

Table: Uncertainty Budget for DASY4 V4.7 Build 53 – Validation

a	b	c	D	e= f(d,k)	f	g	h=cxf/e	i=cxg/e	k
Uncertainty Component	Sec.	Tol. (6%)	Prob. Dist.	Div.	C _i (1g)	C _i (10g)	1g u _i (6%)	10g u _i (6%)	V _i
Measurement System									
Probe Calibration (k=1) (standard calibration)	E.2.1	4.8	N	1	1	1	4.8	4.8	∞
Axial Isotropy	E.2.2	4.7	R	1.73	1	1	2.7	2.7	∞
Hemispherical Isotropy	E.2.2	0	R	1.73	1	1	0.0	0.0	∞
Boundary Effect	E.2.3	1	R	1.73	1	1	0.6	0.6	∞
Linearity	E.2.4	4.7	R	1.73	1	1	2.7	2.7	∞
System Detection Limits	E.2.5	1	R	1.73	1	1	0.6	0.6	∞
Readout Electronics	E.2.6	1	N	1	1	1	1.0	1.0	∞
Response Time	E.2.7	0	R	1.73	1	1	0.0	0.0	∞
Integration Time	E.2.8	0	R	1.73	1	1	0.0	0.0	∞
RF Ambient Conditions	E.6.1	0.05	R	1.73	1	1	0.0	0.0	∞
Probe Positioner Mechanical Tolerance	E.6.2	0.4	R	1.73	1	1	0.2	0.2	∞
Probe Positioning with respect to Phantom Shell	E.6.3	2.9	R	1.73	1	1	1.7	1.7	∞
Extrapolation, interpolation and Integration Algorithms for Max. SAR Evaluation	E.5	1	R	1.73	1	1	0.6	0.6	∞
Test Sample Related									
Dipole Axis to Liquid Surface		2	R	1.73	1	1	1.2	1.2	∞
Power Drift		4.7	R	1.73	1	1	2.7	2.7	∞
				□					□
Phantom and Tissue Parameters									
Phantom Uncertainty (shape and thickness tolerances)	E.3.1	4	R	1.73	1	1	2.3	2.3	∞
Liquid Conductivity – Deviation from target values	E.3.2	5	R	1.73	0.6	0.43	1.7	1.2	∞
Liquid Conductivity – Measurement uncertainty	E.3.3	2.5	N	1.73	0.6	0.43	0.9	0.6	5
Liquid Permittivity – Deviation from target values	E.3.2	5	R	1.73	0.6	0.49	1.7	1.4	∞
Liquid Permittivity – Measurement uncertainty	E.3.3	2.5	N	1.73	0.6	0.49	0.9	0.7	5
Combined standard Uncertainty			RSS				8.0	7.8	154
Expanded Uncertainty (95% CONFIDENCE LEVEL)			k=2				16.0	15.63	

Estimated total measurement uncertainty for the DASY4 measurement system was $\pm 8.0\%$. The extended uncertainty ($K = 2$) was assessed to be $\pm 16.0\%$ based on 95% confidence level. The uncertainty is not added to the Validation measurement result.

Table: Uncertainty Budget for DASY4 Version V4.7 Build 53 – Validation 5GHz

a	b	c	d	e= f(d,k)	f	g	h=cxf/e	i=cxg/e	k
Uncertainty Component	Sec.	Tol. (%)	Prob. Dist.	Div.	C _i (1g)	C _i (10g)	1g u _i (%)	10g u _i (%)	v _i
Measurement System									
Probe Calibration (k=1) (standard calibration)	E.2.1	6.6	N	1	1	1	6.6	6.6	∞
Axial Isotropy	E.2.2	4.7	R	1.73	1	1	2.7	2.7	∞
Hemispherical Isotropy	E.2.2	0	R	1.73	1	1	0.0	0.0	∞
Boundary Effect	E.2.3	2	R	1.73	1	1	1.2	1.2	∞
Linearity	E.2.4	4.7	R	1.73	1	1	2.7	2.7	∞
System Detection Limits	E.2.5	1	R	1.73	1	1	0.6	0.6	∞
Readout Electronics	E.2.6	1	N	1	1	1	1.0	1.0	∞
Response Time	E.2.7	0	R	1.73	1	1	0.0	0.0	∞
Integration Time	E.2.8	0	R	1.73	1	1	0.0	0.0	∞
RF Ambient Conditions	E.6.1	0.075	R	1.73	1	1	0.0	0.0	∞
Probe Positioner Mechanical Tolerance	E.6.2	0.8	R	1.73	1	1	0.5	0.5	∞
Probe Positioning with respect to Phantom Shell	E.6.3	5.7	R	1.73	1	1	3.3	3.3	∞
Extrapolation, interpolation and Integration Algorithms for Max. SAR Evaluation	E.5	4	R	1.73	1	1	2.3	2.3	∞
Test Sample Related									
Dipole Axis to Liquid distance	E.4.2	2	N	1	1	1	2.0	2.0	11
Output Power Variation – SAR Drift Measurement	6.6.2	4.7	R	1.73	1	1	2.7	2.7	∞
Phantom and Tissue Parameters									
Phantom Uncertainty (shape and thickness tolerances)	E.3.1	4	R	1.73	1	1	2.3	2.3	∞
Liquid Conductivity – Deviation from target values	E.3.2	5	R	1.73	0.64	0.43	1.8	1.2	∞
Liquid Conductivity – Measurement uncertainty	E.3.3	2.5	N	1	0.64	0.43	1.6	1.1	5
Liquid Permittivity – Deviation from target values	E.3.2	5	R	1.73	0.6	0.49	1.7	1.4	∞
Liquid Permittivity – Measurement uncertainty	E.3.3	2.5	N	1	0.6	0.49	1.5	1.2	5
Combined standard Uncertainty			RSS				10.3	10.0	154
Expanded Uncertainty (95% CONFIDENCE LEVEL)			k=2				20.5	20.02	

Estimated total measurement uncertainty for the DASY4 measurement system was $\pm 10.3\%$. The extended uncertainty ($K = 2$) was assessed to be $\pm 20.5\%$ based on 95% confidence level. The uncertainty is not added to the measurement result.

9.0 EQUIPMENT LIST AND CALIBRATION DETAILS

Table: SPEAG DASY4 Version V4.7 Build 53

Equipment Type	Manufacturer	Model Number	Serial Number	Calibration Due	Used For this Test?
Robot - Six Axes	Staubli	RX90BL	N/A	Not applicable	Yes
Robot Remote Control	SPEAG	CS7MB	RX90B	Not applicable	Yes
SAM Phantom	SPEAG	N/A	1260	Not applicable	Yes
SAM Phantom	SPEAG	N/A	1060	Not applicable	Yes
Flat Phantom	AndreT	10.1	P 10.1	Not Applicable	Yes
Flat Phantom	AndreT	9.1	P 9.1	Not Applicable	Yes
Flat Phantom	SPEAG	PO1A 6mm	1003	Not Applicable	No
Data Acquisition Electronics	SPEAG	DAE3 V1	359	12-July-2007	Yes
Data Acquisition Electronics	SPEAG	DAE3 V1	442	13-Aug-2007	Yes
Probe E-Field - Dummy	SPEAG	DP1	N/A	Not applicable	No
Probe E-Field	SPEAG	ET3DV6	1380	12-Dec-2007	Yes
Probe E-Field	SPEAG	ET3DV6	1377	14-July-2007	Yes
Probe E-Field	SPEAG	ES3DV6	3029	Not Used	No
Probe E-Field	SPEAG	EX3DV4	3563	14-July-2007	No
Antenna Dipole 300 MHz	SPEAG	D300V2	1005	26-Oct-2007	No
Antenna Dipole 450 MHz	SPEAG	D450V2	1009	14-Dec-2008	No
Antenna Dipole 900 MHz	SPEAG	D900V2	047	6-July-2008	Yes
Antenna Dipole 1640 MHz	SPEAG	D1640V2	314	30-June-2008	No
Antenna Dipole 1800 MHz	SPEAG	D1800V2	242	3-July-2008	Yes
Antenna Dipole 1950 MHz	SPEAG	D1950V3	1113	5-March-2009	No
Antenna Dipole 2450 MHz	SPEAG	D2450V2	724	13-Dec-2008	Yes
Antenna Dipole 3500 MHz	SPEAG	D3500V2	1002	1-July-2007	No
Antenna Dipole 5600 MHz	SPEAG	D5GHzV2	1008	27-Oct-2007	Yes
RF Amplifier	EIN	603L	N/A	*In test	No
RF Amplifier	Mini-Circuits	ZHL-42	N/A	*In test	Yes
RF Amplifier	Mini-Circuits	ZVE-8G	N/A	*In test	Yes
Synthesized signal generator	Hewlett Packard	ESG-D3000A	GB37420238	*In test	Yes
RF Power Meter Dual	Hewlett Packard	437B	3125012786	30-May-2007	Yes
RF Power Sensor 0.01 - 18 GHz	Hewlett Packard	8481H	1545A01634	30-May-2007	Yes
RF Power Meter Dual	Gigatronics	8542B	1830125	18-April-2007	Yes
RF Power Sensor	Gigatronics	80301A	1828805	18-April-2007	Yes
RF Power Meter Dual	Hewlett Packard	435A	1733A05847	*In test	Yes
RF Power Sensor	Hewlett Packard	8482A	2349A10114	*In test	Yes
Network Analyser	Hewlett Packard	8714B	GB3510035	31-Aug-2007	No
Network Analyser	Hewlett Packard	8753ES	JP39240130	30-Sept-2007	Yes
Dual Directional Coupler	Hewlett Packard	778D	1144 04700	*In test	No
Dual Directional Coupler	NARDA	3022	75453	*In test	Yes

* Calibrated during the test for the relevant parameters.



10.0 OET BULLETIN 65 – SUPPLEMENT C TEST METHOD

Notebooks should be evaluated in normal use positions, typical for lap-held bottom-face only. However the number of positions will depend on the number of configurations the laptop can be operated in. The “LIFEBLOCK T SERIES” can be used in either a conventional laptop position (see Appendix A1) or a Tablet configuration. The antenna location in the “LIFEBLOCK T SERIES” is closest to the top of the screen when used in a conventional laptop configuration and due to the separation distances involved between the phantom and the laptop antenna, testing is not required in this position. Also the spacing between the transmitting antennas and the bottom surface of the convertible Tablet PC was less than 20 cm therefore testing was performed in “Laps On” position additionally.

10.1 Description of Positions

10.1.1 “Tablet” Position Definition (0mm spacing)

The device was tested in the 2.00 mm flat section of the AndreT Flat phantom P 10.1 for the “Tablet” position. The Transceiver was placed at the bottom of the phantom and suspended in such way that the back of the device was touching the phantom. This device orientation simulates the PC’s normal use – being held on the lap of the user. A spacing of 0mm ensures that the SAR results are conservative and represent a worst-case position.

10.1.2 “Laps On” Position (0mm spacing)

The device was tested with the bottom touching the flat phantom in the notebook (normal use) configuration. For this position, the device was placed at the bottom of the P 10.1 phantom and suspended in such way that the bottom of the device surface was touching the phantom. A spacing of 0mm ensures that the SAR results are conservative and represent a worst-case assessment (with respect to SAR).

10.1.3 “Edge On” Position

The device was tested in the (2.00 mm) flat section of the AndreT phantom for the “Edge On” position. The Antenna edge of the Transceiver was placed underneath the flat section of the phantom and suspended until the edge touched the phantom. *Refer to Appendix A for photos of measurement positions.*

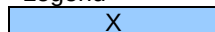
10.2 List of All Test Cases (Antenna In/Out, Test Frequencies, User Modes)

The device has a fixed antenna. Depending on the measured SAR level up to three test channels with the test sample operating at maximum power, as specified in section 4.0 were recorded. The following table represents the matrix used to determine what testing was required. The worst case result was verified with the WLAN transmitting at full power in co-transmission with the WWAN.

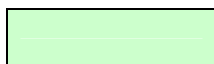
Table: Testing configurations

Phantom Configuration	*Device Mode WWAN Band Name	Test Configurations		
		CHANNEL (LOW)	Channel (Middle)	Channel (High)
Tablet	GPRS 850 MHz		X	
	GPRS 1900 MHz		X	
	EGPRS 850 MHz		X	
	EGPRS 1900 MHz		X	
	WCDMA 850 MHz		X	
	WCDMA 1900 MHz		X	
	WCDMA + HSDPA 850 MHz		X	
	WCDMA + HSDPA 1900 MHz		X	
	WLAN + UMTS		X	
	WLAN + GPRS		X	
Edge On	GPRS 850 MHz		X	
	GPRS 1900 MHz		X	
	EGPRS 850 MHz		X	
	EGPRS 1900 MHz		X	
	WCDMA 850 MHz		X	
	WCDMA 1900 MHz		X	
	WCDMA + HSDPA 850 MHz		X	
	WCDMA + HSDPA 1900 MHz		X	
	WLAN + UMTS		X	
	WLAN + GPRS		X	

Legend



Testing Required in this configuration



Testing required in this configuration only if SAR of middle channel is more than 3dB below the SAR limit or it is the worst case.

10.3 FCC RF Exposure Limits for Occupational/ Controlled Exposure

Spatial Peak SAR Limits For:

Partial-Body:	8.0 mW/g (averaged over any 1g cube of tissue)
Hands, Wrists, Feet and Ankles:	20.0 mW/g (averaged over 10g cube of tissue)

10.4 FCC RF Exposure Limits for Un-controlled/Non-occupational

Spatial Peak SAR Limits For:

Partial-Body:	1.6 mW/g (averaged over any 1g cube of tissue)
Hands, Wrists, Feet and Ankles:	4.0 mW/g (averaged over 10g cube of tissue)



11.0 SAR MEASUREMENT RESULTS

The SAR values averaged over 1g tissue masses were determined for the sample device for all test configurations listed in section 10.1.

11.1 SAR Results

There are two modes of operation which include UMTS and GPRS transmission. Refer to section 10.1 for selection of all device test configurations. Table below displays the SAR results.

Table: SAR MEASUREMENT RESULTS – 850MHz GPRS

Test Position	Plot No.	Test Channel	Test Freq (MHz)	Measured 1g SAR Results (mW/g)	Measured Drift (dB)
Tablet	1	190	836.6	Noise Floor	-
Edge On Top	2	190	836.6	Pre-scan Only	-
Edge On Right	3	190	836.6	Pre-scan Only	-
Laps On	4	190	836.6	Pre-scan Only	-
Edge On Top GPRS Class 10	5	190	836.6	0.172	-0.071
Edge On Right EGPRS Class 10	6	190	836.6	0.275	0.121
Edge On Right GPRS Class 11	7	190	836.6	0.552	-0.121
Edge On Right GPRS Class 12	8	190	836.6	0.355	0.00
Edge On Right GPRS Class 10	9	128	824.2	0.803	0.157
	10	190	836.6	0.799	-0.305
	11	251	848.8	1.010	-0.037
Edge On Right GPRS Class 10 WLAN On	12	251 (WLAN: 06)	848.8 (WLAN: 2437)	0.960	0.271
Edge On Top Ant B with WLAN (DSSS)	13	190 (WLAN: 06)	836.6 (WLAN: 2437)	1.12	-0.215
Edge On Top Ant A with WLAN (OFDM)	14	190 (WLAN: 165)	836.6 (WLAN: 5825)	1.15	-0.253

NOTE: The measurement uncertainty of 24.8% was not added to the result.

Table: SAR MEASUREMENT RESULTS – 1900MHz GPRS

Test Position	Plot No.	Test Channel	Test Freq (MHz)	Measured 1g SAR Results (mW/g)	Measured Drift (dB)
Tablet	15	661	1880	Pre-scan Only	-
Edge On Top	16	661	1880	Pre-scan Only	-
Edge On Right	17	661	1880	Pre-scan Only	-
Laps On	18	661	1880	Pre-scan Only	-
Tablet GPRS Class 12	19	661	1880	0.134	0.193
Edge On Top GPRS Class 12	20	661	1880	0.378	0.204
Edge On Right EGPRS Class 12	21	661	1880	0.419	-0.168
Edge On Right GPRS Class 10	22	661	1880	0.377	-0.027
Edge On Right GPRS Class 11	23	661	1880	0.563	-0.080
Edge On Right GPRS Class 12	24	512	1850.2	0.756	0.011
	25	661	1880	0.748	-0.067
	26	810	1909.8	0.960	-0.082
Edge On Right GPRS Class 12 WLAN On	27	810 (WLAN: 06)	848.8 (WLAN: 2437)	0.934	-0.099
Edge On Top Ant B with WLAN (DSSS)	28	661 (WLAN: 06)	1880 (WLAN: 2437)	1.08	0.238
Edge On Top Ant A with WLAN (OFDM)	29	661 (WLAN: 165)	1880 (WLAN: 5825)	1.05	0.049

NOTE: The measurement uncertainty of 24.8% was not added to the result.

The highest SAR level recorded for GPRS ON was 1.15 mW/g as evaluated in a 1g cube of averaging mass. This value was obtained in Edge On Top position with the WLAN OFDM Antenna A On in channel 165 (5825 MHz) and with GPRS Class 10 transmitting in channel 190 (836.6MHz)



Table: SAR MEASUREMENT RESULTS – 850MHz UMTS

Test Position	Plot No.	Test Channel	Test Freq (MHz)	Measured 1g SAR Results (mW/g)	Measured Drift (dB)
Tablet	30	4183	836.6	Noise Floor	-
Edge On Top	31	4183	836.6	Noise Floor	-
Edge On Right	32	4183	836.6	Pre-scan Only	-
Laps On	33	4183	836.6	Pre-scan Only	-
Edge On Right + HSDPA	34	4132	826.4	0.520	-0.373
Edge On Right	35	4132	826.4	0.558	0.300
	36	4183	836.6	0.399	-0.024
	37	4233	846.6	0.532	0.045
Edge On Right WLAN On	38	4132	826.4	0.523	0.343
Edge On Top Ant B with WLAN (DSSS)	39	4183 (WLAN: 06)	836.6 (WLAN: 2437)	1.02	0.183
Edge On Top Ant A with WLAN (OFDM)	40	4183 (WLAN: 165)	836.6 (WLAN: 5825)	1.39	0.130

NOTE: The measurement uncertainty of 24.8% was not added to the result.

Table: SAR MEASUREMENT RESULTS – 1900MHz UMTS

Test Position	Plot No.	Test Channel	Test Freq (MHz)	Measured 1g SAR Results (mW/g)	Measured Drift (dB)
Tablet	41	9400	1880	Noise Floor	-
Edge On Top	42	9400	1880	Pre-scan Only	-
Edge On Right	43	9400	1880	Pre-scan Only	-
Laps On	44	9400	1880	Noise Floor	-
Tablet	45	9400	1880	0.126	0.049
Edge On Top	46	9400	1880	0.269	0.016
Edge On Right + HSDPA	47	9262	1852.4	0.475	-0.120
	48	9400	1880	0.407	0.109
	49	9538	1907.6	0.486	-0.111
Edge On Right	50	9262	1852.4	0.465	0.157
	51	9400	1880	0.384	-0.260
	52	9538	1907.6	0.519	0.212
Edge On Right WLAN On	53	9538	1907.6	0.519	-0.288
Edge On Top Ant B with WLAN (DSSS)	54	9400 (WLAN: 06)	1880 (WLAN: 2437)	1.02	-0.350
Edge On Top Ant A with WLAN (OFDM)	55	9400 (WLAN: 165)	1880 (WLAN: 5825)	1.21	0.034

NOTE: The measurement uncertainty of 24.8% was not added to the result.

The highest SAR level recorded for UMTS was 1.39 mW/g as evaluated in a 1g cube of averaging mass. This value was obtained in Edge On Top position with the WLAN OFDM Antenna A On in channel 165 (5825 MHz) and with GPRS Class 10 transmitting in channel 9400 (1880MHz)

12.0 COMPLIANCE STATEMENT

The Fujitsu TABLET PC, Model: T2010 with SIERRA WIRELESS Mini-PCI Wireless WAN Module Model: MC8781 & Atheros XB62 WLAN Module, Model: AR5BXB6 was found to comply with the FCC and RSS-102 SAR requirements.

The highest SAR level recorded was 1.39 mW/g for a 1g cube. This value was measured at 1880 MHz (channel 9400) in the "Edge On Top" position in 1900MHz UMTS transmission mode. The WLAN was ON at 5825MHz (channel 165) using Antenna A in OFDM modulation. This was below the limit of 1.6 mW/g for uncontrolled exposure.



APPENDIX A1 TEST SAMPLE PHOTOGRAPHS

Battery 1



Battery 2



T2010 Host - Conventional Laptop Configuration

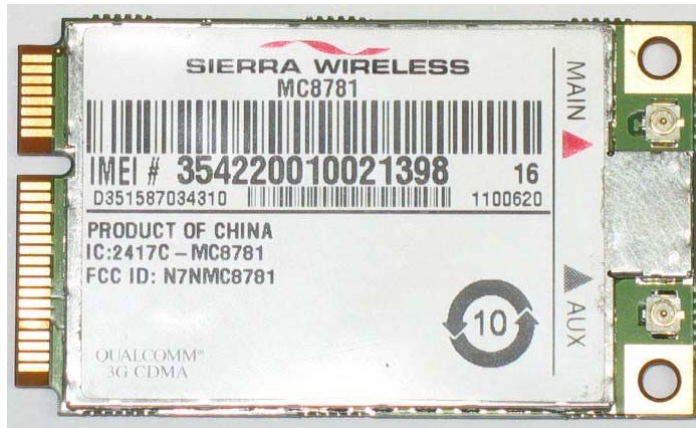


T2010 Host - Tablet Configuration

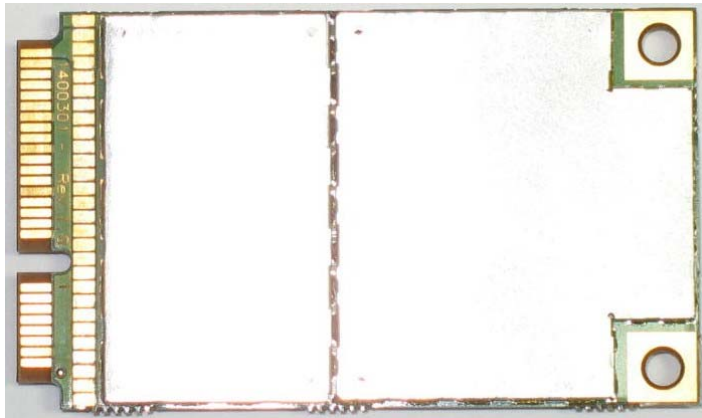


APPENDIX A2 TEST SAMPLE PHOTOGRAPHS

Model: MC8781 – Wireless WAN Module
Front



Back



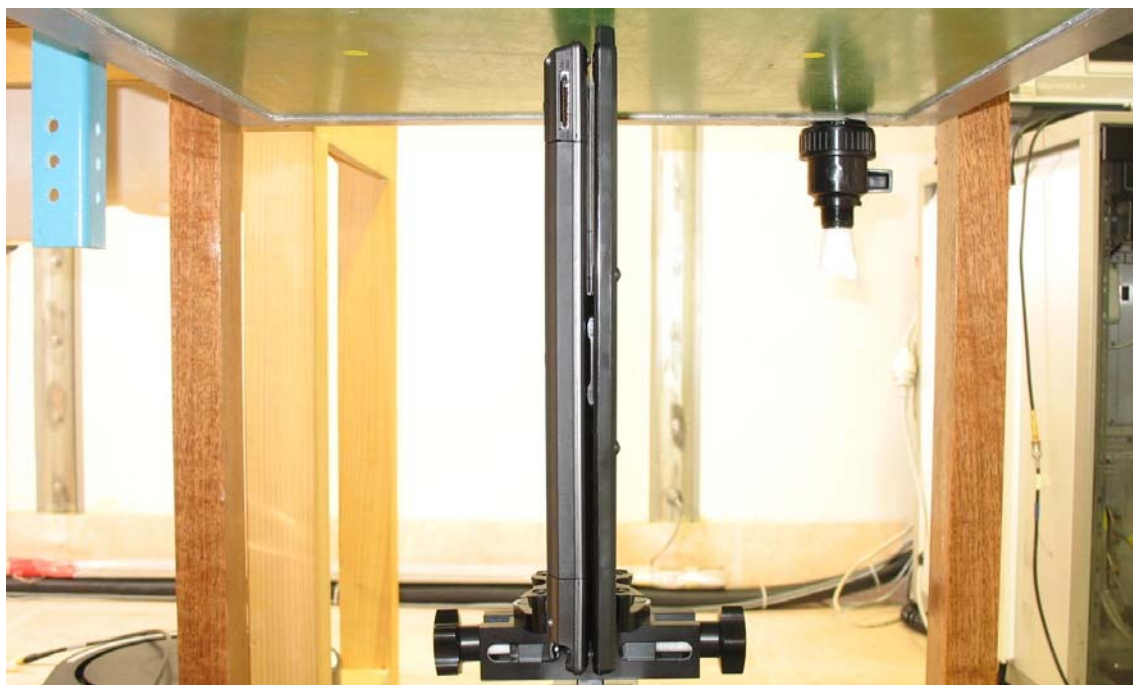
APPENDIX A3 TEST SETUP PHOTOGRAPHS

Tablet Position



APPENDIX A4 TEST SAMPLE PHOTOGRAPHS

Edge On Right Position



APPENDIX A5 TEST SAMPLE PHOTOGRAPHS

Edge On Top Position



APPENDIX A6 TEST SAMPLE PHOTOGRAPHS

Laps On Position



APPENDIX B PLOTS OF THE SAR MEASUREMENTS

Plots of the measured SAR distributions inside the phantom are given in this Appendix for all tested configurations. The spatial peak SAR values were assessed with the procedure described in this report.

Table: 850MHz GPRS Band SAR Measurement Plot Numbers

Test Position	Plot No.	Test Channel
Tablet **	1	190
Edge On Top *	2	190
Edge On Right *	3	190
Laps On *	4	190
Edge On Top GPRS Class 10	5	190
Edge On Right EGPRS Class 10	6	190
Edge On Right GPRS Class 11	7	190
Edge On Right GPRS Class 12	8	190
Z-Axis graphs for Plots 5 to 8		
Edge On Right GPRS Class 10	9	128
	10	190
	11	251
Edge On Right GPRS Class 10 WLAN On	12	251
Z-Axis graphs for Plots 9 to 12		
Edge On Top Ant B with WLAN (DSSS)	13	190 (WLAN: 06)
Edge On Top Ant A with WLAN (OFDM)	14	190 (WLAN: 165)
Z-Axis graphs for Plots 13 to 14		

* Pre-scan

** Noise Floor

Table: 1900MHz GPRS Band SAR Measurement Plot Numbers

Test Position	Plot No.	Test Channel
Tablet **	15	661
Edge On Top **	16	661
Edge On Right *	17	661
Laps On *	18	661
Tablet GPRS Class 12	19	661
Edge On Top GPRS Class 12	20	661
Edge On Right EGPRS Class 12	21	661
Z-Axis graphs for Plots 19 to 21		
Edge On Right GPRS Class 10	22	661
Edge On Right GPRS Class 11	23	661
Z-Axis graphs for Plots 22 to 23		
Edge On Right GPRS Class 12	24	512
	25	661
	26	810
Edge On Right GPRS Class 12 WLAN On	27	810
Z-Axis graphs for Plots 24 to 27		
Edge On Top Ant B with WLAN (DSSS)	28	661 (WLAN: 06)
Edge On Top Ant A with WLAN (OFDM)	29	661 (WLAN: 165)
Z-Axis graphs for Plots 28 to 29		

* Pre-scan

** Noise Floor

Table: 850MHz UMTS Band SAR Measurement Plot Numbers

Test Position	Plot No.	Test Channel
Tablet **	30	4183
Edge On Top *	31	4183
Edge On Right *	32	4183
Laps On **	33	4183
Edge On Right + HSDPA	34	4132
Z-Axis graphs for Plots 34		
Edge On Right	35	4132
	36	4183
	37	4233
Edge On Right WLAN On	38	4132
Z-Axis graphs for Plots 35 to 38		
Edge On Top Ant B with WLAN (DSSS)	39	4183 (WLAN: 06)
Edge On Top Ant A with WLAN (OFDM)	40	4183 (WLAN: 165)
Z-Axis graphs for Plots 39 to 40		

* Pre-scan

** Noise Floor

Table: 1900MHz UMTS Band SAR Measurement Plot Numbers

Test Position	Plot No.	Test Channel
Tablet *	41	9400
Edge On Top *	42	9400
Edge On Right *	43	9400
Laps On *	44	9400
Tablet	45	9400
Edge On Top	46	9400
Z-Axis graphs for Plots 45 to 46		
Edge On Right + HSDPA	47	9262
	48	9400
	49	9538
Z-Axis graphs for Plots 47 to 49		
Edge On Right	50	9262
	51	9400
	52	9538
Edge On Right WLAN On	53	9538
Z-Axis graphs for Plots 50 to 53		
Edge On Top Ant B with WLAN (DSSS)	54	9400 (WLAN: 06)
Edge On Top Ant A with WLAN (OFDM)	55	9400 (WLAN: 165)
Z-Axis graphs for Plots 54 to 55		

* Pre-scan

** Noise Floor