

14.2 SAR results

Note: H1: CCB0049A11C4 H2: CCB0049A11C1

Table 14-1 GSM850 #1 Head

	GSM850 #1 Head								
Ambient Te	emperature:		22.2	2		Liquid Ter	mperature:	22.3	
	Device	SAR	Measured SAR [W/kg]			Reported SAR [W/kg]			
Mode	orientation	measurement	CH251	CH190	CH128	CH251	CH190	CH128	
	Т.,				824.2 MHz				
		ne-up	33.30	33.30	33.30		Scaling factor		
	Slot Average	e Power [dBm]	32.49	32.55	32.57	1.20	1.19	1.18	
		1g SAR	0.118	0.104	0.078	0.14	0.12	0.09	
	Left Cheek	10g SAR	0.094	0.0074	0.057	0.11	0.01	0.07	
		Deviation	0.12	0.09	0.02	0.12	0.09	0.02	
		1g SAR		0.073			0.09		
GSM	Left Tilt	10g SAR		0.057			0.07		
GSW		Deviation		0.09			0.09		
		1g SAR		0.09			0.11		
	Right Cheek	10g SAR		0.066			80.0		
		Deviation		0.04			0.04		
		1g SAR		0.078			0.09		
	Right Tilt	10g SAR		0.061			0.07		
		Deviation		0.04			0.04		
		1g SAR	0.109			0.13			
SIM2	Left Cheek	10g SAR	0.073			0.09			
		Deviation	0.04			0.04			

Table 14-2 GSM850 #1 Body

	GSM850 #1 Body									
Ambient Te	emperature:	22.2				Liquid Ter	mperature:	22.3		
	Device	SAR		sured SAR [\			orted SAR [V			
Mode	orientation	measurement	CH251	CH190	CH128	CH251	CH190	CH128		
				836.6 MHz			836.6 MHz			
		ne-up	27.50 27.08	27.50 27.06	27.50 26.98	1.10	Scaling factor			
	Slot Average	e Power [dBm]	27.08		20.98	1.10		1.13		
	_	1g SAR		0.109			0.12			
	Front	10g SAR		0.082			0.09			
		Deviation		0.03			0.03			
		1g SAR	0.151	0.147	0.121	0.17	0.16	0.14		
	Rear	10g SAR	0.113	0.106	0.099	0.12	0.12	0.11		
GPRS 4		Deviation	-0.08	0.08	0.01	-0.08	0.08	0.01		
Txslots		1g SAR		0.085			0.09			
	Left edge	10g SAR		0.069			0.08			
		Deviation		0.04			0.04			
		1g SAR		0.042			0.05			
	Right edge	10g SAR		0.03			0.03			
		Deviation		-0.06			-0.06			
		1g SAR		0.033			0.04			
	Bottom edge	10g SAR		0.024			0.03			
		Deviation		0.13			0.13			
		ne-up	27.50	27.50	27.50		Scaling factor			
EGPRS	Slot Average	e Power [dBm]	27.00	27.01	26.85	1.12	1.12	1.16		
GMSK 4		1g SAR	0.137			0.15				
Txslots	Rear	10g SAR	0.105			0.12				
		Deviation	0.03			0.03				
		1g SAR	0.128			0.14				
SIM2	Rear	10g SAR	0.103			0.11				
		Deviation	0.12			0.12				



Table 14-3 PCS1900 #1 Head

	PCS1900 #1 Head									
Ambient T	emperature:		22.	2		Liquid Ter	mperature:	22.3		
	Device	SAR	Measured SAR [W/kg]			Reported SAR [W/kg]				
Mode	orientation	measurement	CH810	CH661	CH512	CH810	CH661	CH512		
			1909.8	1880 MHz		1909.8	1880 MHz			
	Tur	ne-up	30.30	30.30	30.30	ę	Scaling factor			
	Slot Average	e Power [dBm]	29.69	29.74	29.75	1.15	1.14	1.13		
		1g SAR	0.097	0.083	0.09	0.11	0.09	0.10		
	Left Cheek	10g SAR	0.059	0.052	0.055	0.07	0.06	0.06		
		Deviation	0.2	0.11	0.14	0.20	0.11	0.14		
		1g SAR		0.053			0.06			
GSM	Left Tilt	10g SAR		0.032			0.04			
GSIVI		Deviation		0.13			0.13			
		1g SAR		0.062			0.07			
	Right Cheek	10g SAR		0.04			0.05			
		Deviation		0.09			0.09			
		1g SAR		0.041			0.05			
	Right Tilt	10g SAR		0.026			0.03			
		Deviation		0.11			0.11			
		1g SAR	0.089			0.10				
SIM2	Left Cheek	10g SAR	0.043			0.05				
		Deviation	-0.04			-0.04				

Table 14-4 PCS1900 #1 Body

	PCS1900 #1 Body									
Ambient Te	emperature:	22.2				Liquid Ter	mperature:	22.3		
	Device	SAR		sured SAR [\			Reported SAR [W/kg]			
Mode		measurement	CH810	CH661	CH512	CH810	CH661	CH512		
			1909.8	1880 MHz	1850.2	1909.8	1880 MHz	1850.2		
		ne-up	28.00 27.58	28.00	28.00 27.52	1.10	Scaling factor	1.12		
	Slot Average	e Power [dBm]	27.58	27.56	27.32	1.10		1.12		
		1g SAR		0.306			0.34			
	Front	10g SAR		0.17			0.19			
		Deviation		0.07			0.07			
		1g SAR		0.467			0.52			
	Rear	10g SAR		0.251			0.28			
CDDC 2	GPRS 2 Txslots Left edge	Deviation		0.03			0.03			
		1g SAR		0.071			0.08			
IXSIOIS		10g SAR		0.047			0.05			
		Deviation		0.09			0.09			
		1g SAR		0.04			0.04			
	Right edge	10g SAR		0.027			0.03			
		Deviation		0.05			0.05			
		1g SAR	0.5	0.492	0.523	0.55	0.54	0.58		
	Bottom edge	10g SAR	0.273	0.265	0.285	0.30	0.29	0.32		
		Deviation	0.13	0.08	-0.06	0.13	0.08	-0.06		
	Tur	ne-up	28.00	28.00	28.00		Scaling factor	*		
EGPRS	Slot Average	e Power [dBm]	27.43	27.59	27.48	1.14	1.10	1.13		
GMSK 2		1g SAR			0.49			0.55		
Txslots	Bottom edge	10g SAR			0.263			0.30		
		Deviation			0.07			0.07		
		1g SAR			0.501			0.56		
SIM2	Bottom edge	10g SAR			0.272			0.30		
		Deviation			-0.04			-0.04		



Table 14-5 WCDMA1900-BII #1Head

	WCDMA1900-BII #1Head										
Ambient T	emperature:	22.2				Liquid Ten	mperature:	22.3			
	Device	SAR	Measured SAR [W/kg]			Reported SAR [W/kg]					
Mode		measurement	CH9538	CH9400	CH9262	CH9538	CH9400	CH9262			
			1907.6 MHz			1907.6 MHz		1852.4 MHz			
	Tun	ie-up	24.00	24.00	24.00	(Scaling factor	*			
	Slot Average	Power [dBm]	23.51	23.55	23.52	1.12	1.11	1.12			
		1g SAR		0.079			0.09				
	Left Cheek	10g SAR		0.052			0.06				
		Deviation		-0.13			-0.13				
		1g SAR		0.072			0.08				
RMC	Left Tilt	10g SAR		0.046			0.05				
RIVIC		Deviation		0.04			0.04				
		1g SAR	0.123	0.111	0.102	0.14	0.12	0.11			
	Right Cheek	10g SAR	0.08	0.072	0.068	0.09	0.08	80.0			
		Deviation	0.06	0.01	0.07	0.06	0.01	0.07			
		1g SAR		0.078			0.09				
	Right Tilt	10g SAR		0.051			0.06				
		Deviation		0.02			0.02				
		1g SAR	0.107			0.12					
SIM2	Right Cheek	10g SAR	0.05			0.06					
		Deviation	0.13			0.13					

Table 14-6 WCDMA1900-BII #1Body

					υ Dii π 1 D O	 y		
			WCD	MA1900-BII #1	Body			
Ambient T	emperature:	22.2				Liquid Ten	nperature:	22.3
	Device	SAR		sured SAR [V			orted SAR [W	
Mode	orientation	measurement	CH9538	CH9400	CH9262	CH9538	CH9400	CH9262
			1907.6 MHz			1907.6 MHz		1852.4 MHz
		ne-up	24.00	24.00	24.00		Scaling factor	
	Slot Average	Power [dBm]	23.51	23.55	23.52	1.12	1.11	1.12
		1g SAR		0.37			0.41	
	Front	10g SAR		0.211			0.23	
		Deviation		0.06			0.06	
		1g SAR		0.628			0.70	
	Rear	10g SAR		0.343			0.38	
		Deviation		0.05			0.05	
RMC		1g SAR		0.128			0.14	
	Left edge	10g SAR		0.081			0.09	
		Deviation		0.04			0.04	
		1g SAR		0.052			0.06	
	Right edge	10g SAR		0.035			0.04	
		Deviation		0.01			0.01	
		1g SAR	0.767	0.742	0.874	0.86	0.82	0.98
	Bottom edge	10g SAR	0.42	0.395	0.48	0.47	0.44	0.54
		Deviation	0.15	-0.04	0.07	0.15	-0.04	0.07
		1g SAR			0.831			0.93
SIM2	Bottom edge	10g SAR			0.36			0.40
		Deviation			0.02			0.02



Table 14-7 WCDMA850-BV #1Head

			WCD	MA850-BV #1F	Head			
Ambient T	emperature:	22.2				Liquid Ter	mperature:	22.3
	Device	SAR	SAR Measured SAR [W/kg]			Reported SAR [W/kg]		
Mode		measurement	CH4233	CH4182	CH4132	CH4233	CH4182	CH4132
	Officiation	measurement		835.4 MHz			835.4 MHz	
	Tun	ie-up	24.00	24.00	24.00		Scaling factor	
	Slot Average	Power [dBm]	23.58	23.52	23.50	1.10	1.12	1.12
		1g SAR	0.176	0.137	0.129	0.19	0.15	0.14
	Left Cheek	10g SAR	0.139	0.108	0.101	0.15	0.12	0.11
		Deviation	0.08	0.06	0.09	0.08	0.06	0.09
		1g SAR		0.083			0.09	
RMC	Left Tilt	10g SAR		0.067			0.07	
RIVIC		Deviation		0.13			0.13	
		1g SAR		0.128			0.14	
	Right Cheek	10g SAR		0.101			0.11	
		Deviation		0.07			0.07	
		1g SAR		0.079			0.09	
	Right Tilt	10g SAR		0.065			0.07	
		Deviation		0.03			0.03	
		1g SAR	0.165			0.18		
SIM2	Left Cheek	10g SAR	0.121			0.13		
		Deviation	0.03			0.03		

Table 14-8 WCDMA850-BV #1Body

				OD 1117 1000	D V #1000	• 7		
			WCE	MA850-BV #1E	Body			
Ambient T	emperature:	22.2				Liquid Ter	mperature:	22.3
	Device	SAR		sured SAR [V	V/kg]	Reported SAR [W/kg]		
Mode		measurement	CH4233	CH4182	CH4132	CH4233	CH4182	CH4132
			846.6 MHz	835.4 MHz				826.4 MHz
		ne-up	24.00	24.00	24.00		Scaling factor	
	Slot Average	Power [dBm]	23.58	23.52	23.50	1.10	1.12	1.12
		1g SAR		0.145			0.16	
	Front	10g SAR		0.109			0.12	
		Deviation		0.01			0.01	
		1g SAR	0.235	0.219	0.187	0.26	0.24	0.21
	Rear	10g SAR	0.176	0.164	0.14	0.19	0.18	0.16
		Deviation	0.01	0.04	0.09	0.01	0.04	0.09
RMC		1g SAR		0.069			0.08	
	Left edge	10g SAR		0.048			0.05	
		Deviation		0.13			0.13	
		1g SAR		0.074			0.08	
	Right edge	10g SAR		0.052			0.06	
		Deviation		0.12			0.12	
		1g SAR		0.033			0.04	
	Bottom edge	10g SAR		0.02			0.02	
		Deviation		0.01			0.01	
		1g SAR	0.221			0.24		
SIM2	Rear	10g SAR	0.167			0.18		
		Deviation	0.02			0.02		



Table 14-9 LTE850-FDD5 #1 Head

			LTE	350-FDD5 #1 I	Head			
Ambient Te	emperature:	22.2				Liquid Ter	mperature:	22.3
	Б.	SAR	Meas	ured SAR [N/kg]		orted SAR [V	V/kg]
Mode	Device	measureme	20600	20525	20450	20600	20525	20450
	orientation	nt	L	М	М	L	М	М
		e-up	24.50	24.50	24.50	Ç	Scaling factor	æ.
	Measured F	Power [dBm]	23.94	23.96	23.94	1.14	1.13	1.14
		1g SAR		0.136			0.15	
	Left Cheek	10g SAR		0.108			0.12	
		Deviation		0.04			0.04	
		1g SAR		0.105			0.12	
10MHz	Left Tilt	10g SAR		0.086			0.10	
QPSK1RB		Deviation		0.13			0.13	
		1g SAR		0.141			0.16	
	Right Cheek	10g SAR		0.112			0.13	
		Deviation		0.01			0.01	
		1g SAR		0.097			0.11	
	Right Tilt	10g SAR		0.078			0.09	
		Deviation		0.02			0.02	
	Davige SAR		Meas	ured SAR [N/kg]	Rep	orted SAR [V	V/kg]
FALSE	Device orientation	measureme	20600	20525	20450	20600	20525	20450
	orientation	nt	М	L	М	М	L	М
	Tune-up		23.50	23.50	23.50	Ç	Scaling factor	. * *
	Measured F	Power [dBm]	22.92	22.96	22.90	1.14	1.13	1.15
		1g SAR		0.113			0.13	
	Left Cheek	10g SAR		0.088			0.10	
		Deviation		-0.11			-0.11	
10MH-		1g SAR		0.089			0.10	
10MHz QPSK50%	Left Tilt	10g SAR		0.072			0.08	
RB		Deviation		0.12			0.12	
Kb		1g SAR		0.12			0.14	
	Right Cheek	10g SAR		0.095			0.11	
		Deviation		0.16			0.16	
		1g SAR		0.083			0.09	
	Right Tilt	10g SAR		0.065			0.07	
		Deviation		-0.08			-0.08	
	Davisa	SAR	Meas	ured SAR [\	N/kg]	Rep	orted SAR [V	V/kg]
Mode	Device orientation	measureme nt	20600	20525	20450	20600	20525	20450
	Tun	e-up	23.50	23.50	23.50		Scaling factor	
10MHz	Measured F	Power [dBm]	22.88	22.95	22.89	1.15	1.14	1.15
QPSK100%		1g SAR						
RB	Left Cheek	10g SAR						
	Left Cheek	10g SAR Deviation						
	Left Cheek			0.135			0.15	
	Left Cheek Right Cheek	Deviation		0.135 0.101			0.15 0.11	



Table 14-10 LTE850-FDD5 #1 Body

			LTE	850-FDD5 #1	Body				
Ambient Te	emperature:	22.2				Liquid Ter	mperature:	22.3	
	Б.	SAR	Meas	sured SAR [W/kg]	Rep	orted SAR [\	W/kg]	
Mode	Device orientation	measureme	20600	20525	20450	20600	20525	20450	
	onentation	nt	L	М	М	L	М	М	
	Tun	e-up	24.50	24.50	24.50	•	Scaling facto)r*	
	Measured F	Power [dBm]	23.94	23.96	23.94	1.14	1.13	1.14	
		1g SAR		0.154			0.17		
	Front	10g SAR		0.121			0.14		
		Deviation		0.03			0.03		
		1g SAR		0.236			0.27		
	Rear	10g SAR		0.182			0.21		
10MHz		Deviation		0.05			0.05		
QPSK1RB		1g SAR		0.163			0.18		
	Left edge	10g SAR		0.15			0.17		
		Deviation		0.07			0.07		
	B	1g SAR		0.135			0.15		
	Right edge	10g SAR		0.096			0.11		
		Deviation		0.11			0.11		
		1g SAR		0.056			0.06		
	Bottom edge			0.028			0.03		
		Deviation		0.13			0.13		
	Device	SAR		sured SAR [
Mode	orientation	measureme	20600	20525	20450	20600	20525	21 20 20 20 20 20 20 20	
	on on a contraction	nt	М	L	М				
	Tun	e-up	23.50	23.50	23.50	٤	Scaling factor*		
	Measured F	Dougor [dDm]	22.92	00.00		1.14	4 40	4 45	
	Wedsarea	ower [ubilij	22.92	22.96	22.90	1.14	1.13	1.15	
	Wedsarea	1g SAR	22.92	0.129	22.90	1.14	0.15	1.15	
	Front		22.92		22.90	1-14		1.15	
		1g SAR	22.92	0.129	22.90	1.14	0.15	1.15	
		1g SAR 10g SAR	22.92	0.129 0.101	22.90	1.14	0.15 0.11	1.15	
		1g SAR 10g SAR Deviation	22.32	0.129 0.101 0.03	22.90	1.14	0.15 0.11 0.03	1.15	
10MHz	Front	1g SAR 10g SAR Deviation 1g SAR	22.92	0.129 0.101 0.03 0.195	22.90	1.14	0.15 0.11 0.03 0.22	1.15	
10MHz QPSK50%	Front	1g SAR 10g SAR Deviation 1g SAR 10g SAR	22.92	0.129 0.101 0.03 0.195 0.151	22.90	1.14	0.15 0.11 0.03 0.22 0.17	1.15	
	Front	1g SAR 10g SAR Deviation 1g SAR 10g SAR Deviation	22.52	0.129 0.101 0.03 0.195 0.151 0.05	22.90	1.14	0.15 0.11 0.03 0.22 0.17 0.05	1.15	
QPSK50%	Front Rear	1g SAR 10g SAR Deviation 1g SAR 10g SAR 10g SAR 10g SAR Deviation 1g SAR	22.52	0.129 0.101 0.03 0.195 0.151 0.05 0.136	22.90	1.14	0.15 0.11 0.03 0.22 0.17 0.05 0.15	1.15	
QPSK50%	Front Rear	1g SAR 10g SAR Deviation 1g SAR 10g SAR 10g SAR Deviation 1g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR	22.52	0.129 0.101 0.03 0.195 0.151 0.05 0.136 0.096	22.90	1.14	0.15 0.11 0.03 0.22 0.17 0.05 0.15 0.11	1.15	
QPSK50%	Front Rear	1g SAR 10g SAR Deviation 1g SAR 10g SAR 10g SAR 10g SAR Deviation 1g SAR 10g SAR Deviation	22.52	0.129 0.101 0.03 0.195 0.151 0.05 0.136 0.096 -0.15	22.90	1.14	0.15 0.11 0.03 0.22 0.17 0.05 0.15 0.11 -0.15	1.15	
QPSK50%	Front Rear Left edge	1g SAR 10g SAR Deviation 1g SAR 10g SAR 10g SAR Deviation 1g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR	22.92	0.129 0.101 0.03 0.195 0.151 0.05 0.136 0.096 -0.15 0.122	22.90	1.14	0.15 0.11 0.03 0.22 0.17 0.05 0.15 0.11 -0.15 0.14	1.15	
QPSK50%	Front Rear Left edge Right edge	1g SAR 10g SAR Deviation 1g SAR 10g SAR 10g SAR 10g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR Deviation 1g SAR 10g SAR 10g SAR 10g SAR 10g SAR	22.92	0.129 0.101 0.03 0.195 0.151 0.05 0.136 0.096 -0.15 0.122 0.079 0.04 0.043	22.90	1.14	0.15 0.11 0.03 0.22 0.17 0.05 0.15 0.11 -0.15 0.14 0.09	1.15	
QPSK50%	Front Rear Left edge	1g SAR 10g SAR Deviation 1g SAR 10g SAR 10g SAR 10g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR Deviation 1g SAR 10g SAR 10g SAR 10g SAR 10g SAR	22.92	0.129 0.101 0.03 0.195 0.151 0.05 0.136 0.096 -0.15 0.122 0.079 0.04	22.90	1.14	0.15 0.11 0.03 0.22 0.17 0.05 0.15 0.11 -0.15 0.14 0.09 0.04	1.15	
QPSK50%	Front Rear Left edge Right edge	1g SAR 10g SAR Deviation 1g SAR 10g SAR 10g SAR 10g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR Deviation 1g SAR 10g SAR 10g SAR 10g SAR 10g SAR		0.129 0.101 0.03 0.195 0.151 0.05 0.136 0.096 -0.15 0.122 0.079 0.04 0.043 0.022 -0.12			0.15 0.11 0.03 0.22 0.17 0.05 0.15 0.11 -0.15 0.14 0.09 0.04 0.05 0.02 -0.12		
QPSK50%	Front Rear Left edge Right edge Bottom edge	1g SAR 10g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR 10g SAR 10g SAR 10g SAR 10g SAR Deviation 1g SAR 10g SAR		0.129 0.101 0.03 0.195 0.151 0.05 0.136 0.096 -0.15 0.122 0.079 0.04 0.043 0.022			0.15 0.11 0.03 0.22 0.17 0.05 0.15 0.11 -0.15 0.14 0.09 0.04 0.05 0.02		
QPSK50%	Front Rear Left edge Right edge Bottom edge	1g SAR 10g SAR Deviation 1g SAR 10g SAR 10g SAR 10g SAR Deviation 1g SAR Deviation 1g SAR	Meas	0.129 0.101 0.03 0.195 0.151 0.05 0.136 0.096 -0.15 0.122 0.079 0.04 0.043 0.022 -0.12 sured SAR [W/kg]	Rep	0.15 0.11 0.03 0.22 0.17 0.05 0.15 0.11 -0.15 0.14 0.09 0.04 0.05 0.02 -0.12 orted SAR [W/kg]	
QPSK50% RB	Front Rear Left edge Right edge Bottom edge	1g SAR 10g SAR Deviation 1g SAR 10g SAR 10g SAR Deviation 1g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR Deviation 1g SAR Deviation 1g SAR Deviation 1g SAR Deviation SAR		0.129 0.101 0.03 0.195 0.151 0.05 0.136 0.096 -0.15 0.122 0.079 0.04 0.043 0.022 -0.12		Rep 20600	0.15 0.11 0.03 0.22 0.17 0.05 0.15 0.11 -0.15 0.14 0.09 0.04 0.05 0.02 -0.12 orted SAR [0]	W/kg] 20450	
QPSK50% RB	Front Rear Left edge Right edge Bottom edge Device orientation Tun	1g SAR 10g SAR Deviation 1g SAR 10g SAR 10g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR Deviation	Meas	0.129 0.101 0.03 0.195 0.151 0.05 0.136 0.096 -0.15 0.122 0.079 0.04 0.043 0.022 -0.12 sured SAR [W/kg]	Rep 20600	0.15 0.11 0.03 0.22 0.17 0.05 0.15 0.11 -0.15 0.14 0.09 0.04 0.05 0.02 -0.12 orted SAR [W/kg] 20450	
QPSK50% RB Mode	Front Rear Left edge Right edge Bottom edge Device orientation Tun Measured F	1g SAR 10g SAR Deviation 1g SAR 10g SAR 10g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR Deviation 1g SAR Deviation 1g SAR Deviation 1g SAR The same of the	Meas 20600	0.129 0.101 0.03 0.195 0.151 0.05 0.136 0.096 -0.15 0.122 0.079 0.04 0.043 0.022 -0.12 sured SAR [W/kg]	Rep 20600	0.15 0.11 0.03 0.22 0.17 0.05 0.15 0.11 -0.15 0.14 0.09 0.04 0.05 0.02 -0.12 orted SAR [0]	W/kg] 20450	
Mode 10MHz QPSK100%	Front Rear Left edge Right edge Bottom edge Device orientation Tun Measured F	1g SAR 10g SAR Deviation 1g SAR 10g SAR 10g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR Deviation	Meas 20600 23.50	0.129 0.101 0.03 0.195 0.151 0.05 0.136 0.096 -0.15 0.122 0.079 0.04 0.043 0.022 -0.12 sured SAR [W/kg] 20450 23.50	Rep 20600	0.15 0.11 0.03 0.22 0.17 0.05 0.15 0.11 -0.15 0.14 0.09 0.04 0.05 0.02 -0.12 orted SAR [1] 20525	W/kg] 20450	
QPSK50% RB Mode	Front Rear Left edge Right edge Bottom edge Device orientation Tun Measured F	1g SAR 10g SAR Deviation 1g SAR 10g SAR 10g SAR Deviation 1g SAR Deviation 1g SAR Deviation 1g SAR to SAR Deviation 1g SAR The SAR Deviation SAR The SAR TH	Meas 20600 23.50	0.129 0.101 0.03 0.195 0.151 0.05 0.136 0.096 -0.15 0.122 0.079 0.04 0.043 0.022 -0.12 sured SAR [W/kg] 20450 23.50	Rep 20600	0.15 0.11 0.03 0.22 0.17 0.05 0.15 0.11 -0.15 0.14 0.09 0.04 0.05 0.02 -0.12 orted SAR [1] 20525	W/kg] 20450	
Mode 10MHz QPSK100%	Front Rear Left edge Right edge Bottom edge Device orientation Tun Measured F	1g SAR 10g SAR Deviation 1g SAR 10g SAR 10g SAR 10g SAR Deviation 1g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR 10g SAR 10g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR 10g SAR 10g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR	Meas 20600 23.50	0.129 0.101 0.03 0.195 0.151 0.05 0.136 0.096 -0.15 0.122 0.079 0.04 0.043 0.022 -0.12 sured SAR [W/kg] 20450 23.50	Rep 20600	0.15 0.11 0.03 0.22 0.17 0.05 0.15 0.11 -0.15 0.14 0.09 0.04 0.05 0.02 -0.12 orted SAR [1] 20525	W/kg] 20450	
Mode 10MHz QPSK100%	Front Rear Left edge Right edge Bottom edge Device orientation Tun Measured F	1g SAR 10g SAR Deviation 1g SAR 10g SAR 10g SAR 10g SAR Deviation 1g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR 10g SAR Deviation SAR measureme nt e-up Power [dBm] 1g SAR 10g SAR	Meas 20600 23.50	0.129 0.101 0.03 0.195 0.151 0.05 0.136 0.096 -0.15 0.122 0.079 0.04 0.043 0.022 -0.12 sured SAR [W/kg] 20450 23.50	Rep 20600	0.15 0.11 0.03 0.22 0.17 0.05 0.15 0.11 -0.15 0.14 0.09 0.04 0.05 0.02 -0.12 orted SAR [1] 20525	W/kg] 20450	
Mode 10MHz QPSK100%	Front Rear Left edge Right edge Bottom edge Device orientation Tun Measured F	1g SAR 10g SAR Deviation 1g SAR 10g SAR 10g SAR 10g SAR Deviation 1g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR 10g SAR Deviation SAR measureme nt e-up Power [dBm] 1g SAR 10g SAR Deviation	Meas 20600 23.50	0.129 0.101 0.03 0.195 0.151 0.05 0.136 0.096 -0.15 0.122 0.079 0.04 0.043 0.022 -0.12 sured SAR [1] 20525 23.50 22.95	W/kg] 20450 23.50	Rep 20600	0.15 0.11 0.03 0.22 0.17 0.05 0.15 0.11 -0.15 0.14 0.09 0.04 0.05 0.02 -0.12 orted SAR [N	W/kg] 20450	



Table 14-11 LTE2500-FDD7 #1 Head

			LTE2	500-FDD7 #1	Head			
Ambient Te	emperature:	22.2				Liquid Ter	nperature:	22.3
	T .	SAR	Meas	ured SAR [\	N/kg]		orted SAR [\	N/kg]
Mode	Device	measureme	21350	21100	20850	21350	21100	20850
	orientation	nt	М	М	М	М	М	М
	Tun	e-up	24.40	24.40	24.40	Ş	Scaling factor	*
	Measured F	Power [dBm]	23.89	24.08	24.10	1.12	1.08	1.07
		1g SAR			0.05			0.05
	Left Cheek	10g SAR			0.027			0.03
		Deviation			0.09			0.09
		1g SAR			0.033			0.04
20MHz	Left Tilt	10g SAR			0.016			0.02
QPSK1RB		Deviation			0.13			0.13
		1g SAR			0.133			0.14
	Right Cheek	10g SAR			0.066			0.07
		Deviation			0.14			0.14
		1g SAR			0.023			0.02
	Right Tilt	10g SAR			0.011			0.01
		Deviation			0.04			0.04
	SAR		Meas	ured SAR [\	N/kg]	Rep	orted SAR [\	N/kg]
FALSE	Device orientation	measureme	21350	21100	20850	21350	21100	20850
	onentation	nt	М	М	М	М	М	М
	Tun	e-up	23.40	23.40	23.40		Scaling factor	r*
		Power [dBm]	22.80	22.86	22.97	1.15	1.13	1.10
		1g SAR			0.041			0.05
	Left Cheek	1g SAR 10g SAR			0.041 0.022			0.05 0.02
	Left Cheek							
	Left Cheek	10g SAR			0.022			0.02
20MHz	Left Cheek Left Tilt	10g SAR Deviation 1g SAR			0.022 0.09			0.02 0.09
QPSK50%		10g SAR Deviation			0.022 0.09 0.027			0.02 0.09 0.03
		10g SAR Deviation 1g SAR 10g SAR Deviation			0.022 0.09 0.027 0.013			0.02 0.09 0.03 0.01 -0.02
QPSK50%	Left Tilt	10g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR			0.022 0.09 0.027 0.013 -0.02 0.101			0.02 0.09 0.03 0.01 -0.02 0.11
QPSK50%		10g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR 10g SAR 10g SAR			0.022 0.09 0.027 0.013 -0.02 0.101 0.051			0.02 0.09 0.03 0.01 -0.02
QPSK50%	Left Tilt	10g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR 10g SAR 10g SAR Deviation			0.022 0.09 0.027 0.013 -0.02 0.101 0.051 -0.09			0.02 0.09 0.03 0.01 -0.02 0.11 0.06 -0.09
QPSK50%	Left Tilt Right Cheek	10g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR 10g SAR 10g SAR 10g SAR Deviation 1g SAR			0.022 0.09 0.027 0.013 -0.02 0.101 0.051 -0.09 0.018			0.02 0.09 0.03 0.01 -0.02 0.11 0.06 -0.09 0.02
QPSK50%	Left Tilt	10g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR 10g SAR 10g SAR Deviation 1g SAR Deviation 1g SAR			0.022 0.09 0.027 0.013 -0.02 0.101 0.051 -0.09 0.018 0.009			0.02 0.09 0.03 0.01 -0.02 0.11 0.06 -0.09 0.02 0.01
QPSK50%	Left Tilt Right Cheek	10g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR 10g SAR 10g SAR Deviation 1g SAR Deviation 1g SAR Deviation	Meas	sured SARIV	0.022 0.09 0.027 0.013 -0.02 0.101 0.051 -0.09 0.018 0.009 -0.12	Rep	orted SARIV	0.02 0.09 0.03 0.01 -0.02 0.11 0.06 -0.09 0.02 0.01 -0.12
QPSK50% RB	Left Tilt Right Cheek	10g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR 10g SAR 10g SAR Deviation 1g SAR Deviation 1g SAR Deviation SAR	Meas	sured SAR [0.022 0.09 0.027 0.013 -0.02 0.101 0.051 -0.09 0.018 0.009 -0.12	Rep	orted SAR [0.02 0.09 0.03 0.01 -0.02 0.11 0.06 -0.09 0.02 0.01 -0.12
QPSK50%	Left Tilt Right Cheek Right Tilt	10g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR 10g SAR 10g SAR Deviation 1g SAR Deviation 1g SAR Deviation	Meas 21350	Sured SAR [N	0.022 0.09 0.027 0.013 -0.02 0.101 0.051 -0.09 0.018 0.009 -0.12	Repo	orted SAR [N	0.02 0.09 0.03 0.01 -0.02 0.11 0.06 -0.09 0.02 0.01 -0.12
QPSK50% RB	Left Tilt Right Cheek Right Tilt Device orientation	10g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR 10g SAR 10g SAR Deviation 1g SAR Deviation 1g SAR Deviation 5g SAR The SAR			0.022 0.09 0.027 0.013 -0.02 0.101 0.051 -0.09 0.018 0.009 -0.12	21350		0.02 0.09 0.03 0.01 -0.02 0.11 0.06 -0.09 0.02 0.01 -0.12 W/kg]
QPSK50% RB	Left Tilt Right Cheek Right Tilt Device orientation Tun	10g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR 10g SAR 10g SAR Deviation 1g SAR Deviation 1g SAR 10g SAR The SAR	21350	21100	0.022 0.09 0.027 0.013 -0.02 0.101 0.051 -0.09 0.018 0.009 -0.12 W/kg]	21350	21100	0.02 0.09 0.03 0.01 -0.02 0.11 0.06 -0.09 0.02 0.01 -0.12 W/kg]
QPSK50% RB	Left Tilt Right Cheek Right Tilt Device orientation Tun	10g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR 10g SAR 10g SAR Deviation 1g SAR Deviation 1g SAR Tog SAR To	21350 23.40	21100	0.022 0.09 0.027 0.013 -0.02 0.101 0.051 -0.09 0.018 0.009 -0.12 W/kg]	21350	21100 Scaling factor	0.02 0.09 0.03 0.01 -0.02 0.11 0.06 -0.09 0.02 0.01 -0.12 W/kg]
QPSK50% RB Mode	Left Tilt Right Cheek Right Tilt Device orientation Tun	10g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR Deviation 1g SAR Deviation SAR Deviation SAR measureme nt e-up Power [dBm]	21350 23.40	21100	0.022 0.09 0.027 0.013 -0.02 0.101 0.051 -0.09 0.018 0.009 -0.12 W/kg] 20850	21350	21100 Scaling factor	0.02 0.09 0.03 0.01 -0.02 0.11 0.06 -0.09 0.02 0.01 -0.12 W/kg]
Mode 20MHz QPSK100%	Left Tilt Right Cheek Right Tilt Device orientation Tun Measured F	10g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR Deviation 1g SAR Deviation SAR Deviation SAR measureme nt e-up Power [dBm] 1g SAR	21350 23.40	21100	0.022 0.09 0.027 0.013 -0.02 0.101 0.051 -0.09 0.018 0.009 -0.12 W/kg] 20850	21350	21100 Scaling factor	0.02 0.09 0.03 0.01 -0.02 0.11 0.06 -0.09 0.02 0.01 -0.12 W/kg]
Mode 20MHz QPSK100%	Left Tilt Right Cheek Right Tilt Device orientation Tun Measured F	10g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR Deviation 1g SAR Deviation SAR Deviation SAR measureme nt e-up Power [dBm] 1g SAR 10g SAR	21350 23.40	21100	0.022 0.09 0.027 0.013 -0.02 0.101 0.051 -0.09 0.018 0.009 -0.12 W/kg] 20850	21350	21100 Scaling factor	0.02 0.09 0.03 0.01 -0.02 0.11 0.06 -0.09 0.02 0.01 -0.12 W/kg]
Mode 20MHz QPSK100%	Left Tilt Right Cheek Right Tilt Device orientation Tun Measured F	10g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR 10g SAR Deviation 1g SAR Deviation 1g SAR Deviation SAR Deviation SAR measureme nt e-up Power [dBm] 1g SAR 10g SAR Deviation	21350 23.40	21100	0.022 0.09 0.027 0.013 -0.02 0.101 0.051 -0.09 0.018 0.009 -0.12 W/kg] 20850 23.40 22.91	21350	21100 Scaling factor	0.02 0.09 0.03 0.01 -0.02 0.11 0.06 -0.09 0.02 0.01 -0.12 W/kg] 20850



Table 14-12 LTE2500-FDD7 #1 Body

			LTE2	500-FDD7 #1	Body			
Ambient Te	emperature:	22.2			·	Liquid Ter	mperature:	22.3
	i	SAR	Meas	ured SAR [\	N/kg]	Rep	orted SAR [W	//kg]
Mode	Device	measureme	21350	21100	20850	21350	21100	20850
	orientation	nt	М	М	М	М	М	М
	Tun	e-up	24.40	24.40	24.40	8	Scaling factor	*
		ower [dBm]	23.89	24.08	24.10	1.12	1.08	1.07
		1g SAR			0.491			0.53
	Front	10g SAR			0.26			0.28
		Deviation			0.17			0.17
		1g SAR	0.815	0.892	0.861	0.92	0.96	0.92
	Rear	10g SAR	0.042	0.459	0.428	0.05	0.49	0.46
20MHz		Deviation	0.09	0.13	0.01	0.09	0.13	0.01
QPSK1RB		1g SAR			0.078			0.08
GESKIKE	Left edge	10g SAR			0.046			0.05
		Deviation			0.07			0.07
		1g SAR			0.132			0.14
	Right edge	10g SAR			0.077			0.08
		Deviation			0.03			0.03
		1g SAR			0.738			0.79
	Bottom edge	10g SAR			0.39			0.42
		Deviation			0.07			0.07
	Device	SAR	Meas	ured SAR [\	N/kg]	Rep	orted SAR [W	//kg]
Mode	orientation	measureme	21350	21100	20850	21350	21100	20850
	Onemation	nt	М	М	М			
	Tun	e-up	23.40	23.40	23.40	S	Scaling factor	*
	Measured F	ower [dBm]	22.80	22.86	22.97	1.15	1.13	1.10
		1g SAR			0.374			0.41
	Front	10g SAR			0.199			0.22
		Deviation			0.08			0.01 0.08 0.05 0.07 0.14 0.08 0.03 0.79 0.42 0.07 V/kg] 20850 r* 1.10 0.41 0.22 0.08 0.83 0.41 0.08
		1g SAR	0.674	0.692	0.75	0.77	0.78	0.83
	Rear	10g SAR	0.344	0.358	0.371	0.40	0.41	0.41
20MHz		Deviation	0.02	-0.11	0.08	0.02	-0.11	0.08
QPSK50%		1g SAR			0.062			0.07
RB	Left edge	10g SAR			0.036			0.04
		Deviation			0.08			0.08
		1g SAR			0.1			0.11
	Right edge	10g SAR			0.059			0.07
		Deviation			0.02			0.02
		1g SAR			0.605			0.67
	Bottom edge	10g SAR			0.317			0.35
		Deviation			0.03	_		0.03
	Device	SAR	Meas	ured SAR [\	/V/kg]	Rep	orted SAR [W	//Kg]
				04400	20850	21350	21100	20850
Mode	orientation	measureme nt	21350	21100	20000			
Mode			21350	23.40	23.40		Caling factor	*
Mode 20MHz	Tun	nt					Scaling factor 1.15	* 1.12
	Tun- Measured P	nt e-up	23.40	23.40	23.40			
20MHz	Tun- Measured P	nt e-up ower [dBm]	23.40	23.40	23.40 22.91			1.12
20MHz QPSK100%	Tun Measured P	nt e-up ower [dBm]	23.40	23.40	23.40 22.91 0.701			1.12 0.79
20MHz QPSK100%	Tun Measured P	nt e-up Power [dBm] 1g SAR 10g SAR	23.40	23.40	23.40 22.91 0.701 0.35			1.12 0.79 0.39
20MHz QPSK100%	Tun Measured P	nt e-up ower [dBm] 1g SAR 10g SAR Deviation	23.40	23.40 22.80	23.40 22.91 0.701 0.35		1.15	1.12 0.79 0.39
20MHz QPSK100% RB	Tun- Measured F	nt e-up ower [dBm] 1g SAR 10g SAR Deviation 1g SAR	23.40	23.40 22.80 0.853	23.40 22.91 0.701 0.35		0.92	1.12 0.79 0.39



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	251	848.8 MHz	33. 3	32.49	Left Cheek	0.094	0.118	0.11	0.14	0.12	Fig A. 1
GSM850	251	848.8 MHz	27.5	27.08	Rear	0.113	0.151	0.12	0.17	-0.08	<u>Fig A. 2</u>
PCS1900	810	1909.8 MHz	30.3	29.69	Left Cheek	0.059	0.097	0.07	0.11	0.2	<u>Fig A. 3</u>
PCS1900	512	1850.2 MHz	28	27. 52	Bottom edge	0.285	0.523	0.32	0.58	-0.06	<u>Fig A. 4</u>
WCDMA1900-BII	9538	1907.6 MHz	24	23.51	Right Cheek	0.08	0.123	0.09	0.14	0.06	<u>Fig A.5</u>
WCDMA1900-BII	9262	1852.4 MHz	24	23.52	Bottom edge	0.48	0.874	0.54	0.98	0.07	<u>Fig A. 6</u>
WCDMA850-BV	4233	846.6 MHz	24	23.58	Left Cheek	0.139	0.176	0.15	0.19	0.08	<u>Fig A. 7</u>
WCDMA850-BV	4233	846.6 MHz	24	23.58	Rear	0.176	0.235	0.19	0.26	0.01	<u>Fig A.8</u>
LTE850-FDD5	20525	836.5 MHz	24.5	23.96	Right Cheek	0.112	0.141	0.13	0.16	0.01	<u>Fig A.9</u>
LTE850-FDD5	20525	836.5 MHz	24.5	23.96	Rear	0.182	0.236	0.21	0.27	0.05	Fig A. 10
LTE2500-FDD7	20850	2510 MHz	24.4	24.10	Right Cheek	0.066	0.133	0.07	0.14	0.14	Fig A. 11
LTE2500-FDD7	21100	2535 MHz	24. 4	24.08	Rear	0.459	0.892	0.49	0.96	0.13	Fig A. 12
WLAN2450	6	2437 MHz	21	20.34	Left Cheek	0.279	0.679	0.32	0.79	0.13	Fig A. 13
WLAN2450	6	2437 MHz	21	20.34	Rear	0.127	0.299	0.15	0.35	0.03	Fig A. 14



14.4 WLAN Evaluation

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 ≤ 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.

			١	WLAN2450 #1					
Ambient Te	emperature:	22.2				Liquid Ter	mperature:	22.3	
	Device	SAR	Mea	sured SAR [V	V/kg]	Rep	orted SAR [W/kg]	
Rate	orientation	measurement	11	6	1	11	6	1	
	onentation	measurement	2462 MHz	2437 MHz	2412 MHz		0	1	
	Tur	ne up	21	21	21	;	Scaling factor*		
	Slot Average	e Power [dBm]	20.12	20.34	19.50	1.22	1.16	1.41	
		1g Fast SAR		0.556			0.65		
	Left Cheek	10g SAR		0.281			0.33		
		Deviation		0.13			0.13		
	Left Tilt	1g Fast SAR		0.376			0.44		
802.11b		10g SAR		0.18			0.21		
1Mbps		Deviation		0.03			0.03		
		1g Fast SAR		0.242			0.28		
	Right Cheek	10g SAR		0.133			0.15		
		Deviation		0.03			0.03		
		1g Fast SAR		0.235			0.27		
	Right Tilt	10g SAR		0.125			0.15		
		Deviation		0.05			0.05		
802.11b		1g Fast SAR		0.542			0.63		
1Mbps	Left Cheek	10g SAR		0.276			0.32		
SIM2		Deviation		0.04			0.04		

Table 14-13 WLAN2450 #1

Table 14-14 WLAN2450 #1 Head Full SAR

			WLAN24	450 #1 Head Fι	ıll SAR			
Ambient Te	emperature:	22.2				Liquid Ter	nperature:	22.3
	Device	SAR	Mea	sured SAR [V	V/kg]	Rep	orted SAR [V	V/kg]
Rate	orientation	measurement	11	6	1	11	6	4
	orientation		2462 MHz	2437 MHz	2412 MHz	- 11	0	•
	Tune up		21	21	21		*	
	Slot Average	e Power [dBm]	20.12	20.34	19.50	1.22	1.16	1.41
		1g Full SAR		0.679			0.79	
	Left Cheek	igi ali ozut		0.073			0.79	
802.11b	Left Cheek	10g SAR		0.279			0.79	
802.11b 1Mbps	Left Cheek							
	Left Cheek	10g SAR		0.279			0.32	
	Left Cheek Left Tilt	10g SAR Deviation		0.279 0.13			0.32 0.13	



Table 14-15 WLAN2450 #1 Body Fast SAR

			WLAN24	150 #1 Body Fa	st SAR			
Ambient Te	emperature:	22.2				Liquid Ter	mperature:	22.3
	Device	SAR	Mea	sured SAR [V	V/kg]	Rep	orted SAR [V	V/kg]
Rate	orientation	measurement	11	6	1	11	6	1
	Offeritation	measurement	2462 MHz	2437 MHz	2412 MHz		0	•
	Tur	ne up	21	21	21		.#o	
	Slot Average	e Power [dBm]	20.12	20.34	19.50	1.22	1.16	1.41
		1g Fast SAR		0.161			0.19	
	Front	10g SAR		0.08			0.09	
		Deviation		0.01			0.01	
		1g Fast SAR		0.26			0.30	
802.11b	Rear	10g SAR		0.116			0.14	
1Mbps		Deviation		0.03			0.03	
		1g Fast SAR		0.101			0.12	
	Top edge	10g SAR		0.048			0.06	
		Deviation		0.11			0.11	
		1g Fast SAR		0.092			0.11	
	Right edge	10g SAR		0.046			0.05	
		Deviation		0.03			0.03	<u></u>
802.11b		1g Fast SAR		0.251			0.29	
1Mbps	Rear	10g SAR		0.109			0.13	
SIM2		Deviation		-0.01			-0.01	

Table 14-16 WLAN2450 #1 Body Full SAR

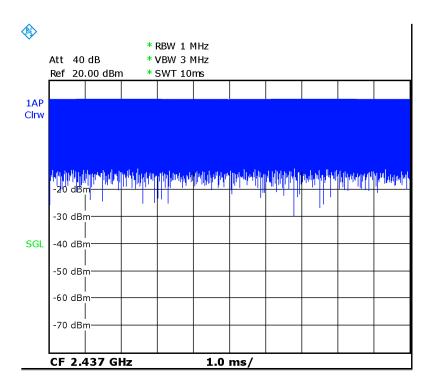
			WLAN2	450 #1 Body Fu	ıll SAR		WLAN2450 #1 Body Full SAR												
Ambient Te	mperature:	22.2				Liquid Ter	nperature:	22.3											
	Device	SAR	Meas	sured SAR [V	V/kg]	Reported SAR [W/kg]													
Rate	orientation	measurement	11	6	1		6	1											
		measurement	2462 MHz	2437 MHz	2412 MHz	- '	0	•											
	Tur	ne up	21	21	21		r*												
802.11b	Slot Average	Power [dBm]	20.12	20.34	19.50	1.22	1.16	1.41											
1Mbps		1g Full SAR		0.299			0.35												
Тибре	Rear	10g SAR		0.127			0.15												
		Deviation		0.03			0.03												

	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	iency	Test Position	Actual duty	maximum duty	Reported SAR(1g)(W/kg)	Scaled reported SAR(1g)(W/kg)	Figure					
MHz Ch.			iactoi	lactor	57 it (19)(17/109)	5/11 (1g)(VV/1(g)						
2437	6	Left Cheek	100.00%	100%	0.79	0.79	Fig.13					

	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	Test Position	Actual duty	maximum duty	Reported SAR(1g)(W/kg)	Scaled reported SAR(1g)(W/kg)	Figure					
MHz	Ch.		factor	factor	SAR(1g)(W/kg)	SAR(1g)(W/kg)						
2437 6 Rear 100.00% 100% 0.35 Fig.14												

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

Mode	СН	Freq	Test Poisition	Original SAR (W/kg)	First Repeated SAR(W/kg)	The Ratio
WCDMA1900-BII	9262	1852.4 MHz	Bottom edge	0.874	0.862	1.01
LTE2500-FDD7	21100	2535 MHz	Rear	0.892	0.884	1.01



16 Measurement Uncertainty

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

10.1	weasurement on	CCIta	ility for 140	IIIai SAIN I	CSIS	(JUUN	11 12~	, Oi 12 <i>)</i>		
No.	Error Description	Type	Uncertainty	Probably	Div.	(Ci)	(Ci)	Std.	Std.	Degree
			value	Distribution		1g	10g	Unc.	Unc.	of
								(1g)	(10g)	freedo
										m
Meas	surement system									
1	Probe calibration	В	6.0	N	1	1	1	6.0	6.0	8
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	8
4	Linearity	В	4.7	R	$\sqrt{3}$	1	1	2.7	2.7	8
5	Detection limit	В	1.0	N	1	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	8
10	RFambient 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	88
13	Post-processing	В	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	8
			Test	sample related	1	ı	I		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-u						
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	8
21	Liquid permittivity (meas.)	A	1.6	N	1	0.6	0.49	1.0	0.8	521



C	Combined standard uncertainty	$u_c^{'} =$	$= \sqrt{\sum_{i=1}^{21} c_i^2 u_i^2}$					9.55	9.43	257
(conf 95 %		ı	$u_e = 2u_c$					19.1	18.9	
16.2	Measurement U	ncerta	ainty for No	ormal SAR	Tests	(3~6	GHz)			
No.	Error Description	Type	Uncertainty	Probably	Div.	(Ci)	(Ci)	Std.	Std.	Degree
			value	Distribution		1g	10g	Unc.	Unc.	of
								(1g)	(10g)	freedo
										m
Meas	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	∞
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	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	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	8
			Test	sample related	l					
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	8
			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	В	5.0	R	$\sqrt{3}$	0.6	0.49	1.7	1.4	∞



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

16.3	Measurement Un	certai	inty for Fas	st SAR Test	:s (30	0MHz	:~3Gŀ	łz)		
No.	Error Description	Type	Uncertainty	Probably	Div.	(Ci)	(Ci)	Std.	Std.	Degree
			value	Distribution		1g	10g	Unc.	Unc.	of
								(1g)	(10g)	freedo
										m
Meas	surement system	r	.		,	1	1		r	
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	∞
10	RF ambient 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	8
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 related	1					
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	∞
	<u> </u>	r	Phan	tom and set-u		r	r	1	r	
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	∞
22	Liquid permittivity (meas.)	A	1.6	N	1	0.6	0.49	1.0	0.8	521
Combined standard uncertainty		$u_c^{'} =$	$\sqrt{\sum_{i=1}^{22} c_i^2 u_i^2}$					10.4	10.3	257
Expanded uncertainty (confidence interval of 95 %)		l	$u_e = 2u_c$					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	
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	RF ambient 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	∞	
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	

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No. I18Z60067-SEM03 Page 54 of 144

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									
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	∞
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
(con	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 24, 2018	One year	
02	Power meter	NRVD	102083	Newspeker 04 2047	One yeer	
03	Power sensor	NRV-Z5	100542	November 01,2017	One year	
04	Signal Generator	E4438C	MY49070393	January 02,2018	One Year	
05	Amplifier	60S1G4	0331848	No Calibration Requested		
06	BTS	CMW500	159889	December 20, 2017	One year	
07	E-field Probe	SPEAG EX3DV4	7464	September 12,2017	One year	
08	DAE	SPEAG DAE4	1525	October 02, 2017	One year	
09	Dipole Validation Kit	SPEAG D835V2	4d069	July 19,2017	One year	
10	Dipole Validation Kit	SPEAG D1900V2	5d101	July 26,2017	One year	
11	Dipole Validation Kit	SPEAG D2450V2	853	July 21,2017	One year	
12	Dipole Validation Kit	SPEAG D2600V2	1012	July 21,2017	One year	

^{***}END OF REPORT BODY***



ANNEX A Graph Results

GSM850_CH251 Left Cheek

Date: 3/14/2018

Electronics: DAE4 Sn1525 Medium: head 835 MHz

Medium parameters used: f = 848.8 MHz; $\sigma = 0.921 \text{ mho/m}$; $\epsilon r = 41.24$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.2°C, Liquid Temperature: 22.3°C Communication System: GSM850 848.8 MHz Duty Cycle: 1:8.3

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

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

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

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

Reference Value = 6.87 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.139 W/kg

SAR(1 g) = 0.118 W/kg; SAR(10 g) = 0.094 W/kgMaximum value of SAR (measured) = 0.123 W/kg

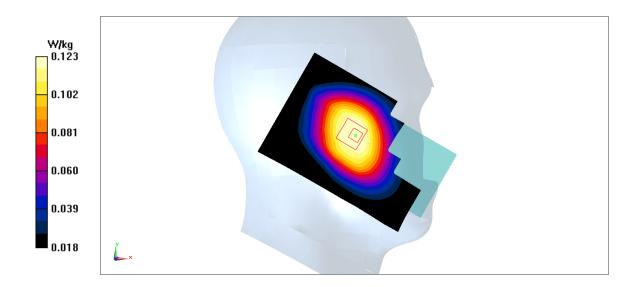


Fig A.1



GSM850_CH251 Rear

Date: 3/14/2018

Electronics: DAE4 Sn1525 Medium: body 835 MHz

Medium parameters used: f = 848.8 MHz; $\sigma = 0.974 \text{ mho/m}$; $\epsilon r = 55.03$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.2°C, Liquid Temperature: 22.3°C Communication System: GSM850 848.8 MHz Duty Cycle: 1:2

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

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

Maximum value of SAR (interpolated) = 0.17 W/kg

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

Reference Value = 12.09 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.199 W/kg

SAR(1 g) = 0.151 W/kg; SAR(10 g) = 0.113 W/kg

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

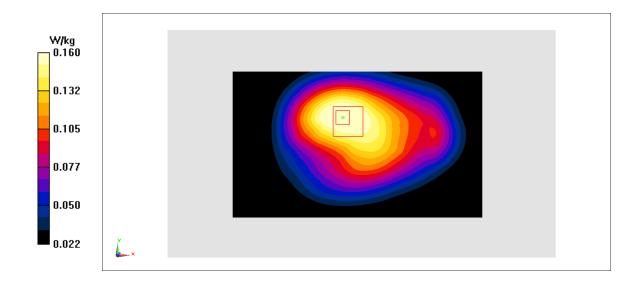


Fig A.2



PCS1900_CH810 Left Cheek

Date: 3/15/2018

Electronics: DAE4 Sn1525 Medium: head 1900 MHz

Medium parameters used: f = 1909.8 MHz; $\sigma = 1.41$ mho/m; $\epsilon r = 40.08$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.2°C, Liquid Temperature: 22.3°C Communication System: PCS1900 1909.8 MHz Duty Cycle: 1:8.3

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

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

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

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

Reference Value = 3.366 V/m; Power Drift = 0.2 dB

Peak SAR (extrapolated) = 0.149 W/kg

SAR(1 g) = 0.097 W/kg; SAR(10 g) = 0.059 W/kgMaximum value of SAR (measured) = 0.113 W/kg

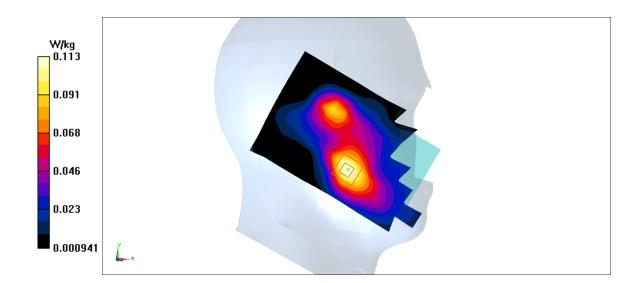


Fig A.3



PCS1900_CH512 Bottom edge

Date: 3/15/2018

Electronics: DAE4 Sn1525 Medium: body 1900 MHz

Medium parameters used: f = 1850.2 MHz; $\sigma = 1.5 \text{ mho/m}$; $\epsilon r = 54.23$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.2°C, Liquid Temperature: 22.3°C Communication System: PCS1900 1850.2 MHz Duty Cycle: 1:4

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

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

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

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

Reference Value = 5.233 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.922 W/kg

SAR(1 g) = 0.523 W/kg; SAR(10 g) = 0.285 W/kg

Maximum value of SAR (measured) = 0.573 W/kg

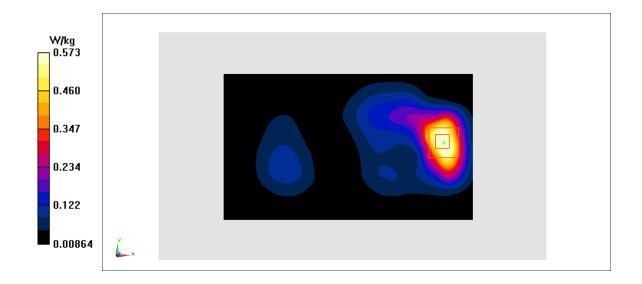


Fig A.4



WCDMA1900-BII_CH9538 Right Cheek

Date: 3/15/2018

Electronics: DAE4 Sn1525 Medium: head 1900 MHz

Medium parameters used: f = 1907.6 MHz; $\sigma = 1.409 \text{ mho/m}$; $\epsilon r = 40.08$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.2°C, Liquid Temperature: 22.3°C

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

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

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

Maximum value of SAR (interpolated) = 0.154 W/kg

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

Reference Value = 6.221 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.185 W/kg

SAR(1 g) = 0.123 W/kg; SAR(10 g) = 0.08 W/kg

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

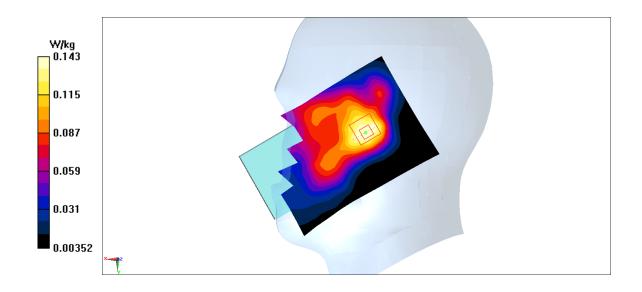


Fig A.5



WCDMA1900-BII_CH9262 Bottom edge

Date: 3/15/2018

Electronics: DAE4 Sn1525 Medium: body 1900 MHz

Medium parameters used: f = 1852.4 MHz; $\sigma = 1.502$ mho/m; $\epsilon r = 54.23$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.2°C, Liquid Temperature: 22.3°C

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

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

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

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

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

Reference Value = 6.887 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 1.52 W/kg

SAR(1 g) = 0.874 W/kg; SAR(10 g) = 0.48 W/kg

Maximum value of SAR (measured) = 0.963 W/kg

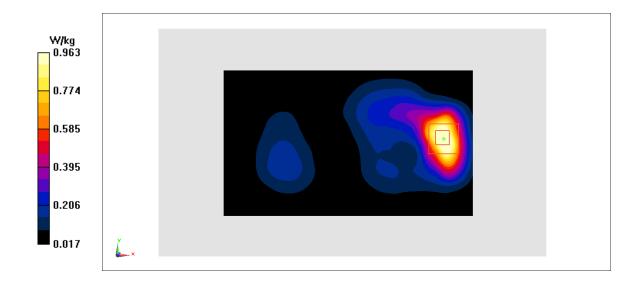


Fig A.6



WCDMA850-BV CH4233 Left Cheek

Date: 3/14/2018

Electronics: DAE4 Sn1525 Medium: head 835 MHz

Medium parameters used: f = 846.6 MHz; $\sigma = 0.919 \text{ mho/m}$; $\epsilon r = 41.25$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.2°C, Liquid Temperature: 22.3°C

Communication System: WCDMA850-BV 846.6 MHz Duty Cycle: 1:1

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

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

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

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

Reference Value = 6.507 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.207 W/kg

SAR(1 g) = 0.176 W/kg; SAR(10 g) = 0.139 W/kg

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

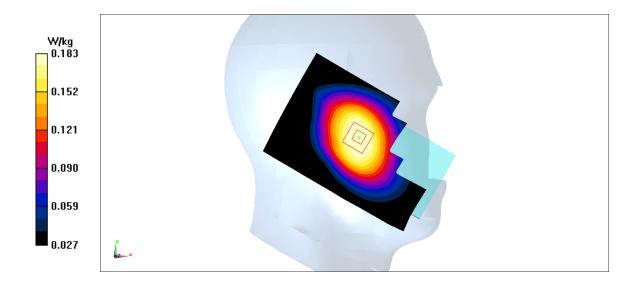


Fig A.7



WCDMA850-BV_CH4233 Rear

Date: 3/14/2018

Electronics: DAE4 Sn1525 Medium: body 835 MHz

Medium parameters used: f = 846.6 MHz; $\sigma = 0.972 \text{ mho/m}$; $\epsilon r = 55.04$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.2°C, Liquid Temperature: 22.3°C

Communication System: WCDMA850-BV 846.6 MHz Duty Cycle: 1:1

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

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

Maximum value of SAR (interpolated) = 0.268 W/kg

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

Reference Value = 15.06 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.306 W/kg

SAR(1 g) = 0.235 W/kg; SAR(10 g) = 0.176 W/kg

Maximum value of SAR (measured) = 0.248 W/kg

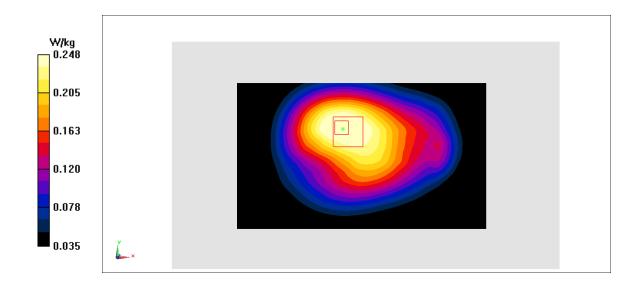


Fig A.8



LTE850-FDD5_CH20525 Right Cheek

Date: 3/14/2018

Electronics: DAE4 Sn1525 Medium: head 835 MHz

Medium parameters used: f = 836.5 MHz; $\sigma = 0.909 \text{ mho/m}$; $\epsilon r = 41.26$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.2°C, Liquid Temperature: 22.3°C

Communication System: LTE850-FDD5 836.5 MHz Duty Cycle: 1:1

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

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

Maximum value of SAR (interpolated) = 0.158 W/kg

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

Reference Value = 6.008 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.164 W/kg

SAR(1 g) = 0.141 W/kg; SAR(10 g) = 0.112 W/kg

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

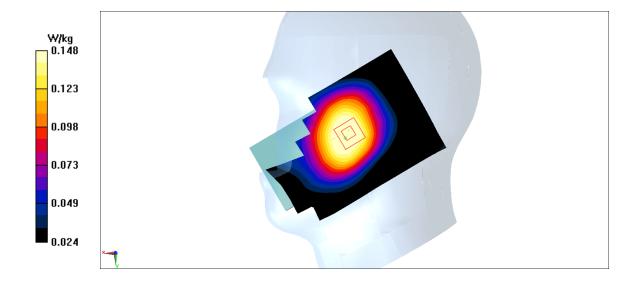


Fig A.9



LTE850-FDD5_CH20525 Rear

Date: 3/14/2018

Electronics: DAE4 Sn1525 Medium: body 835 MHz

Medium parameters used: f = 836.5 MHz; $\sigma = 0.962 \text{ mho/m}$; $\epsilon r = 55.05$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.2°C, Liquid Temperature: 22.3°C

Communication System: LTE850-FDD5 836.5 MHz Duty Cycle: 1:1

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

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

Maximum value of SAR (interpolated) = 0.26 W/kg

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

Reference Value = 15.7 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.287 W/kg

SAR(1 g) = 0.236 W/kg; SAR(10 g) = 0.182 W/kg

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

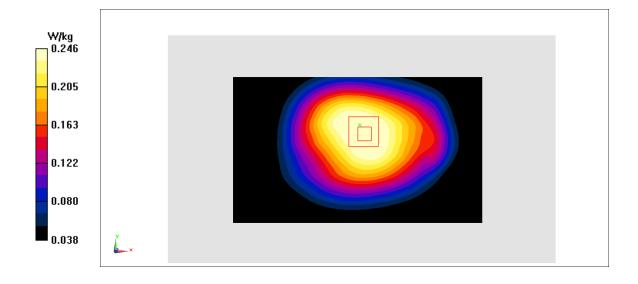


Fig A.10



LTE2500-FDD7_CH20850 Right Cheek

Date: 3/17/2018

Electronics: DAE4 Sn1525 Medium: head 2600 MHz

Medium parameters used: f = 2510 MHz; $\sigma = 1.86 \text{ mho/m}$; $\epsilon r = 38.68$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.2°C, Liquid Temperature: 22.3°C

Communication System: LTE2500-FDD7 2510 MHz Duty Cycle: 1:1

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

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

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

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

Reference Value = 2.407 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.26 W/kg

SAR(1 g) = 0.133 W/kg; SAR(10 g) = 0.066 W/kg

Maximum value of SAR (measured) = 0.15 W/kg

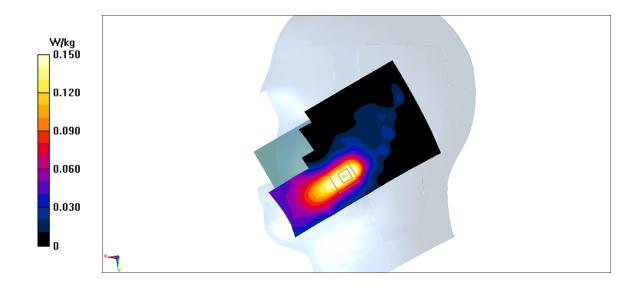


Fig A.11



LTE2500-FDD7_CH21100 Rear

Date: 3/17/2018

Electronics: DAE4 Sn1525 Medium: body 2600 MHz

Medium parameters used: f = 2535 MHz; $\sigma = 2.121$ mho/m; $\epsilon r = 52.47$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.2°C, Liquid Temperature: 22.3°C

Communication System: LTE2500-FDD7 2535 MHz Duty Cycle: 1:1

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

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

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

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

Reference Value = 1.177 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 1.65 W/kg

SAR(1 g) = 0.892 W/kg; SAR(10 g) = 0.459 W/kg

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

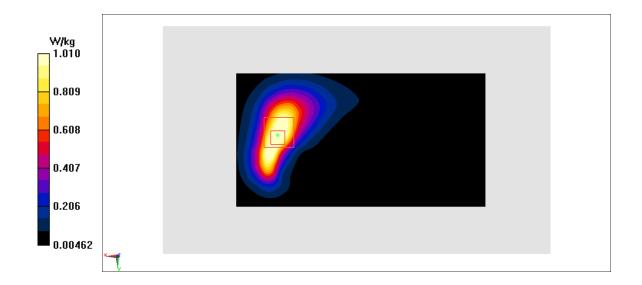


Fig A.12



WLAN2450_CH6 Left Cheek

Date: 3/16/2018

Electronics: DAE4 Sn1525 Medium: head 2450 MHz

Medium parameters used: f = 2437 MHz; $\sigma = 1.801$ mho/m; $\epsilon r = 39.81$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.2°C, Liquid Temperature: 22.3°C Communication System: WLAN2450 2437 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 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) = 0.959 W/kg

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

Reference Value = 8.362 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 1.69 W/kg

SAR(1 g) = 0.679 W/kg; SAR(10 g) = 0.279 W/kg

Maximum value of SAR (measured) = 0.778 W/kg

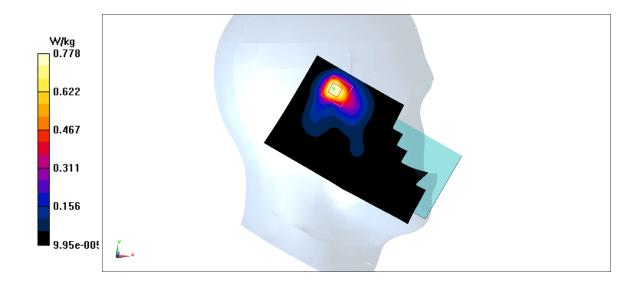


Fig A.13



WLAN2450_CH6 Rear

Date: 3/16/2018

Electronics: DAE4 Sn1525 Medium: body 2450 MHz

Medium parameters used: f = 2437 MHz; $\sigma = 1.97$ mho/m; $\epsilon r = 52.54$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.2°C, Liquid Temperature: 22.3°C Communication System: WLAN2450 2437 MHz Duty Cycle: 1:1

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

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

Maximum value of SAR (interpolated) = 0.377 W/kg

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

Reference Value = 6.086 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.644 W/kg

SAR(1 g) = 0.299 W/kg; SAR(10 g) = 0.127 W/kg

Maximum value of SAR (measured) = 0.357 W/kg

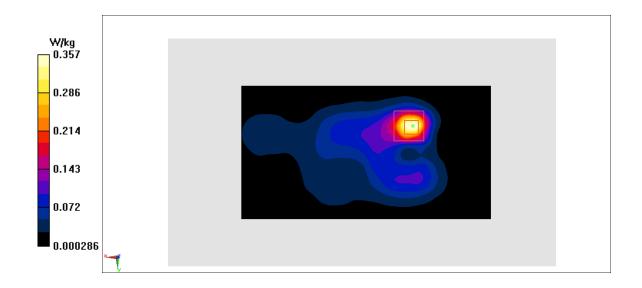


Fig A.14



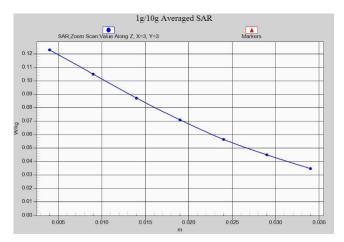


Fig.A.1- 1 Z-Scan at power reference point (GSM850)

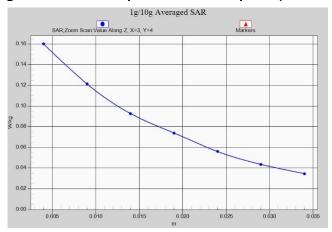


Fig.A.1- 2 Z-Scan at power reference point (GSM850)

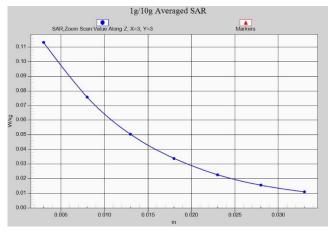


Fig.A.1- 3 Z-Scan at power reference point (PCS1900)



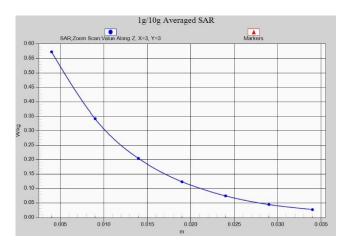


Fig.A.1- 4 Z-Scan at power reference point (PCS1900)

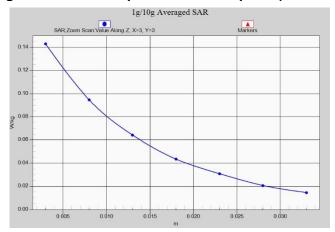


Fig.A.1- 5 Z-Scan at power reference point (W1900)

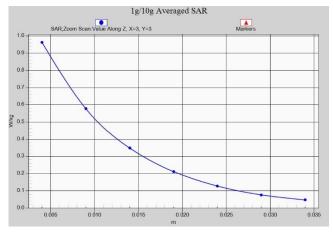


Fig.A.1- 6 Z-Scan at power reference point (W1900)



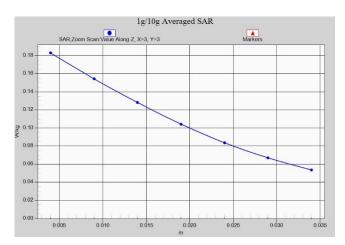


Fig.A.1- 7 Z-Scan at power reference point (W850)

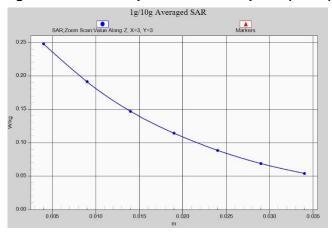


Fig.A.1-8 Z-Scan at power reference point (W850)

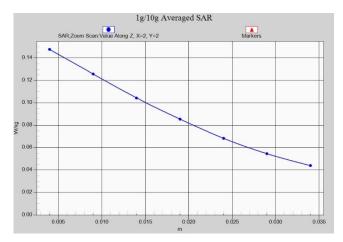


Fig.A.1- 9 Z-Scan at power reference point (LTE Band5)