CETECOM™

Annex 1: Diagrams of testing
to TEST REPORT
No.: 2-0004-11-18-1g

According to:
FCC-Regulations
Part 15.107&15.207, Part 15.109 Class B
IC-Regulations
RSS-132 Issue 2 & RSS-133 Issue 5
RSS-Gen, Issue 3

for

Sony Ericsson Mobile Communications AB

GSM/(E)GPRS/W-CDMA Mobile Phone AAD-3880121-BV

FCC-ID: PY7A3880121
IC: 4170B-A3880121

Laboratory Accreditation and Listings			
DAkkS Deutsche Akkreditierungsstelle D-PL-12047-01-01	Reg. No.: 736496 MRA US-EU 0003	Industry Canada Reg. No.: 3462D-1 Reg. No.: 3462D-2 Reg. No.: 3462D-3	Voluntary Controls for Electromagnetic Emissions Reg. No.: R-2665, R-2666 C-2914, T-1967, G-301
Wi-Fi Alliance AUTHORIZED RF LABORATORY	CTIA Authorized Test Lab LAB CODE 20011130-00		
accredited according to DIN EN ISO/IEC 17025			

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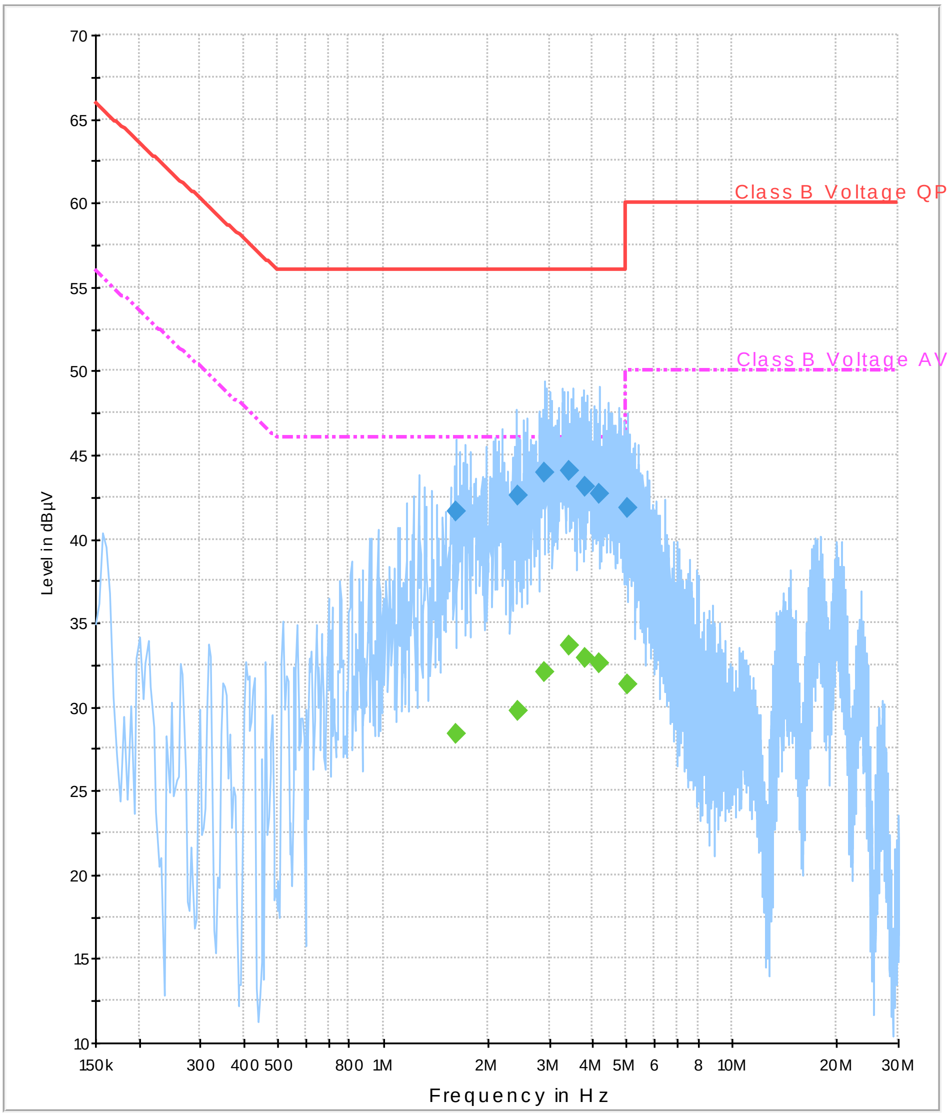
1. Measurement diagrams

1.1. Conducted emissions on AC-mains: RX-Mode

Diagram No. g_1.01

	Date: 19.08.2011 Page 1 of 3
Test Description:	Conducted Voltage Measurement Class B
Testspezification:	FCC 15.107 Class B/ RSS-Gen Issue 3
Technical Data:	Please see next page for detailed information
Diagram:	Shows the peak values as a sum of measured ports (N+L1) in maxhold mode
Operator name:	Lor
Report.- Nr.	2-0004-11-18-1g
Operating mode:	IDLE 850 (RX-Mode)+ GPS RX mode + charging battery
Measured on line:	Mains AC L1 and N
Power during test:	110 V AC 60 Hz
Comment 1:	

01_Class B_Voltage_PK_QPAV_N_L1



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Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
1.624063	41.7	15000.0	9.000	GND	L1	0.1	14.3	56.0
2.432031	42.5	15000.0	9.000	GND	L1	0.1	13.5	56.0
2.902500	43.9	15000.0	9.000	GND	L1	0.1	12.1	56.0
3.403594	44.1	15000.0	9.000	GND	L1	0.1	11.9	56.0
3.822188	43.1	15000.0	9.000	GND	L1	0.1	12.9	56.0
4.175313	42.6	15000.0	9.000	GND	L1	0.1	13.4	56.0
5.010313	41.8	15000.0	9.000	GND	L1	0.1	18.2	60.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
1.624063	28.4	15000.0	9.000	GND	L1	0.1	17.6	46.0
2.432031	29.8	15000.0	9.000	GND	L1	0.1	16.2	46.0
2.902500	32.1	15000.0	9.000	GND	L1	0.1	13.9	46.0
3.403594	33.7	15000.0	9.000	GND	L1	0.1	12.3	46.0
3.822188	32.9	15000.0	9.000	GND	L1	0.1	13.1	46.0
4.175313	32.6	15000.0	9.000	GND	L1	0.1	13.4	46.0
5.010313	31.3	15000.0	9.000	GND	L1	0.1	18.7	50.0

Technical Data of Measurements with R&S EMC32 V8.51.1

EMI Auto Test Template: 01_Class B_Voltage_PK_QPAV_N_L1

Hardware Setup: ESH2-Z5
Measurement Type: 4 Line LISN
Frequency Range: 150 kHz - 30 MHz
Graphics Level Range: 0 dBµV - 90 dBµV

Preview Measurements:
Scan Test Template: 02_Class B pre_PK_fast

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	61.035 Hz	PK+	200 Hz	0,00005 s	0 dB
150 kHz - 30 MHz	3.906 kHz	PK+	9 kHz	0,00005 s	0 dB

Receiver: [ESCS 30]

Data Reduction:
Limit Line #1: Class B Voltage QP
Limit Line #2: Class B Voltage AV
Peak Search: 6 dB , Maximum Results: 10
Subrange Maxima: 50 Subranges , Maxima per Subrange: 2
Acceptance Offset: -13 dB
Maximum Number of Results: 30
After Data Reduction: Interactive data reduction

Frequency Zoom:
Zoom Scan Template: 08_Class B maxZoom_PK100mS

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	5 kHz	PK+	200 Hz	0,1 s	0 dB
150 kHz - 30 MHz	5 kHz	PK+	9 kHz	0,1 s	0 dB

Receiver: [ESCS 30]

Final Measurements:
Template for Single Meas.: 07_Class B fin AV QP

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	4.5 kHz	QPK; CAV	200 Hz	15 s	0 dB
150 kHz - 30 MHz	4.5 kHz	QPK; CAV	9 kHz	15 s	0 dB

Receiver: [ESCS 30]

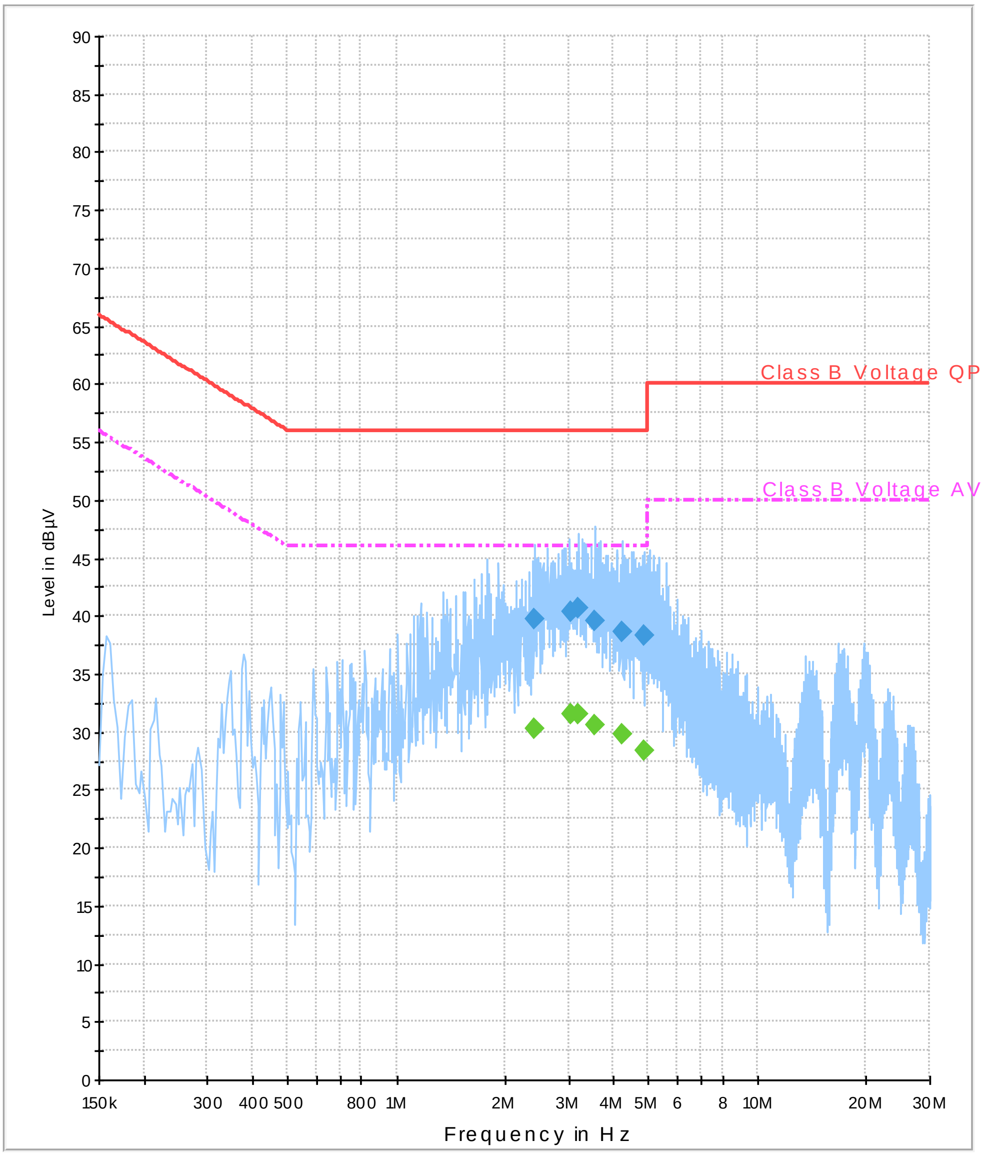
Report Settings:
Report Template: Ctc_Standard_class_B
Create Electronic Report: RTF PDF
Document Name: EMI Report

Actions:
Test stop
Notify: "End of Test"

Diagram No. g_1.02

	Date: 19.08.2011	Page 1 of 2
Test Description:	Conducted Voltage Measurement Class B	
Testspezification:	FCC 15.107 Class B/ RSS-Gen Issue 3	
Technical Data:	Please see next page for detailed information	
Diagram:	Shows the peak values as a sum of measured ports (N+L1) in maxhold mode	
Operator name:	Lor	
Report.- Nr.	2-0004-11-18-1g	
Operating mode:	IDLE 1900 (RX-Mode)+ RADIO RX mode + charging battery	
Measured on line:	Mains AC L1 and N	
Power during test:	110 V AC 60 Hz	
Comment 1:	--	

01_Class B_Voltage_PK_QPAV_N_L1



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Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
2.424219	39.7	15000.0	9.000	GND	L1	0.1	16.3	56.0
3.030781	40.3	15000.0	9.000	GND	L1	0.1	15.7	56.0
3.209375	40.7	15000.0	9.000	GND	L1	0.1	15.3	56.0
3.564844	39.5	15000.0	9.000	GND	L1	0.0	16.5	56.0
4.218906	38.6	15000.0	9.000	GND	L1	0.1	17.4	56.0
4.870625	38.3	15000.0	9.000	GND	L1	0.1	17.7	56.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
2.424219	30.2	15000.0	9.000	GND	L1	0.1	15.8	46.0
3.030781	31.5	15000.0	9.000	GND	L1	0.1	14.5	46.0
3.209375	31.5	15000.0	9.000	GND	L1	0.1	14.6	46.0
3.564844	30.6	15000.0	9.000	GND	L1	0.0	15.4	46.0
4.218906	29.8	15000.0	9.000	GND	L1	0.1	16.2	46.0
4.870625	28.4	15000.0	9.000	GND	L1	0.1	17.6	46.0

Technical Data of Measurements with R&S EMC32 V8.51.1

EMI Auto Test Template: 01_Class B_Voltage_PK_QPAV_N_L1

Hardware Setup: ESH2-Z5
Measurement Type: 4 Line LISN
Frequency Range: 150 kHz - 30 MHz
Graphics Level Range: 0 dBµV - 90 dBµV

Preview Measurements:
Scan Test Template: 02_Class B pre_PK_fast

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	61.035 Hz	PK+	200 Hz	0,00005 s	0 dB
150 kHz - 30 MHz	3.906 kHz	PK+	9 kHz	0,00005 s	0 dB

Receiver: [ESCS 30]

Data Reduction:
Limit Line #1: Class B Voltage QP
Limit Line #2: Class B Voltage AV
Peak Search: 6 dB , Maximum Results: 10
Subrange Maxima: 50 Subranges , Maxima per Subrange: 2
Acceptance Offset: -13 dB
Maximum Number of Results: 30
After Data Reduction: Interactive data reduction

Frequency Zoom:
Zoom Scan Template: 08_Class B maxZoom_PK100mS

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	5 kHz	PK+	200 Hz	0,1 s	0 dB
150 kHz - 30 MHz	5 kHz	PK+	9 kHz	0,1 s	0 dB

Receiver: [ESCS 30]

Final Measurements:
Template for Single Meas.: 07_Class B fin AV QP

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	4.5 kHz	QPK; CAV	200 Hz	15 s	0 dB
150 kHz - 30 MHz	4.5 kHz	QPK; CAV	9 kHz	15 s	0 dB

Receiver: [ESCS 30]

Report Settings:
Report Template: Ctc_Standard_class_B
Create Electronic Report: RTF PDF
Document Name: EMI Report

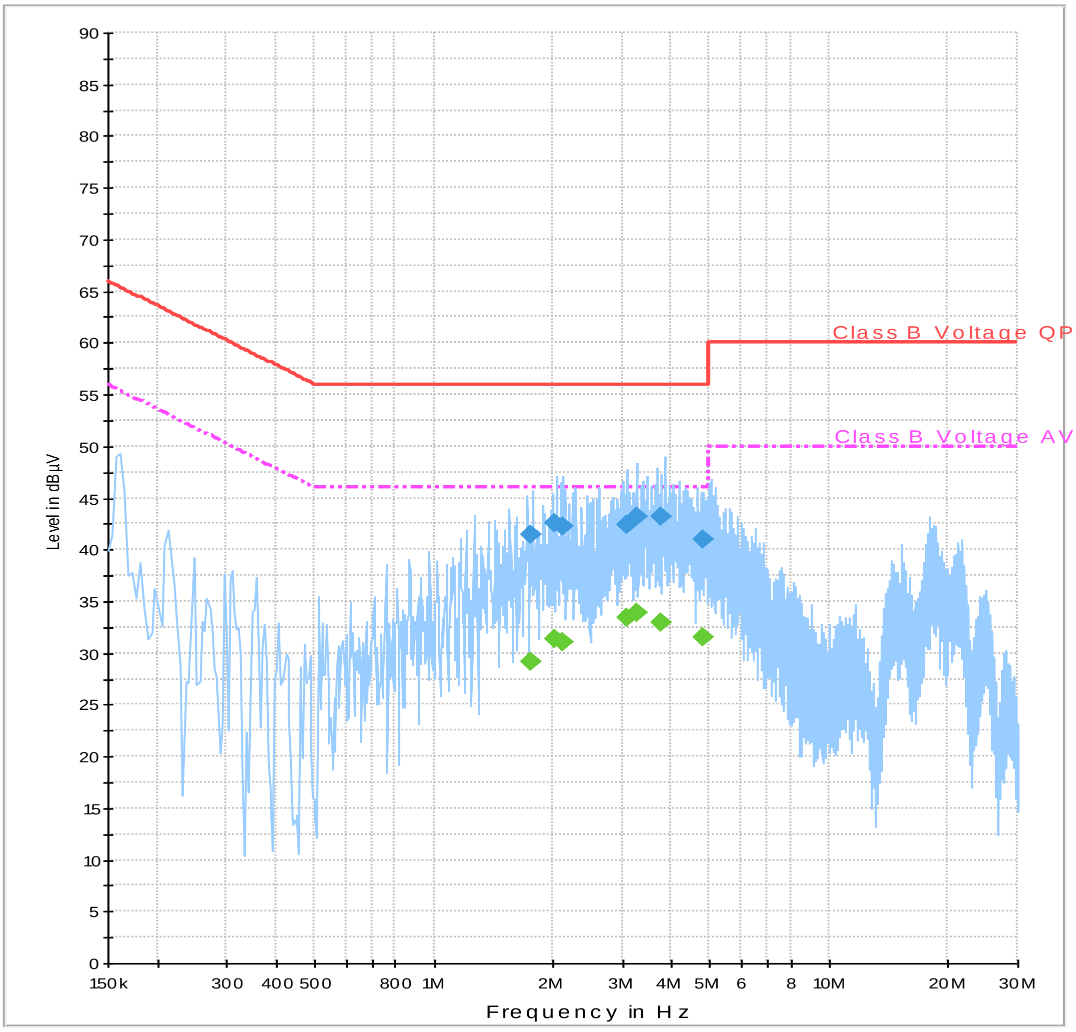
Actions:
Test stop
Notify: "End of Test"

1.2. Conducted emissions on AC-mains: TX-Mode

Diagram No. G_1.03

	Date: 19.08.2011 Page 1 of 3
Test Description:	Conducted Voltage Measurement Class B
Testspezification:	FCC 15.207, RSS-Gen, Issue 3
Technical Data:	Please see next page for detailed information
Diagram:	Shows the peak values as a sum of measured ports (N+L1) in maxhold mode
Operator name:	Lor
Report.- Nr.	2-0004-11-18-1g
Operating mode:	GSM TX 850 + charging battery
Measured on line:	Mains AC L1 and N
Power during test:	110 V AC 60 Hz
Comment 1:	--

01_Class B_Voltage_PK_QPAV_N_L1



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Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
1.769219	41.5	15000.0	9.000	GND	L1	0.1	14.5	56.0
2.033125	42.5	15000.0	9.000	GND	L1	0.1	13.5	56.0
2.124063	42.2	15000.0	9.000	GND	L1	0.1	13.8	56.0
3.082813	42.4	15000.0	9.000	GND	L1	0.1	13.6	56.0
3.254063	43.2	15000.0	9.000	GND	L1	0.1	12.8	56.0
3.752500	43.2	15000.0	9.000	GND	L1	0.1	12.8	56.0
4.825469	41.0	15000.0	9.000	GND	L1	0.1	15.0	56.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
1.769219	29.2	15000.0	9.000	GND	L1	0.1	16.8	46.0
2.033125	31.3	15000.0	9.000	GND	L1	0.1	14.7	46.0
2.124063	31.0	15000.0	9.000	GND	L1	0.1	15.0	46.0
3.082813	33.4	15000.0	9.000	GND	L1	0.1	12.6	46.0
3.254063	33.9	15000.0	9.000	GND	L1	0.1	12.1	46.0
3.752500	32.9	15000.0	9.000	GND	L1	0.1	13.1	46.0
4.825469	31.5	15000.0	9.000	GND	L1	0.1	14.5	46.0

Technical Data of Measurements with R&S EMC32 V8.51.1

EMI Auto Test Template: 01_Class B_Voltage_PK_QPAV_N_L1

Hardware Setup: ESH2-Z5
Measurement Type: 4 Line LISN
Frequency Range: 150 kHz - 30 MHz
Graphics Level Range: 0 dBµV - 90 dBµV

Preview Measurements:
Scan Test Template: 02_Class B pre_PK_fast

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	61.035 Hz	PK+	200 Hz	0,00005 s	0 dB
150 kHz - 30 MHz	3.906 kHz	PK+	9 kHz	0,00005 s	0 dB

Receiver: [ESCS 30]

Data Reduction:
Limit Line #1: Class B Voltage QP
Limit Line #2: Class B Voltage AV
Peak Search: 6 dB , Maximum Results: 10
Subrange Maxima: 50 Subranges , Maxima per Subrange: 2
Acceptance Offset: -13 dB
Maximum Number of Results: 30
After Data Reduction: Interactive data reduction

Frequency Zoom:
Zoom Scan Template: 08_Class B maxZoom_PK100mS

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	5 kHz	PK+	200 Hz	0,1 s	0 dB
150 kHz - 30 MHz	5 kHz	PK+	9 kHz	0,1 s	0 dB

Receiver: [ESCS 30]

Final Measurements:
Template for Single Meas.: 07_Class B fin AV QP

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	4.5 kHz	QPK; CAV	200 Hz	15 s	0 dB
150 kHz - 30 MHz	4.5 kHz	QPK; CAV	9 kHz	15 s	0 dB

Receiver: [ESCS 30]

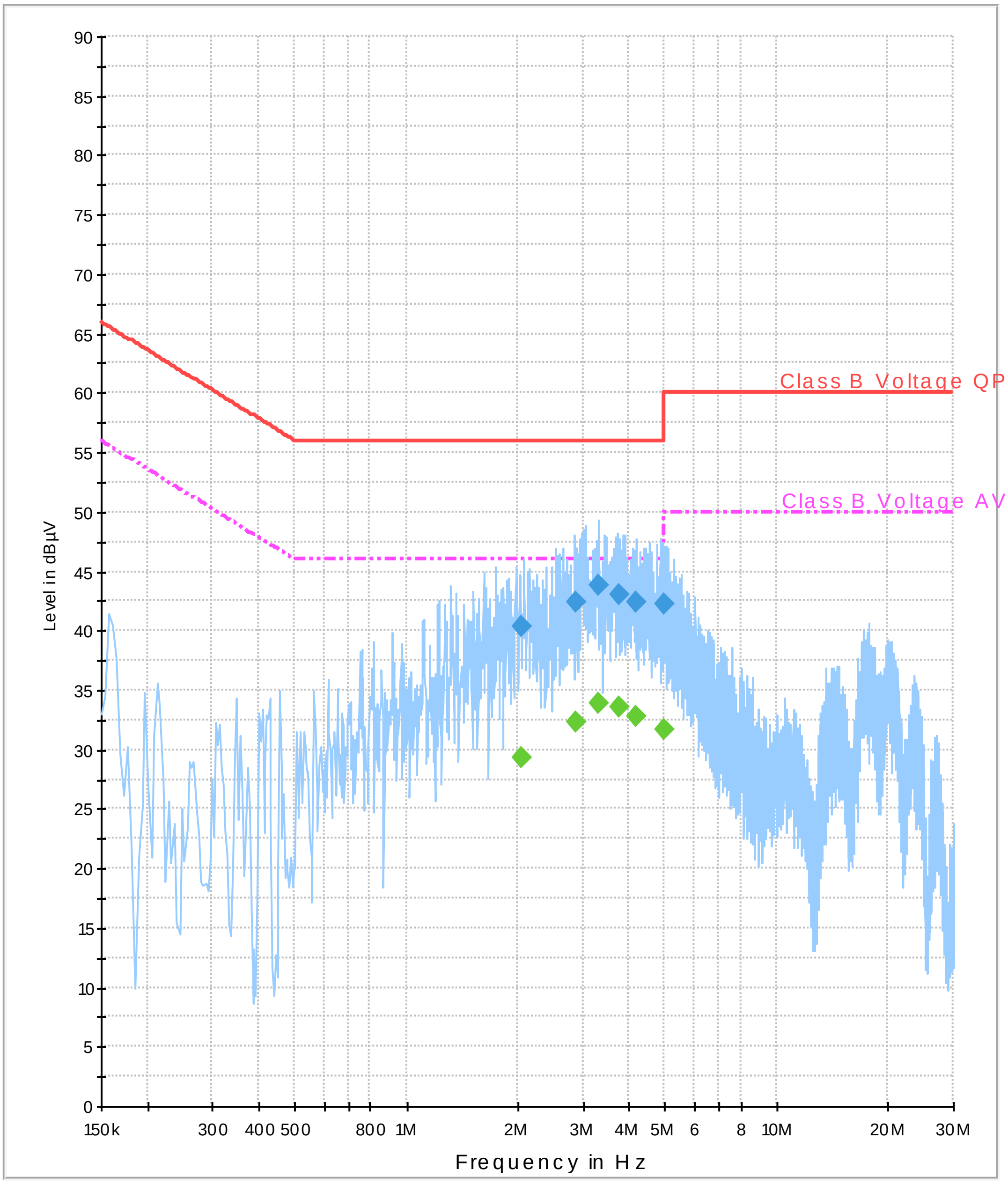
Report Settings:
Report Template: Ctc_Standard_class_B
Create Electronic Report: RTF PDF
Document Name: EMI Report

Actions:
Test stop
Notify: "End of Test"

Diagram No. G_1.04

	Date: 19.08.2011 Page 1 of 2
Test Description:	Conducted Voltage Measurement
Testspezification:	FCC 15.207, RSS-Gen, Issue 3
Technical Data:	Please see next page for detailed information
Diagram:	Shows the peak values as a sum of measured ports (N+L1) in maxhold mode
Operator name:	Lor
Report.- Nr.	2-0004-11-18-1g
Operating mode:	GSM TX 1900 + charging battery
Measured on line:	Mains AC L1 and N
Power during test:	110 V AC 60 Hz
Comment 1:	--

01_Class B_Voltage_PK_QPAV_N_L1



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Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
2.058281	40.4	15000.0	9.000	GND	L1	0.1	15.6	56.0
2.860000	42.4	15000.0	9.000	GND	L1	0.1	13.6	56.0
3.302031	43.8	15000.0	9.000	GND	L1	0.1	12.2	56.0
3.740625	43.0	15000.0	9.000	GND	L1	0.1	13.0	56.0
4.195469	42.3	15000.0	9.000	GND	L1	0.1	13.7	56.0
4.951563	42.2	15000.0	9.000	GND	L1	0.1	13.8	56.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
2.058281	29.3	15000.0	9.000	GND	L1	0.1	16.7	46.0
2.860000	32.3	15000.0	9.000	GND	L1	0.1	13.7	46.0
3.302031	33.9	15000.0	9.000	GND	L1	0.1	12.1	46.0
3.740625	33.5	15000.0	9.000	GND	L1	0.1	12.5	46.0
4.195469	32.8	15000.0	9.000	GND	L1	0.1	13.2	46.0
4.951563	31.7	15000.0	9.000	GND	L1	0.1	14.3	46.0

Technical Data of Measurements with R&S EMC32 V8.51.1

EMI Auto Test Template: 01_Class B_Voltage_PK_QPAV_N_L1

Hardware Setup: ESH2-Z5
Measurement Type: 4 Line LISN
Frequency Range: 150 kHz - 30 MHz
Graphics Level Range: 0 dBµV - 90 dBµV

Preview Measurements:
Scan Test Template: 02_Class B pre_PK_fast

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	61.035 Hz	PK+	200 Hz	0,00005 s	0 dB
150 kHz - 30 MHz	3.906 kHz	PK+	9 kHz	0,00005 s	0 dB

Receiver: [ESCS 30]

Data Reduction:
Limit Line #1: Class B Voltage QP
Limit Line #2: Class B Voltage AV
Peak Search: 6 dB , Maximum Results: 10
Subrange Maxima: 50 Subranges , Maxima per Subrange: 2
Acceptance Offset: -13 dB
Maximum Number of Results: 30
After Data Reduction: Interactive data reduction

Frequency Zoom:
Zoom Scan Template: 08_Class B maxZoom_PK100mS

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	5 kHz	PK+	200 Hz	0,1 s	0 dB
150 kHz - 30 MHz	5 kHz	PK+	9 kHz	0,1 s	0 dB

Receiver: [ESCS 30]

Final Measurements:
Template for Single Meas.: 07_Class B fin AV QP

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	4.5 kHz	QPK; CAV	200 Hz	15 s	0 dB
150 kHz - 30 MHz	4.5 kHz	QPK; CAV	9 kHz	15 s	0 dB

Receiver: [ESCS 30]

Report Settings:
Report Template: Ctc_Standard_class_B
Create Electronic Report: RTF PDF
Document Name: EMI Report

Actions:
Test stop
Notify: "End of Test"

1.3. Radiated field strength for emissions, 30MHz < f < 1000MHz

Diagram No. g_2.01

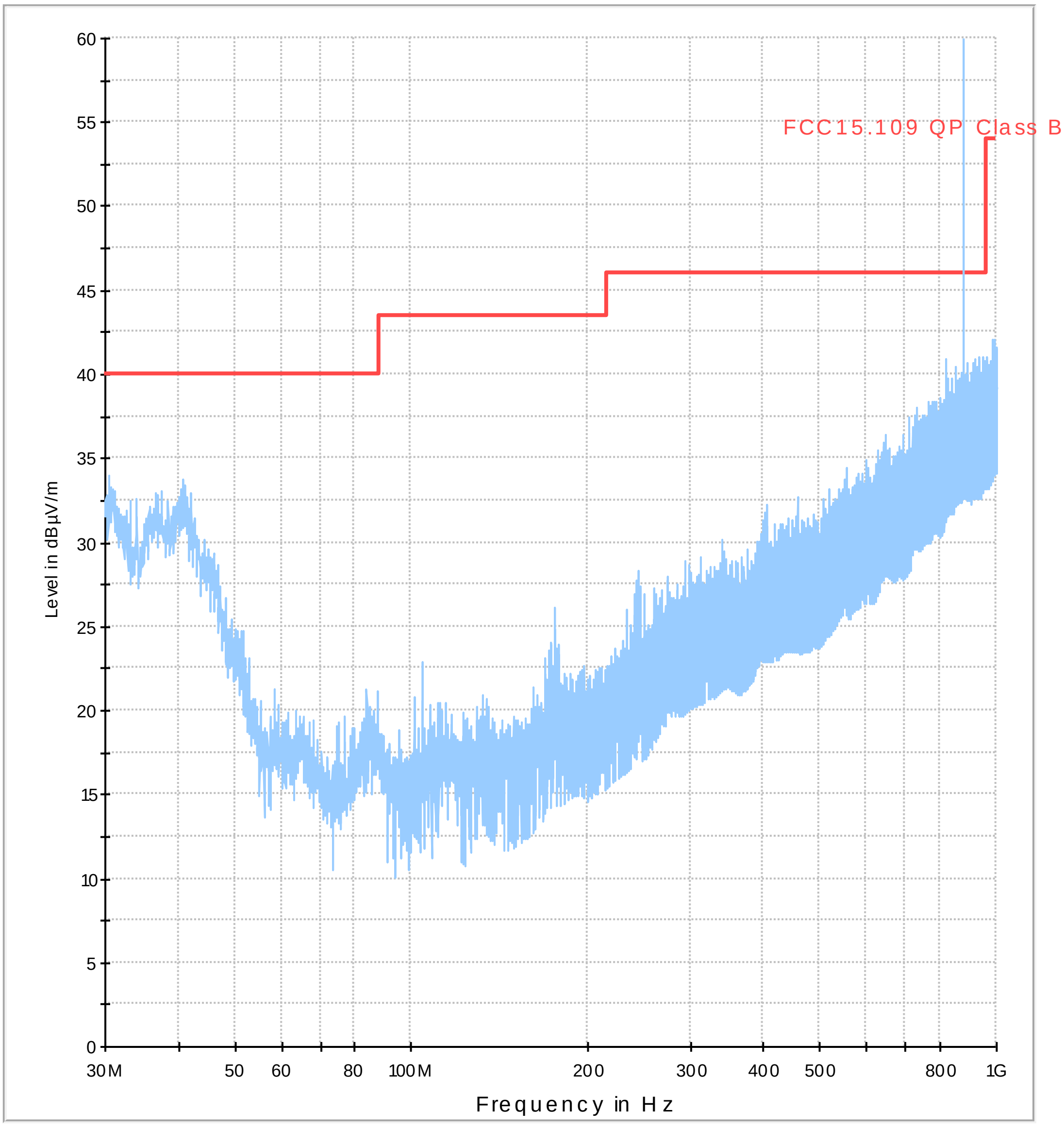
Common Information

Test description:	Electric Fieldstrength Measurement
Test site and distance:	Semi Anechoic Room (measurement distance=3m)
Measured sides of EUT:	front, right, rear, left,top,under side
Rec. antenna (pre-scan):	height 1.00 m and 1.82 m, horizontal and vertical polarisation
Rec. antenna (final):	height between 1 m to 4 m, polarisation according to pre-scan results
Turntable step:	90° during pre-scan, continuously turning during final measurement
Used filter:	lowpass 1200 MHz
Test specification.:	FCC 15.109 class B; RSS-Gen: Issue 3
HW	CB51EYWHH
Operator:	HLa
Operating conditions:	TX-on
Power during tests:	110V/60Hz;

EUT Information

EUT Name:	AAD-3880121-BV + EC700 + CAA+0002016-BV + CCA-0004013
Manufacturer:	Sony Ericsson

05_FCC15.109_hor+vert_kipp



EMI Auto Test Template: 05_FCC15.109_hor+vert_kipp

Hardware Setup:	HW11_FCC_ESCS30_TP1200_EUTkipp
Measurement Type:	E(I)RP
Frequency Range:	30 MHz - 1 GHz
Graphics Level Range:	0 dBµV/m - 60 dBµV/m

Preview Measurements:

Turntable position:	0 - 270 deg , Step Size = 90 deg , Positioning Speed = 8
Elevation:	0 - 90 deg , Step Size = 90 deg , Positioning Speed = 4
Polarization:	H + V
Scan Test Template:	EMI Scan 01_fast_FCC_15_209 B

Subrange	**Step Size**	**Detectors**	**IF BW**	**Meas. Time**	**Preamp**
30 MHz - 1 GHz	40 kHz	PK+	120 kHz	0,00005 s	0 dB

Receiver: [ESS]

Data Reduction:

Limit Line #1:	FCC15.109 QP Class B
Peak Search:	6 dB , Maximum Results: 10
Subrange Maxima:	25 Subranges , Maxima per Subrange: 1
Acceptance Offset:	-6 dB
Maximum Number of Results:	20
After Data Reduction:	Interactive data reduction

Frequency Zoom:

Zoom Scan Template:	EMI Scan 02_20ms_zoom_15_209 B

Subrange	**Step Size**	**Detectors**	**IF BW**	**Meas. Time**	**Preamp**
30 MHz - 1 GHz	10 kHz	PK+	120 kHz	0,02 s	0 dB

Receiver: [ESS]

Adjustment:

Turntable position:	Adjustment with full Range , Measuring Speed = 3
Elevation:	Adjustment with full Range , Measuring Speed = 5
Template for Single Meas.:	EMI Scan 02_20ms_FCC_15_209B

Subrange	**Step Size**	**Detectors**	**IF BW**	**Meas. Time**	**Preamp**
30 MHz - 1 GHz	100 kHz	PK+	120 kHz	0,02 s	0 dB

Receiver: [ESS]

Final Measurements:

Template for Single Meas.:	EMI Scan 03_1s_FCC_15_209 B

Subrange	**Step Size**	**Detectors**	**IF BW**	**Meas. Time**	**Preamp**
30 MHz - 1 GHz	100 kHz	QPK	120 kHz	1 s	0 dB

Receiver: [ESS]

Report Settings:

Report Template:	FCC15_209_vert_hor
Create Electronic Report:	RTF PDF
Document Name:	EMI Report

Actions:

Data Reduction: Before

Notify:	Sound (WAV file) 'tada.wav'

Final Measurements: After

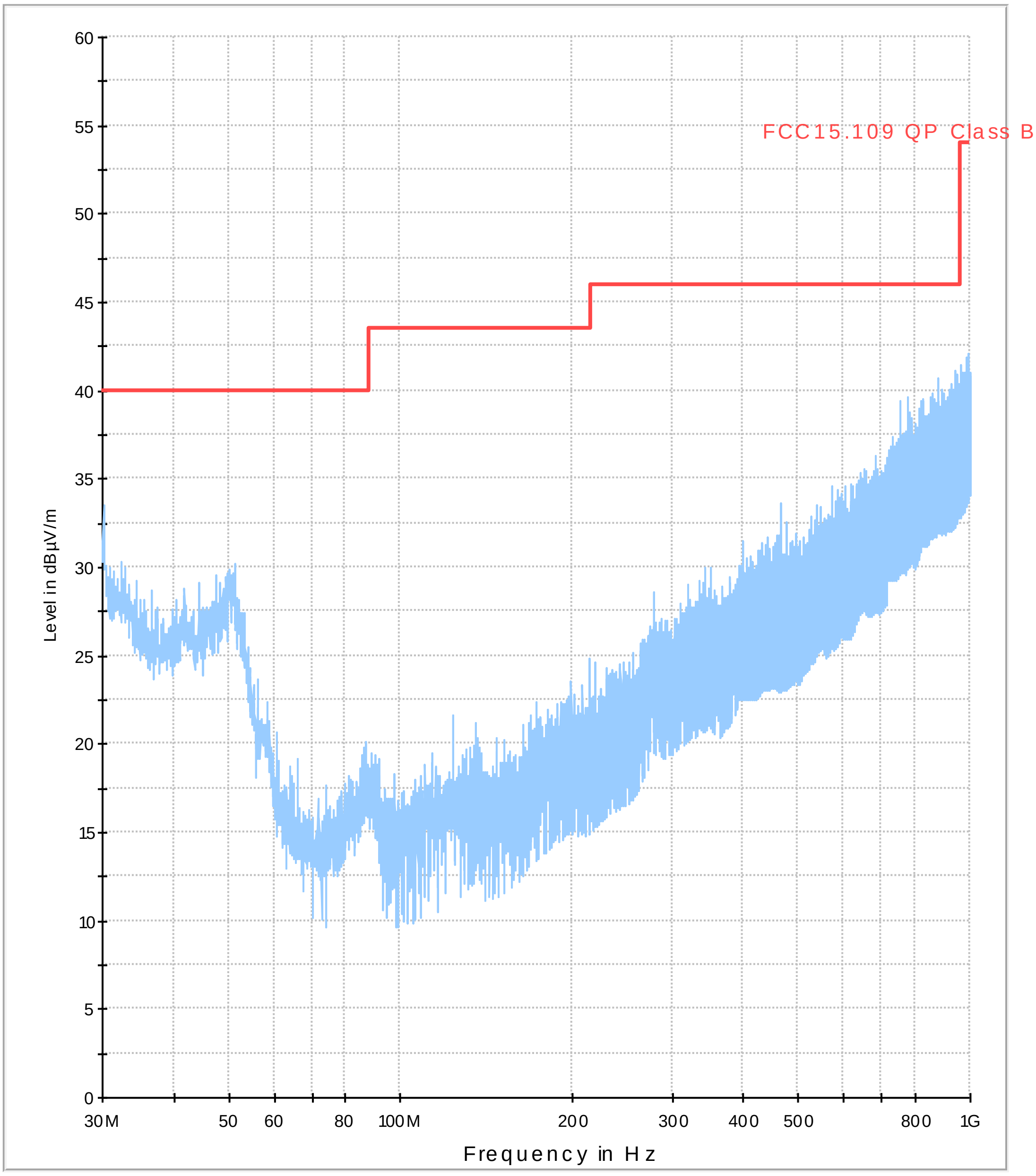
Notify:	Sound (WAV file) 'tada.wav'

Diagram No. g_2.03

Common Information

Test description:	Electric Fieldstrength Measurement
Test site and distance:	Semi Anechoic Room (measurement distance=3m)
Measured sides of EUT:	front, right, rear, left, top, under
Rec. antenna (pre-scan):	height 1.00 m and 1.82 m, horizontal and vertical polarisation
Rec. antenna (final):	height between 1 m to 4 m, polarisation according to pre-scan results
Turntable step:	90° during pre-scan, continuously turning during final measurement
Used filter:	lowpass 1200 MHz
Test specification.:	FCC 15.109 class B; RSS-Gen: Issue 3
Operator:	OOu
Operating conditions:	IDLE 1900 + FM Radio 99.2MHz
Power during tests:	110V/60Hz;
Comment 1:	Channel middle GSM1900(Channel 661)

05_FCC15.109_hor+vert_kipp



EMI Auto Test Template: 05_FCC15.109_hor+vert_kipp

Hardware Setup:	HW11_FCC_ESCS30_TP1200_EUTkipp
Measurement Type:	E(I)RP
Frequency Range:	30 MHz - 1 GHz
Graphics Level Range:	0 dBµV/m - 60 dBµV/m

Preview Measurements:

Turntable position:	0 - 270 deg , Step Size = 90 deg , Positioning Speed = 8
Elevation:	0 - 90 deg , Step Size = 90 deg , Positioning Speed = 4
Polarization:	H + V
Scan Test Template:	EMI Scan 01_fast_FCC_15_209 B

Subrange	**Step Size**	**Detectors**	**IF BW**	**Meas. Time**	**Preamp**
30 MHz - 1 GHz	40 kHz	PK+	120 kHz	0,00005 s	0 dB

Receiver: [ESS]

Data Reduction:

Limit Line #1:	FCC15.109 QP Class B
Peak Search:	6 dB , Maximum Results: 10
Subrange Maxima:	25 Subranges , Maxima per Subrange: 1
Acceptance Offset:	-6 dB
Maximum Number of Results:	20
After Data Reduction:	Interactive data reduction

Frequency Zoom:

Zoom Scan Template: EMI Scan 02_20ms_zoom_15_209 B

Subrange	**Step Size**	**Detectors**	**IF BW**	**Meas. Time**	**Preamp**
30 MHz - 1 GHz	10 kHz	PK+	120 kHz	0,02 s	0 dB

Receiver: [ESS]

Adjustment:

Turntable position:	Adjustment with full Range , Measuring Speed = 3
Elevation:	Adjustment with full Range , Measuring Speed = 5
Template for Single Meas.:	EMI Scan 02_20ms_FCC_15_209B

Subrange	**Step Size**	**Detectors**	**IF BW**	**Meas. Time**	**Preamp**
30 MHz - 1 GHz	100 kHz	PK+	120 kHz	0,02 s	0 dB

Receiver: [ESS]

Final Measurements:

Template for Single Meas.: EMI Scan 03_1s_FCC_15_209 B

Subrange	**Step Size**	**Detectors**	**IF BW**	**Meas. Time**	**Preamp**
30 MHz - 1 GHz	100 kHz	QPK	120 kHz	1 s	0 dB

Receiver: [ESS]

Report Settings:

Report Template:	FCC15_209_vert_hor
Create Electronic Report:	RTF PDF
Document Name:	EMI Report

Actions:

Data Reduction: Before

Notify: Sound (WAV file) 'tada.wav'

Final Measurements: After

Notify: Sound (WAV file) 'tada.wav'

Diagram No. g_2.07

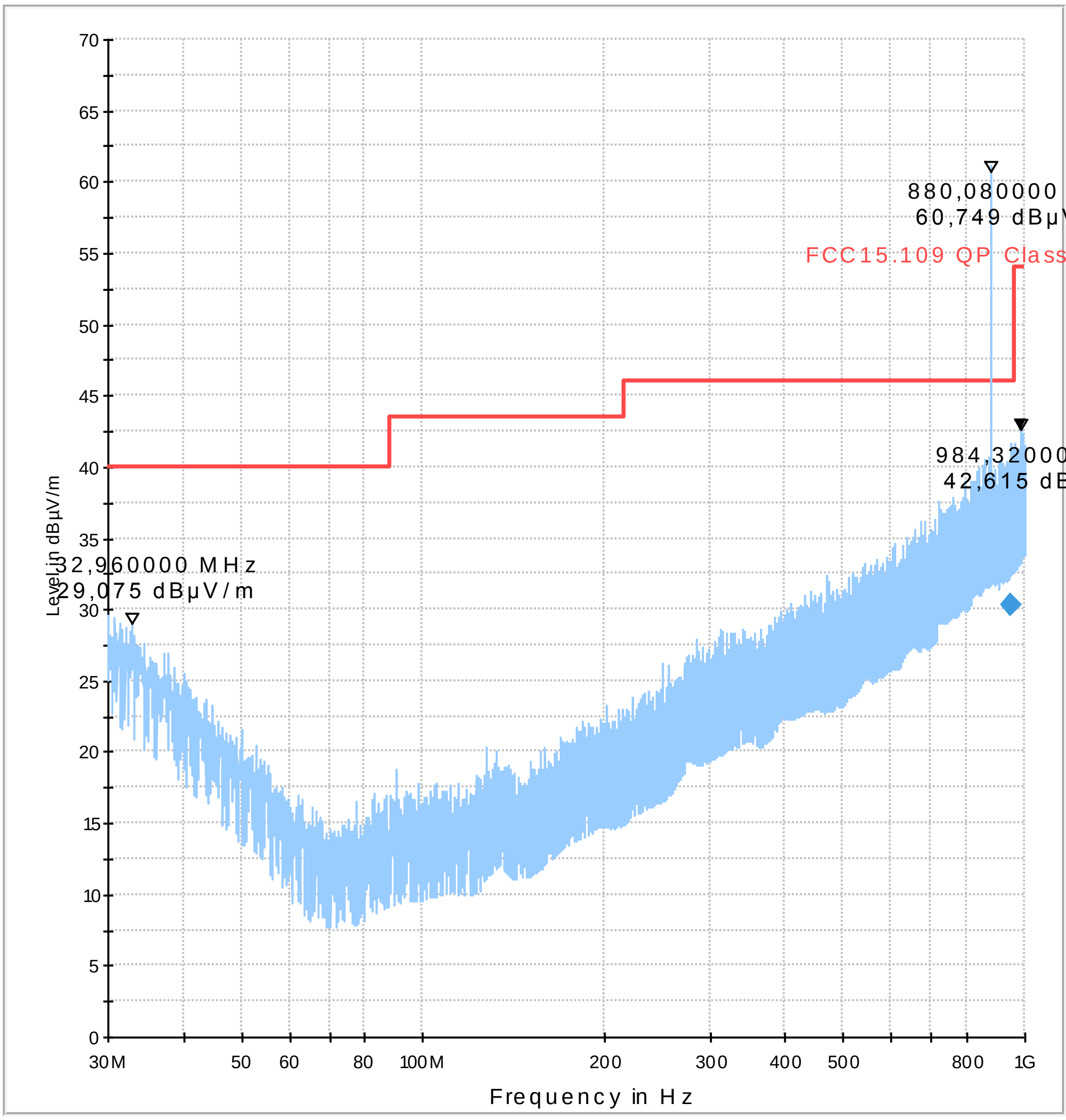
Common Information

Test description:	Electric Field Strength Measurement
Test site and distance:	Semi Anechoic Room (measurement distance=3m)
Measured sides of EUT:	front, right, rear, left, top, under
Rec. antenna (pre-scan):	height 1.00 m and 1.82 m, horizontal and vertical polarisation
Rec. antenna (final):	height between 1 m to 4 m, polarisation according to pre-scan results
Turntable step:	90° during pre-scan, continuously turning during final measurement
Used filter:	lowpass 1200 MHz
Test specification.:	FCC 15.109 class B; RSS-Gen: Issue 3
Operator:	Lor
Operating conditions:	IDLE RX850 + USB Data transfer
Power during tests:	full loaded batteries + power from USB cable
Comment 1:	Channel middle=182, BCCH channel on diagram

EUT Information

EUT Name:	ADD-3880121-BV + USB cable EC700 + Headset CCA--0004013
Manufacturer:	Sony Ericsson
S/N:	CB5A1EYWHH

05_FCC15.109_hor+vert_kipp



Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)
945.000000	30.3	1000.0	120.000	136.0	V	83.0	90.0	26.8	15.7

(continuation of the "Final Result 1" table from column 10 ...)

Frequency (MHz)	Limit (dBµV/m)	Comment
945.000000	46.0	

EMI Auto Test Template: 05_FCC15.109_hor+vert_kipp

Hardware Setup: HW11_FCC_ESCS30_TP1200_EUTkipp
Measurement Type: E(I)RP
Frequency Range: 30 MHz - 1 GHz
Graphics Level Range: 0 dBµV/m - 60 dBµV/m

Preview Measurements:
Turntable position: 0 - 270 deg , Step Size = 90 deg , Positioning Speed = 8
Elevation: 0 - 90 deg , Step Size = 90 deg , Positioning Speed = 4
Polarization: H + V
Scan Test Template: EMI Scan 01_fast_FCC_15_209 B

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
30 MHz - 1 GHz	40 kHz	PK+	120 kHz	0,00005 s	0 dB

Receiver: [ESS]

Data Reduction:
Limit Line #1: FCC15.109 QP Class B
Peak Search: 6 dB , Maximum Results: 10
Subrange Maxima: 25 Subranges , Maxima per Subrange: 1
Acceptance Offset: -6 dB
Maximum Number of Results: 20
After Data Reduction: Interactive data reduction

Frequency Zoom:
Zoom Scan Template: EMI Scan 02_20ms_zoom_15_209 B

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
30 MHz - 1 GHz	10 kHz	PK+	120 kHz	0,02 s	0 dB

Receiver: [ESS]

Adjustment:
Turntable position: Adjustment with full Range , Measuring Speed = 3
Elevation: Adjustment with full Range , Measuring Speed = 5
Template for Single Meas.: EMI Scan 02_20ms_FCC_15_209B

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
30 MHz - 1 GHz	100 kHz	PK+	120 kHz	0,02 s	0 dB

Receiver: [ESS]

Final Measurements:
Template for Single Meas.: EMI Scan 03_1s_FCC_15_209 B

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
30 MHz - 1 GHz	100 kHz	QPK	120 kHz	1 s	0 dB

Receiver: [ESS]

Report Settings:
Report Template: FCC15_209_vert_hor
Create Electronic Report: RTF PDF
Document Name: EMI Report

Actions:
Data Reduction: Before
Notify: Sound (WAV file) 'tada.wav'
Final Measurements: After
Notify: Sound (WAV file) 'tada.wav'

1.4. Radiated field strength for emissions, f > 1000MHz

Diagram No.: g_2.02

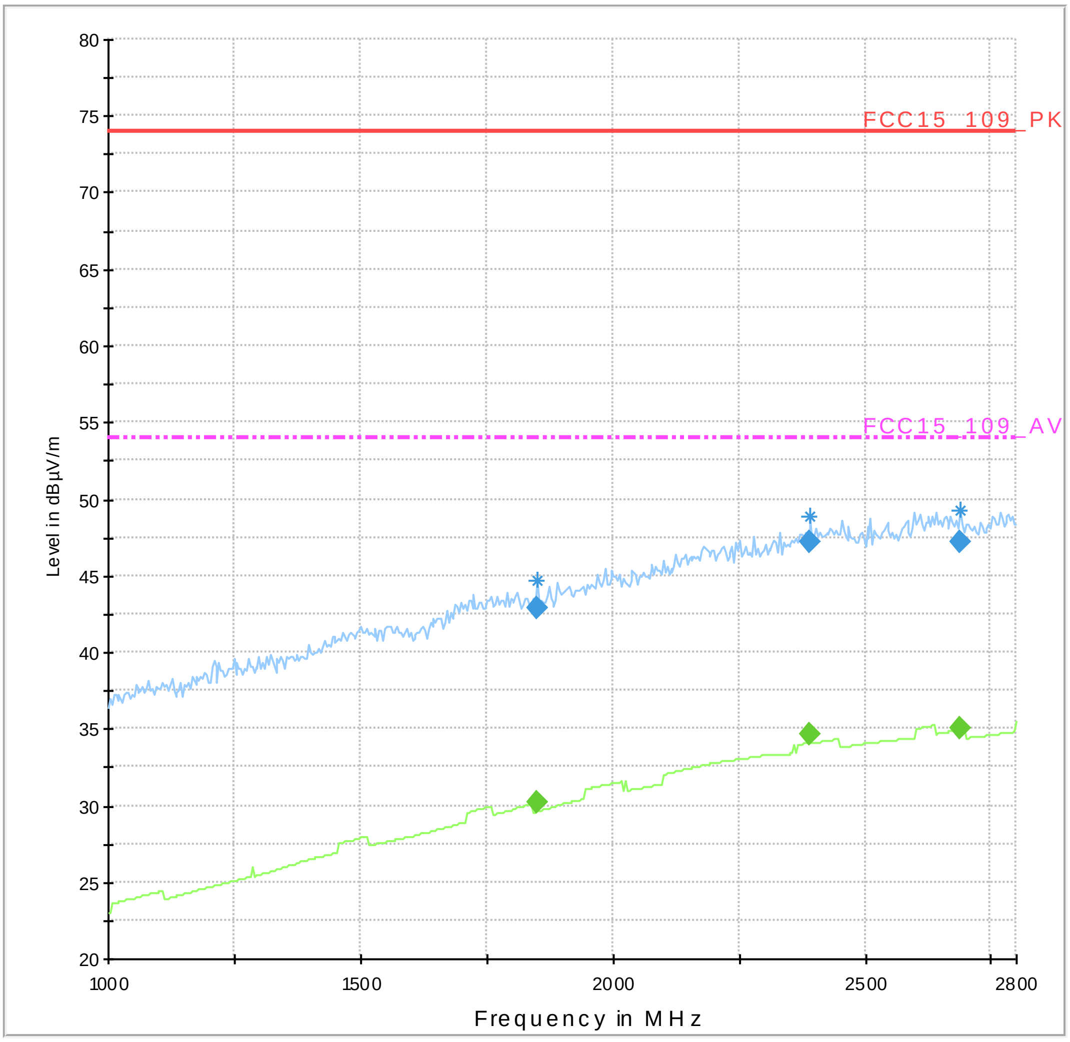
Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.109 Class B/RSS-Gen
Antenna polarisation:	horizontal/vertical
Operation mode:	IDLE 850 + GPS
Operator Name:	Lor
Comment:	GSM Channel middle: 182

EUT Information

EUT Name:	AAD-3880121-BV+ AC/DC Adapter+ USB cable+ headset
Manufacturer:	SEM
Serial Number:	CB5A1EYWHH
Remarks	--

01_Sweep1_FSEK_SM1_KP1_PA1_10ms



Final Result 1

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)
1850.073146	42.8	100.0	1000.000	155.0	H	195.0	0.0	5.9	31.2
2392.544089	47.2	100.0	1000.000	155.0	H	224.0	0.0	9.1	26.8
2688.654309	47.1	100.0	1000.000	155.0	H	193.0	0.0	10.6	26.9

(continuation of the "Final Result 1" table from column 10 ...)

Frequency (MHz)	Limit (dBµV/m	Comment
1850.073146	74.0	
2392.544089	74.0	
2688.654309	74.0	

Final Result 2

Frequency (MHz)	Average (dBµV/m)	Meas. Time	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)
1850.073146	30.3	100.0	1000.000	155.0	H	195.0	0.0	5.9	23.7
2392.544089	34.6	100.0	1000.000	155.0	H	224.0	0.0	9.1	19.4
2688.654309	35.0	100.0	1000.000	155.0	H	193.0	0.0	10.6	19.0

(continuation of the "Final Result 2" table from column 10 ...)

Frequency (MHz)	Limit (dBµV/m	Comment
1850.073146	54.0	
2392.544089	54.0	
2688.654309	54.0	

Diagram No.: g_2.04

Common Information

Test Description:	Radiated field strength emission accord. §15.109 in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	§15.109, class B/RSS-Gen
Antenna polarisation:	horizontal/vertical
Operator Name:	Lor
Comment:	Channel no. middle=182
Op. Mode:	IDLE 850 + GPS + application background

EUT Information

EUT Name:	AAD-3880121-BV+ AC/DC Adapter+ USB cable+ headset
Manufacturer:	SEM
Serial Number:	CB5A1EYWHH
Remarks	--

03_Sweep2_FSEK_SM1_KP1_PA1_10ms_IDLE850

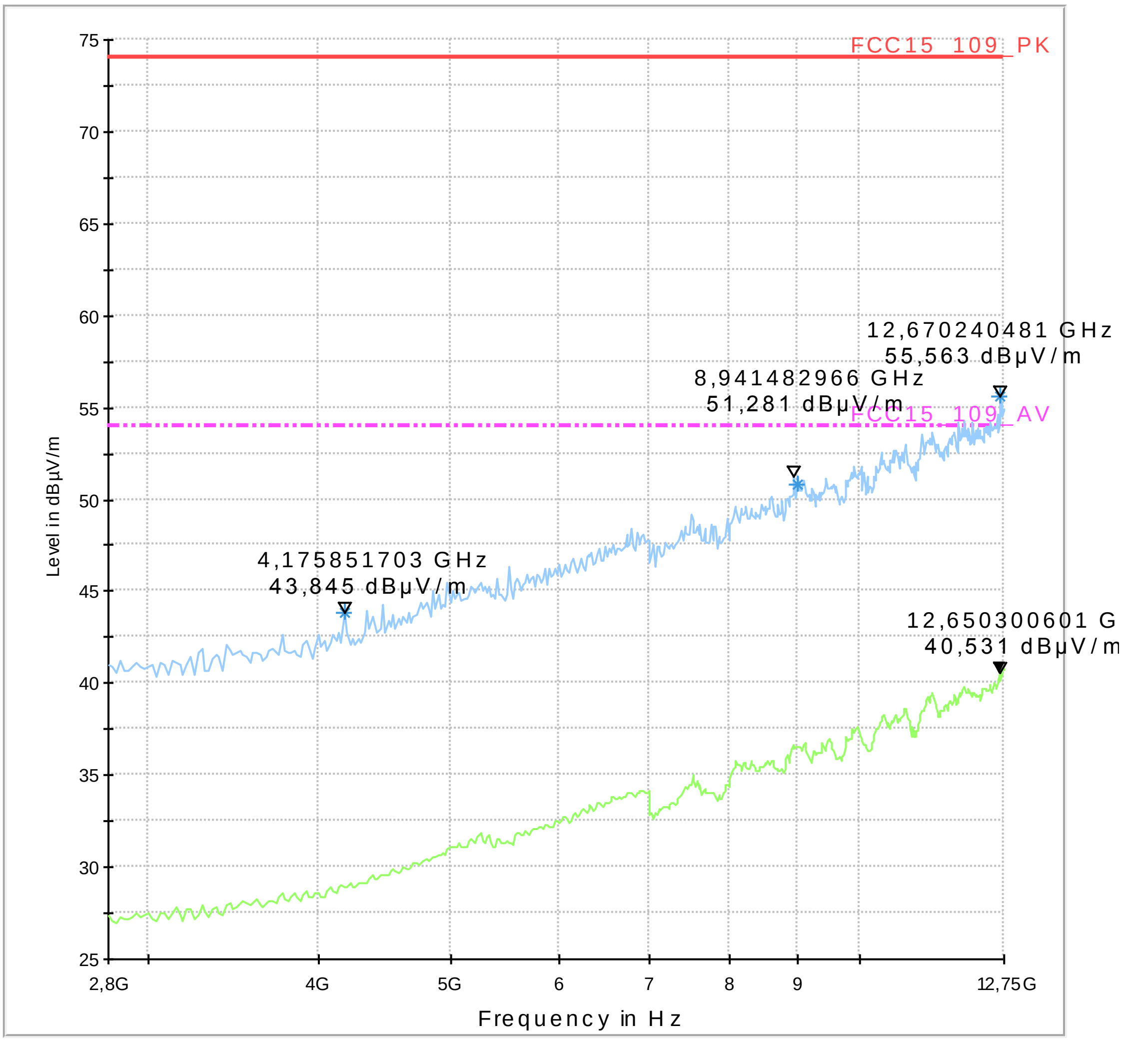


Diagram No.: g_2.05

Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	§15.109, class B/RSS-Gen
Antenna polarisation:	horizontal/vertical
Operation mode:	IDLE 1900 + FM Radio RX Mode (99.2MHz)
Operator Name:	Lor
Comment:	Uplink channel middle: 651, BCCH base station on 1959MHz on diagram

EUT Information

EUT Name:	AAD-3880121-BV+ AC/DC Adapter+ USB cable+ headset
Manufacturer:	SEM
Serial Number:	CB5A1EYWHH
Remarks	--

01_Sweep1_FSEK_SM1_KP1_PA1_10ms

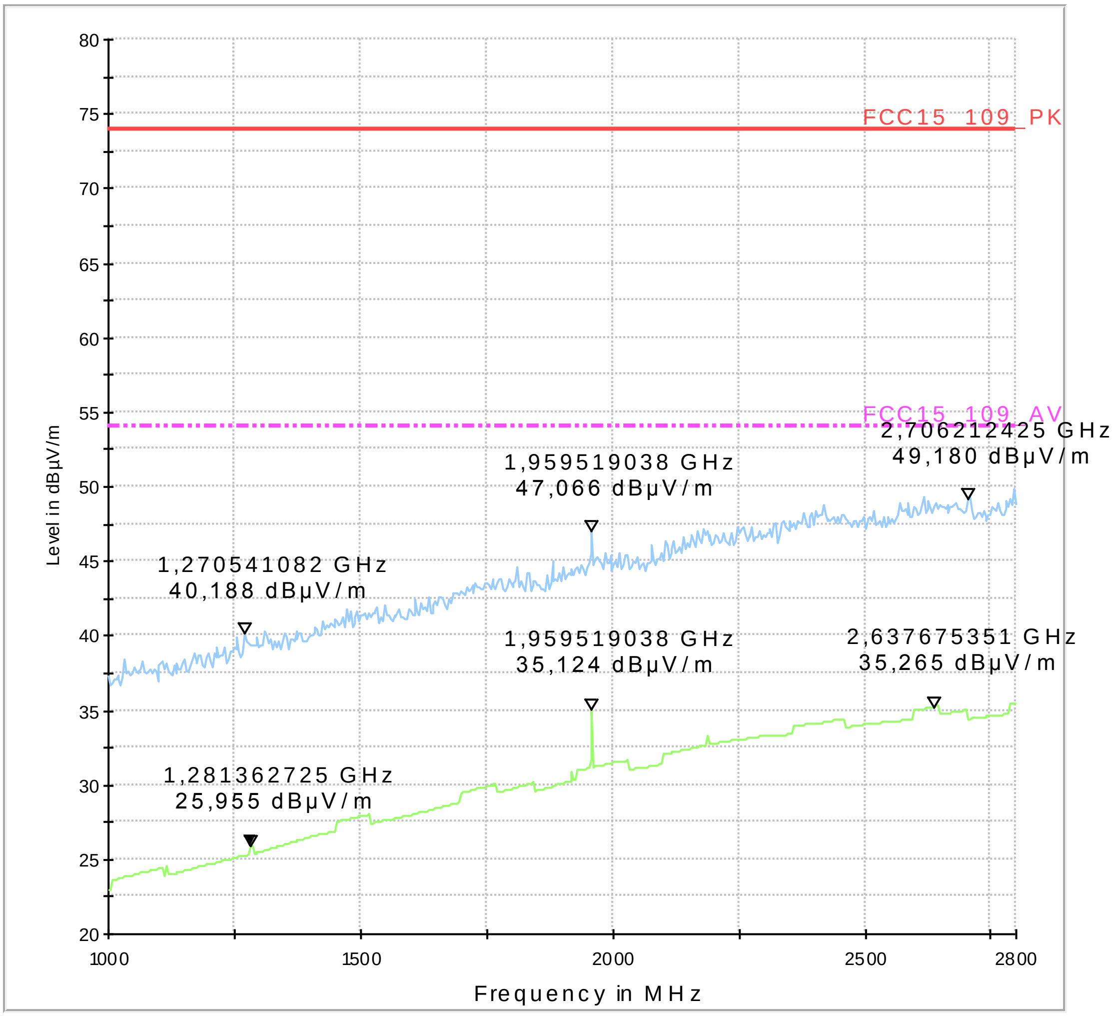


Diagram No.: g_2.06

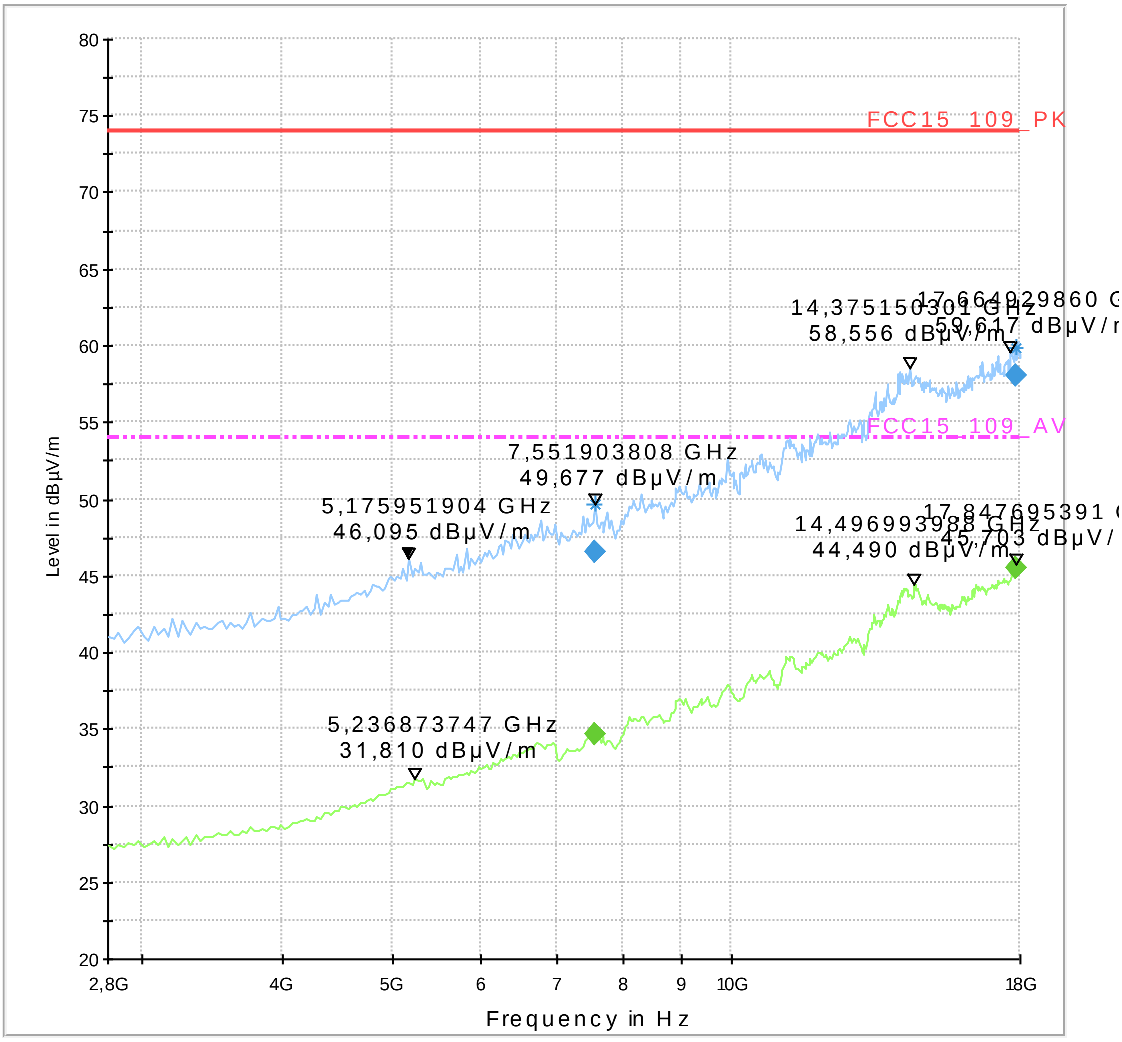
Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	§15.109, class B/RSS-Gen
Antenna polarisation:	horizontal/vertical
Operation mode:	IDLE 1900 + FM Radio RX Mode
Operator Name:	Lor
Comment:	Uplink channel middle: 651

EUT Information

EUT Name:	AAD-3880121-BV+ AC/DC Adapter+ USB cable+ headset
Manufacturer:	SEM
Serial Number:	CB5A1EYWHH
Remarks	--

02_Sweep2_FSEK_SM1_KP1_PA1_10ms_IDLE1900



Final Result 1

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)
7577.314630	46.6	100.0	1000.000	155.0	H	50.0	90.0	10.9	27.4
17851.142285	58.1	100.0	1000.000	155.0	V	48.0	90.0	26.0	15.9

(continuation of the "Final Result 1" table from column 10 ...)

Frequency (MHz)	Limit (dBµV/m)	Comment
7577.314630	74.0	
17851.142285	74.0	

Final Result 2

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)
7577.314630	34.7	100.0	1000.000	155.0	H	50.0	90.0	10.9	19.3
17851.142285	45.5	100.0	1000.000	155.0	V	48.0	90.0	26.0	8.5

(continuation of the "Final Result 2" table from column 10 ...)

Frequency (MHz)	Limit (dBµV/m)	Comment
7577.314630	54.0	
17851.142285	54.0	