



InterLab®

FCC Technical Report on Test Equipment Calibration

Reference: Test Equipment Calibration

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Test Equipment

EUT Digital Signalling System

Equipment	Type	Serial No.	Manufacturer	Cal. data	Next cal.
Digital Radio Communication Tester	CMD 55	831050/020	Rohde & Schwarz	07.10.08	06.10.11
Signalling Unit for Bluetooth	PTW60	100004	Rohde & Schwarz	-	N/A *)
Universal Radio Communication Tester	CMU200	102366	Rohde & Schwarz	22.09.07	21.09.09
Universal Radio Communication Tester	CMU200	837983/052	Rohde & Schwarz	22.09.07	21.09.09
Signalling Unit for Bluetooth	CBT	100589	Rohde & Schwarz	14.08.08	N/A *)
Signalling Unit for GPS	SMU200	100912	Rohde & Schwarz	28.10.08	N/A *)

*) N/A – only used for signalling

EMI Test System

Equipment	Type	Serial No.	Manufacturer	Cal. data	Next cal.
EMI Analyzer	ESI 26	830482/004	Rohde & Schwarz	06.12.07	05.12.09
Signal Generator	SMR 20	846834/008	Rohde & Schwarz	05.12.07	04.12.09
AC Power Source	6404	64040000B04	Croma ATE INC.	01.06.08	31.05.11

EMI Radiated Auxiliary Equipment

Equipment	Type	Serial No.	Manufacturer	Cal. data	Next cal.
Antenna mast 4m	MA 240	240/492	HD GmbH H. Deisel	-	-
Biconical dipole	VUBA 9117	9117108	Schwarzbeck	27.10.08	26.10.13
Broadband Amplifier 18MHz-26GHz	JS4-18002600-32	849785	Miteq	12.11.08	11.05.09
Broadband Amplifier 30MHz-18GHz	JS4-00101800-35	896037	Miteq	12.11.08	11.05.09
Broadband Amplifier 45MHz-27GHz	JS4-00102600-42	619368	Miteq	12.11.08	11.05.09
Cable "ESI to EMI Antenna"	EcoFlex10	W18.01-2 W38.01-2	Kabel Kusch	12.11.08	11.05.09
Cable "ESI to Horn Antenna"	UFB311A UFB293C	W18.02-2 W38.02-2	Rosenberger-Microcoax	12.11.08	11.05.09
Double-ridged horn	HF 906	357357/002	Rohde & Schwarz	12.05.06	11.05.09
Double-ridged horn	HF 906	357357/001	Rohde & Schwarz	20.01.04	N/A – spare antenna
High Pass Filter	5HC3500/127 50-1.2-KK	200035008	Trilithic	12.11.08	11.05.09
High Pass Filter	5HC2700/127 50-1.5-KK	9942012	Trilithic	12.11.08	11.05.09
High Pass Filter	4HC1600/127 50-1.5-KK	9942011	Trilithic	12.11.08	11.05.09
High Pass Filter	WHKX 7.0/18G-8SS	9	Wainwright	12.11.08	11.05.09
KUEP pre amplifier	Kuep 00304000	001	7 layers AG	-	N/A – spare antenna
Log.-per. Antenna	HL 562 Ultralog	830547/003	Rohde & Schwarz	17.05.06	16.05.09
Loop Antenna	HFH2-Z2	829324/006	Rohde & Schwarz	07.10.08	06.10.11
Pyramidal Horn Antenna 26.5 GHz	Model 3160-09	9910-1184	EMCO	28.02.08	N/A (Stand. Gain Horn)
Pyramidal Horn Antenna 40 GHz	Model 3160-10	00086675	EMCO	18.12.07	N/A (Stand. Gain Horn)

EMI Conducted Auxiliary Equipment

Equipment	Type	Serial No.	Manufacturer	Cal. data	Next cal.
Cable "LISN to ESI"	RG214	W18.03+W48.03	Huber+Suhner	12.11.08	11.05.09
Two-Line V-Network	ESH 3-Z5	828304/029	Rohde & Schwarz	13.10.08	12.10.11
Two-Line V-Network	ESH 3-Z5	829996/002	Rohde & Schwarz	-	-
Four-Line Network	ENY41	838119/004	Rohde & Schwarz	06.03.08	05.03.11

Auxiliary Test Equipment

Equipment	Type	Serial No.	Manufacturer	Cal. data	Next cal.
Broadband Resist. Power Divider N	1506A / 93459	LM390	Weinschel	-	-
Broadband Resist. Power Divider SMA	1515 / 93459	LN673	Weinschel	-	-
Digital Multimeter	177	86670383	Fluke	01.08.08	31.07.10
Digital Oscilloscope	TDS 784C	B021311	Tektronix	-	-
Fibre optic link Satellite	FO RS232 Link	181-018	Pontis	-	-
Fibre optic link Transceiver	FO RS232 Link	182-018	Pontis	-	-
I/Q Modulation Generator	AMIQ-B1	832085/018	Rohde & Schwarz	-	-
Notch Filter ultra stable	WRCA800/960 -6E	24	Wainwright	-	-
Temperature Chamber	VT 4002	58566002150010	Vötsch	29.02.08	28.02.09
Temperature Chamber	KWP 120/70	59226012190010	Weiss	29.02.08	28.02.09
ThermoHygro Datalogger 03	Opus10 THI (8152.00)	7482	Lufft Mess- und Regeltechnik GmbH	22.01.09	21.01.10
Spectrum Analyzer 9 kHz to 3 GHz	FSP3	838164/004	Rohde & Schwarz	06.10.08	05.10.11
Spectrum Analyzer 9 kHz to 3 GHz	FSP3	836722/011	Rohde & Schwarz	06.10.08	05.10.11
Signal Analyzer 20 Hz to 26.5 GHz	FSIQ26	840061/005	Rohde & Schwarz	02.10.08	01.10.11

Anechoic Chamber

Equipment	Type	Serial No.	Manufacturer	Cal. data	Next cal.
Air Compressor (pneumatic)			Atlas Copco	-	-
Controller	MCU	1520506	Maturo GmbH	-	-
EMC Camera	CE-CAM/1		CE-SYS	-	-
EMC Camera for observation of EUT	CCD-400E	0005033	Mitsubishi	-	-
Filter ISDN	B84312-C110- E1		Siemens & Matsushita	-	-
Filter telephone systems / modem	B84312-C40- B1		Siemens & Matsushita	-	-
Filter Universal 1A	B84312-C30- H3		Siemens & Matsushita	-	-
Fully/Semi AE Chamber	10.58x6.38x6		Frankonia	-	-
Turntable	DS 420S	420/573/99	HD GmbH, H.Deisel	-	-
Valve Control Unit (pneum.)	VE 615P	615/348/99	HD GmbH, H.Deisel	-	-
ThermoHygro Datalogger 12	Opus10 THI (8152.00)	12482	Lufft Mess- und Regeltechnik GmbH	05.08.08	04.08.09
ThermoAirpressure Datalogger 13	Opus10 TPR (8253.00)	13936	Lufft Mess- und Regeltechnik GmbH	22.01.09	21.01.10



7 layers InterLab Bluetooth RF Test Solution – Setup C Bluetooth BDR and EDR RF Conformance Test System

Equipment	Type	Serial No.	Manufacturer	Cal. data	Next cal.
Power Meter	NRVD	832025/059	Rohde & Schwarz	17.06.08	16.06.09
Power Sensor A	NRV-Z1	832279/013	Rohde & Schwarz	18.06.08	17.06.09
Power Supply	E3632A	MY40003776	Agilent	-	-
Power Supply	PS-2403D	-	Conrad	-	-
Power Supply	NGSM 32/10	2725	Rohde & Schwarz	28.04.08	27.04.09
Rubidium Frequency Normal	MFS	002	Datum GmbH	18.06.08	17.06.09
Signal Analyzer FSIQ26	FSIQ26	832695/007	Rohde & Schwarz	23.08.07	22.08.09
Signal Generator	SMP 03	833680/003	Rohde & Schwarz	04.07.06	03.07.09
Signal Generator	SMIQ03B	832870/017	Rohde & Schwarz	24.05.07	23.05.10
Signal Switching Unit	TOCT	030106	7 layers Inc.	-	-
Signalling Unit	CBT	100302	Rohde & Schwarz	07.05.08	06.05.09
ThermoHygro Datalogger 04	Opus10 THI (8152.00)	7481	Lufft Mess- und Regeltechnik GmbH	22.01.09	21.01.10
Temperature Chamber	KWP 120/70	59226012190010	Weiss	29.02.08	28.02.09

OTA RF Performance

Equipment	Type	Serial No.	Manufacturer	Cal. data	Next cal.
Power Meter	8652A	861836	Giga-Tronics	21.10.08	20.10.09
Power Sensor	80701A	1837015	Giga-Tronics	21.10.08	20.10.09
Power Sensor	80701A	1837017	Giga-Tronics	21.10.08	20.10.09
Universal Radio Communication Tester	CMU200	107459	Rohde & Schwarz	07.11.08	06.11.09
Antenna	Dual polarized horn 3164-03	00052619	ETS Lindgreen	accredited factory calibration	– *)
Fully Anechoic Room	6.7x 3.4x3.0 m	–	Albatross	–	–

*) N/A – only used for relative measurements