233	846.6	Rear	Fig.6	23.69	24	0.267	0.29	0.344	0.37	0.01

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

Table 14.2-7: SAR Values (WCDMA 1700 MHz Band - Head)

					(- /		
	·	·	Ambien	t Temperat	ure: 22 .4 °C	Lic	quid Tempe	rature: 22.2	2°C	·	
Freq	quency		Test	Figure	Conducte	Max.	Measured	Reported	Measure	Reported	Power
Ch.	MHz	Side	Position	Figure No./Note	d Power (dBm)	Power (dBm)	SAR(10g) (W/kg)	SAR(10g) (W/kg)	SAR(1g) (W/kg)	SAR(1g) (W/kg)	Drift (dB)
1537	1712.4	L	Cheek	Fig.7	23.69	24	0.202	0.22	0.300	0.32	0.11

Table 14.2-8: SAR Values (WCDMA 1700 MHz Band - Body) AP ON

					,			3 /		
		A	mbient T	emperature	e: 22.4 °C	Liquid Ter	mperature:	22.2°C		
F	requency	Tool	Figure	Conducte	May tune un	Measured	Reported	Measured	Reported	Power
Frequency	Test	No./Not	d Power	Max. tune-up	SAR(10g)	SAR(10g)	SAR(1g)	SAR(1g)	Drift	
Ch	MHz	Position	е	(dBm)	Power (dBm)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(dB)
173	8 1752.6	Bottom	Fig.8	21.77	22	0.429	0.45	0.838	0.88	-0.02

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

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

Table 14.2-9: SAR Values (WCDMA 1700 MHz Band - Body) AP OFF

		Α	mbient To	emperature	e: 22.4 °C	Liquid Ter	mperature:	22.2°C		
Fred	quency	Test	Figure	Conducte	May tupo up	Measured	Reported	Measured	Reported	Power
	1		No./Not	d Power	Max. tune-up	SAR(10g)	SAR(10g)	SAR(1g)	SAR(1g)	Drift
Ch.	MHz	Position	е	(dBm)	Power (dBm)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(dB)
1738	1752.6	Rear	Fig.9	23.76	24	0.295	0.31	0.504	0.53	-0.12

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



Table 14.2-10: SAR Values(WCDMA 1900 MHz Band - Head)

			Ambient	Temperat	ture: 22.4 °C	Lic	quid Tempe	rature: 22.2	2°C		
Fred	quency		T4	Figure	Conducted	Max.	Measured	Reported	Measure	Reported	Power
Ch.	MHz	Side	Test Position	No./Not e	Power (dBm)	tune-up Power (dBm)	SAR(10g) (W/kg)	SAR(10g) (W/kg)	SAR(1g) (W/kg)	SAR(1g) (W/kg)	Drift (dB)
9662	1852.4	L	Cheek	Fig.10	22.91	23	0.148	0.15	0.230	0.23	0.03

Table 14.2-11: SAR Values (WCDMA 1900 MHz Band - Body) AP ON

		А	mbient T	emperature	e: 22.4 °C	Liquid Ter	nperature:	22.2°C		
Fred	guency	Toot	Figure	Conducte Max. tune-up		Measured	Reported	Measured	Reported	Power
	Frequency	Test	No./Not	d Power	d Power		SAR(10g)	SAR(1g)	SAR(1g)	Drift
Ch.	MHz	Position	е	(dBm)	Power (dBm)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(dB)
9938	1907.6	Bottom	Fig.11	20.66	21	0.464	0.50	0.887	0.96	-0.02

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

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

Table 14.2-12: SAR Values (WCDMA 1900 MHz Band - Body) AP OFF

						•			3 /		
			Α	mbient To	emperature	e: 22.4 °C	Liquid Ter	mperature:	22.2°C		
	Fred	illencv	Tool	Figure	Conducte	May tuna un	Measured	Reported	Measured	Reported	Power
	Frequency	Test	No./Not	d Power	Max. tune-up	SAR(10g)	SAR(10g)	SAR(1g)	SAR(1g)	Drift	
	Ch.	MHz	Position	е	(dBm)	Power (dBm)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(dB)
ĺ	9938	1907.6	Rear	Fig.12	22.62	23	0.282	0.31	0.496	0.54	-0.07

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

Table 14.2-13: SAR Values (LTE Band2 - Head)

			Ambi	ient Temp	erature:	22.4 °C	Liquic	l Temperat	ure: 22.2°C			
Frequ Ch.	MHz	Mode	Side	Test Positio n	Figure No./ Note	Conducte d Power (dBm)	Max. tune- up Power (dBm)	Measure d SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measure d SAR(1g) (W/kg)	Reporte d SAR(1g) (W/kg)	Power Drift (dB)
19100	1900	1RB-High	L	Cheek	Fig.13	23.15	23.5	0.149	0.16	0.234	0.25	0.04

Note1: The LTE mode is QPSK_20MHz.

Table 14.2-14: SAR Values (LTE Band2 - Body) AP ON

			Ambient	Tempera	ature: 22.4 °C	C Liqui	d Tempera	ture: 22.2°C			
Fregu	encv	Mada	Toot	Figure	Conducted	Max. tune-	Measured	Reported	Measured	Reported	Power
Frequency		Mode	Test	No./	Power	up Power	SAR(10g)	SAR(10g)	SAR(1g)	SAR(1g)	Drift
Ch.	MHz		Position	Note	(dBm)	(dBm)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(dB)
19100	1900	1RB-High	Bottom	Fig.14	21.2	21.5	0.510	0.55	0.995	1.07	-0.06

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

Note2: The LTE mode is QPSK_20MHz.

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



Table 14.2-15: SAR Values (LTE Band2 - Body) AP OFF

			Ambient	Tempera	ature: 22.4 °C	C Liqui	d Tempera	ture: 22.2°C	2		
Fregu	encv	Mada	Toot	Figure	Conducted	Max. tune-	Measured	Reported	Measured	Reported	Power
rrequeries		Mode	Test	No./	Power	up Power	SAR(10g)	SAR(10g)	SAR(1g)	SAR(1g)	Drift
Ch.	MHz		Position	Note	(dBm)	(dBm)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(dB)
19100	1900	1RB_High	Rear	Fig.15	23.15	23.5	0.327	0.35	0.586	0.64	0.06

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

Note2: The LTE mode is QPSK_20MHz.

Table 14.2-16: SAR Values(LTE Band4 - Head)

		,	Ambient	Temper	ature: 22	2.4 °C	Liquid	Temperatu	re: 22.2°C			
Freq Ch.	uency MHz	Mode	Side	Test Positio n	Figure No./ Note	Conduc ted Power (dBm)	Max. tune- up Power (dBm)	Measure d SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measure d SAR(1g) (W/kg)	Reporte d SAR(1g) (W/kg)	Powe r Drift (dB)
20050	1720	1RB-High	L	Cheek	Fig.16	23.85	24	0.191	0.20	0.286	0.30	0.07

Note1: The LTE mode is QPSK_20MHz.

Table 14.2-17: SAR Values (LTE Band4 - Body) AP ON

						`					
		A	Ambient Te	emperatur	e: 22 .4 °C	Liqui	d Temperat	ure: 22.2 °C			
Frequ	uency MHz	Mode	Test Position	Figure No./Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
20050	1720	1RB-High	Bottom	Fig.17	21.73	22	0.367	0.39	0.697	0.74	-0.03

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

Note2: The LTE mode is QPSK 20MHz.

Table 14.2-18: SAR Values (LTE Band4 - Body) AP OFF

						•		<u> </u>				
			A	Ambient Te	emperatur	e: 22.4 °C	Liquid	d Temperat	ure: 22.2 °C			
-	Freque	uency	Mode	Test	Figure	Conducted Power	Max. tune-up	Measured SAR(10g)	Reported SAR(10g)	Measured SAR(1g)	Reported SAR(1g)	Power Drift
	Ch.	MHz		Position	No./Note	(dBm)	Power (dBm)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(dB)
	20050	1720	1RB-High	Rear	Fig.18	23.85	24	0.234	0.24	0.394	0.41	0.04

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

Note2: The LTE mode is QPSK_20MHz.



Table 14.2-19: SAR Values (LTE Band5 - Head)

			Ambi	ent Temp	erature	22.4°C	Liquid	Temperatu	re: 22.2°C			
Frequency Ch. MHz	Mode	Side	Test Positio	Figur e No.	Conducte d Power	Max. tune-up Power	Measure d SAR(10g	Reported SAR(10g	Measured SAR(1g)	Reporte d SAR(1g)	Powe r Drift	
OII.	IVII IZ			n		(dBm)	(dBm)) (W/kg))(W/kg)	(W/kg)	(W/kg)	(dB)
20450	829	1RB-High	R	Cheek	Fig.19	23.56	24	0.131	0.14	0.171	0.19	0.02

Note1: The LTE mode is QPSK_10MHz.

Table 14.2-20: SAR Values (LTE Band5 - Body)

			Ambient ⁻	Tempera	nture: 22.5 °C	C Liqui	id Tempera	ture: 22.0°0			
Fregu	encv		Test	Eiguro	Conducted	Max. tune-	Measured	Reported	Measured	Reported	Power
rrequericy	Mode		Figure	Power	up Power	SAR(10g)	SAR(10g)	SAR(1g)	SAR(1g)	Drift	
Ch.	MHz		Position	No.	(dBm)	(dBm)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(dB)
20450	829	1RB-High	Rear	Fig.20	23.56	24	0.228	0.25	0.295	0.33	-0.08

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 Band7 - Head)

			Amb	ient Tem	peratur	e: 22.4 °C	Liquid	Temperatur	e: 22.2°C			
Frequ	iency			Test	Figur	Conduct ed	Max.tune-	Measure	Reported	Measured	Reporte d	Powe
	MHz	Mode	Side	Positi on	e No./ Note	Power (dBm)	up Power (dBm)	SAR(10g) (W/kg)	SAR(10g)(W/kg)	SAR(1g) (W/kg)	SAR(1g) (W/kg)	r Drift (dB)
21350	2560	1RB-High	L	Cheek	Fig.2 1	22.71	23	0.130	0.14	0.246	0.26	-0.07

Note1: The LTE mode is QPSK_20MHz.

Table 14.2-22: SAR Values (LTE Band7 - Body) AP ON

				IUNIC		er oz art vari	200 (2: 2 Bail	a. Boay,	71. 011			
				Ambient	Tempera	ature: 22.4 °	C Liquid	d Temperat	ure: 22.2 °C			
	Frequ	ency		Test	Figure	Conducte	Max. tune-up	Measured	Reported	Measured	Reported	Power
f			Mode	Position	No./	No./ d Power	Power (dBm)	SAR(10g)	SAR(10g)	SAR(1g)	SAR(1g)	Drift
	Ch.	MHz		1 0311011	Note	(dBm)	1 ower (abiii)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(dB)
	21350	2560	1RB_Low	Rear	Fig.22	19.02	19.4	0.563	0.61	1.24	1.35	0.01

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

Note2: The LTE mode is QPSK_20MHz.

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



Table 14.2-23: SAR Values (LTE Band7 - Body) AP OFF

			Ambient	Tempera	ature: 22.4 $^{\circ}$	°C Liquio	d Temperat	ure: 22.2 °C			
Frequ	iency		Test	Figure	Conducte	Max. tune-up	Measured	Reported	Measured	Reported	Power
		Mode		No./	d Power		SAR(10g)	SAR(10g)	SAR(1g)	SAR(1g)	Drift
Ch.	MHz		Position	Note	(dBm)	Power (dBm)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(dB)
21350	2560	1RB_High	Rear	Fig.23	22.71	22.8	0.584	0.60	1.18	1.20	0.10

Note1: The distance between the EUT and the phantom bottom is 15mm. Note2: The LTE mode is QPSK_20MHz.

Table 14.2-24: SAR Values (LTE Band12 - Head)

			Ambi	ent Tempe	erature: 2	22.4 °C	Liquid	Temperatu	re: 22.2°C			
Frequ Ch.	iency MHz	Mode	Side	Test Position	Figure No./ Note	Conduct ed Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g)(W/kg)	Measure d SAR(1g) (W/kg)	Reporte d SAR(1g) (W/kg)	Power Drift (dB)
23095	707.5	1RB-High	R	Cheek	Fig.24	23.7	24.5	0.086	0.10	0.109	0.13	0.05

Note1: The LTE mode is QPSK_10MHz.

Table 14.2-25: SAR Values (LTE Band12 - Body)

						•					
		-	Ambient Te	mperatu	re: 22.4 °C	Liqui	id Tempera	ture: 22.2°0			
Frequ	iency	Mode	Test	Figure	Conducted	Max. tune-up	Measured	Reported	Measured	Reported	Power
Ch.	MHz	Wiode	Position	No./N ote	Power (dBm)	Power (dBm)	SAR(10g) (W/kg)	SAR(10g) (W/kg)	SAR(1g) (W/kg)	SAR(1g) (W/kg)	Drift (dB)
23095	707.5	1RB-High	Rear	Fig.25	23.7	24.5	0.211	0.25	0.267	0.32	-0.18

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

Note2: The LTE mode is QPSK_10MHz.

Table 14.2-26: SAR Values (LTE Band13 - Head)

				IUDIC I-	T.L LU. U/	ur valac	5 (LIL D	ana io in	,uu,			
			Amb	ient Tempe	rature: 22	.4 °C	Liquid	Temperatu	re: 22.2°C			
Frequ	ency	Mada	Cido	Test	Figure	Condu cted	Max. tune-up	Measured	Reported	Measure d	Reporte d	Powe
Ch.	MHz	iviode	Mode Side	Position	No./ Note	Power (dBm)	Power (dBm)	SAR(10g) (W/kg)	SAR(10g)(W/kg)	SAR(1g) (W/kg)	SAR(1g) (W/kg)	r Drift (dB)
23230	782	1RB-Mid	Left	Tilt	Fig.26	23.56	24	0.122	0.14	0.158	0.17	-0.02

Note1: The LTE mode is QPSK_10MHz.



Table 14.2-27: SAR Values (LTE Band13 - Body)

		,	Ambient Te	mperatu	re: 22.4 °C	Liqu	id Tempera	ture: 22.2°0	2		
Freque	ncy	Mode	Test	Figure	Conducted	Max. tune-up	Measured	Reported	Measured	Reported	Power
	МН	Wiode	Position	No./N	Power	Power	SAR(10g)	SAR(10g)	SAR(1g)	SAR(1g)	Drift
Ch.	z			ote	(dBm)	(dBm)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(dB)
23230	782	1RB-Mid	Rear	Fig.27	23.56	24	0.262	0.29	0.336	0.37	0.02

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

Note2: The LTE mode is QPSK_10MHz.

Table 14.2-28: SAR Values (CDMA BC0 - Head)

			Ambie	ent Tempe	erature: 22	.2°C L	iquid Temp	erature: 21	.7°C		
Fred	quency		Test	Liguro	Conduct	Max. tune-	Measured	Reported	Measured	Reported	Power
Ch.	MHz	Side	Positio n	Figure No.	ed Power (dBm)	up Power (dBm)	SAR(10g) (W/kg)	SAR(10g)(W/kg)	SAR(1g) (W/kg)	SAR(1g) (W/kg)	Drift (dB)
777	848.31	R	Cheek	Fig.28	24.59	25	0.189	0.21	0.246	0.27	0.08

Table 14.2-29: SAR Values (CDMA BC0 - Body)

	Ambient Temperature: 22.2 °C Liquid Temperature: 21.7 °C												
Fre	equency MHz	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)			
384	836.52	Rear	Fig.29	24.45	25	0.273	0.31	0.347	0.39	0.10			

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

Table 14.2-30: SAR Values (CDMA BC1 - Head)

	Table 14.2 00. OAK Valado (OBINA DOT TICAA)													
	Ambient Temperature: 22.2 °C Liquid Temperature: 21.7 °C													
Fre	quency		Test	Eiguro	Conducte	Max. tune-	Measured	Reported	Measured	Reported	Power			
	. , T	Side			9	d Power	up Power	SAR(10g)	SAR(10g)	SAR(1g)	SAR(1g)	Drift		
Ch.	MHz			INO.	(dBm)	(dBm)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(dB)			
25	1851.25	L	Cheek	Fig.30	22.72	23	0.142	0.15	0.226	0.24	0.01			

Table 14.2-31: SAR Values (CDMA BC1 - Body) - AP ON

	Ambient Temperature: 22.2 °C Liquid Temperature: 21.7 °C												
Frequency Test Figure Conducted Max. tune-up Measured Reported Reported								Power					
	1			Power	•	SAR(10g)	SAR(10g)	SAR(1g)	SAR(1g)	Drift			
Ch.	MHz	Position	No.	(dBm)	Power (dBm)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(dB)			
1175	1908.75	Bottom	Fig.31	20.7	21	0.489	0.52	0.955	1.02	-0.07			

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

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



Table 14.2-32: SAR Values (CDMA BC1 - Body) - AP OFF

	Ambient Temperature: 22.2 °C Liquid Temperature: 21.7 °C											
F	requency	Test	Figure	Conducted	May tung up	Measured	Reported	Measured	Reported	Power		
	T		Figure	Power	Max. tune-up	SAR(10g)	SAR(10g)	SAR(1g)	SAR(1g)	Drift		
Ch.	MHz	Position	No.	(dBm)	Power (dBm)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(dB)		
600	1880	Rear	Fig.32	22.55	23	0.354	0.39	0.596	0.66	0.05		

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

14.4 WLAN Evaluation

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

Head Evaluation

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

			Amb	ient Tem	perature: 2	2.4 °C	_iquid Temp	erature: 22	. 2 °C		
Freque	ency		Test	Figure	Conducte	Max. tune-	Measured	Reported	Measured	Reported	Power
-		Side		No./	d Power	up Power	SAR(10g)	SAR(10g)	SAR(1g)	SAR(1g)(Drift
MHz	Ch.		Position	Note	(dBm)	(dBm)	(W/kg)	(W/kg)	(W/kg)	W/kg)	(dB)
2437	6	L	Cheek	1	15.68	16	0.234	0.25	0.459	0.49	0.19
2437	6	L	Tilt	/	15.68	16	0.185	0.20	0.364	0.39	0.08
2437	6	R	Cheek	1	15.68	16	0.102	0.11	0.177	0.19	0.02
2437	6	R	Tilt	/	15.68	16	0.097	0.10	0.186	0.20	0.09

As shown above table, the <u>initial test position</u> for head is "Left Cheek". So the head SAR of WLAN is presented as below:

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

			Amb	ient Tem	perature: 2	2.4 °C	Liquid Temp	erature: 22	. 2 °C		
Frequ	ency	Test		Figure	Conducte	Max. tune-	Measured	Reported	Measured	Reported	Power
	<u>, </u>	Side		No./	d Power	up Power	SAR(10g)	SAR(10g)	SAR(1g)	SAR(1g)(Drift
MHz	Ch.		Position	Note	(dBm)	(dBm)	(W/kg)	(W/kg)	(W/kg)	W/kg)	(dB)
2437	6	L	Cheek	Fig.33	15.68	16	0.240	0.26	0.499	0.54	0.19
2437	6	L	Tilt	/	15.68	16	0.182	0.20	0.367	0.40	0.08

Note1: When the <u>reported</u> SAR of the <u>initial test position</u> is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the <u>initial test position</u> using subsequent highest estimated 1-g SAR conditions determined by area scans, on the highest maximum output power channel, until the <u>reported</u> SAR is \leq 0.8 W/kg. Note2: For all positions/configurations tested using the <u>initial test position</u> and subsequent test positions, when the <u>reported</u> 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 <u>reported</u> SAR is \leq 1.2 W/kg or all required channels are tested.

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



Table 14.4-3: SAR Values	(WLAN - Head) - 802.	.11b (Scaled Reported SAR)
--------------------------	----------------------	----------------------------

		Ambien	t Temperatı	ure: 22.4 °C	Liquid Te	emperature: 22.2	2°C
Freque	ency	Side	Test	Actual duty	maximum	Reported SAR	Scaled reported
MHz	Ch.	0.00	Position	factor	duty factor	(1g)(W/kg)	SAR (1g)(W/kg)
2437 6 Left			Touch	98.25%	100%	0.54	0.55

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

Body Evaluation

Table 14.4-4: SAR Values(WLAN - Body) - 802.11b (Fast SAR) 10mm

		Α	mbient T	emperature	22.4 °C	Liquid Tem	nperature: 2	22.2°C		
Freque	Frequency Test		Figure	Conducted	Max. tune-up	Measured	Reported	Measured	Reported	Power
	, 	Position	No./	Power	·	SAR(10g)	SAR(10g)	SAR(1g)	SAR(1g)(Drift
MHz	Ch.	Position	Note	(dBm)	Power (dBm)	(W/kg)	(W/kg)	(W/kg)	W/kg)	(dB)
2437	6	Front	/	15.68	16	0.053	0.06	0.097	0.10	0.05
2437	6	Rear	/	15.68	16	0.041	0.04	0.087	0.09	0.16
2437	6	Right	/	15.68	16	0.051	0.05	0.103	0.11	-0.08
2437	6	Тор	/	15.68	16	0.052	0.06	0.093	0.10	0.07

As shown above table, the <u>initial test position</u> for body is "Right". So the body SAR of WLAN is presented as below:

Table 14.4-5: SAR Values(WLAN - Body)- 802.11b (Full SAR) 10mm

_													
			Α	mbient T	emperature:	: 22.4 °C	Liquid Tem	nperature: 2	22.2°C				
	Frequency Test			Figure	Conducted	May tung up	Measured	Reported	Measured	Reported	Power		
				No./	Power Max. tune-up	SAR(10g)	SAR(10g)	SAR(1g)	SAR(1g)(Drift			
	MHz	Ch.	Position	Note	(dBm)	Power (dBm)	(W/kg)	(W/kg)	(W/kg)	W/kg)	(dB)		
	2437	6	Right	Fig.34	15.68	16	0.054	0.06	0.113	0.12	-0.08		

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

Note2: For all positions/configurations tested using the <u>initial test position</u> and subsequent test positions, when the <u>reported</u> 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 <u>reported</u> SAR is ≤ 1.2 W/kg or all required channels are tested.

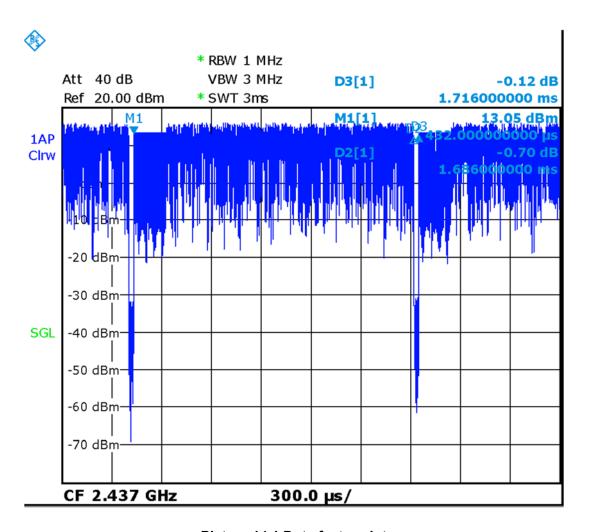
According to the KDB248227 D01, The reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit. The scaled reported SAR is presented as below.



Table 14.4-6: SAR Values (WLAN - Body) - 802.11b (Scaled Reported SAR) 10mm

	Ambient Temperature: 22.4 °C Liquid Temperature: 22.2 °C												
Frequency Test Actual duty maximum Reported SAR Scaled reported SAR													
MHz	Ch.	Position	factor	duty factor	(1g)(W/kg)	(1g)(W/kg)							
2437	6	Right	98.25%	100%	0.12	0.12							
2437	0.09												

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



Picture 14.1 Duty factor plot



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; steps2) through 4) do not apply.
- 2) When the original highest measured SAR is ≥ 0.80 W/kg, repeat that measurement once.
- 3) Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is ≥ 1.45 W/kg ($\sim 10\%$ from the 1-g SAR limit).
- 4) Perform a third repeated measurement only if the original, first or second repeated measurement is ≥1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

Table 15.1: SAR Measurement Variability for Body GSM1900 (1g)

Fred	uency	Toot	Chaoina	Original	First	The	Second
Ch.	MHz	Test Position	Spacing (mm)	SAR (W/kg)	Repeated SAR (W/kg)	The Ratio	Repeated SAR (W/kg)
810	1909.8	Bottom	10	1.21	1.19	1.02	1

Table 15.2: SAR Measurement Variability for Body W1700 (1g) AP ON

Fred	luency	Toot	Chaoina	Original	First	The	Second
Ch.	MHz	Test Position	Spacing (mm)	SAR (W/kg)	Repeated SAR (W/kg)	Ratio	Repeated SAR (W/kg)
1738	1752.6	Bottom	10	0.838	0.827	1.01	1

Table 15.3: SAR Measurement Variability for Body W1900 (1g) AP ON

						\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
Fred	quency	Test	Chaoina	Original	Original First		Second
Ch.	MHz	Position	Spacing (mm)	SAR (W/kg)	Repeated SAR (W/kg)	The Ratio	Repeated SAR (W/kg)
9938	1907.6	Bottom	10	0.887	0.881	1.01	1

Table 15.4: SAR Measurement Variability for Body CDMA BC1 (1g) AP ON

Fred	quency	Toot	Chaoina	Original	First	The	Second	
Ch.	MHz	Test Position	Spacing (mm)	SAR (W/kg)	Repeated SAR (W/kg)	Ratio	Repeated SAR (W/kg)	
1175	1908.75	Bottom	10	0.955	0.941	1.01	1	



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

Frequency			Tool	Cassina	Original	First	The	Second
Ch.	MHz	Mode	Test Position	Spacing (mm)	SAR (W/kg)	Repeated SAR (W/kg)	The Ratio	Repeated SAR (W/kg)
19100	1900	1RB_High	Bottom	10	0.995	0.981	1.01	1

Table 15.6: SAR Measurement Variability for Body LTE B7 (1g) AP ON

Frequ	ency		Toot	Specing	Original	First	The	Second
Ch.	MHz	Mode	Test Position	Spacing (mm)	SAR (W/kg)	Repeated SAR (W/kg)	Ratio	Repeated SAR (W/kg)
21350	2560	1RB_Low	Bottom	10	1.24	1.21	1.02	1

Table 15.7: SAR Measurement Variability for Body LTE B7 (1g) AP OFF

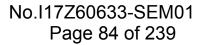
Frequency			Test	Spacing	Original	First	The	Second
Ch.	MHz	Mode	Position	(mm)	SAR (W/kg)	Repeated SAR (W/kg)	Ratio	Repeated SAR (W/kg)
21350	2560	1RB_High	Rear	15	1.18	1.15	1.03	1



16 Measurement Uncertainty

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

16.1 Measurement Uncertainty for Normal SAR Tests (300MHZ~3GHz)											
No.	Error Description	Type	Uncertainty	Probably	Div.	(Ci)	(Ci)	Std.	Std.	Degree	
			value	Distribution		1g	10g	Unc.	Unc.	of	
								(1g)	(10g)	freedom	
Meas	surement system				•		•	•			
1	Probe calibration	В	6.0	N	1	1	1	6.0	6.0	∞	
2	Isotropy	В	4.7	R	$\sqrt{3}$	0.7	0.7	1.9	1.9	∞	
3	Boundary effect	В	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞	
4	Linearity	В	4.7	R	$\sqrt{3}$	1	1	2.7	2.7	∞	
5	Detection limit	В	1.0	N	1	1	1	0.6	0.6	∞	
6	Readout electronics	В	0.3	R	$\sqrt{3}$	1	1	0.3	0.3	∞	
7	Response time	В	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	8	
8	Integration time	В	2.6	R	$\sqrt{3}$	1	1	1.5	1.5	∞	
9	RF ambient conditions-noise	В	0	R	$\sqrt{3}$	1	1	0	0	8	
10	RFambient conditions-reflection	В	0	R	$\sqrt{3}$	1	1	0	0	∞	
11	Probe positioned mech. restrictions	В	0.4	R	$\sqrt{3}$	1	1	0.2	0.2	∞	
12	Probe positioning with respect to phantom shell	В	2.9	R	$\sqrt{3}$	1	1	1.7	1.7	∞	
13	Post-processing	В	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞	
			Test	sample relate	d						
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	В	5.0	R	$\sqrt{3}$	1	1	2.9	2.9	∞	
			Phan	tom and set-u	p		•	•			
17	Phantom uncertainty	В	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	∞	
18	Liquid conductivity (target)	В	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)	В	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	

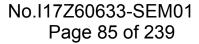




Combined standard uncertainty	$u'_{c} = \sqrt{\sum_{i=1}^{21} c_{i}^{2} u_{i}^{2}}$		9.55	9.43	257
Expanded uncertainty (confidence interval of 95 %)	$u_e = 2u_c$		19.1	18.9	

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

No.	Error Description	Type	Uncertainty	Probably	Div.	(Ci)	(Ci)	Std.	Std.	Degree
INO.	Effor Description	Турс	value	Distribution	DIV.	1g	10g	Unc.	Unc.	of
			value	Distribution		1g	Tog	(1g)	(10g)	freedom
Mea	surement system							(18)	(10g)	necdom
1	Probe calibration	В	6.55	N	1	1	1	6.55	6.55	∞
2	Isotropy	В	4.7	R	$\sqrt{3}$	0.7	0.7	1.9	1.9	∞
3	Boundary effect	В	2.0	R	$\sqrt{3}$	1	1	1.2	1.2	∞
4	Linearity	В	4.7	R	$\sqrt{3}$	1	1	2.7	2.7	∞
5	Detection limit	В	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
6	Readout electronics	В	0.3	R	$\sqrt{3}$	1	1	0.3	0.3	∞
7	Response time	В	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	∞
8	Integration time	В	2.6	R	$\sqrt{3}$	1	1	1.5	1.5	∞
9	RF ambient conditions-noise	В	0	R	$\sqrt{3}$	1	1	0	0	∞
10	RFambient conditions-reflection	В	0	R	$\sqrt{3}$	1	1	0	0	&
11	Probe positioned mech. restrictions	В	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	&
12	Probe positioning with respect to phantom shell	В	6.7	R	$\sqrt{3}$	1	1	3.9	3.9	8
13	Post-processing	В	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	∞
			Test	sample relate	d					
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	В	5.0	R	$\sqrt{3}$	1	1	2.9	2.9	∞
			Phan	tom and set-u	p					
17	Phantom uncertainty	В	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	∞
18	Liquid conductivity (target)	В	5.0	R	$\sqrt{3}$	0.64	0.43	1.8	1.2	8
19	Liquid conductivity (meas.)	A	2.06	N	1	0.64	0.43	1.32	0.89	43
20	Liquid permittivity (target)	В	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
(conf	Expanded uncertainty (confidence interval of 95 %)		$u_e = 2u_c$					21.4	21.1	

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

16.3 Measurement Uncertainty for Fast SAR Tests (300MHz~3GHz)											
No.	Error Description	Type	Uncertainty	Probably	Div.	(Ci)	(Ci)	Std.	Std.	Degree	
			value	Distribution		1g	10g	Unc.	Unc.	of	
								(1g)	(10g)	freedom	
Mea	surement system										
1	Probe calibration	В	6.0	N	1	1	1	6.0	6.0	∞	
2	Isotropy	В	4.7	R	$\sqrt{3}$	0.7	0.7	1.9	1.9	∞	
3	Boundary effect	В	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞	
4	Linearity	В	4.7	R	$\sqrt{3}$	1	1	2.7	2.7	∞	
5	Detection limit	В	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞	
6	Readout electronics	В	0.3	R	$\sqrt{3}$	1	1	0.3	0.3	∞	
7	Response time	В	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	∞	
8	Integration time	В	2.6	R	$\sqrt{3}$	1	1	1.5	1.5	∞	
9	RF ambient conditions-noise	В	0	R	$\sqrt{3}$	1	1	0	0	8	
10	RFambient conditions-reflection	В	0	R	$\sqrt{3}$	1	1	0	0	∞	
11	Probe positioned mech. Restrictions	В	0.4	R	$\sqrt{3}$	1	1	0.2	0.2	∞	
12	Probe positioning with respect to phantom shell	В	2.9	R	$\sqrt{3}$	1	1	1.7	1.7	∞	
13	Post-processing	В	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞	
14	Fast SAR z- Approximation	В	7.0	R	$\sqrt{3}$	1	1	4.0	4.0	&	
			Test	sample relate	d						
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	В	5.0	R	$\sqrt{3}$	1	1	2.9	2.9	∞	
			Phan	tom and set-u	p						
18	Phantom uncertainty	В	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	∞	
19	Liquid conductivity (target)	В	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)	В	5.0	R	$\sqrt{3}$	0.6	0.49	1.7	1.4	80
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
(cont	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	Probably	Div.	(Ci)	(Ci)	Std.	Std.	Degree
			value	Distribution		1g	10g	Unc.	Unc.	of
								(1g)	(10g)	freedom
Meas	Measurement system									
1	Probe calibration	В	6.55	N	1	1	1	6.55	6.55	∞
2	Isotropy	В	4.7	R	$\sqrt{3}$	0.7	0.7	1.9	1.9	∞
3	Boundary effect	В	2.0	R	$\sqrt{3}$	1	1	1.2	1.2	∞
4	Linearity	В	4.7	R	$\sqrt{3}$	1	1	2.7	2.7	∞
5	Detection limit	В	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
6	Readout electronics	В	0.3	R	$\sqrt{3}$	1	1	0.3	0.3	∞
7	Response time	В	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	∞
8	Integration time	В	2.6	R	$\sqrt{3}$	1	1	1.5	1.5	∞
9	RF ambient conditions-noise	В	0	R	$\sqrt{3}$	1	1	0	0	∞
10	RFambient conditions-reflection	В	0	R	$\sqrt{3}$	1	1	0	0	8
11	Probe positioned mech. Restrictions	В	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	8
12	Probe positioning with respect to phantom shell	В	6.7	R	$\sqrt{3}$	1	1	3.9	3.9	&
13	Post-processing	В	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
14	Fast SAR z- Approximation	В	14.0	R	$\sqrt{3}$	1	1	8.1	8.1	8
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	В	5.0	R	$\sqrt{3}$	1	1	2.9	2.9	∞

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Phantom and set-up										
18	Phantom uncertainty	В	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	8
19	Liquid conductivity (target)	В	5.0	R	$\sqrt{3}$	0.64	0.43	1.8	1.2	8
20	Liquid conductivity (meas.)	A	2.06	N	1	0.64	0.43	1.32	0.89	43
21	Liquid permittivity (target)	В	5.0	R	$\sqrt{3}$	0.6	0.49	1.7	1.4	8
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 %)		1	$u_e = 2u_c$					27.0	26.8	

17 MAIN TEST INSTRUMENTS

Table 17.1: List of Main Instruments

No.	Name	Туре	Serial Number	Calibration Date	Valid Period	
01	Network analyzer	E5071C	MY46110673	January 13, 2017	One year	
02	Power meter	NRVD	102083	Santambar 22 2016	One year	
03	Power sensor	NRV-Z5	100595	September 22,2016		
04	Signal Generator	E4438C	MY49071430	January 13,2017	One Year	
05	Amplifier	60S1G4	0331848	No Calibration Requested		
06	BTS	E5515C	MY50263375	January 16, 2017	One year	
07	BTS	CMW500	159890	November 25, 2016	One year	
80	E-field Probe	SPEAG EX3DV4	3846	January 13,2017	One year	
09	DAE	SPEAG DAE4	1331	January 19, 2017	One year	
10	Dipole Validation Kit	SPEAG D750V3	1017	July 20,2016	One year	
11	Dipole Validation Kit	SPEAG D835V2	4d069	July 20,2016	One year	
12	Dipole Validation Kit	SPEAG D1750V2	1003	July 21,2016	One year	
13	Dipole Validation Kit	SPEAG D1900V2	5d101	July 28,2016	One year	
14	Dipole Validation Kit	SPEAG D2450V2	853	July 25,2016	One year	
15	Dipole Validation Kit	SPEAG D2600V2	1012	July 25,2016	One year	

END OF REPORT BODY



ANNEX A Graph Results

850 Right Cheek High

Date: 2017-5-12

Electronics: DAE4 Sn1331 Medium: Head 850 MHz

Medium parameters used (interpolated): f = 848.8 MHz; $\sigma = 0.899 \text{ mho/m}$; $\epsilon r = 41.53$; $\rho = 1000 \text{ mho/m}$

 kg/m^3

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

Communication System: GSM 850 Frequency: 848.8 MHz Duty Cycle: 1:8.3

Probe: EX3DV4 – SN3846 ConvF(9.33, 9.33, 9.33)

Area Scan (71x131x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.281 W/kg

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

Reference Value = 3.742 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.336 W/kg

SAR(1 g) = 0.257 W/kg; SAR(10 g) = 0.196 W/kg

Maximum value of SAR (measured) = 0.284 W/kg

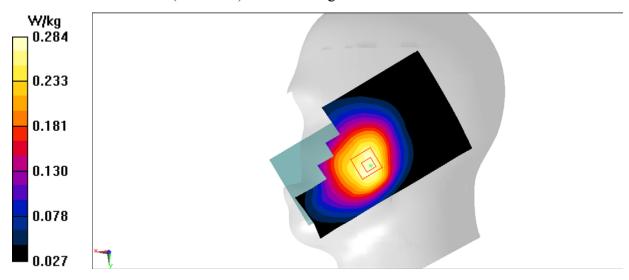


Fig.1 850MHz



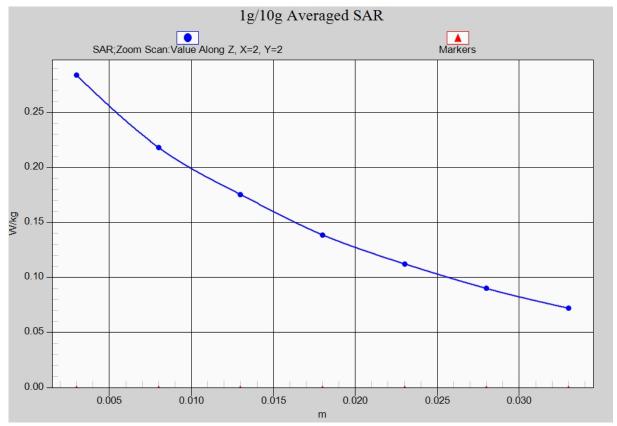


Fig. 1-1 Z-Scan at power reference point (850 MHz)



850 Body Rear High

Date: 2017-5-12

Electronics: DAE4 Sn1331 Medium: Body 850 MHz

Medium parameters used (interpolated): f = 848.8 MHz; $\sigma = 1.005 \text{ mho/m}$; $\epsilon r = 55.13$; $\rho = 1000 \text{ mho/m}$

 kg/m^3

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

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

Probe: EX3DV4 – SN3846 ConvF(9.52, 9.52, 9.52)

Area Scan (121x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.670 W/kg

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

Reference Value = 24.90 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.766 W/kg

SAR(1 g) = 0.611 W/kg; SAR(10 g) = 0.476 W/kg

Maximum value of SAR (measured) = 0.669 W/kg

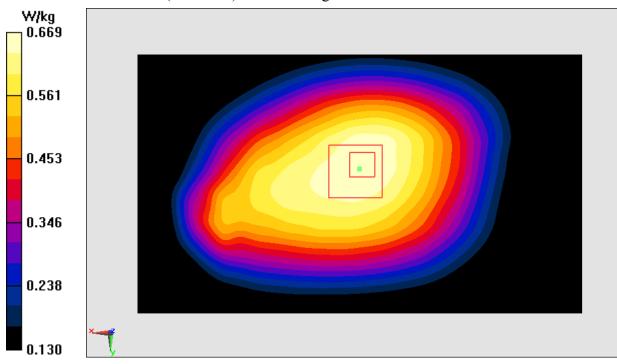


Fig.2 850 MHz



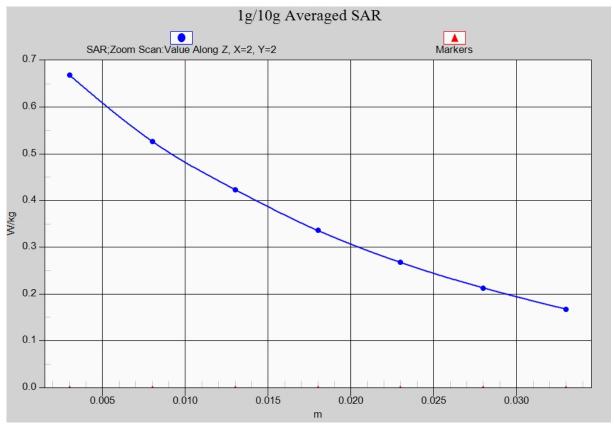


Fig. 2-1 Z-Scan at power reference point (850 MHz)



1900 Left Cheek Middle

Date: 2017-5-14

Electronics: DAE4 Sn1331 Medium: Head 1900 MHz

Medium parameters used: f = 1880 MHz; $\sigma = 1.383 \text{ mho/m}$; $\epsilon r = 41.18$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

Communication System: GSM 1900MHz Frequency: 1880 MHz Duty Cycle: 1:8.3

Probe: EX3DV4– SN3846 ConvF(7.89, 7.89, 7.89)

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

Maximum value of SAR (interpolated) = 0.140 W/kg

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

Reference Value = 3.549 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.180 W/kg

SAR(1 g) = 0.123 W/kg; SAR(10 g) = 0.078 W/kg

Maximum value of SAR (measured) = 0.143 W/kg

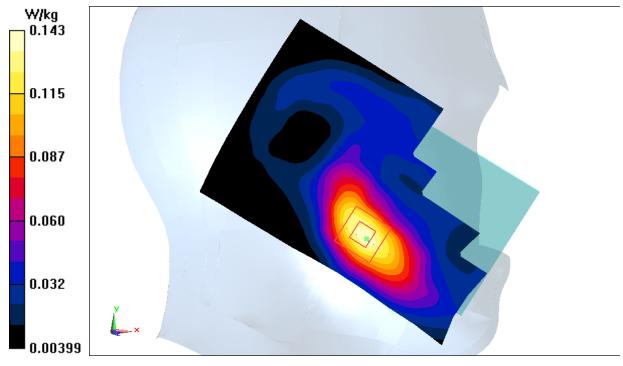


Fig.3 1900 MHz



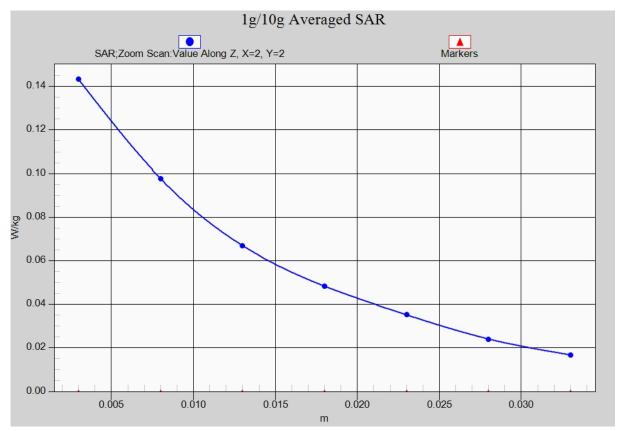


Fig. 3-1 Z-Scan at power reference point (1900 MHz)



1900 Body Bottom High

Date: 2017-5-14

Electronics: DAE4 Sn1331 Medium: Body 1900 MHz

Medium parameters used: f = 1909.8 MHz; $\sigma = 1.525 \text{ mho/m}$; $\epsilon r = 52.07$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

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

Probe: EX3DV4– SN3846 ConvF(7.57, 7.57, 7.57)

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

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

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

Reference Value = 25.35 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 2.06 W/kg

SAR(1 g) = 1.21 W/kg; SAR(10 g) = 0.634 W/kg

Maximum value of SAR (measured) = 1.53 W/kg

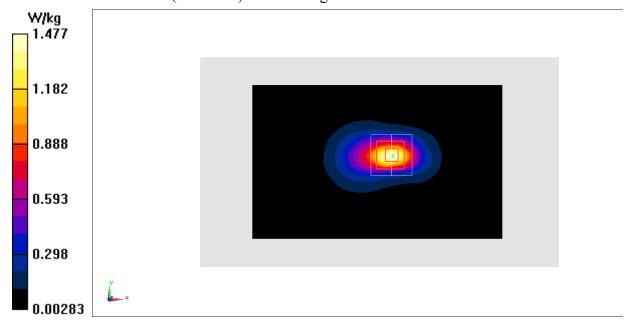


Fig.4 1900 MHz



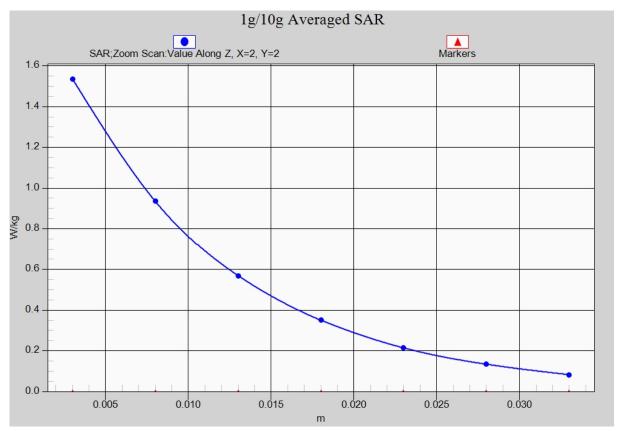


Fig. 4-1 Z-Scan at power reference point (1900 MHz)



WCDMA 850 Right Cheek High

Date: 2017-5-12

Electronics: DAE4 Sn1331 Medium: Head 850 MHz

Medium parameters used (interpolated): f = 846.6 MHz; $\sigma = 0.896 \text{ mho/m}$; $\epsilon r = 41.64$; $\rho = 1000 \text{ mho/m}$

 kg/m^3

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

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

Probe: EX3DV4 – SN3846 ConvF(9.33, 9.33, 9.33)

Area Scan (71x131x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.235 W/kg

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

Reference Value = 3.596 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.272 W/kg

SAR(1 g) = 0.211 W/kg; SAR(10 g) = 0.161 W/kg

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

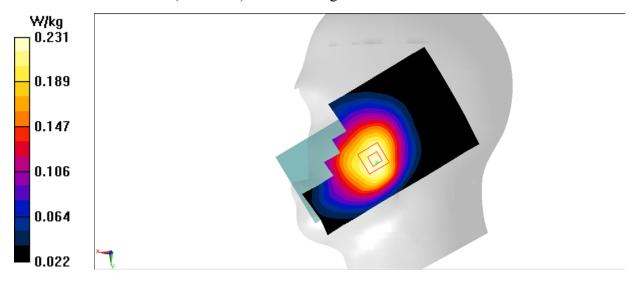


Fig.5 WCDMA 850



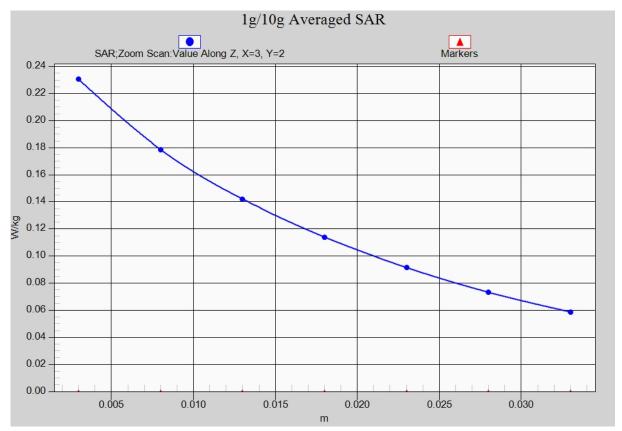


Fig. 5-1 Z-Scan at power reference point (850 MHz)



WCDMA 850 Body Rear High

Date: 2017-5-12

Electronics: DAE4 Sn1331 Medium: Body 850 MHz

Medium parameters used (interpolated): f = 846.6 MHz; $\sigma = 1.003 \text{ mho/m}$; $\epsilon r = 55.28$; $\rho = 1000 \text{ mho/m}$

 kg/m^3

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

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

Probe: EX3DV4 – SN3846 ConvF(9.52, 9.52, 9.52)

Area Scan (81x131x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

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

Reference Value = 20.53 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.446 W/kg

SAR(1 g) = 0.344 W/kg; SAR(10 g) = 0.267 W/kg

Maximum value of SAR (measured) = 0.412 W/kg

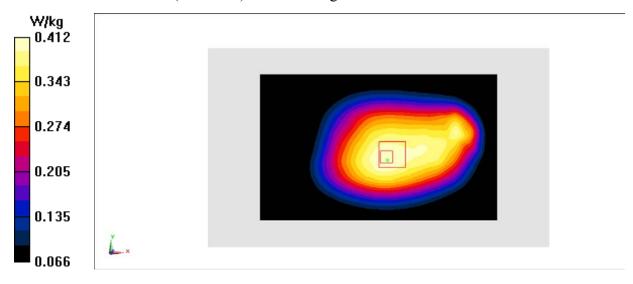


Fig.6 WCDMA 850



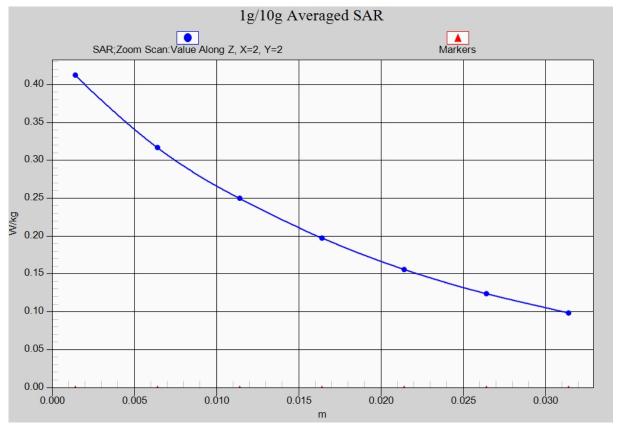


Fig. 6-1 Z-Scan at power reference point (WCDMA850)



WCDMA 1700 Left Cheek Low

Date: 2017-5-13

Electronics: DAE4 Sn1331 Medium: Head 1750 MHz

Medium parameters used (interpolated): f = 1712.4 MHz; $\sigma = 1.344 \text{ mho/m}$; $\epsilon r = 40.47$; $\rho = 1000$

 kg/m^3

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

Communication System: WCDMA 1750 Frequency: 1712.4 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN3846 ConvF(8.16, 8.16, 8.16)

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

Maximum value of SAR (interpolated) = 0.342 W/kg

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

Reference Value = 5.314 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.418 W/kg

SAR(1 g) = 0.300 W/kg; SAR(10 g) = 0.202 W/kg

Maximum value of SAR (measured) = 0.342 W/kg

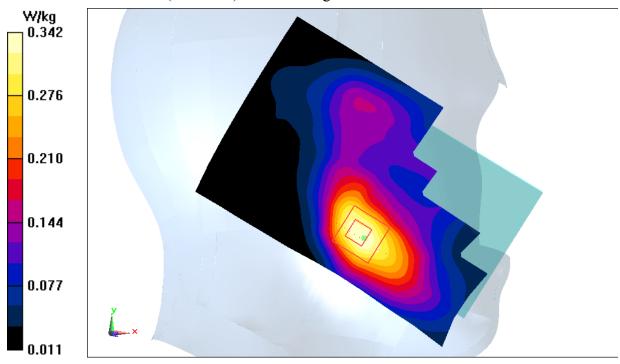


Fig.7 WCDMA1700



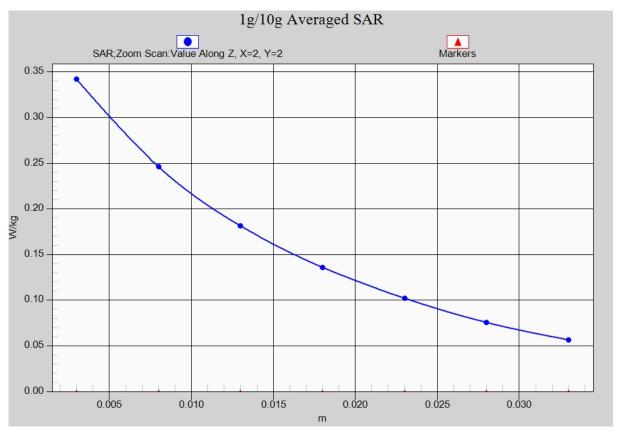


Fig. 7-1 Z-Scan at power reference point (WCDMA1700)



WCDMA 1700 Body Bottom High AP ON

Date: 2017-5-13

Electronics: DAE4 Sn1331 Medium: Body 1750 MHz

Medium parameters used (interpolated): f = 1752.6 MHz; $\sigma = 1.479 \text{ mho/m}$; $\epsilon r = 53.19$; $\rho = 1000$

 kg/m^3

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

Communication System: WCDMA 1900 Frequency: 1752.6 MHz Duty Cycle: 1:1

Probe: EX3DV4-SN3846 ConvF(7.90, 7.90, 7.90)

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

Maximum value of SAR (interpolated) = 0.986 W/kg

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

Reference Value = 17.94 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 1.46 W/kg

SAR(1 g) = 0.838 W/kg; SAR(10 g) = 0.429 W/kgMaximum value of SAR (measured) = 1.05 W/kg

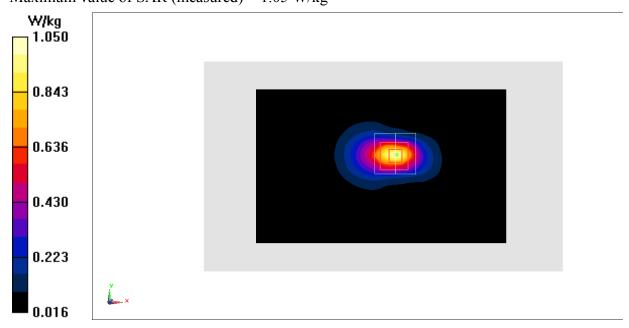


Fig.8 WCDMA1700



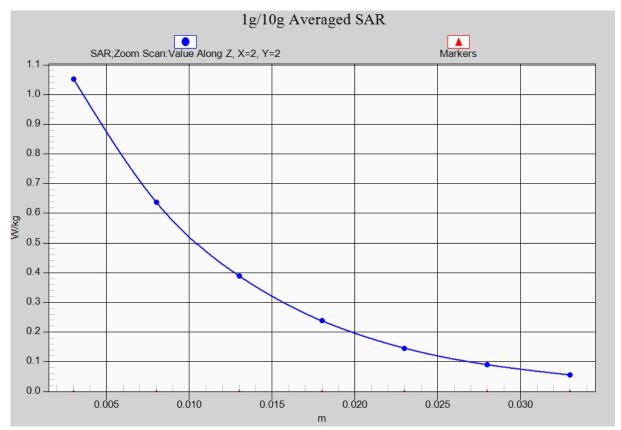


Fig. 8-1 Z-Scan at power reference point (WCDMA1700)



WCDMA 1700 Body Rear High AP OFF

Date: 2017-5-13

Electronics: DAE4 Sn1331 Medium: Body 1750 MHz

Medium parameters used (interpolated): f = 1752.6 MHz; $\sigma = 1.479 \text{ mho/m}$; $\epsilon r = 53.19$; $\rho = 1000$

 kg/m^3

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

Communication System: WCDMA 1900 Frequency: 1752.6 MHz Duty Cycle: 1:1

Probe: EX3DV4-SN3846 ConvF(7.90, 7.90, 7.90)

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

Maximum value of SAR (interpolated) = 0.552 W/kg

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

Reference Value = 12.06 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.815 W/kg

SAR(1 g) = 0.504 W/kg; SAR(10 g) = 0.295 W/kg

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

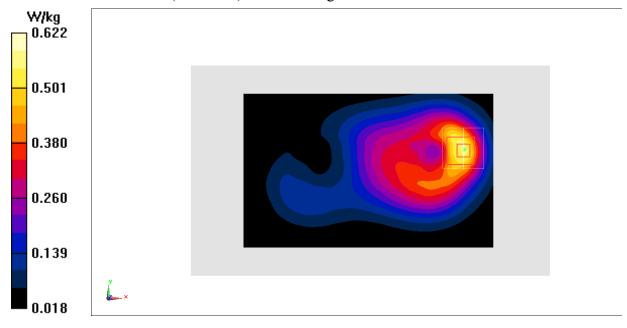


Fig.9 WCDMA1700



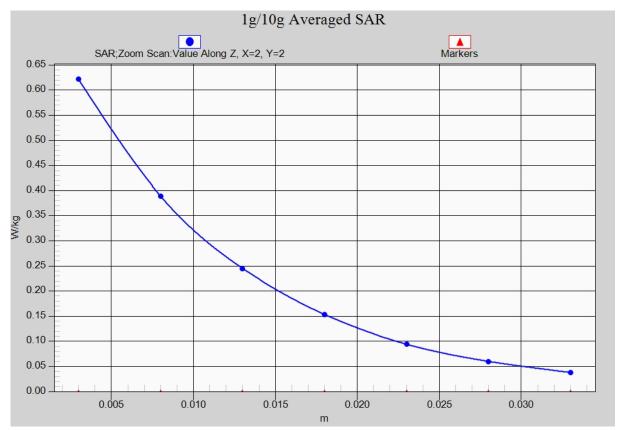


Fig. 9-1 Z-Scan at power reference point (WCDMA1700)



WCDMA 1900 Left Cheek Low

Date: 2017-5-14

Electronics: DAE4 Sn1331 Medium: Head 1900 MHz

Medium parameters used: f = 1852.4 MHz; $\sigma = 1.363 \text{ mho/m}$; $\epsilon r = 40.76$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

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

Probe: EX3DV4– SN3846 ConvF(7.89, 7.89, 7.89)

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

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

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

Reference Value = 6.017 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.336 W/kg

SAR(1 g) = 0.230 W/kg; SAR(10 g) = 0.148 W/kg

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

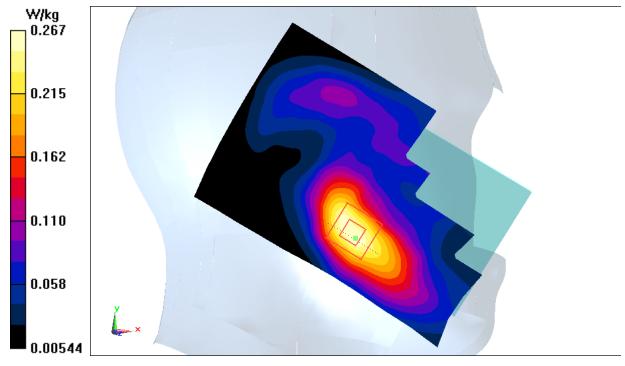


Fig.10 WCDMA1900



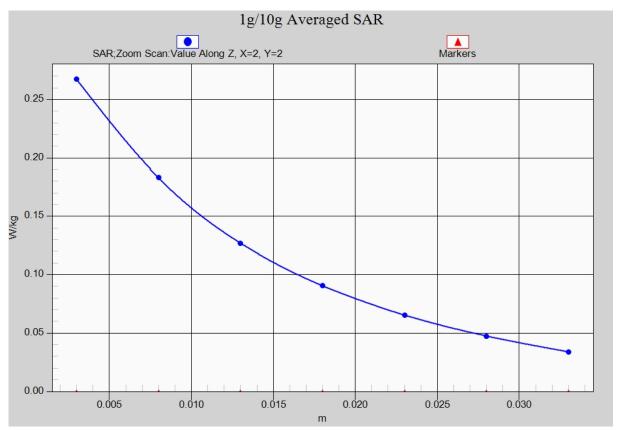


Fig. 10-1 Z-Scan at power reference point (WCDMA1900)



WCDMA 1900 Body Bottom High AP ON

Date: 2017-5-14

Electronics: DAE4 Sn1331 Medium: Body 1900 MHz

Medium parameters used: f = 1907.6 MHz; $\sigma = 1.523 \text{ mho/m}$; $\epsilon r = 52.13$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

Communication System: WCDMA 1900 Frequency: 1907.6 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN3846 ConvF(7.57, 7.57, 7.57)

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

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

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

Reference Value = 22.27 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.52 W/kg

SAR(1 g) = 0.887 W/kg; SAR(10 g) = 0.464 W/kg

Maximum value of SAR (measured) = 1.11 W/kg

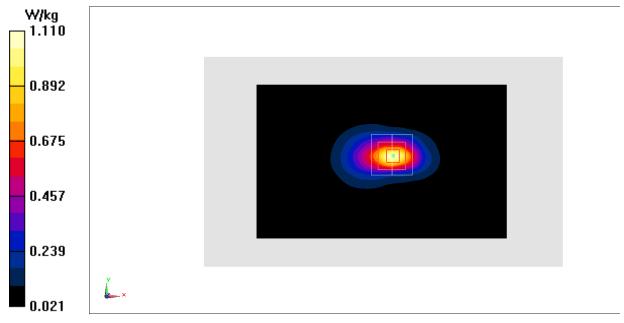


Fig.11 WCDMA1900



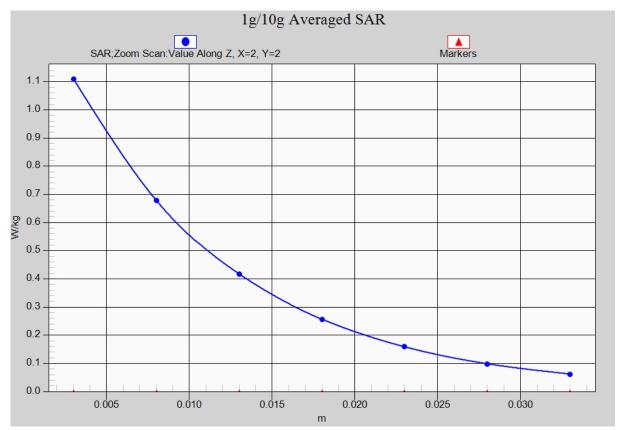


Fig. 11-1 Z-Scan at power reference point (WCDMA1900)



WCDMA 1900 Body Rear High AP OFF

Date: 2017-5-14

Electronics: DAE4 Sn1331 Medium: Body 1900 MHz

Medium parameters used: f = 1907.6 MHz; $\sigma = 1.523 \text{ mho/m}$; $\epsilon r = 52.13$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

Communication System: WCDMA 1900 Frequency: 1907.6 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN3846 ConvF(7.57, 7.57, 7.57)

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

Maximum value of SAR (interpolated) = 0.570 W/kg

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

Reference Value = 9.581 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.808 W/kg

SAR(1 g) = 0.496 W/kg; SAR(10 g) = 0.282 W/kg

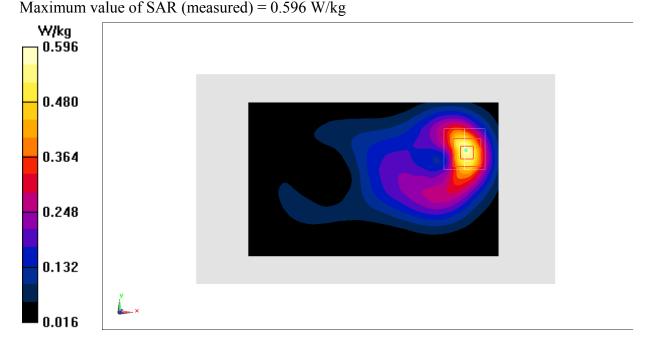


Fig.12 WCDMA1900



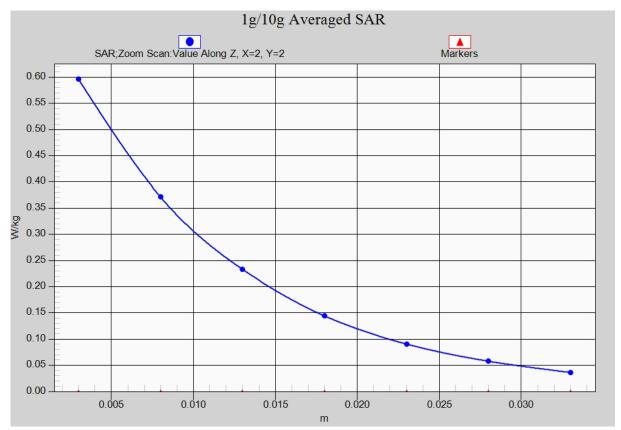


Fig. 12-1 Z-Scan at power reference point (WCDMA1900)



LTE Band2 Left Cheek High with QPSK_20M_1RB_High

Date: 2017-5-14

Electronics: DAE4 Sn1331 Medium: Head 1900 MHz

Medium parameters used: f = 1900 MHz; $\sigma = 1.398 \text{. mho/m}$; $\epsilon r = 39.76$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

Communication System: LTE Band2 Frequency: 1900 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN3846 ConvF(7.89, 7.89, 7.89)

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

Maximum value of SAR (interpolated) = 0.271 W/kg

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

Reference Value = 5.964 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.349 W/kg

SAR(1 g) = 0.234 W/kg; SAR(10 g) = 0.149 W/kg

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

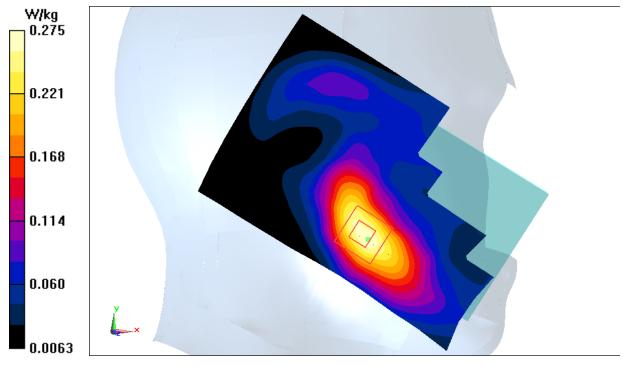


Fig.13 LTE Band2



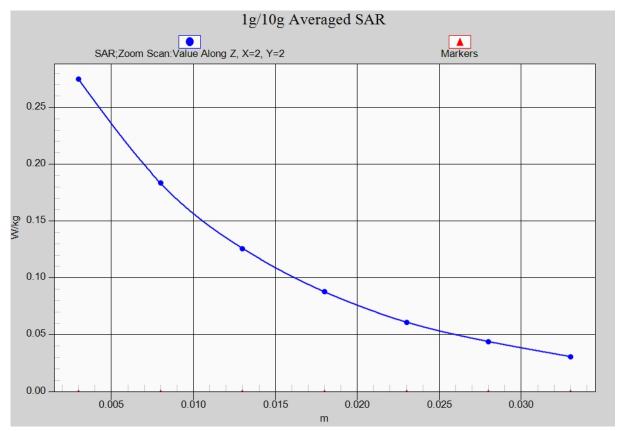


Fig. 13-1 Z-Scan at power reference point (LTE Band2)



LTE Band2 Body Bottom High with QPSK_20M_1RB_High AP ON

Date: 2017-5-14

Electronics: DAE4 Sn1331 Medium: Body 1900 MHz

Medium parameters used: f = 1900 MHz; $\sigma = 1.517 \text{ mho/m}$; $\epsilon r = 52.34$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

Communication System: LTE Band2 Frequency: 1900 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN3846 ConvF(7.57, 7.57, 7.57)

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

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

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

Reference Value = 24.75 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 1.72 W/kg

SAR(1 g) = 0.995 W/kg; SAR(10 g) = 0.510 W/kg

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

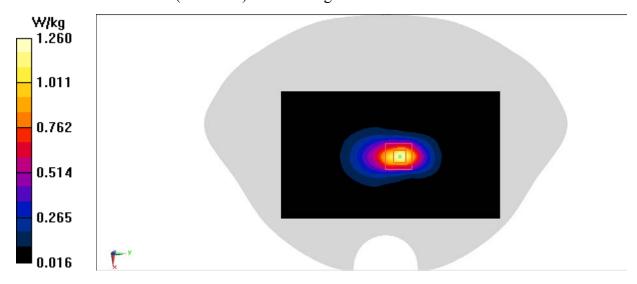


Fig.14 LTE Band2



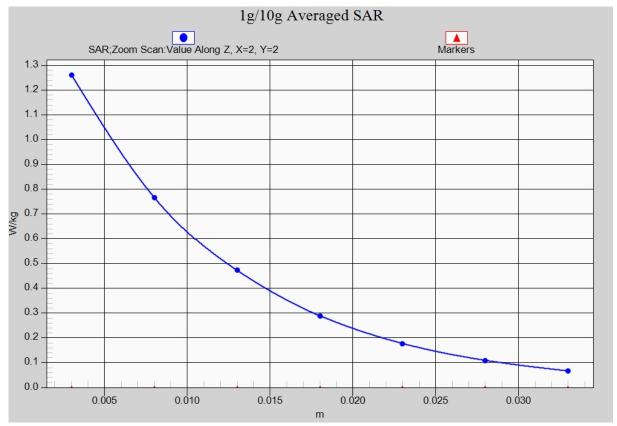


Fig. 14-1 Z-Scan at power reference point (LTE Band2)



LTE Band2 Body Rear High with QPSK_20M_1RB_High AP OFF

Date: 2017-5-14

Electronics: DAE4 Sn1331 Medium: Body 1900 MHz

Medium parameters used: f = 1900 MHz; $\sigma = 1.517 \text{ mho/m}$; $\epsilon r = 52.34$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

Communication System: LTE Band2 Frequency: 1900 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN3846 ConvF(7.57, 7.57, 7.57)

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

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

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

Reference Value = 11.05 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.964 W/kg

SAR(1 g) = 0.586 W/kg; SAR(10 g) = 0.327 W/kg

Maximum value of SAR (measured) = 0.715 W/kg

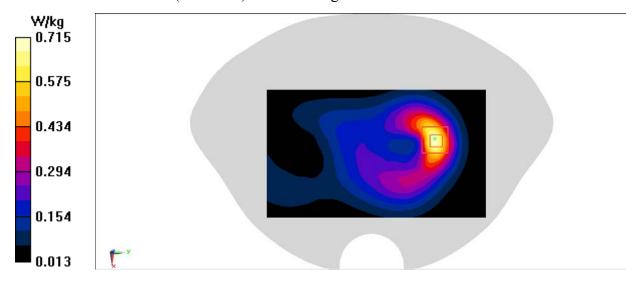


Fig.15 LTE Band2



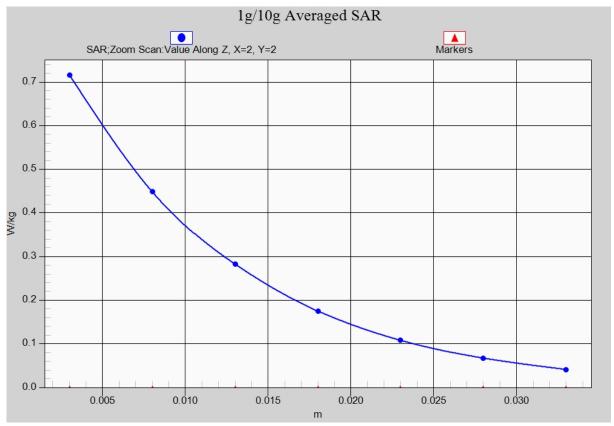


Fig. 15-1 Z-Scan at power reference point (LTE Band2)



LTE Band4 Left Cheek Low with QPSK_20M_1RB_High

Date: 2017-5-13

Electronics: DAE4 Sn1331 Medium: Head 1750 MHz

Medium parameters used f = 1720 MHz; σ = 1.349 mho/m; ϵ r = 40.30; ρ = 1000 kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

Communication System: LTE Band4 Frequency: 1720 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3846 ConvF(8.16, 8.16, 8.16)

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

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

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

Reference Value = 5.173 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.402 W/kg

SAR(1 g) = 0.286 W/kg; SAR(10 g) = 0.191 W/kg

Maximum value of SAR (measured) = 0.326 W/kg

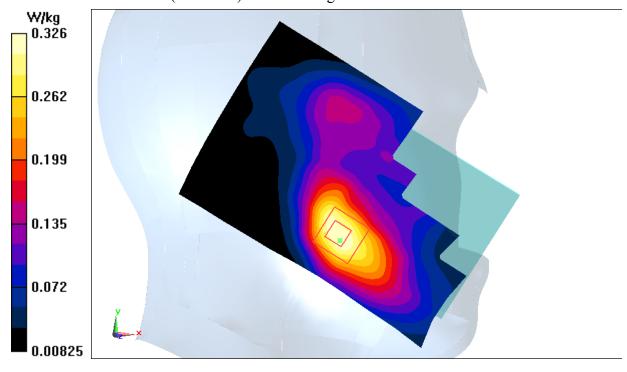


Fig.16 LTE Band4



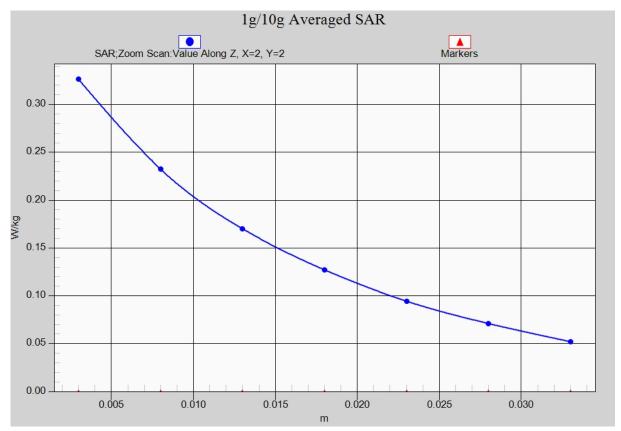


Fig. 16-1 Z-Scan at power reference point (LTE Band4)



LTE Band4 Body Bottom Low with QPSK_20M_1RB_High AP ON

Date: 2017-5-13

Electronics: DAE4 Sn1331 Medium: Body 1750 MHz

Medium parameters used: f = 1720 MHz; $\sigma = 1.452 \text{ mho/m}$; $\epsilon r = 54.18$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

Communication System: LTE Band4 Frequency: 1720 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3846 ConvF(7.90, 7.90, 7.90)

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

Maximum value of SAR (interpolated) = 0.840 W/kg

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

Reference Value = 19.56 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.17 W/kg

SAR(1 g) = 0.697 W/kg; SAR(10 g) = 0.367 W/kg

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

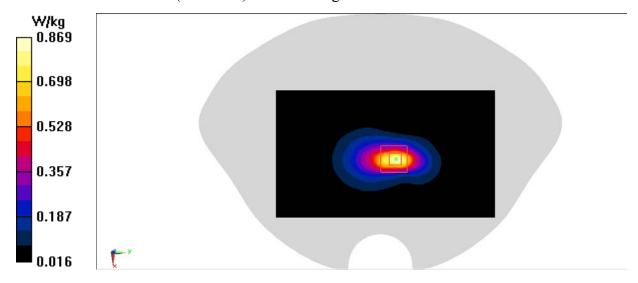


Fig.17 LTE Band4