

Conducted test results

No.1-5389-22-02-03_TR1-A201-R1

July 12, 2024

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

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Authorized

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FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 g mode	105
FCC 15.247 # Peak psd DTS ~ WLAN2G4 g mode	109
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NA # Peak output power 3MHz/3MHz ~ WLAN2G4 g mode	113
FCC 15.247 # Peak output power PM DTS ~ WLAN2G4 g mode	116
FCC 15.247 # TX spurious conducted 20dBc ~ WLAN2G4 g mode	118
FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 g mode	121
FCC 15.247 # Peak psd DTS ~ WLAN2G4 g mode	125
FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 g mode	127
NA # Peak output power 3MHz/3MHz ~ WLAN2G4 g mode	129
FCC 15.247 # Peak output power PM DTS ~ WLAN2G4 g mode	132
FCC 15.247 # TX spurious conducted 20dBc ~ WLAN2G4 g mode	134
FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 g mode	137
FCC 15.247 # Peak psd DTS ~ WLAN2G4 g mode	141
FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 g mode	143
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FCC 15.247 # TX spurious conducted 20dBc ~ WLAN2G4 b mode	150
FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 b mode	153
FCC 15.247 # Peak psd DTS ~ WLAN2G4 b mode	157
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NA # Peak output power 3MHz/3MHz ~ WLAN2G4 b mode	161
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NA # Peak output power 3MHz/3MHz ~ WLAN2G4 b mode	193

FCC 15.247 # Peak output power PM DTS ~ WLAN2G4 n-HT40 mode

References

TC start	10.07.2024 17:53:45
Ambit temp [°C] humidity [rel%]	27.0 50
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.3 PKPM1 Peak-reading Power Meter Method
Description	FCC 15.247 Peak output power PM DTS - WLAN2G4 n-HT40 mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0
Power sensor,Keysight Technologies,U2021XA,MY59190010,A.04.06

Test Parameter

Technology to test	WLAN2G4 n-HT40 mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2422
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2452
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
Full path type	EUT_PM_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.PM/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00010000:00000001

Test at TX 2452 MHz

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	30	19.87	dBm	PASS

Verdict

PASS

FCC 15.247 # TX spurious conducted 20dBc ~ WLAN2G4 n-HT40 mode

References

TC start	10.07.2024 17:40:06
Ambit temp [°C] humidity [rel%]	27.0 50
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
Description	FCC 15.247 TX Emissions cond. DTS DTS - WLAN2G4 n-HT40 mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

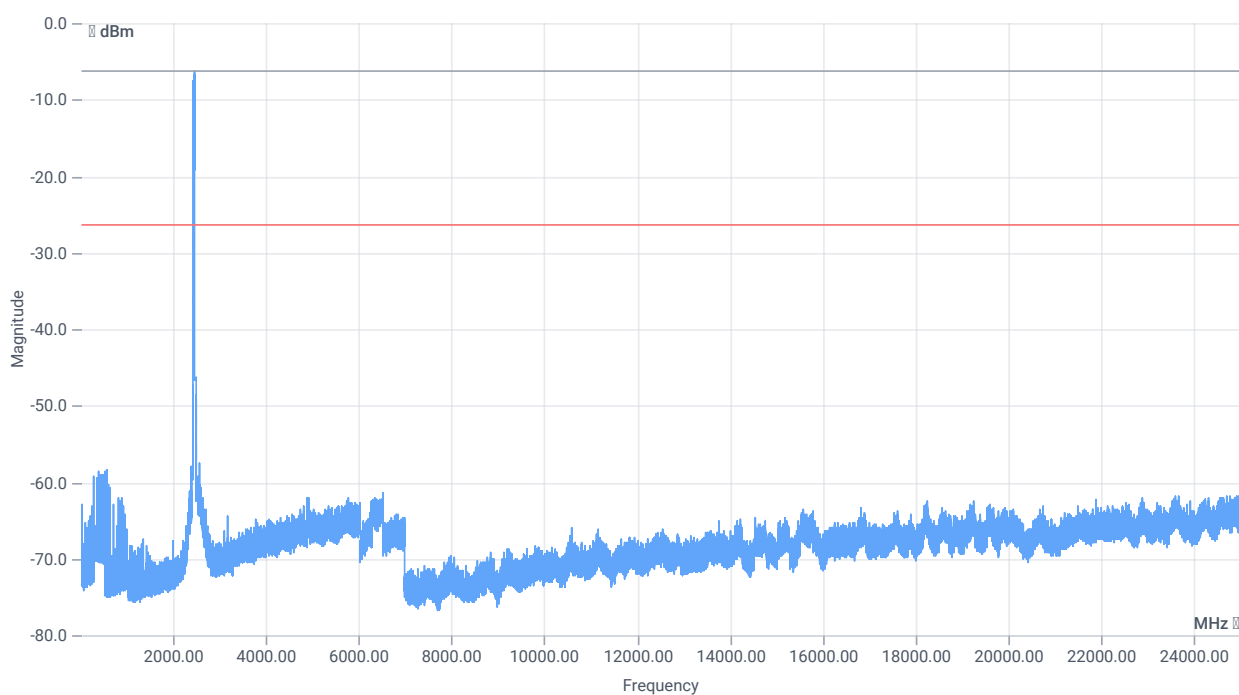
Test Parameter

Technology to test	WLAN2G4 n-HT40 mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2422
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2452
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MPSIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

Test at TX 2452 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	3.63	dBm	INFO
Ref. frequency	---	---	2435.820	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	3.63 23.17 0
Start [MHz] Stop [MHz]	24780.000 25000.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	200 25 1501 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2456.00 MHz	---	---	-6.37	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 2484.167 MHz	0	---	24.63	dB	INFO

Verdict

PASS

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 n-HT40 mode

References

TC start	10.07.2024 17:39:28
Ambit temp [°C] humidity [rel%]	27.0 50
System version	5.0.7.0
Standard Version	FCC 15.247, ISED RSS247 NI
Method	
Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 n-HT40 mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 n-HT40 mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2422
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2452
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

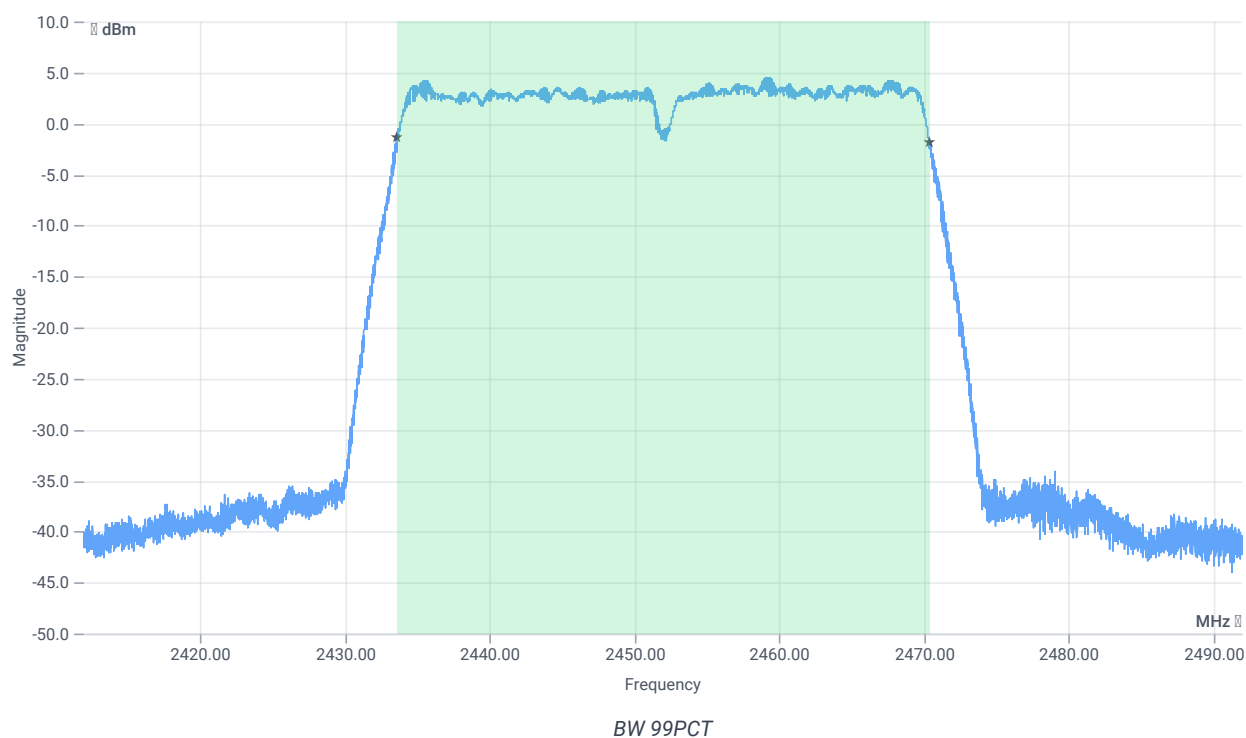
Test at TX 2452 MHz

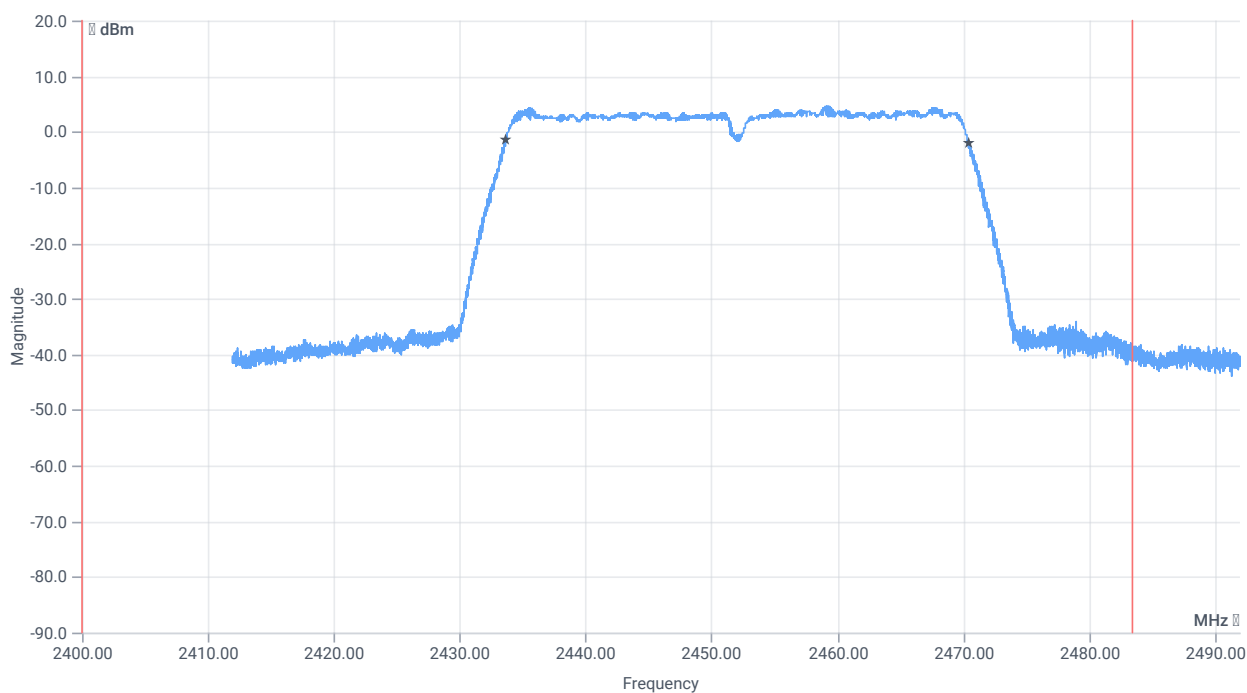
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	4.16	dBm	INFO
Ref. frequency	---	---	2435.620	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	9.16 11.08 15
Start [MHz] Stop [MHz]	2412.000 2492.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

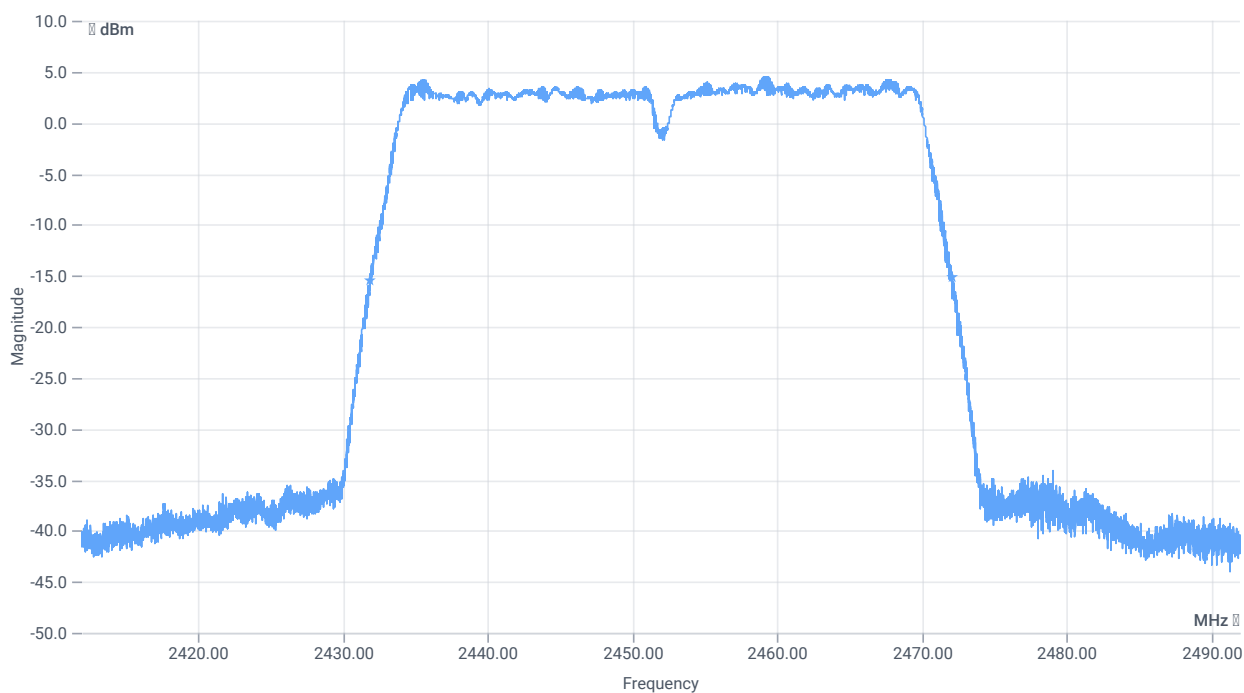




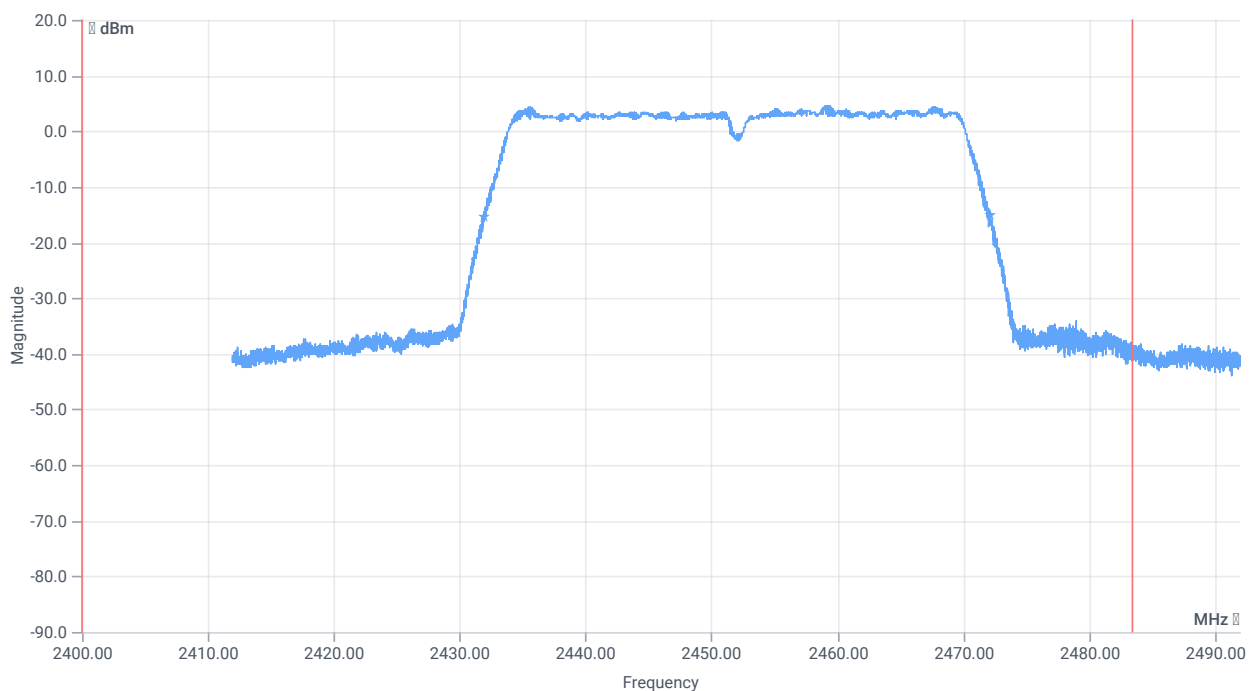
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	36788.000	kHz	INFO
T1 99%	2400.000000	---	2433.6418	MHz	PASS
T2 99%	---	2483.500000	2470.4302	MHz	PASS



BW 20dB



BW within band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	40248	kHz	INFO
T1 20dB	2400.000000	---	2431.8800	MHz	PASS
T2 20dB	---	2483.500000	2472.1280	MHz	PASS

Verdict

PASS

FCC 15.247 # Peak psd DTS ~ WLAN2G4 n-HT40 mode

References

TC start	10.07.2024 17:38:45
Ambit temp [°C] humidity [rel%]	27.0 50
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission
Description	FCC 15.247 Peak psd DTS - WLAN2G4 n-HT40 mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 n-HT40 mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2422
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2452
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

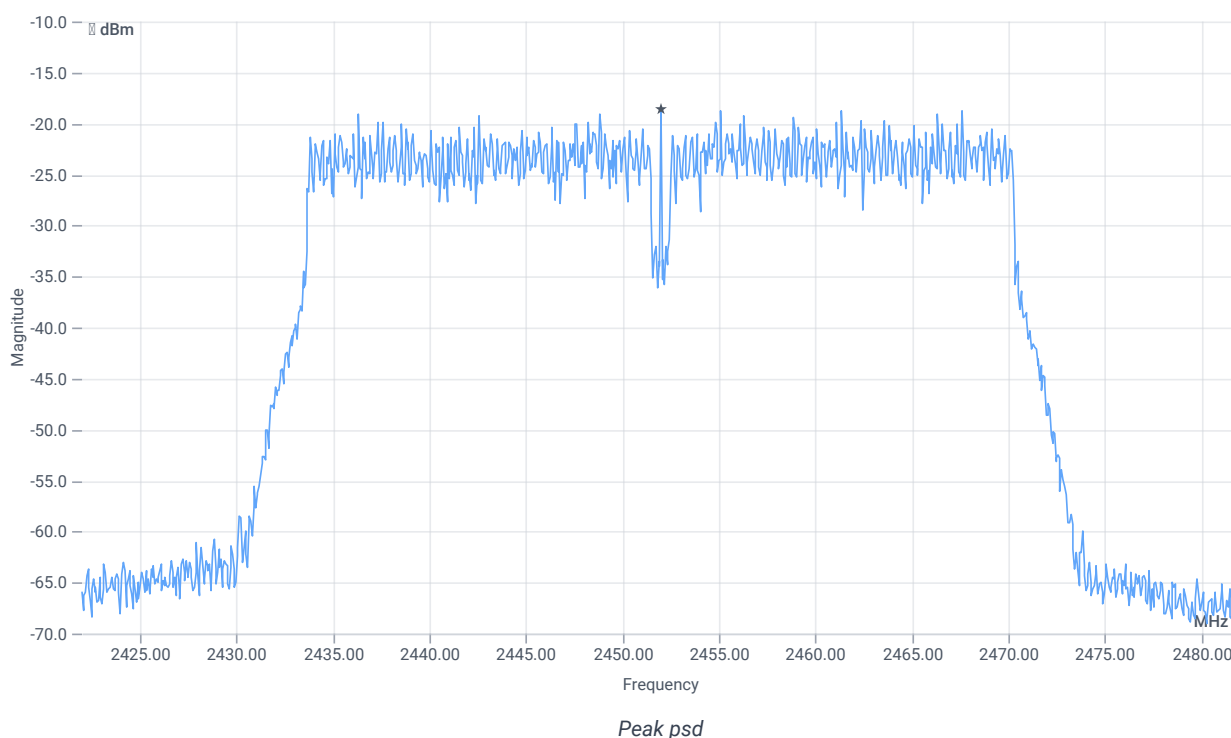
Test at TX 2452 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	4.21	dBm	INFO
Ref. frequency	---	---	2459.290	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	9.21 11.08 15
Start [MHz] Stop [MHz]	2422.000 2482.000
RBW [MHz] VBW [MHz]	0.003000 0.010000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1000 20 1001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak psd	---	8	-18.53	dBm/3KHz	PASS

Verdict

PASS

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 n-HT40 mode

References

TC start	10.07.2024 17:38:14
Ambit temp [°C] humidity [rel%]	27.0 50
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	
Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 n-HT40 mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 n-HT40 mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2422
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2452
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

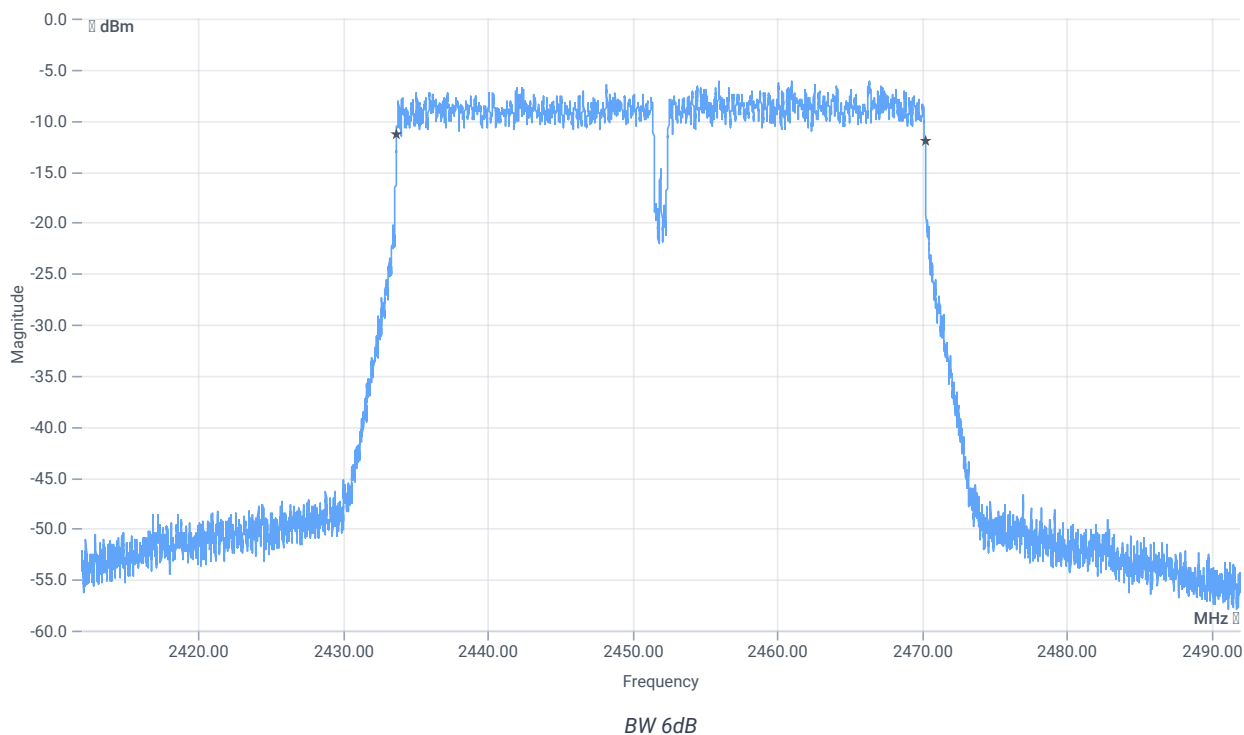
Test at TX 2452 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	3.78	dBm	INFO
Ref. frequency	---	---	2466.190	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	8.78 11.08 15
Start [MHz] Stop [MHz]	2412.000 2492.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS bandwidth (6dB)	500	---	36480	kHz	PASS

Verdict

PASS

NA # Peak output power 3MHz/3MHz ~ WLAN2G4 n-HT40 mode

References

TC start	10.07.2024 17:37:42
Ambit temp [°C] humidity [rel%]	27.0 50
System version	5.0.7.0
Standard Version	NA NI
Method	
Description	Peak OP 3MHz/3MHz WLAN2G4 n-HT40 mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 n-HT40 mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2422
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2452
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

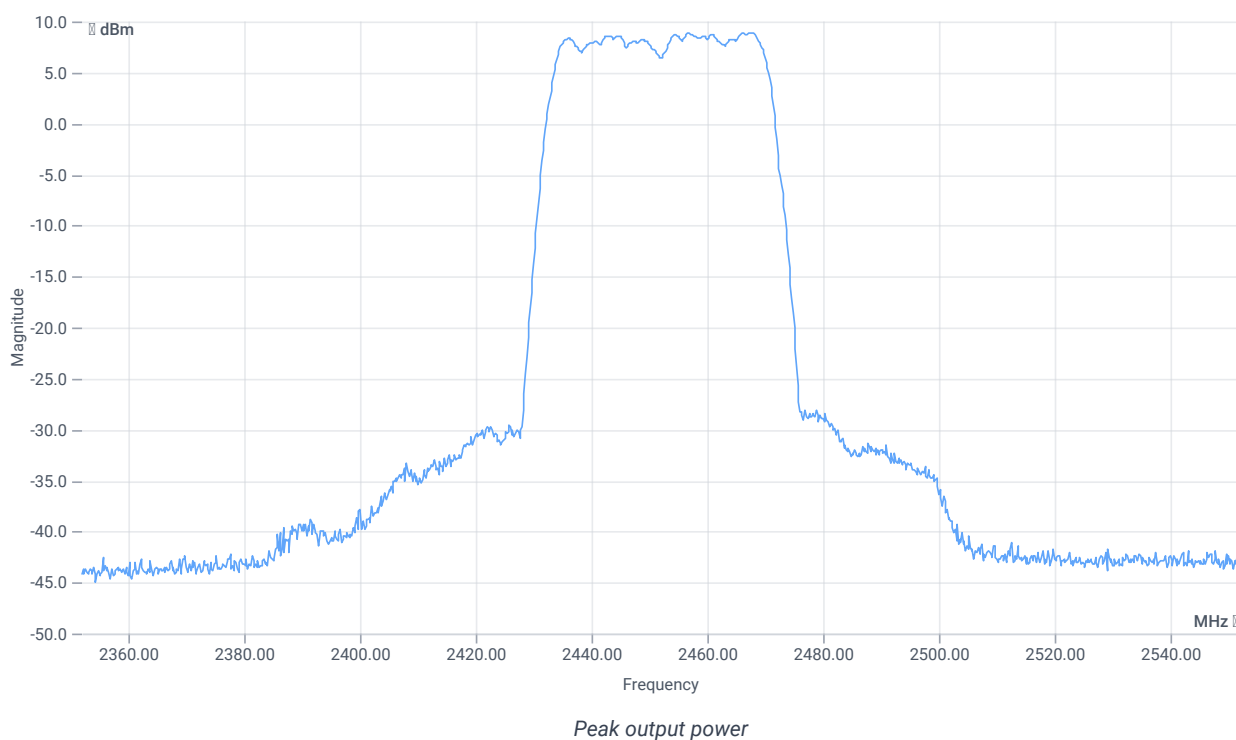
Test at TX 2452 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	3.61	dBm	INFO
Ref. frequency	---	---	2466.290	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	13.61 11.08 20
Start [MHz] Stop [MHz]	2352.000 2552.000
RBW [MHz] VBW [MHz]	3.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1000 10 1001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	---	8.94	dBm	INFO
Peak power	---	---	7.834296	mW	INFO
Frequency at peak	---	---	2467.78	MHz	INFO

Verdict

PASS

FCC 15.247 # Peak output power PM DTS ~ WLAN2G4 n-HT40 mode

References

TC start	10.07.2024 17:36:56
Ambit temp [°C] humidity [rel%]	27.0 50
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.3 PKPM1 Peak-reading Power Meter Method
Description	FCC 15.247 Peak output power PM DTS - WLAN2G4 n-HT40 mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0
Power sensor,Keysight Technologies,U2021XA,MY59190010,A.04.06

Test Parameter

Technology to test	WLAN2G4 n-HT40 mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2422
Frequency mid to test	True Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2452
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
Full path type	EUT_PM_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.PM/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00010000:00000001

Test at TX 2437 MHz

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	30	19.7	dBm	PASS

Verdict

PASS

FCC 15.247 # TX spurious conducted 20dBc ~ WLAN2G4 n-HT40 mode

References

TC start	10.07.2024 17:23:19
Ambit temp [°C] humidity [rel%]	26.9 50
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
Description	FCC 15.247 TX Emissions cond. DTS DTS - WLAN2G4 n-HT40 mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

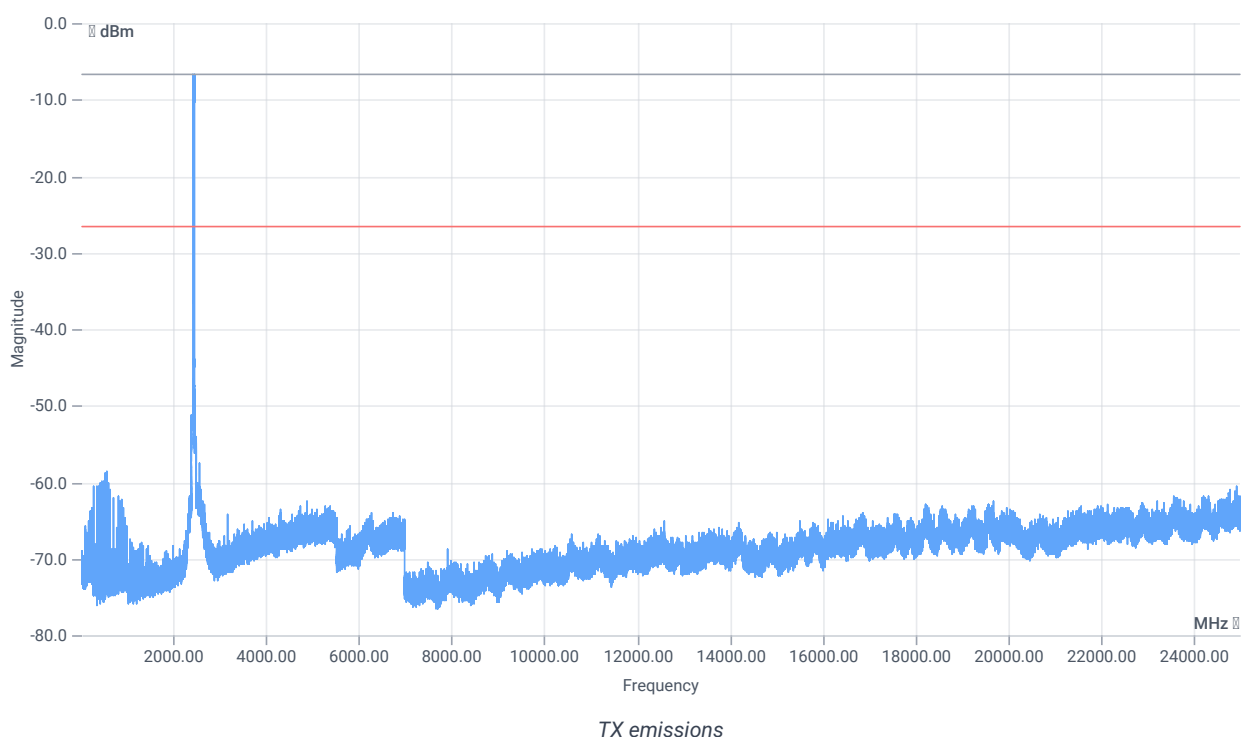
Test Parameter

Technology to test	WLAN2G4 n-HT40 mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2422
Frequency mid to test	True Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2452
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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 2437 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	3.15	dBm	INFO
Ref. frequency	---	---	2454.280	MHz	INFO



READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	3.15 23.17 0
Start [MHz] Stop [MHz]	24780.000 25000.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	200 25 1501 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2433.17 MHz	---	---	-6.68	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 2398 MHz	0	---	24.88	dB	INFO

Verdict

PASS

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 n-HT40 mode

References

TC start	10.07.2024 17:22:39
Ambit temp [°C] humidity [rel%]	26.9 50
System version	5.0.7.0
Standard Version	FCC 15.247, ISED RSS247 NI
Method	
Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 n-HT40 mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 n-HT40 mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2422
Frequency mid to test	True Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2452
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

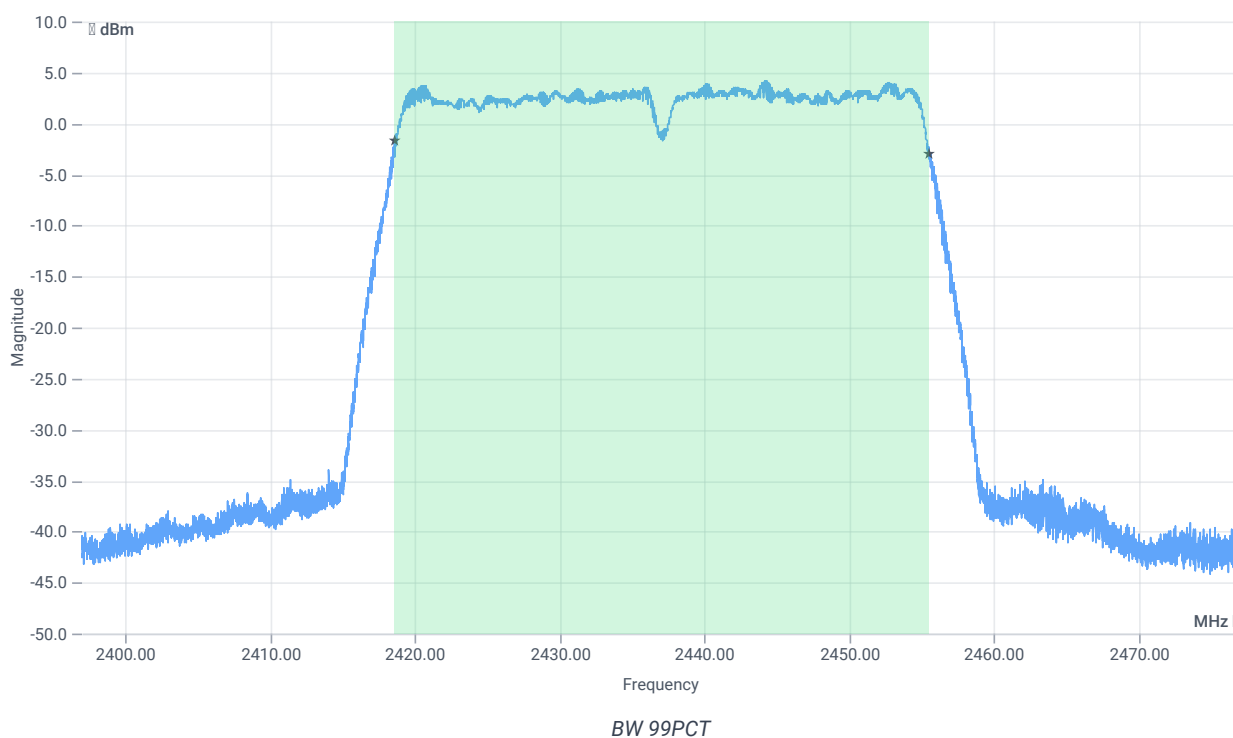
Test at TX 2437 MHz

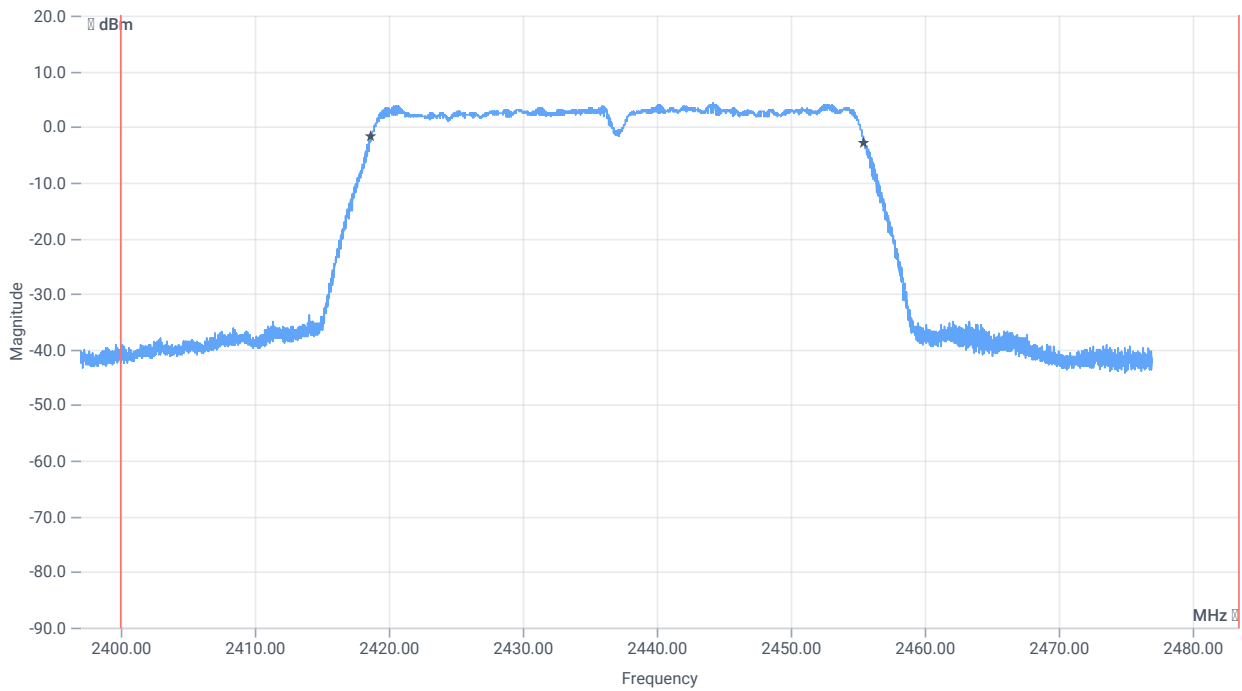
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	3.44	dBm	INFO
Ref. frequency	---	---	2452.580	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	8.44 11.06 15
Start [MHz] Stop [MHz]	2397.000 2477.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

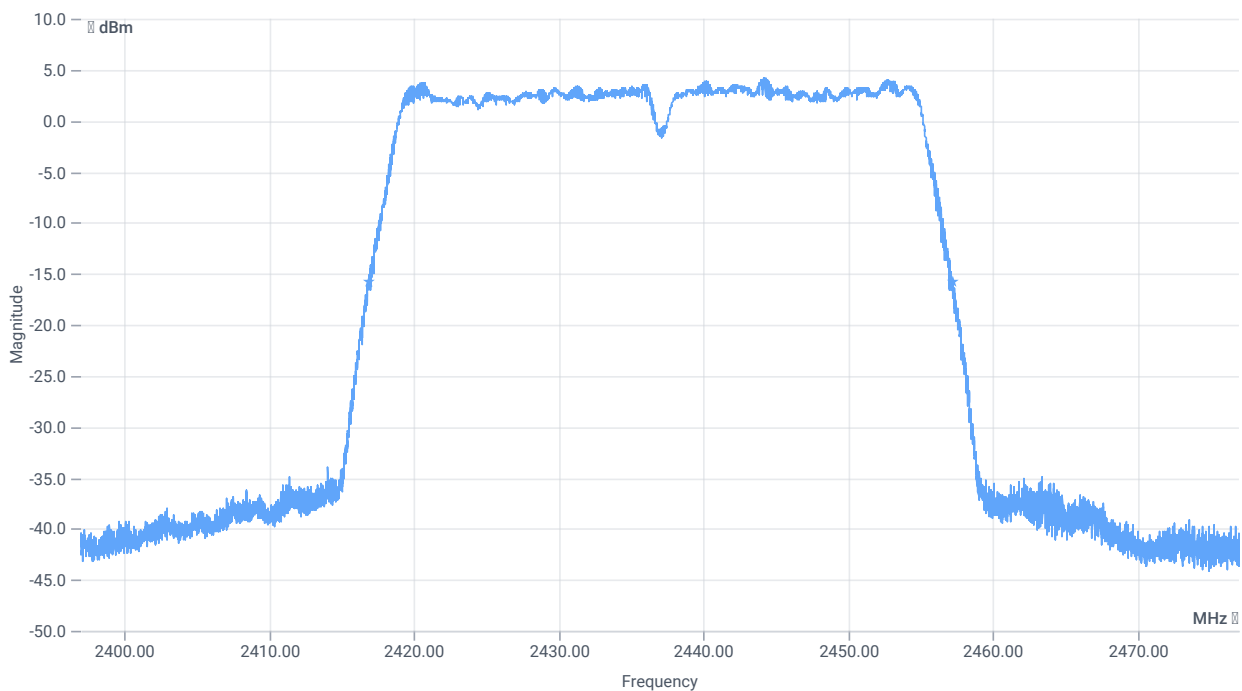




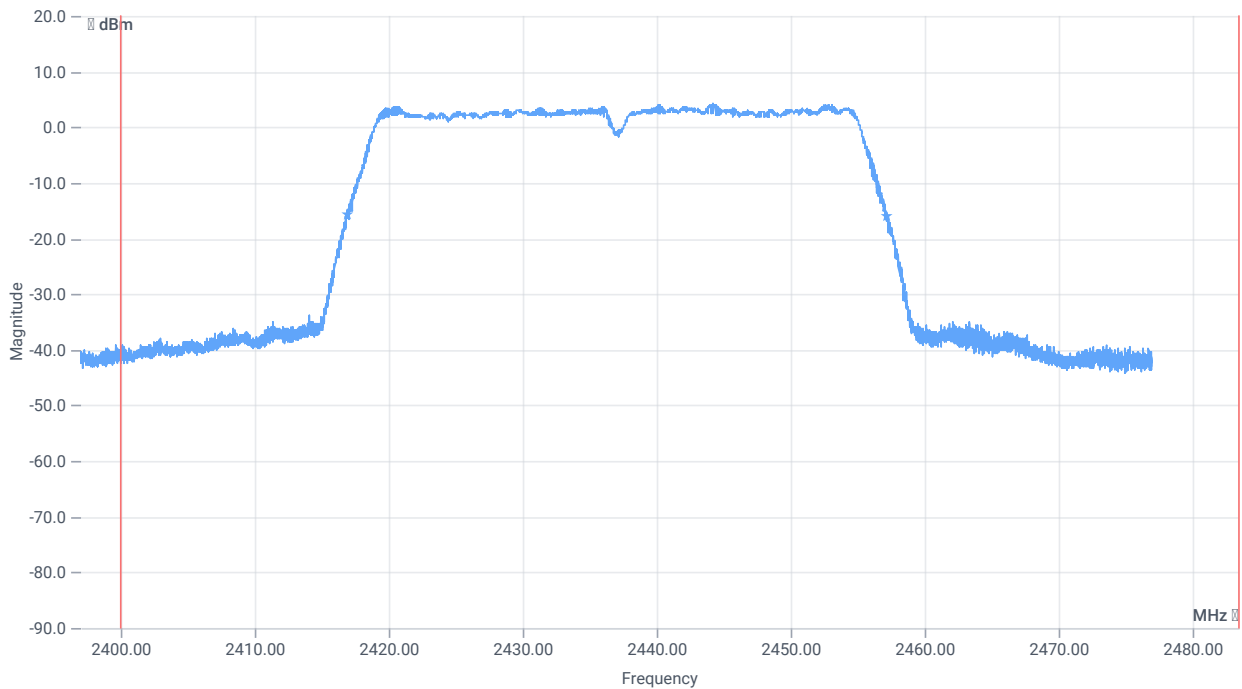
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	36836.000	kHz	INFO
T1 99%	2400.000000	---	2418.6338	MHz	PASS
T2 99%	---	2483.500000	2455.4702	MHz	PASS



BW 20dB



BW within band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	40384	kHz	INFO
T1 20dB	2400.000000	---	2416.8400	MHz	PASS
T2 20dB	---	2483.500000	2457.2240	MHz	PASS

Verdict

PASS

FCC 15.247 # Peak psd DTS ~ WLAN2G4 n-HT40 mode

References

TC start	10.07.2024 17:21:56
Ambit temp [°C] humidity [rel%]	26.9 50
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission
Description	FCC 15.247 Peak psd DTS - WLAN2G4 n-HT40 mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 n-HT40 mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2422
Frequency mid to test	True Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2452
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

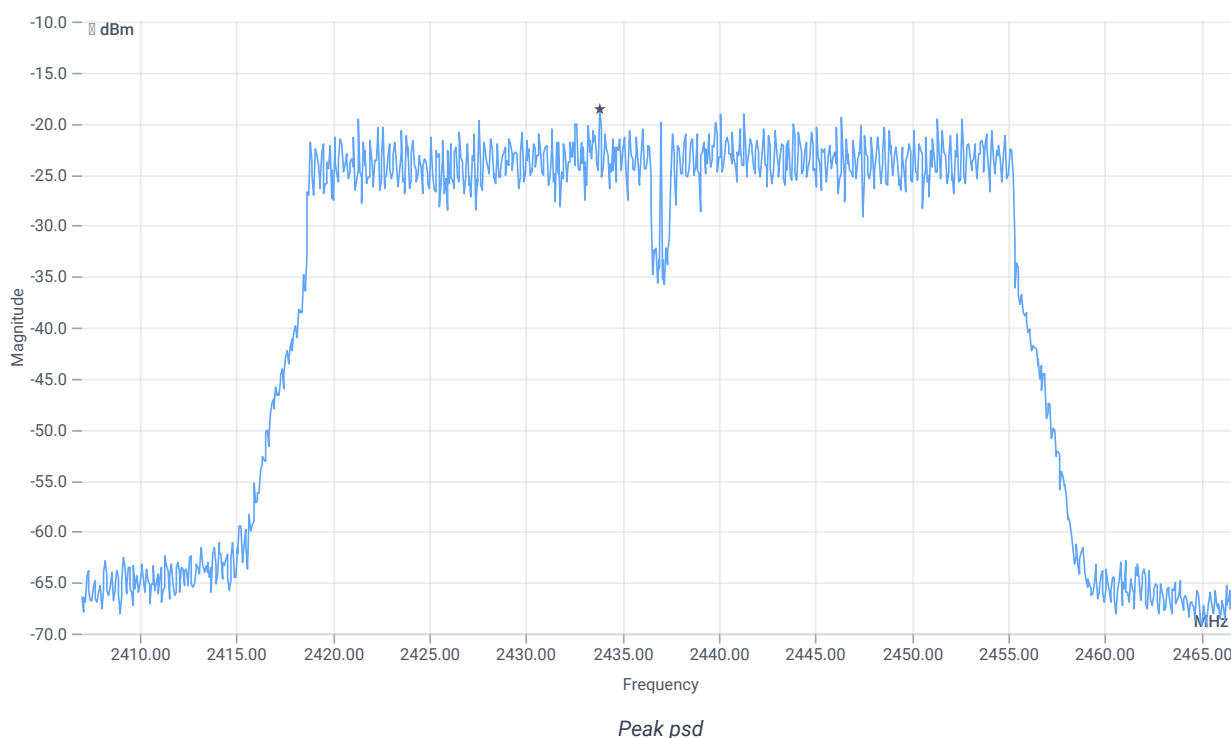
Test at TX 2437 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	3.83	dBm	INFO
Ref. frequency	---	---	2420.620	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	8.83 11.06 15
Start [MHz] Stop [MHz]	2407.000 2467.000
RBW [MHz] VBW [MHz]	0.003000 0.010000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1000 20 1001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak psd	---	8	-18.64	dBm/3KHz	PASS

Verdict

PASS

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 n-HT40 mode

References

TC start	10.07.2024 17:21:25
Ambit temp [°C] humidity [rel%]	26.9 50
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	
Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 n-HT40 mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 n-HT40 mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2422
Frequency mid to test	True Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2452
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

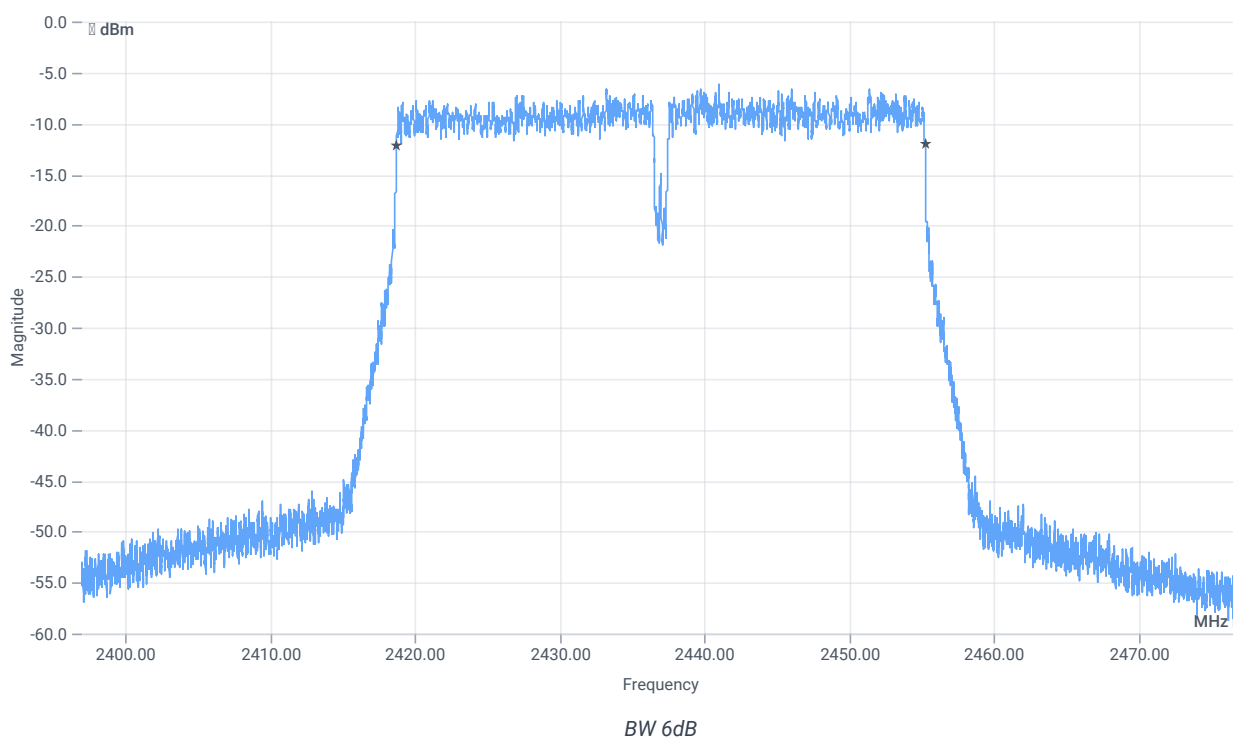
Test at TX 2437 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	3.12	dBm	INFO
Ref. frequency	---	---	2435.100	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	8.12 11.06 15
Start [MHz] Stop [MHz]	2397.000 2477.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS bandwidth (6dB)	500	---	36488	kHz	PASS

Verdict

PASS

NA # Peak output power 3MHz/3MHz ~ WLAN2G4 n-HT40 mode

References

TC start	10.07.2024 17:20:54
Ambit temp [°C] humidity [rel%]	26.9 50
System version	5.0.7.0
Standard Version	NA NI
Method	
Description	Peak OP 3MHz/3MHz WLAN2G4 n-HT40 mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 n-HT40 mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2422
Frequency mid to test	True Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2452
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

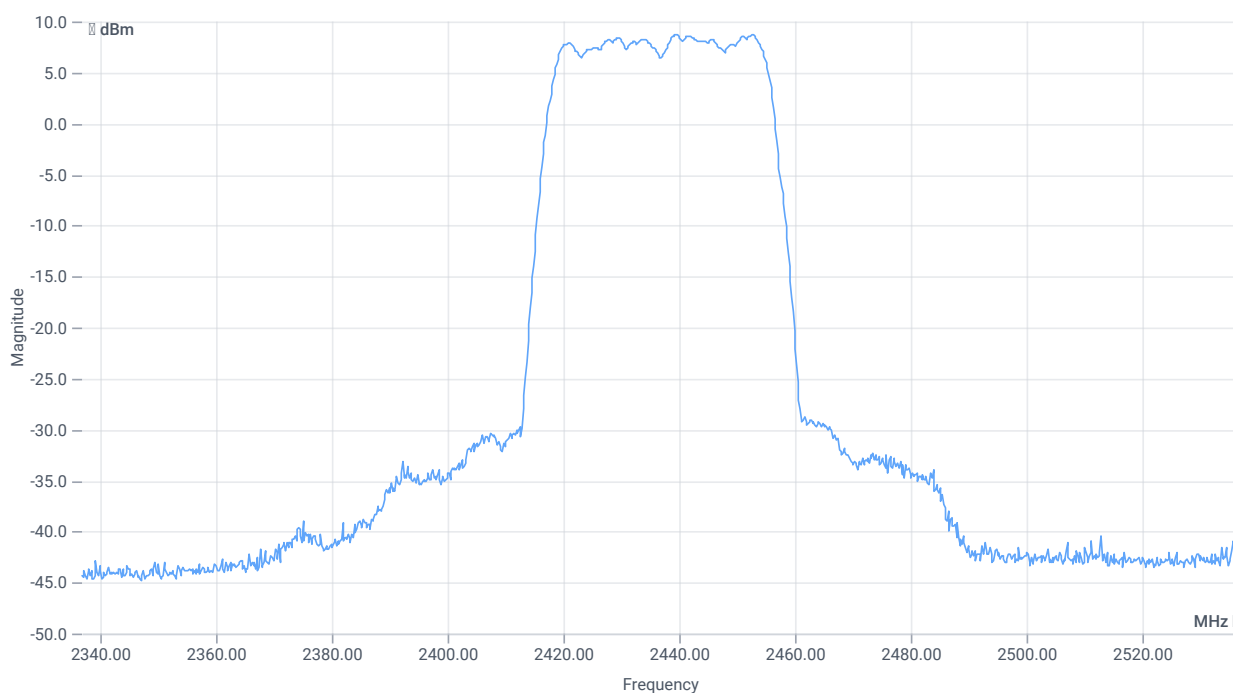
Test at TX 2437 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	3.79	dBm	INFO
Ref. frequency	---	---	2444.190	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	13.79 11.06 20
Start [MHz] Stop [MHz]	2337.000 2537.000
RBW [MHz] VBW [MHz]	3.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1000 10 1001 SWE



Peak output power

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	---	8.7	dBm	INFO
Peak power	---	---	7.413102	mW	INFO
Frequency at peak	---	---	2452.78	MHz	INFO

Verdict

PASS

FCC 15.247 # Peak output power PM DTS ~ WLAN2G4 n-HT40 mode

References

TC start	10.07.2024 17:18:34
Ambit temp [°C] humidity [rel%]	26.9 50
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.3 PKPM1 Peak-reading Power Meter Method
Description	FCC 15.247 Peak output power PM DTS - WLAN2G4 n-HT40 mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0
Power sensor,Keysight Technologies,U2021XA,MY59190010,A.04.06

Test Parameter

Technology to test	WLAN2G4 n-HT40 mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2422
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2452
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
Full path type	EUT_PM_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.PM/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00010000:00000001

Test at TX 2422 MHz

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	30	19.92	dBm	PASS

Verdict

PASS

FCC 15.247 # TX spurious conducted 20dBc ~ WLAN2G4 n-HT40 mode

References

TC start	10.07.2024 17:04:58
Ambit temp [°C] humidity [rel%]	26.8 50
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
Description	FCC 15.247 TX Emissions cond. DTS DTS - WLAN2G4 n-HT40 mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

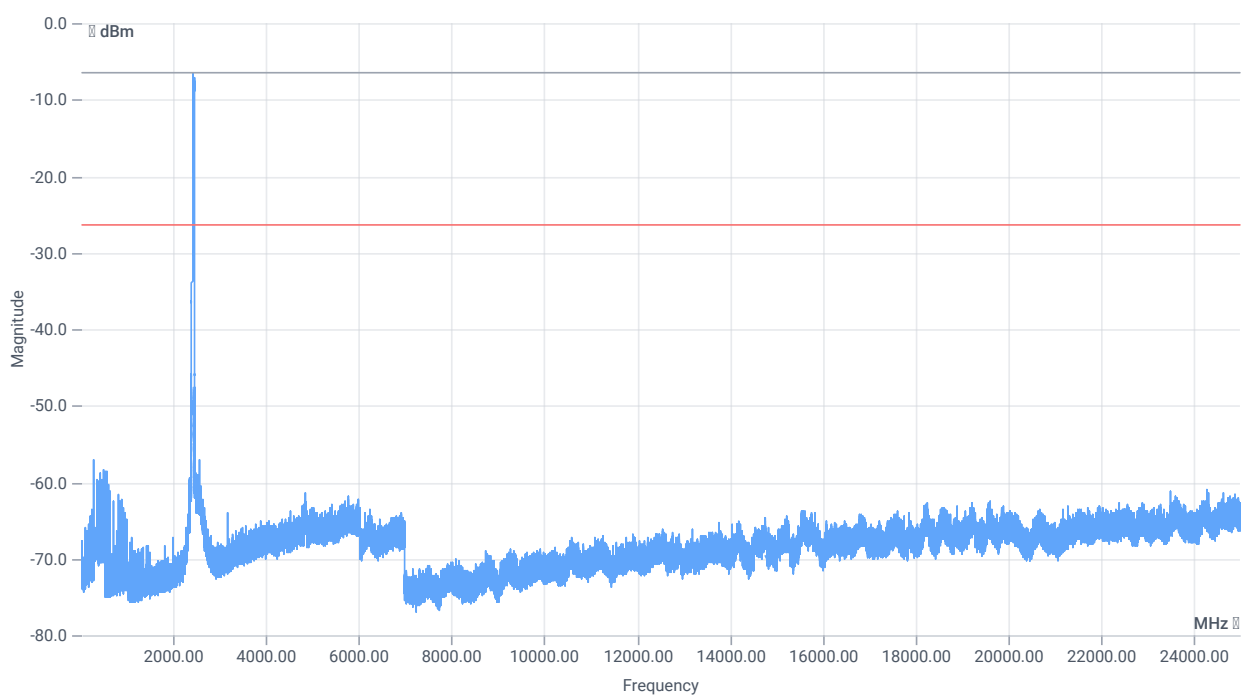
Test Parameter

Technology to test	WLAN2G4 n-HT40 mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2422
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2452
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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 2422 MHz

RESULT: Reference power cond.

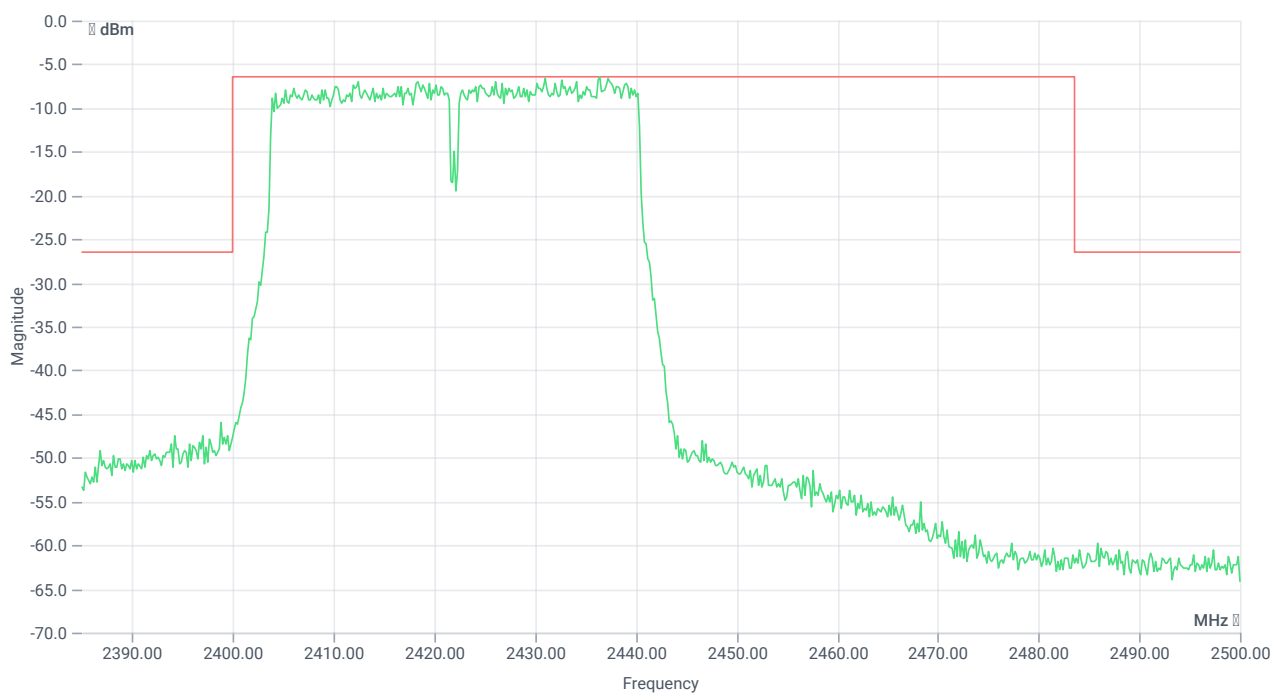
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	3.52	dBm	INFO
Ref. frequency	---	---	2439.280	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	3.52 23.17 0
Start [MHz] Stop [MHz]	24780.000 25000.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	200 25 1501 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2436.50 MHz	---	---	-6.44	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 2398.833 MHz	0	---	19.44	dB	INFO

Verdict

PASS

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 n-HT40 mode

References

TC start	10.07.2024 17:04:18
Ambit temp [°C] humidity [rel%]	26.8 51
System version	5.0.7.0
Standard Version	FCC 15.247, ISED RSS247 NI
Method	
Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 n-HT40 mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 n-HT40 mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2422
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2452
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

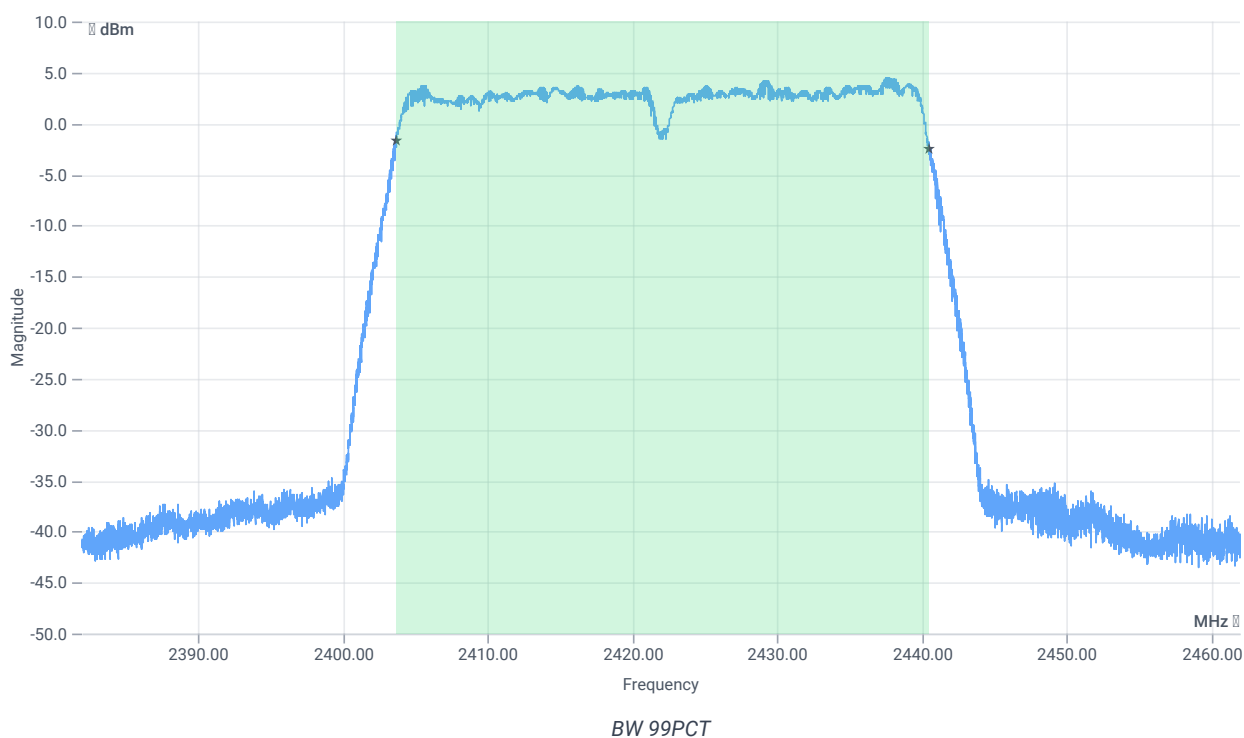
Test at TX 2422 MHz

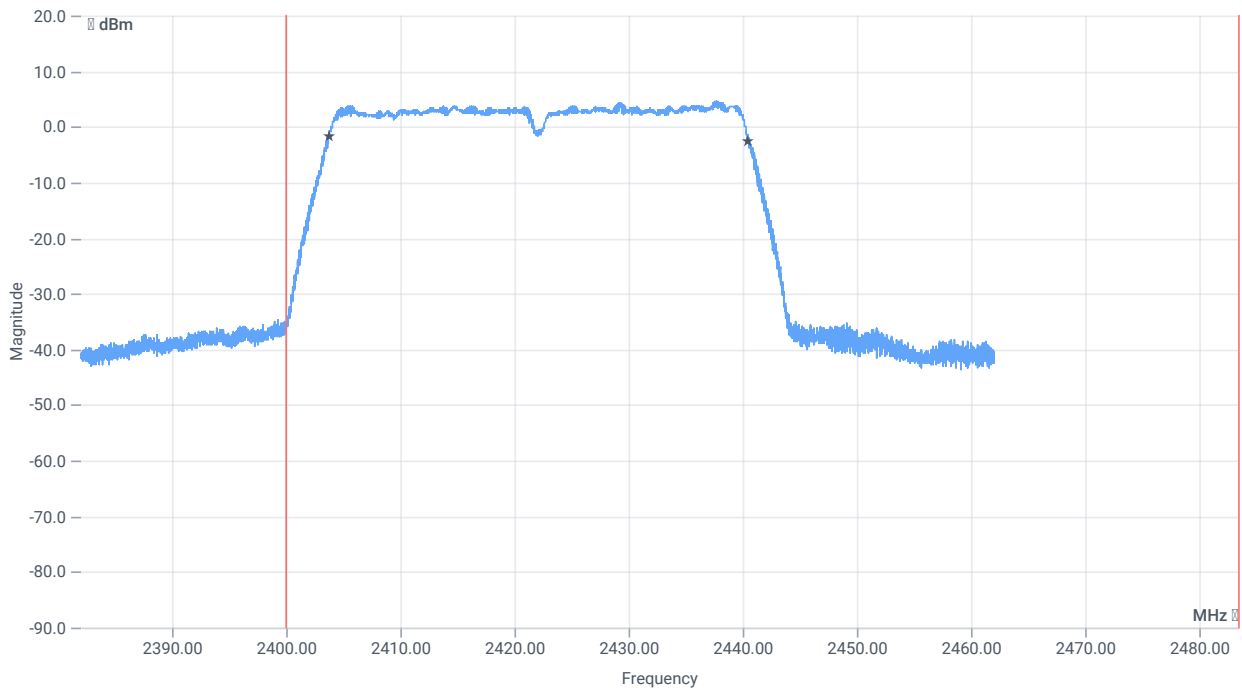
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	3.50	dBm	INFO
Ref. frequency	---	---	2439.080	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	8.50 11.01 15
Start [MHz] Stop [MHz]	2382.000 2462.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

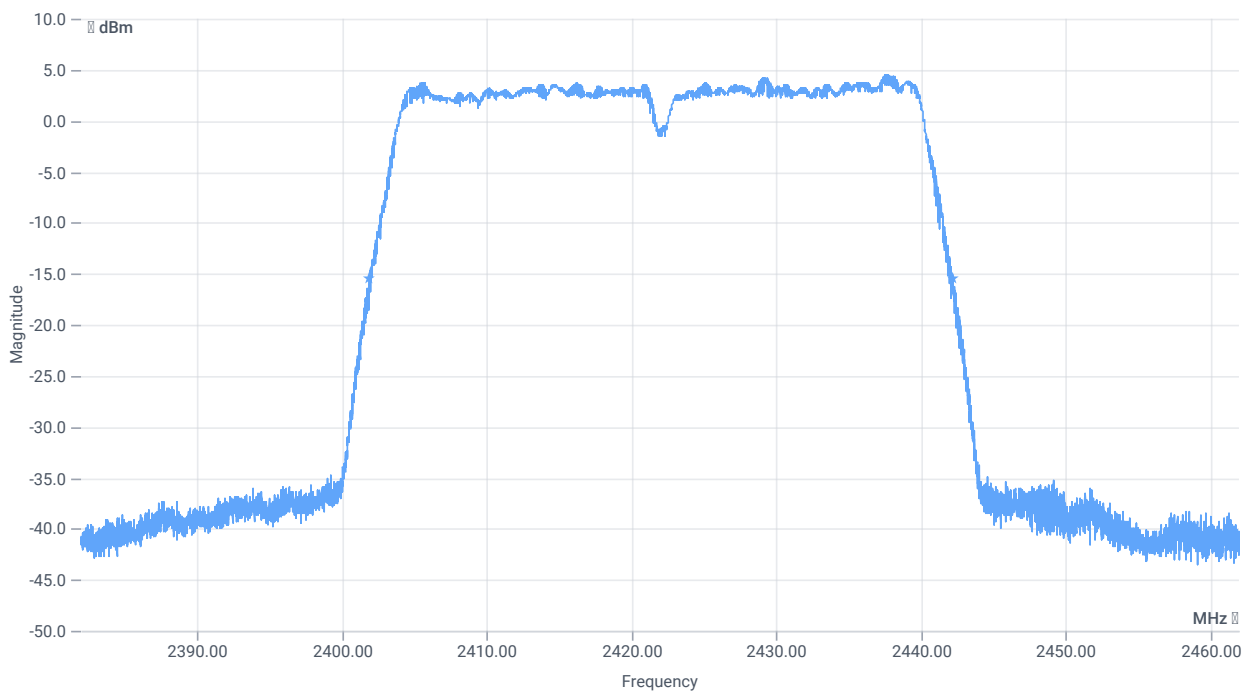




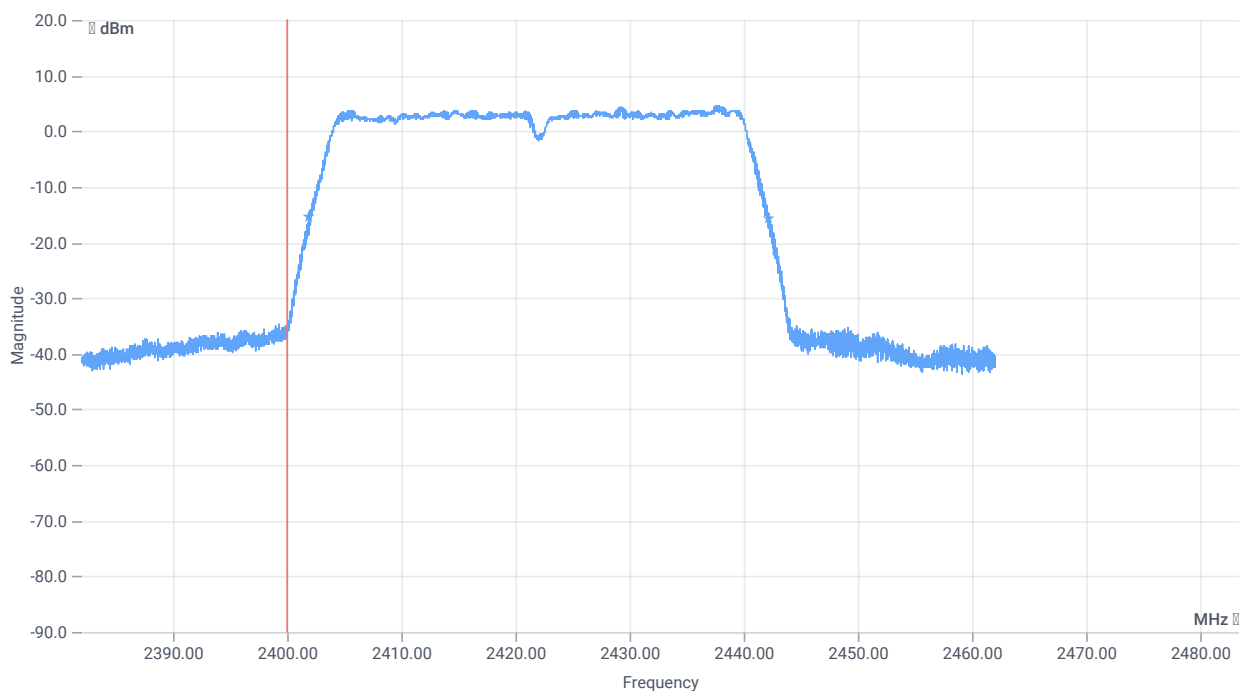
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	36796.000	kHz	INFO
T1 99%	2400.000000	---	2403.6898	MHz	PASS
T2 99%	---	2483.500000	2440.4862	MHz	PASS



BW 20dB



BW within band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	40288	kHz	INFO
T1 20dB	2400.000000	---	2401.9360	MHz	PASS
T2 20dB	---	2483.500000	2442.2240	MHz	PASS

Verdict

PASS

FCC 15.247 # Peak psd DTS ~ WLAN2G4 n-HT40 mode

References

TC start	10.07.2024 17:03:36
Ambit temp [°C] humidity [rel%]	26.7 51
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission
Description	FCC 15.247 Peak psd DTS - WLAN2G4 n-HT40 mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 n-HT40 mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2422
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2452
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

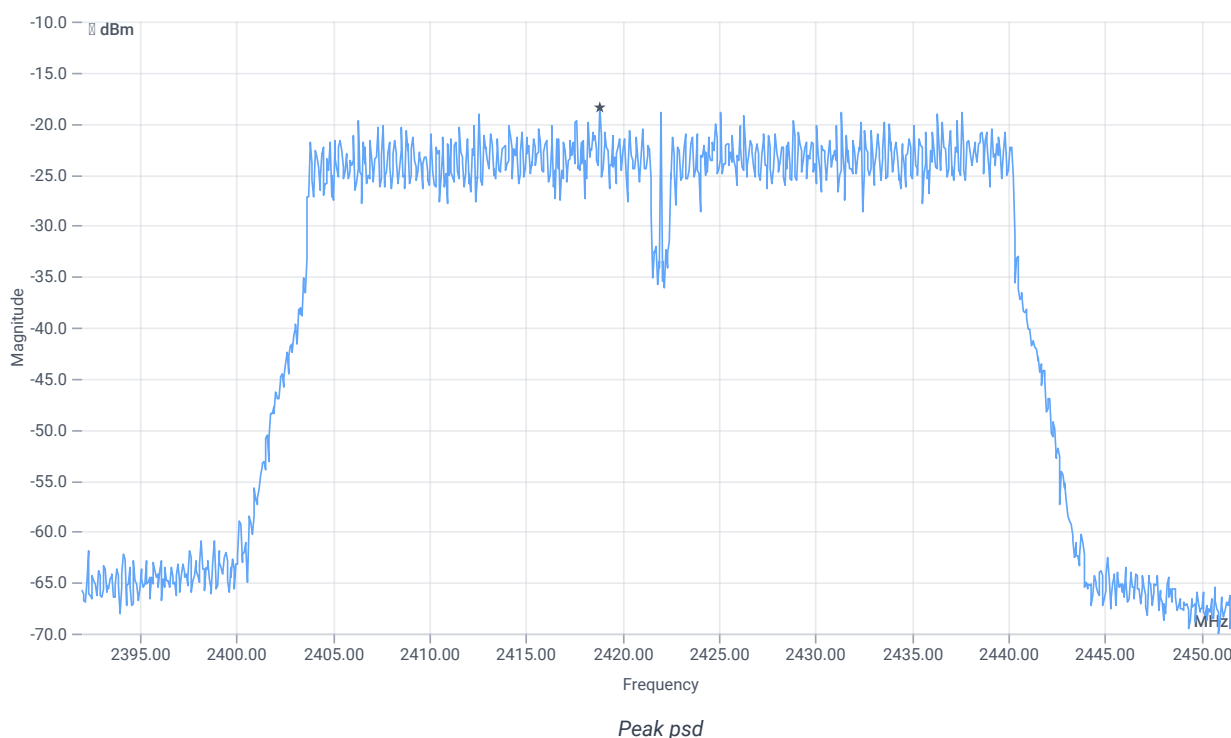
Test at TX 2422 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	3.69	dBm	INFO
Ref. frequency	---	---	2439.280	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	8.69 11.01 15
Start [MHz] Stop [MHz]	2392.000 2452.000
RBW [MHz] VBW [MHz]	0.003000 0.010000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1000 20 1001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak psd	---	8	-18.51	dBm/3KHz	PASS

Verdict

PASS

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 n-HT40 mode

References

TC start	10.07.2024 17:03:05
Ambit temp [°C] humidity [rel%]	26.7 51
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	
Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 n-HT40 mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 n-HT40 mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2422
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2452
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

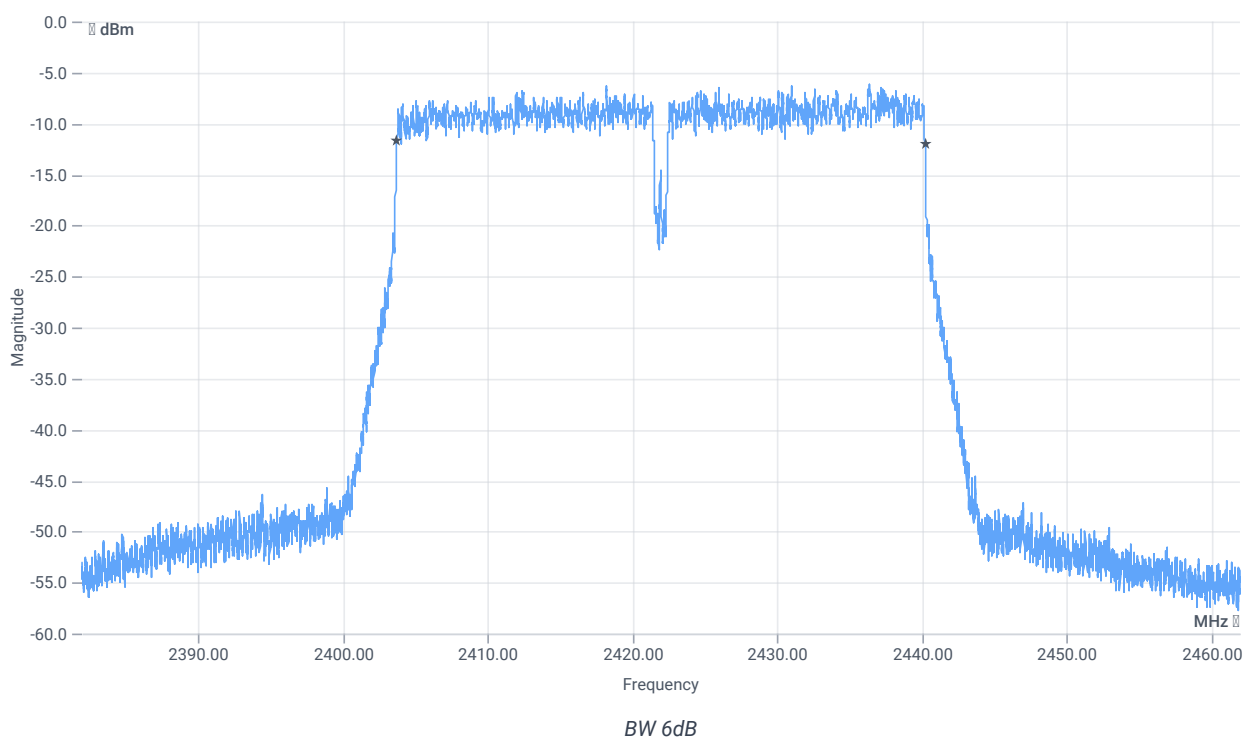
Test at TX 2422 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	3.61	dBm	INFO
Ref. frequency	---	---	2439.280	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	8.61 11.01 15
Start [MHz] Stop [MHz]	2382.000 2462.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS bandwidth (6dB)	500	---	36480	kHz	PASS

Verdict

PASS

NA # Peak output power 3MHz/3MHz ~ WLAN2G4 n-HT40 mode

References

TC start	10.07.2024 17:02:33
Ambit temp [°C] humidity [rel%]	26.7 51
System version	5.0.7.0
Standard Version	NA NI
Method	
Description	Peak OP 3MHz/3MHz WLAN2G4 n-HT40 mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 n-HT40 mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2422
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2452
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

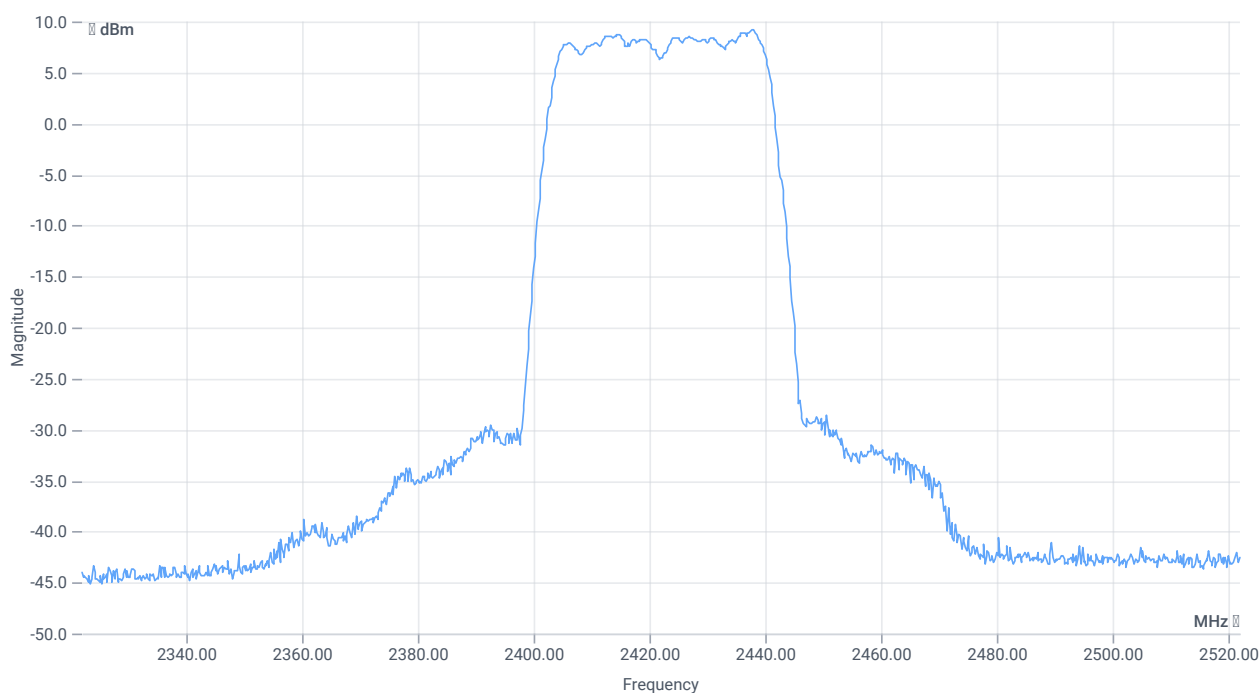
Test at TX 2422 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	3.50	dBm	INFO
Ref. frequency	---	---	2405.720	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	13.50 11.01 20
Start [MHz] Stop [MHz]	2322.000 2522.000
RBW [MHz] VBW [MHz]	3.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1000 10 1001 SWE



Peak output power

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	---	9.16	dBm	INFO
Peak power	---	---	8.241381	mW	INFO
Frequency at peak	---	---	2437.78	MHz	INFO

Verdict

PASS

FCC 15.247 # Peak output power PM DTS ~ WLAN2G4 n-HT20 mode

References

TC start	10.07.2024 17:01:31
Ambit temp [°C] humidity [rel%]	26.7 51
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.3 PKPM1 Peak-reading Power Meter Method
Description	FCC 15.247 Peak output power PM DTS - WLAN2G4 n-HT20 mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0
Power sensor,Keysight Technologies,U2021XA,MY59190010,A.04.06

Test Parameter

Technology to test	WLAN2G4 n-HT20 mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
Full path type	EUT_PM_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.PM/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00010000:00000001

Test at TX 2462 MHz

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	30	21.27	dBm	PASS

Verdict

PASS

FCC 15.247 # TX spurious conducted 20dBc ~ WLAN2G4 n-HT20 mode

References

TC start	10.07.2024 16:47:55
Ambit temp [°C] humidity [rel%]	26.5 51
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
Description	FCC 15.247 TX Emissions cond. DTS DTS - WLAN2G4 nHT20_mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

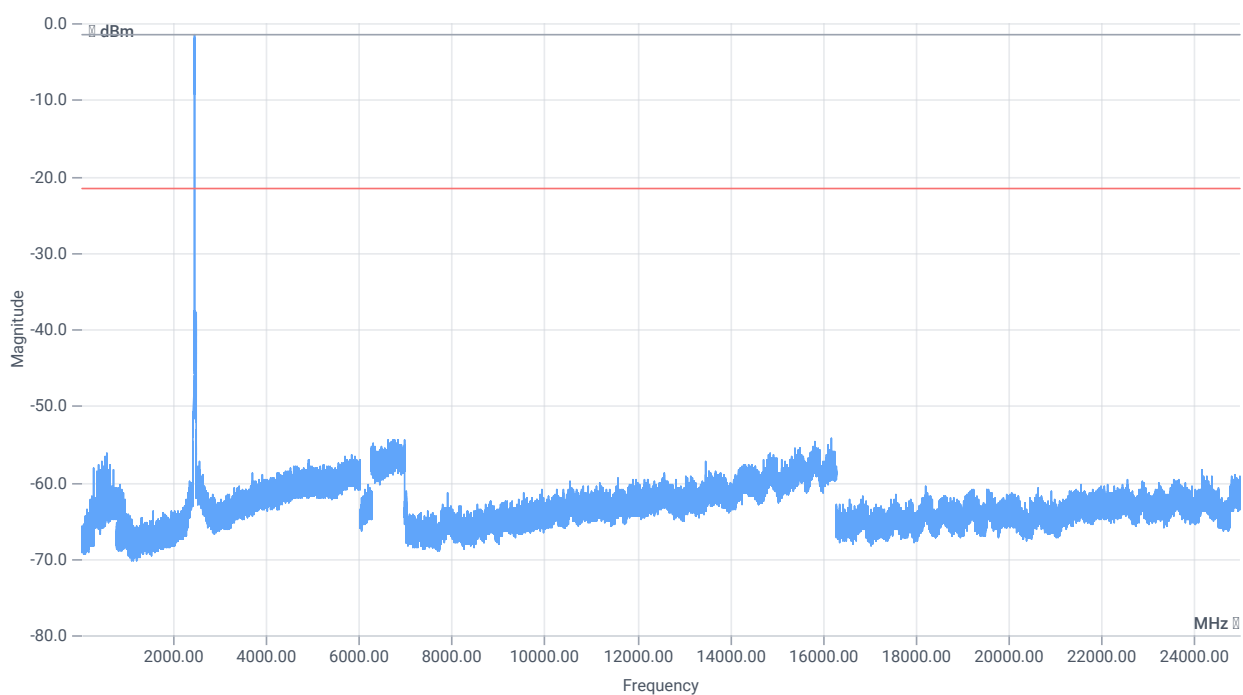
Test Parameter

Technology to test	WLAN2G4 n-HT20 mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MPSIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

Test at TX 2462 MHz

RESULT: Reference power cond.

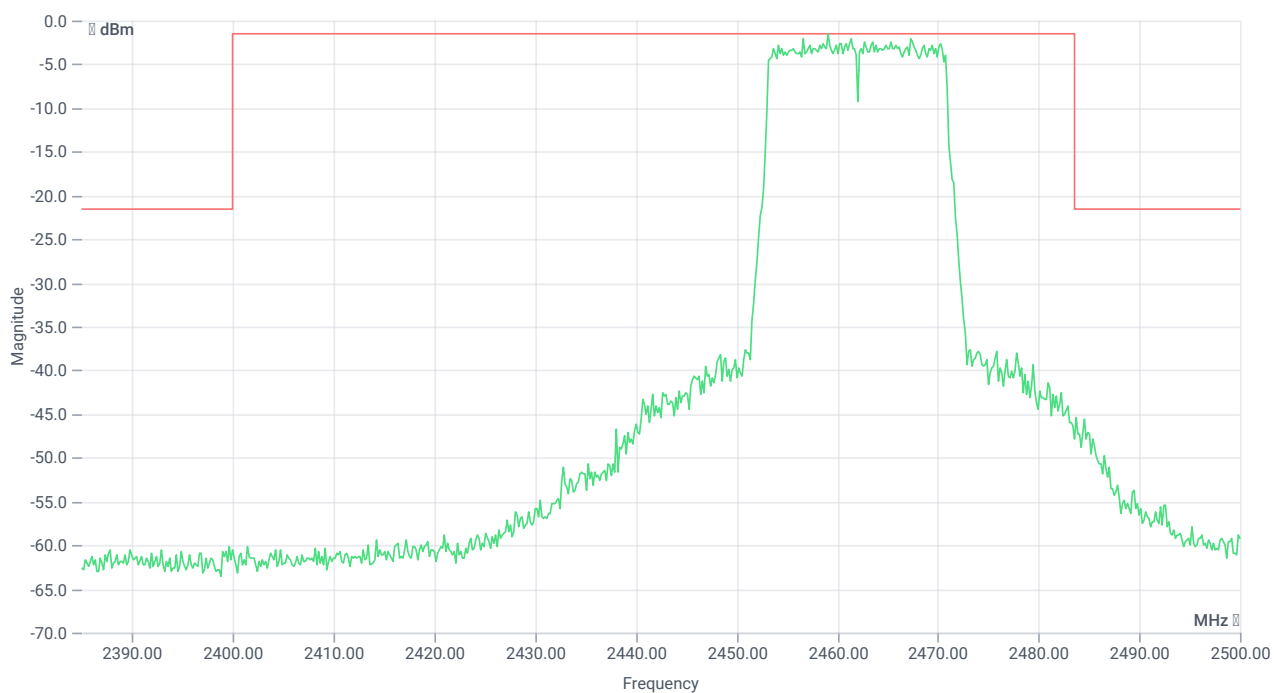
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	8.90	dBm	INFO
Ref. frequency	---	---	2463.500	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	8.90 23.17 5
Start [MHz] Stop [MHz]	24780.000 25000.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	200 25 1501 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2459.17 MHz	---	---	-1.60	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 2483.667 MHz	0	---	23.72	dB	INFO

Verdict

PASS

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 n-HT20 mode

References

TC start	10.07.2024 16:47:16
Ambit temp [°C] humidity [rel%]	26.5 51
System version	5.0.7.0
Standard Version	FCC 15.247, ISED RSS247 NI
Method	
Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 n-HT20 mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 n-HT20 mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

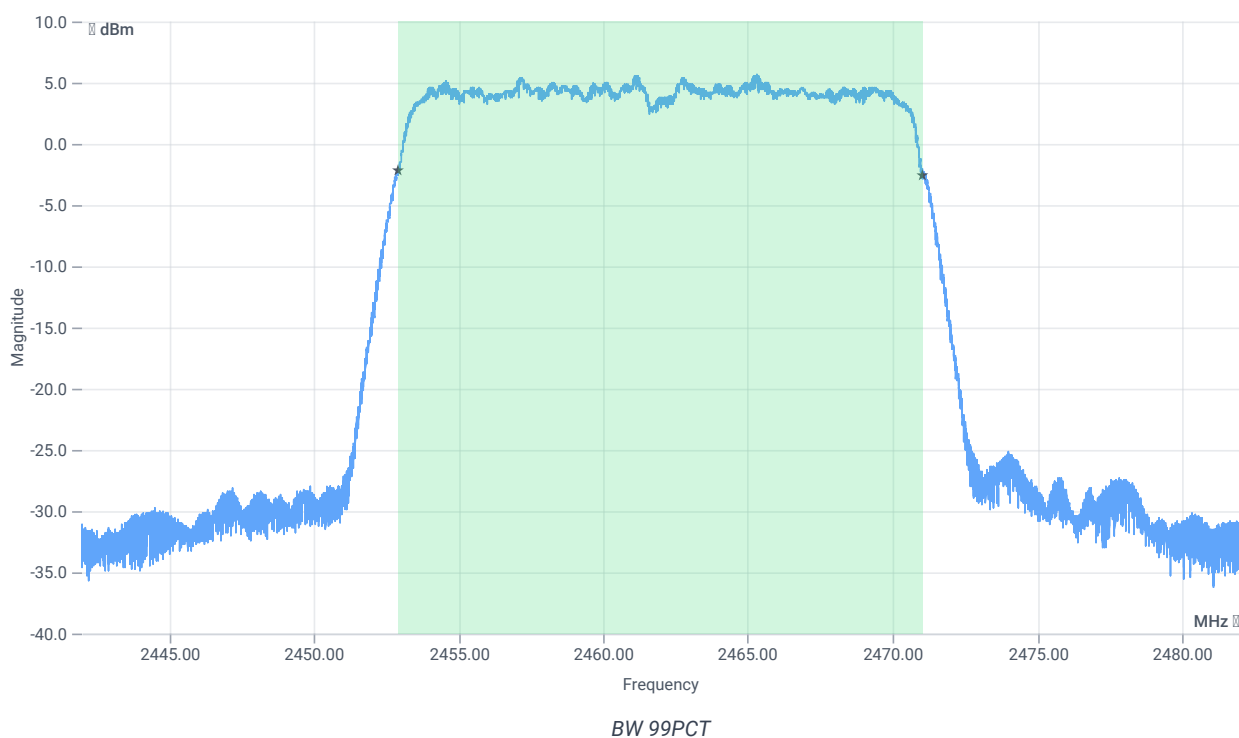
Test at TX 2462 MHz

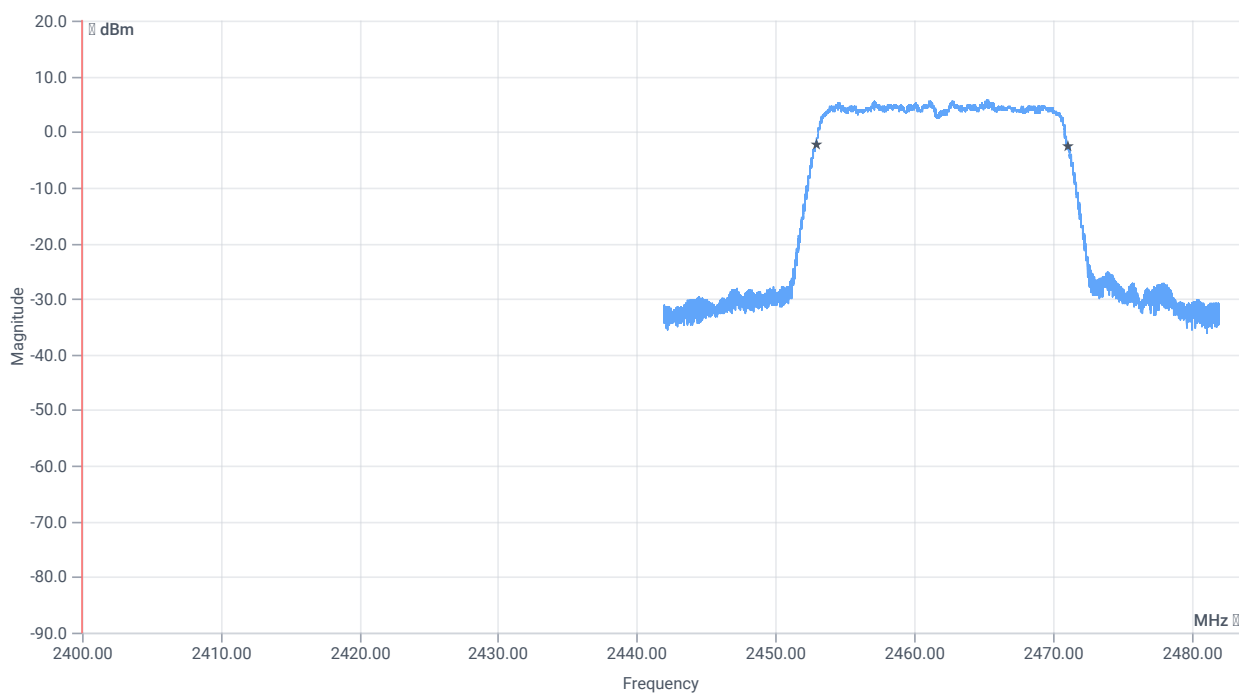
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	8.80	dBm	INFO
Ref. frequency	---	---	2460.600	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	13.80 11.1 20
Start [MHz] Stop [MHz]	2442.000 2482.000
RBW [MHz] VBW [MHz]	0.500000 2.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

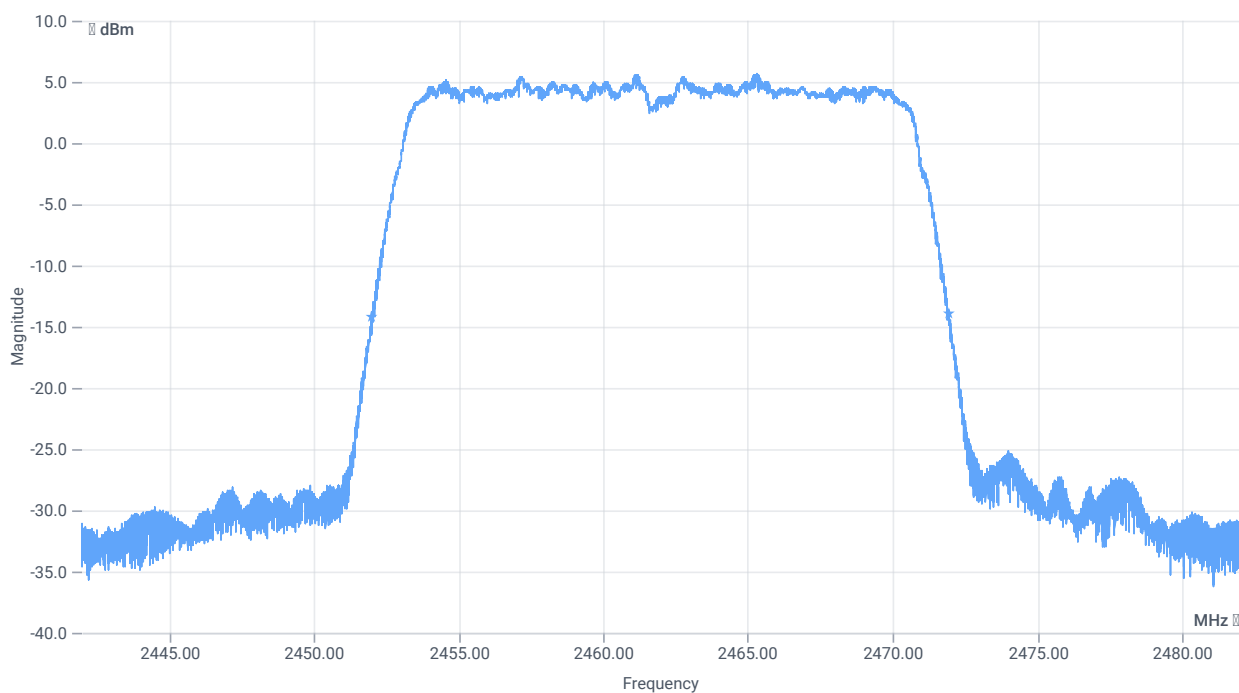




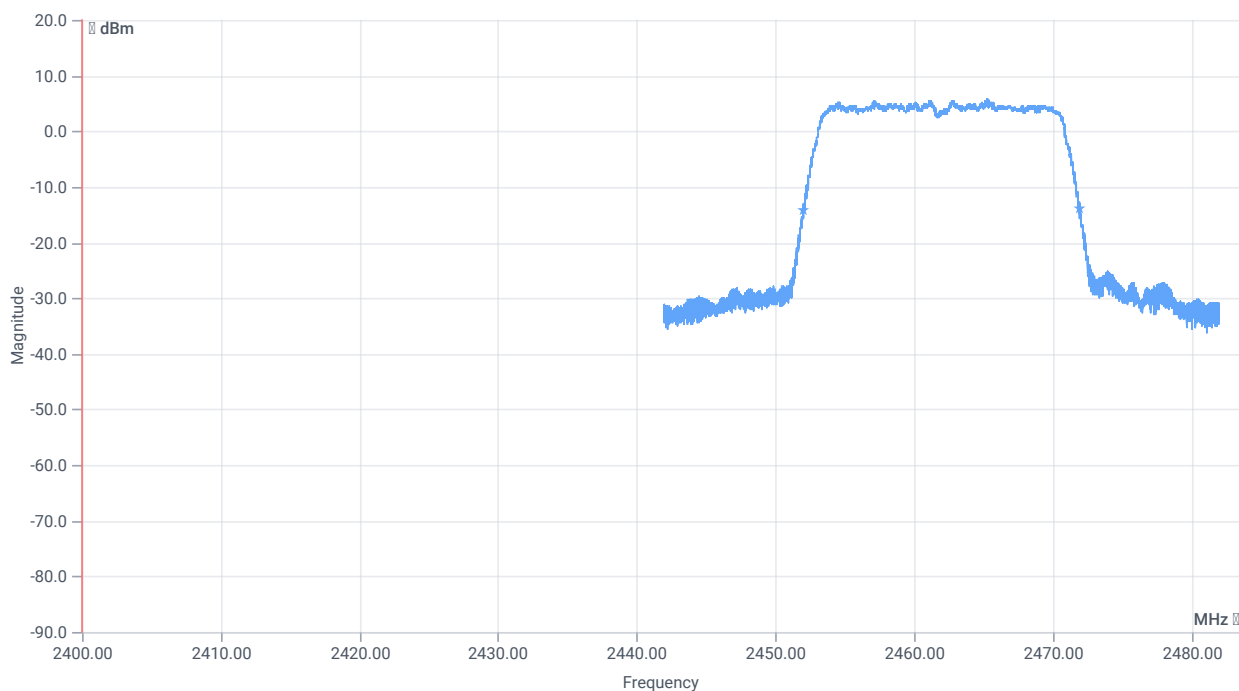
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	18110.000	kHz	INFO
T1 99%	2400.000000	---	2452.9369	MHz	PASS
T2 99%	---	2483.500000	2471.0471	MHz	PASS



BW 20dB



BW within band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	19936	kHz	INFO
T1 20dB	2400.000000	---	2452.0120	MHz	PASS
T2 20dB	---	2483.500000	2471.9480	MHz	PASS

Verdict

PASS

FCC 15.247 # Peak psd DTS ~ WLAN2G4 n-HT20 mode

References

TC start	10.07.2024 16:46:34
Ambit temp [°C] humidity [rel%]	26.5 51
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission
Description	FCC 15.247 Peak psd DTS - WLAN2G4 nHT20_mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 n-HT20 mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

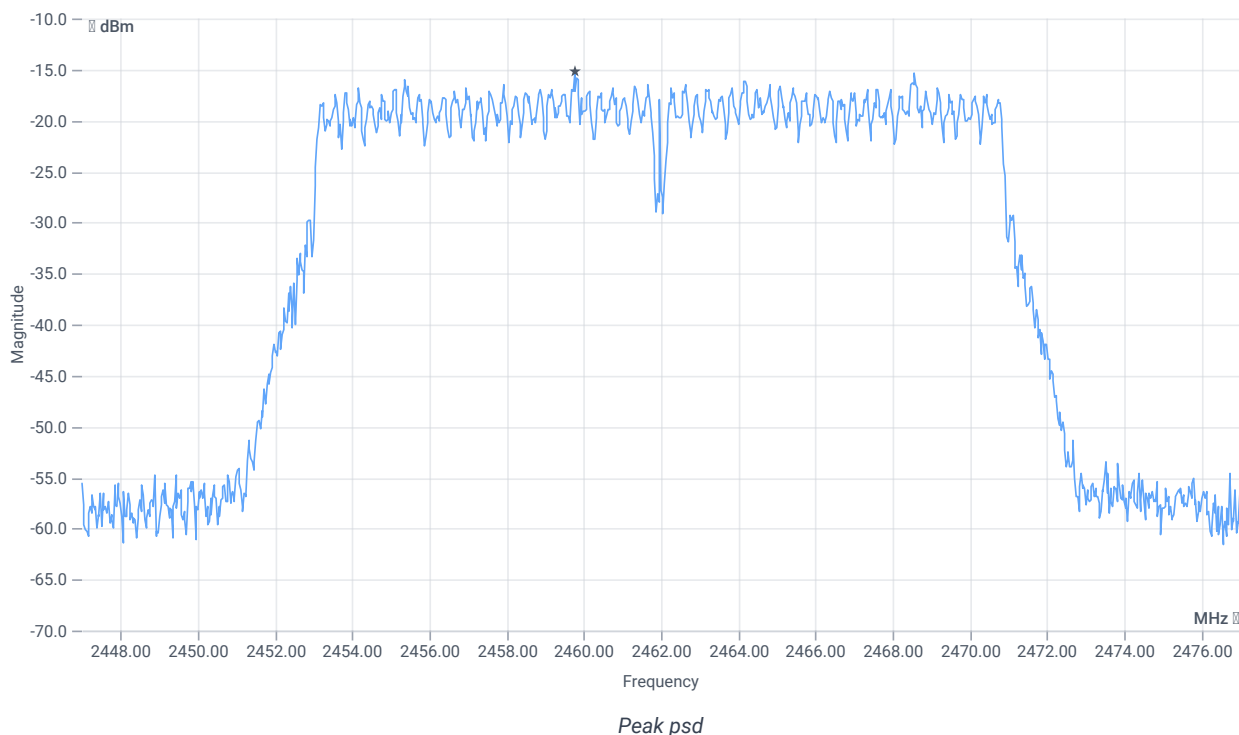
Test at TX 2462 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	9.12	dBm	INFO
Ref. frequency	---	---	2464.600	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	14.12 11.1 20
Start [MHz] Stop [MHz]	2447.000 2477.000
RBW [MHz] VBW [MHz]	0.003000 0.010000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1000 20 1001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak psd	---	8	-15.11	dBm/3KHz	PASS

Verdict

PASS

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 n-HT20 mode

References

TC start	10.07.2024 16:46:00
Ambit temp [°C] humidity [rel%]	26.5 51
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	
Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 n-HT20 mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 n-HT20 mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

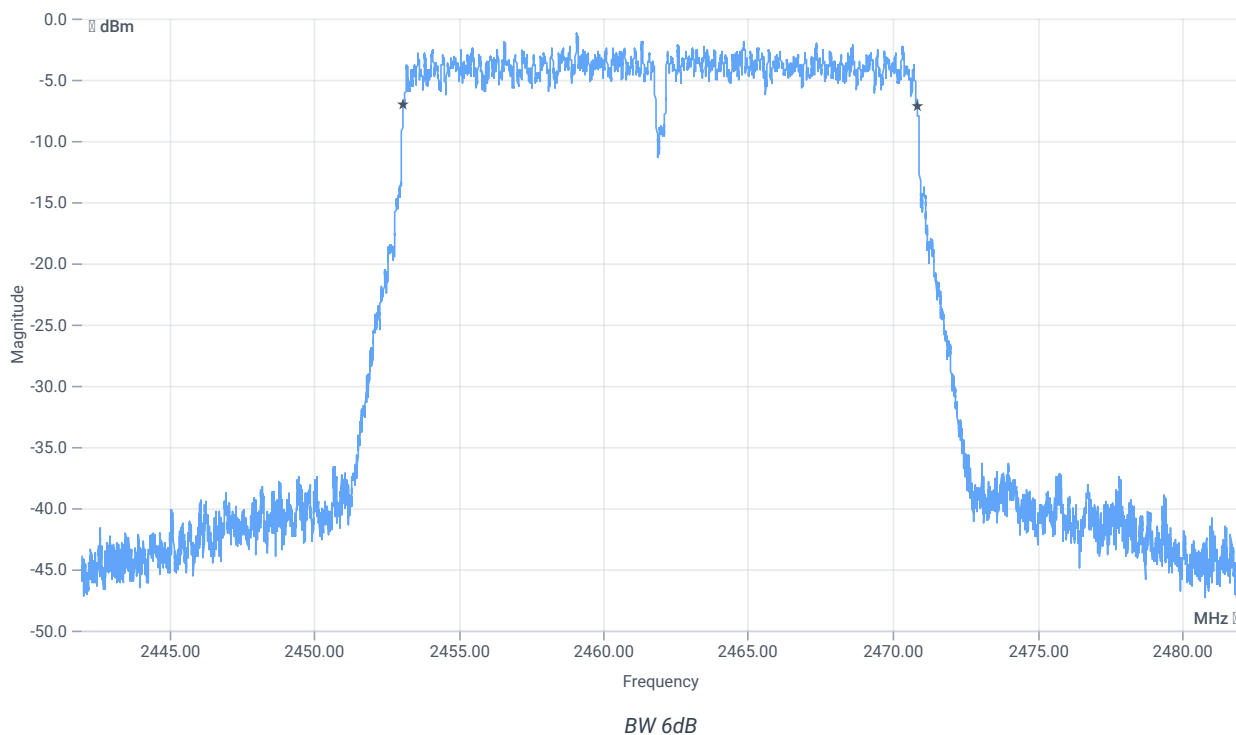
Test at TX 2462 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	9.26	dBm	INFO
Ref. frequency	---	---	2463.500	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	14.26 11.1 20
Start [MHz] Stop [MHz]	2442.000 2482.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS bandwidth (6dB)	500	---	17776	kHz	PASS

Verdict

PASS

NA # Peak output power 3MHz/3MHz ~ WLAN2G4 n-HT20 mode

References

TC start	10.07.2024 16:45:28
Ambit temp [°C] humidity [rel%]	26.5 51
System version	5.0.7.0
Standard Version	NA NI
Method	
Description	Peak OP 3MHz/3MHz WLAN2G4 n-HT20 mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 n-HT20 mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

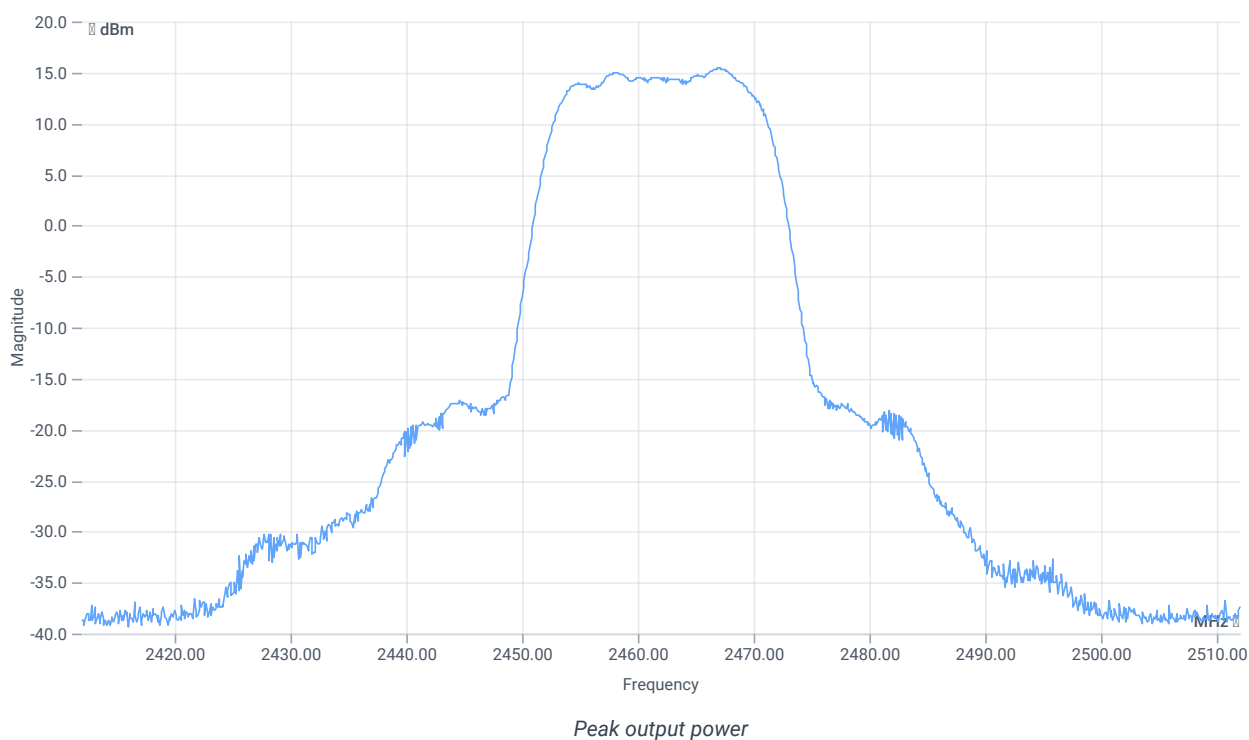
Test at TX 2462 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	9.19	dBm	INFO
Ref. frequency	---	---	2460.700	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	19.19 11.1 25
Start [MHz] Stop [MHz]	2412.000 2512.000
RBW [MHz] VBW [MHz]	3.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1000 10 1001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	---	15.39	dBm	INFO
Peak power	---	---	34.593938	mW	INFO
Frequency at peak	---	---	2467.09	MHz	INFO

Verdict

PASS

FCC 15.247 # Peak output power PM DTS ~ WLAN2G4 n-HT20 mode

References

TC start	10.07.2024 16:44:39
Ambit temp [°C] humidity [rel%]	26.5 51
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.3 PKPM1 Peak-reading Power Meter Method
Description	FCC 15.247 Peak output power PM DTS - WLAN2G4 n-HT20 mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0
Power sensor,Keysight Technologies,U2021XA,MY59190010,A.04.06

Test Parameter

Technology to test	WLAN2G4 n-HT20 mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	True Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
Full path type	EUT_PM_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.PM/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00010000:00000001

Test at TX 2437 MHz

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	30	21.31	dBm	PASS

Verdict

PASS

FCC 15.247 # TX spurious conducted 20dBc ~ WLAN2G4 n-HT20 mode

References

TC start	10.07.2024 16:31:02
Ambit temp [°C] humidity [rel%]	26.3 52
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
Description	FCC 15.247 TX Emissions cond. DTS DTS - WLAN2G4 nHT20_mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

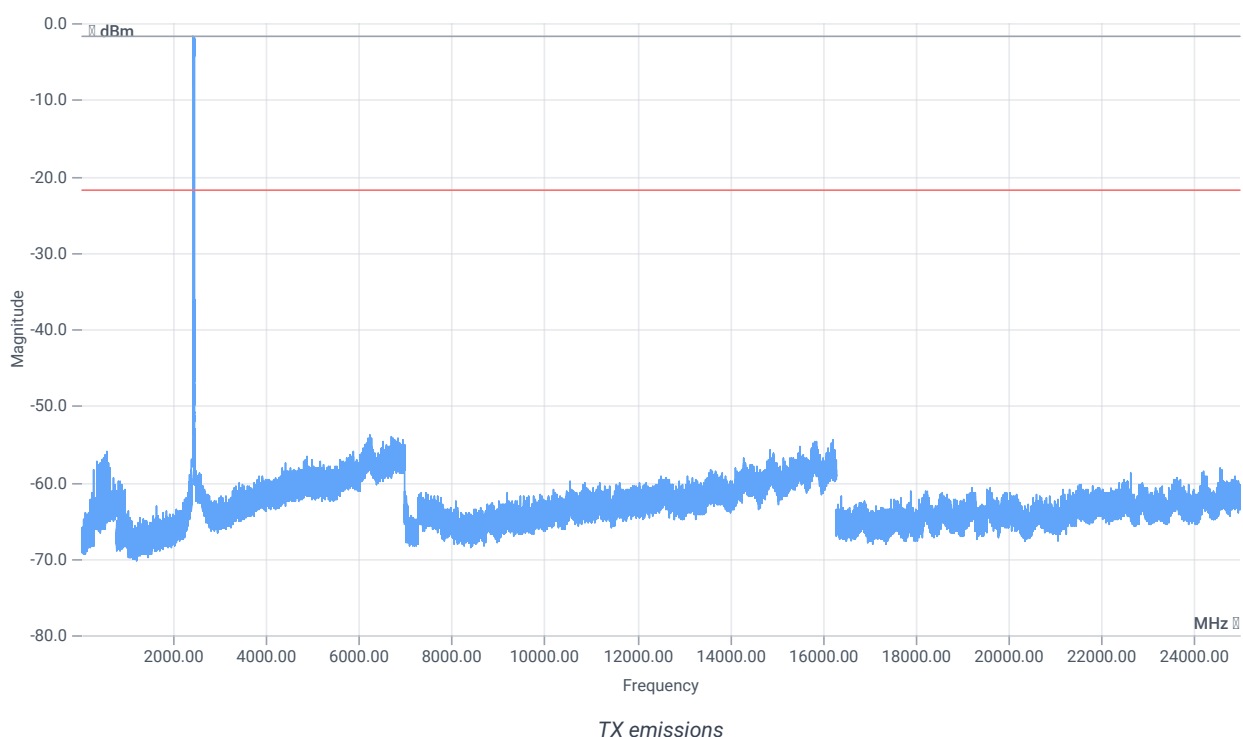
Test Parameter

Technology to test	WLAN2G4 n-HT20 mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	True Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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 2437 MHz

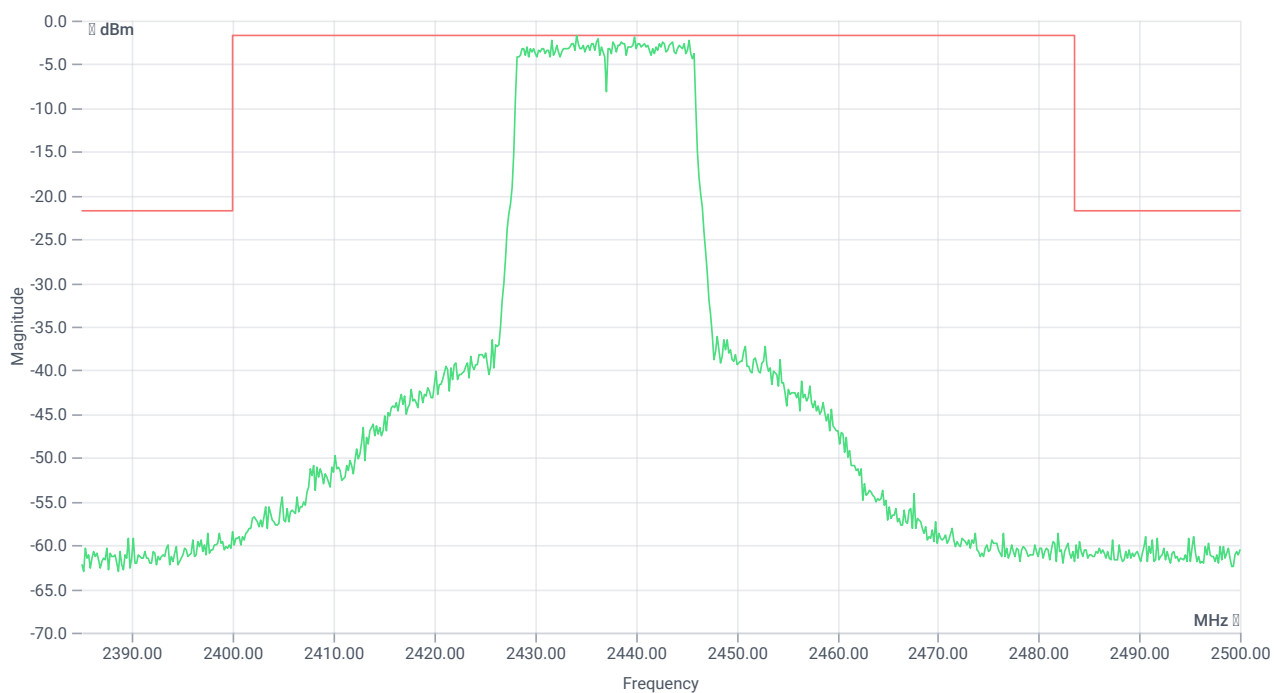
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	9.16	dBm	INFO
Ref. frequency	---	---	2439.000	MHz	INFO



READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	9.16 23.17 5
Start [MHz] Stop [MHz]	24780.000 25000.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	200 25 1501 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2434.17 MHz	---	---	-1.79	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 6225.5 MHz	0	---	32.13	dB	INFO

Verdict

PASS

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 n-HT20 mode

References

TC start	10.07.2024 16:30:23
Ambit temp [°C] humidity [rel%]	26.3 52
System version	5.0.7.0
Standard Version	FCC 15.247, ISED RSS247 NI
Method	
Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 n-HT20 mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 n-HT20 mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	True Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

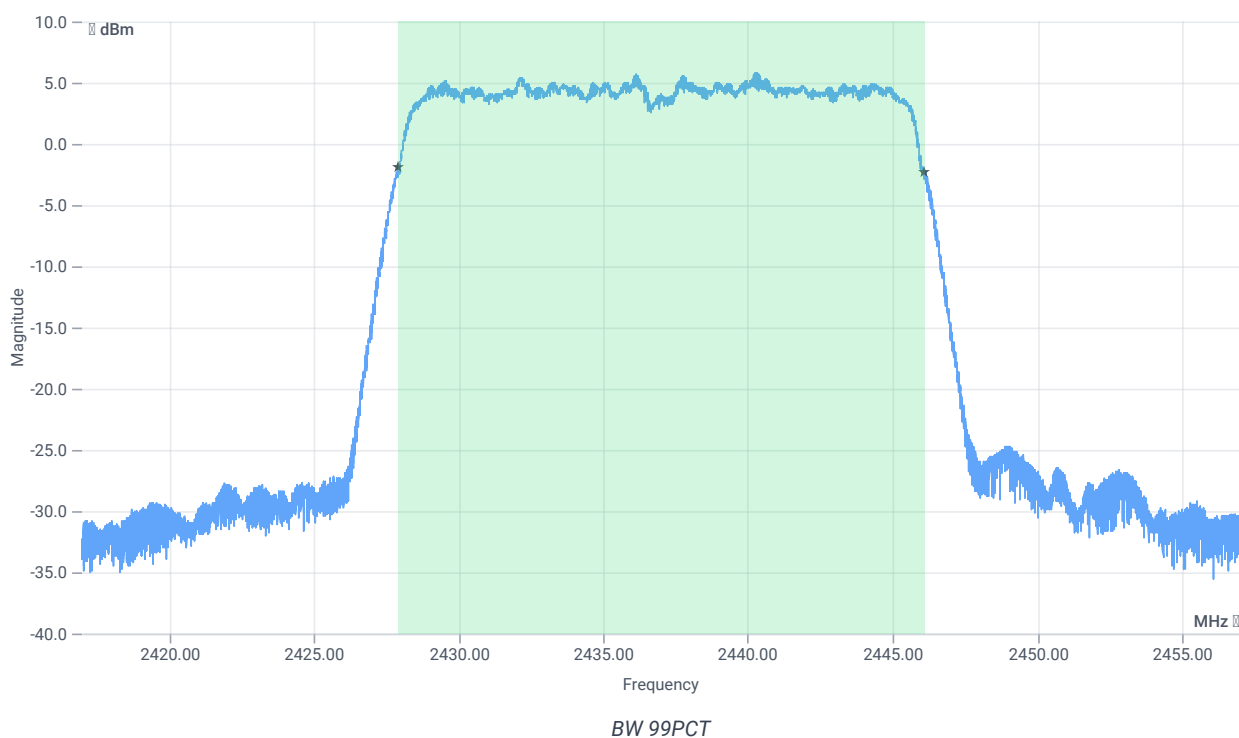
Test at TX 2437 MHz

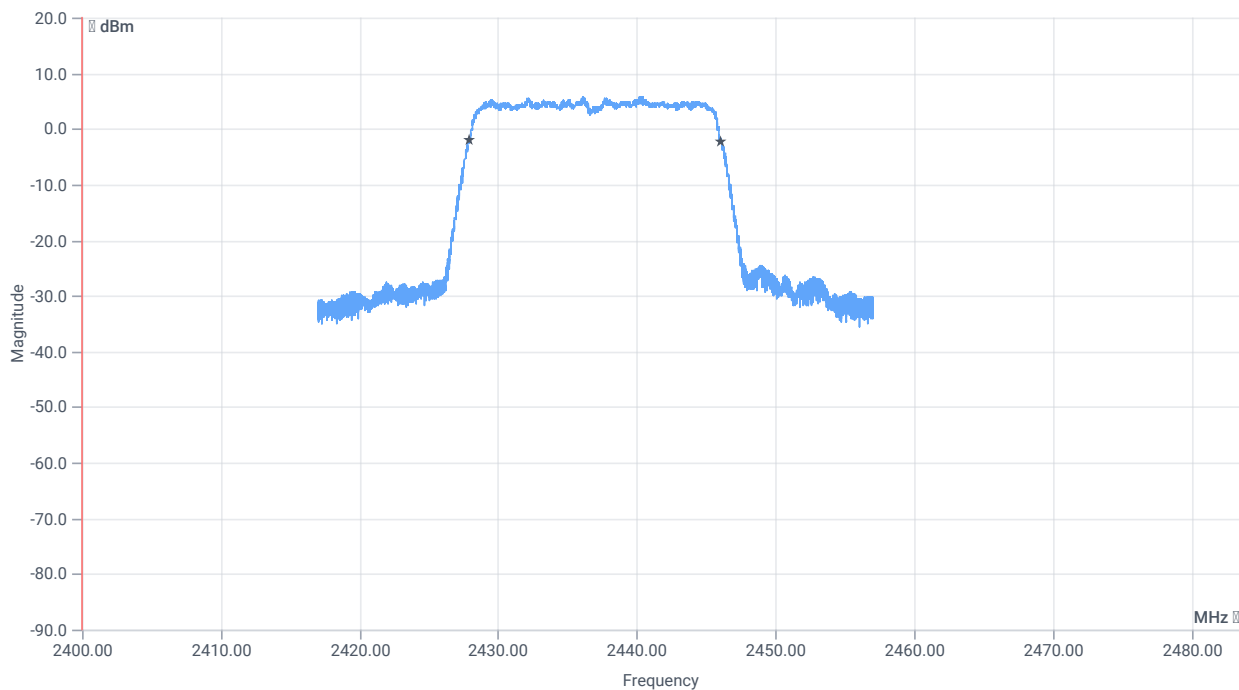
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	9.18	dBm	INFO
Ref. frequency	---	---	2435.000	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	14.18 11.06 20
Start [MHz] Stop [MHz]	2417.000 2457.000
RBW [MHz] VBW [MHz]	0.500000 2.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

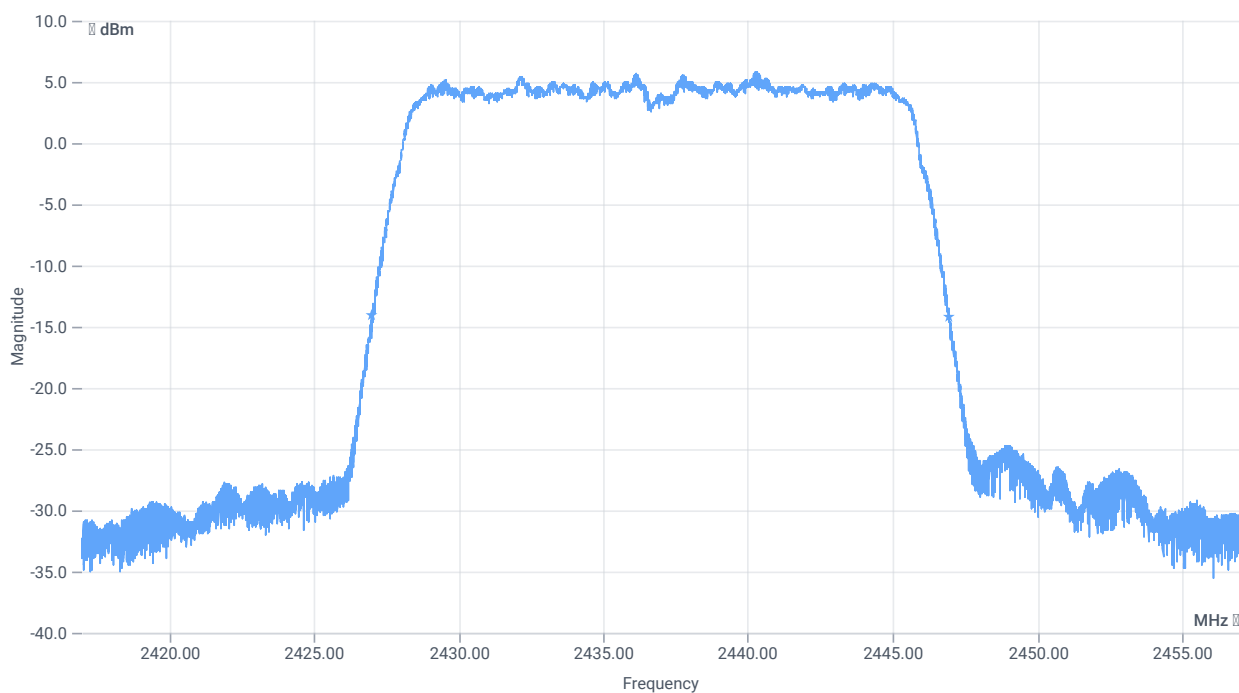




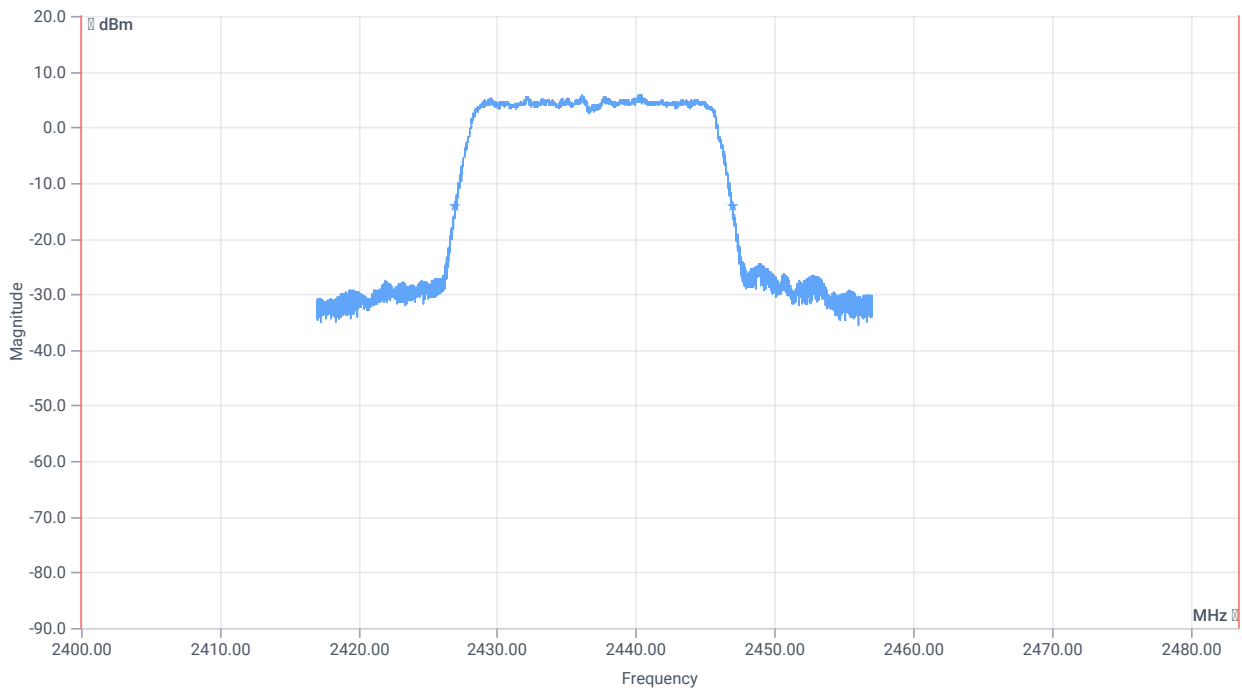
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	18126.000	kHz	INFO
T1 99%	2400.000000	---	2427.9369	MHz	PASS
T2 99%	---	2483.500000	2446.0631	MHz	PASS



BW 20dB



BW within band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	19952	kHz	INFO
T1 20dB	2400.000000	---	2427.0080	MHz	PASS
T2 20dB	---	2483.500000	2446.9600	MHz	PASS

Verdict

PASS

FCC 15.247 # Peak psd DTS ~ WLAN2G4 n-HT20 mode

References

TC start	10.07.2024 16:29:41
Ambit temp [°C] humidity [rel%]	26.3 52
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission
Description	FCC 15.247 Peak psd DTS - WLAN2G4 nHT20_mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 n-HT20 mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	True Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

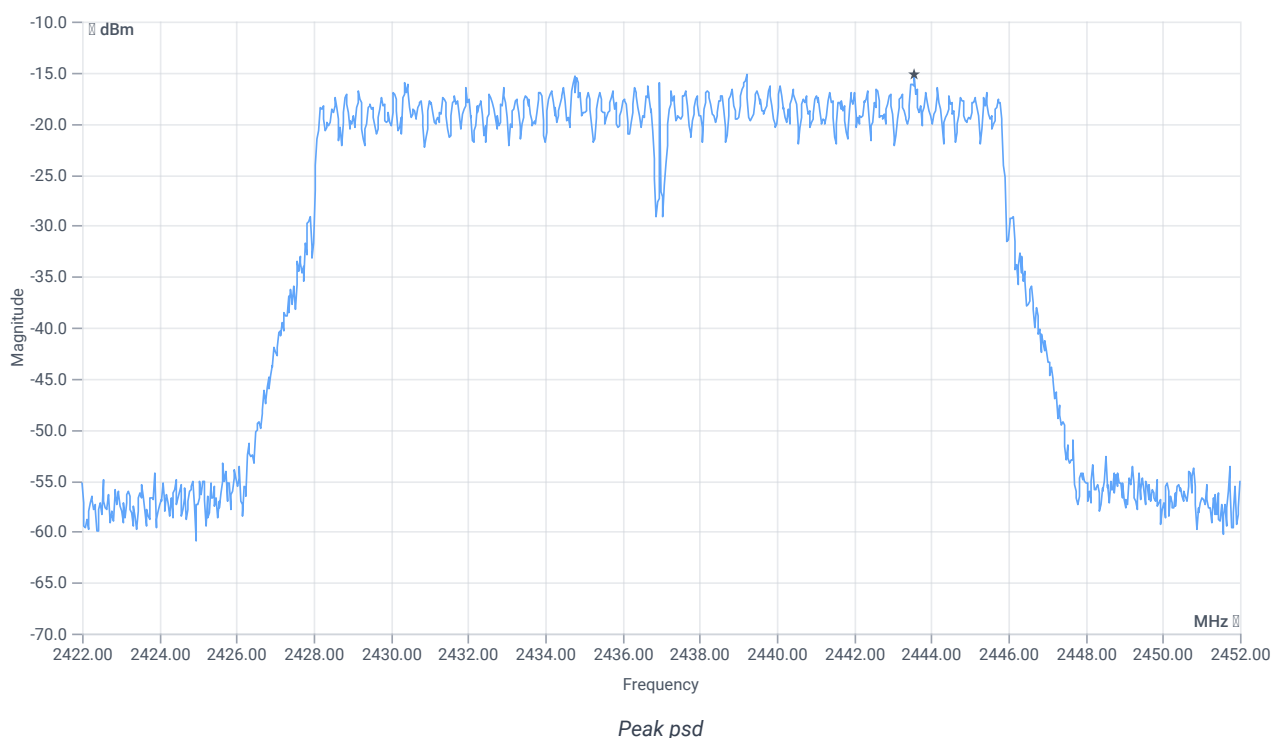
Test at TX 2437 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	9.26	dBm	INFO
Ref. frequency	---	---	2440.500	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	14.26 11.06 20
Start [MHz] Stop [MHz]	2422.000 2452.000
RBW [MHz] VBW [MHz]	0.003000 0.010000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1000 20 1001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak psd	---	8	-15.18	dBm/3KHz	PASS

Verdict

PASS

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 n-HT20 mode

References

TC start	10.07.2024 16:29:08
Ambit temp [°C] humidity [rel%]	26.3 52
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	
Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 n-HT20 mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 n-HT20 mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	True Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

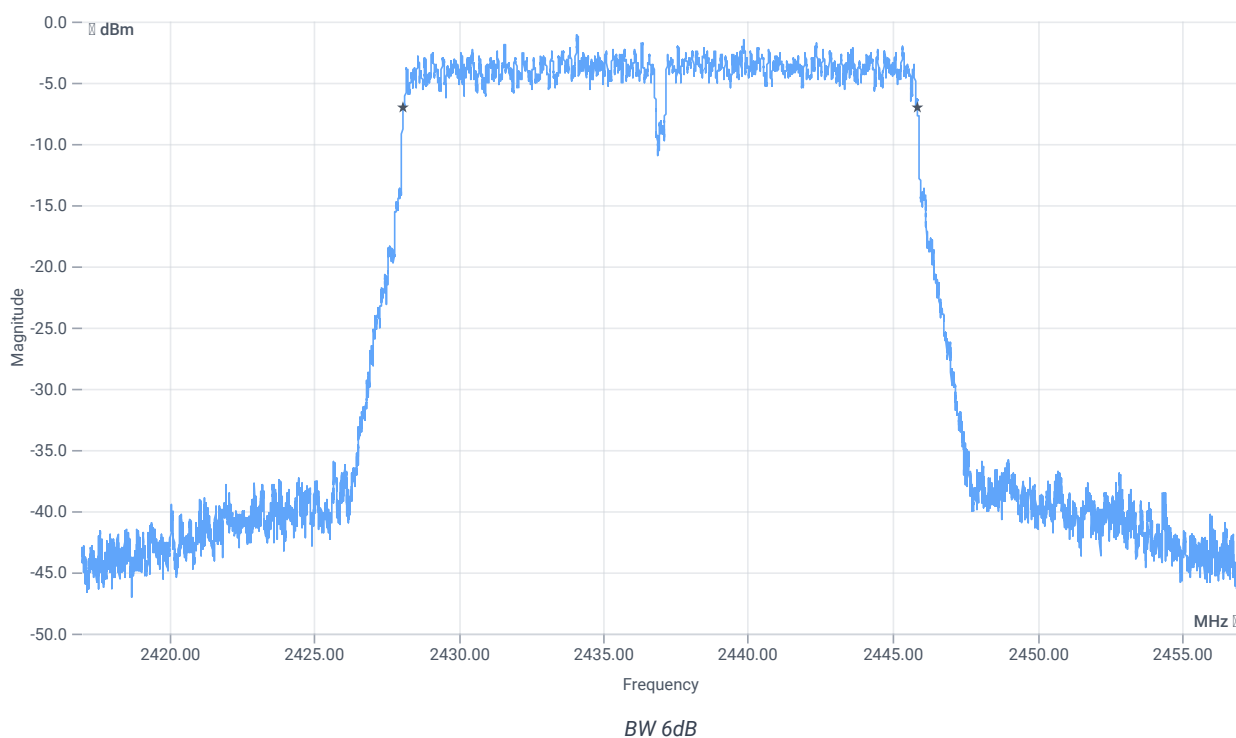
Test at TX 2437 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	9.00	dBm	INFO
Ref. frequency	---	---	2435.700	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	14.00 11.06 20
Start [MHz] Stop [MHz]	2417.000 2457.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS bandwidth (6dB)	500	---	17784	kHz	PASS

Verdict

PASS

NA # Peak output power 3MHz/3MHz ~ WLAN2G4 n-HT20 mode

References

TC start	10.07.2024 16:28:38
Ambit temp [°C] humidity [rel%]	26.3 52
System version	5.0.7.0
Standard Version	NA NI
Method	
Description	Peak OP 3MHz/3MHz WLAN2G4 n-HT20 mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 n-HT20 mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	True Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

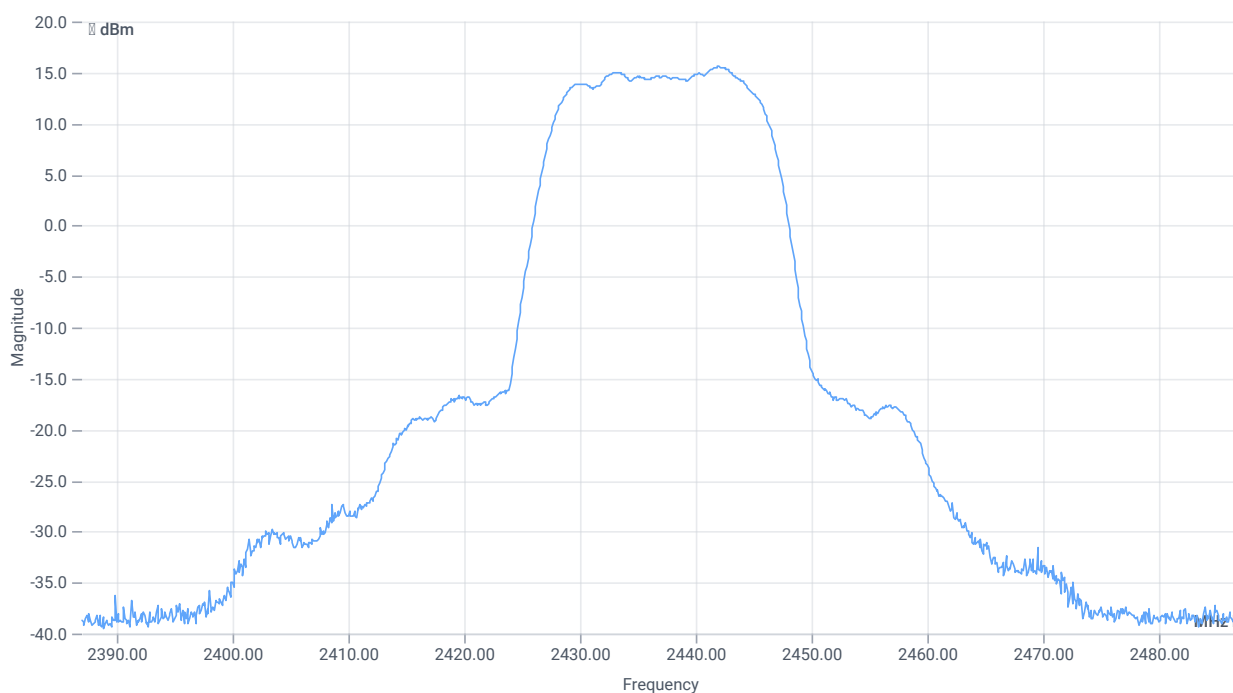
Test at TX 2437 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	9.03	dBm	INFO
Ref. frequency	---	---	2444.690	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	19.03 11.06 25
Start [MHz] Stop [MHz]	2387.000 2487.000
RBW [MHz] VBW [MHz]	3.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1000 10 1001 SWE



Peak output power

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	---	15.54	dBm	INFO
Peak power	---	---	35.809644	mW	INFO
Frequency at peak	---	---	2441.9	MHz	INFO

Verdict

PASS

FCC 15.247 # Peak output power PM DTS ~ WLAN2G4 n-HT20 mode

References

TC start	10.07.2024 16:15:38
Ambit temp [°C] humidity [rel%]	26.0 53
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.3 PKPM1 Peak-reading Power Meter Method
Description	FCC 15.247 Peak output power PM DTS - WLAN2G4 n-HT20 mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0
Power sensor,Keysight Technologies,U2021XA,MY59190010,A.04.06

Test Parameter

Technology to test	WLAN2G4 n-HT20 mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
Full path type	EUT_PM_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.PM/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00010000:00000001

Test at TX 2412 MHz

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	30	21.37	dBm	PASS

Verdict

PASS

FCC 15.247 # TX spurious conducted 20dBc ~ WLAN2G4 n-HT20 mode

References

TC start	10.07.2024 16:02:02
Ambit temp [°C] humidity [rel%]	25.6 54
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
Description	FCC 15.247 TX Emissions cond. DTS DTS - WLAN2G4 nHT20_mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

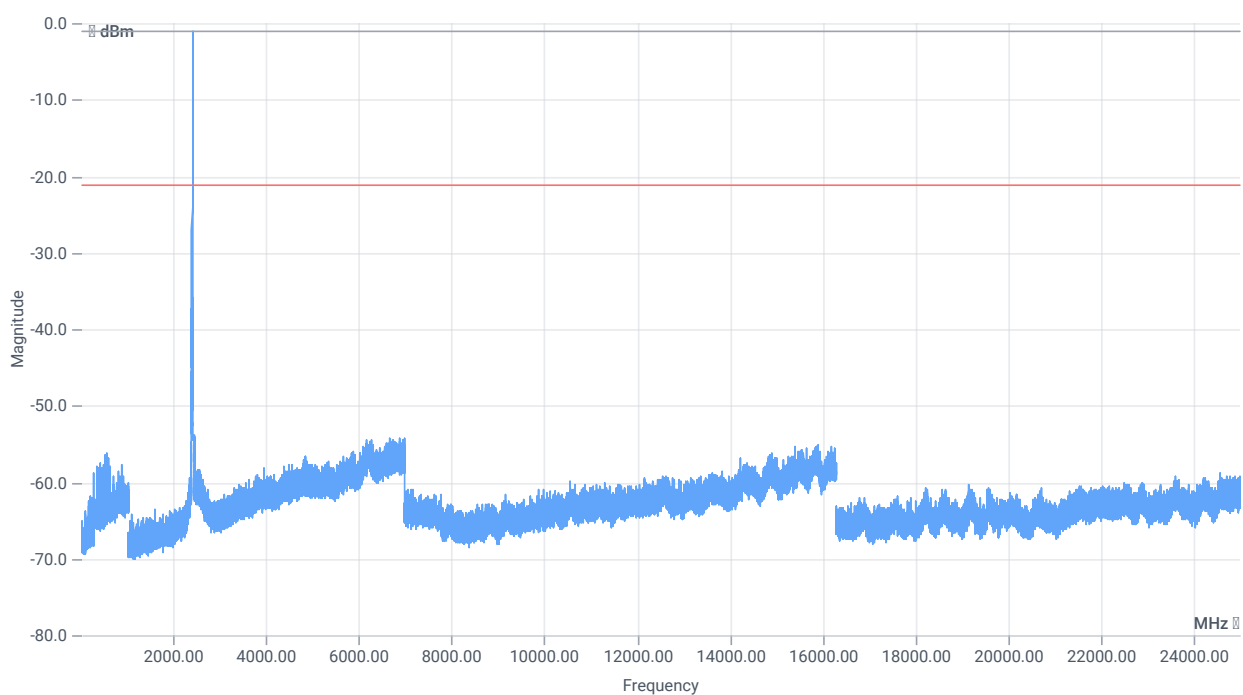
Test Parameter

Technology to test	WLAN2G4 n-HT20 mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MPSIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

Test at TX 2412 MHz

RESULT: Reference power cond.

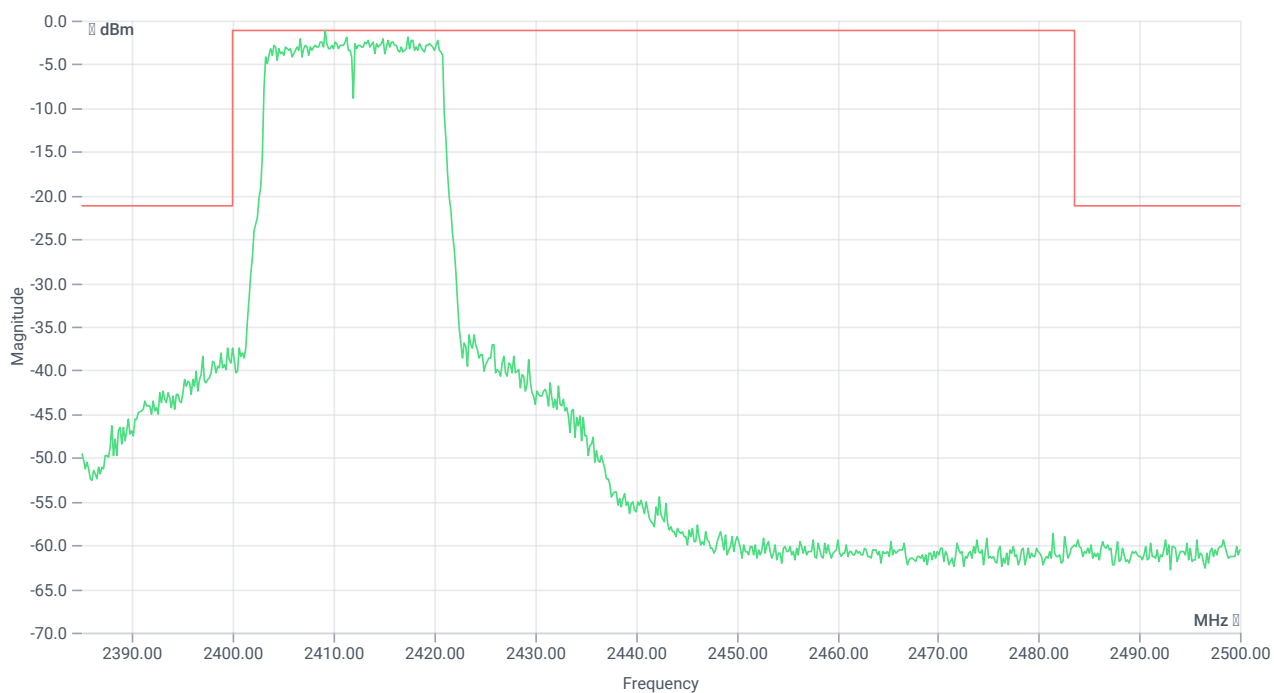
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	9.31	dBm	INFO
Ref. frequency	---	---	2415.500	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	9.31 23.17 5
Start [MHz] Stop [MHz]	24780.000 25000.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	200 25 1501 SWE



TX emissions band zoomed

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2409.17 MHz	---	---	-1.18	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 2399.5 MHz	0	---	16.37	dB	INFO

Verdict

PASS

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 n-HT20 mode

References

TC start	10.07.2024 16:01:22
Ambit temp [°C] humidity [rel%]	25.5 54
System version	5.0.7.0
Standard Version	FCC 15.247, ISED RSS247 NI
Method	
Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 n-HT20 mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 n-HT20 mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

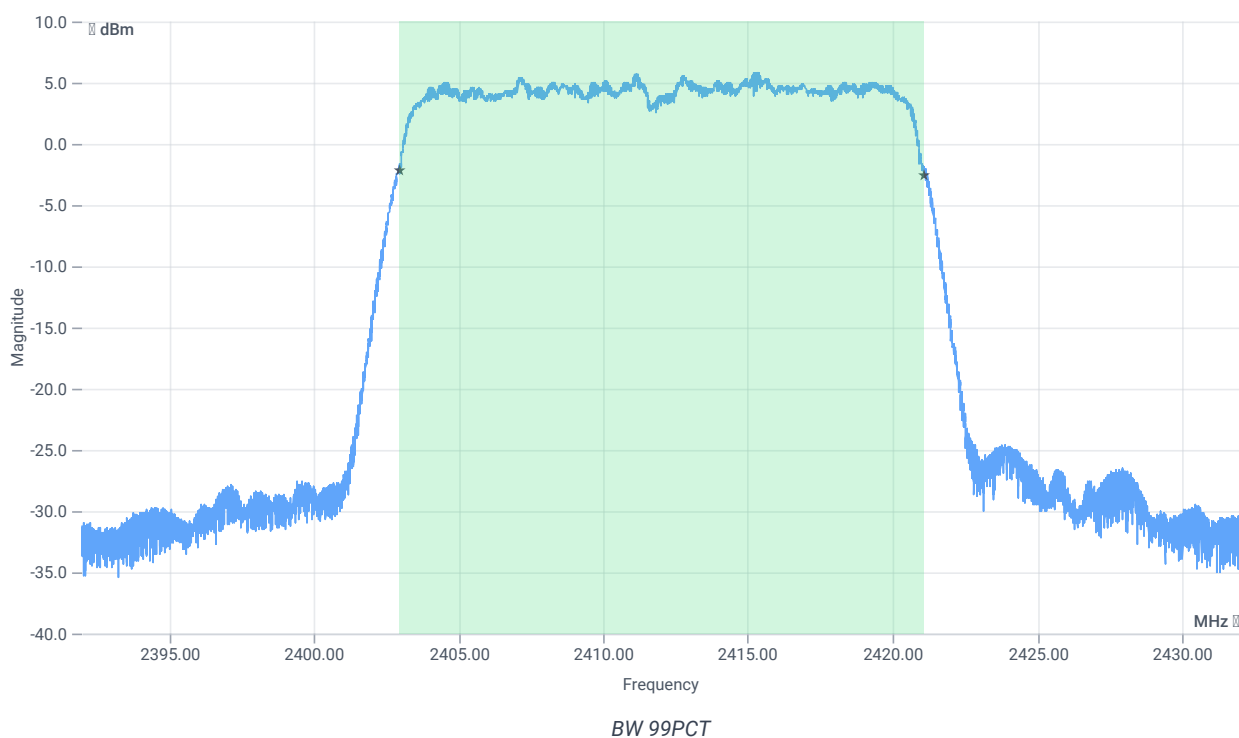
Test at TX 2412 MHz

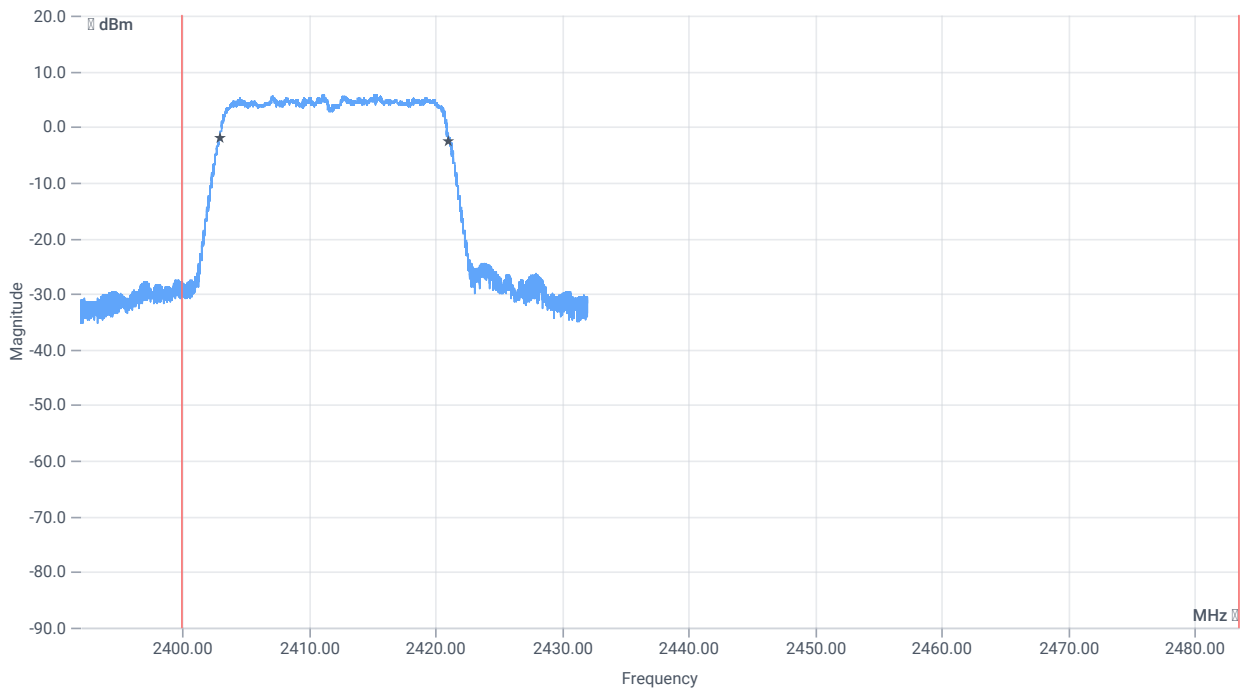
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	9.22	dBm	INFO
Ref. frequency	---	---	2413.700	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	14.22 10.98 20
Start [MHz] Stop [MHz]	2392.000 2432.000
RBW [MHz] VBW [MHz]	0.500000 2.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

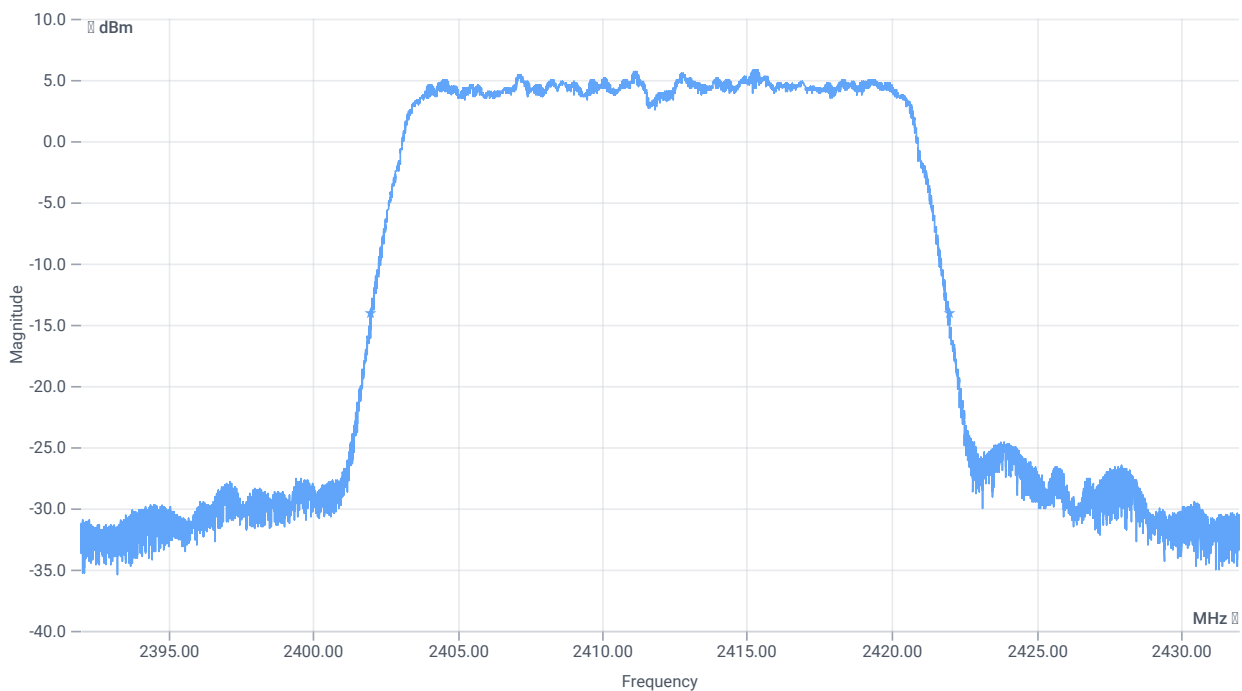




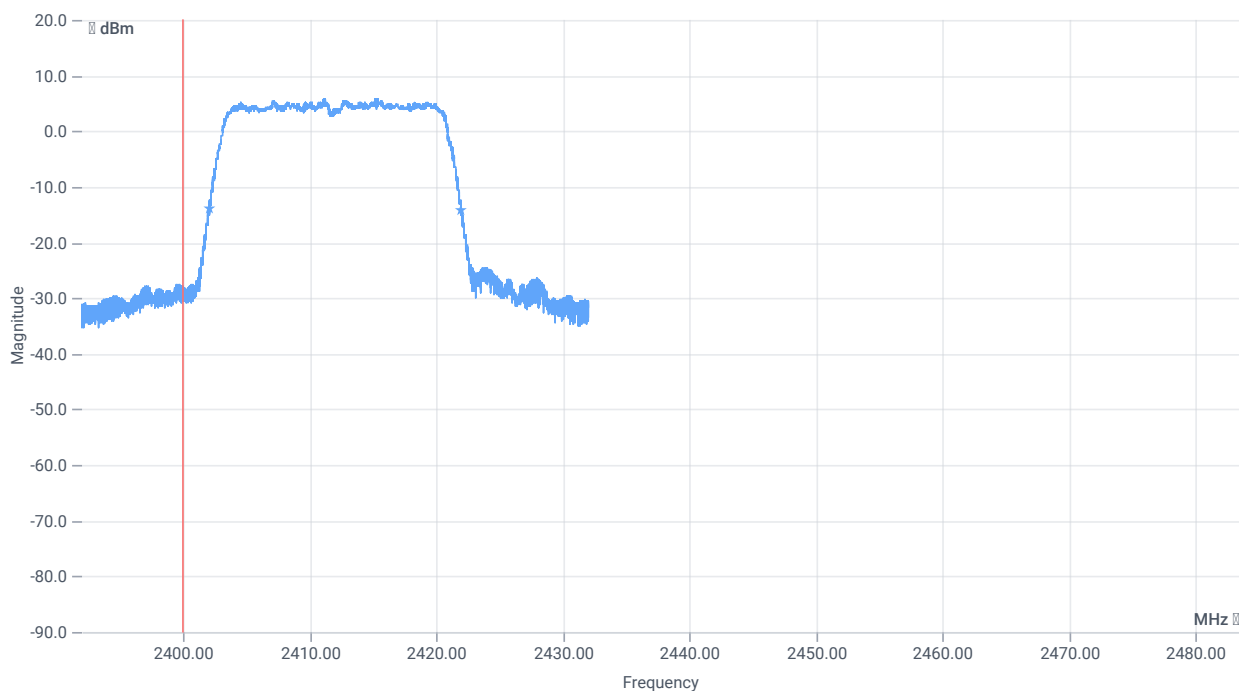
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	18114.000	kHz	INFO
T1 99%	2400.000000	---	2402.9569	MHz	PASS
T2 99%	---	2483.500000	2421.0711	MHz	PASS



BW 20dB



BW within band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	19952	kHz	INFO
T1 20dB	2400.000000	---	2402.0200	MHz	PASS
T2 20dB	---	2483.500000	2421.9720	MHz	PASS

Verdict

PASS

FCC 15.247 # Peak psd DTS ~ WLAN2G4 n-HT20 mode

References

TC start	10.07.2024 16:00:41
Ambit temp [°C] humidity [rel%]	25.5 54
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission
Description	FCC 15.247 Peak psd DTS - WLAN2G4 nHT20_mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 n-HT20 mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

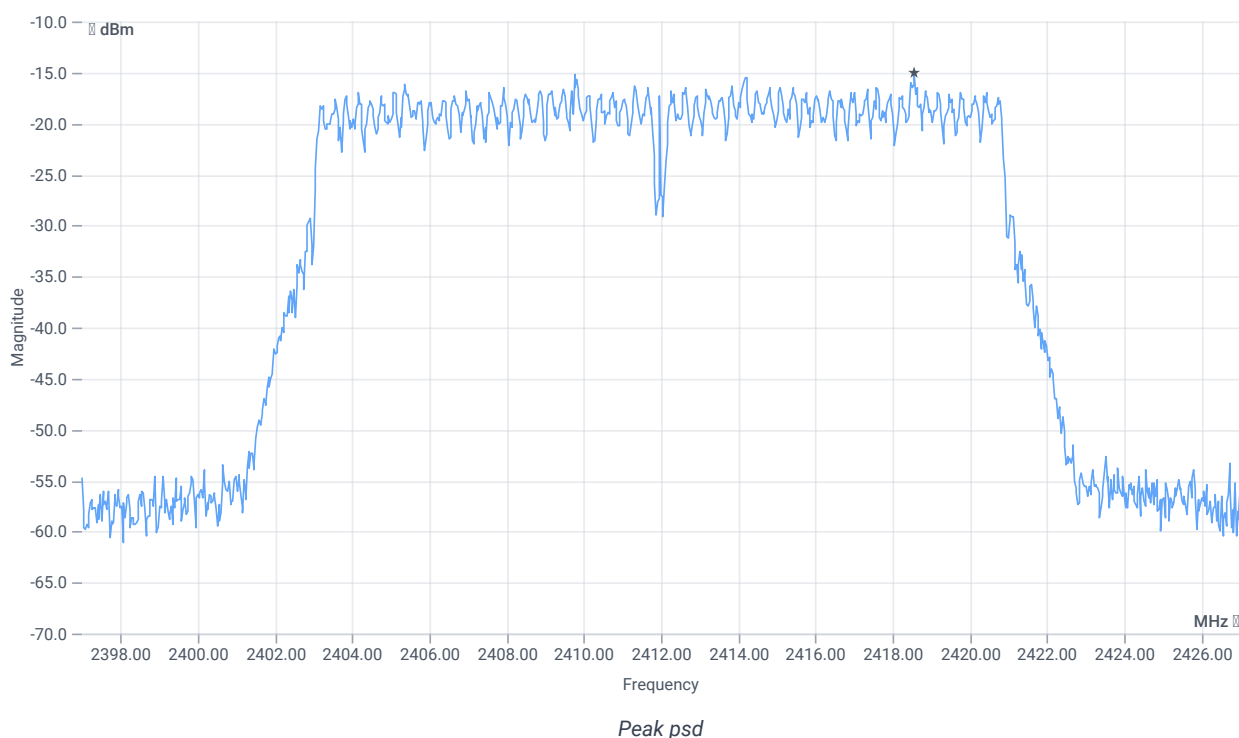
Test at TX 2412 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	9.14	dBm	INFO
Ref. frequency	---	---	2415.100	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	14.14 10.98 20
Start [MHz] Stop [MHz]	2397.000 2427.000
RBW [MHz] VBW [MHz]	0.003000 0.010000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1000 20 1001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak psd	---	8	-15.06	dBm/3KHz	PASS

Verdict

PASS

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 n-HT20 mode

References

TC start	10.07.2024 16:00:06
Ambit temp [°C] humidity [rel%]	25.5 54
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	
Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 n-HT20 mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 n-HT20 mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

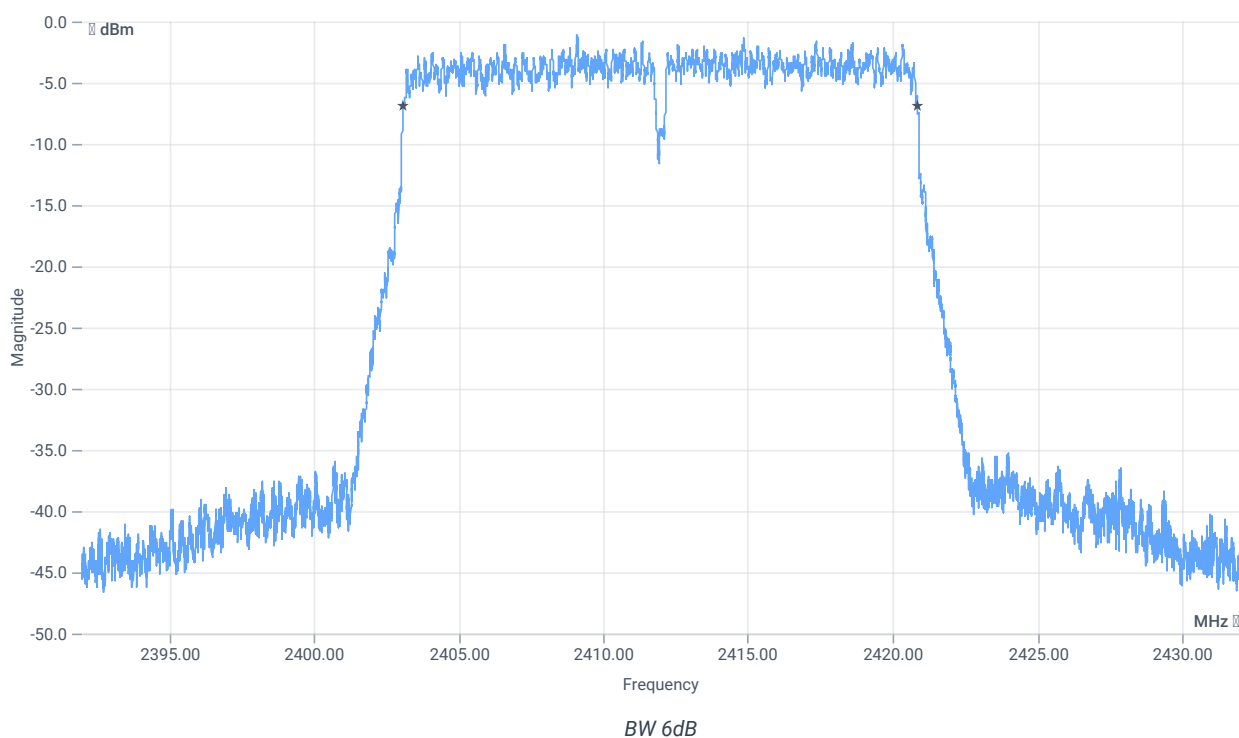
Test at TX 2412 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	9.32	dBm	INFO
Ref. frequency	---	---	2416.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	14.32 10.98 20
Start [MHz] Stop [MHz]	2392.000 2432.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS bandwidth (6dB)	500	---	17780	kHz	PASS

Verdict

PASS

NA # Peak output power 3MHz/3MHz ~ WLAN2G4 n-HT20 mode

References

TC start	10.07.2024 15:59:36
Ambit temp [°C] humidity [rel%]	25.5 54
System version	5.0.7.0
Standard Version	NA NI
Method	
Description	Peak OP 3MHz/3MHz WLAN2G4 n-HT20 mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 n-HT20 mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

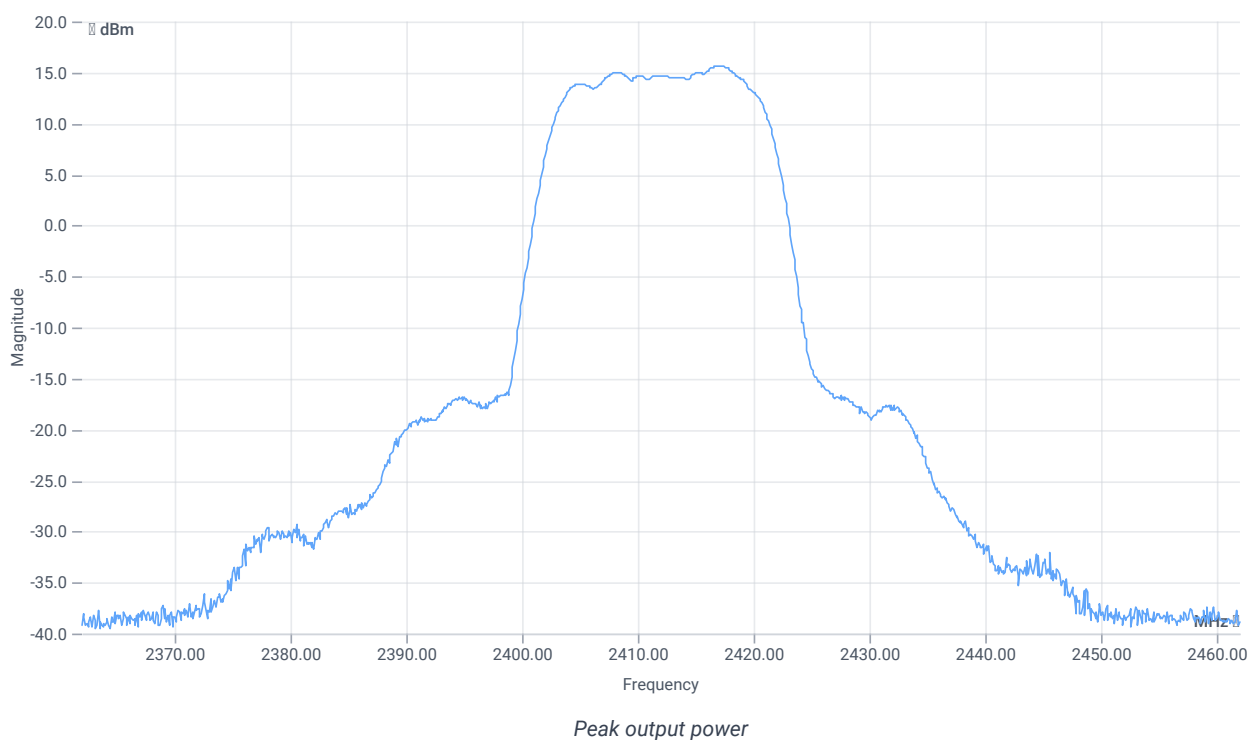
Test at TX 2412 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	9.43	dBm	INFO
Ref. frequency	---	---	2415.700	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	19.43 10.98 25
Start [MHz] Stop [MHz]	2362.000 2462.000
RBW [MHz] VBW [MHz]	3.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1000 10 1001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	---	15.69	dBm	INFO
Peak power	---	---	37.068072	mW	INFO
Frequency at peak	---	---	2417	MHz	INFO

Verdict

PASS

FCC 15.247 # Peak output power PM DTS ~ WLAN2G4 g mode

References

TC start	10.07.2024 15:48:53
Ambit temp [°C] humidity [rel%]	25.0 55
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.3 PKPM1 Peak-reading Power Meter Method
Description	FCC 15.247 Peak output power PM DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0
Power sensor,Keysight Technologies,U2021XA,MY59190010,A.04.06

Test Parameter

Technology to test	WLAN2G4 g mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
Full path type	EUT_PM_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.PM/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00010000:00000001

Test at TX 2462 MHz

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	30	21.6	dBm	PASS

Verdict

PASS

FCC 15.247 # TX spurious conducted 20dBc ~ WLAN2G4 g mode

References

TC start	10.07.2024 15:35:17
Ambit temp [°C] humidity [rel%]	24.2 57
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
Description	FCC 15.247 TX Emissions cond. DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

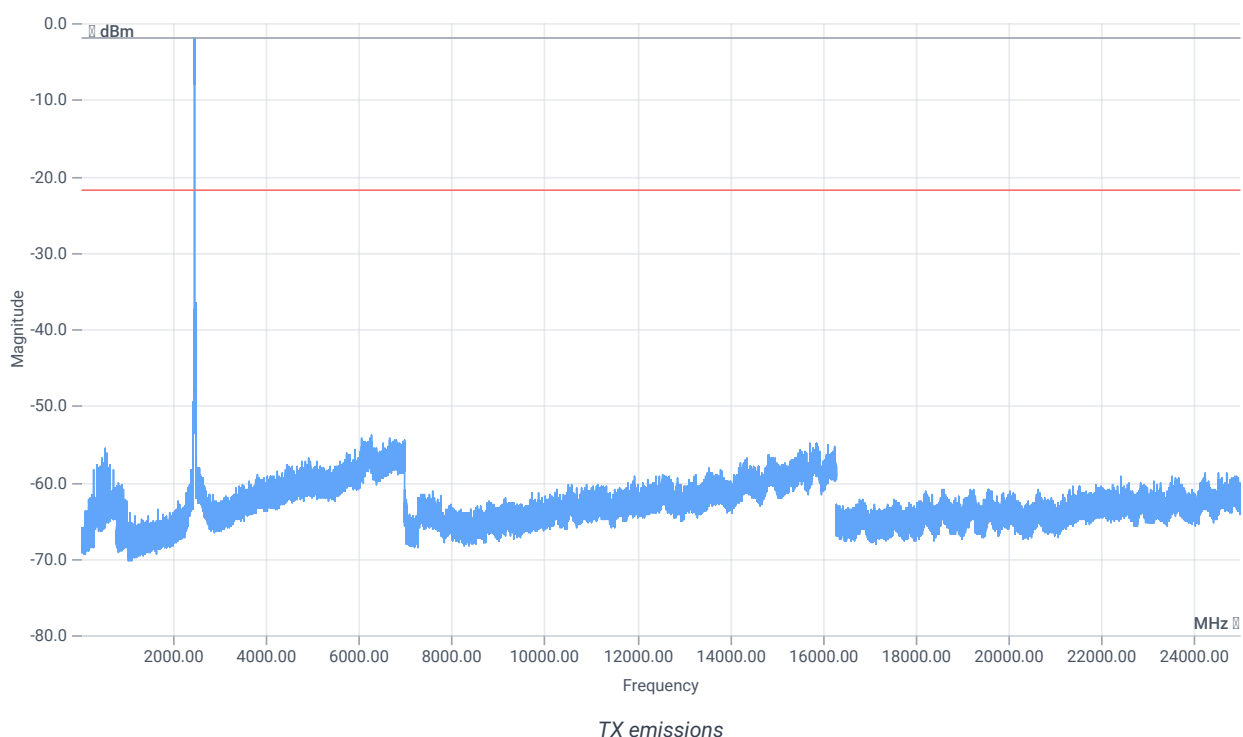
Test Parameter

Technology to test	WLAN2G4 g mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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 2462 MHz

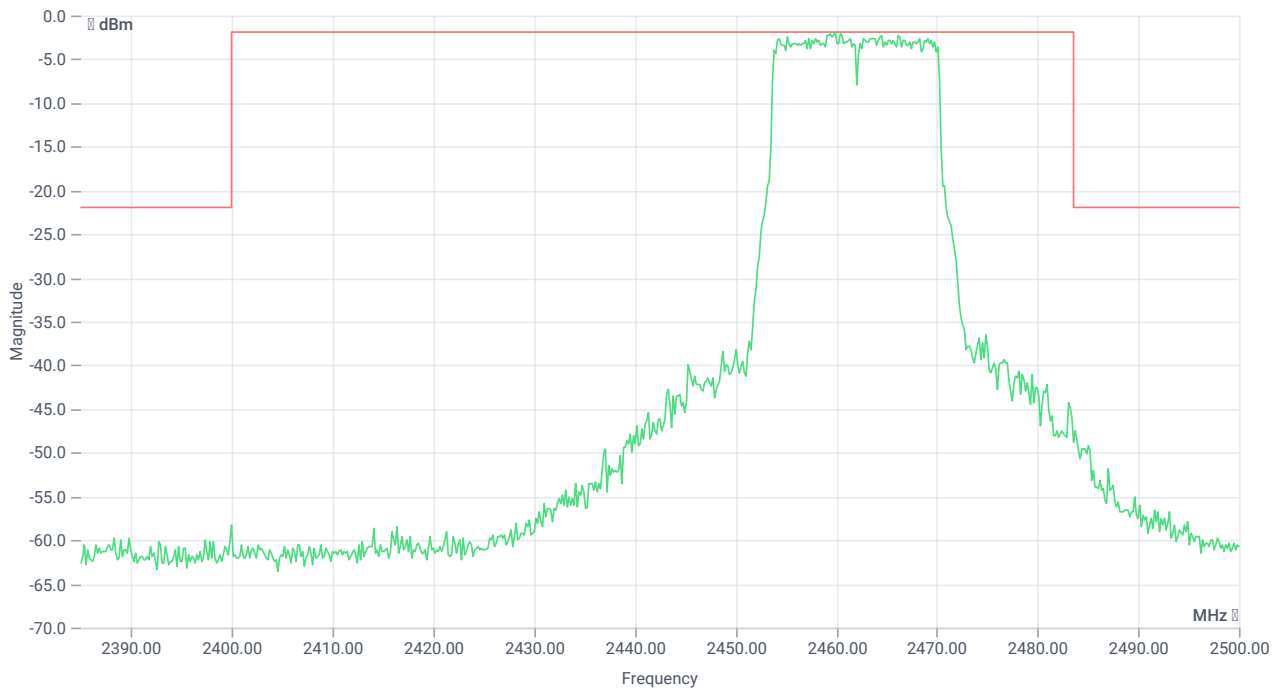
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	9.06	dBm	INFO
Ref. frequency	---	---	2458.900	MHz	INFO



READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	9.06 23.17 5
Start [MHz] Stop [MHz]	24780.000 25000.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	200 25 1501 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2459.83 MHz	---	---	-1.92	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 2483.667 MHz	0	---	25.59	dB	INFO

Verdict

PASS

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 g mode

References

TC start	10.07.2024 15:34:37
Ambit temp [°C] humidity [rel%]	24.2 57
System version	5.0.7.0
Standard Version	FCC 15.247, ISED RSS247 NI
Method	
Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 g mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

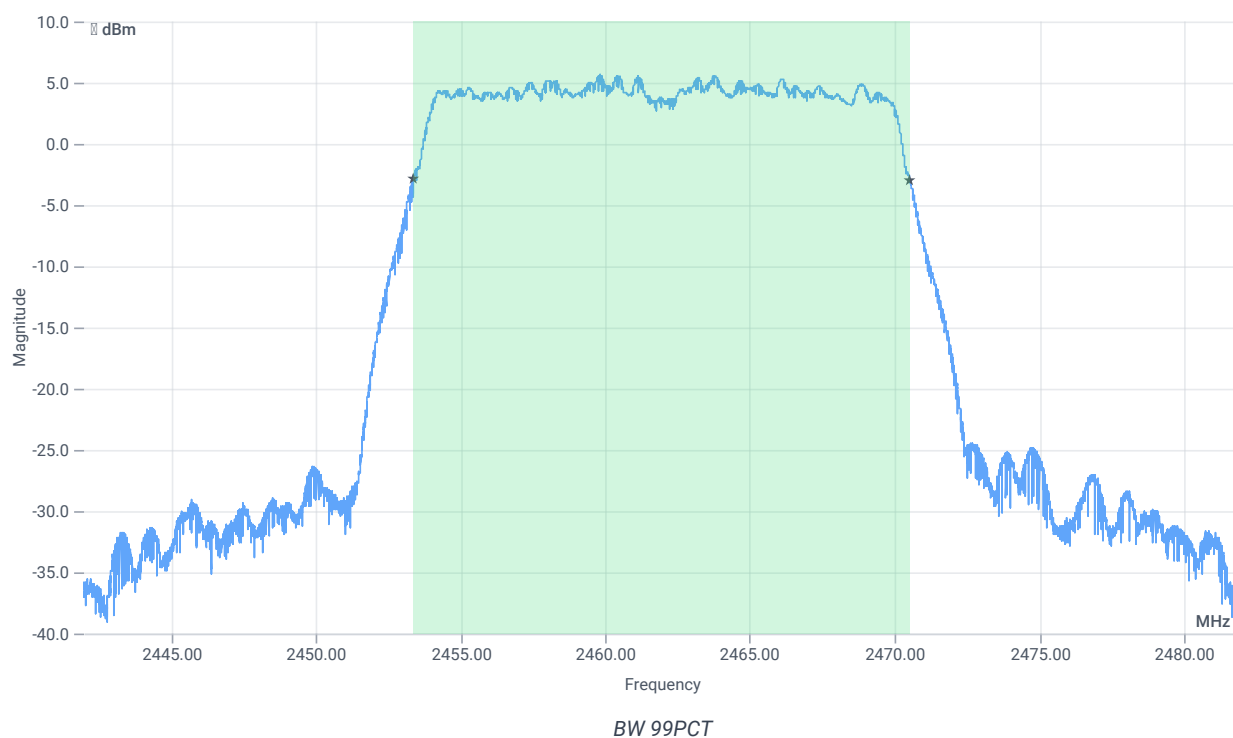
Test at TX 2462 MHz

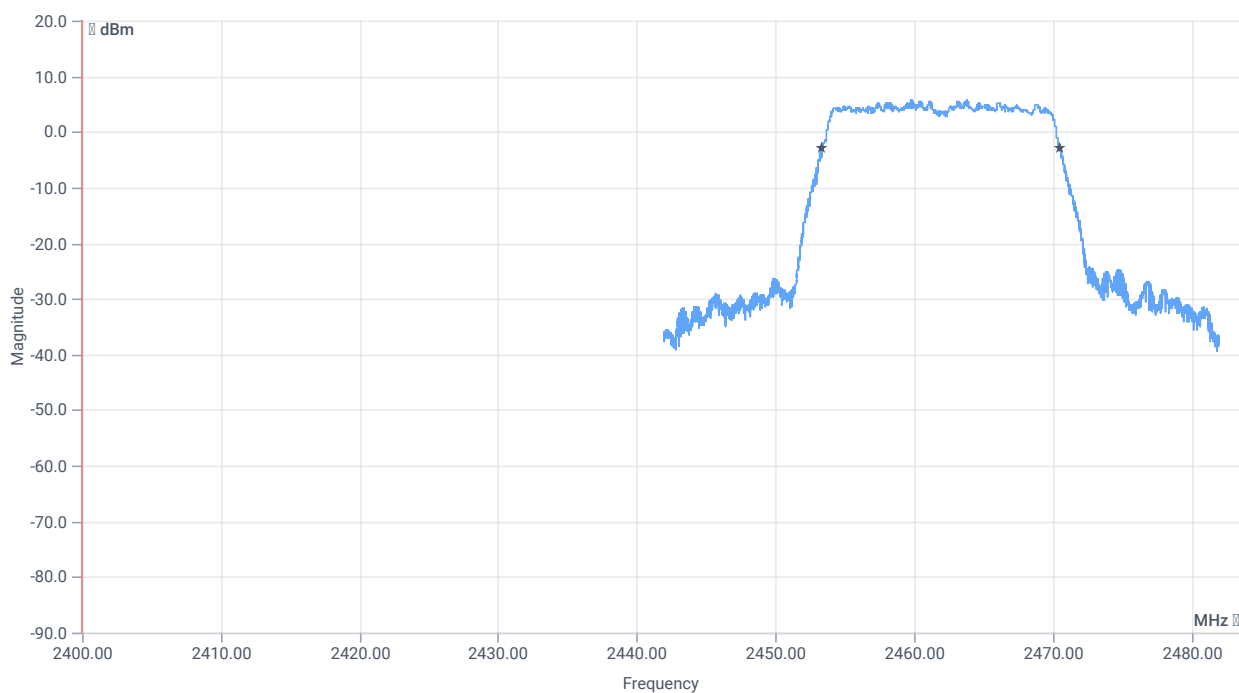
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	9.13	dBm	INFO
Ref. frequency	---	---	2463.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	14.13 11.1 20
Start [MHz] Stop [MHz]	2442.000 2482.000
RBW [MHz] VBW [MHz]	0.500000 2.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

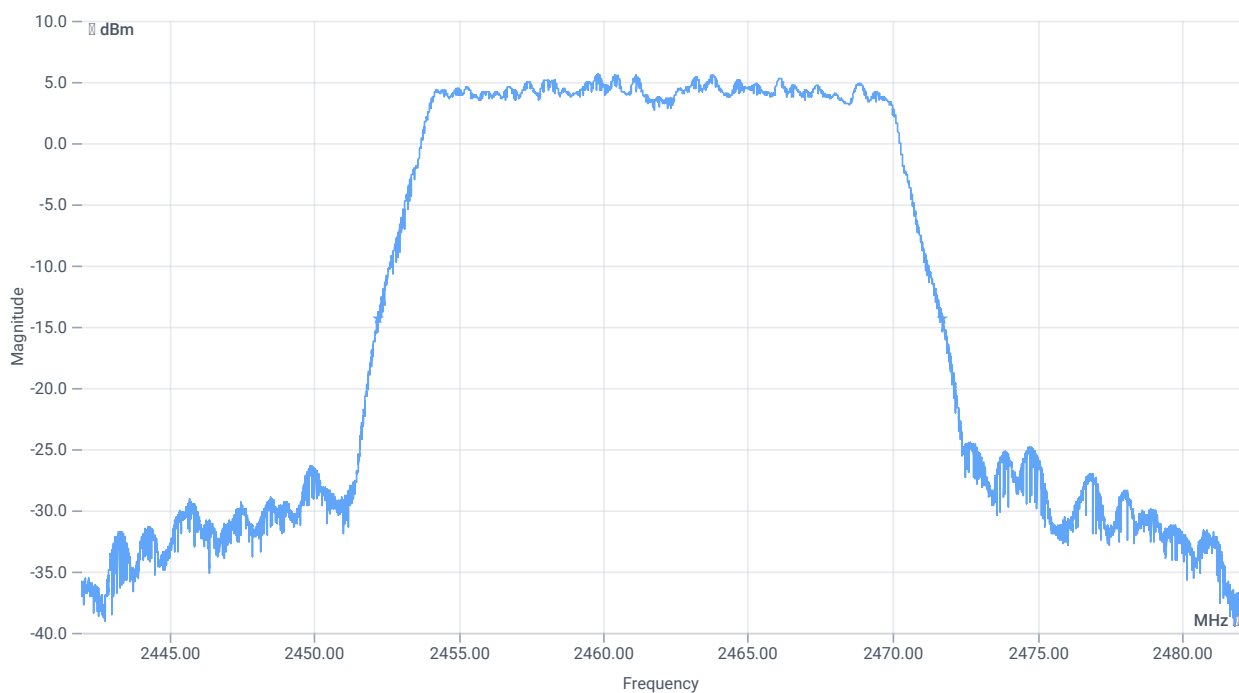




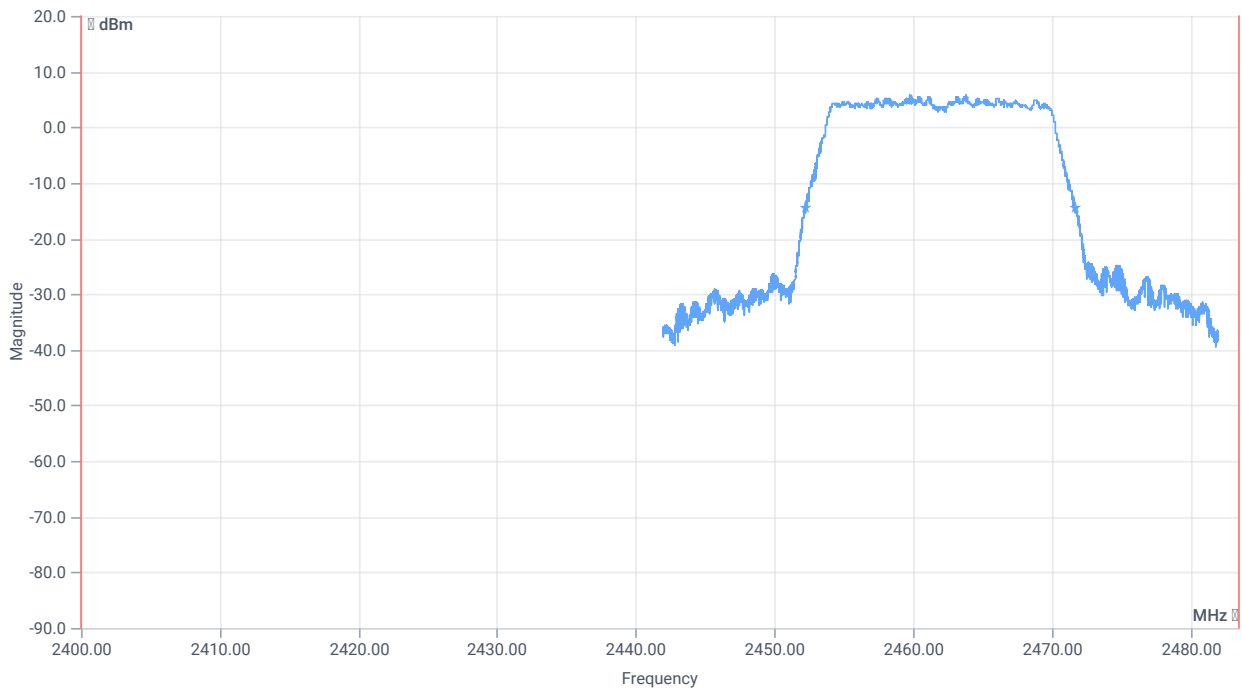
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	17154.000	kHz	INFO
T1 99%	2400.000000	---	2453.3689	MHz	PASS
T2 99%	---	2483.500000	2470.5231	MHz	PASS



BW 20dB



BW within band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	19512	kHz	INFO
T1 20dB	2400.000000	---	2452.2160	MHz	PASS
T2 20dB	---	2483.500000	2471.7280	MHz	PASS

Verdict

PASS

FCC 15.247 # Peak psd DTS ~ WLAN2G4 g mode

References

TC start	10.07.2024 15:33:56
Ambit temp [°C] humidity [rel%]	24.2 57
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission
Description	FCC 15.247 Peak psd DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 g mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

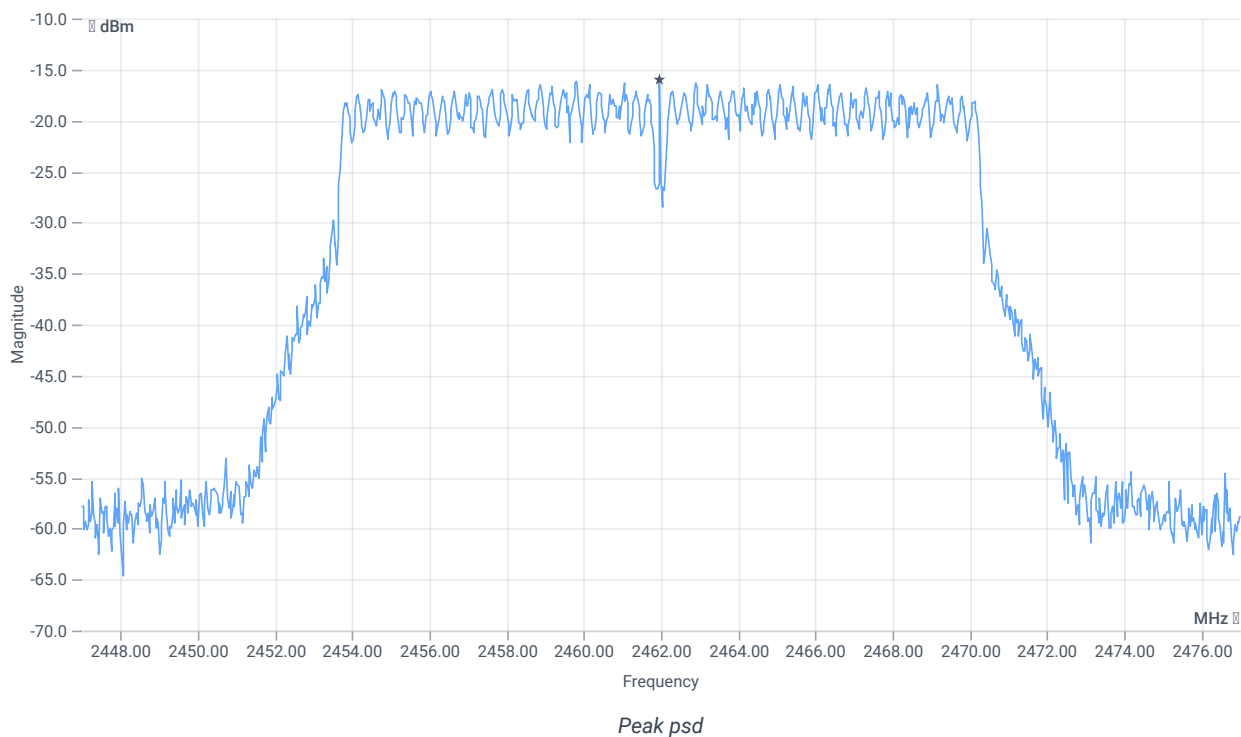
Test at TX 2462 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	9.18	dBm	INFO
Ref. frequency	---	---	2458.900	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	14.18 11.1 20
Start [MHz] Stop [MHz]	2447.000 2477.000
RBW [MHz] VBW [MHz]	0.003000 0.010000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1000 20 1001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak psd	---	8	-15.93	dBm/3KHz	PASS

Verdict

PASS

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 g mode

References

TC start	10.07.2024 15:33:22
Ambit temp [°C] humidity [rel%]	24.2 57
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	
Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 g mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

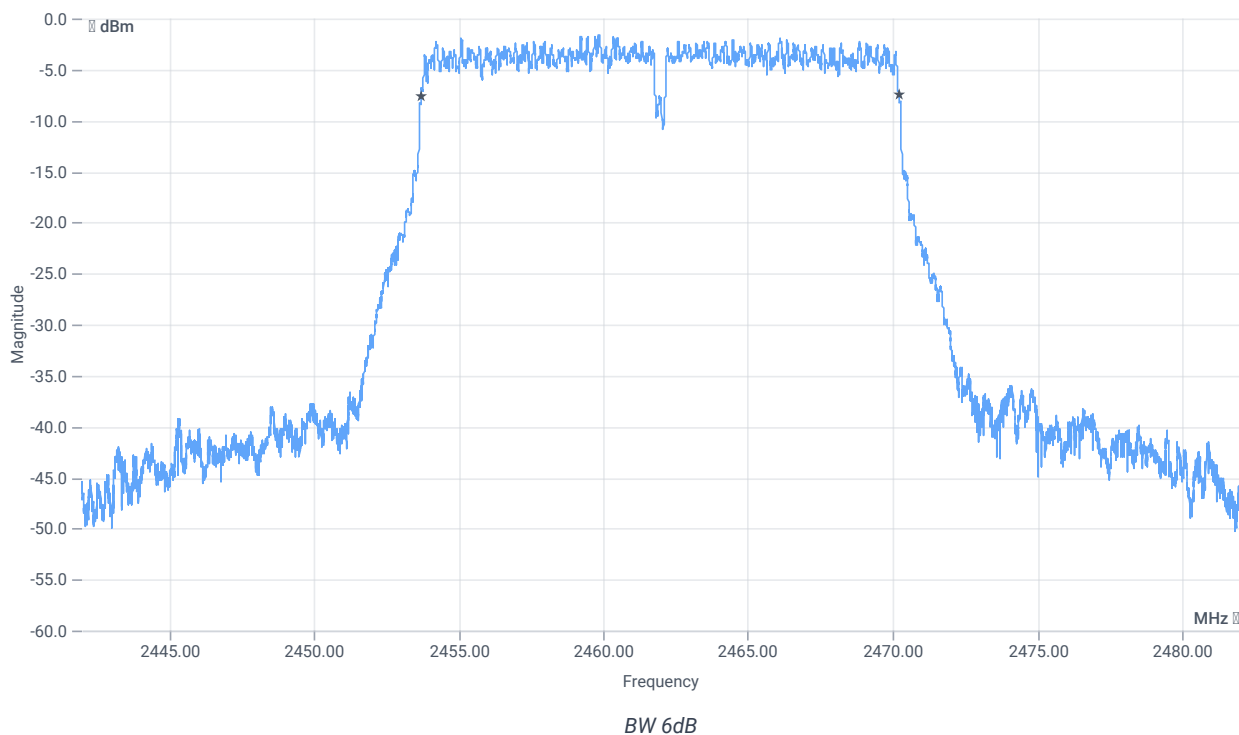
Test at TX 2462 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	8.79	dBm	INFO
Ref. frequency	---	---	2468.890	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	13.79 11.1 20
Start [MHz] Stop [MHz]	2442.000 2482.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS bandwidth (6dB)	500	---	16548	kHz	PASS

Verdict

PASS

NA # Peak output power 3MHz/3MHz ~ WLAN2G4 g mode

References

TC start	10.07.2024 15:32:52
Ambit temp [°C] humidity [rel%]	24.2 57
System version	5.0.7.0
Standard Version	NA NI
Method	
Description	Peak OP 3MHz/3MHz WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 g mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

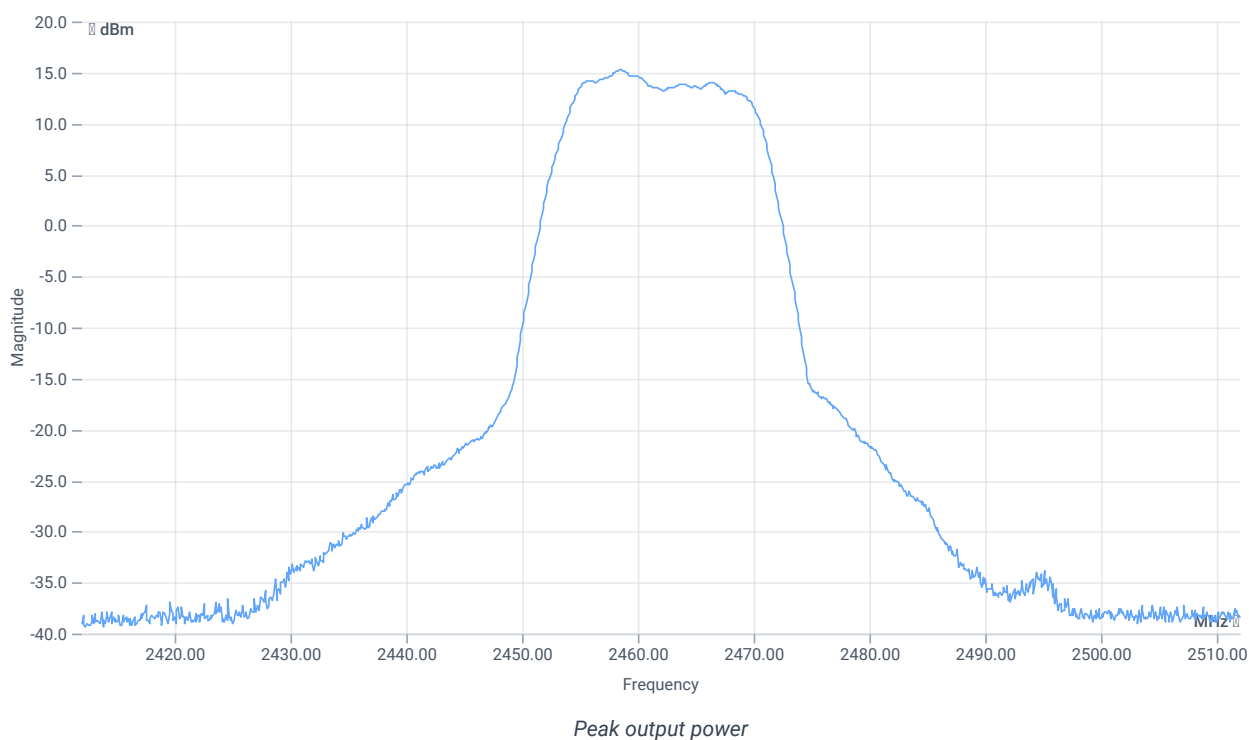
Test at TX 2462 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	9.29	dBm	INFO
Ref. frequency	---	---	2463.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	19.29 11.1 25
Start [MHz] Stop [MHz]	2412.000 2512.000
RBW [MHz] VBW [MHz]	3.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1000 10 1001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	---	15.26	dBm	INFO
Peak power	---	---	33.573761	mW	INFO
Frequency at peak	---	---	2458.5	MHz	INFO

Verdict

PASS

FCC 15.247 # Peak output power PM DTS ~ WLAN2G4 g mode

References

TC start	12.07.2024 10:16:03
Ambit temp [°C] humidity [rel%]	24.7 60
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.3 PKPM1 Peak-reading Power Meter Method
Description	FCC 15.247 Peak output power PM DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0
Power sensor,Keysight Technologies,U2021XA,MY59190010,A.04.06

Test Parameter

Technology to test	WLAN2G4 g mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	True Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
Full path type	EUT_PM_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.PM/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00010000:00000001

Test at TX 2437 MHz

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	30	20.71	dBm	PASS

Verdict

PASS

FCC 15.247 # TX spurious conducted 20dBc ~ WLAN2G4 g mode

References

TC start	12.07.2024 10:02:31
Ambit temp [°C] humidity [rel%]	24.5 61
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
Description	FCC 15.247 TX Emissions cond. DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

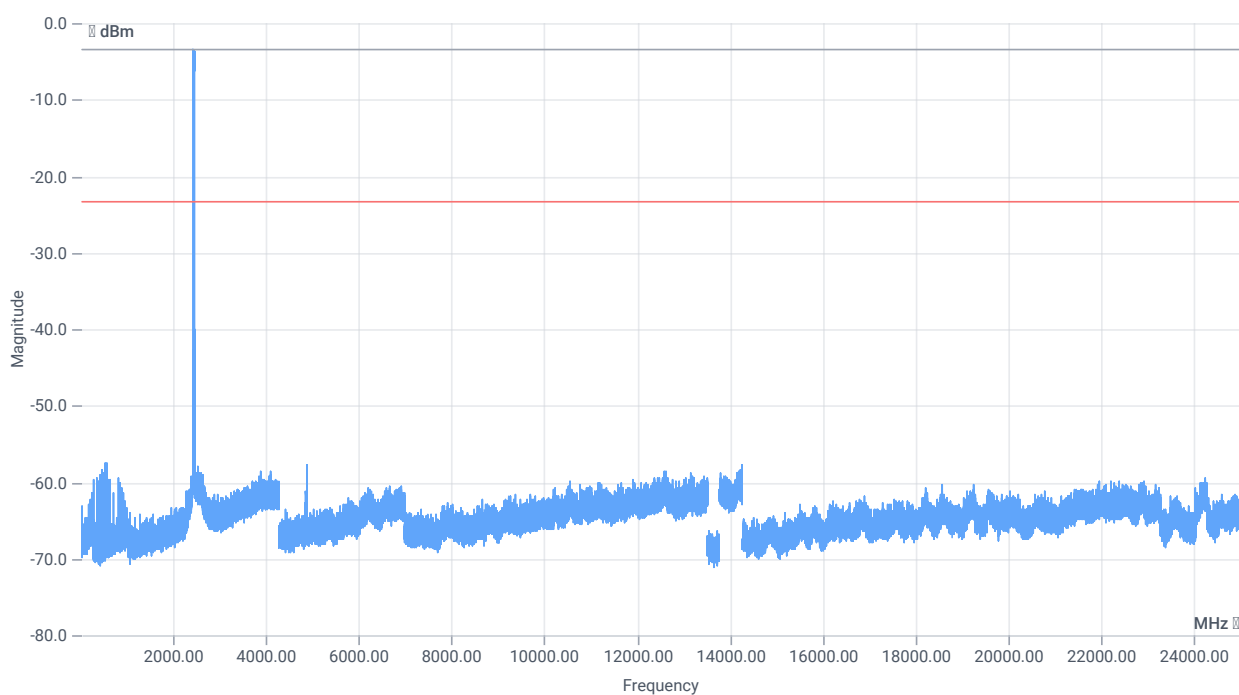
Test Parameter

Technology to test	WLAN2G4 g mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	True Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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 2437 MHz

RESULT: Reference power cond.

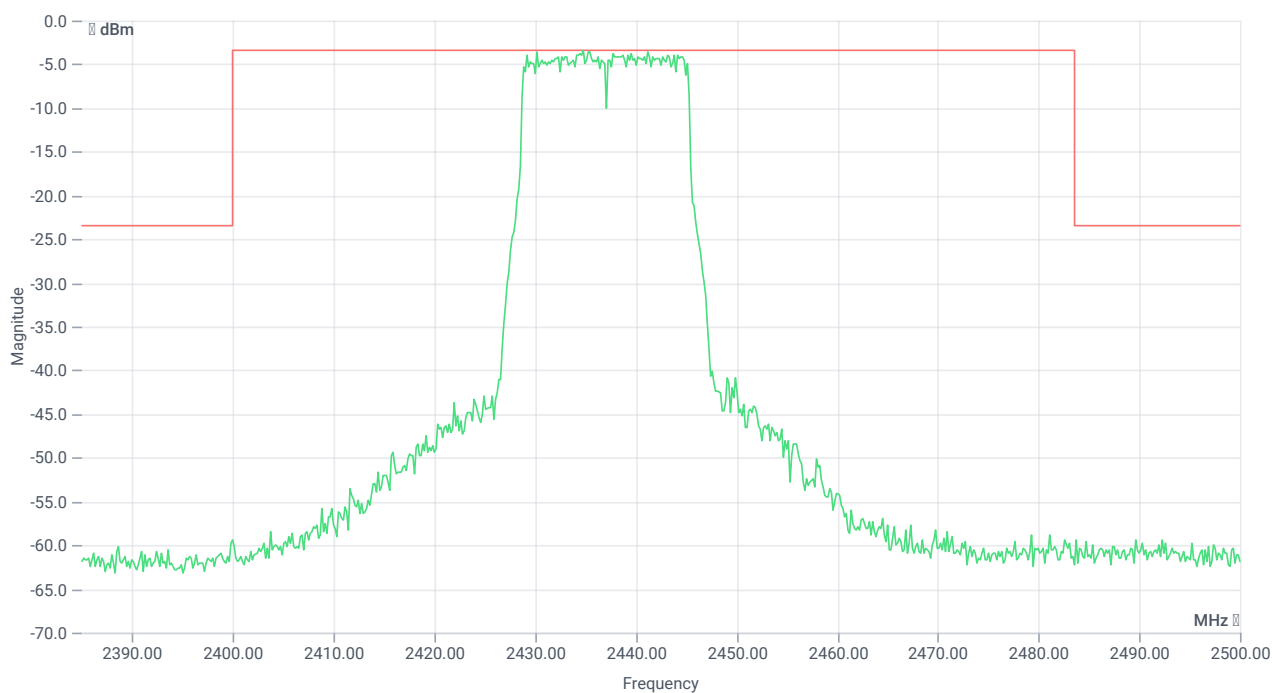
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	7.80	dBm	INFO
Ref. frequency	---	---	2438.600	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	7.80 23.17 0
Start [MHz] Stop [MHz]	24780.000 25000.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	200 25 1501 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2434.83 MHz	---	---	-3.38	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 534.5 MHz	0	---	34.16	dB	INFO

Verdict

PASS

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 g mode

References

TC start	12.07.2024 10:01:54
Ambit temp [°C] humidity [rel%]	24.5 61
System version	5.0.7.0
Standard Version	FCC 15.247, ISED RSS247 NI
Method	
Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 g mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	True Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

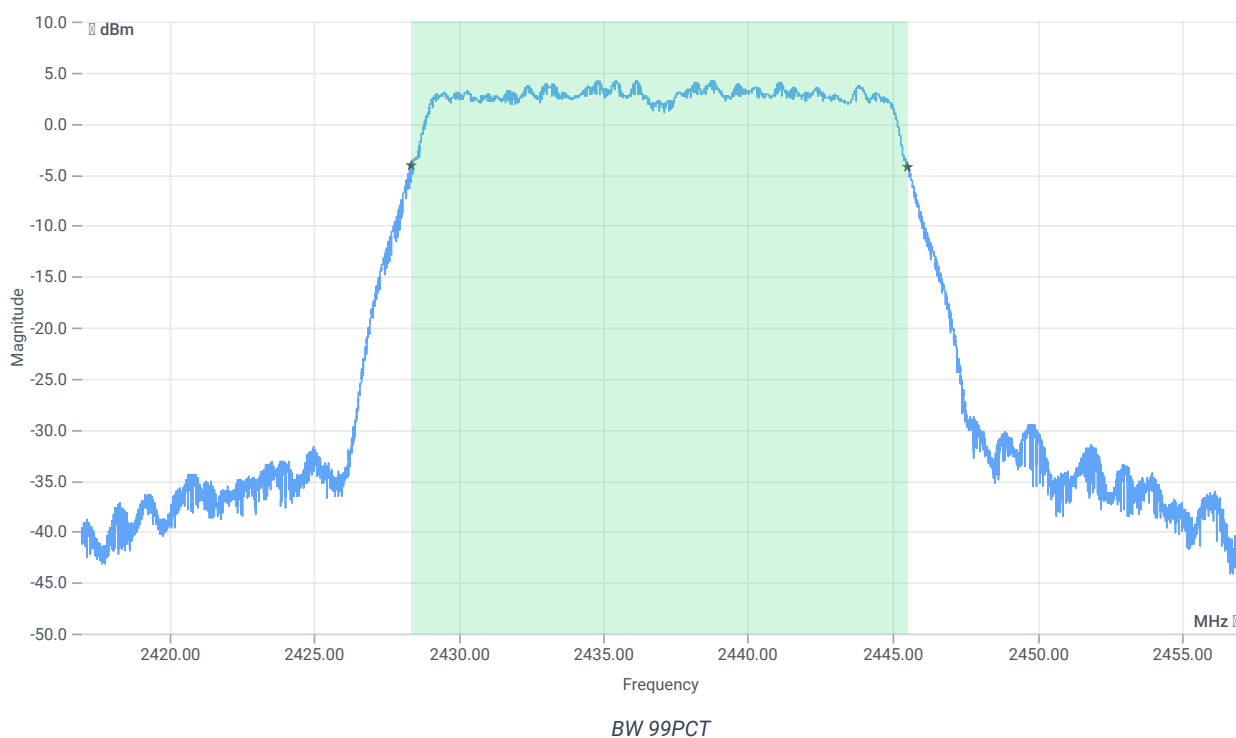
Test at TX 2437 MHz

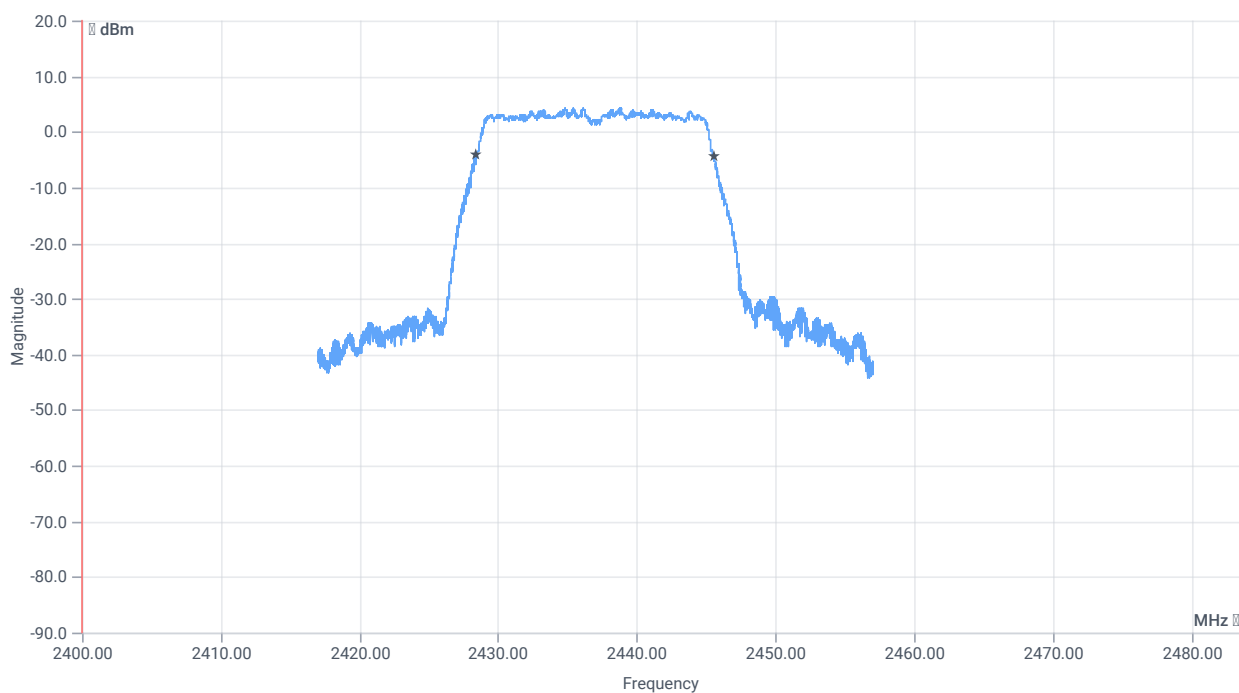
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	8.12	dBm	INFO
Ref. frequency	---	---	2438.600	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	13.12 11.06 20
Start [MHz] Stop [MHz]	2417.000 2457.000
RBW [MHz] VBW [MHz]	0.500000 2.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

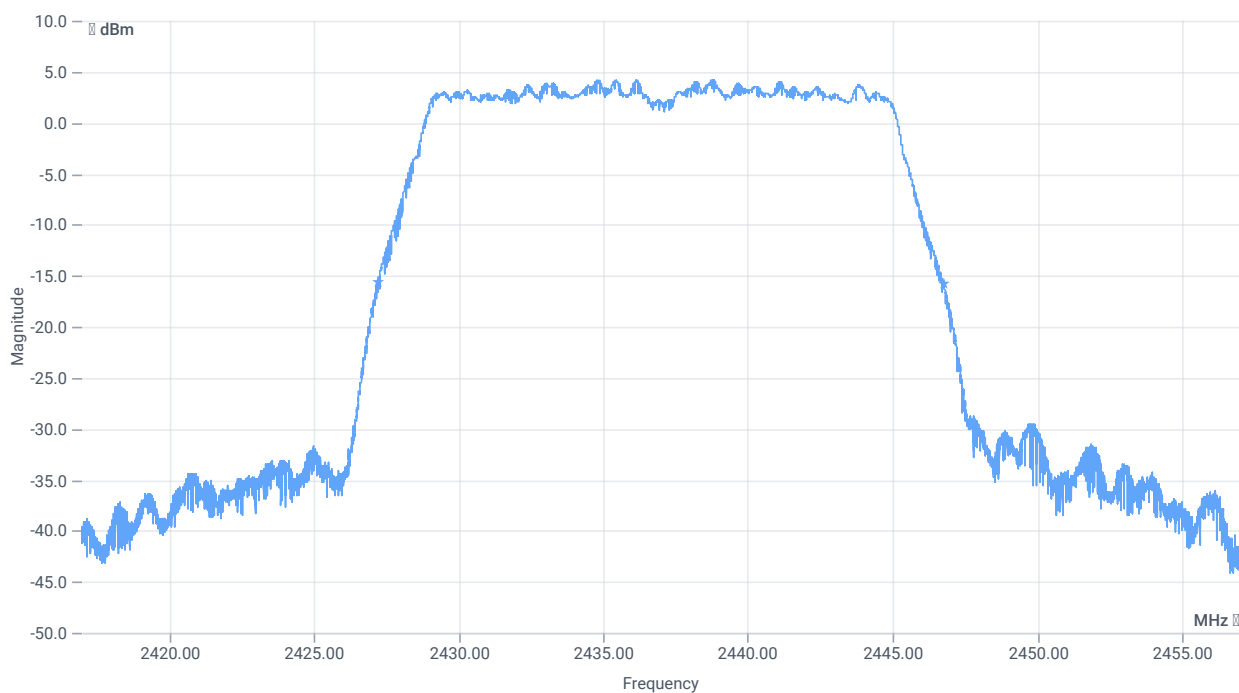




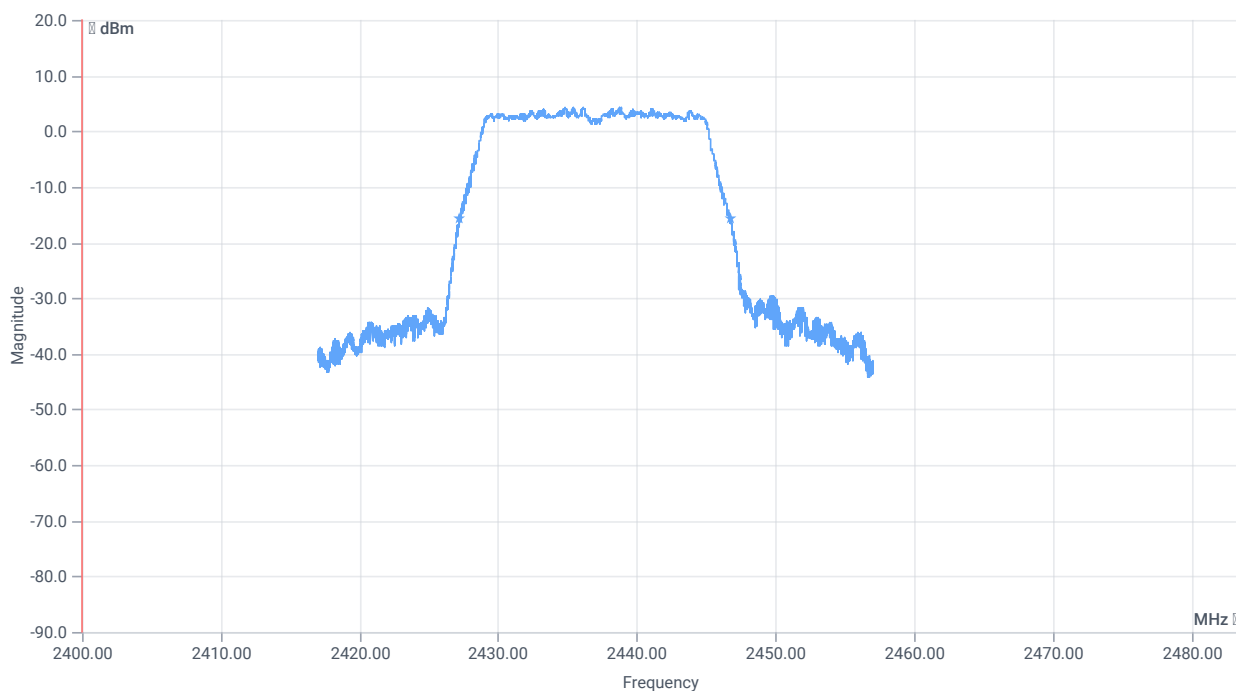
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	17146.000	kHz	INFO
T1 99%	2400.000000	---	2428.3769	MHz	PASS
T2 99%	---	2483.500000	2445.5231	MHz	PASS



BW 20dB



BW within band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	19536	kHz	INFO
T1 20dB	2400.000000	---	2427.2120	MHz	PASS
T2 20dB	---	2483.500000	2446.7480	MHz	PASS

Verdict

PASS

FCC 15.247 # Peak psd DTS ~ WLAN2G4 g mode

References

TC start	12.07.2024 10:01:11
Ambit temp [°C] humidity [rel%]	24.5 61
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission
Description	FCC 15.247 Peak psd DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 g mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	True Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

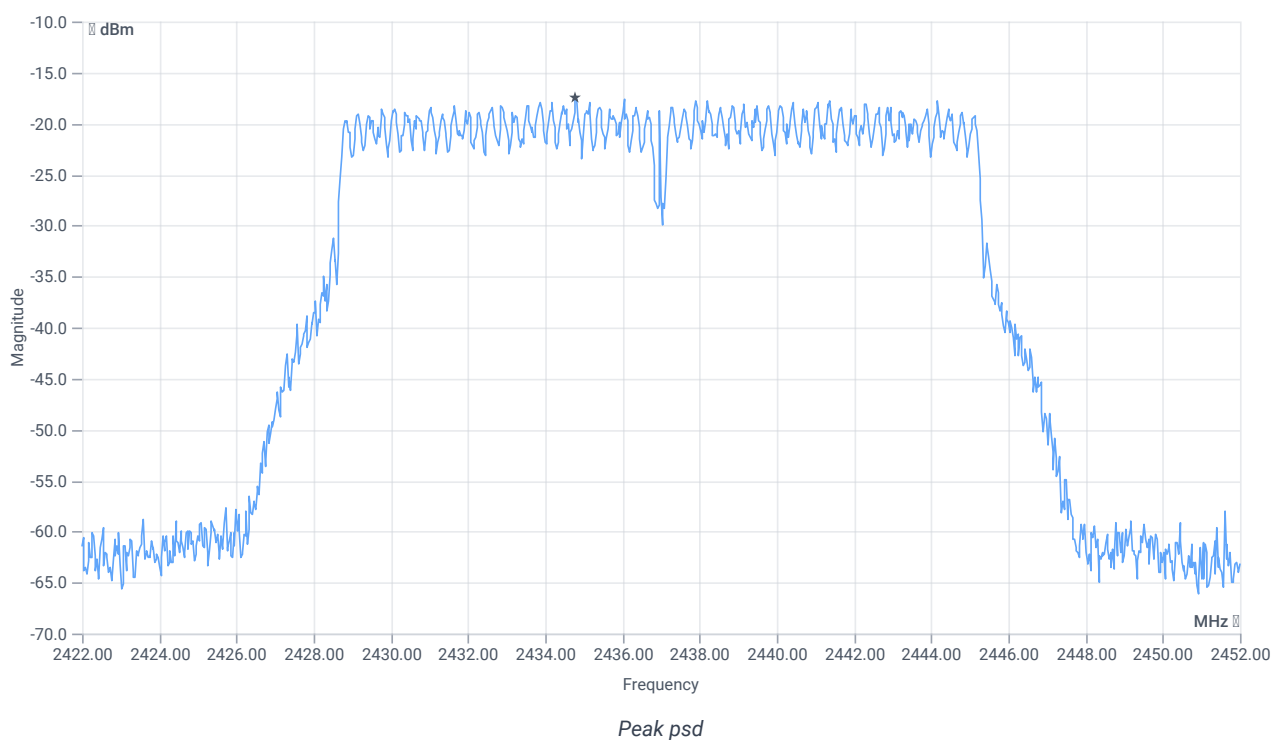
Test at TX 2437 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	7.89	dBm	INFO
Ref. frequency	---	---	2433.900	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	12.89 11.06 20
Start [MHz] Stop [MHz]	2422.000 2452.000
RBW [MHz] VBW [MHz]	0.003000 0.010000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1000 20 1001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak psd	---	8	-17.5	dBm/3KHz	PASS

Verdict

PASS

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 g mode

References

TC start	12.07.2024 10:00:38
Ambit temp [°C] humidity [rel%]	24.5 61
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	
Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 g mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	True Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

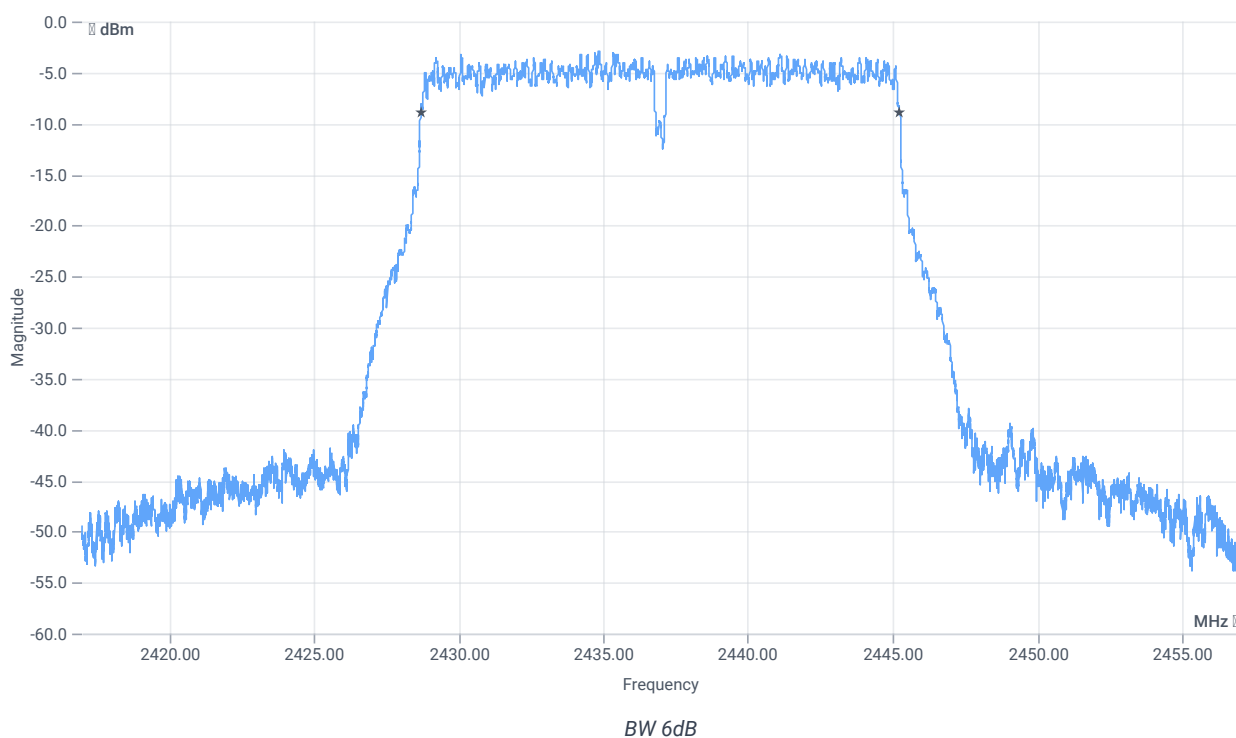
Test at TX 2437 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	7.76	dBm	INFO
Ref. frequency	---	---	2433.900	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	12.76 11.06 20
Start [MHz] Stop [MHz]	2417.000 2457.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS bandwidth (6dB)	500	---	16560	kHz	PASS

Verdict

PASS

NA # Peak output power 3MHz/3MHz ~ WLAN2G4 g mode

References

TC start	12.07.2024 10:00:08
Ambit temp [°C] humidity [rel%]	24.5 61
System version	5.0.7.0
Standard Version	NA NI
Method	
Description	Peak OP 3MHz/3MHz WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 g mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	True Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

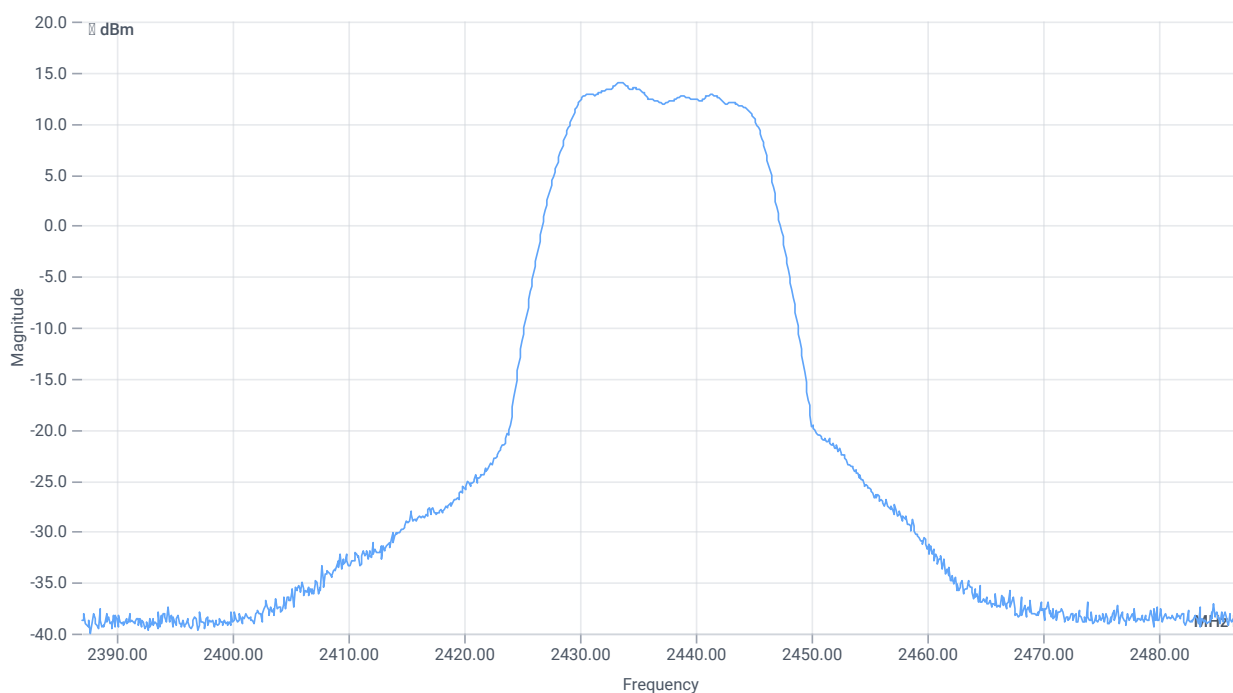
Test at TX 2437 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	8.31	dBm	INFO
Ref. frequency	---	---	2438.500	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	18.31 11.06 25
Start [MHz] Stop [MHz]	2387.000 2487.000
RBW [MHz] VBW [MHz]	3.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1000 10 1001 SWE



Peak output power

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	---	13.97	dBm	INFO
Peak power	---	---	24.945947	mW	INFO
Frequency at peak	---	---	2433.5	MHz	INFO

Verdict

PASS

FCC 15.247 # Peak output power PM DTS ~ WLAN2G4 g mode

References

TC start	10.07.2024 11:34:10
Ambit temp [°C] humidity [rel%]	25.4 53
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.3 PKPM1 Peak-reading Power Meter Method
Description	FCC 15.247 Peak output power PM DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0
Power sensor,Keysight Technologies,U2021XA,MY59190010,A.04.06

Test Parameter

Technology to test	WLAN2G4 g mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
Full path type	EUT_PM_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.PM/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00010000:00000001

Test at TX 2412 MHz

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	30	21.79	dBm	PASS

Verdict

PASS

FCC 15.247 # TX spurious conducted 20dBc ~ WLAN2G4 g mode

References

TC start	10.07.2024 11:20:33
Ambit temp [°C] humidity [rel%]	25.3 54
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
Description	FCC 15.247 TX Emissions cond. DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

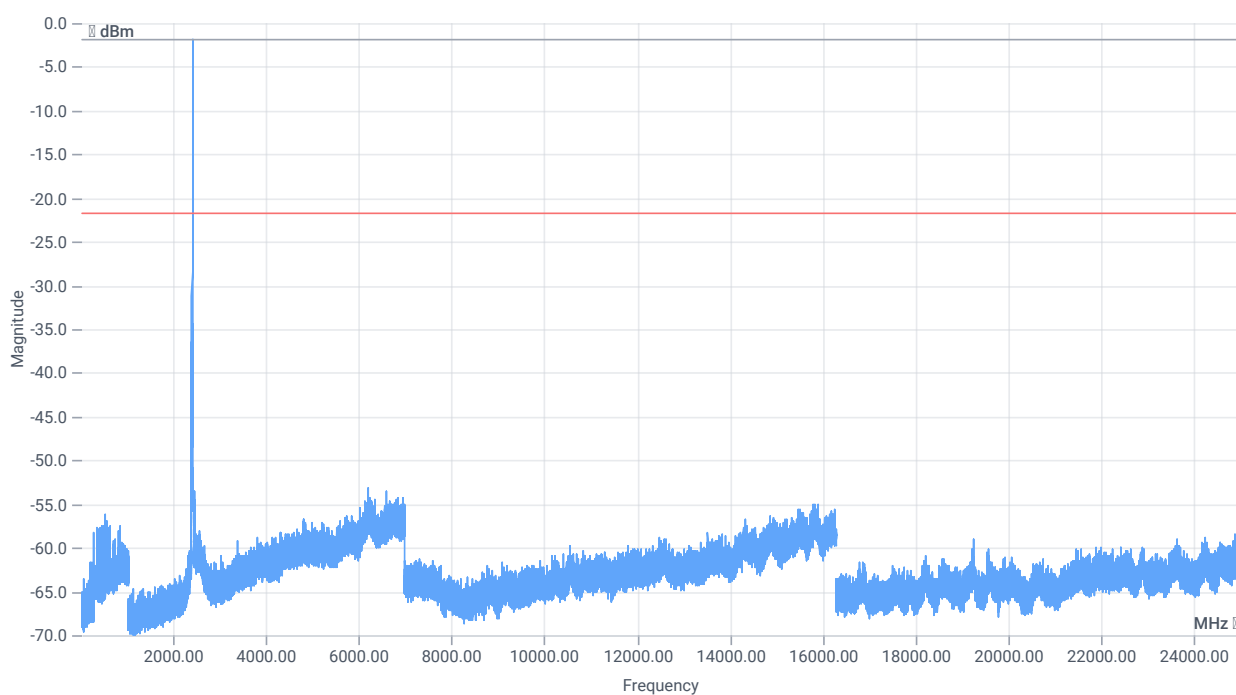
Test Parameter

Technology to test	WLAN2G4 g mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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 2412 MHz

RESULT: Reference power cond.

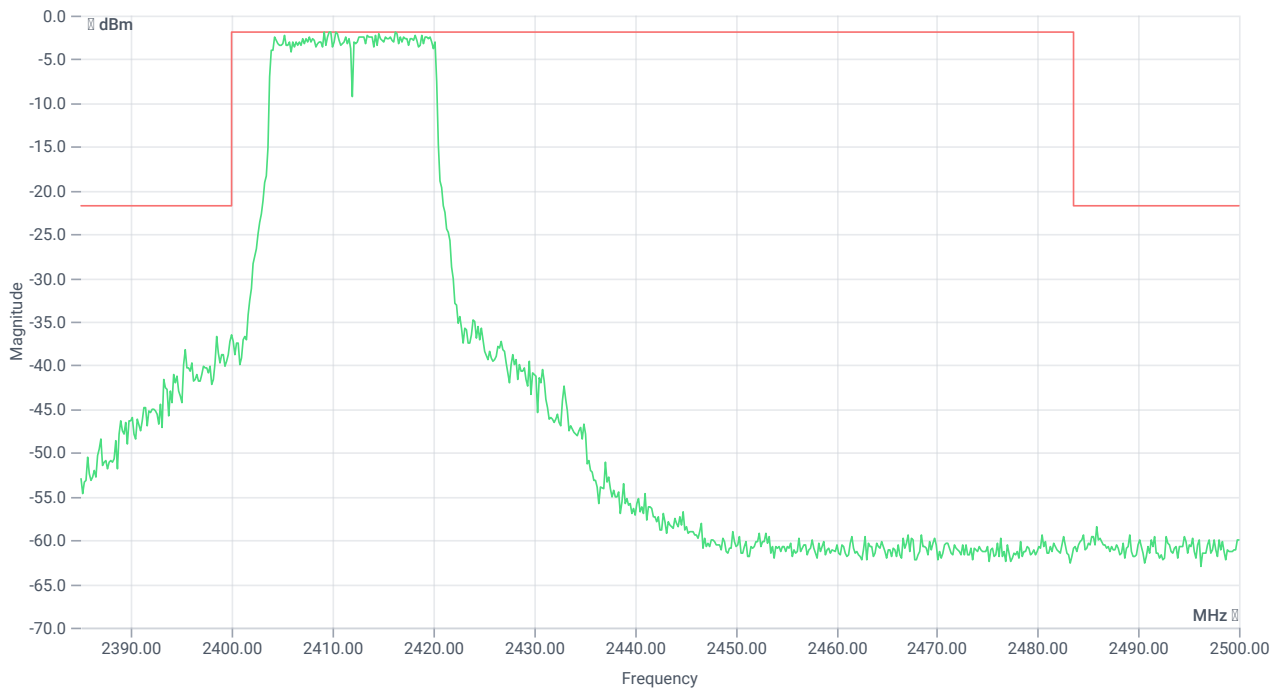
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	9.30	dBm	INFO
Ref. frequency	---	---	2414.500	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	9.30 23.17 5
Start [MHz] Stop [MHz]	24780.000 25000.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	200 25 1501 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2410.33 MHz	---	---	-1.84	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 30 MHz	0	---	-133.59	dB	INFO

Verdict

PASS

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 g mode

References

TC start	10.07.2024 11:19:53
Ambit temp [°C] humidity [rel%]	25.3 54
System version	5.0.7.0
Standard Version	FCC 15.247, ISED RSS247 NI
Method	
Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 g mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

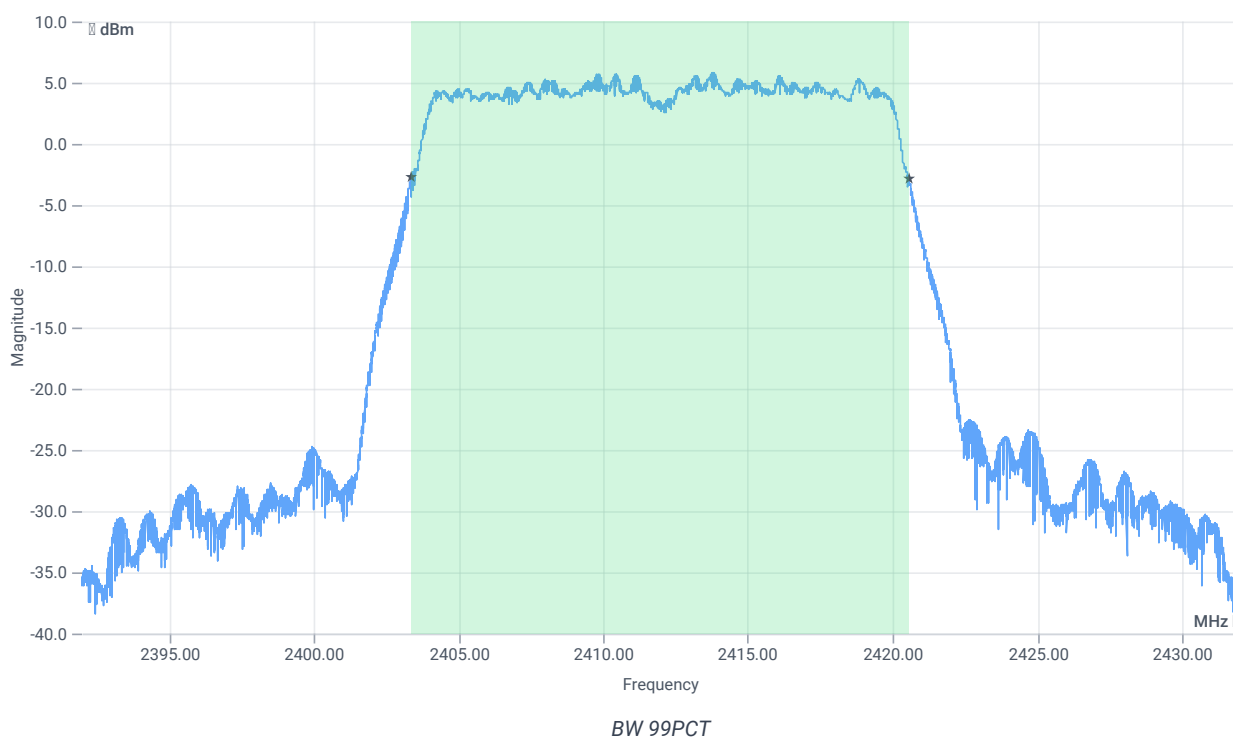
Test at TX 2412 MHz

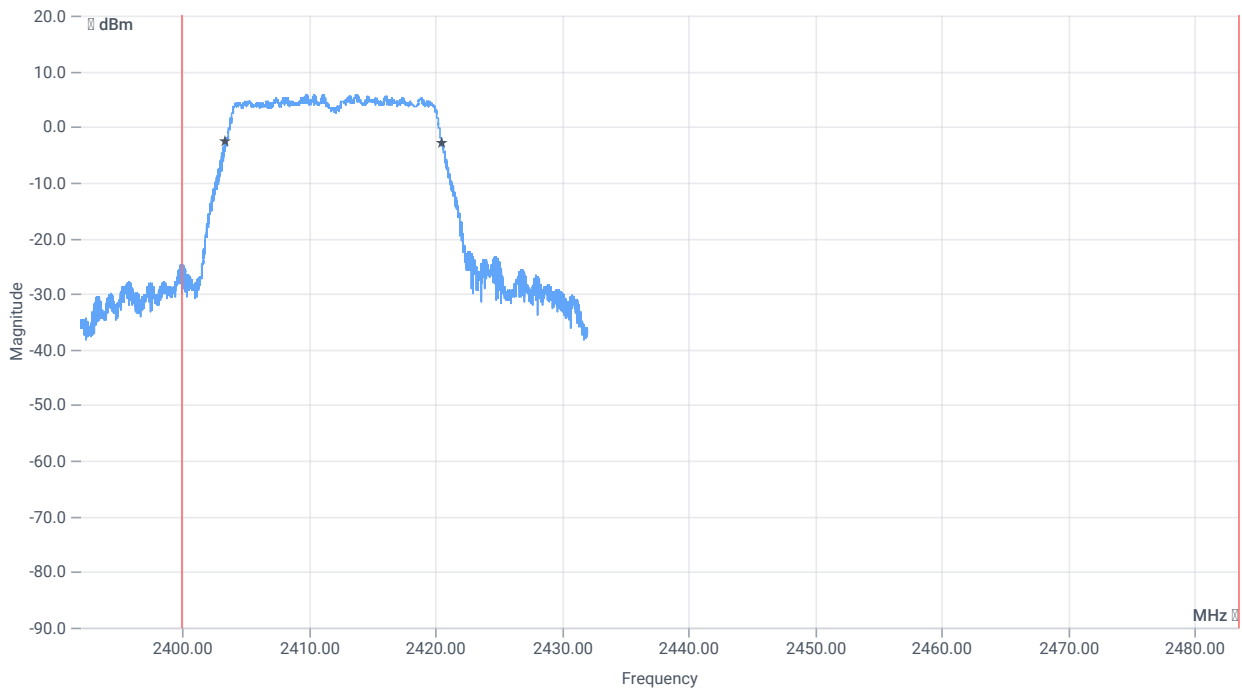
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	9.53	dBm	INFO
Ref. frequency	---	---	2413.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	14.53 10.98 20
Start [MHz] Stop [MHz]	2392.000 2432.000
RBW [MHz] VBW [MHz]	0.500000 2.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

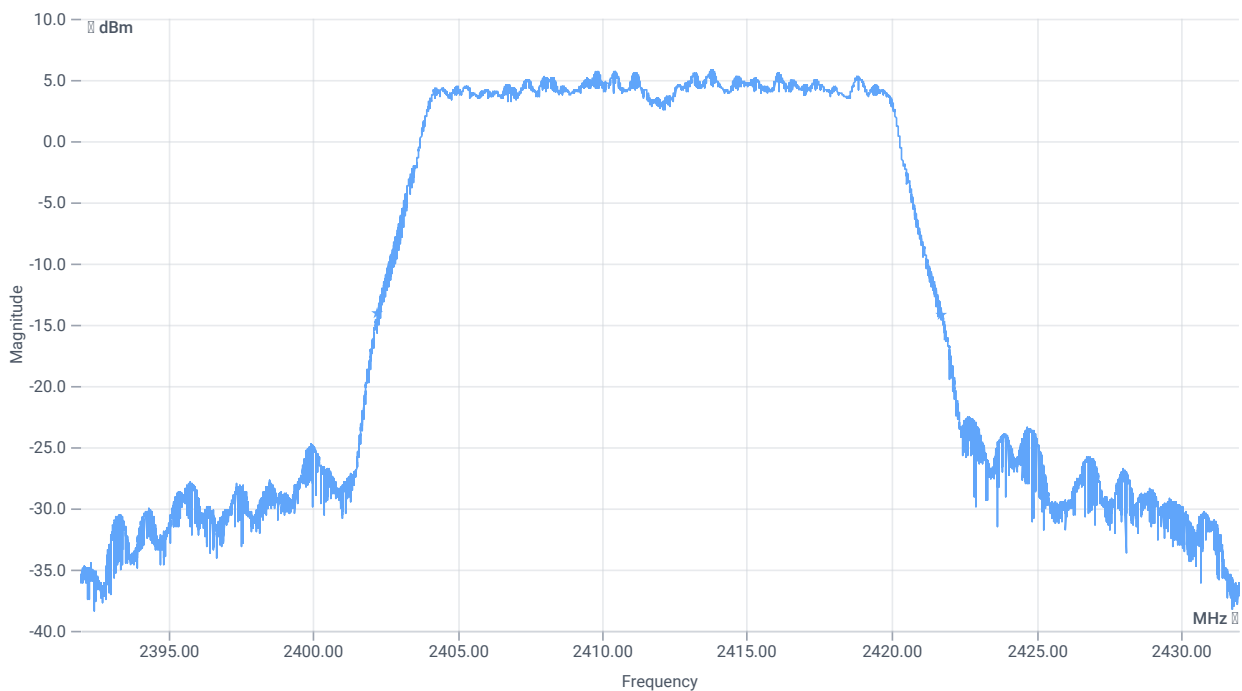




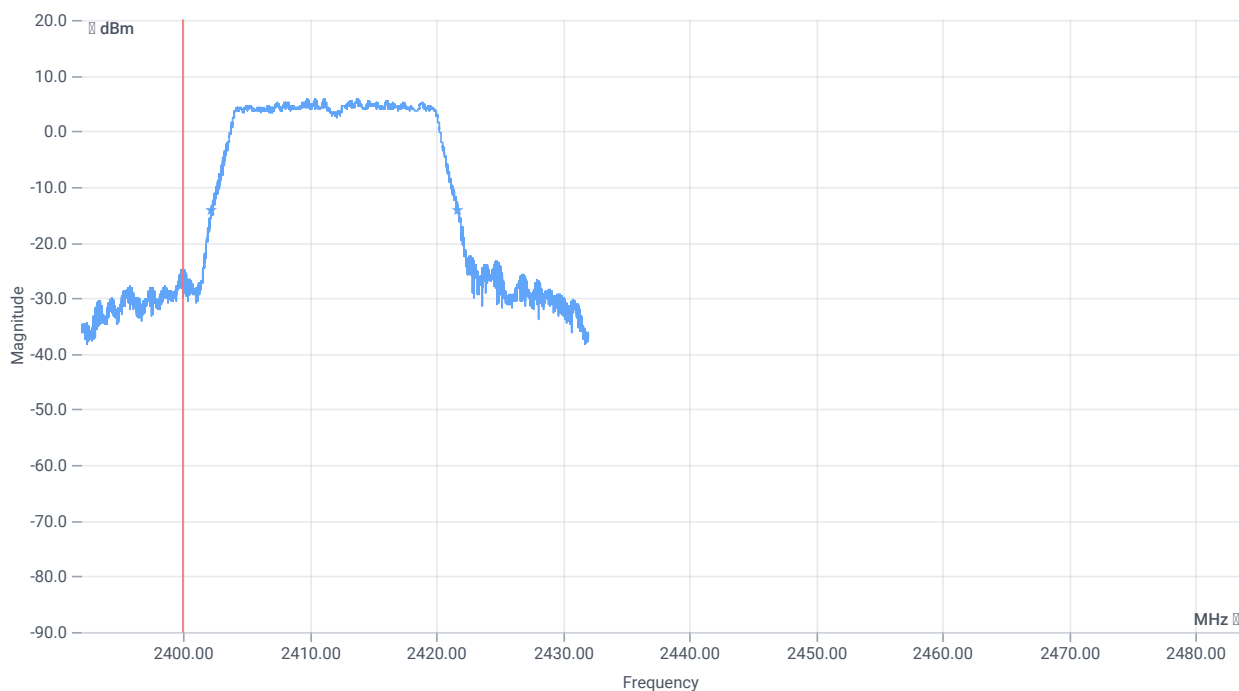
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	17166.000	kHz	INFO
T1 99%	2400.000000	---	2403.3889	MHz	PASS
T2 99%	---	2483.500000	2420.5551	MHz	PASS



BW 20dB



BW within band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	19496	kHz	INFO
T1 20dB	2400.000000	---	2402.2400	MHz	PASS
T2 20dB	---	2483.500000	2421.7360	MHz	PASS

Verdict

PASS

FCC 15.247 # Peak psd DTS ~ WLAN2G4 g mode

References

TC start	10.07.2024 11:19:12
Ambit temp [°C] humidity [rel%]	25.3 54
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission
Description	FCC 15.247 Peak psd DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 g mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

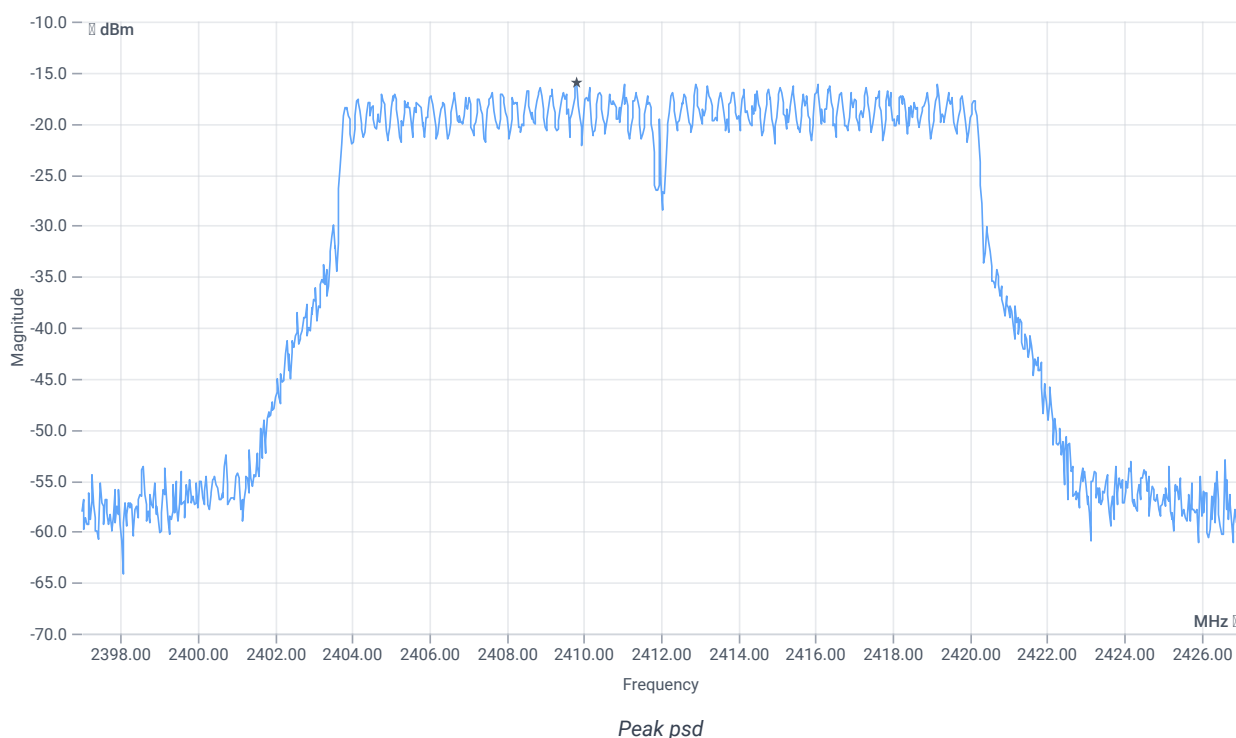
Test at TX 2412 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	9.38	dBm	INFO
Ref. frequency	---	---	2413.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	14.38 10.98 20
Start [MHz] Stop [MHz]	2397.000 2427.000
RBW [MHz] VBW [MHz]	0.003000 0.010000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1000 20 1001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak psd	---	8	-16.05	dBm/3KHz	PASS

Verdict

PASS

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 g mode

References

TC start	10.07.2024 11:18:37
Ambit temp [°C] humidity [rel%]	25.3 54
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	
Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 g mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

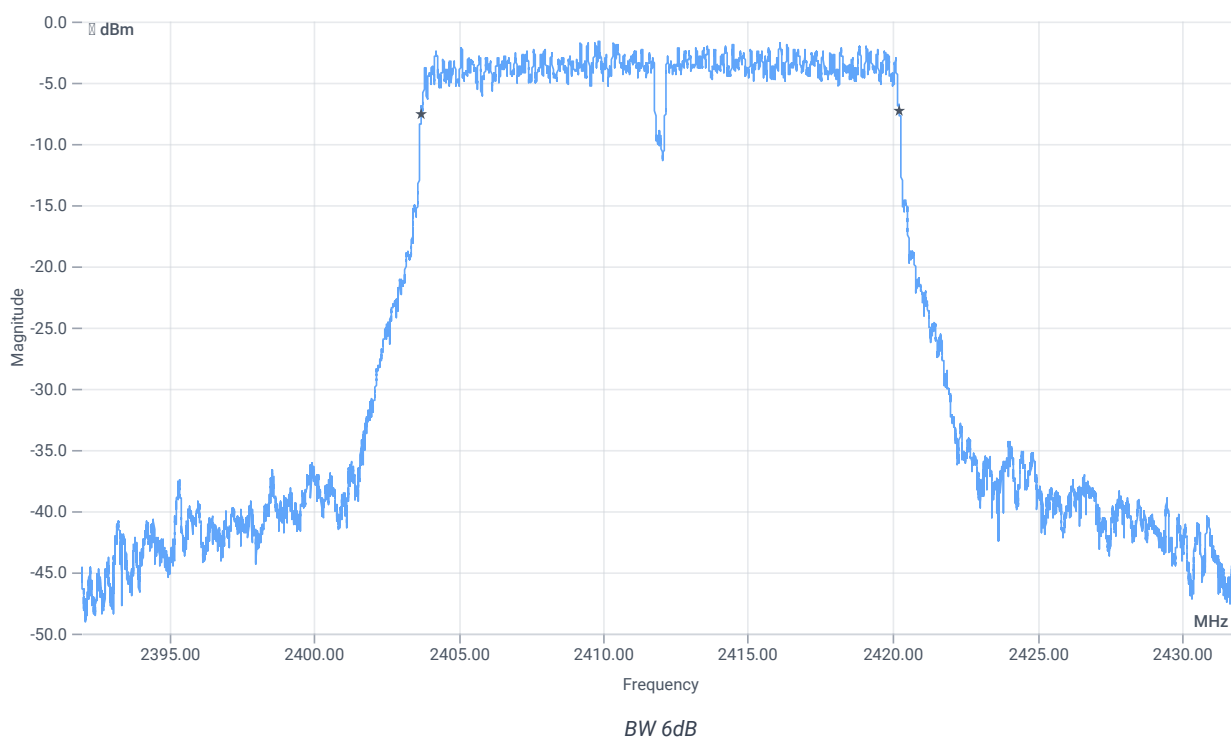
Test at TX 2412 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	9.38	dBm	INFO
Ref. frequency	---	---	2413.600	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	14.38 10.98 20
Start [MHz] Stop [MHz]	2392.000 2432.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS bandwidth (6dB)	500	---	16552	kHz	PASS

Verdict

PASS

NA # Peak output power 3MHz/3MHz ~ WLAN2G4 g mode

References

TC start	10.07.2024 11:18:07
Ambit temp [°C] humidity [rel%]	25.3 54
System version	5.0.7.0
Standard Version	NA NI
Method	
Description	Peak OP 3MHz/3MHz WLAN2G4 g mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 g mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

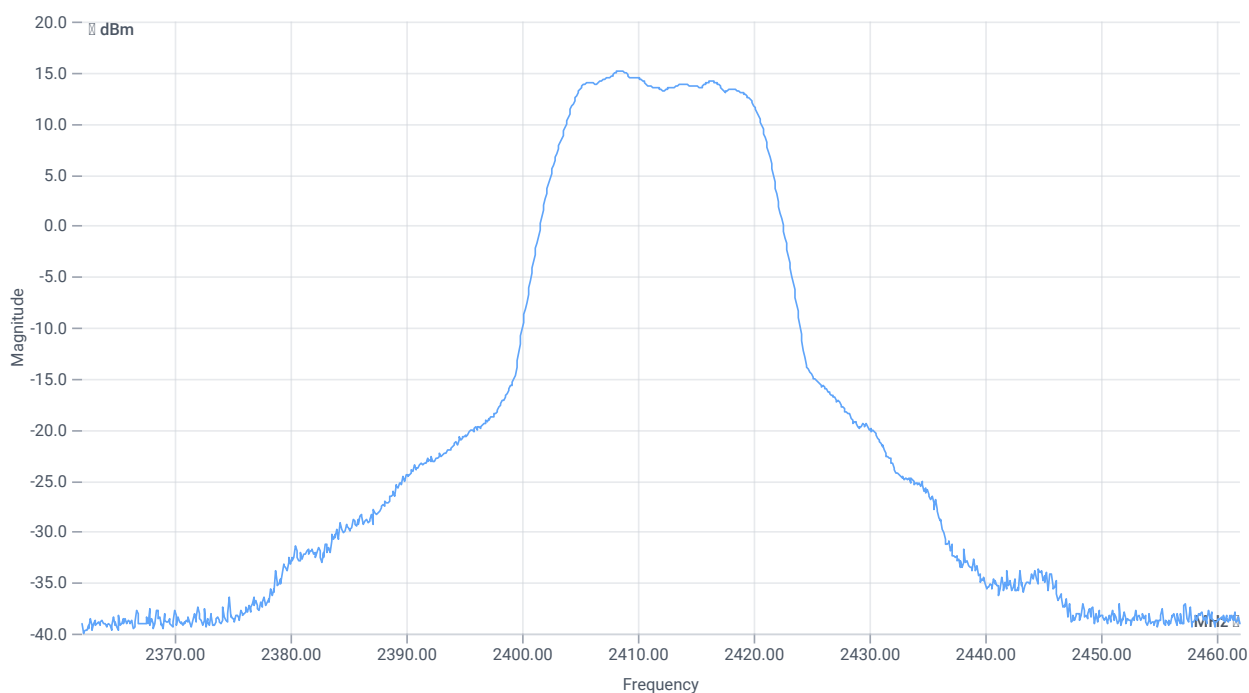
Test at TX 2412 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	9.34	dBm	INFO
Ref. frequency	---	---	2414.500	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	19.34 10.98 25
Start [MHz] Stop [MHz]	2362.000 2462.000
RBW [MHz] VBW [MHz]	3.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1000 10 1001 SWE



Peak output power

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	---	15.14	dBm	INFO
Peak power	---	---	32.658783	mW	INFO
Frequency at peak	---	---	2408.5	MHz	INFO

Verdict

PASS

FCC 15.247 # Peak output power PM DTS ~ WLAN2G4 b mode

References

TC start	10.07.2024 11:11:39
Ambit temp [°C] humidity [rel%]	25.3 54
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.3 PKPM1 Peak-reading Power Meter Method
Description	FCC 15.247 Peak output power PM DTS - WLAN2G4 b mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0
Power sensor,Keysight Technologies,U2021XA,MY59190010,A.04.06

Test Parameter

Technology to test	WLAN2G4 b mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
Full path type	EUT_PM_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.PM/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00010000:00000001

Test at TX 2462 MHz

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	30	17.21	dBm	PASS

Verdict

PASS

FCC 15.247 # TX spurious conducted 20dBc ~ WLAN2G4 b mode

References

TC start	10.07.2024 10:58:01
Ambit temp [°C] humidity [rel%]	25.2 54
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
Description	FCC 15.247 TX Emissions cond. DTS - WLAN2G4 b mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

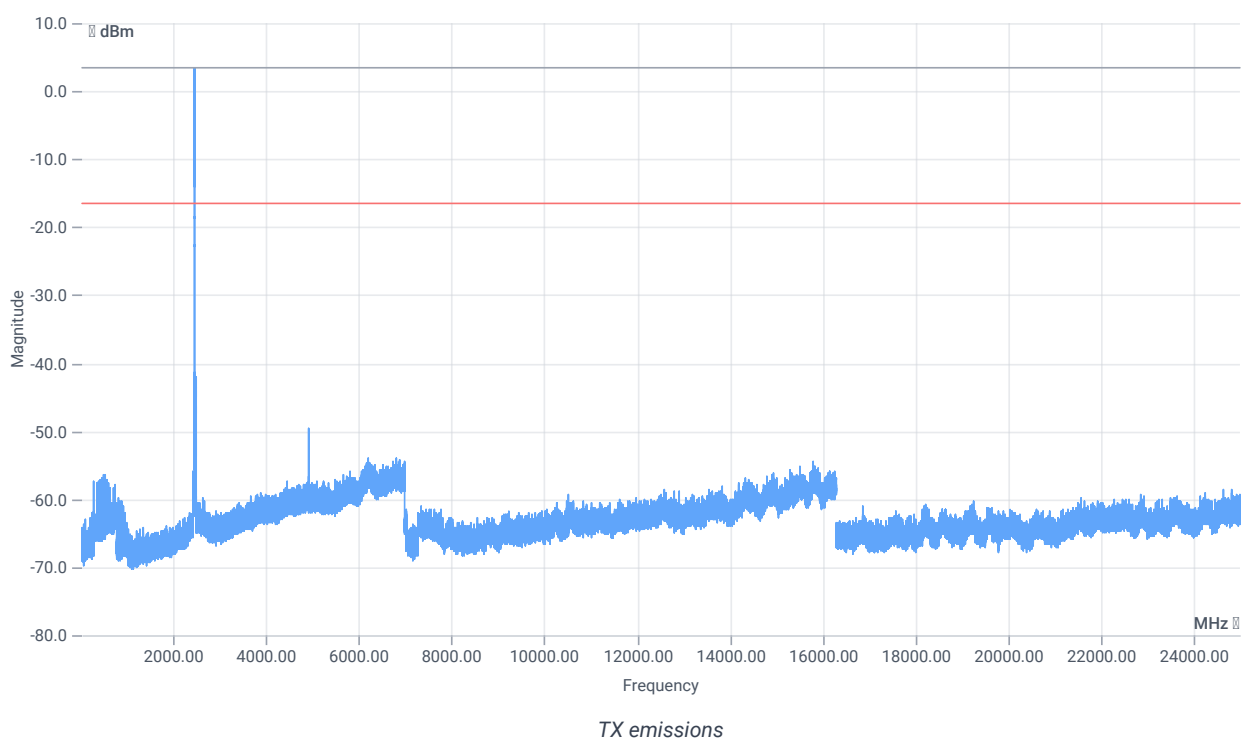
Test Parameter

Technology to test	WLAN2G4 b mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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 2462 MHz

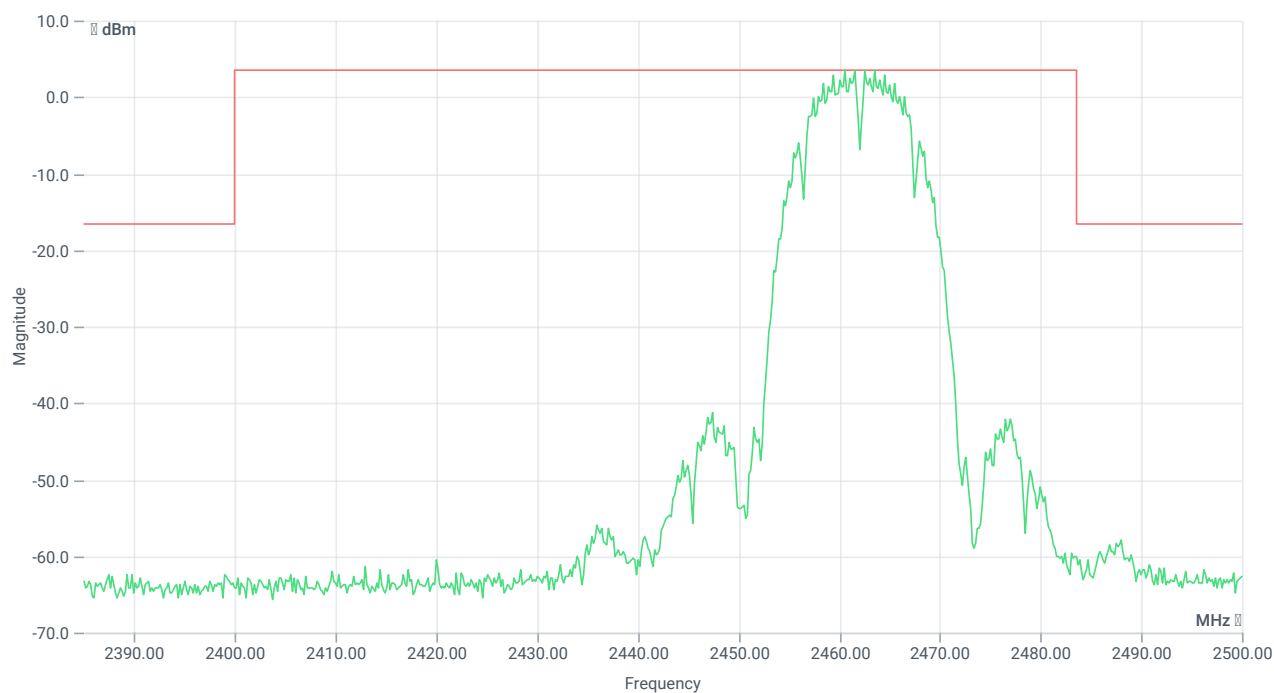
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	9.01	dBm	INFO
Ref. frequency	---	---	2460.700	MHz	INFO



READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	9.01 23.17 5
Start [MHz] Stop [MHz]	24780.000 25000.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	200 25 1501 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2461.50 MHz	---	---	3.51	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 4924 MHz	0	---	33.06	dB	INFO

Verdict

PASS

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 b mode

References

TC start	10.07.2024 10:57:22
Ambit temp [°C] humidity [rel%]	25.2 54
System version	5.0.7.0
Standard Version	FCC 15.247, ISED RSS247 NI
Method	
Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 b mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 b mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

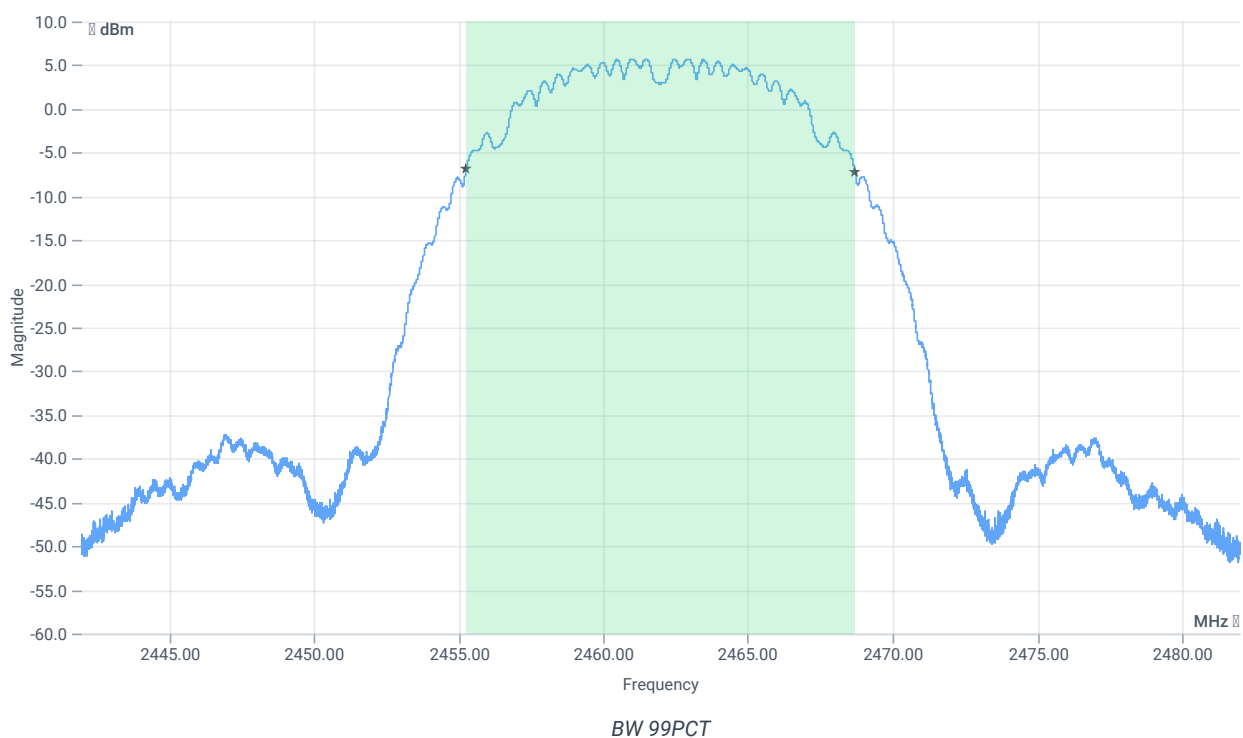
Test at TX 2462 MHz

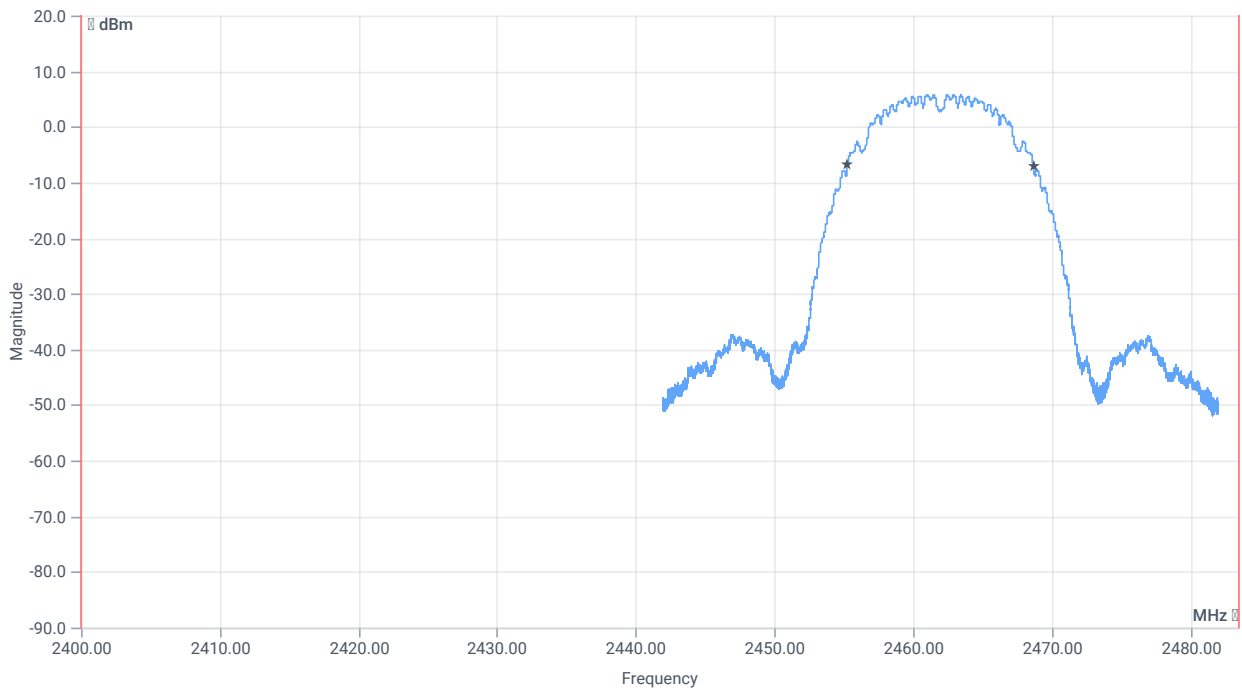
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	9.03	dBm	INFO
Ref. frequency	---	---	2463.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	14.03 11.1 20
Start [MHz] Stop [MHz]	2442.000 2482.000
RBW [MHz] VBW [MHz]	0.500000 2.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

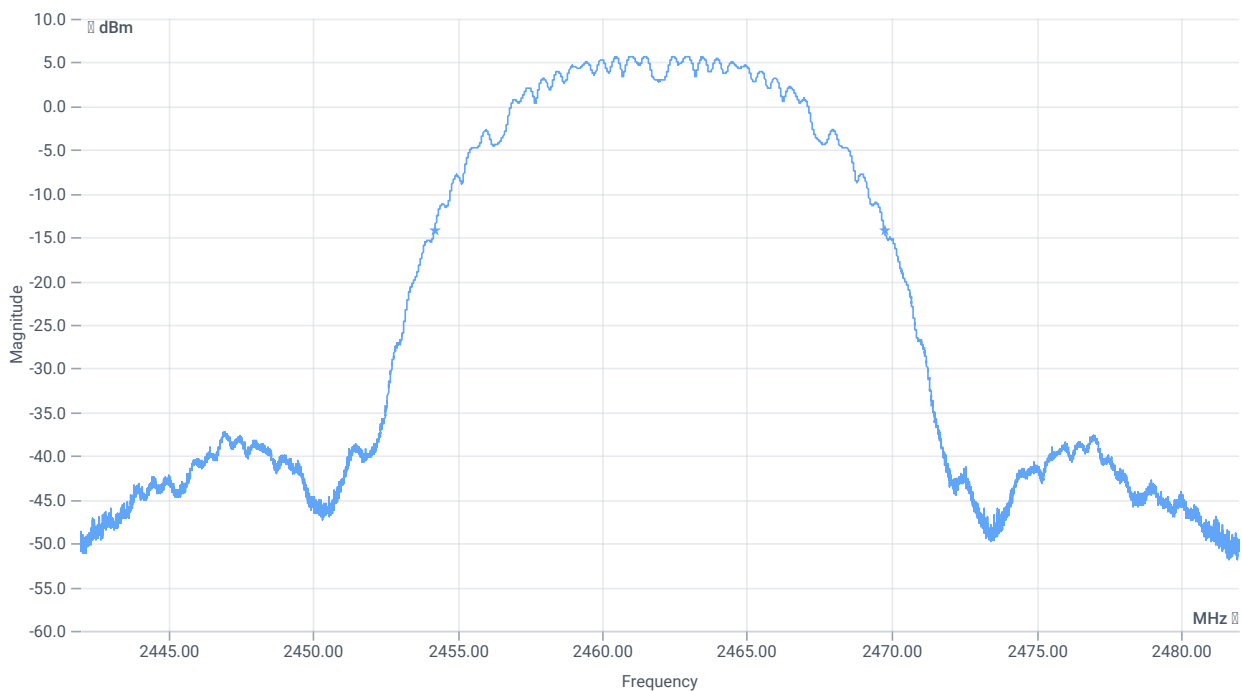




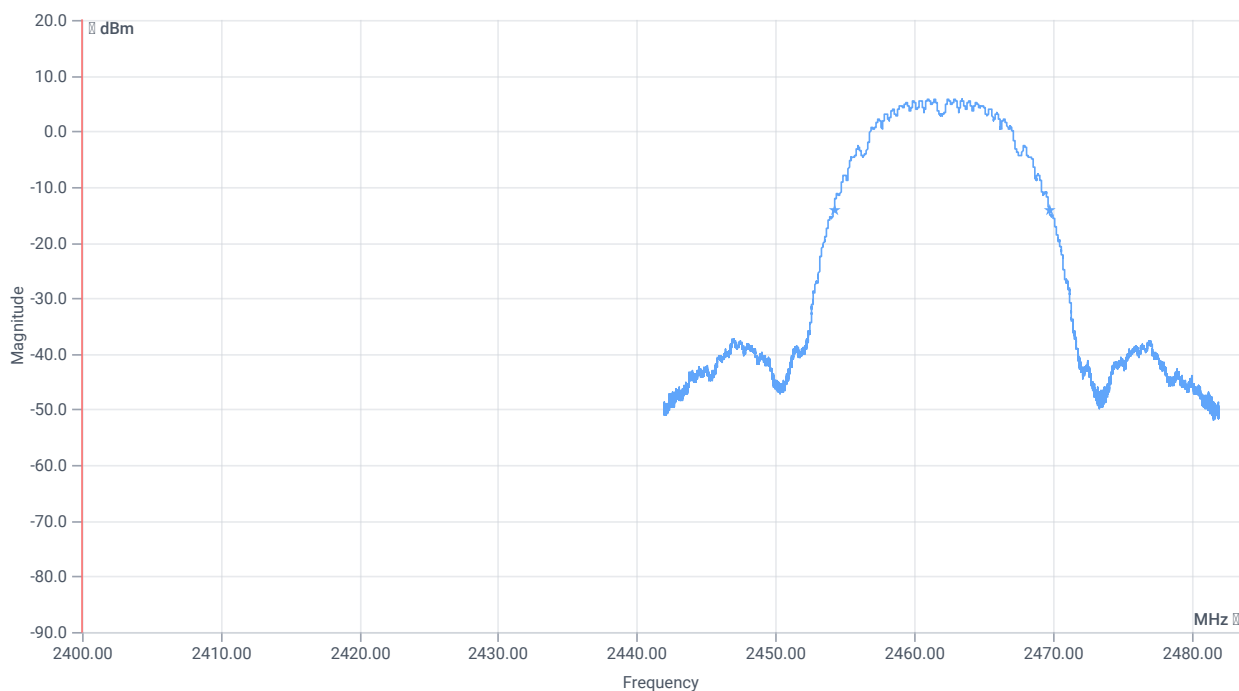
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	13423.000	kHz	INFO
T1 99%	2400.000000	---	2455.2767	MHz	PASS
T2 99%	---	2483.500000	2468.6993	MHz	PASS



BW 20dB



BW within band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	15528	kHz	INFO
T1 20dB	2400.000000	---	2454.2160	MHz	PASS
T2 20dB	---	2483.500000	2469.7440	MHz	PASS

Verdict

PASS

FCC 15.247 # Peak psd DTS ~ WLAN2G4 b mode

References

TC start	10.07.2024 10:56:40
Ambit temp [°C] humidity [rel%]	25.2 54
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission
Description	FCC 15.247 Peak psd DTS - WLAN2G4 b mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 b mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

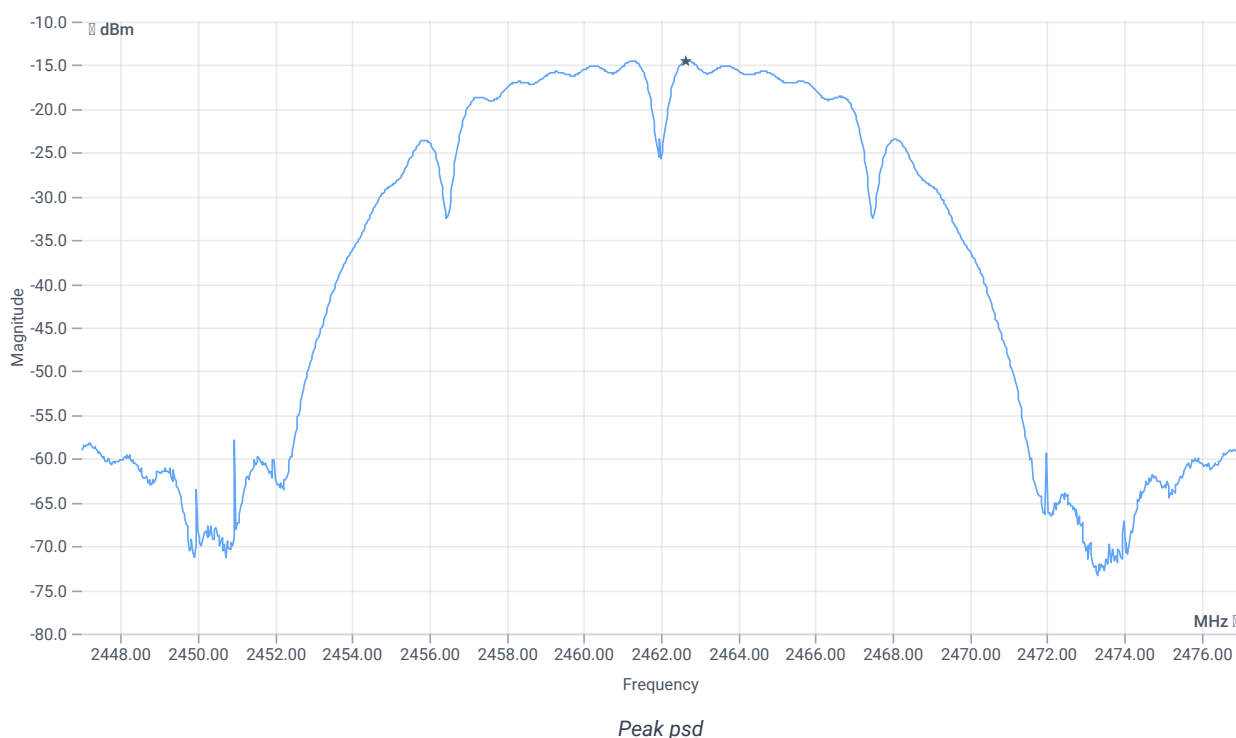
Test at TX 2462 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	9.02	dBm	INFO
Ref. frequency	---	---	2463.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	14.02 11.1 20
Start [MHz] Stop [MHz]	2447.000 2477.000
RBW [MHz] VBW [MHz]	0.003000 0.010000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1000 20 1001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak psd	---	8	-14.5	dBm/3KHz	PASS

Verdict

PASS

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 b mode

References

TC start	10.07.2024 10:56:06
Ambit temp [°C] humidity [rel%]	25.2 54
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	
Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 b mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 b mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

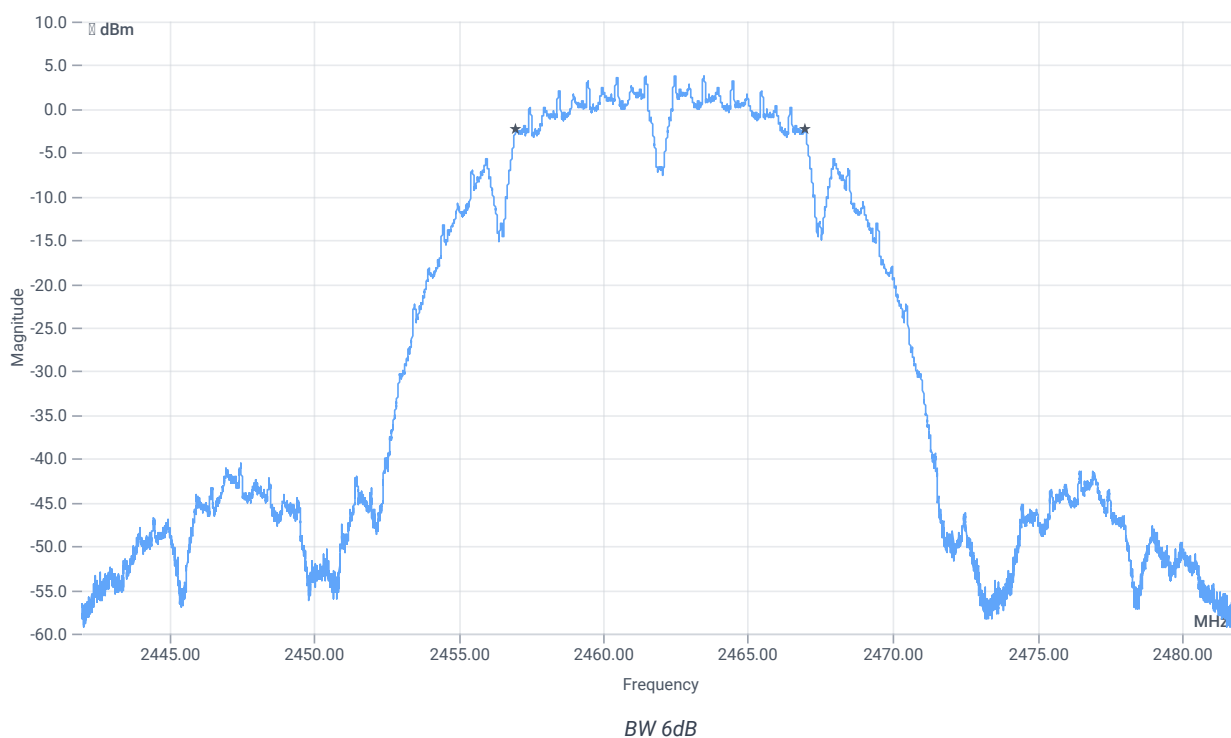
Test at TX 2462 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	9.06	dBm	INFO
Ref. frequency	---	---	2463.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	14.06 11.1 20
Start [MHz] Stop [MHz]	2442.000 2482.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS bandwidth (6dB)	500	---	10020	kHz	PASS

Verdict

PASS

NA # Peak output power 3MHz/3MHz ~ WLAN2G4 b mode

References

TC start	10.07.2024 10:55:36
Ambit temp [°C] humidity [rel%]	25.2 54
System version	5.0.7.0
Standard Version	NA NI
Method	
Description	Peak OP 3MHz/3MHz WLAN2G4 b mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 b mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

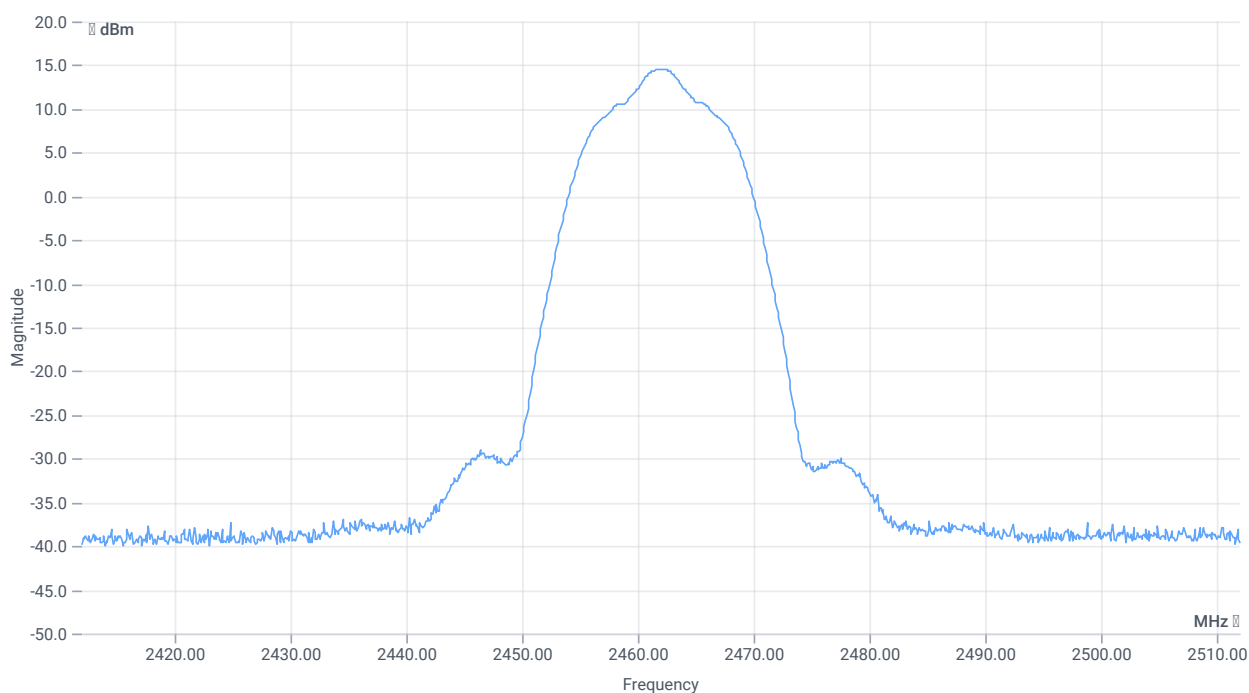
Test at TX 2462 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	9.08	dBm	INFO
Ref. frequency	---	---	2460.700	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	19.08 11.1 25
Start [MHz] Stop [MHz]	2412.000 2512.000
RBW [MHz] VBW [MHz]	3.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1000 10 1001 SWE



Peak output power

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	---	14.49	dBm	INFO
Peak power	---	---	28.119008	mW	INFO
Frequency at peak	---	---	2461.8	MHz	INFO

Verdict

PASS

FCC 15.247 # Peak output power PM DTS ~ WLAN2G4 b mode

References

TC start	10.07.2024 10:42:03
Ambit temp [°C] humidity [rel%]	25.1 54
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.3 PKPM1 Peak-reading Power Meter Method
Description	FCC 15.247 Peak output power PM DTS - WLAN2G4 b mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0
Power sensor,Keysight Technologies,U2021XA,MY59190010,A.04.06

Test Parameter

Technology to test	WLAN2G4 b mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	True Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
Full path type	EUT_PM_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.PM/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00010000:00000001

Test at TX 2437 MHz

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	30	17.09	dBm	PASS

Verdict

PASS

FCC 15.247 # TX spurious conducted 20dBc ~ WLAN2G4 b mode

References

TC start	10.07.2024 10:28:28
Ambit temp [°C] humidity [rel%]	25.0 55
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
Description	FCC 15.247 TX Emissions cond. DTS - WLAN2G4 b mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

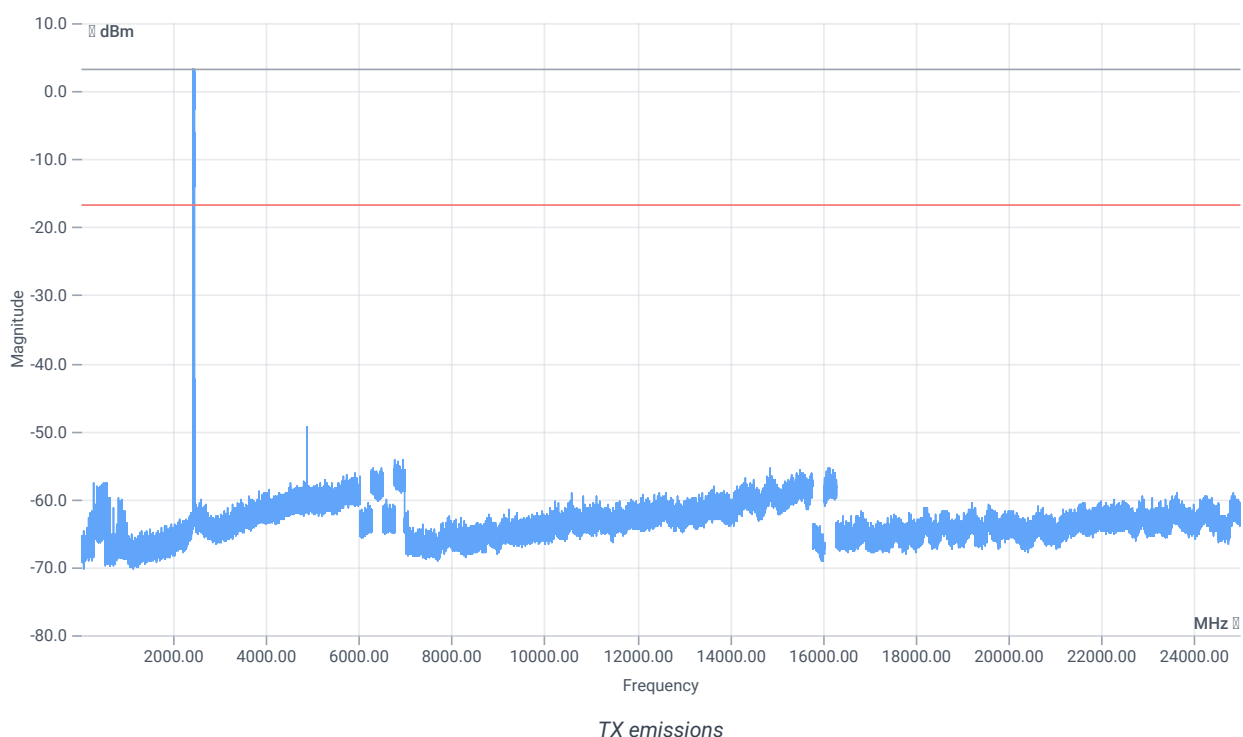
Test Parameter

Technology to test	WLAN2G4 b mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	True Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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 2437 MHz

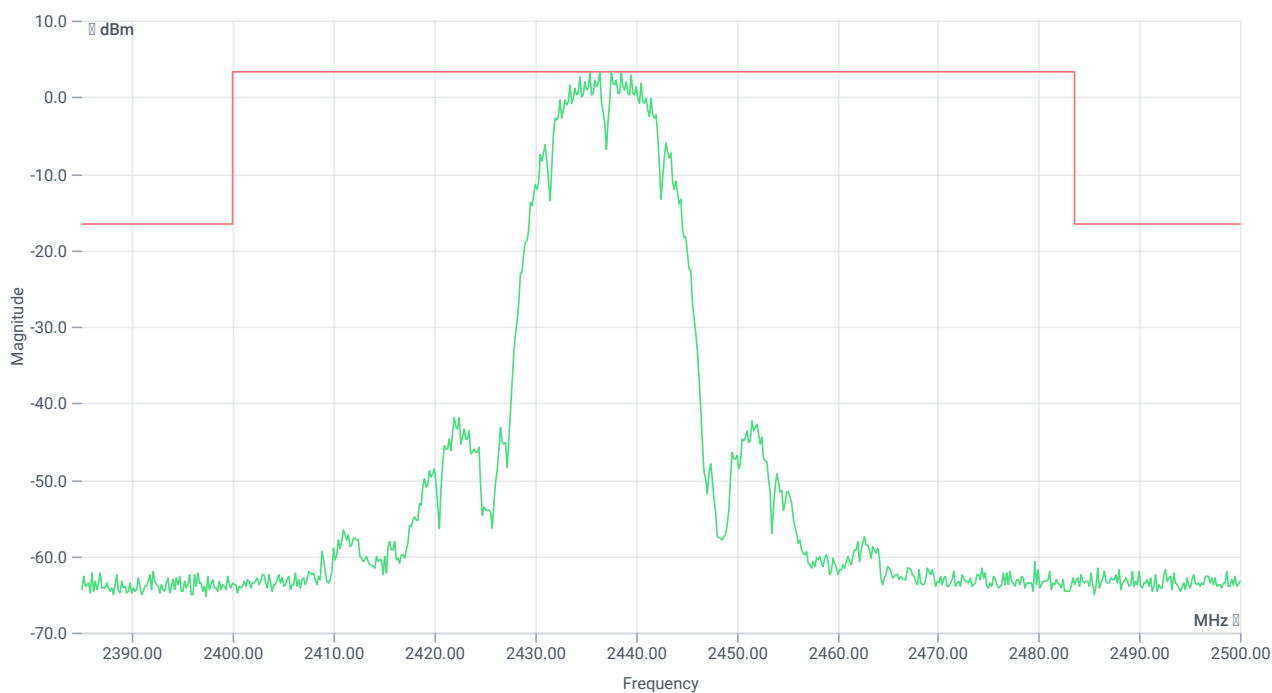
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	8.80	dBm	INFO
Ref. frequency	---	---	2438.300	MHz	INFO



READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	8.80 23.17 5
Start [MHz] Stop [MHz]	24780.000 25000.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	200 25 1501 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2437.50 MHz	---	---	3.30	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 4874 MHz	0	---	32.73	dB	INFO

Verdict

PASS

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 b mode

References

TC start	10.07.2024 10:27:48
Ambit temp [°C] humidity [rel%]	24.9 55
System version	5.0.7.0
Standard Version	FCC 15.247, ISED RSS247 NI
Method	
Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 b mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 b mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	True Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

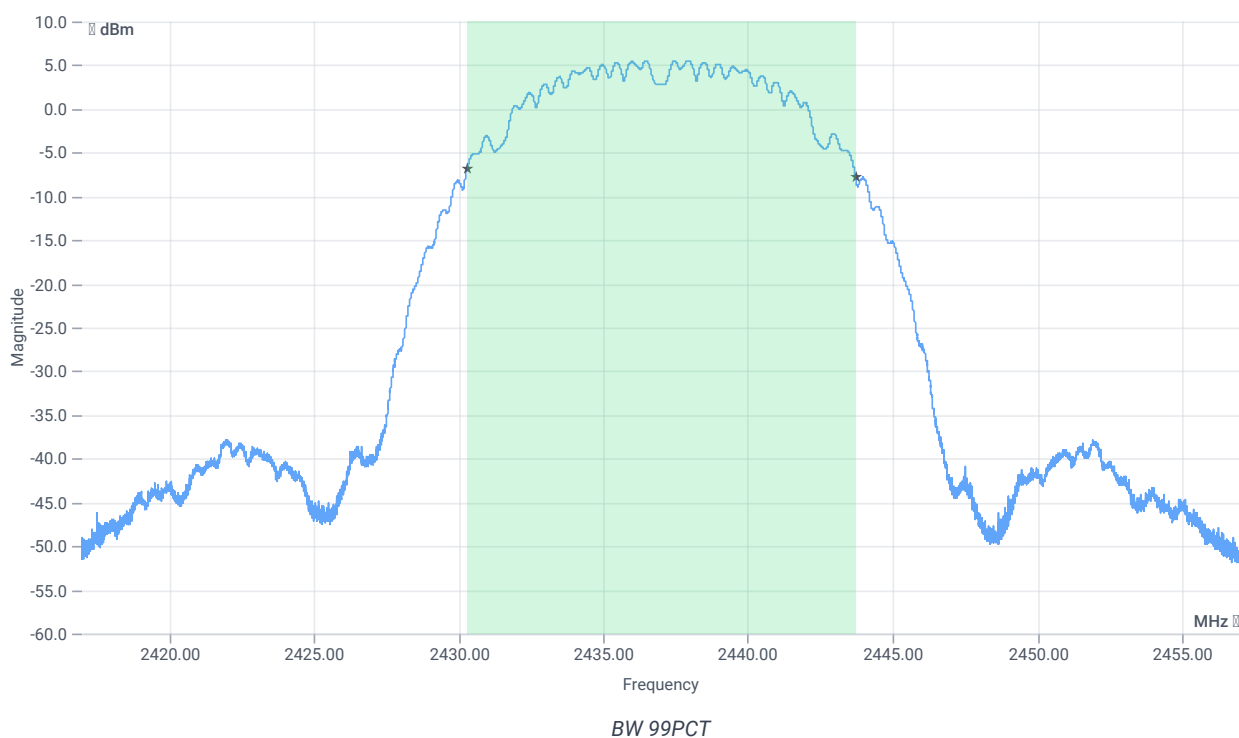
Test at TX 2437 MHz

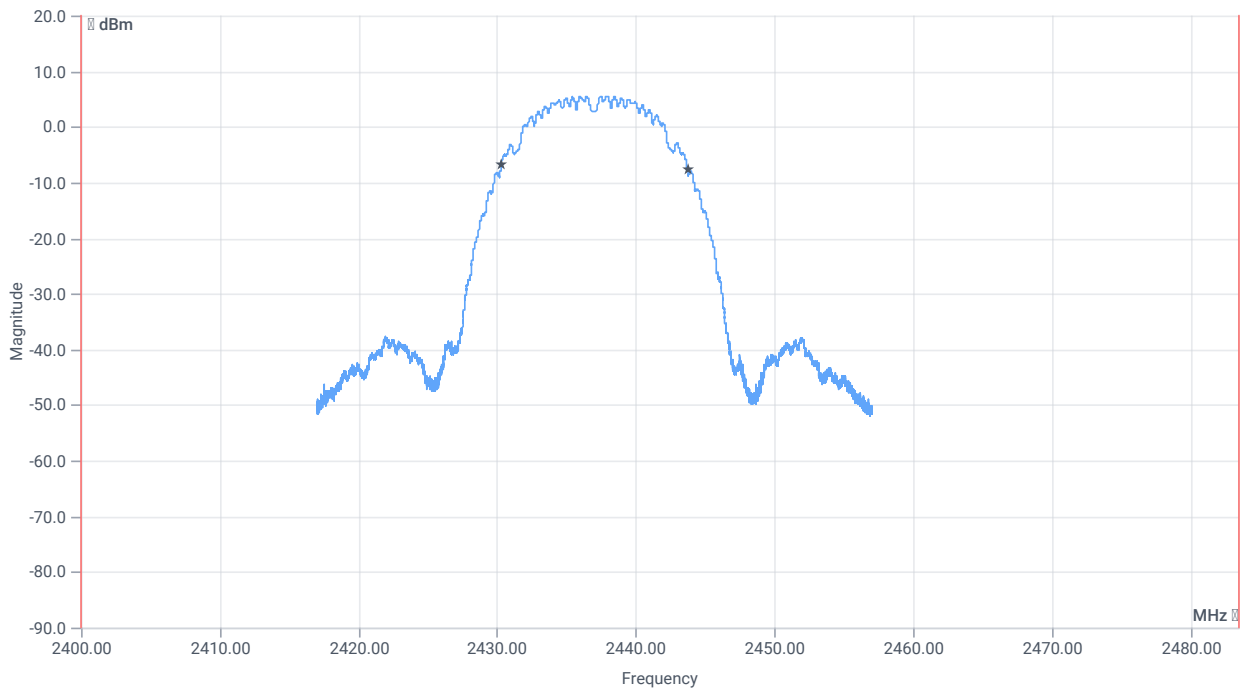
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	8.80	dBm	INFO
Ref. frequency	---	---	2438.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	13.80 11.06 20
Start [MHz] Stop [MHz]	2417.000 2457.000
RBW [MHz] VBW [MHz]	0.500000 2.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

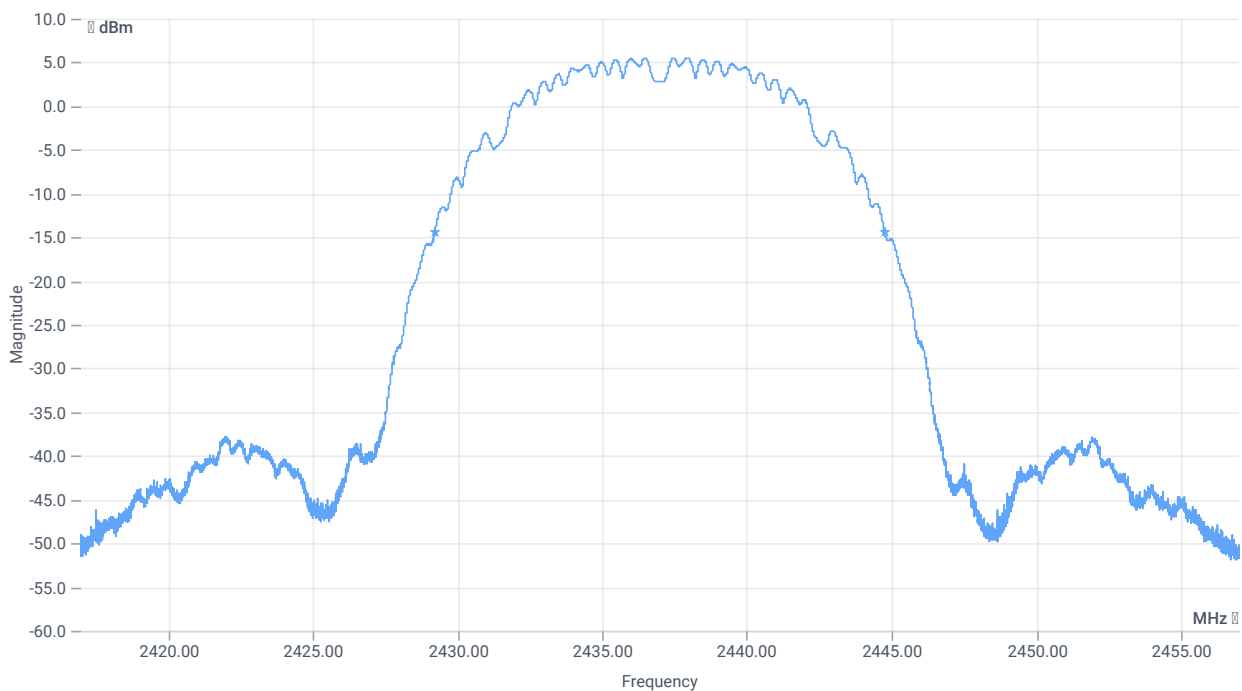




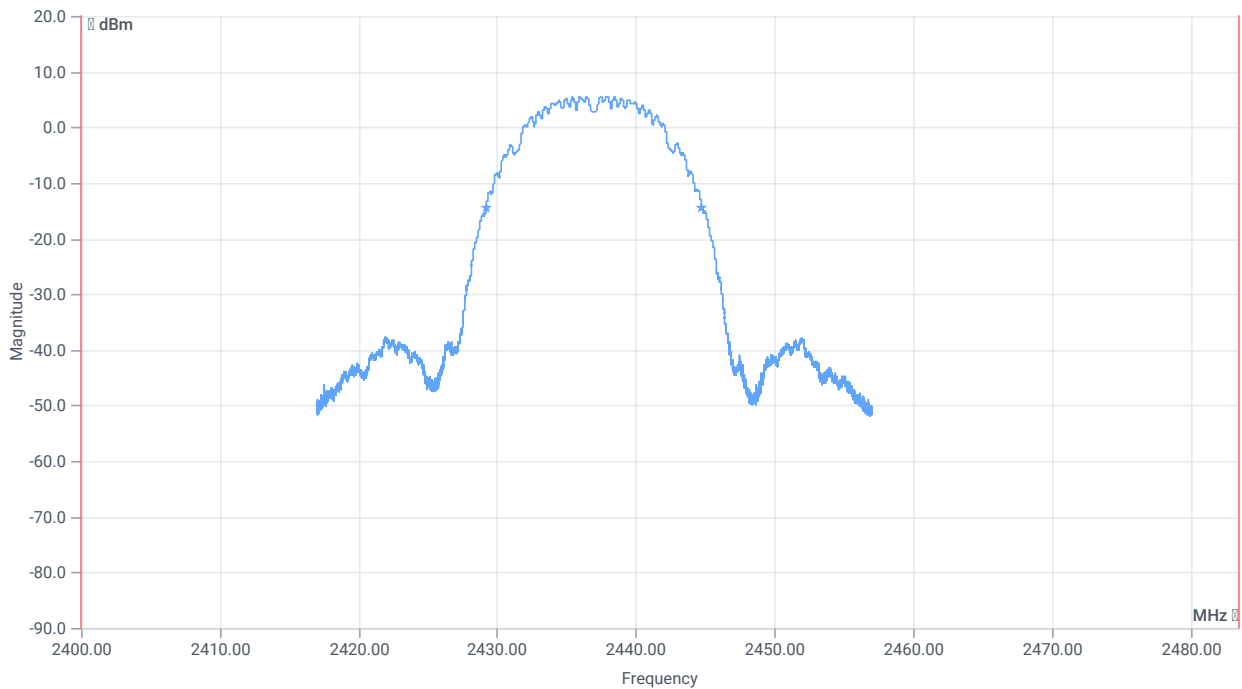
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	13427.000	kHz	INFO
T1 99%	2400.000000	---	2430.2927	MHz	PASS
T2 99%	---	2483.500000	2443.7193	MHz	PASS



BW 20dB



BW within band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	15524	kHz	INFO
T1 20dB	2400.000000	---	2429.2240	MHz	PASS
T2 20dB	---	2483.500000	2444.7480	MHz	PASS

Verdict

PASS

FCC 15.247 # Peak psd DTS ~ WLAN2G4 b mode

References

TC start	10.07.2024 10:27:07
Ambit temp [°C] humidity [rel%]	25.0 55
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission
Description	FCC 15.247 Peak psd DTS - WLAN2G4 b mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 b mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	True Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

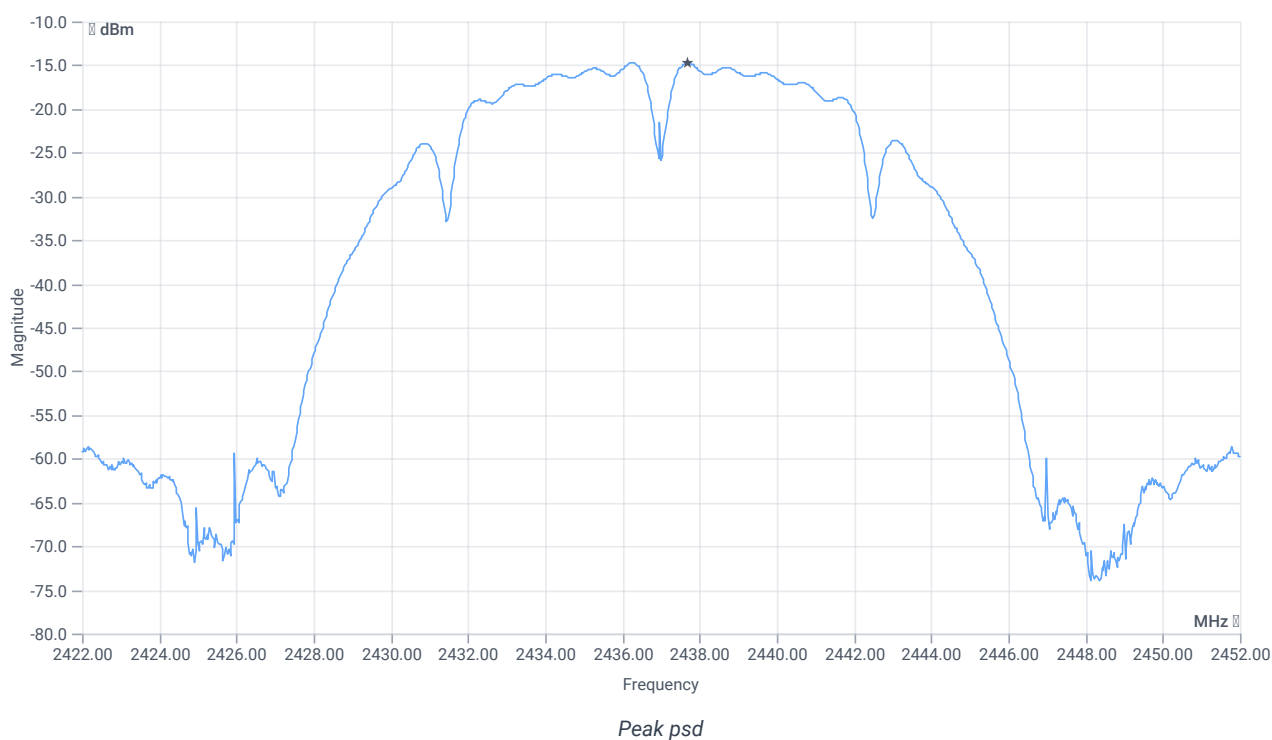
Test at TX 2437 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	8.83	dBm	INFO
Ref. frequency	---	---	2438.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	13.83 11.06 20
Start [MHz] Stop [MHz]	2422.000 2452.000
RBW [MHz] VBW [MHz]	0.003000 0.010000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1000 20 1001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak psd	---	8	-14.72	dBm/3KHz	PASS

Verdict

PASS

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 b mode

References

TC start	10.07.2024 10:26:33
Ambit temp [°C] humidity [rel%]	25.0 55
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	
Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 b mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 b mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	True Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

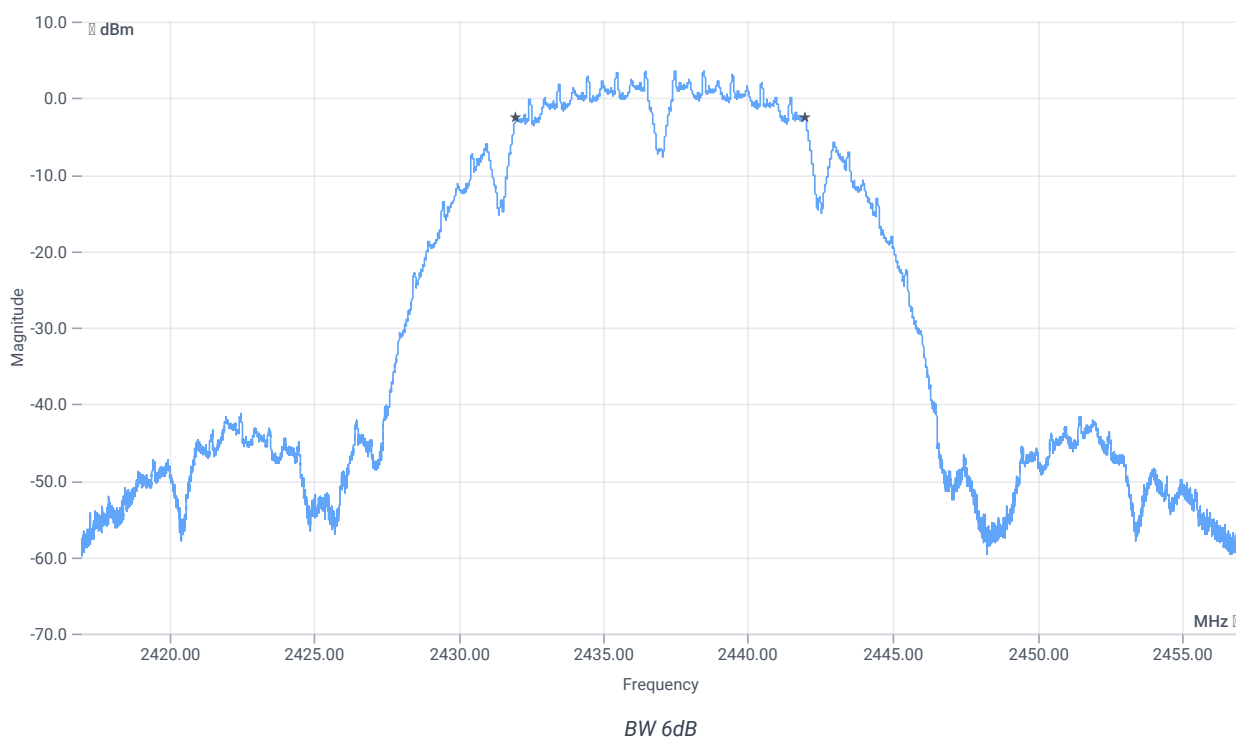
Test at TX 2437 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	8.84	dBm	INFO
Ref. frequency	---	---	2438.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	13.84 11.06 20
Start [MHz] Stop [MHz]	2417.000 2457.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS bandwidth (6dB)	500	---	10008	kHz	PASS

Verdict

PASS

NA # Peak output power 3MHz/3MHz ~ WLAN2G4 b mode

References

TC start	10.07.2024 10:26:01
Ambit temp [°C] humidity [rel%]	25.0 55
System version	5.0.7.0
Standard Version	NA NI
Method	
Description	Peak OP 3MHz/3MHz WLAN2G4 b mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 b mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	True Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

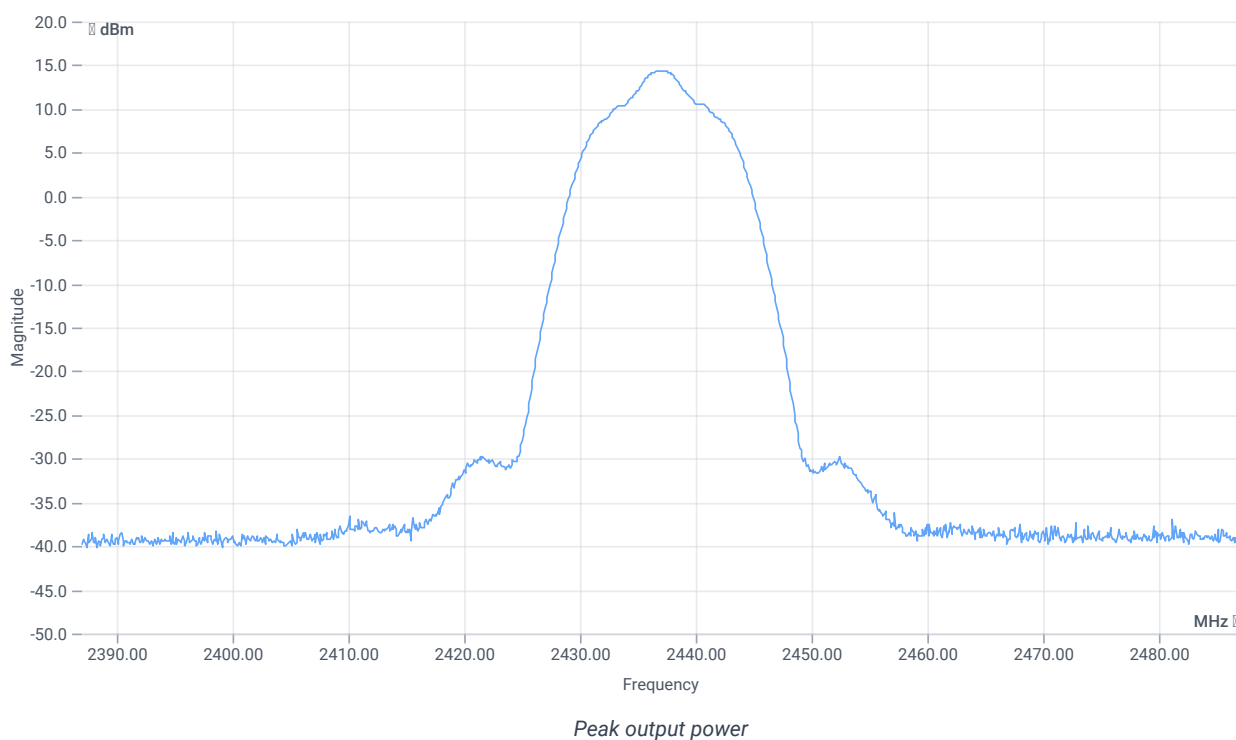
Test at TX 2437 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	8.96	dBm	INFO
Ref. frequency	---	---	2438.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	18.96 11.06 25
Start [MHz] Stop [MHz]	2387.000 2487.000
RBW [MHz] VBW [MHz]	3.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1000 10 1001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	---	14.32	dBm	INFO
Peak power	---	---	27.039584	mW	INFO
Frequency at peak	---	---	2437.2	MHz	INFO

Verdict

PASS

FCC 15.247 # Peak output power PM DTS ~ WLAN2G4 b mode

References

TC start	10.07.2024 10:25:10
Ambit temp [°C] humidity [rel%]	24.9 55
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.3 PKPM1 Peak-reading Power Meter Method
Description	FCC 15.247 Peak output power PM DTS - WLAN2G4 b mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0
Power sensor,Keysight Technologies,U2021XA,MY59190010,A.04.06

Test Parameter

Technology to test	WLAN2G4 b mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
Full path type	EUT_PM_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.PM/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00010000:00000001

Test at TX 2412 MHz

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	30	13.94	dBm	PASS

Verdict

PASS

FCC 15.247 # TX spurious conducted 20dBc ~ WLAN2G4 b mode

References

TC start	10.07.2024 10:11:39
Ambit temp [°C] humidity [rel%]	24.9 55
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
Description	FCC 15.247 TX Emissions cond. DTS - WLAN2G4 b mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

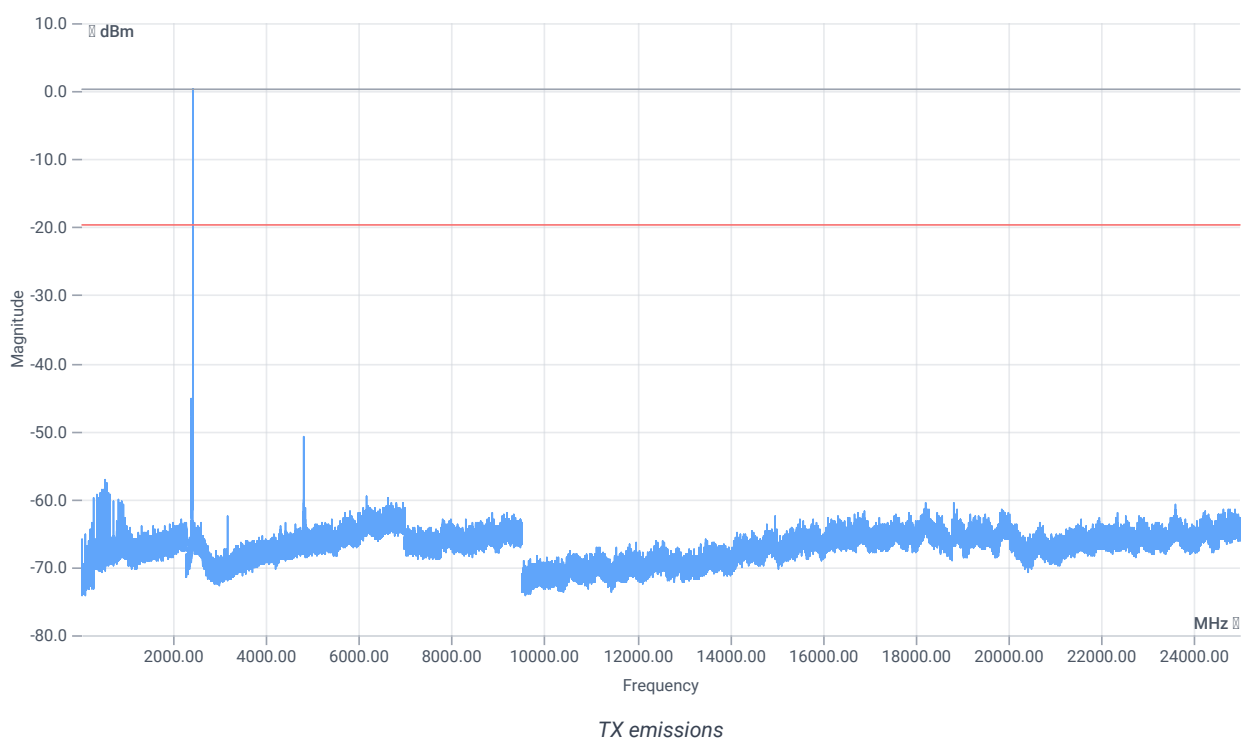
Test Parameter

Technology to test	WLAN2G4 b mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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 2412 MHz

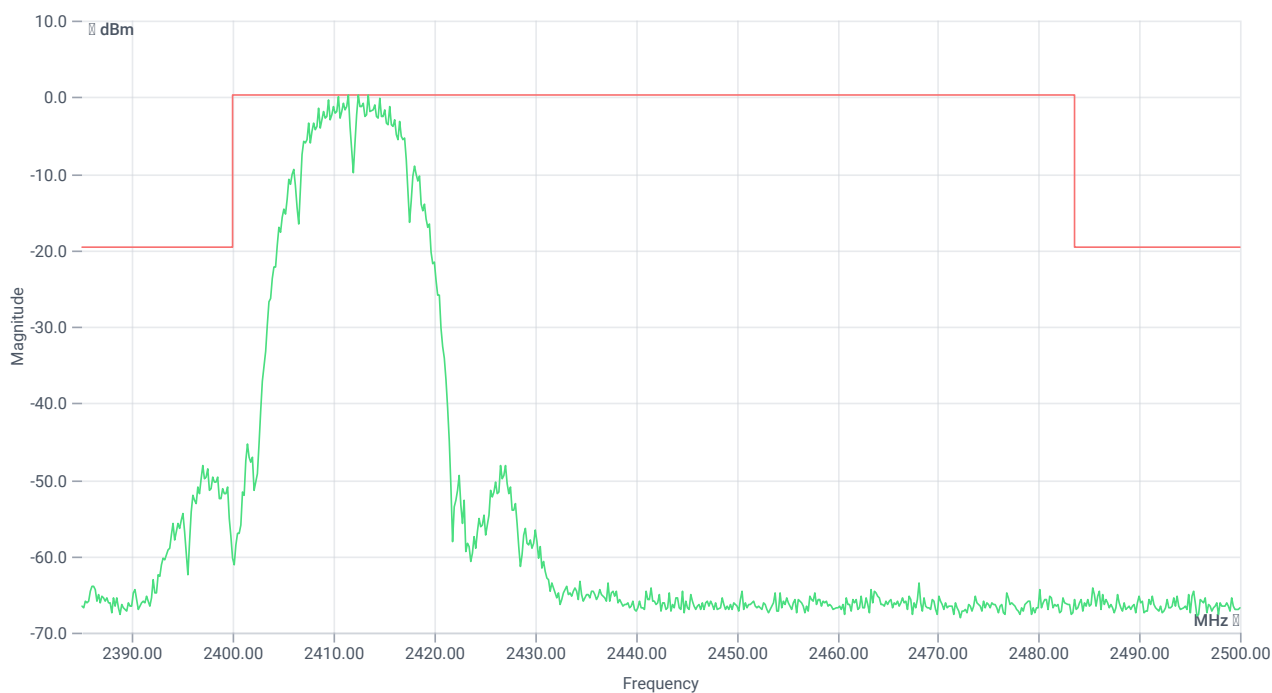
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.70	dBm	INFO
Ref. frequency	---	---	2413.300	MHz	INFO



READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	5.70 23.17 0
Start [MHz] Stop [MHz]	24780.000 25000.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	200 25 1501 SWE



TX emissions band zoomed

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2412.50 MHz	---	---	0.29	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 2397 MHz	0	---	28.55	dB	INFO

Verdict

PASS

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 b mode

References

TC start	10.07.2024 10:10:59
Ambit temp [°C] humidity [rel%]	24.9 55
System version	5.0.7.0
Standard Version	FCC 15.247, ISED RSS247 NI
Method	
Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 b mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 b mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

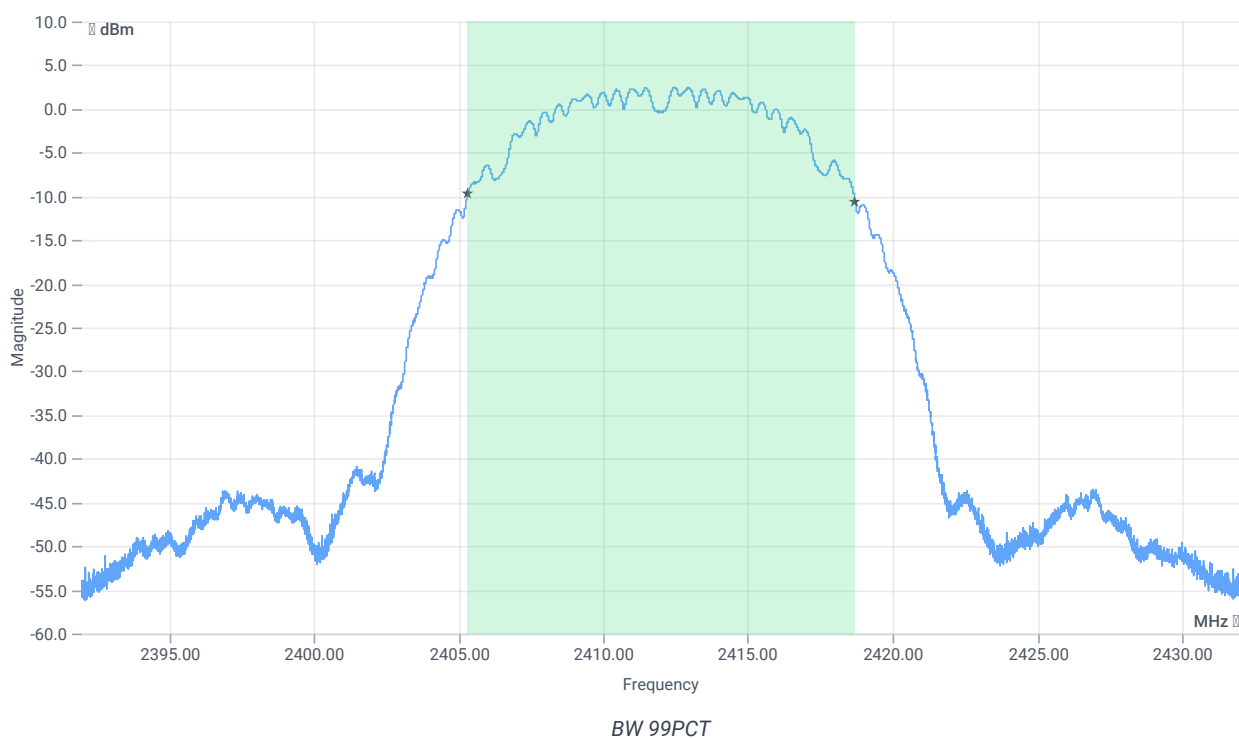
Test at TX 2412 MHz

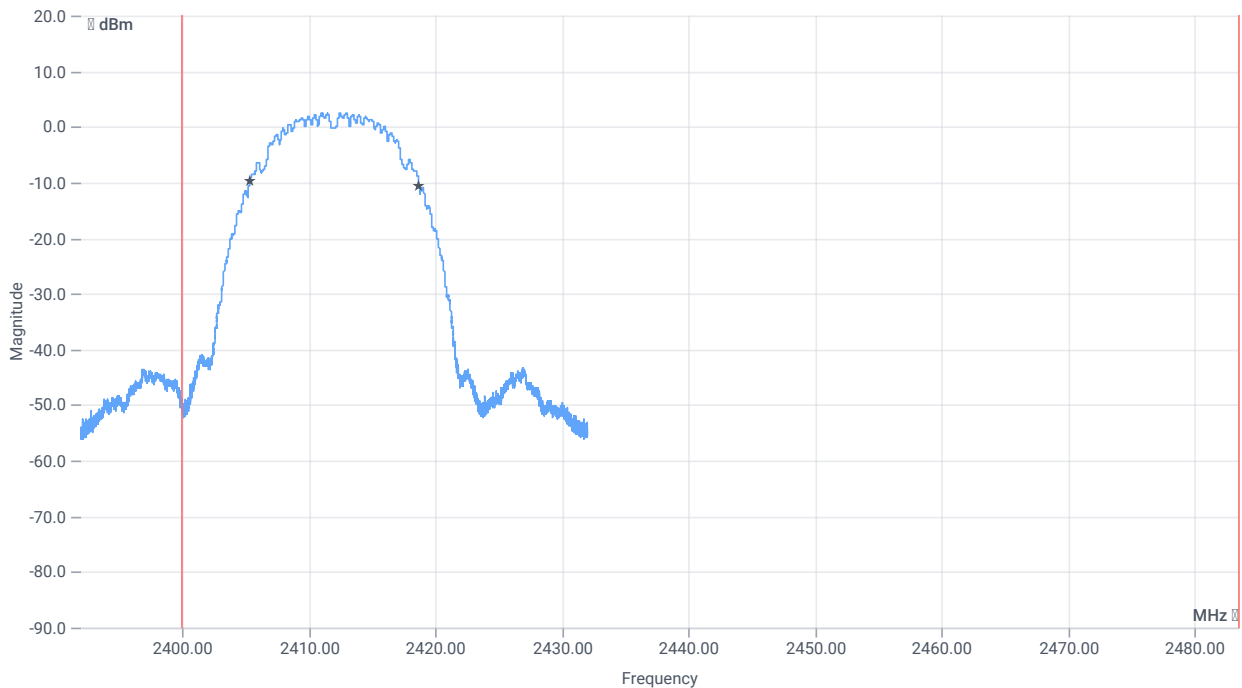
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.74	dBm	INFO
Ref. frequency	---	---	2413.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.74 10.98 15
Start [MHz] Stop [MHz]	2392.000 2432.000
RBW [MHz] VBW [MHz]	0.500000 2.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

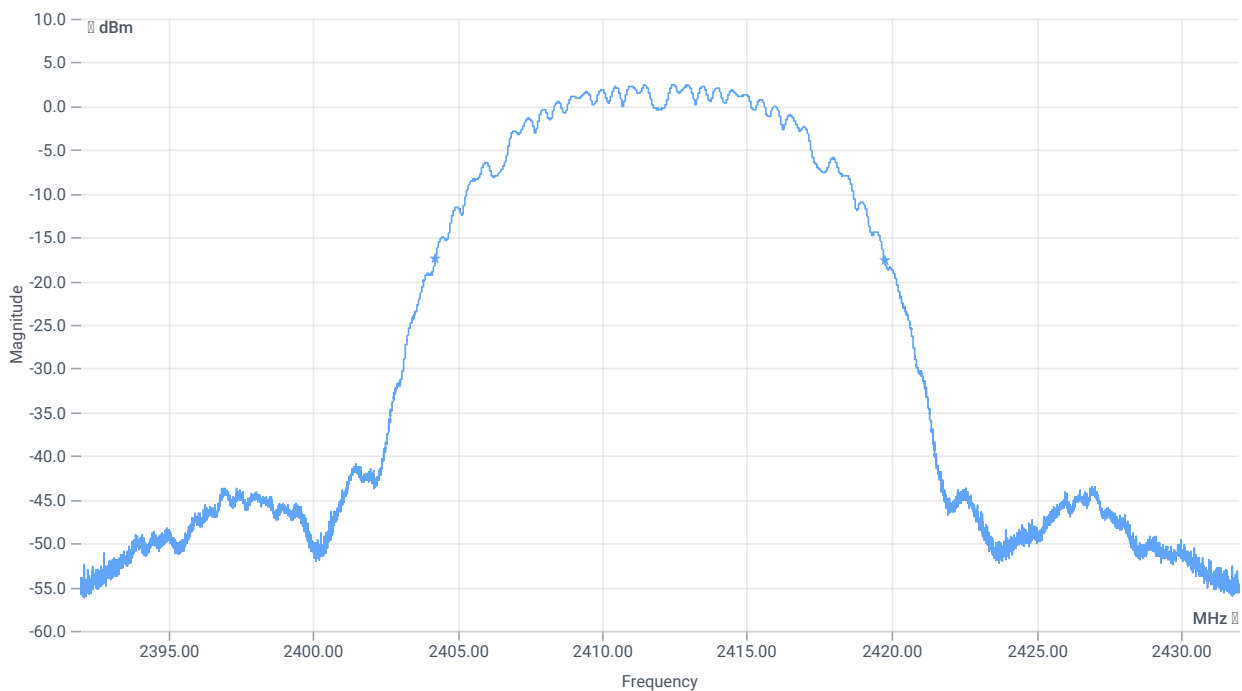




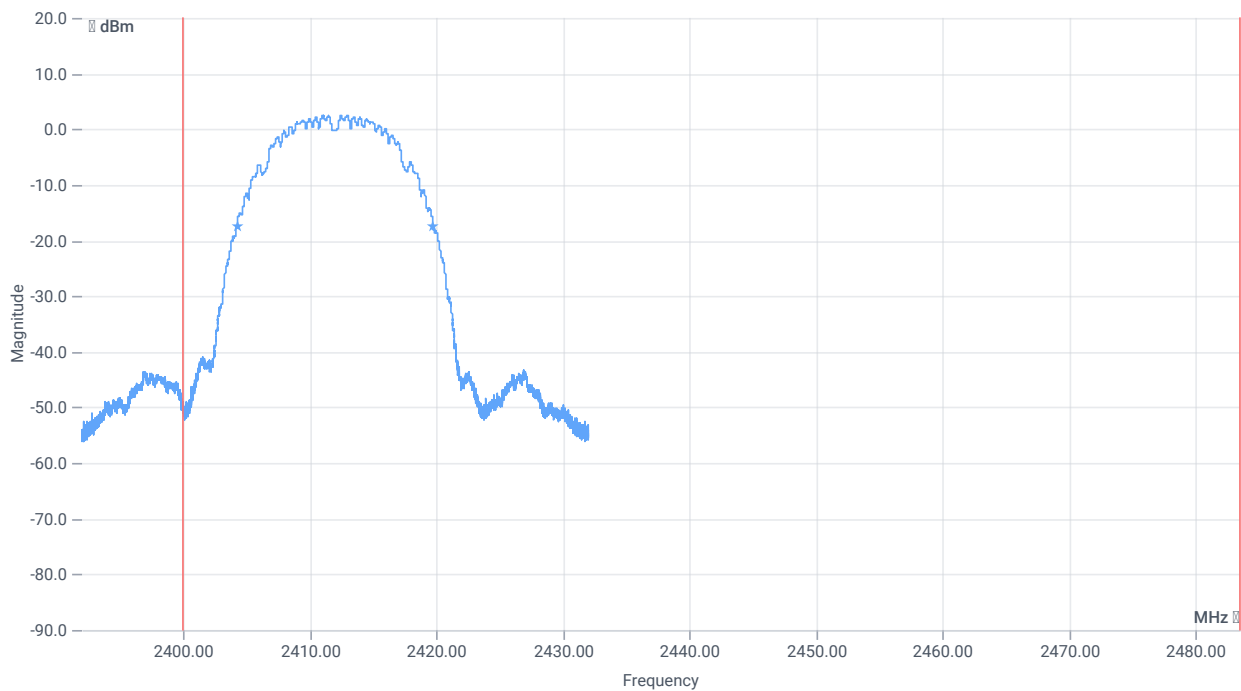
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	13383.000	kHz	INFO
T1 99%	2400.000000	---	2405.3287	MHz	PASS
T2 99%	---	2483.500000	2418.7113	MHz	PASS



BW 20dB



BW within band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	15504	kHz	INFO
T1 20dB	2400.000000	---	2404.2400	MHz	PASS
T2 20dB	---	2483.500000	2419.7440	MHz	PASS

Verdict
PASS

FCC 15.247 # Peak psd DTS ~ WLAN2G4 b mode

References

TC start	10.07.2024 10:10:17
Ambit temp [°C] humidity [rel%]	24.9 55
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission
Description	FCC 15.247 Peak psd DTS - WLAN2G4 b mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 b mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

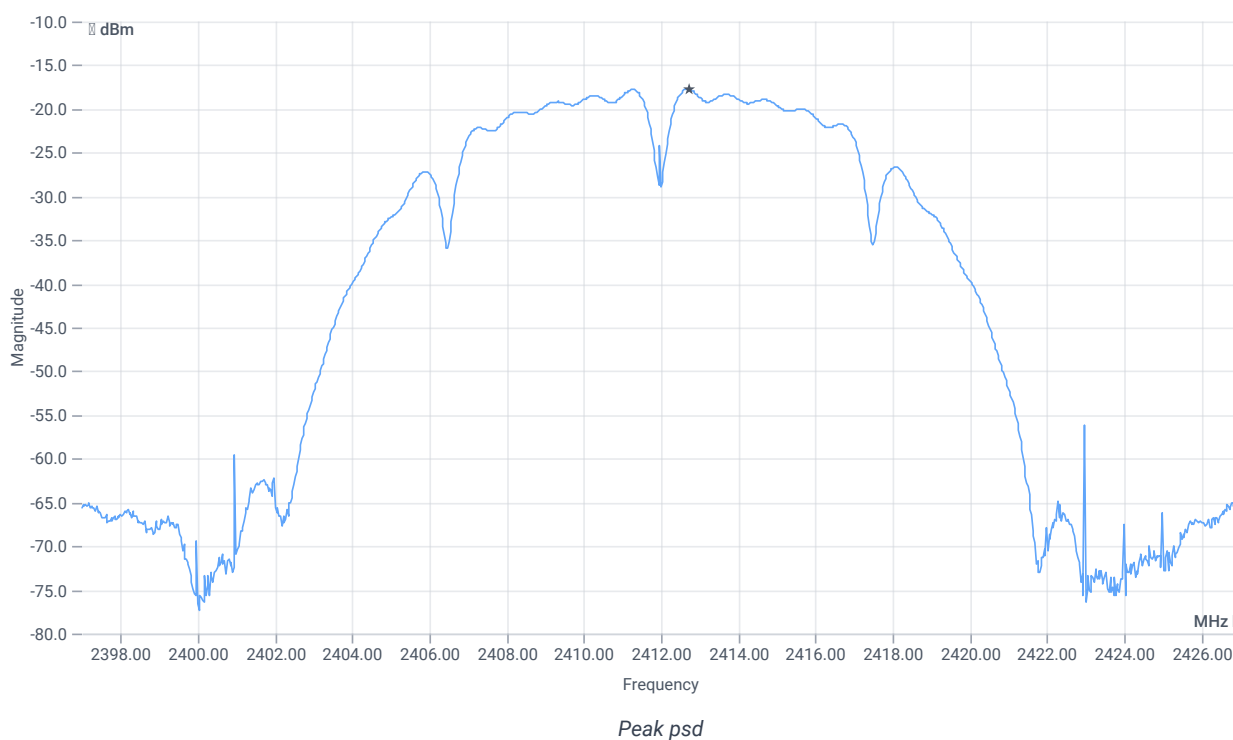
Test at TX 2412 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.74	dBm	INFO
Ref. frequency	---	---	2413.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.74 10.98 15
Start [MHz] Stop [MHz]	2397.000 2427.000
RBW [MHz] VBW [MHz]	0.003000 0.010000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1000 20 1001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak psd	---	8	-17.77	dBm/3KHz	PASS

Verdict

PASS

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 b mode

References

TC start	10.07.2024 10:09:43
Ambit temp [°C] humidity [rel%]	24.9 56
System version	5.0.7.0
Standard Version	FCC 15.247 NI
Method	
Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 b mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 b mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

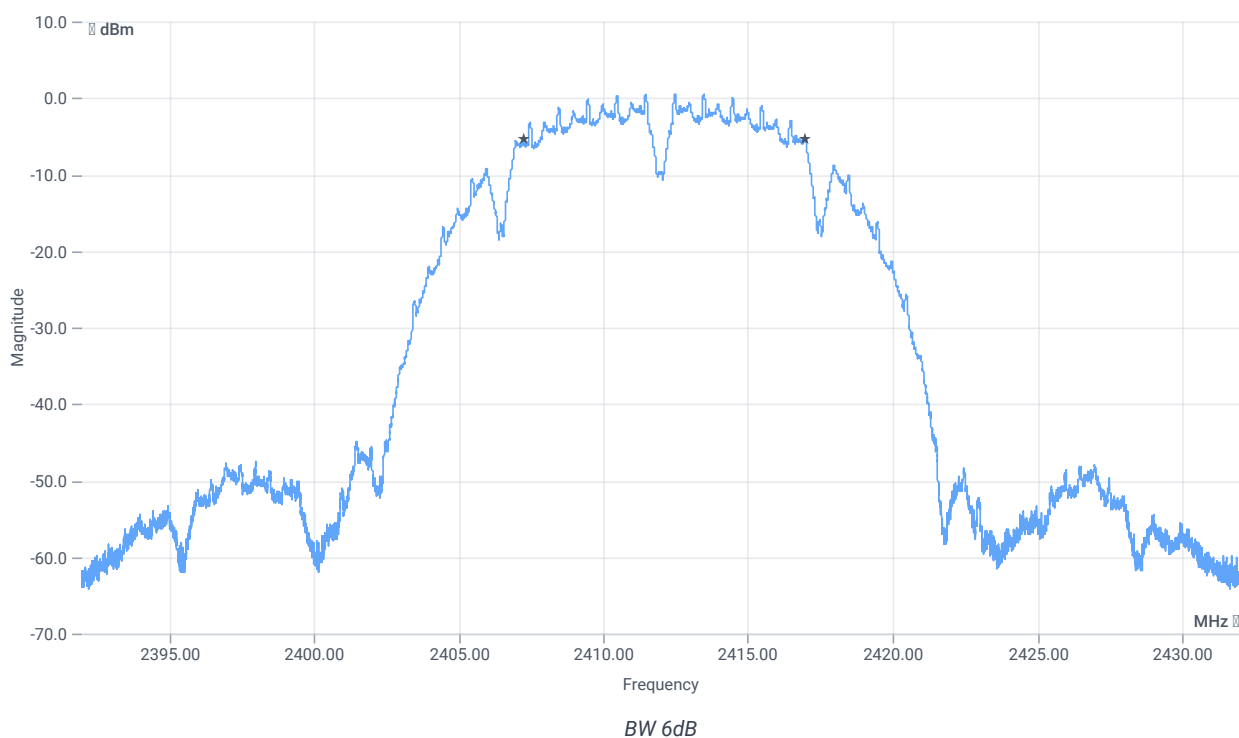
Test at TX 2412 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.84	dBm	INFO
Ref. frequency	---	---	2413.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.84 10.98 15
Start [MHz] Stop [MHz]	2392.000 2432.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS bandwidth (6dB)	500	---	9712	kHz	PASS

Verdict

PASS

NA # Peak output power 3MHz/3MHz ~ WLAN2G4 b mode

References

TC start	10.07.2024 10:09:12
Ambit temp [°C] humidity [rel%]	24.9 55
System version	5.0.7.0
Standard Version	NA NI
Method	
Description	Peak OP 3MHz/3MHz WLAN2G4 b mode
Information	

EUT Common Settings WLAN2G4

Number of antenna ports	1
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,cetecom advanced GmbH,USM,B002,1.0.0

Test Parameter

Technology to test	WLAN2G4 b mode
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2462
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.5
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

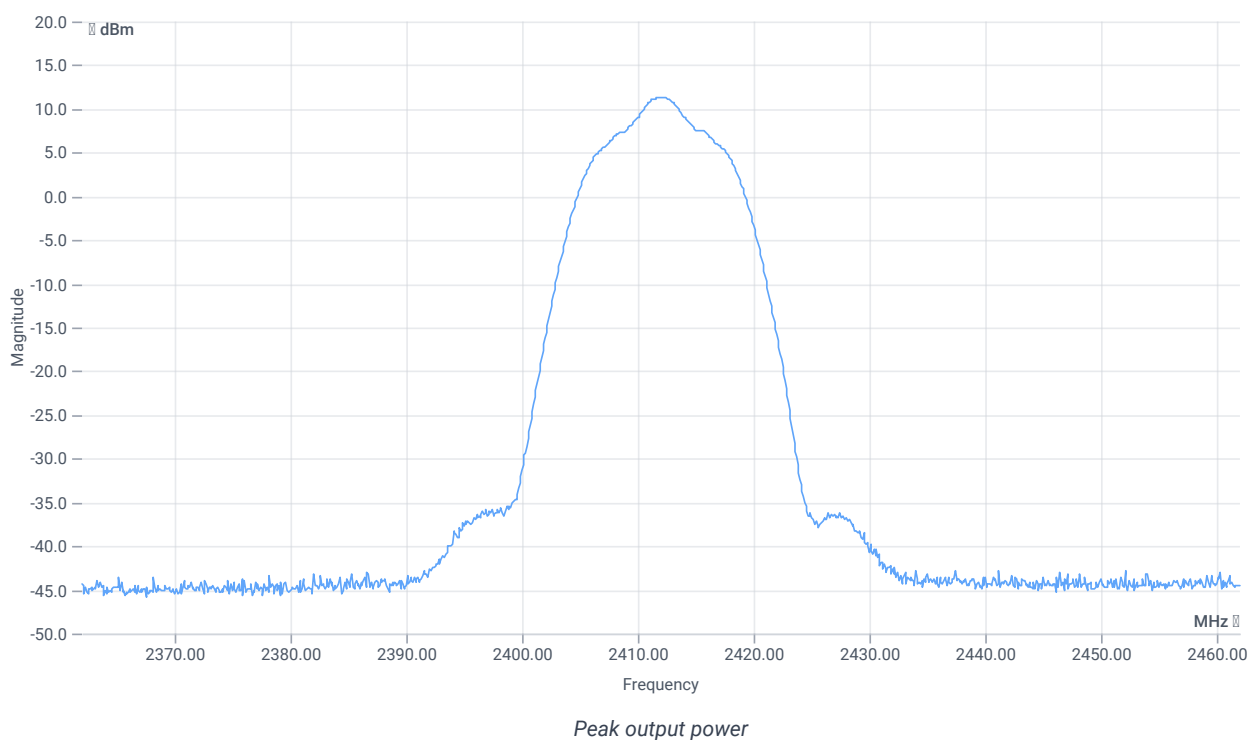
Test at TX 2412 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.95	dBm	INFO
Ref. frequency	---	---	2413.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	15.95 10.98 20
Start [MHz] Stop [MHz]	2362.000 2462.000
RBW [MHz] VBW [MHz]	3.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1000 10 1001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	---	11.25	dBm	INFO
Peak power	---	---	13.335214	mW	INFO
Frequency at peak	---	---	2412.2	MHz	INFO

Verdict

PASS

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