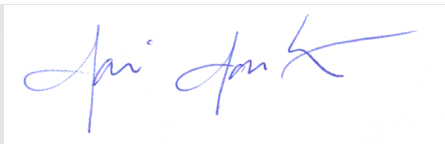
FCC Part 22/24 Compliance Test Report

Test Report no.:	Tre_FCC_0831_07.doc	**Date of Report:**	25-Sep-2008
Number of pages:	18	**Customer's Contact person:**	Tia Melava
Testing laboratory:	TCC Nokia Copenhagen Laboratory Frederikskaj 1790 COPENHAGEN V DENMARK Tel. +45 33 292929 Fax. +45 33 292934	**Customer:**	Nokia Corporation P.O. Box 86 Joensuunkatu 7 FIN-24101 SALO, FINLAND Tel. +358 (0) 7180 08000 Fax. +358 (0) 7180 44277
FCC listing no.: **IC recognition no.:**	99059 661AD-1		
Tested devices/ accessories:	**Phone: RM-494 (hw0303), Battery: BL-4U, Headset: HS-47**		
FCC ID:	PYARM-494	**IC:**	661V-RM494
Supplement reports:	None		
Testing has been carried out in accordance with:	**CFR 47, FCC rules Parts 22 and 24, TIA-603-C-2004 and IC standards RSS-GEN (Issue 2, June 2007), RSS-132 (Issue 2, September 2005) and RSS-133 (Issue 3, June 2005). Deviations, modifications or clarifications (if any) to above mentioned documents are written in each section under "Test method and limit".**		
Documentation:	The test report must always be reproduced in full; reproduction of an excerpt only is subject to written approval of the testing laboratory. The documentation of the testing performed on the tested devices is archived for 15 years at TCC Nokia.		
Test Results:	**The EUT complies with the requirements in respect of all parameters subject to the test.** The test results relate only to devices specified in this document.		
Date and signature for the contents:	 Digitally signed by Jari Jantunen Date: 2008.09.25 14:26:57 +03'00'		

Jari Jantunen, System Manager

TCC Nokia Copenhagen Laboratory
Frederikskaj
1790 COPENHAGEN V
DENMARK
Tel. +45 33 292929
Fax. +45 33 292934

1. Summary for FCC Part 22/24 Compliance Test Report

Date of receipt	07-jan-2008
Testing completed	15-jan-2008
The customer's contact person	Tia Melava
Test Plan referred to	T:\Projects\RM-343\TestPlan_RS\RS_Testplan_RM-343_NewAfterCrash.xls
Notes	None
Document name	T:\Projects\RM-343\EMC\Results\FCC\Cph_FCC_0803_03.doc

1.1. EUT and Accessory Information

The EUT is a 4-band (GSM850/900/1800/1900) mobile phone with GPRS, EGPRS and Bluetooth. The EUT is tested with maximum rated TX power, modulated with pseudo random bit sequence (PRBS9).

Product	Type	SN	HW	MV	SW	DUT
Phone	RM-343	004401/01/437252/4	0303	-	07.45.3	27579
Battery	BL-4U	46204074110101 00336,0670S60	-	-	-	27586
Headset	HS-47	0694579651502106247	-	-	-	27392

1.2. Summary of Test Results

GSM 850:

Section in CFR 47	Section in *RSS-GEN* or RSS-132	Name of the test	Result
§2.1046(a), 22.913(a)	*4.6*, 4.4	Conducted RF output power	NP
§22.913(a)	*4.6*, 4.4	Radiated RF output power	Passed
§2.1049(h)	*4.4.1*	99 % occupied bandwidth	NP
§22.917(a)	*4.7*, 4.5	Band edge compliance	Passed
§22.917(a), §2.1051	*4.7*, 4.5	Spurious emissions at antenna terminals	NP
§22.917(a), §2.1053	*4.7*, 4.5	Spurious radiated emissions	NP
§2.1055(a)	*4.5*, 4.3	Frequency stability, temperature variation	NP
§2.1055(d)	*4.5*, 4.3	Frequency stability, voltage variation	NP

GSM 1900:

Section in CFR 47	Section in RSS-133	Name of the test	Result
§2.1046(a)	6.2	Conducted RF output power	NP
§24.232(b)	6.2	Radiated RF output power	Passed
§2.1049(h)	5.6	99 % occupied bandwidth	NP
§24.238(a)	6.3	Band edge compliance	Passed
§24.238(a), §2.1051	6.3	Spurious emissions at antenna terminals	NP
§24.238(a), §2.1053	6.3	Spurious radiated emissions	NP
§2.1055(a)	7	Frequency stability, temperature variation	NP
§2.1055(d)	7	Frequency stability, voltage variation	NP

PASSED	The EUT complies with the essential requirements in the standard.
FAILED	The EUT does not comply with the essential requirements in the standard.
NP	The test was not performed by the TCC Nokia Copenhagen Laboratory.

The test results of PYARM-343 are re-used for certification of the PYARM-493. The table above indicates the results, which will be re-used

TCC Nokia Copenhagen Laboratory
Frederikskaj
1790 COPENHAGEN V
DENMARK
Tel. +45 33 292929
Fax. +45 33 292934

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TCC Nokia Copenhagen Laboratory
Frederikskaj
1790 COPENHAGEN V
DENMARK
Tel. +45 33 292929
Fax. +45 33 292934

2. Radiated RF output power

(FCC §22.913(a), §24.232(b), RSS-132 4.4, RSS-133 6.4)

EUT with DUT number	RM-343 dut 27579, BL-4U dut 27586
Accessories with DUT numbers	HS-47 dut 27392
Operation Voltage [V] / [Hz]	Battery
Result	Passed
Remarks	None
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	21.2 / 48.5 99.56
Date of measurements	15-Jan-2008
Measured by	Jan Engelbrechtsen

2.1. Test method and limit

The measurement is made according to TIA-603-C-2004 as follows:

The measurement is performed in the Anechoic Chamber with absorbers on the floor and measuring antenna at fixed height using 2-axis EUT position system. The turntable is rotated 360 degrees and this is repeated for both horizontal and vertical receive antenna polarizations.

The EUT is placed on a nonconductive plate at 170 cm height.

The substitution method is used. Substitution values at each frequencies are measured beforehand and saved to the test software.

TCC Nokia Copenhagen Laboratory
Frederikskaj
1790 COPENHAGEN V
DENMARK
Tel. +45 33 292929
Fax. +45 33 292934

The substitution corrections are obtained as described below:

$$A_{SUBST} = P_{SUBST\_TX} - P_{SUBST\_RX} - L_{SUBST\_CABLES} + G_{SUBST\_TX\_ANT}$$

Where A_{SUBST} is the final substitution correction including receive antenna gain. P_{SUBST_TX} is signal generator level, P_{SUBST_RX} is receiver level, L_{SUBST_CABLES} is cable losses including both TX and RX cables and $G_{SUBST\_TX\_ANT}$ is substitution antenna gain.

The measurement results are obtained as described below:

$$P\ [dBm] = P_{MEAS} + A_{TOT}$$

Where P_{MEAS} is receiver reading in dBm and A_{TOT} is total correction factor including cable loss and substitution correction ($A_{TOT} = L_{CABLES} + A_{SUBST}$).

Limits for radiated RF output power measurements

Frequency range [MHz]	Limit [W]	Limit [dBm]
824 - 849	7	38.5
1850 - 1910	2	33

2.2. GSM 850 Test results

Phone Slide Closed:

GSM mode

Channel / f_C [MHz]	ERP [dBm]	ERP [W]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Result
128 / 824.2	24.10	0.257	-10.10	34.20	HORIZONTAL	passed
190 / 836.6	25.00	0.316	-9.10	34.10	HORIZONTAL	passed
251 / 848.8	24.30	0.269	-8.10	32.40	VERTICAL	passed

GPRS mode, 2 TX Slots

Channel / f_C [MHz]	ERP [dBm]	ERP [W]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Result
128 / 824.2	23.50	0.224	-10.70	34.20	HORIZONTAL	passed
190 / 836.6	24.60	0.288	-9.50	34.10	HORIZONTAL	passed
251 / 848.8	24.10	0.257	-8.30	32.40	VERTICAL	passed

GPRS mode, 3 TX Slots

Channel / f_C [MHz]	ERP [dBm]	ERP [W]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Result
128 / 824.2	21.90	0.155	-12.30	34.20	HORIZONTAL	passed
190 / 836.6	22.80	0.191	-11.30	34.10	HORIZONTAL	passed
251 / 848.8	22.20	0.166	-10.20	32.40	VERTICAL	passed

EGPRS mode, 2 TX Slots

Channel / f_C [MHz]	ERP [dBm]	ERP [W]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Result
128 / 824.2	15.60	0.036	-18.60	34.20	HORIZONTAL	passed
190 / 836.6	16.20	0.042	-17.90	34.10	HORIZONTAL	passed
251 / 848.8	15.50	0.035	-16.90	32.40	VERTICAL	passed

EGPRS mode, 3 TX Slots

Channel / f_C [MHz]	ERP [dBm]	ERP [W]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Result
128 / 824.2	15.70	0.037	-18.50	34.20	HORIZONTAL	passed
190 / 836.6	16.40	0.044	-17.70	34.10	HORIZONTAL	passed
251 / 848.8	16.00	0.040	-16.40	32.40	VERTICAL	passed

TCC Nokia Copenhagen Laboratory
Frederikskaj
1790 COPENHAGEN V
DENMARK
Tel. +45 33 292929
Fax. +45 33 292934

Phone Slide Open:

GSM mode

Channel / f_C [MHz]	ERP [dBm]	ERP [W]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Result
128 / 824.2	21.50	0.141	-12.00	33.50	VERTICAL	passed
190 / 836.6	23.50	0.224	-10.60	34.10	HORIZONTAL	passed
251 / 848.8	25.60	0.363	-8.50	34.10	HORIZONTAL	passed

GPRS mode, 2 TX Slots

Channel / f_C [MHz]	ERP [dBm]	ERP [W]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Result
128 / 824.2	21.20	0.132	-12.30	33.50	VERTICAL	passed
190 / 836.6	23.30	0.214	-10.80	34.10	HORIZONTAL	passed
251 / 848.8	25.30	0.339	-8.80	34.10	HORIZONTAL	passed

GPRS mode, 3 TX Slots

Channel / f_C [MHz]	ERP [dBm]	ERP [W]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Result
128 / 824.2	19.70	0.093	-13.80	33.50	VERTICAL	passed
190 / 836.6	21.60	0.145	-12.50	34.10	HORIZONTAL	passed
251 / 848.8	23.60	0.229	-10.50	34.10	HORIZONTAL	passed

EGPRS mode, 2 TX Slots

Channel / f_C [MHz]	ERP [dBm]	ERP [W]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Result
128 / 824.2	11.00	0.013	-22.50	33.50	VERTICAL	passed
190 / 836.6	12.20	0.017	-21.90	34.10	HORIZONTAL	passed
251 / 848.8	15.70	0.037	-18.40	34.10	HORIZONTAL	passed

EGPRS mode, 3 TX Slots

Channel / f_C [MHz]	ERP [dBm]	ERP [W]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Result
128 / 824.2	13.40	0.022	-20.10	33.50	VERTICAL	passed
190 / 836.6	15.30	0.034	-18.80	34.10	HORIZONTAL	passed
251 / 848.8	16.90	0.049	-17.20	34.10	HORIZONTAL	passed

2.3. GSM 1900 Test results

Phone Slide Closed:

GSM mode

Channel / f_C [MHz]	EIRP [dBm]	EIRP [W]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Result
512 / 1850.2	28.70	0.741	-15.20	43.90	HORIZONTAL	passed
661 / 1880.0	28.20	0.661	-15.80	44.00	HORIZONTAL	passed
810 / 1909.8	28.00	0.631	-17.00	45.00	HORIZONTAL	passed

GPRS mode, 2 TX Slots

Channel / f_C [MHz]	EIRP [dBm]	EIRP [W]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Result
512 / 1850.2	28.40	0.692	-15.50	43.90	HORIZONTAL	passed
661 / 1880.0	27.90	0.617	-16.10	44.00	HORIZONTAL	passed
810 / 1909.8	27.40	0.550	-17.60	45.00	HORIZONTAL	passed

GPRS mode, 3 TX Slots

Channel / f_C [MHz]	EIRP [dBm]	EIRP [W]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Result
512 / 1850.2	27.30	0.537	-16.60	43.90	HORIZONTAL	passed
661 / 1880.0	26.70	0.468	-17.30	44.00	HORIZONTAL	passed
810 / 1909.8	26.60	0.457	-18.40	45.00	HORIZONTAL	passed

TCC Nokia Copenhagen Laboratory
Frederikskaj
1790 COPENHAGEN V
DENMARK
Tel. +45 33 292929
Fax. +45 33 292934

EGPRS mode, 2 TX Slots

Channel / f_C [MHz]	EIRP [dBm]	EIRP [W]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Result
512 / 1850.2	25.00	0.316	-18.90	43.90	HORIZONTAL	passed
661 / 1880.0	24.20	0.263	-19.80	44.00	HORIZONTAL	passed
810 / 1909.8	24.00	0.251	-21.00	45.00	HORIZONTAL	passed

EGPRS mode, 3 TX Slots

Channel / f_C [MHz]	EIRP [dBm]	EIRP [W]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Result
512 / 1850.2	24.70	0.295	-19.20	43.90	HORIZONTAL	passed
661 / 1880.0	24.40	0.275	-19.60	44.00	HORIZONTAL	passed
810 / 1909.8	24.00	0.251	-21.00	45.00	HORIZONTAL	passed

Phone Slide Open:

GSM mode

Channel / f_C [MHz]	EIRP [dBm]	EIRP [W]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Result
512 / 1850.2	29.50	0.891	-14.40	43.90	HORIZONTAL	passed
661 / 1880.0	29.00	0.794	-15.00	44.00	HORIZONTAL	passed
810 / 1909.8	29.20	0.832	-15.80	45.00	HORIZONTAL	passed

GPRS mode, 2 TX Slots

Channel / f_C [MHz]	EIRP [dBm]	EIRP [W]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Result
512 / 1850.2	29.90	0.977	-14.00	43.90	HORIZONTAL	passed
661 / 1880.0	28.50	0.708	-15.50	44.00	HORIZONTAL	passed
810 / 1909.8	24.30	0.269	-20.70	45.00	HORIZONTAL	passed

GPRS mode, 3 TX Slots

Channel / f_C [MHz]	EIRP [dBm]	EIRP [W]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Result
512 / 1850.2	28.30	0.676	-15.60	43.90	HORIZONTAL	passed
661 / 1880.0	27.60	0.575	-16.40	44.00	HORIZONTAL	passed
810 / 1909.8	27.70	0.589	-17.30	45.00	HORIZONTAL	passed

EGPRS mode, 2 TX Slots

Channel / f_C [MHz]	EIRP [dBm]	EIRP [W]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Result
512 / 1850.2	26.10	0.407	-17.80	43.90	HORIZONTAL	passed
661 / 1880.0	25.30	0.339	-18.70	44.00	HORIZONTAL	passed
810 / 1909.8	25.20	0.331	-19.80	45.00	HORIZONTAL	passed

EGPRS mode, 3 TX Slots

Channel / f_C [MHz]	EIRP [dBm]	EIRP [W]	P_{MEAS} [dBm]	A_{TOT} [dB]	Polarisation	Result
512 / 1850.2	25.70	0.372	-18.20	43.90	HORIZONTAL	passed
661 / 1880.0	25.20	0.331	-18.80	44.00	HORIZONTAL	passed
810 / 1909.8	25.20	0.331	-19.80	45.00	HORIZONTAL	passed

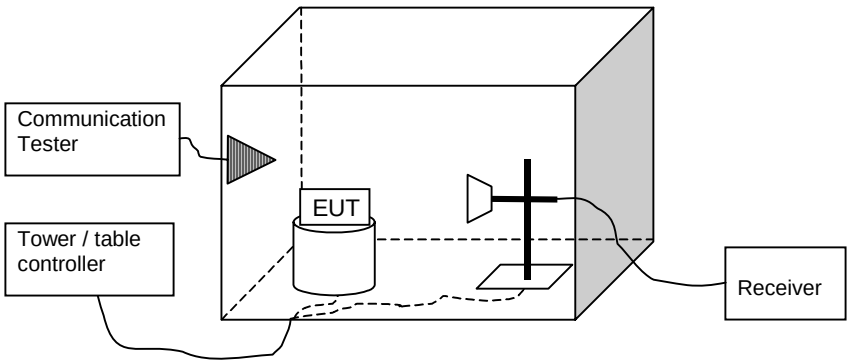
TCC Nokia Copenhagen Laboratory
Frederikskaj
1790 COPENHAGEN V
DENMARK
Tel. +45 33 292929
Fax. +45 33 292934

3. Band edge compliance

(FCC §22.917(a), 24.238(a), RSS-GEN 4.7, RSS-132 4.5, RSS-133 6.3)

EUT with DUT number	RM-343 dut 27579, BL-4U dut 27586
Accessories with DUT numbers	HS-47 dut 27392
Operation Voltage [V] / [Hz]	Battery
Result	Passed
Remarks	None
Temp [°C] / Humidity [%RH] / Air Pressure [kPa]	21.2 / 48.5 99.56
Date of measurements	15-Jan-2008
Measured by	Jan Engelbrechtsen

3.1. Test setup



3.2. Test method and limit

The measurement is made according to FCC rules parts 22 and 24 and IC standards RSS-GEN, RSS-132 and RSS-133.

Limits for band edge compliance measurements

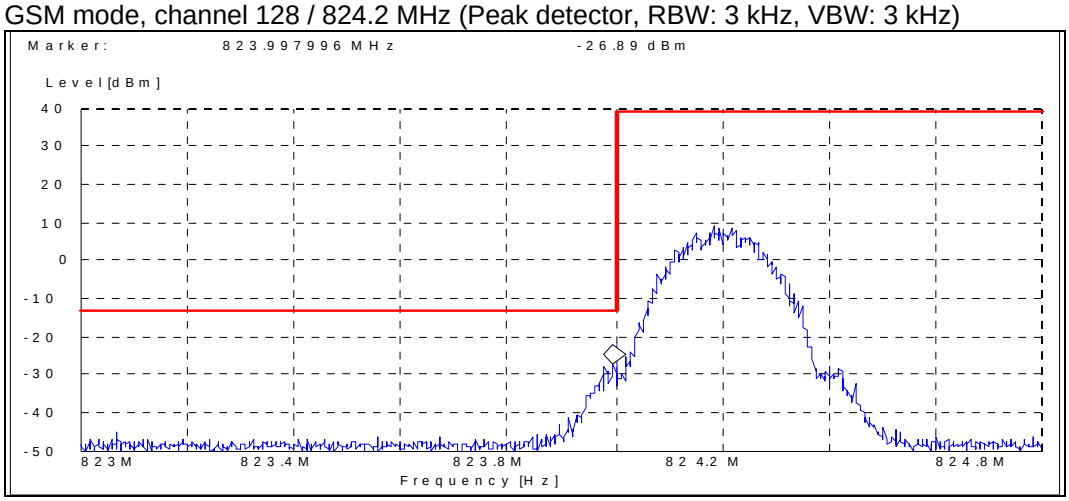
Operation band	Frequency range [MHz]	Limit [dBm]
GSM 850	Below 824 and above 849	-13
GSM 1900	Below 1850 and above 1910	-13

TCC Nokia Copenhagen Laboratory
Frederikskaj
1790 COPENHAGEN V
DENMARK
Tel. +45 33 292929
Fax. +45 33 292934

3.3. GSM 850 Test results

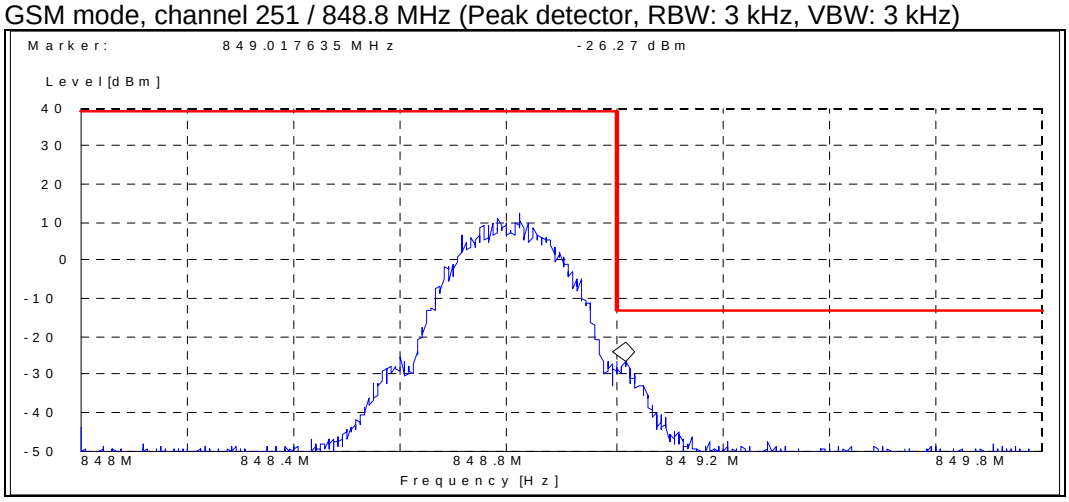
Phone Slide Closed:

GSM mode, channel 128 / 824.2 MHz (Peak detector, RBW: 3 kHz, VBW: 3 kHz)



Operation mode (TX on)	Channel / f_C [MHz]	P [dBm]
GSM	128 / 824.2	-26.90

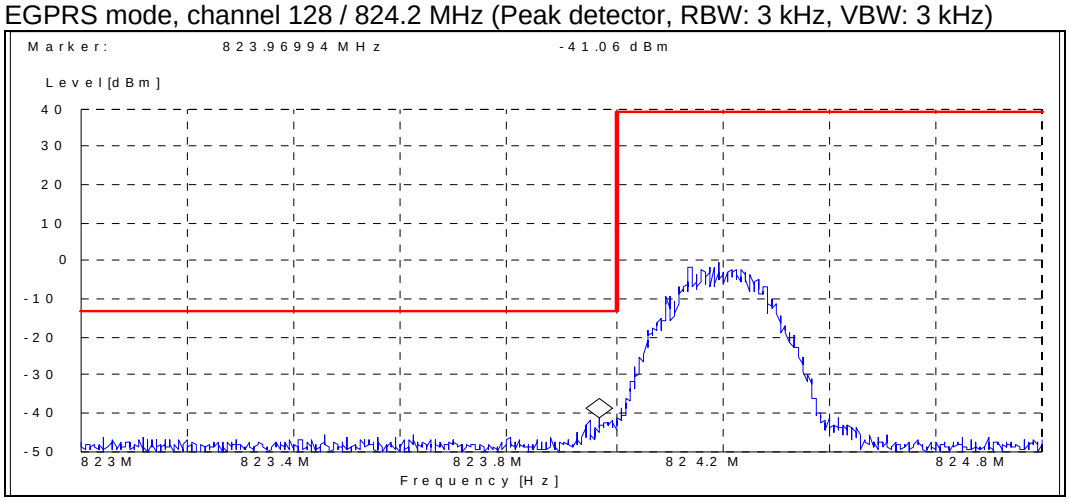
GSM mode, channel 251 / 848.8 MHz (Peak detector, RBW: 3 kHz, VBW: 3 kHz)



Operation mode (TX on)	Channel / f_C [MHz]	P [dBm]
GSM	251 / 848.8	-26.30

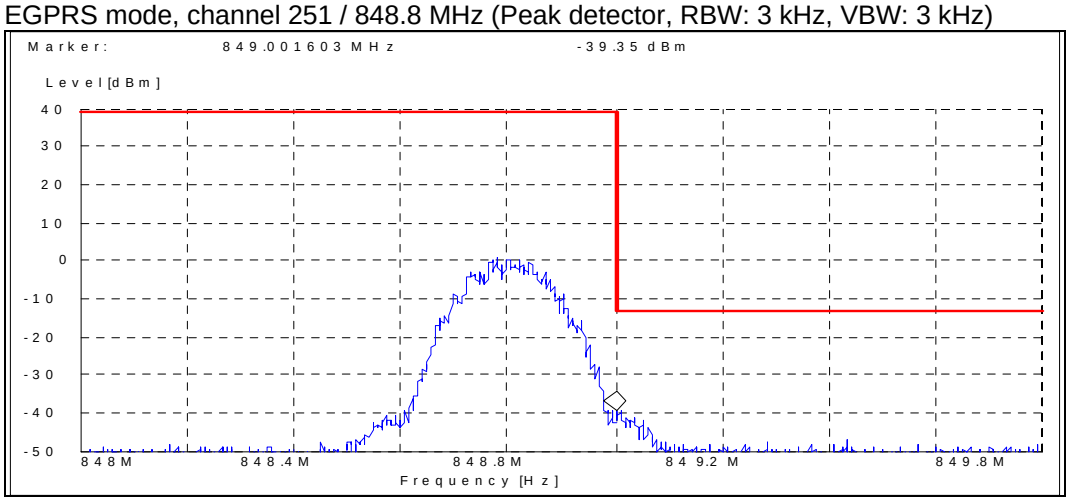
TCC Nokia Copenhagen Laboratory
Frederikskaj
1790 COPENHAGEN V
DENMARK
Tel. +45 33 292929
Fax. +45 33 292934

EGPRS mode, channel 128 / 824.2 MHz (Peak detector, RBW: 3 kHz, VBW: 3 kHz)



Operation mode (TX on)	Channel / f_C [MHz]	P [dBm]
EGPRS	128 / 824.2	-41.10

EGPRS mode, channel 251 / 848.8 MHz (Peak detector, RBW: 3 kHz, VBW: 3 kHz)

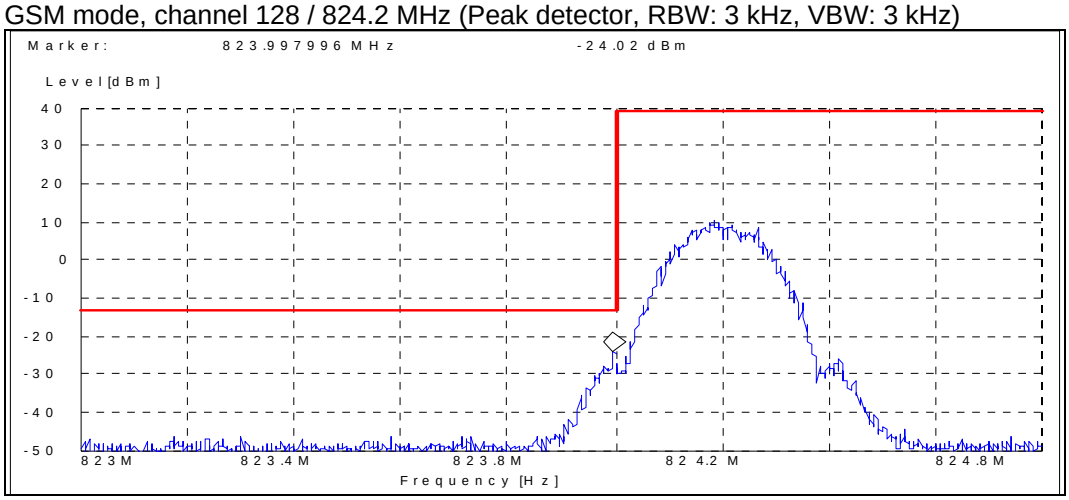


Operation mode (TX on)	Channel / f_C [MHz]	P [dBm]
EGPRS	251 / 848.8	-39.30

TCC Nokia Copenhagen Laboratory
Frederikskaj
1790 COPENHAGEN V
DENMARK
Tel. +45 33 292929
Fax. +45 33 292934

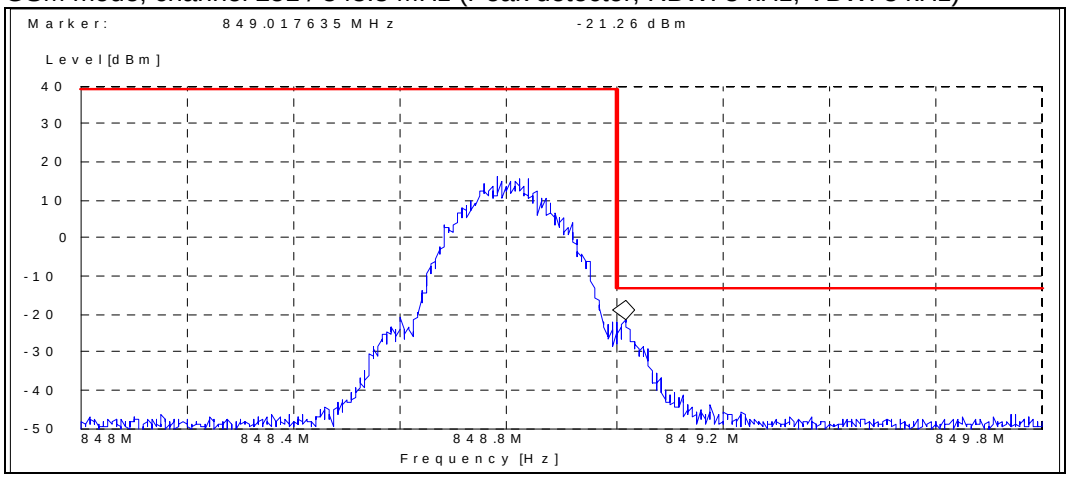
Phone Slide Open:

GSM mode, channel 128 / 824.2 MHz (Peak detector, RBW: 3 kHz, VBW: 3 kHz)



Operation mode (TX on)	Channel / f_C [MHz]	P [dBm]
GSM	128 / 824.2	-24.00

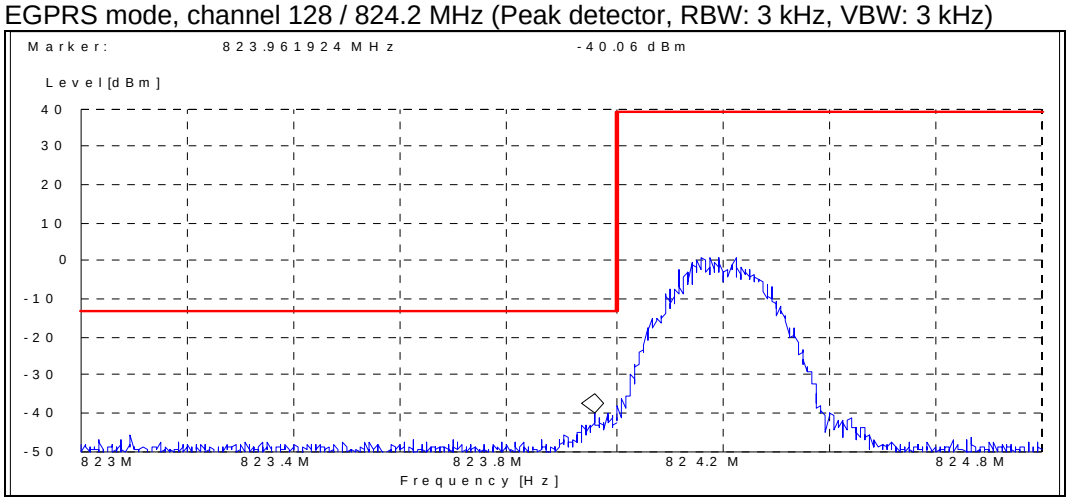
GSM mode, channel 251 / 848.8 MHz (Peak detector, RBW: 3 kHz, VBW: 3 kHz)



Operation mode (TX on)	Channel / f_C [MHz]	P [dBm]
GSM	251 / 848.8	-21.30

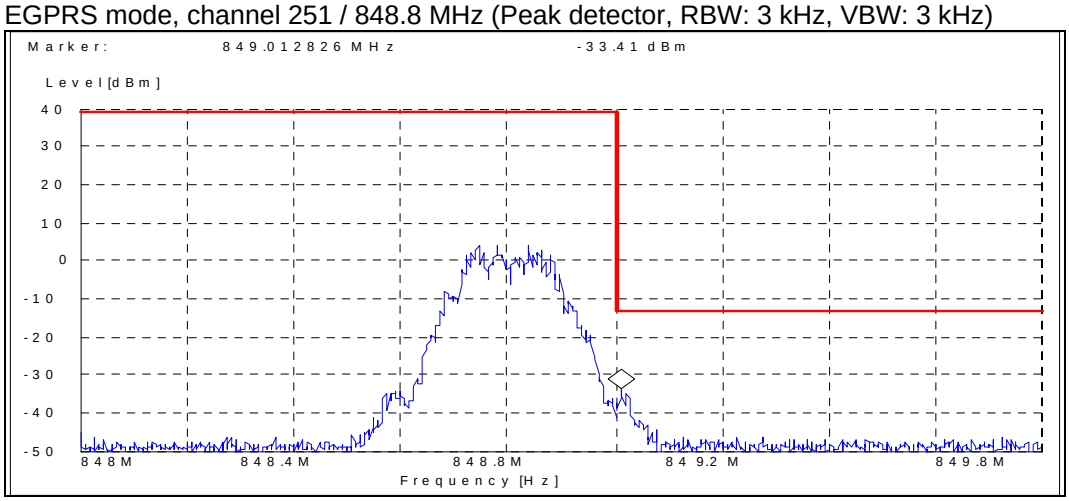
TCC Nokia Copenhagen Laboratory
Frederikskaj
1790 COPENHAGEN V
DENMARK
Tel. +45 33 292929
Fax. +45 33 292934

EGPRS mode, channel 128 / 824.2 MHz (Peak detector, RBW: 3 kHz, VBW: 3 kHz)



Operation mode (TX on)	Channel / f_C [MHz]	P [dBm]
EGPRS	128 / 824.2	-40.10

EGPRS mode, channel 251 / 848.8 MHz (Peak detector, RBW: 3 kHz, VBW: 3 kHz)



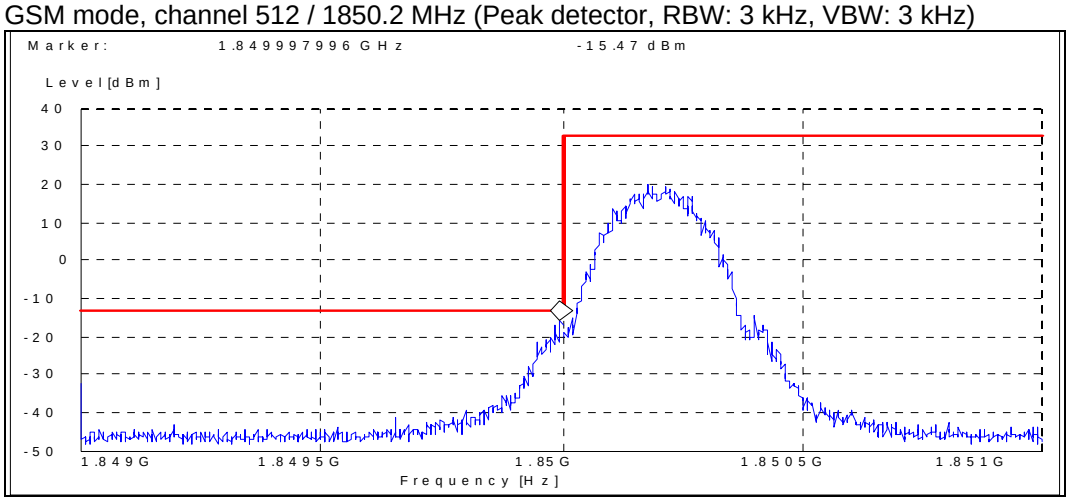
Operation mode (TX on)	Channel / f_C [MHz]	P [dBm]
EGPRS	251 / 848.8	-33.40

TCC Nokia Copenhagen Laboratory
Frederikskaj
1790 COPENHAGEN V
DENMARK
Tel. +45 33 292929
Fax. +45 33 292934

3.4. GSM 1900 Test results

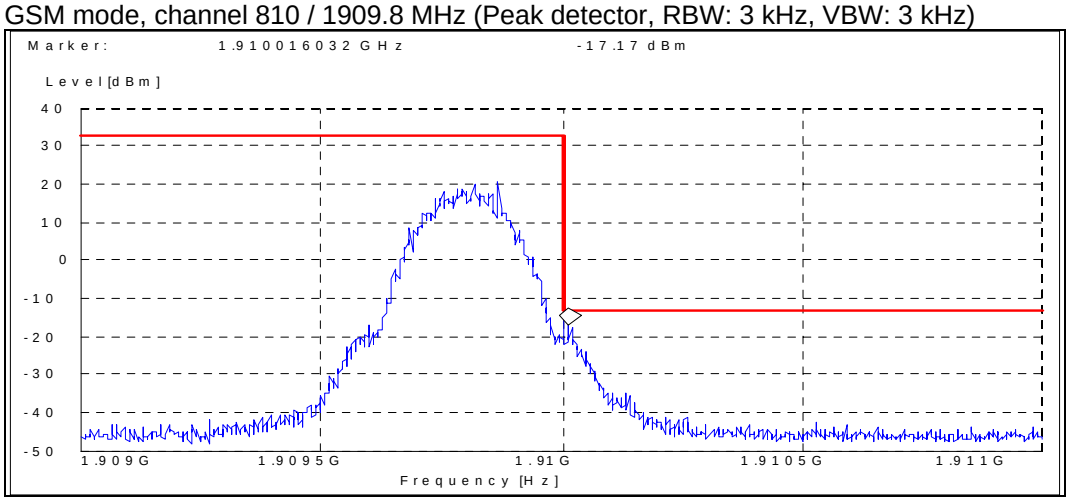
Phone Slide Closed:

GSM mode, channel 512 / 1850.2 MHz (Peak detector, RBW: 3 kHz, VBW: 3 kHz)



Operation mode (TX on)	Channel / f_C [MHz]	P [dBm]
GSM	512 / 1850.2	-15.50

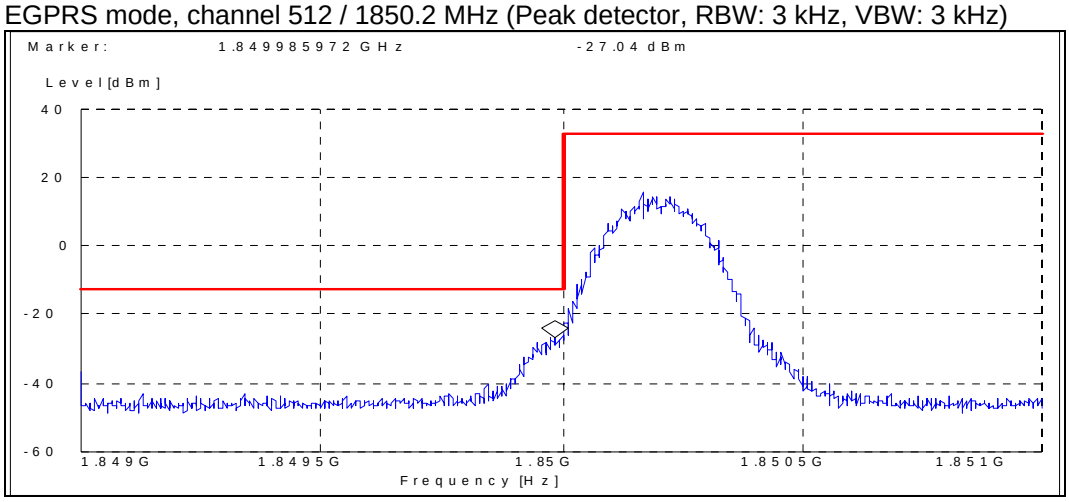
GSM mode, channel 810 / 1909.8 MHz (Peak detector, RBW: 3 kHz, VBW: 3 kHz)



Operation mode (TX on)	Channel / f_C [MHz]	P [dBm]
GSM	810 / 1909.8	-17.20

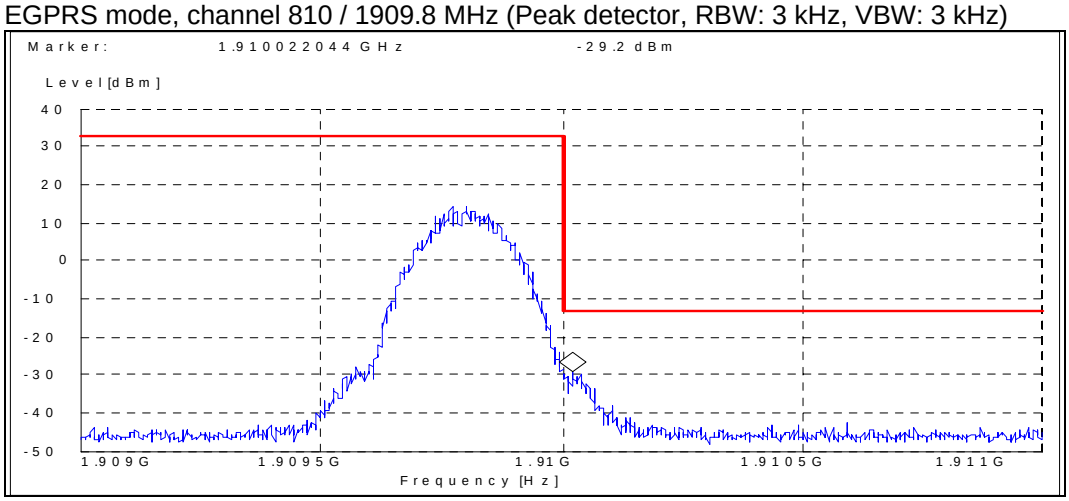
TCC Nokia Copenhagen Laboratory
Frederikskaj
1790 COPENHAGEN V
DENMARK
Tel. +45 33 292929
Fax. +45 33 292934

EGPRS mode, channel 512 / 1850.2 MHz (Peak detector, RBW: 3 kHz, VBW: 3 kHz)



Operation mode (TX on)	Channel / f_C [MHz]	P [dBm]
EGPRS	512 / 1850.2	-27.00

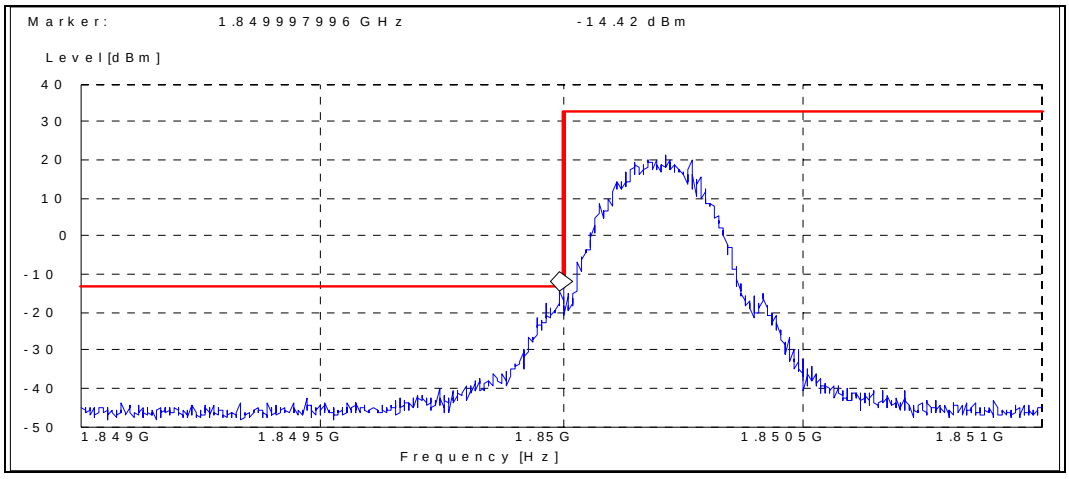
EGPRS mode, channel 810 / 1909.8 MHz (Peak detector, RBW: 3 kHz, VBW: 3 kHz)



Operation mode (TX on)	Channel / f_C [MHz]	P [dBm]
EGPRS	810 / 1909.8	-29.20

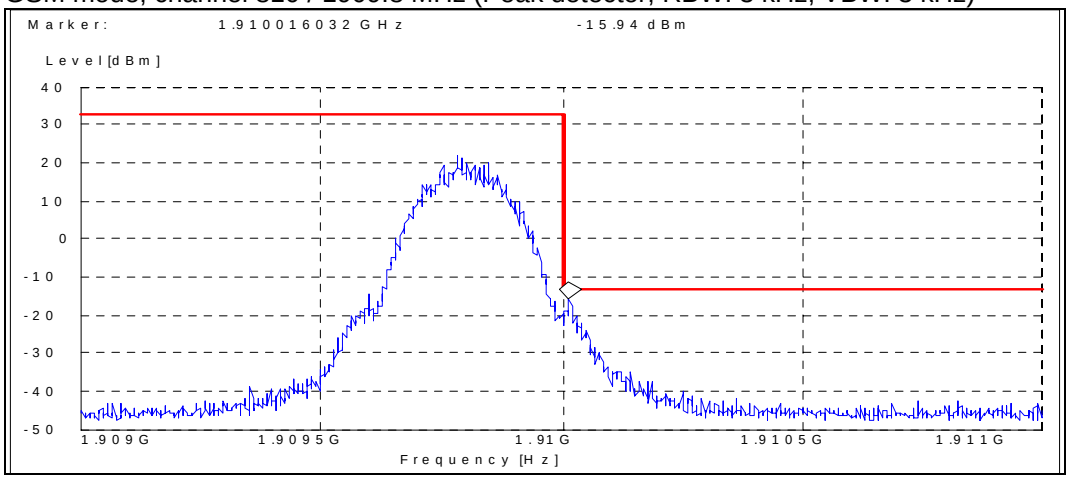
Phone Slide Open:
GSM mode, channel 512 / 1850.2 MHz (Peak detector, RBW: 3 kHz, VBW: 3 kHz)

TCC Nokia Copenhagen Laboratory
Frederikskaj
1790 COPENHAGEN V
DENMARK
Tel. +45 33 292929
Fax. +45 33 292934



Operation mode (TX on)	Channel / f_C [MHz]	P [dBm]
GSM	512 / 1850.2	-14.40

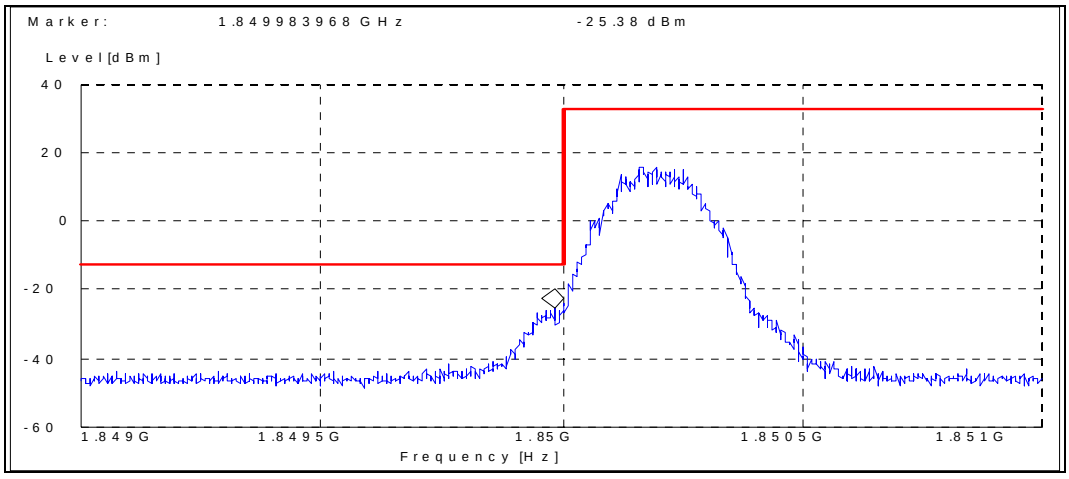
GSM mode, channel 810 / 1909.8 MHz (Peak detector, RBW: 3 kHz, VBW: 3 kHz)



Operation mode (TX on)	Channel / f_C [MHz]	P [dBm]
GSM	810 / 1909.8	-15.90

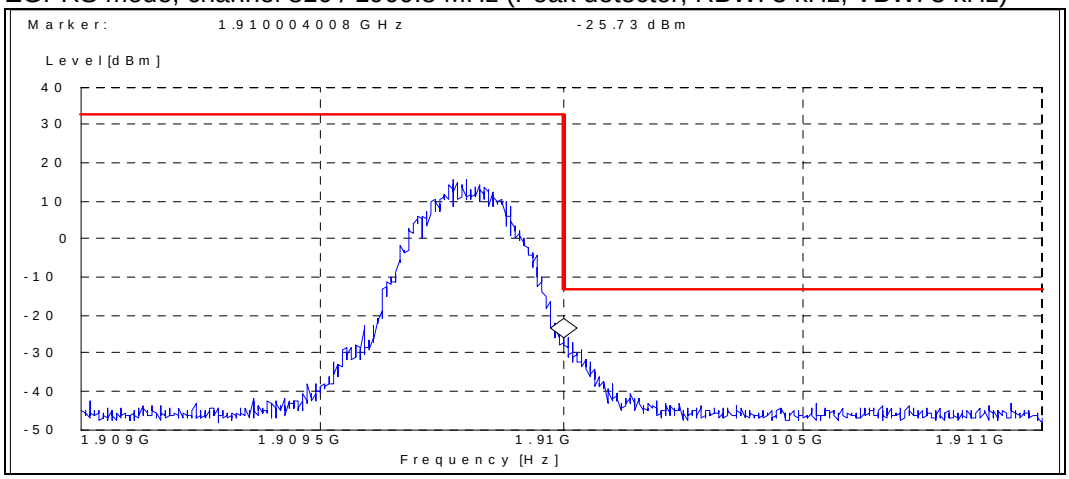
EGPRS mode, channel 512 / 1850.2 MHz (Peak detector, RBW: 3 kHz, VBW: 3 kHz)

TCC Nokia Copenhagen Laboratory
Frederikskaj
1790 COPENHAGEN V
DENMARK
Tel. +45 33 292929
Fax. +45 33 292934



Operation mode (TX on)	Channel / f_C [MHz]	P [dBm]
EGPRS	512 / 1850.2	-25.40

EGPRS mode, channel 810 / 1909.8 MHz (Peak detector, RBW: 3 kHz, VBW: 3 kHz)



Operation mode (TX on)	Channel / f_C [MHz]	P [dBm]
EGPRS	810 / 1909.8	-25.70

TCC Nokia Copenhagen Laboratory
Frederikskaj
1790 COPENHAGEN V
DENMARK
Tel. +45 33 292929
Fax. +45 33 292934

4. Test Equipment

4.1. Conducted measurements

Eq. No	Equipment	Type	Manufacturer	Used in
13037	Power Supply 0-15V 10A	EA3012	LP Instruments	15C, 15B
13513	Pulse Limiter 9KHz-30MHz	ESH3Z2	Rohde&Schwarz	15C, 15B
13666	EMI Test Receiver 9KHz-2,5GHz	ESPC	Rohde&Schwarz	15C, 15B
13935	Two Lines Artificial Mains Network	ESH3-Z5	Rohde&Schwarz	15C, 15B
16995	Directional Coupler 20dB 0,5-2,0 GHz SMA Conn.	1538RA-20	Weinschel	15C, 15B
18772	Shielded Chamber	RFD-100	ETS-Lindgren	15C, 15B
19171	Universal Radio Communication Tester	CMU200	Rohde&Schwarz	15C, 15B
11386	System DC Power Supply	HP6632A	Hewlett Packard	22/24/27, 15C, 15B
19678	Spectrum Analyzer 26 GHz	FSP	Rohde&Schwarz	22/24/27, 15C, 15B
16601	Universal Radio Communication Tester	CMU200	Rohde&Schwarz	22/24/27, 15C, 15B
19625	Vötsch Climatic Chamber	VT4002EMC	Vötsch	22/24/27, 15C, 15B
13357	Rohde & Schwartz Signal Generator	SMP02	Rohde&Schwarz	22/24/27, 15C, 15B
20168	Bluetooth EDR Tester	CBT	Rohde&Schwarz	22/24/27, 15C, 15B

4.2. Radiated measurements

Eq. No	Equipment	Type	Manufacturer	Used in
18416	Universal Radio Communication Tester	CMU200	Rohde&Schwarz	22/24/27, 15C, 15B
	Programmable Relay Switching System	----------	Pickering	22/24/27, 15C, 15B
15742	Programmable Relay Switching System	----------	Pickering	22/24/27, 15C, 15B
14020	Power Supply Module Relay Switching System 45W	10-910-002	Pickering	22/24/27, 15C, 15B
15743	Power Supply Module Relay Switching System 50W	10-910L-001	Pickering	22/24/27, 15C, 15B
16490	RS-232/IEEE-488.2 Interface	10-921-001	Pickering	22/24/27, 15C, 15B
	RS-232/IEEE-488.2 Interface	10-921-001	Pickering	22/24/27, 15C, 15B
20078	Relay 2x6 Chnl µWave Mux	10-785B-522	Pickering	22/24/27, 15C, 15B
14021	Relay Dual 6 Chnl µWave Mux	10-785-522		22/24/27, 15C, 15B
	Relay Dual 6 Chnl µWave Mux	10-785-522		22/24/27, 15C, 15B
17644	Dual 6 Channel MUX Microwave Relay SMA 50 Ohm	10-785-522	Pickering	22/24/27, 15C, 15B
16948	Dual 6 Channel MUX Microwave Relay SMA 50 Ohm	10-785-522	Pickering	22/24/27, 15C, 15B
16949	Dual 6 Channel MUX Microwave Relay SMA 50 Ohm	10-785-522	Pickering	22/24/27, 15C, 15B
18792	Multi Device Controller	2090	ETS-EMCO	22/24/27, 15C, 15B
14963	RF Preamplifier 100MHz-4GHz (Metal Chassis)	AFS3-00100400	Miteq/NMP Cph	22/24/27, 15C, 15B
18861	EMI Test Receiver 20Hz-26,5GHz	ESI	Rohde & Schwarz	22/24/27, 15C, 15B
20335	Ultra Broadband Antenna Ultralog 30-3000MHz	HL562	Rohde&Schwarz	22/24/27, 15C, 15B
18773	Shielded Chamber	RFD-100	ETS-Lindgren	22/24/27, 15C, 15B
18774	Shielded Chamber	RFSD-F/A-100	ETS-Lindgren	22/24/27, 15C, 15B
19151	High Pass Filter 3GHz	WHJS3000-10SS	Wainwright	22/24/27, 15C, 15B

TCC Nokia Copenhagen Laboratory
Frederikskaj
1790 COPENHAGEN V
DENMARK
Tel. +45 33 292929
Fax. +45 33 292934

Eq. No	Equipment	Type	Manufacturer	Used in
	WHK3.0/18G-10ss			
13937	Ultra Stable Notch Filter 850MHz	WRCA902.4-0.2/40-6SS	Wainwright Instruments	22/24/27, 15C, 15B
13936	Ultra Stable Notch Filter 1747,5MHz	WRCD1747.5-0.2/40-10SS	Wainwright Instruments	22/24/27, 15C, 15B
14114	Highpass filter	WHK1000-12SS	Wainwright Instruments	22/24/27, 15C, 15B
14188	Ultra Stable Notch Filter 902,4MHz	WRCA902.4-0.2/40-6SS	Wainwright	22/24/27, 15C, 15B
14187	Ultra Stable Notch Filter 1747,5MHz	WRCD1747.5-0.2/40-10SS	Wainwright	22/24/27, 15C, 15B
16633	Ultra Stable Notch Filter 1880,0MHz	WRCD1880.0-0.2/40-10SS	Wainwright	22/24/27, 15C, 15B
19587	BT/WLAN Band Reject Filter	WRCG2400/2483-2390/2493-35/10SS	Wainwright	22/24/27, 15C, 15B
20115	WDCMA Band 2 filter		Wainwright	24, 15C, 15B
20114	WDCMA Band 4 filter	WRCG1737/1743-1733/1747-40/6SS	Wainwright	27, 15C, 15B
20116	WDCMA Band 5&6 filter	WRCG832/83/-825/845-40/5SS	Wainwright	22, 15C, 15B
18323	Band reject filter 1947-1953MHz 40dB	WRCG1947/1953-1940/1960-40/6SS	Wainwright	22/24/27, 15C, 15B
20031	Double Ridged Broadband Horn	BBHA 9120 D	SCHWARZBECK	22/24/27, 15C, 15B
19966	Magnetic Loop Antenna 9 kHz - 30 MHz	HFH2-Z2	Rohde&Schwarz	15C, 15B
14993	EMI Test Receiver 9KHz-2750MHz	ESCS30	Rohde&Schwarz	22/24/27, 15C, 15B
15191	Turntable Contoller Unit	G-800SDX	YAESU	22/24/27, 15C, 15B
14900	Antenna Controller	HD100	HD GmbH	22/24/27, 15C, 15B
19374	Resonant Dipole Antenna 850MHz SMA m Conn.	---------	NMP Cph	22/24/27, 15C, 15B
19375	Resonant Dipole Antenna 1900MHz SMA m Conn.	----------	NMP Cph	22/24/27, 15C, 15B
20168	Bluetooth EDR Tester	CBT	Rohde&Schwarz	22/24/27, 15C, 15B

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1790 COPENHAGEN V
DENMARK
Tel. +45 33 292929
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