

### Table 14-5 WCDMA1900-BII Head

			W	CDMA1900-BII He	ead			
Ambient Te	emperature:	22.5				Liquid Ter	mperature:	23.3
	Device	SAR		asured SAR [W			ported SAR [W	
Mode	orientation	measurement	CH9538	CH9400	CH9262	CH9538	CH9400	CH9262
	Т		1907.6 MHz	1880 MHz	1852.4 MHz	1907.6 MHz	1880 MHz	1852.4 MHz
		e-up	24.50	24.50	24.50	4.00	Scaling factor*	
	Slot Average	Power [dBm]	24.24	23.99	24.02	1.06	1.12	1.12
		1g SAR	0.499	0.466	0.47	0.53	0.52	0.52
	Left Cheek	10g SAR	0.315	0.264	0.269	0.33	0.30	0.30
		Deviation	0.06	0.11	0.04	0.06	0.11	0.04
		1g SAR		0.164			0.18	
	Left Tilt	10g SAR		0.1			0.11	
RMC		Deviation		-0.1			-0.10	
		1g SAR		0.304			0.34	
	Right Cheek	10g SAR		0.239			0.27	
		Deviation		0.09			0.09	
		1g SAR		0.145			0.16	
	Right Tilt	10g SAR		0.092			0.10	
		Deviation		0.16			0.16	
RMC		1g SAR	0.472			0.50		
B1	Left Cheek	10g SAR	0.273			0.29		
		Deviation	-0.08			-0.08		
		1g SAR	0.466			0.50		
SIM 2	Left Cheek	10g SAR	0.265			0.28		
		Deviation	-0.12			-0.12		

# Table 14-6 WCDMA1900-BII Body

			W	CDMA1900-BII Bo	ody			
Ambient <sup>-</sup>	Temperature:	22.5				Liquid Ter	nperature:	23.3
	Device	SAR		asured SAR [W		Reported SAR [W/I		
Mode	orientation	measurement	CH9538	CH9400	CH9262	CH9538	CH9400	CH9262
			1907.6 MHz	1880 MHz	1852.4 MHz	1907.6 MHz	1880 MHz	1852.4 MHz
		ө-ир	24.50	24.50	24.50		Scaling factor*	_
	Slot Average	Power [dBm]	24.24	23.99	24.02	1.06	1.12	1.12
		1g SAR		0.526			0.59	
	Front	10g SAR		0.291			0.33	
		Deviation		0.01			0.01	
		1g SAR		0.464			0.52	
	Rear	10g SAR		0.245			0.28	
		Deviation		-0.06			-0.06	
RMC		1g SAR		0.465			0.52	
	Bottom edge	10g SAR		0.231			0.26	
		Deviation		0.17			0.17	
		1g SAR	0.416	0.549	0.502	0.44	0.62	0.56
	Left edge	10g SAR	0.136	0.332	0.275	0.14	0.37	0.31
		Deviation	0.04	-0.16	0.18	0.04	-0.16	0.18
		1g SAR		0.0674			0.08	
	Right edge	10g SAR		0.0366			0.04	
		Deviation		0.09			0.09	
		1g SAR		0.526			0.59	
RMC B1	Left edge	10g SAR		0.291			0.33	
		Deviation		0.09			0.09	
		1g SAR		0.515			0.58	
SIM 2	Left edge	10g SAR		0.285			0.32	
		Deviation		-0.01			-0.01	



# Table 14-7 WCDMA1700-BIV Head

			W	CDMA1700-BIV He	ead			
Ambient 7	Temperature:	22.5				Liquid Ter	mperature:	23.3
	Device	SAR		asured SAR [W			ported SAR [W/	
Mode	orientation	measurement	CH1513	CH1412	CH1312	CH1513	CH1412	CH1312
			1752.6 MHz	1732.4 MHz	1712.4 MHz	1752.6 MHz	1732.4 MHz	1712.4 MHz
	Tun	ie-up	24.50	24.50	24.50		Scaling factor*	
	Slot Average	Power [dBm]	24.03	24.01	24.11	1.11	1.12	1.10
		1g SAR	0.268	0.208	0.202	0.30	0.23	0.22
	Left Cheek	10g SAR	0.178	0.137	0.136	0.20	0.15	0.15
		Deviation	0.18	0.02	0.11	0.18	0.02	0.11
		1g SAR		0.195			0.22	
	Left Tilt	10g SAR		0.144			0.16	
RMC		Deviation		-0.09			-0.09	
		1g SAR		0.201			0.23	
	Right Cheek	10g SAR		0.152			0.17	
		Deviation		0.12			0.12	
		1g SAR		0.101			0.11	
	Right Tilt	10g SAR		0.07			0.08	
		Deviation		0.06			0.06	
DMC		1g SAR	0.247			0.28		
RMC B1	Left Cheek	10g SAR	0.169			0.19		
		Deviation	0.05			0.05		
		1g SAR	0.261			0.29		
SIM 2	Left Cheek	10g SAR	0.171			0.19		
		Deviation	0.1			0.10		

# Table 14-8 WCDMA1700-BIV Body

Ambient T	emperature:	22.5				Liquid Ter	mperature:	23.3
	Device	SAR		asured SAR [W			ported SAR [W/	
Mode	orientation	measurement	CH1513	CH1412	CH1312	CH1513	CH1412	CH1312
			1752.6 MHz	1732.4 MHz	1712.4 MHz	1752.6 MHz	1732.4 MHz	1712.4 MHz
		e-up	24.50	24.50	24.50		Scaling factor*	
	Slot Average	Power [dBm]	24.03	24.01	24.11	1.11	1.12	1.10
		1g SAR		0.253			0.28	
	Front	10g SAR		0.15			0.17	
		Deviation		0.11			0.11	
		1g SAR		0.235			0.26	
	Rear	10g SAR		0.136			0.15	
		Deviation		-0.09			-0.09	
RMC		1g SAR	0.375	0.296	0.258	0.42	0.33	0.28
	Bottom edge	10g SAR	0.2	0.155	0.133	0.22	0.17	0.15
		Deviation	-0.18	0.02	-0.05	-0.18	0.02	-0.05
		1g SAR		0.203			0.23	
	Left edge	10g SAR		0.104			0.12	
		Deviation		-0.11			-0.11	
		1g SAR		0.054			0.06	
	Right edge	10g SAR		0.03			0.03	
		Deviation		-0.11			-0.11	
		1g SAR	0.343			0.38		
RMC B1	Bottom edge	10g SAR	0.165			0.18		
		Deviation	0.07			0.07		
		1g SAR	0.347			0.39		
SIM 2	Bottom edge	10g SAR	0.169			0.19		
		Deviation	0.16			0.16		



# Table 14-9 WCDMA850-BV Head

			W	/CDMA850-BV He	ad			
Ambient 7	Femperature:	22.5				Liquid Ter	mperature:	23.3
	Device	SAR		asured SAR [W			ported SAR [W	
Mode	orientation	measurement	CH4233	CH4715	CH4132	CH4233	CH4715	CH4132
			846.6 MHz	835.4 MHz	826.4 MHz	846.6 MHz	835.4 MHz	826.4 MHz
	Tun	ne-up	24.50	24.50	24.50		Scaling factor*	
	Slot Average	Power [dBm]	24.42	24.39	24.50	1.02	1.02	1.00
		1g SAR		0.145			0.15	
	Left Cheek	10g SAR		0.106			0.11	
		Deviation		0.03			0.03	
		1g SAR		0.136			0.14	
	Left Tilt	10g SAR		0.075			0.08	
RMC		Deviation		-0.01			-0.01	
		1g SAR	0.174	0.22	0.209	0.18	0.23	0.21
	Right Cheek	10g SAR	0.121	0.17	0.146	0.12	0.17	0.15
		Deviation	0.09	-0.05	0.03	0.09	-0.05	0.03
		1g SAR		0.086			0.09	
	Right Tilt	10g SAR		0.04			0.04	
		Deviation		0.12			0.12	
DMC		1g SAR		0.203			0.21	
RMC B1	Right Cheek	10g SAR		0.116			0.12	
		Deviation		0.01			0.01	
		1g SAR		0.198			0.20	
SIM 2	Right Cheek	10g SAR		0.113			0.12	
		Deviation		0.03			0.03	

# Table 14-10 WCDMA850-BV Body

			W	CDMA850-BV Bo	dy			
Ambient T	emperature:	22.5				Liquid Ter	nperature:	23.3
	Device	SAR		asured SAR [W			ported SAR [W/	
Mode	orientation	measurement	CH4233	CH4715	CH4132	CH4233	CH4715	CH4132
	***************************************		846.6 MHz	835.4 MHz	826.4 MHz	846.6 MHz	835.4 MHz	826.4 MHz
		e-up	24.50	24.50	24.50		Scaling factor*	1
	Slot Average	Power [dBm]	24.42	24.39	24.50	1.02	1.02	1.00
		1g SAR		0.244			0.25	
	Front	10g SAR		0.182			0.19	
		Deviation		0.1			0.10	
		1g SAR		0.268			0.27	
	Rear	10g SAR		0.201			0.21	1
		Deviation		0.08			0.08	
RMC		1g SAR		0.216			0.22	
	Bottom edge	10g SAR		0.107			0.11	
		Deviation		0.16			0.16	
		1g SAR		0.191			0.20	
	Left edge	10g SAR		0.126			0.13	
		Deviation		0.03			0.03	
		1g SAR	0.331	0.374	0.318	0.34	0.38	0.32
	Right edge	10g SAR	0.219	0.256	0.211	0.22	0.26	0.21
		Deviation	-0.1	-0.12	0.08	-0.10	-0.12	0.08
		1g SAR		0.348			0.36	
SIM2	Right edge	10g SAR		0.227			0.23	
		Deviation		-0.07			-0.07	
		1g SAR		0.359			0.37	
RMC B1	Right edge	10g SAR		0.237			0.24	
		Deviation		0.1			0.10	



# Table 14-11 LTE1900-FDD2 Head

				TE1900-FDD2 Hea	ıd			
Ambient Te	emperature:	22.5				Liquid Te	emperature:	23.3
			Me	asured SAR [W/	'ka1		Reported SAR [W/I	
Mode	Device	SAR	19100	18900	18700	19100	18900	18700
	orientation	measurement	М	Н	М	М	Н	M
	Tun	e-up	24.90	24.90	24.90		Scaling factor*	
		Power [dBm]	24.49	24.02	24.25	1.10	1.22	1.16
		1g SAR	0.328			0.36		
	Left Cheek	10g SAR	0.208			0.23		
		Deviation	-0.06			-0.06		
		1g SAR	0.122			0.13		
20MHz	Left Tilt	10g SAR	0.085			0.09		
QPSK1RB		Deviation	0.08			0.08		
		1g SAR	0.185			0.20		
	Right Cheek	10g SAR	0.131			0.14		
		Deviation	0.11			0.11		
		1g SAR	0.119			0.13		
	Right Tilt	10g SAR	0.065			0.07		
		Deviation	-0.06			-0.06		
			Me	asured SAR [W/	kg]	R	Reported SAR [W/kg]	
TRUE	Device orientation	SAR measurement	19100	18900	18700	19100	18900	18700
			Н	Н	L	Н	Н	L
	Tun	e-up	23.90	23.90	23.90		Scaling factor*	
	Measured F	Power [dBm]	23.20	23.11	23.12	1.18	1.20	1.20
		1g SAR	0.249			0.29		
	Left Cheek	10g SAR	0.159			0.19		
		Deviation	0.04			0.04		kg] 18700 L L 1.20
		1g SAR	0.091			0.11		
20MHz	Left Tilt	10g SAR	0.063			0.07		
QPSK50%RB		Deviation	0.18			0.18		
		1g SAR	0.151			0.18		
	Right Cheek	10g SAR	0.107			0.13		
		Deviation	0.06			0.06		
		1g SAR	0.087			0.10		
	Right Tilt	10g SAR	0.047			0.06		
		Deviation	0.11			0.11		
			Me	asured SAR [W/	kg]	R	Reported SAR [W/	<b>(g</b> ]
Mode	Device orientation	SAR measurement	19100	18900	18700	19100	18900	18700
	Tun	e-up	23.90	23.90	23.90		Scaling factor*	
20MHz	Measured F	Power [dBm]	23.13	23.19	23.13	1.19	1.18	1.19
QPSK100%RB		1g SAR						
QI SICIOOZII	Left Cheek	10g SAR						
		Deviation						
20MHz		1g SAR	0.304			0.33		
QPSK1RB	Left Cheek	10g SAR	0.197			0.22		
						0.40		
B1		Deviation	-0.12			-0.12		
		1g SAR	0.311			0.34		
B1 SIM 2	Left Cheek							



# Table 14-12 LTE1900-FDD2 Body

			ubic 14-12	TE1900-FDD2 Bod	V DOZ	,		
Ambient Te	emperature:	22.5				Liquid Te	emperature:	23.3
		0.10	Me	asured SAR [W/	(g]	F	Reported SAR [W/k	g]
Mode	Device orientation	SAR	19100	18900	18700	19100	18900	18700
	onemation	measurement	М	Н	М	М	Н	М
	Tun	e-up	24.90	24.90	24.90		Scaling factor*	
	Measured F	Power [dBm]	24.49	24.02	24.25	1.10	1.22	1.16
		1g SAR	0.426			0.47		
	Front	10g SAR	0.233			0.26		
		Deviation	-0.03			-0.03		
		1g SAR	0.335			0.37		
	Rear	10g SAR	0.192			0.21		
20MHz		Deviation	-0.01			-0.01		
QPSK1RB		1g SAR	0.327			0.36		
	Bottom edge	10g SAR	0.161			0.18		
		Deviation	0.18			0.18		
	Left edge	1g SAR	0.371 0.204			0.41 0.22		
	Lett edge	10g SAR Deviation	0.204			0.22		
		1g SAR	0.0532			0.04		
	Right edge	10g SAR	0.0374			0.04		
	3 3 .	Deviation	-0.14			-0.14		
			Me	asured SAR [W/	(g]	F	Reported SAR [W/k	g]
Mode	Device	SAR	19100	18900	18700	19100	18900	18700
	orientation	measurement	н	н	L			
	Tun	e-up	23.90	23.90	23.90		Scaling factor*	
	Measured Power [dBm]		23.20	23.11	23.12	1.18	1.20	1.20
		1g SAR	0.333			0.39		
	Front	10g SAR	0.183			0.22		
		Deviation	0.09			0.09		kg] 18700 M 1.16
	_	1g SAR	0.274			0.32		
	Rear	10g SAR	0.157			0.18		
20MHz		Deviation 1g SAR	-0.01 0.258			-0.01 0.30		
QPSK50%RB	Bottom edge	10g SAR	0.236			0.15		
	Dottom cage	Deviation	-0.06			-0.06		
		1g SAR	0.306			0.36		
	Left edge	10g SAR	0.169			0.20		
	_	Deviation	-0.06			-0.06		
		1g SAR	0.048			0.06		
	Right edge	10g SAR	0.0268			0.03		
		Deviation	0.11			0.11		
	Device	SAR	Me	asured SAR [W/	(g]		Reported SAR [W/k	9]
Mode	orientation	measurement	19100	18900	18700	19100	18900	18700
	Tun	e-up	23.90	23.90	23.90		Scaling factor*	
20MHz	Measured F	Power [dBm]	23.13	23.19	23.13	1.19	1.18	1.19
QPSK100%RB		1g SAR						
,,	Front	10g SAR						
		Deviation						
20MHz		1g SAR	0.412			0.45		
QPSK1RB	Front	10g SAR	0.221			0.24		
B1		Deviation	0.11			0.11		
SIM 2	Front	1g SAR	0.407			0.45		
SIM 2	Front	10g SAR Deviation	0.214 0.05			0.24 0.05		
	i	<ul> <li>Deviation</li> </ul>	u 05					



# Table 14-13 LTE1700-FDD4 Head

			1	TE1700-FDD4 Hea	ч			
Ambient Te	emnerature:	22.5		1217001354 1100	-	Liquid Ter	mperature:	23.3
7 WILDIONE TO	mporataro.	1	Me	easured SAR [W/	kal		eported SAR [W/I	
Mode	Device	SAR	20300	20175	20050	20300	20175	20050
mode	orientation	measurement	Н	Н	M	Н	Н	M
	Tun	le-up	24.80	24.80	24.80		Scaling factor*	
		Power [dBm]	24.48	24.11	24.72	1.08	1.17	1.02
		1g SAR			0.13			0.13
	Left Cheek	10g SAR			0.085			0.09
		Deviation			-0.12			-0.12
		1g SAR			0.057			0.06
20MHz	Left Tilt	10g SAR			0.035			0.04
QPSK1RB		Deviation			0.08			0.08
		1g SAR			0.06			0.06
	Right Cheek	10g SAR			0.035			0.04
	_	Deviation			-0.06			-0.06
		1g SAR			0.059			0.06
	Right Tilt	10g SAR			0.035			0.04
	Ĭ	Deviation			-0.06			-0.06
			Me	easured SAR [W/		Re	eported SAR (W/I	
TRUE	Device orientation	SAR measurement	20300	20175	20050	20300	20175	20050
	orientation	measurement	м	н	L	M	н	L
	Tun	le-up	23.80	23.80	23.80		Scaling factor*	
		Power [dBm]	23.35	23.04	23.12	1.11	1.19	1.17
		1g SAR	0.112			0.12		
	Left Cheek	10g SAR	0.073			0.08		
		Deviation	0.07			0.07		
		1g SAR	0.039			0.04		
20MHz	Left Tilt	10g SAR	0.024			0.03		
QPSK50%RB		Deviation	0.18			0.18		
Qi Gidowin		1g SAR	0.062			0.07		
	Right Cheek	10g SAR	0.044			0.05		
	rught oncort	Deviation	0.04			0.04		
		1g SAR	0.053			0.06		
	Right Tilt	10g SAR	0.031			0.03		
	rught rit	Deviation	0.15			0.15		
		Deviation		easured SAR [W/	col		eported SAR [W/I	col
	Device	SAR	IMIC	asured SACTION	\ <del>9</del> 1	100	Sported State (**/	le
Mode	orientation	measurement	20300	20175	20050	20300	20175	20050
	Tun	le-up	23.80	23.80	23.80		Scaling factor*	
		Power [dBm]	23.26	23.06	23.19	1.13	1.18	1.15
20MHz		1g SAR						
QPSK100%RB	Left Cheek	10g SAR						
	22.1 3.100.1	Deviation						
20MHz		1g SAR			0.12			0.12
QPSK1RB	Left Cheek	10g SAR			0.075			0.08
B1		Deviation			0.11			0.11
		1g SAR			0.121			0.12
SIM 2	Left Cheek	10g SAR			0.081			0.08
		Deviation			-0.06			-0.06
		Dovidion			0.00			0.00



# Table 14-14 LTE1700-FDD4 Body

			L	TE1700-FDD4 Bod	у			
Ambient Te	mperature:	22.5				Liquid Te	mperature:	23.3
	Davida	04.0	Me	asured SAR [W/	kg]	R	emperature: Reported SAR [W/ 20175 H Scaling factor* 1.17  Reported SAR [W/ 20175 Scaling factor* 1.19	g]
Mode	Device orientation	SAR measurement	20300	20175	20050	20300	20175	20050
	orientation	measurement	Н	Н	М	Н	Н	М
	Tui	ne-up	24.80	24.80	24.80		Scaling factor*	
	Measured	Power [dBm]	24.48	24.11	24.72	1.08	1.17	1.02
		1g SAR			0.138			0.14
	Front	10g SAR			0.0853			0.09
		Deviation			0.09			0.09
		1g SAR			0.118			0.12
	Rear	10g SAR			0.0793			0.08
20MHz		Deviation			0.12			0.12
QPSK1RB		1g SAR			0.143			0.15
	Bottom edge	10g SAR			0.081			0.08
		Deviation			0.07			0.07
		1g SAR			0.179			0.18
	Left edge	10g SAR			0.109			0.11
		Deviation			0			0.00
	Dialet adam	1g SAR			0.0912 0.0377			0.09
	Right edge	10g SAR Deviation			0.0377			0.04
		Deviation	Me	asured SAR [W/		P	enorted SAR IW/k	
	Device	SAR						
Mode	orientation	measurement	20300	20175	20050	20300	20175	20050
			M	Н	L			
		ne-up	23.80	23.80	23.80			
	Measured	Power [dBm]	23.35	23.04	23.12	1.11	1.19	1.17
		1g SAR	0.106			0.12		
	Front	10g SAR	0.0628			0.07		
		Deviation	0.02			0.02		
	Rear	1g SAR 10g SAR	0.0973 0.0617			0.11 0.07		
	Real	Deviation	-0.11			-0.11		
20MHz		1g SAR	0.102			0.11		
QPSK50%RB	Bottom edge	10g SAR	0.0631			0.07		
		Deviation	-0.04			-0.04		•
		1g SAR	0.109			0.12		
	Left edge	10g SAR	0.0638			0.07		
		Deviation	-0.02			-0.02		
		1g SAR	0.0524			0.06		
	Right edge	10g SAR	0.0213			0.02		
		Deviation	0.11			0.11		
	Device	SAR	Me	asured SAR [W/	kg]	R	eported SAR [W/k	9]
Mode	orientation	measurement	20300	20175	20050	20300	20175	20050
	Orioination	Inicacaronione	20000	20170	20000	20000	20170	20000
	Tui	ne-up	23.80	23.80	23.80		Scaling factor*	
20MHz	Measured	Power [dBm]	23.26	23.06	23.19	1.13	1.18	1.15
QPSK100%RB		1g SAR						
Q. OK 100 /6KB	Left edge	10g SAR						
		Deviation						
20MHz		1g SAR			0.149			0.15
QPSK1RB	Left edge	10g SAR			0.0966			0.10
B1		Deviation			0.04			0.04
							are en en arternatuari ari Sti Sti Sti Sti Sti Sti Sti Sti	
	f	1g SAR			0.149			0.15
SIM 2	Left edge	1g SAR 10g SAR Deviation			0.149 0.0879 0.14			0.15 0.09 0.14



# Table 14-15 LTE2500-FDD7 Head

			l l	TE2500-FDD7 Hea	d			
Ambient Te	emperature:	22.5				Liquid To	emperature:	23.3
			Me	asured SAR [W/	kal		Reported SAR [W/I	cal
Mode	Device	SAR	21350	21100	20850	21350	21100	20850
	orientation	measurement	М	М	М	M	М	M
	Tun	e-up	24.50	24.50	24.50		Scaling factor*	
		Power [dBm]	23.93	23.55	23.78	1.14	1.25	1.18
		1g SAR	0.368			0.42		
	Left Cheek	10g SAR	0.206			0.23		
		Deviation	0.06			0.06		
		1g SAR	0.09			0.10		
20MHz	Left Tilt	10g SAR	0.043			0.05		
QPSK1RB		Deviation	0.04			0.04		
		1g SAR	0.203			0.23		
	Right Cheek	10g SAR	0.117			0.13		
		Deviation	-0.09			-0.09		
		1g SAR	0.162			0.18		
	Right Tilt	10g SAR	0.066			0.08		
		Deviation	0.01			0.01		
			Me	easured SAR [W/	kg]	F	Reported SAR [W/	<b>(g</b> ]
TRUE	Device orientation	SAR measurement	21350	21100	20850	21350	21100	20850
			М	Н	L	М	Н	L
	Tun	e-up	23.50	23.50	23.50		Scaling factor*	
	Measured F	Power [dBm]	22.66	22.64	22.59	1.21	1.22	1.23
		1g SAR	0.283			0.34		
	Left Cheek	10g SAR	0.152			0.18		
		Deviation	0.17			0.17		
		1g SAR	0.073			0.09		
20MHz	Left Tilt	10g SAR	0.034			0.04		
QPSK50%RB		Deviation	0.04			0.04		
		1g SAR	0.154			0.19		
	Right Cheek	10g SAR	0.089			0.11		
		Deviation	0.09			0.09		
		1g SAR	0.13			0.16		
	Right Tilt	10g SAR	0.053			0.06		
		Deviation	0.01			0.01		
			Me	asured SAR [W/	kg]	F	Reported SAR [W/	<b>(g</b> ]
Mode	Device orientation	SAR measurement	21350	21100	20850	21350	21100	20850
	Tur	e-up	23.50	23.50	23.50		Scaling factor*	
20MHz	Measured F	Power [dBm]	22.60	22.62	22.54	1.23	1.22	1.25
QPSK100%RB		1g SAR						
C.1.007011D	Left Cheek	10g SAR						
		Deviation						
20MHz		1g SAR	0.334			0.38		
QPSK1RB	Left Cheek	10g SAR	0.171			0.19		
B1		Deviation	-0.05			-0.05		
		1g SAR	0.364			0.41		
SIM 2	Left Cheek	1g SAR 10g SAR Deviation	0.364 0.193 0.1			0.41 0.22 0.10		



# Table 14-16 LTE2500-FDD7 Body

				TE2500-FDD7 Body	/			
Ambient Te	emperature:	22.5				Liquid To	emperature:	23.3
	B	04.0	Me	asured SAR [W/l	(g]	F	Reported SAR [W/k	<b>9</b> ]
Mode	Device orientation	SAR measurement	21350	21100	20850	21350	21100	20850
	Onemation	Illeasurement	М	М	М	М	М	М
	Tui	ne-up	24.50	24.50	24.50		Scaling factor*	
	Measured	Power [dBm]	23.93	23.55	23.78	1.14	1.25	1.18
		1g SAR	0.335			0.38		
	Front	10g SAR	0.181			0.21		
		Deviation	-0.1			-0.10		
		1g SAR	0.382			0.44		
	Rear	10g SAR	0.215			0.25		
20MHz		Deviation	-0.04			-0.04		
QPSK1RB		1g SAR	0.324			0.37		
	Bottom edge	10g SAR	0.144			0.16		
		Deviation	0.09			0.09		
		1g SAR	0.461			0.53		
	Left edge	10g SAR	0.247			0.28		
		Deviation	0.05			0.05		
		1g SAR	0.0561			0.06		
	Right edge	10g SAR	0.0327			0.04		
		Deviation	0.07	coursed CAD DAVI		0.07	Described CAR IIW//	_
	Device	SAR		asured SAR [W/			Reported SAR [W/k	
Mode	orientation	measurement	21350 M	21100 H	20850	21350	21100	20850
	Tur	<u> </u>			L 22.50		Scaling factor*	
	Tune-up Measured Power [dBm]		23.50 22.66	23.50 22.64	23.50 22.59	1.21	1.22	4.00
	Measureu	1g SAR	0.292	22.04	22.59	0.35	1.22	1.23
	Front	10g SAR	0.292			0.33		20850
	TTOTAL	Deviation	0.14			0.14		
		1g SAR	0.304			0.37		
	Rear	10g SAR	0.179			0.22		
001411-		Deviation	0.02			0.02		
20MHz QPSK50%RB		1g SAR	0.243			0.30		
QF3K5U%KB	Bottom edge	10g SAR	0.108			0.13		
		Deviation	-0.09			-0.09		
		1g SAR	0.326			0.40		
	Left edge	10g SAR	0.173			0.21		
		Deviation	-0.1			-0.10		
	5	1g SAR	0.0506			0.06		
	Right edge	10g SAR Deviation	0.0266			0.03		
			0.19		6:16:16:16:16:16:16:16:16:16:16:16:16:16	0.19		
		Deviation		coured CAD IW/			Donostod CAD IW/k	
	Device			asured SAR [W/	(g]	F	Reported SAR [W/k	<u>9]</u>
Mode	Device orientation	SAR measurement		asured SAR [W/i	(g] 20850	21350	Reported SAR [W/k	g] 20850
Mode	orientation	SAR measurement	21350	21100	20850		21100	
	orientation Tui	SAR measurement	21350 23.50	21100 23.50	20850	21350	21100 Scaling factor*	20850
20MHz	orientation Tui	SAR measurement ne-up Power [dBm]	21350 23.50 22.60	21100 23.50 22.62	20850		21100	
	orientation Tui	SAR measurement ne-up Power [dBm] 1g SAR	21350 23.50	21100 23.50	20850	21350 1.23	21100 Scaling factor*	20850
20MHz	orientation Tui Measured	SAR measurement ne-up Power [dBm]	21350 23.50 22.60	21100 23.50 22.62	20850	21350	21100 Scaling factor*	20850
20MHz	orientation Tui Measured	SAR measurement ne-up Power [dBm] 1g SAR 10g SAR Deviation	21350 23.50 22.60	21100 23.50 22.62	20850	21350 1.23	21100 Scaling factor*	20850
20MHz QPSK100%RB	orientation Tui Measured	SAR measurement ne-up Power [dBm] 1g SAR 10g SAR	21350 23.50 22.60	21100 23.50 22.62	20850	21350	21100 Scaling factor*	20850
20MHz QPSK100%RB 20MHz	orientation Tui Measured Front	SAR measurement ne-up Power [dBm] 1g SAR 10g SAR Deviation 1g SAR	21350 23.50 22.60	21100 23.50 22.62	20850	21350 1.23 0.48	21100 Scaling factor*	20850
20MHz QPSK100%RB 20MHz QPSK1RB	orientation Tui Measured Front	SAR measurement  ne-up Power [dBm]  1g SAR 10g SAR Deviation 1g SAR 10g SAR	21350 23.50 22.60 0.418 0.224	21100 23.50 22.62	20850	21350 1.23 0.48 0.26	21100 Scaling factor*	20850
20MHz QPSK100%RB 20MHz QPSK1RB	orientation Tui Measured Front	SAR measurement  ne-up Power [dBm]  1g SAR 10g SAR Deviation 1g SAR 10g SAR Deviation	21350 23.50 22.60 0.418 0.224 0.1	21100 23.50 22.62	20850	21350 1.23 0.48 0.26 0.10	21100 Scaling factor*	20850



# Table14-17 LTE700-FDD12 Head

			l	TE700-FDD12 Hea	d			
Ambient Te	emperature:	22.5				Liquid T	emperature:	23.3
			Me	asured SAR [W/	kg]	·	Reported SAR [W/I	kg]
Mode	Device	SAR .	23130	23095	23060	23130	23095	23060
	orientation	measurement	М	М	М	М	М	М
	Tun	ie-up	25.00	25.00	25.00		Scaling factor*	
	Measured F	Power [dBm]	23.95	23.93	23.86	1.27	1.28	1.30
		1g SAR	0.1			0.13		
	Left Cheek	10g SAR	0.088			0.11		
		Deviation	0.03			0.03		
		1g SAR	0.057			0.07		
10MHz	Left Tilt	10g SAR	0.025			0.03		
QPSK1RB		Deviation	0.01			0.01		
		1g SAR	0.124			0.16		
	Right Cheek	10g SAR	0.098			0.12		
		Deviation	0.02			0.02		
		1g SAR	0.07			0.09		
	Right Tilt	10g SAR	0.06			0.08		
		Deviation	0.03			0.03		
			Me	easured SAR [W/	kg]	ı	Reported SAR [W/	kg]
TRUE	Device orientation	SAR measurement	23130	23095	23060	23130	23095	23060
			L	М	М	L	М	М
	Tun	ie-up	24.00	24.00	24.00		Scaling factor*	
	Measured F	Power [dBm]	22.92	22.87	22.84	1.28	1.30	1.31
		1g SAR	0.078			0.10		
	Left Cheek	10g SAR	0.066			0.08		
		Deviation	0.08			0.08		
		1g SAR	0.04			0.05		
10MHz	Left Tilt	10g SAR	0.02			0.03		
QPSK50%RB		Deviation	0.03			0.03		
		1g SAR	0.094			0.12		
	Right Cheek	10g SAR	0.075			0.10	<b>-</b>	
		Deviation	-0.09			-0.09		
		1g SAR	0.054			0.07		
	Right Tilt	10g SAR	0.045			0.06	<u> </u>	
	_	Deviation	0.13			0.13	<b>-</b>	
			Me	asured SAR [W/	kq]	F	Reported SAR [W/I	kg]
Mode	Device orientation	SAR measurement	23130	23095	23060	23130	23095	23060
	Tue	le-up	24.00	24.00	24.00		Scaling factor*	
			22.91		22.69	1.28		4.05
10MHz	Measureu r	Power [dBm]	22.91	22.85	22.09	1.20	1.30	1.35
QPSK100%RB	Loft Chook	1g SAR						
	Left Cheek	10g SAR						
1014117		Deviation	0.006			0.12		
10MHz	Pight Chock	1g SAR	0.096 0.076			0.12 0.10		
QPSK1RB	Right Cheek	10g SAR					-	
B1		Deviation	0.08			0.08		
SIM 1	Right Cheek	1g SAR 10g SAR	0.098 0.085			0.12 0.11	-	
SIIVI I	ragni Cheek	Deviation	0.085			0.11	1	
		<ul> <li>Deviation</li> </ul>						



# Table 14-18 LTE700-FDD12 Body

			L	TE700-FDD12 Body	/			
Ambient Te	emperature:	22.5				Liquid To	emperature:	23.3
	Daviss	040	Me	asured SAR [W/	(g)	F	Reported SAR [W/k	9]
Mode	Device orientation	SAR measurement	23130	23095	23060	23130	23095	23060
	onentation	measurement	М	М	М	М	М	М
	Tui	ne-up	25.00	25.00	25.00		Scaling factor*	
	Measured	Power [dBm]	23.95	23.93	23.86	1.27	1.28	1.30
		1g SAR	0.133			0.17		
	Front	10g SAR	0.106			0.14		
		Deviation	0.12			0.12		
		1g SAR	0.108			0.14		
	Rear	10g SAR	0.0852			0.11		
10MHz		Deviation	0.04			0.04		
QPSK1RB		1g SAR	0.0426			0.05		
	Bottom edge	10g SAR	0.0237			0.03		
		Deviation	0.06			0.06		
		1g SAR	0.124			0.16		
	Left edge	10g SAR	0.0867			0.11		
		Deviation	0.16			0.16		
	B: 14 1	1g SAR 10g SAR	0.182 0.129			0.23 0.16		
	Right edge		-0.08			-0.08		
		Deviation		asured SAR [W/l	(a)		Penorted SAR IW/k	al
Mode	Device	SAR	23130	23095	23060	Reported SAR [W/kg] 23130 23095 2306		
Mode	orientation	measurement	L L	M	M	20100	23033	23000
	Tu	ne-up	24.00	24.00	24.00		Scaling factor*	
		Power [dBm]	22.92	22.87	22.84	1.28	1.30	1.31
		1g SAR	0.0982			0.13		
	Front	10g SAR	0.0778			0.10		
		Deviation	-0.05			-0.05		
		1g SAR	0.0783			0.10		
	Rear	10g SAR	0.0615			0.08		
10MHz		Deviation	0.08			0.08		
QPSK50%RB		1g SAR	0.0309			0.04		
	Bottom edge	10g SAR	0.017			0.02		
		Deviation	0.06			0.06		
		1g SAR	0.09			0.12		
	Left edge	10g SAR Deviation	0.063 0.03			0.08	_	
						0.03		4
	Right edge	1g SAR 10g SAR	0.135 0.0949			0.17		
	rtigrit eage	TOG SAIN	0.0343					
	Deviation		<b>-</b> ∩ ∩4			-0 04		
		Deviation	-0.04 <b>Me</b>	asured SAR (W/	(a)	-0.04	Reported SAR (W/k	al
Mada	Device	Deviation SAR		asured SAR [W/k	(g)		Reported SAR [W/k	9]
Mode	Device orientation				23060		Reported SAR [W/k	g] 23060
Mode	orientation	SAR	Me	asured SAR [W/		·		
	orientation Tui	SAR measurement	23130	asured SAR [W/k	23060	·	23095	
10MHz	orientation Tui	SAR measurement	23130 24.00	23095 24.00	23060	23130	23095 Scaling factor*	23060
	orientation Tui	SAR measurement ne-up Power [dBm]	23130 24.00 22.91	23095 24.00 22.85	23060	23130 1.28	23095 Scaling factor*	23060
10MHz	orientation Tui Measured	SAR measurement ne-up Power [dBm] 1g SAR	23130 24.00 22.91	23095 24.00 22.85	23060	23130 1.28	23095 Scaling factor*	23060
10MHz	orientation Tui Measured	SAR measurement ne-up Power [dBm] 1g SAR 10g SAR	23130 24.00 22.91	23095 24.00 22.85	23060	23130 1.28	23095 Scaling factor*	23060
10MHz QPSK100%RB	orientation Tui Measured	SAR measurement ne-up Power [dBm] 1g SAR 10g SAR Deviation	23130 24.00 22.91	23095 24.00 22.85	23060	23130 1.28	23095 Scaling factor*	23060
10MHz QPSK100%RB 10MHz	orientation Tui Measured Front	SAR measurement ne-up Power [dBm] 1g SAR 10g SAR Deviation 1g SAR	23130 24.00 22.91 0.177	23095 24.00 22.85	23060	1.28 0.23	23095 Scaling factor*	23060
10MHz QPSK100%RB 10MHz QPSK1RB	orientation Tui Measured Front	SAR measurement  ne-up Power [dBm]  1g SAR 10g SAR Deviation 1g SAR 10g SAR	23130 24.00 22.91 0.177 0.121	23095 24.00 22.85	23060	23130 1.28 0.23 0.15	23095 Scaling factor*	23060
10MHz QPSK100%RB 10MHz QPSK1RB	orientation Tui Measured Front	SAR measurement  ne-up Power [dBm]  1g SAR 10g SAR Deviation 1g SAR 10g SAR Deviation	23130 24.00 22.91 0.177 0.121 0.03	23095 24.00 22.85	23060	23130 1.28 0.23 0.15 0.03	23095 Scaling factor*	23060



#### Table 14-19 LTE2600-FDD38 Head

			L	TE2600-TDD38 He	ad			
Ambient Te	emperature:	22.5				Liquid T	emperature:	23.3
		1	Me	asured SAR [W	/kg]		eported SAR [W/	kg]
Mode	Device	SAR	38150	38000	37850	38150	38000	37850
	orientation	measurement	М	н	н	М	Н	Н
	Tur	ne-up	24.50	24.50	24.50		Scaling factor*	
	Measured	Power [dBm]	23.74	23.50	23.52	1.19	1.26	1.25
		1g SAR	0.2			0.24		
	Left Cheek	10g SAR	0.101			0.12		
		Deviation	0.02			0.02		
		1g SAR	0.051			0.06		
20MHz	Left Tilt	10g SAR	0.026			0.03		
QPSK1RB		Deviation	0.12			0.12		
		1g SAR	0.081			0.10		
	Right Cheek	10g SAR	0.046			0.05		
		Deviation	0.09			0.09		
		1g SAR	0.055			0.07		
	Right Tilt	10g SAR	0.028			0.03		
		Deviation	-0.14			-0.14		
			Me	asured SAR [W	/kg]	R	eported SAR [W/	kg]
TRUE	Device orientation	SAR measurement	38150	38000	37850	38150	38000	37850
			L	Н	L	L	Н	L
	Tur	ne-up	23.50	23.50	23.50		Scaling factor*	
	Measured	Power [dBm]	22.51	22.49	22.53	1.26	1.26	1.25
		1g SAR			0.144			0.18
	Left Cheek	10g SAR			0.077			0.10
		Deviation			0.08			0.08
		1g SAR			0.09			0.11
20MHz	Left Tilt	10g SAR			0.042			0.05
QPSK50%RB		Deviation			0.06			0.06
		1g SAR			0.065			0.08
	Right Cheek	10g SAR			0.037			0.05
		Deviation			-0.05			-0.05
		1g SAR			0.07			0.09
	Right Tilt	10g SAR			0.033			0.04
		Deviation			0.03			0.03
			Me	asured SAR [W	/kg]	R	eported SAR [W/	kg]
Mode	Device orientation	SAR measurement	38150	38000	37850	38150	38000	37850
	Tur	ne-up	23.50	23.50	23.50		Scaling factor*	
		Power [dBm]	22.41	22.44	22.43	1.29	1.28	1.28
20MHz	Wodsuled	1g SAR				1.20	1.20	1.20
QPSK100%RB	Left Cheek	10g SAR						
	Len Olleck	Deviation						
20MHz		1g SAR	0.164			0.20		
QPSK1RB	Left Cheek	10g SAR	0.084			0.20		
B1	Leit Glieck	Deviation	0.084			0.10		
БI		1g SAR	0.151			0.18	400000000000000000000000000000000000000	
SIMO	Left Chook							
SINIZ	Leit Olleek							
SIM2	Left Cheek	10g SAR Deviation	0.082			0.10 0.01		



# Table 14-20 LTE2600-FDD38 Body

			Ľ	TE2600-TDD38 Bo	dy			
Ambient Te	mperature:	22.5				Liquid Te	mperature:	23.3
	Device	SAR	Mea	asured SAR [W/	'kg]	Re	ported SAR [W/l	(g]
Mode	orientation	measurement	38150	38000	37850	38150	38000	37850
	Onomation	moasaromont	M	Н	Н	М	Н	Н
	Tur	ıө-up	24.50	24.50	24.50		Scaling factor*	
	Measured I	Power [dBm]	23.74	23.50	23.52	1.19	1.26	1.25
		1g SAR	0.146			0.17		
	Front	10g SAR	0.083			0.10		
		Deviation	0.05			0.05		
		1g SAR	0.104			0.12		
	Rear	10g SAR	0.064			0.08		
20MHz		Deviation	0.08			0.08		
QPSK1RB	<b>-</b>	1g SAR	0.106			0.13		
	Bottom edge	10g SAR	0.052			0.06		
		Deviation	0.03			0.03		
	l oft oder	1g SAR	0.12			0.14		
	Left edge	10g SAR	0.069			0.08		
		Deviation	-0.01			-0.01		
	Dight adas	1g SAR	0.024			0.03		
	Right edge	10g SAR Deviation	0.012 -0.03			0.01 -0.03		
		Deviation		soured CAR IM	lkal		ported SAR [W/	ral .
Mode	de Device SAR		Measured SAR [W/kg] 38150 38000 37850		38150	37850		
WIOGO	orientation	measurement	L 30130	Н	37830 L	36130	38000	37650
	Tur	le-up	23.50	23.50	23.50		Scaling factor*	
-		Power [dBm]	22.51	22.49	22.53	1.26	1.26	1.25
	Measured	1g SAR	22.31	22.49	0.087	1.20	1.20	0.11
	Front	10g SAR			0.05			0.06
	1 10110	Deviation			0.01			0.01
		1g SAR			0.084			0.11
	Rear	10g SAR			0.053			0.07
001411		Deviation			0.09			0.09
20MHz QPSK50%RB		1g SAR			0.065			0.08
QPSK90%KB	Bottom edge	10g SAR			0.034			0.04
		Deviation			0.01			0.01
		1g SAR			0.091			0.11
	Left edge	10g SAR			0.052			0.07
		Deviation			0.05			0.05
		1g SAR			0.019			0.02
	Right edge	10g SAR			0.009			0.01
		Deviation			-0.08			-0.08
	Davida	040	Mea	asured SAR [W/	'kg]	Re	ported SAR [W/I	<u>(g]</u>
Mode	Device orientation	SAR measurement	38150	38000	37850	38150	38000	37850
	Tur	ne-up	23.50	23.50	23.50		Scaling factor*	
20MHz	Measured I	Power [dBm]	22.41	22.44	22.43	1.29	1.28	1.28
QPSK100%RB		1g SAR						
	Front	10g SAR Deviation						
20MHz		1g SAR	0.122			0.15		
QPSK1RB	Front	10g SAR	0.071			0.08		
B1		Deviation	0.12			0.12		
		1g SAR	0.124			0.15		
SIM 2	Front	10g SAR	0.072			0.09		
	ront	Deviation	-0.09			-0.09		
					<ul><li></li></ul>		**************************************	



### 14.3 Full SAR

Test Band	Channel	Frequency	Tune-Up	Measured Power	Test Position	Measured 10g SAR	Measured 1g SAR	Reported 10g SAR	Reported 1g SAR	Power Drift	Figure
GSM850	128	824.2 MHz	33.6	33. 49	Right Cheek	0.138	0.178	0.14	0.18	-0.06	Fig A. 1
GSM850	128	824.2 MHz	29	28.80	Right edge	0.209	0.305	0.22	0.32	0.08	Fig A. 2
PCS1900	661	1880 MHz	31	30.92	Left Cheek	0.122	0.19	0.12	0.19	-0.02	<u>Fig A. 3</u>
PCS1900	512	1850.2 MHz	28	27.85	Left edge	0.338	0. 558	0.35	0.58	-0.12	<u>Fig A. 4</u>
WCDMA1900-BII	9538	1907.6 MHz	24. 5	24. 24	Left Cheek	0.315	0. 499	0.33	0.53	0.06	<u>Fig A.5</u>
WCDMA1900-BII	9400	1880 MHz	24. 5	23.99	Left edge	0.332	0.549	0.37	0.62	-0. 16	Fig A. 6
WCDMA1700-BIV	1513	1752.6 MHz	24. 5	24.03	Left Cheek	0.178	0. 268	0.20	0.30	0.18	Fig A. 7
WCDMA1700-BIV	1513	1752.6 MHz	24.5	24.03	Bottom edge	0.2	0.375	0.22	0.42	-0. 18	<u>Fig A.8</u>
WCDMA850-BV	4715	835.4 MHz	24. 5	24. 39	Right Cheek	0.17	0. 22	0.17	0.23	-0.05	Fig A. 9
WCDMA850-BV	4715	835.4 MHz	24. 5	24. 39	Right edge	0.256	0.374	0.26	0.38	-0.12	Fig A. 10
LTE1900-FDD2	19100	1900 MHz	24. 9	24. 49	Left Cheek	0.208	0.328	0.23	0.36	-0.06	<u>Fig A.11</u>
LTE1900-FDD2	19100	1900 MHz	24. 9	24. 49	Front	0. 233	0. 426	0.26	0.47	-0.03	Fig A. 12
LTE1700-FDD4	20050	1720 MHz	24.8	24.72	Left Cheek	0.085	0. 13	0.09	0.13	-0.12	Fig A. 13
LTE1700-FDD4	20050	1720 MHz	24.8	24.72	Left edge	0.109	0.179	0.11	0.18	0	Fig A. 14
LTE2500-FDD7	21350	2560 MHz	24. 5	23.93	Left Cheek	0. 206	0.368	0.23	0.42	0.06	<u>Fig A. 15</u>
LTE2500-FDD7	21350	2560 MHz	24. 5	23.93	Left edge	0. 247	0.461	0.28	0.53	0.05	Fig A. 16
LTE700-FDD12	23130	711 MHz	25	23.95	Right Cheek	0.098	0.124	0.12	0.16	0.02	Fig A. 17
LTE700-FDD12	23130	711 MHz	25	23.95	Right edge	0.129	0.182	0.16	0.23	-0. 08	Fig A. 18
LTE2600-TDD38	38150	2610 MHz	24. 5	23.74	Left Cheek	0.101	0.2	0.12	0.24	0.02	Fig A. 19
LTE2600-TDD38	38150	2610 MHz	24. 5	23.74	Front	0.083	0.146	0.10	0.17	0.05	Fig A. 20



#### 14.4 WLAN Evaluation For 2.4G

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

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.

Note3: 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.

WLAN 2450 Head Fast SAR Ambient Temperature: 22.5 Liquid Temperature: 23.3 Measured SAR [W/kg] Reported SAR [W/kg] SAR Rate 11 orientation measurement 11 2462 MHz 2437 MHz 2412 MHz Tune up 16 16 16 Scaling factor\* 1.01 Slot Average Power [dBm] 15.76 15.79 15.94 1.06 1.05 1g Fast SAR 0.553 0.56 Left Cheek 10g SAR 0.286 0.29 0.08 0.08 Deviation 1g Fast SAR 0.435 0.44 Left Tilt 0.20 0.202 10g SAR 802.11b 1Mbps 0.19 Deviation 0.19 1.04 1g Fast SAR 1.03 Right Cheek 0.478 0.48 10g SAR Deviation 0.04 0.04 1g Fast SAR 0.704 0.71 Right Tilt 10g SAR 0.317 0.32 Deviation -0.14 -0.14 1g Fast SAR 0.976 0.99 10g SAR 0.452 0.46 Right Cheek -0.03 -0.03 Deviation 1g Fast SAR 0.962 0.98 0.449 0.46 SIM 1 Right Cheek 10g SAR Deviation -0.01 -0.01

Table 14.4-1 WLAN 2450 head

			WLA	N 2450 Head Full	SAR			
Ambient Te	mperature:	22.5				Liquid Ter	23.3	
	Davisa	CAD	M	easured SAR [W/kg	a]	R	eported SAR [W/kg	]
Rate	Device orientation	SAR measurement	11	6	1	11	6	4
	0.10.11411011	moudarement	2462 MHz	2437 MHz	2412 MHz	- 11	0	
	Tun	e up	16	16	16	Scaling factor*		
	Slot Average Power [dBm]		15.76	15.79	15.94	1.06	1.05	1.01
		1g Full SAR		1.13	1.16		1.19	1.18
000 44h 4Mhna	Right Cheek	10g SAR		0.466	0.48		0.49	0.49
802.11b 1Mbps		Deviation		-0.09	0.04		-0.09	0.04
		1g Full SAR			0.642			0.65
	Right Tilt	10g SAR			0.278			0.28
		Deviation			-0.14			-0.14

	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:												
Frequ	uency	Sido	Toot Desition	Antical distribution	maximum duty	Reported SAR	Scaled reported	Figure				
MHz Ch. Side Test Position Actual duty factor factor (1g) (W/kg) SAR (1g) (W/kg)						rigure						
2437	2437 6 Right Touch 97.73% 100% <b>1.19 1.22</b> Fig.21											

SAR is not required for OFDM because the 802.11b adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is  $\leq 1.2 \text{ W/kg}$ .



#### **Table 14.4-2 WLAN 2450 body**

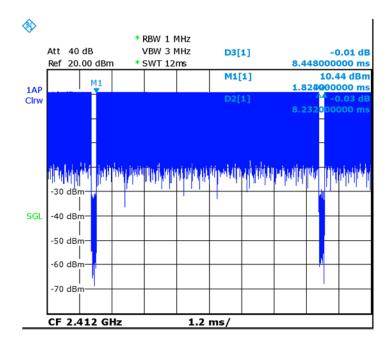
			WLAN	N 2450 Body Fas	t SAR				
Ambient Te	mperature:	22.5				Liquid Ter	nperature:	23.3	
		0.15	Me	easured SAR [W/k	g]	Reported SAR [W/kg]			
Rate	Device orientation	SAR measurement	11	6	1	11		4	
	orientation	measurement	2462 MHz	2437 MHz	2412 MHz	11	6	1	
	Tun	e up	16	16	16		Scaling factor*		
Slot Averag		Power [dBm]	15.76	15.79	15.94	1.06	1.05	1.01	
		1g Fast SAR			0.084			0.09	
	Front	10g SAR			0.047			0.05	
		Deviation			0.02			0.02	
		1g Fast SAR			0.08			0.08	
	Rear	10g SAR			0.043			0.04	
		Deviation			0.04			0.04	
802.11b 1Mbps		1g Fast SAR			0.083			0.08	
	Top edge	10g SAR			0.035			0.04	
		Deviation			-0.02			-0.02	
		1g Fast SAR			0.029			0.03	
	Left edge	10g SAR			0.014			0.01	
		Deviation			0.1			0.10	
		1g Fast SAR			0.026			0.03	
	Right edge	10g SAR			0.013			0.01	
		Deviation			0.17			0.17	
		1g Fast SAR			0.082			0.08	
B1	Front	10g SAR			0.044			0.04	
		Deviation			0.15			0.15	
		1g Fast SAR			0.081			0.08	
SIM 2	Front	10g SAR			0.045			0.05	
		Deviation			0.07			0.07	

WLAN 2450 Body Full SAR											
Ambient Te	mperature:	22.5				Liquid Ter	23.3				
Device		0.15	М	easured SAR [W/k	g]	Reported SAR [W/kg]					
Rate	orientation	SAR measurement	11	6	1	11	6	•			
		measurement	2462 MHz	2437 MHz	2412 MHz	11	0	1			
	Tun	e up	16	16	16						
	Slot Average	Slot Average Power [dBm]		15.79	15.94	1.06	1.05	1.01			
802.11b 1Mbps					0.086			0.09			
	Front	10g SAR			0.047			0.05			
		Deviation			0.02			0.02			

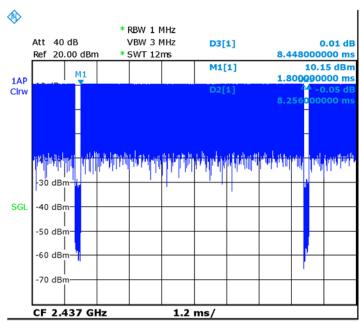
	According to the KDB248227 D01, The reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit. The scaled reported SAR is presented as below:										
Frequency  MHz  Ch.  Test position  Actual duty factor factor  Actual duty factor  Maximum duty factor  factor  (1g) (W/kg)  SAR (1g) (W/kg)						Figure					
2412	1	Front	97.44%	100%	0.09	0.09	Fig.22				
2412	2412 1 Left 97.44% 100% <b>0.03 0.03</b> /										

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





Picture 14.1 Duty factor plot for CH.1



Picture 14.2 Duty factor plot for CH.6



#### 14.5 WLAN Evaluation For 5G

Table 14.5-1: OFDM mode specified maximum output power of WLAN antenna

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

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

Table 14.5-2: Maximum output power specified of WLAN antenna

802.11 mode	а	g	ı	n	ac			
Ch. BW(MHz)	20	20	20	40	20	40	80	160
U-NII-1	22							
U-NII-2A	18							
U-NII-2C	19							
U-NII-3	16							
§ 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 14.5-3: Maximum output power measured of WLAN antenna, for the applicable OFDM configurations according to the default power measurement procedures for selection initial test configurations

802.11 mode	а	n			а	IC
BW(MHz)	20	20	40	20	40	80
U-NII-1	36/ <mark>40</mark> /44/48 <b>21/21/20/19</b>	36/40/44/48 Lower power	38/46 Lower power	/	/	/
U-NII-2A	<mark>52</mark> /56/60/64 <mark>18</mark> /1 <b>6/16/15</b>	52/56/60/64 Lower power	54/62 Lower power	/	/	/
U-NII-2C	100/104/108/ <mark>112</mark> 19/19/19/ <mark>19</mark> 116/120/124/128 18/17/17/16 132/136/140 15/14/15	100/104/108/112 116/132/136/140 Lower power	102/110/134 Lower power	/	/	/
U-NII-3	149/153/ <mark>157</mark> /161/165 <b>14/14/<mark>15</mark>/15/15</b>	149/153/157/161/165 Lower power	151/159 Lower power	/	/	/

 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 14.5-4: Reported SAR of initial test configuration for Head

802.11 mode	а	n	n ac				
BW(MHz)	20	20	40	20	40	80	
U-NII-1	36/40/44/48 U-NII-2A exclusion	36/40/44/48	38/46	/	/	/	
	applied			,	,	,	
U-NII-2A	<mark>52</mark> /56/60/64	52/56/60/64	54/62	,	/	,	
O-IVII-ZA	0.63	02/00/00/04	04/02	,	,	,	
U-NII-2C	100/104/108/ <mark>112</mark> 116/120/124/128 132/136/140 <b>0.79</b>	100/104/108/112 116/132/136/140	102/110/118/ 126/134	/	/	/	
U-NII-3	149/153/ <mark>157</mark> /161/165 <b>1.08</b>	149/153/157/161/ 165	151/159	/	1	/	

U-NII-1 and U-NII-2A bands have the same specified maximum output and tolerance; SAR is measured for U-NII-2A band first. Adjusted SAR of U-NII-2A band is ≤ 1.2W/kg, SAR is not required for U-NII-1 band.

Table 14.5-5: Reported SAR of initial test configuration for Body

802.11 mode	а	ı	ı	ас				
BW(MHz)	20	20	40	20	40	80		
U-NII-1	36/40/44/48 U-NII-2A exclusion applied	36/40/44/48	38/46	/	/	/		
U-NII-2A	52/56/60/64 0.02	52/56/60/64	54/62	/	/	/		
U-NII-2C	100/104/108/ <mark>112</mark> 116/120/124/128 132/136/140 <b>0.04</b>	100/104/108/112 116/132/136/140	102/110/118/126/ 134	/	/	/		
U-NII-3	149/153/ <mark>157</mark> /161/165 <b>0.05</b>	149/153/157/161/ 165	151/159	/	/	/		

U-NII-1 and U-NII-2A bands have the same specified maximum output and tolerance; SAR is measured for U-NII-2A band first. Adjusted SAR of U-NII-2A band is  $\leq$  1.2W/kg, SAR is not required for U-NII-1 band.



# Table 14.5-6: SAR Values (WLAN - Head) - 802.11a 6Mbps

Frequ	ency		Test	Figure	Conducted	Max. tune-up	Measured	Reported	Measured	Reported	Power
	1	Side		_	Power		SAR(10g)	SAR(10g)	SAR(1g)	SAR(1g)	Drift
MHz	Ch.		Position	No.	(dBm)	Power (dBm)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(dB)
5260	52	Left	Touch	/	12.56	12.6	0.0694	0.07	0.181	0.18	0.13
5260	52	Left	Tilt	/	12.56	12.6	0.0586	0.06	0.165	0.17	0.14
5260	52	Right	Touch	/	12.56	12.6	0.168	0.17	0.624	0.63	0.04
5260	52	Right	Tilt	/	12.56	12.6	0.133	0.13	0.389	0.39	0.02
5560	112	Left	Touch	/	12.82	12.9	0.106	0.11	0.266	0.27	0.12
5560	112	Left	Tilt	/	12.82	12.9	0.0855	0.09	0.25	0.25	0.01
5560	112	Right	Touch	/	12.82	12.9	0.22	0.22	0.779	0.79	-0.05
5560	112	Right	Tilt	/	12.82	12.9	0.202	0.21	0.651	0.66	0.05
5785	157	Left	Touch	/	11.74	11.8	0.132	0.13	0.328	0.33	-0.15
5785	157	Left	Tilt	/	11.74	11.8	0.148	0.15	0.409	0.41	0.11
5785	157	Right	Touch	Fig.23	11.74	11.8	0.299	0.30	1.07	1.08	0.1
5785	157	Right	Tilt	/	11.74	11.8	0.215	0.22	0.684	0.69	-0.04
5805	161	Right	Touch	/	11.71	11.8	0.217	0.22	0.654	0.67	0.09
5785	157	Right	Touch	B1	11.74	11.8	0.223	0.23	0.745	0.76	0.01
5785	157	Right	Touch	S2	11.74	11.8	0.235	0.24	0.772	0.78	0.07

#### Table 14.5-7: SAR Values (WLAN - Body) - 802.11a 6Mbps

	Table 14.5-7. OAK Values (WEAK - Body) - 002.11a olimps											
Frequ	ency	Test	D	Figure	Conducted	Max. tune-up	Measured	Reported	Measured	Reported	Power	
	1			_	Power		SAR(10g)	SAR(10g)	SAR(1g)	SAR(1g)	Drift	
MHz	Ch.	Position	(mm)	No.	(dBm)	Power (dBm)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(dB)	
5260	52	Front	10	/	12.56	12.6	0.004	<0.01	0.01	0.01	-0.03	
5260	52	Rear	10	/	12.56	12.6	0.005	0.01	0.016	0.02	0.02	
5260	52	Left	10	/	12.56	12.6	0.003	<0.01	0.001	<0.01	0.01	
5260	52	Тор	10	/	12.56	12.6	0.004	<0.01	0.012	0.01	0.05	
5560	112	Front	10	/	12.82	12.9	0.007	0.01	0.022	0.02	-0.02	
5560	112	Rear	10	/	12.82	12.9	0.012	0.01	0.035	0.04	0.04	
5560	112	Left	10	/	12.82	12.9	0.002	<0.01	0.012	0.01	0.09	
5560	112	Тор	10	/	12.82	12.9	0.014	0.01	0.043	0.04	0.01	
5785	157	Front	10	/	11.74	11.8	0.011	0.01	0.036	0.04	0.01	
5785	157	Rear	10	/	11.74	11.8	0.014	0.01	0.038	0.04	0.04	
5785	157	Left	10	/	11.74	11.8	0.005	0.01	0.016	0.02	0.07	
5785	157	Тор	10	Fig.24	11.74	11.8	0.018	0.02	0.051	0.05	0.04	
5785	157	Тор	10	B1	11.74	11.8	0.017	0.02	0.043	0.04	0.06	
5785	157	Тор	10	S2	11.74	11.8	0.016	0.02	0.044	0.04	-0.15	



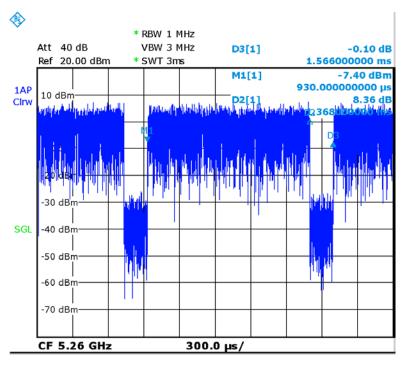
According to the KDB248227 D01, The reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit. The scaled reported SAR is presented as below.

Table 14.5-8: SAR Values (WLAN - Head) – 802.11a 6Mbps (Scaled Reported SAR)

Frequ	ency	Cido	Test	Actual	maximum	Reported	Scaled SAR
MHz	Ch.	Side	Position	duty factor	duty factor	SAR (1g) (W/kg)	reported SAR (1g) (W/kg)
5785	157	Right	Touch	87.36%	100%	1.08	1.24

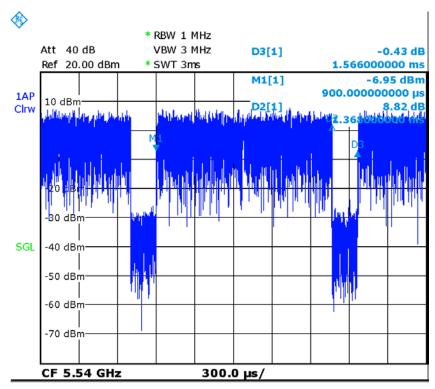
Table 14.5-9: SAR Values (WLAN - Body) – 802.11a 6Mbps (Scaled Reported SAR)

Frequ	Frequency		2	Actual		Reported	Scaled
MHz	Ch.	Test Position	D (mm)	duty factor	duty factor	SAR (1g) (W/kg)	reported SAR (1g) (W/kg)
5785	157	Тор	10	87.36%	100%	0.05	0.06
5785	157	Left	10	87.36%	100%	0.02	0.02

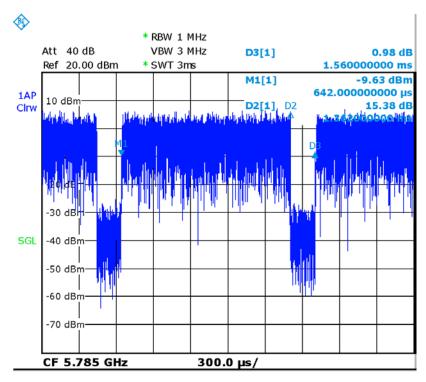


Picture 14.3 The plot of duty factor for CH.52





Picture 14.4 The plot of duty factor for CH.112



Picture 14.5 The plot of duty factor for CH.157



### 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 (~ 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.

Mode	Channel	Frequency	Test Position	Original SAR (W/kg)	First Repeated SAR(W/kg)	The Ratio
WLAN 2450	6	2437 MHz	Right Cheek	1. 13	1. 12	1.01
WLAN 5G	157	5785 MHz	Right Cheek	1.07	1.06	1.01



# **16 Measurement Uncertainty**

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

16.	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)	freedo	
										m	
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	N	1	1	1	0.6	0.6	∞	
6	Readout electronics	В	0.3	R	$\sqrt{3}$	1	1	0.3	0.3	8	
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	0.4	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 related	ı						
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	∞	
	1	ı	Phan	tom and set-u	p			1		ı	
17	Phantom uncertainty	В	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	∞	
	1	1	l	1	1	1	L		1	L	



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		$= \sqrt{\sum_{i=1}^{21} c_i^2 u_i^2}$					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
			value	Distribution		1g	10g	Unc.	Unc.	of
								(1g)	(10g)	freedo
										m
Mea	surement system	1				1		1	1	T
1	Probe calibration	В	6.55	N	1	1	1	6.55	6.55	$\infty$
2	Isotropy	В	4.7	R	$\sqrt{3}$	0.7	0.7	1.9	1.9	8
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	8
5	Detection limit	В	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	8
6	Readout electronics	В	0.3	R	$\sqrt{3}$	1	1	0.3	0.3	8
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	8
9	RF ambient conditions-noise	В	0	R	$\sqrt{3}$	1	1	0	0	∞
10	RF ambient 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	∞
12	Probe positioning with respect to	В	6.7	R	$\sqrt{3}$	1	1	3.9	3.9	∞



	phantom shell									
13	Post-processing	В	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	∞
		l	Test	sample related	ł	I	I	l	l	I.
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-uj	p					
17	Phantom uncertainty	В	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	$\infty$
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	$u_c^{'} =$	$\sqrt{\sum_{i=1}^{21} c_i^2 u_i^2}$					10.7	10.6	257
(conf 95 %	•		$u_e = 2u_c$					21.4	21.1	
16.	3 Measurement U								Т	T
No.	Error Description	Type	Uncertainty value	Probably Distribution	Div.	(Ci) 1g	(Ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)	Degree of freedo m
Mea	surement system				ı	I	I			
1	Probe calibration	В	6.0	N	1	1	1	6.0	6.0	$\infty$
2	Isotropy	В	4.7	R	$\sqrt{3}$	0.7	0.7	1.9	1.9	8
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	8
5	Detection limit	В	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	8



6	Readout electronics	В	0.3	R	$\sqrt{3}$	1	1	0.3	0.3	8
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	8
9	RF ambient conditions-noise	В	0	R	$\sqrt{3}$	1	1	0	0	8
10	RF ambient conditions-reflection	В	0	R	$\sqrt{3}$	1	1	0	0	8
11	Probe positioned mech. Restrictions	В	0.4	R	$\sqrt{3}$	1	1	0.2	0.2	8
12	Probe positioning with respect to phantom shell	В	2.9	R	$\sqrt{3}$	1	1	1.7	1.7	8
13	Post-processing	В	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	8
14	Fast SAR z-Approximation	В	7.0	R	$\sqrt{3}$	1	1	4.0	4.0	∞
			Test	sample related	ì					
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	8
Phantom and set-up										
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	8
22	Liquid permittivity (meas.)	A	1.6	N	1	0.6	0.49	1.0	0.8	521
(	Combined standard uncertainty	u' <sub>c</sub> =	$\sqrt{\sum_{i=1}^{22} c_i^2 u_i^2}$					10.4	10.3	257
_	anded uncertainty fidence interval of		$u_e = 2u_c$					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)	freedo
										m
	surement 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	8
4	Linearity	В	4.7	R	$\sqrt{3}$	1	1	2.7	2.7	8
5	Detection limit	В	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	8
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	RF ambient 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	8
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	∞
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	∞
Phantom and set-up										



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18	Phantom uncertainty	В	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	80
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		$u_c^{'} =$	$=\sqrt{\sum_{i=1}^{22}c_i^2u_i^2}$					13.5	13.4	257
(cont	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	Туре	Serial Number	Calibration Date	Valid Period	
01	Network analyzer	E5071C	MY46110673	January 13, 2017	One year	
02	Power meter	NRVD	102083	Contombox 22 2040	One year	
03	Power sensor	NRV-Z5	100595	September 22,2016	One year	
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	149646	November 03, 2016	One year	
08	E-field Probe	SPEAG EX3DV4	3846	January 13,2017	One year	
09	DAE	SPEAG DAE4	1331	January19, 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	
16	Dipole Validation Kit	SPEAG D5GHzV2	1060	July 27,2016	One year	

<sup>\*\*\*</sup>END OF REPORT BODY\*\*\*



### **ANNEX A Graph Results**

#### GSM850\_CH128 Right Cheek

Date: 4/6/2017

Electronics: DAE4 Sn1331 Medium: Head 835 MHz

Medium parameters used: f = 824.2 MHz;  $\sigma = 0.891 \text{ mho/m}$ ;  $\epsilon r = 41.61$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5°C, Liquid Temperature: 23.3°C Communication System: GSM850 824.2 MHz Duty Cycle: 1:8.3

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

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

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

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

Reference Value = 5.773 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.223 W/kg

SAR(1 g) = 0.178 W/kg; SAR(10 g) = 0.138 W/kg

Maximum value of SAR (measured) = 0.195 W/kg

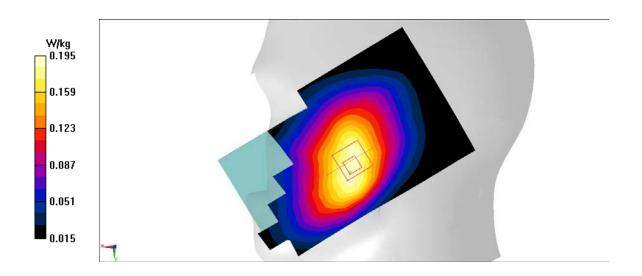


Figure A.1



#### GSM850\_CH128 Right edge

Date: 4/6/2017

Electronics: DAE4 Sn1331 Medium: Body 835 MHz

Medium parameters used: f = 824.2 MHz;  $\sigma = 0.978 \text{ mho/m}$ ;  $\epsilon r = 56.11$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5°C, Liquid Temperature: 23.3°C Communication System: GSM850 824.2 MHz Duty Cycle: 1:2

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

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

Maximum value of SAR (interpolated) = 0.35 W/kg

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

Reference Value = 17.31 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.433 W/kg

SAR(1 g) = 0.305 W/kg; SAR(10 g) = 0.209 W/kg

Maximum value of SAR (measured) = 0.347 W/kg

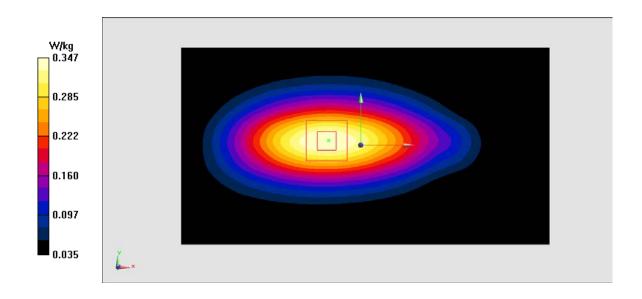


Figure A.2



#### PCS1900\_CH661 Left Cheek

Date: 4/8/2017

Electronics: DAE4 Sn1331 Medium: Head 1900 MHz

Medium parameters used: f = 1880 MHz;  $\sigma = 1.371 \text{ mho/m}$ ;  $\epsilon r = 39.57$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5°C, Liquid Temperature: 23.3°C Communication System: PCS1900 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) = 0.221 W/kg

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

Reference Value = 3.794 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.275 W/kg

SAR(1 g) = 0.19 W/kg; SAR(10 g) = 0.122 W/kg

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

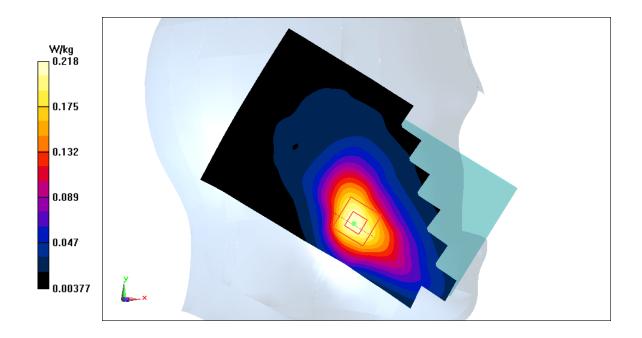


Figure A.3



#### PCS1900\_CH512 Left edge

Date: 4/8/2017

Electronics: DAE4 Sn1331 Medium: Body 1900 MHz

Medium parameters used: f = 1850.2 MHz;  $\sigma = 1.488 \text{ mho/m}$ ;  $\epsilon r = 53.25$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5°C, Liquid Temperature: 23.3°C Communication System: PCS1900 1850.2 MHz Duty Cycle: 1:2

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) = 0.672 W/kg

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

Reference Value = 9.807 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.881 W/kg

SAR(1 g) = 0.558 W/kg; SAR(10 g) = 0.338 W/kg

Maximum value of SAR (measured) = 0.663 W/kg

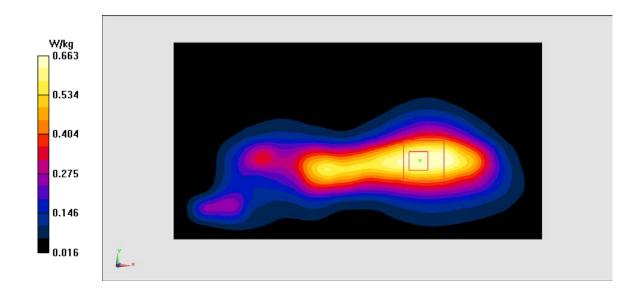


Figure A.4



#### WCDMA1900-BII\_CH9538 Left Cheek

Date: 4/8/2017

Electronics: DAE4 Sn1331 Medium: Head 1900 MHz

Medium parameters used: f = 1907.6 MHz;  $\sigma = 1.398 \text{ mho/m}$ ;  $\epsilon r = 39.54$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5°C, Liquid Temperature: 23.3°C

Communication System: WCDMA1900-BII 1907.6 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) = 0.579 W/kg

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

Reference Value = 5.884 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.734 W/kg

SAR(1 g) = 0.499 W/kg; SAR(10 g) = 0.315 W/kg

Maximum value of SAR (measured) = 0.575 W/kg

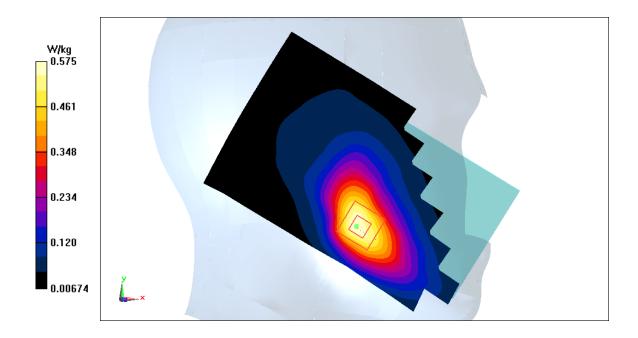


Figure A.5



#### WCDMA1900-BII\_CH9400 Left edge

Date: 4/8/2017

Electronics: DAE4 Sn1331 Medium: Body 1900 MHz

Medium parameters used: f = 1880 MHz;  $\sigma = 1.517 \text{ mho/m}$ ;  $\epsilon r = 53.21$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5°C, Liquid Temperature: 23.3°C

Communication System: WCDMA1900-BII 1880 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) = 0.665 W/kg

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

Reference Value = 14.41 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 0.875 W/kg

SAR(1 g) = 0.549 W/kg; SAR(10 g) = 0.332 W/kg

Maximum value of SAR (measured) = 0.656 W/kg

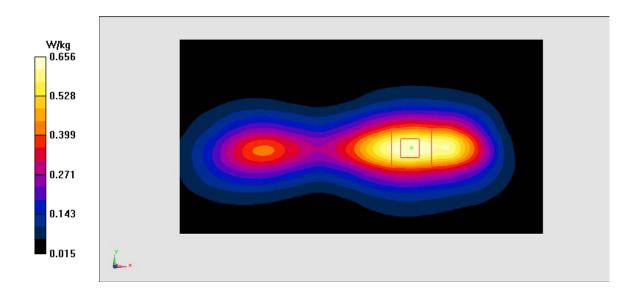


Figure A.6



## WCDMA1700-BIV\_CH1513 Left Cheek

Date: 4/7/2017

Electronics: DAE4 Sn1331 Medium: Head 1750 MHz

Medium parameters used: f = 1752.6 MHz;  $\sigma = 1.383 \text{ mho/m}$ ;  $\epsilon r = 40.67$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5°C, Liquid Temperature: 23.3°C

Communication System: WCDMA1700-BIV 1752.6 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) = 0.304 W/kg

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

Reference Value = 3.688 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.374 W/kg

SAR(1 g) = 0.268 W/kg; SAR(10 g) = 0.178 W/kg

Maximum value of SAR (measured) = 0.3 W/kg

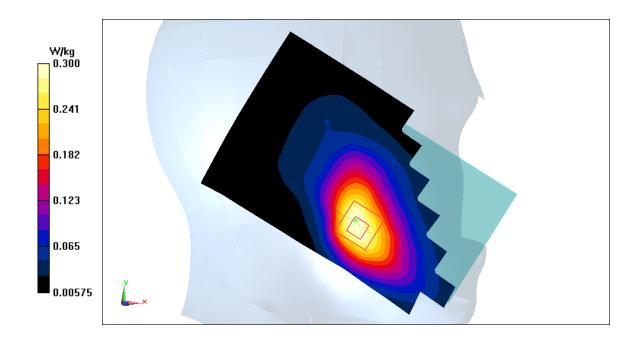


Figure A.7



## WCDMA1700-BIV\_CH1513 Bottom edge

Date: 4/7/2017

Electronics: DAE4 Sn1331 Medium: Body 1750 MHz

Medium parameters used: f = 1752.6 MHz;  $\sigma = 1.517 \text{ mho/m}$ ;  $\epsilon r = 53.21$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5°C, Liquid Temperature: 23.3°C

Communication System: WCDMA1700-BIV 1752.6 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) = 0.498 W/kg

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

Reference Value = 13.33 V/m; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 0.673 W/kg

SAR(1 g) = 0.375 W/kg; SAR(10 g) = 0.2 W/kg

Maximum value of SAR (measured) = 0.457 W/kg

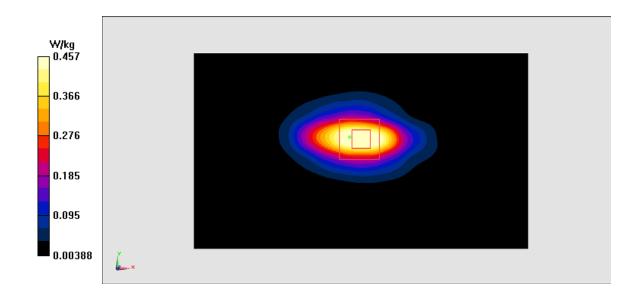


Figure A.8



# WCDMA850-BV\_CH4715 Right Cheek

Date: 4/6/2017

Electronics: DAE4 Sn1331 Medium: Head 835 MHz

Medium parameters used: f = 835.4 MHz;  $\sigma = 0.902 \text{ mho/m}$ ;  $\epsilon r = 41.59$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5°C, Liquid Temperature: 23.3°C

Communication System: WCDMA850-BV 835.4 MHz Duty Cycle: 1:1

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

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

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

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

Reference Value = 7.234 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.277 W/kg

SAR(1 g) = 0.22 W/kg; SAR(10 g) = 0.17 W/kg

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

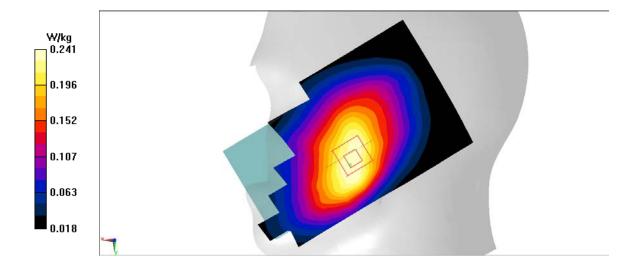


Figure A.9



## WCDMA850-BV\_CH4715 Right edge

Date: 4/6/2017

Electronics: DAE4 Sn1331 Medium: Body 835 MHz

Medium parameters used: f = 835.4 MHz;  $\sigma = 0.989 \text{ mho/m}$ ;  $\epsilon r = 56.09$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5°C, Liquid Temperature: 23.3°C

Communication System: WCDMA850-BV 835.4 MHz Duty Cycle: 1:1

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

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

Maximum value of SAR (interpolated) = 0.428 W/kg

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

Reference Value = 19.02 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.538 W/kg

SAR(1 g) = 0.374 W/kg; SAR(10 g) = 0.256 W/kg

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

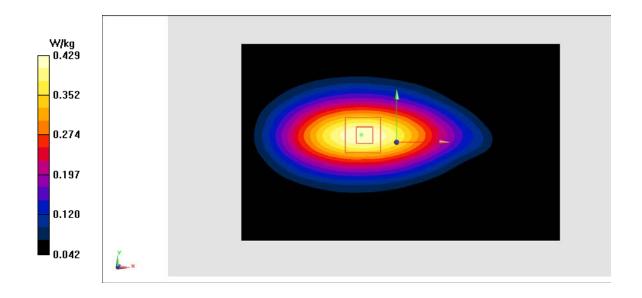


Figure A.10



## LTE1900-FDD2\_CH19100 Left Cheek

Date: 4/8/2017

Electronics: DAE4 Sn1331 Medium: Head 1900 MHz

Medium parameters used: f = 1900 MHz;  $\sigma = 1.39 \text{ mho/m}$ ;  $\epsilon r = 39.55$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5°C, Liquid Temperature: 23.3°C

Communication System: LTE1900-FDD2 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) = 0.38 W/kg

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

Reference Value = 4.786 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.477 W/kg

SAR(1 g) = 0.328 W/kg; SAR(10 g) = 0.208 W/kg

Maximum value of SAR (measured) = 0.38 W/kg

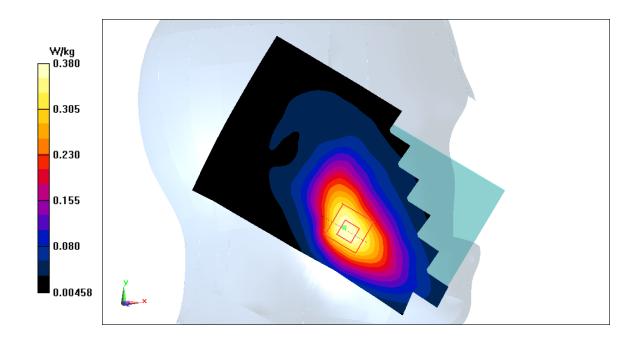


Figure A.11



## LTE1900-FDD2\_CH19100 Front

Date: 4/8/2017

Electronics: DAE4 Sn1331 Medium: Body 1900 MHz

Medium parameters used: f = 1900 MHz;  $\sigma = 1.536 \text{ mho/m}$ ;  $\epsilon r = 53.19$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5°C, Liquid Temperature: 23.3°C

Communication System: LTE1900-FDD2 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) = 0.535 W/kg

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

Reference Value = 8.505 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.766 W/kg

SAR(1 g) = 0.426 W/kg; SAR(10 g) = 0.233 W/kg

Maximum value of SAR (measured) = 0.536 W/kg

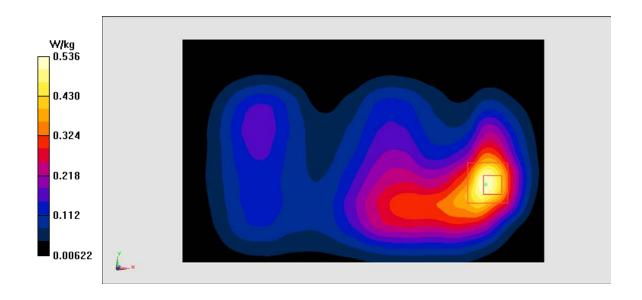


Figure A.12



## LTE1700-FDD4\_CH20050 Left Cheek

Date: 4/7/2017

Electronics: DAE4 Sn1331 Medium: Head 1750 MHz

Medium parameters used: f = 1720 MHz;  $\sigma = 1.352 \text{ mho/m}$ ;  $\epsilon r = 40.72$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5°C, Liquid Temperature: 23.3°C

Communication System: LTE1700-FDD4 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) = 0.154 W/kg

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

Reference Value = 3.307 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.186 W/kg

SAR(1 g) = 0.13 W/kg; SAR(10 g) = 0.085 W/kg

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

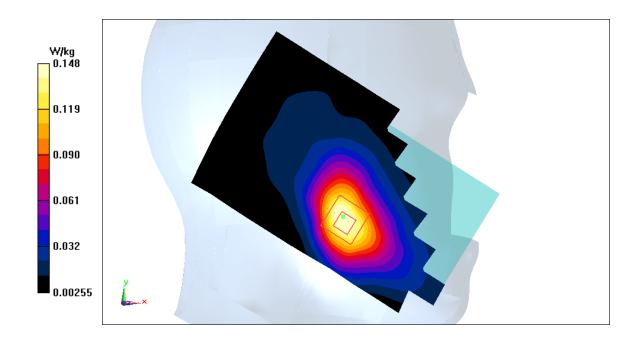


Figure A.13



## LTE1700-FDD4\_CH20050 Left edge

Date: 4/7/2017

Electronics: DAE4 Sn1331 Medium: Body 1750 MHz

Medium parameters used: f = 1720 MHz;  $\sigma = 1.486 \text{ mho/m}$ ;  $\epsilon r = 53.26$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5°C, Liquid Temperature: 23.3°C

Communication System: LTE1700-FDD4 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) = 0.217 W/kg

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

Reference Value = 8.154 V/m; Power Drift = 0 dB

Peak SAR (extrapolated) = 0.289 W/kg

SAR(1 g) = 0.179 W/kg; SAR(10 g) = 0.109 W/kg

Maximum value of SAR (measured) = 0.216 W/kg

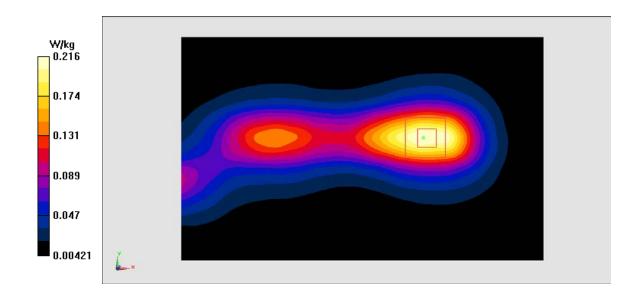


Figure A.14



## LTE2500-FDD7\_CH21350 Left Cheek

Date: 4/10/2017

Electronics: DAE4 Sn1331 Medium: Head 2600 MHz

Medium parameters used: f = 2560 MHz;  $\sigma = 1.928 \text{ mho/m}$ ;  $\epsilon r = 39.62$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5°C, Liquid Temperature: 23.3°C

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

Probe: EX3DV4 – SN3846 ConvF(7.12,7.12,7.12)

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

Maximum value of SAR (interpolated) = 0.418 W/kg

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

Reference Value = 4.591 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.626 W/kg

SAR(1 g) = 0.368 W/kg; SAR(10 g) = 0.206 W/kg

Maximum value of SAR (measured) = 0.437 W/kg

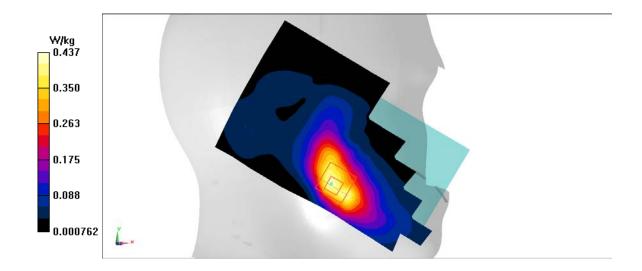


Figure A.15



# LTE2500-FDD7\_CH21350 Left edge

Date: 4/10/2017

Electronics: DAE4 Sn1331 Medium: Body 2600 MHz

Medium parameters used: f = 2560 MHz;  $\sigma = 2.1 \text{ mho/m}$ ;  $\epsilon r = 51.66$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5°C, Liquid Temperature: 23.3°C

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

Probe: EX3DV4 – SN3846 ConvF(7.25,7.25,7.25)

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

Maximum value of SAR (interpolated) = 0.58 W/kg

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

Reference Value = 12.63 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.842 W/kg

SAR(1 g) = 0.461 W/kg; SAR(10 g) = 0.247 W/kg

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

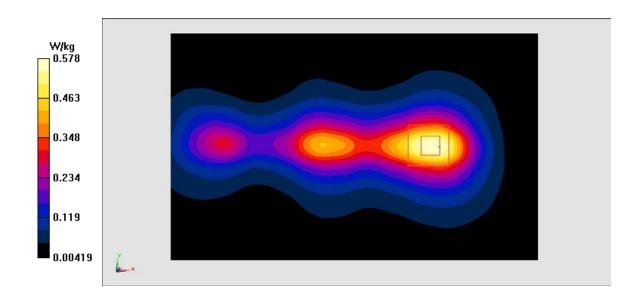


Figure A.16



## LTE700-FDD12\_CH23130 Right Cheek

Date: 4/5/2017

Electronics: DAE4 Sn1331 Medium: Head 750 MHz

Medium parameters used: f = 711 MHz;  $\sigma = 0.861$  mho/m;  $\epsilon r = 41.75$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 23.3°C

Communication System: LTE700-FDD12 711 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3846 ConvF(9.65,9.65,9.65)

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

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

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

Reference Value = 5.117 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.157 W/kg

SAR(1 g) = 0.124 W/kg; SAR(10 g) = 0.098 W/kg

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

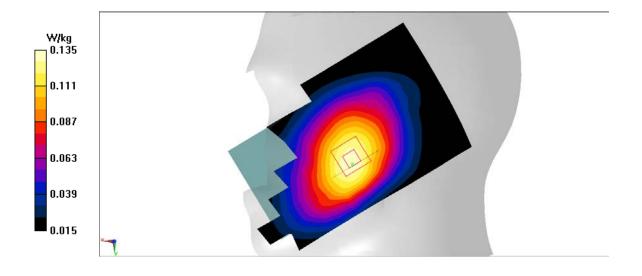


Figure A.17



## LTE700-FDD12\_CH23130 Right edge

Date: 4/5/2017

Electronics: DAE4 Sn1331 Medium: Body 750 MHz

Medium parameters used: f = 711 MHz;  $\sigma = 0.914$  mho/m;  $\epsilon r = 55.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.5°C, Liquid Temperature: 23.3°C

Communication System: LTE700-FDD12 711 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(9.96,9.96,9.96)

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

Maximum value of SAR (interpolated) = 0.21 W/kg

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

Reference Value = 14.68 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.261 W/kg

SAR(1 g) = 0.182 W/kg; SAR(10 g) = 0.129 W/kg

Maximum value of SAR (measured) = 0.21 W/kg

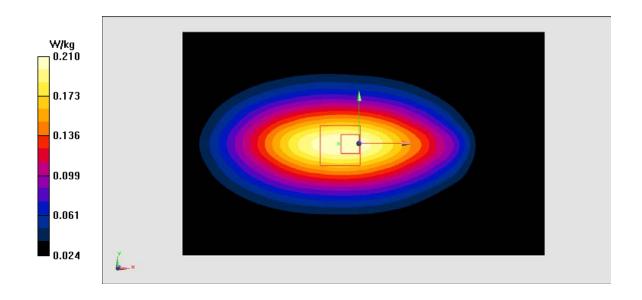


Figure A.18



## LTE2600-TDD38\_CH38150 Left Cheek

Date: 4/10/2017

Electronics: DAE4 Sn1331 Medium: Head 2600 MHz

Medium parameters used: f = 2610 MHz;  $\sigma = 1.976 \text{ mho/m}$ ;  $\epsilon r = 39.56$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5°C, Liquid Temperature: 23.3°C

Communication System: LTE2600-TDD38 2610 MHz Duty Cycle: 1:1.58

Probe: EX3DV4 – SN3846 ConvF(7.12,7.12,7.12)

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

Maximum value of SAR (interpolated) = 0.175 W/kg

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

Reference Value = 2.258 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.272 W/kg

SAR(1 g) = 0.2 W/kg; SAR(10 g) = 0.101 W/kg

Maximum value of SAR (measured) = 0.185 W/kg

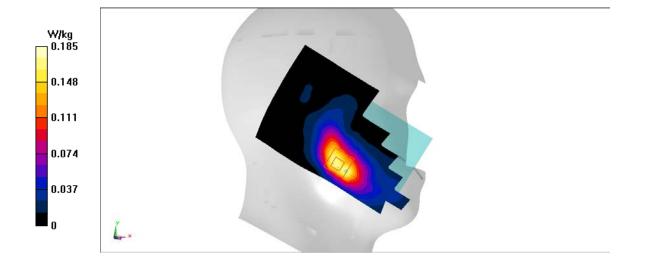


Figure A.19



### LTE2600-TDD38 CH38150 Front

Date: 4/10/2017

Electronics: DAE4 Sn1331 Medium: Body 2600 MHz

Medium parameters used: f = 2610 MHz;  $\sigma = 2.148 \text{ mho/m}$ ;  $\epsilon r = 51.6$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5°C, Liquid Temperature: 23.3°C

Communication System: LTE2600-TDD38 2610 MHz Duty Cycle: 1:1.58

Probe: EX3DV4 – SN3846 ConvF(7.25,7.25,7.25)

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

Maximum value of SAR (interpolated) = 0.176 W/kg

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

Reference Value = 4.047 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.265 W/kg

SAR(1 g) = 0.146 W/kg; SAR(10 g) = 0.083 W/kg

Maximum value of SAR (measured) = 0.18 W/kg

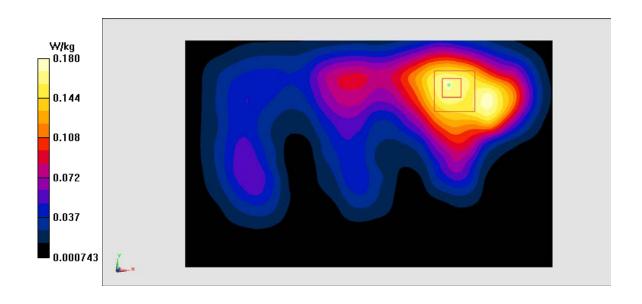


Figure A.20