

Annex 1: Measurement diagrams
to
TEST REPORT
No. 2-20789055b/10

According to:
FCC Regulations
Part 15.209 & 15.247
IC-Regulations
RSS-210, Issue 7
RSS-gen, Issue 2

for
Everon Oy/AB

GSM/GPRS/GPS Watch helping device URG-BRA-002
+ battery pack URG-BAT-002
FCC ID: YLO201001
IC: 9150A-201001





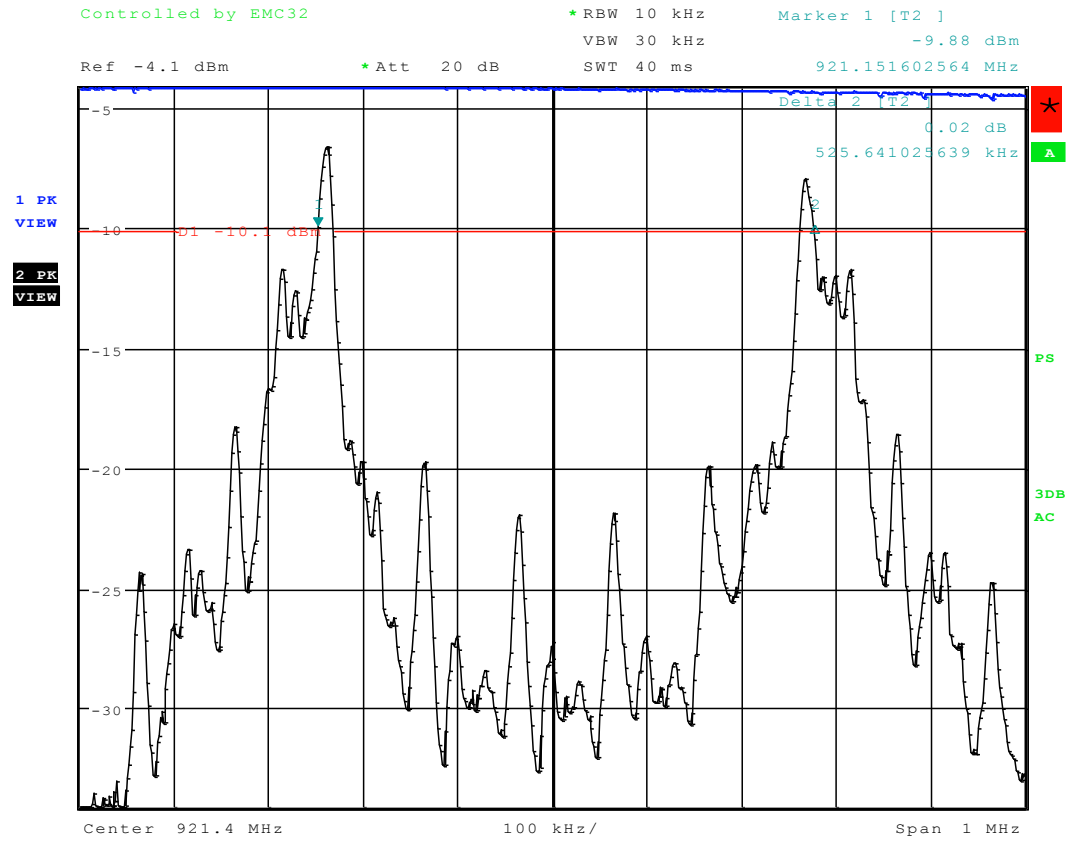
Laboratory Accreditation and Listings			
 DGA-PL-176/94-03	 Reg. No.: 99538 MRA US-EU 0003	 Industry Canada Reg. No.: 3462D-1 3462D-2	 Reg. No.: R-2665, R-2666 C-2914, T-339
accredited according to DIN EN ISO/IEC 17025			
<p align="center">CETECOM GmbH Laboratory Radio Communications & Electromagnetic Compatibility Im Teelbruch 116 • 45219 Essen • Germany Registered in Essen, Germany, Reg. No.: HRB Essen 8984 Tel.: + 49 (0) 20 54 / 95 19-954 • Fax: + 49 (0) 20 54 / 95 19-964 E-mail: info@cetecom.de • Internet: www.cetecom.com</p>			

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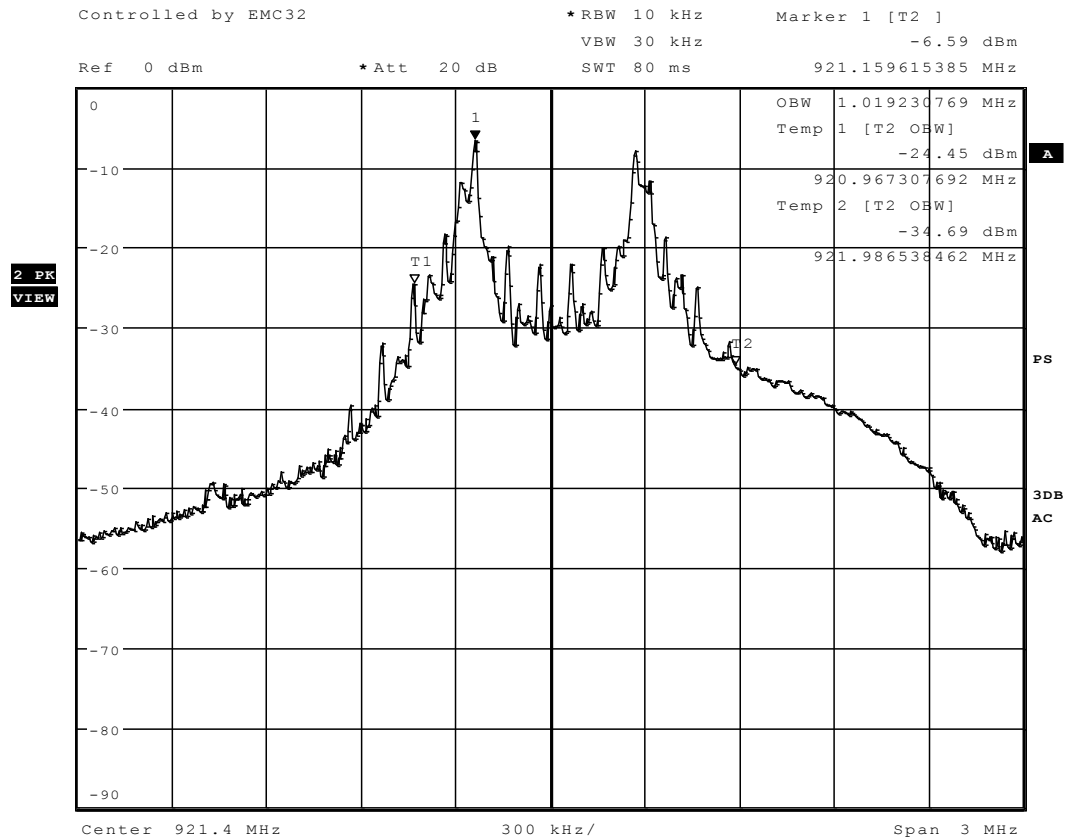
1. Summary of test results

1.1. Measurement: 6-dB bandwidth



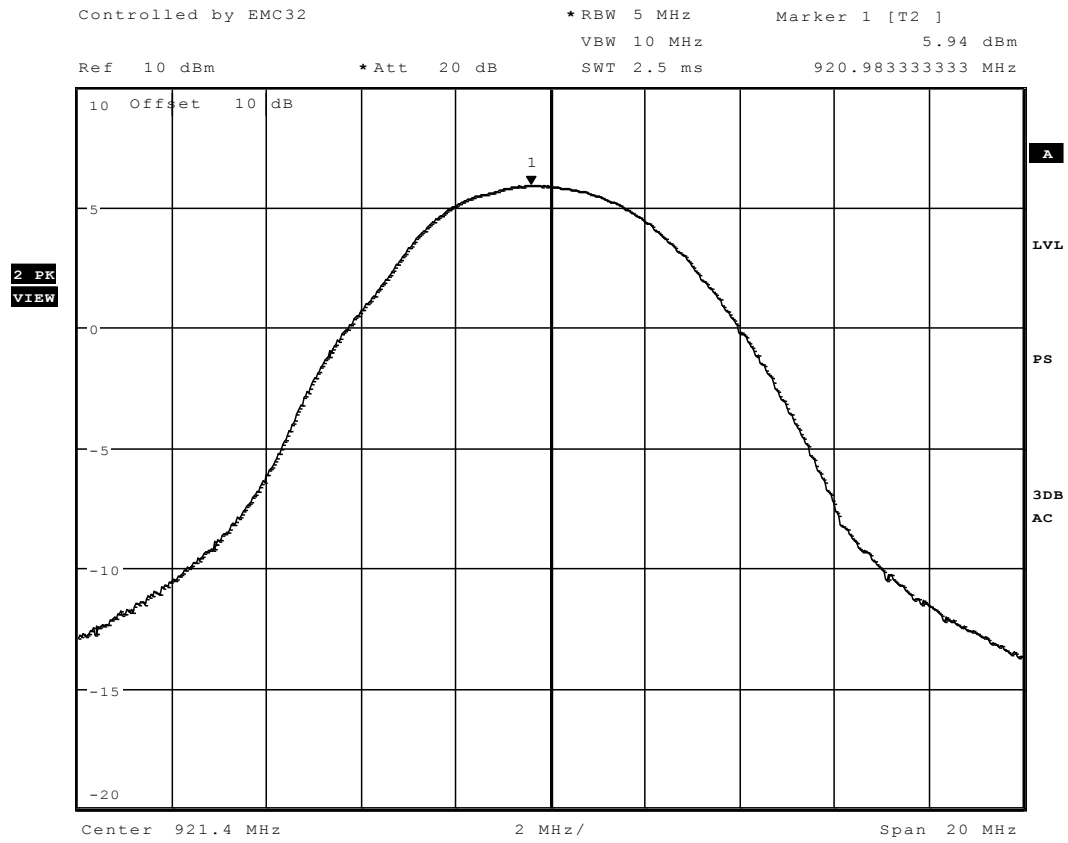
Date: 29.JUL.2010 15:17:32

1.2. Measurement: 99% bandwidth



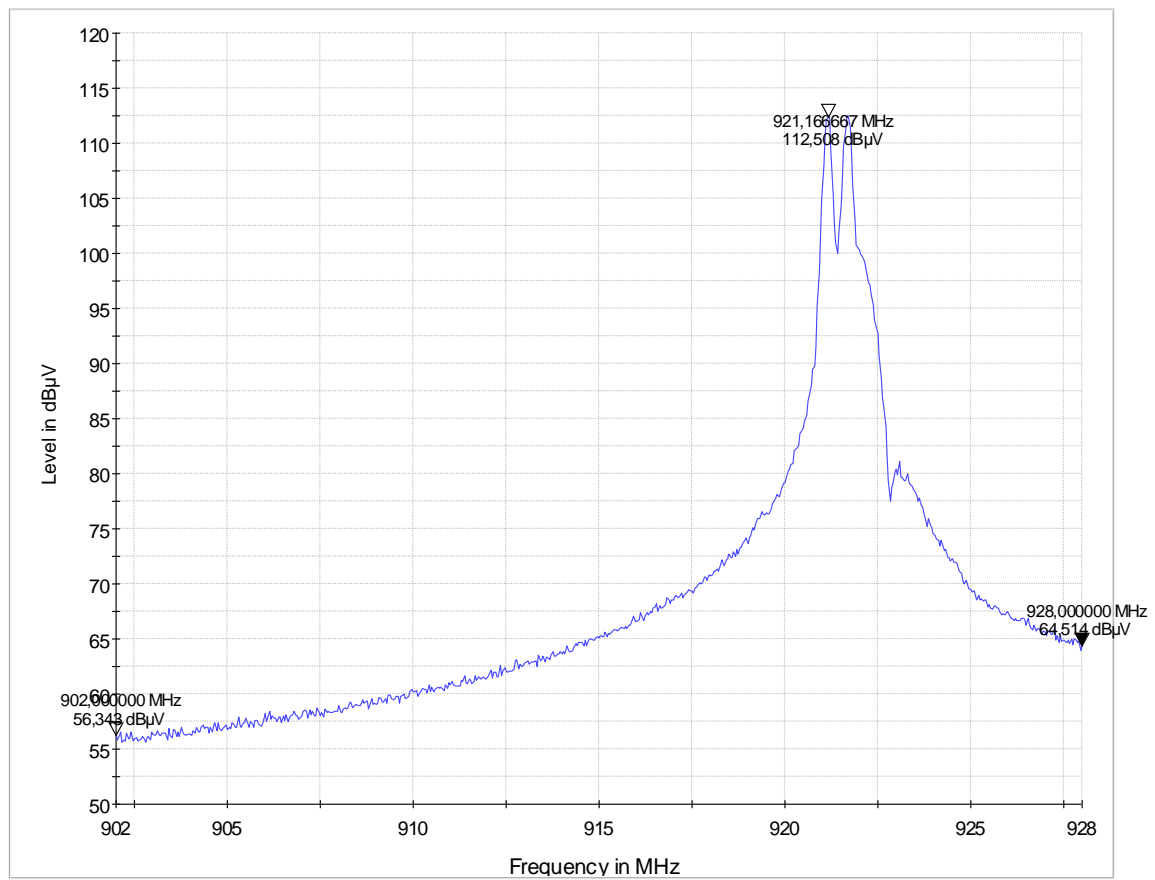
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1.3. Measurements: Transmitter output power, conducted

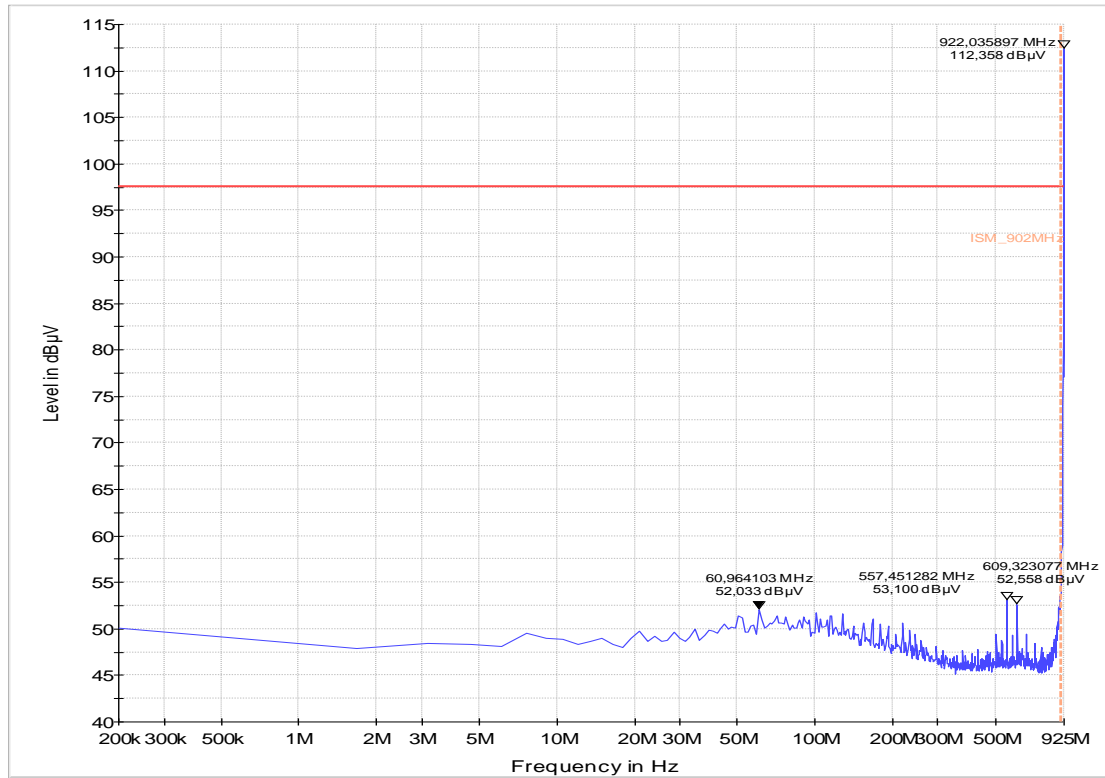


Date: 29.JUL.2010 15:44:27

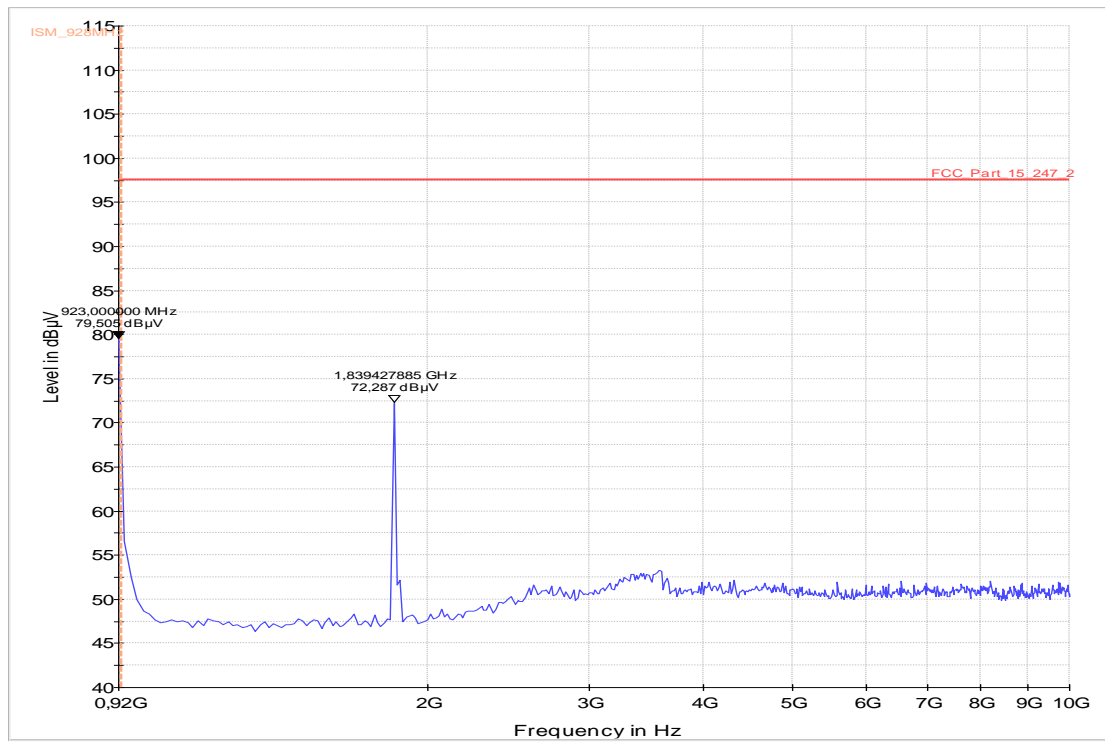
1.4. Measurements: Out-Of-Band 20dBc emissions, conducted



Sweep 1: Carrier reference value

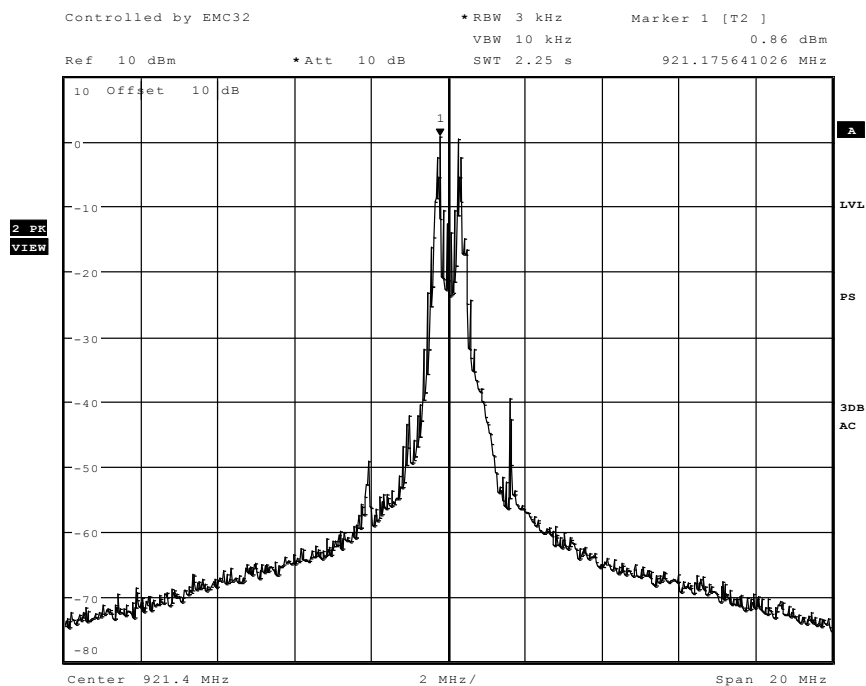


Sweep 2



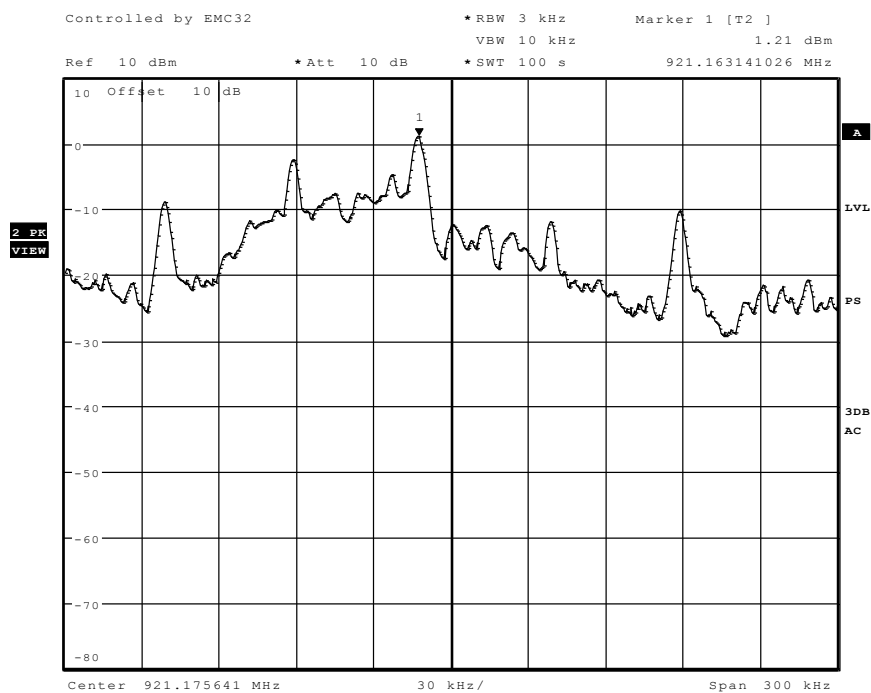
Sweep 3

1.5. Measurements: Power spectral density



Date: 29.JUL.2010 15:49:42

Step 1 accord. ANSI 63.10, chapter 6.11.2.3



Date: 29.JUL.2010 15:53:05

Step 1 accord. ANSI 63.10, chapter 6.11.2.3

1.6. Measurements: Emissions on AC-mains accord. §15.207

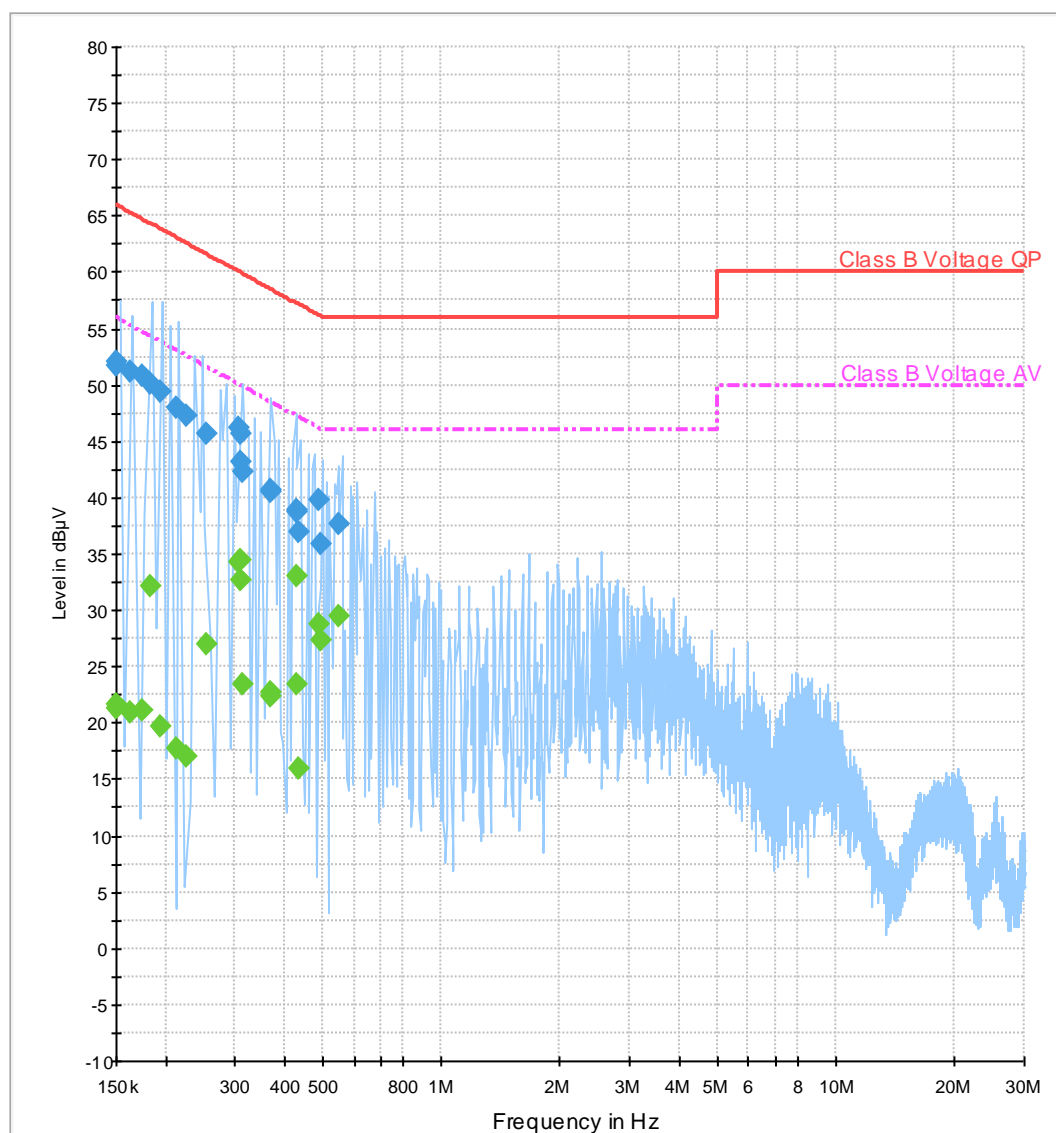
Diagram No. 1.05

Common Information

Test Description:	Conducted Voltage Measurement Class B
Test specification:	FCC 15.207
Measurement Receiver:	R&S ESCS 30, Ser.-Nr. 100160, Ref.-Nr. 377
Scan Mode:	EMC 32, automatic scan mode, repetitive scan, maxhold mode
Diagram:	Shows the peak values as a sum of measured ports (N+L1) in maxhold mode
Operators name:	Lor

EUT:	WATCH + Battery Pack + AC/DC Adaptor
Manufacturer:	Everon
Operating Conditions:	TX-mode, 921.4MHz
Measurement on line:	Mains AC L1 and N
Power during the test :	110 V AC 60 Hz

01_Class B_Voltage_PK_QPAV_N_L1



Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.150000	51.7	15000.0	9.000	GN	L1	0.0	14.3	66.0
0.150000	52.1	15000.0	9.000	GN	N	0.0	13.9	66.0
0.162656	51.2	15000.0	9.000	GN	L1	0.0	14.1	65.3
0.174375	50.8	15000.0	9.000	GN	N	0.0	13.9	64.7
0.182188	50.2	15000.0	9.000	GN	L1	0.0	14.2	64.4
0.193906	49.5	15000.0	9.000	GN	N	0.0	14.4	63.9
0.213438	48.1	15000.0	9.000	GN	N	0.0	15.1	63.1
0.225156	47.3	15000.0	9.000	GN	N	0.0	15.4	62.6
0.252500	45.7	15000.0	9.000	GN	L1	0.0	16.1	61.7
0.305938	46.2	15000.0	9.000	GN	N	0.0	13.9	60.1
0.309219	45.7	15000.0	9.000	GN	N	0.0	14.3	60.0
0.311562	43.2	15000.0	9.000	GN	L1	0.0	16.7	59.9
0.315000	42.3	15000.0	9.000	GN	L1	0.0	17.5	59.8
0.370781	40.7	15000.0	9.000	GN	N	0.0	17.9	58.5
0.371250	40.5	15000.0	9.000	GN	N	0.0	18.0	58.5
0.429844	38.9	15000.0	9.000	GN	L1	0.0	18.4	57.3
0.431562	38.7	15000.0	9.000	GN	N	0.0	18.5	57.2
0.436094	37.0	15000.0	9.000	GN	N	0.0	20.1	57.1
0.490625	39.7	15000.0	9.000	GN	N	0.0	16.5	56.2
0.495156	35.9	15000.0	9.000	GN	L1	0.0	20.2	56.1
0.552656	37.7	15000.0	9.000	GN	N	0.0	18.3	56.0

Final Result 2

Frequency (MHz)	CAverage (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.150000	21.3	15000.0	9.000	GN	L1	0.0	34.7	56.0
0.150000	21.7	15000.0	9.000	GN	N	0.0	34.3	56.0
0.162656	20.9	15000.0	9.000	GN	L1	0.0	34.4	55.3
0.174375	21.2	15000.0	9.000	GN	N	0.0	33.5	54.7
0.182188	32.2	15000.0	9.000	GN	L1	0.0	22.2	54.4
0.193906	19.7	15000.0	9.000	GN	N	0.0	34.2	53.9
0.213438	17.7	15000.0	9.000	GN	N	0.0	35.4	53.1
0.225156	17.1	15000.0	9.000	GN	N	0.0	35.5	52.6
0.252500	26.9	15000.0	9.000	GN	L1	0.0	24.8	51.7
0.305938	34.3	15000.0	9.000	GN	N	0.0	15.8	50.1
0.309219	32.8	15000.0	9.000	GN	N	0.0	17.2	50.0
0.311562	34.4	15000.0	9.000	GN	L1	0.0	15.5	49.9
0.315000	23.5	15000.0	9.000	GN	L1	0.0	26.3	49.8
0.370781	22.8	15000.0	9.000	GN	N	0.0	25.7	48.5
0.371250	22.4	15000.0	9.000	GN	N	0.0	26.1	48.5
0.429844	33.1	15000.0	9.000	GN	L1	0.0	14.2	47.3
0.431562	23.4	15000.0	9.000	GN	N	0.0	23.8	47.2
0.436094	16.0	15000.0	9.000	GN	N	0.0	31.1	47.1
0.490625	28.7	15000.0	9.000	GN	N	0.0	17.5	46.2
0.495156	27.4	15000.0	9.000	GN	L1	0.0	18.7	46.1
0.552656	29.4	15000.0	9.000	GN	N	0.0	16.6	46.0

Templates and settings of EMC32 V8.40.0**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: -10 dBμV - 80 dBμV

Preview Measurements:
Scan Test Template: 02_Class B_pre_PK_fast

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
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
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
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"

1.7. Measurements: General field strength emissions accord. §15.205 & §15.209

1.7.1. Field strength emissions in the frequency range 9kHz to 30MHz

Diagram No. 3.02

Common Information

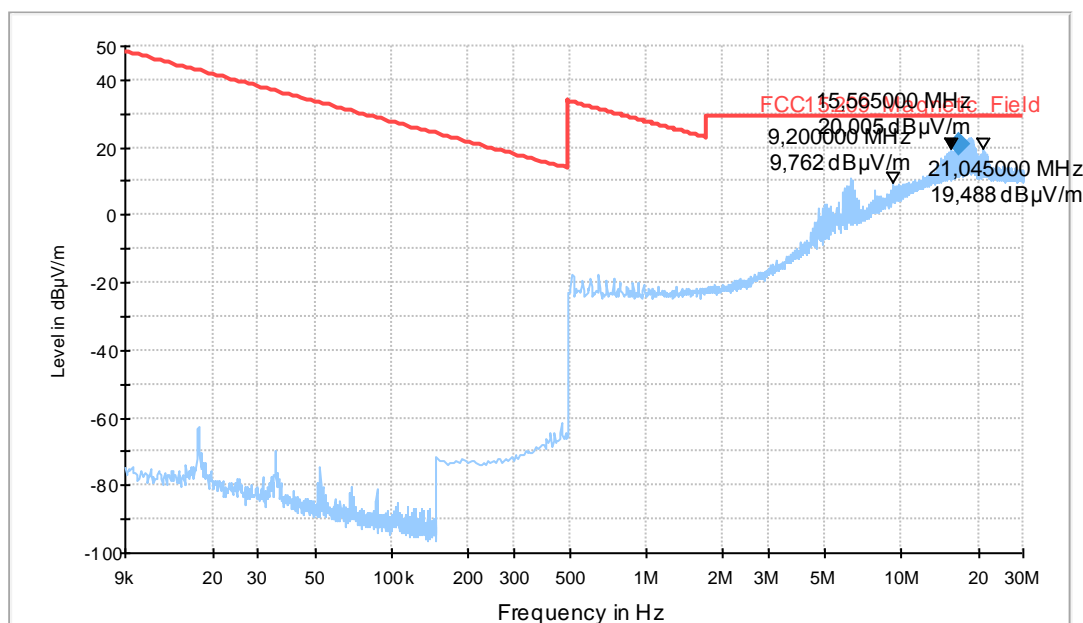
Test description: Magnetic Fieldstrength Measurement related to 3 m distance
 Test site and distance: Semi Anechoic Room (SAR) with 3 m measurement distance
 Measured sides of EUT: front, right, rear, left
 Rec. antenna (pre-scan): height 1.00 m, parallel and 90° to EUT polarisation
 Turntable step: 90° during pre-scan
 Used filter: bypass
 Test specification.: FCC 15.205 § 15.209

Operator: Lor
 Operating conditions: TX-on
 Comment 1: Ch. 921.4MHz

EUT Information

Description: Wrist Watch
 EUT Name: Everon
 Manufacturer: Everon
 Serial Number: 10-25-05-F1-01004608
 Hardware Rev: 1205
 Software Rev: --
 Comment:

FCC15.209_magn hor+vert



Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
16.915000	20.9	1000.0	10.000	H	122.0	2.3	8.64	29.54

(continuation of the "Final Result 1" table from column 9 ...)

Frequency (MHz)	Comment
16.915000	

EMI Auto Test Template: FCC15.209_magn hor+vert

Hardware Setup: HW25_FCC15109_ESCS_MgFeld_ohne_SAR_MATRIX
 Measurement Type: Open-Area-Test-Site
 Frequency Range: 9 kHz - 30 MHz
 Graphics Level Range: -100 dBµV/m - 50 dBµV/m

Preview Measurements:
 Antenna height: 1000 - 1000 cm , Step Size = 0 cm , Speed = 1
 Polarization: H + V
 Turntable position: 35 - 305 deg , Step Size = 90 deg , Speed = 5
 Scan Test Template: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver
9 kHz - 150 kHz	MaxPeak	200 Hz	0,01 s	Receiver 1 [ESS]
150 kHz - 30 MHz	MaxPeak	10 kHz	0,01 s	Receiver 1 [ESS]

Data Reduction:
 Limit Line #1: FCC15.209_Magnetic_Field
 Peak Search: 20 dB , Maximum Results: 10
 Subrange Maxima: 10 Subranges , Maxima per Subrange: 1
 Acceptance Offset: -10 dB
 Maximum Number of Results: 20

Adjustment:
 Antenna height: Adjustment with full Range , Speed = 1
 Turntable position: Adjustment with full Range , Speed = 1
 Template for Single Meas.: 01_FCC_MG_FELD_PK_FAST_H&V_EUT

Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver
9 kHz - 150 kHz	MaxPeak	200 Hz	0,01 s	Receiver 1 [ESS]
150 kHz - 30 MHz	MaxPeak	10 kHz	0,01 s	Receiver 1 [ESS]

Final Measurements:
 Template for Single Meas.: 02_FCC_MG_FELD_QP_final_H&V_EUT

Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver
9 kHz - 150 kHz	QuasiPeak	200 Hz	1 s	Receiver 1 [ESS]
150 kHz - 30 MHz	QuasiPeak	10 kHz	1 s	Receiver 1 [ESS]

Report Settings:
 Report Template: FCC15_209_magn_vert_hor
 Create Electronic Report: PDF
 Document Name: EMI Report

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

1.7.2. Field strength emissions in the frequency range 30MHz to 1GHz

Diagram No. 2.02

Common Information

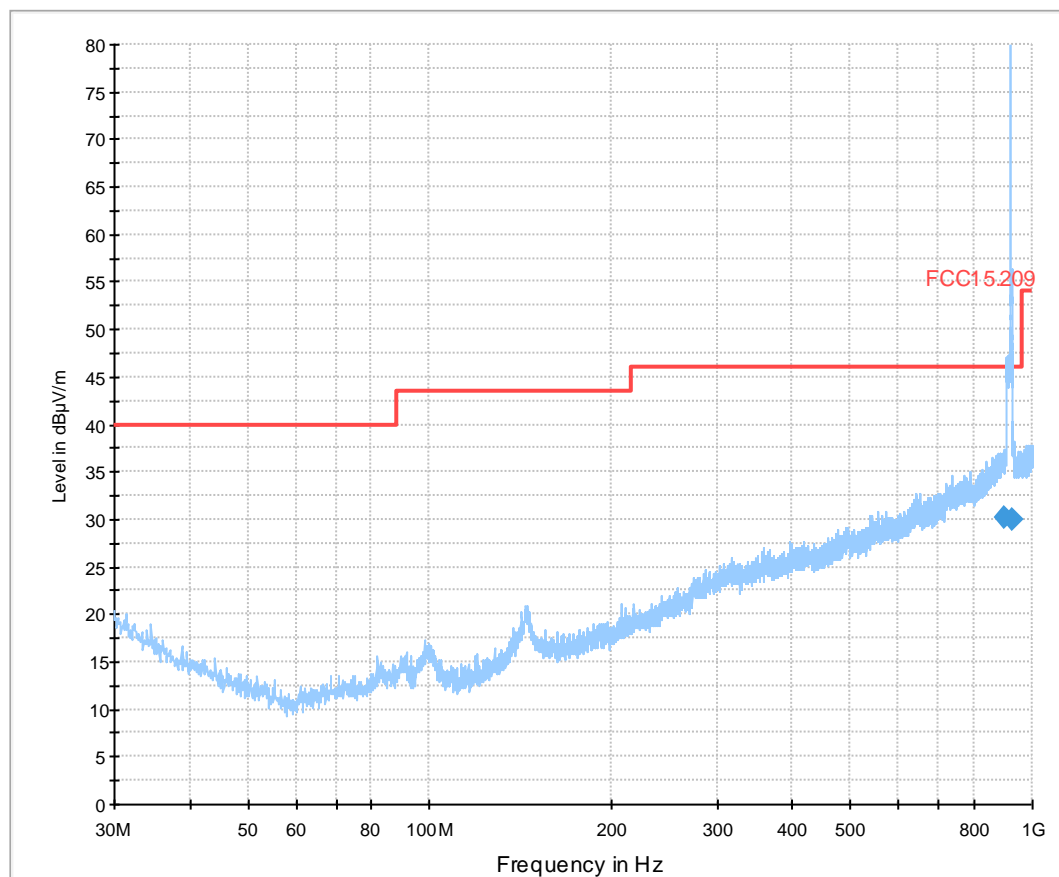
Test description:	Electric Fieldstrength Measurement related to 3 m distance
Test site and distance:	Semi Anechoic Room (SAR) with 3 m measurement distance
Measured sides of EUT:	front, right, rear, left
Rec. antenna (pre-scan):	height 1.00 m and 1.82 m, horizontal and vertical polarisation
Rec. antenna (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 15.205 § 15.209

Operator:	Lor
Operating conditions:	TX-on continuous,
Comment 1:	Channel 921.4MHz
Comment 2:	EUT placed vertical

EUT Information

Description:	
EUT Name:	Wrist Watch
Manufacturer:	Everon
Serial Number:	10-25-05-F1-01004608
Hardware Rev:	1205
Software Rev:	--
Comment:	

FCC15.209_ISM-Band-hor+vert



Final Result 1

Frequency (MHz)	QuasiPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
900.880000	30.1	1000.0	120.000	332.0	V	94.0	27.4	15.90	46.00
927.000000	29.9	1000.0	120.000	244.0	V	340.0	26.8	16.10	46.00

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

Frequency (MHz)	Comment
900.880000	
927.000000	

EMI Auto Test Template: FCC15.209_ISM-Band-hor+vert

Hardware Setup: HW13_FCC_ESCS30_Bypass
 Measurement Type: Open-Area-Test-Site
 Frequency Range: 30 MHz - 1 GHz
 Graphics Level Range: 0 dBμV/m - 80 dBμV/m

Preview Measurements:

Antenna height: 100 - 182 cm , Step Size = 82 cm , Speed = 8
 Polarization: H + V
 Turntable position: 0 - 270 deg , Step Size = 90 deg , Speed = 8
 Scan Test Template: EMI Scan 01_10ms_EN55022B-ISM-BAND

Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver
30 MHz - 902 MHz	MaxPeak	120 kHz	0,01 s	Receiver 1 [ESS]
902 MHz - 928 MHz	MaxPeak	120 kHz	0,01 s	Receiver 1 [ESS]
928 MHz - 1 GHz	MaxPeak	120 kHz	0,01 s	Receiver 1 [ESS]

Data Reduction:

Limit Line #1: FCC15.209
 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_EN55022B

Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver
30 MHz - 1 GHz	MaxPeak	120 kHz	0,02 s	Receiver 1 [ESS]

Adjustment:

Antenna height: Adjustment with full Range , Speed = 3
 Turntable position: Adjustment with full Range , Speed = 3
 Template for Single Meas.: EMI Scan 02_20ms_EN55022B

Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver
30 MHz - 1 GHz	MaxPeak	120 kHz	0,02 s	Receiver 1 [ESS]

Final Measurements:

Template for Single Meas.: EMI Scan 03_1s_EN55022B

Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver
30 MHz - 1 GHz	QuasiPeak	120 kHz	1 s	Receiver 1 [ESS]

Report Settings:

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

Actions:

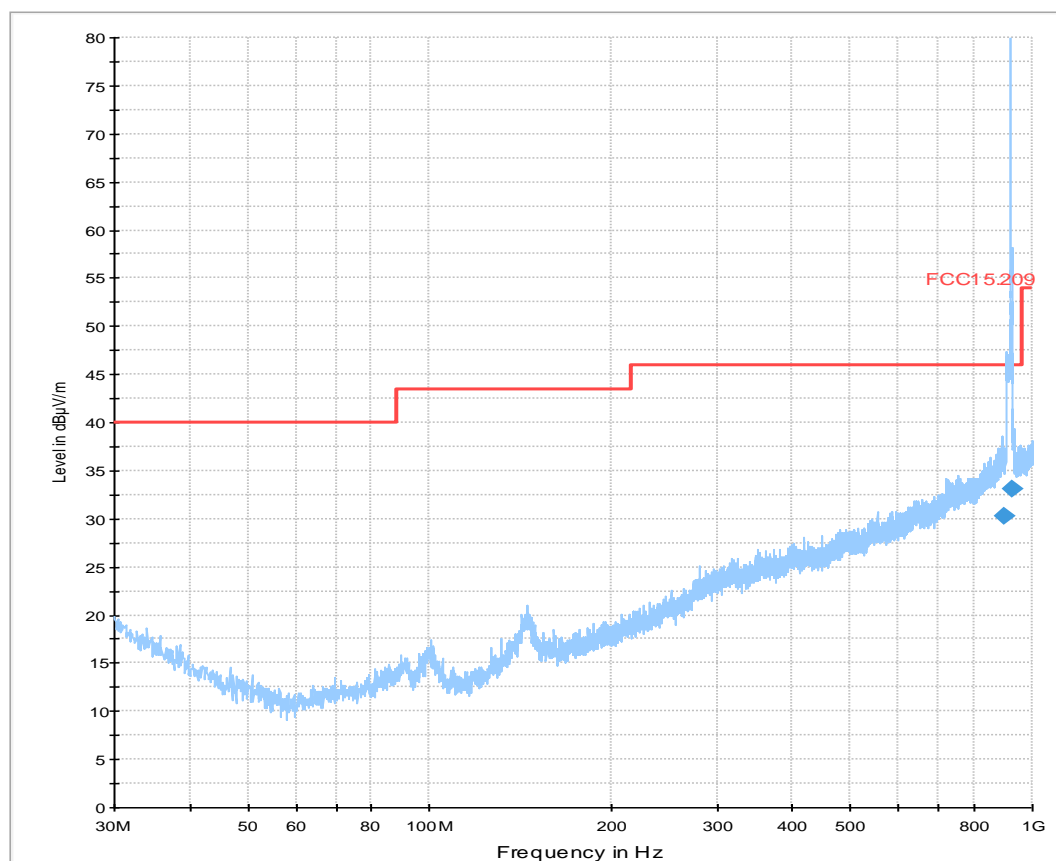
Data Reduction: Before
 Notify: Sound (WAV file) 'tada.wav'
 Final Measurements: After
 Notify: Sound (WAV file) 'tada.wav'

Diagram No. 2.03

Common Information

Test description:	Electric Fieldstrength Measurement related to 3 m distance
Test site and distance:	Semi Anechoic Room (SAR) with 3 m measurement distance
Measured sides of EUT:	front, right, rear, left
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 15.205 § 15.209
Operator:	Lor
Operating conditions:	TX-on continuous,
Comment 1:	Channel 921.4MHz
Comment 2:	EUT placed horizontal

FCC15.209_ISM-Band-hor+vert



Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
901.190000	30.2	1000.0	120.000	309.0	V	323.0	27.4	15.80	46.00
927.070000	33.1	1000.0	120.000	120.0	H	17.0	26.8	12.90	46.00

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

Frequency (MHz)	Comment
901.190000	
927.070000	

EMI Auto Test Template: FCC15.209_ISM-Band-hor+vert

Hardware Setup: HW13_FCC_ESCS30_Bypass
 Measurement Type: Open-Area-Test-Site
 Frequency Range: 30 MHz - 1 GHz
 Graphics Level Range: 0 dBµV/m - 80 dBµV/m

Preview Measurements:

Antenna height: 100 - 182 cm , Step Size = 82 cm , Speed = 8
 Polarization: H + V
 Turntable position: 0 - 270 deg , Step Size = 90 deg , Speed = 8
 Scan Test Template: EMI Scan 01_10ms_EN55022B-ISM-BAND

Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver
30 MHz - 902 MHz	MaxPeak	120 kHz	0,01 s	Receiver 1 [ESS]
902 MHz - 928 MHz	MaxPeak	120 kHz	0,01 s	Receiver 1 [ESS]
928 MHz - 1 GHz	MaxPeak	120 kHz	0,01 s	Receiver 1 [ESS]

Data Reduction:

Limit Line #1: FCC15.209
 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_EN55022B

Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver
30 MHz - 1 GHz	MaxPeak	120 kHz	0,02 s	Receiver 1 [ESS]

Adjustment:

Antenna height: Adjustment with full Range , Speed = 3
 Turntable position: Adjustment with full Range , Speed = 3
 Template for Single Meas.: EMI Scan 02_20ms_EN55022B

Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver
30 MHz - 1 GHz	MaxPeak	120 kHz	0,02 s	Receiver 1 [ESS]

Final Measurements:

Template for Single Meas.: EMI Scan 03_1s_EN55022B

Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver
30 MHz - 1 GHz	QuasiPeak	120 kHz	1 s	Receiver 1 [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. 2.30

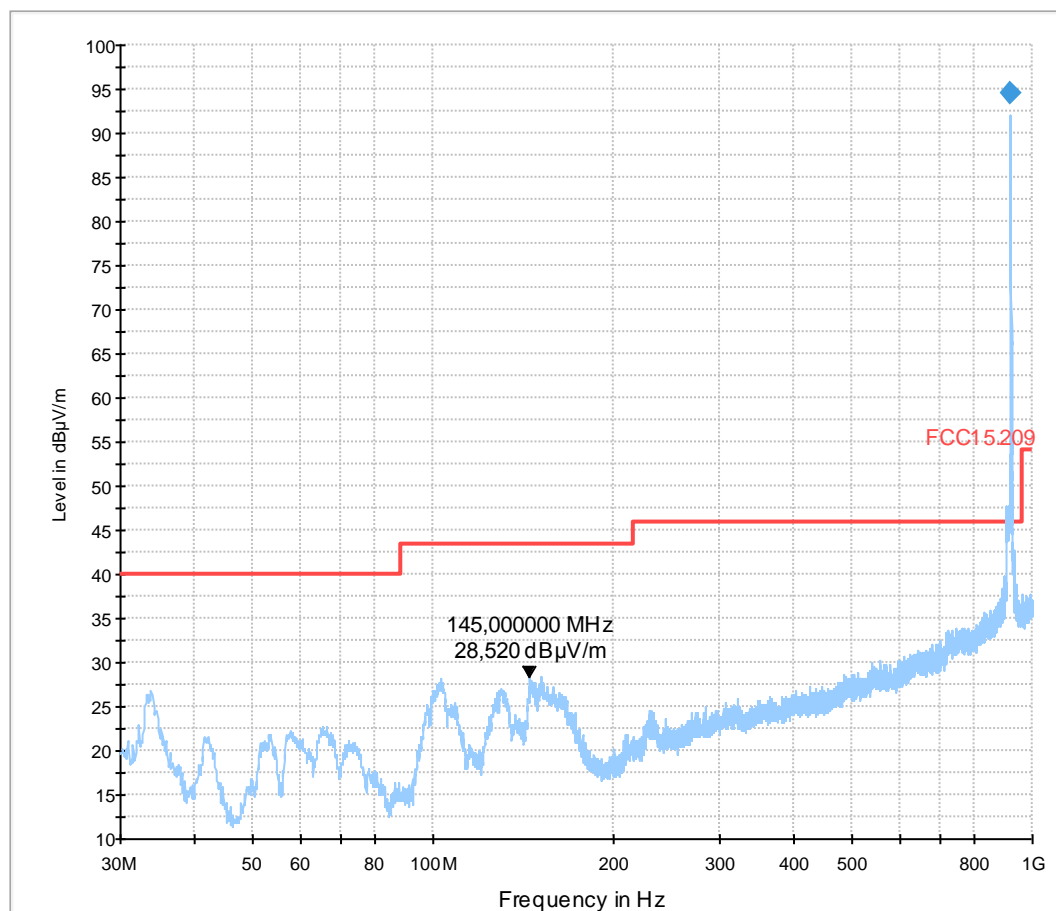
Common Information

Test description:	Electric Fieldstrength Measurement related to 3 m distance
Test site and distance:	Semi Anechoic Room (SAR) with 3 m measurement distance
Measured sides of EUT:	front, right, rear, left
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 15.205 § 15.209
Operator:	MEL
Operating conditions:	TX-mode ISM 921.4MHz, charging battery pack
Comment 1:	EUT placed horizontal

EUT Information

Description:	
EUT Name:	Wrist Watch + Cradle + AC/DC Adaptor
Manufacturer:	Everon
Serial Number:	Watch (10-25-05-F1-01004608)
Hardware Rev:	1205
Software Rev:	--
Comment:	

FCC15.209_ISM-Band-hor+vert



Final Result 1

Frequency (MHz)	QuasiPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
921.540000	94.6	1000.0	120.000	179.0	H	86.0	26.5	-48.60	46.00

Frequency (MHz)	Comment
921.540000	

EMI Auto Test Template: FCC15.209_ISM-Band-hor+vert

Hardware Setup: HW13_FCC_ESCS30_Bypass
 Measurement Type: Open-Area-Test-Site
 Frequency Range: 30 MHz - 1 GHz
 Graphics Level Range: 0 dBμV/m - 80 dBμV/m

Preview Measurements:
 Antenna height: 100 - 182 cm , Step Size = 82 cm , Speed = 8
 Polarization: H + V
 Turntable position: 0 - 270 deg , Step Size = 90 deg , Speed = 8
 Scan Test Template: EMI Scan 01_10ms_EN55022B-ISM-BAND

Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver
30 MHz - 902 MHz	MaxPeak	120 kHz	0,01 s	Receiver 1 [ESS]
902 MHz - 928 MHz	MaxPeak	120 kHz	0,01 s	Receiver 1 [ESS]
928 MHz - 1 GHz	MaxPeak	120 kHz	0,01 s	Receiver 1 [ESS]

Data Reduction:
 Limit Line #1: FCC15.209
 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_EN55022B

Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver
30 MHz - 1 GHz	MaxPeak	120 kHz	0,02 s	Receiver 1 [ESS]

Adjustment:
 Antenna height: Adjustment with full Range , Speed = 3
 Turntable position: Adjustment with full Range , Speed = 3
 Template for Single Meas.: EMI Scan 02_20ms_EN55022B

Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver
30 MHz - 1 GHz	MaxPeak	120 kHz	0,02 s	Receiver 1 [ESS]

Final Measurements:
 Template for Single Meas.: EMI Scan 03_1s_EN55022B

Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver
30 MHz - 1 GHz	QuasiPeak	120 kHz	1 s	Receiver 1 [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. 2.31

Common Information

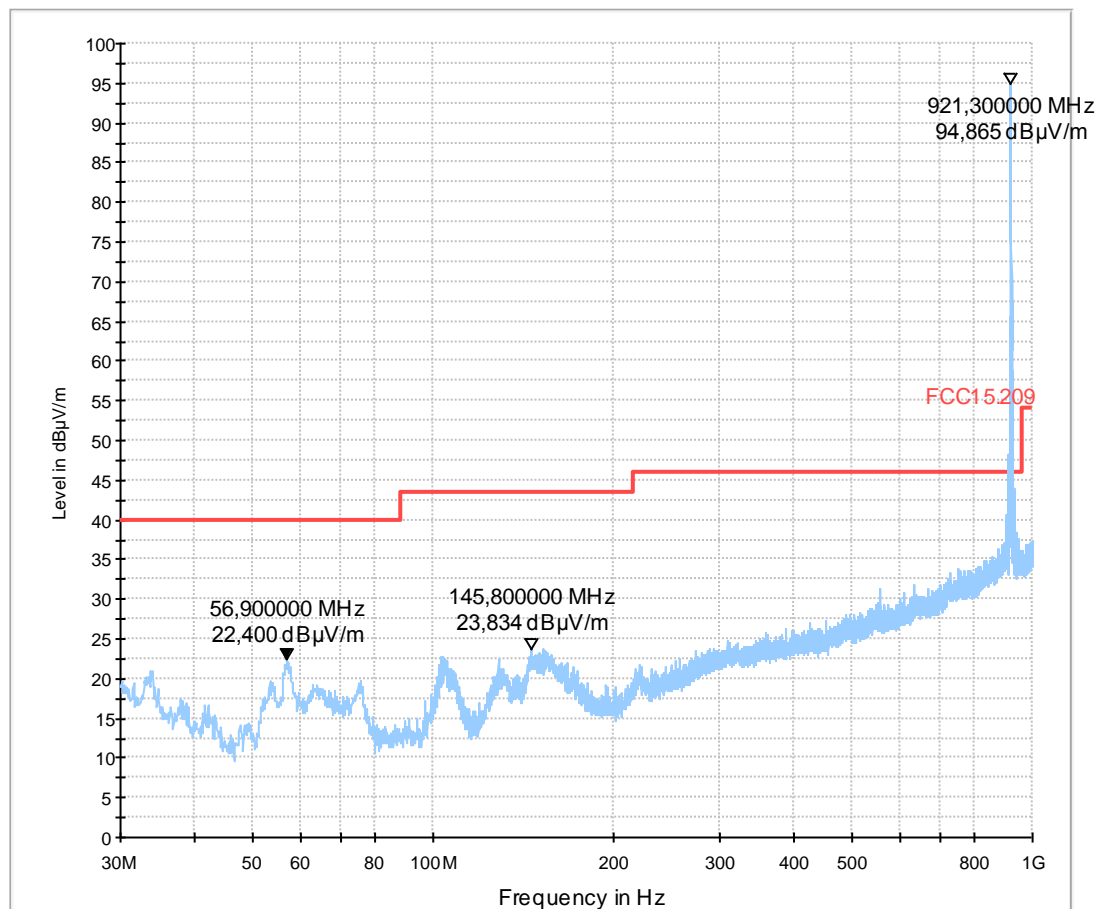
Test description:	Electric Fieldstrength Measurement related to 3 m distance
Test site and distance:	Semi Anechoic Room (SAR) with 3 m measurement distance
Measured sides of EUT:	front, right, rear, left
Rec. antenna (pre-scan):	height 1.00 m and 1.82 m, horizontal and vertical polarisation
Rec. antenna (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 15.205 § 15.209

Operator:	MEL
Operating conditions:	TX mode ISM (921.4MHz) + charging battery
	EUT placed vertical

EUT Information

Description:	
EUT Name:	Wrist Watch + Cradle + AC/DC Adaptor
Manufacturer:	Everon
Serial Number:	Watch (10-25-05-F1-01004608)
Hardware Rev:	1205
Software Rev:	--
Comment:	

FCC15.209_hor+vert



EMI Auto Test Template: FCC15.209_hor+vert

Hardware Setup: HW13_FCC_ESCS30_Bypass
 Measurement Type: Open-Area-Test-Site
 Frequency Range: 30 MHz - 1 GHz
 Graphics Level Range: 0 dB μ V/m - 60 dB μ V/m

Preview Measurements:
 Antenna height: 100 - 182 cm , Step Size = 82 cm , Speed = 8
 Polarization: H + V
 Turntable position: 0 - 270 deg , Step Size = 90 deg , Speed = 8
 Scan Test Template: EMI Scan 01_1ms_EN55022B

Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver
30 MHz - 1 GHz	MaxPeak	120 kHz	0,001 s	Receiver 1 [ESS]

Data Reduction:
 Limit Line #1: FCC15.209
 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_EN55022B

Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver
30 MHz - 1 GHz	MaxPeak	120 kHz	0,02 s	Receiver 1 [ESS]

Adjustment:
 Antenna height: Adjustment with full Range , Speed = 3
 Turntable position: Adjustment with full Range , Speed = 3
 Template for Single Meas.: EMI Scan 02_20ms_EN55022B

Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver
30 MHz - 1 GHz	MaxPeak	120 kHz	0,02 s	Receiver 1 [ESS]

Final Measurements:
 Template for Single Meas.: EMI Scan 03_1s_EN55022B

Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver
30 MHz - 1 GHz	QuasiPeak	120 kHz	1 s	Receiver 1 [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'

1.7.3. Band-Edge radiated

Diagram No. 2.02a

Common Information

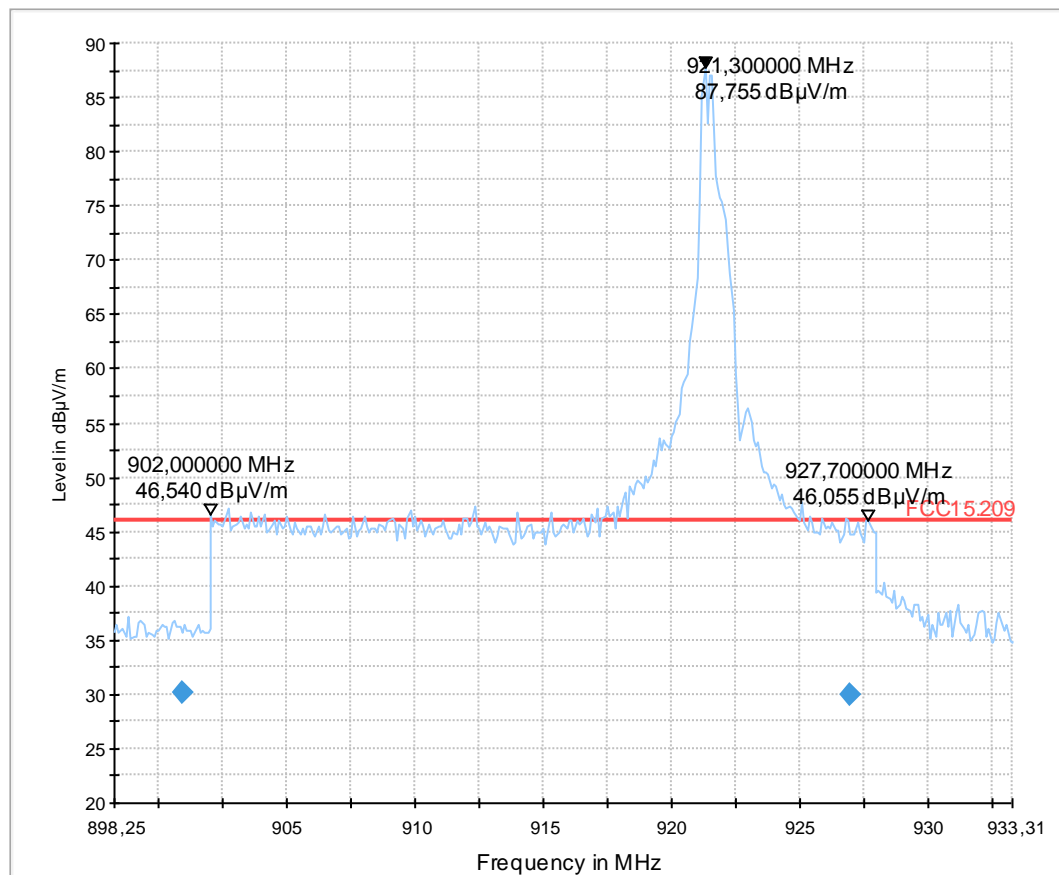
Test description:	Electric Fieldstrength Measurement related to 3 m distance
Test site and distance:	Semi Anechoic Room (SAR) with 3 m measurement distance
Measured sides of EUT:	front, right, rear, left
Rec. antenna (pre-scan):	height 1.00 m and 1.82 m, horizontal and vertical polarisation
Rec. antenna (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 15.205 § 15.209

Operator:	Lor
Operating conditions:	TX-on continuous,
Comment 1:	Channel 921.4MHz
Comment 2:	EUT placed vertical

EUT Information

Description:	Wrist Watch
EUT Name:	Everon
Manufacturer:	10-25-05-F1-01004608
Serial Number:	1205
Hardware Rev:	--
Software Rev:	
Comment:	

FCC15.209_ISM-Band-hor+vert



Final Result 1

Frequency (MHz)	QuasiPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
900.880000	30.1	1000.0	120.000	332.0	V	94.0	27.4	15.90	46.00
927.000000	29.9	1000.0	120.000	244.0	V	340.0	26.8	16.10	46.00

EMI Auto Test Template: FCC15.209_ISM-Band-hor+vert

Hardware Setup: HW13_FCC_ESCS30_Bypass
 Measurement Type: Open-Area-Test-Site
 Frequency Range: 30 MHz - 1 GHz
 Graphics Level Range: 0 dBμV/m - 80 dBμV/m

Preview Measurements:

Antenna height: 100 - 182 cm , Step Size = 82 cm , Speed = 8
 Polarization: H + V
 Turntable position: 0 - 270 deg , Step Size = 90 deg , Speed = 8
 Scan Test Template: EMI Scan 01_10ms_EN55022B-ISM-BAND

Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver
30 MHz - 902 MHz	MaxPeak	120 kHz	0,01 s	Receiver 1 [ESS]
902 MHz - 928 MHz	MaxPeak	120 kHz	0,01 s	Receiver 1 [ESS]
928 MHz - 1 GHz	MaxPeak	120 kHz	0,01 s	Receiver 1 [ESS]

Data Reduction:

Limit Line #1: FCC15.209
 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_EN55022B

Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver
30 MHz - 1 GHz	MaxPeak	120 kHz	0,02 s	Receiver 1 [ESS]

Adjustment:

Antenna height: Adjustment with full Range , Speed = 3
 Turntable position: Adjustment with full Range , Speed = 3
 Template for Single Meas.: EMI Scan 02_20ms_EN55022B

Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver
30 MHz - 1 GHz	MaxPeak	120 kHz	0,02 s	Receiver 1 [ESS]

Final Measurements:

Template for Single Meas.: EMI Scan 03_1s_EN55022B

Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver
30 MHz - 1 GHz	QuasiPeak	120 kHz	1 s	Receiver 1 [ESS]

Report Settings:

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

Actions:

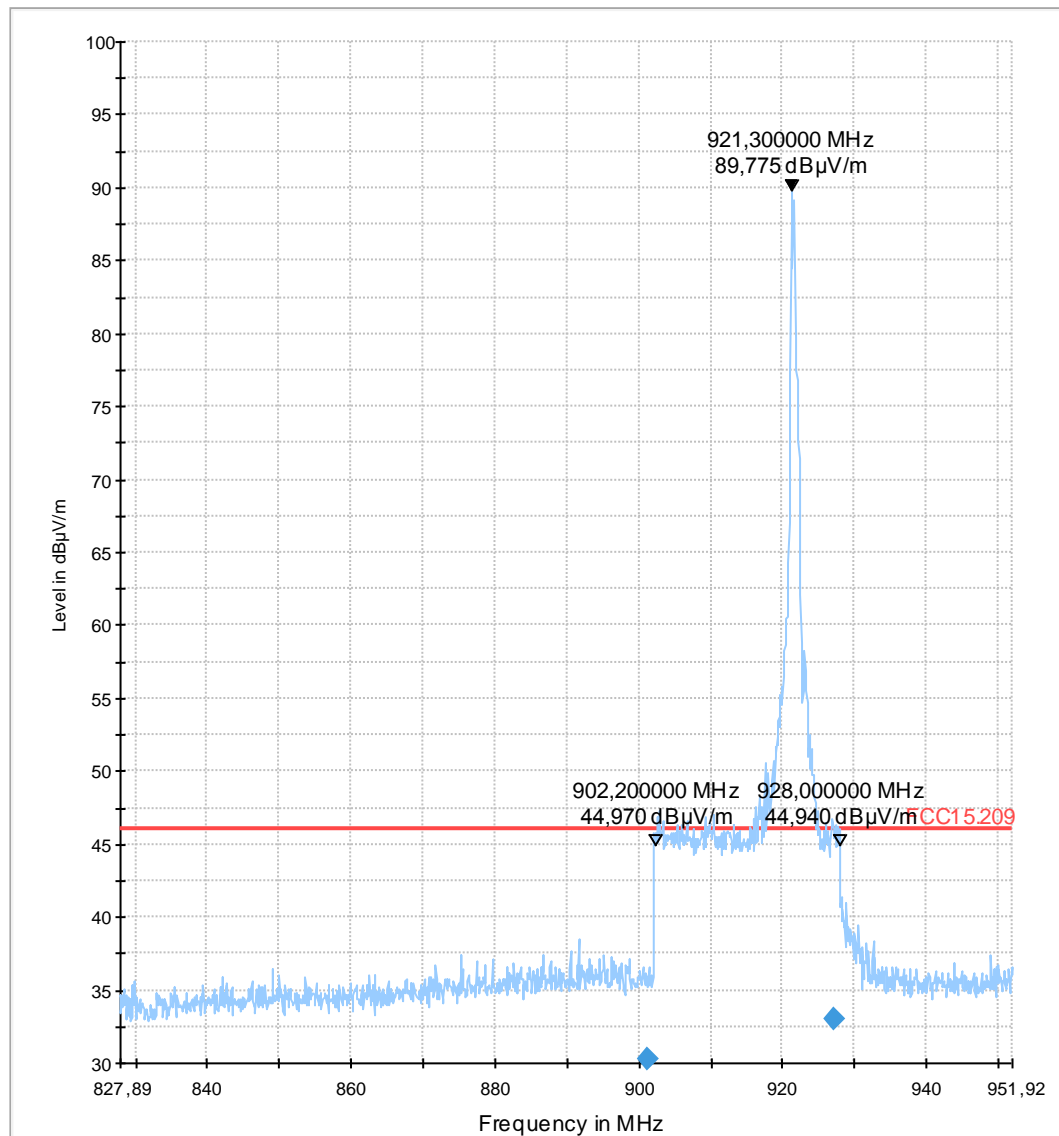
Data Reduction: Before
 Notify: Sound (WAV file) 'tada.wav'
 Final Measurements: After
 Notify: Sound (WAV file) 'tada.wav'

Diagram No. 2.03a**Common Information**

Test description:	Electric Fieldstrength Measurement related to 3 m distance
Test site and distance:	Semi Anechoic Room (SAR) with 3 m measurement distance
Measured sides of EUT:	front, right, rear, left
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 15.205 § 15.209

Operator:	Lor
Operating conditions:	TX-on continuous,
Comment 1:	Channel 921.4MHz
Comment 2:	EUT placed horizontal

FCC15.209_ISM-Band-hor+vert



Final Result 1

Frequency (MHz)	QuasiPeak (dBμV/m)	Measurement Time	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Correction (dB)	Marginal (dB)	Limit (dBμV/m)
901.19000	30.2	1000.	120.000	309.0	V	323.0	27.4	15.80	46.00
927.07000	33.1	1000.	120.000	120.0	H	17.0	26.8	12.90	46.00

EMI Auto Test Template: FCC15.209_ISM-Band-hor+vert

Hardware Setup: HW13_FCC_ESCS30_Bypass
 Measurement Type: Open-Area-Test-Site
 Frequency Range: 30 MHz - 1 GHz
 Graphics Level Range: 0 dBμV/m - 80 dBμV/m

Preview Measurements:

Antenna height: 100 - 182 cm , Step Size = 82 cm , Speed = 8
 Polarization: H + V
 Turntable position: 0 - 270 deg , Step Size = 90 deg , Speed = 8
 Scan Test Template: EMI Scan 01_10ms_EN55022B-ISM-BAND

Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver
30 MHz - 902 MHz	MaxPeak	120 kHz	0,01 s	Receiver 1 [ESS]
902 MHz - 928 MHz	MaxPeak	120 kHz	0,01 s	Receiver 1 [ESS]
928 MHz - 1 GHz	MaxPeak	120 kHz	0,01 s	Receiver 1 [ESS]

Data Reduction:

Limit Line #1: FCC15.209
 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_EN55022B

Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver
30 MHz - 1 GHz	MaxPeak	120 kHz	0,02 s	Receiver 1 [ESS]

Adjustment:

Antenna height: Adjustment with full Range , Speed = 3
 Turntable position: Adjustment with full Range , Speed = 3
 Template for Single Meas.: EMI Scan 02_20ms_EN55022B

Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver
30 MHz - 1 GHz	MaxPeak	120 kHz	0,02 s	Receiver 1 [ESS]

Final Measurements:

Template for Single Meas.: EMI Scan 03_1s_EN55022B

Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver
30 MHz - 1 GHz	QuasiPeak	120 kHz	1 s	Receiver 1 [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'

1.7.4. Field strength emissions in the frequency range 1GHz to 10GHz

Diagram No.: 2.11

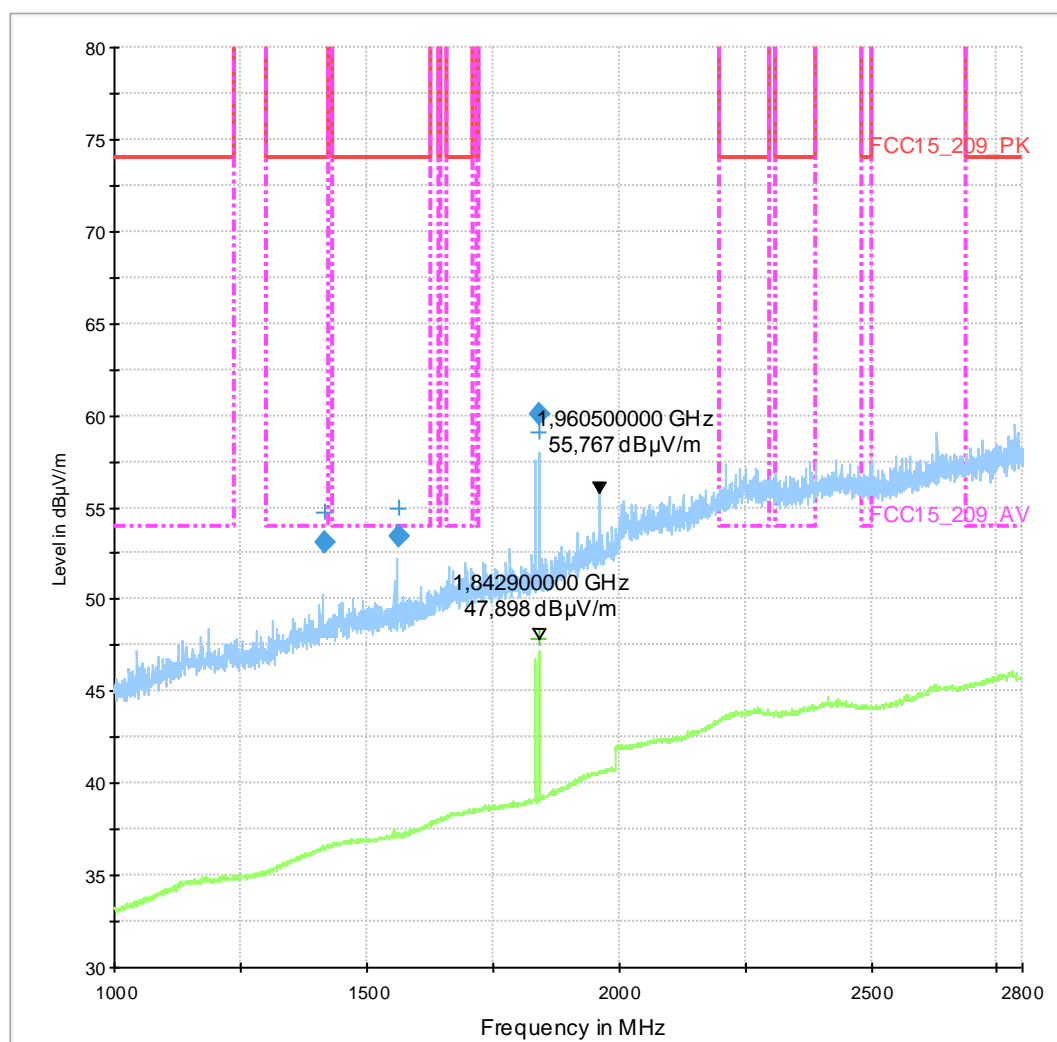
Common Information

Test Description:	Radiated field strength emission accord. §15.247 in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	§15.205 & 15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Operator Name:	Lor
Comment:	Ch. 921.4MHz + charging battery EUT placed vertical

EUT Information

Description:	
EUT Name:	WATCH+Craddle+AC/DC Adaptor
Remark	Everon

Sweep1_SM1_K0



Final Measurement Result 1

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)
1415.500000	53.1	---	100.0	1000.000	155.0	V	67.0	29.6
1563.600000	53.4	---	100.0	1000.000	155.0	V	106.0	30.7
1842.900000	60.1	---	100.0	1000.000	155.0	V	256.0	32.7

Frequency (MHz)	Comment
1415.500000	
1563.600000	
1842.900000	

EMI Auto Test Template: Sweep1_SM1_K0

Hardware Setup: 549_dBuVm_PA0_TH3_KP1_ESU
 Measurement Type: Open-Area-Test-Site
 Frequency Range: 1 GHz - 2,8 GHz
 Graphics Level Range: 30 dBμV/m - 110 dBμV/m

Preview Measurements:
 Scan Test Template: Sweep1_pre

Data Reduction:
 Limit Line #1: FCC15_209_PK
 Limit Line #2: FCC15_209_AV
 Peak Search: 6 dB , Maximum Results: 10
 Subrange Maxima: 50 Subranges , Maxima per Subrange: 1
 Maximum Number of Results: 30
 After Data Reduction: Interactive data reduction

Frequency Zoom:
 Zoom Scan Template: Sweep1_zoom

Adjustment:
 Template for Single Meas.: Sweep1_zoom

Final Measurements:
 Template for Single Meas.: Sweep1_fin
 Template for Single Meas.:(>1GHz) Sweep1_fin

Report Settings:
 Report Template: Report Setup FCC 15_247

Actions:
 Test start
 Notify: "Matrix richtig geschaltet !?! Spekki (ESU) angeschlossen ??"

Diagram No.: 2.12

Common Information

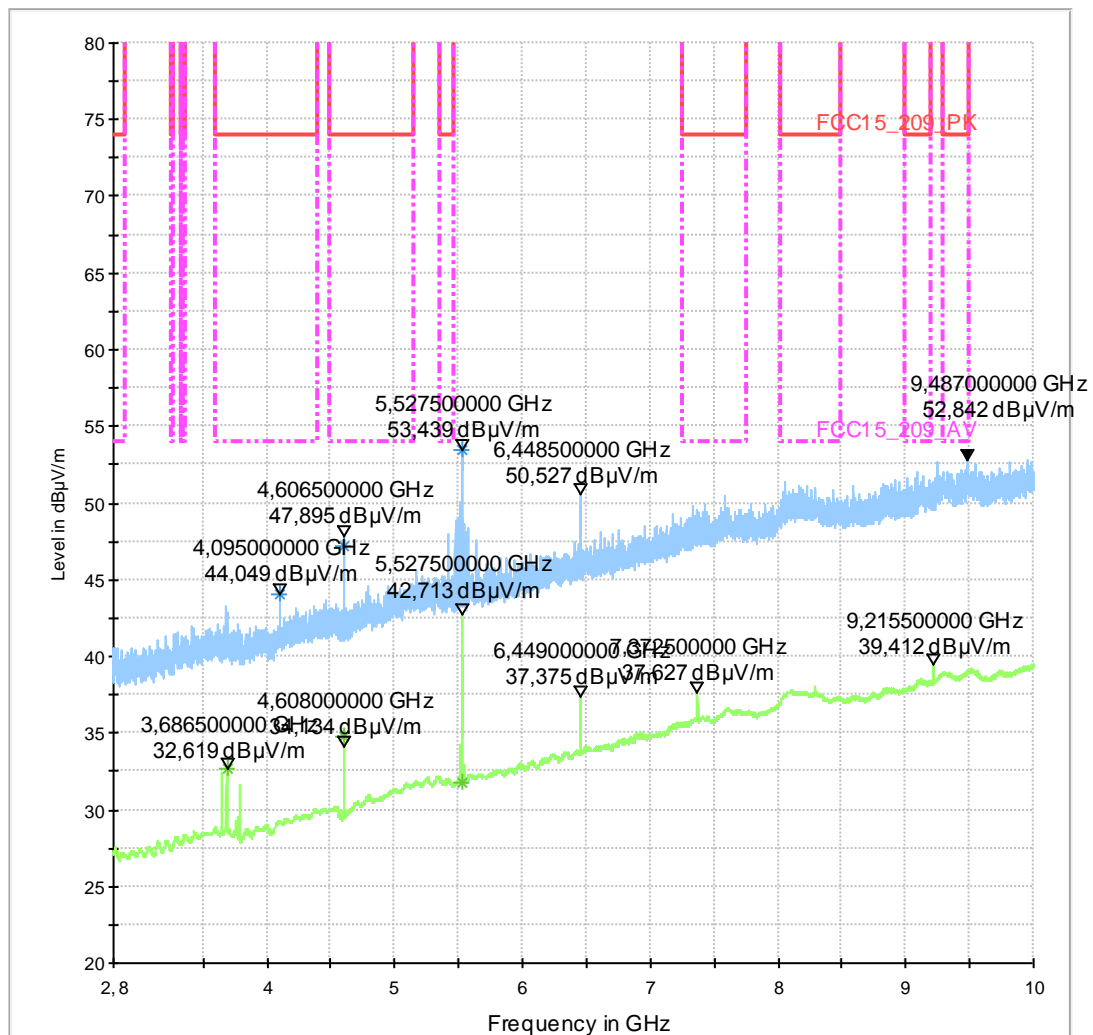
Test Description: Radiated field strength emission accord. §15.247 in 3m distance
 Test Site: CETECOM GmbH Essen
 Test Standard: §15.205 & 15.209 Intentional Radiator
 Antenna polarisation: horizontal/vertical

Operator Name: Lor
 Comment: Ch. 921.4MHz + charging battery
 EUT placed vertical

EUT Information

Description:
 EUT Name: WATCH+Craddle+AC/DC Adaptor
 Remark: Everon

Sweep2_SM1_K0



EMI Auto Test Template: Sweep2_SM1_K0

Hardware Setup: 549_dBuVm_PA484_TH3_KP1_ESU
Measurement Type: Open-Area-Test-Site
Frequency Range: 2,8 GHz - 10 GHz
Graphics Level Range: 20 dB μ V/m - 80 dB μ V/m

Preview Measurements:

Scan Test Template: Sweep2_pre

Data Reduction:

Limit Line #1: FCC15_209_PK
Limit Line #2: FCC15_209_AV
Peak Search: 6 dB , Maximum Results: 10
Subrange Maxima: 50 Subranges , Maxima per Subrange: 1
Acceptance Offset: -20 dB
Maximum Number of Results: 30
After Data Reduction: Interactive data reduction

Frequency Zoom:

Zoom Scan Template: Sweep2_zoom

Adjustment:

Template for Single Meas.: Sweep2_zoom

Final Measurements:

Template for Single Meas.: Sweep2_fin

Report Settings:

Report Template: Report Setup FCC 15_247
Create Electronic Report: RTF PDF
Document Name: dummy EMI Report

Actions:

Test start
Notify: "Switch-Matrix richtig geschaltet ? Spekki (ESU) angeschlossen ?"

Diagram No.: 2.13

Common Information

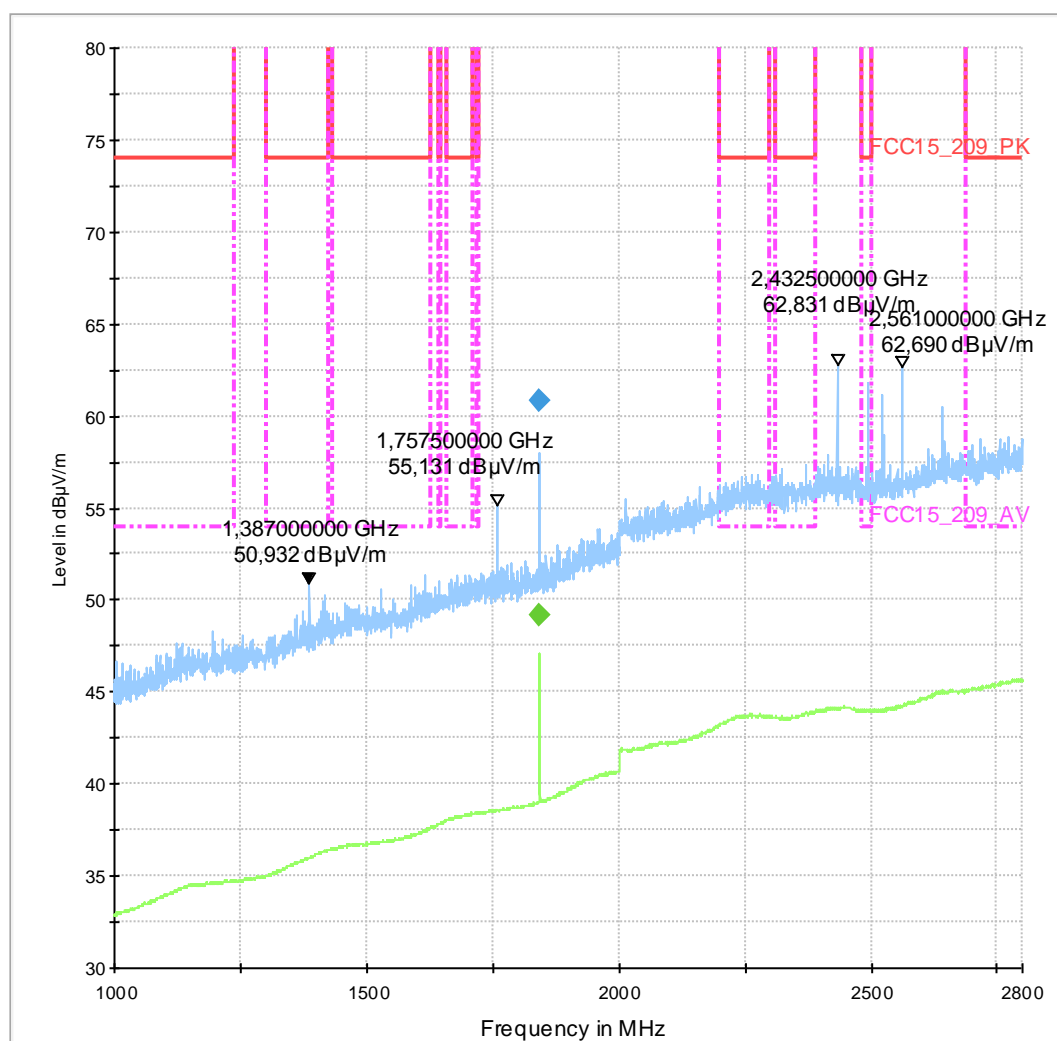
Test Description: Radiated field strength emission accord. §15.247 in 3m distance
 Test Site: CETECOM GmbH Essen
 Test Standard: §15.205 & 15.209 Intentional Radiator
 Antenna polarisation: horizontal/vertical

Operator Name: Lor
 Comment: Ch. 921.4MHz + charging battery
 EUT placed horizontal

EUT Information

Description:
 EUT Name: WATCH+Craddle+AC/DC Adaptor
 Remark: Everon

Sweep1_SM1_K0



Final Result 1

Frequency (MHz)	MaxPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1842.400000	60.8	100.0	1000.000	155.0	H	310.0	32.7	59.2	120.0

Frequency (MHz)	Comment
1842.400000	

Final Result 2

Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1842.900000	49.2	100.0	1000.000	155.0	H	307.0	32.7	50.8	100.0

Frequency (MHz)	Comment
1842.900000	

EMI Auto Test Template: Sweep1_SM1_K0

Hardware Setup: 549_dBuVm_PA0_TH3_KP1_ESU
 Measurement Type: Open-Area-Test-Site
 Frequency Range: 1 GHz - 2,8 GHz
 Graphics Level Range: 30 dBμV/m - 110 dBμV/m

Preview Measurements:
 Scan Test Template: Sweep1_pre

Data Reduction:
 Limit Line #1: FCC15_209_PK
 Limit Line #2: FCC15_209_AV
 Peak Search: 6 dB , Maximum Results: 10
 Subrange Maxima: 50 Subranges , Maxima per Subrange: 1
 Maximum Number of Results: 30
 After Data Reduction: Interactive data reduction

Frequency Zoom:
 Zoom Scan Template: Sweep1_zoom

Adjustment:
 Template for Single Meas.: Sweep1_zoom

Final Measurements:
 Template for Single Meas.: Sweep1_fin
 Template for Single Meas.:(>1GHz) Sweep1_fin

Report Settings:
 Report Template: Report Setup FCC 15_247

Actions:
 Test start
 Notify: "Matrix richtig geschaltet !? Spekki (ESU) angeschlossen ??"

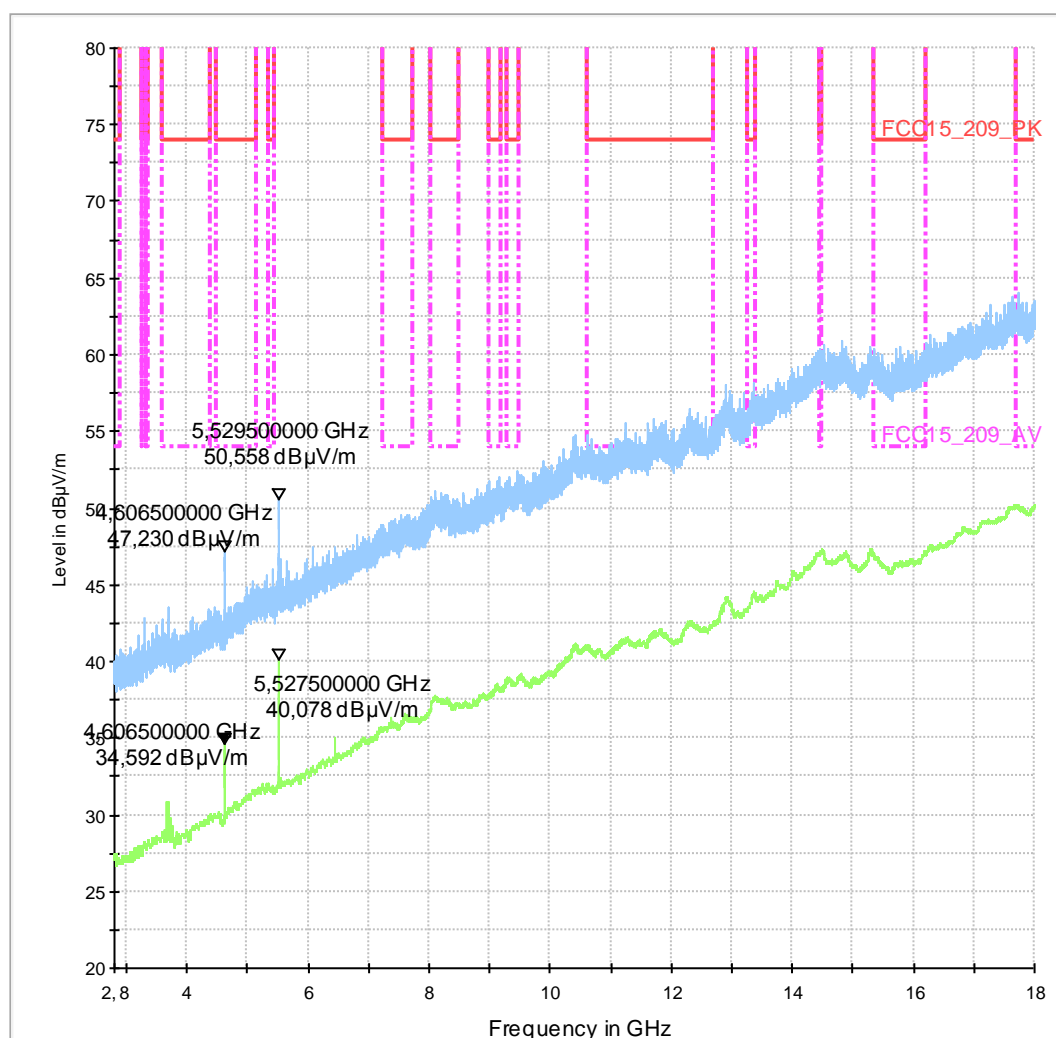
Diagram No.: 2.14**Common Information**

Test Description:	Radiated field strength emission accord. §15.247 in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	§15.205 & 15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Operator Name:	Lor
Comment:	Ch. 921.4MHz + charging battery EUT placed horizontal

EUT Information

Description:	
EUT Name:	WATCH+Craddle+AC/DC Adaptor
Remark	Everon

Sweep2_SM1_K0



EMI Auto Test Template: Sweep2_SM1_K0

Hardware Setup: 549_dBuVm_PA484_TH3_KP1_ESU
Measurement Type: Open-Area-Test-Site
Frequency Range: 2,8 GHz - 18 GHz
Graphics Level Range: 20 dB μ V/m - 80 dB μ V/m

Preview Measurements:

Scan Test Template: Sweep2_pre

Data Reduction:

Limit Line #1: FCC15_209_PK
Limit Line #2: FCC15_209_AV
Peak Search: 6 dB , Maximum Results: 10
Subrange Maxima: 50 Subranges , Maxima per Subrange: 1
Acceptance Offset: -20 dB
Maximum Number of Results: 30
After Data Reduction: Interactive data reduction

Frequency Zoom:

Zoom Scan Template: Sweep2_zoom

Adjustment:

Template for Single Meas.: Sweep2_zoom

Final Measurements:

Template for Single Meas.: Sweep2_fin

Report Settings:

Report Template: Report Setup FCC 15_247
Create Electronic Report: RTF PDF
Document Name: dummy EMI Report

Actions:

Test start
Notify: "Switch-Matrix richtig geschaltet ? Spekki (ESU) angeschlossen ?"