

Annex 1: Measurement diagrams to
TEST REPORT
 No.: 18-1-0018601T01a

According to:
FCC Regulations
 Part 15.205
 Part 15.209
 Part 15.247

ISED-Regulations
 RSS-Gen, Issue 4
 RSS-247, Issue 1

for

Robert Bosch Car Multimedia GmbH

AIVICMFB0

FCC-ID: YBN-AIVICMBF0
 ISED: 9595A-AIVICMBF0
 PMN: AIVICMBF0
 HVIN: AIVICMBF0








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
 	 Lab Code: 20011130-00	 MRA US-EU 0003
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.com • Internet: www.cetecom.com </p>		
Laboratory Accreditation and Listings		

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1. Measurement diagrams

1.1. Radiated magnetic field measurements below 30 MHz

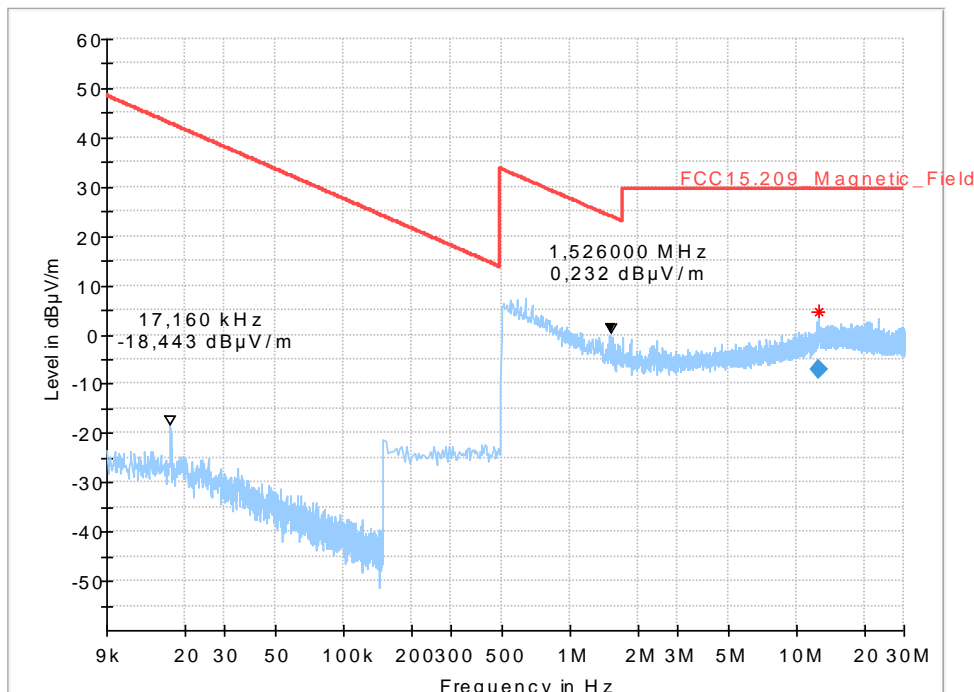
2.01_BT_EDR_3-DH5_ch78

Date:	16.03.2018	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:	JVo	
Operating conditions:	BT EDR 3-DH5 3Mbps ch78 = 2480MHz	
Power during tests:	13,5VDC	

EUT Information

EUT Name:	AIVICMFBO
Manufacturer:	Robert Bosch Car Multimedia
Serial Number:	5603
Hardware Rev:	001
Software Rev:	0507
Comment:	

Full Spectrum



Final Result

Frequency (MHz)	RMS (dBµV/m)	Limit (dBµV/m)	Margi n (dB)	Meas. Time (ms)	Bandwid th (kHz)	Heigh t (cm)	Pol	Azimut h (deg)	Corr. (dB)
12.582000	-7.19	29.54	36.73	1000.0	10.000	100.0	H	297.0	-12.2

1.2. Radiated electric field measurement 30 MHz to 1 GHz

3.01_BT_EDR_3-DH5_ch78

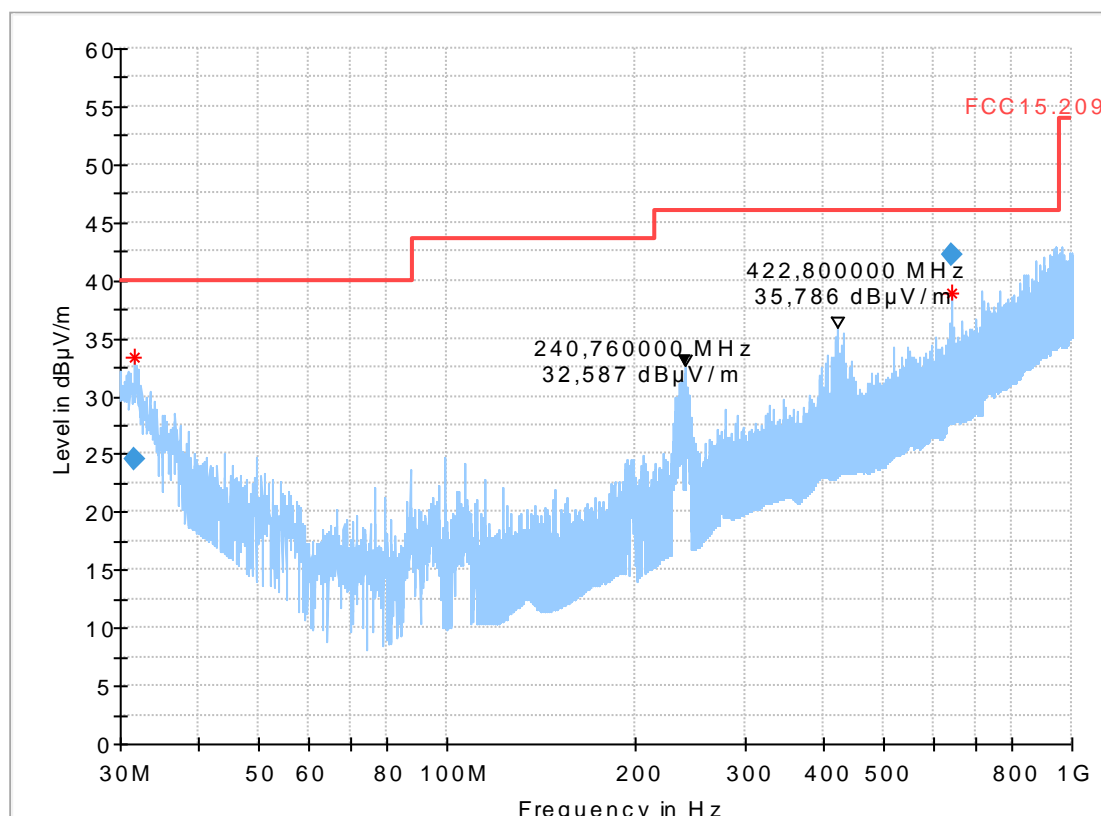
Common Information

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:	EMC32 V9.25.0
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; RSS-Gen: Issue 4
Operator:	JVo
Operating conditions:	BT EDR 3-DH5 3Mbps ch78 = 2480MHz
Power during tests:	13.5V DC
Comment 1:	

EUT Information

EUT Name:	AIVICMFB0
Manufacturer:	Robert Bosch Car Multimedia
Serial Number:	5603
Hardware Rev:	001
Software Rev:	0507
Comment:	

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)
31.660000	24.57	40.00	15.43	1000.0	120.000	151.0	V	182.0	20.8
643.496000	42.26	46.00	3.74	1000.0	120.000	129.0	H	130.0	23.2

1.3. Radiated electric field measurement above 1 GHz

4.01a_BT_EDR_3-DH5_ch78

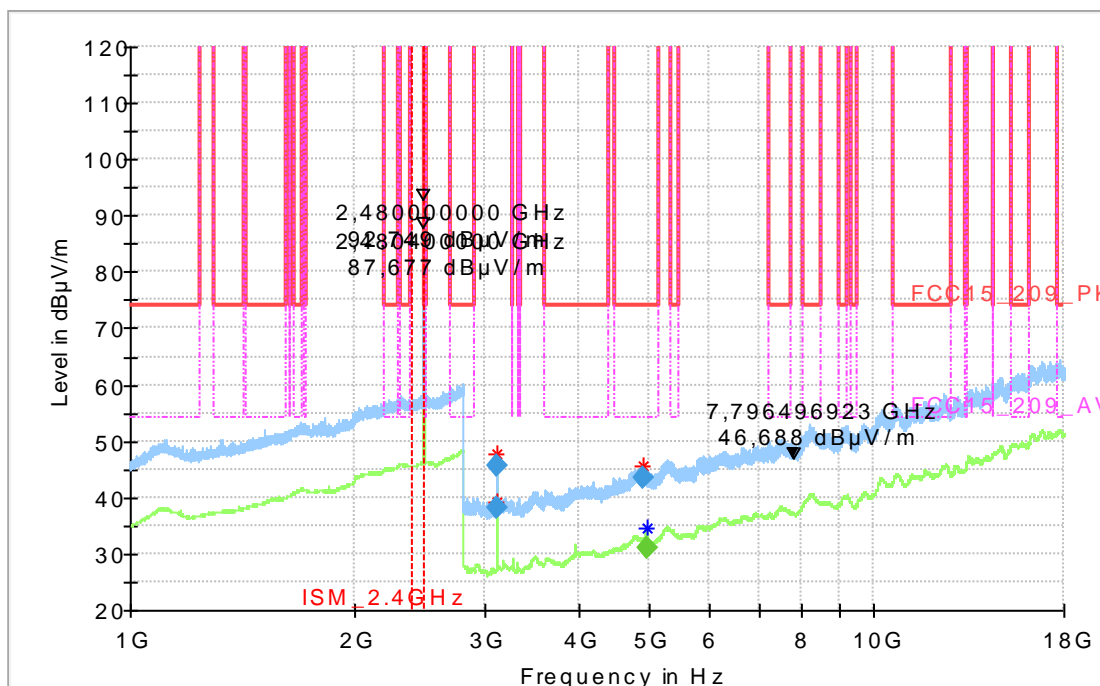
Common Information

Test Description: Radiated field strength emission in 3m distance
 Test Site: CETECOM GmbH Essen
 Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 4
 Antenna polarisation: horizontal/vertical

 Operation mode: TX, continuous
 Operator Name: Lor
 Comment: Channel no. high

EUT Information

EUT Name: AIVICMFBO
 Manufacturer: Robert Bosch Car Multimedia
 Serial Number: 5603
 Hardware Rev: 001
 Software Rev: 0507
 Comment:



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margi n (dB)	Meas . Time	Bandwid th (kHz)	Heigh t (cm)	Pol	Azimut h (deg)	Elevatio n (deg)
3113.600000	38.18	---	150.00	111.82	100.0	1000.000	155.0	H	338.0	0.0
3118.400000	45.49	---	150.00	104.51	100.0	1000.000	155.0	V	223.0	0.0
4880.800000	43.42	---	74.00	30.58	100.0	1000.000	155.0	V	80.0	90.0
4960.400000	---	30.99	54.00	23.01	100.0	1000.000	155.0	V	123.0	90.0

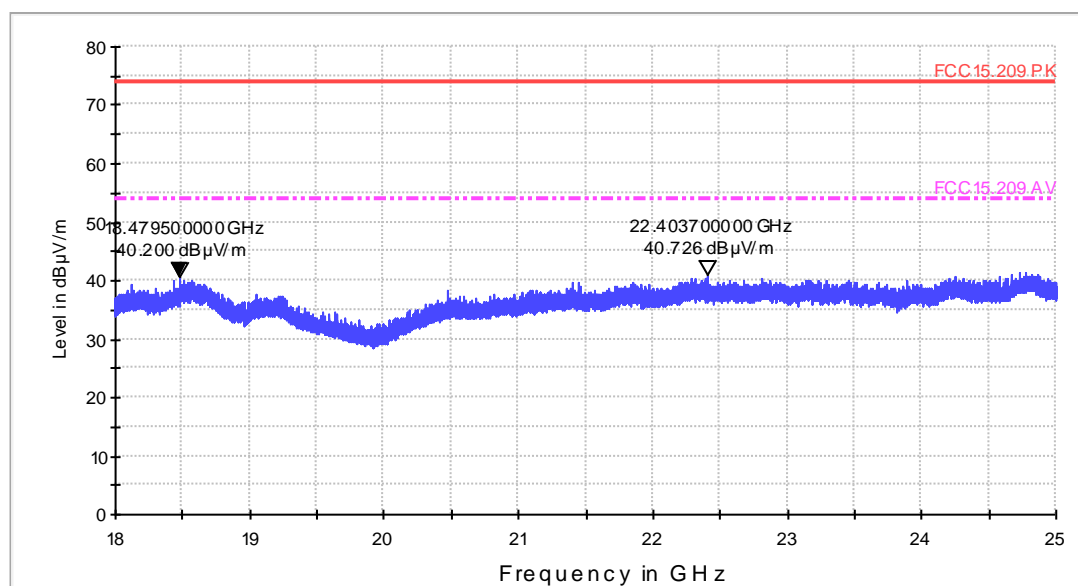
Diagram No.: 4.01b_BTE_EDR_3_dh5_ch78**Common Information**

Test Description:	Radiated field strength emission in 1m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247, 15.205&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Distance correction factor	3 to 1m: -10.5 dB applying to measurement results
SW-Version:	EMC32 V8.53.0
Operation mode:	TX mode continuous
Operator Name:	
Comment:	Channel no. high

EUT Information

EUT Name:	AIVICMFBO
Manufacturer:	Robert Bosch Car Multimedia
Serial Number:	5603
Hardware Rev:	001
Software Rev:	0507
Comment:	

FCC_Sweep_15.247_18_25GHz_Pre



1.4. Radiated band edge compliance

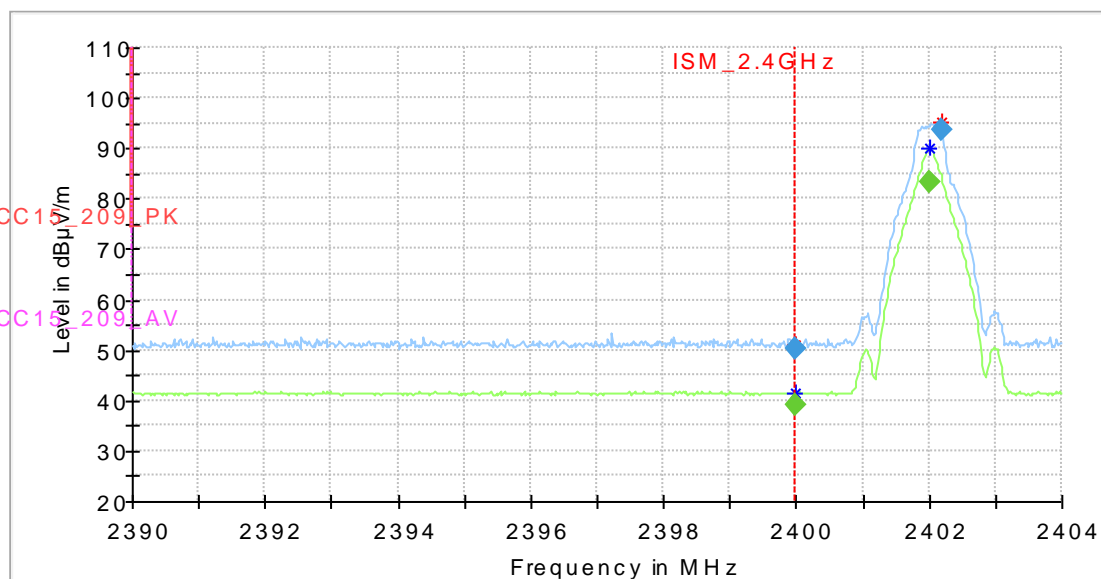
Diagram No.: 9.01_BE_low_BT_3-DH5_ch00

Common Information

Test Description:	Band-Edge: Radiated Field Strength Emissions Emissions in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 4
Antenna polarisation:	horizontal/vertical
Operation mode:	TX, continuous
Operator Name:	JVoigt
Comment:	Channel no. low 2402 MHz
Comment2:	Modulation Type: 3-DH5

EUT Information

EUT Name:	AIVICMFBO
Manufacturer:	Robert Bosch Car Multimedia
Serial Number:	5603
Hardware Rev:	001
Software Rev:	0507
Comment:	



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)
2400.000000	---	39.07	150.00	110.93	100.0	100.000	155.0	V	228.0	90.0
2400.000000	50.33	---	150.00	99.67	100.0	100.000	155.0	V	217.0	90.0
2402.000000	---	83.27	150.00	66.73	100.0	100.000	155.0	V	337.0	90.0
2402.180000	93.62	---	150.00	56.38	100.0	100.000	155.0	H	303.0	0.0

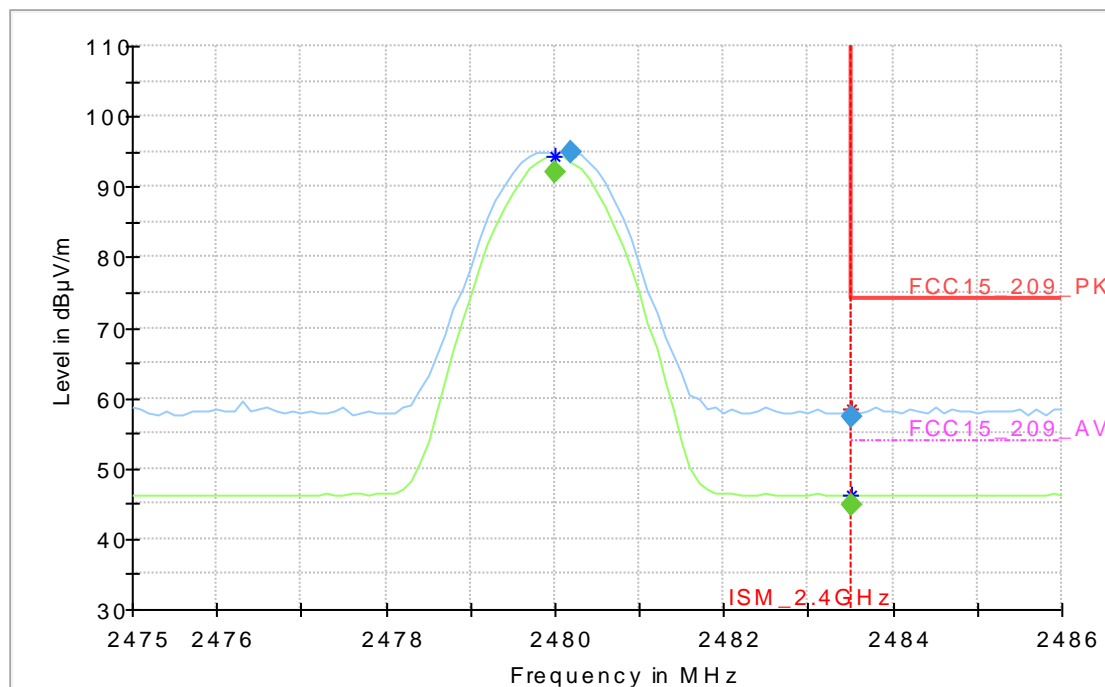
Diagram No.: 9.02_BE_high_BT_3-DH5_ch78

Common Information

Test Description:	Band-Edge: Radiated Field Strength Emissions Emissions in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 4
Antenna polarisation:	horizontal/vertical
Operation mode:	TX, continuous
Operator Name:	Lor
Comment:	Channel no. high

EUT Information

EUT Name:	AIVICMFBO
Manufacturer:	Robert Bosch Car Multimedia
Serial Number:	5603
Hardware Rev:	001
Software Rev:	0507
Comment:	



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)
2480.00000	---	92.19	150.00	57.81	100.0	1000.000	155.0	H	314.0	90.0
2480.20000	94.84	---	150.00	55.16	100.0	1000.000	155.0	H	314.0	90.0
2483.50000	57.30	---	74.00	16.70	100.0	1000.000	155.0	H	265.0	90.0
2483.50000	---	44.94	54.00	9.06	100.0	1000.000	155.0	H	323.0	0.0