

Table 14-11 CDMA800-BC0 #1 Head

CDMA800-BC0 #1 Head								
Ambient Temperature: 22.5			Liquid Temperature: 22.3					
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			CH777 848.3 MHz	CH384 836.5 MHz	CH1013 824.7 MHz	CH777 848.3 MHz	CH384 836.5 MHz	CH1013 824.7 MHz
SO55/RC1	Tune-up		25.50	25.50	25.50	Scaling factor*		
	Slot Average Power [dBm]		23.72	23.73	23.50	1.51	1.50	1.58
	Left Cheek	1g SAR		0.296			0.44	
		10g SAR		0.236			0.35	
		Deviation		0.05			0.05	
	Left Tilt	1g SAR		0.214			0.32	
		10g SAR		0.168			0.25	
		Deviation		0.03			0.03	
	Right Cheek	1g SAR	0.321	0.314	0.254	0.48	0.47	0.40
		10g SAR	0.246	0.241	0.197	0.37	0.36	0.31
		Deviation	-0.02	-0.07	-0.05	-0.02	-0.07	-0.05
	Right Tilt	1g SAR		0.195			0.29	
		10g SAR		0.155			0.23	
		Deviation		0.04			0.04	

Table 14-12 CDMA800-BC0 #1 Body

CDMA800-BC0 #1 Body								
Ambient Temperature: 22.5			Liquid Temperature: 22.3					
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			CH777 848.3 MHz	CH384 836.5 MHz	CH1013 824.7 MHz	CH777 848.3 MHz	CH384 836.5 MHz	CH1013 824.7 MHz
SO32/RC3 (FCH only)	Tune-up		25.50	25.50	25.50	Scaling factor*		
	Slot Average Power [dBm]		23.75	23.79	23.54	1.50	1.48	1.57
	Front	1g SAR		0.302			0.45	
		10g SAR		0.233			0.35	
		Deviation		0.09			0.09	
	Rear	1g SAR	0.397	0.434	0.365	0.59	0.64	0.57
		10g SAR	0.303	0.331	0.285	0.45	0.49	0.45
		Deviation	-0.01	0.04	0.07	-0.01	0.04	0.07
	Left edge	1g SAR		0.228			0.34	
		10g SAR		0.159			0.24	
		Deviation		0.13			0.13	
	Right edge	1g SAR		0.306			0.45	
		10g SAR		0.219			0.32	
		Deviation		-0.09			-0.09	
	Bottom edge	1g SAR		0.127			0.19	
10g SAR			0.079			0.12		
Deviation			0.05			0.05		

Table 14-13 CDMA1900-BC1 #1 Head

CDMA1900-BC1 #1 Head								
Ambient Temperature: 22.5			Liquid Temperature: 22.3					
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			CH1175 1908.75	CH600 1880 MHz	CH25 1851.25	CH1175 1908.75	CH600 1880 MHz	CH25 1851.25
SO55/RC1	Tune-up		24.50	24.50	24.50	Scaling factor*		
	Slot Average Power [dBm]		23.96	23.93	23.87	1.13	1.14	1.16
	Left Cheek	1g SAR	0.326	0.329	0.312	0.37	0.38	0.36
		10g SAR	0.2	0.202	0.193	0.23	0.23	0.22
		Deviation	0.02	0.08	0.12	0.02	0.08	0.12
	Left Tilt	1g SAR		0.114			0.13	
		10g SAR		0.074			0.08	
		Deviation		-0.05			-0.05	
	Right Cheek	1g SAR		0.169			0.19	
		10g SAR		0.106			0.12	
		Deviation		0.03			0.03	
	Right Tilt	1g SAR		0.128			0.15	
		10g SAR		0.08			0.09	
		Deviation		0.09			0.09	

Table 14-14 CDMA1900-BC1 #1 Body

CDMA1900-BC1 #1 Body								
Ambient Temperature: 22.5			Liquid Temperature: 22.3					
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			CH1175 1908.75 MHz	CH600 1880 MHz	CH25 1851.25 MHz	CH1175 1908.75 MHz	CH600 1880 MHz	CH25 1851.25 MHz
S032/RC3 (FCH only)	Tune-up		24.50	24.50	24.50	Scaling factor*		
	Slot Average Power [dBm]		23.97	23.94	23.91	1.13	1.14	1.15
	Front	1g SAR	0.928	0.81	0.729	1.05	0.92	0.84
		10g SAR	0.538	0.476	0.443	0.61	0.54	0.51
		Deviation	0.01	0.08	0.14	0.01	0.08	0.14
	Rear	1g SAR	1.19	1.03	0.945	1.34	1.17	1.08
		10g SAR	0.678	0.591	0.547	0.77	0.67	0.63
		Deviation	-0.03	0.06	-0.07	-0.03	0.06	-0.07
	Left edge	1g SAR		0.408			0.46	
		10g SAR		0.252			0.29	
		Deviation		-0.02			-0.02	
	Right edge	1g SAR		0.21			0.24	
		10g SAR		0.131			0.15	
		Deviation		0.05			0.05	
	Bottom edge	1g SAR	1.122	0.945	0.852	1.27	1.08	0.98
10g SAR		0.599	0.508	0.461	0.68	0.58	0.53	
Deviation		-0.11	0.14	0.04	-0.11	0.14	0.04	
S032/RC3 (FCH only)	Rear Omm	10g SAR	3.05			3.45		
	Deviation		0.04			0.04		

Note: According to KDB 648474 D04, when hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg.

Table 14-15 CDMA800-BC10 #1 Head

CDMA800-BC10 #1 Head								
Ambient Temperature: 22.5			Liquid Temperature: 22.3					
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			CH684 823.1 MHz	CH580 820.5 MHz	CH476 817.9 MHz	CH684 823.1 MHz	CH580 820.5 MHz	CH476 817.9 MHz
SO55/RC1	Tune-up		25.50	25.50	25.50	Scaling factor*		
	Slot Average Power [dBm]		23.88	23.86	23.82	1.45	1.46	1.47
	Left Cheek	1g SAR		0.263			0.38	
		10g SAR		0.199			0.29	
		Deviation		0.04			0.04	
	Left Tilt	1g SAR		0.188			0.27	
		10g SAR		0.139			0.20	
		Deviation		0.03			0.03	
	Right Cheek	1g SAR	0.306	0.27	0.279	0.44	0.39	0.41
		10g SAR	0.235	0.191	0.199	0.34	0.28	0.29
		Deviation	-0.09	0.05	-0.01	-0.09	0.05	-0.01
	Right Tilt	1g SAR		0.173			0.25	
		10g SAR		0.127			0.19	
		Deviation		-0.08			-0.08	

Table 14-16 CDMA800-BC10 #1 Body

CDMA800-BC10 #1 Body								
Ambient Temperature: 22.5			Liquid Temperature: 22.3					
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			CH684 823.1 MHz	CH580 820.5 MHz	CH476 817.9 MHz	CH684 823.1 MHz	CH580 820.5 MHz	CH476 817.9 MHz
SO32/RC3 (FCH only)	Tune-up		25.50	25.50	25.50	Scaling factor*		
	Slot Average Power [dBm]		23.88	23.86	23.89	1.45	1.46	1.45
	Front	1g SAR		0.323			0.47	
		10g SAR		0.248			0.36	
		Deviation		0.01			0.01	
	Rear	1g SAR	0.43	0.437	0.421	0.62	0.64	0.61
		10g SAR	0.327	0.339	0.328	0.47	0.49	0.48
		Deviation	-0.05	0.07	0.12	-0.05	0.07	0.12
	Left edge	1g SAR		0.235			0.34	
		10g SAR		0.163			0.24	
		Deviation		-0.03			-0.03	
	Right edge	1g SAR		0.286			0.42	
		10g SAR		0.202			0.29	
		Deviation		0.08			0.08	
	Bottom edge	1g SAR		0.143			0.21	
10g SAR			0.089			0.13		
Deviation			0.06			0.06		



Table 14-17 LTE1900-FDD2 #1 Head

LTE1900-FDD2 #1 Head								
Ambient Temperature: 22.5				Liquid Temperature: 22.3				
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			19100	18900	18700	19100	18900	18700
			M	M	M	M	M	M
20MHz QPSK1RB	Tune-up		23.50	23.50	23.50	Scaling factor*		
	Measured Power [dBm]		23.19	23.16	23.09	1.07	1.08	1.10
	Left Cheek	1g SAR	0.545			0.59		
		10g SAR	0.333			0.36		
		Deviation	0.05			0.05		
	Left Tilt	1g SAR	0.334			0.36		
		10g SAR	0.205			0.22		
		Deviation	-0.01			-0.01		
	Right Cheek	1g SAR	0.451			0.48		
		10g SAR	0.275			0.30		
		Deviation	-0.08			-0.08		
	Right Tilt	1g SAR	0.449			0.48		
		10g SAR	0.27			0.29		
		Deviation	0.12			0.12		
TRUE	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			19100	18900	18700	19100	18900	18700
			M	M	H	M	M	H
20MHz QPSK50% RB	Tune-up		22.50	22.50	22.50	Scaling factor*		
	Measured Power [dBm]		22.04	21.96	21.99	1.11	1.13	1.12
	Left Cheek	1g SAR	0.44			0.49		
		10g SAR	0.268			0.30		
		Deviation	0.06			0.06		
	Left Tilt	1g SAR	0.283			0.31		
		10g SAR	0.175			0.19		
		Deviation	0.09			0.09		
	Right Cheek	1g SAR	0.358			0.40		
		10g SAR	0.235			0.26		
		Deviation	-0.07			-0.07		
	Right Tilt	1g SAR	0.351			0.39		
		10g SAR	0.212			0.24		
		Deviation	0.03			0.03		

Table 14-18 LTE1900-FDD2 #1 Body

LTE1900-FDD2 #1 Body								
Ambient Temperature: 22.5				Liquid Temperature: 22.3				
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			19100 M	18900 M	18700 M	19100 M	18900 M	18700 M
20MHz QPSK1RB	Tune-up		23.50	23.50	23.50	Scaling factor*		
	Measured Power [dBm]		23.19	23.16	23.09	1.07	1.08	1.10
	Front	1g SAR	0.576			0.62		
		10g SAR	0.346			0.37		
		Deviation	0.01			0.01		
	Rear	1g SAR	0.737			0.79		
		10g SAR	0.436			0.47		
		Deviation	-0.09			-0.09		
	Left edge	1g SAR	0.294			0.32		
		10g SAR	0.187			0.20		
		Deviation	-0.06			-0.06		
	Right edge	1g SAR	0.142			0.15		
		10g SAR	0.091			0.10		
		Deviation	-0.03			-0.03		
	Bottom edge	1g SAR	0.674			0.72		
10g SAR		0.375			0.40			
Deviation		0.05			0.05			
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			19100 M	18900 M	18700 H	19100	18900	18700
20MHz QPSK50% RB	Tune-up		22.50	22.50	22.50	Scaling factor*		
	Measured Power [dBm]		22.04	21.96	21.99	1.11	1.13	1.12
	Front	1g SAR	0.447			0.50		
		10g SAR	0.269			0.30		
		Deviation	-0.02			-0.02		
	Rear	1g SAR	0.571			0.64		
		10g SAR	0.338			0.38		
		Deviation	-0.14			-0.14		
	Left edge	1g SAR	0.23			0.26		
		10g SAR	0.146			0.16		
		Deviation	-0.03			-0.03		
	Right edge	1g SAR	0.11			0.12		
		10g SAR	0.072			0.08		
		Deviation	-0.01			-0.01		
	Bottom edge	1g SAR	0.535			0.60		
10g SAR		0.299			0.33			
Deviation		0.07			0.07			



Table 14-19 LTE1700-FDD4 #1 Head

LTE1700-FDD4 #1 Head								
Ambient Temperature: 22.5				Liquid Temperature: 22.3				
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			20300 M	20175 M	20050 M	20300 M	20175 M	20050 M
20MHz QPSK1RB	Tune-up		24.00	24.00	24.00	Scaling factor*		
	Measured Power [dBm]		22.76	22.77	22.82	1.33	1.33	1.31
	Left Cheek	1g SAR			0.371			0.49
		10g SAR			0.238			0.31
		Deviation			0.06			0.06
	Left Tilt	1g SAR			0.076			0.10
		10g SAR			0.048			0.06
		Deviation			-0.03			-0.03
	Right Cheek	1g SAR			0.192			0.25
		10g SAR			0.118			0.15
		Deviation			0.11			0.11
	Right Tilt	1g SAR			0.08			0.10
		10g SAR			0.054			0.07
Deviation				-0.14			-0.14	
TRUE	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			20300 M	20175 M	20050 H	20300 M	20175 M	20050 H
20MHz QPSK50% RB	Tune-up		23.00	23.00	23.00	Scaling factor*		
	Measured Power [dBm]		21.63	21.65	21.71	1.37	1.37	1.35
	Left Cheek	1g SAR			0.321			0.43
		10g SAR			0.198			0.27
		Deviation			0.06			0.06
	Left Tilt	1g SAR			0.059			0.08
		10g SAR			0.04			0.05
		Deviation			0.08			0.08
	Right Cheek	1g SAR			0.183			0.25
		10g SAR			0.113			0.15
		Deviation			-0.01			-0.01
	Right Tilt	1g SAR			0.066			0.09
		10g SAR			0.045			0.06
Deviation				0.05			0.05	

Table 14-20 LTE1700-FDD4 #1 Body

LTE1700-FDD4 #1 Body								
Ambient Temperature: 22.5				Liquid Temperature: 22.3				
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			20300 M	20175 M	20050 M	20300 M	20175 M	20050 M
20MHz QPSK1RB	Tune-up		24.00	24.00	24.00	Scaling factor*		
	Measured Power [dBm]		22.76	22.77	22.82	1.33	1.33	1.31
	Front	1g SAR			0.444			0.58
		10g SAR			0.279			0.37
		Deviation			-0.05			-0.05
	Rear	1g SAR	0.687	0.619	0.592	0.91	0.82	0.78
		10g SAR	0.419	0.383	0.366	0.56	0.51	0.48
		Deviation	0.02	0.1	0.14	0.02	0.10	0.14
	Left edge	1g SAR			0.242			0.32
		10g SAR			0.153			0.20
		Deviation			-0.07			-0.07
	Right edge	1g SAR			0.068			0.09
		10g SAR			0.044			0.06
		Deviation			0.04			0.04
	Bottom edge	1g SAR			0.408			0.53
10g SAR				0.236			0.31	
Deviation				-0.09			-0.09	
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			20300 M	20175 M	20050 H	20300	20175	20050
20MHz QPSK50% RB	Tune-up		23.00	23.00	23.00	Scaling factor*		
	Measured Power [dBm]		21.63	21.65	21.71	1.37	1.37	1.35
	Front	1g SAR			0.357			0.48
		10g SAR			0.223			0.30
		Deviation			0.01			0.01
	Rear	1g SAR			0.498			0.67
		10g SAR			0.307			0.41
		Deviation			0.05			0.05
	Left edge	1g SAR			0.208			0.28
		10g SAR			0.132			0.18
		Deviation			-0.11			-0.11
	Right edge	1g SAR			0.055			0.07
		10g SAR			0.036			0.05
		Deviation			0.12			0.12
	Bottom edge	1g SAR			0.356			0.48
10g SAR				0.206			0.28	
Deviation				0.08			0.08	
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			20300	20175	20050	20300	20175	20050
20MHz QPSK100% RB	Tune-up		23.00	23.00	23.00	Scaling factor*		
	Measured Power [dBm]		21.59	21.60	21.59	1.38	1.38	1.38
	Rear	1g SAR		0.416			0.57	
		10g SAR		0.254			0.35	
Deviation			-0.09			-0.09		



Table 14-21 LTE850-FDD5 #1 Head

LTE850-FDD5 #1 Head								
Ambient Temperature: 22.5				Liquid Temperature: 22.3				
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			20600	20525	20450	20600	20525	20450
			H	M	M	H	M	M
10MHz QPSK1RB	Tune-up		24.00	24.00	24.00	Scaling factor*		
	Measured Power [dBm]		22.90	22.86	22.86	1.29	1.30	1.30
	Left Cheek	1g SAR	0.247			0.32		
		10g SAR	0.195			0.25		
		Deviation	-0.03			-0.03		
	Left Tilt	1g SAR	0.131			0.17		
		10g SAR	0.102			0.13		
		Deviation	0.11			0.11		
	Right Cheek	1g SAR	0.177			0.23		
		10g SAR	0.134			0.17		
		Deviation	0.09			0.09		
	Right Tilt	1g SAR	0.162			0.21		
		10g SAR	0.125			0.16		
		Deviation	-0.13			-0.13		
TRUE	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			20600	20525	20450	20600	20525	20450
			L	M	L	L	M	L
10MHz QPSK50% RB	Tune-up		23.00	23.00	23.00	Scaling factor*		
	Measured Power [dBm]		21.83	21.82	21.85	1.31	1.31	1.30
	Left Cheek	1g SAR			0.09			0.12
		10g SAR			0.07			0.09
		Deviation			-0.05			-0.05
	Left Tilt	1g SAR			0.09			0.12
		10g SAR			0.07			0.09
		Deviation			-0.05			-0.05
	Right Cheek	1g SAR			0.152			0.20
		10g SAR			0.114			0.15
		Deviation			0.01			0.01
	Right Tilt	1g SAR			0.083			0.11
		10g SAR			0.065			0.08
		Deviation			-0.11			-0.11

Table 14-22 LTE850-FDD5 #1 Body

LTE850-FDD5 #1 Body									
Ambient Temperature:			22.5			Liquid Temperature:			22.3
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]			
			20600	20525	20450	20600	20525	20450	
			H	M	M	H	M	M	
10MHz QPSK1RB	Tune-up		24.00	24.00	24.00	Scaling factor*			
	Measured Power [dBm]		22.90	22.86	22.86	1.29	1.30	1.30	
	Front	1g SAR	0.28			0.36			
		10g SAR	0.215			0.28			
		Deviation	0.01			0.01			
	Rear	1g SAR	0.38			0.49			
		10g SAR	0.292			0.38			
		Deviation	-0.03			-0.03			
	Left edge	1g SAR	0.211			0.27			
		10g SAR	0.143			0.18			
		Deviation	0.04			0.04			
	Right edge	1g SAR	0.298			0.38			
		10g SAR	0.211			0.27			
		Deviation	-0.06			-0.06			
	Bottom edge	1g SAR	0.141			0.18			
		10g SAR	0.082			0.11			
		Deviation	0.09			0.09			
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]			
			20600	20525	20450	20600	20525	20450	
			L	M	L				
10MHz QPSK50% RB	Tune-up		23.00	23.00	23.00	Scaling factor*			
	Measured Power [dBm]		21.83	21.82	21.85	1.31	1.31	1.30	
	Front	1g SAR			0.214			0.28	
		10g SAR			0.164			0.21	
		Deviation			0.05			0.05	
	Rear	1g SAR			0.285			0.37	
		10g SAR			0.216			0.28	
		Deviation			0.13			0.13	
	Left edge	1g SAR			0.16			0.21	
		10g SAR			0.11			0.14	
		Deviation			-0.15			-0.15	
	Right edge	1g SAR			0.19			0.25	
		10g SAR			0.133			0.17	
		Deviation			0.03			0.03	
	Bottom edge	1g SAR			0.11			0.14	
		10g SAR			0.064			0.08	
		Deviation			0.07			0.07	



Table 14-23 LTE700-FDD12 #1 Head

LTE700-FDD12 #1 Head								
Ambient Temperature: 22.5				Liquid Temperature: 22.3				
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			23130	23095	23060	23130	23095	23060
			M	M	M	M	M	M
10MHz QPSK1RB	Tune-up		24.00	24.00	24.00	Scaling factor*		
	Measured Power [dBm]		22.91	22.91	22.85	1.28	1.29	1.30
	Left Cheek	1g SAR	0.119			0.15		
		10g SAR	0.098			0.13		
		Deviation	0.02			0.02		
	Left Tilt	1g SAR	0.076			0.10		
		10g SAR	0.061			0.08		
		Deviation	0.07			0.07		
	Right Cheek	1g SAR	0.202			0.26		
		10g SAR	0.162			0.21		
		Deviation	-0.09			-0.09		
	Right Tilt	1g SAR	0.111			0.14		
		10g SAR	0.094			0.12		
Deviation		0.09			0.09			
TRUE	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			23130	23095	23060	23130	23095	23060
			M	L	M	M	L	M
10MHz QPSK50% RB	Tune-up		23.00	23.00	23.00	Scaling factor*		
	Measured Power [dBm]		21.90	21.96	21.85	1.29	1.27	1.30
	Left Cheek	1g SAR		0.087			0.11	
		10g SAR		0.072			0.09	
		Deviation		0.12			0.12	
	Left Tilt	1g SAR		0.056			0.07	
		10g SAR		0.044			0.06	
		Deviation		0.08			0.08	
	Right Cheek	1g SAR		0.096			0.12	
		10g SAR		0.078			0.10	
		Deviation		-0.09			-0.09	
	Right Tilt	1g SAR		0.093			0.12	
		10g SAR		0.076			0.10	
Deviation			-0.07			-0.07		

Table 14-24 LTE700-FDD12 #1 Body

LTE700-FDD12 #1 Body								
Ambient Temperature: 22.5				Liquid Temperature: 22.3				
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			23130 M	23095 M	23060 M	23130 M	23095 M	23060 M
10MHz QPSK1RB	Tune-up		24.00	24.00	24.00	Scaling factor*		
	Measured Power [dBm]		22.91	22.91	22.85	1.28	1.29	1.30
	Front	1g SAR	0.22			0.28		
		10g SAR	0.166			0.21		
		Deviation	0.02			0.02		
	Rear	1g SAR	0.33			0.42		
		10g SAR	0.247			0.32		
		Deviation	-0.19			-0.19		
	Left edge	1g SAR	0.201			0.26		
		10g SAR	0.138			0.18		
		Deviation	0.14			0.14		
	Right edge	1g SAR	0.192			0.25		
		10g SAR	0.132			0.17		
		Deviation	0.07			0.07		
	Bottom edge	1g SAR	0.062			0.08		
10g SAR		0.035			0.04			
Deviation		-0.08			-0.08			
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			23130 M	23095 L	23060 M	23130	23095	23060
10MHz QPSK50% RB	Tune-up		23.00	23.00	23.00	Scaling factor*		
	Measured Power [dBm]		21.90	21.96	21.85	1.29	1.27	1.30
	Front	1g SAR		0.171			0.22	
		10g SAR		0.128			0.16	
		Deviation		0.04			0.04	
	Rear	1g SAR		0.247			0.31	
		10g SAR		0.184			0.23	
		Deviation		0.02			0.02	
	Left edge	1g SAR		0.128			0.16	
		10g SAR		0.087			0.11	
		Deviation		0.1			0.10	
	Right edge	1g SAR		0.163			0.21	
		10g SAR		0.113			0.14	
		Deviation		-0.06			-0.06	
	Bottom edge	1g SAR		0.05			0.06	
10g SAR			0.029			0.04		
Deviation			-0.09			-0.09		



Table 14-25 LTE750-FDD13 #1 Head

LTE750-FDD13 #1 Head								
Ambient Temperature: 22.5				Liquid Temperature: 22.3				
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			H	M	23230	H	M	23230
			H	H	M	H	H	M
10MHz QPSK1RB	Tune-up		24.00	24.00	24.00	Scaling factor*		
	Measured Power [dBm]		0.00	0.00	22.86	251.19	251.19	1.30
	Left Cheek	1g SAR			0.193			0.25
		10g SAR			0.143			0.19
		Deviation			0.1			0.10
	Left Tilt	1g SAR			0.158			0.21
		10g SAR			0.116			0.15
		Deviation			-0.06			-0.06
	Right Cheek	1g SAR			0.23			0.30
		10g SAR			0.185			0.24
		Deviation			0.12			0.12
	Right Tilt	1g SAR			0.155			0.20
		10g SAR			0.114			0.15
		Deviation			0.02			0.02
	TRUE	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]	
H				M	23230	H	M	23230
			H	H	M	H	H	M
10MHz QPSK50% RB	Tune-up		23.00	23.00	23.00	Scaling factor*		
	Measured Power [dBm]		0.00	0.00	21.86	199.53	199.53	1.30
	Left Cheek	1g SAR			0.15			0.20
		10g SAR			0.111			0.14
		Deviation			0.06			0.06
	Left Tilt	1g SAR			0.121			0.16
		10g SAR			0.089			0.12
		Deviation			-0.06			-0.06
	Right Cheek	1g SAR			0.175			0.23
		10g SAR			0.125			0.16
		Deviation			0.09			0.09
	Right Tilt	1g SAR			0.116			0.15
		10g SAR			0.085			0.11
		Deviation			0.06			0.06

Table 14-26 LTE750-FDD13 #1 Body

LTE750-FDD13 #1 Body								
Ambient Temperature: 22.5				Liquid Temperature: 22.3				
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			H	M	23230	H	M	23230
			H	H	M	H	H	M
10MHz QPSK1RB	Tune-up		24.00	24.00	24.00	Scaling factor*		
	Measured Power [dBm]		0.00	0.00	22.86	251.19	251.19	1.30
	Front	1g SAR			0.288			0.37
		10g SAR			0.223			0.29
		Deviation			0.02			0.02
	Rear	1g SAR			0.436			0.57
		10g SAR			0.34			0.44
		Deviation			0			0.00
	Left edge	1g SAR			0.249			0.32
		10g SAR			0.177			0.23
		Deviation			-0.06			-0.06
	Right edge	1g SAR			0.277			0.36
		10g SAR			0.198			0.26
		Deviation			0.09			0.09
	Bottom edge	1g SAR			0.089			0.12
		10g SAR			0.05			0.07
Deviation				0.1			0.10	
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			H	M	23230	H	M	23230
			H	H	M			
10MHz QPSK50% RB	Tune-up		23.00	23.00	23.00	Scaling factor*		
	Measured Power [dBm]		0.00	0.00	21.86	199.53	199.53	1.30
	Front	1g SAR			0.222			0.29
		10g SAR			0.172			0.22
		Deviation			-0.13			-0.13
	Rear	1g SAR			0.338			0.44
		10g SAR			0.263			0.34
		Deviation			-0.05			-0.05
	Left edge	1g SAR			0.191			0.25
		10g SAR			0.136			0.18
		Deviation			0.02			0.02
	Right edge	1g SAR			0.214			0.28
		10g SAR			0.153			0.20
		Deviation			0.07			0.07
	Bottom edge	1g SAR			0.074			0.10
		10g SAR			0.04			0.05
Deviation				0.04			0.04	



Table 14-27 LTE1900-FDD25 #1 Head

LTE1900-FDD25 #1 Head								
Ambient Temperature: 22.5				Liquid Temperature: 22.3				
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			26590	26365	26140	26590	26365	26140
			M	M	M	M	M	M
20MHz QPSK1RB	Tune-up		24.00	24.00	24.00	Scaling factor*		
	Measured Power [dBm]		23.14	23.10	22.98	1.22	1.23	1.27
	Left Cheek	1g SAR	0.541			0.66		
		10g SAR	0.33			0.40		
		Deviation	0.02			0.02		
	Left Tilt	1g SAR	0.381			0.46		
		10g SAR	0.233			0.28		
		Deviation	-0.07			-0.07		
	Right Cheek	1g SAR	0.492			0.60		
		10g SAR	0.328			0.40		
		Deviation	-0.05			-0.05		
	Right Tilt	1g SAR	0.408			0.50		
		10g SAR	0.24			0.29		
		Deviation	0.08			0.08		
TRUE	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			26590	26365	26140	26590	26365	26140
			M	M	H	M	M	H
20MHz QPSK50% RB	Tune-up		23.00	23.00	23.00	Scaling factor*		
	Measured Power [dBm]		22.00	22.01	21.95	1.26	1.26	1.27
	Left Cheek	1g SAR		0.524		0.66		
		10g SAR		0.323		0.41		
		Deviation		0.12		0.12		
	Left Tilt	1g SAR		0.262		0.33		
		10g SAR		0.163		0.20		
		Deviation		0.09		0.09		
	Right Cheek	1g SAR		0.456		0.57		
		10g SAR		0.298		0.37		
		Deviation		0.03		0.03		
	Right Tilt	1g SAR		0.332		0.42		
		10g SAR		0.206		0.26		
		Deviation		-0.15		-0.15		



Table 14-28 LTE1900-FDD25 #1 Body

LTE1900-FDD25 #1 Body								
Ambient Temperature: 22.5				Liquid Temperature: 22.3				
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			26590	26365	26140	26590	26365	26140
			M	M	M	M	M	M
20MHz QPSK1RB	Tune-up		24.00	24.00	24.00	Scaling factor*		
	Measured Power [dBm]		23.14	23.10	22.98	1.22	1.23	1.27
	Front	1g SAR	0.639			0.78		
		10g SAR	0.369			0.45		
		Deviation	0.01			0.01		
	Rear	1g SAR	0.809	0.752	0.708	0.99	0.92	0.90
		10g SAR	0.462	0.432	0.412	0.56	0.53	0.52
		Deviation	0	0.14	-0.09	0.00	0.14	-0.09
	Left edge	1g SAR	0.283			0.34		
		10g SAR	0.177			0.22		
		Deviation	0.05			0.05		
	Right edge	1g SAR	0.142			0.17		
		10g SAR	0.089			0.11		
		Deviation	0.13			0.13		
	Bottom edge	1g SAR	0.753	0.693	0.646	0.92	0.85	0.82
10g SAR		0.399	0.369	0.346	0.49	0.45	0.44	
Deviation		0.1	-0.08	0.02	0.10	-0.08	0.02	
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			26590	26365	26140	26590	26365	26140
			M	M	H			
20MHz QPSK50% RB	Tune-up		23.00	23.00	23.00	Scaling factor*		
	Measured Power [dBm]		22.00	22.01	21.95	1.26	1.26	1.27
	Front	1g SAR		0.471			0.59	
		10g SAR		0.279			0.35	
		Deviation		0.15			0.15	
	Rear	1g SAR		0.609			0.77	
		10g SAR		0.347			0.44	
		Deviation		0.03			0.03	
	Left edge	1g SAR		0.245			0.31	
		10g SAR		0.15			0.19	
		Deviation		-0.01			-0.01	
	Right edge	1g SAR		0.117			0.15	
		10g SAR		0.074			0.09	
		Deviation		0.09			0.09	
	Bottom edge	1g SAR		0.557			0.70	
10g SAR			0.296			0.37		
Deviation			0.11			0.11		
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			26590	26365	26140	26590	26365	26140
20MHz QPSK100% RB	Tune-up		23.00	23.00	23.00	Scaling factor*		
	Measured Power [dBm]		21.84	21.89	21.92	1.30	1.29	1.28
	Rear	1g SAR			0.503			0.64
		10g SAR			0.298			0.38
Deviation				0.03			0.03	
20MHz QPSK100% RB	Bottom edge	1g SAR			0.462			0.59
		10g SAR			0.249			0.32
		Deviation			-0.01			-0.01



Table 14-29 LTE850-FDD26 #1 Head

LTE850-FDD 26 #1 Head								
Ambient Temperature: 22.5				Liquid Temperature: 22.3				
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			26965	26865	26775	26965	26865	26775
			H	M	H	H	M	H
15 MHz QPSK1RB	Tune-up		24.00	24.00	24.00	Scaling factor*		
	Measured Power [dBm]		23.09	23.05	22.98	1.23	1.25	1.27
	LeftCheek	1g SAR	0.226			0.28		
		10g SAR	0.182			0.22		
		Deviation	0.1			0.10		
	LeftTilt	1g SAR	0.159			0.20		
		10g SAR	0.128			0.16		
		Deviation	-0.09			-0.09		
	RightCheek	1g SAR	0.281			0.35		
		10g SAR	0.214			0.26		
		Deviation	-0.08			-0.08		
	RightTilt	1g SAR	0.075			0.09		
10g SAR		0.061			0.08			
Deviation		0.02			0.02			
TRUE	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			26965	26865	26775	26965	26865	26775
			M	H	L	M	H	L
15 MHz QPSK50% RB	Tune-up		23.00	23.00	23.00	Scaling factor*		
	Measured Power [dBm]		22.12	22.06	22.03	1.23	1.24	1.25
	LeftCheek	1g SAR	0.182			0.22		
		10g SAR	0.146			0.18		
		Deviation	-0.1			-0.10		
	LeftTilt	1g SAR	0.108			0.13		
		10g SAR	0.088			0.11		
		Deviation	0.09			0.09		
	RightCheek	1g SAR	0.143			0.18		
		10g SAR	0.109			0.13		
		Deviation	0.13			0.13		
	RightTilt	1g SAR	0.064			0.08		
10g SAR		0.052			0.06			
Deviation		0.1			0.10			



Table 14-30 LTE850-FDD26 #1 Body

LTE850-FDD26 #1 Body								
Ambient Temperature: 22.5				Liquid Temperature: 22.3				
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			26965	26865	26775	26965	26865	26775
			H	M	H	H	M	H
15 MHz QPSK1RB	Tune-up		24.00	24.00	24.00	Scaling factor*		
	Measured Power [dBm]		23.09	23.05	22.98	1.23	1.25	1.27
	Front	1g SAR	0.264			0.33		
		10g SAR	0.203			0.25		
		Deviation	0.07			0.07		
	Rear	1g SAR	0.36			0.44		
		10g SAR	0.276			0.34		
		Deviation	-0.01			-0.01		
	Leftedge	1g SAR	0.19			0.23		
		10g SAR	0.133			0.16		
		Deviation	-0.04			-0.04		
	Rightedge	1g SAR	0.296			0.37		
		10g SAR	0.207			0.26		
		Deviation	0.1			0.10		
	Bottom edge	1g SAR	0.137			0.17		
10g SAR		0.077			0.10			
Deviation		0.06			0.06			
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			26965	26865	26775	26965	26865	26775
			M	H	L			
15 MHz QPSK50% RB	Tune-up		23.00	23.00	23.00	Scaling factor*		
	Measured Power [dBm]		22.12	22.06	22.03	1.23	1.24	1.25
	Front	1g SAR	0.198			0.24		
		10g SAR	0.153			0.19		
		Deviation	-0.09			-0.09		
	Rear	1g SAR	0.285			0.35		
		10g SAR	0.215			0.26		
		Deviation	0.03			0.03		
	Leftedge	1g SAR	0.15			0.18		
		10g SAR	0.104			0.13		
		Deviation	0.01			0.01		
	Rightedge	1g SAR	0.214			0.26		
		10g SAR	0.15			0.18		
		Deviation	0.12			0.12		
	Bottom edge	1g SAR	0.115			0.14		
10g SAR		0.064			0.08			
Deviation		-0.08			-0.08			



Table 14-31 LTE2500-TDD41 #1 Body PC3 AP ON

LTE2500-TDD41 #1 Normal AP ON Body												
Ambient Temperature:			22.5					Liquid Temperature:				23.3
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]					Reported SAR [W/kg]				
			41490	41055	40620	40185	39750	41490	41055	40620	40185	39750
			2680	2636.5	2593	2549.5	2506	2680	2636.5	2593	2549.5	2506
			M	M	M	M	M	M	M	M	M	
20 MHz QPSK1RB	Tune-up		22.50	22.50	22.50	22.50	22.50	Scaling factor*				
	Measured Power [dBm]		22.21	22.24	22.21	22.17	22.32	1.07	1.06	1.07	1.08	1.04
	Front	1g SAR					0.247					0.26
		10g SAR					0.125					0.13
		Deviation					0.13					0.13
	Rear	1g SAR					0.504					0.53
		10g SAR					0.243					0.25
		Deviation					0.04					0.04
	Leftedge	1g SAR					0.125					0.13
		10g SAR					0.068					0.07
		Deviation					0.05					0.05
	Rightedge	1g SAR					0.053					0.06
		10g SAR					0.031					0.03
		Deviation					0.13					0.13
	Bottom edge	1g SAR					0.601					0.63
10g SAR						0.276					0.29	
Deviation						-0.01					-0.01	
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]					Reported SAR [W/kg]				
			41490	41055	40620	40185	39750	41490	41055	40620	40185	39750
			2680	2636.5	2593	2549.5	2506	2680	2636.5	2593	2549.5	2506
			M	M	L	M	M	M	L	M	M	
20 MHz QPSK50% RB	Tune-up		21.50	21.50	21.50	21.50	21.50	Scaling factor*				
	Measured Power [dBm]		21.15	21.09	21.07	21.07	21.23	1.08	1.10	1.11	1.11	1.06
	Front	1g SAR					0.237					0.25
		10g SAR					0.12					0.13
		Deviation					-0.01					-0.01
	Rear	1g SAR					0.48					0.51
		10g SAR					0.231					0.25
		Deviation					-0.14					-0.14
	Leftedge	1g SAR					0.12					0.13
		10g SAR					0.065					0.07
		Deviation					0.06					0.06
	Rightedge	1g SAR					0.049					0.05
		10g SAR					0.024					0.03
		Deviation					-0.1					-0.10
	Bottom edge	1g SAR					0.575					0.61
10g SAR						0.265					0.28	
Deviation						-0.05					-0.05	



Table 14-32 LTE2500-TDD41 #2 Head PC3 AP OFF

LTE2500-TDD41 #2 Normal AP OFF Head												
Ambient Temperature: 22.5						Liquid Temperature: 23.3						
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]					Reported SAR [W/kg]				
			41490	41055	40620	40185	39750	41490	41055	40620	40185	39750
			2680	2636.5	2593	2549.5	2506	2680	2636.5	2593	2549.5	2506
			M	M	M	M	M	M	M	M	M	
20 MHz QPSK1RB	Tune-up		23.50	23.50	23.50	23.50	23.50	Scaling factor*				
	Measured Power [dBm]		23.21	23.19	23.09	23.19	23.29	1.07	1.07	1.10	1.07	1.05
	LeftCheek	1g SAR					0.168					0.18
		10g SAR					0.09					0.09
		Deviation					0.14					0.14
	LeftTilt	1g SAR					0.057					0.06
		10g SAR					0.033					0.03
		Deviation					-0.12					-0.12
	RightCheek	1g SAR					0.087					0.09
		10g SAR					0.051					0.05
		Deviation					0.11					0.11
	RightTilt	1g SAR					0.087					0.09
		10g SAR					0.048					0.05
		Deviation					0.07					0.07
	TRUE	Device orientation	SAR measurement	Measured SAR [W/kg]					Reported SAR [W/kg]			
41490				41055	40620	40185	39750	41490	41055	40620	40185	39750
2680				2636.5	2593	2549.5	2506	2680	2636.5	2593	2549.5	2506
			M	M	M	L	H	M	M	M	L	H
20 MHz QPSK50% RB	Tune-up		22.50	22.50	22.50	22.50	22.50	Scaling factor*				
	Measured Power [dBm]		22.00	21.98	21.91	21.93	22.06	1.12	1.13	1.14	1.14	1.11
	LeftCheek	1g SAR					0.131					0.14
		10g SAR					0.07					0.08
		Deviation					0.04					0.04
	LeftTilt	1g SAR					0.049					0.05
		10g SAR					0.027					0.03
		Deviation					0.12					0.12
	RightCheek	1g SAR					0.065					0.07
		10g SAR					0.039					0.04
		Deviation					0.05					0.05
	RightTilt	1g SAR					0.065					0.07
		10g SAR					0.036					0.04
		Deviation					-0.11					-0.11

Table 14-33 LTE2500-TDD41 #2 Body PC3 AP OFF

LTE2500-TDD41 #2 Normal AP OFF Body												
Ambient Temperature: 22.5						Liquid Temperature: 23.3						
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]					Reported SAR [W/kg]				
			41490	41055	40620	40185	39750	41490	41055	40620	40185	39750
			2680	2636.5	2593	2549.5	2506	2680	2636.5	2593	2549.5	2506
			M	M	M	L	H	M	M	M	L	H
20 MHz QPSK1RB	Tune-up		23.50	23.50	23.50	23.50	23.50	Scaling factor*				
	Measured Power [dBm]		23.21	23.19	23.09	23.19	23.29	1.07	1.07	1.10	1.07	1.05
	Front 15mm	1g SAR					0.128					0.13
		10g SAR					0.067					0.07
		Deviation					0.04					0.04
	Rear 15mm	1g SAR					0.233					0.24
		10g SAR					0.116					0.12
		Deviation					0.02					0.02
	Mode	Device orientation	SAR measurement	Measured SAR [W/kg]					Reported SAR [W/kg]			
41490				41055	40620	40185	39750	41490	41055	40620	40185	39750
2680				2636.5	2593	2549.5	2506	2680	2636.5	2593	2549.5	2506
			M	M	M	L	H	M	M	M	L	H
20 MHz QPSK50% RB	Tune-up		22.50	22.50	22.50	22.50	22.50	Scaling factor*				
	Measured Power [dBm]		22.00	21.98	21.91	21.93	22.06	1.12	1.13	1.14	1.14	1.11
	Front 15mm	1g SAR					0.123					0.14
		10g SAR					0.064					0.07
		Deviation					-0.09					-0.09
	Rear 15mm	1g SAR					0.224					0.25
		10g SAR					0.111					0.12
		Deviation					0.04					0.04



Table 14-34 LTE2500-TDD41 #3 Body PC2 AP ON

LTE2500-TDD41 #3 HPUE AP ON Body												
Ambient Temperature:		22.5					Liquid Temperature:					23.3
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]					Reported SAR [W/kg]				
			41490	41055	40620	40185	39750	41490	41055	40620	40185	39750
			2680	2636.5	2593	2549.5	2506	2680	2636.5	2593	2549.5	2506
			M	M	M	M	M	M	M	M	M	
20MHz QPSK1RB	Tune-up		25.50	25.50	25.50	25.50	25.50	Scaling factor*				
	Measured Power [dBm]		25.18	25.38	25.12	25.10	25.38	1.08	1.03	1.09	1.10	1.03
	Front	1g SAR					0.363					0.37
		10g SAR					0.174					0.18
		Deviation					-0.02					-0.02
	Rear	1g SAR					0.743					0.76
		10g SAR					0.332					0.34
		Deviation					-0.03					-0.03
	Leftedge	1g SAR					0.182					0.19
		10g SAR					0.099					0.10
		Deviation					0.14					0.14
	Rightedge	1g SAR					0.071					0.07
		10g SAR					0.043					0.04
		Deviation					-0.03					-0.03
	Bottom edge	1g SAR	1.03	1.16	1.06	0.96	0.877	1.11	1.19	1.16	1.05	0.90
10g SAR		0.464	0.523	0.48	0.435	0.399	0.50	0.54	0.52	0.48	0.41	
Deviation		-0.1	-0.15	-0.01	-0.04	0.01	-0.10	-0.15	-0.01	-0.04	0.01	
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]					Reported SAR [W/kg]				
			41490	41055	40620	40185	39750	41490	41055	40620	40185	39750
			2680	2636.5	2593	2549.5	2506	2680	2636.5	2593	2549.5	2506
			M	M	M	M	H	M	M	M	H	
20MHz QPSK50% RB	Tune-up		24.50	24.50	24.50	24.50	24.50	Scaling factor*				
	Measured Power [dBm]		24.05	24.01	23.95	23.95	24.12	1.11	1.12	1.13	1.13	1.09
	Front	1g SAR					0.279					0.30
		10g SAR					0.133					0.15
		Deviation					-0.11					-0.11
	Rear	1g SAR					0.57					0.62
		10g SAR					0.254					0.28
		Deviation					-0.11					-0.11
	Leftedge	1g SAR					0.139					0.15
		10g SAR					0.076					0.08
		Deviation					-0.02					-0.02
	Rightedge	1g SAR					0.05					0.05
		10g SAR					0.03					0.03
		Deviation					0.01					0.01
	Bottom edge	1g SAR					0.675					0.74
10g SAR						0.308					0.34	
Deviation						-0.01					-0.01	
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]					Reported SAR [W/kg]				
			41490	41055	40620	40185	39750	41490	41055	40620	40185	39750
			2680	2636.5	2593	2549.5	2506	2680	2636.5	2593	2549.5	2506
			M	M	M	M	M	M	M	M	M	
20MHz QPSK100% RB	Tune-up		24.50	24.50	24.50	24.50	24.50	Scaling factor*				
	Measured Power [dBm]		24.13	24.03	23.94	23.90	24.07	1.09	1.11	1.14	1.15	1.10
	Bottom edge	1g SAR	0.888					0.97				
		10g SAR	0.391					0.43				
Deviation		-0.08					-0.08					

LTE2500-TDD41 #3 HPUE AP ON Body												
Ambient Temperature:		22.5					Liquid Temperature:					23.3
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]					Reported SAR [W/kg]				
			41490	41055	40620	40185	39750	41490	41055	40620	40185	39750
			2680	2636.5	2593	2549.5	2506	2680	2636.5	2593	2549.5	2506
			M	M	M	M	M	M	M	M	M	
20MHz QPSK1RB	Tune-up		25.50	25.50	25.50	25.50	25.50	Scaling factor*				
	Measured Power [dBm]		25.18	25.38	25.12	25.10	25.38	1.08	1.03	1.09	1.10	1.03
	Bottom edge	10g SAR		0.952					0.98			
Deviation			0.06					0.06				

Note: According to KDB 648474 D04, when hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg.



Table 14-35 LTE2500-TDD41 #4 Head PC2 AP OFF

LTE2500-TDD41 #4 HPUE AP OFF Head												
Ambient Temperature:			22.5					Liquid Temperature:				23.3
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]					Reported SAR [W/kg]				
			41490	41055	40620	40185	39750	41490	41055	40620	40185	39750
			2680	2636.5	2593	2549.5	2506	2680	2636.5	2593	2549.5	2506
			M	M	M	M	M	M	M	M	M	
20M Hz QPSK1RB	Tune-up		26.50	26.50	26.50	26.50	26.50	Scaling factor*				
	Measured Power [dBm]		26.17	26.23	26.15	26.14	26.34	1.08	1.06	1.08	1.09	1.04
	LeftCheek	1g SAR					0.191					0.20
		10g SAR					0.102					0.11
		Deviation					0.08					0.08
	LeftTilt	1g SAR					0.07					0.07
		10g SAR					0.04					0.04
		Deviation					0.04					0.04
	RightCheek	1g SAR					0.092					0.10
		10g SAR					0.053					0.05
		Deviation					-0.03					-0.03
	RightTilt	1g SAR					0.093					0.10
		10g SAR					0.051					0.05
		Deviation					-0.03					-0.03
	TRUE	Device orientation	SAR measurement	Measured SAR [W/kg]					Reported SAR [W/kg]			
41490				41055	40620	40185	39750	41490	41055	40620	40185	39750
2680				2636.5	2593	2549.5	2506	2680	2636.5	2593	2549.5	2506
			M	M	M	M	H	M	M	M	H	
20M Hz QPSK50% RB	Tune-up		25.50	25.50	25.50	25.50	25.50	Scaling factor*				
	Measured Power [dBm]		25.03	25.02	24.97	25.00	25.13	1.11	1.12	1.13	1.12	1.09
	LeftCheek	1g SAR					0.146					0.16
		10g SAR					0.078					0.08
		Deviation					-0.01					-0.01
	LeftTilt	1g SAR					0.057					0.06
		10g SAR					0.032					0.03
		Deviation					0.11					0.11
	RightCheek	1g SAR					0.075					0.08
		10g SAR					0.043					0.05
		Deviation					-0.06					-0.06
	RightTilt	1g SAR					0.073					0.08
		10g SAR					0.039					0.04
		Deviation					0.12					0.12

Table 14-36 LTE2500-TDD41 #4 Body PC2 AP OFF

LTE2500-TDD41 #4 HPUE AP OFF Body													
Ambient Temperature:			22.5					Liquid Temperature:				23.3	
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]					Reported SAR [W/kg]					
			41490	41055	40620	40185	39750	41490	41055	40620	40185	39750	
			2680	2636.5	2593	2549.5	2506	2680	2636.5	2593	2549.5	2506	
			M	M	M	M	M	M	M	M	M		
20M Hz QPSK1RB	Tune-up		26.50	26.50	26.50	26.50	26.50	Scaling factor*					
	Measured Power [dBm]		26.17	26.23	26.15	26.14	26.34	1.08	1.06	1.08	1.09	1.04	
	Front 15m	1g SAR					0.195					0.20	
		10g SAR					0.105					0.11	
		Deviation					0.02					0.02	
	Rear 15m	1g SAR					0.294					0.30	
		10g SAR					0.15					0.16	
		Deviation					0.06					0.06	
	Mode	Device orientation	SAR measurement	Measured SAR [W/kg]					Reported SAR [W/kg]				
				41490	41055	40620	40185	39750	41490	41055	40620	40185	39750
				2680	2636.5	2593	2549.5	2506	2680	2636.5	2593	2549.5	2506
				M	M	M	M	H	M	M	M	H	
	20M Hz QPSK50% RB	Tune-up		25.50	25.50	25.50	25.50	25.50	Scaling factor*				
		Measured Power [dBm]		25.03	25.02	24.97	25.00	25.13	1.11	1.12	1.13	1.12	1.09
		Front 15m	1g SAR					0.163					0.18
10g SAR							0.087					0.09	
Deviation							-0.11					-0.11	
Rear 15m		1g SAR					0.283					0.31	
		10g SAR					0.144					0.16	
		Deviation					0.05					0.05	



CA UP LINK SPOT CHECK

SAR measurement is not required for the 16QAM and 64QAM. When primary mode and the adjusted SAR is ≤ 1.2 W/kg and secondary mode is $\leq 1/4$ dB higher than the primary mode.

Frequency (MHz) PCC	Channel Number PCC	Frequency (MHz) SCC	Channel Number SCC	Test setup	EUT Measured Power (dBm)	Tune up (dBm)	Measured SAR 1g (W/kg)	Calculated SAR 1g (W/kg)	Measured SAR 10g (W/kg)	Calculated SAR 10g (W/kg)	Power Drift
2506	39750	2525.8	39948	1RB-Middle	23.25	23.5	0.166	0.18	0.086	0.09	0.14
2506	39750	2525.8	39948	1RB-Middle	26.25	26.5	0.193	0.20	0.1	0.11	-0.02
2506	39750	2525.8	39948	1RB-Middle Bottom Edge 10mm	22.31	22.5	0.598	0.62	0.271	0.28	-0.18
2506	39750	2525.8	39948	1RB-Middle Rear 15mm	23.25	23.5	0.231	0.24	0.135	0.14	0.03
2660.2	41292	2680	41490	1RB-Middle Bottom Edge 10mm	25.24	25.5	1.01	1.07	0.463	0.49	0.06
2506	39750	2525.8	39948	1RB-Middle Rear 15mm	26.25	26.5	0.291	0.31	0.156	0.17	-0.03



Table 14-37 LTE700-FDD71 #1 Head

LTE700-FDD71 #1 Head								
Ambient Temperature: 22.5				Liquid Temperature: 22.3				
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			133372	133297	133222	133372	133297	133222
			M	H	M	M	H	M
20MHz QPSK1RB	Tune-up		24.50	24.50	24.50	Scaling factor*		
	Measured Power [dBm]		22.98	22.85	23.01	1.42	1.46	1.41
	Left Cheek	1g SAR			0.128			0.18
		10g SAR			0.108			0.15
		Deviation			-0.13			-0.13
	Left Tilt	1g SAR			0.087			0.12
		10g SAR			0.06			0.08
		Deviation			-0.05			-0.05
	Right Cheek	1g SAR			0.137			0.19
		10g SAR			0.112			0.16
		Deviation			0.08			0.08
	Right Tilt	1g SAR			0.078			0.11
		10g SAR			0.068			0.10
		Deviation			0.14			0.14
	TRUE	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]	
133372				133297	133222	133372	133297	133222
			M	L	H	M	L	H
20MHz QPSK50% RB	Tune-up		23.50	23.50	23.50	Scaling factor*		
	Measured Power [dBm]		21.94	21.94	21.96	1.43	1.43	1.43
	Left Cheek	1g SAR			0.116			0.17
		10g SAR			0.097			0.14
		Deviation			0.12			0.12
	Left Tilt	1g SAR			0.082			0.12
		10g SAR			0.055			0.08
		Deviation			0.12			0.12
	Right Cheek	1g SAR			0.091			0.13
		10g SAR			0.074			0.11
		Deviation			-0.11			-0.11
	Right Tilt	1g SAR			0.067			0.10
		10g SAR			0.056			0.08
		Deviation			0.07			0.07

Table 14-38 LTE700-FDD71 #1 Body

LTE700-FDD71 #1 Body								
Ambient Temperature: 22.5				Liquid Temperature: 22.3				
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			133372 M	133297 H	133222 M	133372 M	133297 H	133222 M
20MHz QPSK1RB	Tune-up		24.50	24.50	24.50	Scaling factor*		
	Measured Power [dBm]		22.98	22.85	23.01	1.42	1.46	1.41
	Front	1g SAR			0.161			0.23
		10g SAR			0.123			0.17
		Deviation			0.01			0.01
	Rear	1g SAR			0.244			0.34
		10g SAR			0.183			0.26
		Deviation			-0.06			-0.06
	Left edge	1g SAR			0.165			0.23
		10g SAR			0.109			0.15
		Deviation			0.11			0.11
	Right edge	1g SAR			0.146			0.21
		10g SAR			0.1			0.14
		Deviation			0.08			0.08
	Bottom edge	1g SAR			0.054			0.08
10g SAR				0.028			0.04	
Deviation				-0.05			-0.05	
Mode	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			133372 M	133297 L	133222 H	133372	133297	133222
20MHz QPSK50% RB	Tune-up		23.50	23.50	23.50	Scaling factor*		
	Measured Power [dBm]		21.94	21.94	21.96	1.43	1.43	1.43
	Front	1g SAR			0.144			0.21
		10g SAR			0.109			0.16
		Deviation			0.03			0.03
	Rear	1g SAR			0.23			0.33
		10g SAR			0.174			0.25
		Deviation			0.06			0.06
	Left edge	1g SAR			0.146			0.21
		10g SAR			0.097			0.14
		Deviation			-0.13			-0.13
	Right edge	1g SAR			0.129			0.18
		10g SAR			0.088			0.13
		Deviation			0.15			0.15
	Bottom edge	1g SAR			0.049			0.07
10g SAR				0.025			0.04	
Deviation				0.09			0.09	



14.2 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	190	836.6 MHz	34	32.66	Left Cheek	0.187	0.241	0.25	0.33	-0.06	Fig A.1
GSM850	251	848.8 MHz	32	31.21	Rear	0.392	0.497	0.47	0.60	-0.08	Fig A.2
PCS1900	512	1850.2 MHz	30.5	29.40	Left Cheek	0.209	0.338	0.27	0.44	0.12	Fig A.3
PCS1900	512	1850.2 MHz	28.5	28.11	Rear	0.47	0.781	0.51	0.85	-0.09	Fig A.4
WCDMA1900-B1I	9400	1880 MHz	24	22.83	Left Cheek	0.319	0.519	0.42	0.68	0.17	Fig A.5
WCDMA1900-B1I	9400	1880 MHz	24	22.83	Rear	0.444	0.726	0.58	0.95	0	Fig A.6
WCDMA1700-B1V	1513	1752.6 MHz	24	22.95	Left Cheek	0.287	0.453	0.37	0.58	0.11	Fig A.7
WCDMA1700-B1V	1513	1752.6 MHz	24	22.95	Rear	0.496	0.826	0.63	1.05	0.03	Fig A.8
WCDMA850-BV	4233	846.6 MHz	24.5	23.17	Right Cheek	0.224	0.297	0.30	0.40	-0.17	Fig A.9
WCDMA850-BV	4182	835.4 MHz	24.5	23.10	Rear	0.261	0.331	0.36	0.46	0.06	Fig A.10
CDMA800-BC0	777	848.3 MHz	25.5	23.72	Right Cheek	0.246	0.321	0.37	0.48	-0.02	Fig A.11
CDMA800-BC0	384	836.5 MHz	25.5	23.79	Rear	0.331	0.434	0.49	0.64	0.04	Fig A.12
CDMA1900-BC1	600	1880 MHz	24.5	23.93	Left Cheek	0.202	0.329	0.23	0.38	0.08	Fig A.13
CDMA1900-BC1	1175	1908.75 MHz	24.5	23.97	Rear	0.678	1.19	0.77	1.34	-0.03	Fig A.14
CDMA800-BC10	684	823.1 MHz	25.5	23.88	Right Cheek	0.235	0.306	0.34	0.44	-0.09	Fig A.15
CDMA800-BC10	580	820.5 MHz	25.5	23.86	Rear	0.339	0.437	0.49	0.64	0.07	Fig A.16
LTE1900-FDD2	19100	1900 MHz	23.5	23.19	Left Cheek	0.333	0.545	0.36	0.59	0.05	Fig A.17
LTE1900-FDD2	19100	1900 MHz	23.5	23.19	Rear	0.436	0.737	0.47	0.79	-0.09	Fig A.18
LTE1700-FDD4	20050	1720 MHz	24	22.82	Left Cheek	0.238	0.371	0.31	0.49	0.06	Fig A.19
LTE1700-FDD4	20300	1745 MHz	24	22.76	Rear	0.419	0.687	0.56	0.91	0.02	Fig A.20
LTE850-FDD5	20600	844 MHz	24	22.90	Left Cheek	0.195	0.247	0.25	0.32	-0.03	Fig A.21
LTE850-FDD5	20600	844 MHz	24	22.90	Rear	0.292	0.38	0.38	0.49	-0.03	Fig A.22
LTE700-FDD12	23130	711 MHz	24	22.91	Right Cheek	0.162	0.202	0.21	0.26	-0.09	Fig A.23
LTE700-FDD12	23130	711 MHz	24	22.91	Rear	0.247	0.33	0.32	0.42	-0.19	Fig A.24
LTE750-FDD13	23230	782 MHz	24	22.86	Right Cheek	0.185	0.23	0.24	0.30	0.12	Fig A.25
LTE750-FDD13	23230	782 MHz	24	22.86	Rear	0.34	0.436	0.44	0.57	0	Fig A.26
LTE1900-FDD25	26590	1905 MHz	24	23.14	Left Cheek	0.33	0.541	0.40	0.66	0.02	Fig A.27
LTE1900-FDD25	26590	1905 MHz	24	23.14	Rear	0.462	0.809	0.56	0.99	0	Fig A.28
LTE850-FDD26	26965	841.5 MHz	24	23.09	Right Cheek	0.214	0.281	0.26	0.35	-0.08	Fig A.29
LTE850-FDD26	26965	841.5 MHz	24	23.09	Rear	0.276	0.36	0.34	0.44	-0.01	Fig A.30
LTE2500-TDD41	39750	2506 MHz	22.5	22.32	Bottom edge	0.276	0.601	0.29	0.63	-0.01	Fig A.31
LTE2500-TDD41	39750	2506 MHz	23.5	23.50	Left Cheek	0.09	0.168	0.09	0.18	0.14	Fig A.32
LTE2500-TDD41	39750	2506 MHz	23.5	23.29	Rear15mm	0.111	0.224	0.12	0.25	0.04	Fig A.33
LTE2500-TDD41	41055	2636.5 MHz	25.5	25.38	Bottom edge	0.523	1.16	0.54	1.19	-0.15	Fig A.34
LTE2500-TDD41	39750	2506 MHz	26.5	26.50	Left Cheek	0.102	0.191	0.11	0.20	0.08	Fig A.35
LTE2500-TDD41	39750	2506 MHz	26.5	26.34	Rear15mm	0.144	0.283	0.16	0.31	0.05	Fig A.36
LTE700-FDD71	133222	2506 MHz	24.5	23.01	Right Cheek	0.112	0.137	0.16	0.19	0.08	Fig A.37
LTE700-FDD71	133222	2506 MHz	24.5	23.01	Rear	0.183	0.244	0.26	0.34	-0.06	Fig A.38



14.3 WLAN Evaluation

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

Table 14-39 WLAN2450 #1 Receiver OFF Body Fast SAR

WLAN2450 #1 Normal Body Fast SAR								
Ambient Temperature: 22.5				Liquid Temperature: 22.3				
Rate	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			11 2462 MHz	6 2437 MHz	1 2412 MHz	11	6	1
802.11b 1Mbps	Tune up		20	20	20	Scaling factor*		
	Sub Average Power [dBm]		19.41	19.57	19.49	1.15	1.10	1.12
802.11b 1Mbps	Front	1g Fast SAR		0.19			0.21	
		10g SAR		0.107			0.12	
		Deviation		-0.06			-0.06	
802.11b 1Mbps	Rear	1g Fast SAR		0.345			0.38	
		10g SAR		0.178			0.20	
		Deviation		0.01			0.01	
802.11b 1Mbps	Right edge	1g Fast SAR		0.236			0.26	
		10g SAR		0.121			0.13	
		Deviation		0.08			0.08	
802.11b 1Mbps	Top edge	1g Fast SAR		0.091			0.10	
		10g SAR		0.048			0.05	
		Deviation		-0.09			-0.09	

Table 14-40 WLAN2450 #1 Receiver OFF Body Full SAR

WLAN2450 #1 Normal Body Full SAR								
Ambient Temperature: 22.5				Liquid Temperature: 22.3				
Rate	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			11 2462 MHz	6 2437 MHz	1 2412 MHz	11	6	1
802.11b 1Mbps	Tune up		20	20	20	Scaling factor*		
	Sub Average Power [dBm]		19.41	19.57	19.49	1.15	1.10	1.12
	Rear	1g Full SAR		0.334			0.37	
		10g SAR		0.175			0.19	
		Deviation		0.01			0.01	

Table 14-41 WLAN2450 #2 Receiver ON Head Fast SAR

WLAN2450 #2 Low Power Head Fast SAR								
Ambient Temperature: 22.5				Liquid Temperature: 22.3				
Rate	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			11	6	1	11	6	1
			2462 MHz	2437 MHz	2412 MHz			
802.11b 1Mbps	Tune up		17	17	17	Scaling factor*		
	Slot Average Power [dBm]		16.36	16.49	16.39	1.16	1.12	1.15
	Left Cheek	1g Fast SAR		0.785	0.826		0.88	0.95
		10g SAR		0.403	0.422		0.45	0.49
		Deviation		0.06	-0.06		0.06	-0.06
	Left Tilt	1g Fast SAR		0.463			0.52	
		10g SAR		0.246			0.28	
		Deviation		-0.03			-0.03	
	Right Cheek	1g Fast SAR		0.249			0.28	
		10g SAR		0.138			0.16	
		Deviation		-0.03			-0.03	
	Right Tilt	1g Fast SAR		0.185			0.21	
		10g SAR		0.103			0.12	
		Deviation		0.1			0.10	

Table 14-42 WLAN2450 #2 Receiver ON Head Full SAR

WLAN2450 #2 Low Power Head Full SAR								
Ambient Temperature: 22.5				Liquid Temperature: 22.3				
Rate	Device orientation	SAR measurement	Measured SAR [W/kg]			Reported SAR [W/kg]		
			11	6	1	11	6	1
			2462 MHz	2437 MHz	2412 MHz			
802.11b 1Mbps	Tune up		17	17	17	Scaling factor*		
	Slot Average Power [dBm]		16.36	16.49	16.39	1.16	1.12	1.15
	Left Cheek	1g Full SAR		0.801	0.795		0.90	0.91
		10g SAR		0.393	0.388		0.44	0.45
		Deviation		0.06	-0.06		0.06	-0.06
	Left Tilt	1g Full SAR		0.434			0.49	
		10g SAR		0.232			0.26	
		Deviation		-0.03			-0.03	

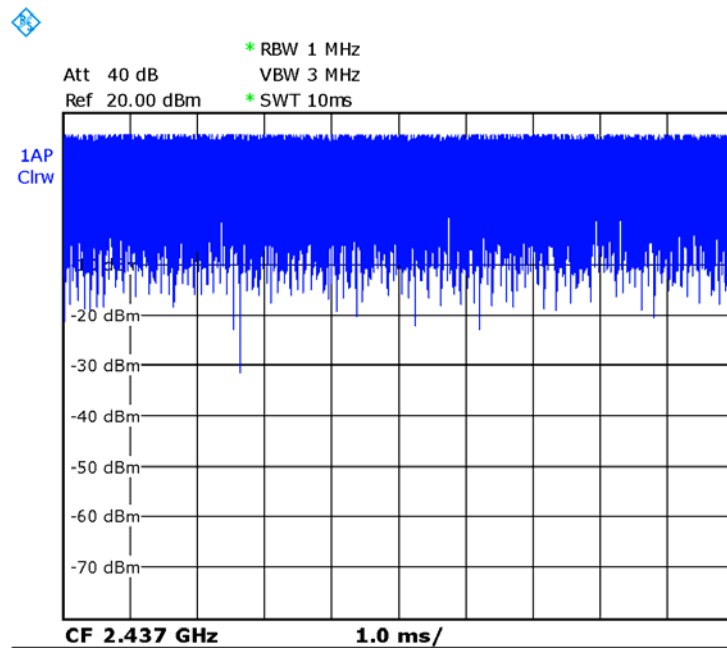
SAR is not required for OFDM because the 802.11b adjusted SAR \leq 1.2 W/kg.

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

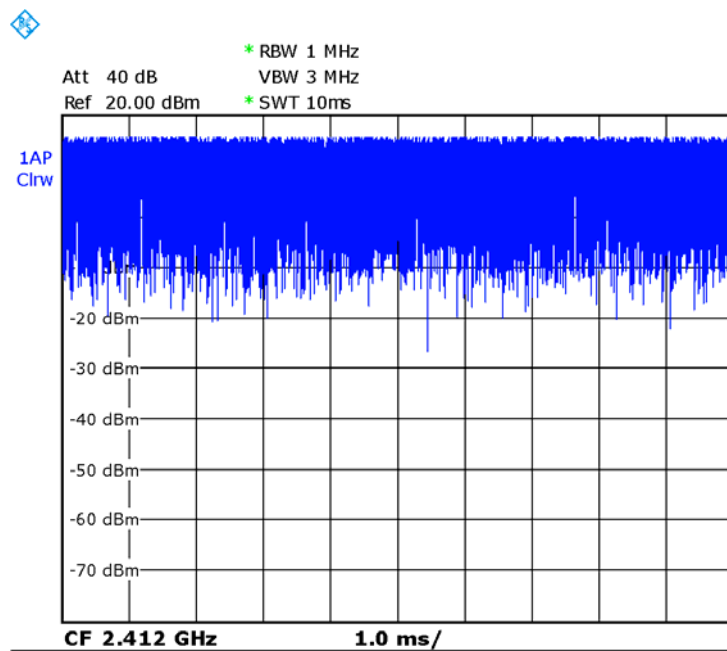
Frequency		Test Position	Actual duty factor	maximum duty factor	Reported SAR (g)/W/kg	Scaled reported SAR (g)/W/kg	Figure
MHz	Ch.						
2437	6	Bottom edge	100.00%	100%	0.37	0.37	Fig A.39

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		Test Position	Actual duty factor	maximum duty factor	Reported SAR (g)/W/kg	Scaled reported SAR (g)/W/kg	Figure
MHz	Ch.						
2412 MHz	1	Left Cheek	100.00%	100%	0.91	0.91	Fig A.40



Picture 14.1 Duty factor plot CH6



Picture 14.2 Duty factor plot CH1

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	CH	Freq	Test Poisition	Original SAR (W/kg)	First Repeated SAR(W/kg)	The Ratio
WCDMA1700-BIV	1513	1752.6 MHz	Rear	0.826	0.819	1.01
CDMA1900-BC1	1175	1908.75 MH	Rear	1.19	1.16	1.03
LTE1900-FDD25	26590	1905 MHz	Rear	0.809	0.801	1.01
LTE2500-TDD41	41055	2636.5 MHz	Bottom edge	1.16	1.12	1.04
WLAN2450	6	2437 MHz	Left Cheek	0.801	0.795	1.01

16 Measurement Uncertainty

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

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

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

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

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

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

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

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

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

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

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

16	Device holder uncertainty	A	3.4	N	1	1	1	3.4	3.4	5
17	Drift of output power	B	5.0	R	$\sqrt{3}$	1	1	2.9	2.9	∞
Phantom and set-up										
18	Phantom uncertainty	B	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	∞
19	Liquid conductivity (target)	B	5.0	R	$\sqrt{3}$	0.64	0.43	1.8	1.2	∞
20	Liquid conductivity (meas.)	A	2.06	N	1	0.64	0.43	1.32	0.89	43
21	Liquid permittivity (target)	B	5.0	R	$\sqrt{3}$	0.6	0.49	1.7	1.4	∞
22	Liquid permittivity (meas.)	A	1.6	N	1	0.6	0.49	1.0	0.8	521
Combined standard uncertainty		$u_c = \sqrt{\sum_{i=1}^{22} c_i^2 u_i^2}$						13.5	13.4	257
Expanded uncertainty (confidence interval of 95 %)		$u_e = 2u_c$						27.0	26.8	

17 MAIN TEST INSTRUMENTS

Table 17.1: List of Main Instruments

No.	Name	Type	Serial Number	Calibration Date	Valid Period
01	Network analyzer	E5071C	MY46110673	January 24, 2018	One year
02	Power meter	NRVD	102196	March 07, 2018	One year
03	Power sensor	NRV-Z5	100596		
04	Signal Generator	E4438C	MY49071430	January 2, 2018	One Year
05	Amplifier	60S1G4	0331848	No Calibration Requested	
06	BTS	E5515C	MY50263375	January 23, 2018	BTS
07	E-field Probe	SPEAG EX3DV4	7514	August 27, 2018	One year
08	DAE	SPEAG DAE4	1525	September 18, 2018	One year
09	Dipole Validation Kit	SPEAG D750V3	1017	July 19, 2017	Three years
10	Dipole Validation Kit	SPEAG D835V2	4d069	July 19, 2017	Three years
11	Dipole Validation Kit	SPEAG D1750V2	1003	July 21, 2017	Three years
12	Dipole Validation Kit	SPEAG D1900V2	5d101	July 26, 2017	Three years
13	Dipole Validation Kit	SPEAG D2450V2	853	July 21, 2017	Three years
14	Dipole Validation Kit	SPEAG D2600V2	1012	July 21, 2017	Three years

END OF REPORT BODY

ANNEX A Graph Results

GSM850_CH190 Left Cheek

Date: 12/2/2018

Electronics: DAE4 Sn1525

Medium: head 835 MHz

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.89$ mho/m; $\epsilon_r = 40.69$; $\rho = 1000$ kg/m³

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

Communication System: GSM850 836.6 MHz Duty Cycle: 1:8.3

Probe: EX3DV4 – SN7514 ConvF(9.09,9.09,9.09)

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

Maximum value of SAR (interpolated) = 0.256 W/kg

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

Reference Value = 6.216 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.317 W/kg

SAR(1 g) = 0.241 W/kg; SAR(10 g) = 0.187 W/kg

Maximum value of SAR (measured) = 0.291 W/kg

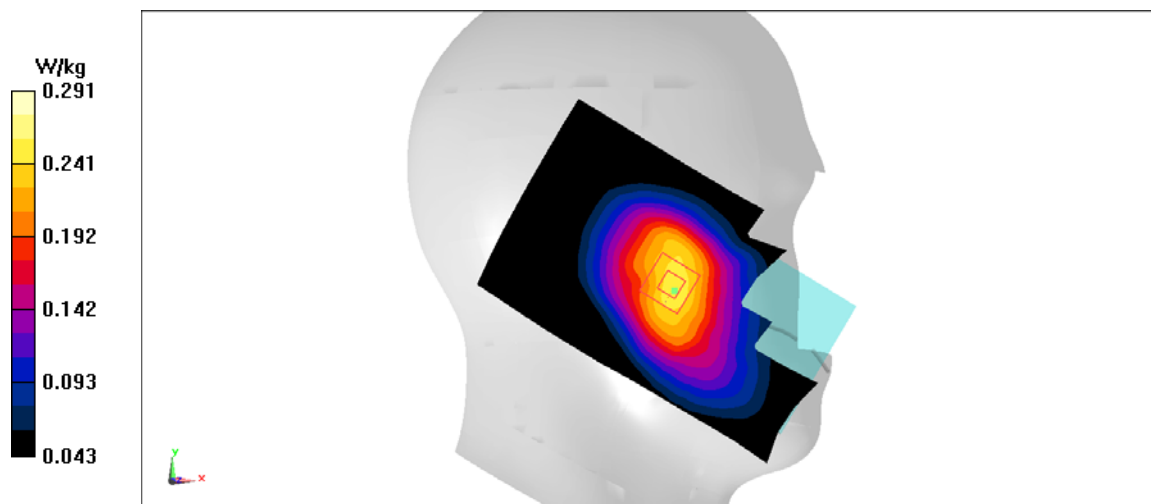


Fig A.1

GSM850_CH251 Rear

Date: 12/2/2018

Electronics: DAE4 Sn1525

Medium: body 835 MHz

Medium parameters used: $f = 848.8$ MHz; $\sigma = 0.968$ mho/m; $\epsilon_r = 54.41$; $\rho = 1000$ kg/m³

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

Communication System: GSM850 848.8 MHz Duty Cycle: 1:4

Probe: EX3DV4 – SN7514 ConvF(9.47,9.47,9.47)

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

Maximum value of SAR (interpolated) = 0.542 W/kg

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

Reference Value = 23.65 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.615 W/kg

SAR(1 g) = 0.497 W/kg; SAR(10 g) = 0.392 W/kg

Maximum value of SAR (measured) = 0.519 W/kg

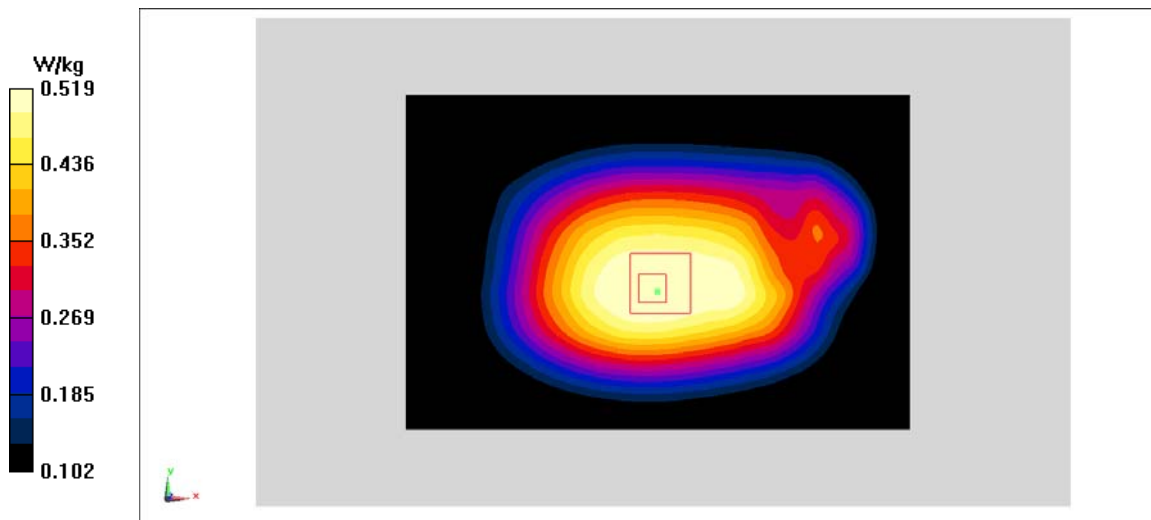


Fig A.2