

Annex 1: Measurement diagrams to Test Report 21-1-0041301T01a

Number of pages:	61	Date of Report:	2021-Jul-05
Testing company:	CETECOM GmbH Im Teelbruch 116 45219 Essen Germany Tel. + 49 (0) 20 54 / 95 19-0 Fax: + 49 (0) 20 54 / 95 19-150	Applicant:	Husqvarna AB
Product: Model:	Application board with Bluetooth functionality Application Board Type 4		
FCC ID:	ZASHQ-BLE-1H	IC:	23307-HQBLE1H
Testing has been carried out in accordance with:	Title 47 CFR, Chapter I FCC Regulations, Subchapter A Subpart C: §15.247 (DTS) , RSS-247, Issue 2 (DTS) RSS-Gen., Issue 5 Deviations, modifications or clarifications (if any) to above mentioned documents are written in each section under "Test method and limit".		

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1 Measurement diagrams

1.1 Radiated measurements

2.01a_BT_LE_low_standing

Common Information

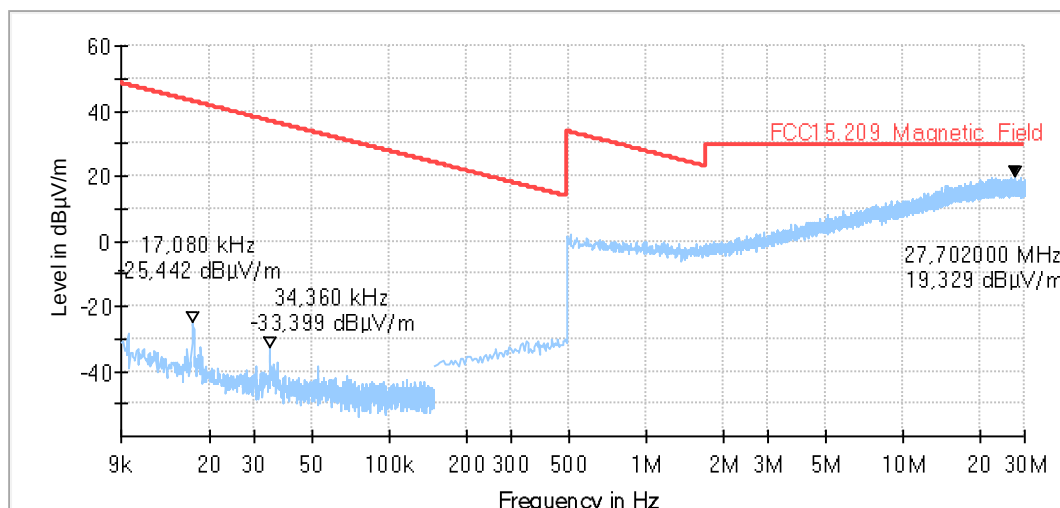
Test Description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test Site Location:	Ref.-Nr. 441 Semi Anechoic Chamber (SAC1) with 3 m measurement distance
Version of Testsoftware:	EMC32 V10.50.0
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used Filter:	bypass
Test Standard:	FCC 15.205&15.209 & RSS Gen. Issue 5

Operator:	PMA/SSanthakum/Soz
Operating Mode:	BLE low channel
Power during tests:	20V DC
Comment 1:	Channel low
Comment 2:	
Environmental Conditions::	Humidity : 51%rH; Temperature: 21°C
EUT Setup:	1
Verdict:	Passed
Comment:	

EUT Information

PMT number:	21-1-00413S02_C01
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Full Spectrum



2.01b_BT_LE_low_laying

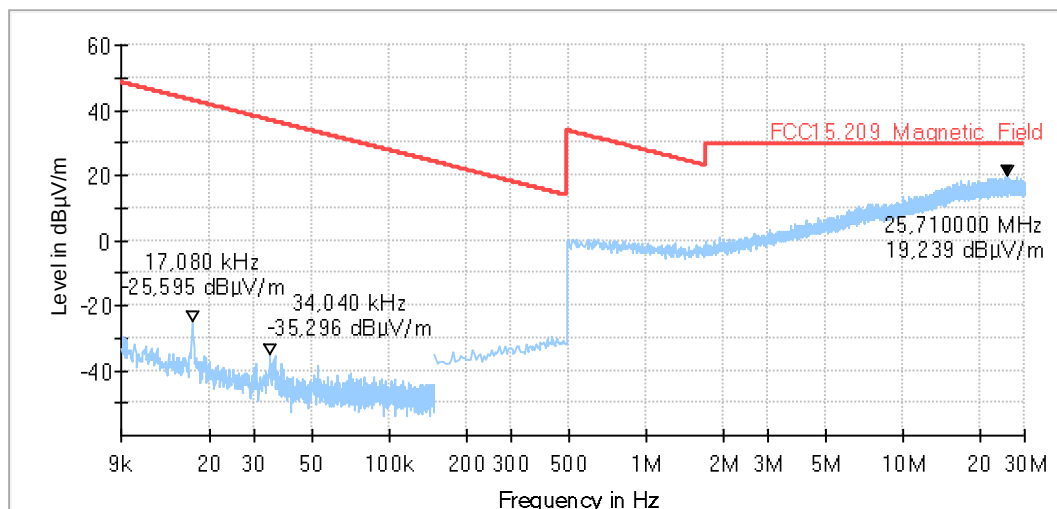
Common Information

Test Description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test Site Location:	Ref.-Nr. 441 Semi Anechoic Chamber (SAC1) with 3 m measurement distance
Version of Testsoftware:	EMC32 V10.50.0
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used Filter:	bypass
Test Standard:	FCC 15.205 § 15.209; RSS-Gen: Issue 5
Operator:	PMa/SSanthakum/Soz
Operating Mode:	BLE low channel
Power during tests:	20V DC
Comment 1:	Channel low
Comment 2:	
Environmental Conditions:	Humidity : 51%rH; Temperature: 21°C
EUT Setup:	1
Verdict:	Passed
Comment:	

EUT Information

PMT number:	21-1-00413S02_C01
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Full Spectrum



2.02a_BT_LE_mid_standing

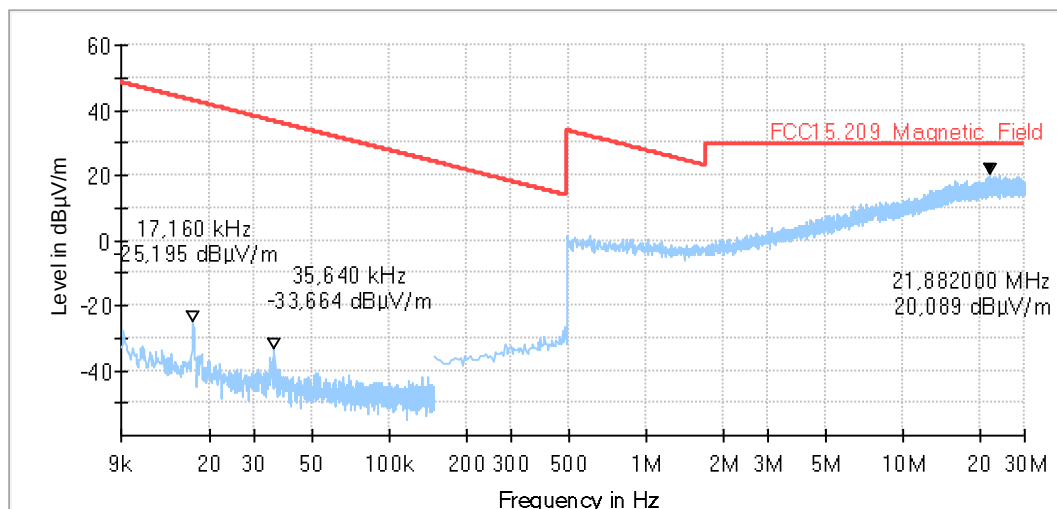
Common Information

Test Description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test Site Location:	Ref.-Nr. 441 Semi Anechoic Chamber (SAC1) with 3 m measurement distance
Version of Testsoftware:	EMC32 V10.50.0
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used Filter:	bypass
Test Standard:	FCC 15.205 § 15.209; RSS-Gen: Issue 4
Operator:	PMa/SSanthakum/Soz
Operating Mode:	BLE middle channel
Power during tests:	20V DC
Comment 1:	Channel middle
Comment 2:	
Environmental Conditions::	Humidity : 51%rH; Temperature: 21°C
EUT Setup:	1
Verdict:	Passed
Comment:	

EUT Information

PMT number:	21-1-00413S02_C01
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Full Spectrum



2.01b_BT_LE_low_laying

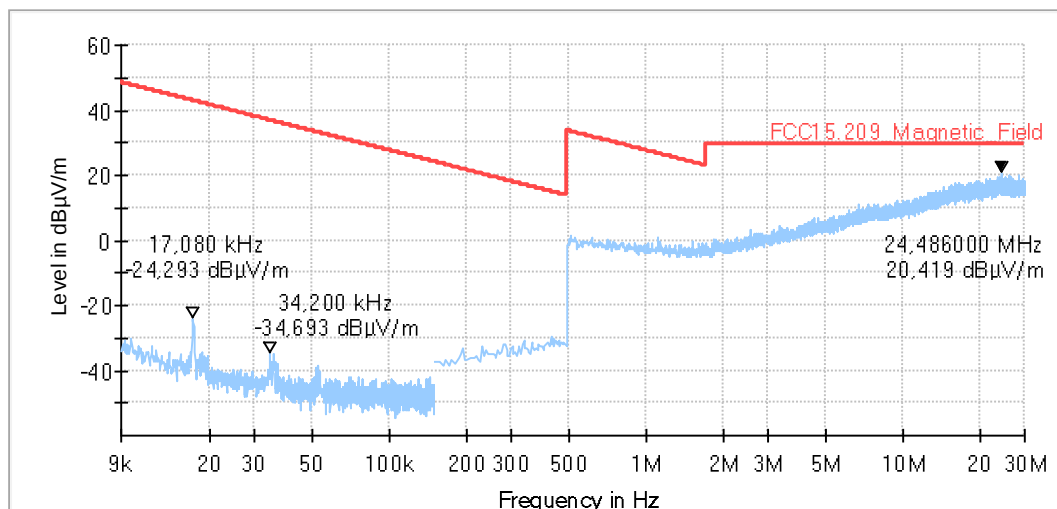
Common Information

Test Description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test Site Location:	Ref.-Nr. 441 Semi Anechoic Chamber (SAC1) with 3 m measurement distance
Version of Testsoftware:	EMC32 V10.50.0
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used Filter:	bypass
Test Standard:	FCC 15.205 § 15.209; RSS-Gen: Issue 5
Operator:	PMa/SSanthakum/Soz
Operating Mode:	BLE middle channel
Power during tests:	20V DC
Comment 1:	Channel low
Comment 2:	
Environmental Conditions::	Humidity : 51%rH; Temperature: 21°C
EUT Setup:	1
Verdict:	Passed
Comment:	

EUT Information

PMT number:	21-1-00413S02_C01
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Full Spectrum



2.03a_BT_LE_high_standing

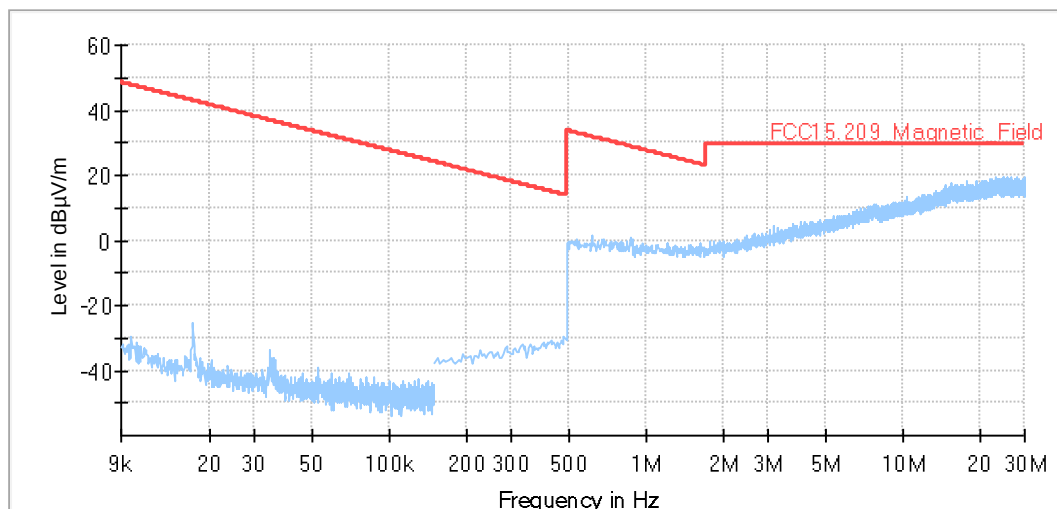
Common Information

Test Description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test Site Location:	Ref.-Nr. 441 Semi Anechoic Chamber (SAC1) with 3 m measurement distance
Version of Testsoftware:	EMC32 V10.50.0
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used Filter:	bypass
Test Standard:	FCC 15.205 § 15.209; RSS-Gen: Issue 5
Operator:	PMa/SSanthakum/Soz
Operating Mode:	BLE high channel
Power during tests:	20V DC
Comment 1:	Channel high
Comment 2:	
Environmental Conditions::	Humidity : 51%rH; Temperature: 21°C
EUT Setup:	1
Verdict:	Passed
Comment:	

EUT Information

PMT number:	21-1-00413S02_C01
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Full Spectrum



2.03b_BT_LE_high_laying

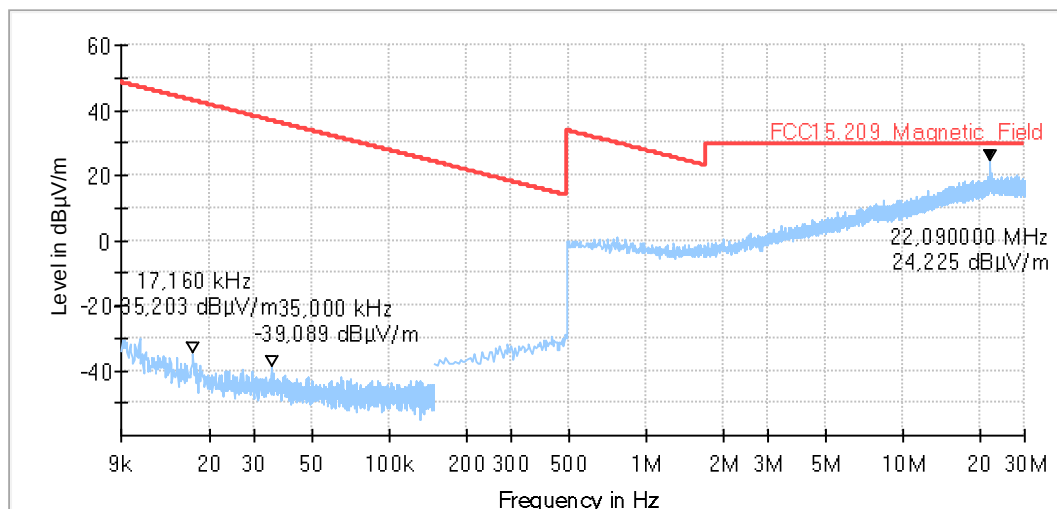
Common Information

Test Description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test Site Location:	Ref.-Nr. 441 Semi Anechoic Chamber (SAC1) with 3 m measurement distance
Version of Testsoftware:	EMC32 V10.50.0
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Used Filter:	bypass
Test Standard:	FCC 15.205 § 15.209; RSS-Gen: Issue 4
Operator:	PMa/SSanthakum/Soz
Operating Mode:	BLE high channel
Power during tests:	20V DC
Comment 1:	Channel high
Comment 2:	
Environmental Conditions:	Humidity : 51%rH; Temperature: 21°C
EUT Setup:	1
Verdict:	Passed
Comment:	

EUT Information

PMT number:	21-1-00413S02_C01
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Full Spectrum



3.01a_BT_LE_low_standing

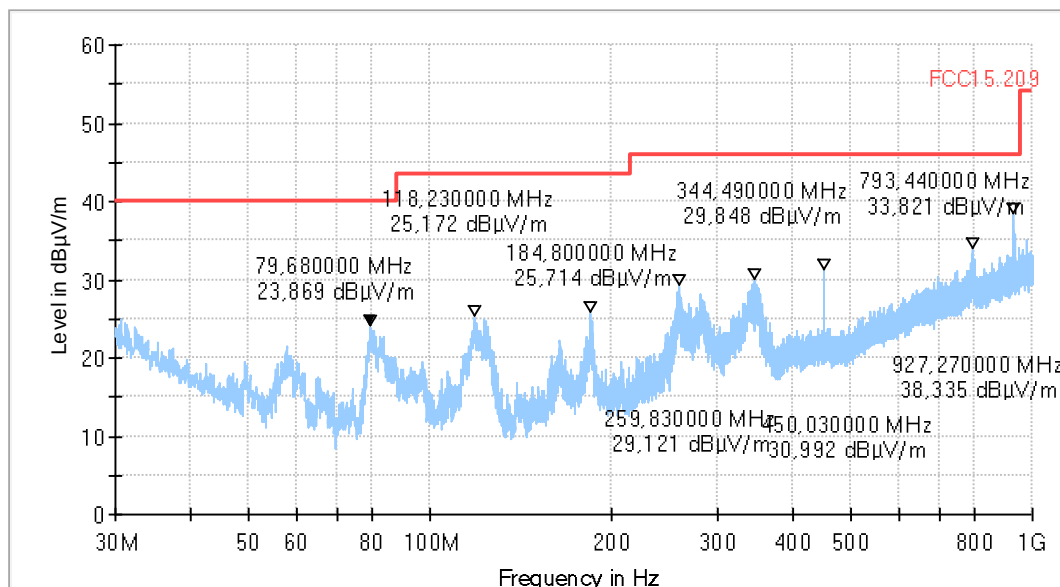
Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.205&15.209 & RSS Gen. Issue 5
Antenna polarisation:	horizontal/vertical
Environmental Conditions::	Humidity : 47%rH; Temperature: 20°C
Operator Name:	
EUT:	
Operating Mode:	BLE low channel
Power supply:	
Comment:	Channel no. low/
Verdict:	Passed

EUT Information

PMT number:	21-1-00413S02_C01
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Full Spectrum



Remark: The peaks at 793 and 927 MHz are known external disturbances and do not come from EUT.

3.01b_BT_LE_low_laying

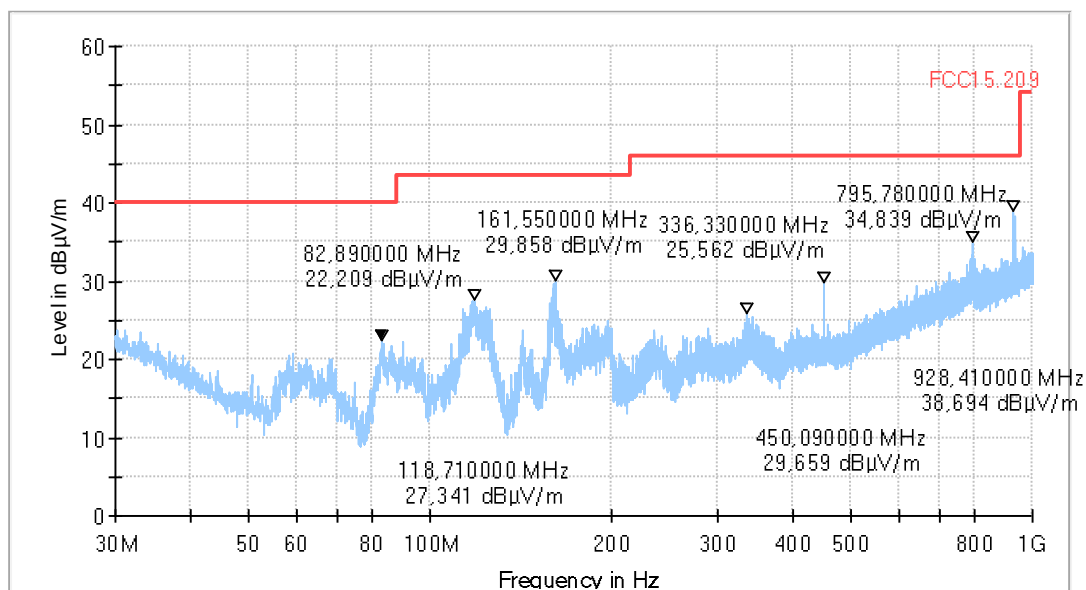
Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.205&15.209 & RSS Gen. Issue 5
Antenna polarisation:	horizontal/vertical
Environmental Conditions::	Humidity : 47%rH; Temperature: 20°C
Operator Name:	
EUT:	
Operating Mode:	BLE low channel
Power supply:	
Comment:	Channel no. low
Verdict:	Passed

EUT Information

PMT number:	21-1-00413S02_C01
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Full Spectrum



Remark: The peaks at 795 and 928 MHz are known external disturbances and do not come from EUT.

3.02a_BT_LE_mid_standing

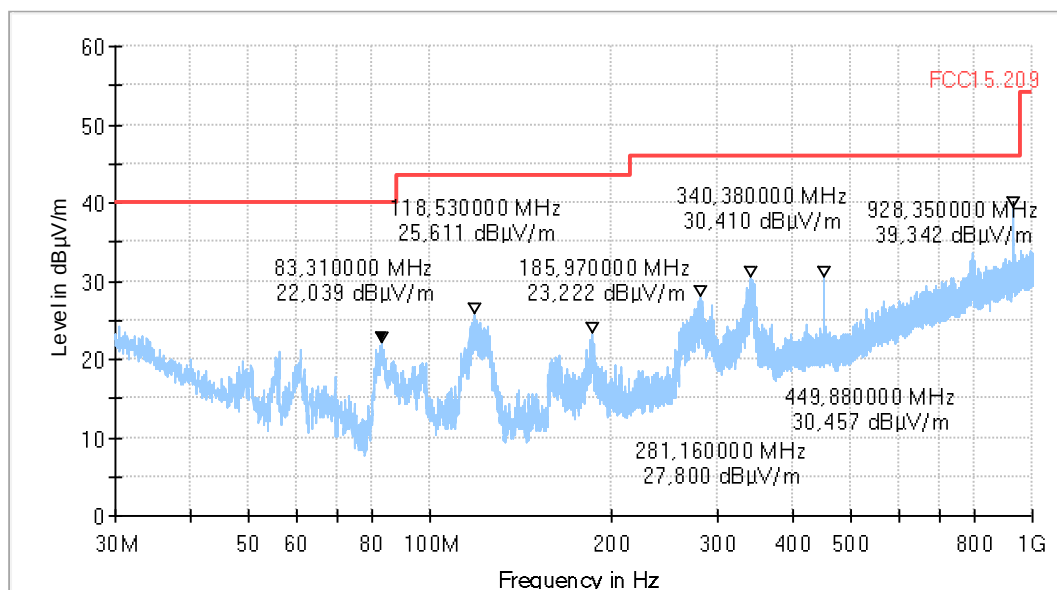
Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.205&15.209 & RSS Gen. Issue 5
Antenna polarisation:	horizontal/vertical
Environmental Conditions::	Humidity : 47%rH; Temperature: 20°C
Operator Name:	
EUT:	
Operating Mode:	BLE middle channel
Power supply:	
Comment:	Channel no. middle
Verdict:	Passed

EUT Information

PMT number:	21-1-00413S02_C01
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Full Spectrum



Remark: The peaks at 799 and 928 MHz are known external disturbances and do not come from EUT.

3.02b_BT_LE_mid_laying

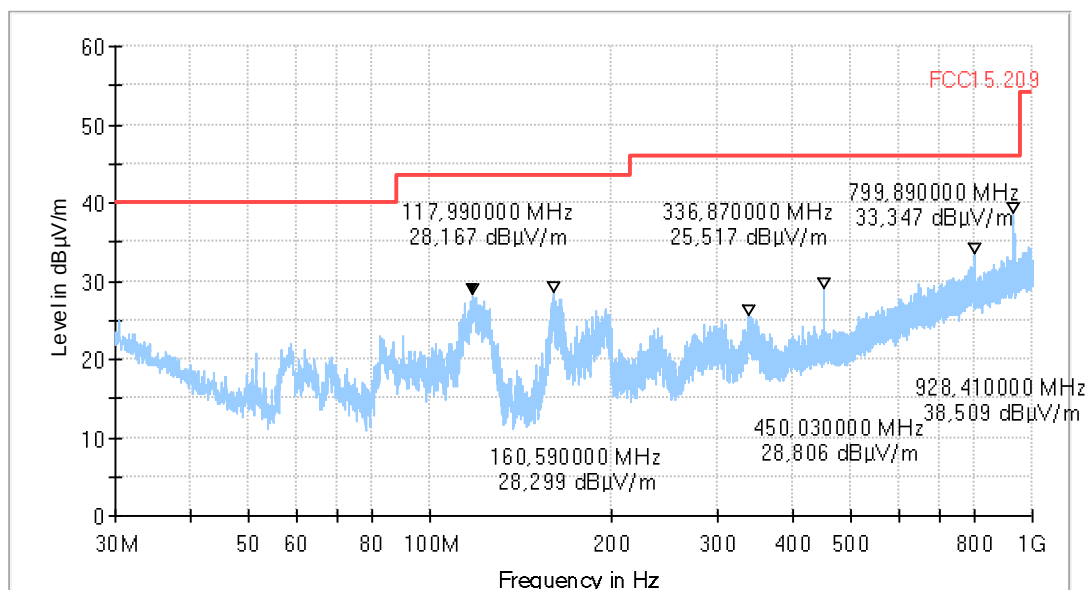
Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.205&15.209 & RSS Gen. Issue 5
Antenna polarisation:	horizontal/vertical
Environmental Conditions::	Humidity : 47%rH; Temperature: 20°C
Operator Name:	
EUT:	
Operating Mode:	BLE middle channel
Power supply:	
Comment:	Channel no. middle
Verdict:	Passed

EUT Information

PMT number:	21-1-00413S02_C01
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Full Spectrum



Remark: The peaks at 799 and 928 MHz are known external disturbances and do not come from EUT.

3.03a_BT_LE_high_standing

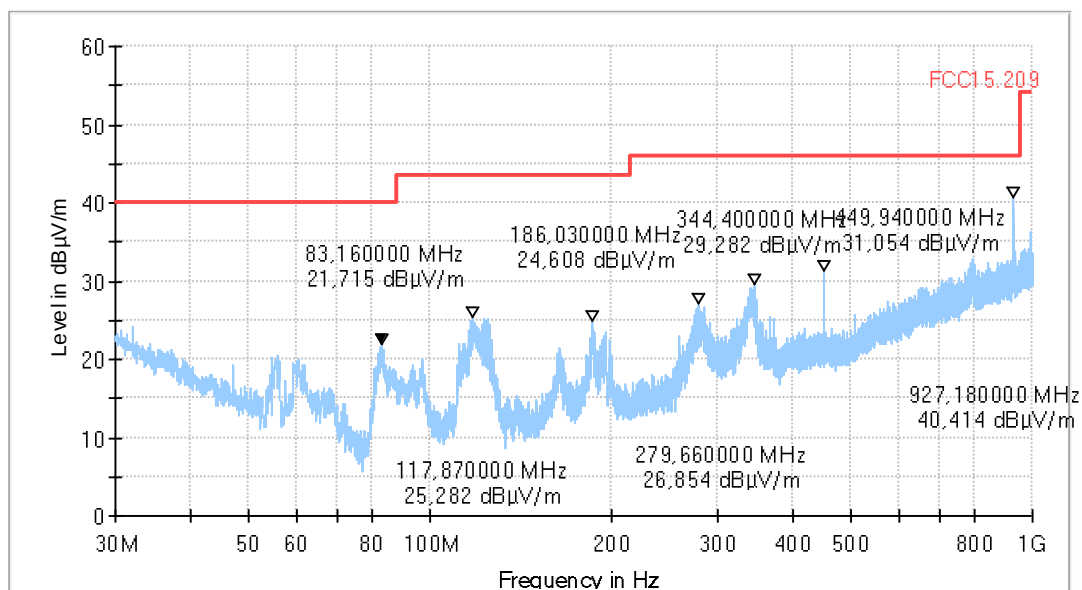
Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.205&15.209 & RSS Gen. Issue 5
Antenna polarisation:	horizontal/vertical
Environmental Conditions::	Humidity : 47%rH; Temperature: 20°C
Operator Name:	
EUT:	
Operating Mode:	BLE high channel
Power supply:	
Comment:	Channel no. high
Verdict:	Passed

EUT Information

PMT number:	21-1-00413S02_C01
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Full Spectrum



Remark: The peaks at 799 and 927 MHz are known external disturbances and do not come from EUT.

3.03b_BT_LE_high_laying

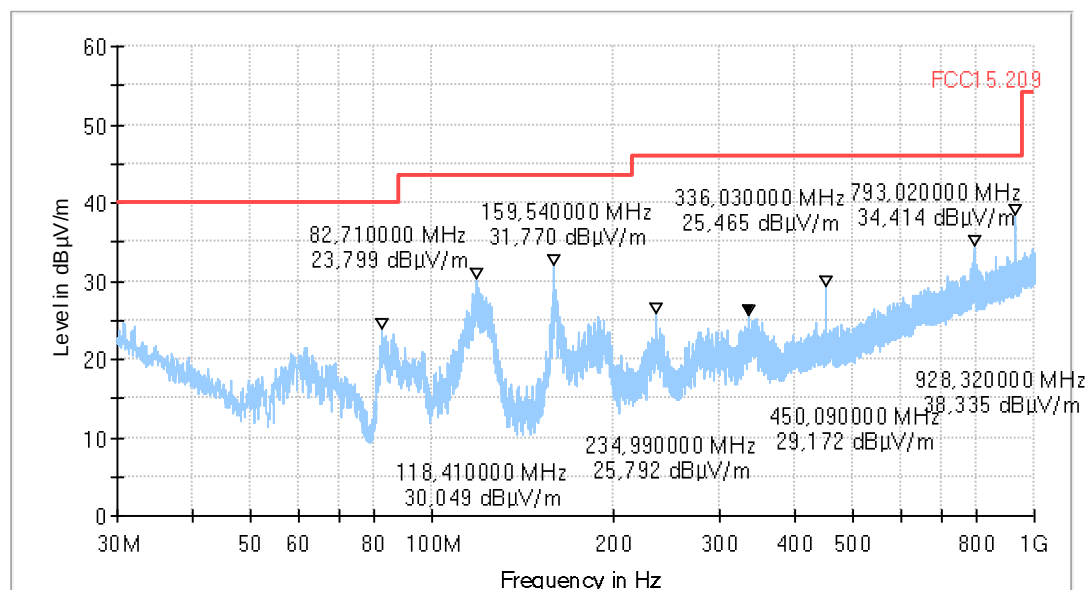
Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.205&15.209 & RSS Gen. Issue 5
Antenna polarisation:	horizontal/vertical
Environmental Conditions:	Humidity : 47%rH; Temperature: 20°C
Operator Name:	
EUT:	
Operating Mode:	BLE high channel
Power supply:	
Comment:	Channel no. high
Verdict:	Passed

EUT Information

PMT number:	21-1-00413S02_C01
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Full Spectrum



Remark: The peaks at 793 and 928 MHz are known external disturbances and do not come from EUT.

4.01a_RSE_TX_Ch37_AntH_1-2.8G

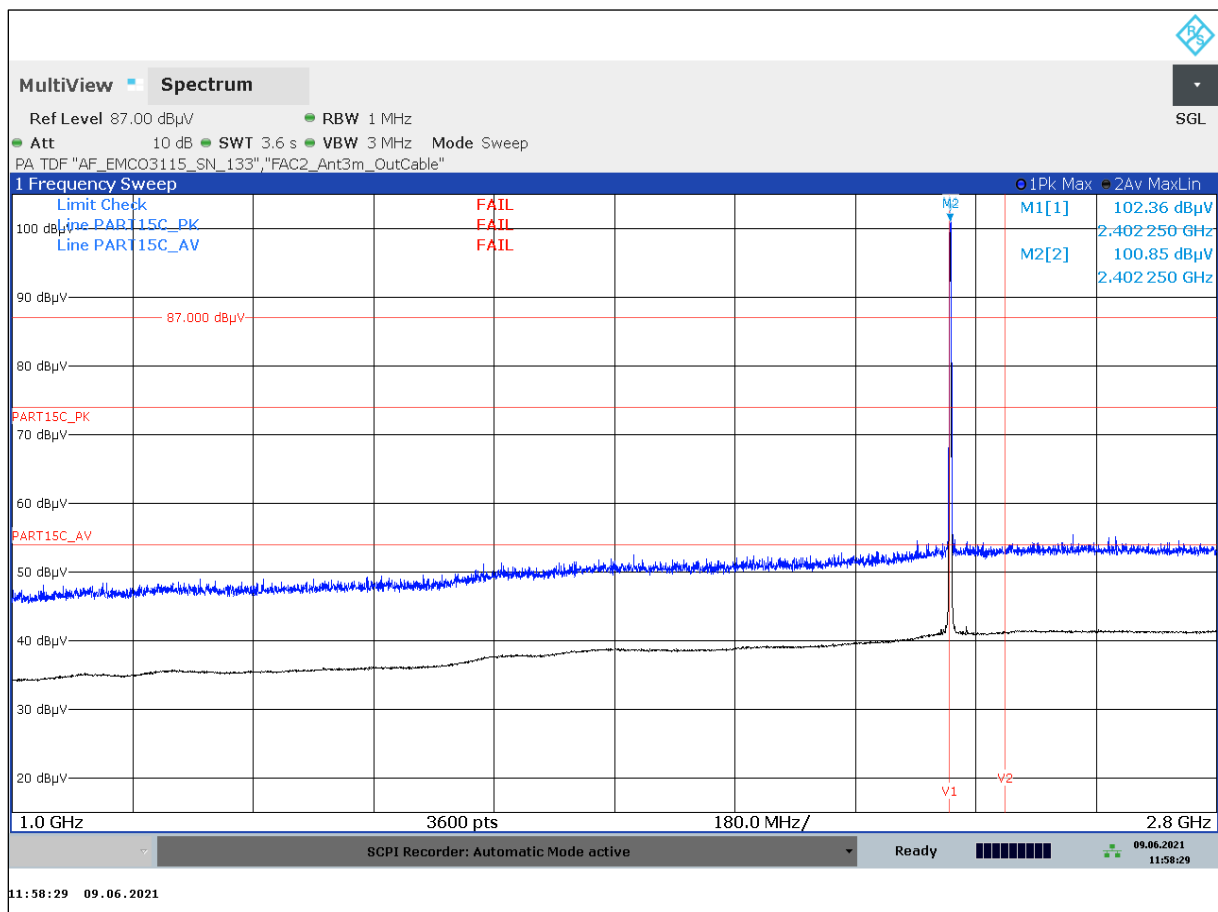
Common Information

Test Description: Radiated field strength emission in 3m distance
Test Site: Fully Anechoic Chamber (FAC2) - EMC32 V10.50.0
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 5
Antenna polarisation: horizontal/vertical

Operating Mode: 1
Operator: PMa
Environmental Conditions: Humidity : 49 %rH; Temperature: 21 °C
Verdict: Passed

EUT Information

PMT number: 21-1-00413S03_C01



Remark: The FAIL notification is invalid as it refers to the in-band carrier.

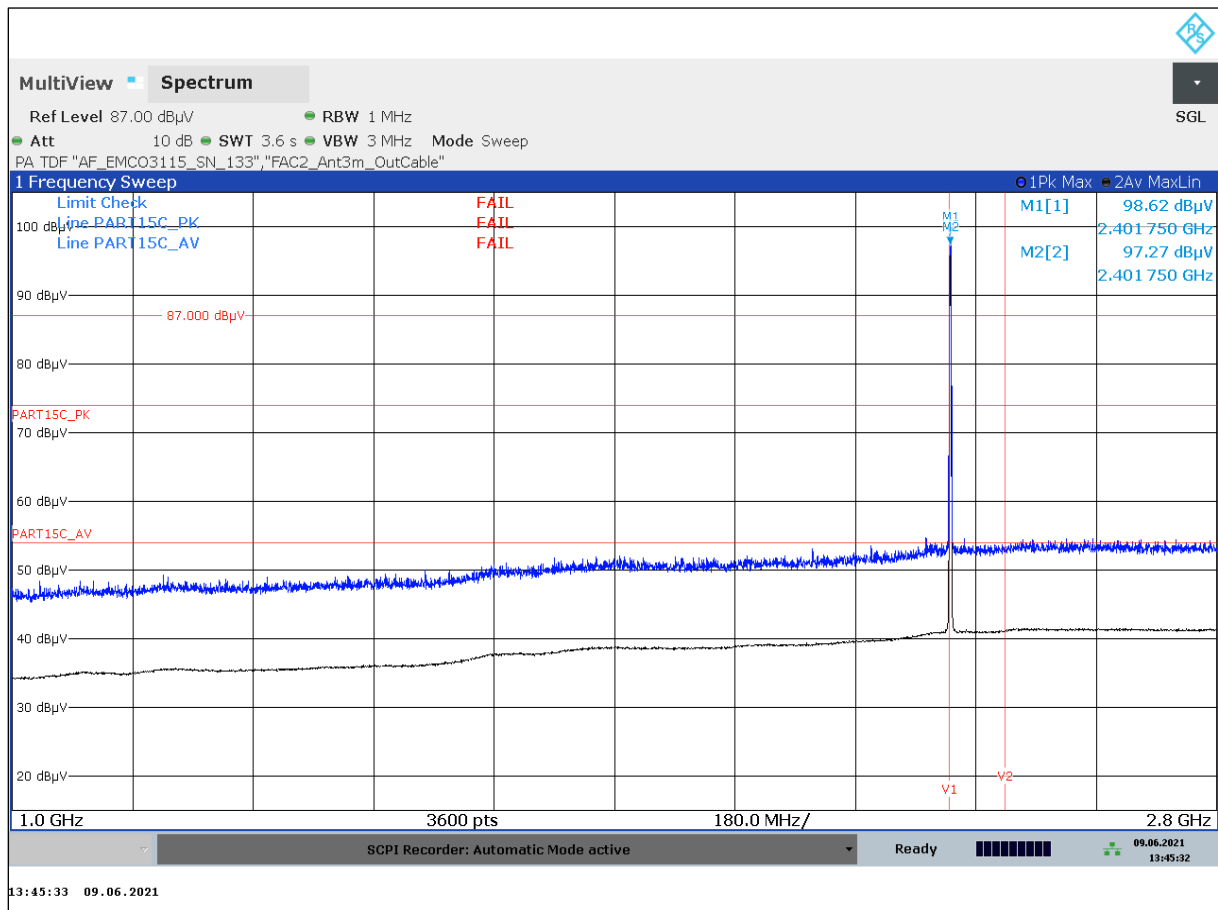
4.01b_RSE_TX_Ch37_AntV_1-2.8G

Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	Fully Anechoic Chamber (FAC2) - EMC32 V10.50.0
Test Standard:	FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 5
Antenna polarisation:	horizontal/vertical
Operating Mode:	1
Operator:	PMA
Environmental Conditions:	Humidity : 49 %rH; Temperature: 21 °C
Verdict:	Passed

EUT Information

PMT number:	21-1-00413S03_C01
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Remark: The FAIL notification is invalid as it refers to the in-band carrier.

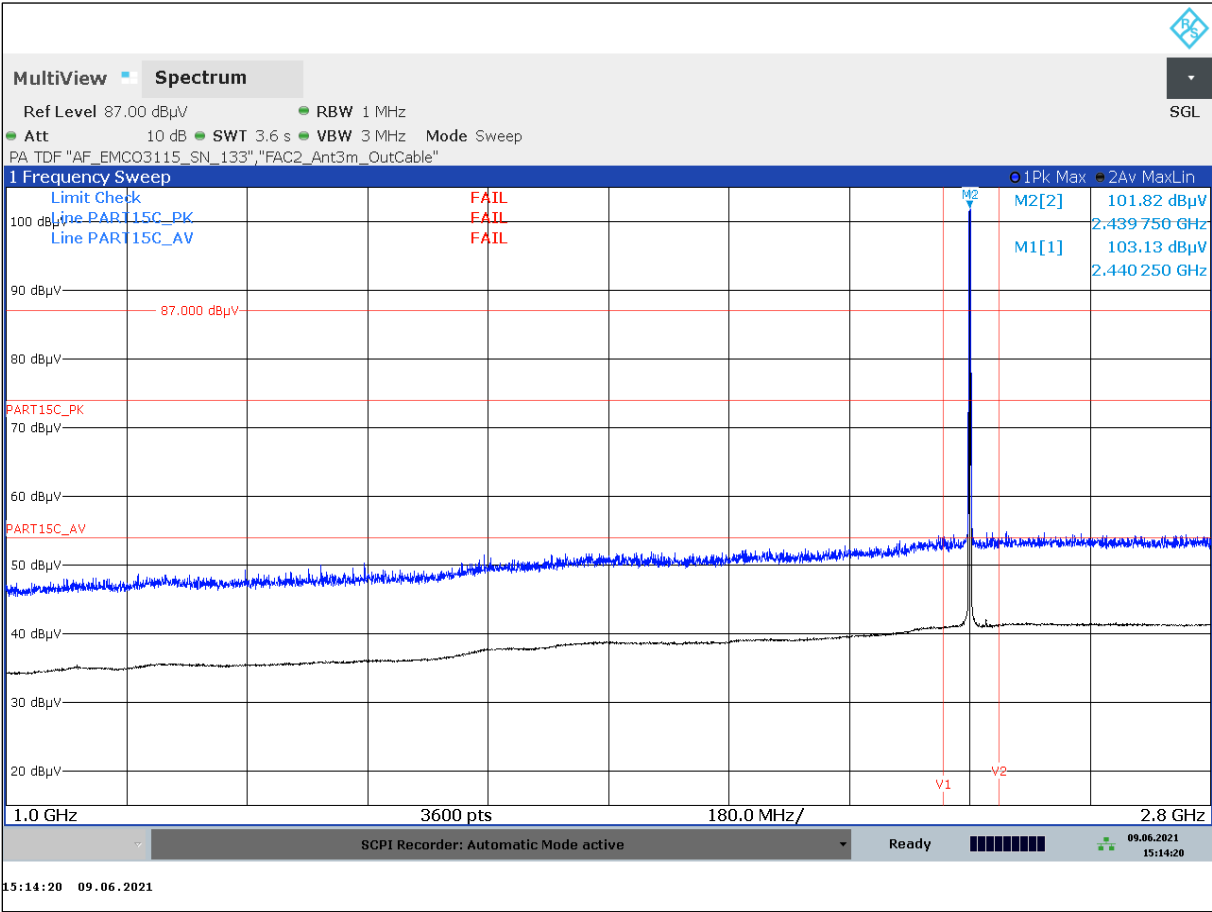
4.02a_RSE_TX_Ch19_AntH_1-2.8G

Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	Fully Anechoic Chamber (FAC2) - EMC32 V10.50.0
Test Standard:	FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 5
Antenna polarisation:	horizontal/vertical
Operating Mode:	1
Operator:	PMa
Environmental Conditions::	Humidity : 49 %rH; Temperature: 21 °C
Verdict:	Passed

EUT Information

PMT number:	21-1-00413S03_C01
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Remark: The FAIL notification is invalid as it refers to the in-band carrier.

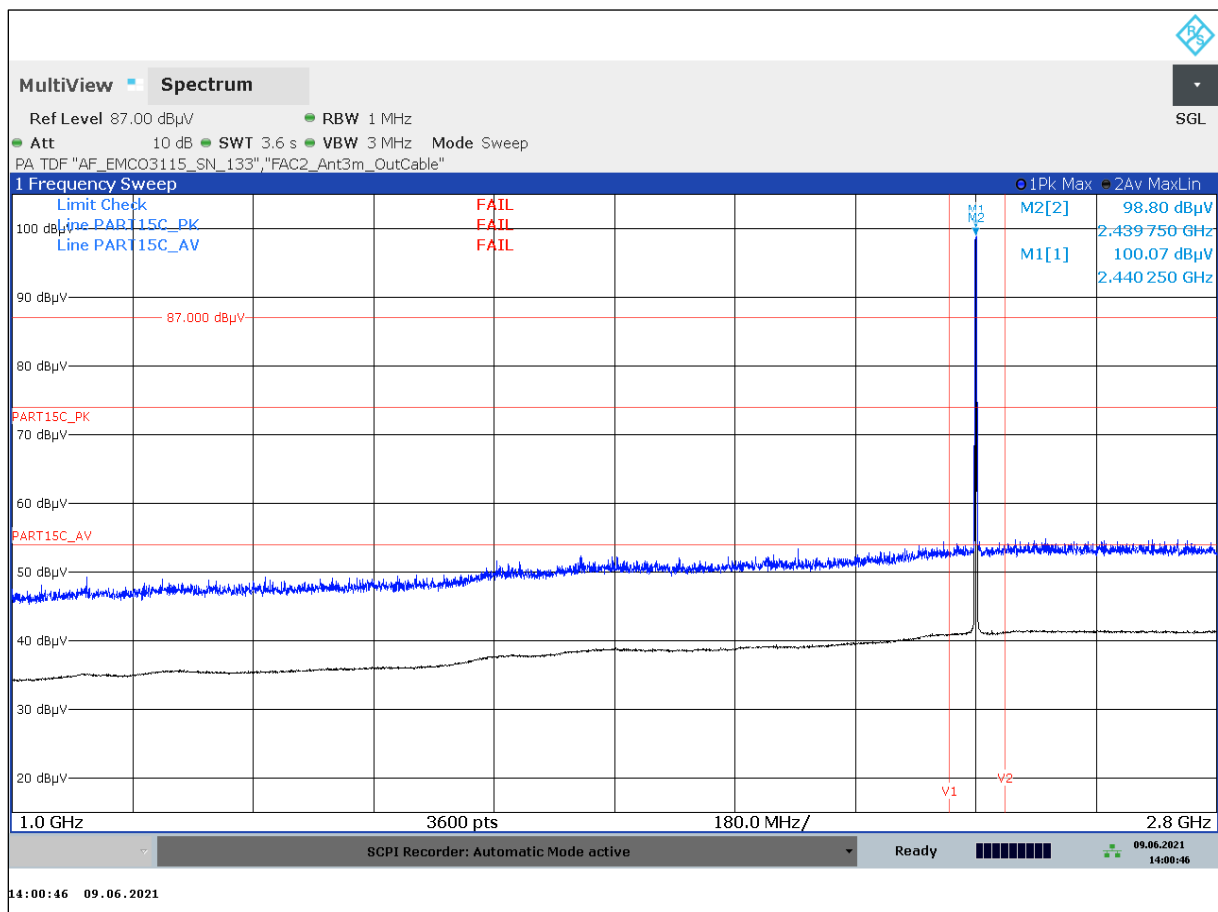
4.02b_RSE_TX_Ch19_AntV_1-2.8G

Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	Fully Anechoic Chamber (FAC2) - EMC32 V10.50.0
Test Standard:	FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 5
Antenna polarisation:	horizontal/vertical
Operating Mode:	1
Operator:	Pma
Environmental Conditions:	Humidity : 49 %rH; Temperature: 21 °C
Verdict:	Passed

EUT Information

PMT number:	21-1-00413S03_C01
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Remark: The FAIL notification is invalid as it refers to the in-band carrier.

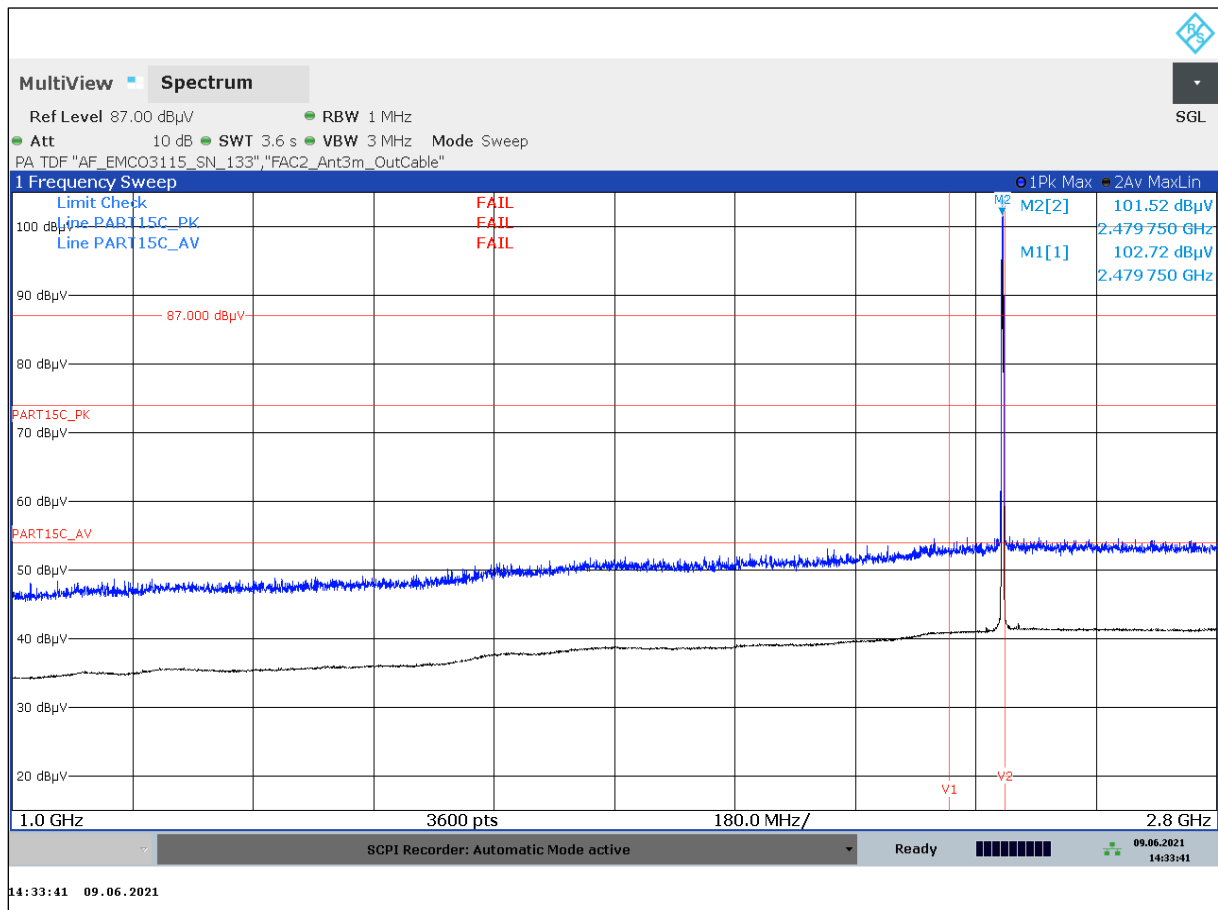
4.03a_RSE_TX_Ch39_AntH_1-2.8G

Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	Fully Anechoic Chamber (FAC2) - EMC32 V10.50.0
Test Standard:	FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 5
Antenna polarisation:	horizontal/vertical
Operating Mode:	1
Operator:	PMa
Environmental Conditions:	Humidity : 49 %rH; Temperature: 21 °C
Verdict:	Passed

EUT Information

PMT number:	21-1-00413S03_C01
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Remark: The FAIL notification is invalid as it refers to the in-band carrier.

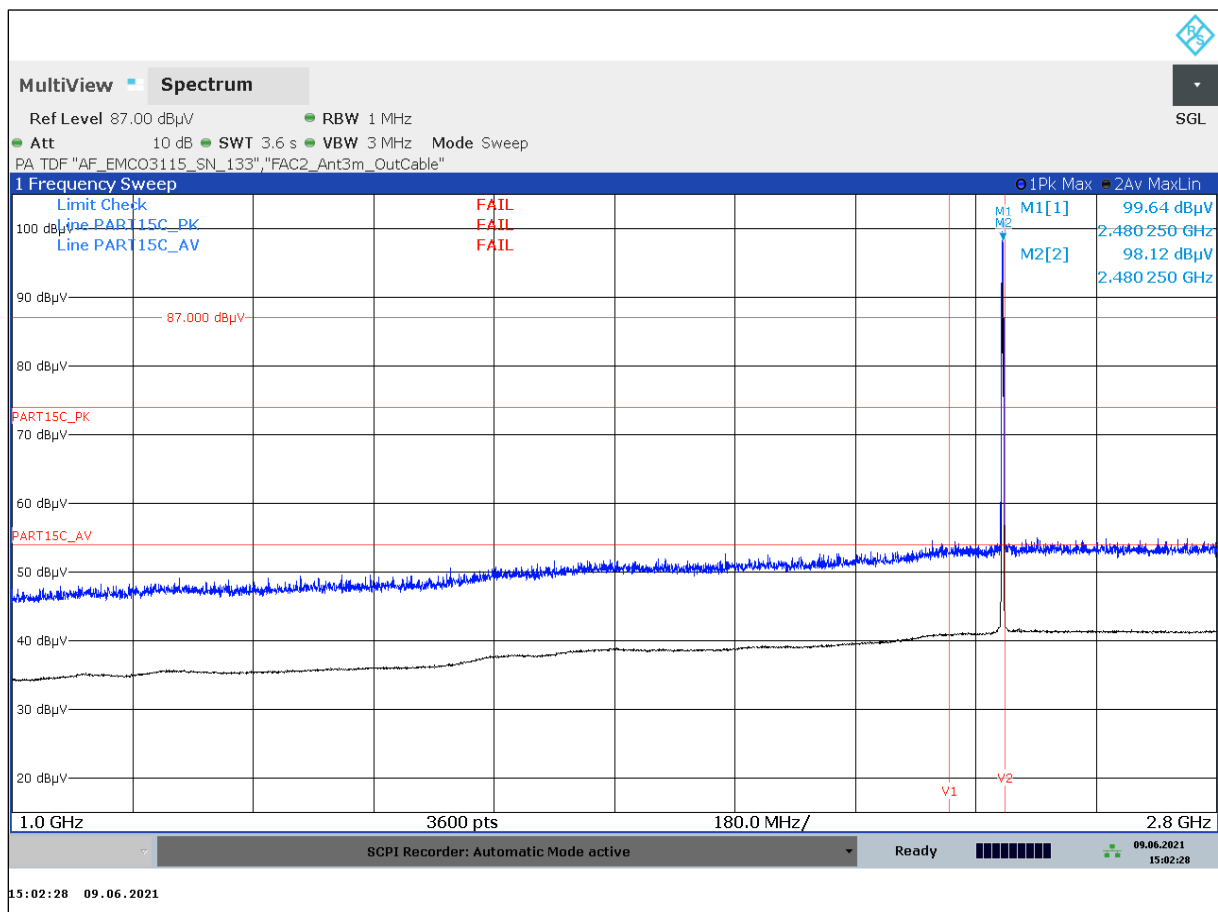
4.03b_RSE_TX_Ch39_AntH_1-2.8G

Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	Fully Anechoic Chamber (FAC2) - EMC32 V10.50.0
Test Standard:	FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 5
Antenna polarisation:	horizontal/vertical
Operating Mode:	1
Operator:	PMa
Environmental Conditions:	Humidity : 49 %rH; Temperature: 21 °C
Verdict:	Passed

EUT Information

PMT number:	21-1-00413S03_C01
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Remark: The FAIL notification is invalid as it refers to the in-band carrier.

4.01c_RSE_TX_Ch37_AntH_2.8-8G

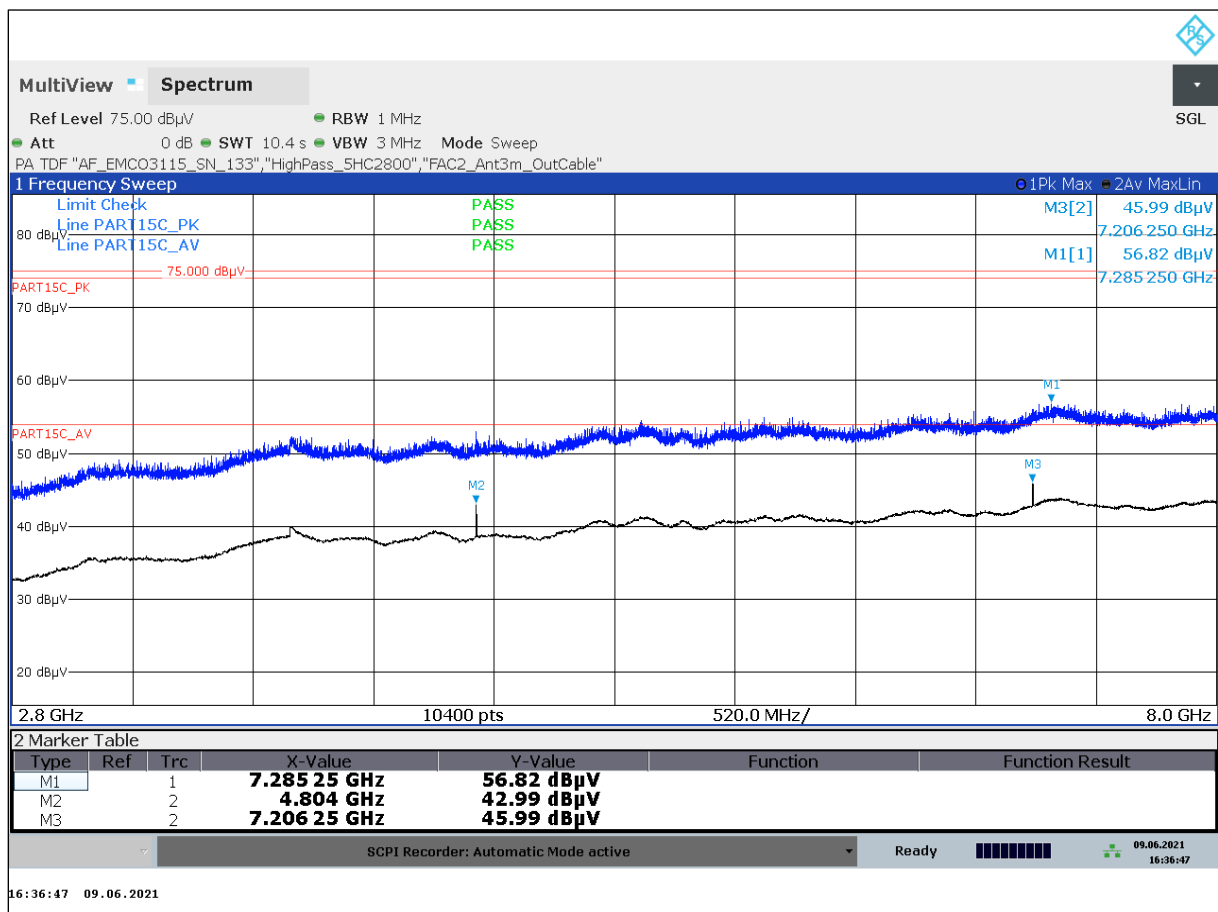
Common Information

Test Description: Radiated field strength emission in 3m distance
Test Site: Fully Anechoic Chamber (FAC2) - EMC32 V10.50.0
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 5
Antenna polarisation: horizontal/vertical

Operating Mode: 1
Operator: PMa
Environmental Conditions: Humidity : 49 %rH; Temperature: 21 °C
Verdict: Passed

EUT Information

PMT number: 21-1-00413S03_C01



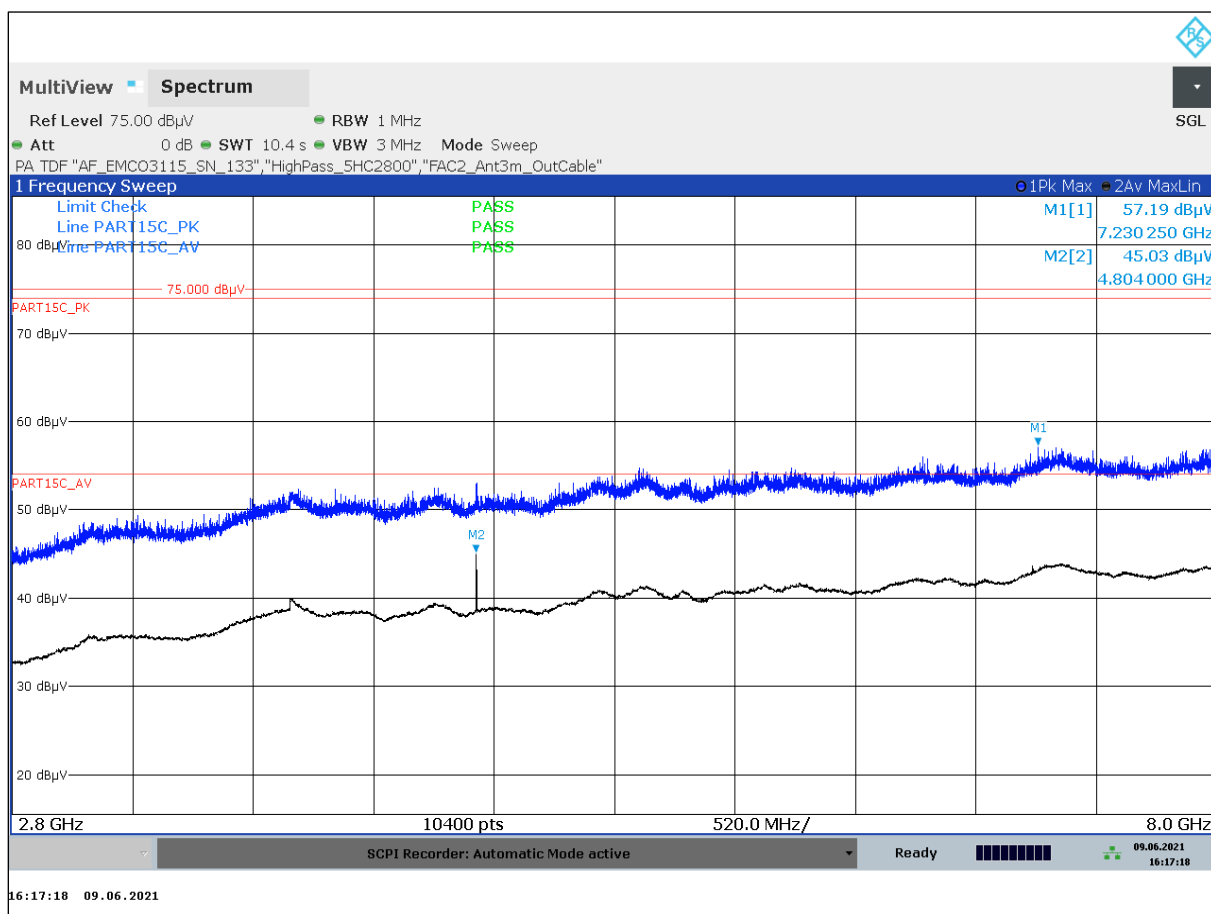
4.01d_RSE_TX_Ch37_AntV_2.8-8G

Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	Fully Anechoic Chamber (FAC2) - EMC32 V10.50.0
Test Standard:	FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 5
Antenna polarisation:	horizontal/vertical
Operating Mode:	1
Operator:	PMa
Environmental Conditions:	Humidity : 49 %rH; Temperature: 21 °C
Verdict:	Passed

EUT Information

PMT number:	21-1-00413S03_C01
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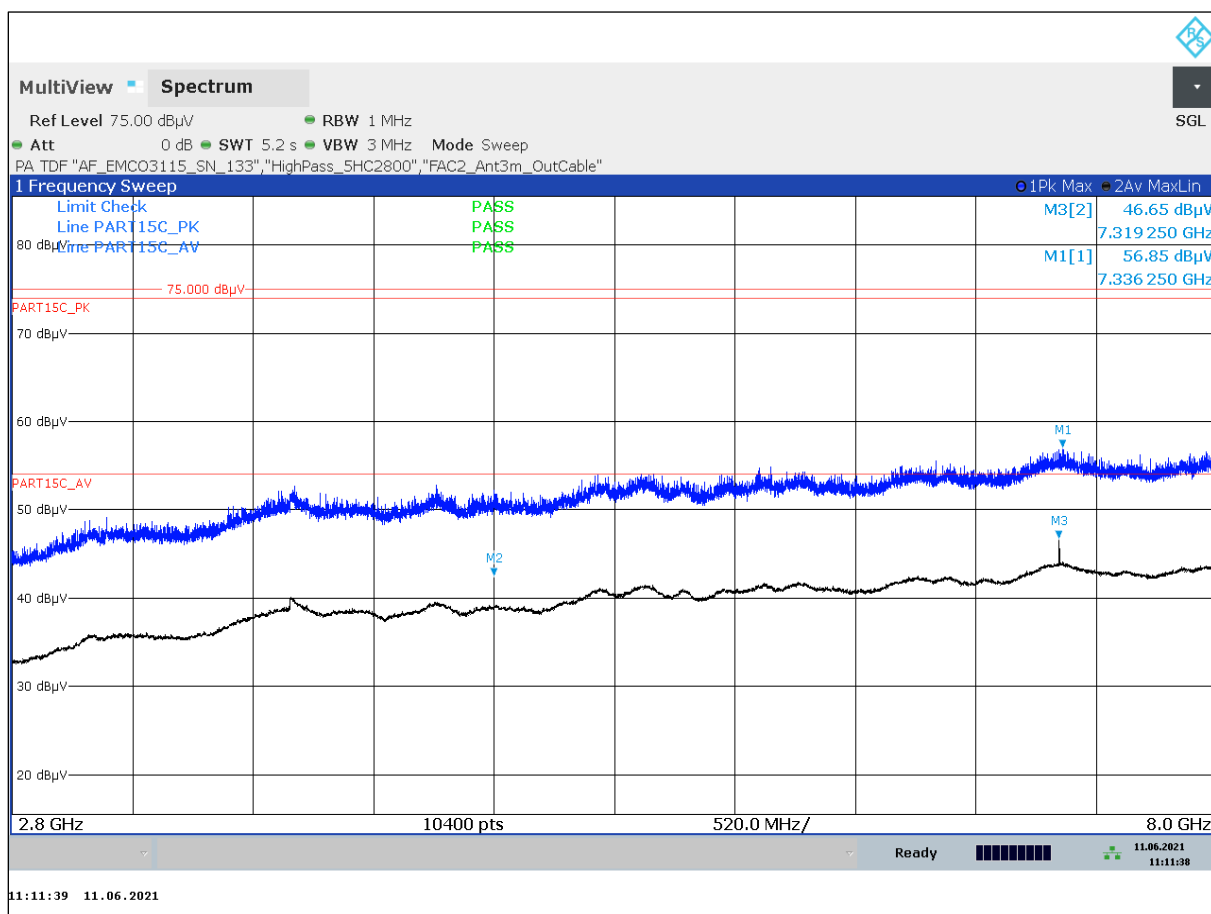
4.02c_RSE_TX_Ch19_AntH_2.8-8G

Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	Fully Anechoic Chamber (FAC2) - EMC32 V10.50.0
Test Standard:	FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 5
Antenna polarisation:	horizontal/vertical
Operating Mode:	1
Operator:	PMa
Environmental Conditions:	Humidity : 49 %rH; Temperature: 21 °C
Verdict:	Passed

EUT Information

PMT number:	21-1-00413S03_C01
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4.02d_RSE_TX_Ch19_AntV_2.8-8G

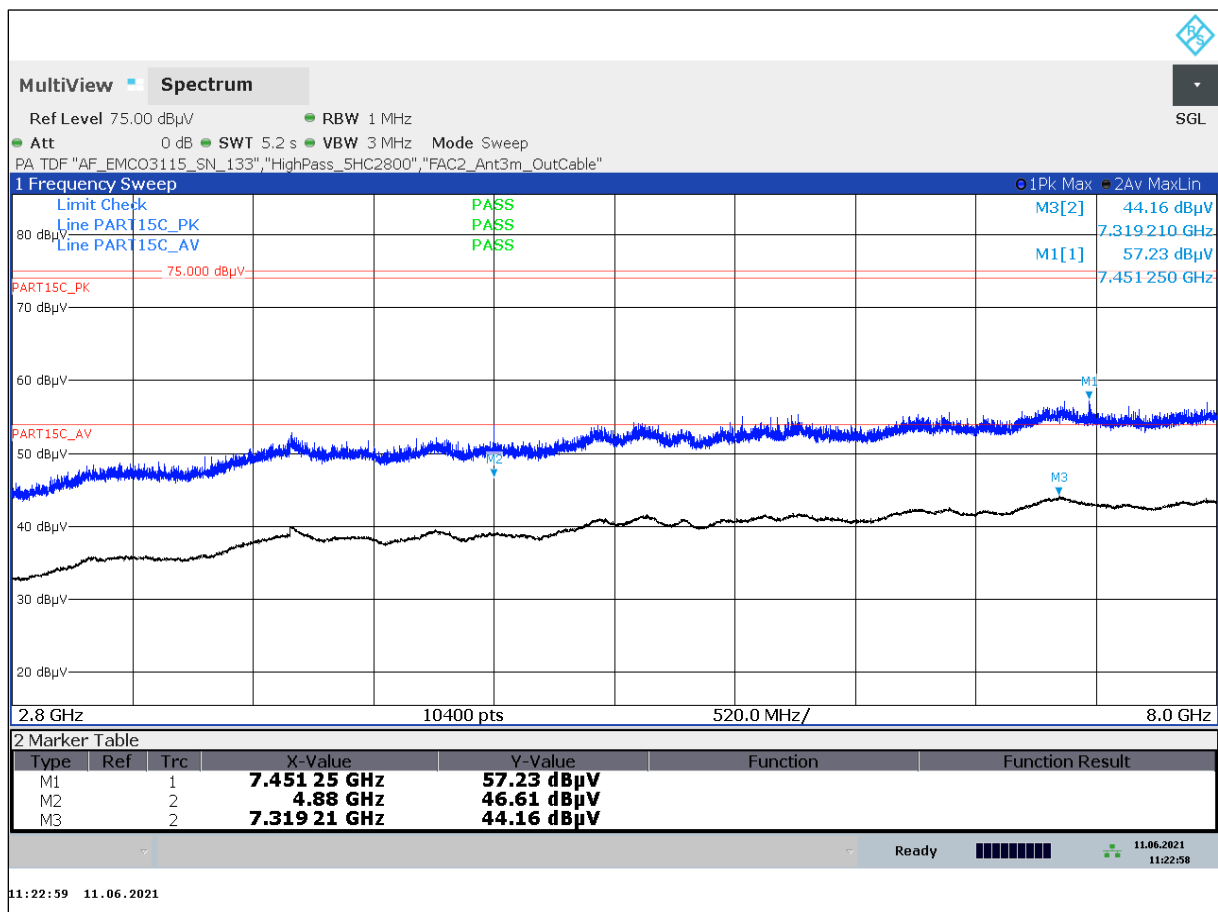
Common Information

Test Description: Radiated field strength emission in 3m distance
Test Site: Fully Anechoic Chamber (FAC2) - EMC32 V10.50.0
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 5
Antenna polarisation: horizontal/vertical

Operating Mode: 1
Operator: PMa
Environmental Conditions: Humidity : 49 %rH; Temperature: 21 °C
Verdict: Passed

EUT Information

PMT number: 21-1-00413S03_C01



4.03c_RSE_TX_Ch39_AntH_2.8-8G

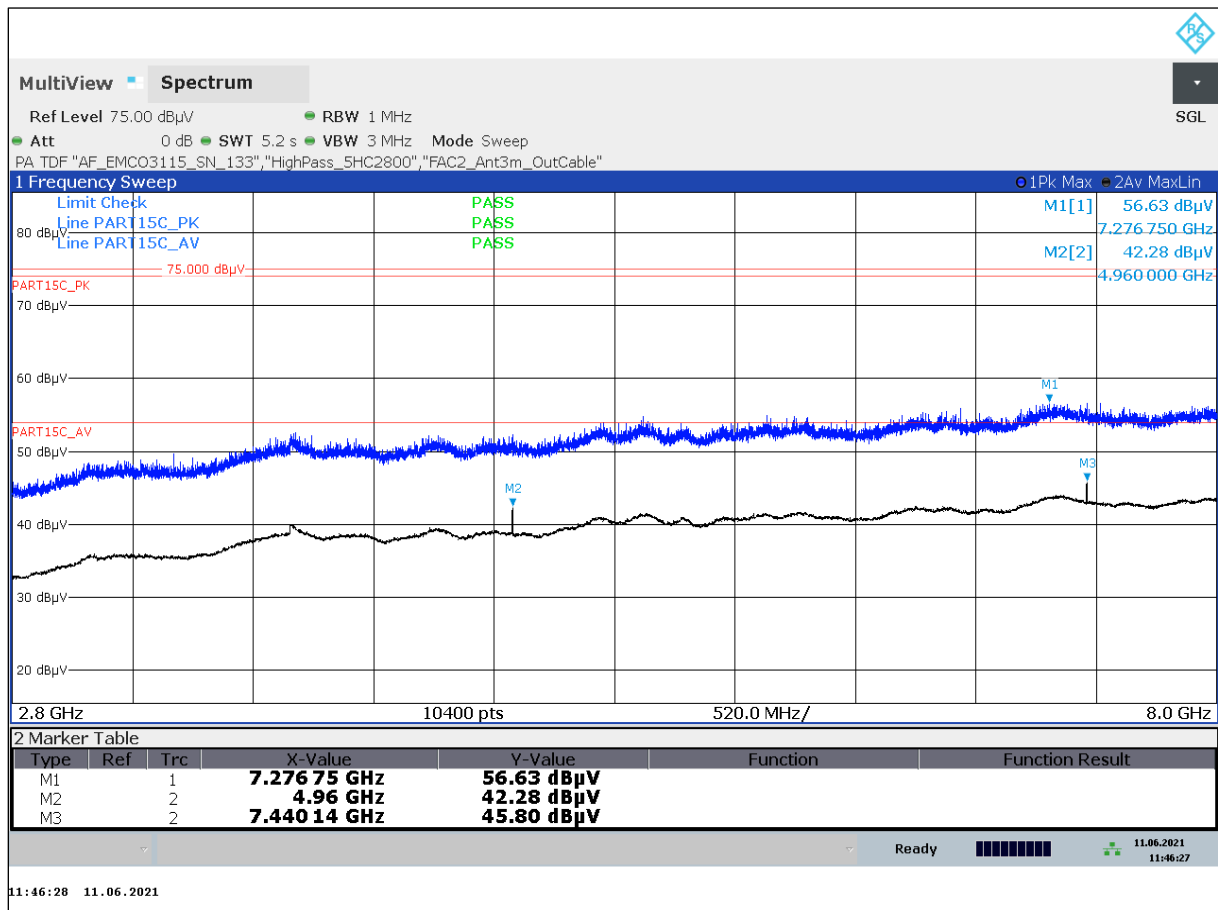
Common Information

Test Description: Radiated field strength emission in 3m distance
Test Site: Fully Anechoic Chamber (FAC2) - EMC32 V10.50.0
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 5
Antenna polarisation: horizontal/vertical

Operating Mode: 1
Operator: PMa
Environmental Conditions: Humidity : 49 %rH; Temperature: 21 °C
Verdict: Passed

EUT Information

PMT number: 21-1-00413S03_C01



4.03d_RSE_TX_Ch39_AntV_2.8-8G

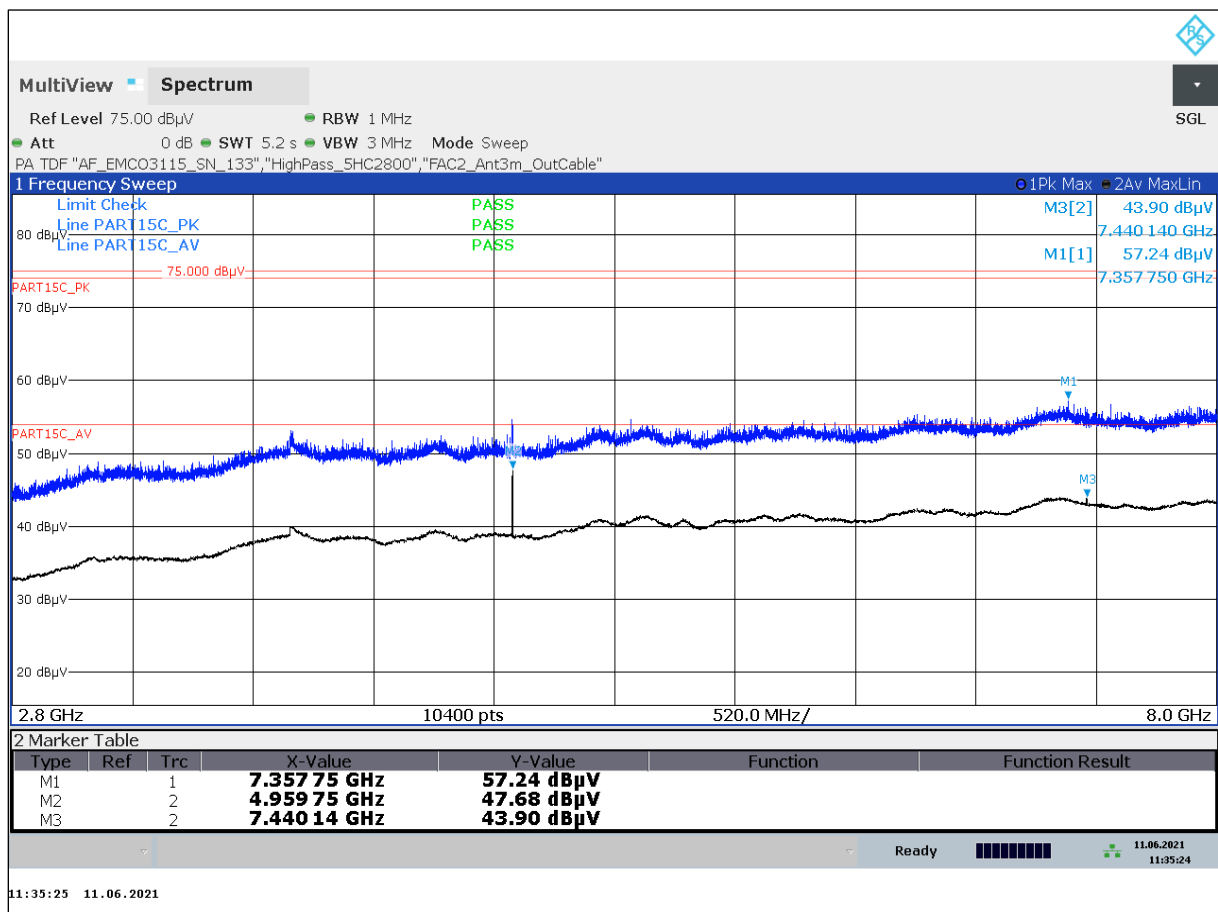
Common Information

Test Description: Radiated field strength emission in 3m distance
Test Site: Fully Anechoic Chamber (FAC2) - EMC32 V10.50.0
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 5
Antenna polarisation: horizontal/vertical

Operating Mode: 1
Operator: PMa
Environmental Conditions: Humidity : 49 %rH; Temperature: 21 °C
Verdict: Passed

EUT Information

PMT number: 21-1-00413S03_C01



4.01e_RSE_TX_Ch37_AntH_8-18G

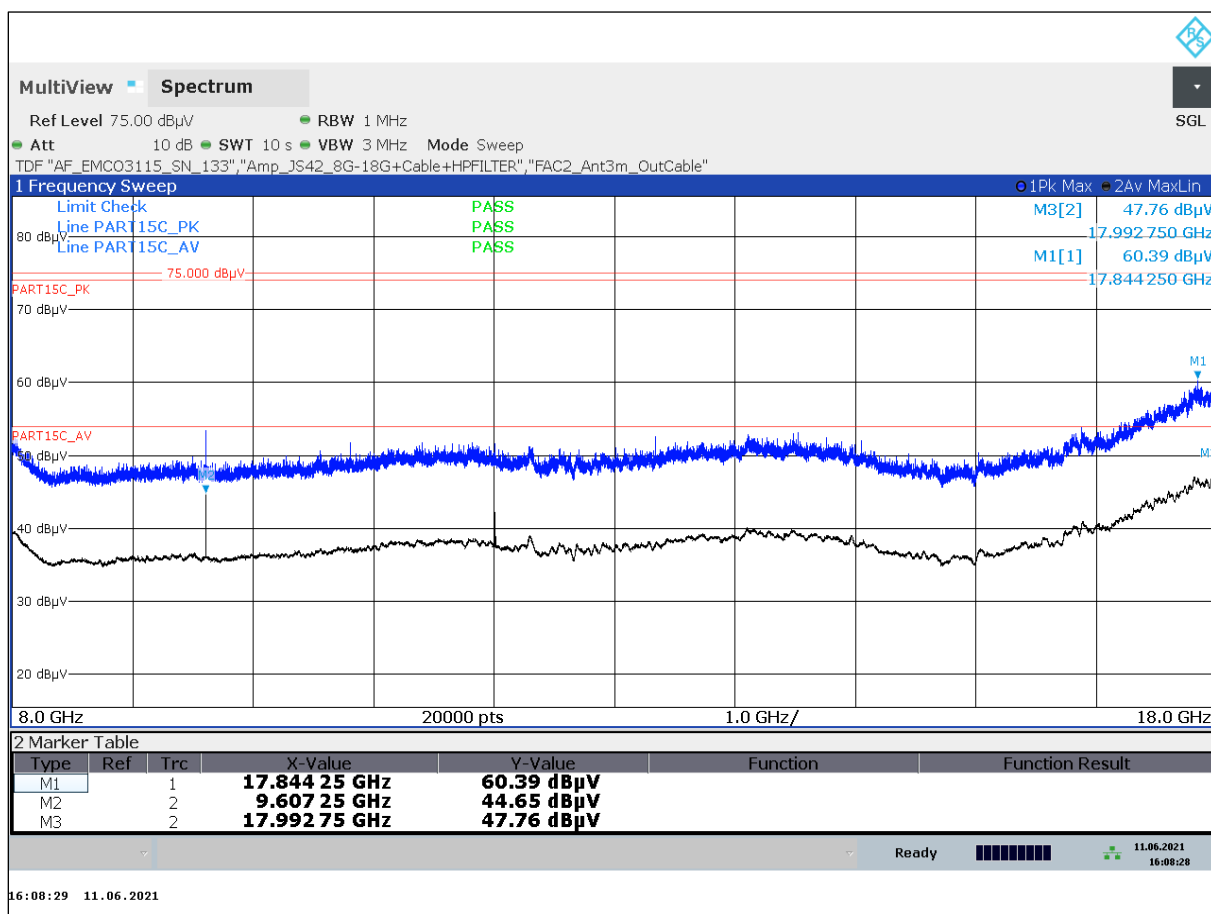
Common Information

Test Description: Radiated field strength emission in 3m distance
Test Site: Fully Anechoic Chamber (FAC2) - EMC32 V10.50.0
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 5
Antenna polarisation: horizontal/vertical

Operating Mode: 1
Operator: PMa
Environmental Conditions: Humidity : 49 %rH; Temperature: 21 °C
Verdict: Passed

EUT Information

PMT number: 21-1-00413S03_C01



4.01f_RSE_TX_Ch37_AntV_8-18G

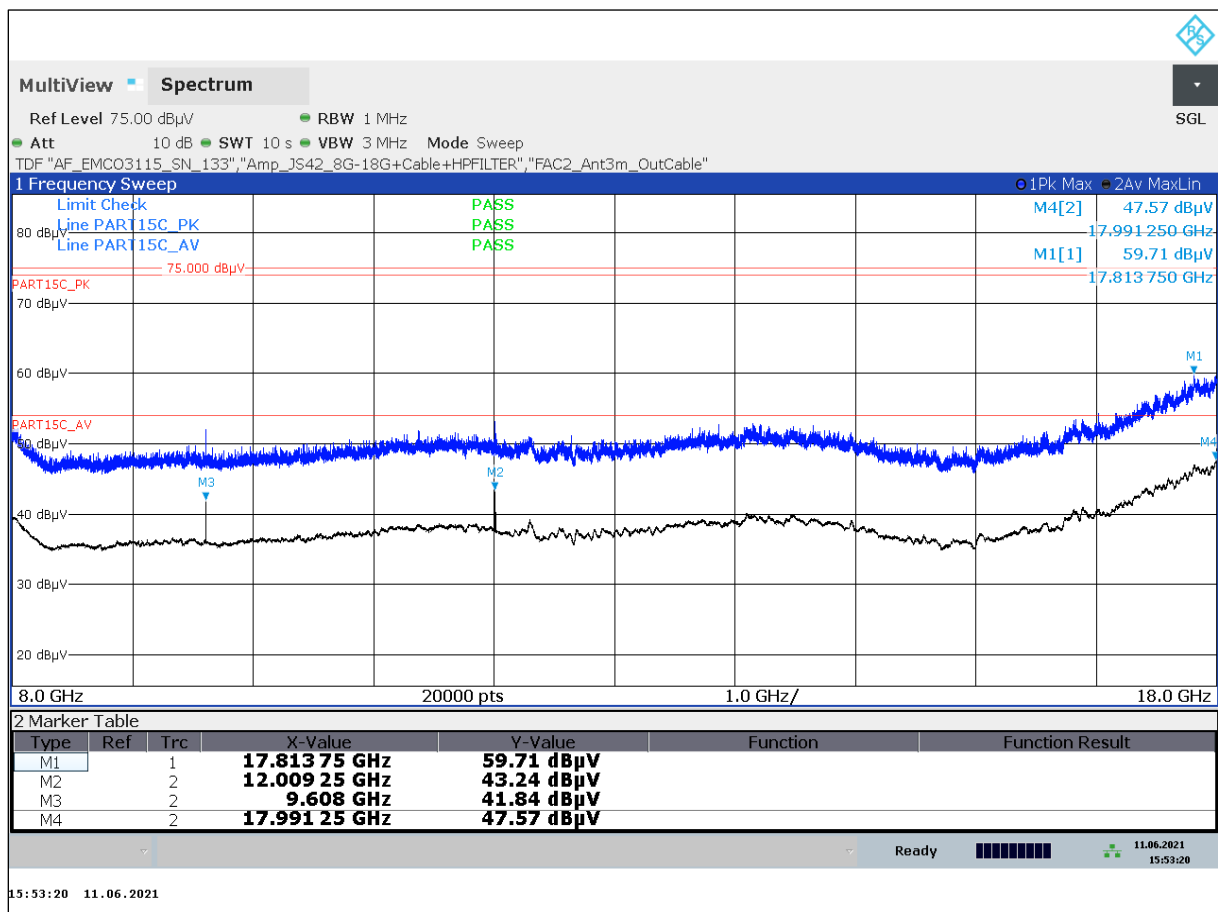
Common Information

Test Description: Radiated field strength emission in 3m distance
Test Site: Fully Anechoic Chamber (FAC2) - EMC32 V10.50.0
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 5
Antenna polarisation: horizontal/vertical

Operating Mode: 1
Operator: PMa
Environmental Conditions: Humidity : 49 %rH; Temperature: 21 °C
Verdict: Passed

EUT Information

PMT number: 21-1-00413S03_C01



4.02e_RSE_TX_Ch19_AntH_8-18G

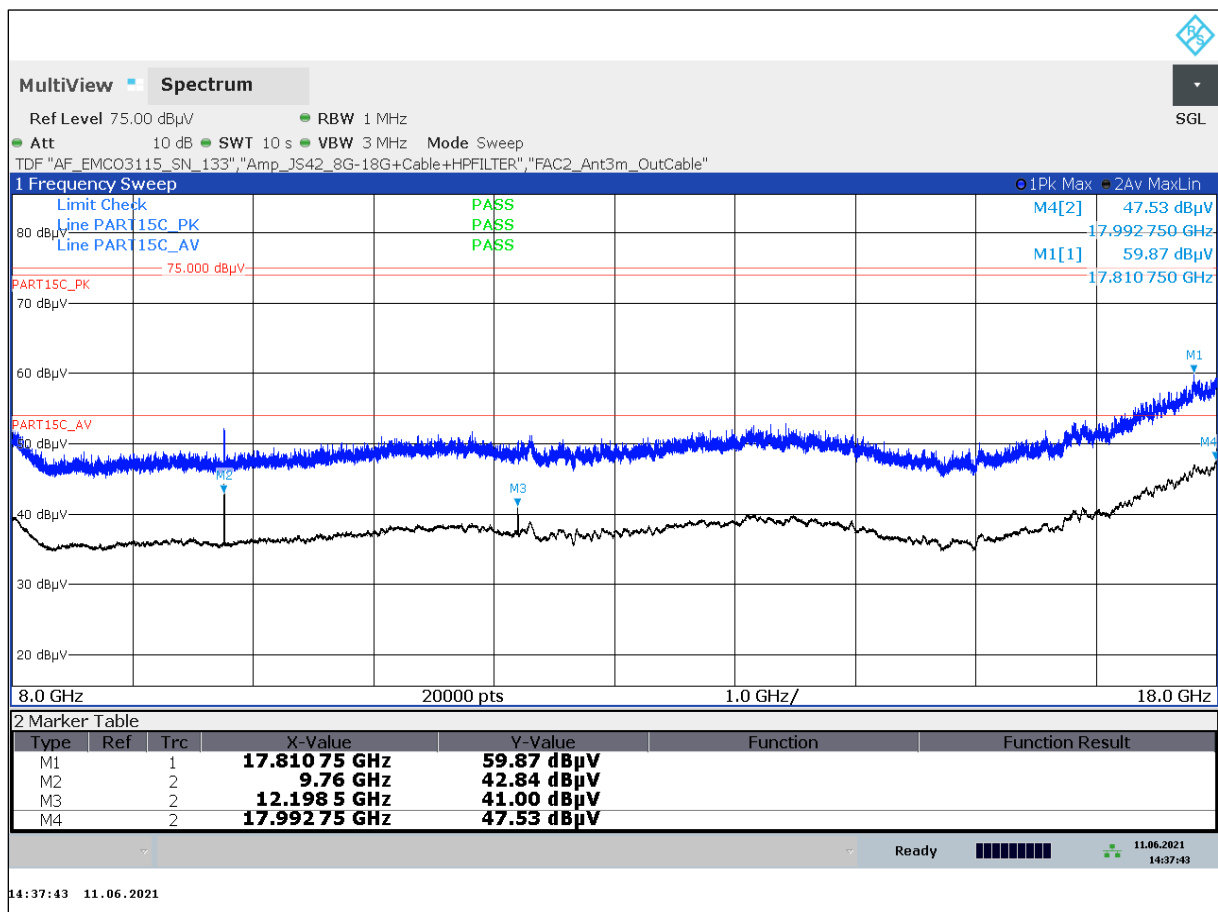
Common Information

Test Description: Radiated field strength emission in 3m distance
Test Site: Fully Anechoic Chamber (FAC2) - EMC32 V10.50.0
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 5
Antenna polarisation: horizontal/vertical

Operating Mode: 1
Operator: PMa
Environmental Conditions: Humidity : 49 %rH; Temperature: 21 °C
Verdict: Passed

EUT Information

PMT number: 21-1-00413S03_C01



4.02f_RSE_TX_Ch19_AntV_8-18G

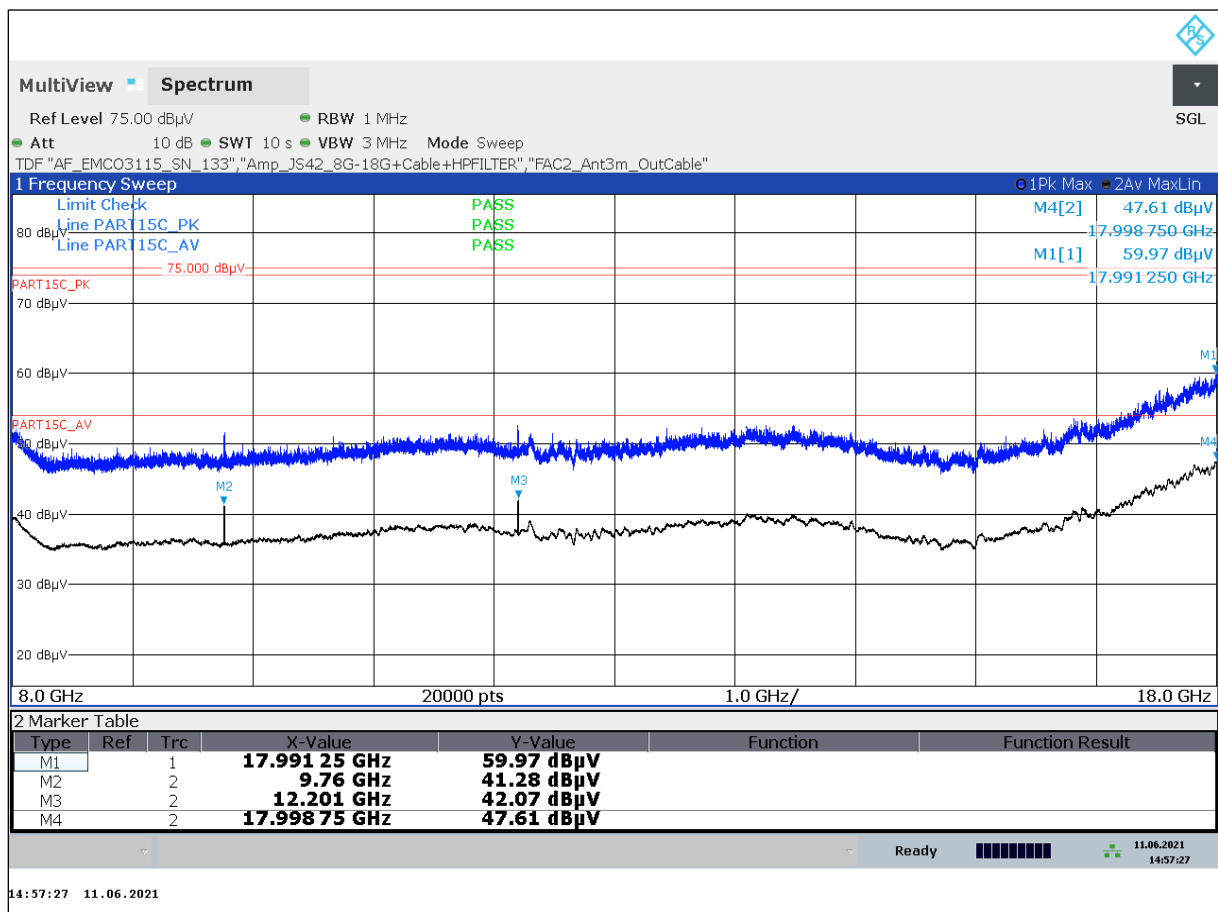
Common Information

Test Description: Radiated field strength emission in 3m distance
Test Site: Fully Anechoic Chamber (FAC2) - EMC32 V10.50.0
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 5
Antenna polarisation: horizontal/vertical

Operating Mode: 1
Operator: PMa
Environmental Conditions: Humidity : 49 %rH; Temperature: 21 °C
Verdict: Passed

EUT Information

PMT number: 21-1-00413S03_C01



4.03e_RSE_TX_Ch39_AntH_8-18G

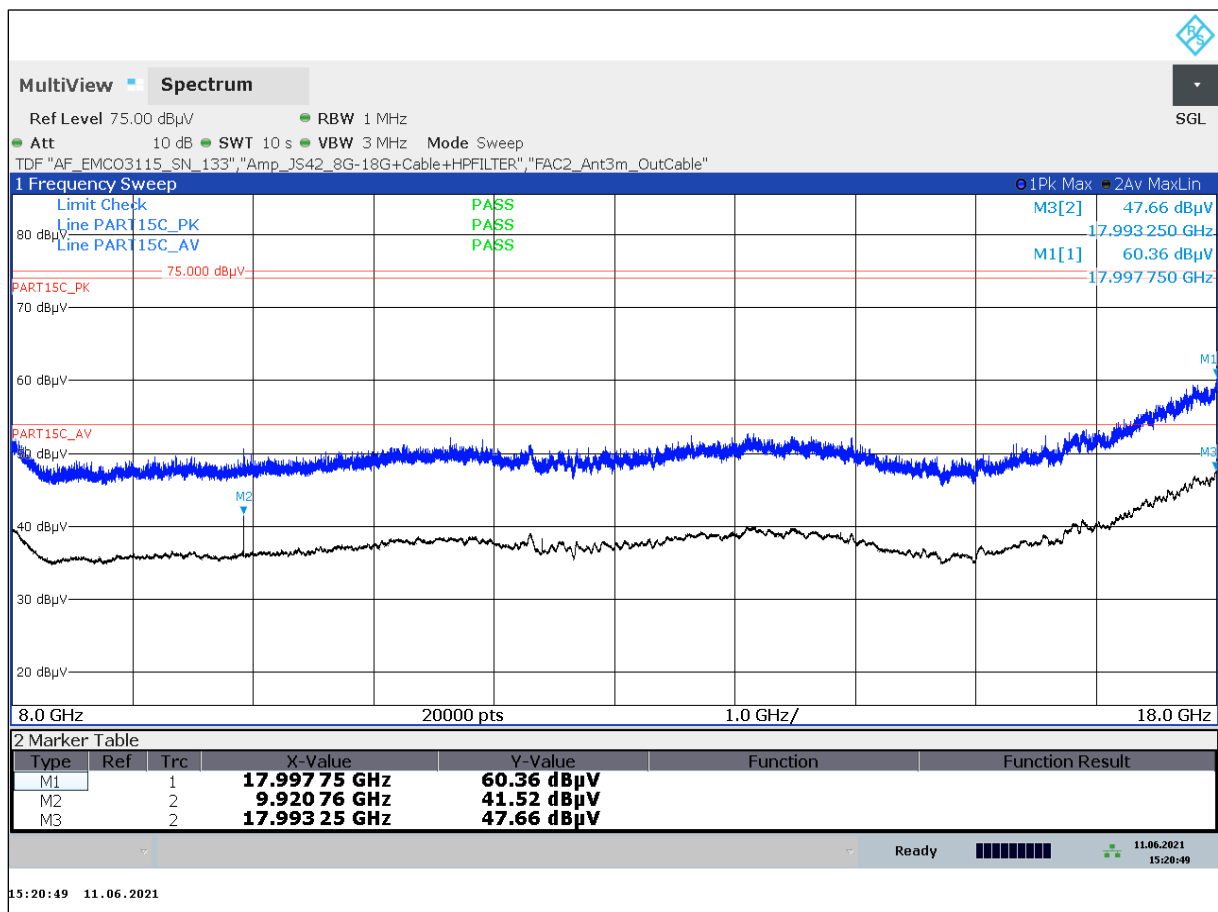
Common Information

Test Description: Radiated field strength emission in 3m distance
Test Site: Fully Anechoic Chamber (FAC2) - EMC32 V10.50.0
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 5
Antenna polarisation: horizontal/vertical

Operating Mode: 1
Operator: PMa
Environmental Conditions: Humidity : 49 %rH; Temperature: 21 °C
Verdict: Passed

EUT Information

PMT number: 21-1-00413S03_C01



4.03f_RSE_TX_Ch39_AntV_8-18G

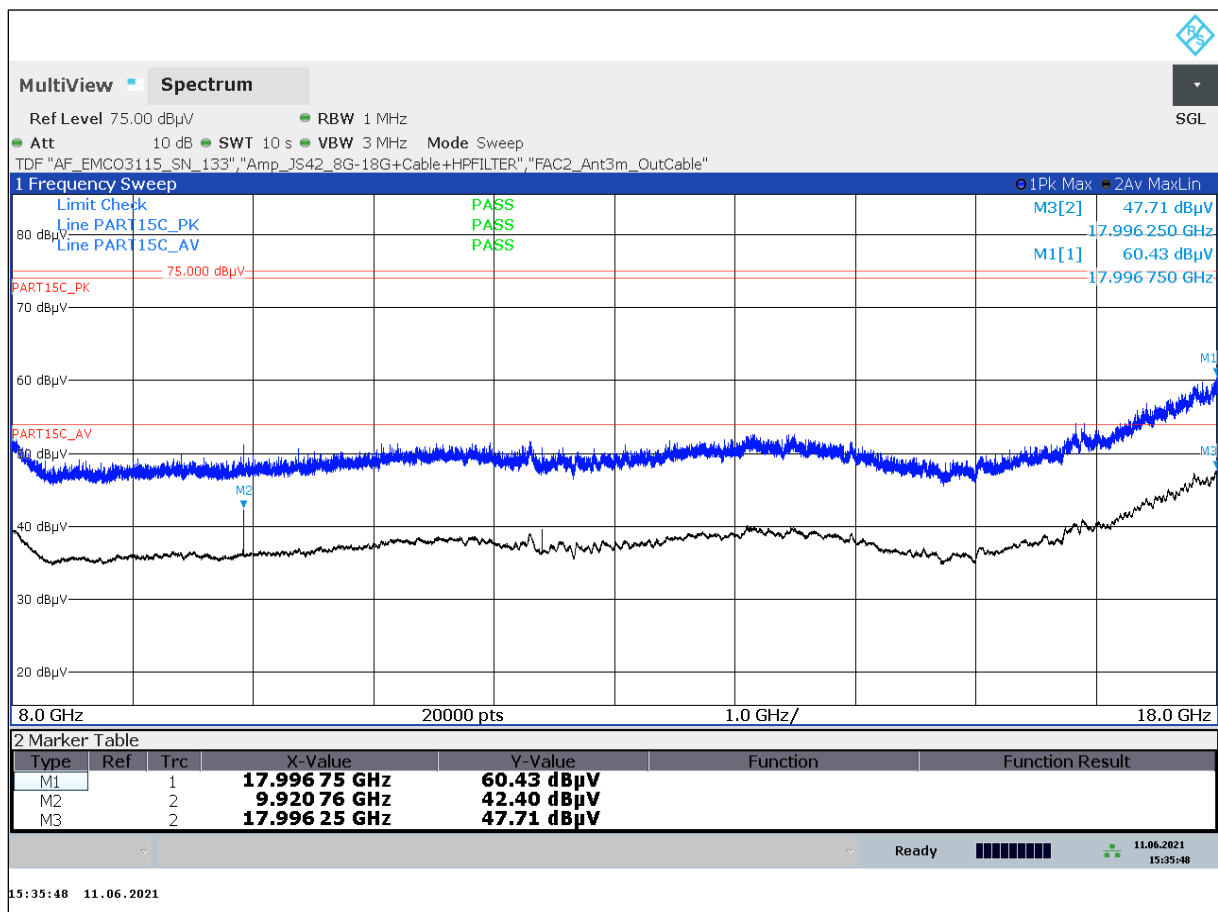
Common Information

Test Description: Radiated field strength emission in 3m distance
Test Site: Fully Anechoic Chamber (FAC2) - EMC32 V10.50.0
Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 5
Antenna polarisation: horizontal/vertical

Operating Mode: 1
Operator: PMa
Environmental Conditions: Humidity : 49 %rH; Temperature: 21 °C
Verdict: Passed

EUT Information

PMT number: 21-1-00413S03_C01



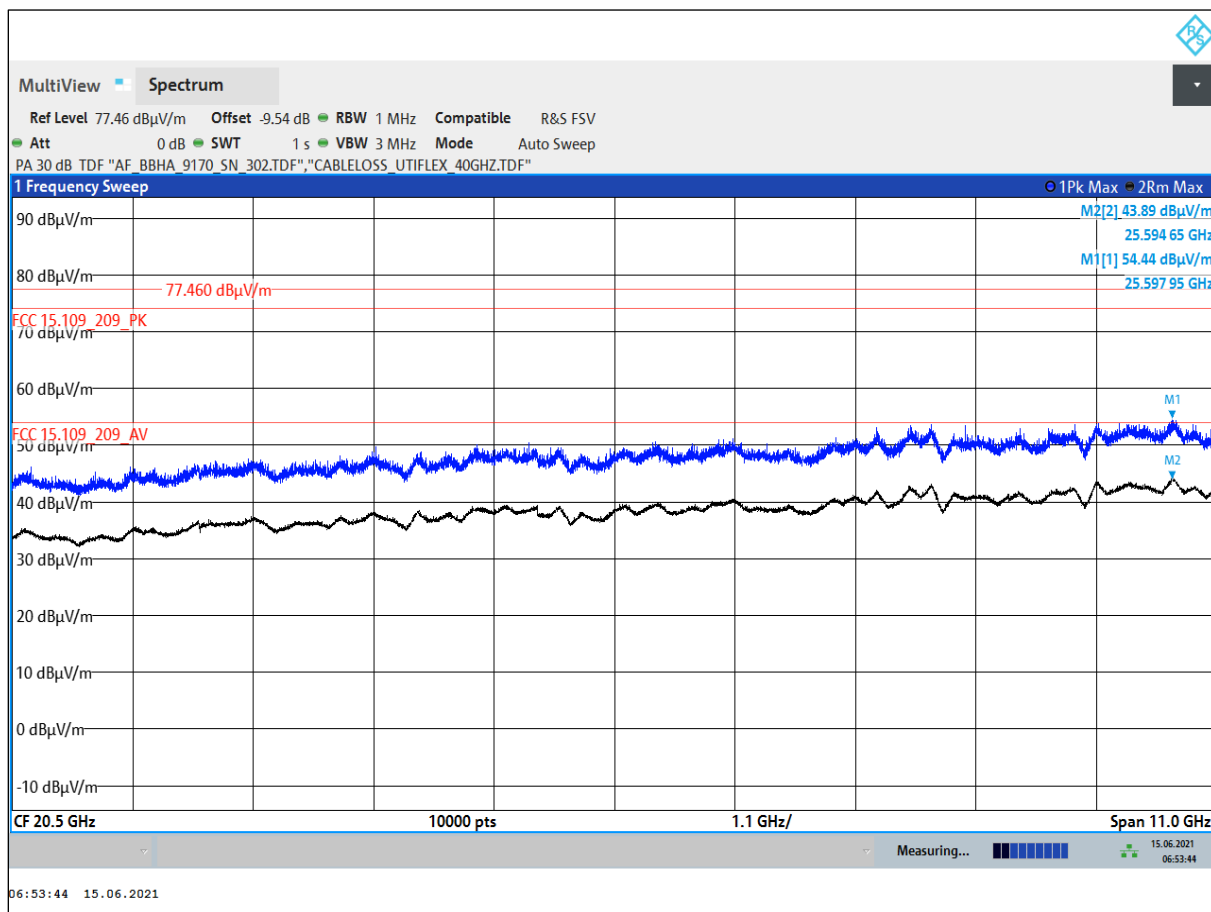
4.01g_RSE_TX_Ch37_18-26G

Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	Fully Anechoic Chamber (FAC2) - EMC32 V10.50.0
Test Standard:	FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 5
Antenna polarisation:	horizontal/vertical
Operating Mode:	1
Operator:	PMa
Environmental Conditions:	Humidity : 49 %rH; Temperature: 21 °C
Verdict:	Passed

EUT Information

PMT number:	21-1-00413S03_C01
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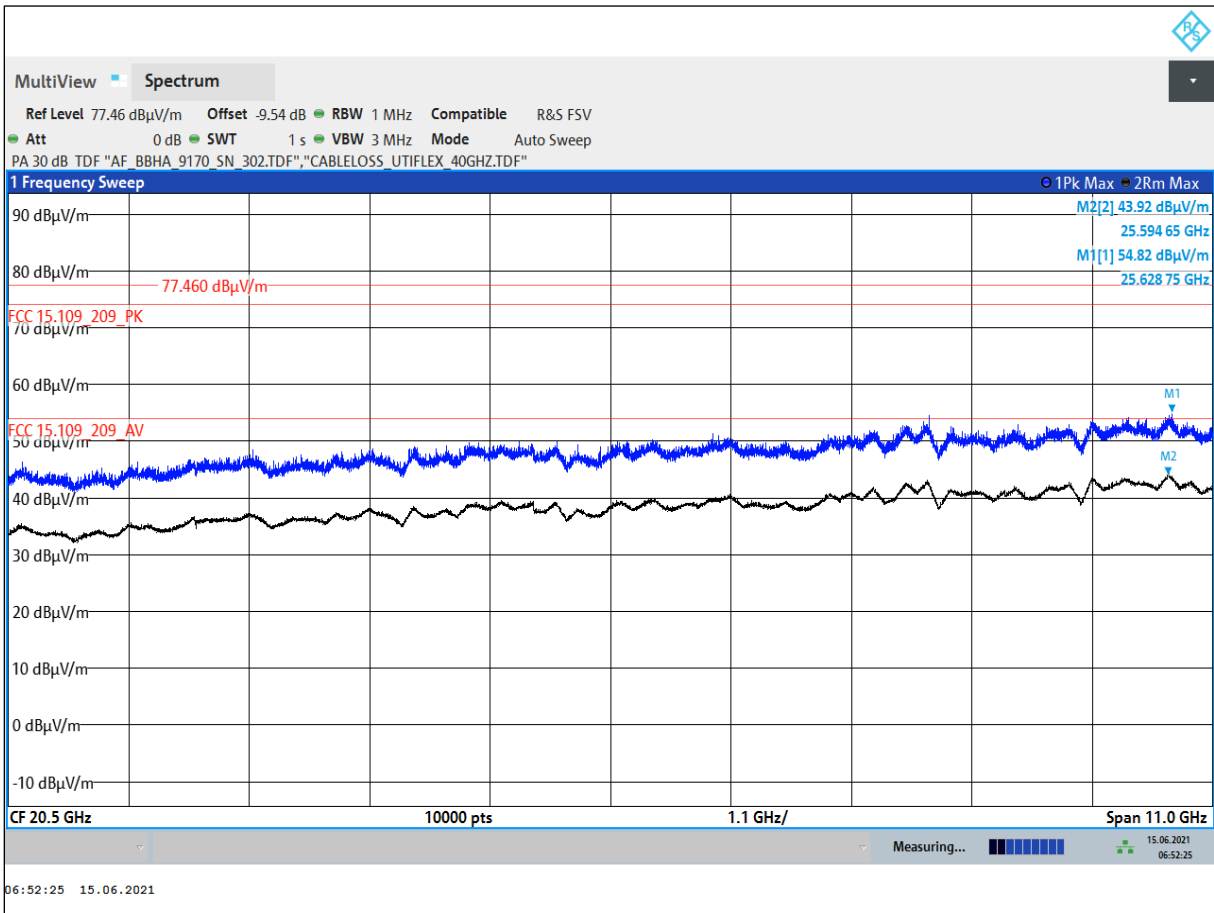
4.02g_RSE_TX_Ch19_18-26G

Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	Fully Anechoic Chamber (FAC2) - EMC32 V10.50.0
Test Standard:	FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 5
Antenna polarisation:	horizontal/vertical
Operating Mode:	1
Operator:	PMa
Environmental Conditions:	Humidity : 49 %rH; Temperature: 21 °C
Verdict:	Passed

EUT Information

PMT number:	21-1-00413S03_C01
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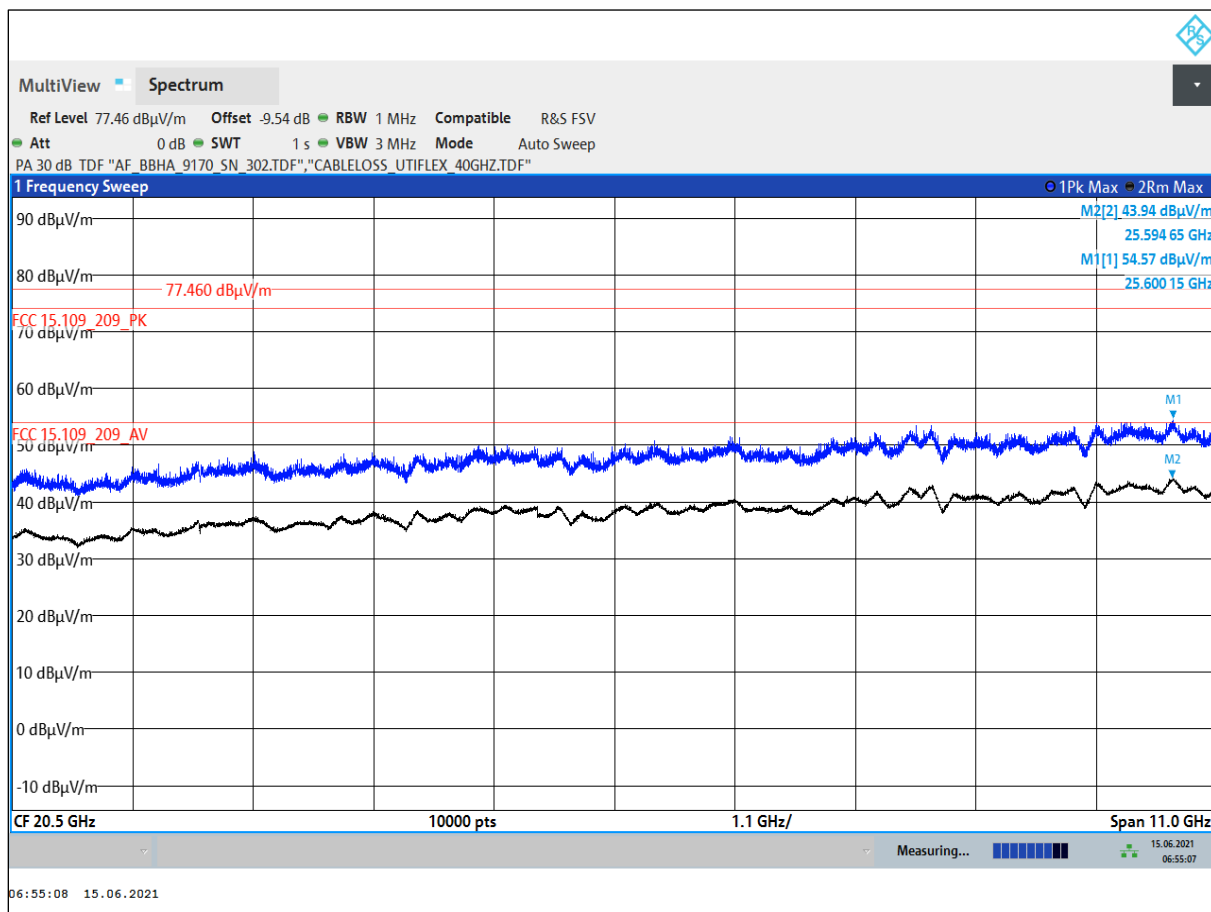
4.03g_RSE_TX_Ch39_18-26G

Common Information

Test Description:	Radiated field strength emission in 3m distance
Test Site:	Fully Anechoic Chamber (FAC2) - EMC32 V10.50.0
Test Standard:	FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 5
Antenna polarisation:	horizontal/vertical
Operating Mode:	1
Operator:	PMa
Environmental Conditions:	Humidity : 49 %rH; Temperature: 21 °C
Verdict:	Passed

EUT Information

PMT number:	21-1-00413S03_C01
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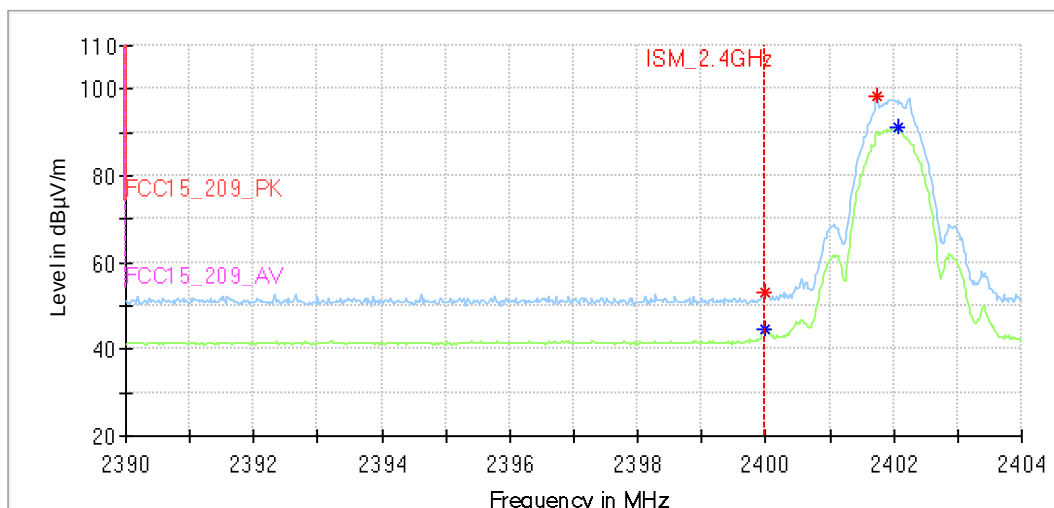
9.01_BE_low

Common Information

Test Description: Band-Edge: Radiated Field Strength Emissions Emissions in 3m distance
 Test Site: Fully Anechoic Chamber (FAC1) - EMC32 V10.60.20
 Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 5
 Antenna polarisation: horizontal/vertical

Operating Mode: 1
 Operator: PMa
 Comment: Channel no. low
 Comment2: -
 EUT Setup: 1
 Verdict: Passed

Full Spectrum



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	RMS (dBµV/m)	Limit (dBµV/m)	Margin	Meas. Time (ms)	Bandwidth	Height	Pol	Azimuth	Elevation
2400.000000	---	44.72	150.00	105.28	---	---	155.0	H	260.0	0.0
2400.000000	53.00	---	150.00	97.00	---	---	155.0	H	260.0	0.0
2401.740000	98.18	---	150.00	51.82	---	---	155.0	V	266.0	90.0
2402.060000	---	91.17	150.00	58.83	---	---	155.0	H	255.0	0.0

(continuation of the "Critical_Freqs" table from column 16 ...)

Frequency (MHz)	Corr. (dB/m)	Comment
2400.000000	37	08:42:34 - 24.06.2021
2400.000000	37	08:42:38 - 24.06.2021
2401.740000	37	08:42:01 - 24.06.2021
2402.060000	37	08:42:10 - 24.06.2021

9.02_BE_high

Common Information

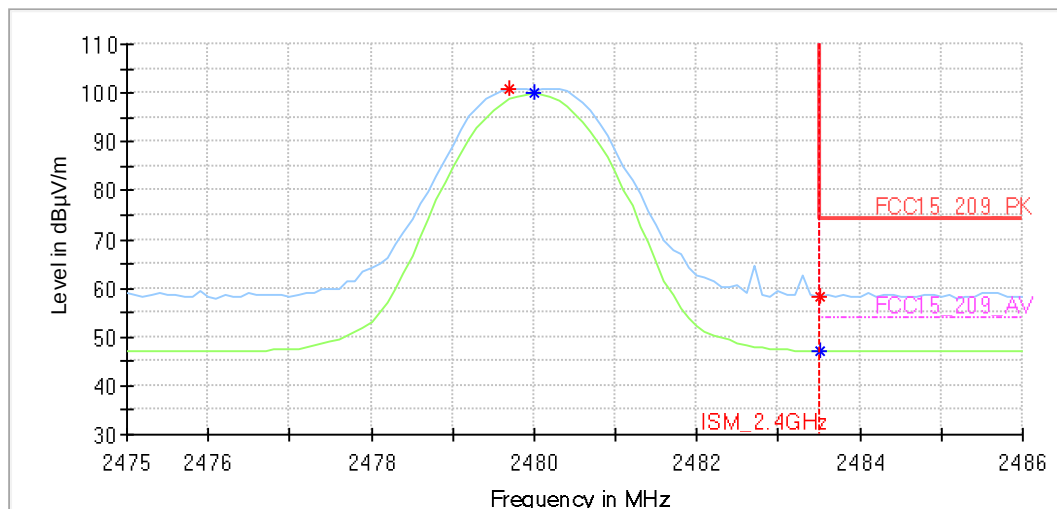
Test Description: Band-Edge: Radiated Field Strength Emissions Emissions in 3m distance
 Test Site: Fully Anechoic Chamber (FAC1) - EMC32 V10.60.20
 Test Standard: FCC 15.247&15.209 Intentional Radiator / RSS-Gen, Issue 5
 Antenna polarisation: horizontal/vertical

Operating Mode: 1
 Operator: PMa
 Comment: Channel no. high
 Comment2: -
 EUT Setup: 1
 Verdict: Passed

EUT Information

PMT number: 21-1-00413S03_C01

Full Spectrum



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	RMS (dBµV/m)	Limit (dBµV/m)	Margin	Meas. Time (ms)	Bandwidth	Height	Pol	Azimuth	Elevation
2479.700000	100.90	---	150.00	49.10	---	---	155.0	H	260.0	0.0
2480.000000	---	99.87	150.00	50.13	---	---	155.0	H	260.0	0.0
2483.500000	58.12	---	74.00	15.88	---	---	155.0	V	315.0	90.0
2483.500000	---	47.16	54.00	6.84	---	---	155.0	V	315.0	90.0

(continuation of the "Critical_Freqs" table from column 16 ...)

Frequency (MHz)	Corr. (dB/m)	Comment
2479.700000	37	09:23:17 - 24.06.2021
2480.000000	37	09:23:15 - 24.06.2021
2483.500000	37	09:23:11 - 24.06.2021
2483.500000	37	09:23:05 - 24.06.2021

1.2 Conducted measurements

Peak output power (Sweep)

Mode	DUT Frequency (MHz)	Peak Power (dBm)	Limit Max (dBm)	Result
BT-LE [GFSK]; 2402MHz	2402.000000	4.1	30.0	PASS
BT-LE [GFSK]; 2440MHz	2440.000000	3.7	30.0	PASS
BT-LE [GFSK]; 2480MHz	2480.000000	3.7	30.0	PASS

Minimum Emission Bandwidth 6 dB

Mode	DUT Frequency	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left	Band Edge Right
BT-LE [GFSK]; 2402MHz	2402.0000	0.732674	0.500000	---	2401.6039	2402.3366
BT-LE [GFSK]; 2440MHz	2440.0000	0.752476	0.500000	---	2439.6039	2440.3564
BT-LE [GFSK]; 2480MHz	2480.0000	0.752476	0.500000	---	2479.6039	2480.3564

Peak Power Spectral Density

Mode	DUT Frequency	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
BT-LE [GFSK]; 2402MHz	2402.000000	2401.727500	-0.498	8.0	PASS
BT-LE [GFSK]; 2440MHz	2440.000000	2439.722500	-0.804	8.0	PASS
BT-LE [GFSK]; 2480MHz	2480.000000	2479.722500	-0.814	8.0	PASS

Occupied Channel Bandwidth 99%

Mode	DUT Frequency	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left	Band Edge Right
BT-LE [GFSK]; 2402MHz	2402.0000	1.040000	---	---	2401.4525	2402.4925
BT-LE [GFSK]; 2440MHz	2440.0000	1.065000	---	---	2439.4375	2440.5025
BT-LE [GFSK]; 2480MHz	2480.0000	1.060000	---	---	2479.4375	2480.4975

Tx Spurious Emission

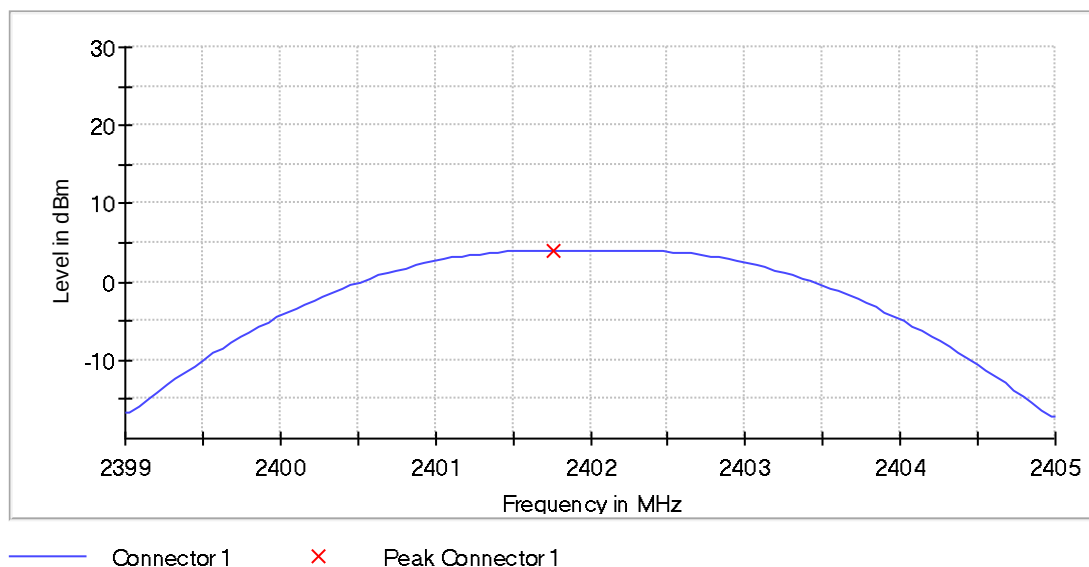
Mode	DUT Frequency (MHz)	Result
BT-LE [GFSK]; 2402MHz	2402.000000	PASS
BT-LE [GFSK]; 2440MHz	2440.000000	PASS
BT-LE [GFSK]; 2480MHz	2480.000000	PASS

Peak output power (Sweep) (2402 MHz; BT-LE [GFSK] (5 dBm); 1 MHz)

Test according to FCC title 47 part 15 §15.247(b), KDB 558074 D01 DTS Meas Guidance v05r02 and ANSI C63.10-2013

Result

DUT Frequency (MHz)	Peak Power (dBm)	Limit Max (dBm)	Result
2402.000000	4.1	30.0	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.39900 GHz	2.39900 GHz
Stop Frequency	2.40500 GHz	2.40500 GHz
Span	6.000 MHz	6.000 MHz
RBW	2.000 MHz	>= 1.000 MHz
VBW	10.000 MHz	>= 6.000 MHz
SweepPoints	101	~ 101
SweepTime	1.000 ms	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	4 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.09 dB	0.50 dB

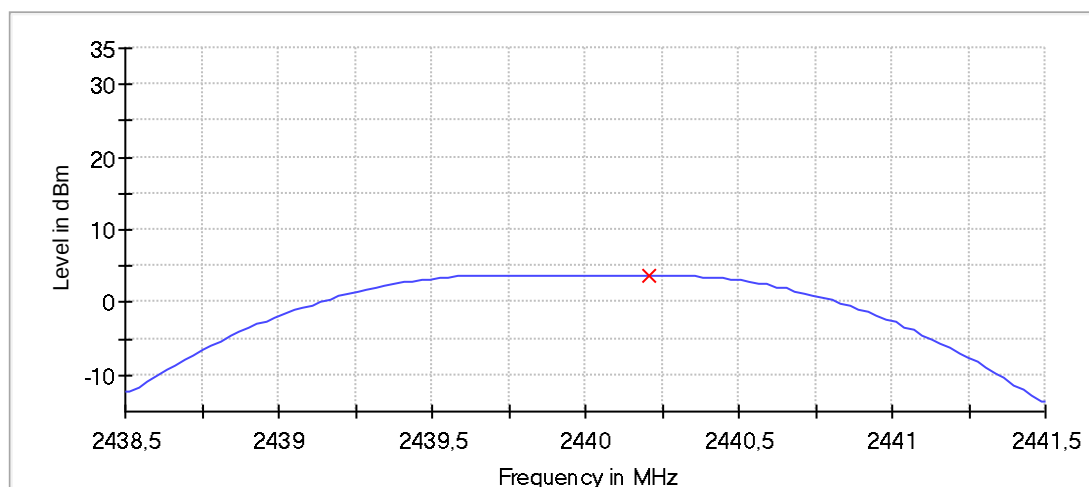
Peak output power (Sweep) (2440 MHz; BT-LE [GFSK] (5 dBm); 1 MHz)

Test according to FCC title 47 part 15 §15.247(b), KDB 558074 D01 DTS Meas Guidance v05r02 and ANSI C63.10-2013

Result

DUT Frequency (MHz)	Peak Power (dBm)	Limit Max (dBm)	Result
2440.000000	3.7	30.0	PASS

Peak Power



— Connector 1 × Peak Connector 1

Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.43850 GHz	2.43850 GHz
Stop Frequency	2.44150 GHz	2.44150 GHz
Span	3.000 MHz	3.000 MHz
RBW	1.000 MHz	>= 732.675 kHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	101	~ 101
SweepTime	1.000 ms	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	4 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.06 dB	0.50 dB

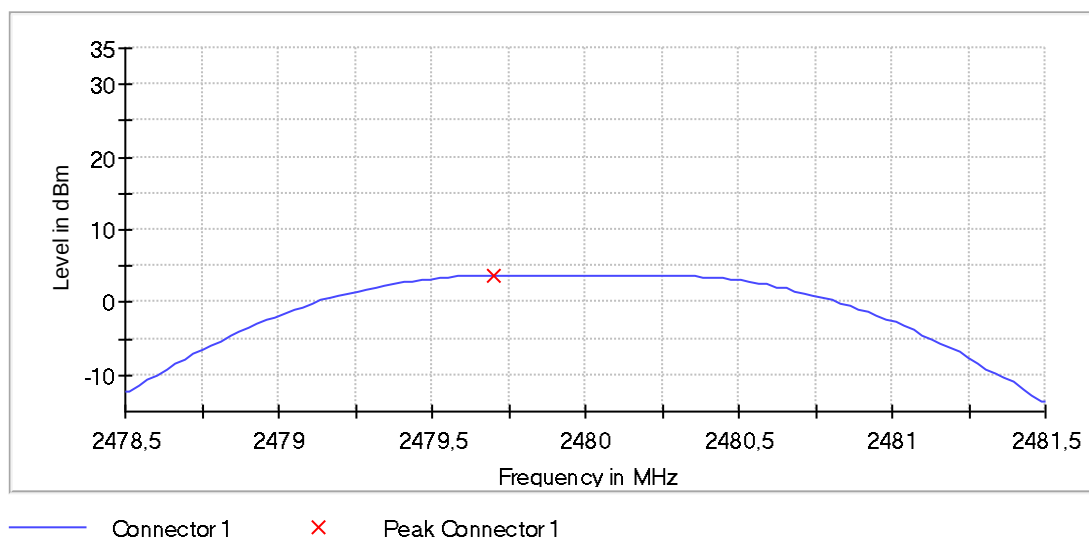
Peak output power (Sweep) (2480 MHz; BT-LE [GFSK] (5 dBm); 1 MHz)

Test according to FCC title 47 part 15 §15.247(b), KDB 558074 D01 DTS Meas Guidance v05r02 and ANSI C63.10-2013

Result

DUT Frequency (MHz)	Peak Power (dBm)	Limit Max (dBm)	Result
2480.000000	3.7	30.0	PASS

Peak Power



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.47850 GHz	2.47850 GHz
Stop Frequency	2.48150 GHz	2.48150 GHz
Span	3.000 MHz	3.000 MHz
RBW	1.000 MHz	>= 752.477 kHz
VBW	3.000 MHz	>= 3.000 MHz
SweepPoints	101	~ 101
SweepTime	1.000 ms	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	4 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.12 dB	0.50 dB

Minimum Emission Bandwidth 6 dB (2402 MHz; BT-LE [GFSK] (5 dBm); 1 MHz)

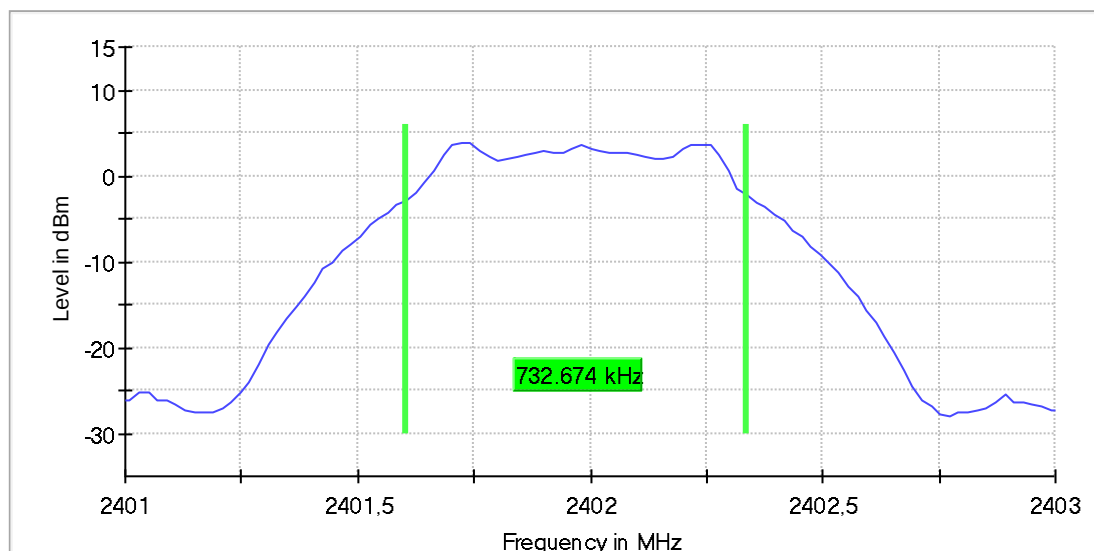
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v05r02 and ANSI C63.10-2013

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2402.000000	0.732674	0.500000	---	2401.603960	2402.336634

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2402.000000	3.9	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40100 GHz	2.40100 GHz
Stop Frequency	2.40300 GHz	2.40300 GHz
Span	2.000 MHz	2.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	101	~ 40
SweepTime	1.000 ms	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	11 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.23 dB	0.50 dB

Minimum Emission Bandwidth 6 dB (2440 MHz; BT-LE [GFSK] (5 dBm); 1 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v05r02 and ANSI C63.10-2013

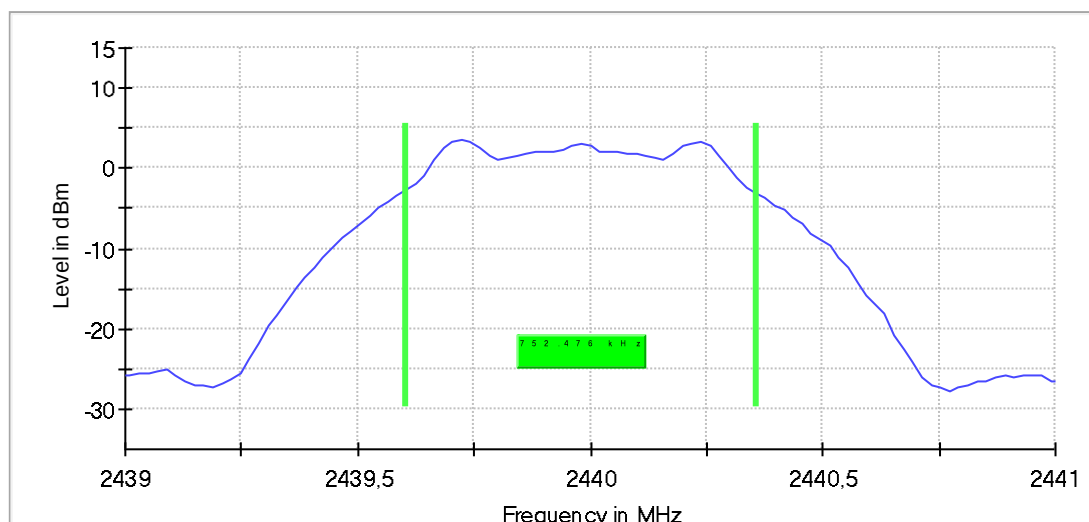
6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2440.000000	0.752476	0.500000	---	2439.603960	2440.356436

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2440.000000	3.5	PASS

6 dB Bandwidth



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.43900 GHz	2.43900 GHz
Stop Frequency	2.44100 GHz	2.44100 GHz
Span	2.000 MHz	2.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	101	~ 40
Sweptime	1.000 ms	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	7 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.35 dB	0.50 dB

Minimum Emission Bandwidth 6 dB (2480 MHz; BT-LE [GFSK] (5 dBm); 1 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v05r02 and ANSI C63.10-2013

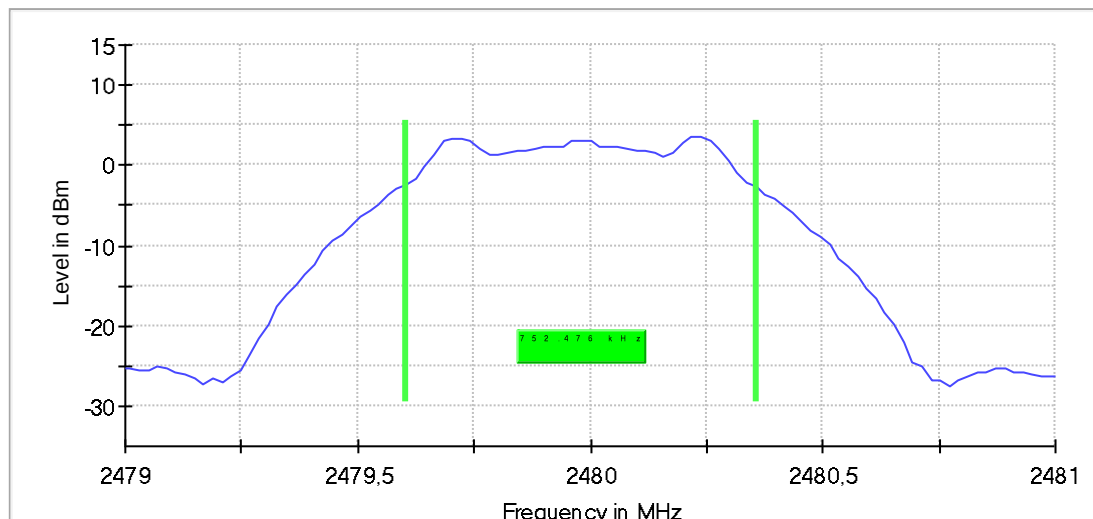
6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2480.000000	0.752476	0.500000	---	2479.603960	2480.356436

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2480.000000	3.5	PASS

6 dB Bandwidth



Measurement

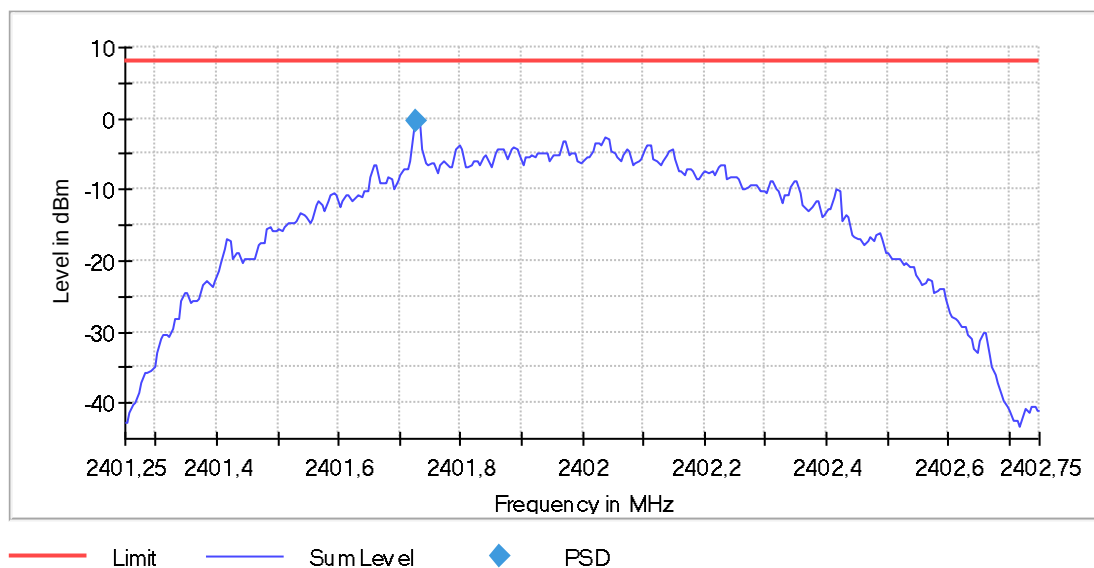
Setting	Instrument Value	Target Value
Start Frequency	2.47900 GHz	2.47900 GHz
Stop Frequency	2.48100 GHz	2.48100 GHz
Span	2.000 MHz	2.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	101	~ 40
SweepTime	1.000 ms	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	15 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.16 dB	0.50 dB

Peak Power Spectral Density (2402 MHz; BT-LE [GFSK] (5 dBm); 1 MHz)

Test according to FCC title 47 part 15 §15.247(a),(e), KDB 558074 D01 DTS Meas Guidance v05r02 and ANSI C63.10-2013

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2402.000000	2401.727500	-0.498	8.0	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40125 GHz	2.40125 GHz
Stop Frequency	2.40275 GHz	2.40275 GHz
Span	1.500 MHz	1.500 MHz
RBW	10.000 kHz	<= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	300	~ 300
SweepTime	1.500 ms	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	Sweep
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	15 / max. 150	max. 150
Stable	2 / 2	2
Max Stable Difference	0.18 dB	0.50 dB

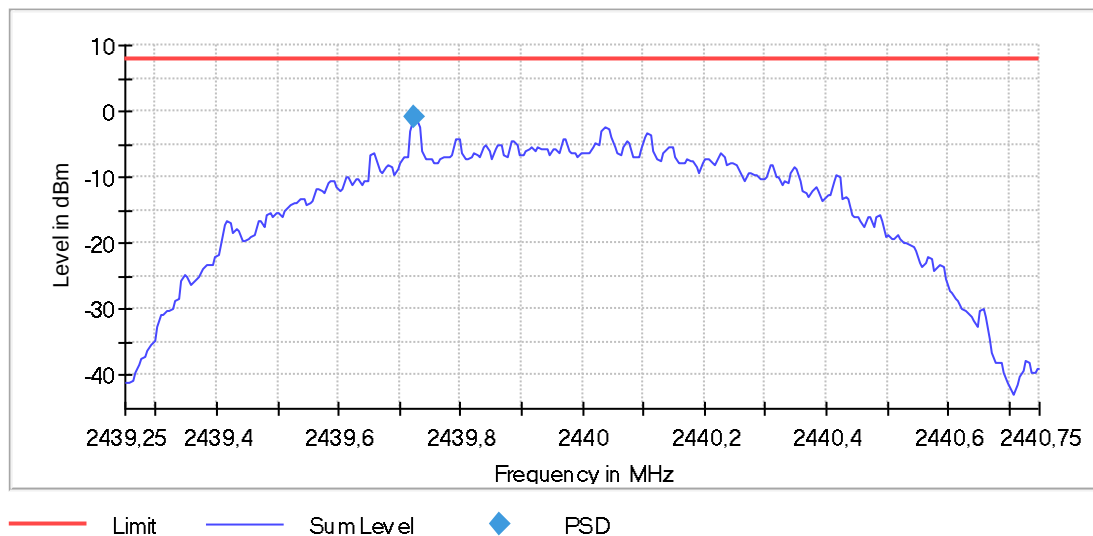
Peak Power Spectral Density (2440 MHz; BT-LE [GFSK] (5 dBm); 1 MHz)

Test according to FCC title 47 part 15 §15.247(a),(e), KDB 558074 D01 DTS Meas Guidance v05r02 and ANSI C63.10-2013

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2440.000000	2439.722500	-0.804	8.0	PASS

Peak Power Spectral Density



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.43925 GHz	2.43925 GHz
Stop Frequency	2.44075 GHz	2.44075 GHz
Span	1.500 MHz	1.500 MHz
RBW	10.000 kHz	<= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	300	~ 300
SweepTime	1.500 ms	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	Sweep
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	18 / max. 150	max. 150
Stable	2 / 2	2
Max Stable Difference	0.26 dB	0.50 dB

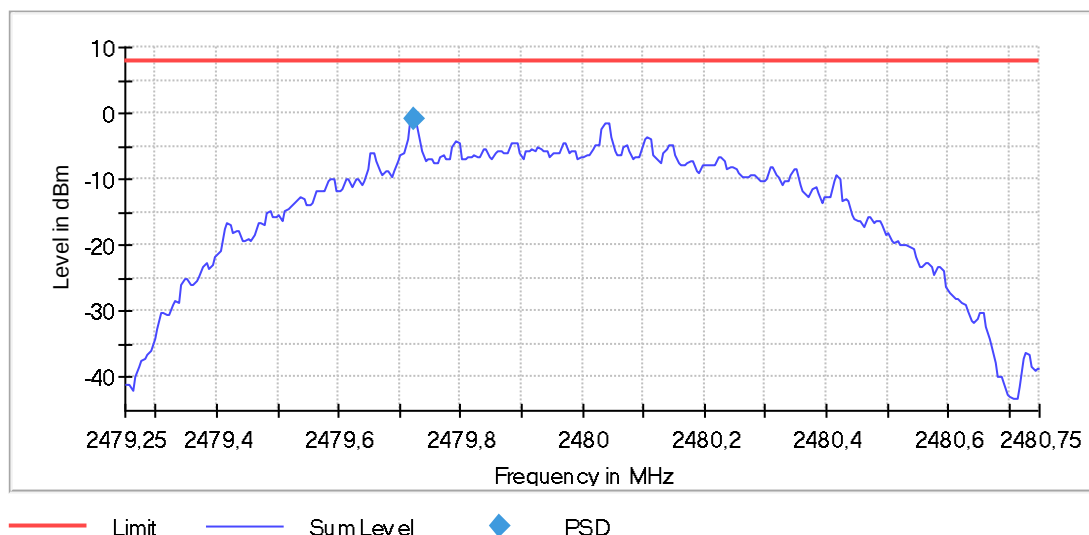
Peak Power Spectral Density (2480 MHz; BT-LE [GFSK] (5 dBm); 1 MHz)

Test according to FCC title 47 part 15 §15.247(a),(e), KDB 558074 D01 DTS Meas Guidance v05r02 and ANSI C63.10-2013

Result

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2480.000000	2479.722500	-0.814	8.0	PASS

Peak Power Spectral Density



— Limit — Sum Level ◆ PSD

Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.47925 GHz	2.47925 GHz
Stop Frequency	2.48075 GHz	2.48075 GHz
Span	1.500 MHz	1.500 MHz
RBW	10.000 kHz	<= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	300	~ 300
SweepTime	1.500 ms	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	Sweep
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	22 / max. 150	max. 150
Stable	2 / 2	2
Max Stable Difference	0.26 dB	0.50 dB

Occupied Channel Bandwidth 99% (2402 MHz; BT-LE [GFSK] (5 dBm); 1 MHz)

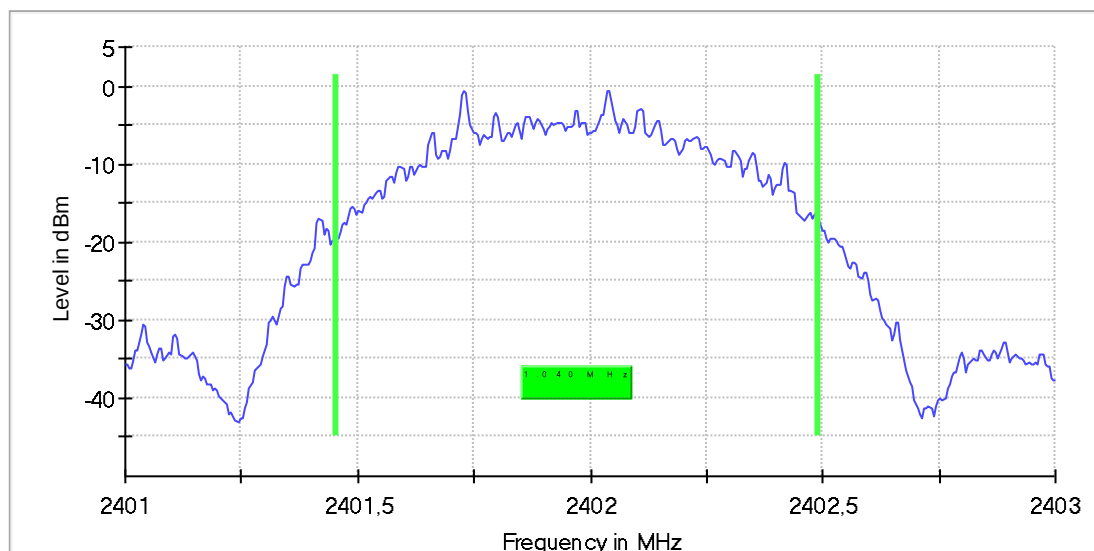
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v05r02 and ANSI C63.10-2013

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2402.000000	1.040000	---	---	2401.452500	2402.492500

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2402.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40100 GHz	2.40100 GHz
Stop Frequency	2.40300 GHz	2.40300 GHz
Span	2.000 MHz	2.000 MHz
RBW	10.000 kHz	>= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	400	~ 400
SweepTime	2.000 ms	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	33 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.29 dB	0.30 dB

Occupied Channel Bandwidth 99% (2440 MHz; BT-LE [GFSK] (5 dBm); 1 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v05r02 and ANSI C63.10-2013

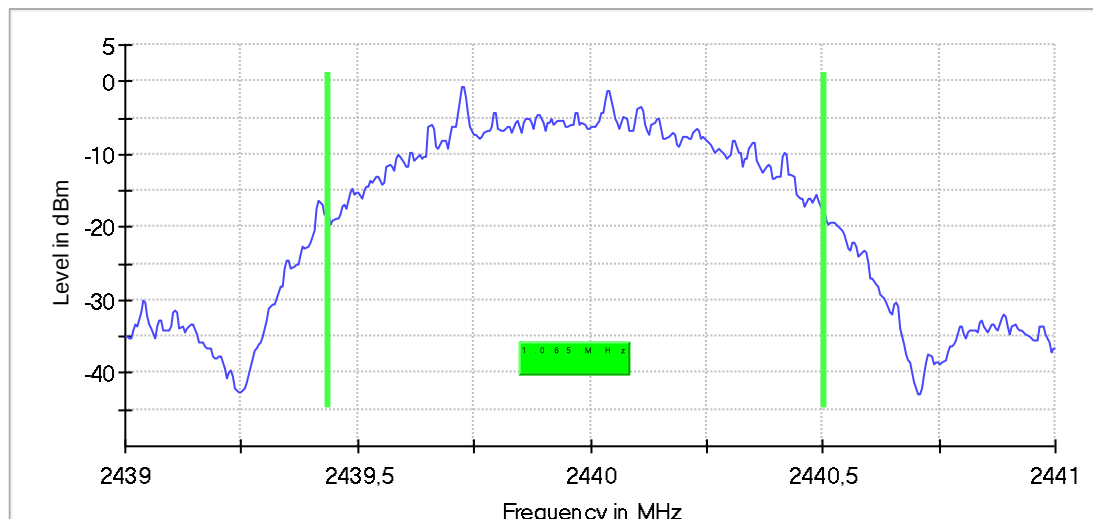
99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2440.000000	1.065000	---	---	2439.437500	2440.502500

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2440.000000	PASS

99 %Bandwidth



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.43900 GHz	2.43900 GHz
Stop Frequency	2.44100 GHz	2.44100 GHz
Span	2.000 MHz	2.000 MHz
RBW	10.000 kHz	>= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	400	~ 400
SweepTime	2.000 ms	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	41 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.30 dB

Occupied Channel Bandwidth 99% (2480 MHz; BT-LE [GFSK] (5 dBm); 1 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v05r02 and ANSI C63.10-2013

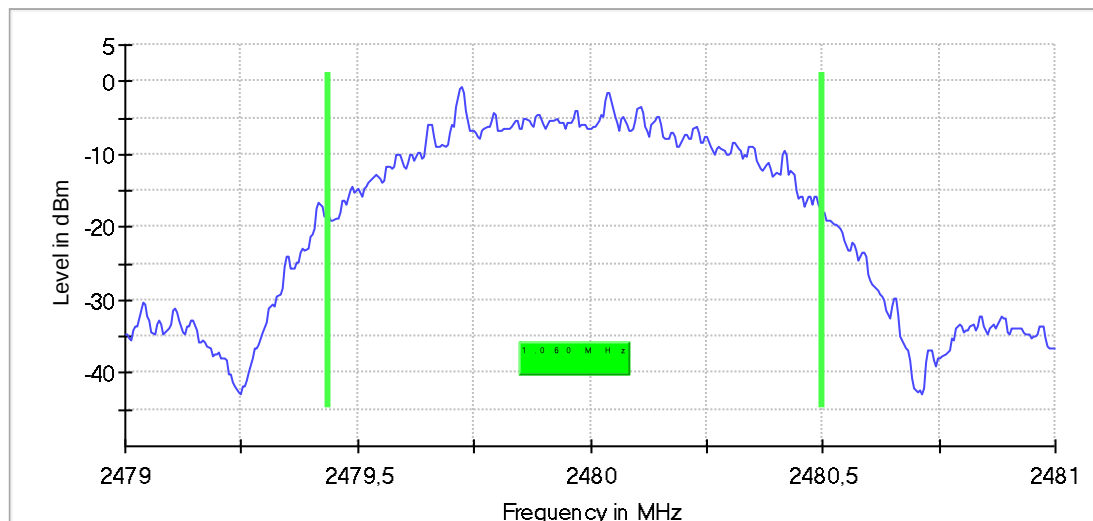
99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2480.000000	1.060000	---	---	2479.437500	2480.497500

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2480.000000	PASS

99 %Bandwidth



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.47900 GHz	2.47900 GHz
Stop Frequency	2.48100 GHz	2.48100 GHz
Span	2.000 MHz	2.000 MHz
RBW	10.000 kHz	>= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	400	~ 400
SweepTime	2.000 ms	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	39 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.30 dB

Tx Spurious Emission (2402 MHz; BT-LE [GFSK] (5 dBm); 1 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.247(d), KDB 558074 D01 DTS Meas Guidance v05r02 and ANSI C63.10-2013

Result

DUT Frequency (MHz)	Result
2402.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
2399.958664	6.3	-49.2	-12.2	37.0	PASS

Pre Measurements

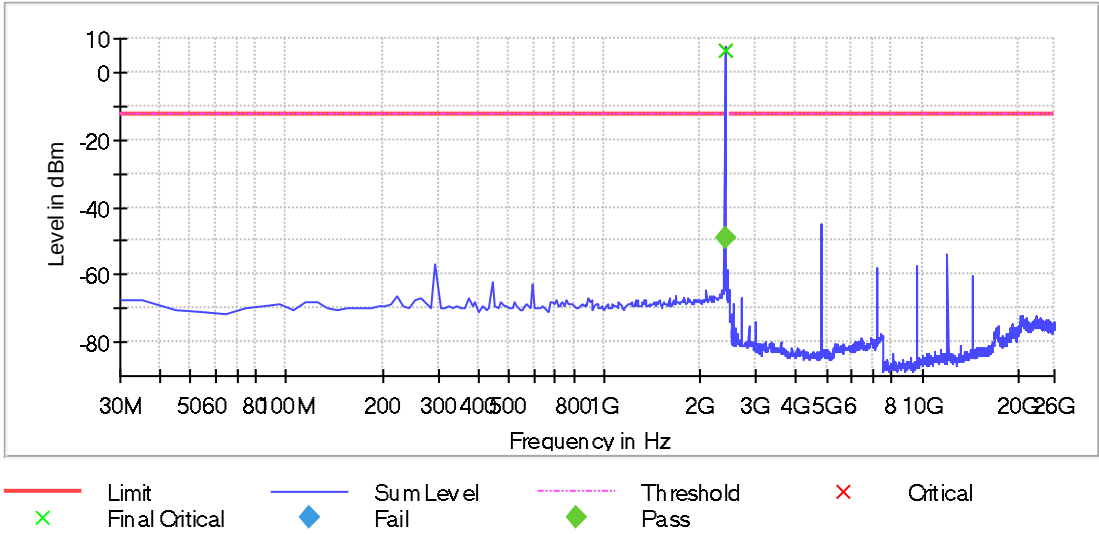
Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
2395.021008	6.3	-18.5	-12.2
4807.166065	-44.8	32.6	-12.2
12013.029431	-54.0	41.8	-12.2
293.886555	-57.1	44.9	-12.2
9604.412133	-57.4	45.2	-12.2
7205.789099	-58.0	45.8	-12.2
2385.063025	-59.5	47.3	-12.2
14411.652465	-60.2	48.0	-12.2
443.256303	-62.2	50.0	-12.2
592.626050	-62.6	50.3	-12.2
2375.105042	-63.0	50.7	-12.2
2365.147059	-63.8	51.6	-12.2
2345.231092	-64.3	52.1	-12.2
2096.281513	-64.5	52.3	-12.2
2355.189076	-65.7	53.5	-12.2

Measurement Settings

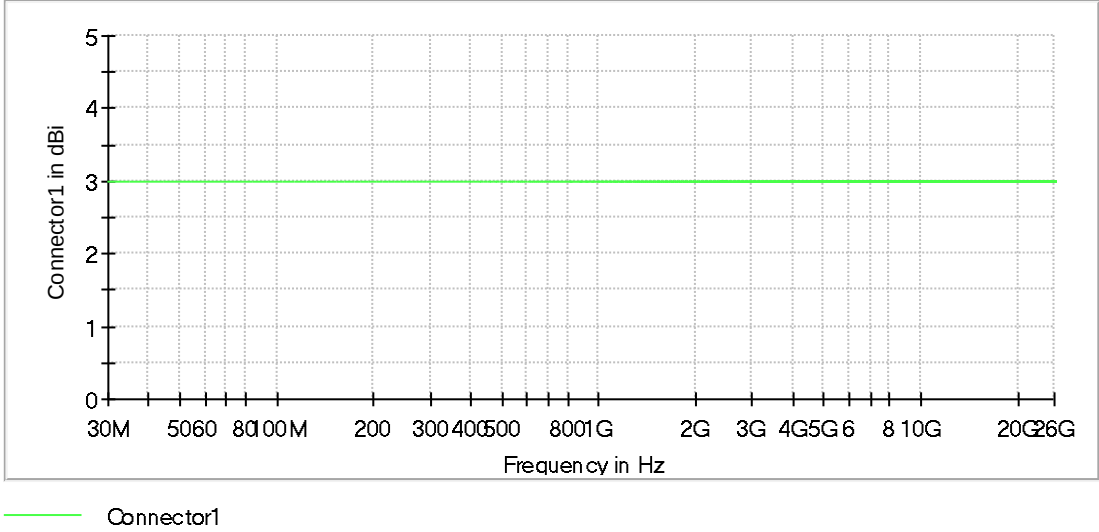
Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	2400.000000	1	1
2400.000000	2483.500000	1	1
2483.500000	26000.000000	1	1

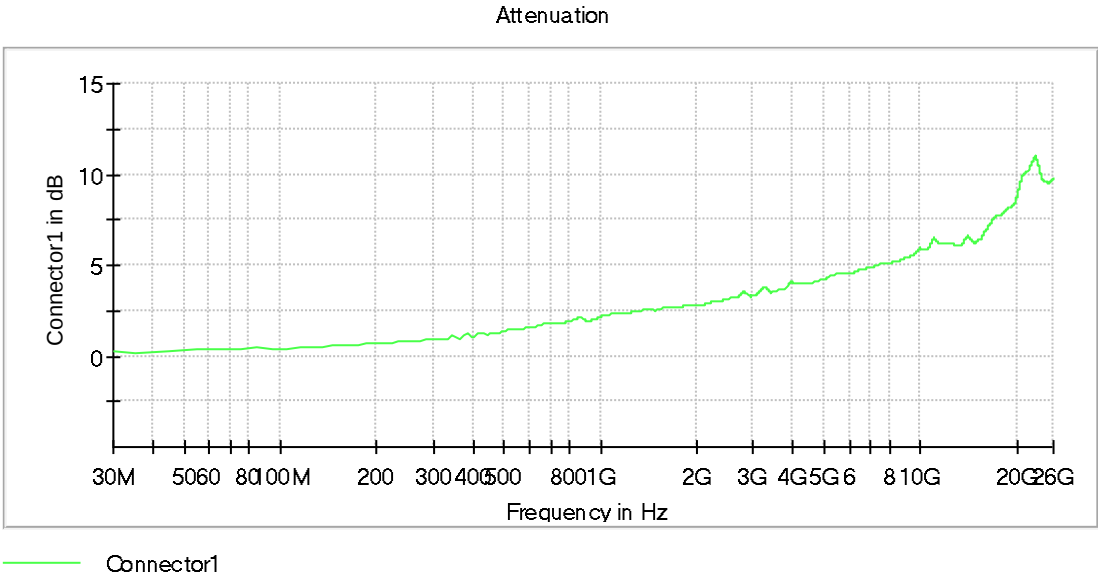


Spurious

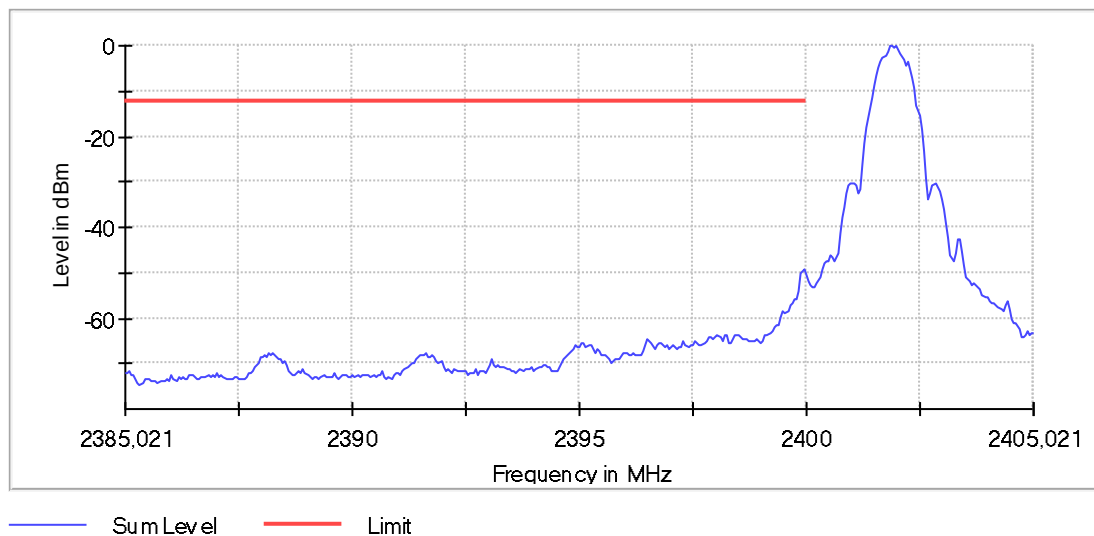


Gain





FinalMeas_2395021008Hz



Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	≤ 100.000 kHz
VBW	300.000 kHz	≥ 300.000 kHz
SweepPoints	238	~ 238
SweepTime	23.700 ms	AUTO
Reference Level	-10.000 dBm	-30.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	3	3
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	5 / max. 40	max. 40
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Final Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	≤ 100.000 kHz
VBW	300.000 kHz	≥ 300.000 kHz
SweepPoints	401	~ 401
SweepTime	1.000 ms	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	20.000 dB	AUTO
Detector	Sample	Sample
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Average Linear	Average Linear
SweepType	Sweep	AUTO
Preamp	off	off

Tx Spurious Emission (2440 MHz; BT-LE [GFSK] (5 dBm); 1 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.247(d), KDB 558074 D01 DTS Meas Guidance v05r02 and ANSI C63.10-2013

Result

DUT Frequency (MHz)	Result
2440.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

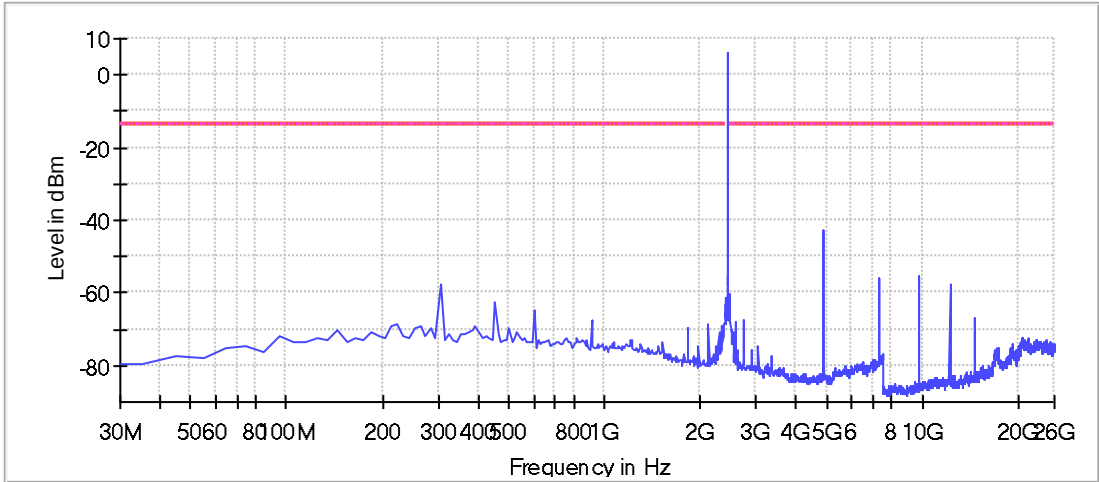
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
4877.125903	-42.5	28.9	-13.6
9754.326073	-55.7	42.0	-13.6
7315.725988	-56.2	42.5	-13.6
7325.720251	-56.3	42.7	-13.6
9764.320336	-57.1	43.4	-13.6
303.844538	-57.7	44.1	-13.6
12202.920421	-57.7	44.1	-13.6
453.214286	-62.8	49.1	-13.6
602.584034	-64.7	51.1	-13.6
14641.520506	-66.9	53.3	-13.6
2748.347960	-67.4	53.7	-13.6
911.281513	-67.4	53.7	-13.6
2488.497131	-67.5	53.8	-13.6
2395.021008	-68.0	54.3	-13.6
2588.439758	-68.2	54.5	-13.6

Measurement Settings

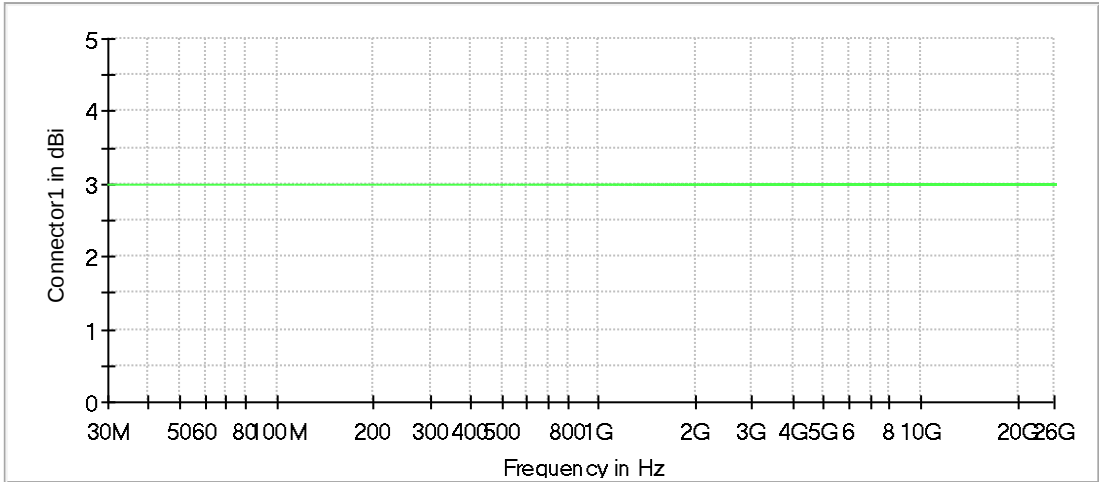
Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	2400.000000	1	1
2400.000000	2483.500000	1	1
2483.500000	26000.000000	1	1

Spurious



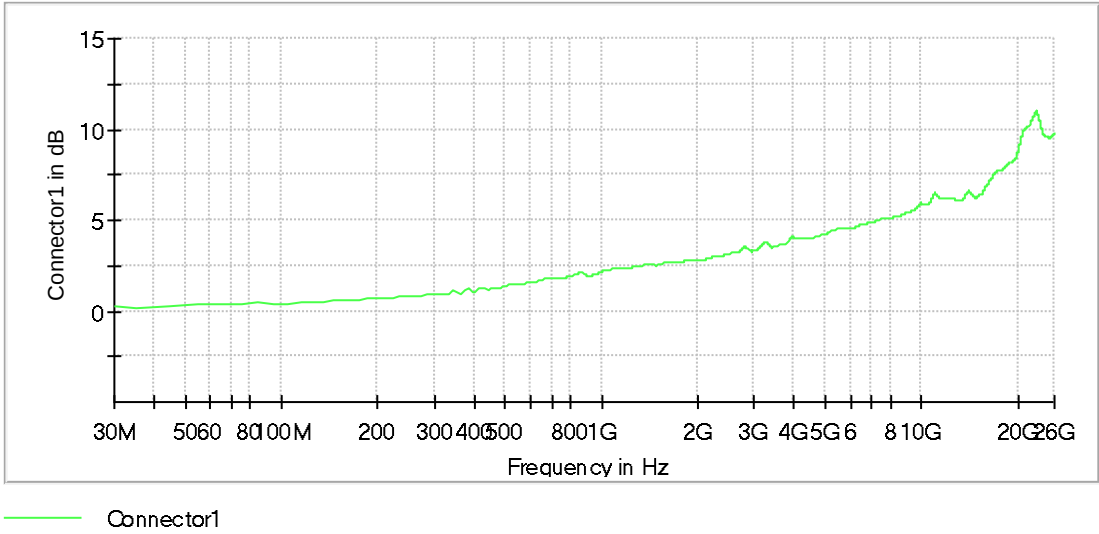
— Limit — Sum Level - - - Threshold X Critical X Final Critical

Gain



— Connector1

Attenuation



Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	238	~ 238
SweepTime	23.700 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	3	3
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	7 / max. 40	max. 40
Stable	3 / 3	3
Max Stable Difference	0.09 dB	0.50 dB

Tx Spurious Emission (2480 MHz; BT-LE [GFSK] (5 dBm); 1 MHz)

Customized settings.

Test according to FCC title 47 part 15 §15.247(d), KDB 558074 D01 DTS Meas Guidance v05r02 and ANSI C63.10-2013

Result

DUT Frequency (MHz)	Result
2480.000000	PASS

Final measurements

Frequency (MHz)	Level Pre Measurement (dBm)	level (dBm)	Limit (dBm)	Margin (dB)	Result
---	---	---	---	---	---

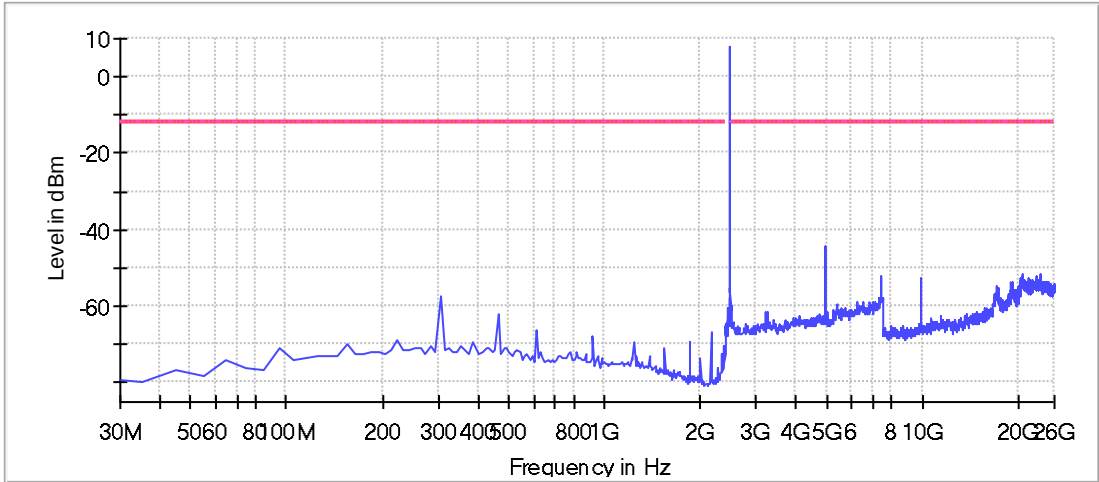
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
4957.080004	-44.2	32.0	-12.2
23446.465895	-51.7	39.5	-12.2
20688.049405	-51.8	39.6	-12.2
7445.651402	-52.1	40.0	-12.2
20508.152677	-52.2	40.0	-12.2
22696.896196	-52.3	40.1	-12.2
20478.169890	-52.7	40.5	-12.2
21467.601891	-52.7	40.6	-12.2
20528.141203	-52.8	40.6	-12.2
9924.228538	-52.8	40.6	-12.2
23396.494581	-52.8	40.6	-12.2
23606.374097	-52.9	40.7	-12.2
22946.752762	-52.9	40.7	-12.2
21747.441245	-52.9	40.7	-12.2
20638.078092	-53.0	40.9	-12.2

Measurement Settings

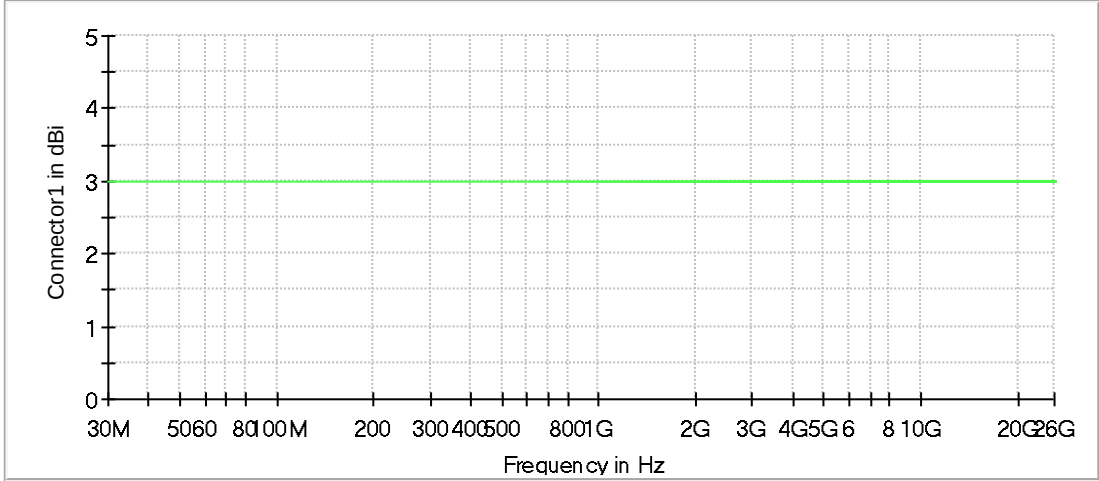
Start Frequency (MHz)	Stop Frequency (MHz)	Pre Measurement	Final Measurement
30.000000	2400.000000	1	1
2400.000000	2483.500000	1	1
2483.500000	26000.000000	1	1

Spurious



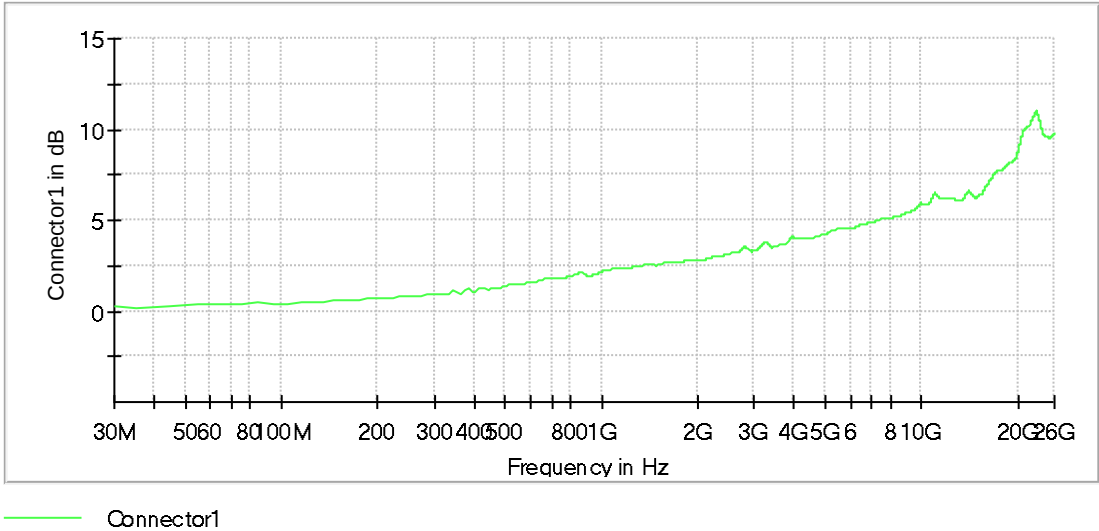
— Limit — Sum Level — Threshold × Critical × Final Critical

Gain



— Connector1

Attenuation



Pre Measurement 1

Setting	Instrument Value	Target Value
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	238	~ 238
SweepTime	23.700 ms	AUTO
Reference Level	-30.000 dBm	-30.000 dBm
Attenuation	0.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	3	3
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	5 / max. 40	max. 40
Stable	3 / 3	3
Max Stable Difference	0.33 dB	0.50 dB

End Of Annex 1