



EUROFINS PRODUCT SERVICE GMBH



Testing Cert #1983.01

TEST- REPORT

Compliance Test Report

**FCC PART 15 SUBPART C
IC RSS 210 ISSUE 7**

FCC ID: RK7156-01

Bluetooth Handsfree Car Kit

Audio 2010

TEST REPORT NUMBER: G0M21005-3245-P-15



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1 General Information

1.1 Notes

The results of this test report relate exclusively to the item tested as specified in chapter "Description of test item" and are not transferable to any other test items.

Eurofins Product Service GmbH is not responsible for any generalisations and conclusions drawn from this report. Any modification of the test item can lead to invalidity of test results and this test report may therefore be not applicable to the modified test item.

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Operator:

30.06.2010

W. Treffke



Date

Eurofins-Lab.

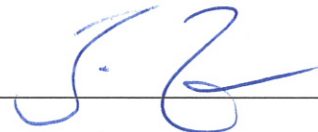
Name

Signature

Technical responsibility for area of testing:

30.06.2010

J. Zimmermann



Date

Eurofins

Name

Signature

1.2 Testing laboratory

EUROFINS PRODUCT SERVICE GMBH
Storkower Strasse 38c
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Germany
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DAR ACCREDITED TESTING LABORATORY
DAR-REGISTRATION NUMBER: DAT-P-268/08

RECOGNIZED NOTIFIED BODY EMC
REGISTRATION NUMBER: BNetzA-bS EMV-07/61

RECOGNIZED NOTIFIED BODY R&TTE
REGISTRATION NUMBER: BNetzA-bS-02/51-53

FCC FILED TEST LABORATORY
REG.-No. 96970

A2LA ACCREDITED TESTING LABORATORY
CERTIFICATE No. 1983.01

BLUETOOTH QUALIFICATION TEST FACILITY (BQTF)
ACCREDITED BY BLUETOOTH QUALIFICATION REVIEW BOARD

INDUSTRY CANADA FILED TEST LABORATORY
REG. NO. IC 3470

Test location, where different:

Name	: ./.
Street	: ./.
Town	: ./.
Country	: ./.
Telephone	: ./.
Fax	: ./.

1.3 Details of approval holder

Name : Funkwerk Dabendorf GmbH
Street : Märkische Strasse
Town : 15806 Dabendorf
Country : Germany
Telephone : 03377 316-0 /-142
Fax : 03377 316-134

Contact : Herr Bodo Nickel
Telephone : 03377 316-0 /-142

1.4 Application details

Date of receipt of application : 14.06.2010
Date of receipt of test item : 14.06.2010
Date of test : 25.06.2010 - 29.06.2010

1.5 Test item

Description of test item : Bluetooth Handsfree Car Kit
Type identification : Audio 2010

Technical data

Frequency range : 2400 - 2483.5MHz
Tested frequencies : F₁ 2402MHz
Tested frequencies : F₂ 2441MHz
Tested frequencies : F₃ 2480MHz
Antenna type : internal
Antenna Gain : 0dBi
Power supply : 13.2VDC
Operating mode : semi duplex
Modulation : FHSS
Device classification : Mobile Device (Human Body distance > 20 cm)

Manufacturer:
(if applicable)

Name : Funkwerk Dabendorf GmbH
Street : Märkische Strasse
Town : 15806 Dabendorf
Country : Germany

1.6 Test standards

Technical standard : **FCC PART 15 SUBPART C
IC RSS 210 ISSUE 7**

2 Technical test

2.1 Summary of test results

No deviations from the technical specification(s) were ascertained in the course of the tests performed.

or

The deviations as specified in 2.4 were ascertained in the course of the tests performed.

2.2 Test environment

Temperature : 22 ... 26°C

Relative humidity content : 20 ... 75%

Air pressure : 86 ... 103kPa

Extreme conditions parameters:

V_{nom} : 13.2VDC

$V_{min} (V_{nom}-15\%)$: --

$V_{max} (V_{nom}+15\%)$: --

T_{nom} : 25°C

2.3 Test equipment utilized

Measurement Equipment List			
No.	Measurement device:	Type:	Manufacturer:
ETS 0086	Semi-anechoic chamber	AC1	Frankonia
ETS 0271	Spectrum Analyzer	FSEK30	Rhode & Schwarz
ETS 0030	Biconical Antenna	HK 116	Rhode & Schwarz
ETS 0013	LPD Antenna	HL 223	Rhode & Schwarz
ETS 0019	Horn Antenna	BBHA 9120D	Schwarzbeck
ETS 0432	Amplifier-Matrix		
ETS 0259	Power Meter	NRVD	Rhode & Schwarz
ETS 0278	Power Sensor	NRV-Z31	Rhode & Schwarz
ETS 0496	Spectrum Analyzer	FSP30	Rhode & Schwarz
ETS 0543	CBT Bluetooth Tester	CBT	Rhode & Schwarz

2.4 Test results

 1st test

 test after modification

 production test

Test case	Subclause	Required	Test passed	Test failed
INFORMATIONAL TRANSMITTER PARAMETERS				
Occupied Bandwidth	IC RSS-Gen. 4.6.1	<input checked="" type="checkbox"/>		
TRANSMITTER PARAMETERS				
20dB Bandwidth	FCC § 15.247(a)(1) IC RSS-210 § A8.1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Frequency hopping channel number	FCC § 15.247(a)(1)(iii) IC RSS-210 § A8.1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Frequency hopping channel spacing	FCC § 15.247(a)(1) IC RSS-210 § A8.1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Time of occupancy (dwell time)	FCC § 15.247(a)(1)(iii) IC RSS-210 § A8.1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Maximum peak conducted output power	FCC § 15.247(b) IC RSS-210 § A8.4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Maximum peak e.i.r.p. output power	FCC § 15.247(b) IC RSS-210 § A8.4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Band-edge Compliance	FCC § 15.247(d) IC RSS-210 § A8.5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Conducted spurious emissions	FCC § 15.247(d) IC RSS-210 § A8.5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Radiated spurious emissions	FCC § 15.247(d) FCC § 15.209 IC RSS-210 § A8.5 IC RSS-Gen § 4.9	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
RECEIVER PARAMETERS				
Radiated spurious emissions	FCC § 15.109 IC RSS-Gen § 4.10 IC RSS-Gen § 7.2.3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
POWER LINE PARAMETERS				
AC power line conducted emissions	FCC § 15.207 IC RSS-Gen. 7.2.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Test Report No.: G0M21005-3245-P-15

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 Storkower Str. 38c, D-15526 Reichenwalde, Germany

3 Sample emission level calculation

The following is a description of terms and a sample calculation, as appears in the radiated emissions data table. The numbers used in the calculation are for example only. There is no direct correlation to the specific data taken for the product described in this document:

Reading:

This is the reading obtained on the spectrum analyzer in dBV. Any external preamplifiers used are taken into account through internal analyzer settings.

A.F.:

This is the antenna factor for the receiving antenna. It is a conversion factor, which converts electric fields strengths to voltages, which can be measured directly on the spectrum analyzer. It is treated as a loss in dB. Cable losses have been included with the A.F. to simplify the calculations. The antenna factor is used in calculations as follows:

$$\text{Reading on Analyzer (dB}\mu\text{V)} + \text{A.F. (dB)} = \text{Net field strength (dB}\mu\text{V/m)}$$

Net:

This is the net field strength measurement (as shown above).

Limit:

This is the FCC Class B radiated emission limit (in units of dB μ V/m). The FCC limits are given in units of μ V/m. The following formula is used to convert the units of V/m to dB μ V/m:

$$\text{Limit (dB}\mu\text{V/m)} = 20 * \log (\mu\text{V/m})$$

Margin:

This is the margin of compliance below the FCC limit. The units are given in dB.

A positive margin indicates the emission was below the limit. A negative margin indicates that the emission exceeds the limit.

Example only:

Reading	+	AF	=	Net Reading	:	FCC limit	-	Net reading	=	Margin
21.5 dB μ V		+ 26 dB		= 47.5 dB μ V/m		57 dB μ V/m		-47.5 dB μ V/m		= 9.5 dB

4 Informational Transmitter parameters

4.1 Transmitter Modes for conformance testing

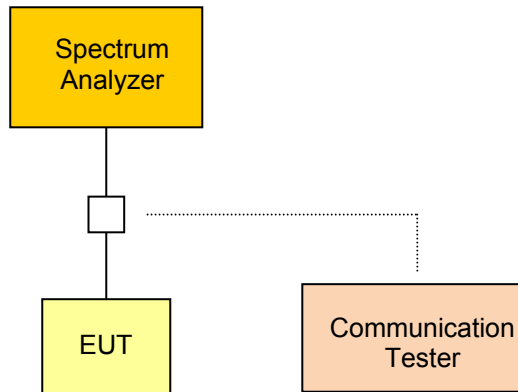
The following transmission modes are elected for compliance testing.

TEST MODE Basic	
Conditions	
Spread Spectrum :	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Spreading Technique :	FHSS
Modulation :	GFSK
Packet Type :	DH5
Data rate :	1Mbps
Duty Cycle :	46%

4.2 Occupied Bandwidth

According to RSS-Gen Section 4.6.1 the 99% emission bandwidth occupied by the modulated transmitted signal has to be reported as calculated or measured.

4.2.1 Measurement procedure



The EUT is connected to a spectrum analyzer and set to transmission mode (using a communication tester if needed) with maximum power under normal test conditions. The span of the analyzer is set wide enough to capture all significant emissions of the modulation spectrum. The resolution bandwidth is set as close as possible to 1% of the selected span without being below 1%. The occupied bandwidth is then measured and evaluated by an internal measurement procedure of the analyzer.

4.2.2 Results

Transmitter occupied bandwidth			
Measurement Conditions			
Test mode :		Basic	
Power occupation :		99%	
Channel [MHz]	Lower edge frequency [MHz]	Upper edge frequency [MHz]	Occupied Bandwidth [MHz]
Test mode Basic			
2402	2401.52	2402.44	0.920
2441	2440.52	2441.44	0.920
2480	2479.51	2480.44	0.930
See attached diagram in Annex			
Verdict			PASS

5 Transmitter parameters

5.1 20dB Bandwidth

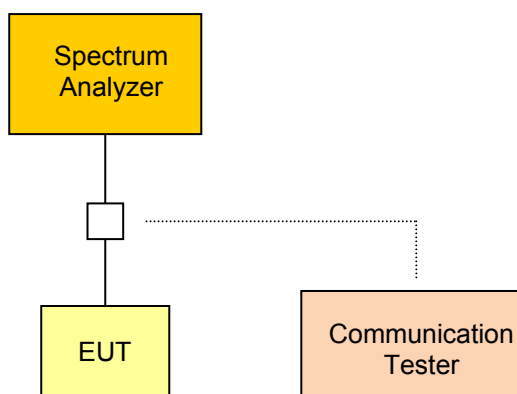
According FCC rules 47 CFR 15.247(a)(1) and RSS-210 Section A8.1 the 20dB Bandwidth determines the necessary carrier spacing used in the frequency hopping system.

5.1.1 Limits

According FCC and IC rules frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25kHz or the 20dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400–2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.

20dB Bandwidth limits	
Output Power	20dB Bandwidth Limit
$\leq 125\text{mW} / 21\text{dBm}$	1.5 * carrier spacing
125mW – 1W / 21 – 30dBm	1.0 * carrier spacing

5.1.2 Measurement procedure



The eut is connected to a spectrum analyzer and set to transmission mode (using a communication tester if needed) with maximum power under normal test conditions. The resolution bandwidth is set to 1% of the 20dB bandwidth of the emission spectrum ($VBW \geq RBW$). The center frequency is set to the hopping channel center frequency. The span of the analyzer is set to 2 -3 times the 20dB bandwidth. The bandwidth is determined using markers with peak detector and max hold.

According to 47 CFR 15.31 battery power equipment is measured using new batteries and equipment using external power supply is measured with 85%, 100% and 115% of the nominal rated supply voltage.

5.1.3 Results

20dB Bandwidth		
Measurement Conditions		
Test mode :	Basic	
Max. output power :	1.64dBm	
Carrier spacing :	1MHz	
Channel [MHz]	20dB Bandwidth [MHz]	Bandwidth Limit [MHz]
2402	0.935	1.5
2441	0.935	1.5
2480	0.935	1.5
See attached diagrams in Annex		
Verdict		PASS

5.2 Frequency hopping channel number

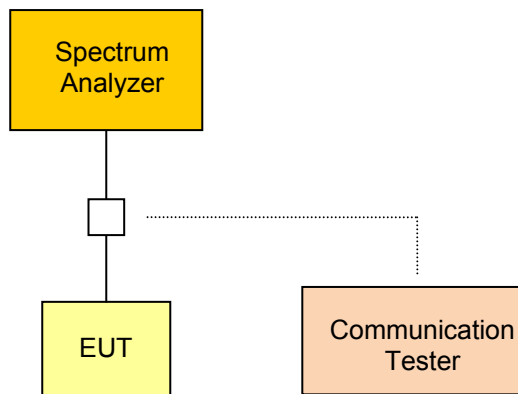
According FCC rules 47 CFR 15.247(a)(1)(iii) and RSS-210 Section A8.1 the number of hopping channels used, determines if the system can be certified as a hopping system and also the power level the system can use.

5.2.1 Limits

According FCC and IC rules frequency hopping systems shall use a minimum of 15 hopping channels. If the hopping system uses at least 75 hopping channels, the maximum conducted output power can be increased from 0.125W to 1W.

Frequency hopping channel number limits	
Max. conducted output Power	Minimum number of channels
$\leq 125\text{mW} / 21\text{dBm}$	15
125mW – 1W / 21 - 30dBm	75

5.2.2 Measurement procedure



The eut is connected to a spectrum analyzer and set to transmission mode (using a communication tester if needed) with hopping activated. The resolution bandwidth is set to 1% of the span ($VBW \geq RBW$) and the span is set to 2400 – 2483.5MHz. The power level is measured with peak detector and max hold.

5.2.3 Results

Number of hopping channels	
Measurement Conditions	
Test mode :	Basic
Max. output power :	1.64dBm
Number of channels	Hopping channel limit
79	15
See attached diagrams in Annex	
Verdict	PASS

5.3 Frequency hopping channel spacing

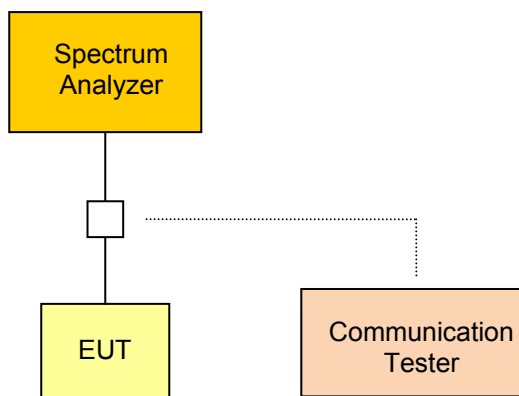
According FCC rules 47 CFR 15.247(a)(1) and RSS-210 Section A8.1 the minimum hopping channel frequency spacing is correlated to the 20dB bandwidth of the hopping channel emission and and maximum peak output power.

5.3.1 Limits

According FCC and IC rules frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25kHz or the 20dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400–2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.

Frequency hopping channel spacing limits	
Max. conducted output Power	Minimum hopping channel spacing
$\leq 125\text{mW} / 21\text{dBm}$	$\geq 25\text{kHz}$ or $\frac{2}{3}$ of 20dB bandwidth
125mW – 1W / 21 – 30dBm	$\geq 25\text{kHz}$ or 20dB bandwidth

5.3.2 Measurement procedure



The eut is connected to a spectrum analyzer and set to transmission mode (using a communication tester if needed) with hopping activated. The resolution bandwidth is set to 1% of the span ($VBW \geq RBW$) and the span is set wide enough to capture two adjacent channels. The power level is measured with peak detector and max hold.

5.3.3 Results

Frequency hopping channel spacing	
Measurement Conditions	
Test mode :	Basic
Tested channels :	2441MHz / 2442MHz
Max. output power :	1.64dBm
Channel spacing [kHz]	Channel spacing limit [kHz]
1003.2	$\frac{2}{3} * 935 = 623$
See attached diagrams in Annex	
Verdict	PASS

5.4 Time of occupancy (Dwell time)

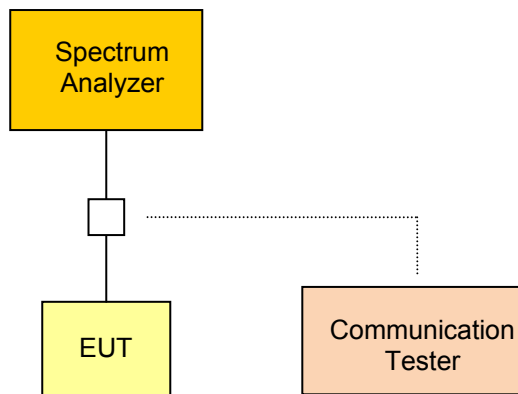
According FCC rules 47 CFR 15.247(a)(1)(iii) and RSS-210 Section A8.1 the average time of occupancy on any channel is limited.

5.4.1 Limits

According FCC and IC rules the average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

Frequency hopping channel number limits	
Dwell time limit	Channel occupancy period
0.4s	0.4 * Number of hopping channels

5.4.2 Measurement procedure



The eut is connected to a spectrum analyzer and set to transmission mode (using a communication tester if needed) with hopping activated. The resolution bandwidth is set to 1MHz (VBW≥RBW) and the span is set to zero centered on a hopping channel. The sweep time is set large enough to capture the dwell time. The power level is measured with peak detector and max hold.

5.4.3 Results

Time of occupancy (Dwell time)	
Measurement Conditions	
Test mode :	Basic
Tested channel :	2441
Number of hopping channels :	79
Time of occupancy	Channel occupancy periode
64 * 2.907ms = 0.186s	31.6s
See attached diagrams in Annex	
Verdict	PASS

5.5 Maximum peak conducted output power

According to FCC rules 47 CFR 15.247(b)(1) and RSS-210 Section A8.4 the maximum peak conducted output power is limited and has been verified.

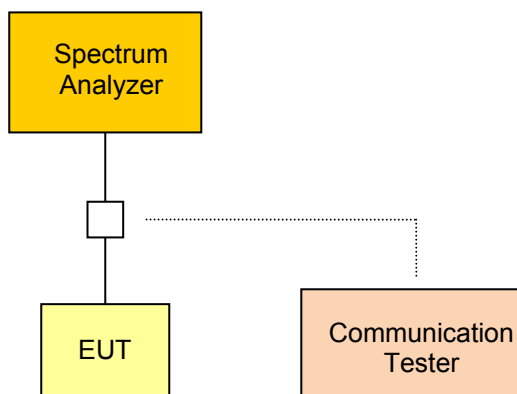
5.5.1 Limits

For frequency hopping systems operating in the band 2400-2483.5 MHz employing at least 75 hopping channels, the maximum peak conducted output power shall not exceed 1 W; for all other frequency hopping systems in the band, the maximum peak conducted output power shall not exceed 0.125 W.

Transmitter spurious emission limits	
Number of Hopping Channels	Conducted Power Limit
≥ 75	1W (30dBm)*
15 - 74	125mW (21dBm)*

*) The conducted output power limit specified above is based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in the table, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

5.5.2 Measurement procedure



The EUT is connected to a spectrum analyzer and set to transmission mode (using a communication tester if needed) with maximum power under normal test conditions. The resolution bandwidth is set higher than the 20dB Bandwidth of the emission spectrum ($VBW \geq RBW$). The span of the analyzer is set larger than 5 times the resolution bandwidth. The maximum power emitted by the EUT is measured using peak detector and max hold.

According to 47 CFR 15.31 battery power equipment is measured using new batteries and equipment using external power supply is measured with 85%, 100% and 115% of the nominal rated supply voltage.

5.5.3 Results

Maximum peak conducted output power		
Measurement Conditions		
Test mode :	Basic	
Antenna gain :	0dBi	
Power correction :	0dB	
Number of Hopping channels :	79	
Channel [MHz]	Conducted output power [dBm]	Power Limit [dBm]
2402	1.64	30
2441	1.23	30
2480	0.86	30
See attached diagrams in Annex		
Verdict		PASS

5.6 Maximum e.i.r.p. output power

According FCC rules 47 CFR 15.247(b)(1) and RSS-210 Section A8.4 the maximum peak e.i.r.p. conducted output power is limited and has be verified.

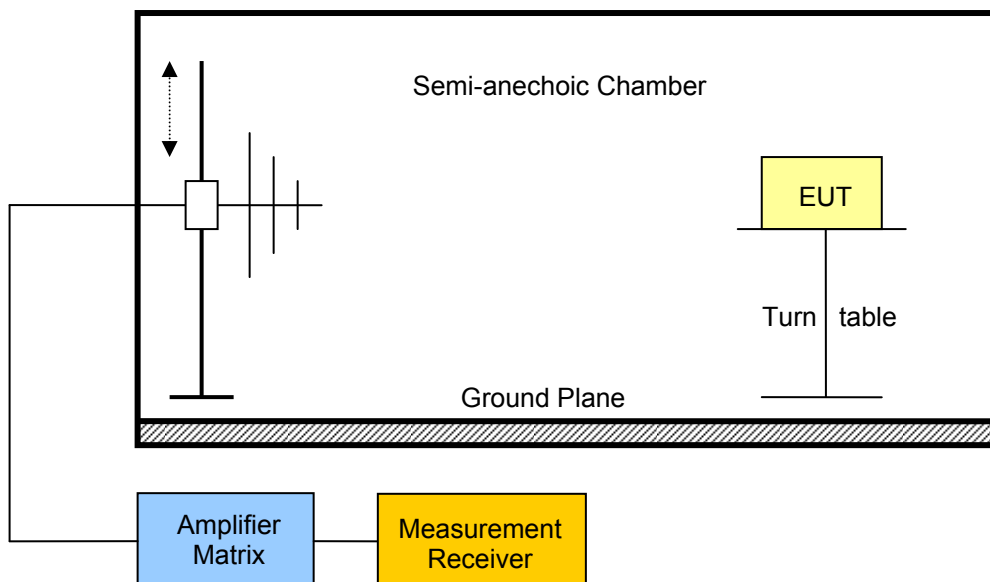
5.6.1 Limits

According to the FCC Rules the conducted output power limit specified is based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in the table, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi. This translates to the following e.i.r.p. power limits.

Transmitter spurious emission limits	
Number of Hopping Channels	E.I.R.P. Power Limit
≥ 75	4W e.i.r.p. (36dBm e.i.r.p.)
15 - 74	500mW e.i.r.p. (27dBm e.i.r.p.)*

*) According RSS-210 the e.i.r.p. output power is generally limited to 4W (36dBm) without limit on the number of hopping channels.

5.6.2 Measurement procedure



The eut is placed on a table in a semi-anechoic chamber. The eut is actived with the transmission modes stated in the test report. The emission level of all emission up to the 10th harmonic is scanned. In the frequency range below 1GHz a resolution bandwidth of 100kHz is used and above 1GHz a resolution bandwidth of 1MHz is used. To obtain the peak emission level the eut is rotated through 360° and the hight of the measurement antenna changed. All emission that come to within 20dB of the limit line are recorded.

Alternate validation procedure

Alternatively the e.i.r.p. power is calculated from the declared antenna gain and the measured maximum peak conducted output power.

Which method has been used is stated in the result table.

5.6.3 Results

Maximum e.i.r.p. output power		
Measurement Conditions		
Test mode :	Basic	
Validation methode :	<input type="checkbox"/> Measurement <input checked="" type="checkbox"/> Alternate	
Antenna gain :	0dBi	
Channel [MHz]	E.I.R.P. output power [dBm e.i.r.p.]	E.I.R.P. Power Limit [dBm e.i.r.p.]
Test mode DH5		
2402	1.64	36
2441	1.23	36
2480	0.86	36
See attached diagrams in Annex		
Measurement uncertainty		4.22dB
Verdict		PASS

5.7 Transmitter band-edge compliance

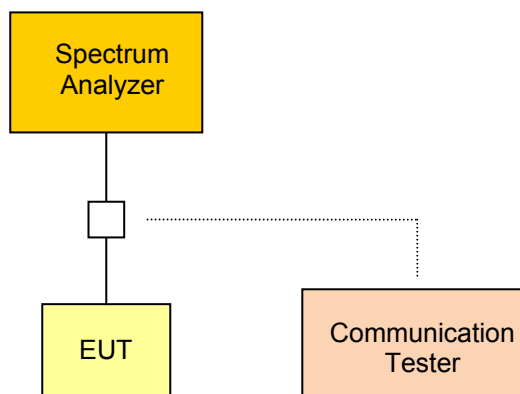
According FCC rules 47 CFR 15.209, 15.247(d) and RSS-210 Section A8.5 the emission level of out-of-band emissions are limited and has to be validated.

5.7.1 Limits

The emission limit of out of band emission in any 100kHz bandwidth outside the frequency band in which the spread spectrum device is operating, the radio frequency power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general limits (see “Transmitter spurious emissions”-measurement) is not required.

Transmitter band-edge emission limits	
TX-Power Detector	Out of band attenuation
Peak	-20dBc/100kHz
RMS	-30dBc/100kHz

5.7.2 Measurement procedure



The eut is connected to a spectrum analyzer and set to transmission mode (using a communication tester if needed) without hopping with maximum power under normal test conditions. The span of the analyzer is set large enough to capture the maximum emission within the emission band as well as any modulation product which fall outside the authorized band of operation. The resolution bandwidth is set to 1% of the span ($VBW \geq RBW$). The

A marker is set on the emission at the bandedge, or on the highest modulation product outside of the band, if this level is greater than that at the bandedge. Using the delta-marker function the highest peak of of the in-band emission is measured.

The same measurement procedure is repeated in hopping mode.

5.7.3 Results

Transmitter band-edge emissions		
Measurement Conditions		
Test mode :	Basic	
Power mode :	Peak	
Mode	Lower edge emission [dBc]	Upper edge emission [dBc]
Single	-44.60	-40.01
Hopping	-44.10	-44.10
See attached diagram in Annex		
Verdict		PASS

5.8 Transmitter conducted spurious emissions

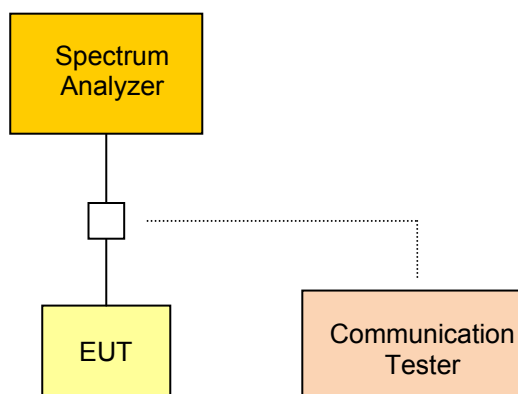
According FCC rules 47 CFR 15.247(d) and RSS-210 Section A8.5 unwanted emissions in the spurious domain are power limited and has to be validated.

5.8.1 Limits

The emission limit of out of band emission in any 100kHz bandwidth outside the frequency band in which the spread spectrum device is operating, the radio frequency power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general limits (see “Transmitter radiated spurious emissions”-measurement) is not required.

Transmitter band-edge emission limits	
TX-Power Detector	Out of band attenuation
Peak	-20dBc/100kHz
RMS	-30dBc/100kHz

5.8.2 Measurement procedure



The eut is connected to a spectrum analyzer and set to transmission mode with maximum power under normal test conditions. The span of the analyzer is set large enough to capture the maximum emission within the emission band as well as any spurious emission outside the authorized band of operation. The resolution bandwidth is set to 100kHz (VBW≥RBW). The emissions are measured using peak detector and max hold.

The measurement is performed over the frequency range of 30MHz up to the tenth harmonic.

5.8.3 Results

Transmitter conducted spurious Emissions						
Measurement Conditions						
Test mode :		Basic				
Modulated :		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
Channel Frequency [MHz]	Emission Frequency [MHz]	Emission Level [dBm]	Peak field Strength [dBm]	Limit [dBm]	Detector	Margin [dB]
2402	4800	-35.71	0.5	-19.5	peak	-16.21
2441	4880	-34.66	-0.6	-20.6	peak	-14.06
2480	4960	-38.82	0.6	-19.4	peak	-19.42
See attached diagrams in Annex						
Verdict					PASS	

5.9 Transmitter radiated spurious emissions

According FCC rules 47 CFR 15.209, 15.247(d) and RSS-210 Section A8.5 unwanted emissions in the spurious domain are power limited and has to be validated.

5.9.1 Limits

The emission limit of out of band emission in any 100kHz bandwidth outside the frequency band in which the spread spectrum device is operating, the radio frequency power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general limits (see “Transmitter spurious emissions”-measurement) is not required.

Transmitter out-of-band emission limits	
TX-Power Detector	Out of band attenuation
Peak	-20dBc/100kHz
RMS	-30dBc/100kHz

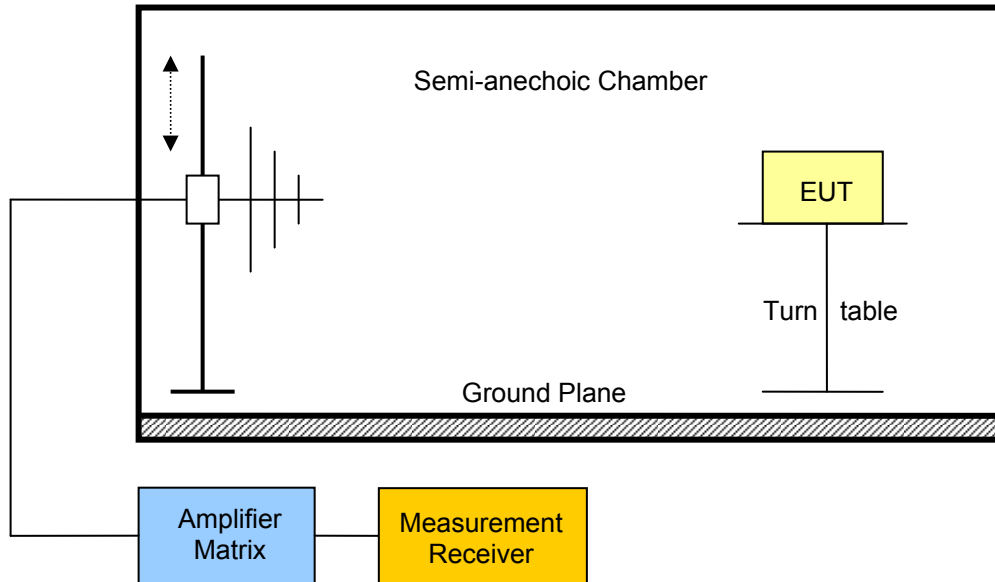
In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

Tranmitter restricted band spurious emission limits				
Frequency range [MHz]	Detector	Limit [μ V/m]	Calculated Limit 3m [dB μ V/m]	Measurement Distance [m]
30 – 88	Quasi-Peak	100	40	3
88 – 216	Quasi-Peak	150	43.5	3
216 – 960	Quasi-Peak	200	46	3
960 – 1000	Quasi-Peak	500	54	3
> 1000	Average	500	54	3

When average radiated emission measurements are specified, including average emission measurements below 1000 MHz, there also is a limit on the peak level of the radio frequency emissions. The limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit applicable to the equipment under test.

5.9.2 Measurement procedure

The spurious emission measurement is performed on 3m a semi-anechoic test site.



The eut is placed on a non-metallic table. Any emission is received by the measurement antenna and measured via a measurement receiver connected to the antenna. To obtain the maximum emission the eut is rotated through 360°.

Due to practical reasons the spurious emission level check is first performed with a peak detector and the quasi-peak and average limits.

If any emission is detected that gets close to the emission limit the detector is changed and the quasi-peak or average detector is used. Which detector is used is determined by the emission frequency. If pulsed transmission is used, averaging over the pulse train is used.

The measurement values are also corrected to obtain the field strength values at the defined measurement distances of the emission limits.

The measurement is performed over the frequency range of 30MHz up to the tenth harmonic.

5.9.3 Results

Transmitter radiated spurious Emissions						
Measurement Conditions						
Test mode :		Basic				
Measurement distance :		3m				
Modulated :		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
Channel Frequency [MHz]	Emission Frequency [MHz]	Polarization	Measured Field Strength [dB μ V/m]	Limit@3m [dB μ V/m]	Detector	Margin [dB]
2441	4882	Horizontal	56.45	74	Peak	-17.55
2441	4882	Horizontal	48.26	54	Average	-5.74
2480	2484	Horizontal	57.17	74	Peak	-16.83
2480	2484	Horizontal	45.63	54	Average	-8.37
2480	4954	Horizontal	53.90	74	Peak	-20.10
2480	4960	Horizontal	50.10	54	Average	-3.90
2480	4962	Vertical	58.32	74	Peak	-15.68
2480	4960	Vertical	50.09	54	Average	-3.91
2441	4882	Vertical	56.63	74	Peak	-17.37
2441	4882	Vertical	49.08	54	Average	-4.92
2402	4802	Vertical	55.30	74	Peak	-18.70
2402	4804	Vertical	47.40	54	Average	-6.60
See attached diagrams in Annex						
Verdict					PASS	

6 Receiver parameters

6.1 Receiver spurious emissions

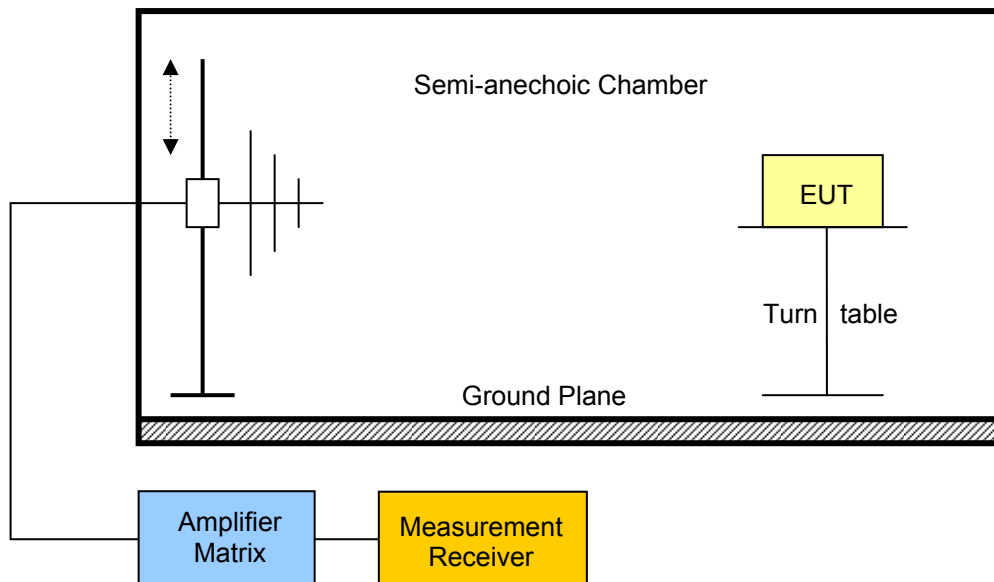
According RSS-Gen Section 4.9 the emission of unintentional radiators have to comply with limits stated in the rules.

6.1.1 Limits

Receiver spurious emission limits @ 3m				
Frequency range [MHz]	Detector	Limit@3m [$\mu\text{V}/\text{m}$]	Calculated Limit @ 3m [$\text{dB}\mu\text{V}/\text{m}$]	Measurement Distance [m]
30 – 88	Quasi-Peak	100	40	3
88 – 216	Quasi-Peak	150	43.5	3
216 – 960	Quasi-Peak	200	46	3
960 – 1000	Quasi-Peak	500	54	3
> 1000	Average	500	54	3

6.1.2 Measurement procedure

The spurious emission measurement is performed on a 10m open area test site.



The eut is placed on a non-metallic table. Any emission is received by a loop antenna and measured via a measurement receiver connected to the loop antenna. To obtain the maximum emission the eut is rotated through 360°.

Due to practical reasons the spurious emission level check is first performed with a peak detector and the quasi-peak and average limits.

If any emission is detected that gets close to the emission limit the detector is changed and the quasi-peak or average detector is used. Which detector is used is determined by the emission frequency. If pulsed transmission is used, averaging over the pulse train is used.

The measurement values are also corrected to obtain the field strength values at the defined measurement distances of the emission limits.

The measurement is performed over the frequency range of 30MHz up to the 3rd harmonic.

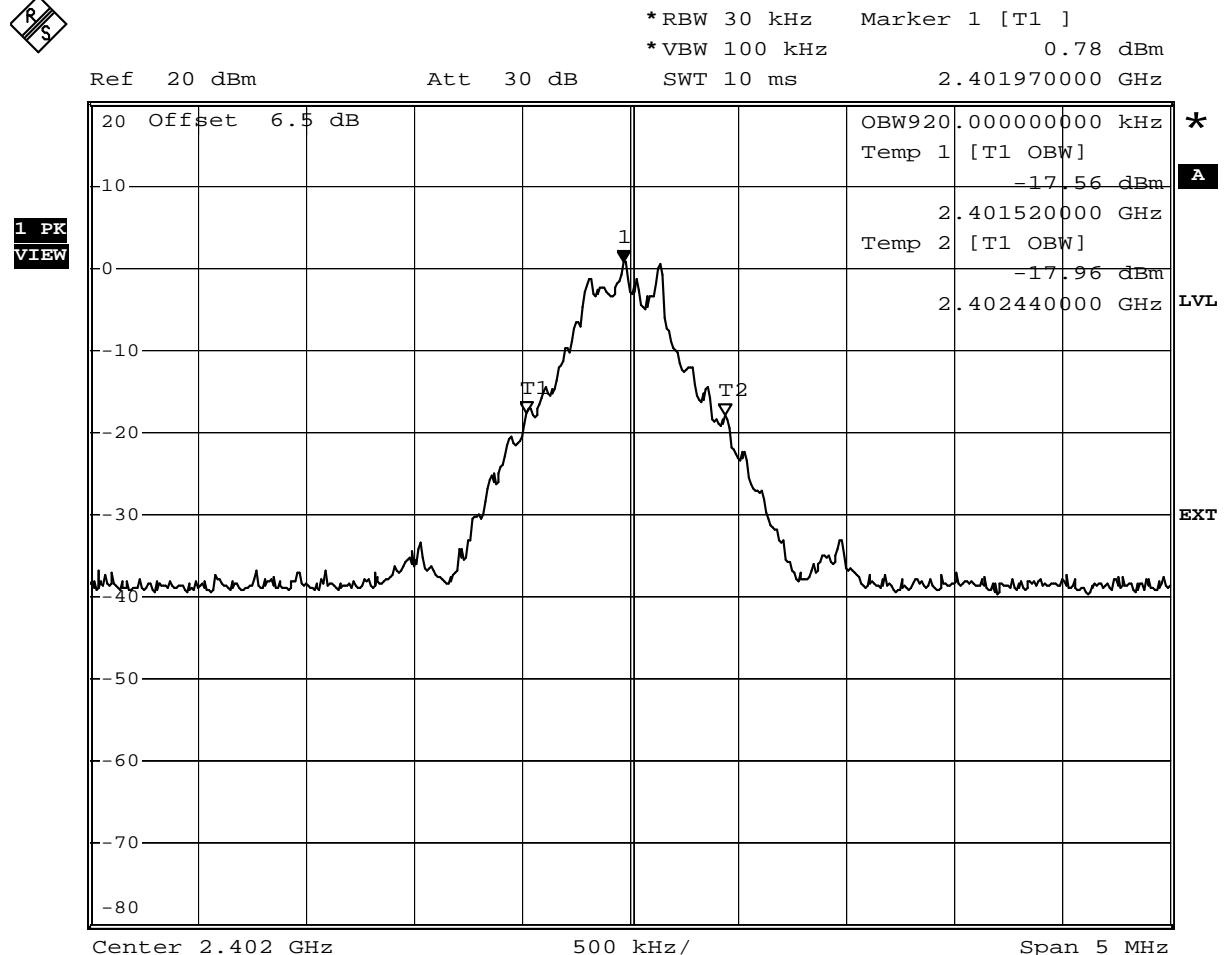
6.1.3 Results

Receiver spurious Emissions						
Measurement Conditions						
Test mode :		Basic				
Measurement distance :		3m				
Channel Frequency [MHz]	Emission Frequency [MHz]	Polarization	Measured Field Strength [μ V/m]	Limit@3m [μ V/m]	Detector	Margin [dB]
2441	36,132	Vertical	69,34	100	Peak	-30,66
	196,253	Horizontal	49,03	150	Peak	-100,97
	491,784	Vertical	30,55	200	Peak	-169,45
	983,968	Horizontal	63,24	500	Peak	-436,76
	2184,000	Vertical	181,34	500	Peak	-318,66
	3826,000	Horizontal	161,44	500	Peak	-338,56
	7992,000	Vertical	345,94	500	Peak	-154,06
	7840,000	Horizontal	312,97	500	Peak	-187,03
	11487,00	Vertical	153,29	500	Peak	-346,71
	11431,00	Horizontal	137,88	500	Peak	-362,12
See attached diagrams in Annex						
Verdict					PASS	

Annex B Transmitter occupied bandwidth

RSS Gen Occupied Bandwidth

EUT	Bluetooth Handsfree Car Kit
Model	Audio 2010
Approval Holder	Funkwerk Dabendorf GmbH
Temperature / Voltage	23°C / Vnom
Test Site / Operator	Eurofins Product Service GmbH / Mr. Treffke
Test Specification	4.4.1 Occupied Bandwidth
Comment 1	Channel.: 0 / 2402 MHz
Comment 2	A spectrum analyzer with an integrated 99% power bandwidth function is used
Comment 3	



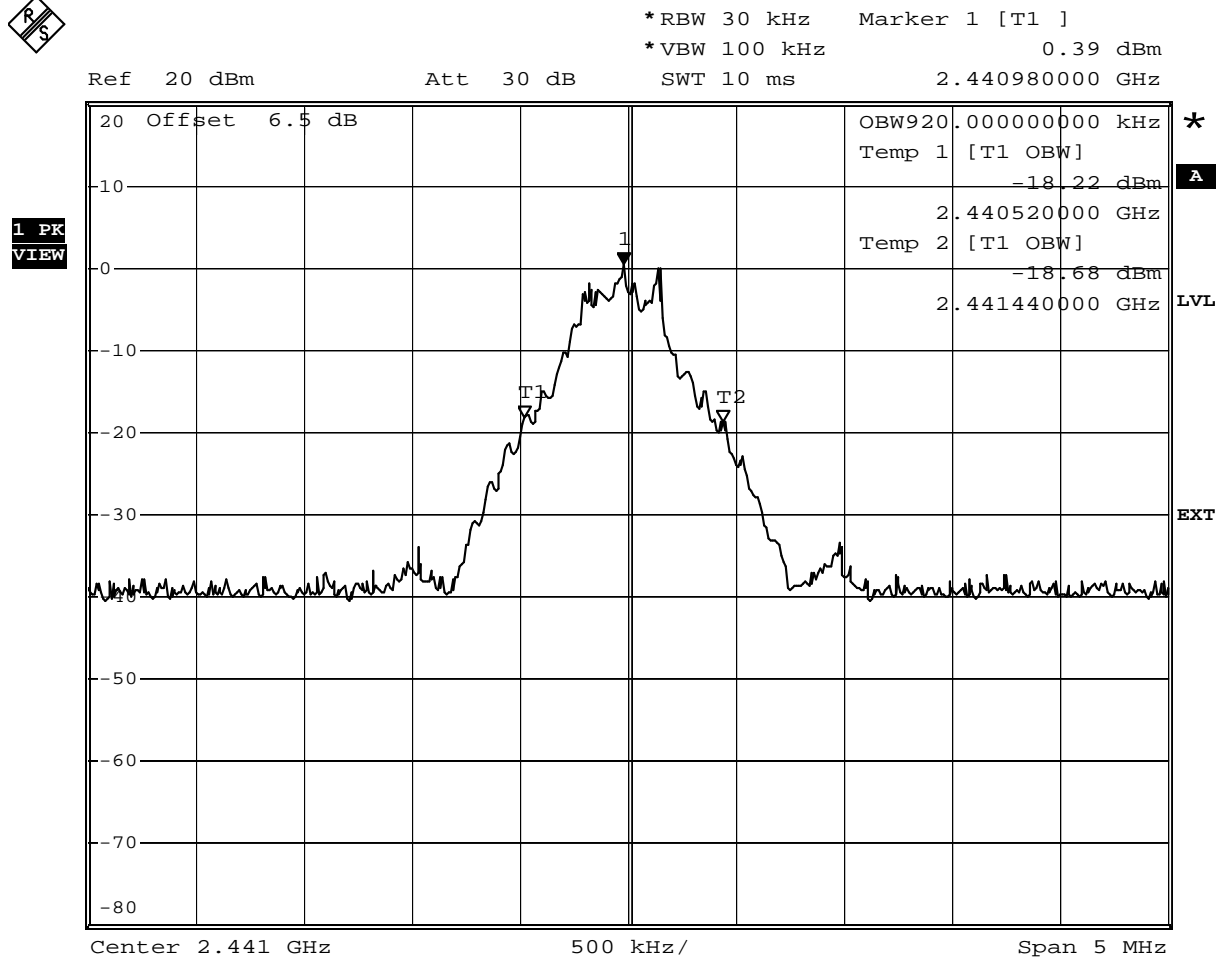
Comment: Occupied bandwidth: 920 KHz
 Date: 29.JUN.2010 13:03:56

Test Report No.: G0M21005-3245-P-15

Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

**RSS Gen
Occupied Bandwidth**

EUT	Bluetooth Handsfree Car Kit
Model	Audio 2010
Approval Holder	Funkwerk Dabendorf GmbH
Temperature / Voltage	23°C / Vnom
Test Site / Operator	Eurofins Product Service GmbH / Mr. Treffke
Test Specification	4.4.1 Occupied Bandwidth
Comment 1	Channel.: 39 / 2441 MHz
Comment 2	A spectrum analyzer with an integrated 99% power bandwidth function is used
Comment 3	



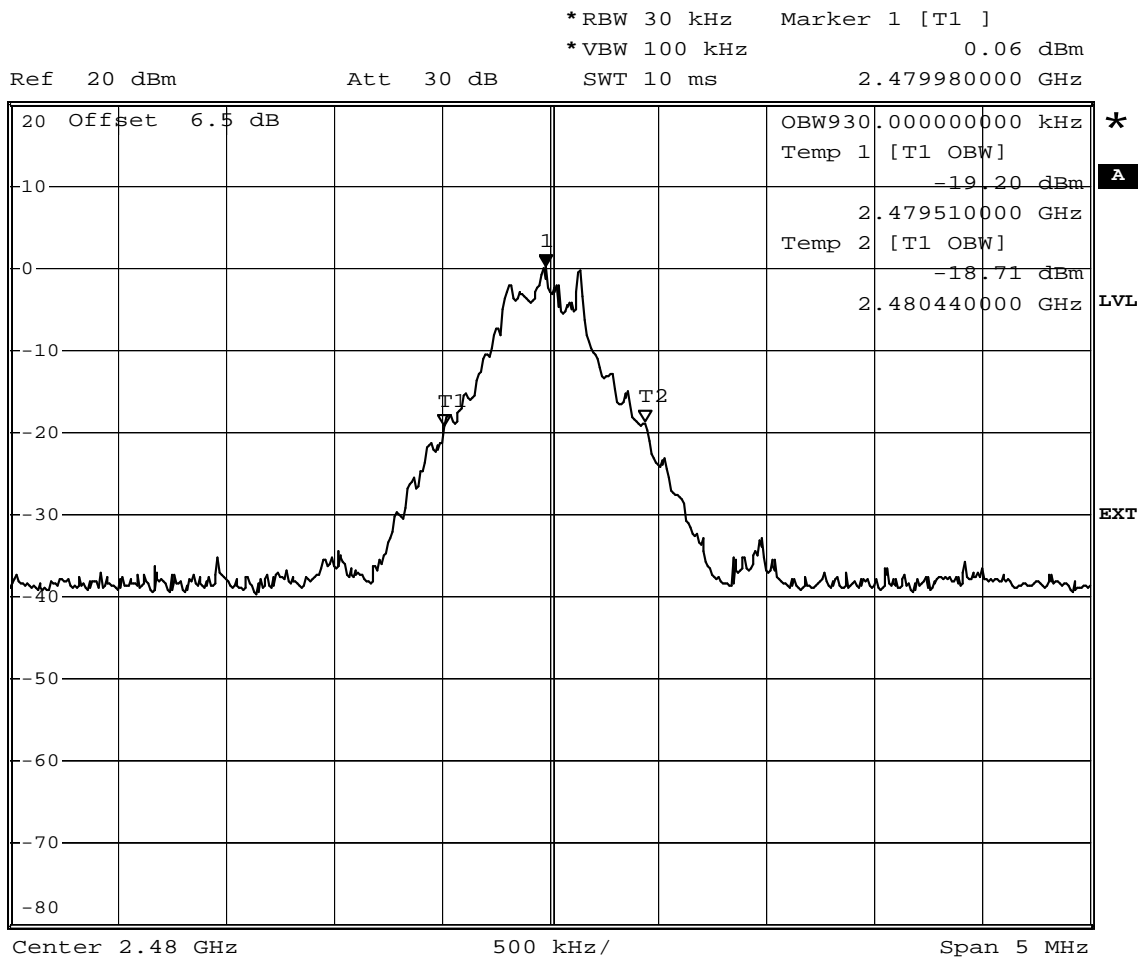
Comment: Occupied bandwidth: 920 KHz
 Date: 29.JUN.2010 13:06:52

 Test Report No.: G0M21005-3245-P-15

 Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

**RSS Gen
Occupied Bandwidth**

EUT Bluetooth Handsfree Car Kit
 Model Audio 2010
 Approval Holder Funkwerk Dabendorf GmbH
 Temperature / Voltage 23°C / Vnom
 Test Site / Operator Eurofins Product Service GmbH / Mr. Treffke
 Test Specification 4.4.1 Occupied Bandwidth
 Comment 1 Channel.: 78 / 2480 MHz
 Comment 2 A spectrum analyzer with an integrated 99% power bandwidth function is used
 Comment 3



Comment: Occupied bandwidth: 930 KHz
 Date: 29.JUN.2010 13:09:40

Test Report No.: G0M21005-3245-P-15

Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

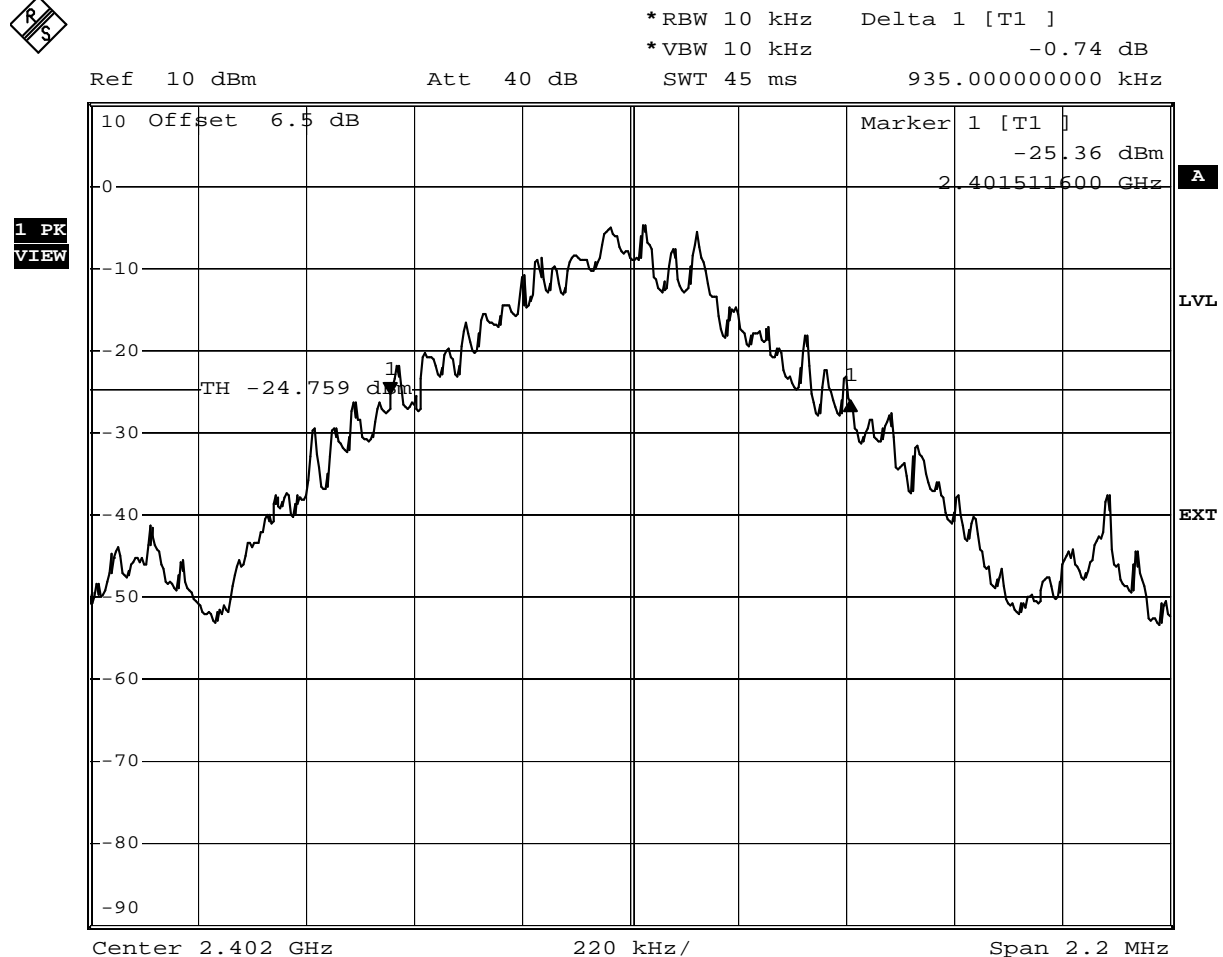
Annex J Receiver radiated spurious emissions

No spurious emission have been observed. Due to the fact that all measured frequency ranges are spurious free the plots have been omitted.

Annex C Transmitter 20dB bandwidth

FCC part 15.247
20 dB bandwidth

EUT	Bluetooth Handsfree Car Kit
Model	Audio 2010
Approval Holder	Funkwerk Dabendorf GmbH
Temperature / Voltage	23°C / Vnom
Test Site / Operator	Eurofins Product Service GmbH / Mr. Treffke
Test Specification	FCC part 15 section 247(a)
Comment 1	20 dB bandwidth
Comment 2	Channel.: 0 / 2402 MHz / GFSK
Comment 3	



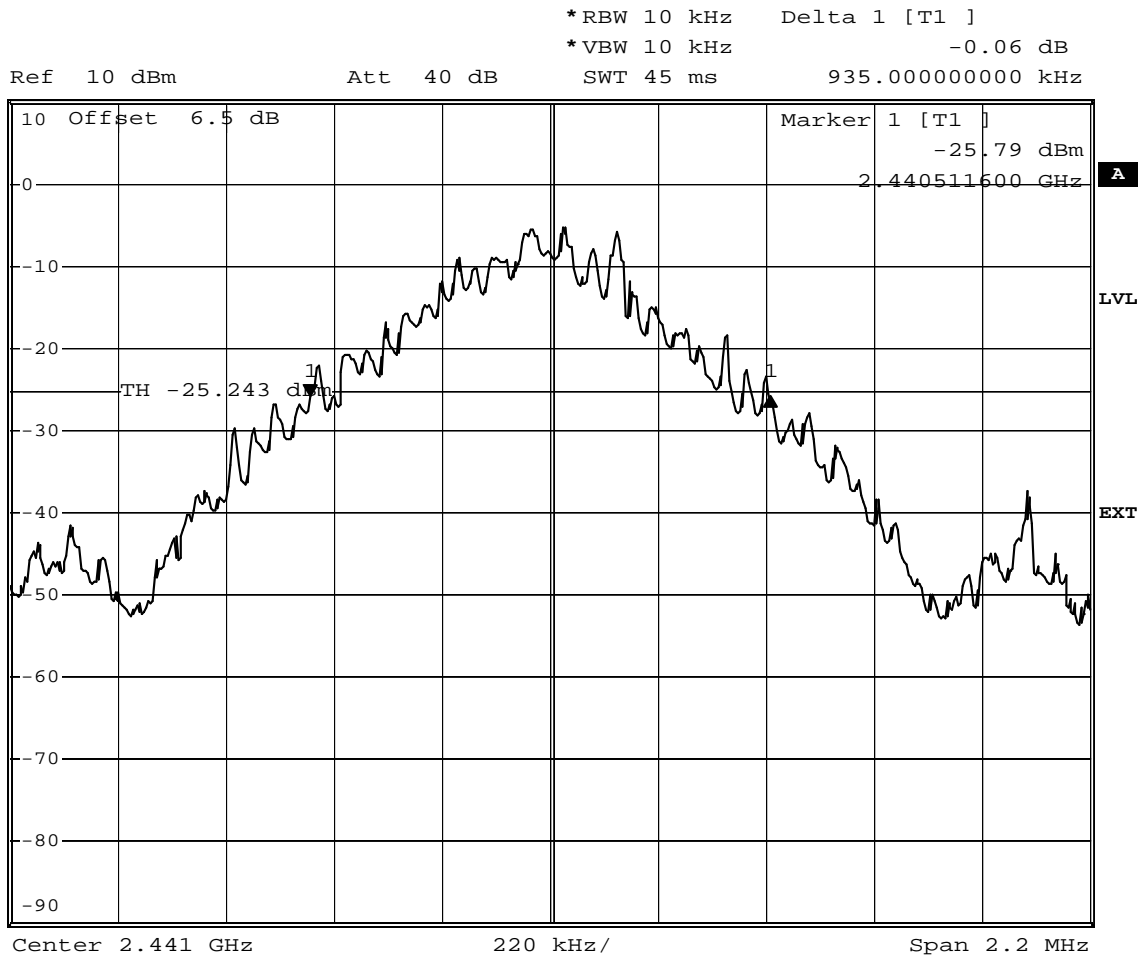
Comment: 20 dB bandwidth: 935 KHz
Date: 29.JUN.2010 10:04:51

Test Report No.: G0M21005-3245-P-15

Eurofins Product Service GmbH
Storkower Str. 38c, D-15526 Reichenwalde, Germany

FCC part 15.247
20 dB bandwidth

EUT	Bluetooth Handsfree Car Kit
Model	Audio 2010
Approval Holder	Funkwerk Dabendorf GmbH
Temperature / Voltage	23°C / Vnom
Test Site / Operator	Eurofins Product Service GmbH / Mr. Treffke
Test Specification	FCC part 15 section 247(a)
Comment 1	20 dB bandwidth
Comment 2	Channel.: 39 / 2441 MHz
Comment 3	



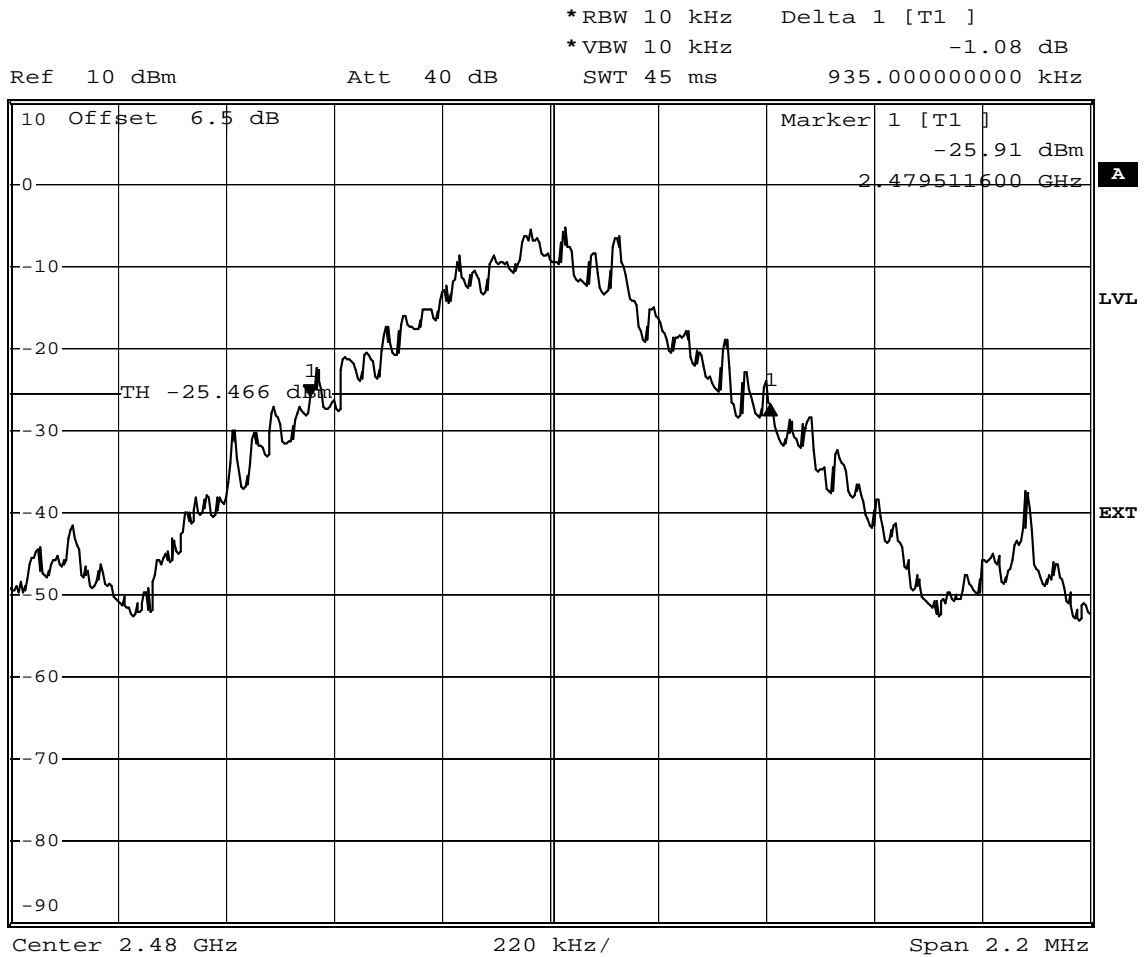
Comment: 20 dB bandwidth: 935 KHz
 Date: 29.JUN.2010 10:06:27

Test Report No.: G0M21005-3245-P-15

Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

FCC part 15.247
20 dB bandwidth

EUT	Bluetooth Handsfree Car Kit
Model	Audio 2010
Approval Holder	Funkwerk Dabendorf GmbH
Temperature / Voltage	23°C / Vnom
Test Site / Operator	Eurofins Product Service GmbH / Mr. Treffke
Test Specification	FCC part 15 section 247(a)
Comment 1	20 dB bandwidth
Comment 2	Channel.: 78 / 2480 MHz
Comment 3	



Comment: 20 dB bandwidth: 935 KHz
Date: 29.JUN.2010 10:08:09

Test Report No.: G0M21005-3245-P-15

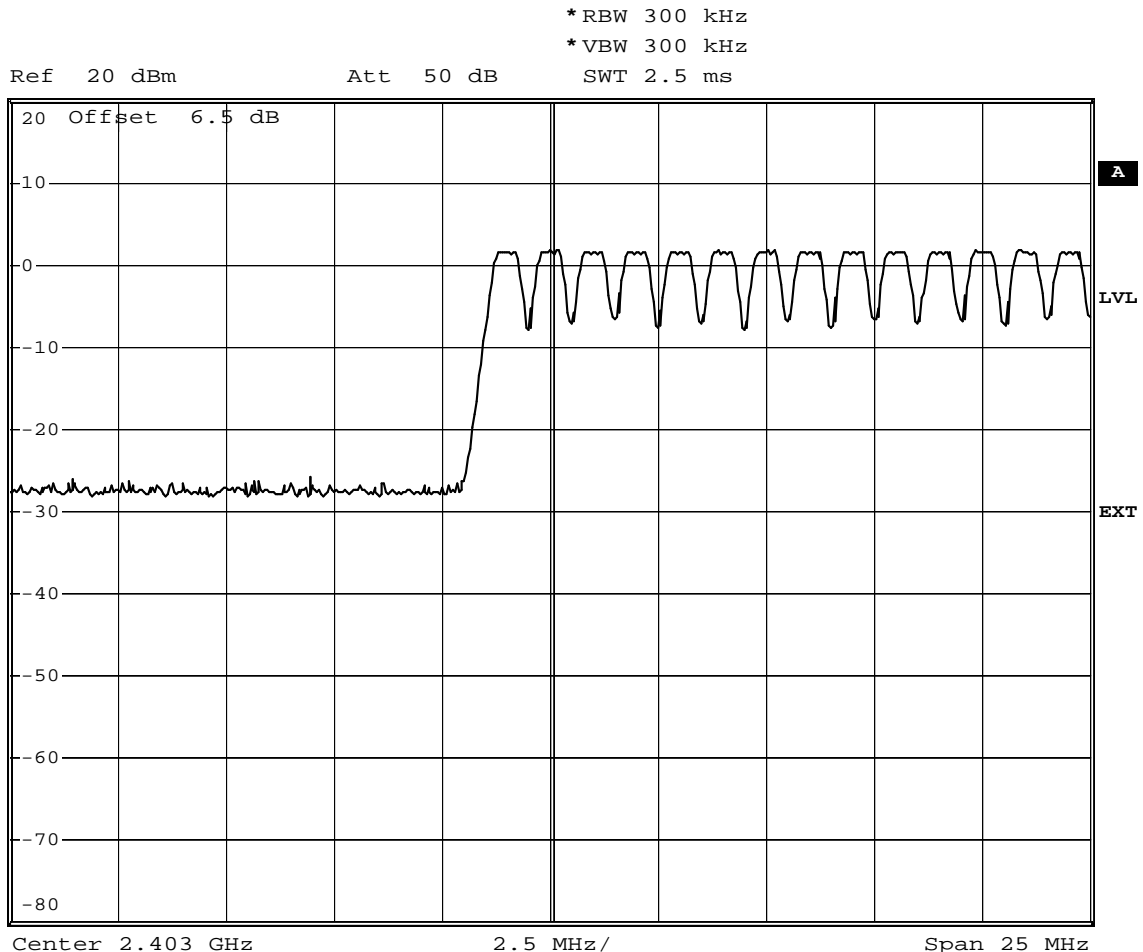
Eurofins Product Service GmbH
Storkower Str. 38c, D-15526 Reichenwalde, Germany

Annex D Hopping channels

FCC part 15.247

Number of hopping frequencies

EUT	Bluetooth Handsfree Car Kit
Model	Audio 2010
Approval Holder	Funkwerk Dabendorf GmbH
Temperature / Voltage	23°C / Vnom
Test Site / Operator	Eurofins Product Service GmbH / Mr. Treffke
Test Specification	FCC part 15 section 247(a)
Comment 1	Number of hopping frequencies
Comment 2	Channel.: 0-13
Comment 3	



Comment: Number of hopping frequencies

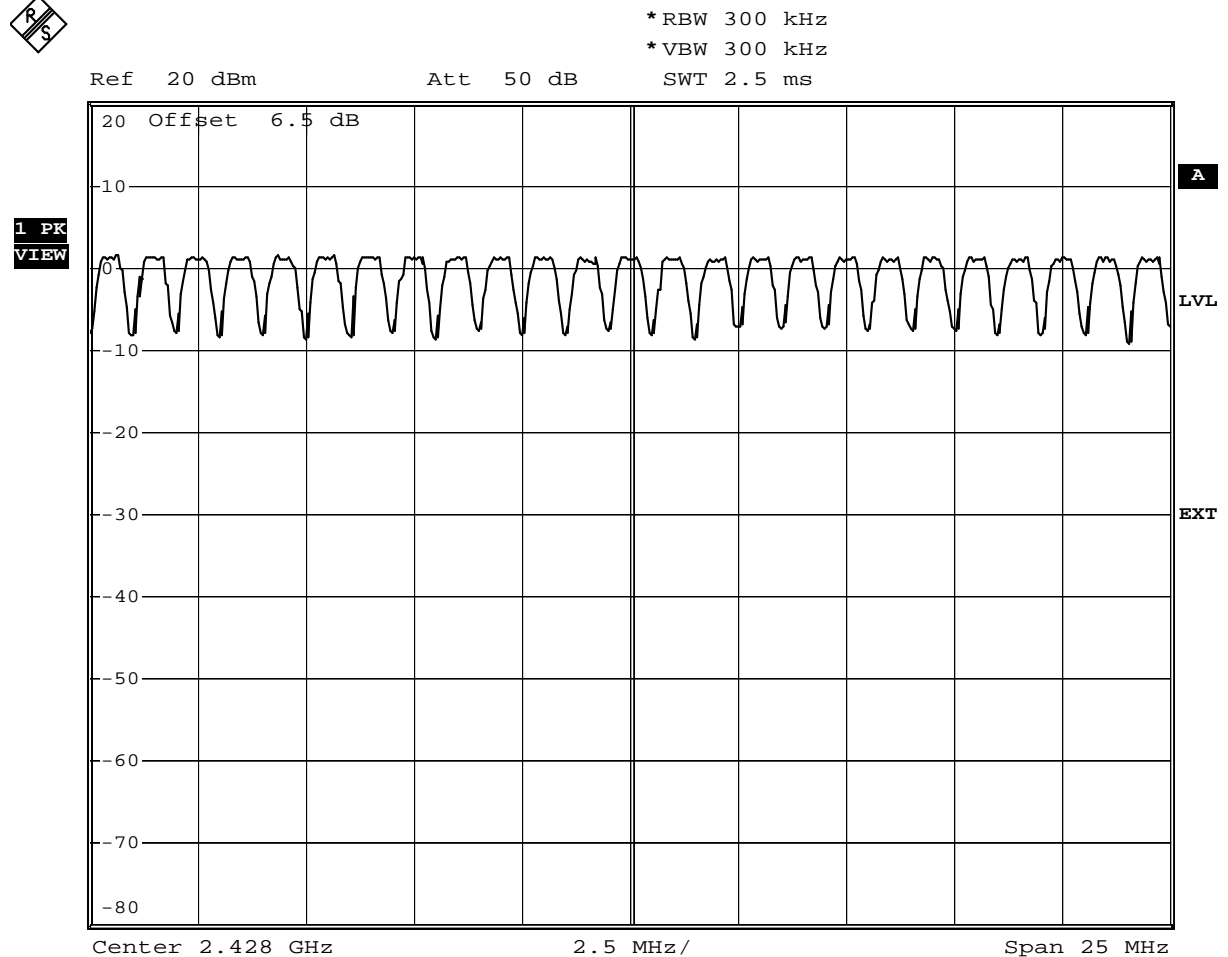
Date: 29.JUN.2010 12:23:49

Test Report No.: G0M21005-3245-P-15

Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

FCC part 15.247
Number of hopping frequencies

EUT	Bluetooth Handsfree Car Kit
Model	Audio 2010
Approval Holder	Funkwerk Dabendorf GmbH
Temperature / Voltage	23°C / Vnom
Test Site / Operator	Eurofins Product Service GmbH / Mr. Treffke
Test Specification	FCC part 15 section 247(a)
Comment 1	Number of hopping frequencies
Comment 2	Channel.: 14-38
Comment 3	



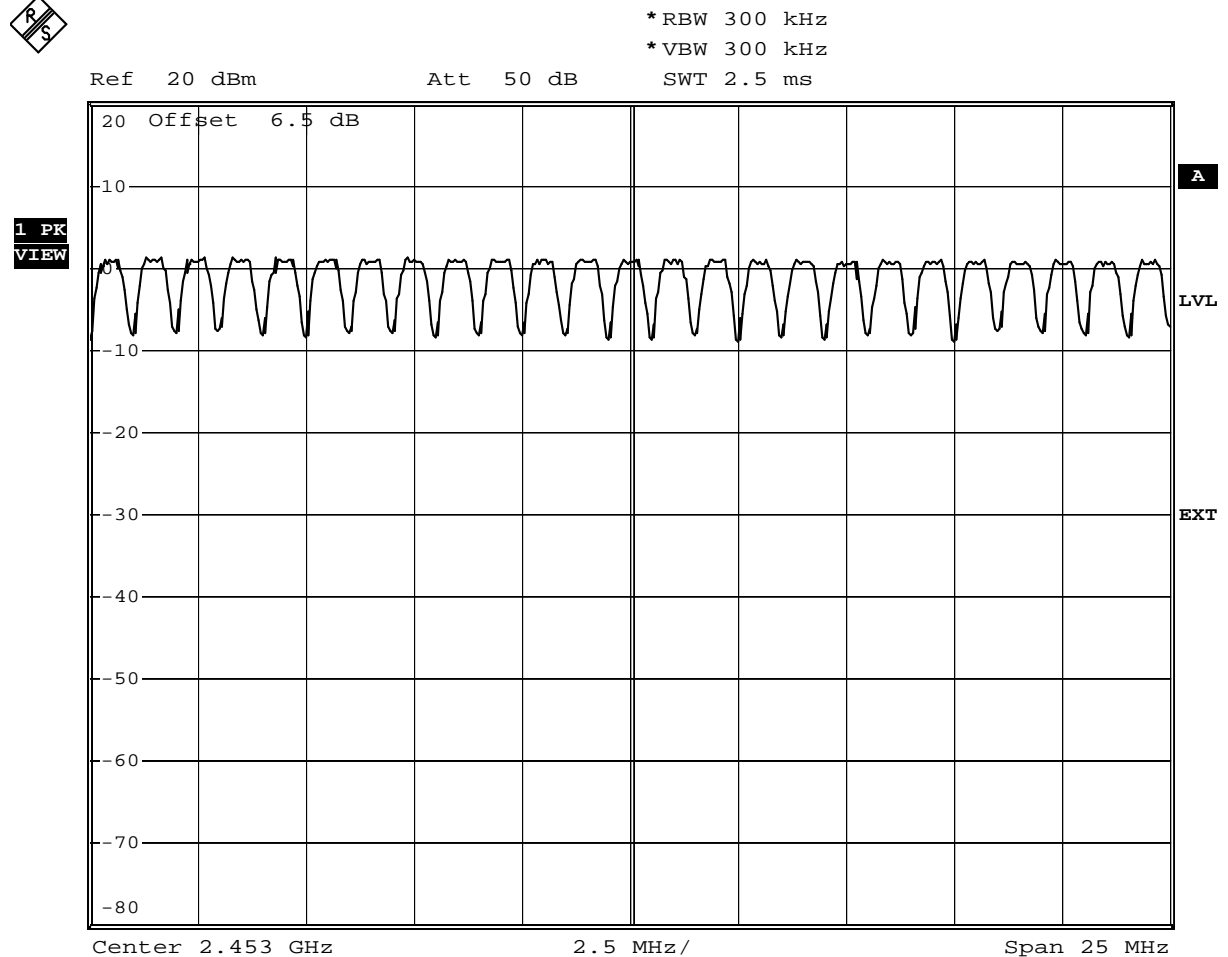
Comment: Number of hopping frequencies
Date: 29.JUN.2010 12:25:20

Test Report No.: G0M21005-3245-P-15

Eurofins Product Service GmbH
Storkower Str. 38c, D-15526 Reichenwalde, Germany

FCC part 15.247
Number of hopping frequencies

EUT	Bluetooth Handsfree Car Kit
Model	Audio 2010
Approval Holder	Funkwerk Dabendorf GmbH
Temperature / Voltage	23°C / Vnom
Test Site / Operator	Eurofins Product Service GmbH / Mr. Treffke
Test Specification	FCC part 15 section 247(a)
Comment 1	Number of hopping frequencies
Comment 2	Channel.:39-63
Comment 3	



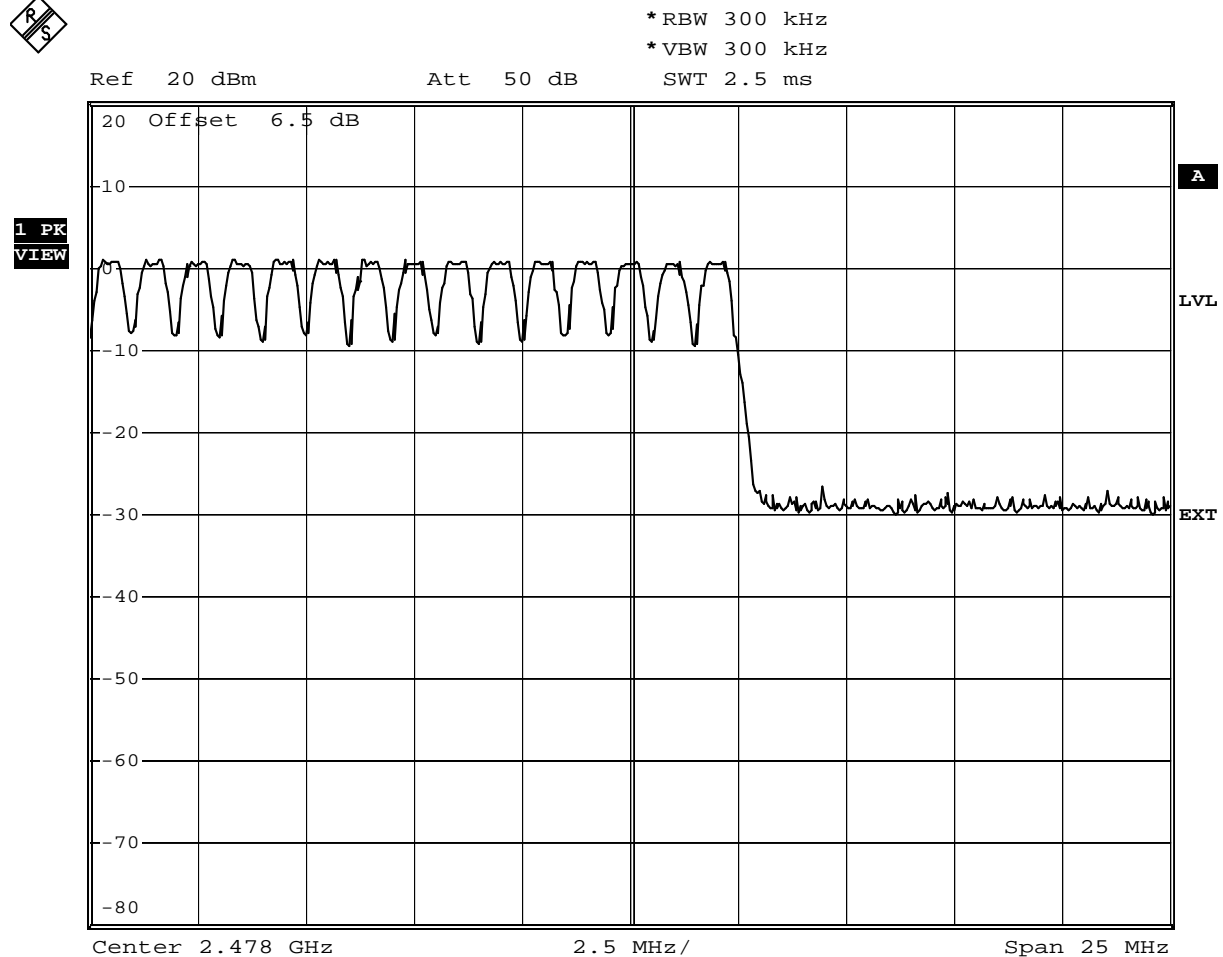
Comment: Number of hopping frequencies
Date: 29.JUN.2010 12:27:07

Test Report No.: G0M21005-3245-P-15

Eurofins Product Service GmbH
Storkower Str. 38c, D-15526 Reichenwalde, Germany

FCC part 15.247
Number of hopping frequencies

EUT	Bluetooth Handsfree Car Kit
Model	Audio 2010
Approval Holder	Funkwerk Dabendorf GmbH
Temperature / Voltage	23°C / Vnom
Test Site / Operator	Eurofins Product Service GmbH / Mr. Treffke
Test Specification	FCC part 15 section 247(a)
Comment 1	Number of hopping frequencies
Comment 2	Channel.: 64-78
Comment 3	



Comment: Number of hopping frequencies
 Date: 29.JUN.2010 12:30:05

Test Report No.: G0M21005-3245-P-15

Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Annex E Hopping channel separation

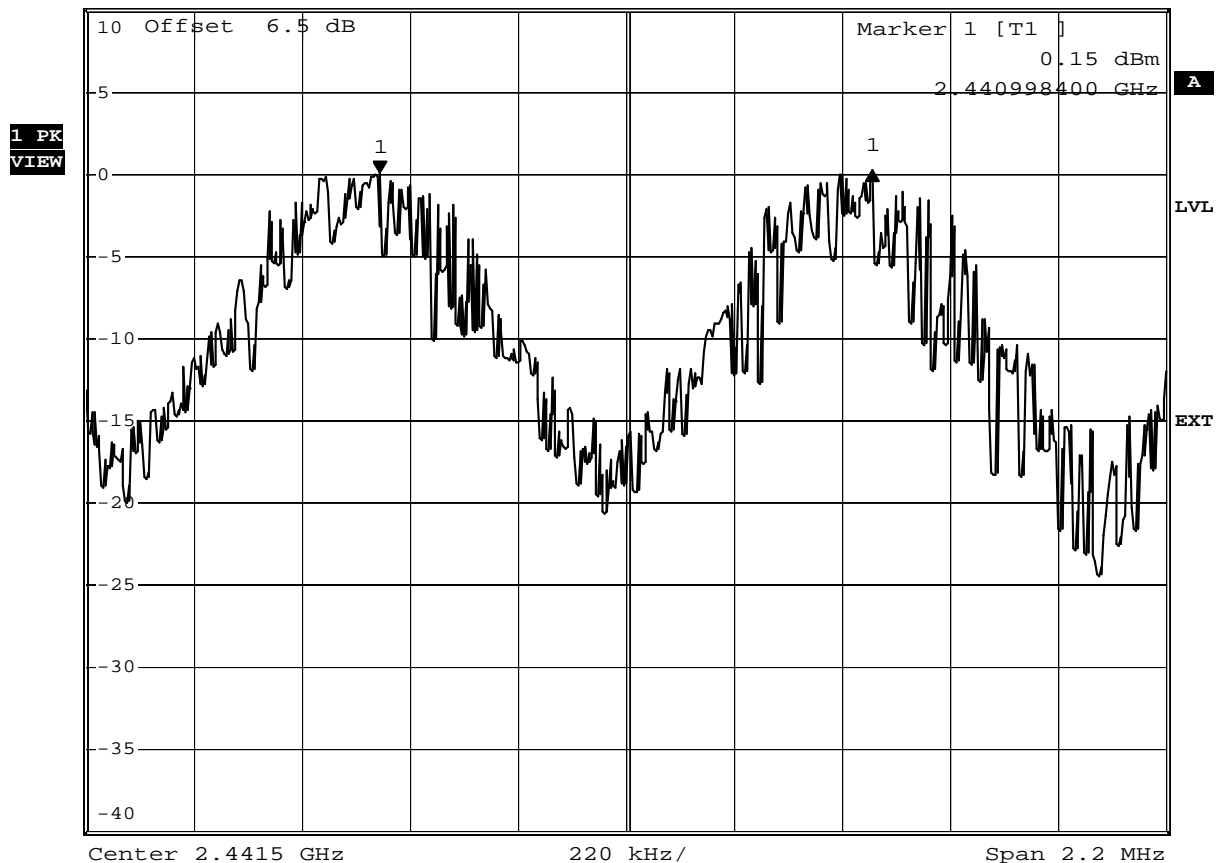
FCC part 15.247

Carrier frequency separation

EUT	Bluetooth Handsfree Car Kit
Model	Audio 2010
Approval Holder	Funkwerk Dabendorf GmbH
Temperature / Voltage	23°C / Vnom
Test Site / Operator	Eurofins Product Service GmbH / Mr. Treffke
Test Specification	FCC part 15 section 247(a)(1)
Comment 1	Carrier frequency separation
Comment 2	Channel.: 39/40 / 2441/2442 MHz
Comment 3	Hopping mode



*RBW 100 kHz Delta 1 [T1]
 *VBW 100 kHz 0.01 dB
 Ref 10 dBm Att 40 dB SWT 2.5 ms 1.003200000 MHz



Comment: Limit: > two-thirds of the 20 dB bandwidth ; Result: Pass

Date: 29.JUN.2010 11:42:19

Test Report No.: G0M21005-3245-P-15

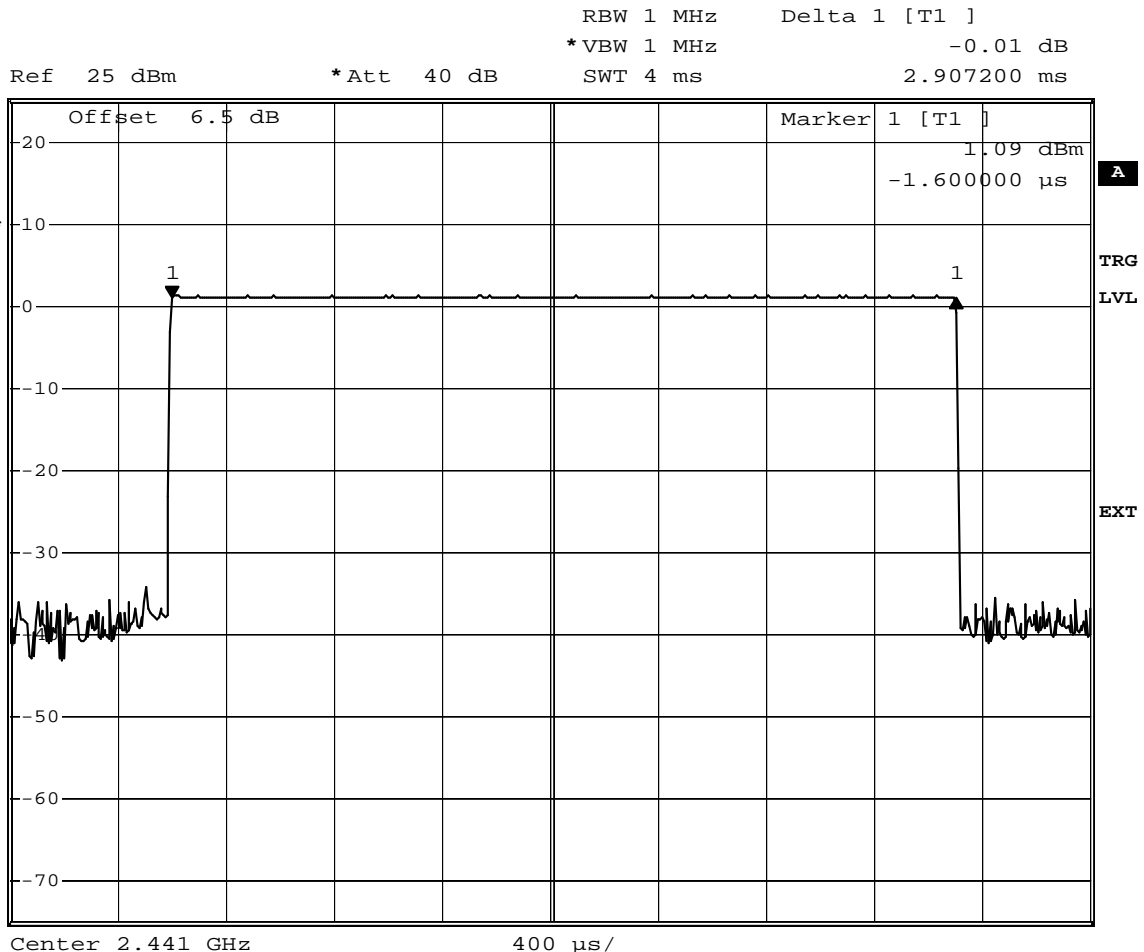
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Annex F Time of occupancy

FCC part 15.247

Time of occupancy (dwell time)

EUT	Bluetooth Handsfree Car Kit
Model	Audio 2010
Approval Holder	Funkwerk Dabendorf GmbH
Temperature / Voltage	23°C / Vnom
Test Site / Operator	Eurofins Product Service GmbH / Mr. Treffke
Test Specification	FCC part 15 section 247(a)
Comment 1	Time of occupancy
Comment 2	Channel.: 39 / 2441 MHz (Hopping mode)
Comment 3	64 events * 2.907 ms result: 186 ms



Comment: Burst length=2.9072 ms
 Date: 29.JUN.2010 13:15:07

Test Report No.: G0M21005-3245-P-15

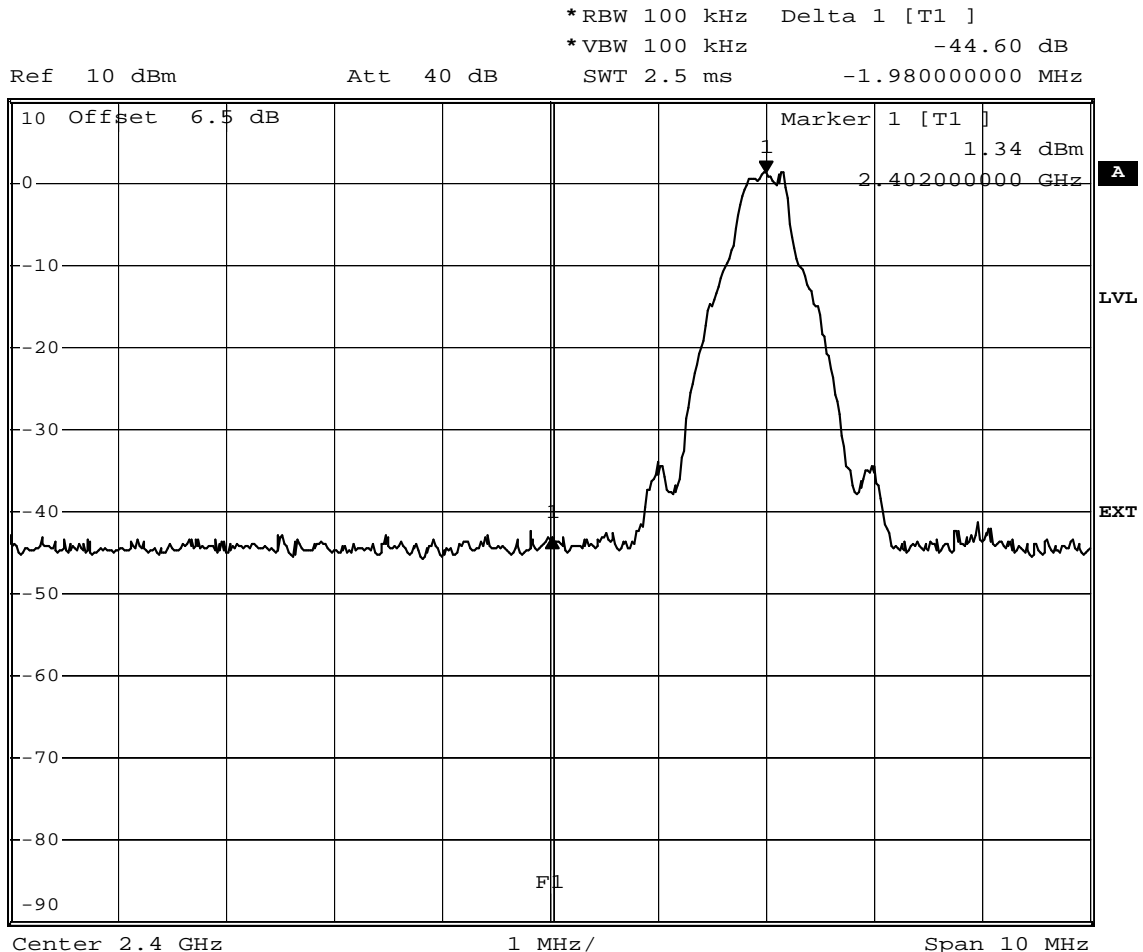
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Annex G Band edge compliance

FCC part 15.247

Band-edge compliance of RF conducted emissions

EUT	Bluetooth Handsfree Car Kit
Model	Audio 2010
Approval Holder	Funkwerk Dabendorf GmbH
Temperature / Voltage	23°C / Vnom
Test Site / Operator	Eurofins Product Service GmbH / Mr. Treffke
Test Specification	FCC part 15 section 247(c)
Comment 1	Band-edge compliance
Comment 2	Channel.: 0 / 2402 MHz
Comment 3	Single frequency mode



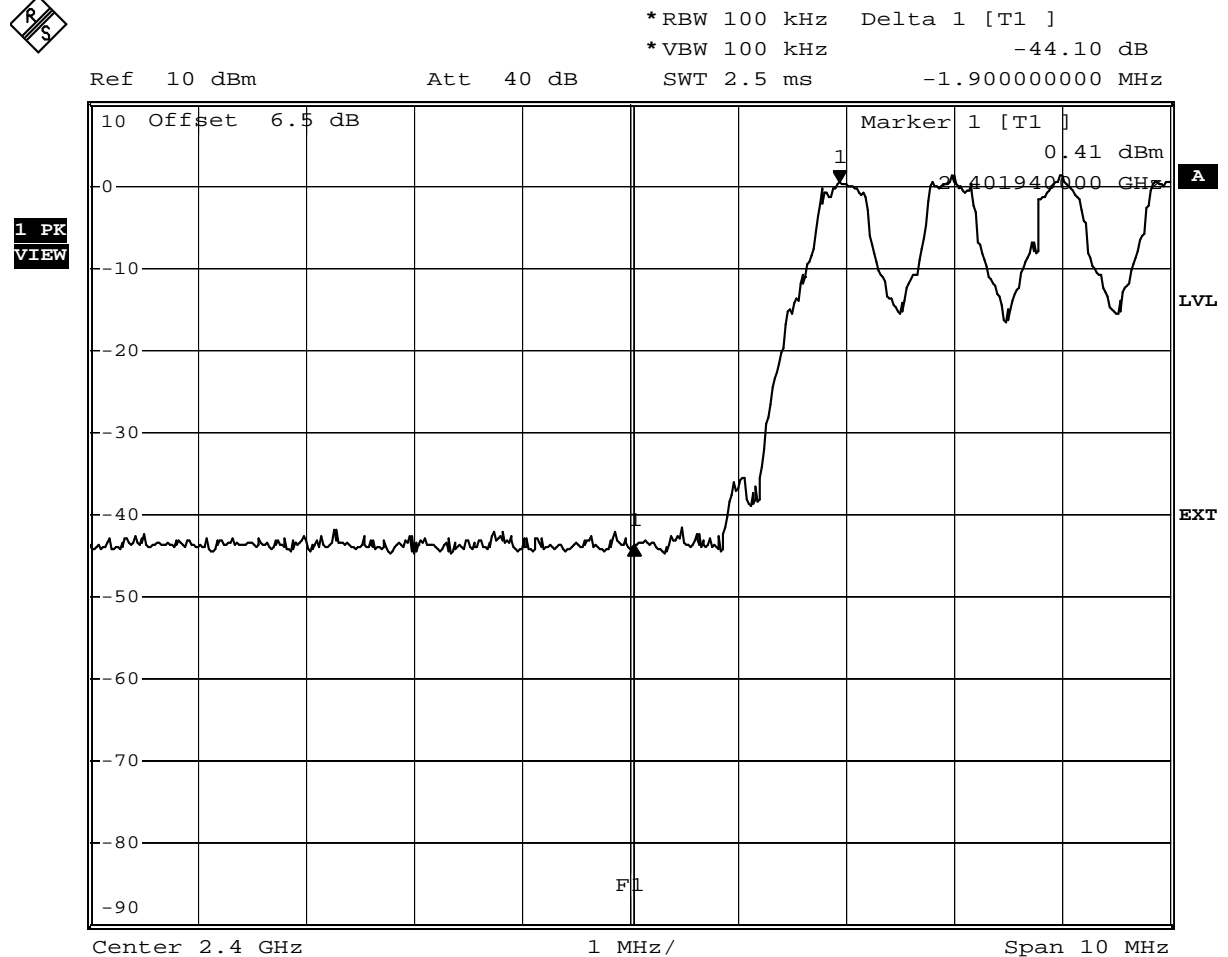
Comment: Limit: Marker Delta value >20 dB; Result: PASS
 Date: 29.JUN.2010 10:12:02

Test Report No.: G0M21005-3245-P-15

Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

FCC part 15.247
Band-edge compliance of RF conducted emissions

EUT	Bluetooth Handsfree Car Kit
Model	Audio 2010
Approval Holder	Funkwerk Dabendorf GmbH
Temperature / Voltage	23°C / Vnom
Test Site / Operator	Eurofins Product Service GmbH / Mr. Treffke
Test Specification	FCC part 15 section 247(c)
Comment 1	Band-edge compliance
Comment 2	Channel.: 0 / 2402 MHz
Comment 3	Hopping mode



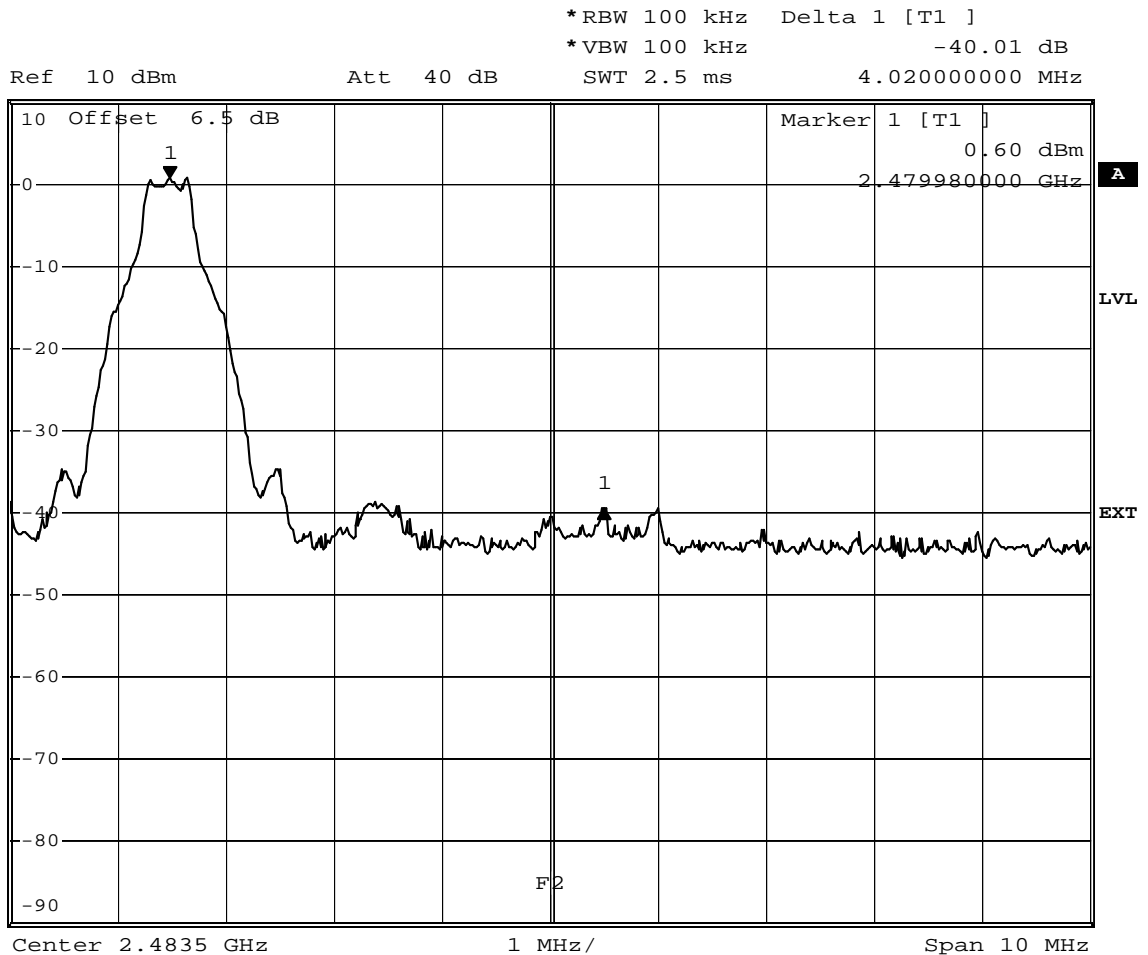
Comment: Limit: Marker Delta value >20 dB; Result: PASS
 Date: 29.JUN.2010 10:21:16

 Test Report No.: G0M21005-3245-P-15

 Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

FCC part 15.247
Band-edge compliance of RF conducted emissions

EUT	Bluetooth Handsfree Car Kit
Model	Audio 2010
Approval Holder	Funkwerk Dabendorf GmbH
Temperature / Voltage	23°C / Vnom
Test Site / Operator	Eurofins Product Service GmbH / Mr. Treffke
Test Specification	FCC part 15 section 247(c)
Comment 1	Band-edge compliance
Comment 2	Channel.: 78 / 2480 MHz
Comment 3	Single frequency mode



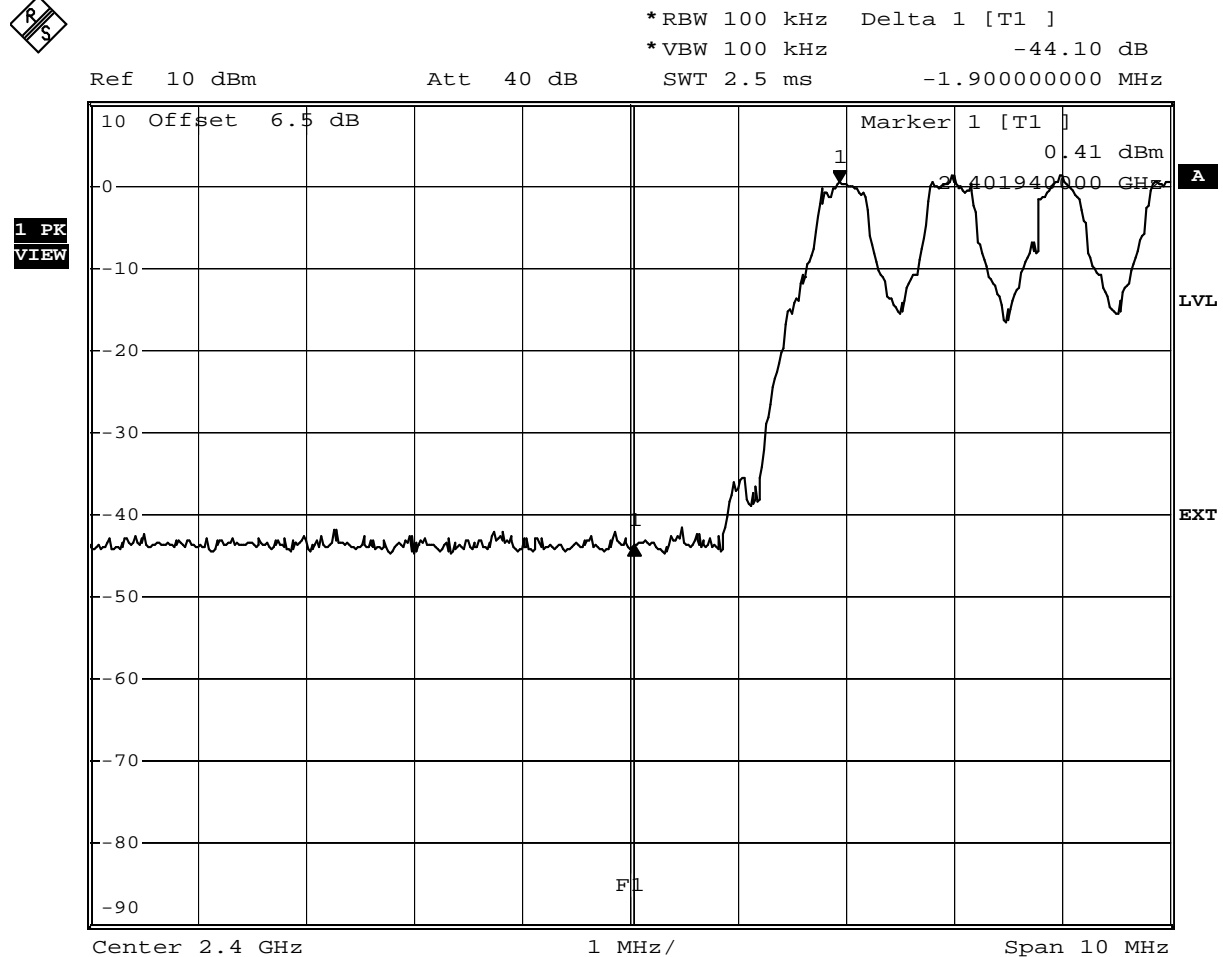
Comment: Limit: Marker Delta value >20 dB; Result: PASS
 Date: 29.JUN.2010 10:14:01

 Test Report No.: G0M21005-3245-P-15

 Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

FCC part 15.247
Band-edge compliance of RF conducted emissions

EUT	Bluetooth Handsfree Car Kit
Model	Audio 2010
Approval Holder	Funkwerk Dabendorf GmbH
Temperature / Voltage	23°C / Vnom
Test Site / Operator	Eurofins Product Service GmbH / Mr. Treffke
Test Specification	FCC part 15 section 247(c)
Comment 1	Band-edge compliance
Comment 2	Channel.: 78 / 2480 MHz
Comment 3	Hopping mode



Comment: Limit: Marker Delta value >20 dB; Result: PASS
 Date: 29.JUN.2010 10:39:02

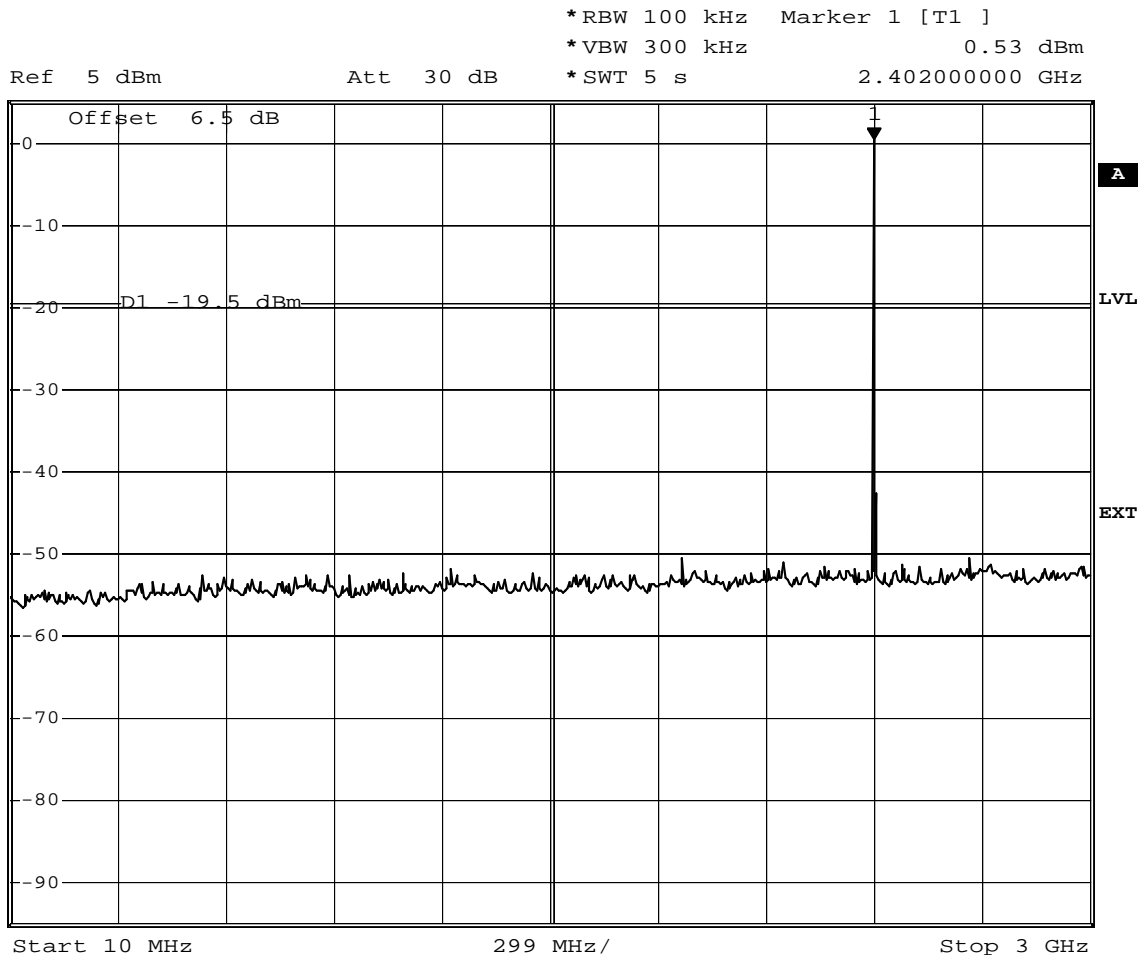
 Test Report No.: G0M21005-3245-P-15

 Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Annex H Transmitter conducted spurious emissions

FCC part 15.247 (d) Spurious Emissions

EUT	Bluetooth Handsfree Car Kit
Model	Audio 2010
Approval Holder	Funkwerk Dabendorf GmbH
Temperature / Voltage	23°C / Vnom
Test Site / Operator	Eurofins Product Service GmbH / Mr. Treffke
Test Specification	FCC part 15.247 (d)
Comment 1	Spurious Emissions conducted
Comment 2	Channel : 2402 MHz
Comment 3	GFSK / DH5



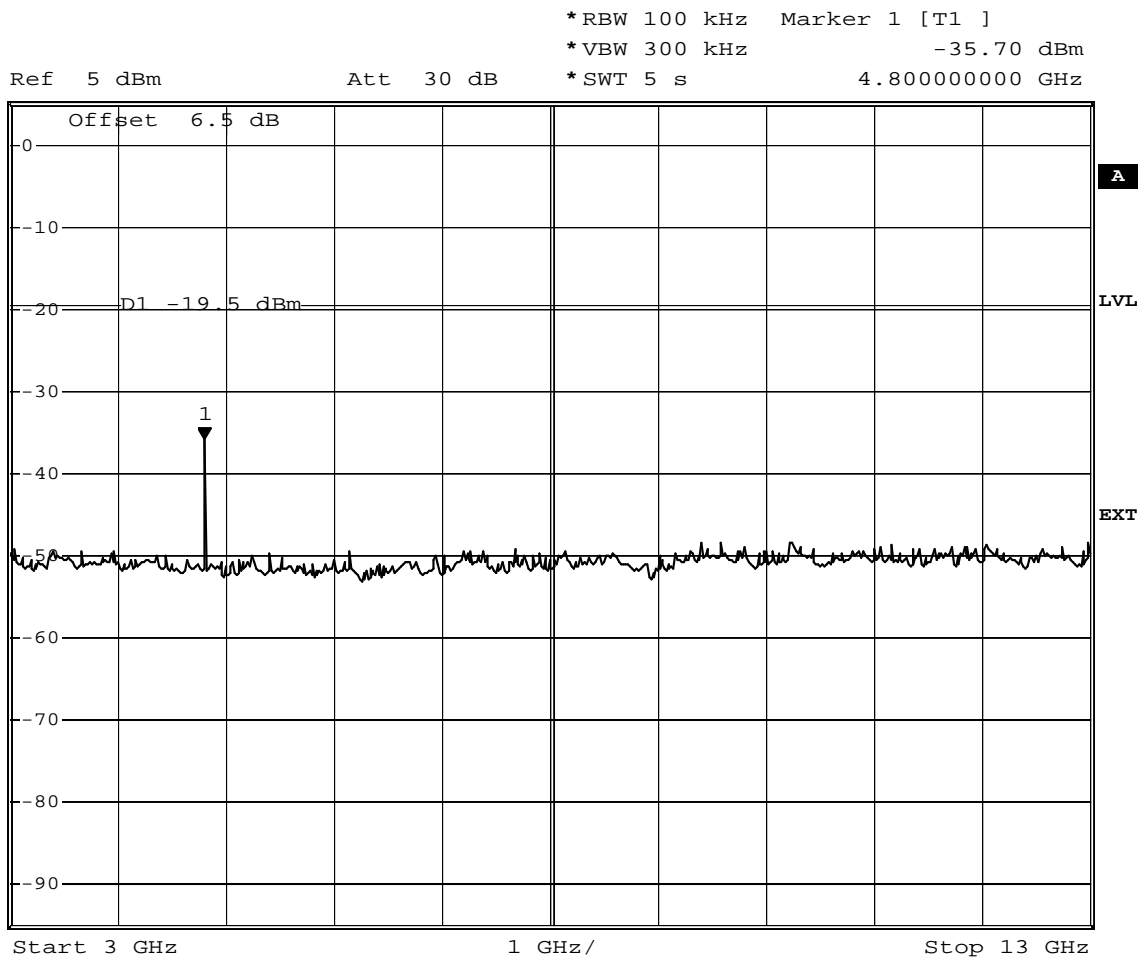
Date: 29.JUN.2010 13:29:34

Test Report No.: G0M21005-3245-P-15

Eurofins Product Service GmbH
Storkower Str. 38c, D-15526 Reichenwalde, Germany

**FCC part 15.247 (d)
Spurious Emissions**

EUT	Bluetooth Handsfree Car Kit
Model	Audio 2010
Approval Holder	Funkwerk Dabendorf GmbH
Temperature / Voltage	23°C / Vnom
Test Site / Operator	Eurofins Product Service GmbH / Mr. Treffke
Test Specification	FCC part 15.247 (d)
Comment 1	Spurious Emissions conducted
Comment 2	Channel : 2402 MHz
Comment 3	GFSK / DH5



Date: 29.JUN.2010 13:37:47

Test Report No.: G0M21005-3245-P-15

 Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

**FCC part 15.247 (d)
Spurious Emissions**

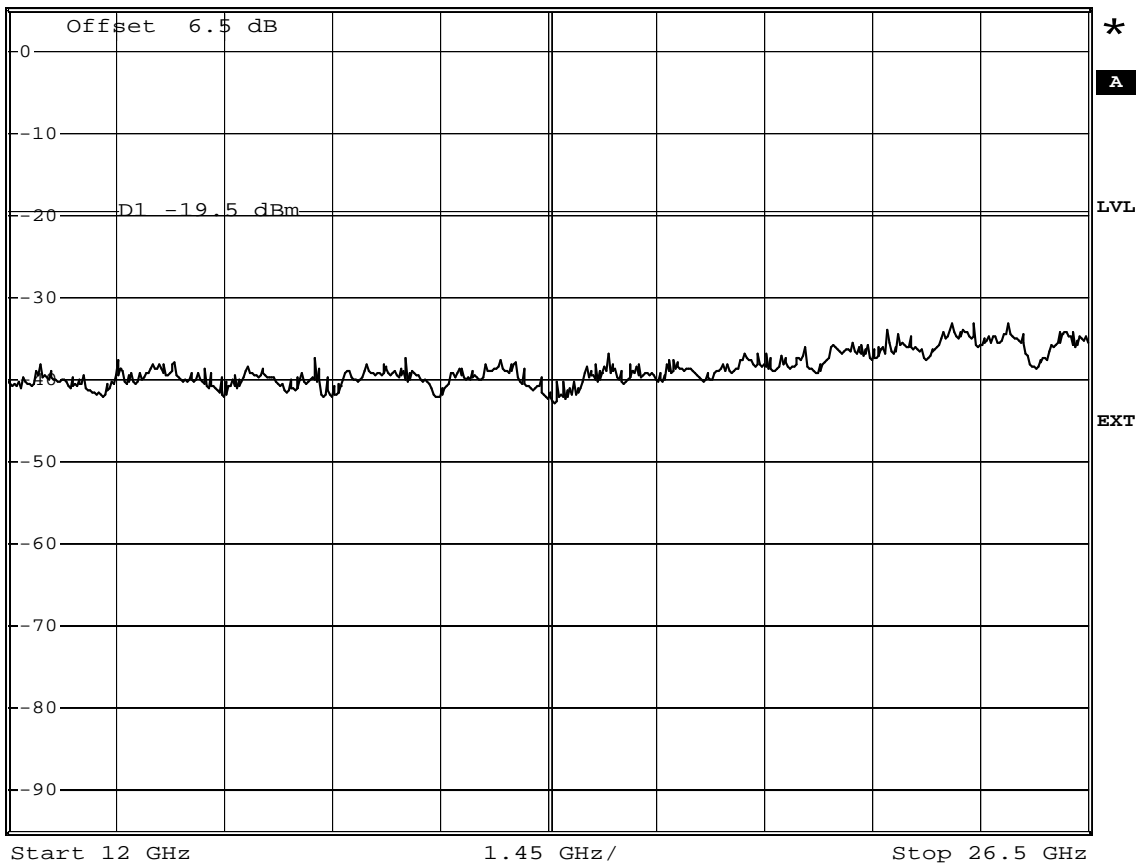
EUT	Bluetooth Handsfree Car Kit
Model	Audio 2010
Approval Holder	Funkwerk Dabendorf GmbH
Temperature / Voltage	23°C / Vnom
Test Site / Operator	Eurofins Product Service GmbH / Mr. Treffke
Test Specification	FCC part 15.247 (d)
Comment 1	Spurious Emissions conducted
Comment 2	Channel : 2402 MHz
Comment 3	GFSK / DH5



*RBW 100 kHz
*VBW 300 kHz
*SWT 5 s

Ref 5 dBm

Att 30 dB

**1 PK
VIEW**


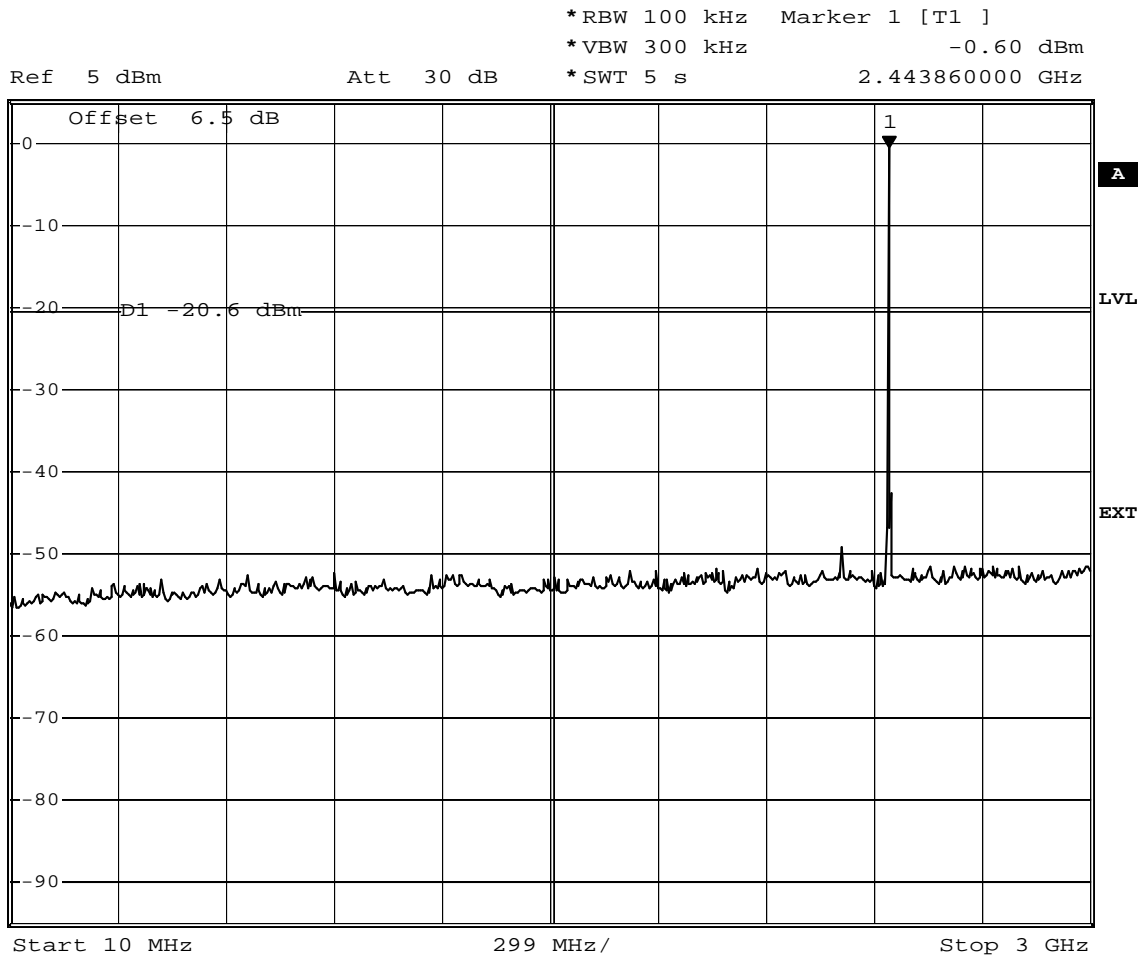
Date: 29.JUN.2010 13:39:30

Test Report No.: G0M21005-3245-P-15

 Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

**FCC part 15.247 (d)
Spurious Emissions**

EUT	Bluetooth Handsfree Car Kit
Model	Audio 2010
Approval Holder	Funkwerk Dabendorf GmbH
Temperature / Voltage	23°C / Vnom
Test Site / Operator	Eurofins Product Service GmbH / Mr. Treffke
Test Specification	FCC part 15.247 (d)
Comment 1	Spurious Emissions conducted
Comment 2	Channel : 2441 MHz
Comment 3	GFSK / DH5



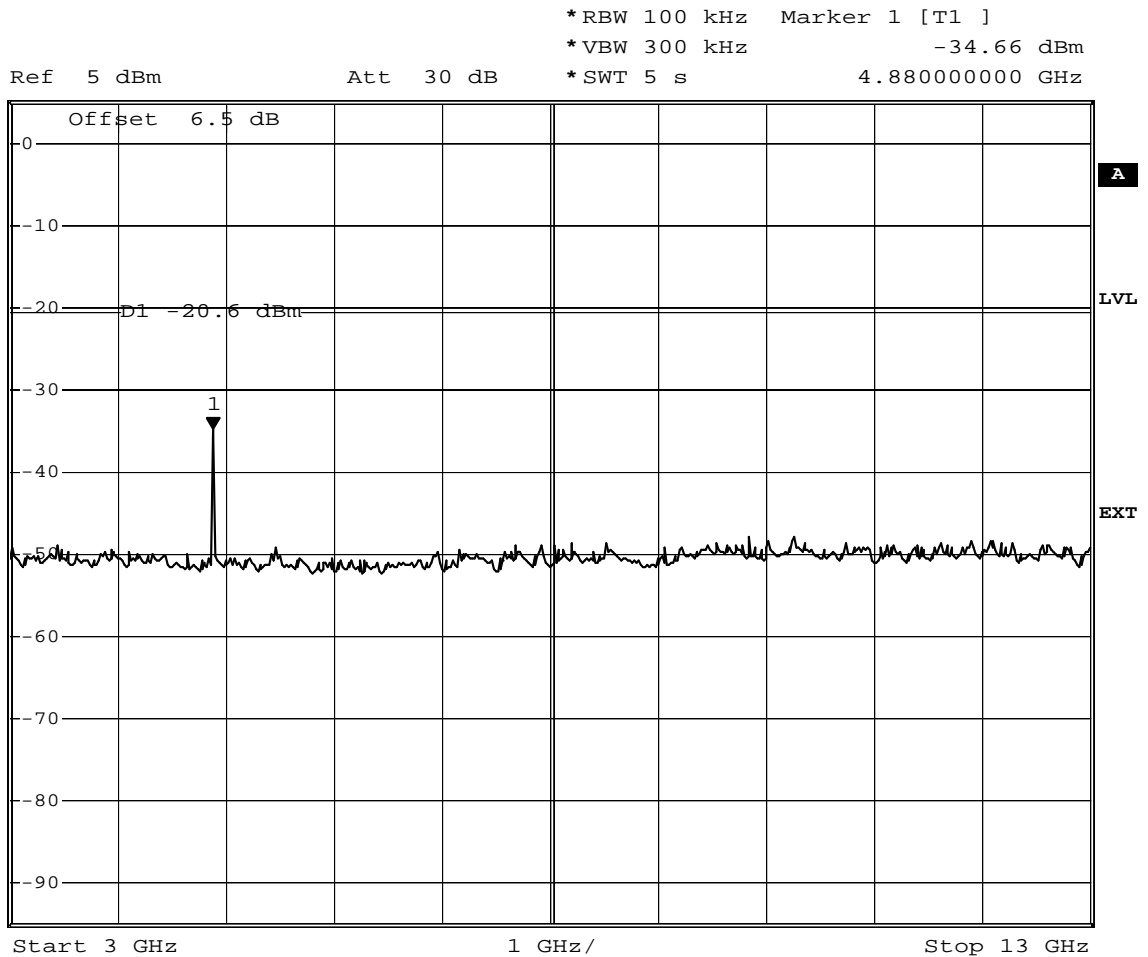
Date: 29.JUN.2010 13:41:28

Test Report No.: G0M21005-3245-P-15

 Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

**FCC part 15.247 (d)
Spurious Emissions**

EUT	Bluetooth Handsfree Car Kit
Model	Audio 2010
Approval Holder	Funkwerk Dabendorf GmbH
Temperature / Voltage	23°C / Vnom
Test Site / Operator	Eurofins Product Service GmbH / Mr. Treffke
Test Specification	FCC part 15.247 (d)
Comment 1	Spurious Emissions conducted
Comment 2	Channel : 2441 MHz
Comment 3	GFSK / DH5



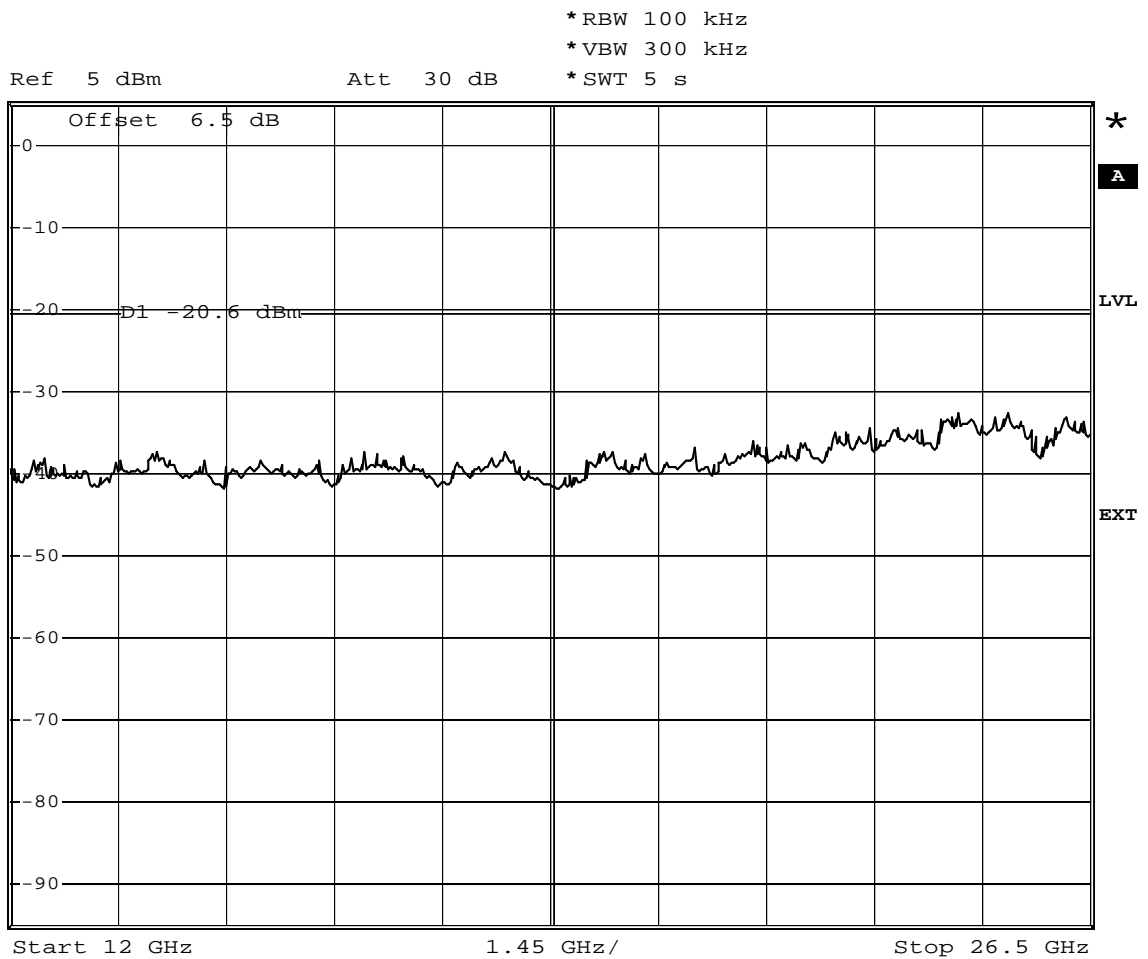
Date: 29.JUN.2010 13:42:47

Test Report No.: G0M21005-3245-P-15

 Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

**FCC part 15.247 (d)
Spurious Emissions**

EUT	Bluetooth Handsfree Car Kit
Model	Audio 2010
Approval Holder	Funkwerk Dabendorf GmbH
Temperature / Voltage	23°C / Vnom
Test Site / Operator	Eurofins Product Service GmbH / Mr. Treffke
Test Specification	FCC part 15.247 (d)
Comment 1	Spurious Emissions conducted
Comment 2	Channel : 2441 MHz
Comment 3	GFSK / DH5



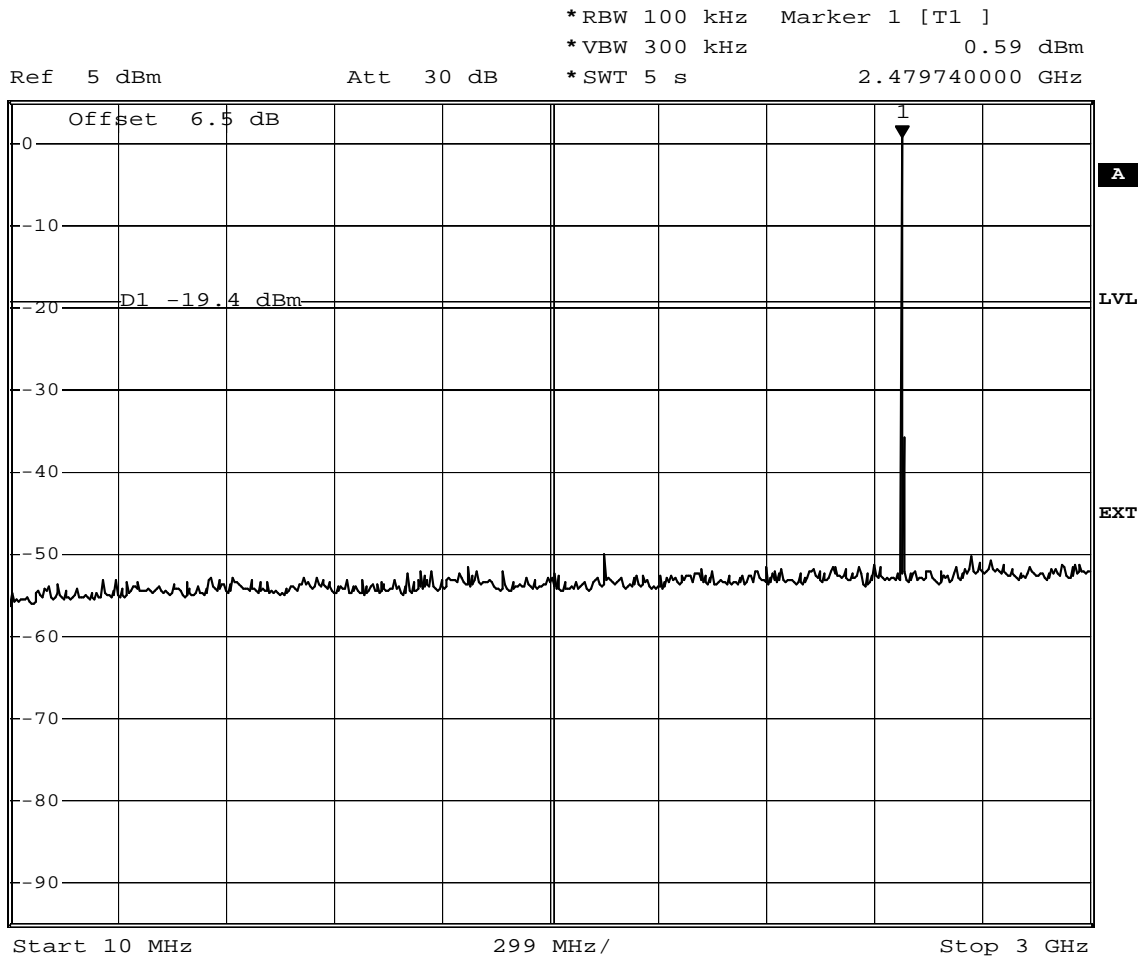
Date: 29.JUN.2010 13:44:01

Test Report No.: G0M21005-3245-P-15

Eurofins Product Service GmbH
Storkower Str. 38c, D-15526 Reichenwalde, Germany

**FCC part 15.247 (d)
Spurious Emissions**

EUT	Bluetooth Handsfree Car Kit
Model	Audio 2010
Approval Holder	Funkwerk Dabendorf GmbH
Temperature / Voltage	23°C / Vnom
Test Site / Operator	Eurofins Product Service GmbH / Mr. Treffke
Test Specification	FCC part 15.247 (d)
Comment 1	Spurious Emissions conducted
Comment 2	Channel : 2480 MHz
Comment 3	GFSK / DH5



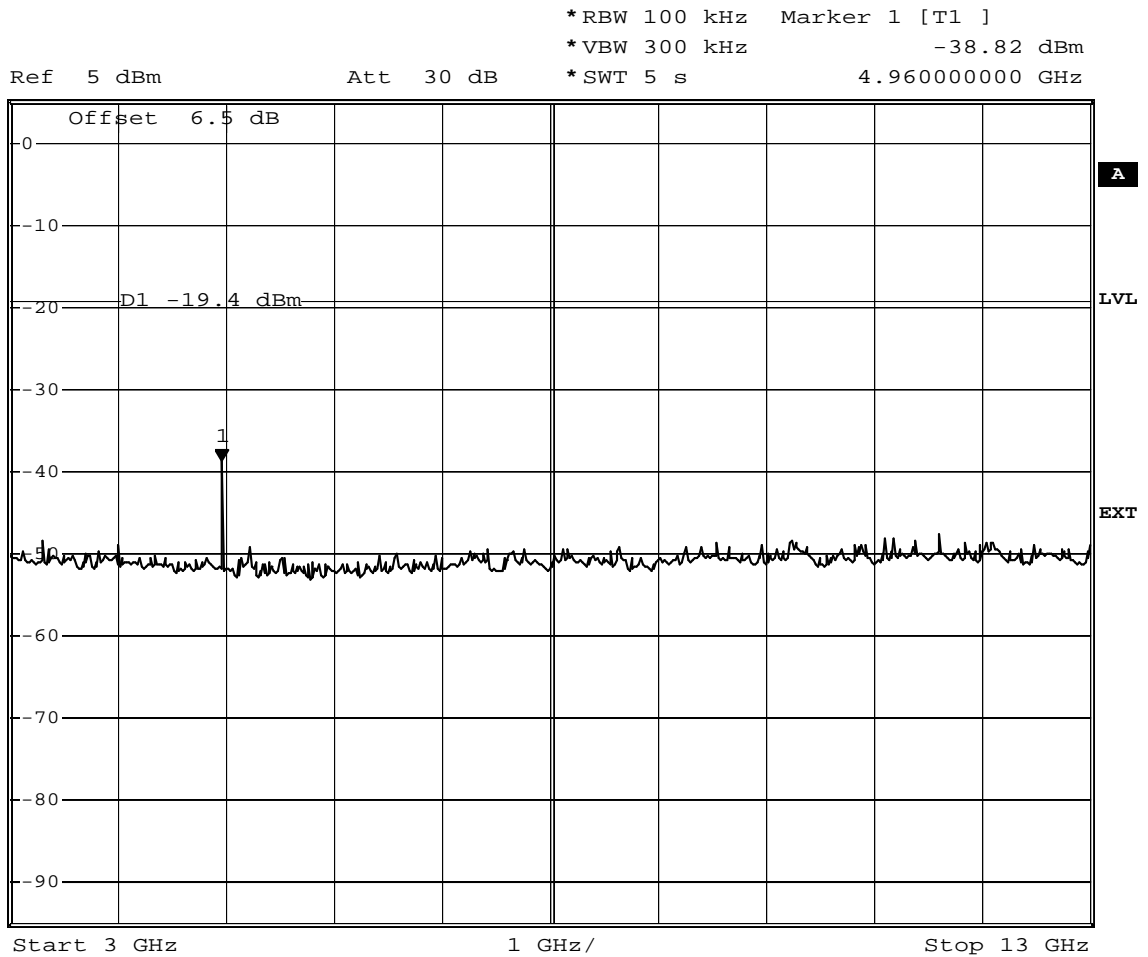
Date: 29.JUN.2010 13:47:28

Test Report No.: G0M21005-3245-P-15

 Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

**FCC part 15.247 (d)
Spurious Emissions**

EUT	Bluetooth Handsfree Car Kit
Model	Audio 2010
Approval Holder	Funkwerk Dabendorf GmbH
Temperature / Voltage	23°C / Vnom
Test Site / Operator	Eurofins Product Service GmbH / Mr. Treffke
Test Specification	FCC part 15.247 (d)
Comment 1	Spurious Emissions conducted
Comment 2	Channel : 2480 MHz
Comment 3	GFSK / DH5



Date: 29.JUN.2010 14:05:17

Test Report No.: G0M21005-3245-P-15

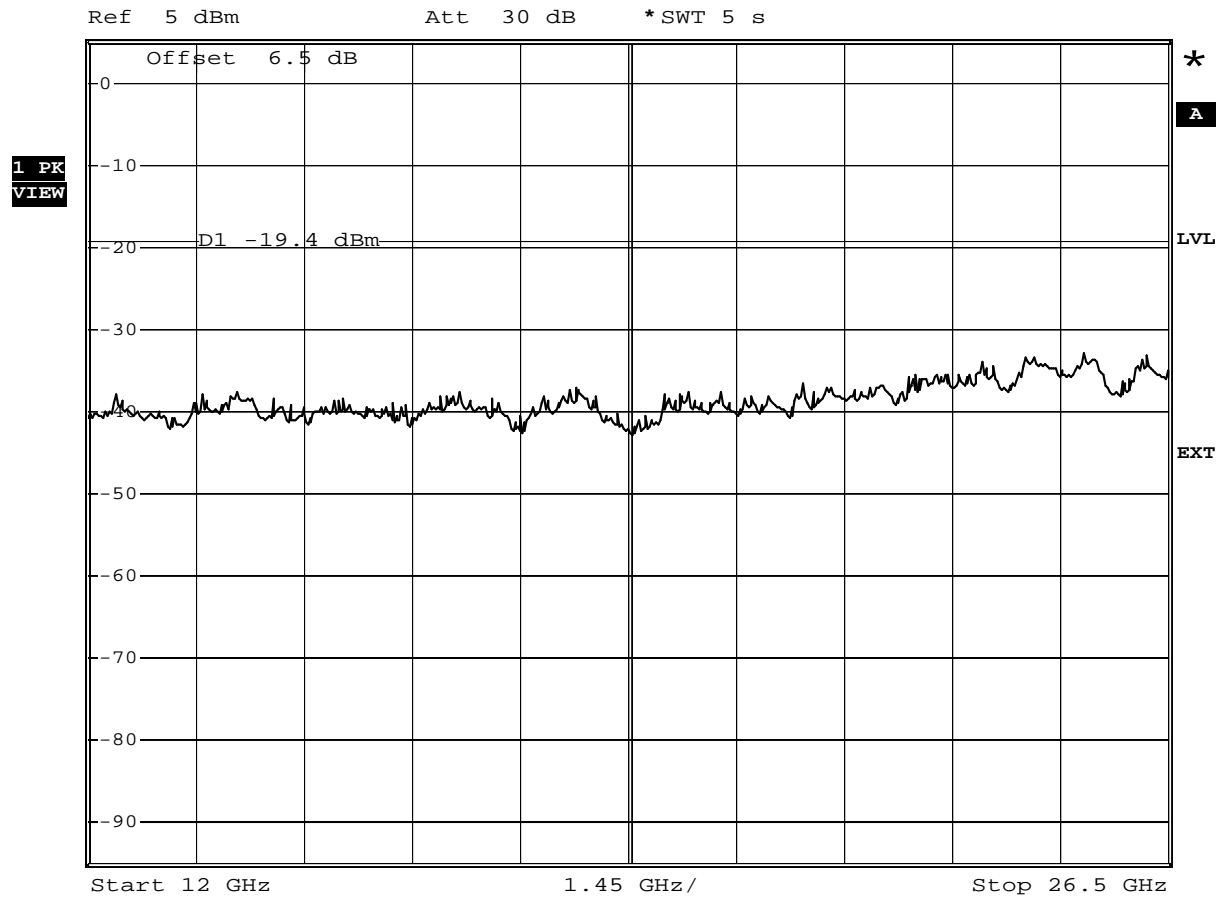
 Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

**FCC part 15.247 (d)
Spurious Emissions**

EUT	Bluetooth Handsfree Car Kit
Model	Audio 2010
Approval Holder	Funkwerk Dabendorf GmbH
Temperature / Voltage	23°C / Vnom
Test Site / Operator	Eurofins Product Service GmbH / Mr. Treffke
Test Specification	FCC part 15.247 (d)
Comment 1	Spurious Emissions conducted
Comment 2	Channel : 2480 MHz
Comment 3	GFSK / DH5



*RBW 100 kHz
 *VBW 300 kHz
 *SWT 5 s



Date: 29.JUN.2010 14:06:47

Test Report No.: G0M21005-3245-P-15

Eurofins Product Service GmbH
Storkower Str. 38c, D-15526 Reichenwalde, Germany

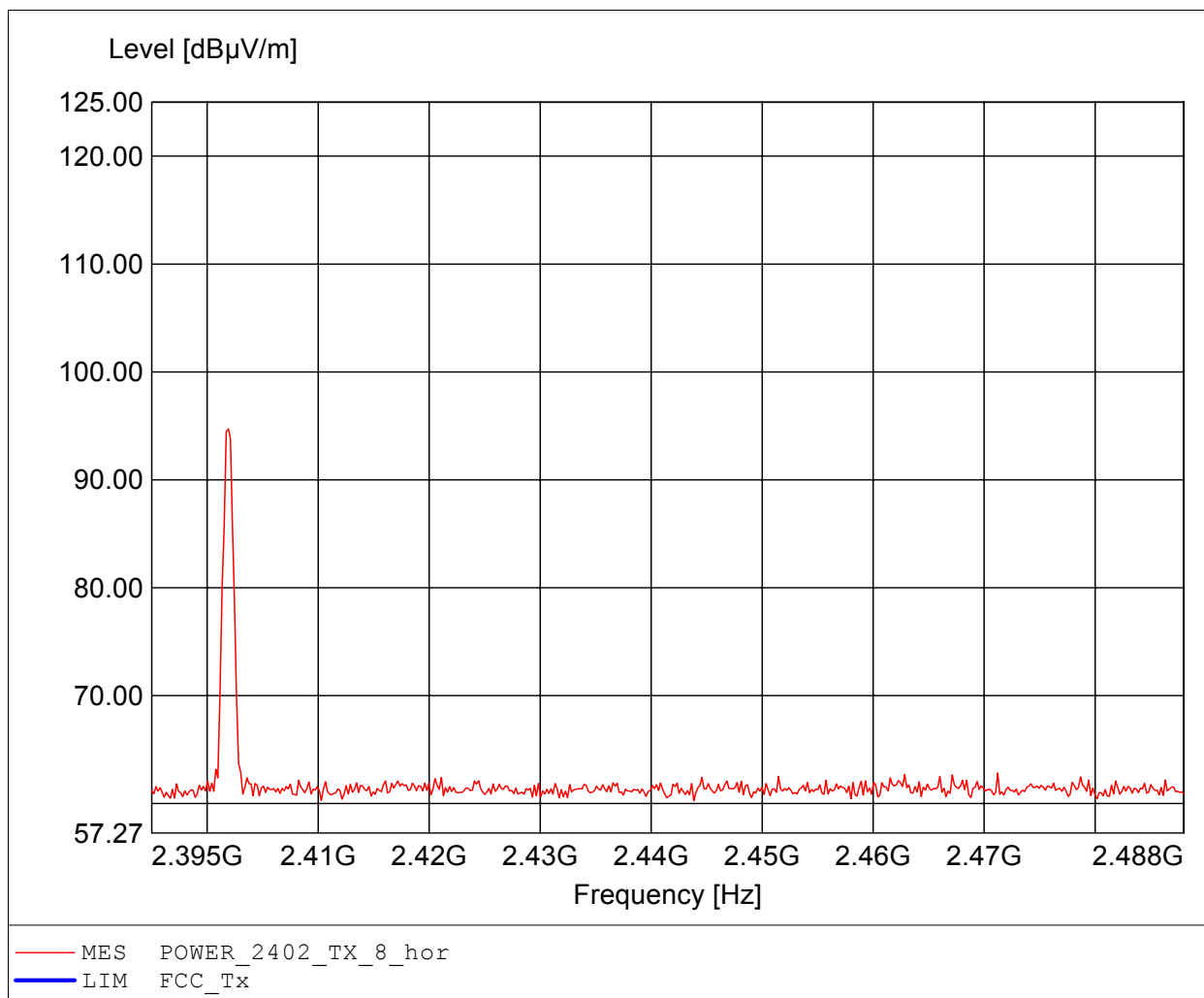
Annex I Transmitter radiated spurious emissions

**Only plots containing emissions are given in this section.
All missing plots or frequency ranges are free of spurious
emissions and contain only background noise.**

Carrier power (Field Strength)

FCC RULES PART 15, SUBPART C

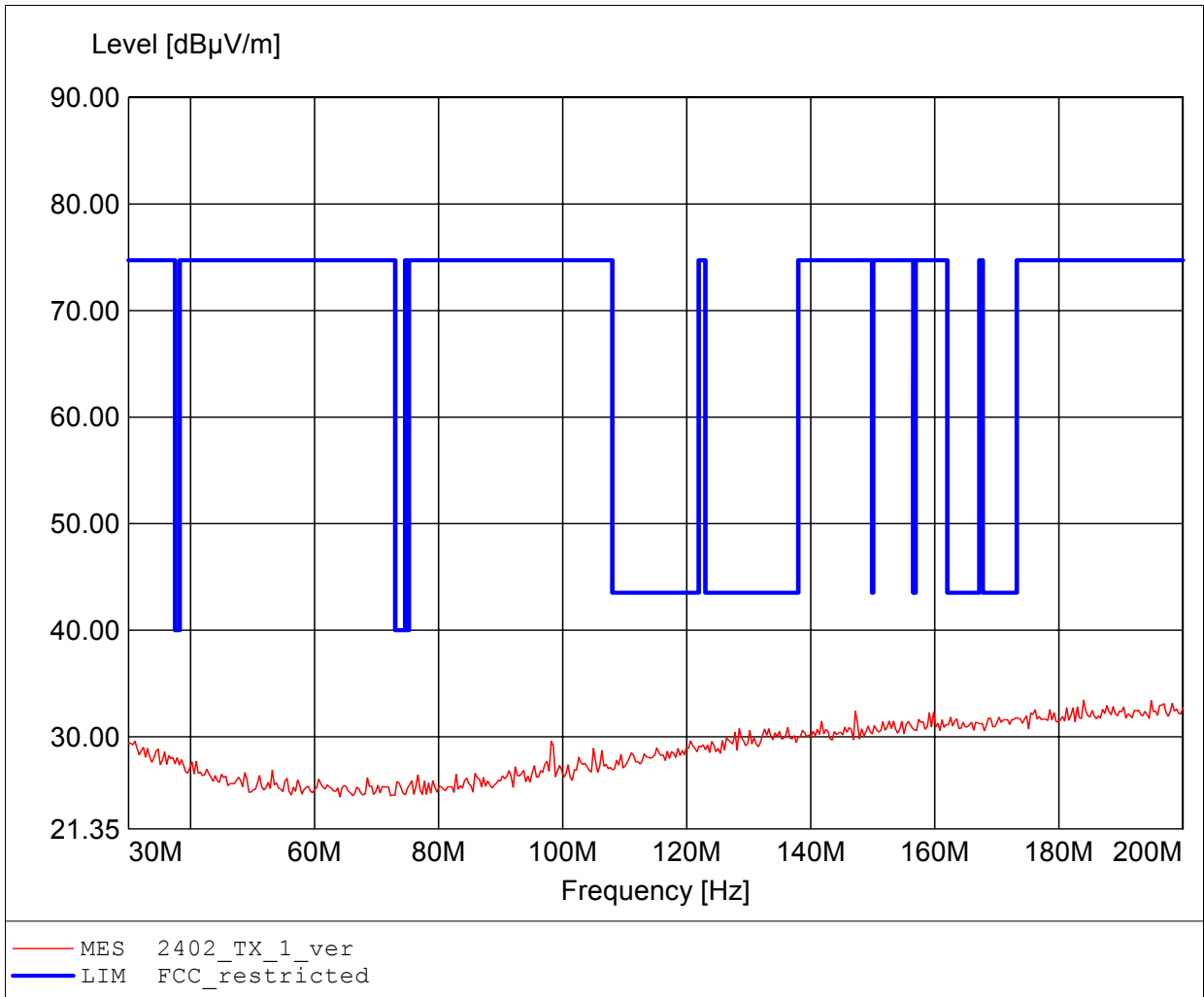
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2402
Comment 1: Dist.: 3m, Ant.: HL 025
Comment 2: Freq: 2.402GHz, Emax: 94.72dBuV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

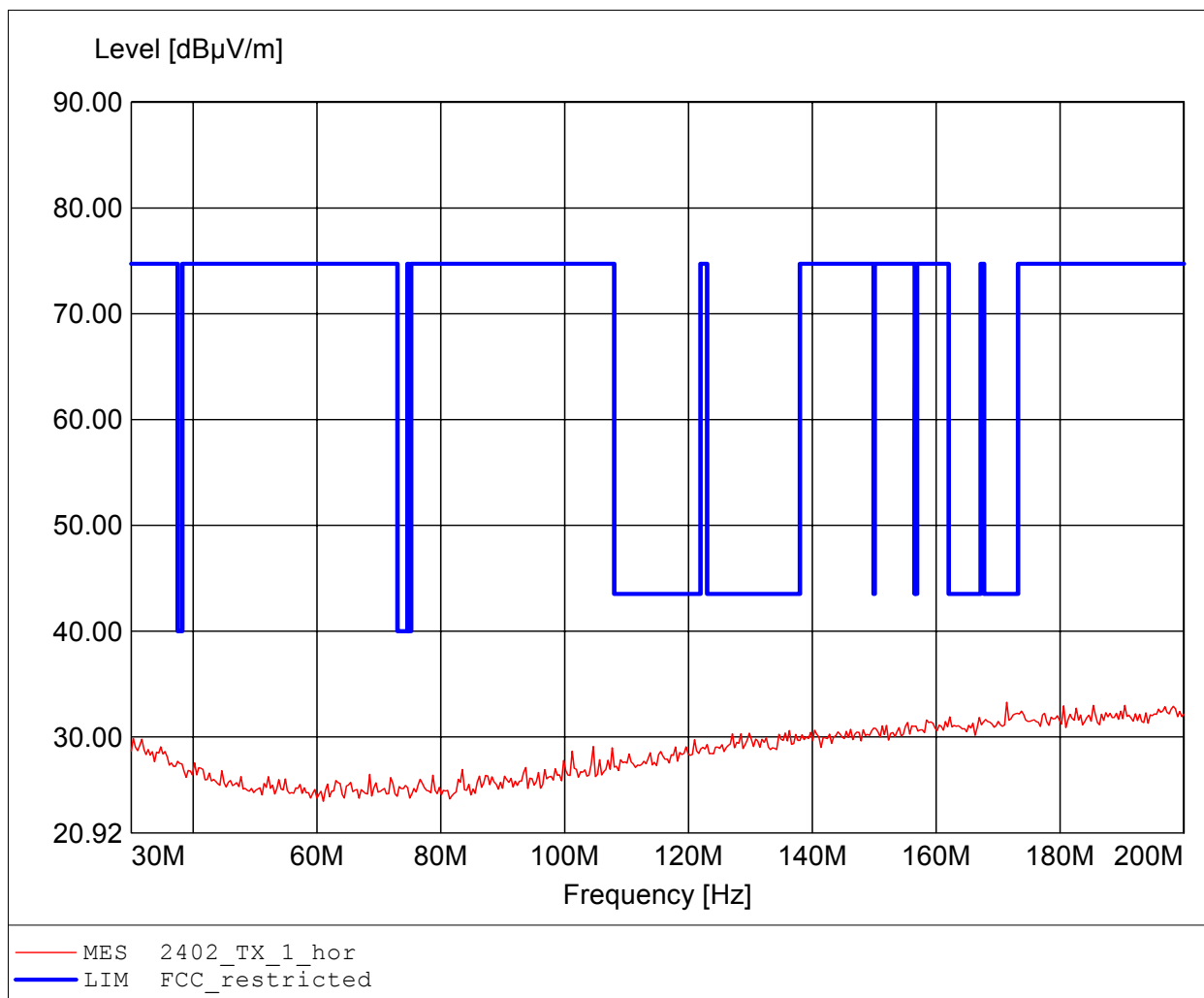
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2402
Comment 1: Dist.: 3m, Ant.: HK 116
Comment 2: Freq: 183.988MHz, Emax: 33.43dBµV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

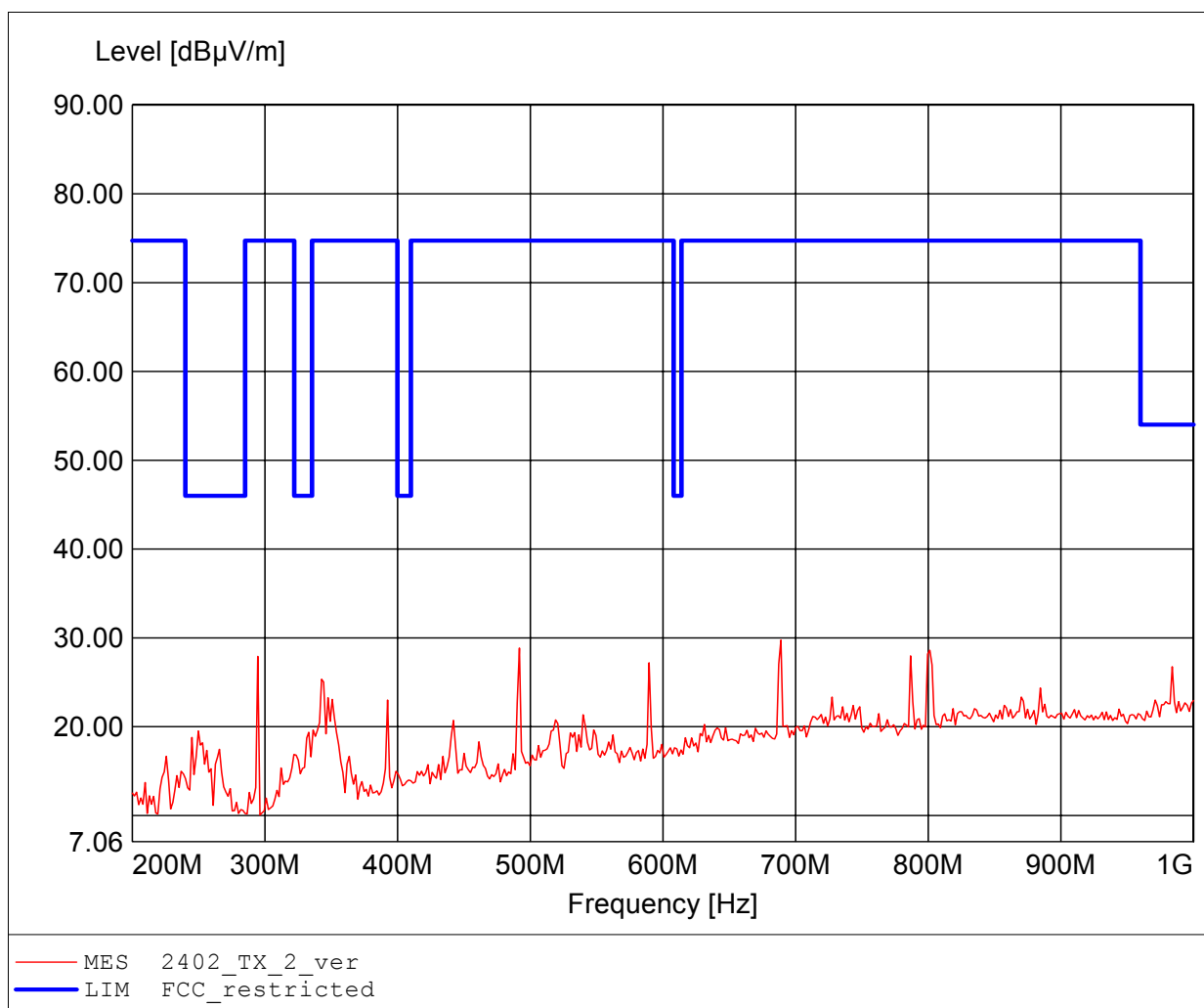
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2402
Comment 1: Dist.: 3m, Ant.: HK 116
Comment 2: Freq: 171.383MHz, Emax: 33.27dBµV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

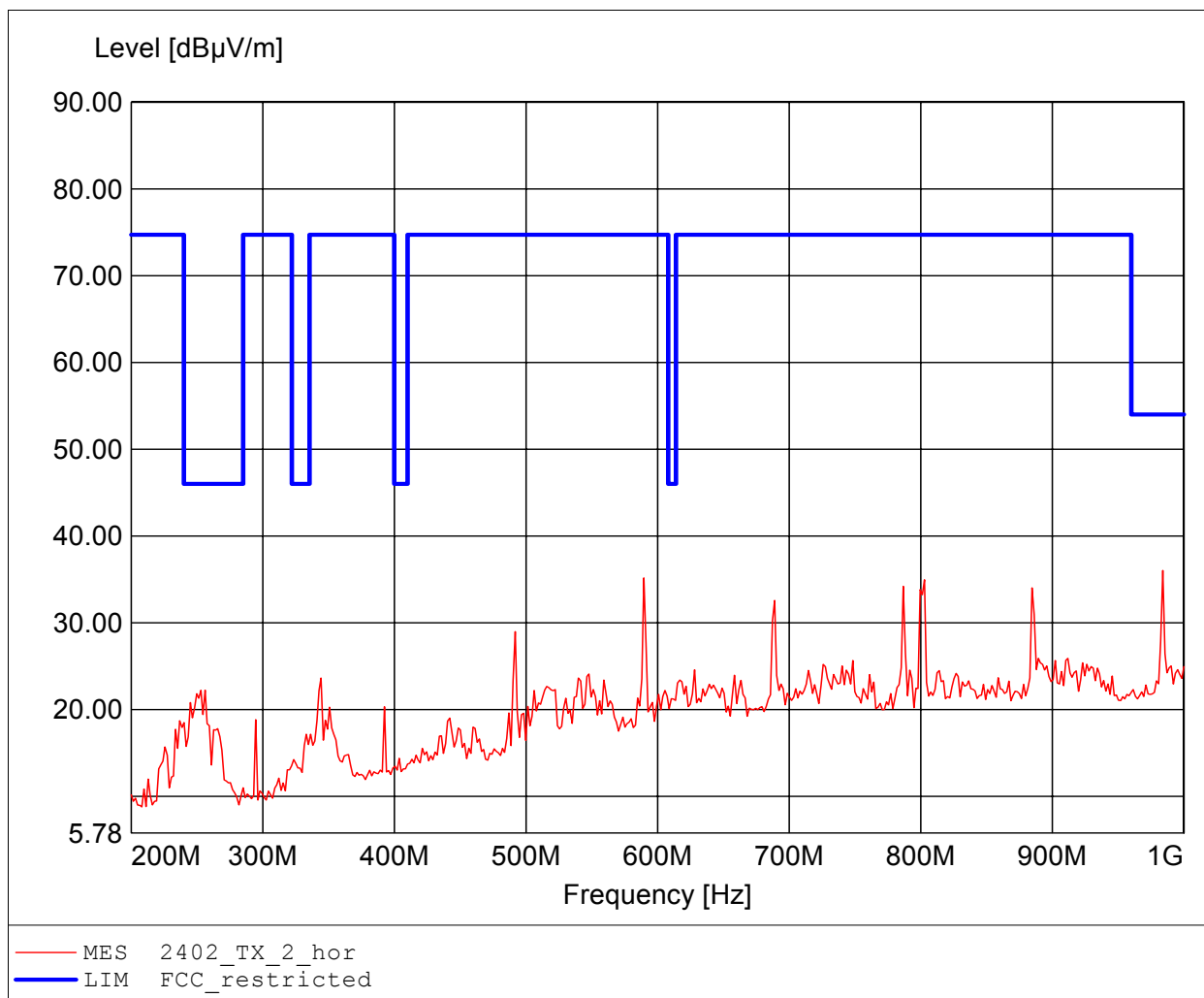
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2402
Comment 1: Dist.: 3m, Ant.: HL 223, amplif.
Comment 2: Freq: 688.978MHz, Emax: 29.75dBµV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

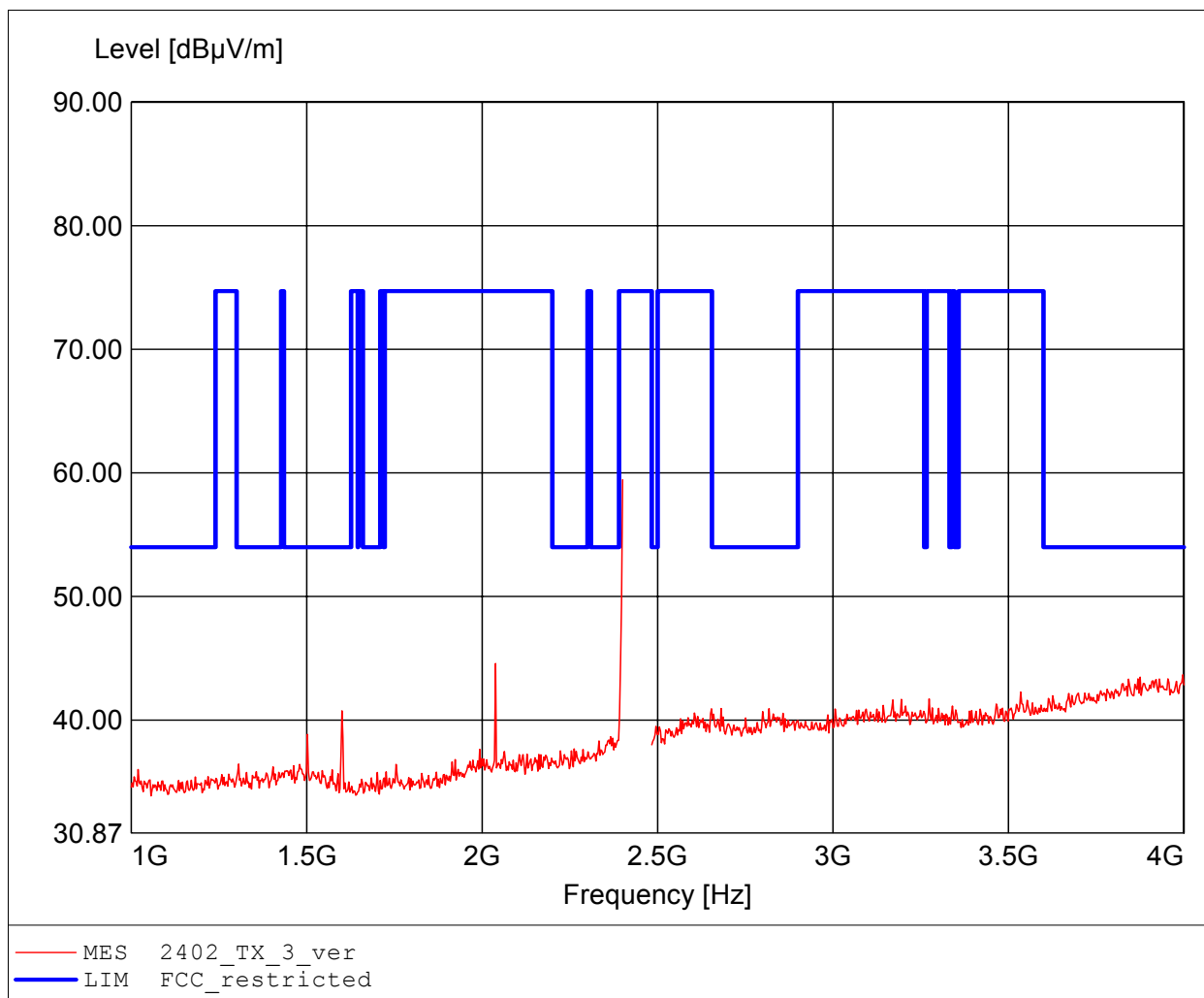
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2402
Comment 1: Dist.: 3m, Ant.: HL 223, amplif.
Comment 2: Freq: 983.968MHz, Emax: 36.03dBµV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

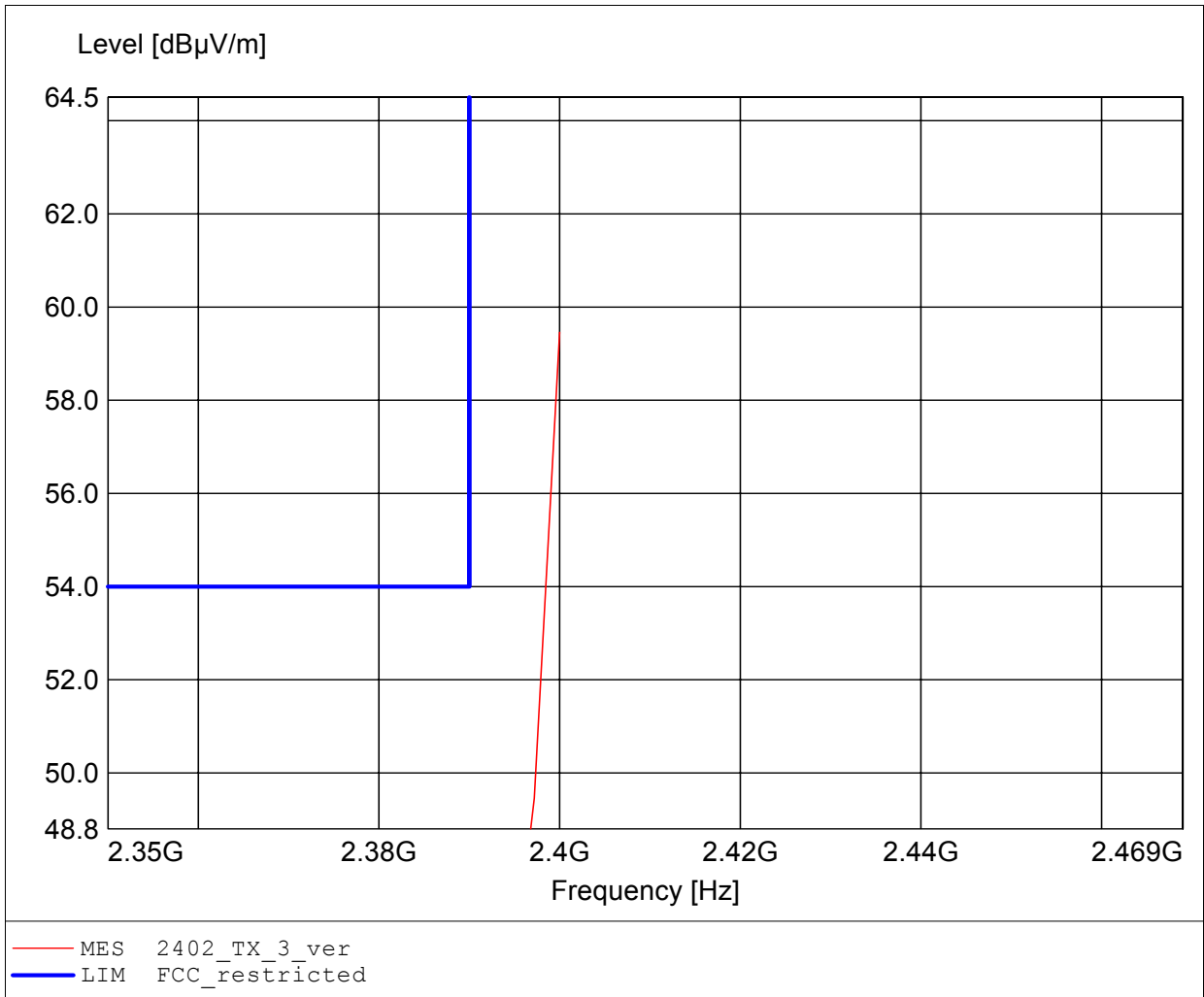
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2402
Comment 1: Dist.: 3m, Ant.: HL 025, amplif.
Comment 2: Freq: 2.400GHz, Emax: 59.46dBuV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

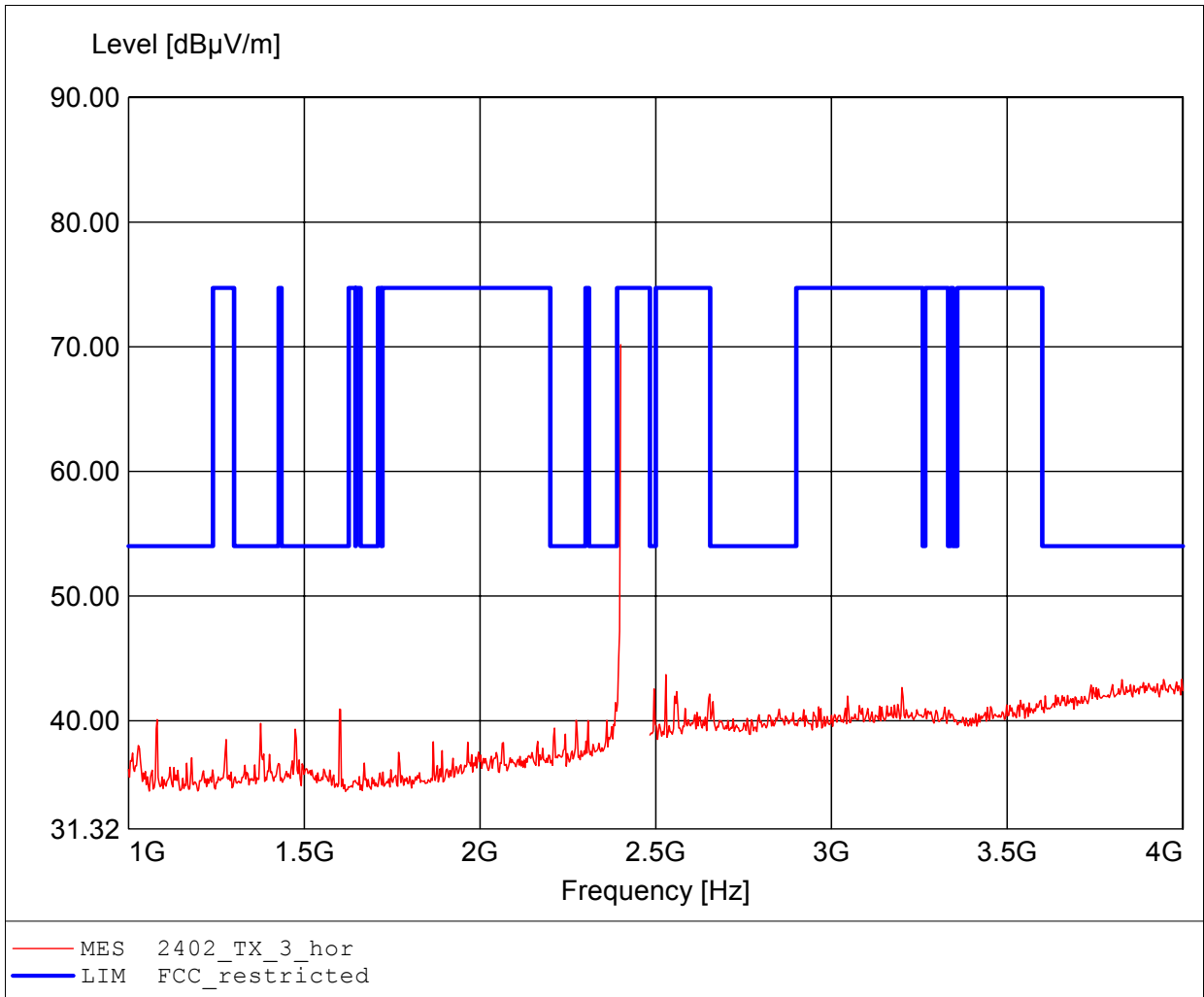
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2402
Comment 1: Dist.: 3m, Ant.: HL 025, amplif.
Comment 2: Freq: 2.400GHz, Emax: 59.46dBuV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

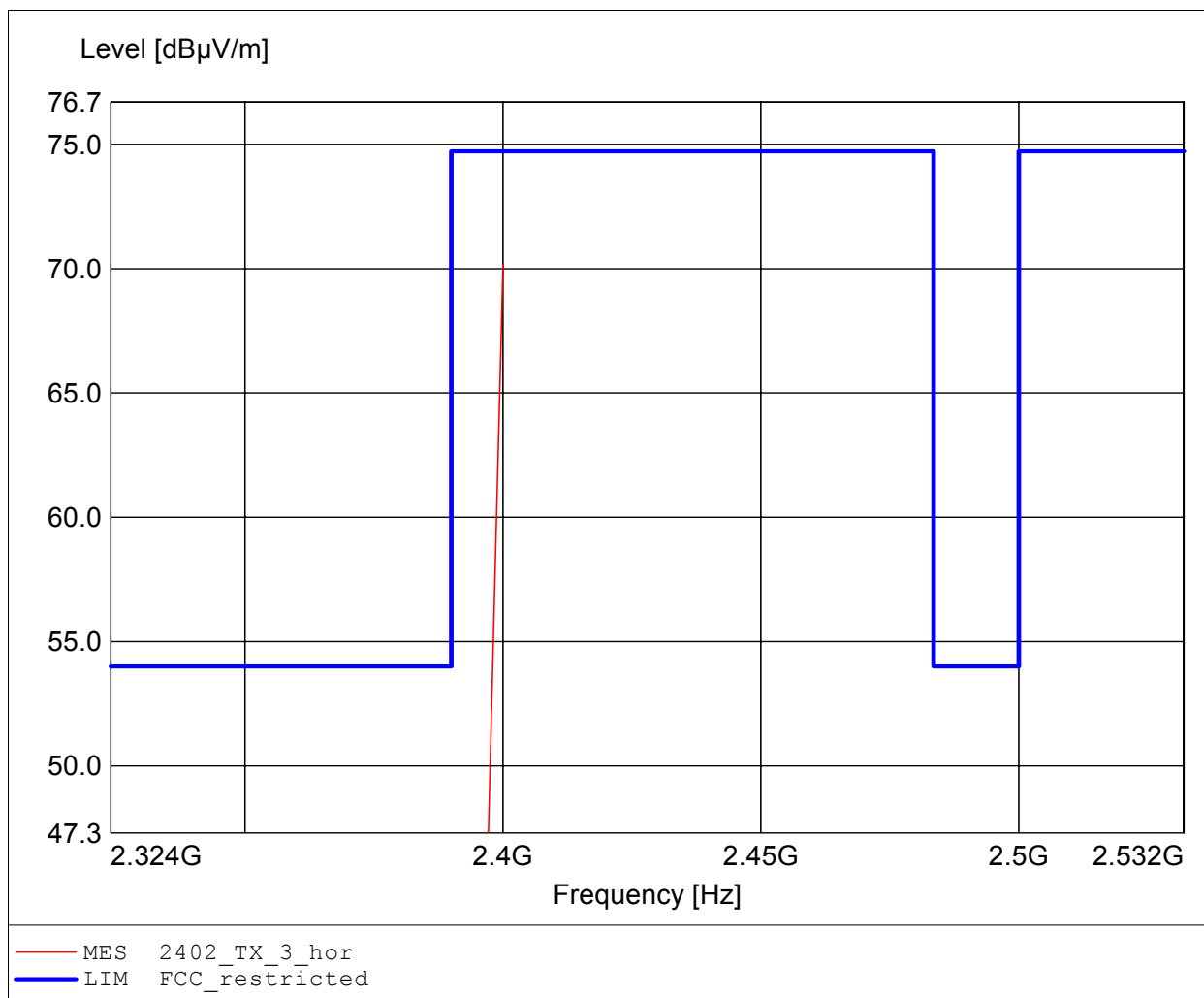
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2402
Comment 1: Dist.: 3m, Ant.: HL 025, amplif.
Comment 2: Freq: 2.400GHz, Emax: 70.16dBuV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

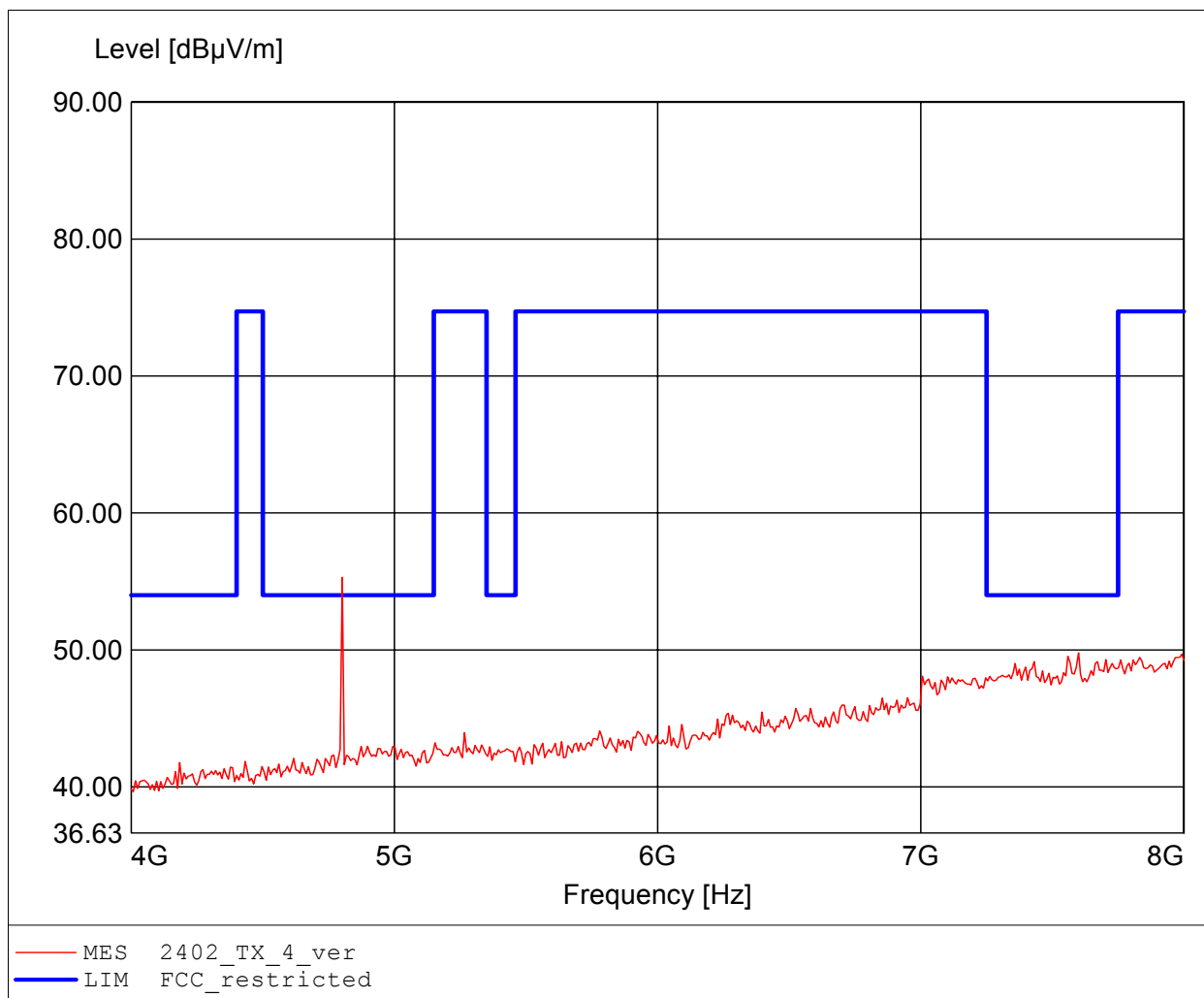
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2402
Comment 1: Dist.: 3m, Ant.: HL 025, amplif.
Comment 2: Freq: 2.400GHz, Emax: 70.16dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

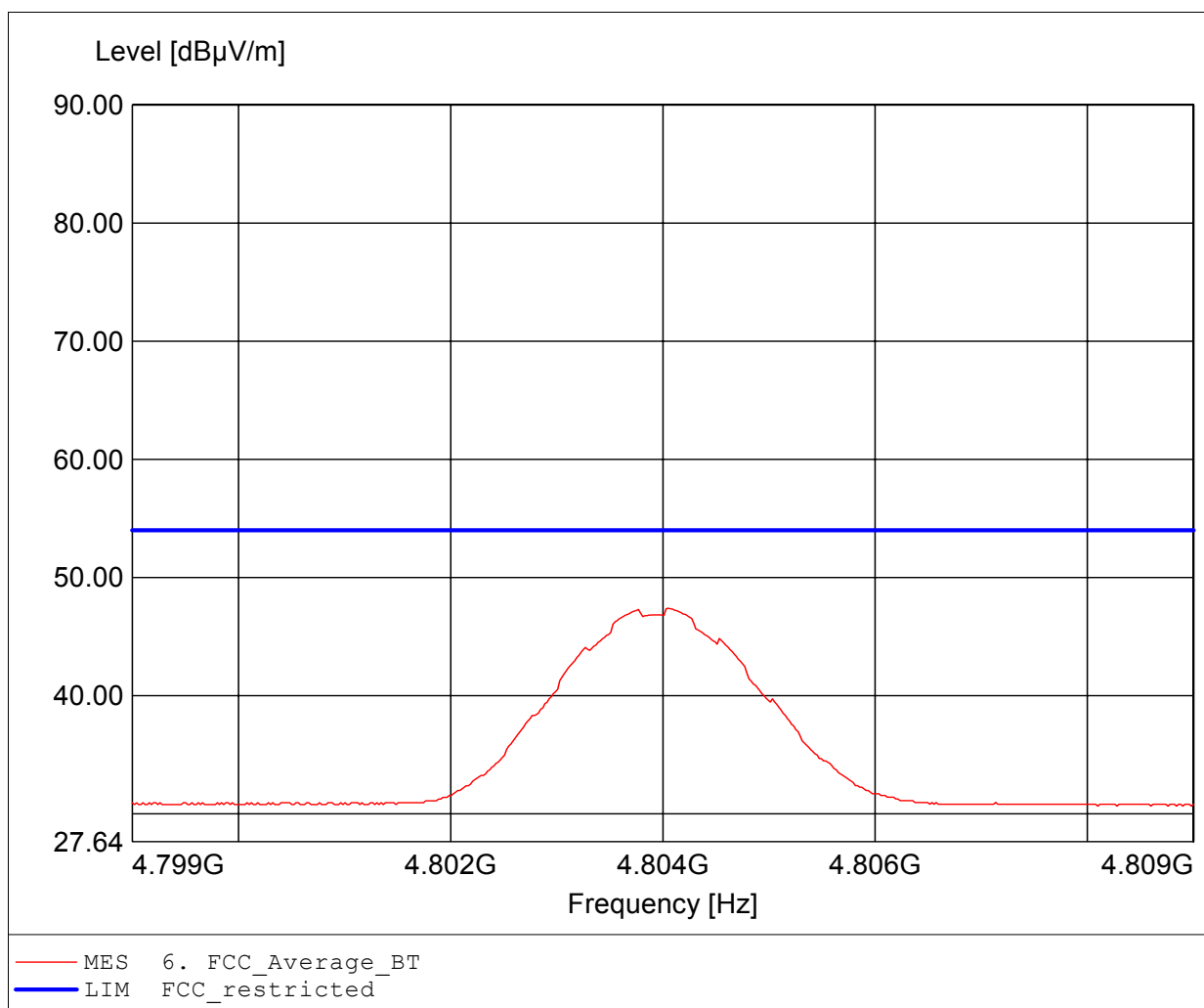
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2402
Comment 1: Dist.: 3m, Ant.: HL 025, ampl.+HP.
Comment 2: Freq: 4.802GHz, Emax: 55.30dBuV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

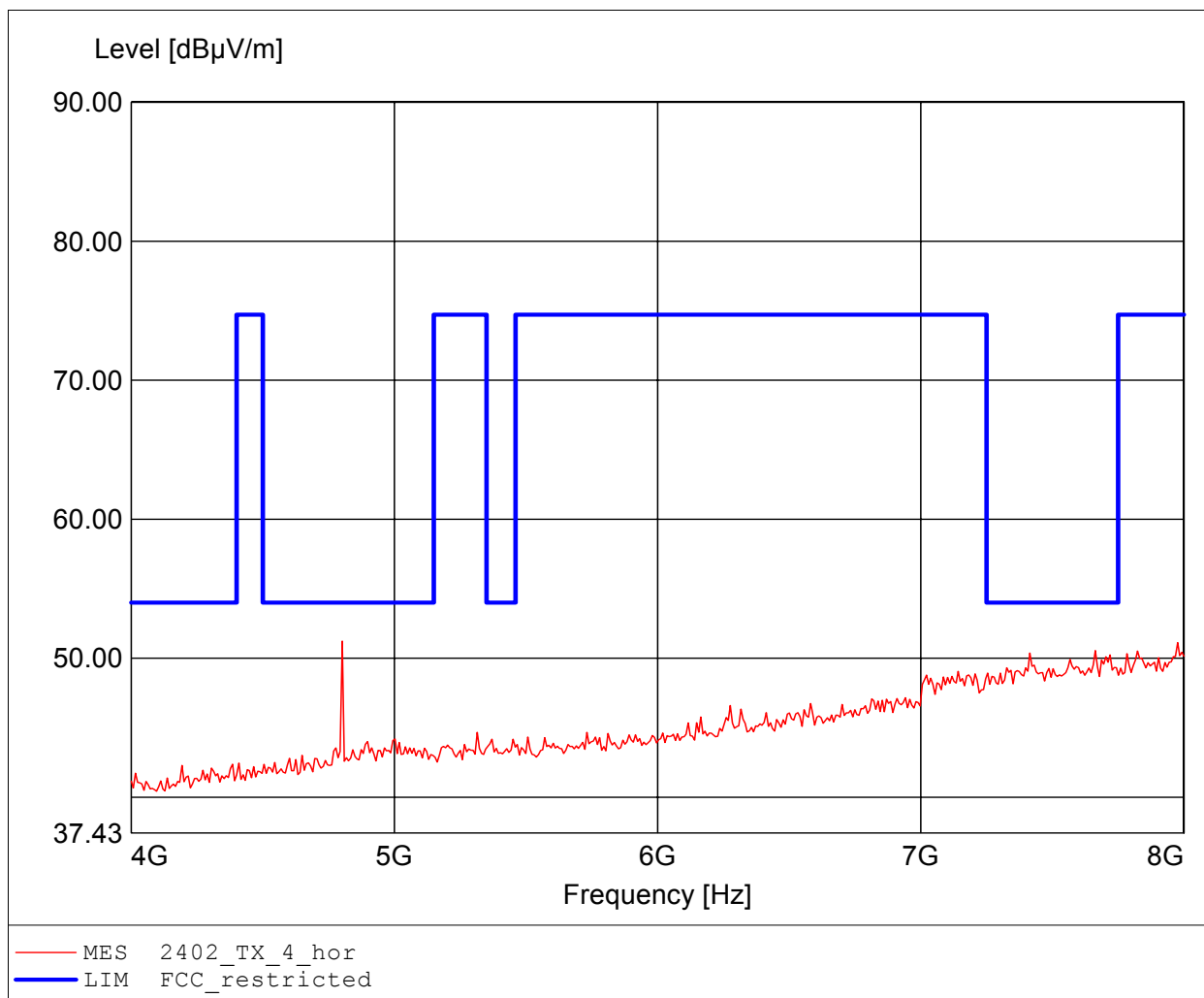
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit / GOM21005-3245
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / CH.: 2402
Test Specification: according to §15.247, average detector
Comment 1: Dist.: 3m, Ant.: BBHA9120D, ampl.+HP.
Comment 2: Freq: 4.804GHz, Emax: 47.40dBuV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

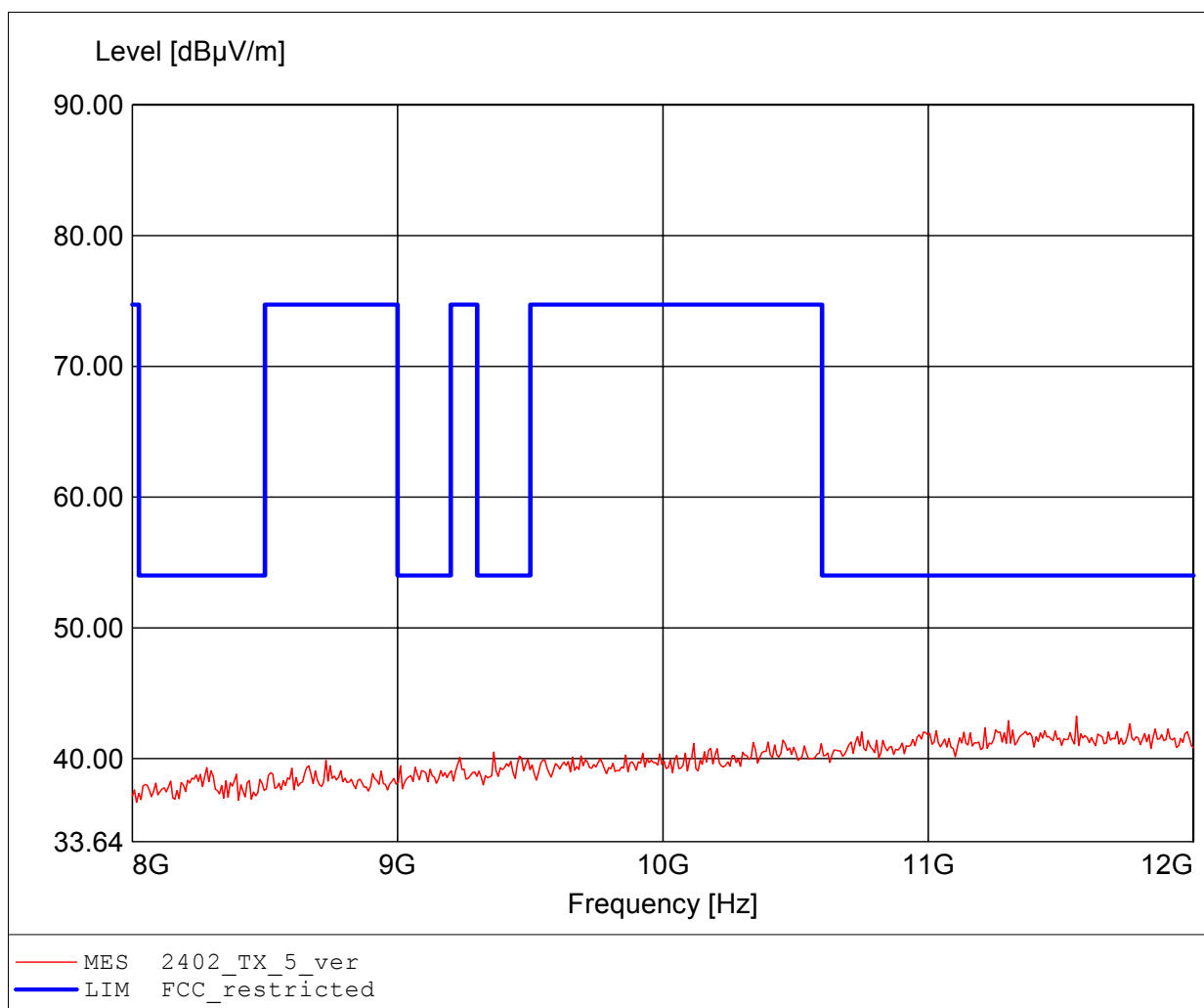
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2402
Comment 1: Dist.: 3m, Ant.: HL 025, ampl.+HP.
Comment 2: Freq: 4.802GHz, Emax: 51.23dBuV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

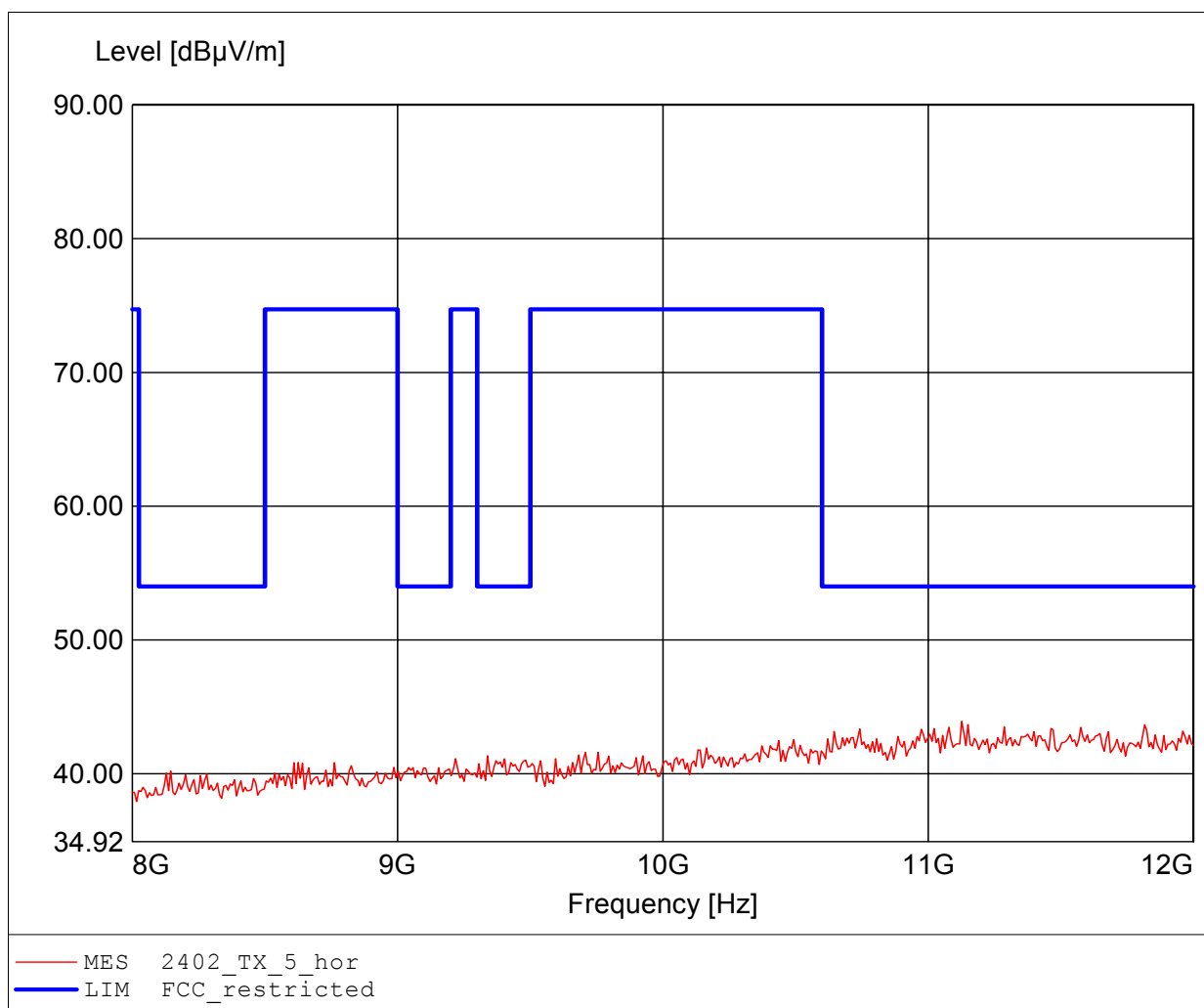
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2402
Comment 1: Dist.: 3m, Ant.: HL 025, ampl.+HP.
Comment 2: Freq: 11.559GHz, Emax: 43.25dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

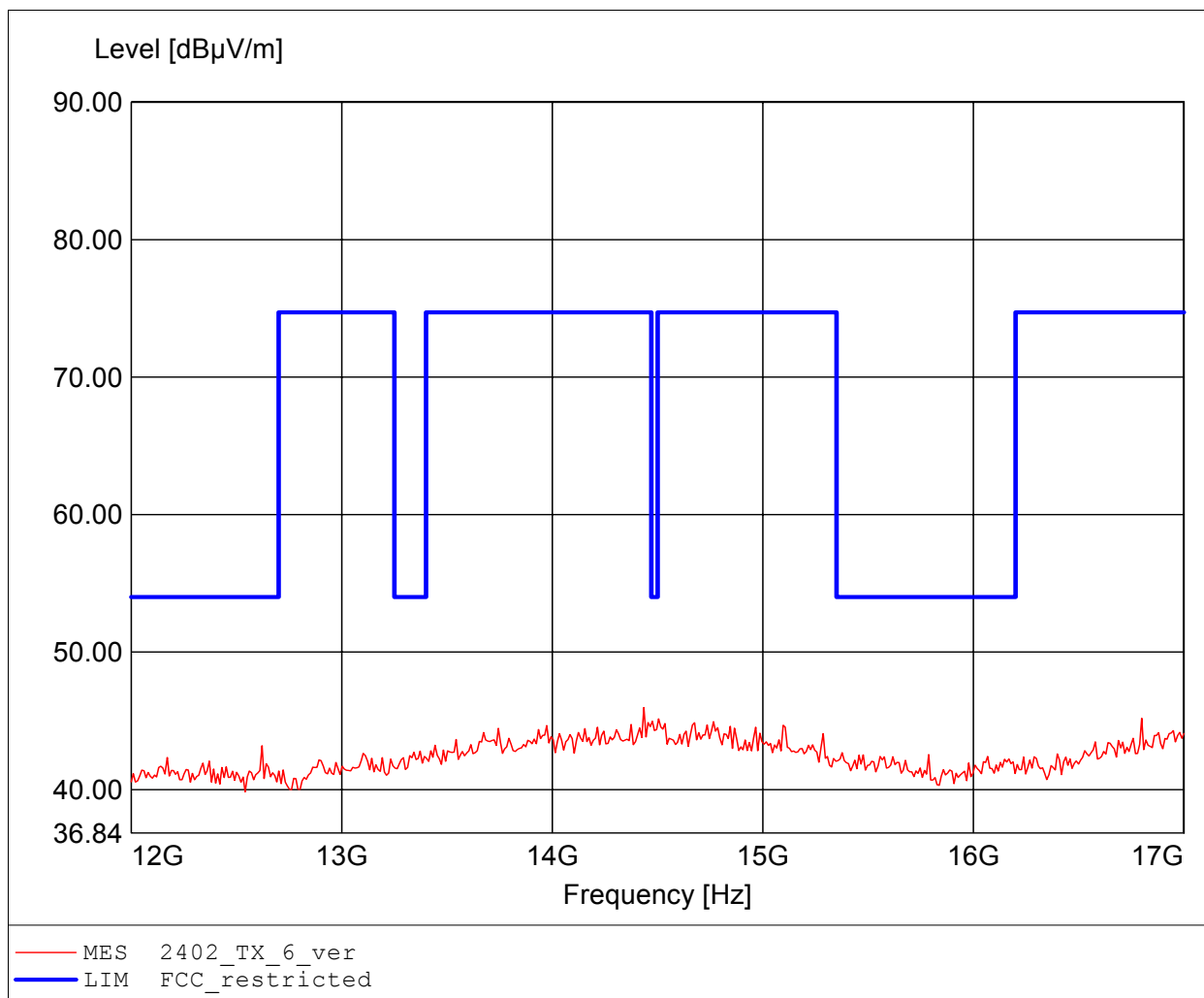
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2402
Comment 1: Dist.: 3m, Ant.: HL 025, ampl.+HP.
Comment 2: Freq: 11.126GHz, Emax: 43.91dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

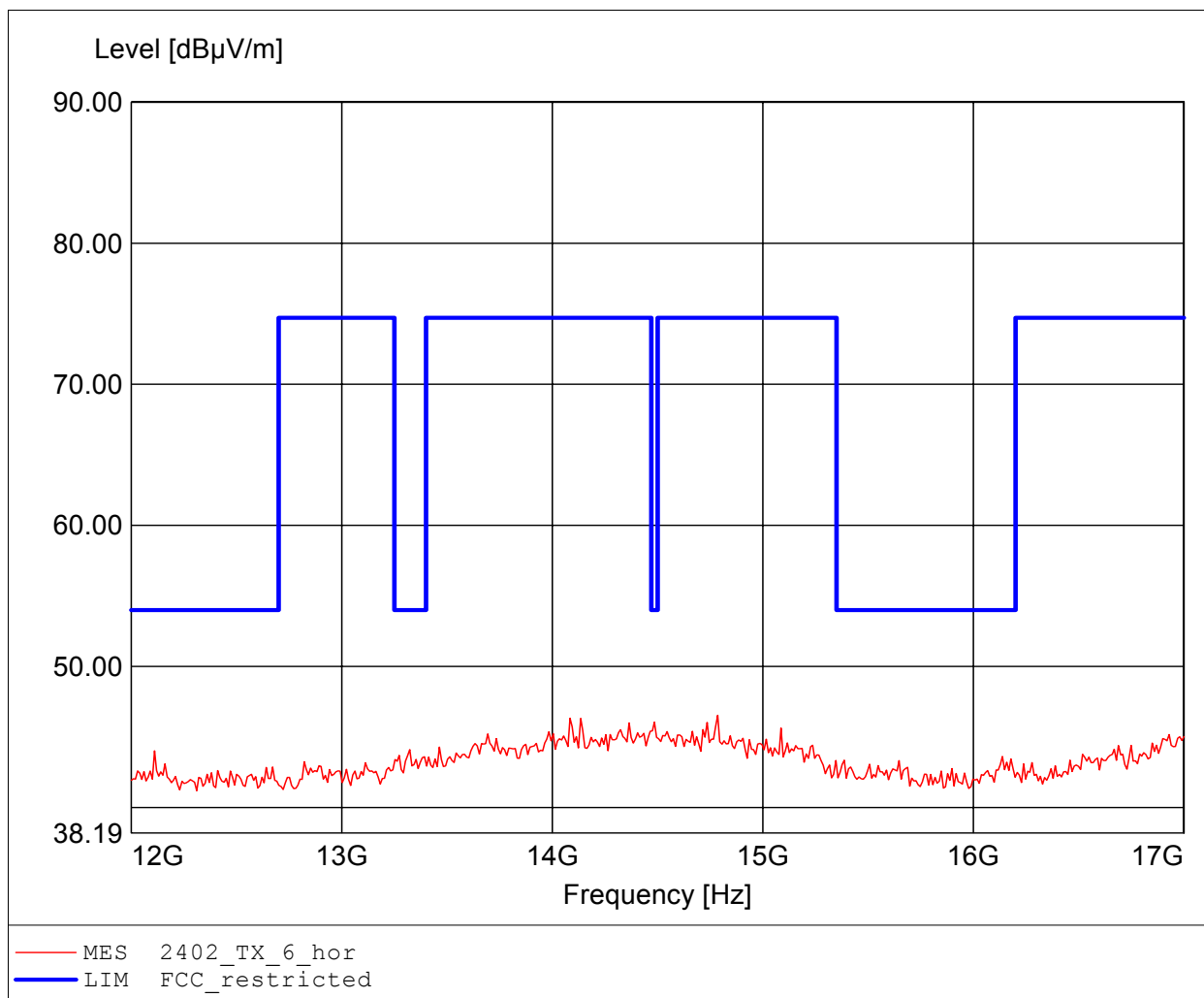
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2402
Comment 1: Dist.: 3m, Ant.: HL 025, ampl.+HP.
Comment 2: Freq: 14.435GHz, Emax: 45.97dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

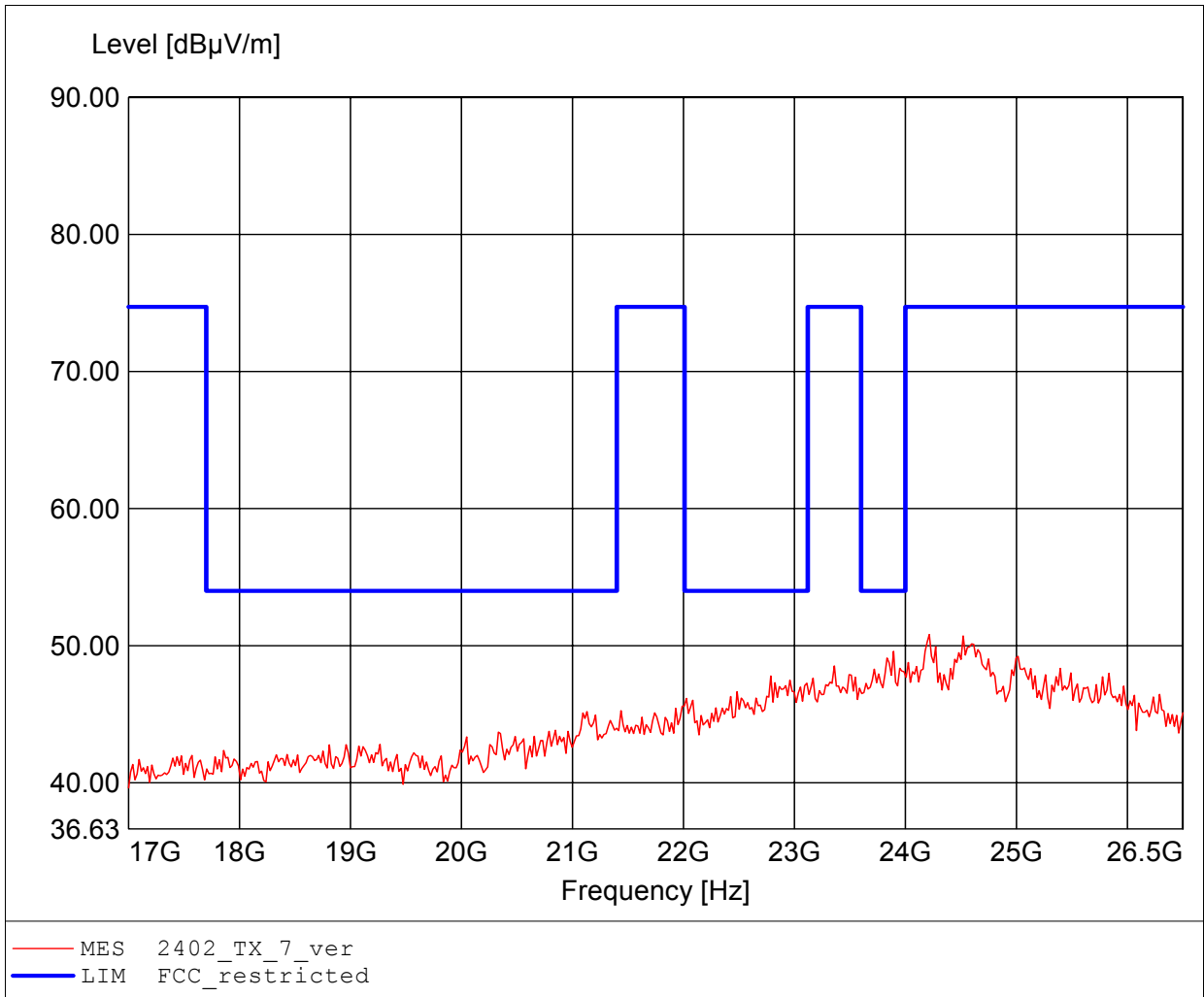
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2402
Comment 1: Dist.: 3m, Ant.: HL 025, ampl.+HP.
Comment 2: Freq: 14.786GHz, Emax: 46.53dB μ V/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

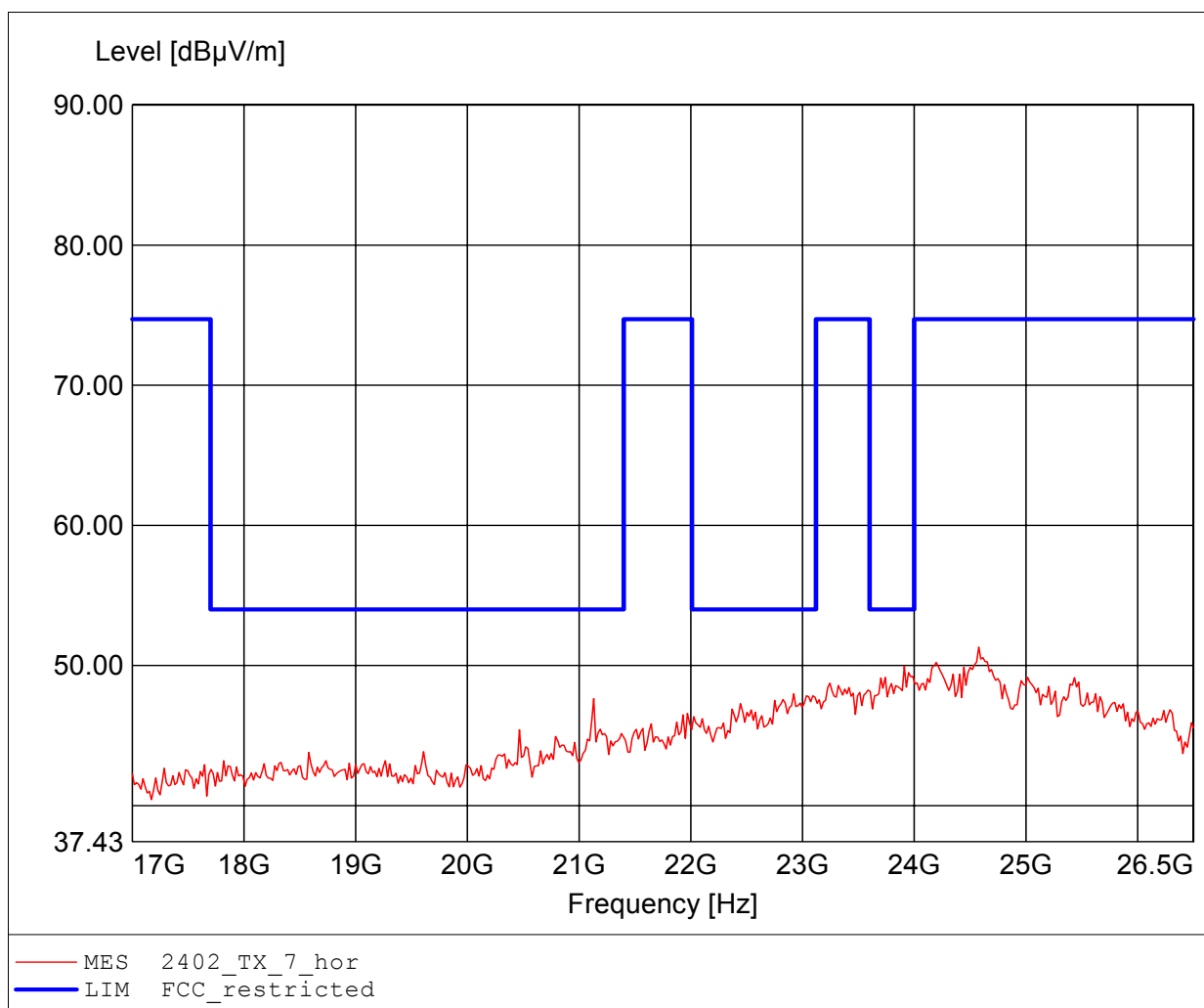
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2402
Comment 1: Dist.: 3m, Ant.: HL025, amplif.
Comment 2: Freq: 24.215GHz, Emax: 50.81dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

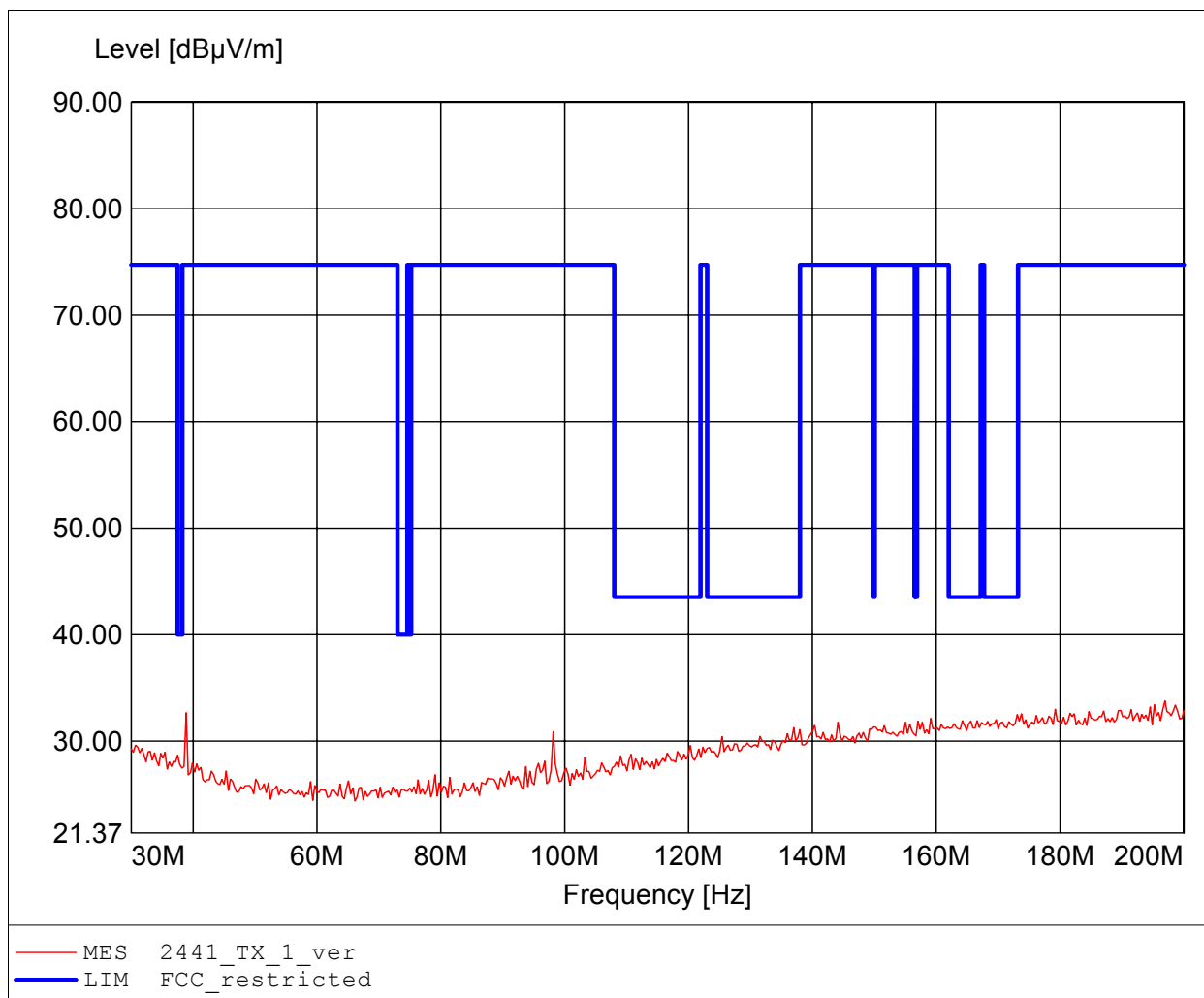
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2402
Comment 1: Dist.: 3m, Ant.: HL025, amplif.
Comment 2: Freq: 24.577GHz, Emax: 51.31dBuV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

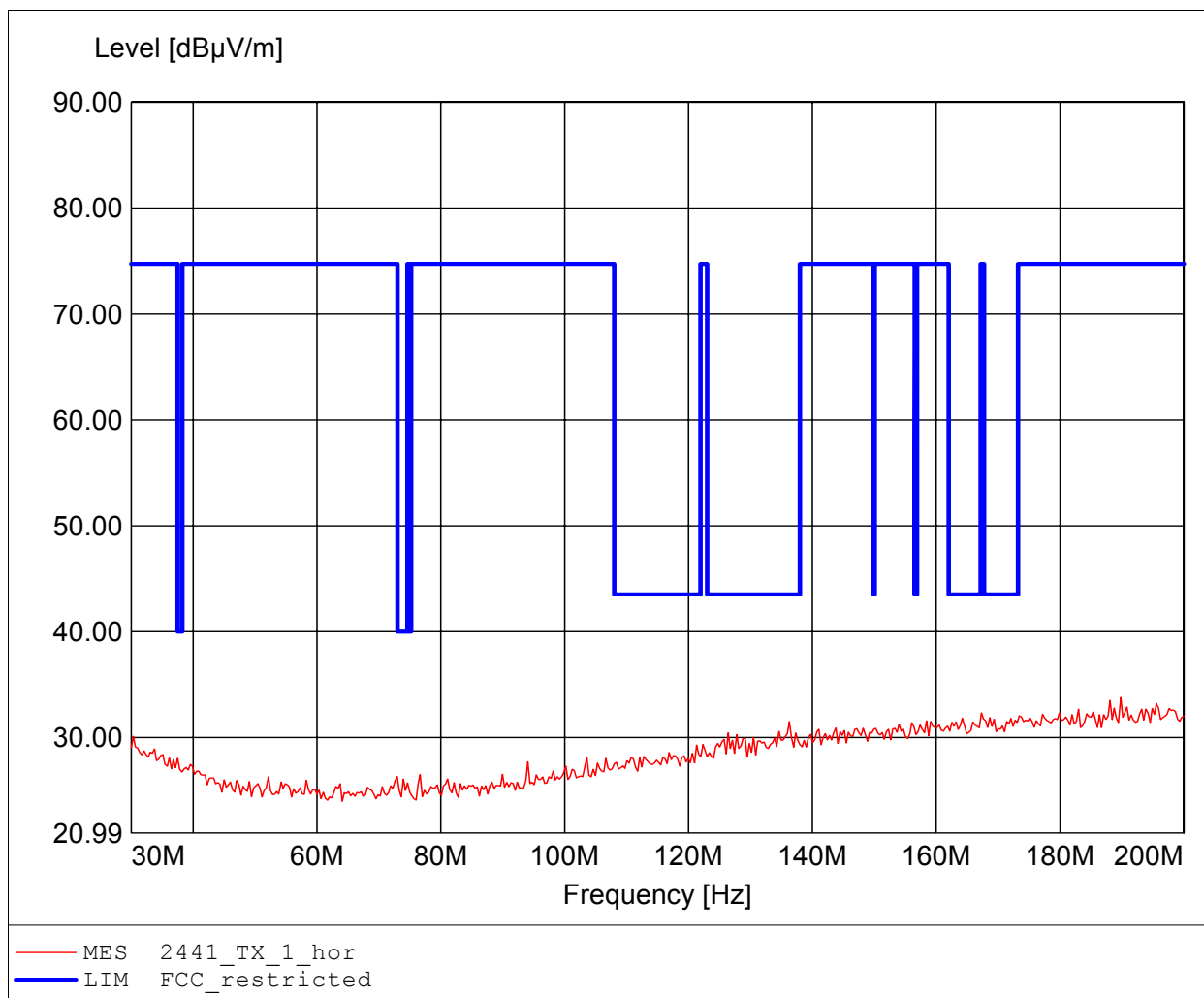
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2441
Comment 1: Dist.: 3m, Ant.: HK 116
Comment 2: Freq: 196.934MHz, Emax: 33.77dBµV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

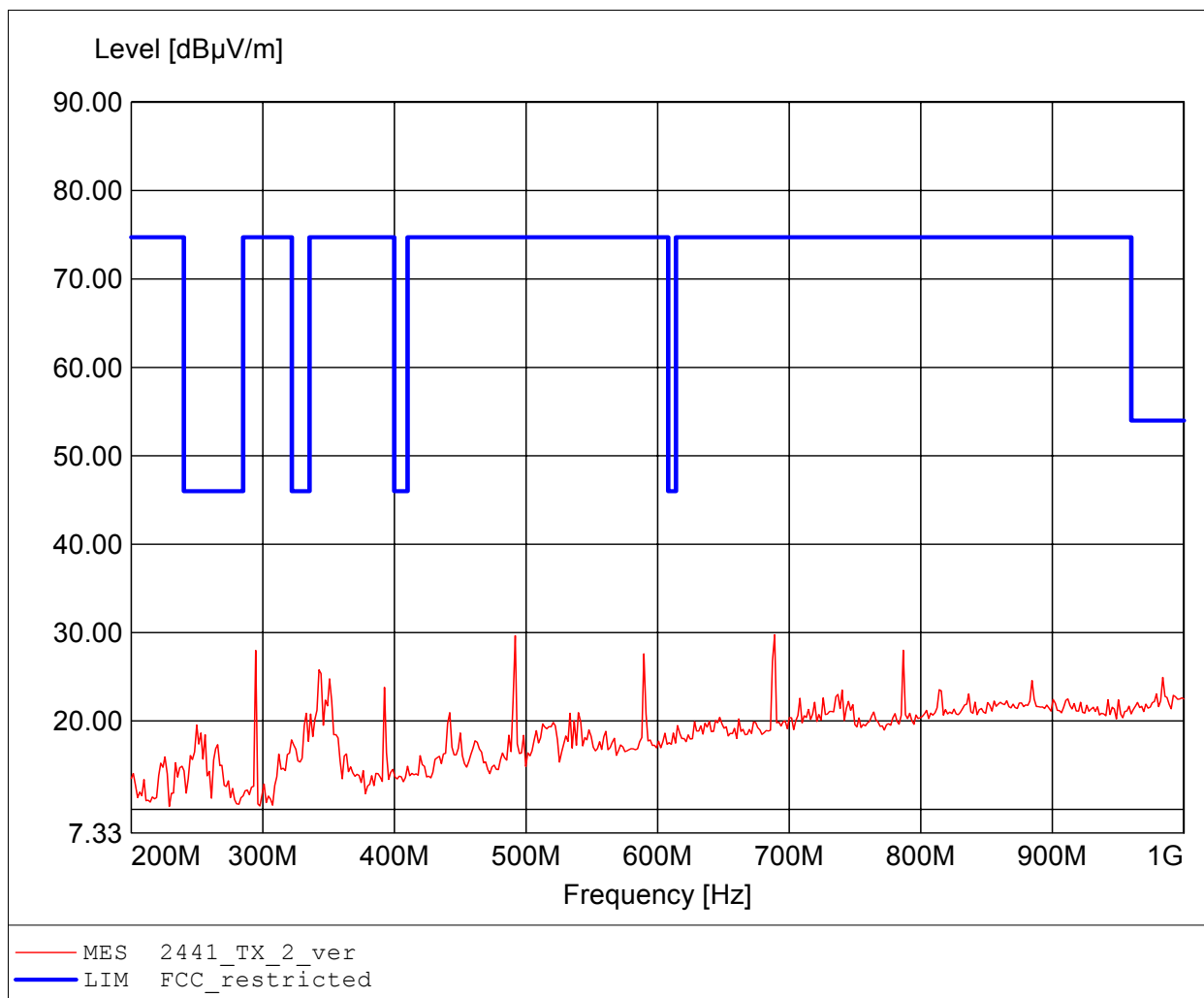
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2441
Comment 1: Dist.: 3m, Ant.: HK 116
Comment 2: Freq: 189.780MHz, Emax: 33.78dBµV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

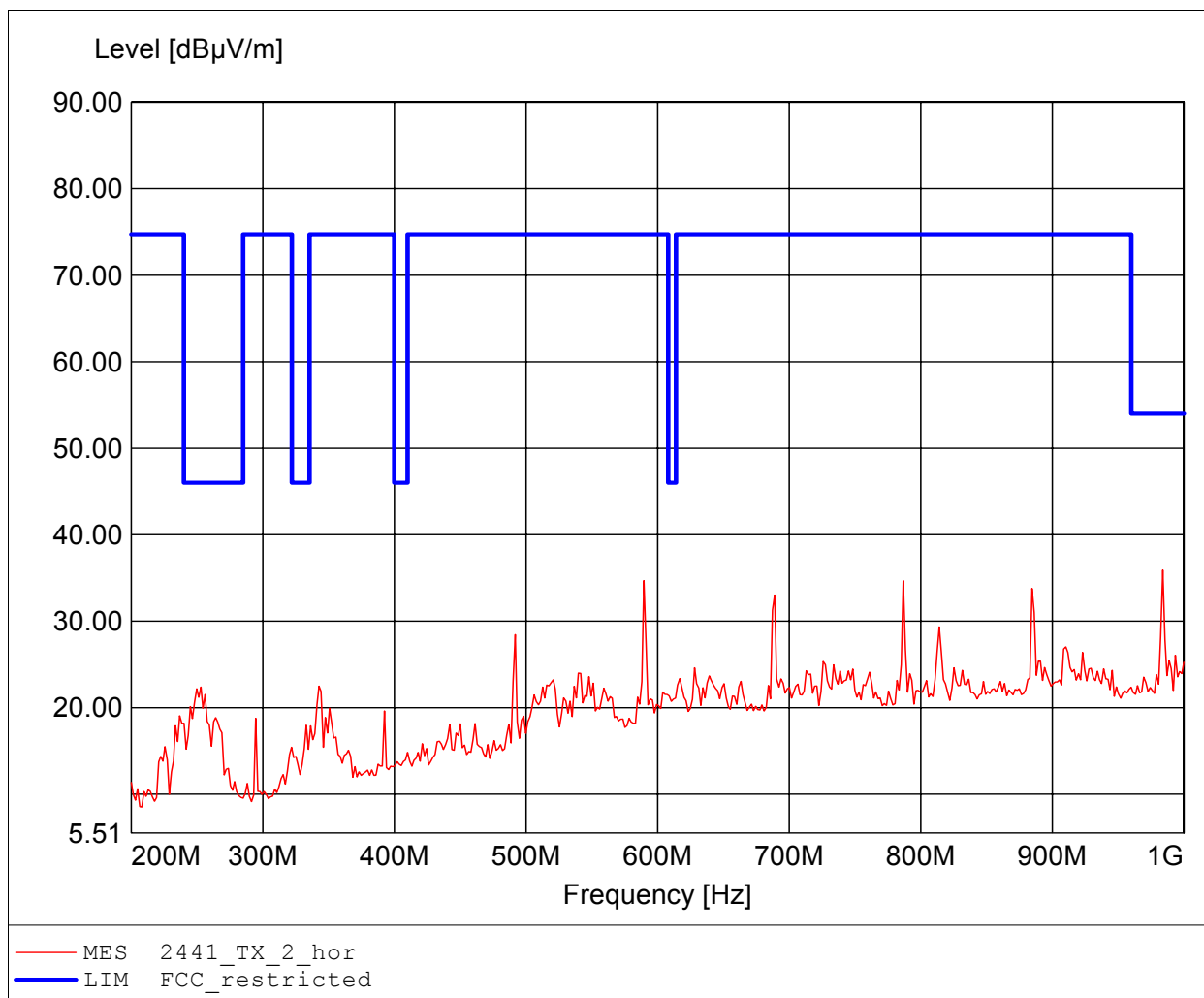
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2441
Comment 1: Dist.: 3m, Ant.: HL 223, amplif.
Comment 2: Freq: 688.978MHz, Emax: 29.75dBµV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

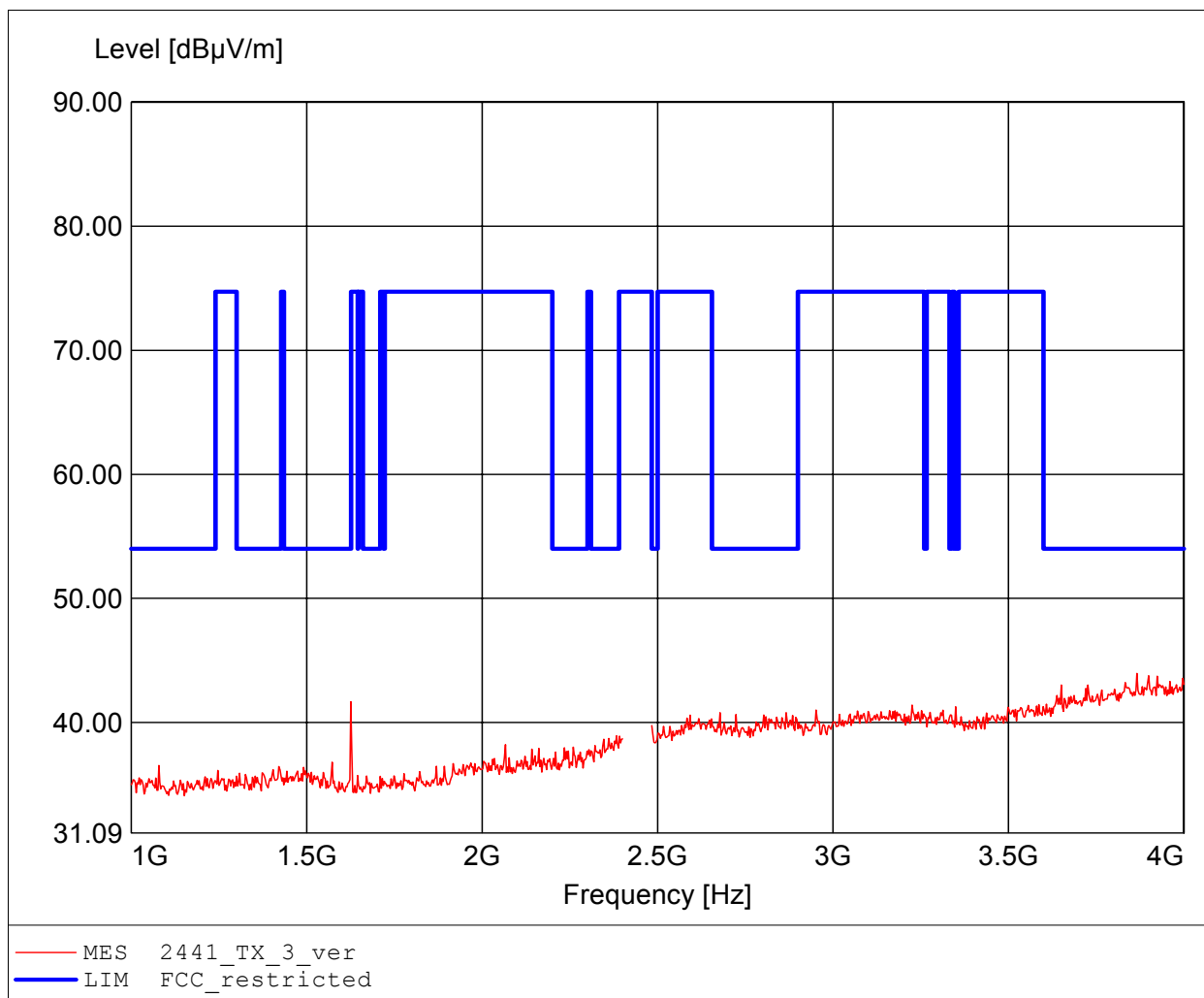
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2441
Comment 1: Dist.: 3m, Ant.: HL 223, amplif.
Comment 2: Freq: 983.968MHz, Emax: 35.91dBµV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

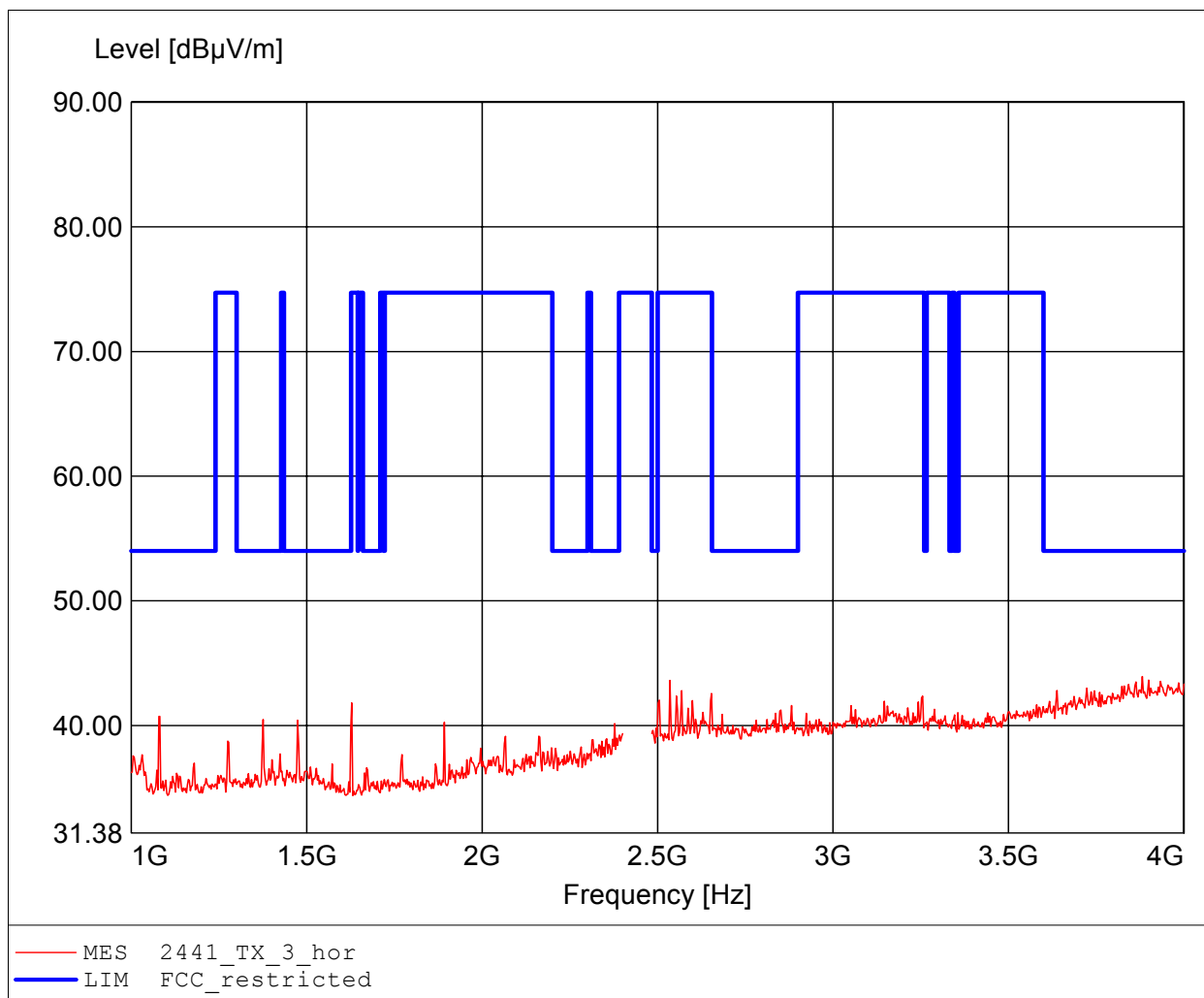
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2441
Comment 1: Dist.: 3m, Ant.: HL 025, amplif.
Comment 2: Freq: 3.866GHz, Emax: 43.95dBuV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

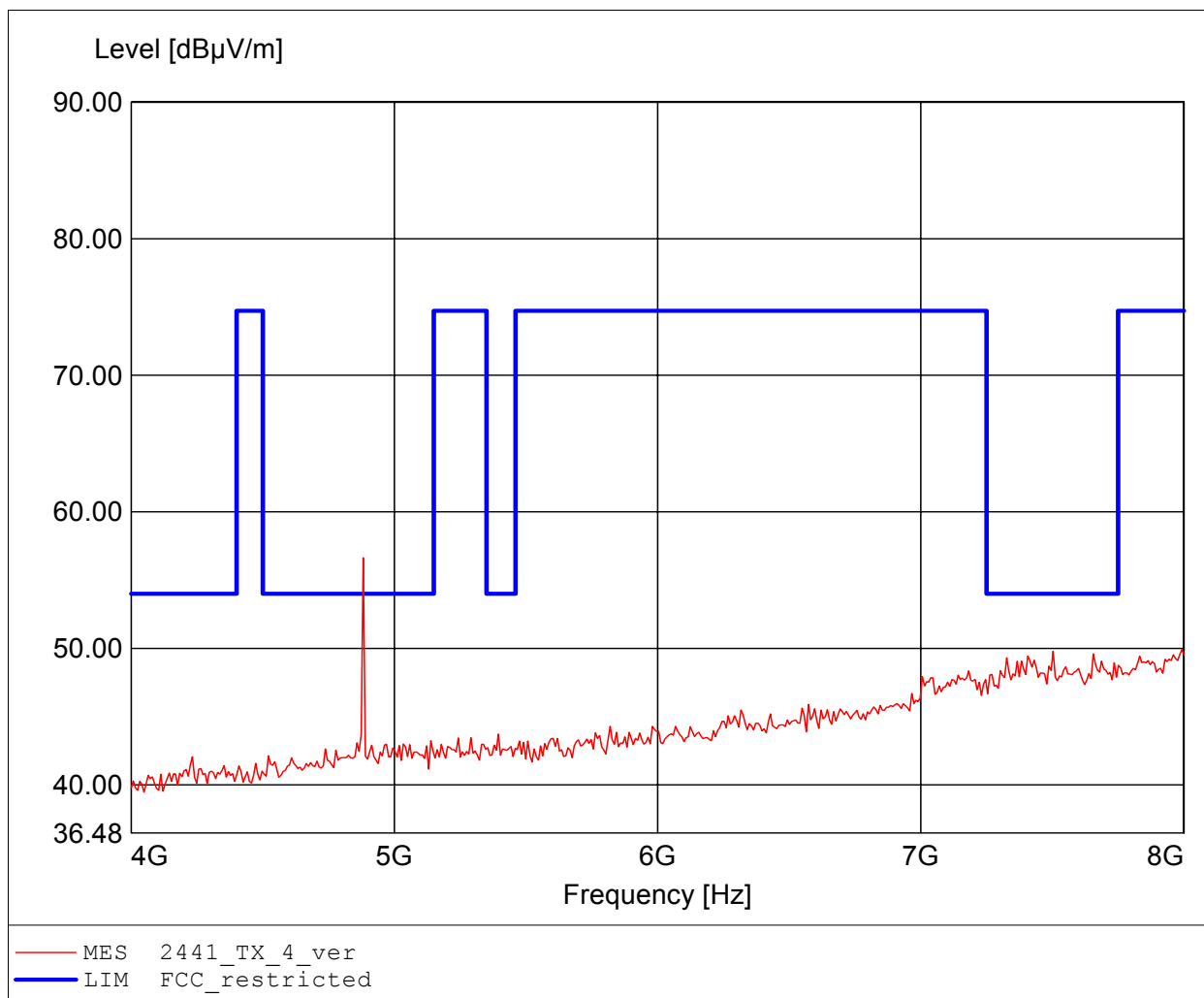
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2441
Comment 1: Dist.: 3m, Ant.: HL 025, amplif.
Comment 2: Freq: 3.881GHz, Emax: 43.93dBuV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

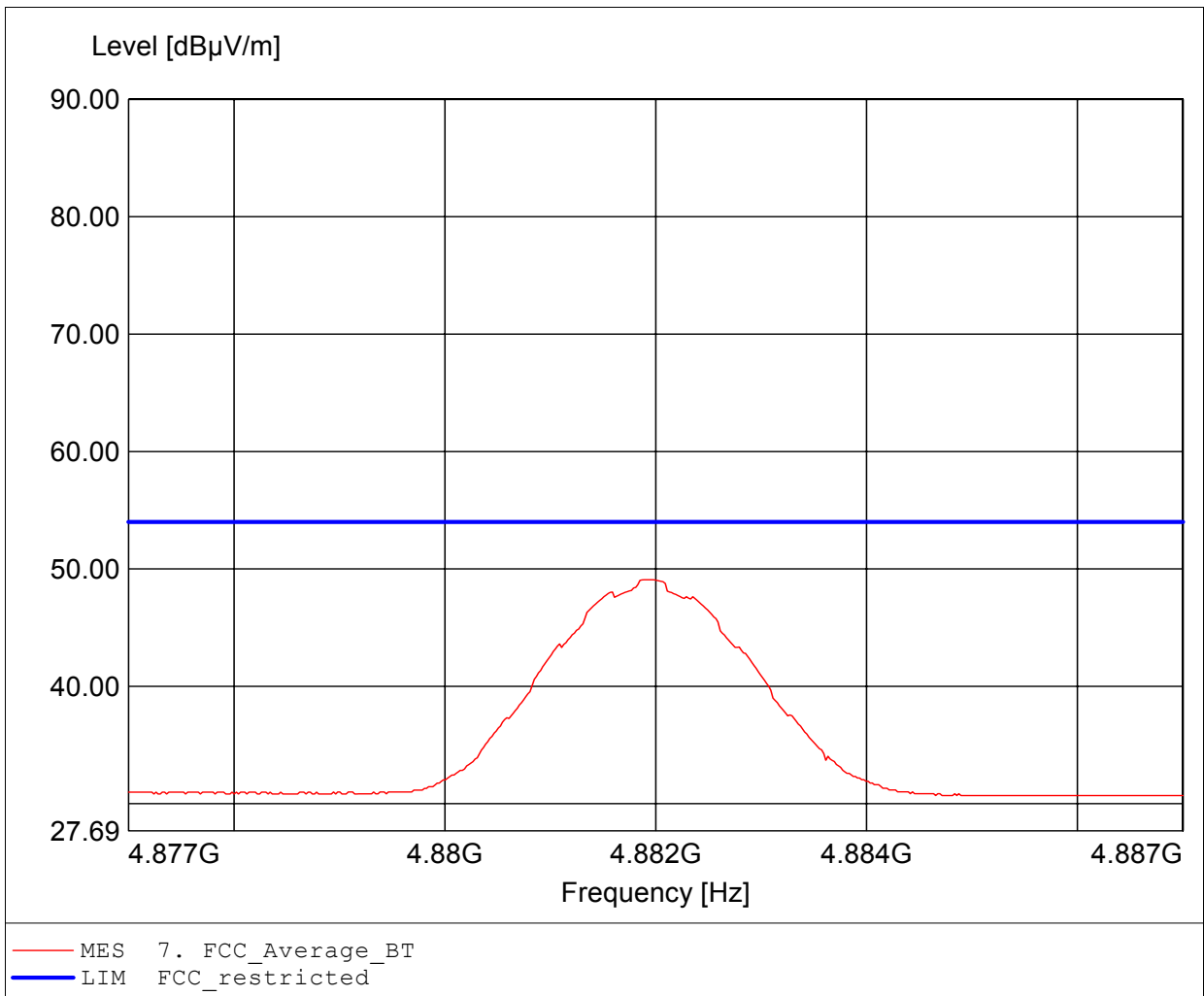
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2441
Comment 1: Dist.: 3m, Ant.: HL 025, ampl.+HP.
Comment 2: Freq: 4.882GHz, Emax: 56.63dBuV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

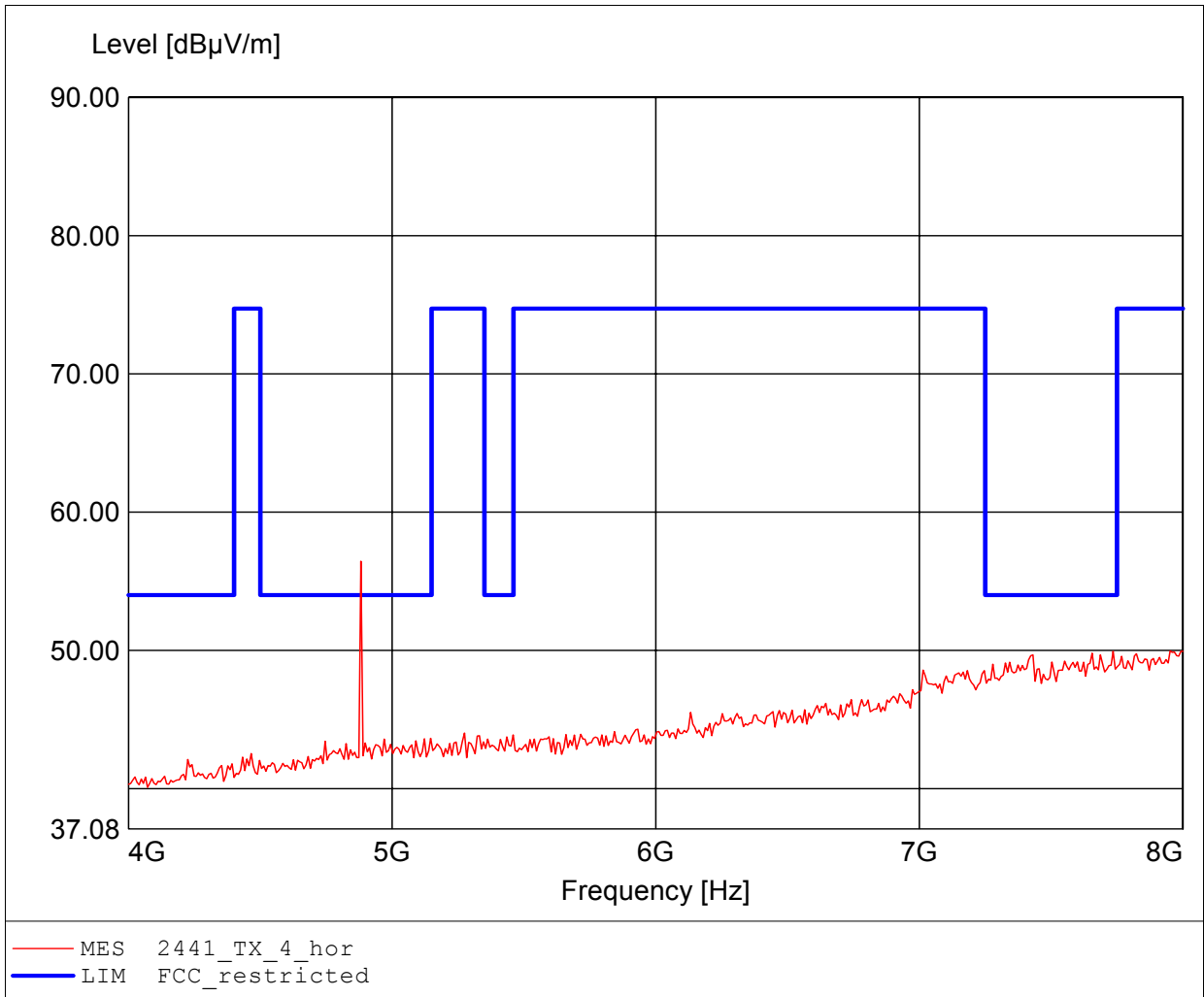
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit / GOM21005-3245
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / CH.: 2441
Test Specification: according to §15.247, average detector
Comment 1: Dist.: 3m, Ant.: BBHA9120D, amplif.
Comment 2: Freq: 4.882GHz, Emax: 49.08dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

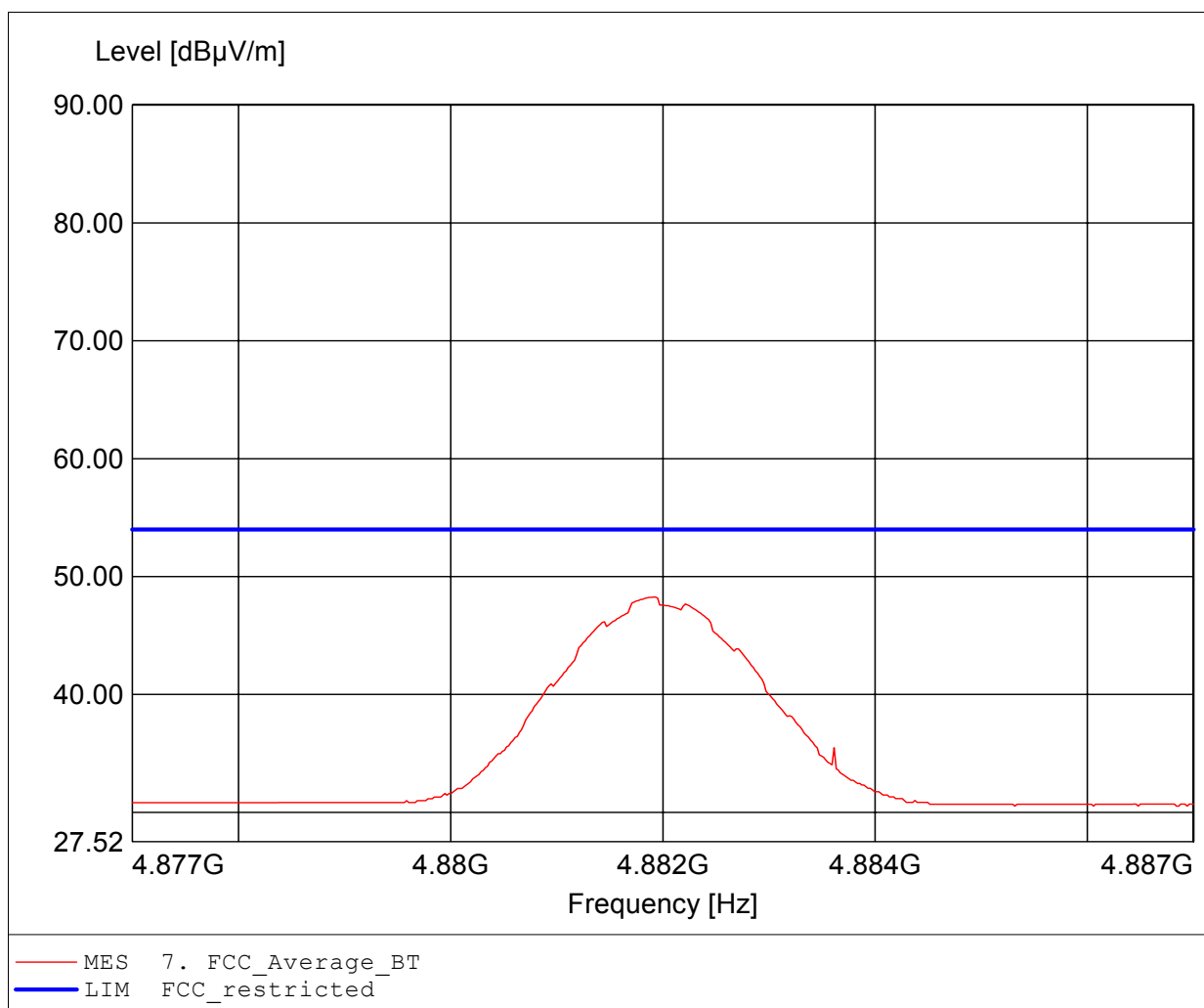
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2441
Comment 1: Dist.: 3m, Ant.: HL 025, ampl.+HP.
Comment 2: Freq: 4.882GHz, Emax: 56.45dBuV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

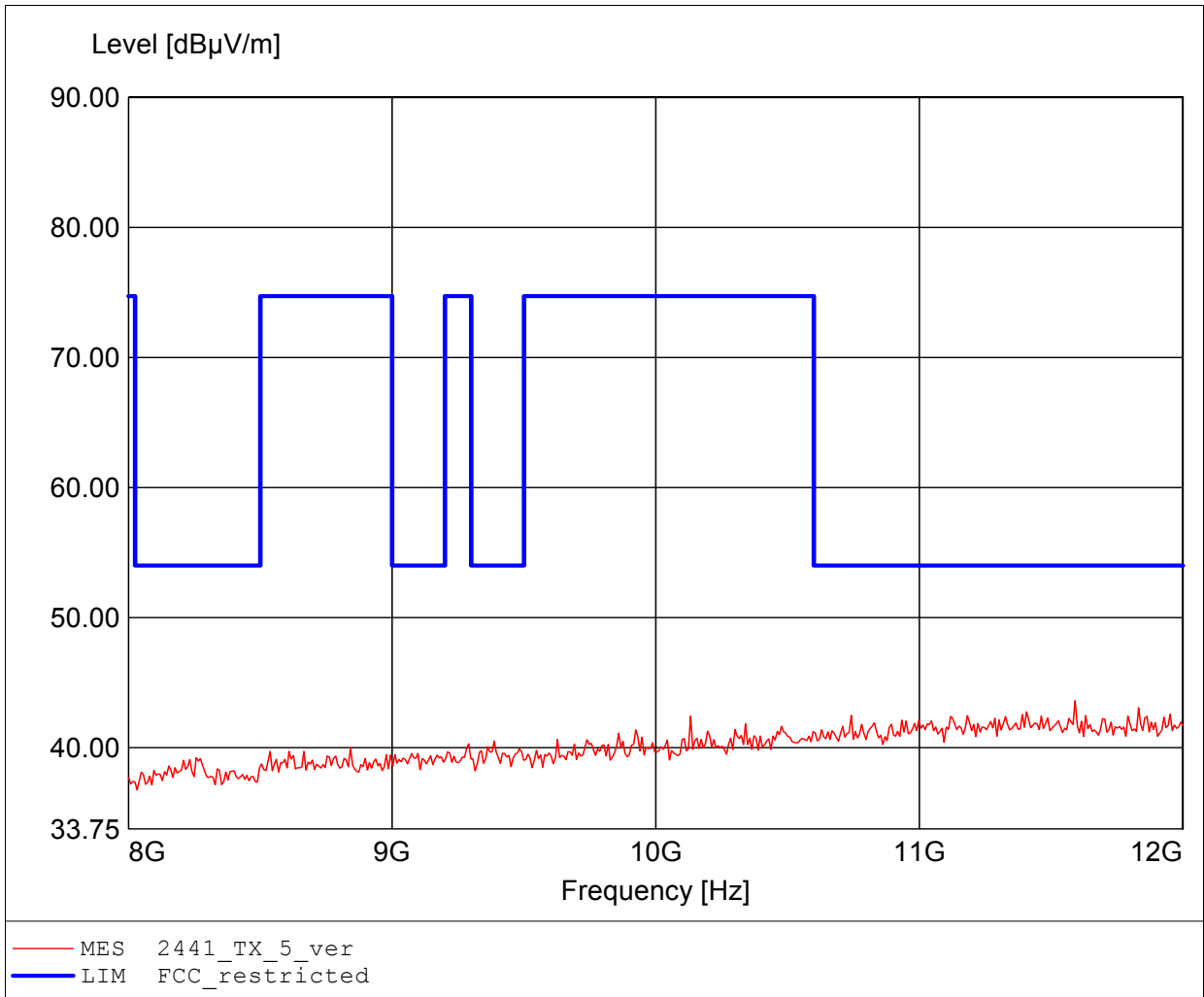
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit / GOM21005-3245
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / CH.: 2441
Test Specification: according to §15.247, average detector
Comment 1: Dist.: 3m, Ant.: BBHA9120D, amplif.
Comment 2: Freq: 4.882GHz, Emax: 48.26dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

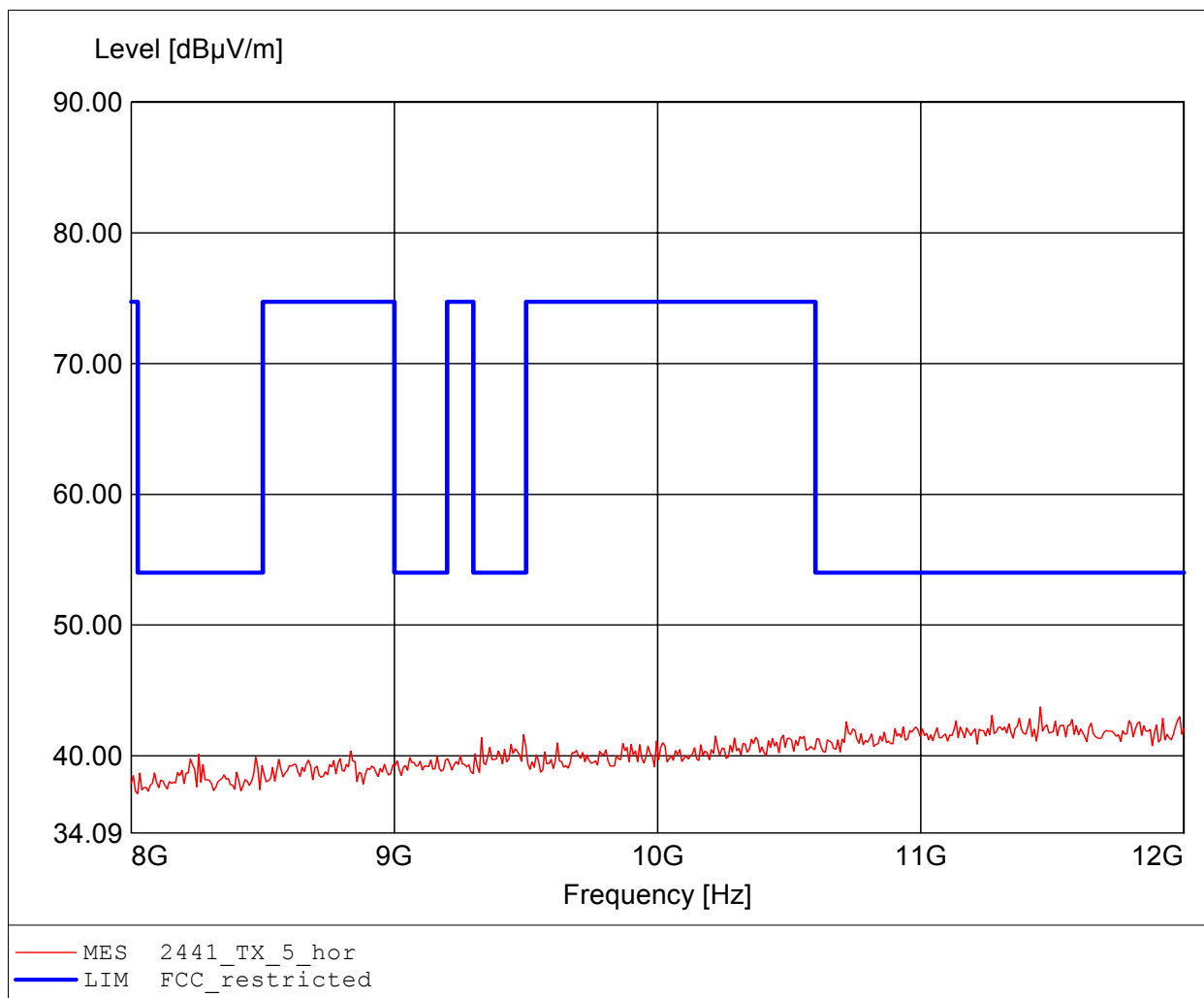
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2441
Comment 1: Dist.: 3m, Ant.: HL 025, ampl.+HP.
Comment 2: Freq: 11.591GHz, Emax: 43.61dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

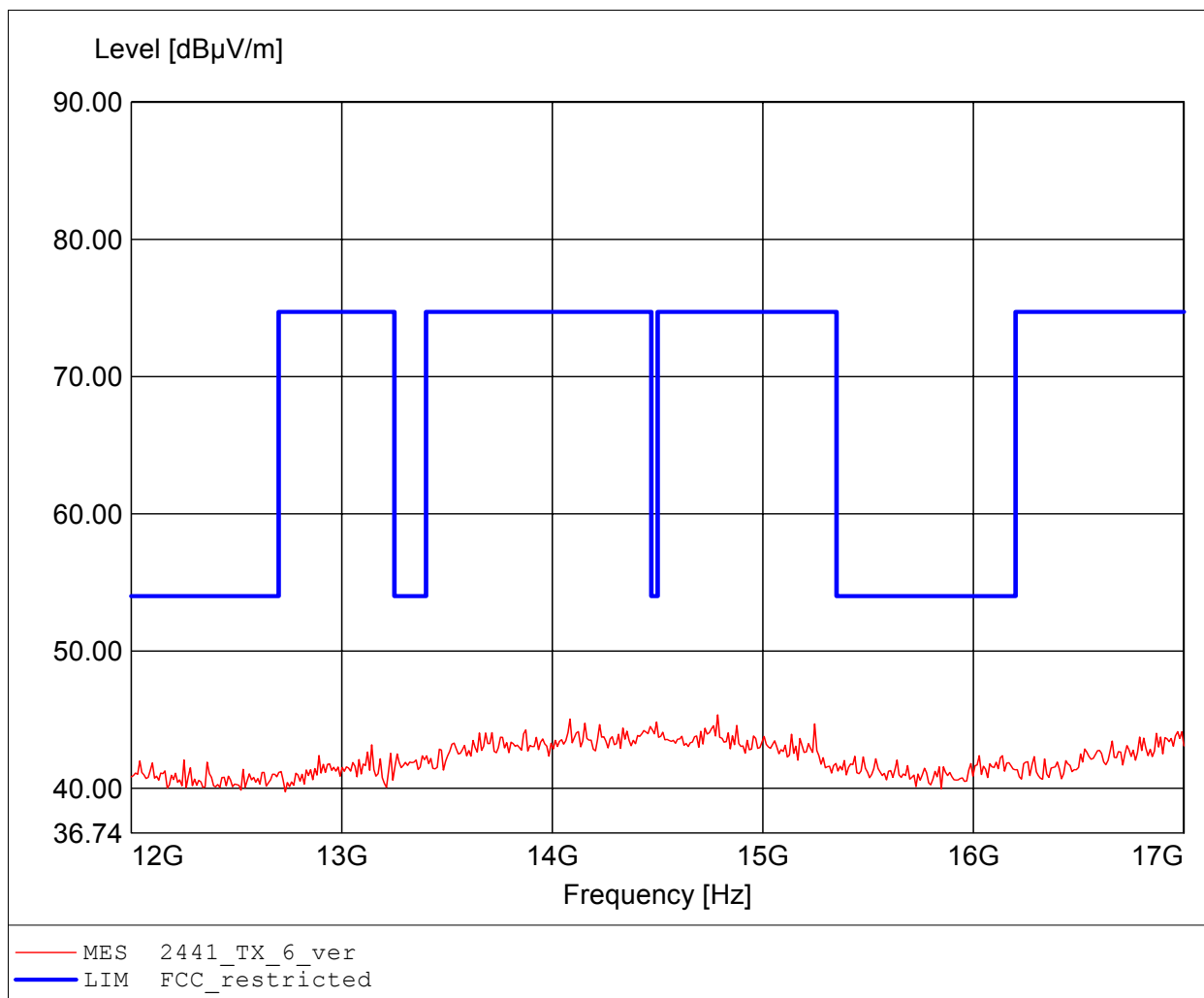
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2441
Comment 1: Dist.: 3m, Ant.: HL 025, ampl.+HP.
Comment 2: Freq: 11.455GHz, Emax: 43.73dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

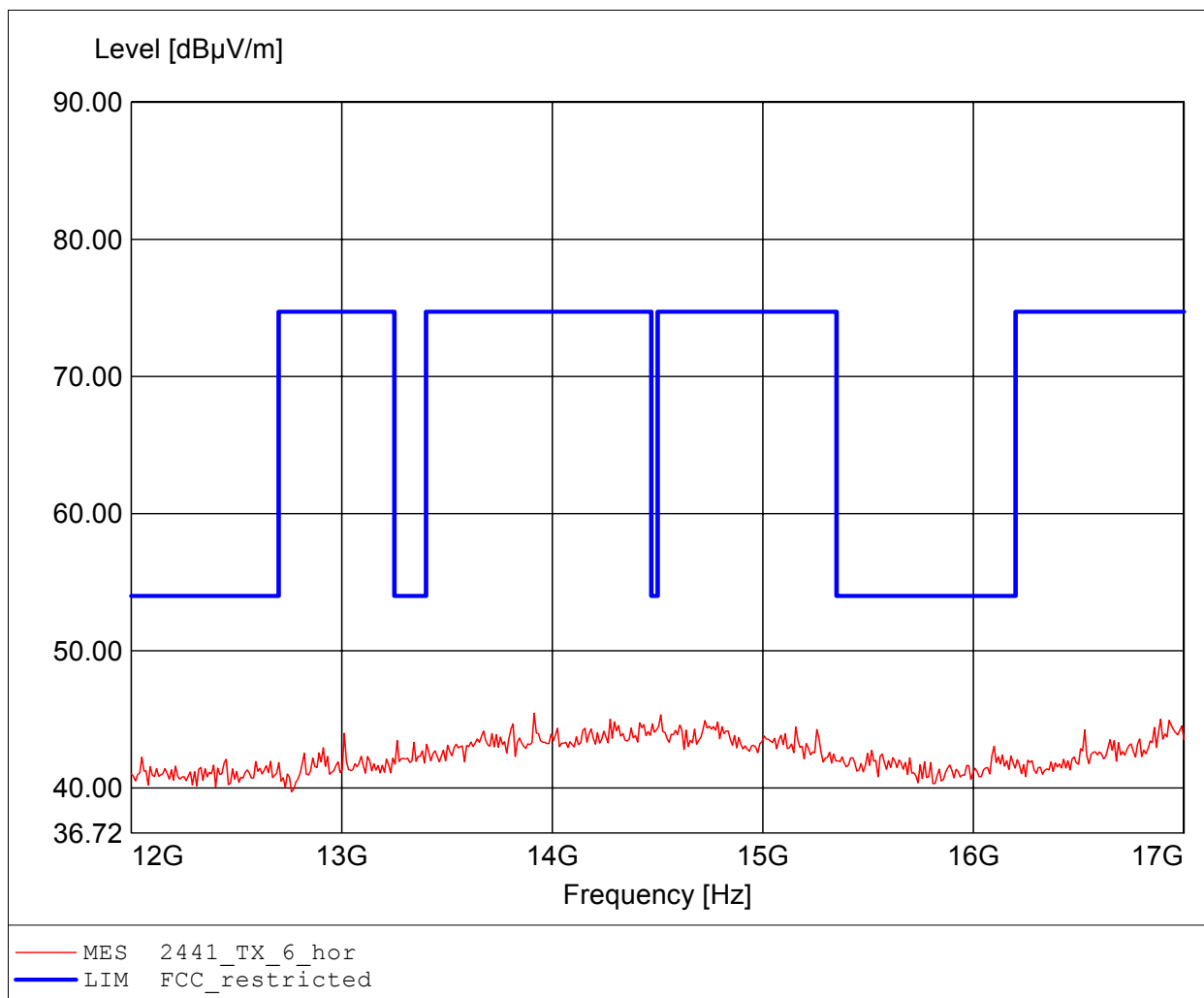
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2441
Comment 1: Dist.: 3m, Ant.: HL 025, ampl.+HP.
Comment 2: Freq: 14.786GHz, Emax: 45.35dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

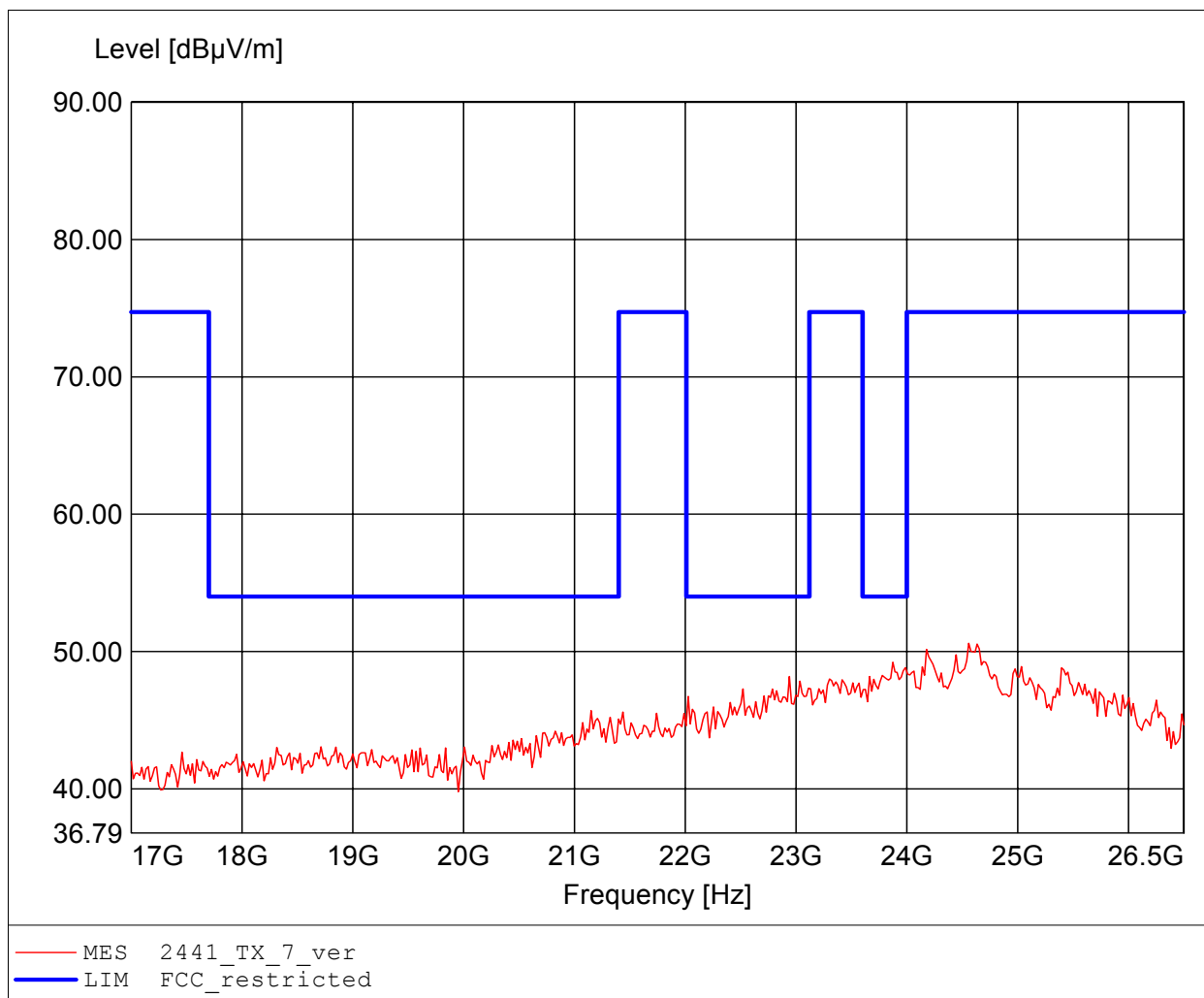
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2441
Comment 1: Dist.: 3m, Ant.: HL 025, ampl.+HP.
Comment 2: Freq: 13.914GHz, Emax: 45.45dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

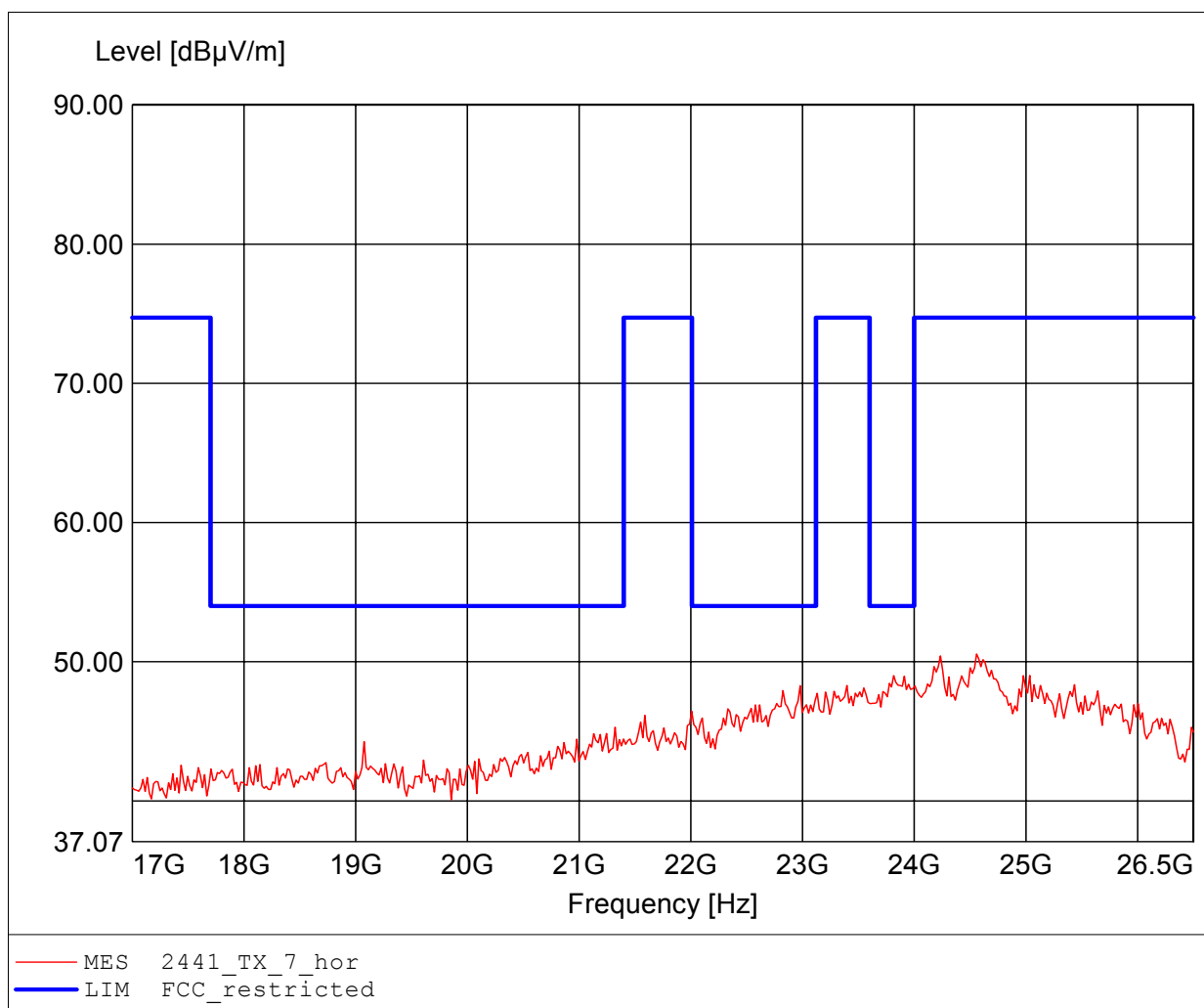
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2441
Comment 1: Dist.: 3m, Ant.: HL025, amplif.
Comment 2: Freq: 24.558GHz, Emax: 50.61dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

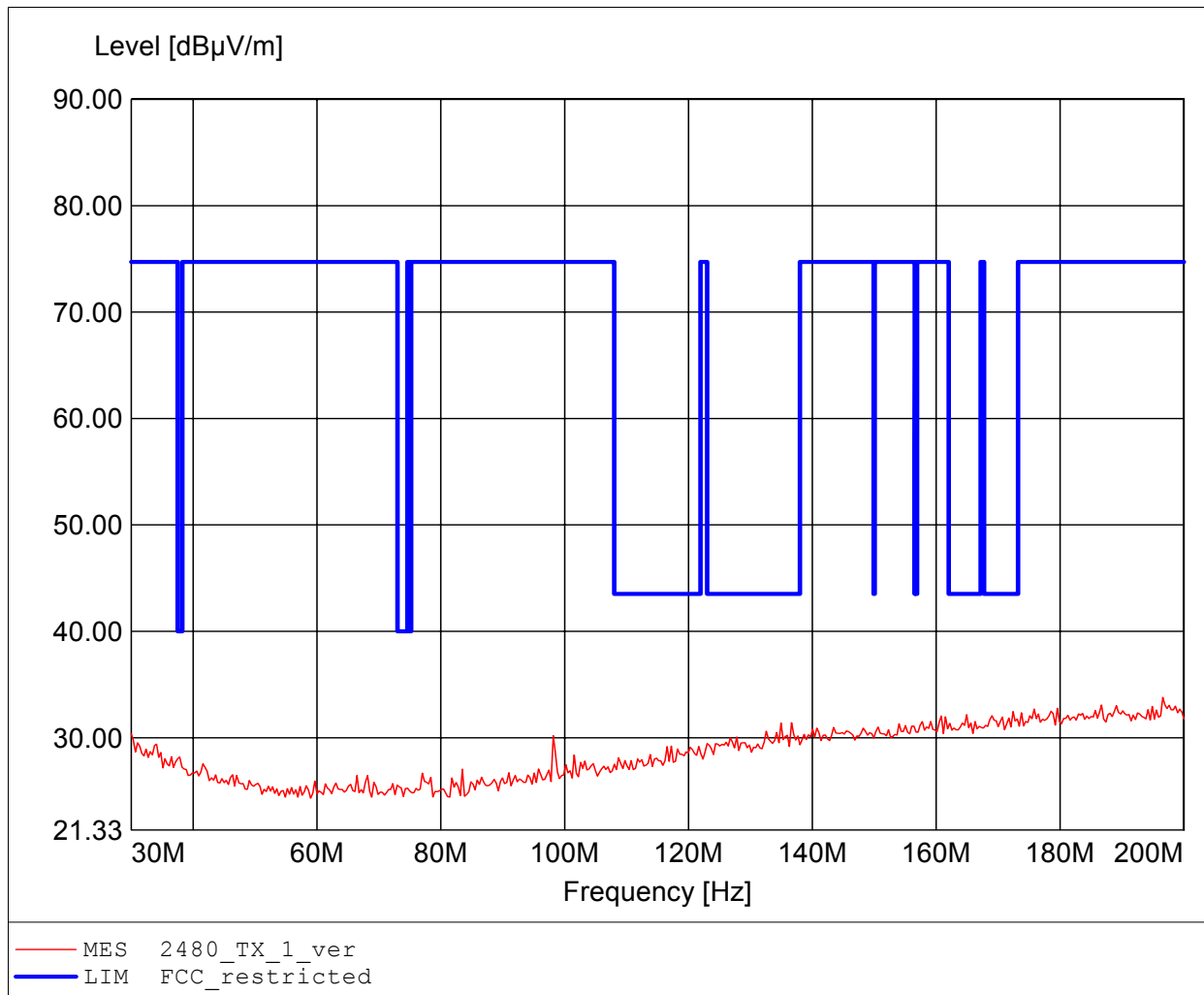
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2441
Comment 1: Dist.: 3m, Ant.: HL025, amplif.
Comment 2: Freq: 24.558GHz, Emax: 50.56dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

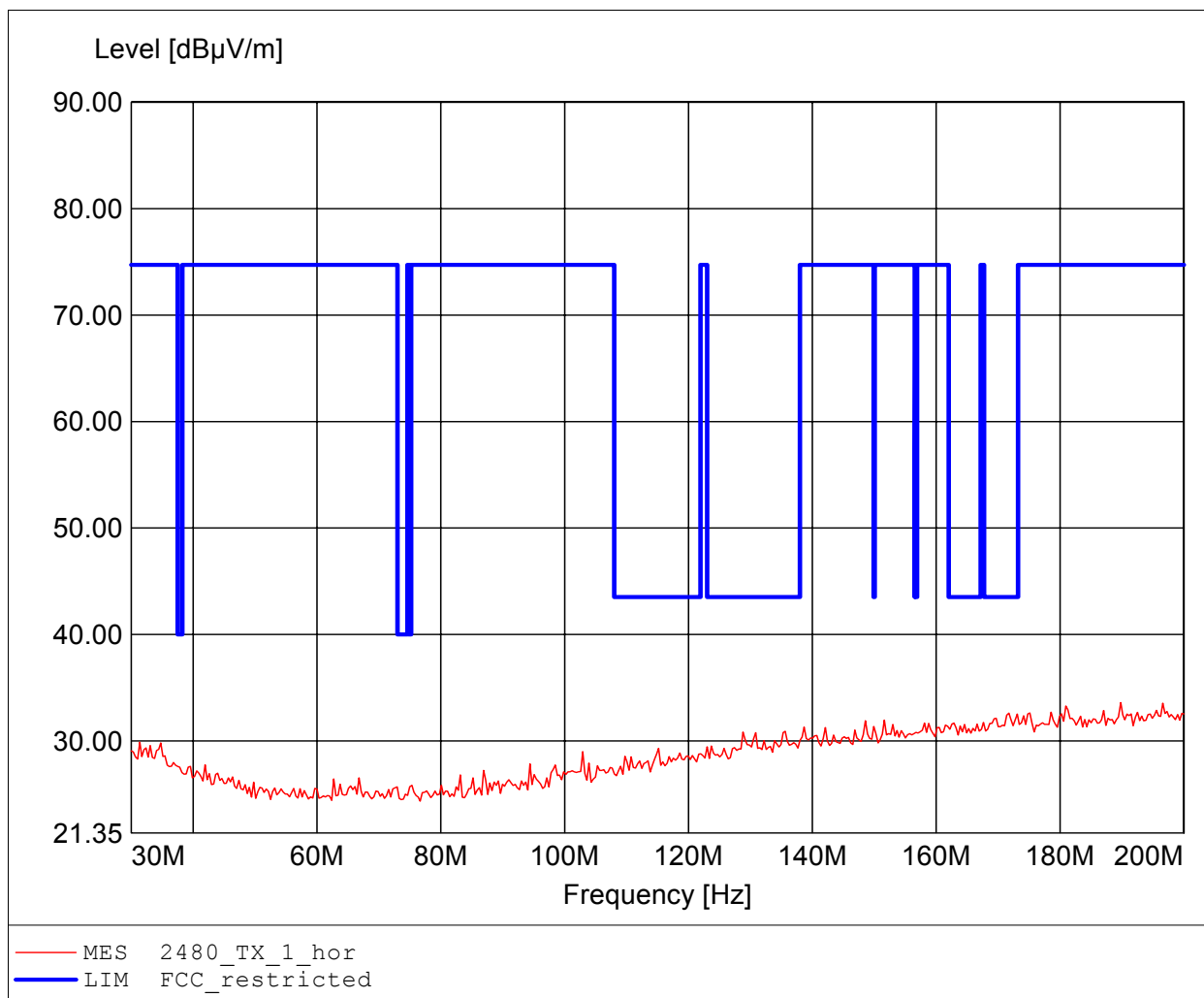
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2480
Comment 1: Dist.: 3m, Ant.: HK 116
Comment 2: Freq: 196.593MHz, Emax: 33.79dBµV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

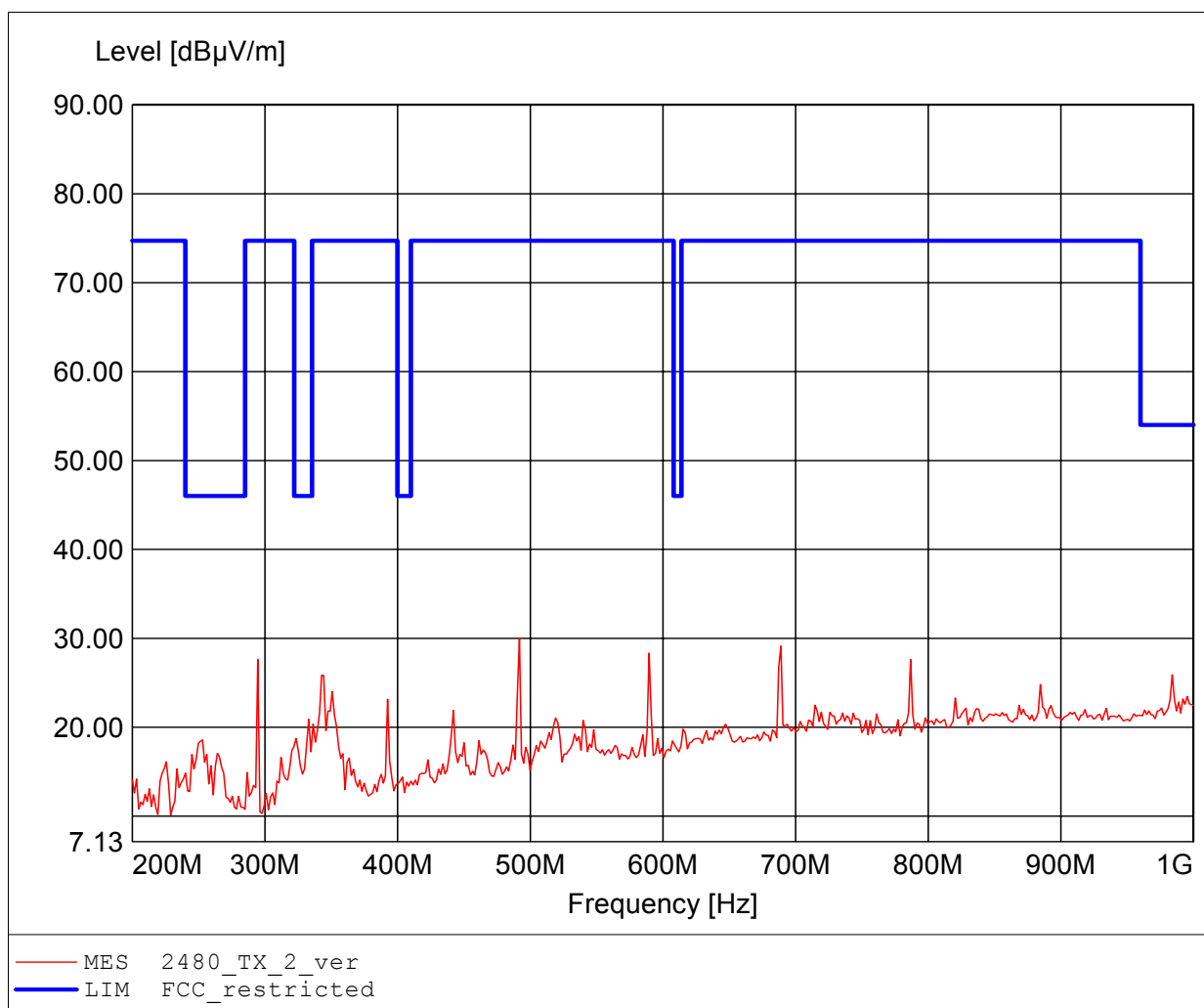
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2480
Comment 1: Dist.: 3m, Ant.: HK 116
Comment 2: Freq: 189.780MHz, Emax: 33.60dBµV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

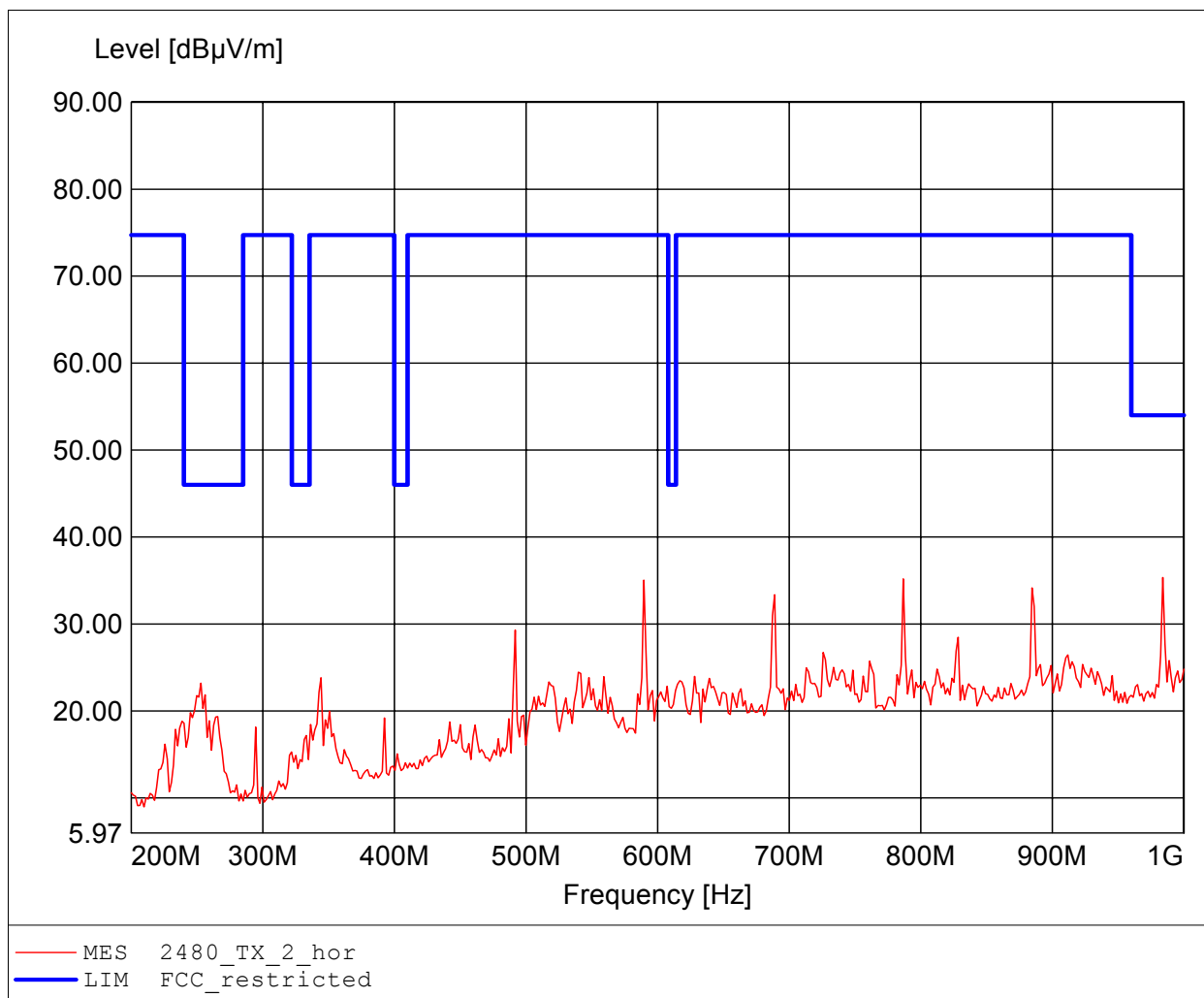
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2480
Comment 1: Dist.: 3m, Ant.: HL 223, amplif.
Comment 2: Freq: 491.784MHz, Emax: 30.03dBµV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

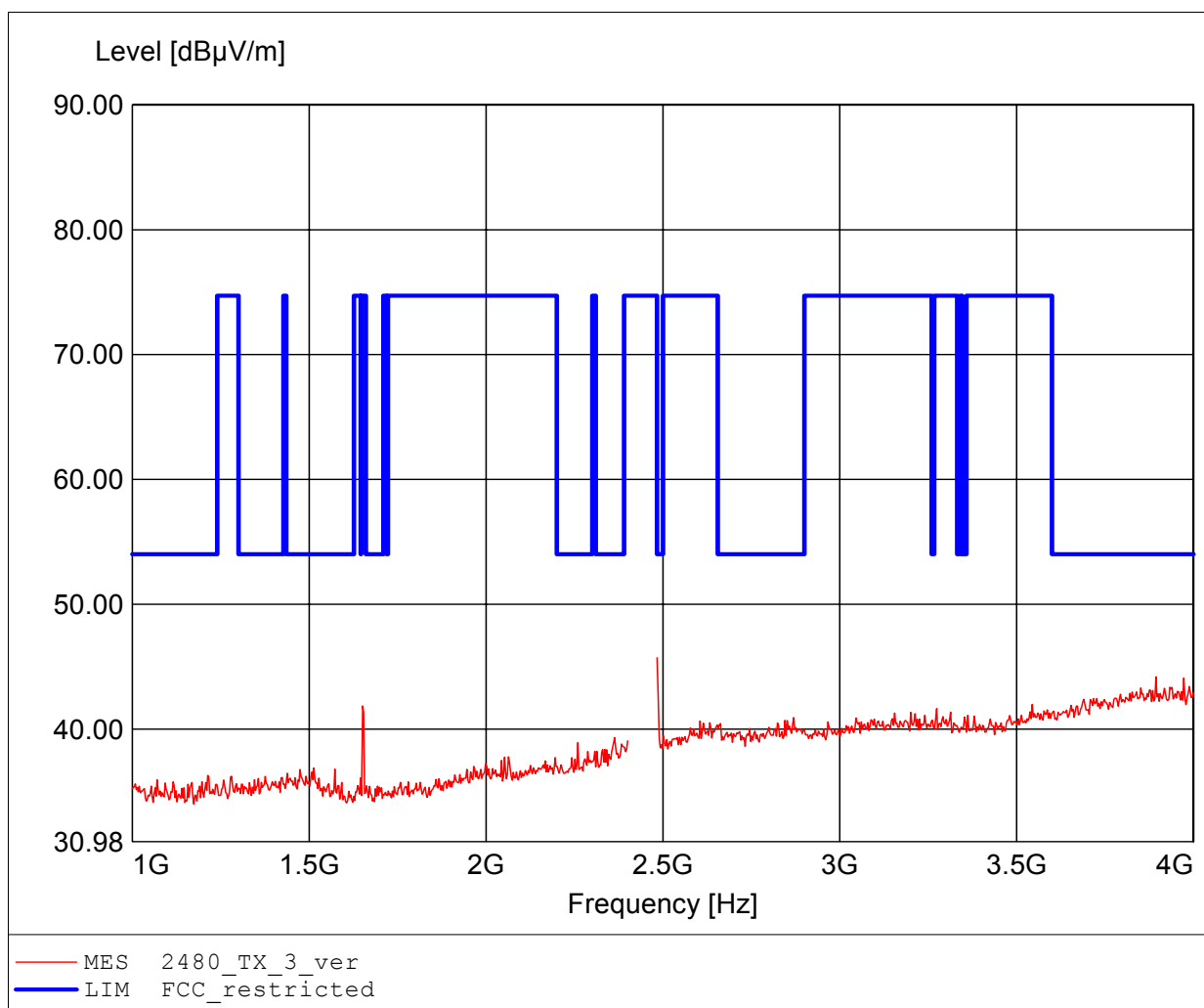
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2480
Comment 1: Dist.: 3m, Ant.: HL 223, amplif.
Comment 2: Freq: 983.968MHz, Emax: 35.36dBµV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

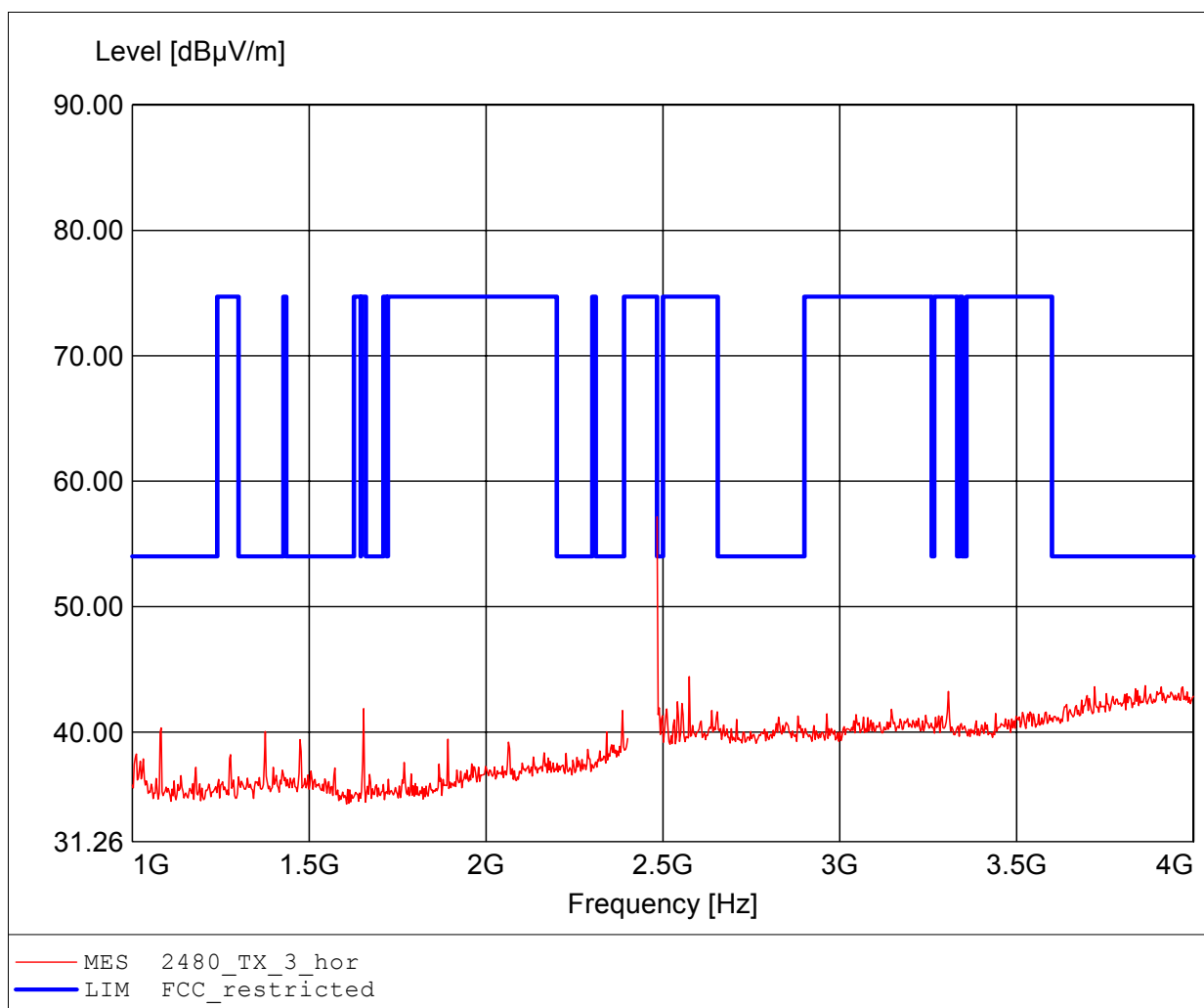
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2480
Comment 1: Dist.: 3m, Ant.: HL 025, amplif.
Comment 2: Freq: 2.484GHz, Emax: 45.72dBuV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

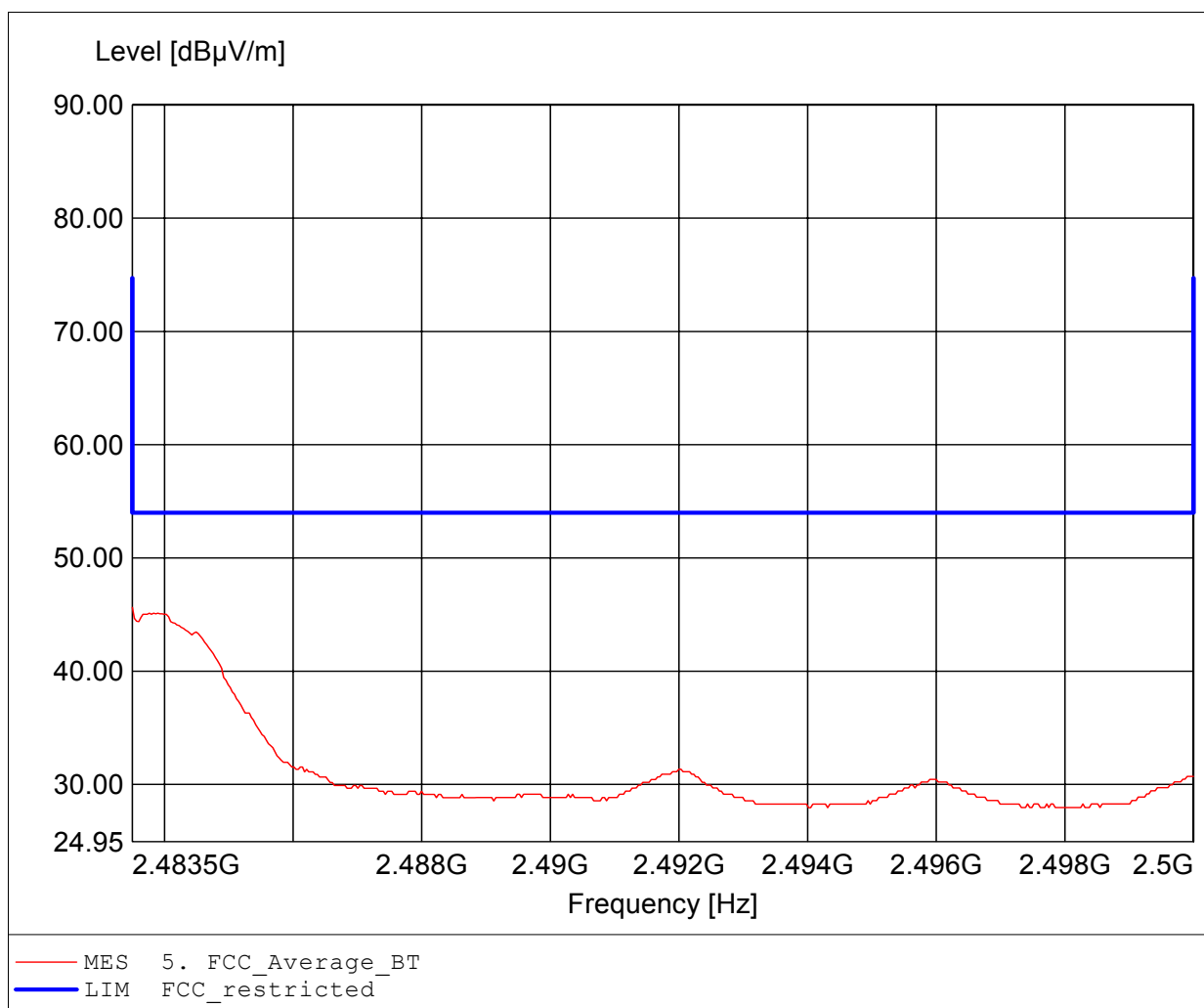
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2480
Comment 1: Dist.: 3m, Ant.: HL 025, amplif.
Comment 2: Freq: 2.484GHz, Emax: 57.17dBuV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

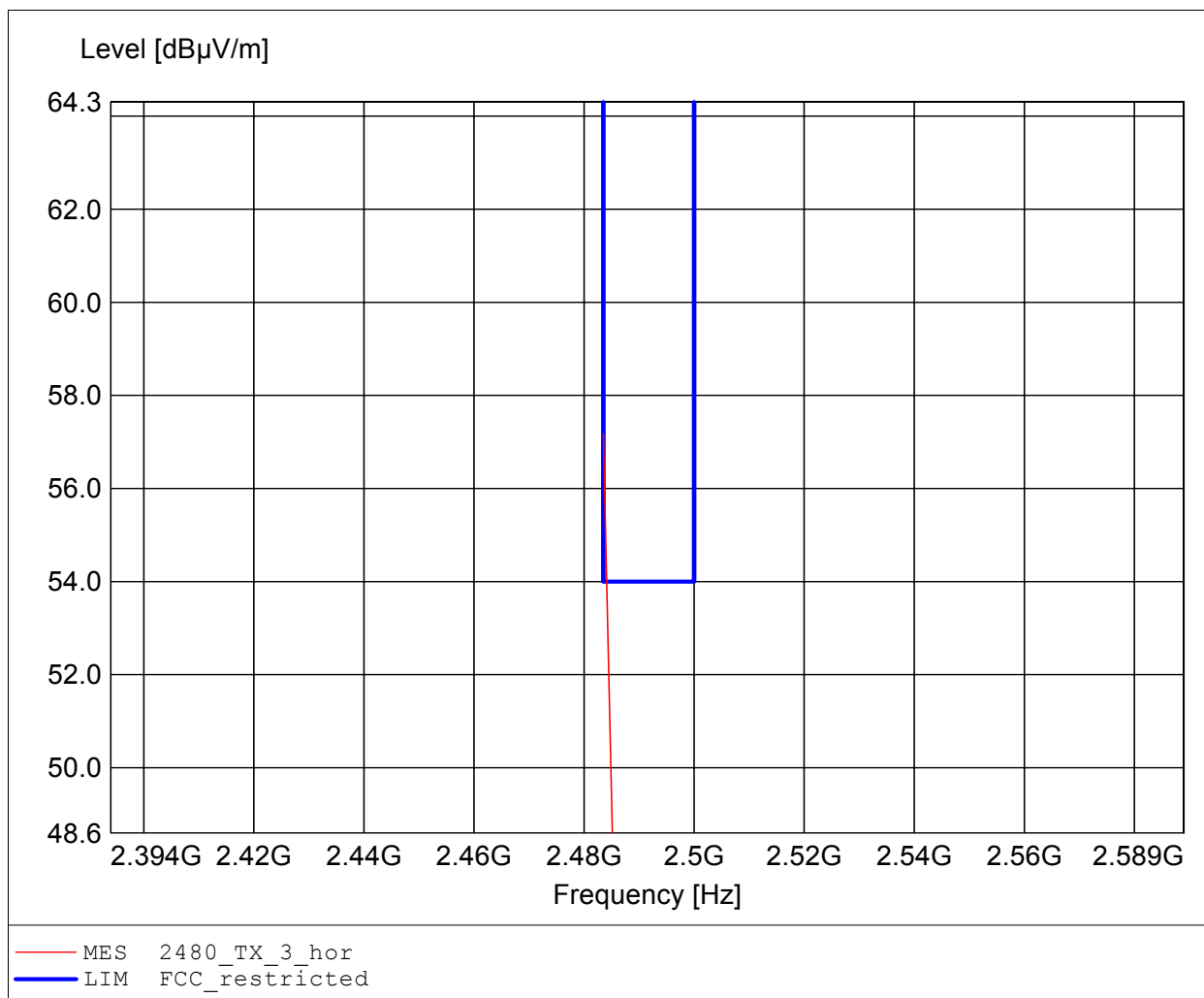
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit / GOM21005-3245
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / CH.: 2480
Test Specification: according to §15.247, average detector
Comment 1: Dist.: 3m, Ant.: BBHA9120D, ampl.+HP.
Comment 2: Freq: 2.484GHz, Emax: 45.63dBuV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

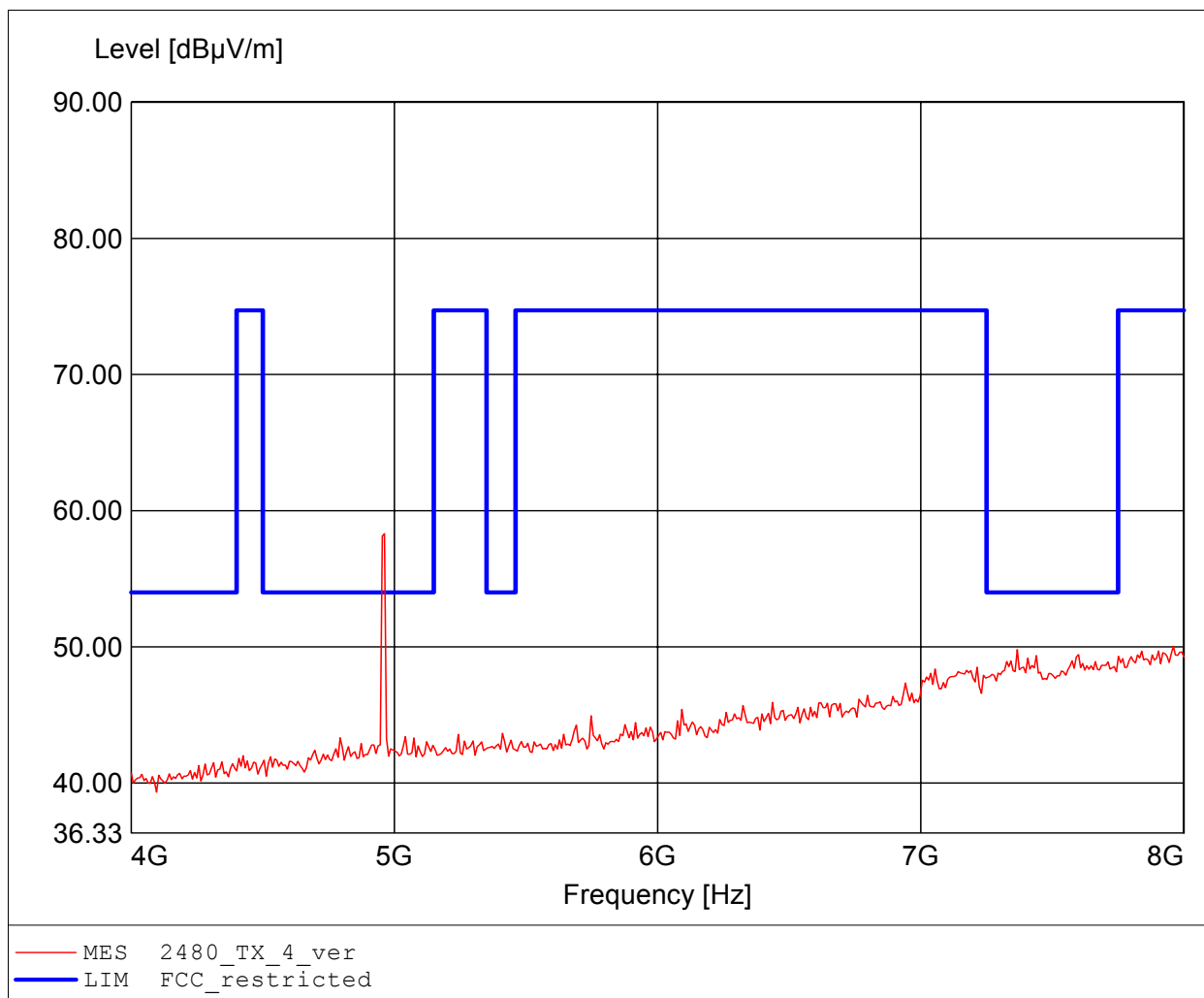
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2480
Comment 1: Dist.: 3m, Ant.: HL 025, amplif.
Comment 2: Freq: 2.484GHz, Emax: 57.17dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

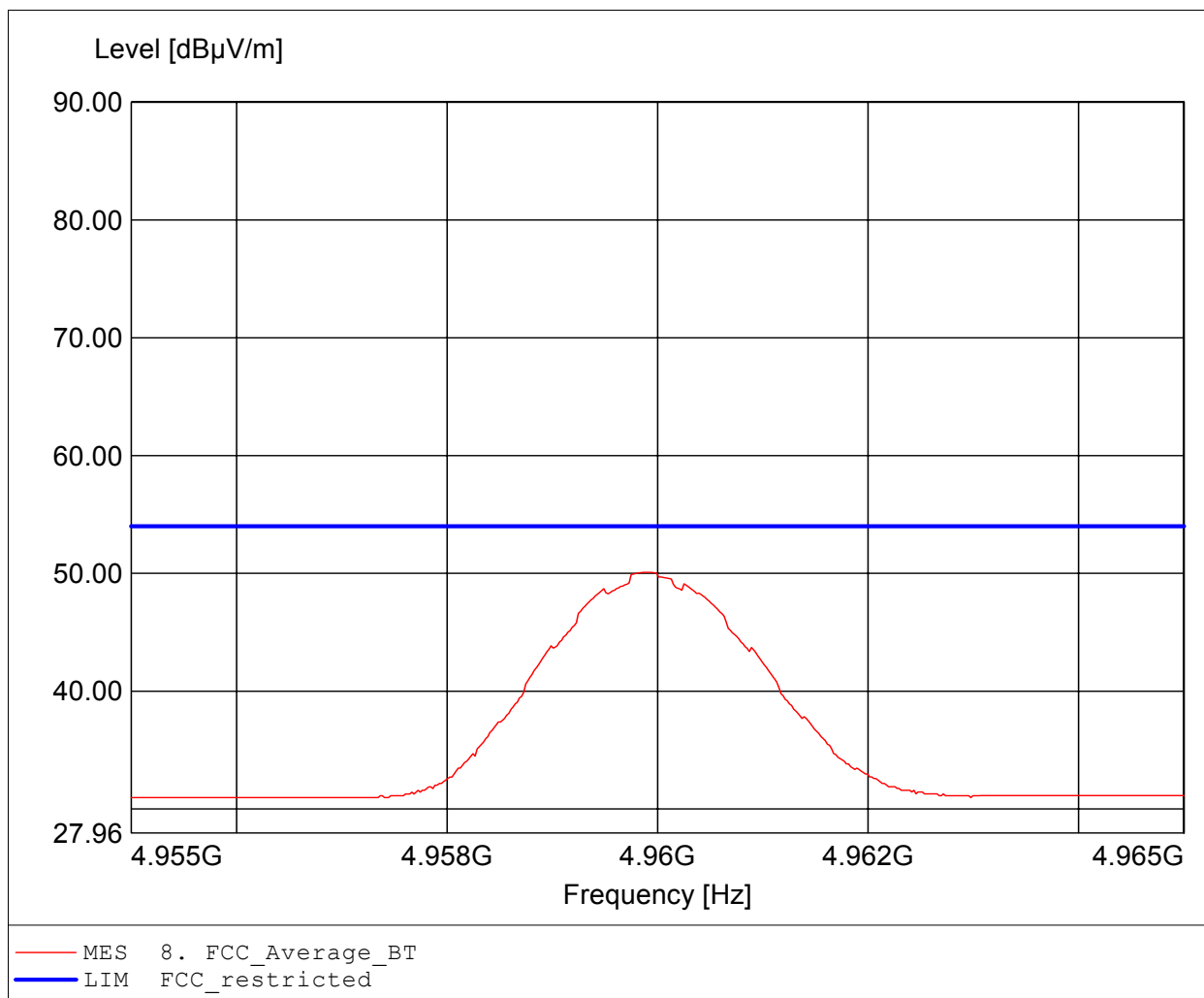
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2480
Comment 1: Dist.: 3m, Ant.: HL 025, ampl.+HP.
Comment 2: Freq: 4.962GHz, Emax: 58.32dBuV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

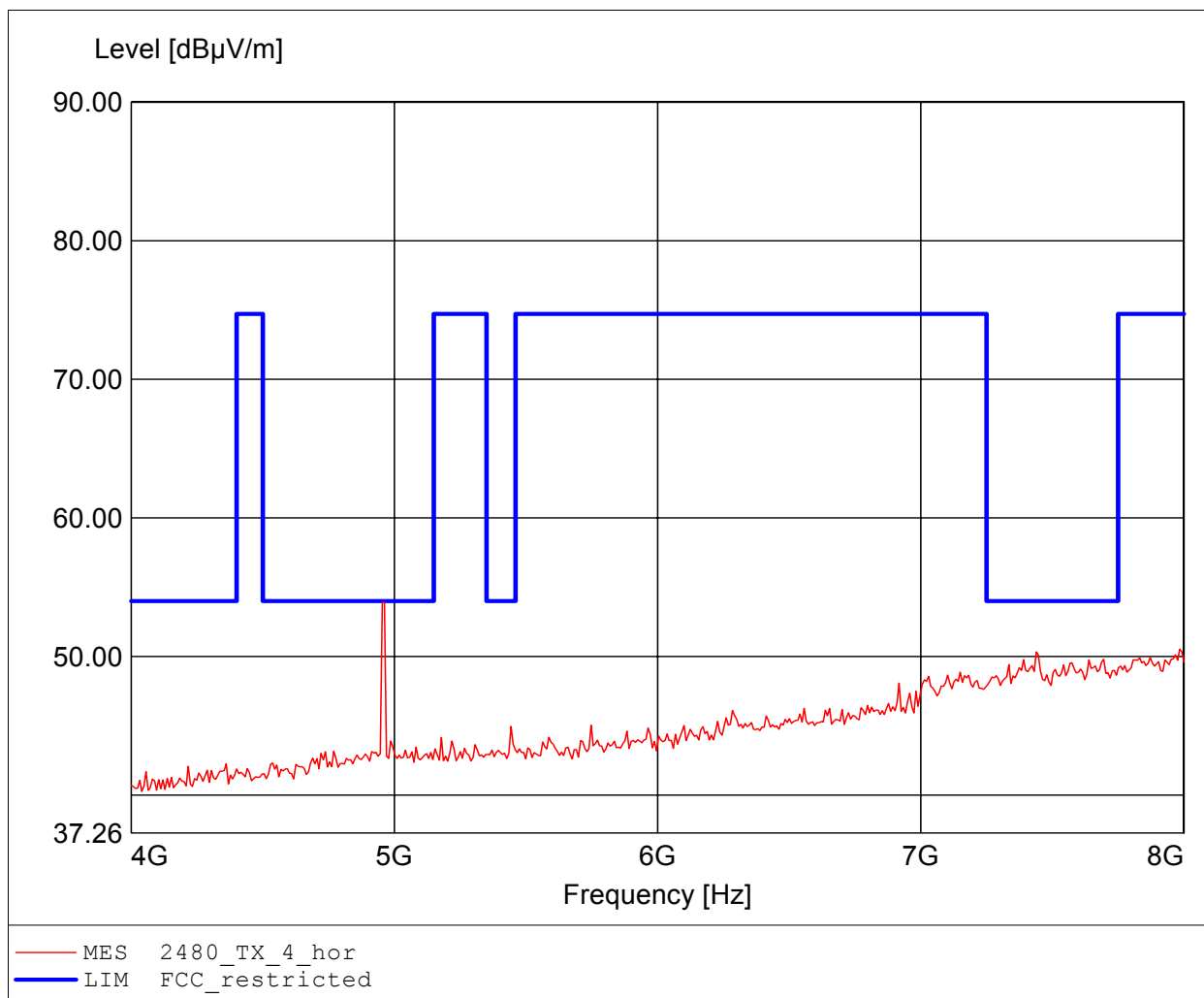
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit / GOM21005-3245
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / CH.: 2480
Test Specification: according to §15.247, average detector
Comment 1: Dist.: 3m, Ant.: BBHA9120D, amplif.
Comment 2: Freq: 4.960GHz, Emax: 50.09dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

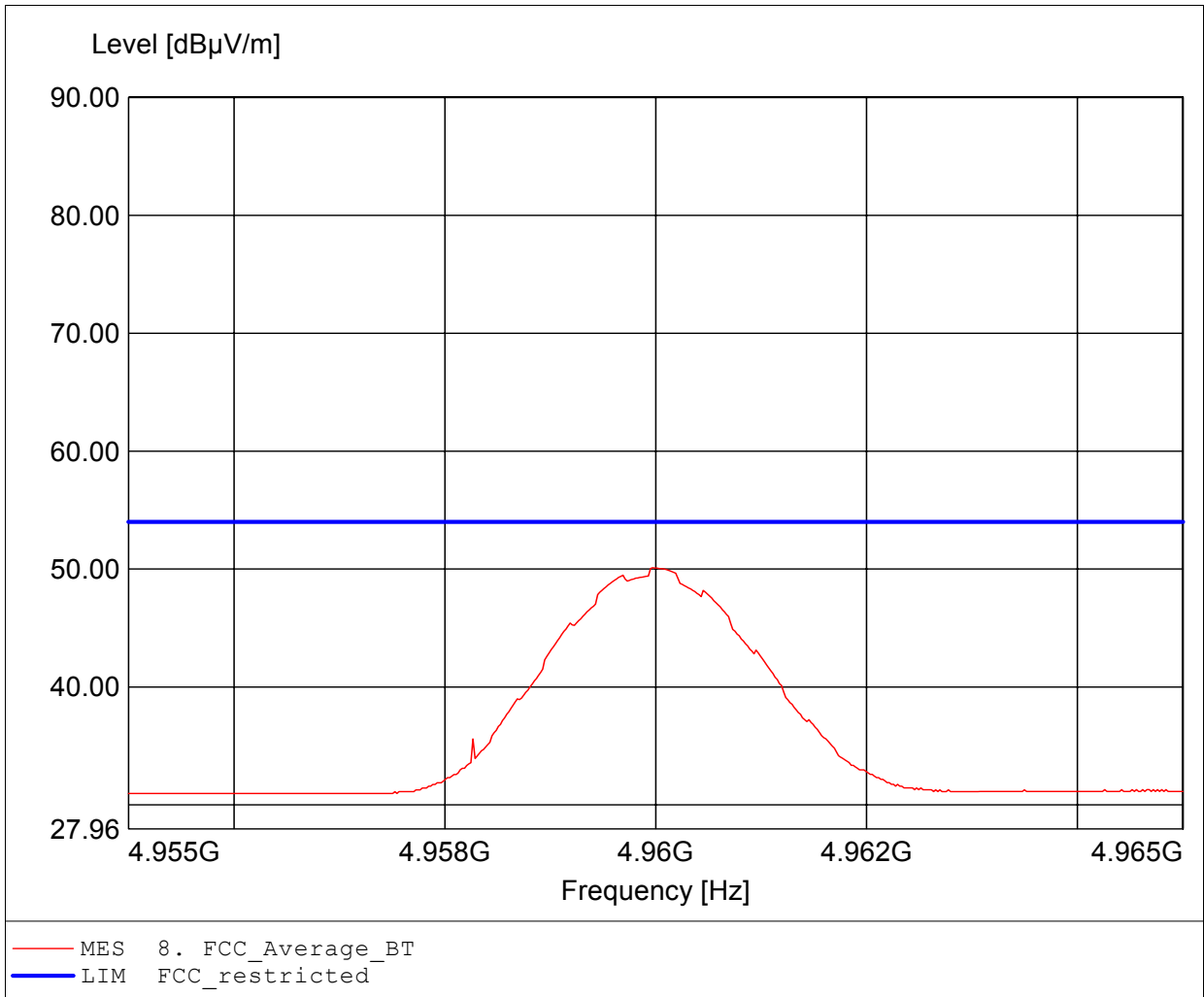
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2480
Comment 1: Dist.: 3m, Ant.: HL 025, ampl.+HP.
Comment 2: Freq: 4.954GHz, Emax: 53.90dBuV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

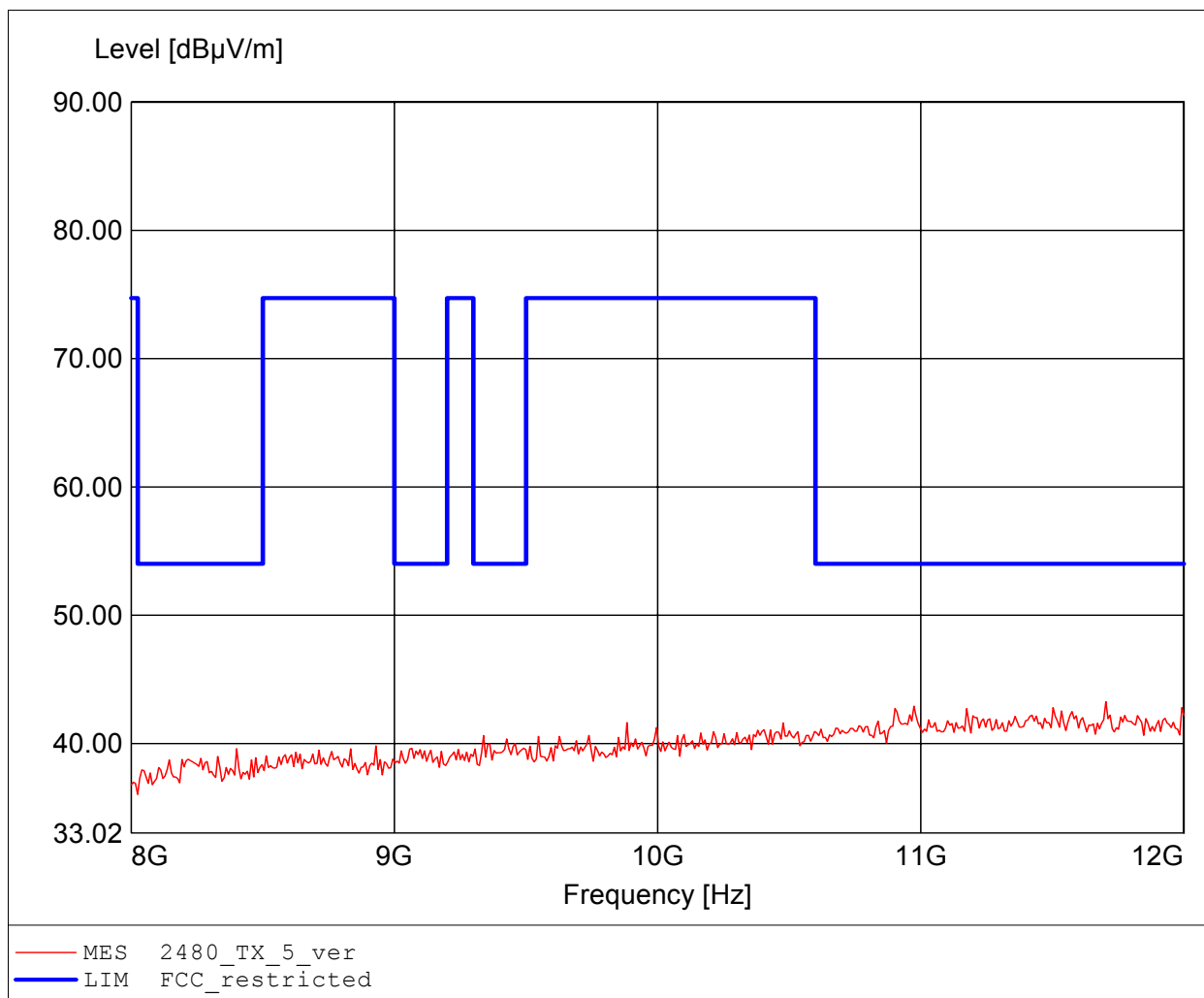
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit / GOM21005-3245
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / CH.: 2480
Test Specification: according to §15.247, average detector
Comment 1: Dist.: 3m, Ant.: BBHA9120D, amplif.
Comment 2: Freq: 4.960GHz, Emax: 50.10dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

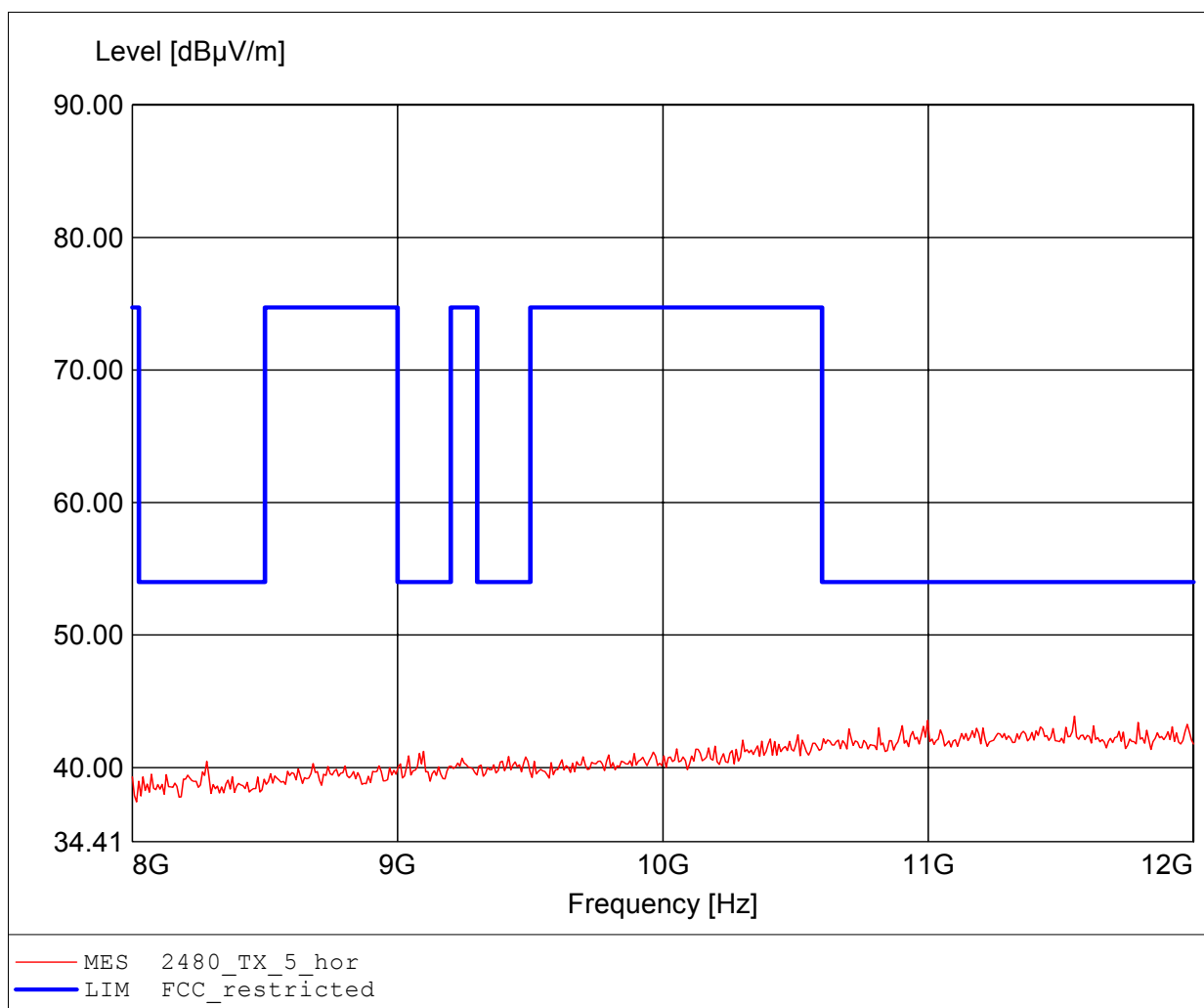
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2480
Comment 1: Dist.: 3m, Ant.: HL 025, ampl.+HP.
Comment 2: Freq: 11.703GHz, Emax: 43.26dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

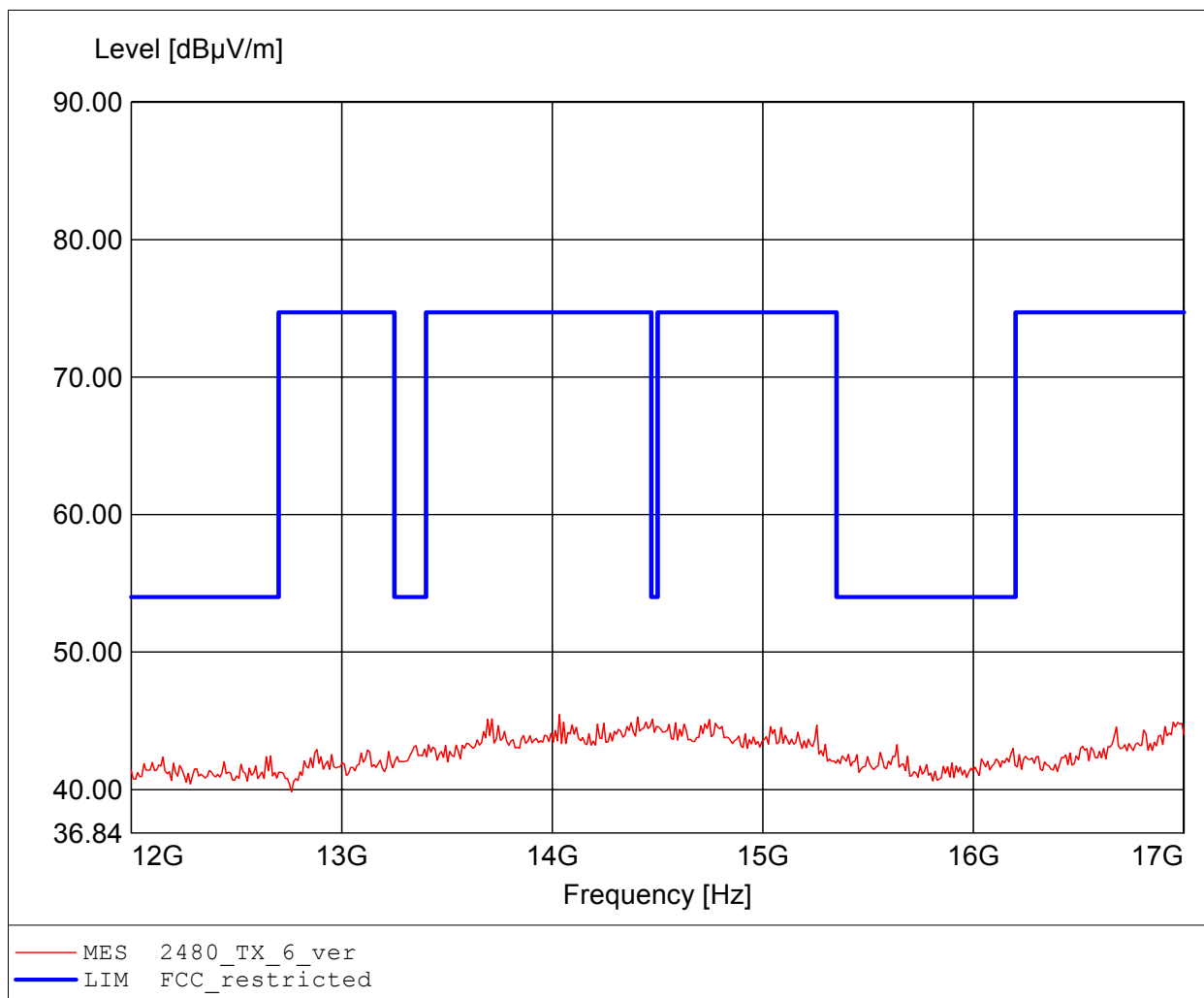
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2480
Comment 1: Dist.: 3m, Ant.: HL 025 G0M21005-3245
Comment 2: Freq: 11.551GHz, Emax: 43.88dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

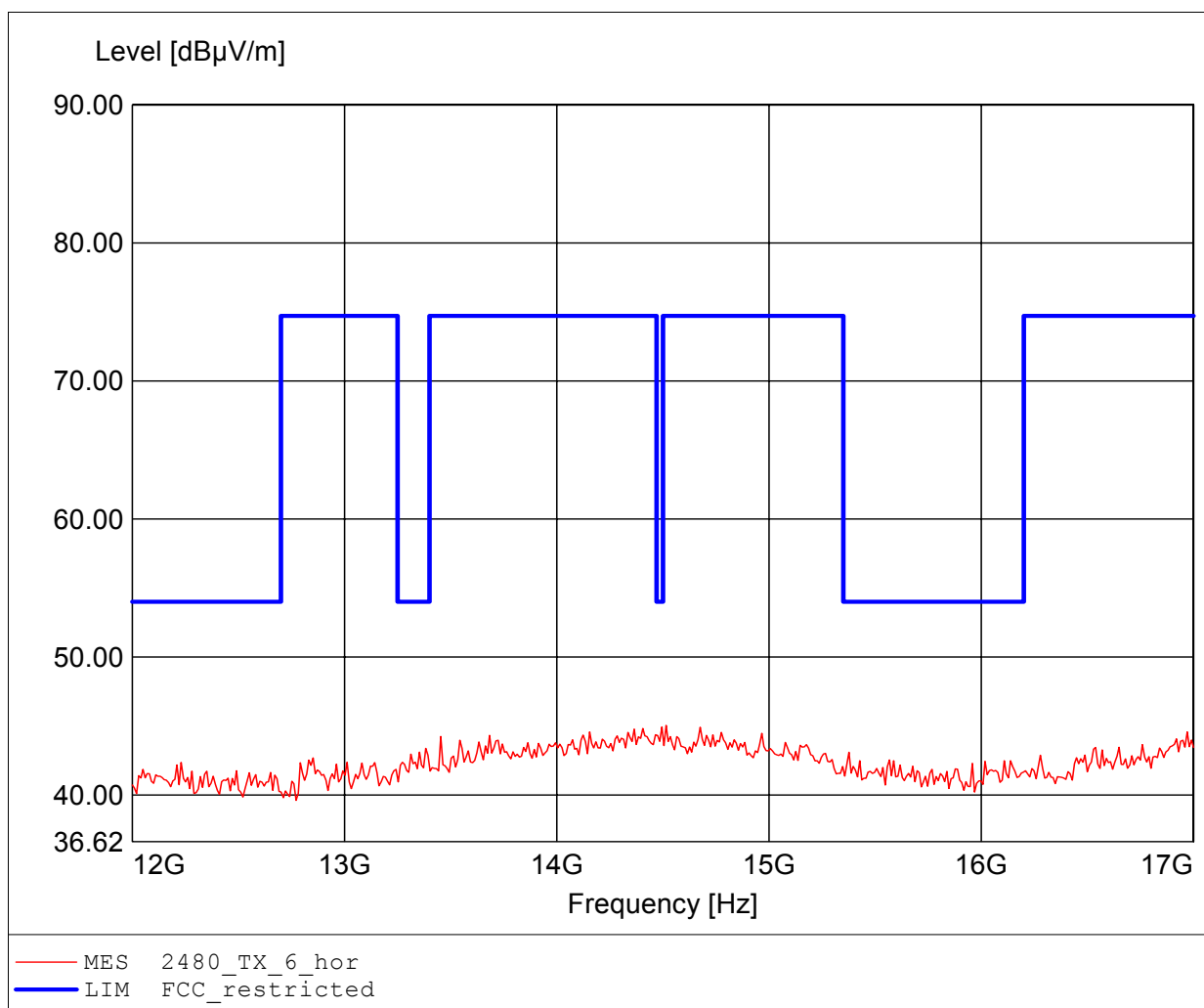
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2480
Comment 1: Dist.: 3m, Ant.: HL 025, ampl.+HP.
Comment 2: Freq: 14.034GHz, Emax: 45.46dB μ V/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

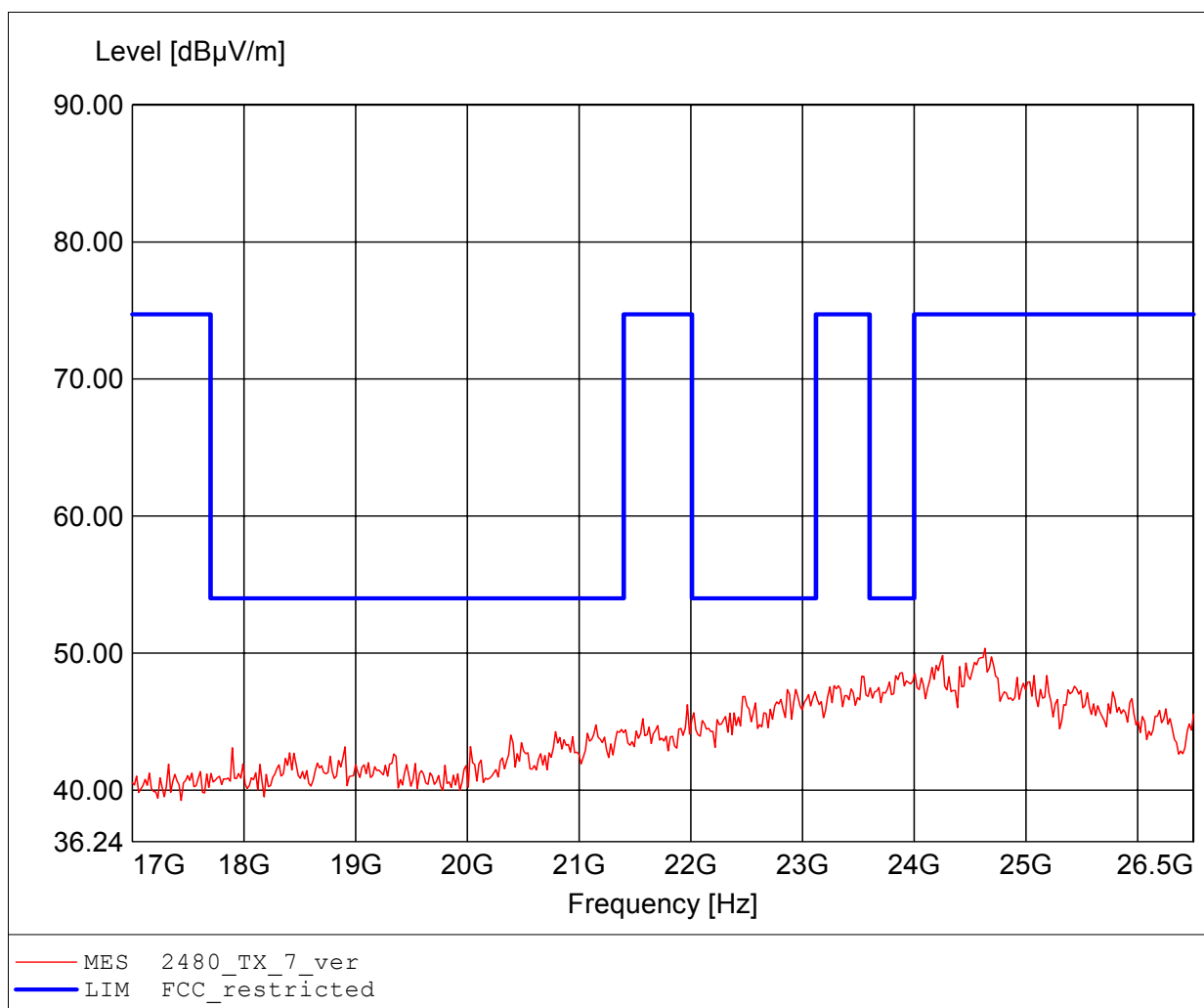
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2480
Comment 1: Dist.: 3m, Ant.: HL 025, ampl.+HP.
Comment 2: Freq: 14.515GHz, Emax: 45.04dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

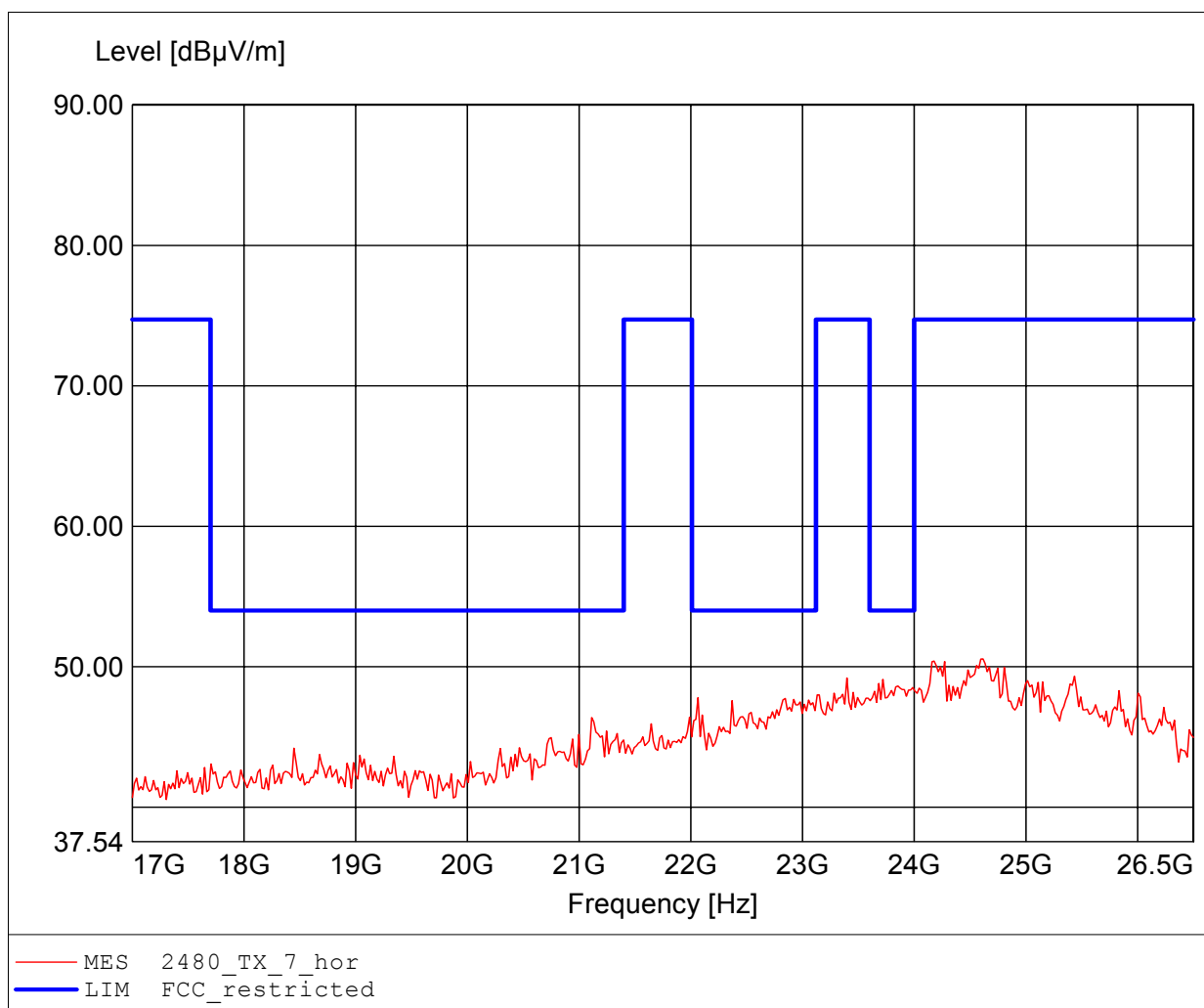
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2480
Comment 1: Dist.: 3m, Ant.: HL025, amplif.
Comment 2: Freq: 24.634GHz, Emax: 50.36dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

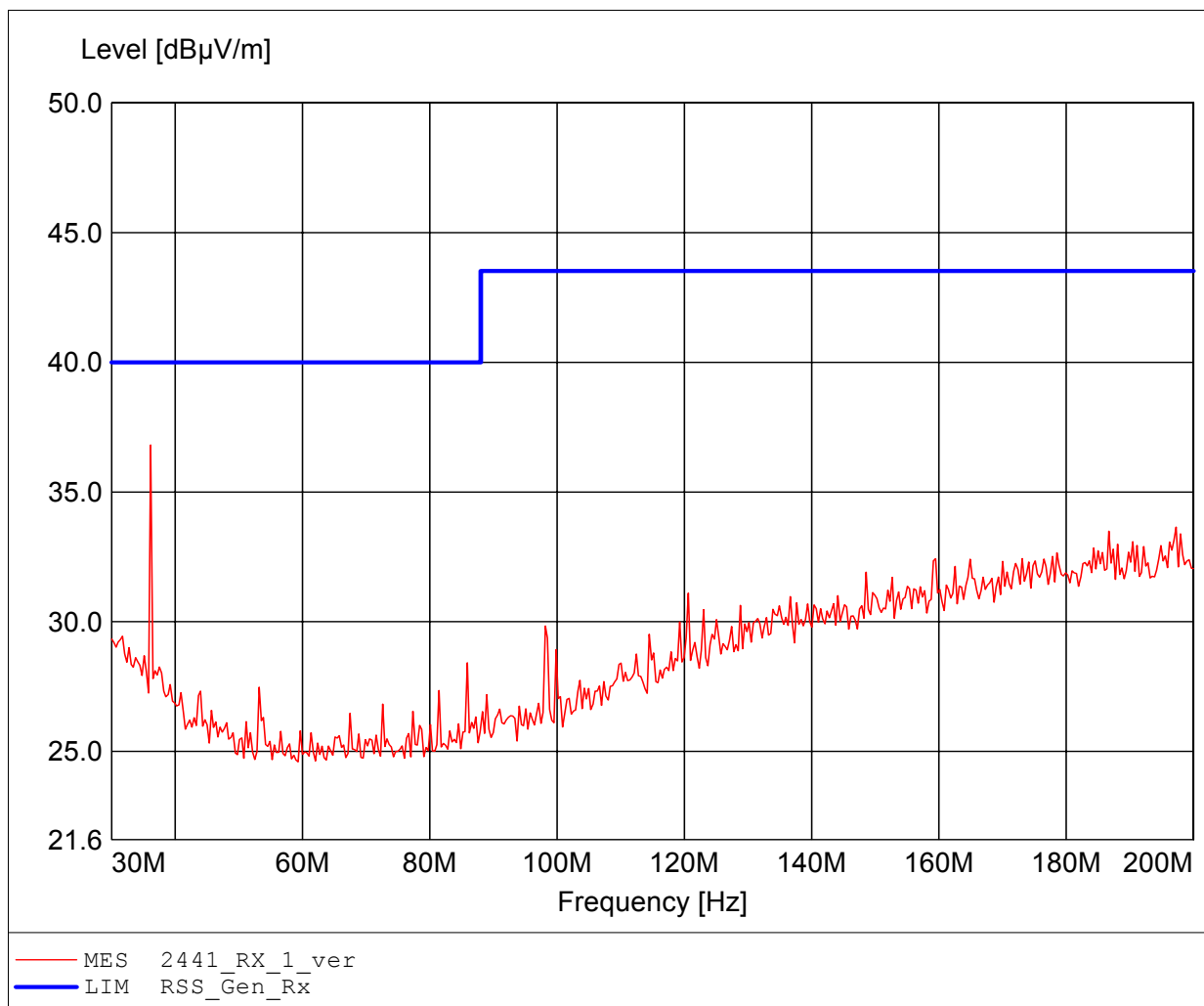
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / Pmax
Test Specification: Freq. / CH: 2480
Comment 1: Dist.: 3m, Ant.: HL025, amplif.
Comment 2: Freq: 24.615GHz, Emax: 50.55dBuV/m, RBW: 1MHz



Field Strength under normal conditions

Standards Industry Canada, RSS-GEN

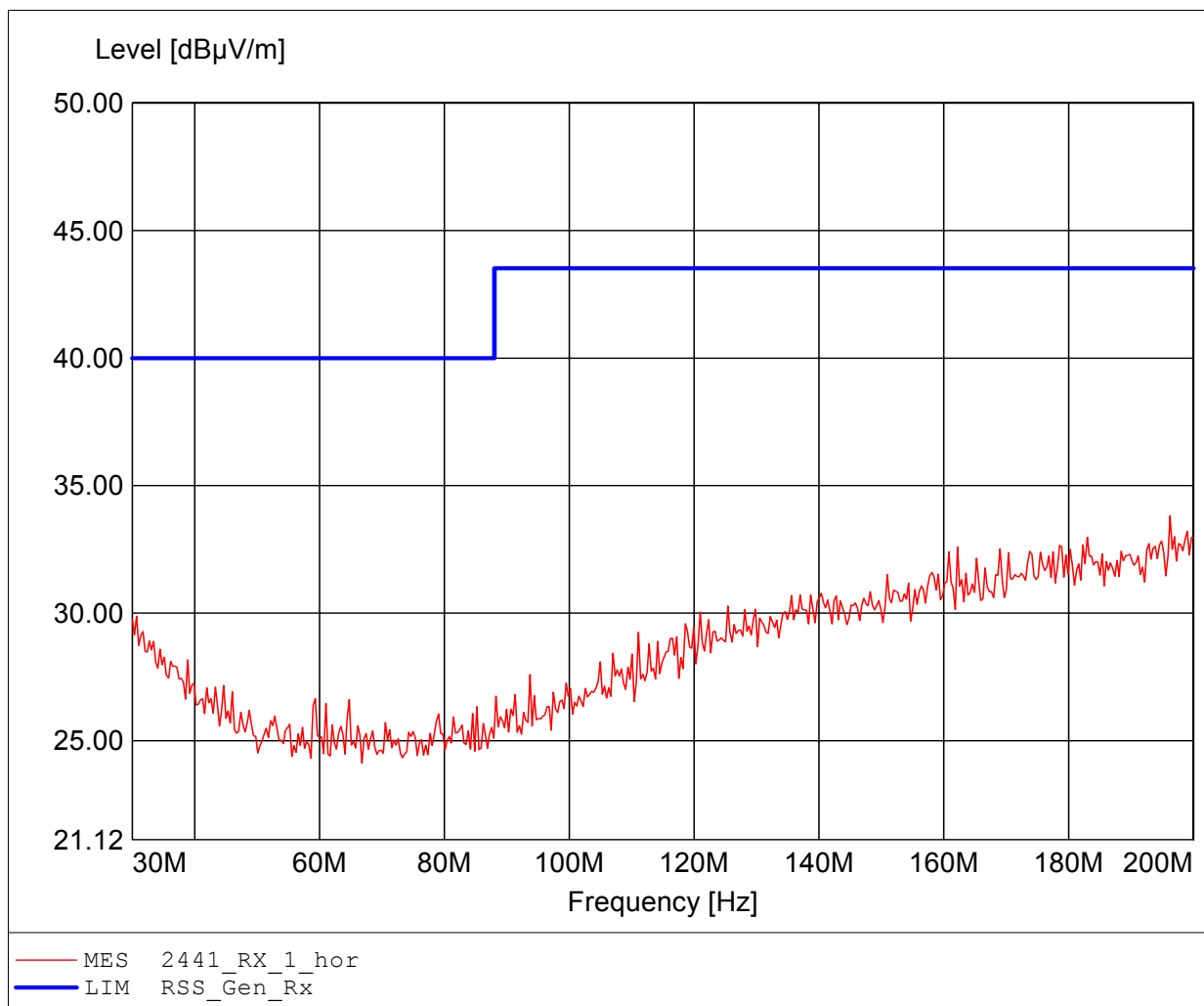
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / RX_worst_case
Test Specification: Freq. / CH: 2441
Comment 1: Dist.: 3m, Ant.: HK 116
Comment 2: Freq:36.132MHz Emax:36.82dBuV/m RBW: 100 kHz



Field Strength under normal conditions

Standards Industry Canada, RSS-GEN

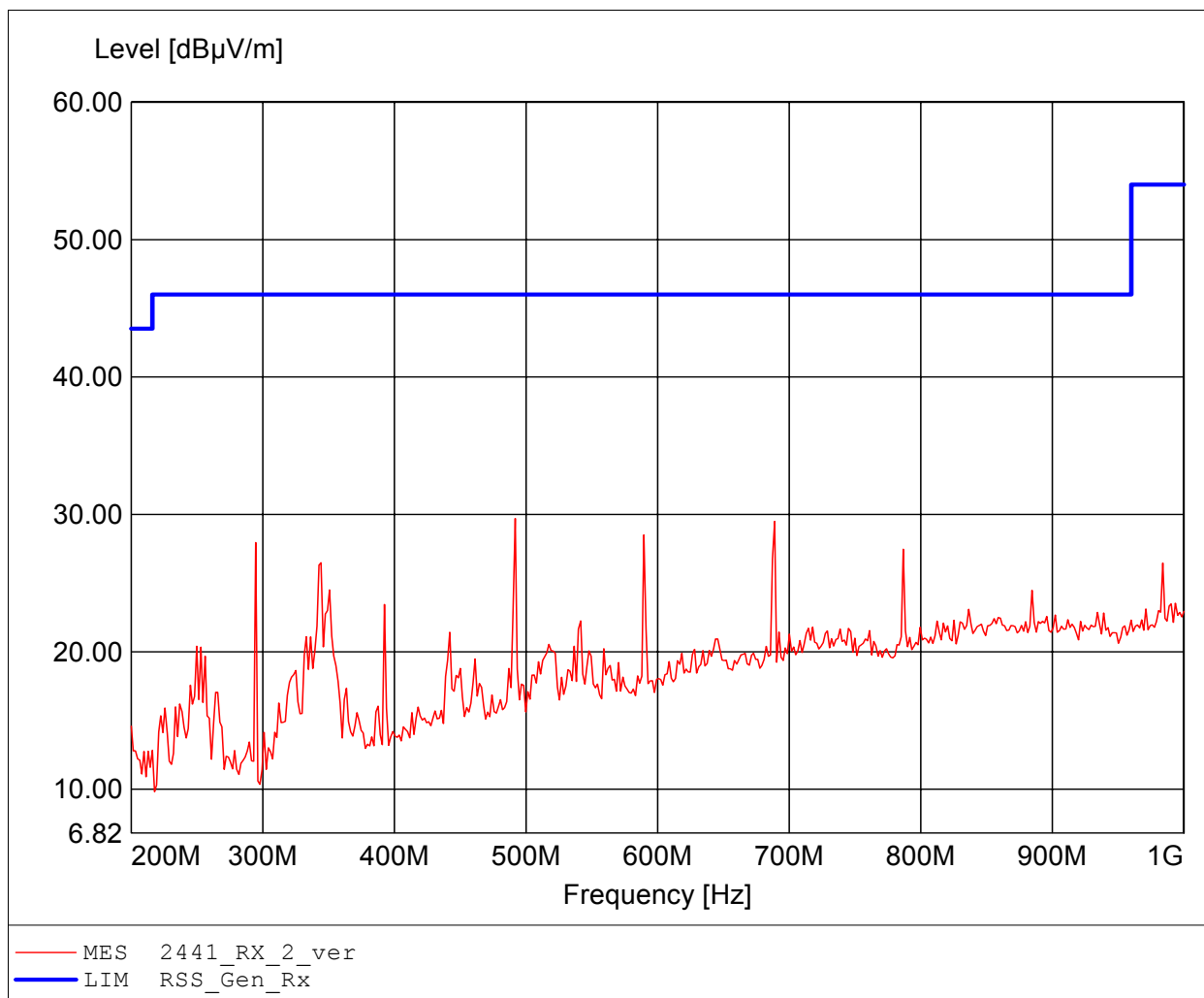
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / RX_worst_case
Test Specification: Freq. / CH: 2441
Comment 1: Dist.: 3m, Ant.: HK 116
Comment 2: Freq:196.253MHz Emax:33.81dBuV/m RBW: 100 kHz



Field Strength under normal conditions

Standards Industry Canada, RSS-GEN

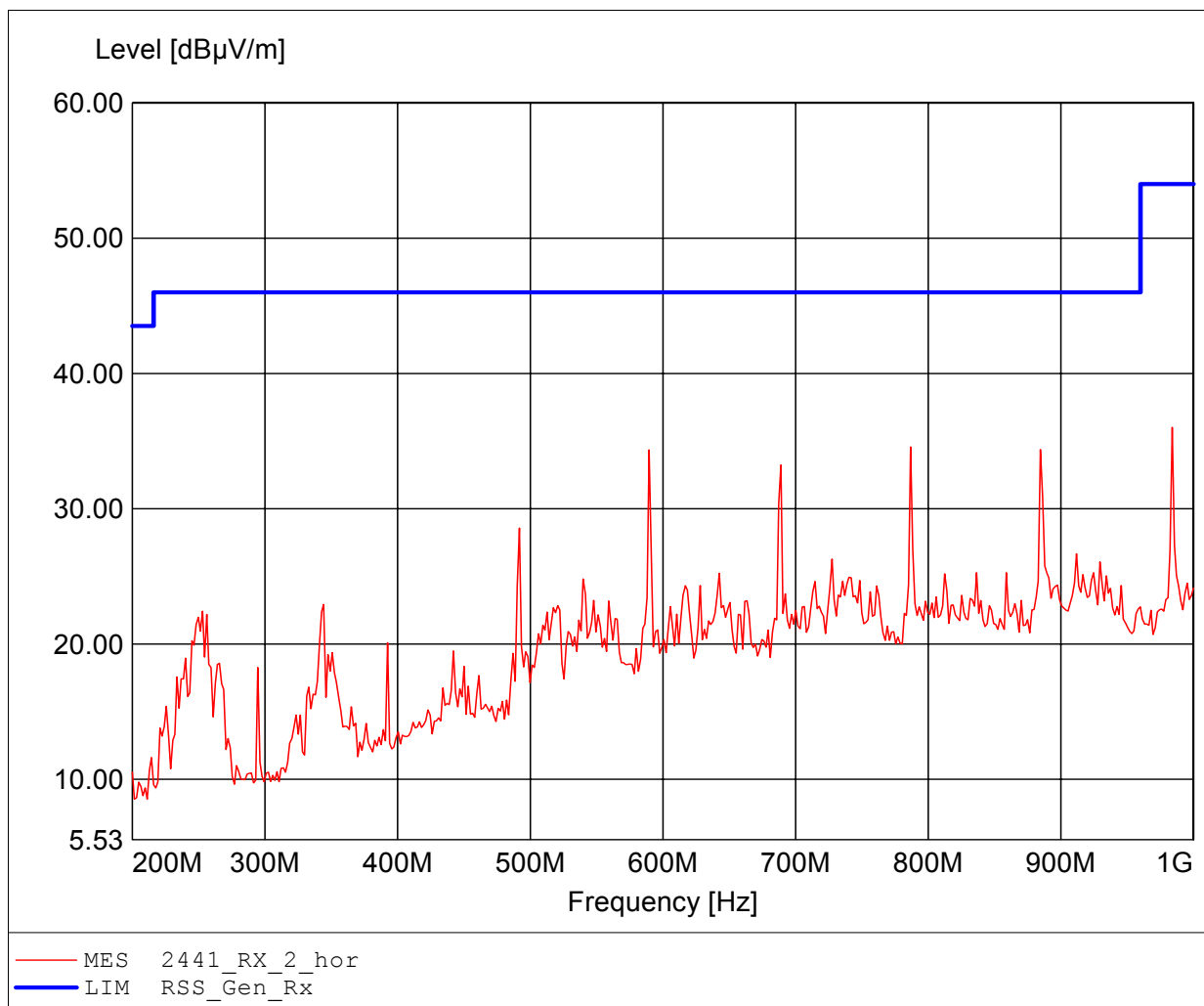
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / RX_worst_case
Test Specification: Freq. / CH: 2441
Comment 1: Dist.: 3m, Ant.: HL 223, ampl.
Comment 2: Freq:491.784MHz Emax:29.70dBuV/m RBW: 100 kHz



Field Strength under normal conditions

Standards Industry Canada, RSS-GEN

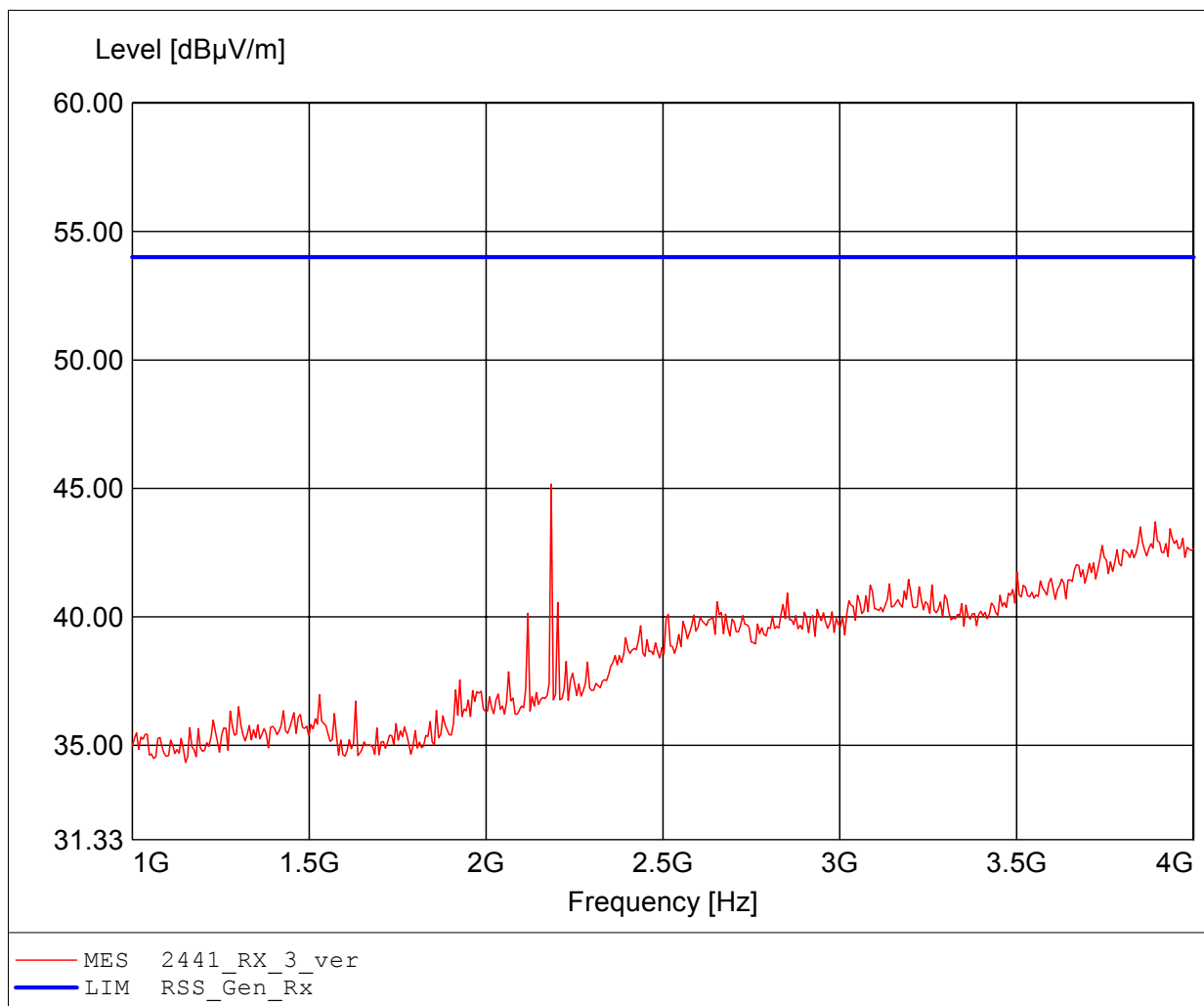
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / RX_worst_case
Test Specification: Freq. / CH: 2441
Comment 1: Dist.: 3m, Ant.: HL 223, ampl.
Comment 2: Freq:983.968MHz Emax:36.02dBuV/m RBW: 100 kHz



Field Strength under normal conditions

Standards Industry Canada, RSS-GEN

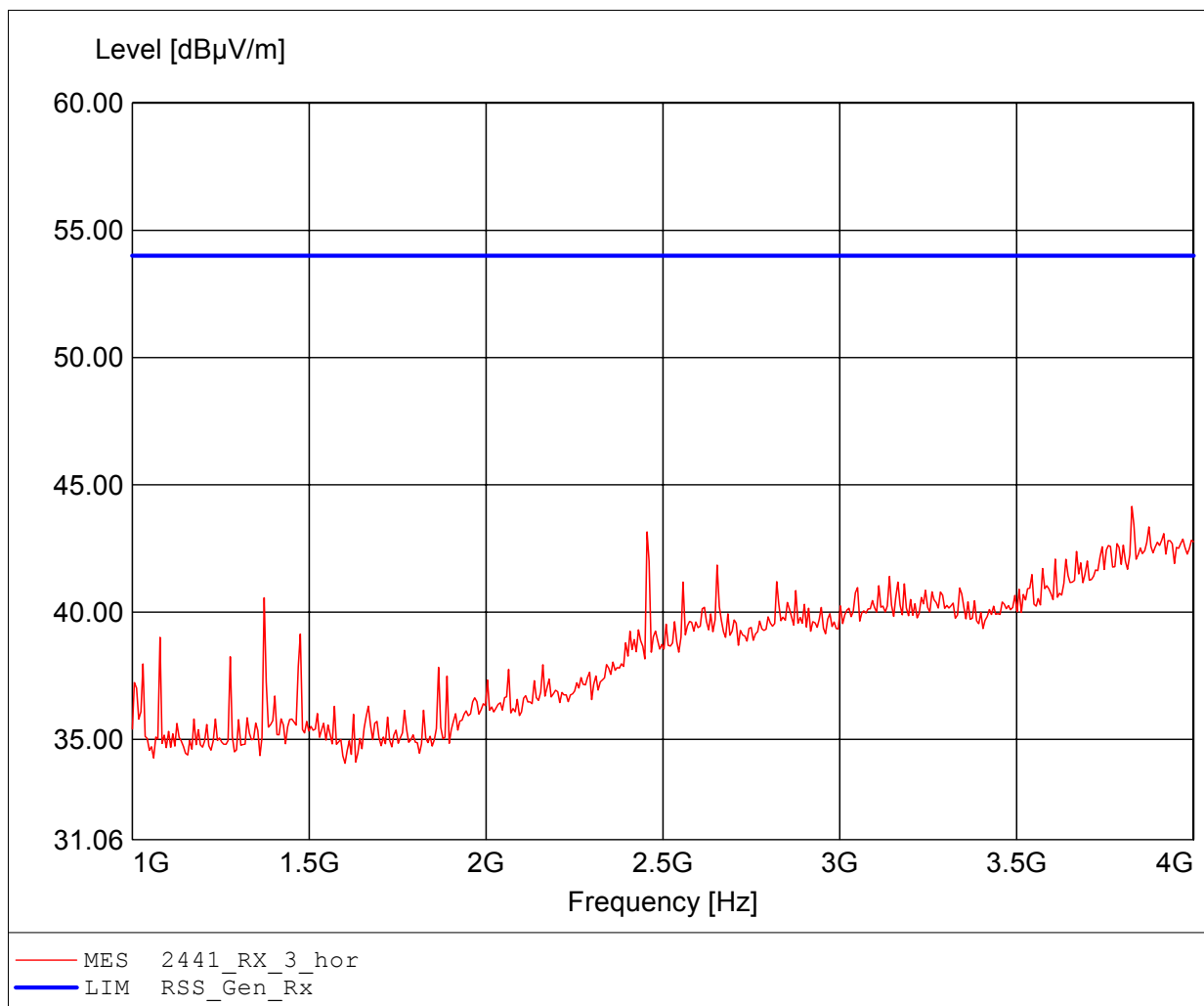
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / RX_worst_case
Test Specification: Freq. / CH: 2441
Comment 1: Dist.: 3m, Ant.: HL025, ampl.
Comment 2: Freq:2.184GHz Emax:45.17dBuV/m RBW: 1 MHz



Field Strength under normal conditions

Standards Industry Canada, RSS-GEN

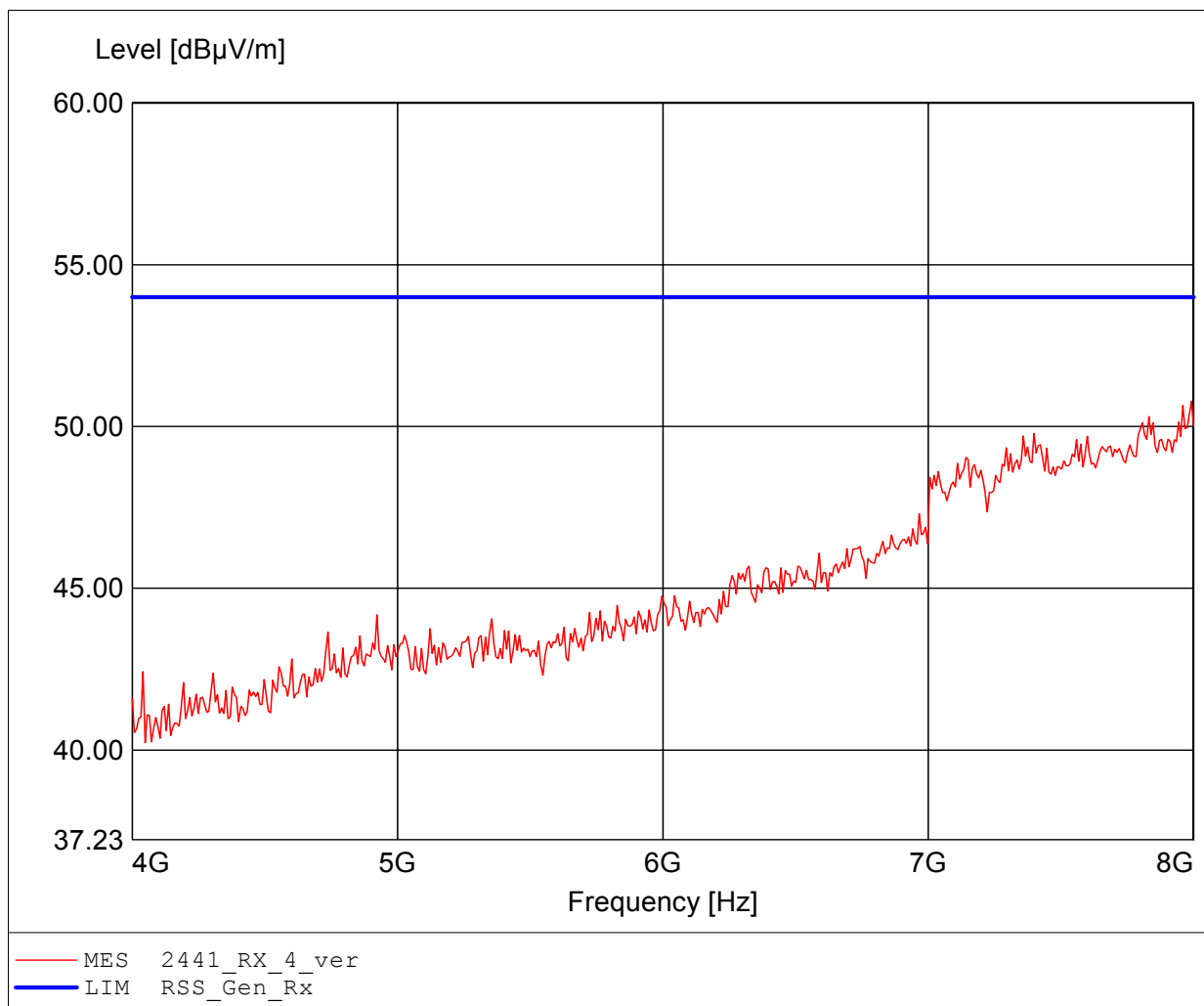
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / RX_worst_case
Test Specification: Freq. / CH: 2441
Comment 1: Dist.: 3m, Ant.: HL025, ampl.
Comment 2: Freq:3.826GHz Emax:44.16dBuV/m RBW: 1 MHz



Field Strength under normal conditions

Standards Industry Canada, RSS-GEN

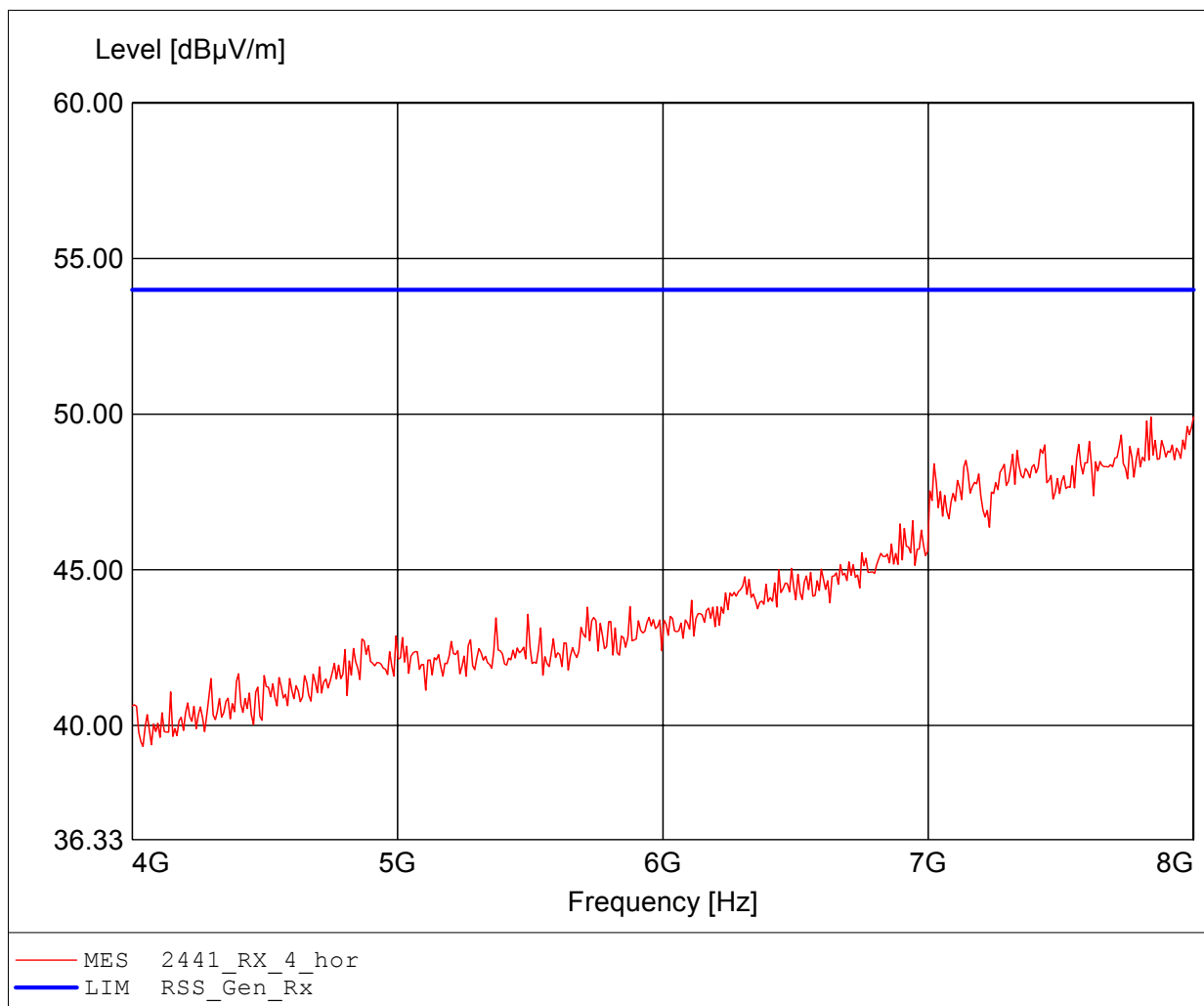
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / RX_worst_case
Test Specification: Freq. / CH: 2441
Comment 1: Dist.: 3m, Ant.: HL025, ampl.
Comment 2: Freq:7.992GHz Emax:50.78dBµV/m RBW: 1 MHz



Field Strength under normal conditions

Standards Industry Canada, RSS-GEN

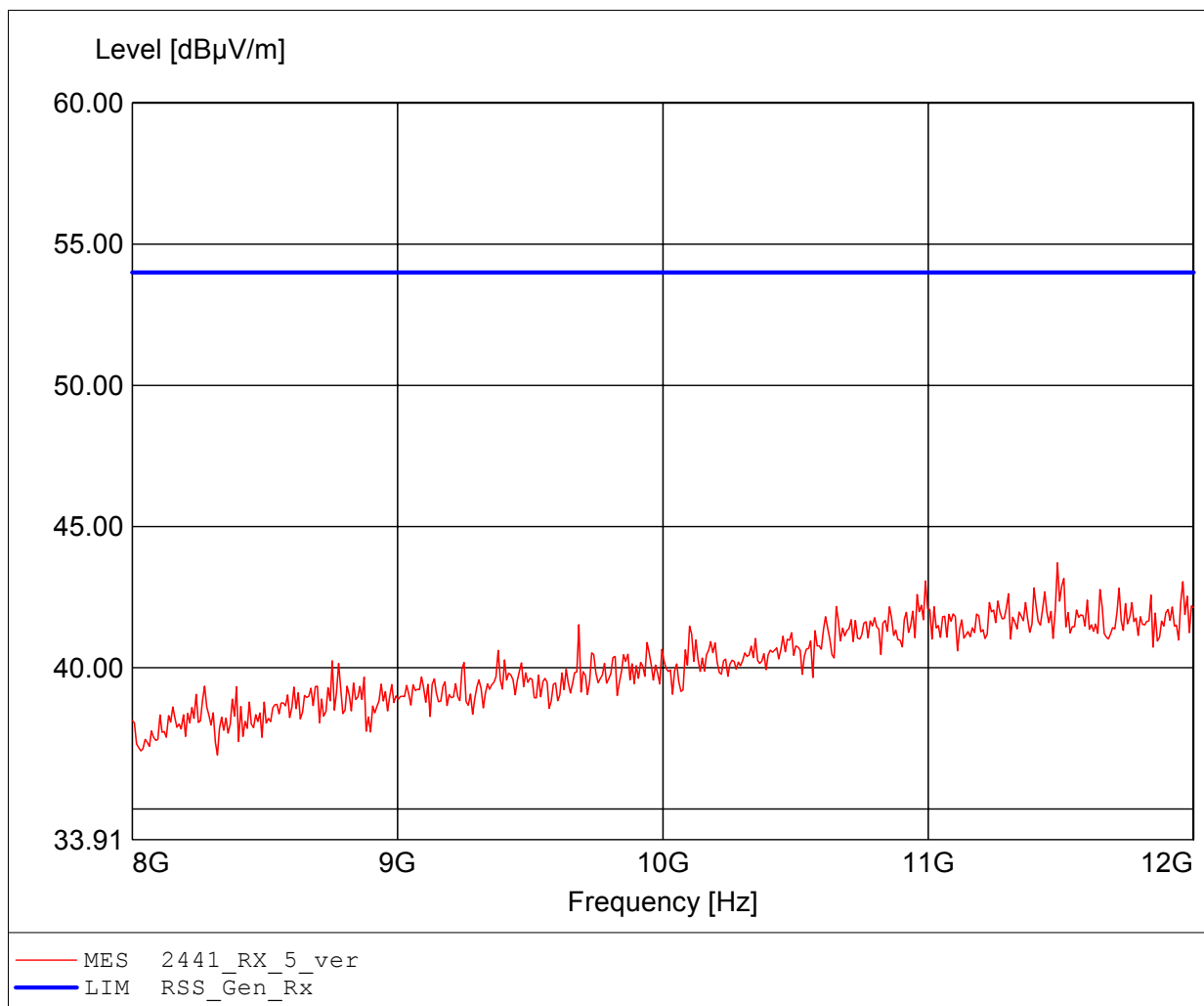
Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / RX_worst_case
Test Specification: Freq. / CH: 2441
Comment 1: Dist.: 3m, Ant.: HL025, ampl.
Comment 2: Freq:7.840GHz Emax:49.91dBuV/m RBW: 1 MHz



Field Strength under normal conditions

Standards Industry Canada, RSS-GEN

Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / RX_worst_case
Test Specification: Freq. / CH: 2441
Comment 1: Dist.: 3m, Ant.: HL025, ampl.
Comment 2: Freq:11.487GHz Emax:43.71dBµV/m RBW: 1 MHz



Field Strength under normal conditions

Standards Industry Canada, RSS-GEN

Approval Holder: Funkwerk Dabendorf GmbH
EUT: Bluetooth Handsfree Car Kit
Model: Audio 2010
Test Site / Operator: Eurofins Product Service GmbH / Mr. Pudell
Test Condition: Temp.: 24°C / Unom.: 13.2 V DC / RX_worst_case
Test Specification: Freq. / CH: 2441
Comment 1: Dist.: 3m, Ant.: HL025, ampl.
Comment 2: Freq:11.431GHz Emax:42.79dBµV/m RBW: 1 MHz

