

Conducted test results

No.1-7522-24-03-02_TR1-A201-R1

February 24, 2025

Test Standard(s) FCC 15.247, ISSED RSS247 - NI
NA - NI

This document is electronically signed and valid without handwritten signature.
Public keys for verification of the electronic signatures can be requested at the testing laboratory.



Authorized

cn=Andreas Curette,
o=cetecom advanced
GmbH, ou=CUR-230601,
email=andreas.curette@cet
ecomadvanced.com, c=DE
2025.02.24 09:57:44 +01'00'

Andreas Curette

Lab Manager
Radio Labs

Table of Content

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ Generic 2G4	3
FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ Generic 2G4	7
FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ Generic 2G4	11
NA # Hardcopy SA ~	15
NA # Hardcopy SA ~	17
NA # Hardcopy SA ~	19
NA # Hardcopy SA ~	21
NA # Hardcopy SA ~	23
NA # Hardcopy SA ~	25

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ Generic 2G4

References

TC start	24.02.2025 09:19:43
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.6.4
Standard Version	FCC 15.247, ISED RSS247 NI
Method	
Description	FCC 15.247 Bandwidth 99PCT-20DB DTS - Generic 2G4
Information	

EUT Common settings 2G4

Hopping supported	No
Burst length [ms]	10
Nominal bandwidth [MHz]	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

Test Parameter

Technology to test	Generic 2G4
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2403
Frequency mid to test	False Freq [MHz] 2439
Frequency high to test	False Freq [MHz] 2475
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	19.4
Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

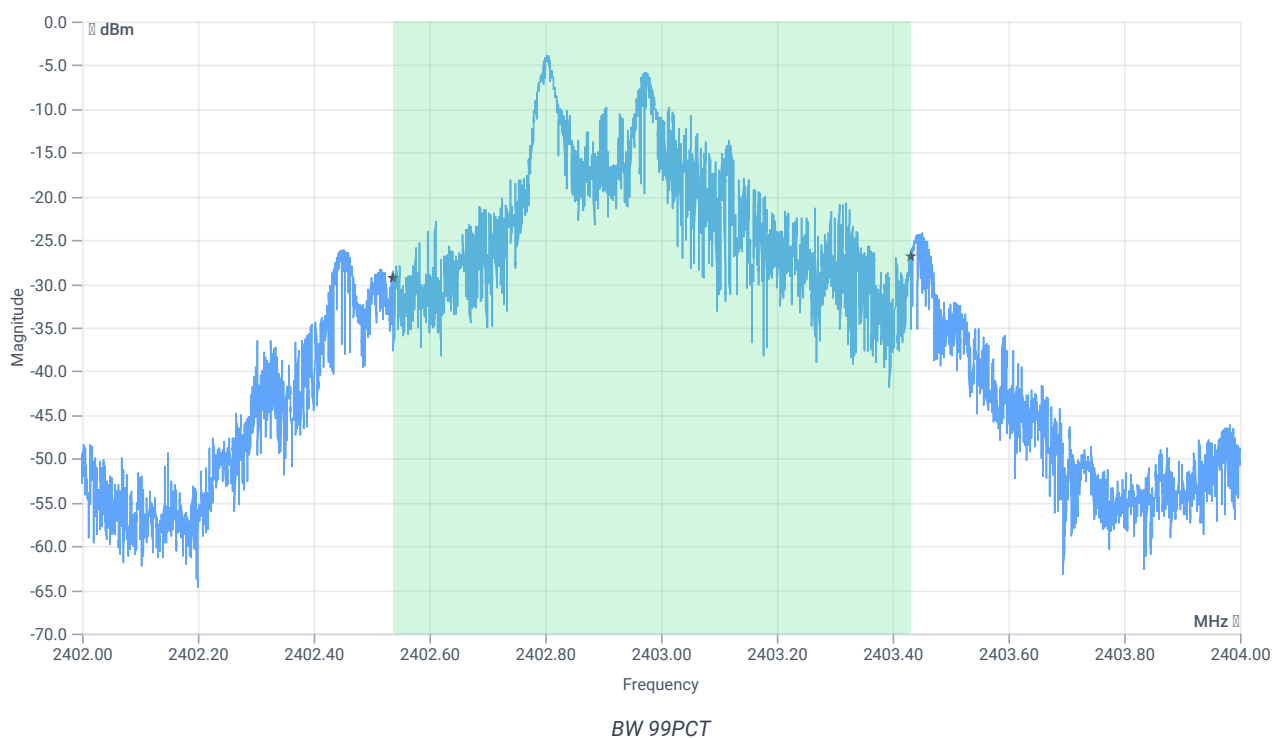
Test at TX 2403 MHz

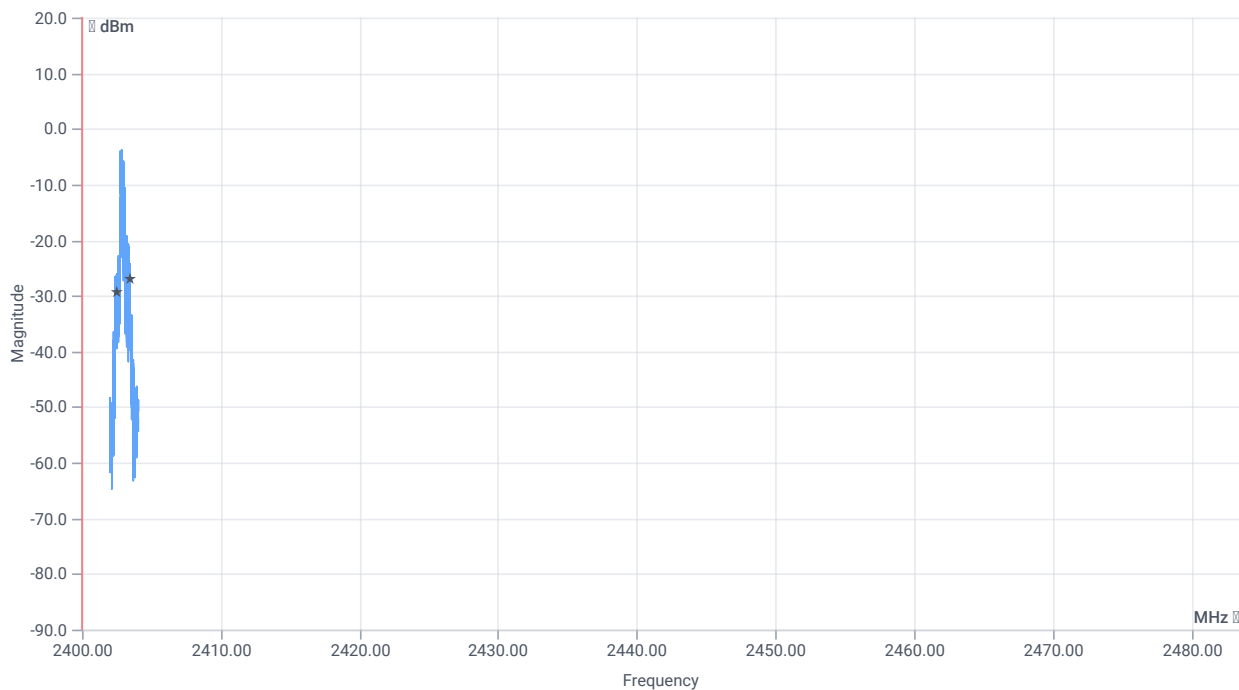
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	-4.06	dBm	INFO
Ref. frequency	---	---	2402.600	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	0.94 27.55 0
Start [MHz] Stop [MHz]	2402.000 2404.000
RBW [MHz] VBW [MHz]	0.020000 0.100000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

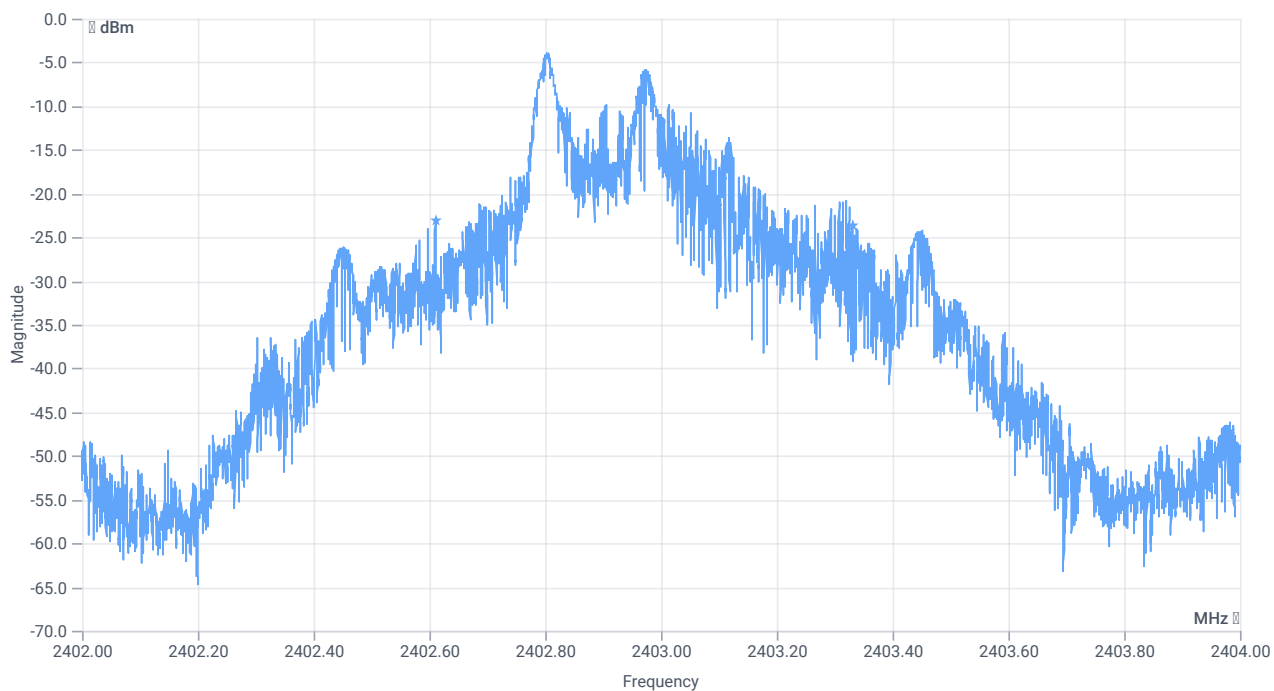




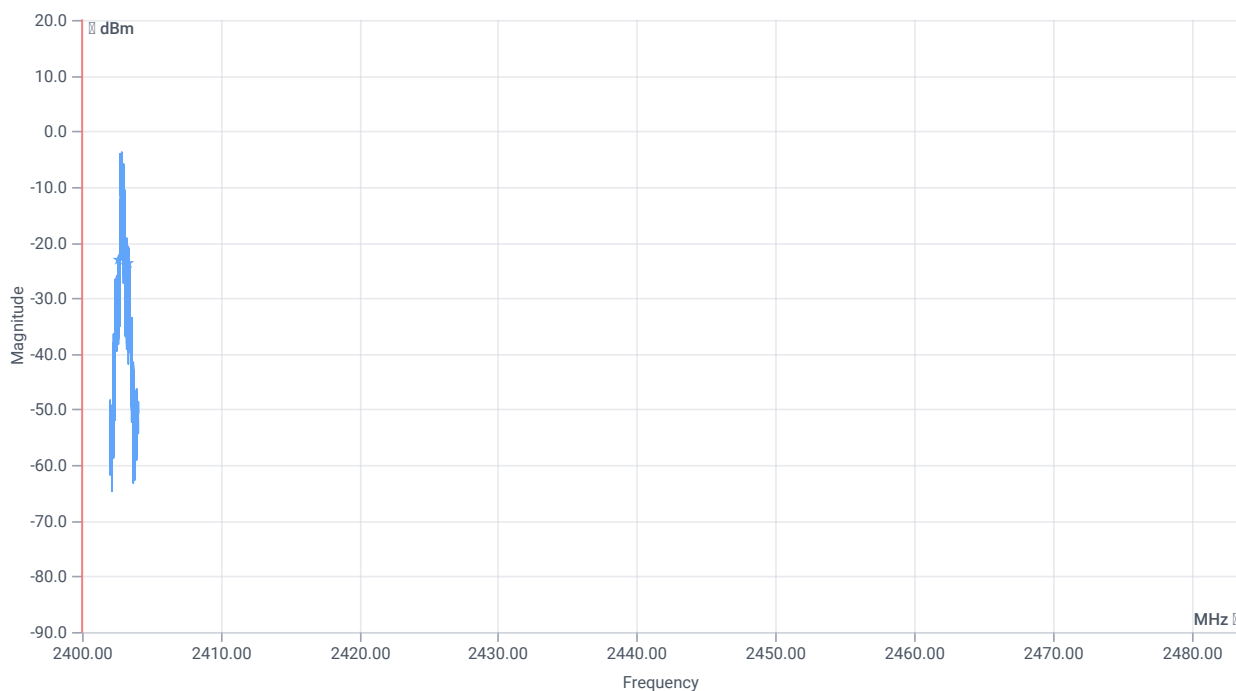
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	894.000	kHz	INFO
T1 99%	2400.000000	---	2402.5362	MHz	PASS
T2 99%	---	2483.500000	2403.4306	MHz	PASS



BW 20dB



BW within band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	721	kHz	INFO
T1 20dB	2400.000000	---	2402.6100	MHz	PASS
T2 20dB	---	2483.500000	2403.3306	MHz	PASS

Verdict

PASS

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ Generic 2G4

References

TC start	24.02.2025 09:23:15
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.6.4
Standard Version	FCC 15.247, ISED RSS247 NI
Method	
Description	FCC 15.247 Bandwidth 99PCT-20DB DTS - Generic 2G4
Information	

EUT Common settings 2G4

Hopping supported	No
Burst length [ms]	10
Nominal bandwidth [MHz]	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

Test Parameter

Technology to test	Generic 2G4
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2403
Frequency mid to test	True Freq [MHz] 2439
Frequency high to test	False Freq [MHz] 2475
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	21.3
Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

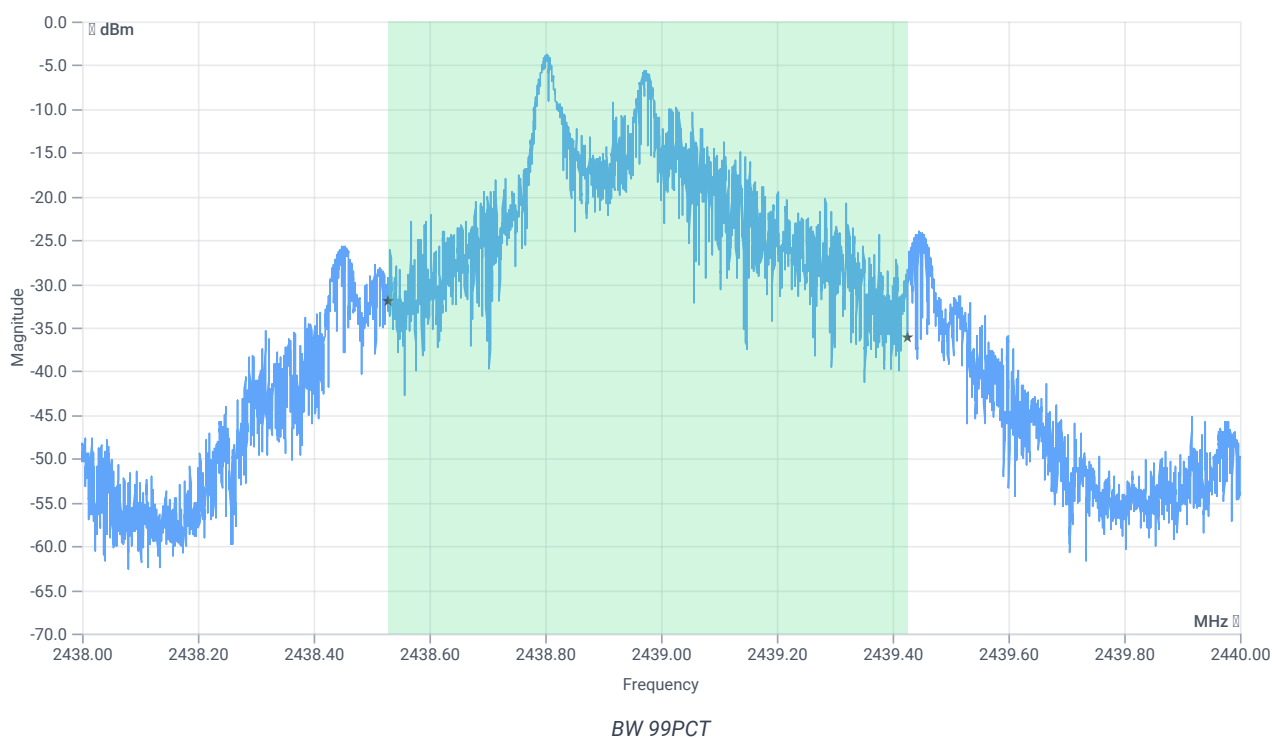
Test at TX 2439 MHz

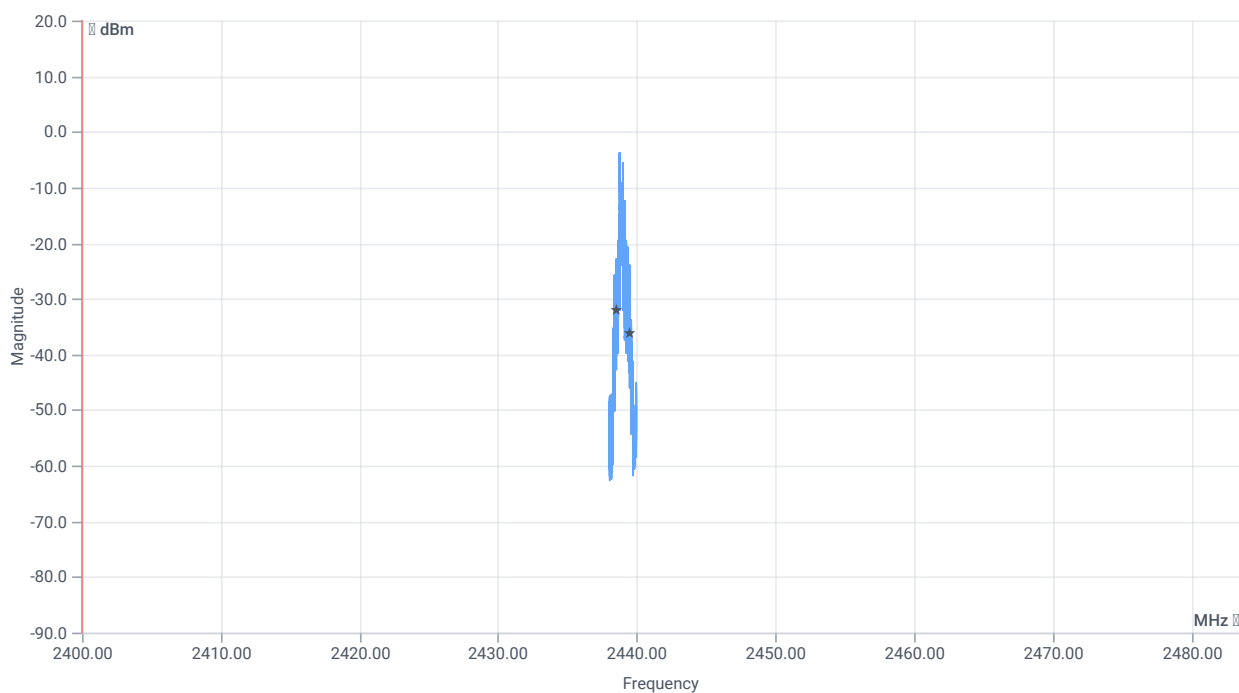
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	-2.45	dBm	INFO
Ref. frequency	---	---	2438.600	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	2.55 29.54 0
Start [MHz] Stop [MHz]	2438.000 2440.000
RBW [MHz] VBW [MHz]	0.020000 0.100000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

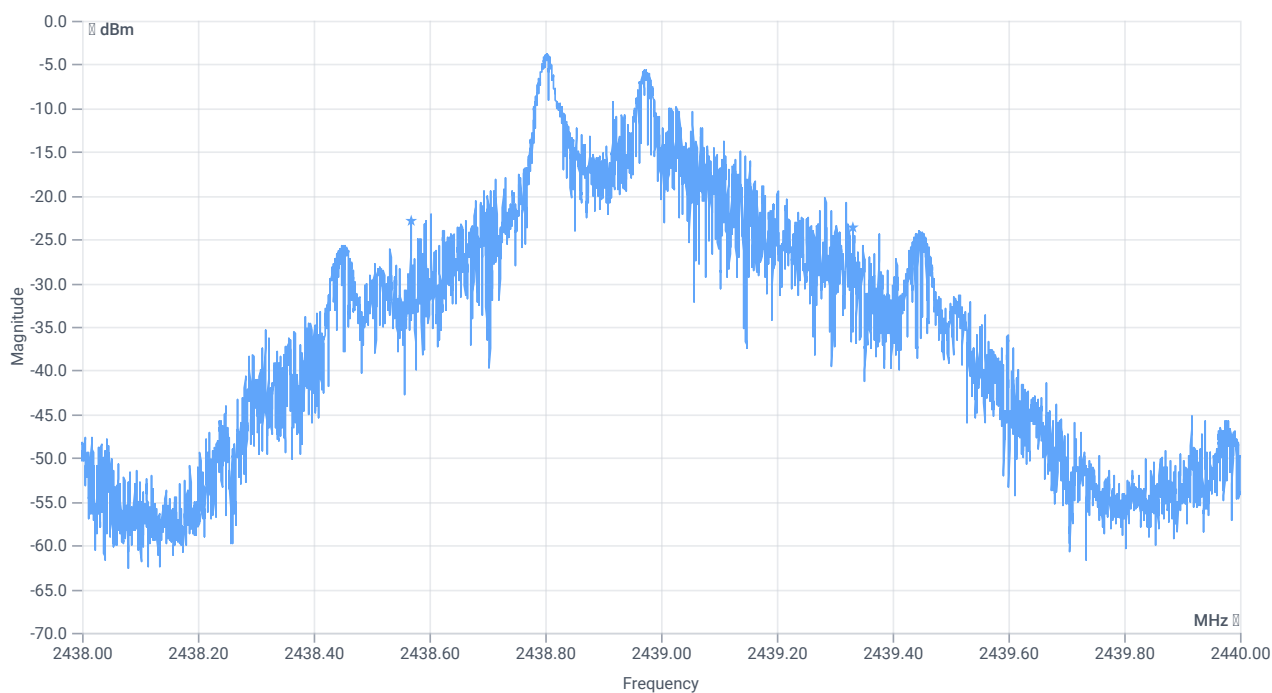




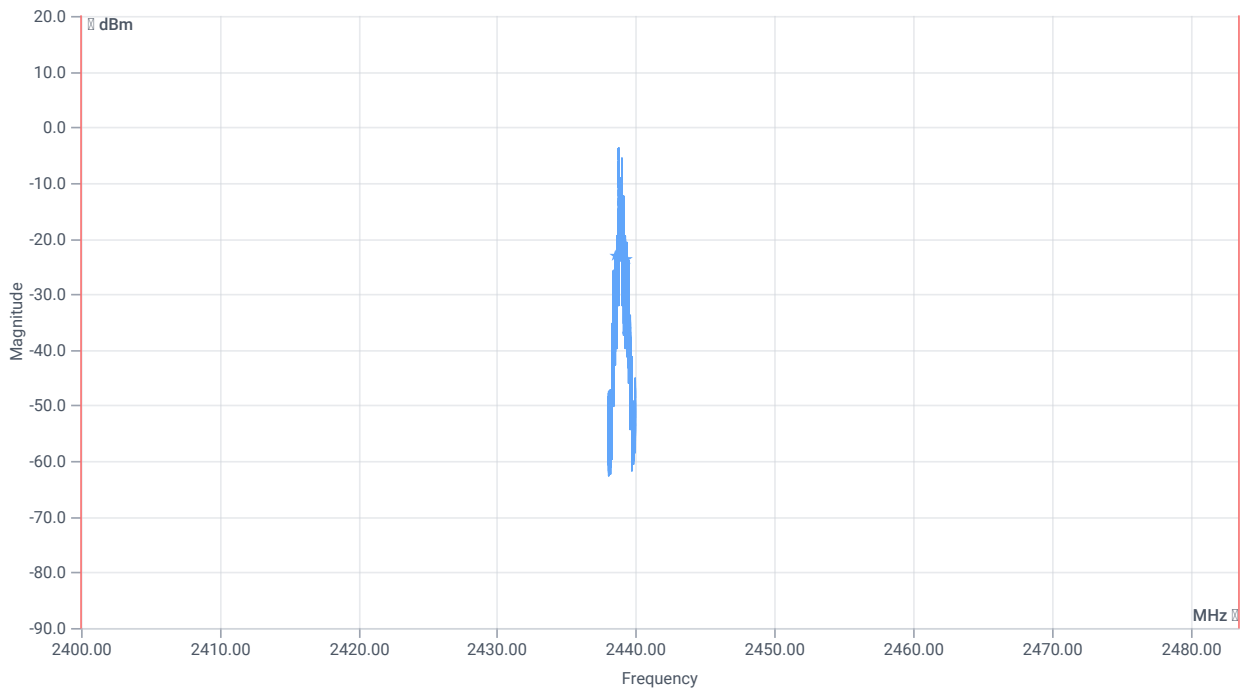
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	898.000	kHz	INFO
T1 99%	2400.000000	---	2438.5284	MHz	PASS
T2 99%	---	2483.500000	2439.4264	MHz	PASS



BW 20dB



BW within band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	763	kHz	INFO
T1 20dB	2400.000000	---	2438.5676	MHz	PASS
T2 20dB	---	2483.500000	2439.3310	MHz	PASS

Verdict

PASS

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ Generic 2G4

References

TC start	24.02.2025 09:25:17
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.6.4
Standard Version	FCC 15.247, ISED RSS247 NI
Method	
Description	FCC 15.247 Bandwidth 99PCT - 20DB FHSS - Generic 2G4
Information	

EUT Common settings 2G4

Hopping supported	No
Burst length [ms]	10
Nominal bandwidth [MHz]	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

Test Parameter

Technology to test	Generic 2G4
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2403
Frequency mid to test	False Freq [MHz] 2439
Frequency high to test	True Freq [MHz] 2475
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	18.5
Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

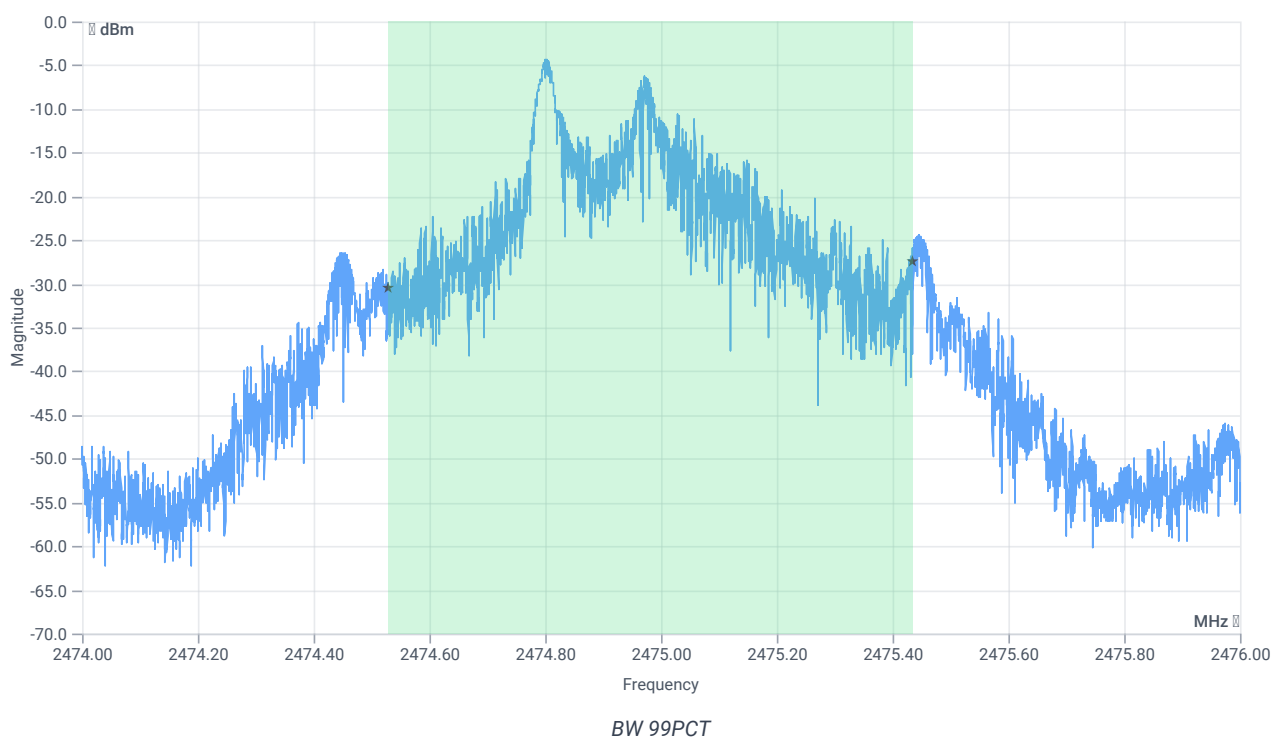
Test at TX 2475 MHz

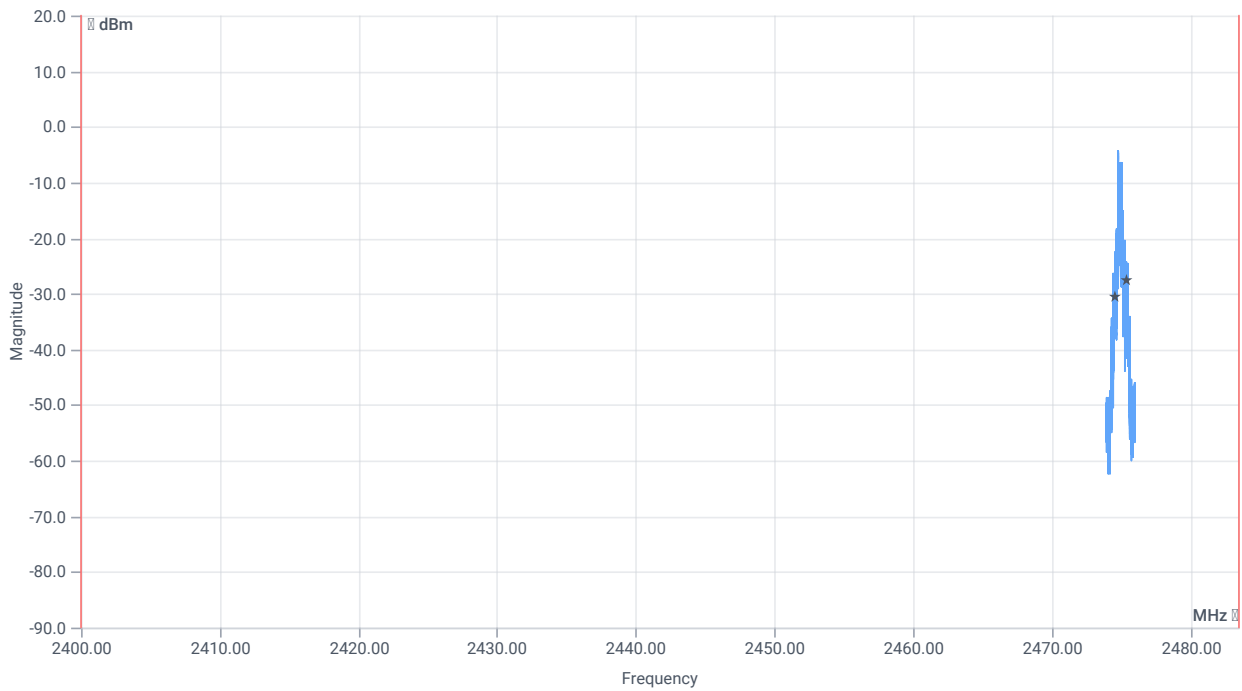
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	-3.89	dBm	INFO
Ref. frequency	---	---	2474.600	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	1.11 26.82 0
Start [MHz] Stop [MHz]	2474.000 2476.000
RBW [MHz] VBW [MHz]	0.020000 0.100000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

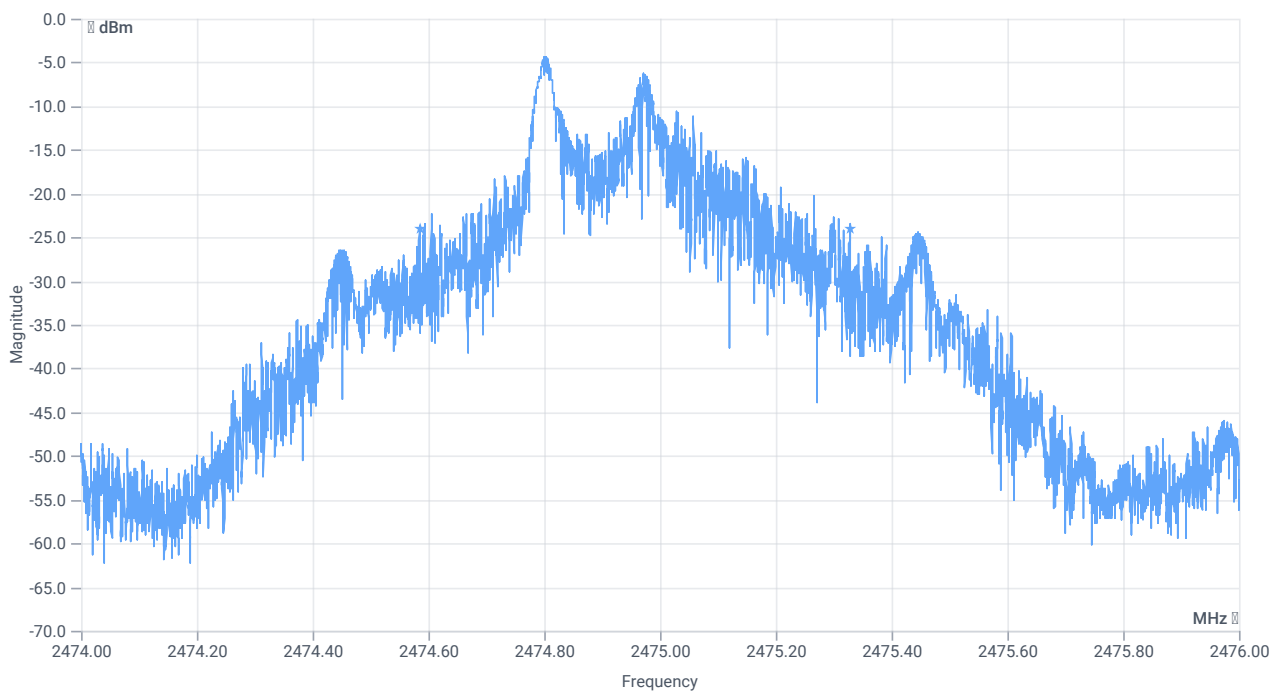




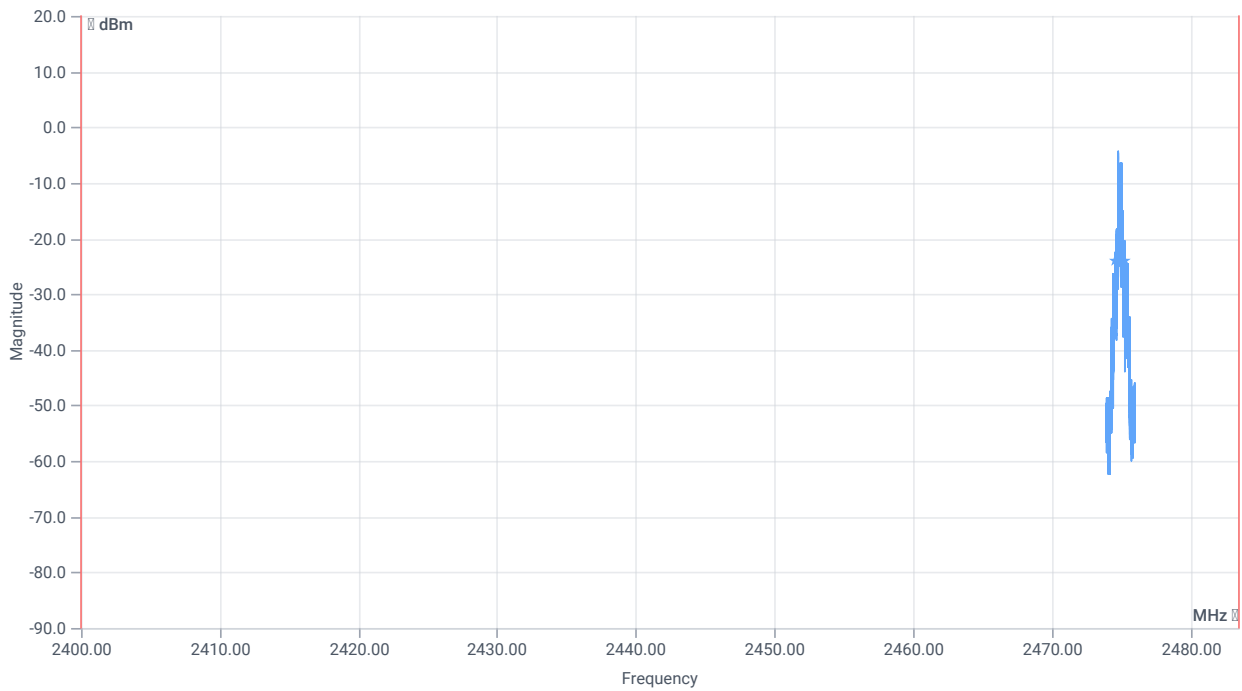
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	907.000	kHz	INFO
T1 99%	2400.000000	---	2474.5276	MHz	PASS
T2 99%	---	2483.500000	2475.4346	MHz	PASS



BW 20dB



BW within band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	744	kHz	INFO
T1 20dB	2400.000000	---	2474.5844	MHz	PASS
T2 20dB	---	2483.500000	2475.3280	MHz	PASS

Verdict

PASS

NA # Hardcopy SA ~

References

TC start	21.02.2025 14:14:10
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.6.4
Standard Version	NA NI
Method	
Description	Hardcopy spectrum analyzer
Information	

Equipment

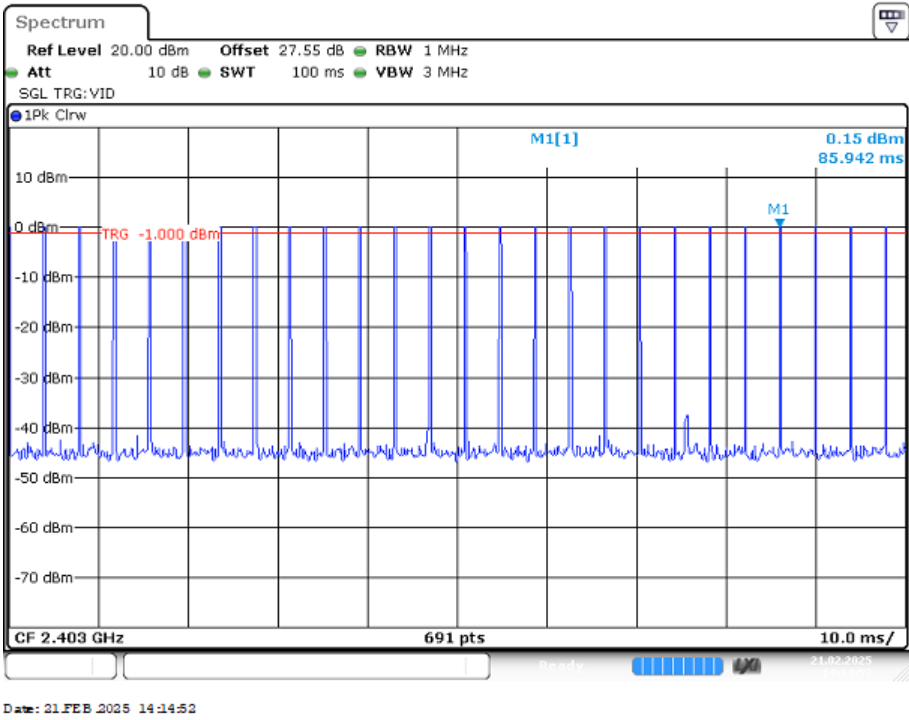
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70

Test Parameter

Technology to test

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	20.00 27.55 10
Start [MHz] Stop [MHz]	2403.000 2403.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS WRIT
Sweep: time [ms] count points per Section type	100 0 691 SWE



NA # Hardcopy SA ~

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Marker Readout					
Marker 1 Time	---	---	85.942	ms	INFO
Marker 1 Mag.	---	---	0.15	NI	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Delta Marker Readout					

Verdict
INFO

NA # Hardcopy SA ~

References

TC start	21.02.2025 14:15:35
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.6.4
Standard Version	NA NI
Method	
Description	Hardcopy spectrum analyzer
Information	

Equipment

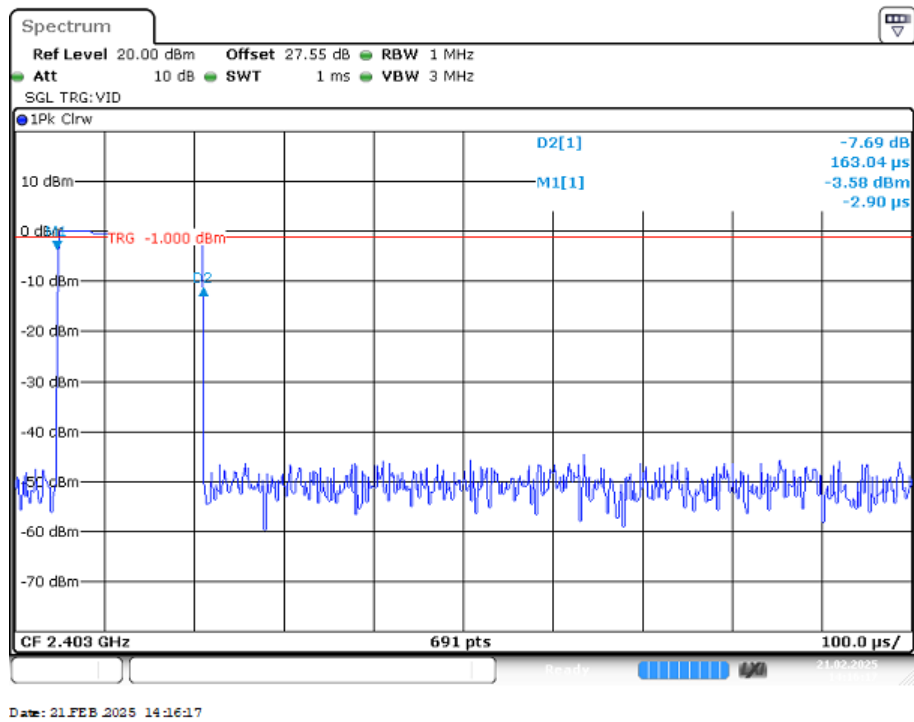
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70

Test Parameter

Technology to test

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	20.00 27.55 10
Start [MHz] Stop [MHz]	2403.000 2403.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS WRIT
Sweep: time [ms] count points per Section type	1 0 691 SWE



NA # Hardcopy SA ~

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Marker Readout					
Marker 1 Time	---	---	-0.003	ms	INFO
Marker 1 Mag.	---	---	-3.58	NI	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Delta Marker Readout					
Delta Marker 2 Time	---	---	0.163	ms	INFO
Delta Marker 2 Level	---	---	-7.693	dB	INFO

Verdict

INFO

NA # Hardcopy SA ~

References

TC start	21.02.2025 14:22:32
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.6.4
Standard Version	NA NI
Method	
Description	Hardcopy spectrum analyzer
Information	

Equipment

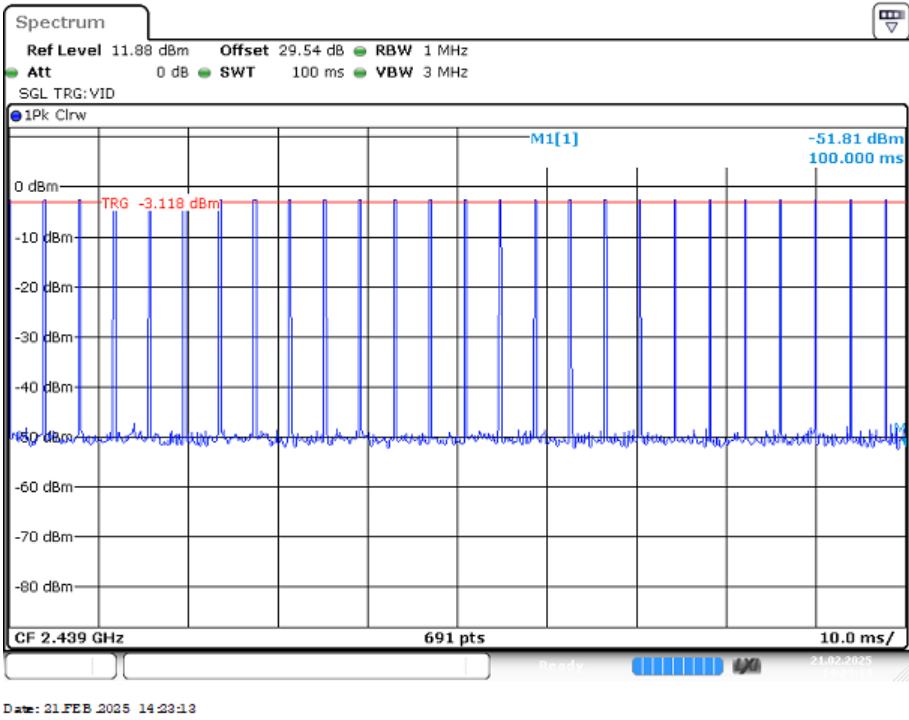
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70

Test Parameter

Technology to test

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	11.88 29.54 0
Start [MHz] Stop [MHz]	2439.000 2439.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS WRIT
Sweep: time [ms] count points per Section type	100 0 691 SWE



NA # Hardcopy SA ~

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Marker Readout					
Marker 1 Time	---	---	100.000	ms	INFO
Marker 1 Mag.	---	---	-51.81	NI	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Delta Marker Readout					

Verdict
INFO

NA # Hardcopy SA ~

References

TC start	21.02.2025 14:23:34
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.6.4
Standard Version	NA NI
Method	
Description	Hardcopy spectrum analyzer
Information	

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70

Test Parameter

Technology to test

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	11.88 29.54 0
Start [MHz] Stop [MHz]	2439.000 2439.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS WRIT
Sweep: time [ms] count points per Section type	1 0 691 SWE

NA # Hardcopy SA ~

References

TC start	21.02.2025 14:27:13
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.6.4
Standard Version	NA NI
Method	
Description	Hardcopy spectrum analyzer
Information	

Equipment

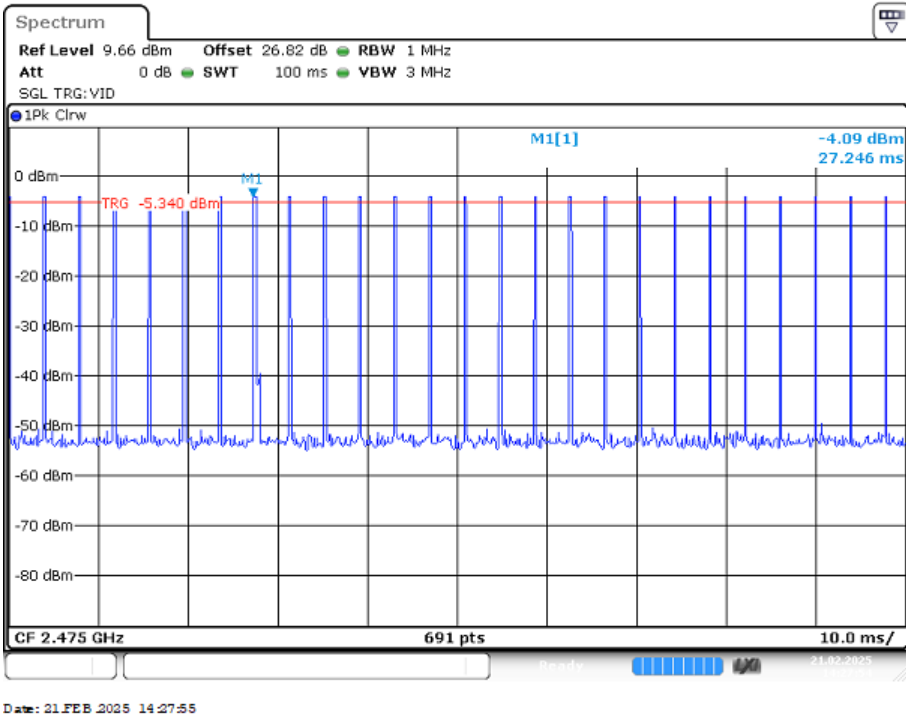
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70

Test Parameter

Technology to test

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	9.66 26.82 0
Start [MHz] Stop [MHz]	2475.000 2475.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS WRIT
Sweep: time [ms] count points per Section type	100 0 691 SWE



NA # Hardcopy SA ~

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Marker Readout					
Marker 1 Time	---	---	27.246	ms	INFO
Marker 1 Mag.	---	---	-4.09	NI	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Delta Marker Readout					

Verdict
INFO

NA # Hardcopy SA ~

References

TC start	21.02.2025 14:27:58
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.6.4
Standard Version	NA NI
Method	
Description	Hardcopy spectrum analyzer
Information	

Equipment

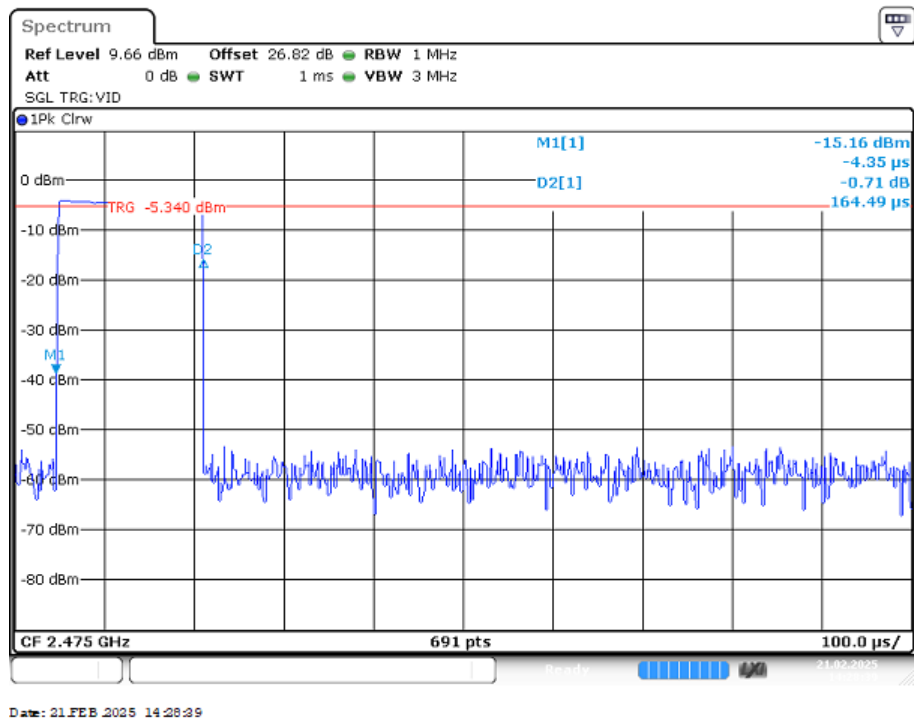
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70

Test Parameter

Technology to test

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	9.66 26.82 0
Start [MHz] Stop [MHz]	2475.000 2475.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS WRIT
Sweep: time [ms] count points per Section type	1 0 691 SWE



NA # Hardcopy SA ~

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Marker Readout					
Marker 1 Time	---	---	-0.004	ms	INFO
Marker 1 Mag.	---	---	-15.16	NI	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Delta Marker Readout					
Delta Marker 2 Time	---	---	0.164	ms	INFO
Delta Marker 2 Level	---	---	-0.710	dB	INFO

Verdict

INFO

- END OF DOCUMENT -