

Annex 1: Measurement diagrams to
TEST REPORT
 No.: 17-1-0291301T01a-C1

According to:
FCC Regulations
 Part 15.209

ISED-Regulations
 RSS-210, Issue 9
 RSS-Gen, Issue 4

for

Robert Bosch Car Multimedia GmbH

Instrument cluster with immobilizer Audi FPK Gen2 (Q3)

FCC-ID: YBN-AUFPK20
 ISED: 9595A-AUFPK20
 PMN: Audi FPK Gen2
 HVIN: Audi FPK Gen2







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		
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Laboratory Accreditation and Listings		

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1. Measurement diagrams

1.1. Diagrams of radiated magnetic fields - carrier strength on 125.4kHz

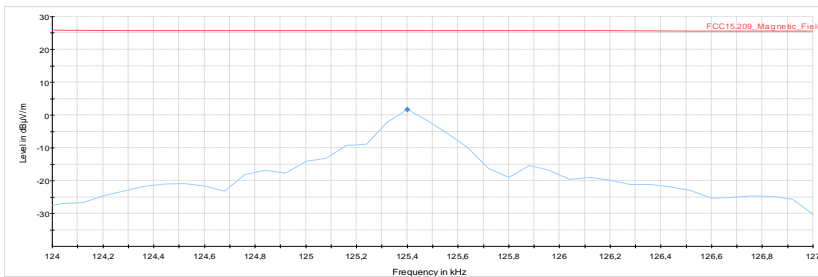


Diagram 1: (2.01_MagFeld_FCC_EUT_standing_antenna_hor)

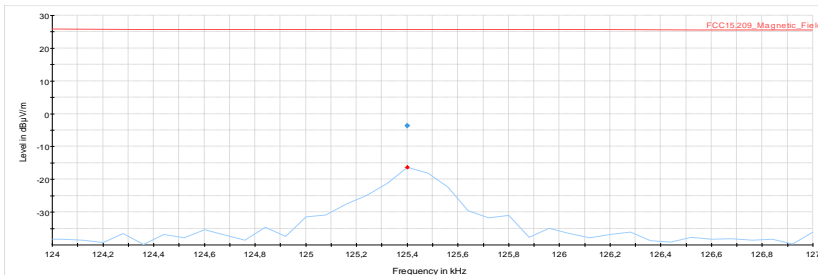


Diagram 2: (2.02_MagFeld_FCC_EUT_standing_antenna_ver)

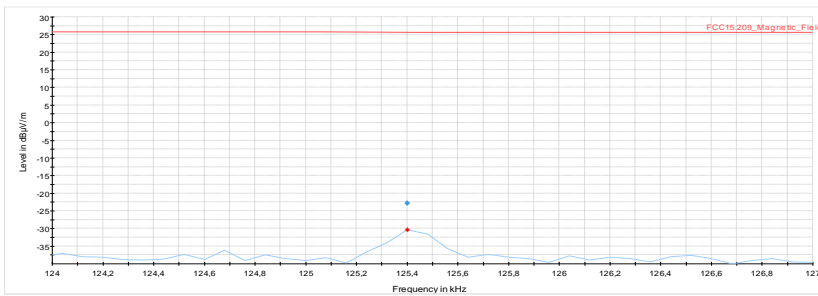


Diagram 3: (2.03_MagFeld_FCC_EUT_laying_antenna_ver)

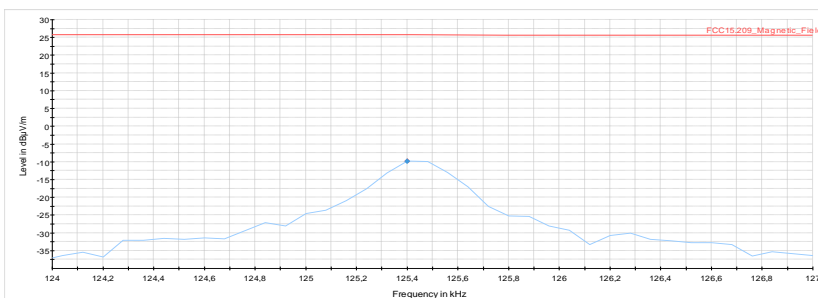


Diagram 4: (2.04_MagFeld_FCC_EUT_laying_antenna_hor)

1.2. Diagrams of emissions, radiated magnetic fields

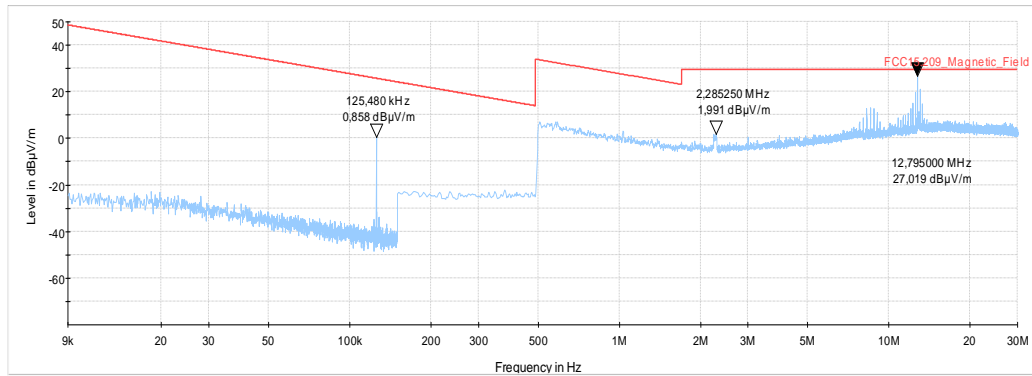


Diagram 5: (2.05_MagFeld_RSE_FCC_EUT_standing_antenna_hor)

Wanted Carrier on 125.48kHz

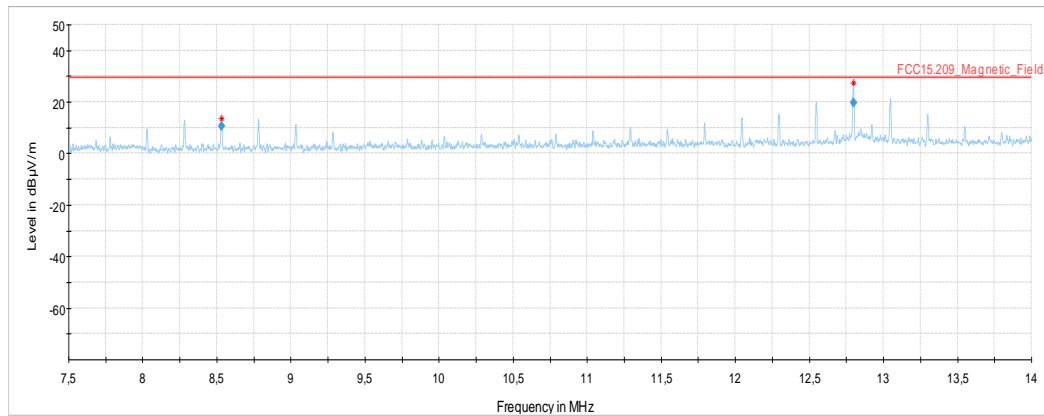


Diagram 6: (2.06_MagFeld_RSE_zoom7.5MHz-14MHz_FCC_EUT_standing_antenna_hor)

1.3. Diagrams of radiated field strength emissions, 30 MHz - 1 GHz (Diagram group 03)

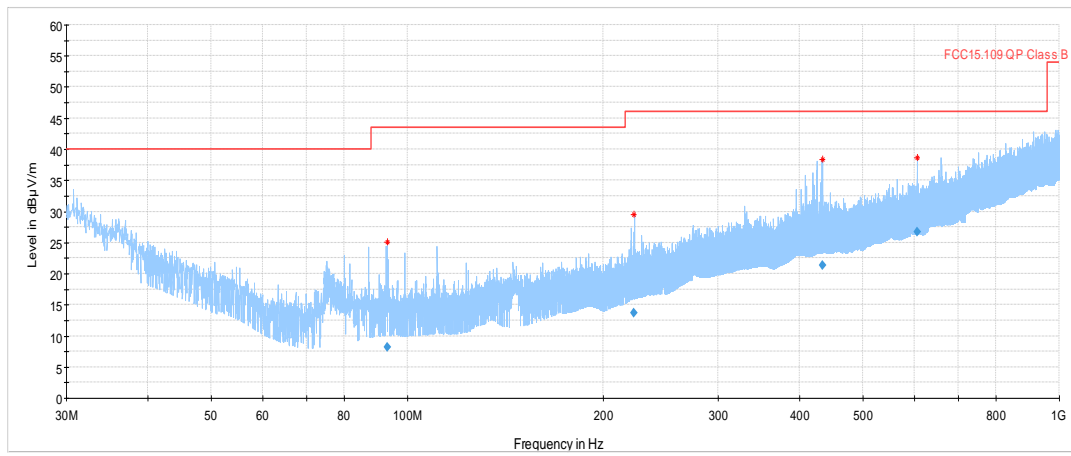


Diagram 7: (3.01_EMI_Field_FCC_EUT_Standing)

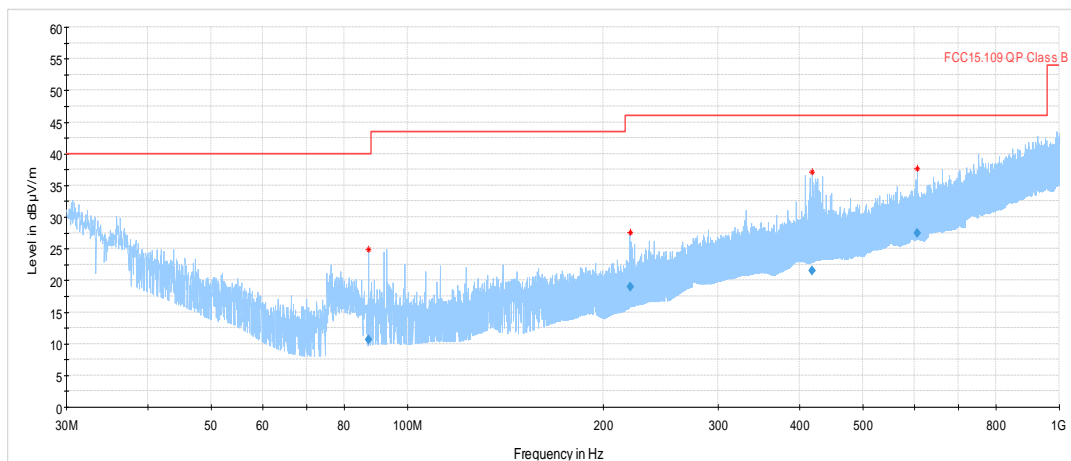
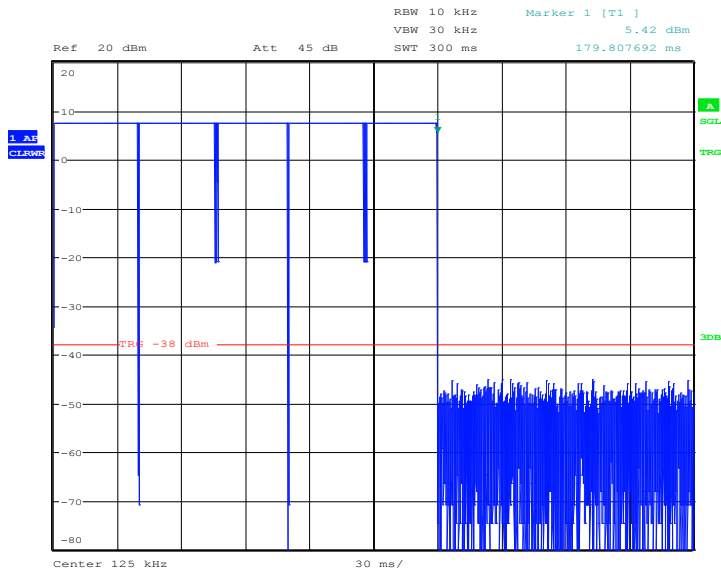


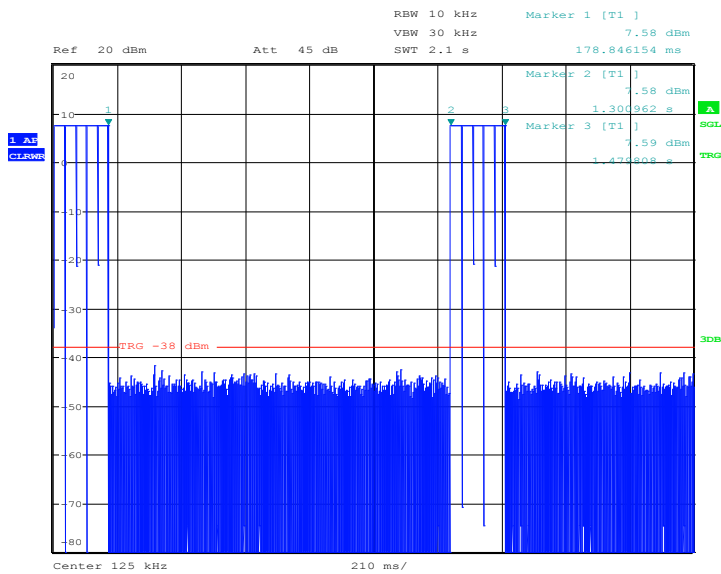
Diagram 8: (3.02_EMI_Field_FCC_EUT_Laying)

1.4. Timing diagrams



Date: 26.MAR.2018 12:17:23

Diagram 9: Pulse width for one burst (=179.80ms)

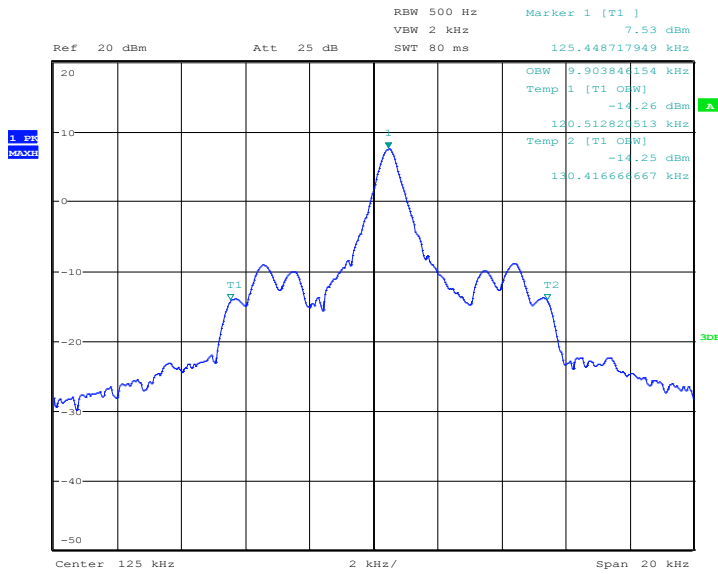


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Diagram 10: Pulse repetition (consecutive bursts)

Test measurement equipment settings according ANSI C.63.10:2013, Chapter 11.6

1.5. Occupied bandwidth



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Diagram 11: Occupied bandwidth measurements

Results: OBW = 9.903846kHz

Test measurement equipment settings according ANSI C.63.10:2013, Chapter 6.9.3

1.6. Frequency stability according RSS-Gen.

The occupied bandwidth (shown above) lays completely outside the restricted frequency bands (RSS-Gen., table7) 90-110kHz. Due PLL frequency stabilization of the frequency generating circuits, the frequency is stabilized against specified nominal frequency of 125.4kHz.