

Annex 1: Measurement diagrams
TEST REPORT
 No.: 18-1-0048401T01a

According to:

FCC Regulations

Part 15.205
 Part 15.209
 Part 15.407

ISED-Regulations

RSS-Gen, Issue 4
 RSS-247, Issue 2

for

Robert Bosch Car Multimedia

Navigation System with Bluetooth and WLAN
 AIVIL12F0

FCC ID: YBNAIVIL12F0

ISED: 9595A-AIVIL12F0

Laboratory Accreditation and Listings		
 Deutsche Akkreditierungsstelle D-PL-12047-01-01 Accredited EMC-Test Laboratory	 Industry Canada Reg. No.: 3462D-1 Reg. No.: 3462D-2 Reg. No.: 3462D-3	 Voluntary Controls for Electromagnetic Emissions Reg. No.: R-20013, C-20009, T-20006, G-20013
 AUTHORIZED RF LABORATORY	 Authorized Test Lab Lab Code: 20011130-00	 FEDERAL COMMUNICATIONS COMMISSION MRA US-EU 0003
accredited according to DIN EN ISO/IEC 17025		
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.com • Internet: www.cetecom.com		
Laboratory Accreditation and Listings		

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1. Summary of test results

1.1. Radiated magnetic field measurements below 30 MHz

Diagram No. 2.01a_a-mode_6Mbps_ch040_Laying

Date:	08.07.2018	Page 1 of 1
Test description:	Magnetic Field Strength Measurement related to 30/300 m distance	
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance	
Version of Testsoftware:	EMC32 V9.25.0	
Distance correction:	used accord. table, pls. see test report	
Technical Data:	Please see page 2 for detailed data of measurement setup	
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation	
Used filter:	bypass	
Test specification:	FCC 15.205 § 15.209; RSS-Gen: Issue 4	
Operator:	TFR	
Operating conditions:	Wlan5GHz_a-mode_CH40_6MBit	
Comment:	DUT Laying	

EUT Information

Manufacturer:	Robert Bosch Car Multimedia
Product:	AIVIL12F0
EUT Model:	AIVIL12F0
HW:	001
SW:	X317
Serial Nr.:	0007625
Connected Devices:	--

Full Spectrum

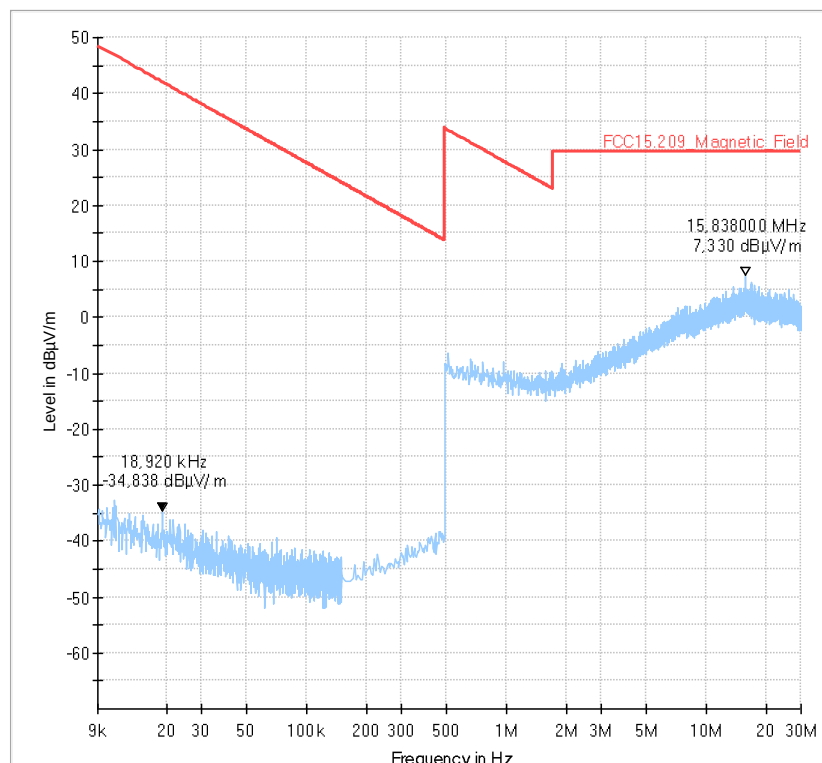


Diagram No. 2.01b_a-mode_6Mbps_ch040_Standing

Date: 08.07.2018	Page 1 of 1
Test description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC32 V9.25.0
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test specification:	FCC 15.205 § 15.209; RSS-Gen: Issue 4
Operator:	TFr
Operating conditions:	Wlan5GHz_a-mode_CH40_6MBit
Comment:	DUT Standing

EUT Information

Manufacturer:	Robert Bosch Car Multimedia
Product:	AIVIL12F0
EUT Model:	AIVIL12F0
HW:	001
SW:	X317
Serial Nr.:	0007625
Connected Devices:	--

Full Spectrum

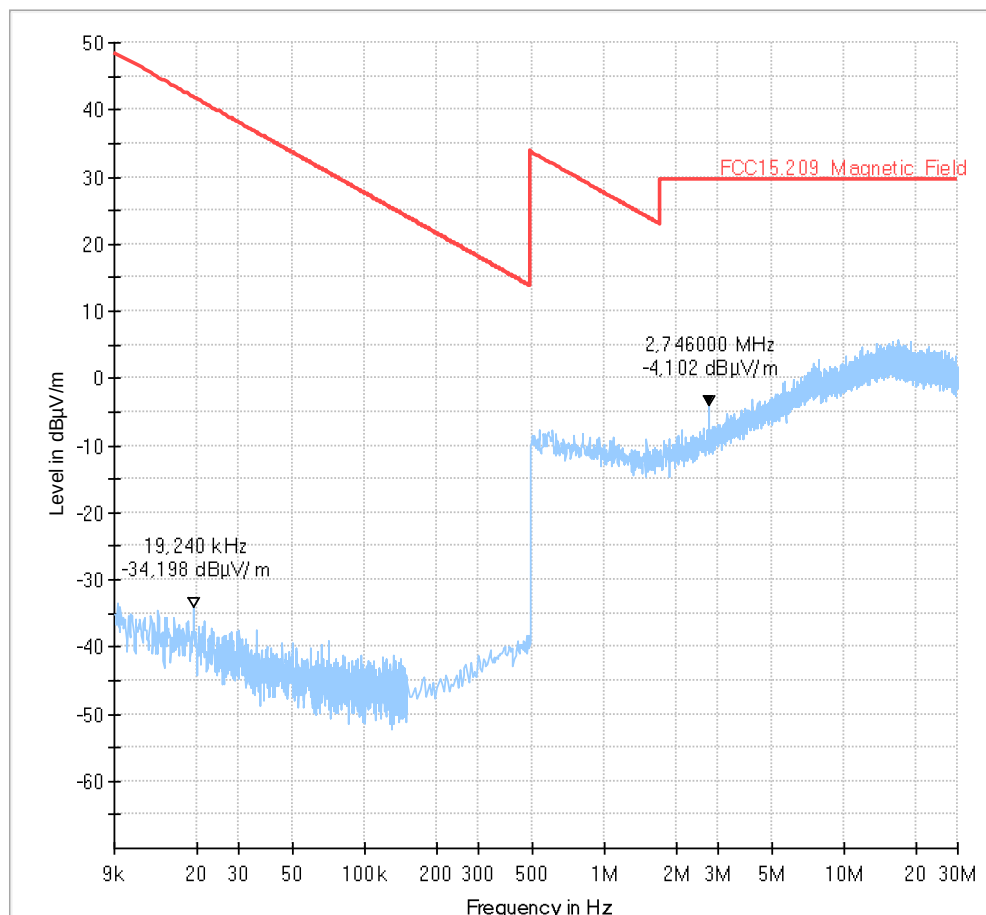


Diagram No. 2.02a_a-mode_9Mbps_ch056_Laying

Date: 08.07.2018	Page 1 of 1
Test description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC32 V9.25.0
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test specification:	FCC 15.205 § 15.209; RSS-Gen: Issue 4
Operator:	TFr
Operating conditions:	Wlan5GHz_a-mode_CH56_9MBit
Comment:	DUT Laying

EUT Information

Manufacturer:	Robert Bosch Car Multimedia
Product:	AIVIL12F0
EUT Model:	AIVIL12F0
HW:	001
SW:	X317
Serial Nr.:	0007625
Connected Devices:	--

Full Spectrum

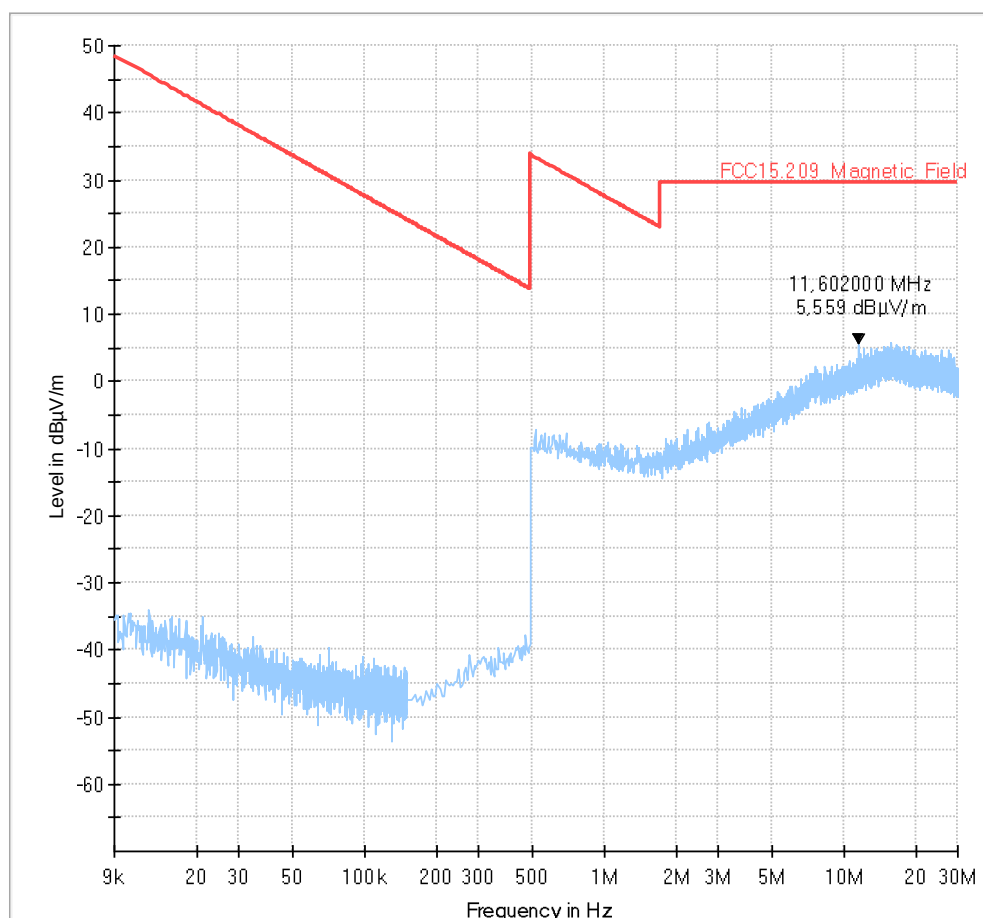


Diagram No. 2.02b_a-mode_9Mbps_ch056_Standing

Date: 08.07.2018	Page 1 of 1
Test description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC32 V9.25.0
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test specification:	FCC 15.205 § 15.209; RSS-Gen: Issue 4
Operator:	TFR
Operating conditions:	Wlan5GHz_a-mode_CH56_9MBit
Comment:	DUT Standing

EUT Information

Manufacturer:	Robert Bosch Car Multimedia
Product:	AIVIL12F0
EUT Model:	AIVIL12F0
HW:	001
SW:	X317
Serial Nr.:	0007625
Connected Devices:	--

Full Spectrum

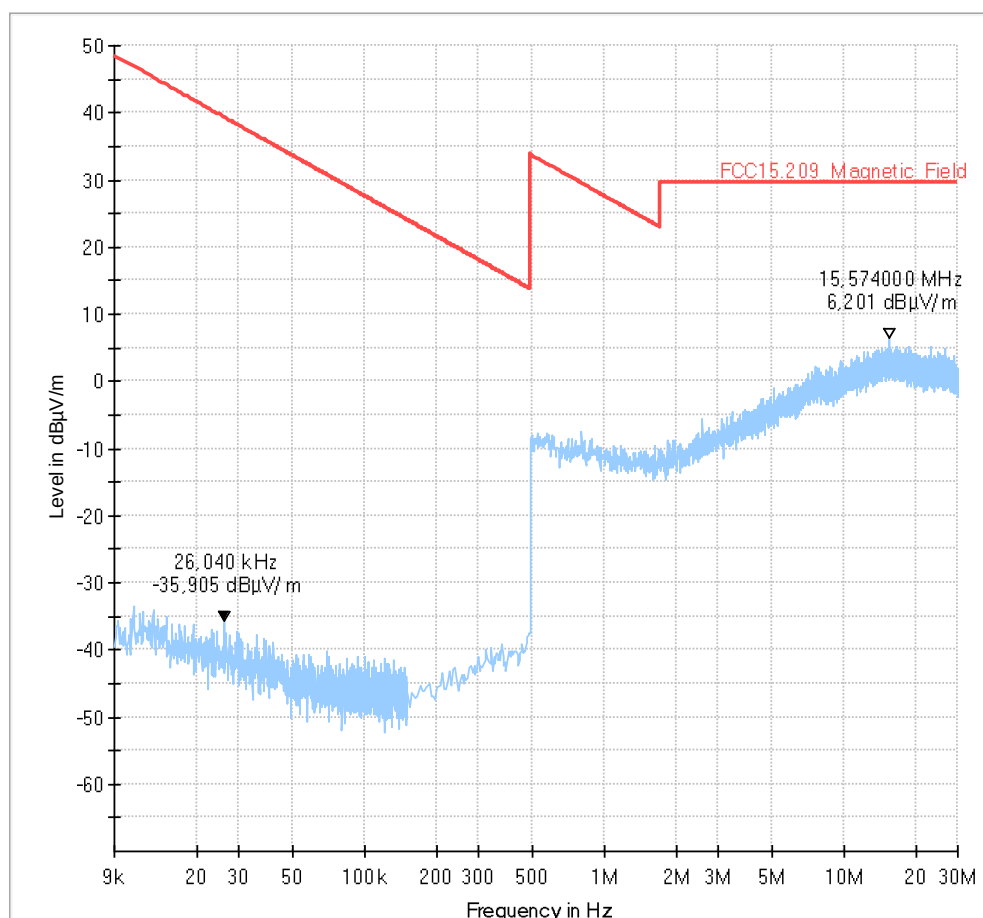


Diagram No. 2.03a_a-mode_12Mbps_ch100_Laying

Date: 08.07.2018	Page 1 of 1
Test description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC32 V9.25.0
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	Bypass
Test specification:	FCC 15.205 § 15.209; RSS-Gen: Issue 4
Operator:	TFR
Operating conditions:	Wlan5GHz_a-mode_CH100_12MBit
Comment:	DUT Laying

EUT Information

Manufacturer:	Robert Bosch Car Multimedia
Product:	AIVIL12F0
EUT Model:	AIVIL12F0
HW:	001
SW:	X317
Serial Nr.:	0007625
Connected Devices:	--

Full Spectrum

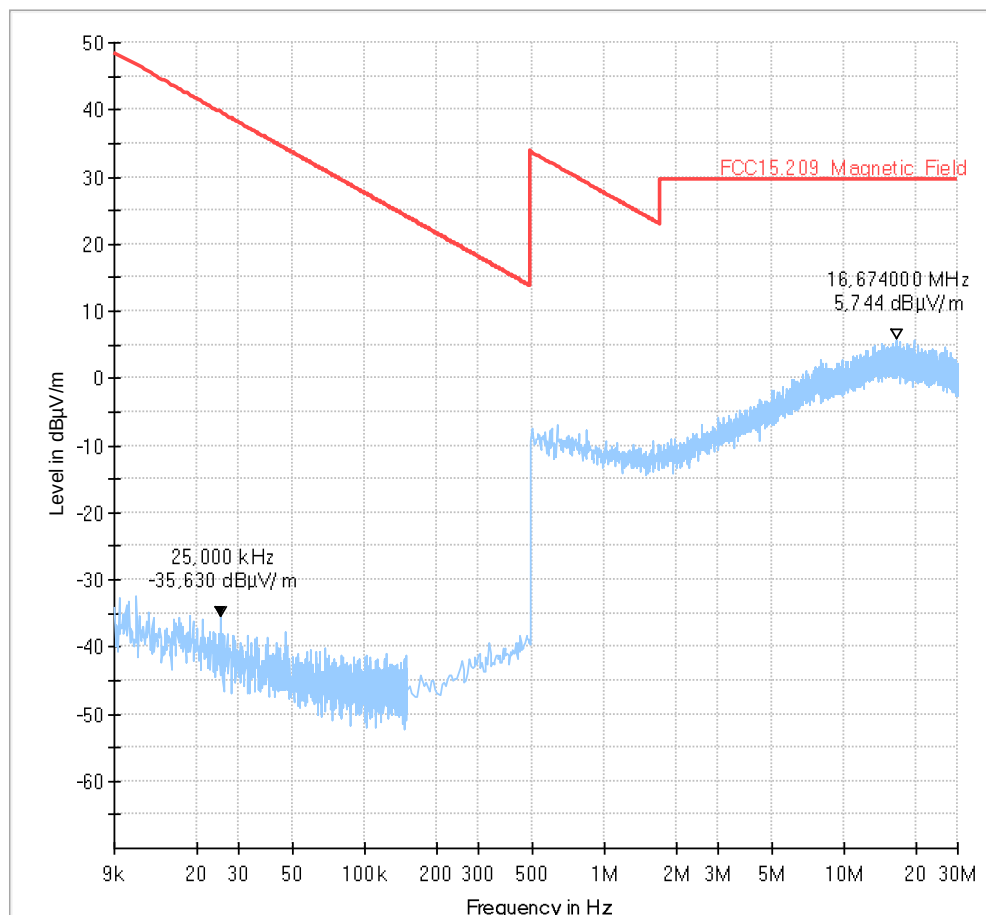


Diagram No. 2.03b_a-mode_12Mbps_ch100_Standing

Date: 08.07.2018	Page 1 of 1
Test description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC32 V9.25.0
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test specification:	FCC 15.205 § 15.209; RSS-Gen: Issue 4
Operator:	TFR
Operating conditions:	Wlan5GHz_a-mode_CH100_12MBit
Comment:	DUT Standing

EUT Information

Manufacturer:	Robert Bosch Car Multimedia
Product:	AIVIL12F0
EUT Model:	AIVIL12F0
HW:	001
SW:	X317
Serial Nr.:	0007625
Connected Devices:	--

Full Spectrum

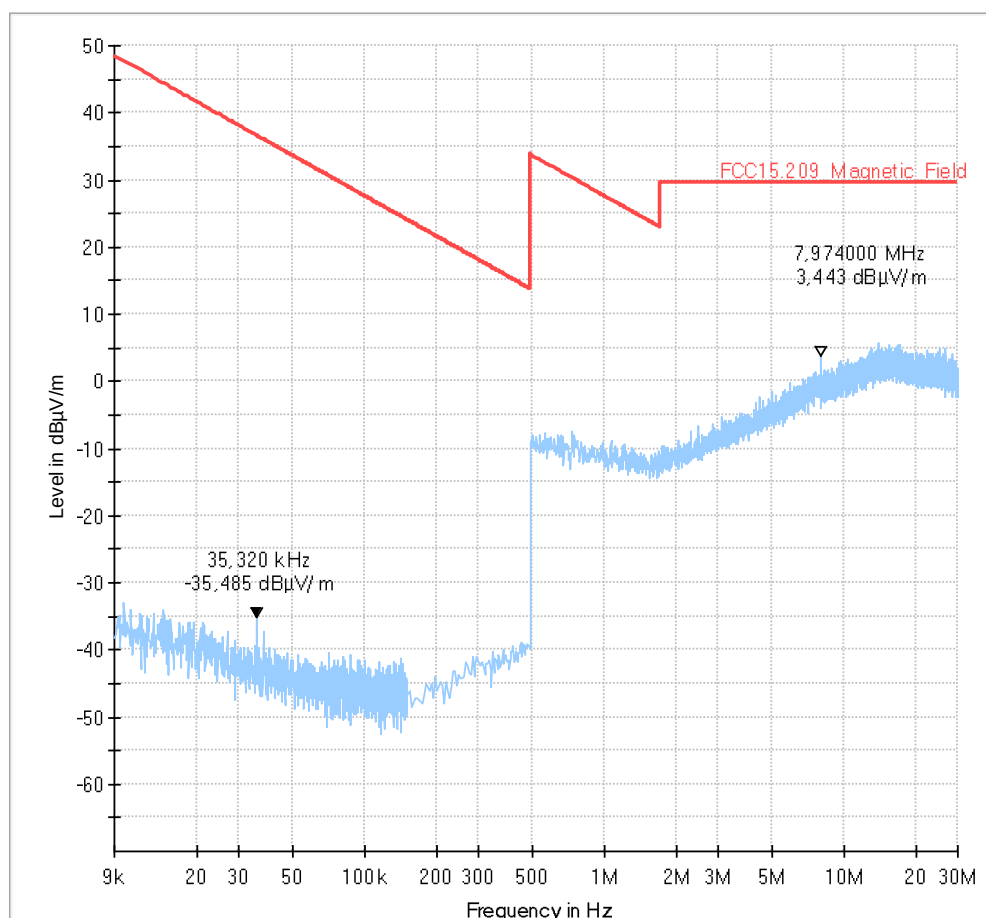


Diagram No. 2.04a_a-mode_6Mbps_ch149_laying

Date:	08.07.2018	Page 1 of 1
Test description:	Magnetic Field Strength Measurement related to 30/300 m distance	
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance	
Version of Testsoftware:	EMC32 V9.25.0	
Distance correction:	used accord. table, pls. see test report	
Technical Data:	Please see page 2 for detailed data of measurement setup	
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation	
Used filter:	bypass	
Test specification:	FCC 15.205 § 15.209; RSS-Gen: Issue 4	
Operator:	TFR	
Operating conditions:	Wlan5GHz_a-mode_CH149_6MBit	
Comment:	DUT Laying	

EUT Information

Manufacturer:	Robert Bosch Car Multimedia
Product:	AIVIL12F0
EUT Model:	AIVIL12F0
HW:	001
SW:	X317
Serial Nr.:	0007625
Connected Devices:	--

Full Spectrum

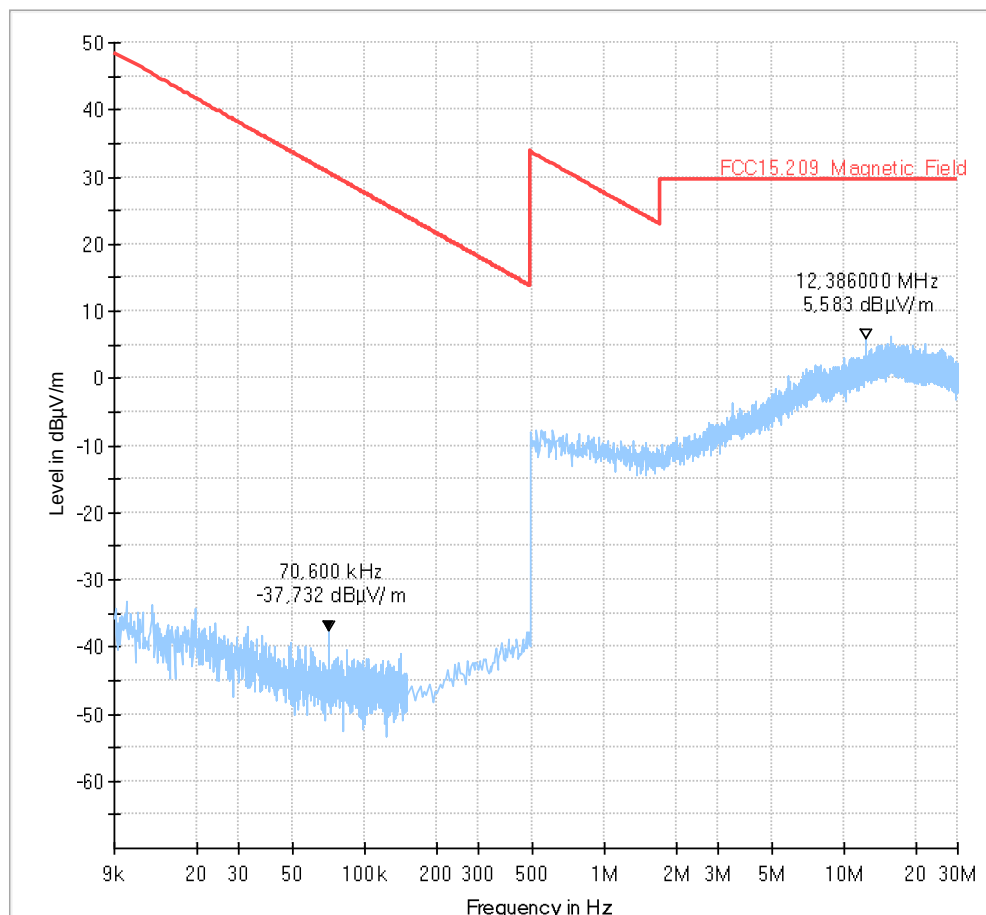


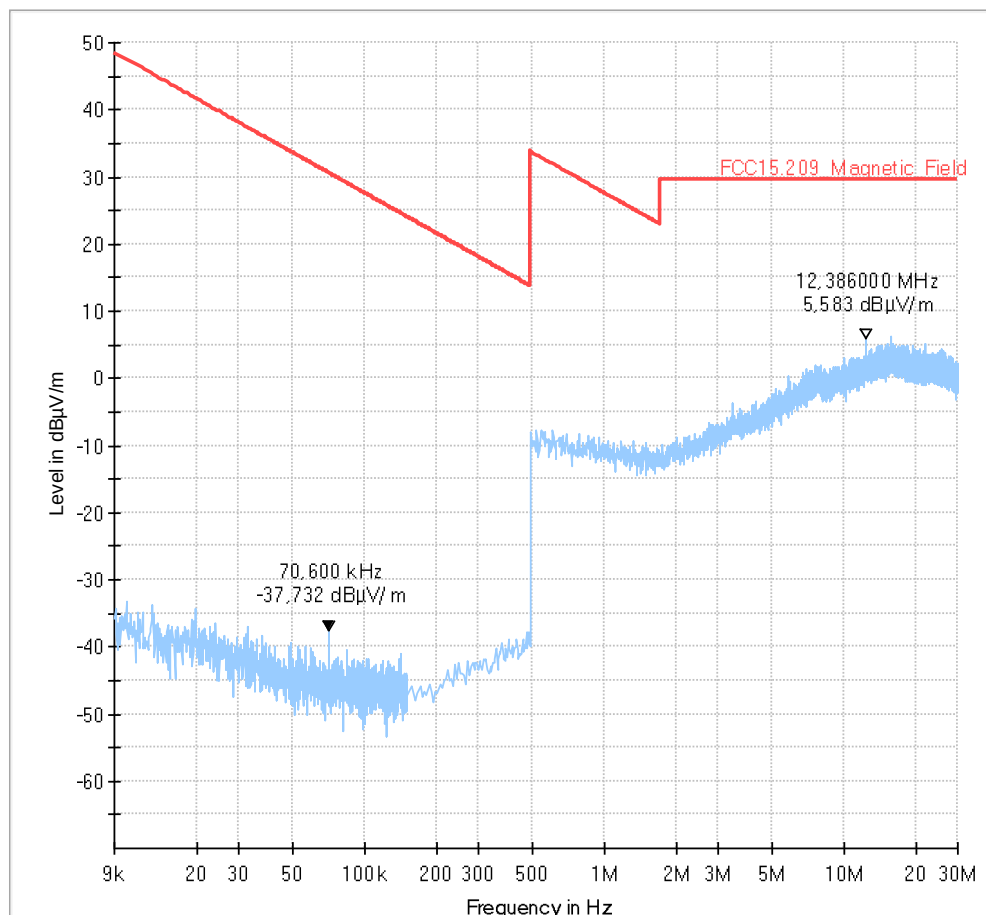
Diagram No. 2.04b_a-mode_6Mbps_ch149_Standing

Date: 08.07.2018	Page 1 of 1
Test description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC32 V9.25.0
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test specification:	FCC 15.205 § 15.209; RSS-Gen: Issue 4
Operator:	TFR
Operating conditions:	Wlan5GHz_a-mode_CH149_6MBit
Comment:	DUT Standing

EUT Information

Manufacturer:	Robert Bosch Car Multimedia
Product:	AIVIL12F0
EUT Model:	AIVIL12F0
HW:	001
SW:	X317
Serial Nr.:	0007625
Connected Devices:	--

Full Spectrum



1.2. Radiated electric field measurement 30 MHz to 1 GHz

3.01a_a-mode_6Mbps_ch040

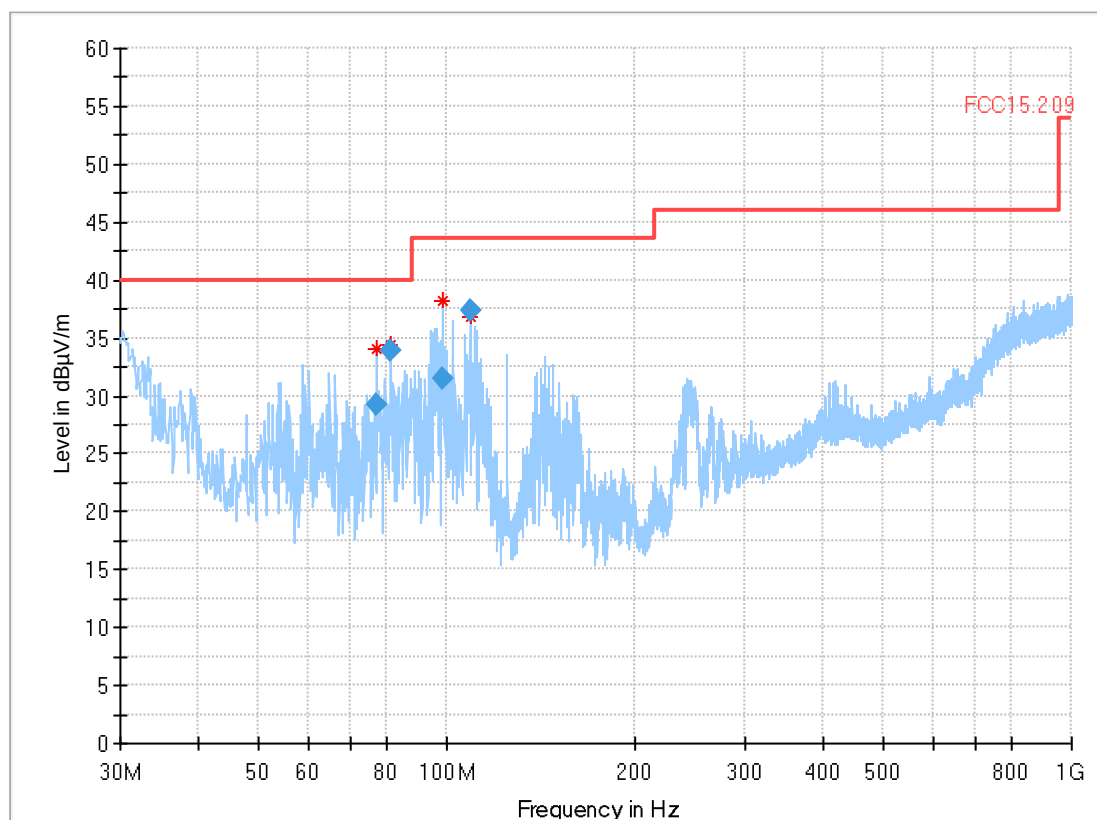
Common Information

Test description:	Electric Field Strength Measurement
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC.V9.25.00
Distance correction:	not used
Used filter:	not used
Technical Data:	please see page 2 for detailed data of measurement setup
Test specification.:	FCC 15.209/15.205; RSS-Gen., Issue 4
Operator:	MBe
Operating mode:	a-mode_6Mbps_ch040
Power during tests:	13,5VDC
Comment 1:	EUT Laying

EUT Information

Manufacturer:	Robert Bosch Car Multimedia
Product:	AIVIL12F0
EUT Model:	AIVIL12F0
HW:	001
SW:	X317
Serial Nr.:	0007625
Connected Devices:	--

Full Spectrum



Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
77.20000	29.23	40.00	10.77	1000.0	120.000	112.0	V	0.0	6.7
81.21000	33.91	40.00	6.09	1000.0	120.000	137.0	V	264.0	7.1
98.49000	31.50	43.50	12.00	1000.0	120.000	197.0	H	208.0	8.1
108.80000	37.41	43.50	6.09	1000.0	120.000	190.0	H	42.0	8.2

3.01b_a-mode_6Mbps_ch040

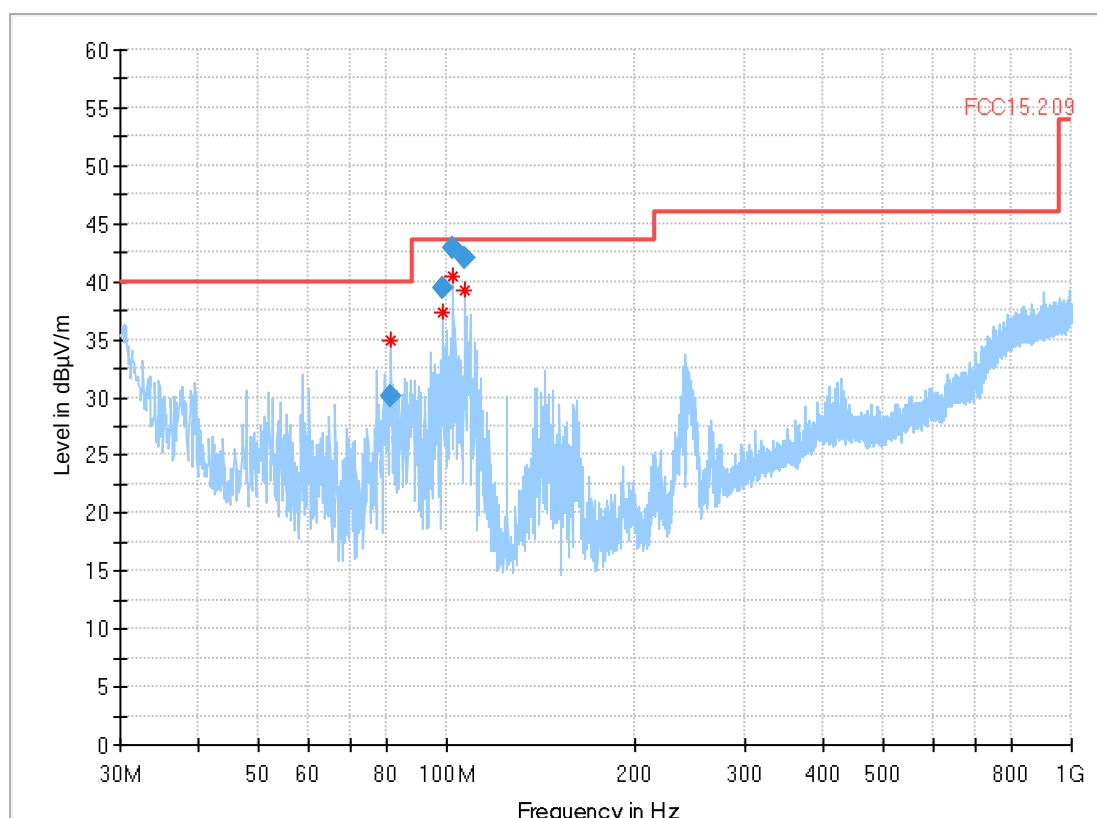
Common Information

Test description:	Electric Field Strength Measurement
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC.V9.25.00
Distance correction:	not used
Used filter:	not used
Technical Data:	please see page 2 for detailed data of measurement setup
Test specification.:	FCC 15.209/15.205; RSS-Gen., Issue 4
Operator:	MBe
Operating mode:	a-mode_6Mbps_ch040
Power during tests:	13,5VDC
Comment 1:	EUT Standing

EUT Information

Manufacturer:	Robert Bosch Car Multimedia
Product:	AIVIL12F0
EUT Model:	AIVIL12F0
HW:	001
SW:	X317
Serial Nr.:	0007625
Connected Devices:	--

Full Spectrum



Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
81.21000	30.17	40.00	9.83	1000.0	120.000	157.0	V	0.0	7.1
98.46000	39.44	43.50	4.06	1000.0	120.000	224.0	H	25.0	8.1
101.89000	42.91	43.50	0.59	1000.0	120.000	193.0	H	21.0	8.1
106.70000	42.10	43.50	1.40	1000.0	120.000	202.0	H	26.0	8.1

3.02a_a-mode_9Mbps_ch056

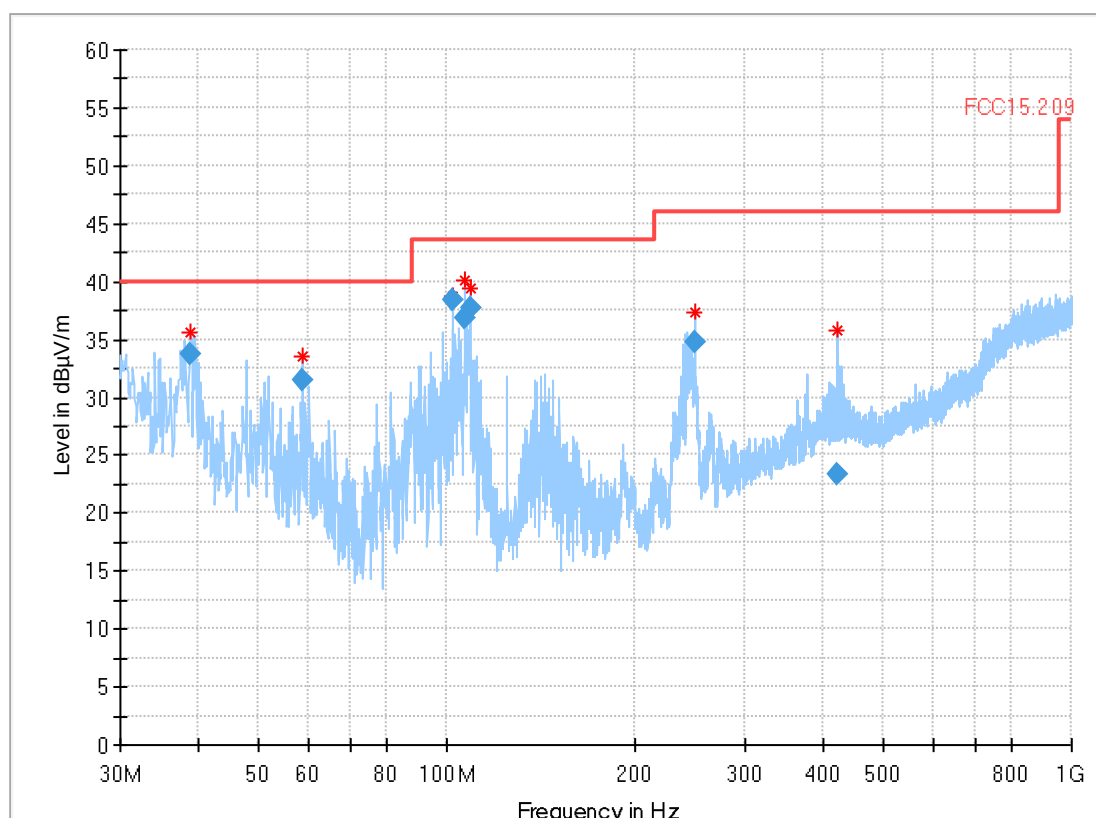
Common Information

Test description:	Electric Field Strength Measurement
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC.V9.25.00
Distance correction:	not used
Used filter:	not used
Technical Data:	please see page 2 for detailed data of measurement setup
Test specification.:	FCC 15.209/15.205; RSS-Gen., Issue 4
Operator:	Rls
Operating mode:	a-mode_9Mbps_ch056
Power during tests:	13,9VDC
Comment 1:	EUT Laying

EUT Information

Manufacturer:	Robert Bosch Car Multimedia
Product:	AIVIL12F0
EUT Model:	AIVIL12F0
HW:	001
SW:	X317
Serial Nr.:	0007625
Connected Devices:	--

Full Spectrum



Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
38.95000	33.68	40.00	6.32	1000.0	120.000	105.0	V	289.0	17.6
58.72000	31.50	40.00	8.50	1000.0	120.000	109.0	V	189.0	9.4
101.89000	38.31	43.50	5.19	1000.0	120.000	185.0	H	147.0	8.1
106.71000	36.88	43.50	6.62	1000.0	120.000	199.0	H	161.0	8.1
108.79000	37.69	43.50	5.81	1000.0	120.000	210.0	H	157.0	8.2
250.01000	34.75	46.00	11.25	1000.0	120.000	126.0	H	4.0	13.0
421.17000	23.41	46.00	22.59	1000.0	120.000	351.0	V	251.0	18.9

3.02b_a-mode_9Mbps_ch056

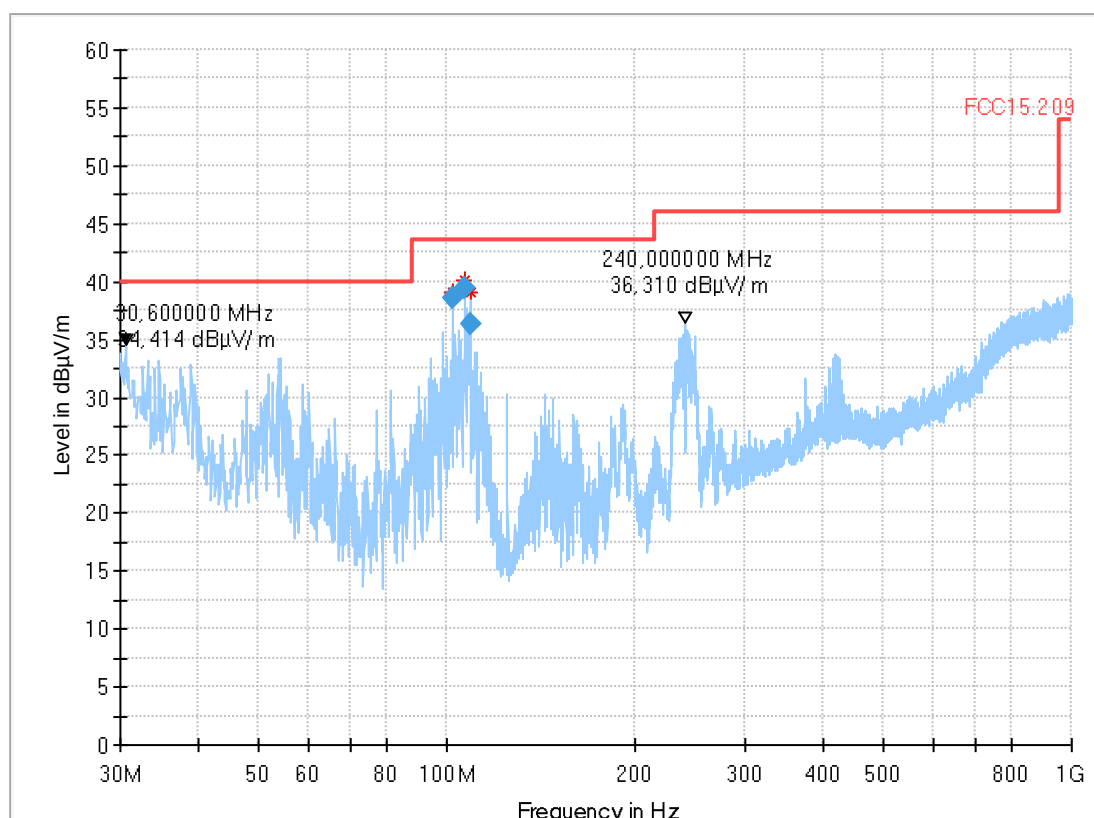
Common Information

Test description:	Electric Field Strength Measurement
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC.V9.25.00
Distance correction:	not used
Used filter:	not used
Technical Data:	please see page 2 for detailed data of measurement setup
Test specification.:	FCC 15.209/15.205; RSS-Gen., Issue 4
Operator:	Rls
Operating mode:	a-mode_6Mbps_ch064
Power during tests:	13,9VDC
Comment 1:	EUT Standing

EUT Information

Manufacturer:	Robert Bosch Car Multimedia
Product:	AIVIL12F0
EUT Model:	AIVIL12F0
HW:	001
SW:	X317
Serial Nr.:	0007625
Connected Devices:	--

Full Spectrum



Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
101.890000	38.59	43.50	4.91	1000.0	120.000	360.0	H	0.0	8.1
106.690000	39.35	43.50	4.15	1000.0	120.000	275.0	H	0.0	8.1
108.800000	36.36	43.50	7.14	1000.0	120.000	274.0	H	156.0	8.2

3.03a_a-mode_12Mbps_ch100

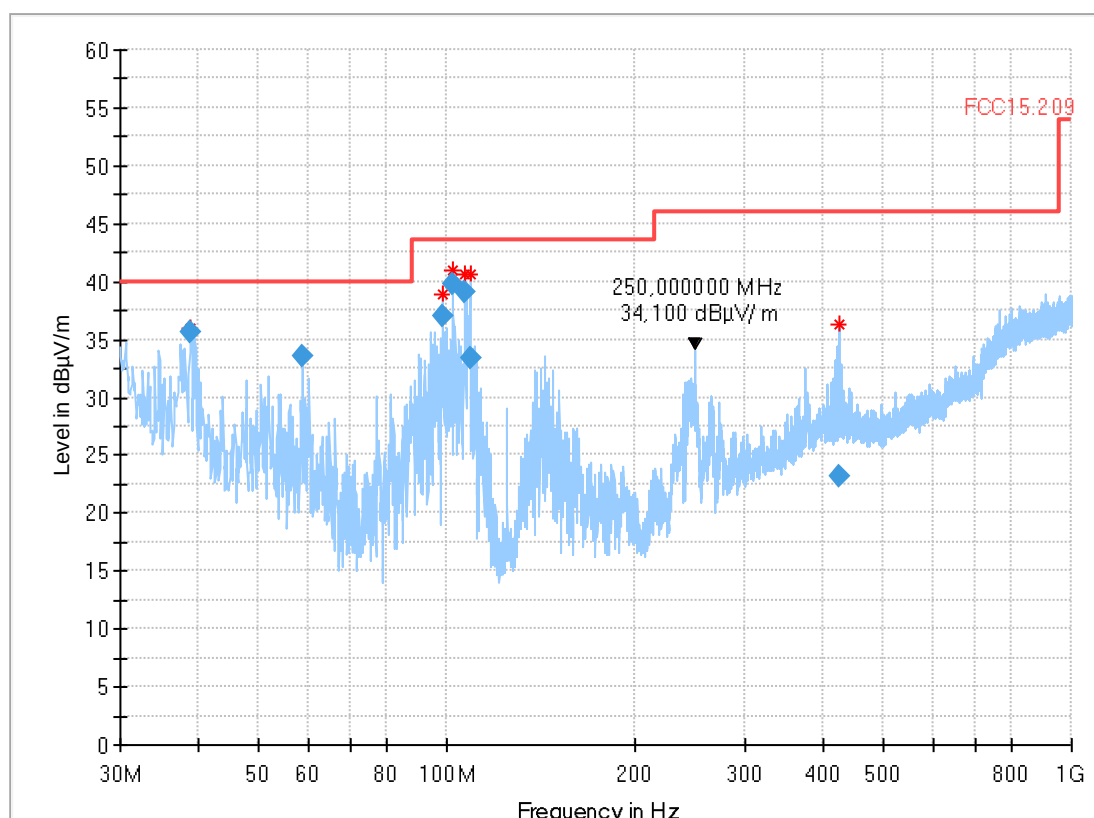
Common Information

Test description:	Electric Field Strength Measurement
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC.V9.25.00
Distance correction:	not used
Used filter:	not used
Technical Data:	please see page 2 for detailed data of measurement setup
Test specification.:	FCC 15.209/15.205; RSS-Gen., Issue 4
Operator:	Rls
Operating mode:	a-mode_12Mbps_ch100
Power during tests:	13,9VDC
Comment 1:	EUT Laying

EUT Information

Manufacturer:	Robert Bosch Car Multimedia
Product:	AIVIL12F0
EUT Model:	AIVIL12F0
HW:	001
SW:	X317
Serial Nr.:	0007625
Connected Devices:	--

Full Spectrum



Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
38.95000	35.57	40.00	4.43	1000.0	120.000	105.0	V	236.0	17.6
58.70000	33.62	40.00	6.38	1000.0	120.000	109.0	V	156.0	9.5
98.47000	37.06	43.50	6.44	1000.0	120.000	201.0	H	163.0	8.1
101.880000	39.79	43.50	3.71	1000.0	120.000	190.0	H	166.0	8.1
106.710000	39.13	43.50	4.37	1000.0	120.000	264.0	H	4.0	8.1
108.810000	33.32	43.50	10.18	1000.0	120.000	215.0	H	141.0	8.2
424.440000	23.14	46.00	22.86	1000.0	120.000	287.0	V	173.0	19.1

3.03b_a-mode_12Mbps_ch100

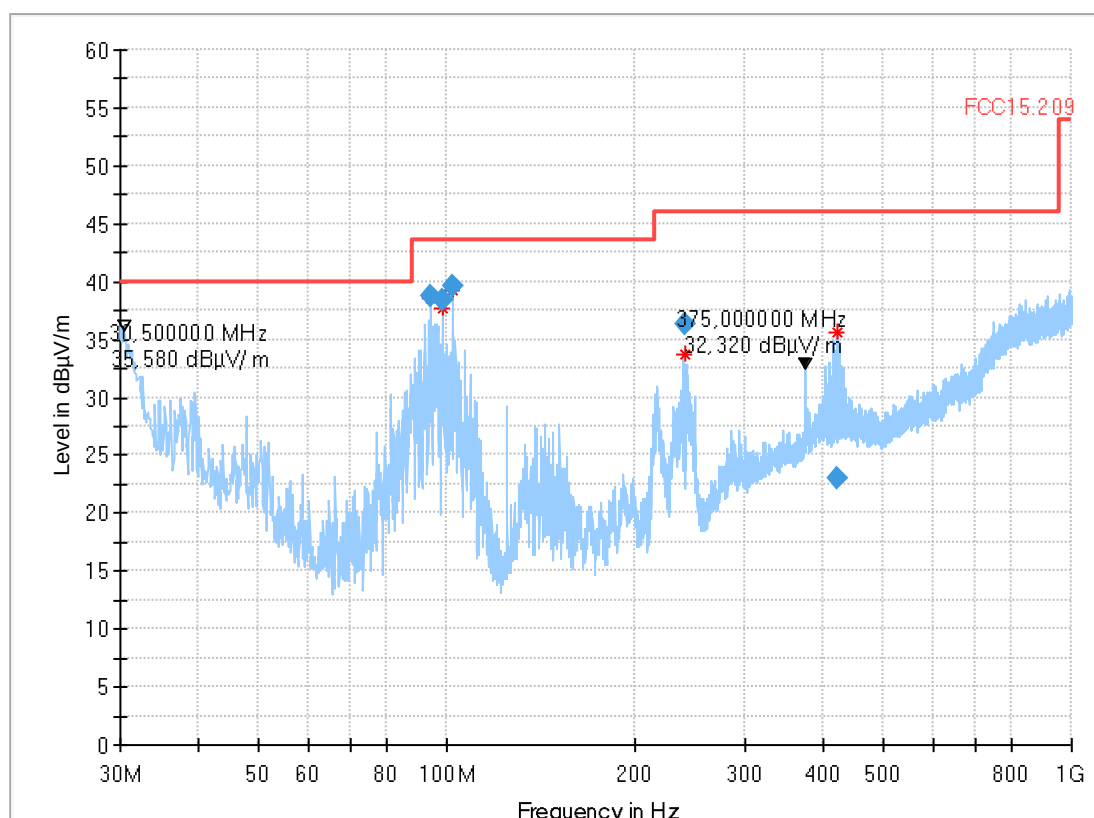
Common Information

Test description:	Electric Field Strength Measurement
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC.V9.25.00
Distance correction:	not used
Used filter:	not used
Technical Data:	please see page 2 for detailed data of measurement setup
Test specification.:	FCC 15.209/15.205; RSS-Gen., Issue 4
Operator:	Rls
Operating mode:	a-mode_12Mbps_ch100
Power during tests:	13,9VDC
Comment 1:	EUT Standing

EUT Information

Manufacturer:	Robert Bosch Car Multimedia
Product:	AIVIL12F0
EUT Model:	AIVIL12F0
HW:	001
SW:	X317
Serial Nr.:	0007625
Connected Devices:	--

Full Spectrum



Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
94.38000	38.65	43.50	4.85	1000.0	120.000	166.0	V	0.0	8.2
98.49000	38.31	43.50	5.19	1000.0	120.000	126.0	V	0.0	8.1
101.890000	39.57	43.50	3.93	1000.0	120.000	217.0	H	6.0	8.1
240.010000	36.30	46.00	9.70	1000.0	120.000	105.0	H	0.0	13.1
421.200000	22.99	46.00	23.01	1000.0	120.000	231.0	V	0.0	18.9

3.04a_a-mode_6Mbps_ch149

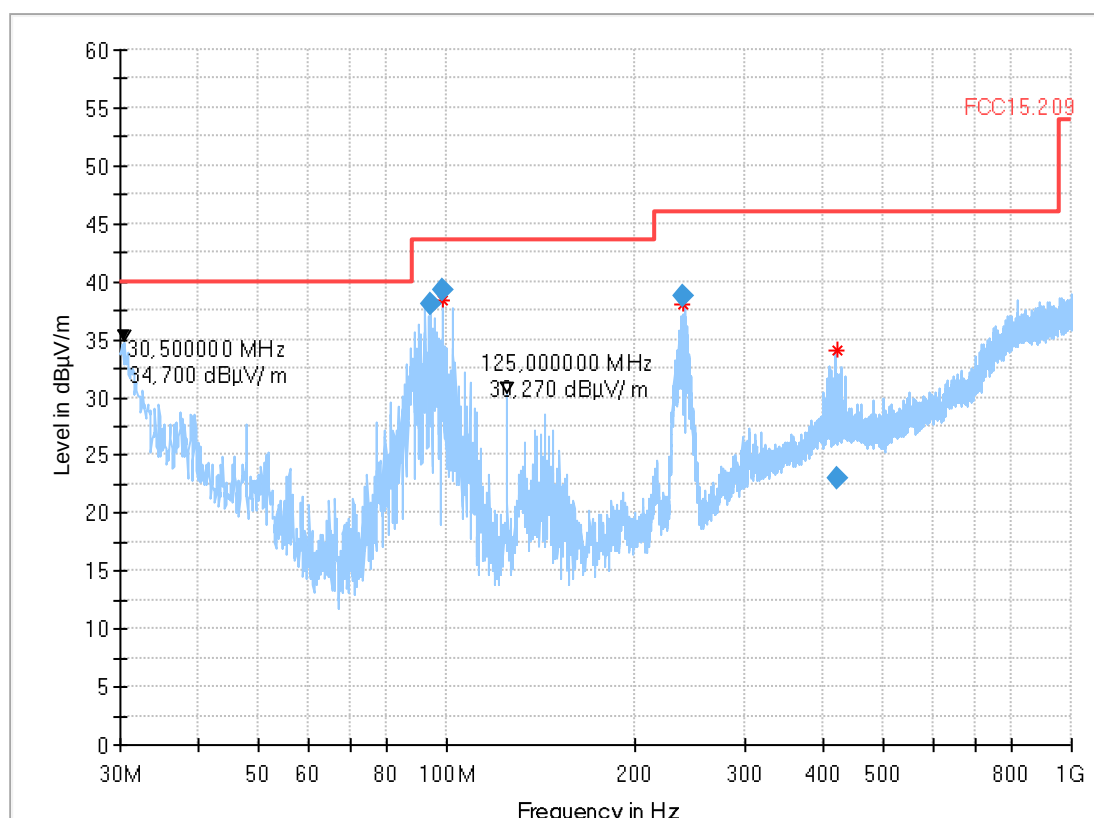
Common Information

Test description:	Electric Field Strength Measurement
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC.V9.25.00
Distance correction:	not used
Used filter:	not used
Technical Data:	please see page 2 for detailed data of measurement setup
Test specification.:	FCC 15.209/15.205; RSS-Gen., Issue 4
Operator:	Rls
Operating mode:	a-mode_6Mbps_ch149
Power during tests:	13,9VDC
Comment 1:	EUT Laying

EUT Information

Manufacturer:	Robert Bosch Car Multimedia
Product:	AIVIL12F0
EUT Model:	AIVIL12F0
HW:	001
SW:	X317
Serial Nr.:	0007625
Connected Devices:	--

Full Spectrum



Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
94.37000	37.96	43.50	5.54	1000.0	120.000	134.0	V	2.0	8.2
98.48000	39.33	43.50	4.17	1000.0	120.000	267.0	H	42.0	8.1

238.8300 00	38.79	46.00	7.21	1000.0	120.000	105.0	H	0.0	13.1
420.0700 00	22.96	46.00	23.04	1000.0	120.000	298.0	V	191.0	18.8

3.04b_a-mode_6Mbps_ch149

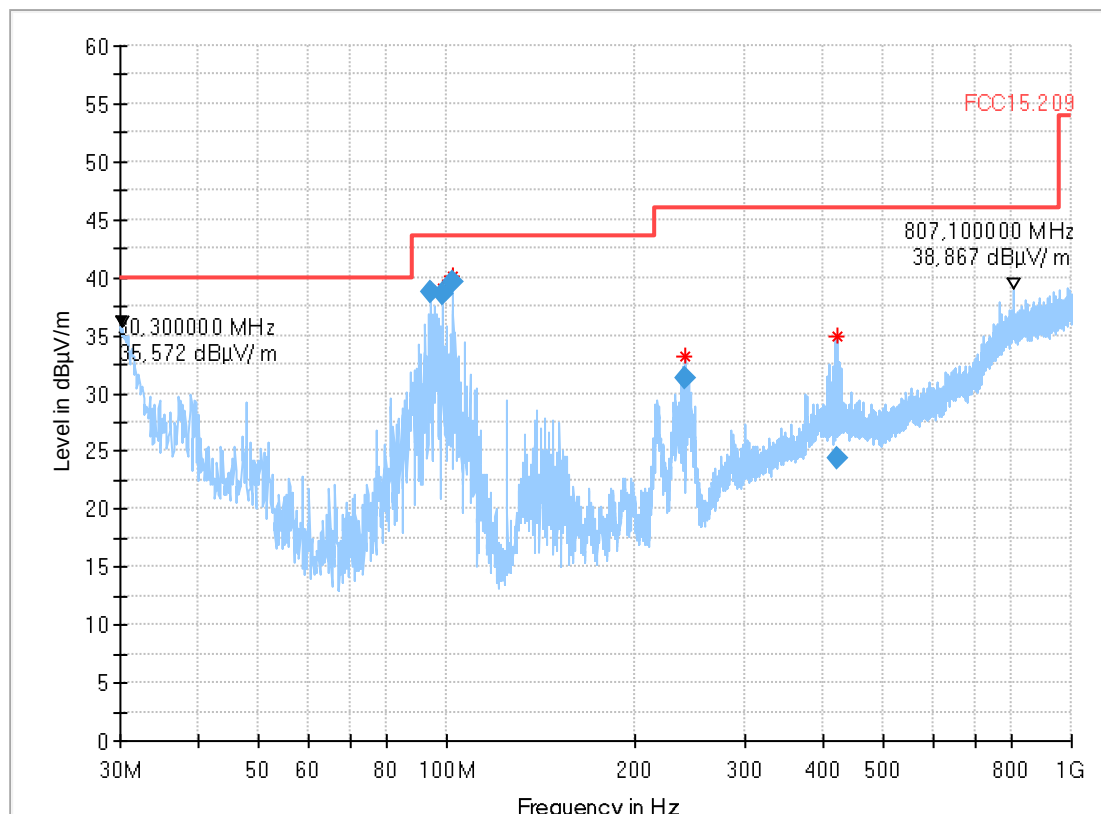
Common Information

Test description:	Electric Field Strength Measurement
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC.V9.25.00
Distance correction:	not used
Used filter:	not used
Technical Data:	please see page 2 for detailed data of measurement setup
Test specification.:	FCC 15.209/15.205; RSS-Gen., Issue 4
Operator:	Rls
Operating mode:	a-mode_6Mbps_ch149
Power during tests:	13,9VDC
Comment 1:	EUT Standing

EUT Information

Manufacturer:	Robert Bosch Car Multimedia
Product:	AIVIL12F0
EUT Model:	AIVIL12F0
HW:	001
SW:	X317
Serial Nr.:	0007625
Connected Devices:	--

Full Spectrum



Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
94.38000	38.75	43.50	4.75	1000.0	120.000	142.0	V	1.0	8.2
98.47000	38.53	43.50	4.97	1000.0	120.000	136.0	V	3.0	8.1
101.890000	39.63	43.50	3.87	1000.0	120.000	224.0	H	1.0	8.1
240.760000	31.31	46.00	14.69	1000.0	120.000	109.0	H	0.0	13.1
422.930000	24.46	46.00	21.54	1000.0	120.000	344.0	V	125.0	19.0

1.3. Radiated electric field measurement above 1 GHz < f < 7GHz

8.01a_a-mode_6Mbps_ch040

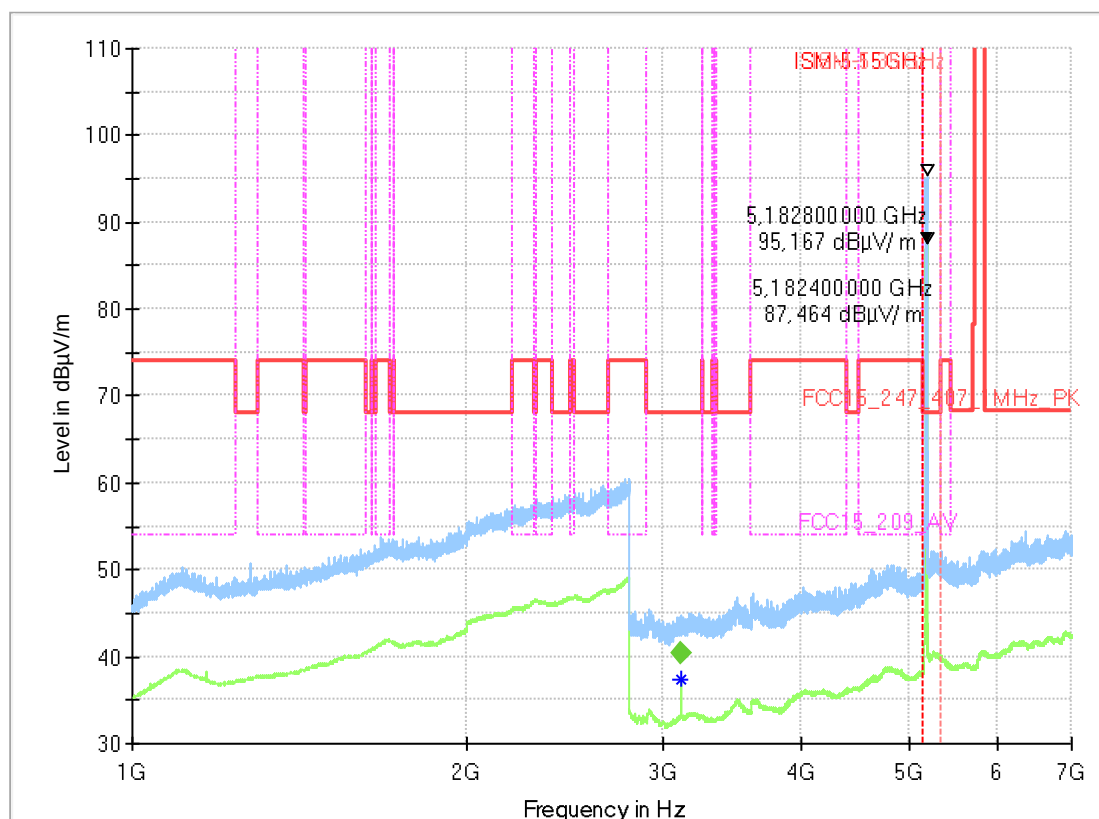
Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.407&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Software Version:	#Ver
Operation mode:	a-mode 6Mbps ch040
Operator Name:	Klv

EUT Information

Manufacturer:	Robert Bosch Car Multimedia
Product:	AIVIL12F0
EUT Model:	AIVIL12F0
HW:	001
SW:	X317
Serial Nr.:	0007625
Connected Devices:	--

Full Spectrum



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	RMS (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)
3118.400000	---	40.30	150.00	109.70	100.0	1000.000	155.0	V	187.0	0.0

8.02a_a-mode_9Mbps_ch056

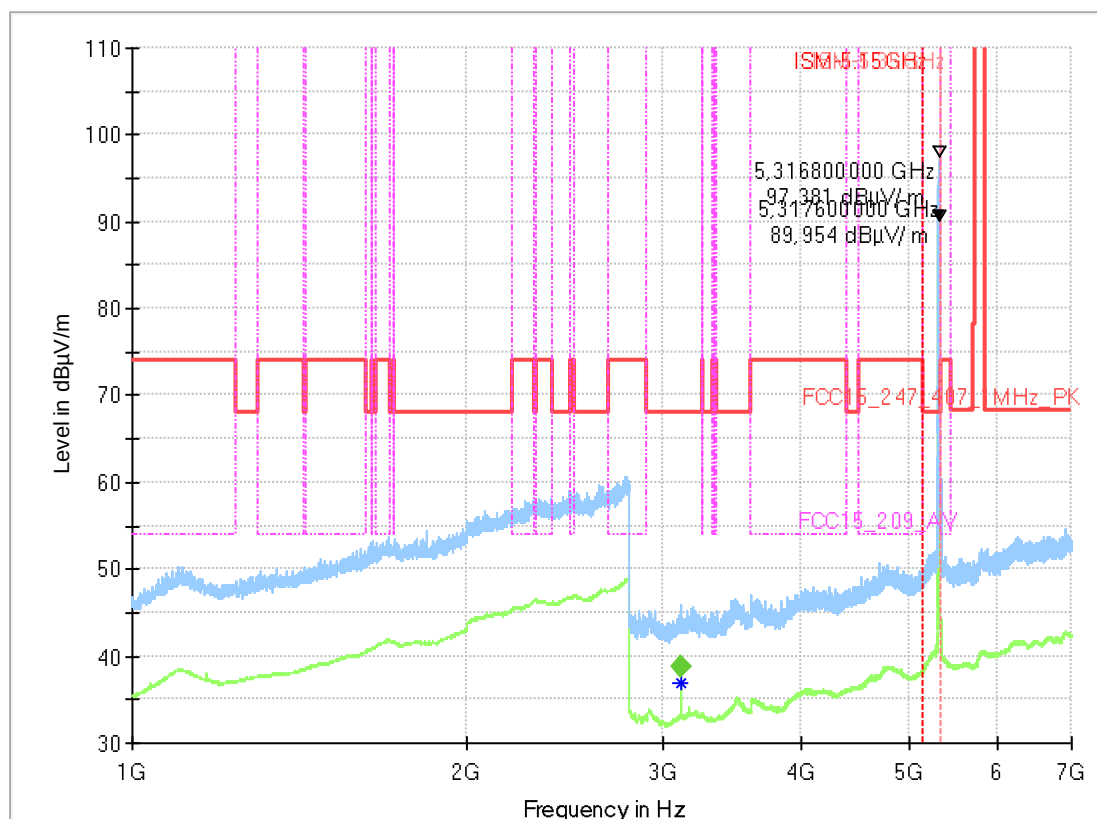
Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.407&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Software Version:	#Ver
Operation mode:	a-mode 9Mbps ch056
Operator Name:	Klv

EUT Information

Manufacturer:	Robert Bosch Car Multimedia
Product:	AIVIL12F0
EUT Model:	AIVIL12F0
HW:	001
SW:	X317
Serial Nr.:	0007625
Conected Devices:	--

Full Spectrum



Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	RMS (dBμV/m)	Limit (dBμV/m)	Margi n (dB)	Meas . Time	Bandwidt h (kHz)	Heigh t (cm)	Pol	Azimut h (deg)	Elevatio n (deg)
3118.400000	---	38.81	150.00	111.19	100.0	1000.000	155.0	V	172.0	0.0

8.03a_a-mode_12Mbps_ch100

Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.407&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Software Version:	#Ver
Operation mode:	a-mode 6Mbps ch100
Operator Name:	Klv

EUT Information

Manufacturer:	Robert Bosch Car Multimedia
Product:	AIVIL12F0
EUT Model:	AIVIL12F0
HW:	001
SW:	X317
Serial Nr.:	0007625
Conected Devices:	--

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	RMS (dBμV/m)	Limit (dBμV/m)	Margi n (dB)	Meas . Time	Bandwidt h (kHz)	Heigh t (cm)	Pol	Azimut h (deg)	Elevatio n (deg)
2796.550000	---	48.48	54.00	5.52	100.0	1000.000	155.0	H	49.0	0.0
3118.400000	---	39.38	150.00	110.62	100.0	1000.000	155.0	V	170.0	0.0

8.04a_a-mode_6Mbps_ch149

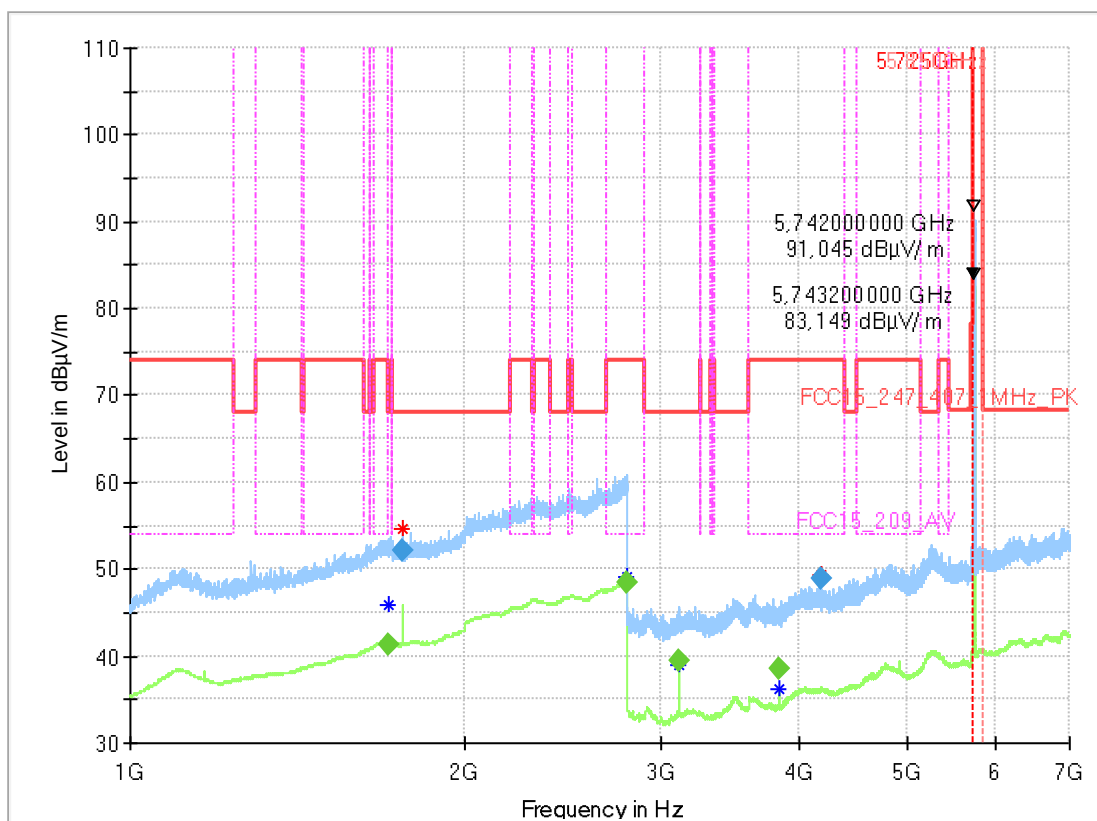
Common Information

Test Description: Radiated field strength emission in 3m distance
 Test Site: CETECOM GmbH Essen
 Test Standard: FCC 15.407&15.209 Intentional Radiator
 Antenna polarisation: horizontal/vertical
 Software Version: #Ver
 Operation mode: a-mode | 6Mbps | ch149
 Operator Name: Klv

EUT Information

Manufacturer: Robert Bosch Car Multimedia
 Product: AIVIL12F0
 EUT Model: AIVIL12F0
 HW: 001
 SW: X317
 Serial Nr.: 0007625
 Connected Devices: --

Full Spectrum



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	RMS (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)
1709.200000	---	41.31	54.00	12.69	100.0	1000.000	155.0	H	95.0	90.0
1756.700000	52.15	---	68.00	15.85	100.0	1000.000	155.0	H	157.0	90.0
2800.000000	---	48.47	54.00	5.53	100.0	1000.000	155.0	H	113.0	0.0
3118.400000	---	39.35	150.00	110.65	100.0	1000.000	155.0	V	187.0	0.0
3830.000000	---	38.53	54.00	15.47	100.0	1000.000	155.0	V	257.0	90.0
4193.250000	48.88	---	74.00	25.12	100.0	1000.000	155.0	V	226.0	90.0

1.4. Radiated electric field measurement above 7 GHz < f < 18GHz

8.01b_a-mode_6Mbps_ch040

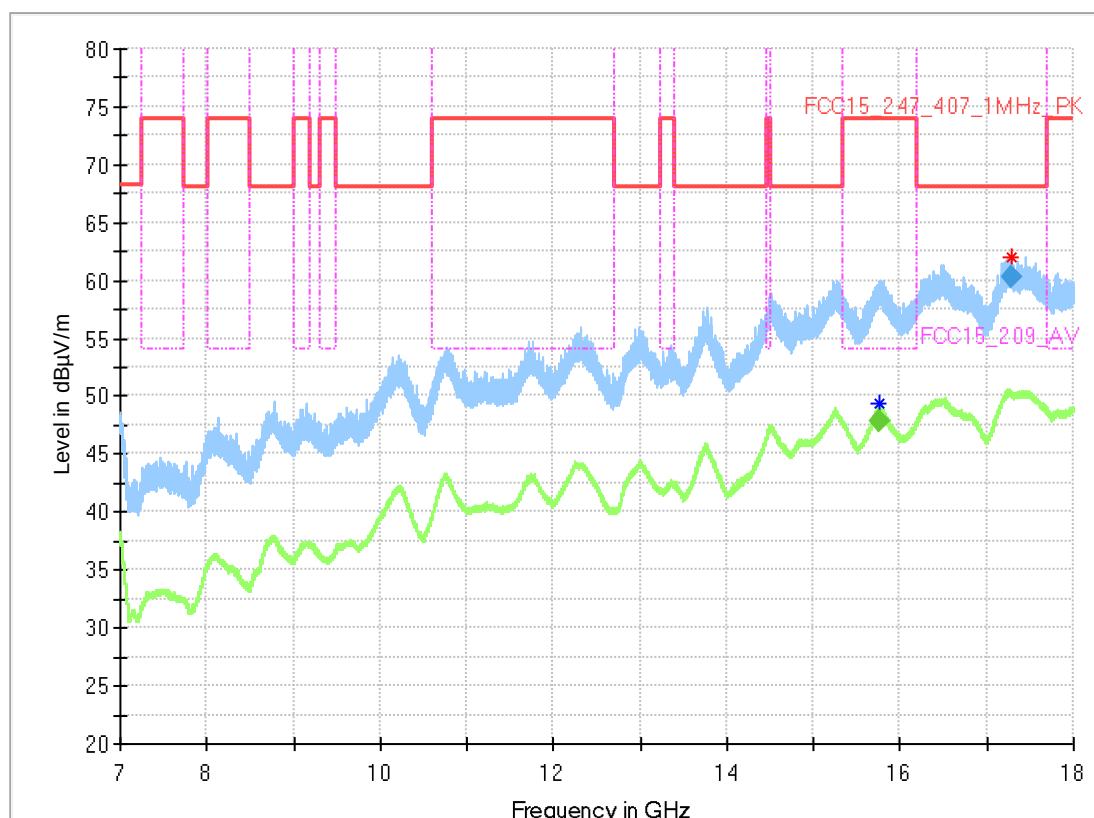
Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.407&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Software Version:	#Ver
Operation mode:	a-mode 6Mbps ch040
Operator Name:	Klv

EUT Information

Manufacturer:	Robert Bosch Car Multimedia
Product:	AIVIL12F0
EUT Model:	AIVIL12F0
HW:	001
SW:	X317
Serial Nr.:	0007625
Connected Devices:	--

Full Spectrum



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	RMS (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
15757.000000	---	47.82	54.00	6.18	100.0	1000.000	155.0	V	202.0
17277.800000	60.35	---	68.00	7.65	100.0	1000.000	155.0	H	18.0

8.02b_a-mode_9Mbps_ch056

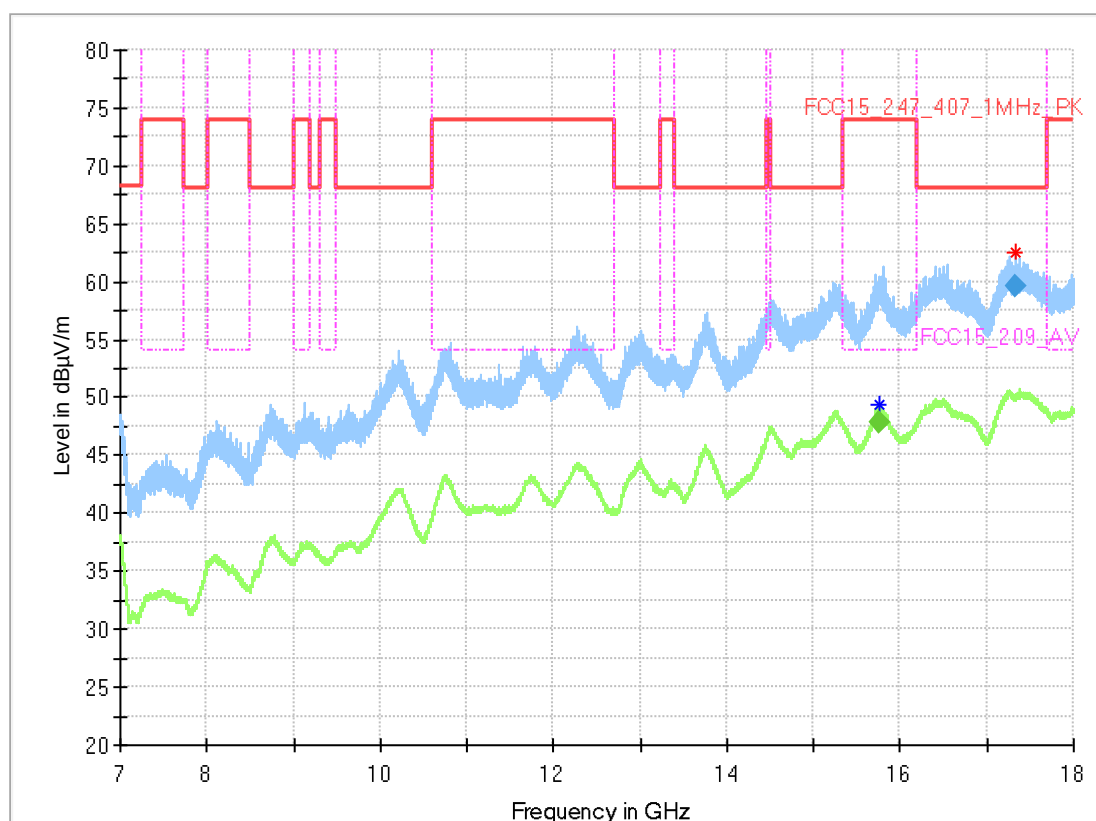
Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.407&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Software Version:	#Ver
Operation mode:	a-mode 9Mbps ch056
Operator Name:	Klv

EUT Information

Manufacturer:	Robert Bosch Car Multimedia
Product:	AIVIL12F0
EUT Model:	AIVIL12F0
HW:	001
SW:	X317
Serial Nr.:	0007625
Conected Devices:	--

Full Spectrum



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	RMS (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
15766.200000	---	47.78	54.00	6.22	100.0	1000.000	155.0	H	42.0
17330.600000	59.51	---	68.00	8.49	100.0	1000.000	155.0	V	25.0

8.03b_a-mode_12Mbps_ch100

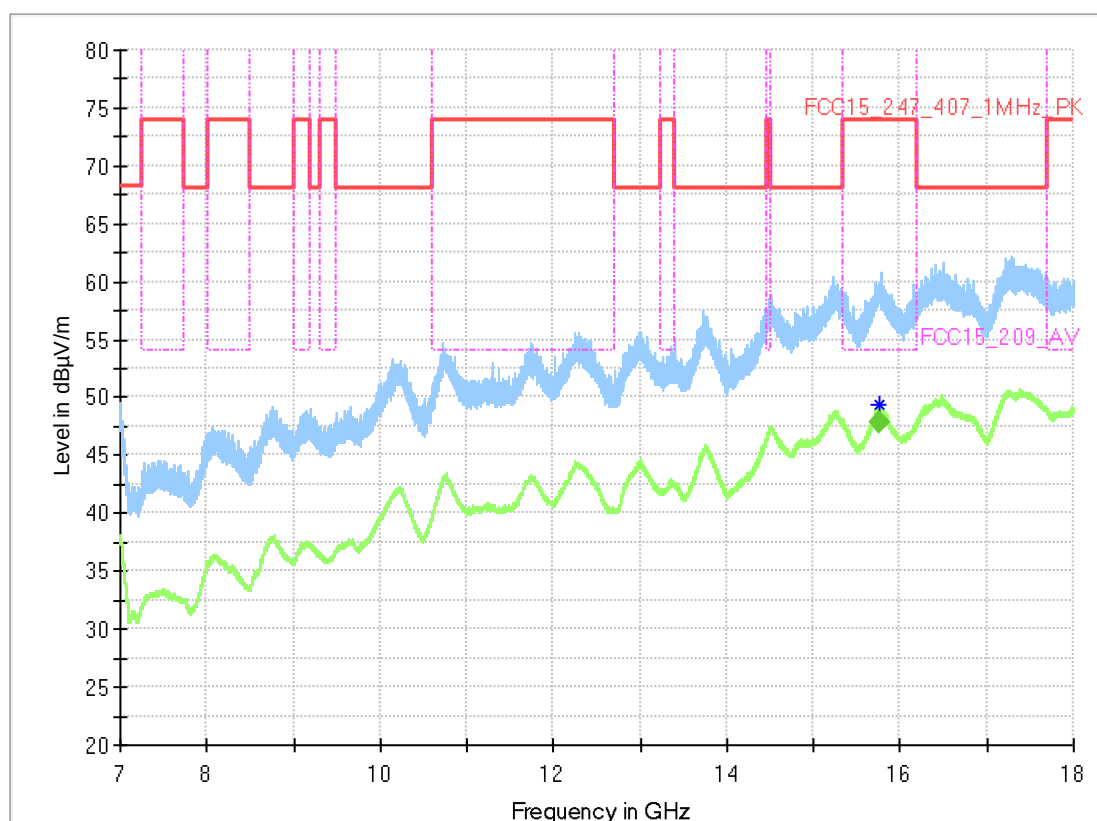
Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.407&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Software Version:	#Ver
Operation mode:	a-mode 12Mbps ch100
Operator Name:	Klv

EUT Information

Manufacturer:	Robert Bosch Car Multimedia
Product:	AIVIL12F0
EUT Model:	AIVIL12F0
HW:	001
SW:	X317
Serial Nr.:	0007625
Conected Devices:	--

Full Spectrum



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	RMS (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Measurement Time	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
15754.600000	---	47.83	54.00	6.17	100.0	1000.000	155.0	H	36.0

8.04b_a-mode_6Mbps_ch149

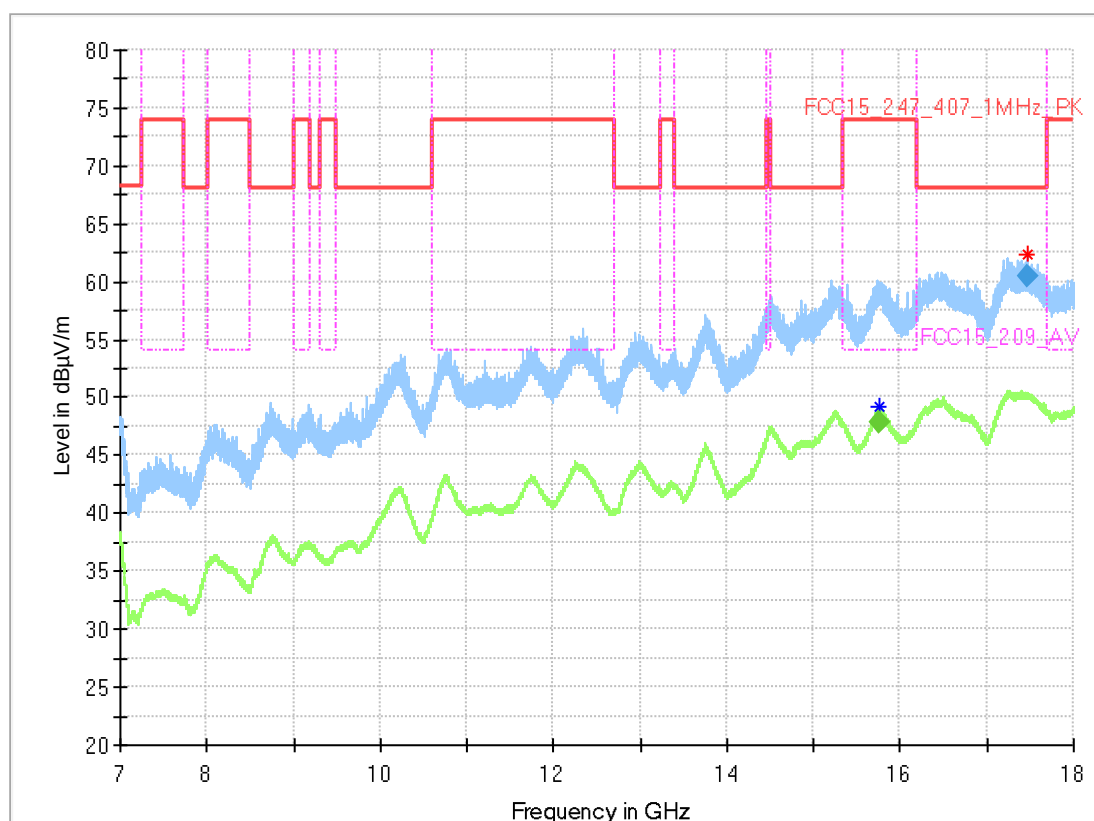
Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.407&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Software Version:	#Ver
Operation mode:	a-mode 6Mbps ch149
Operator Name:	Klv

EUT Information

Manufacturer:	Robert Bosch Car Multimedia
Product:	AIVIL12F0
EUT Model:	AIVIL12F0
HW:	001
SW:	X317
Serial Nr.:	0007625
Conected Devices:	--

Full Spectrum

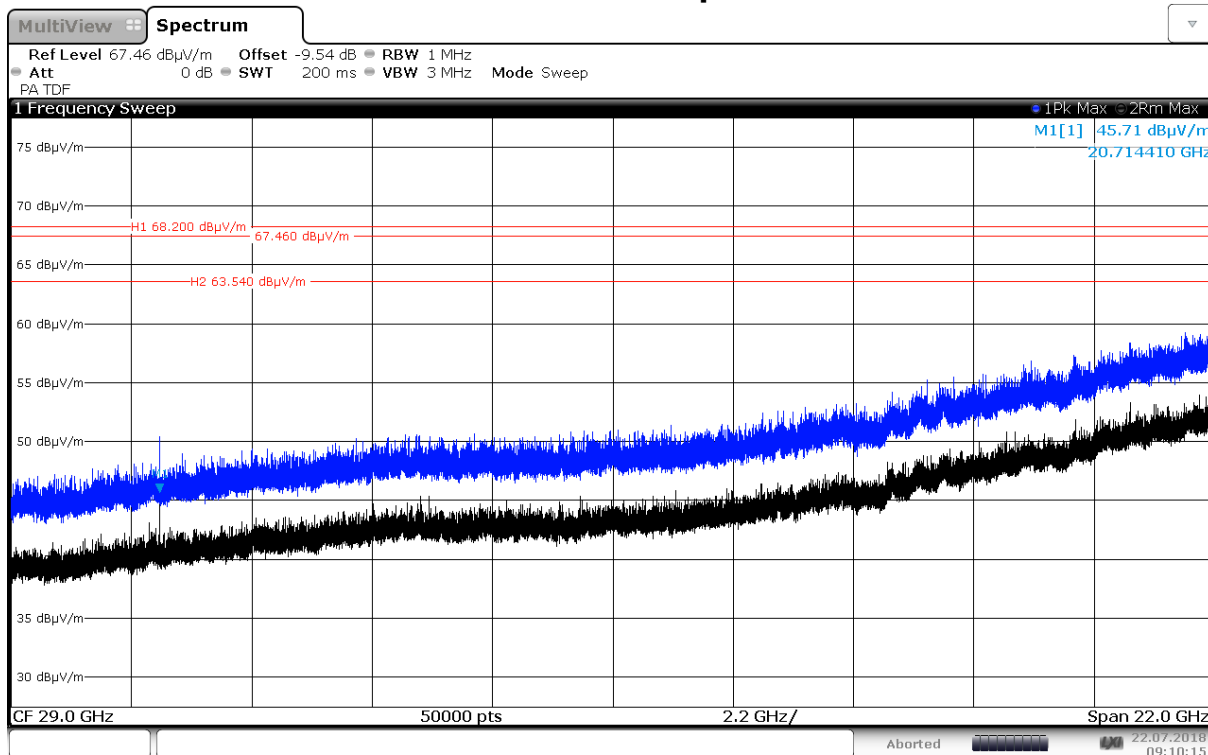


Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	RMS (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
15765.400000	---	47.80	54.00	6.20	100.0	1000.000	155.0	H	133.0
17459.000000	60.51	---	68.00	7.49	100.0	1000.000	155.0	H	188.0

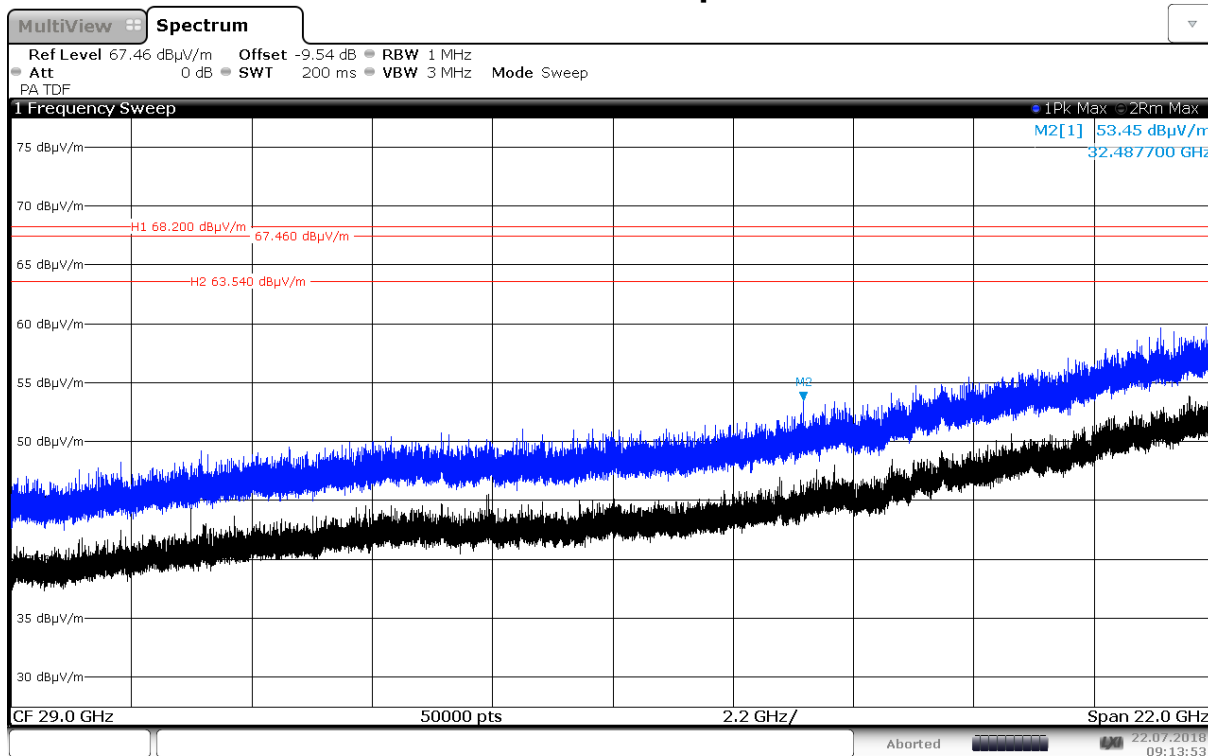
1.5. Radiated electric field measurement above 18 GHz < f < 40GHz

8.01c_a-mode_6Mbps_ch040



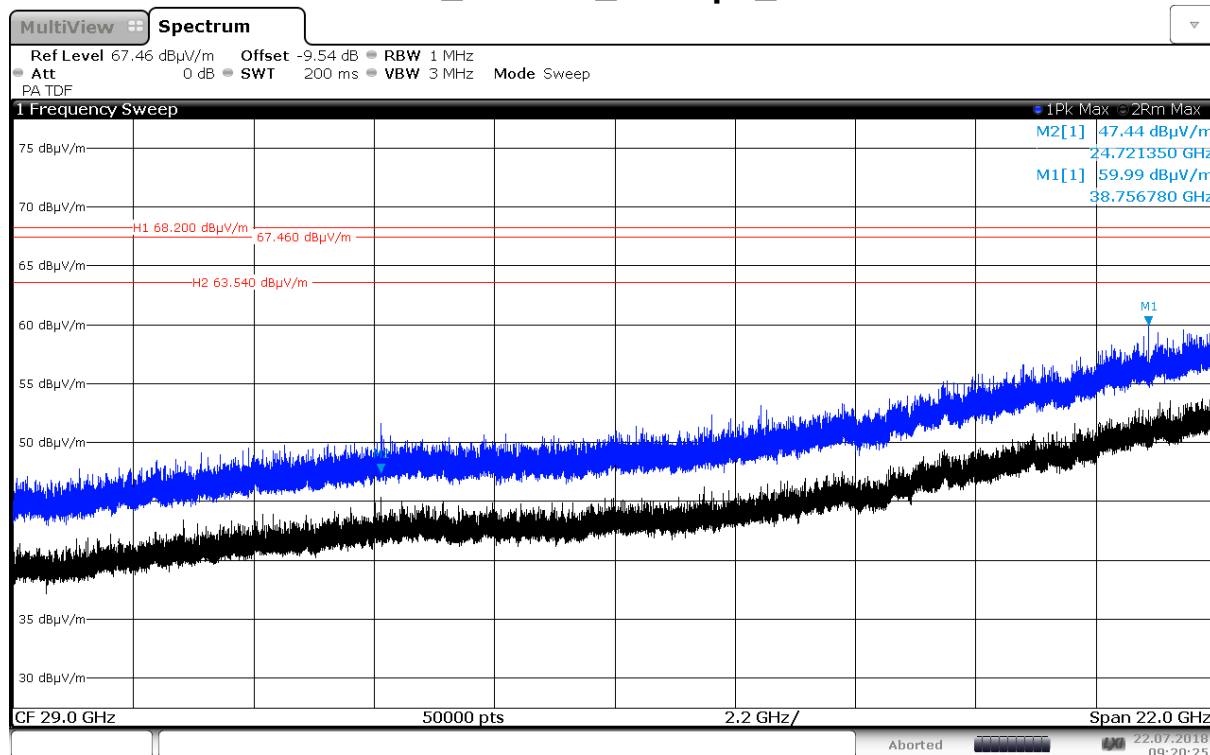
09:10:15 22.07.2018

8.02c_a-mode_9Mbps_ch056



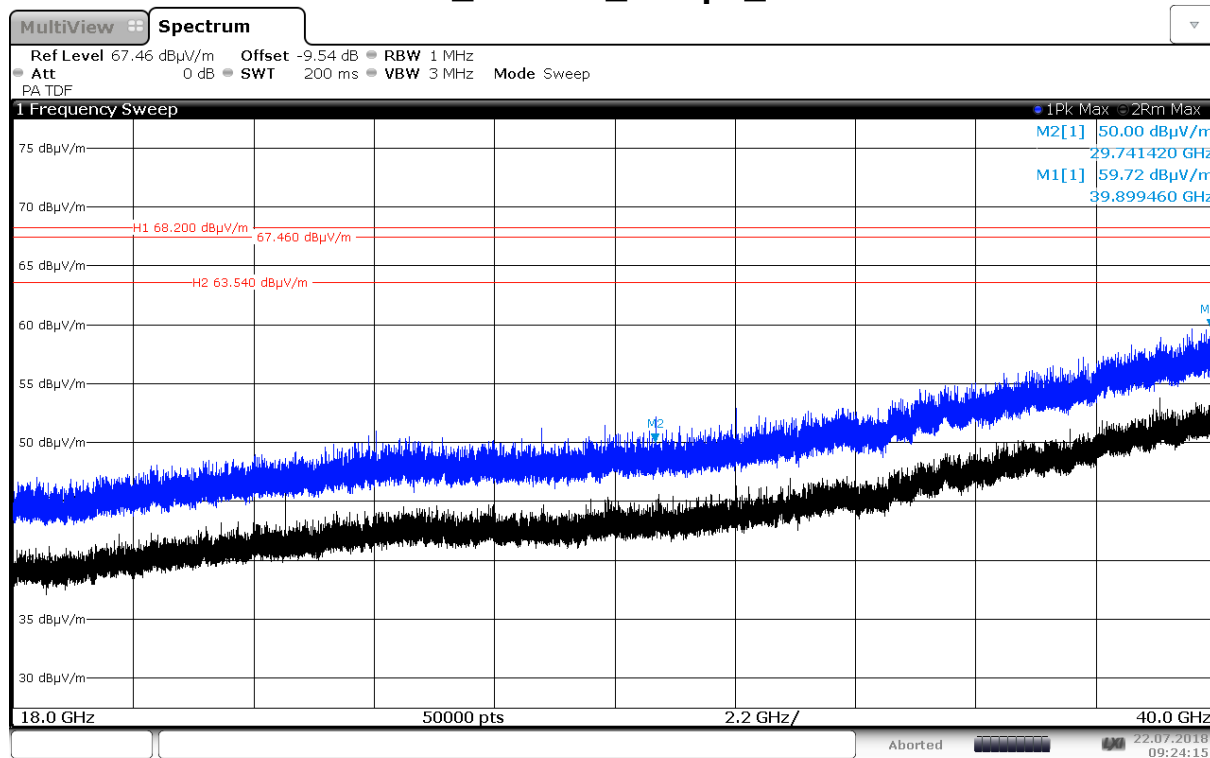
09:13:54 22.07.2018

8.01b_a-mode_12Mbps_ch100



09:20:26 22.07.2018

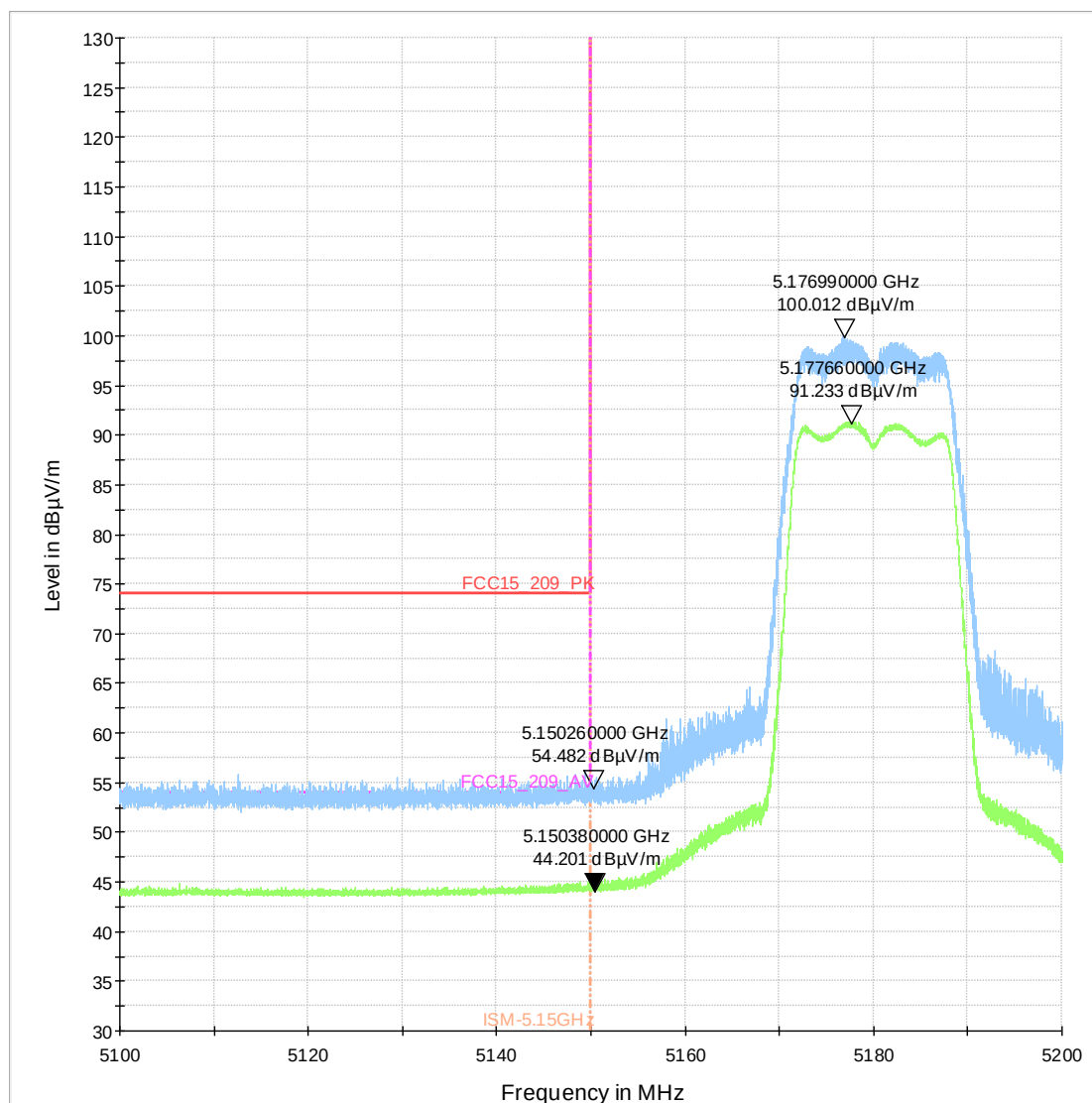
8.01b_a-mode_6Mbps_ch149



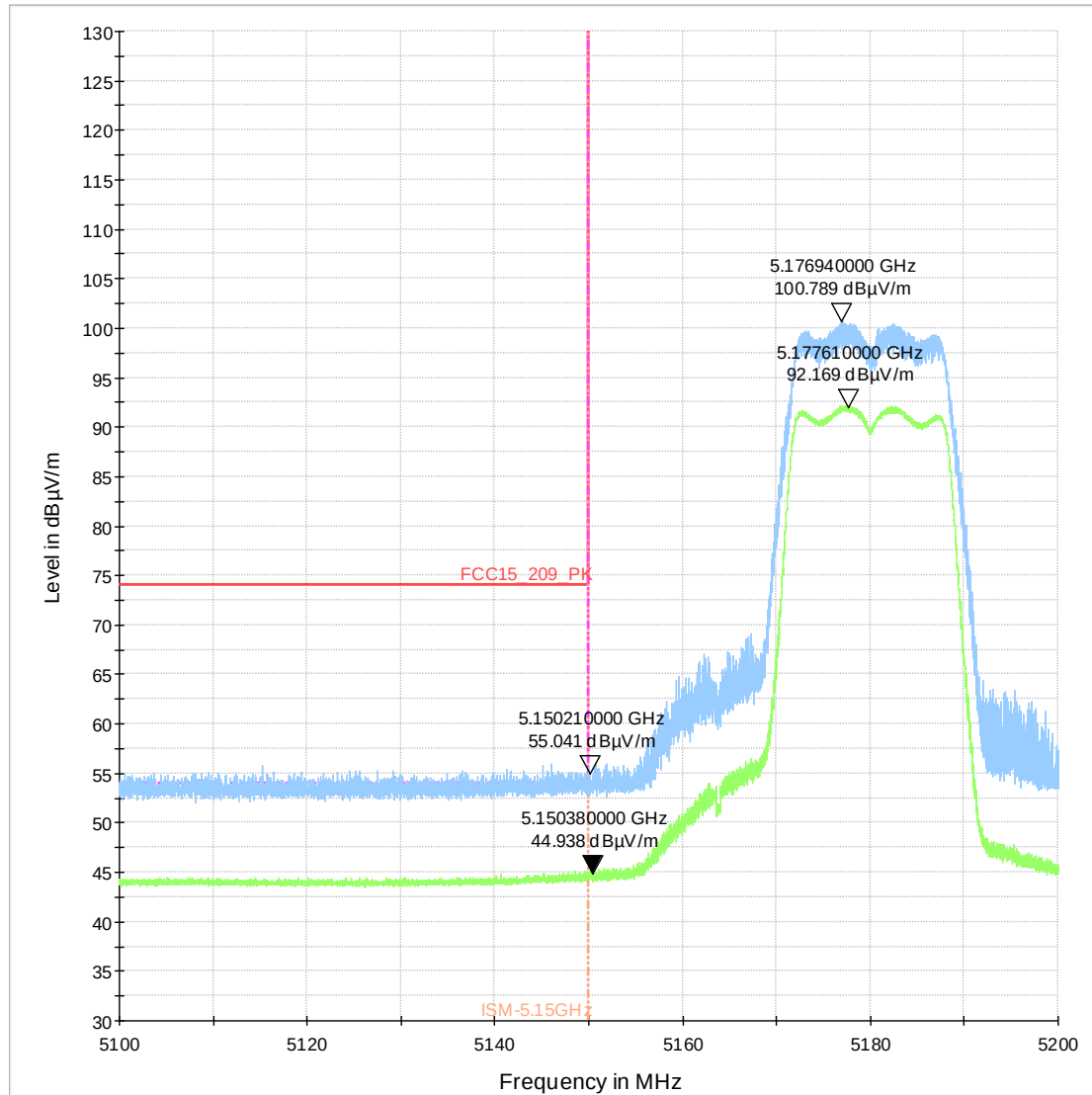
09:24:15 22.07.2018

1.6. Band edge compliance

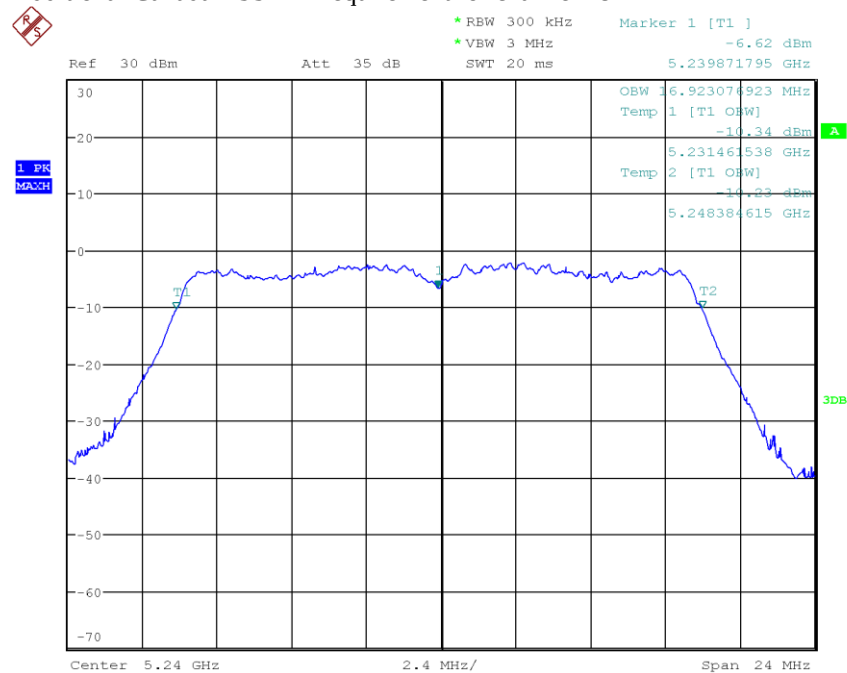
9.01_BE_low_a-mode_ch036_laying



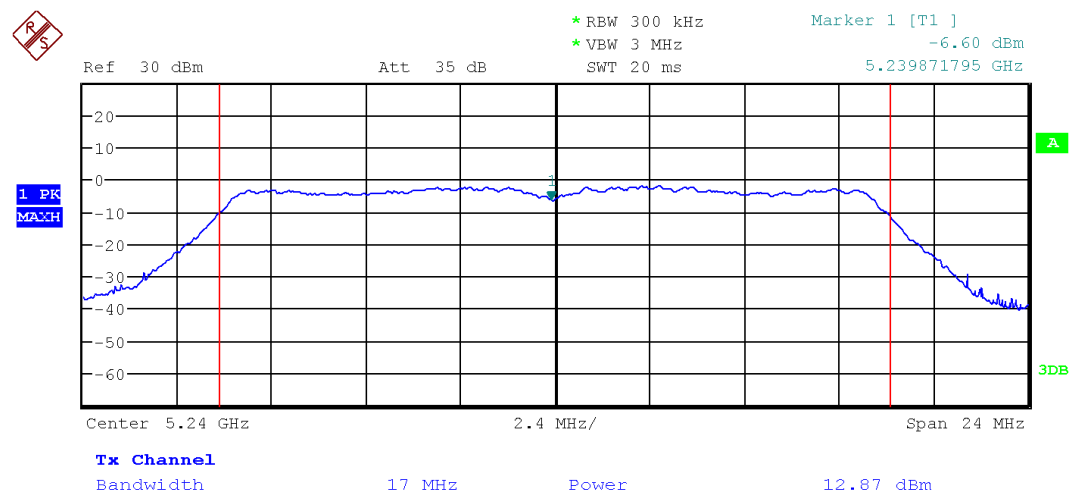
9.01_BE_low_a-mode_ch036_standing



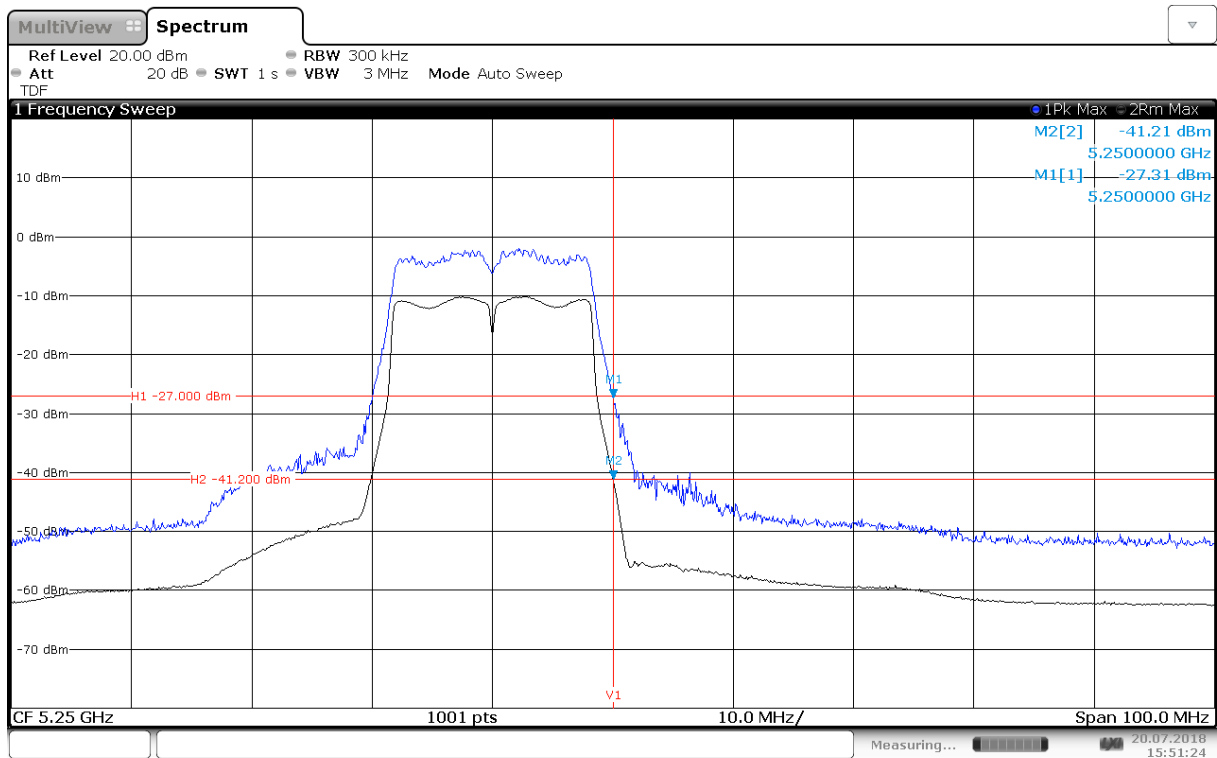
Additional Canada RSS-247 requirement for channel 48



Date: 20.JUL.2018 15:30:21

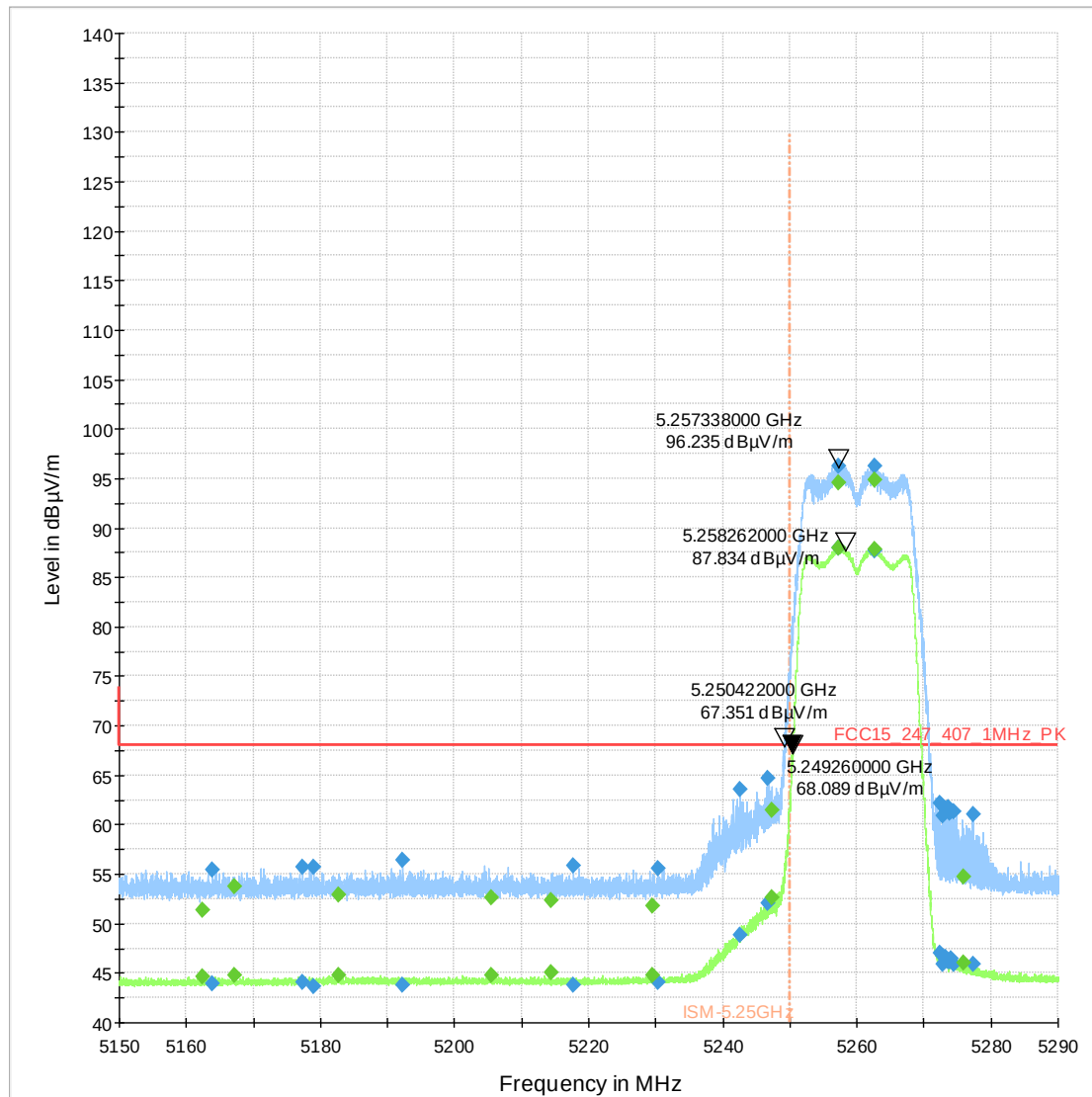


Date: 20.JUL.2018 15:31:00

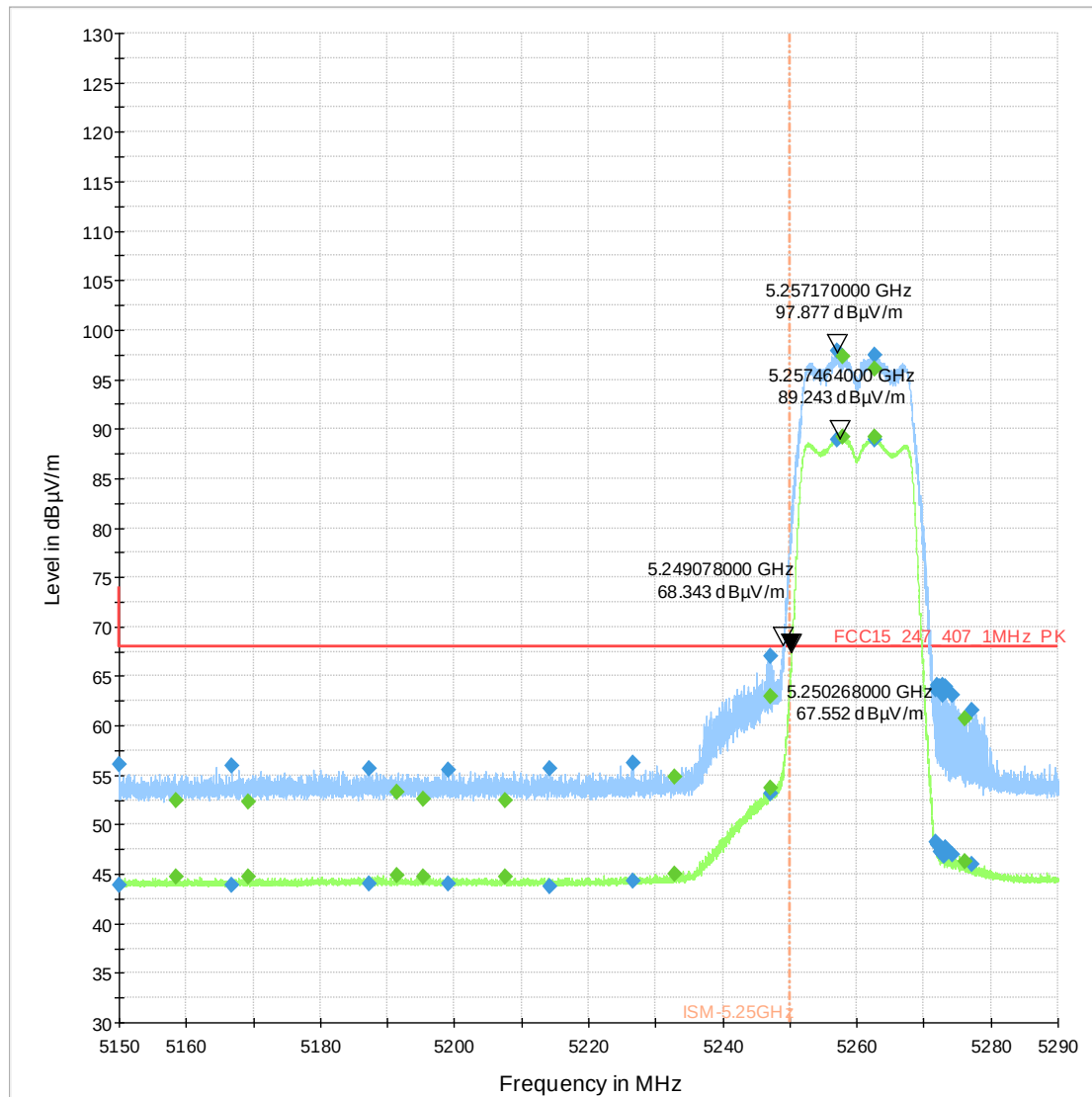


15:51:24 20.07.2018

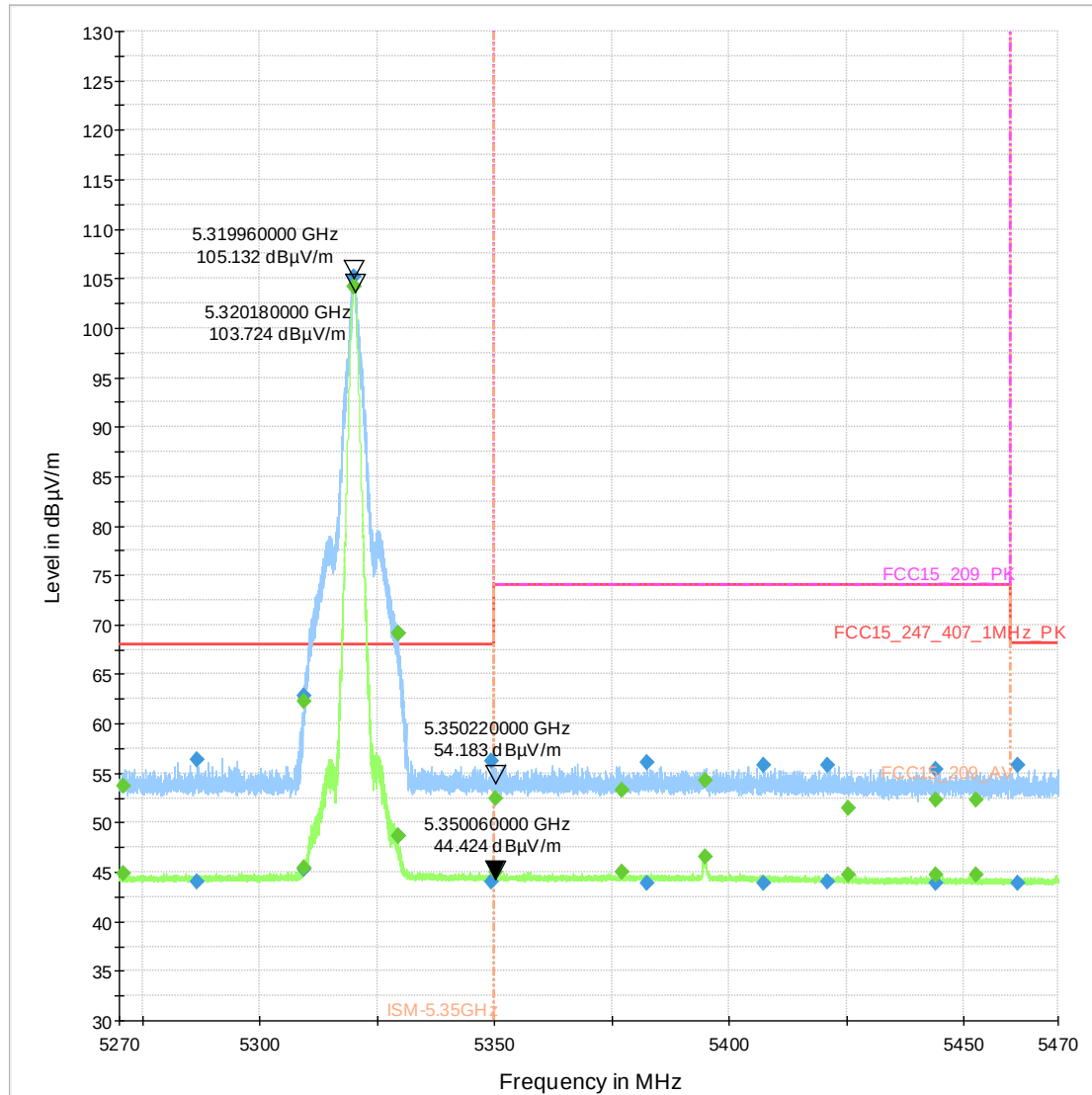
9.03_BE_low_a-mode_ch052_laying



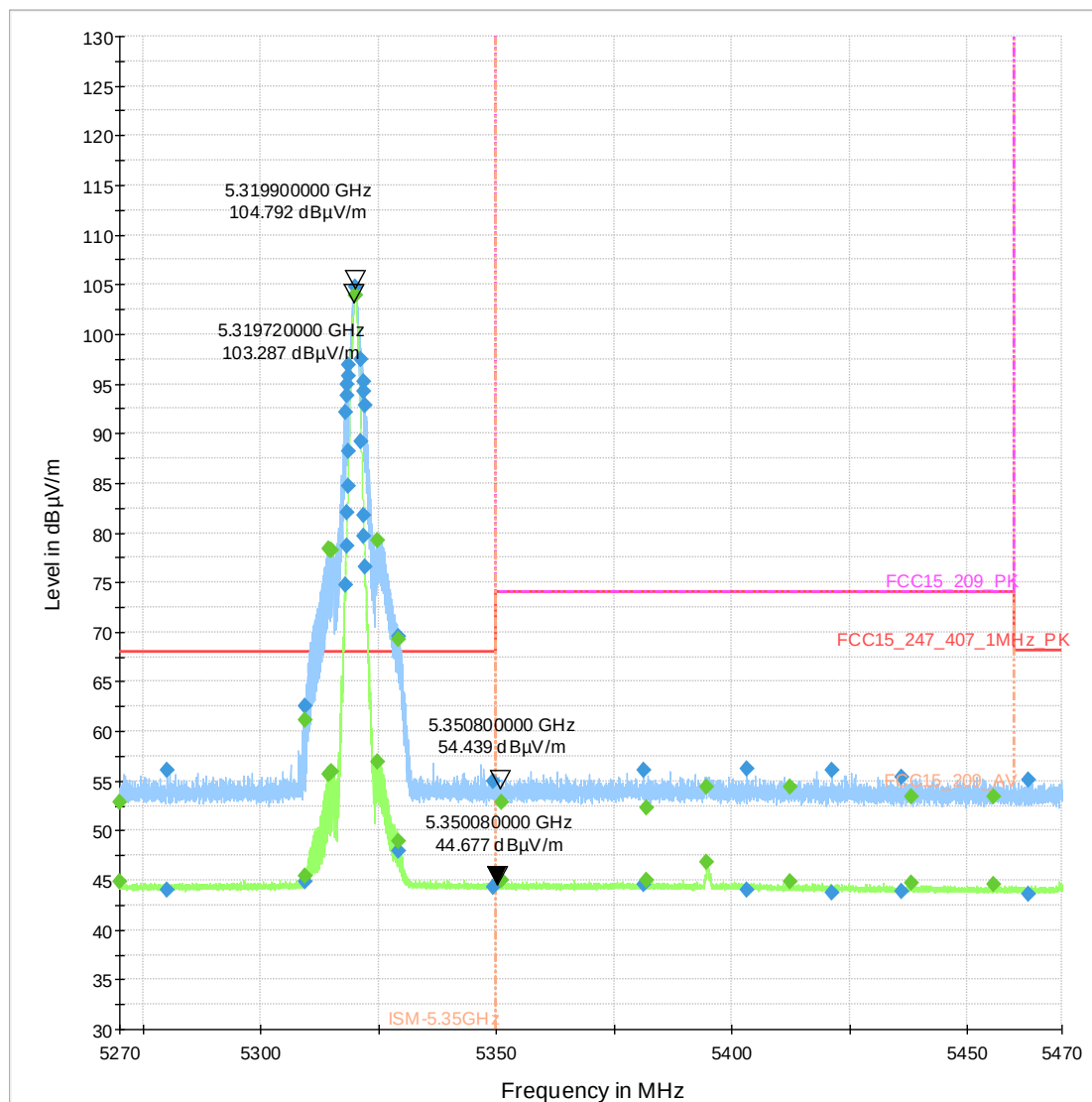
9.03_BE_low_a-mode_ch052_standing



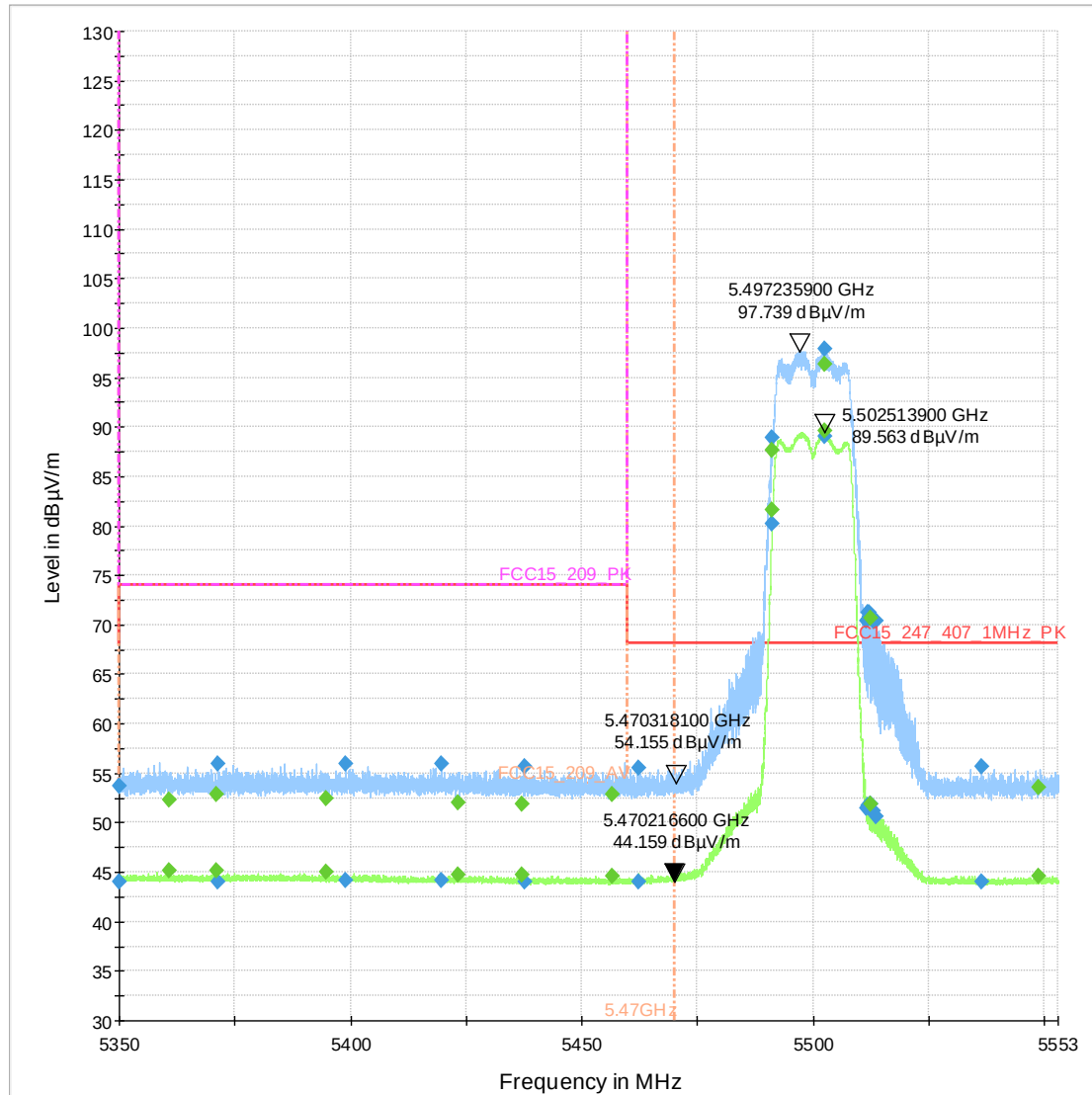
9.04_BE_high_a-mode_ch064_laying



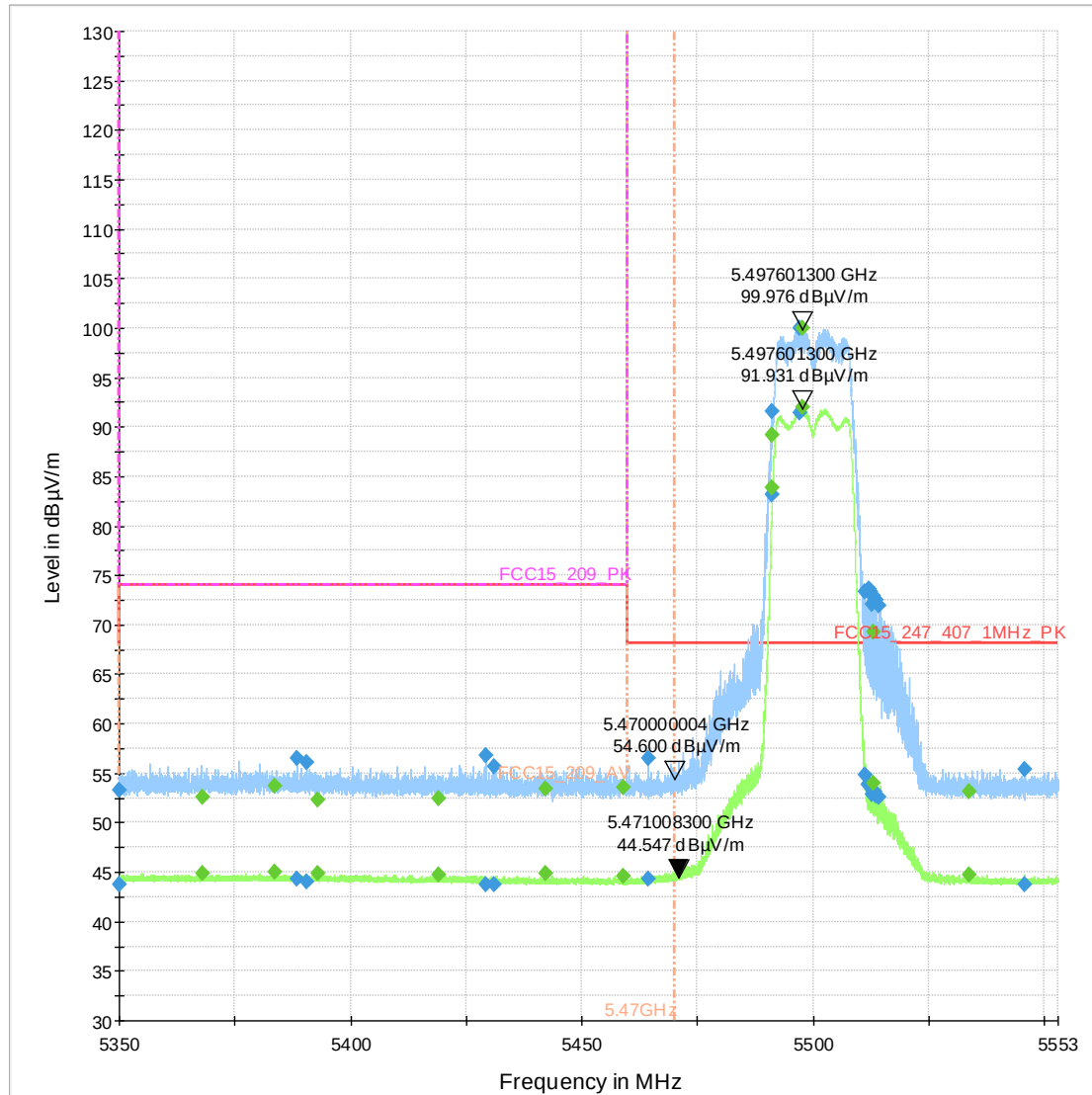
9.04_BE_high_a-mode_ch064_standing



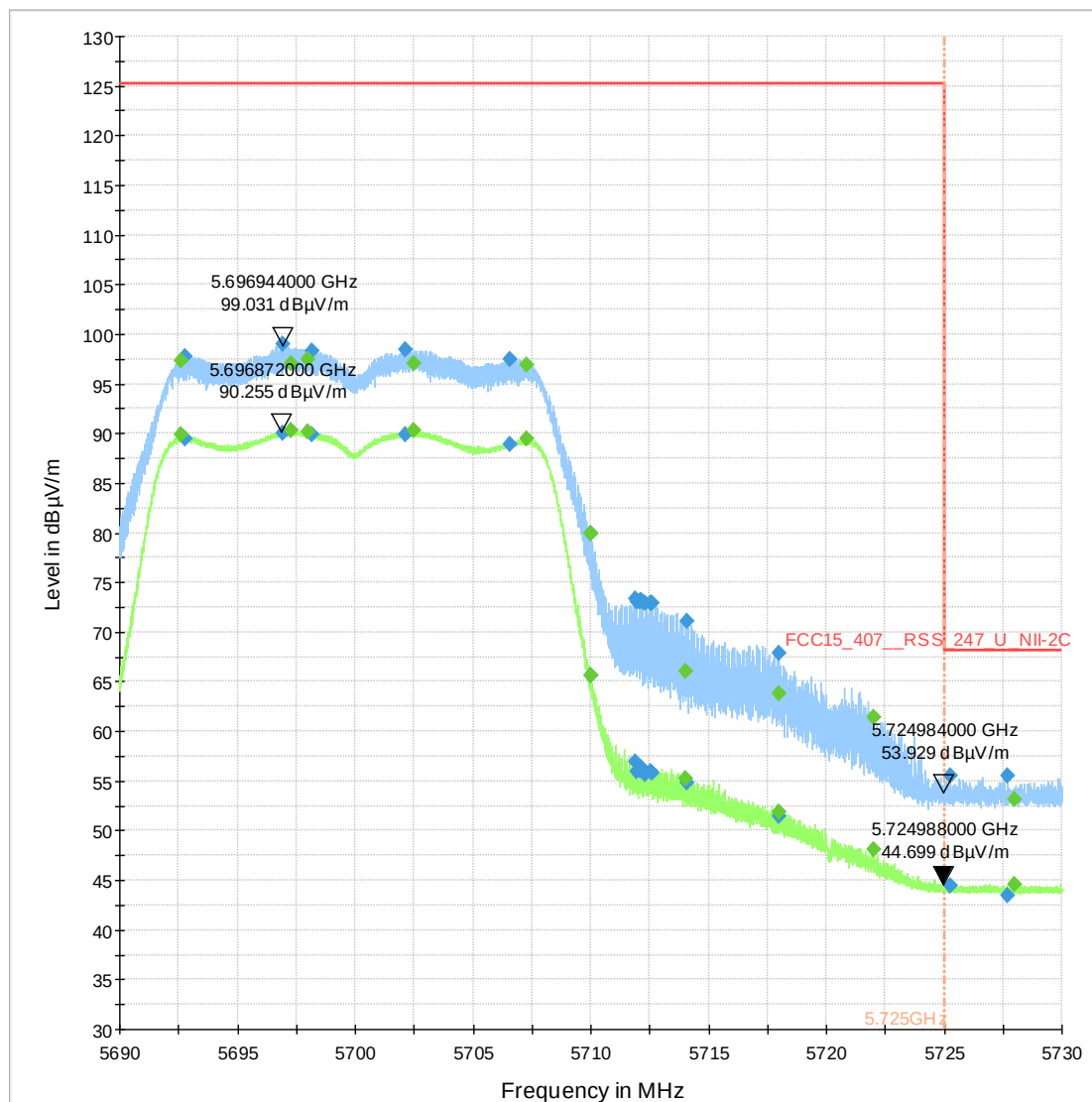
9.05_BE_low_a-mode_ch100_laying



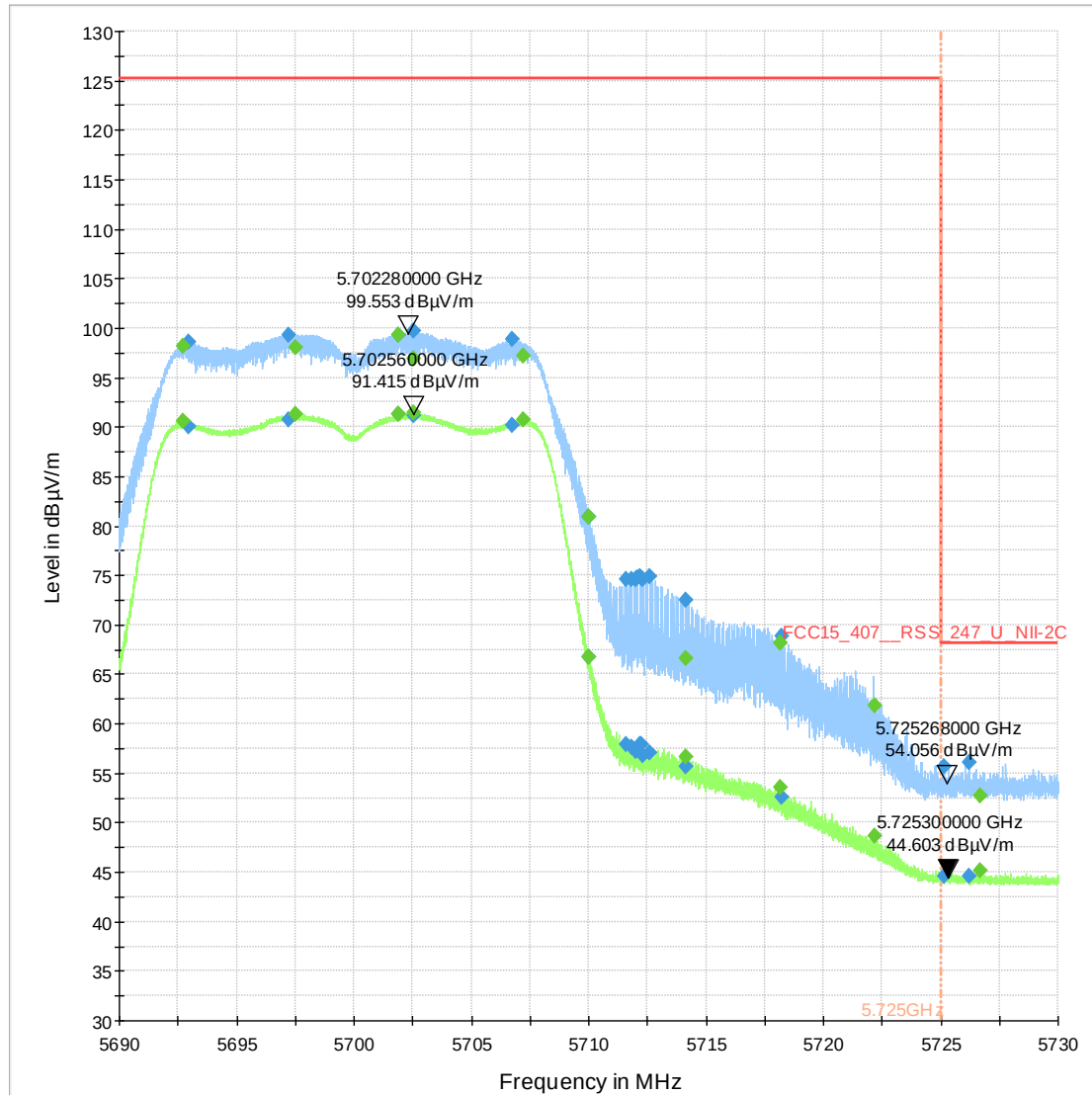
9.05_BE_low_a-mode_ch100_standing



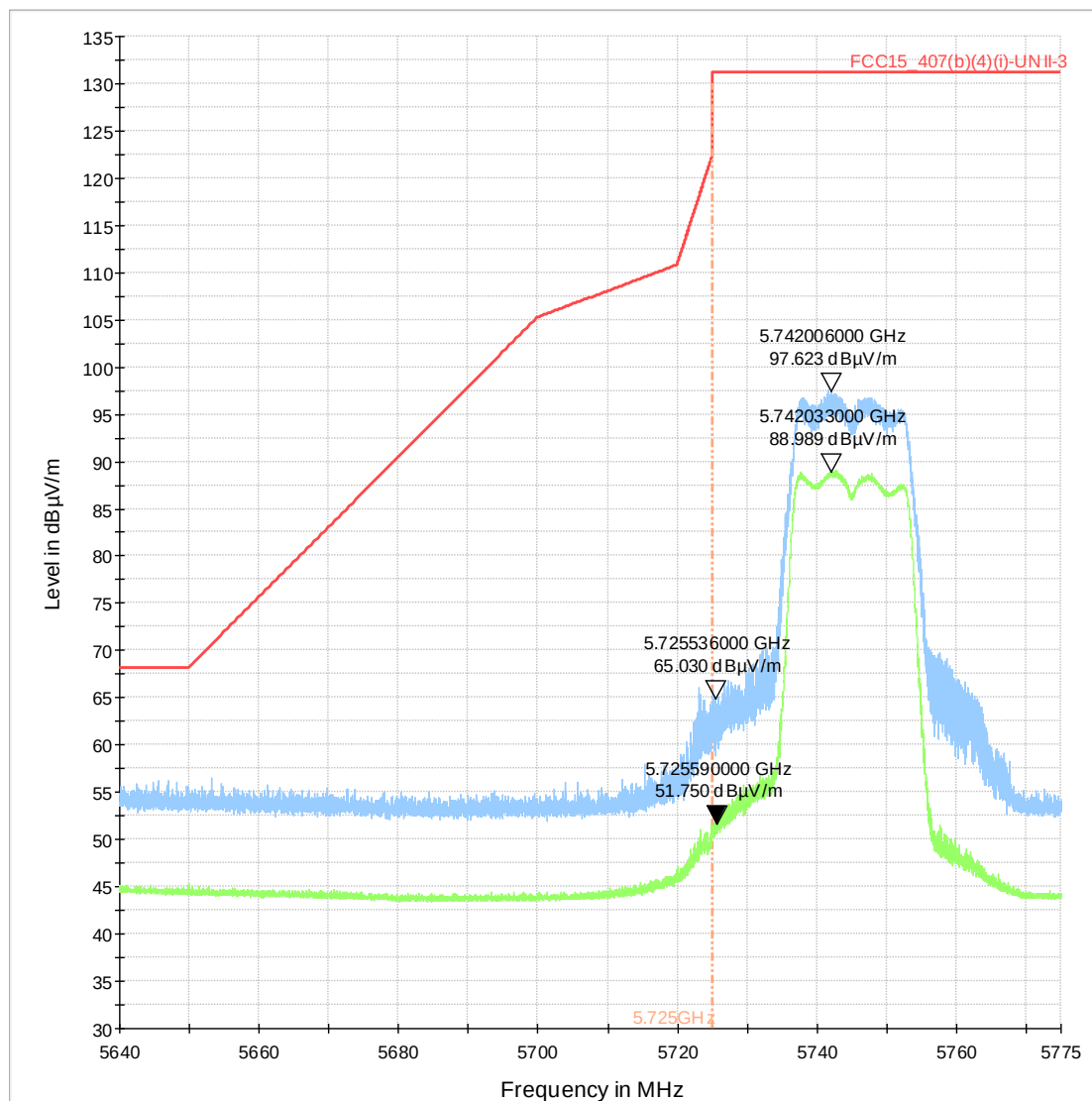
9.06_BE_high_a-mode_ch140_laying



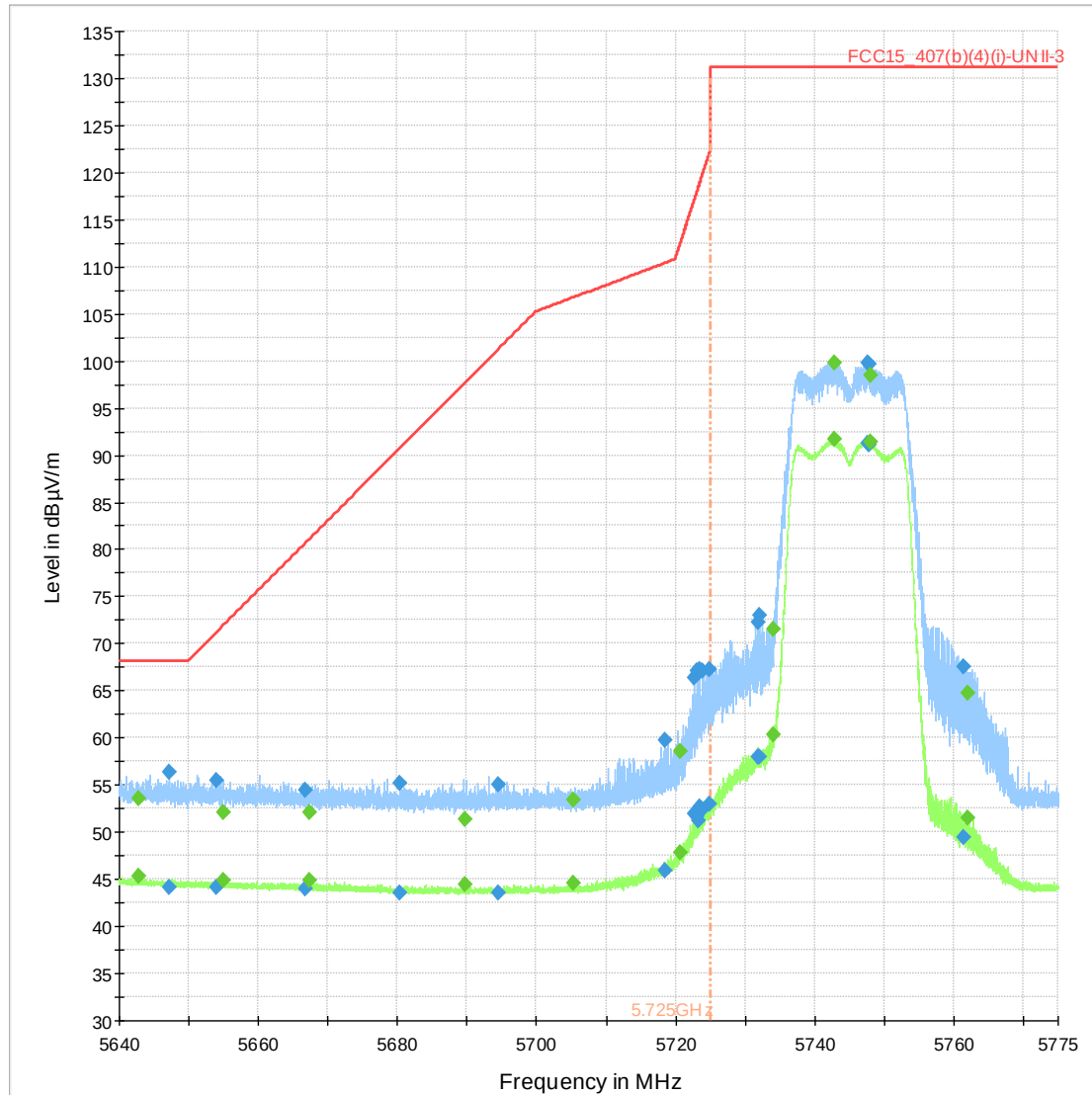
9.06_BE_high_a-mode_ch140_standing



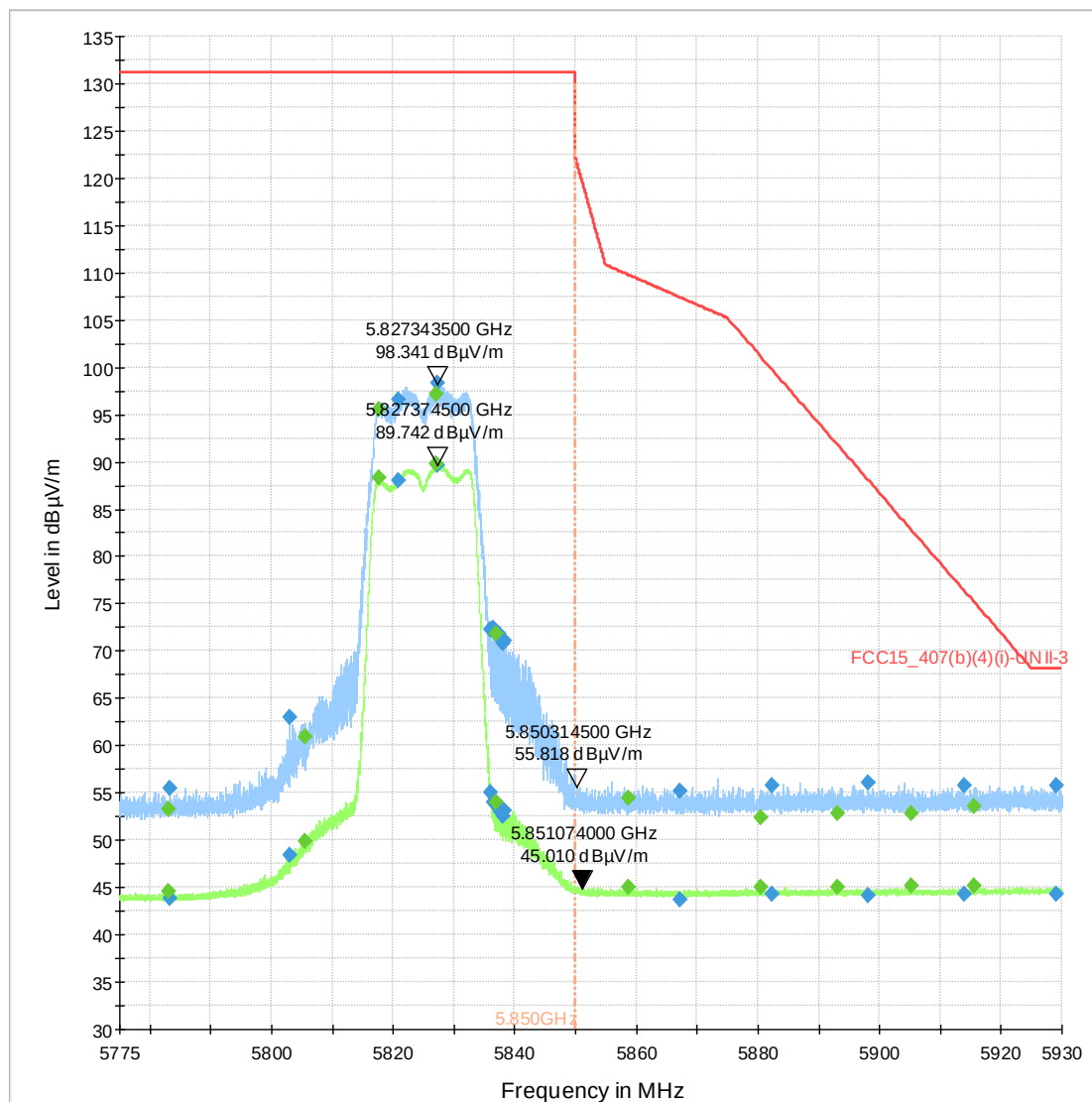
9.07_BE_low_a-mode_ch149_laying



9.07_BE_low_a-mode_ch149_standing



9.08_BE_high_a-mode_ch165_laying



9.08_BE_high_a-mode_ch165_standing

