

FCC 15.247 # TX spurious conducted 20dBc ~ BT Classic EDR Pi/4DQPSK

Test References

TC Start	12.12.2022 16:43:11
Ambit Temp [°C] Humidity [rel%]	24.2 26
System Version	3.3.3.4
Test Specification	FCC 15.247 -
Test Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
TC Version	0.0.1
My Description	FCC 15.247 TX Emissions Conducted FHSS - BT Classic EDR Pi/4DQPSK

Add. Information

EUT Common Settings BT Classic

Intermodulation Value N	3
Image Freq. Low Mid High [MHz]	0 0 0
Power Class	1
Power Control	No
Longest Supported Packet Type	DH5
RF Supported	Basic Rate True EDR Pi/4DQPSK True EDR 8DPSK True
Testmode	None
Perform Inquiry	Yes
EUT BT Address (if Inquiry No)	0123456789AB
Signaling BT Address	BABEBEDADBAD
Switch Matrix & Pathcompensation enabled	Yes

Test Parameter

Technology to test	BT Classic EDR Pi/4DQPSK
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2402
Frequency mid to test	True Freq [MHz] 2441
Frequency high to test	True Freq [MHz] 2480
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	0
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

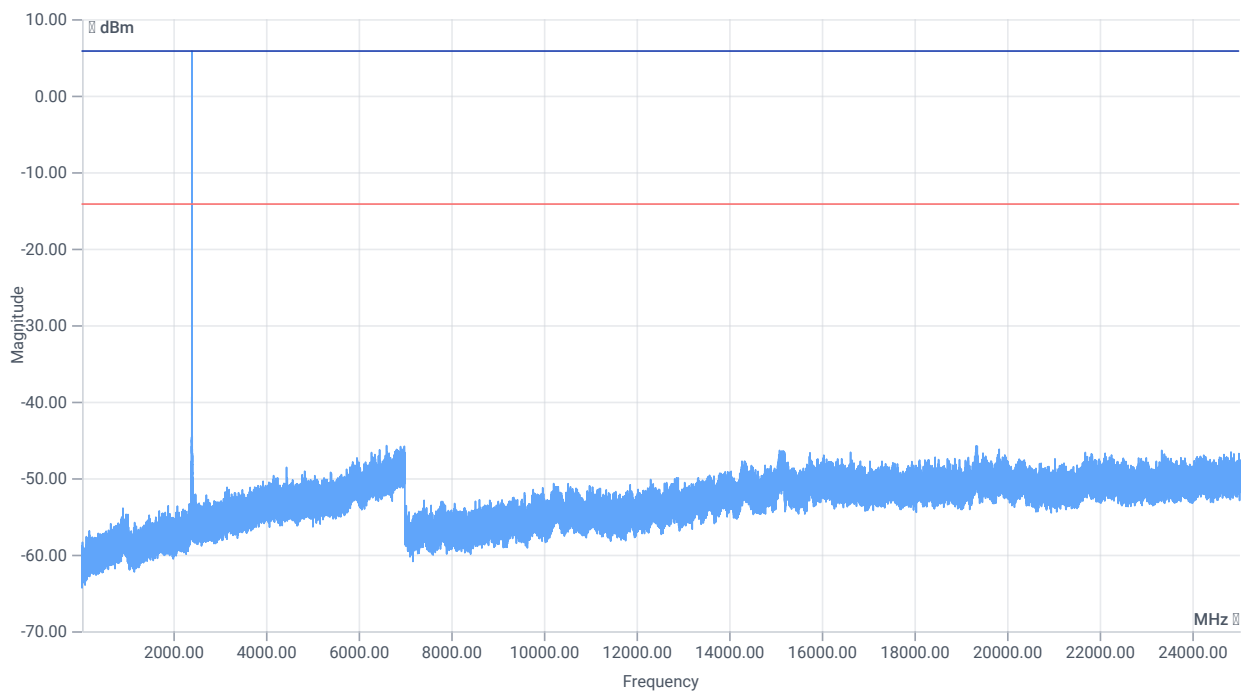
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70

Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI

Test at TX 2402 MHz

RESULT: Reference Power cond.

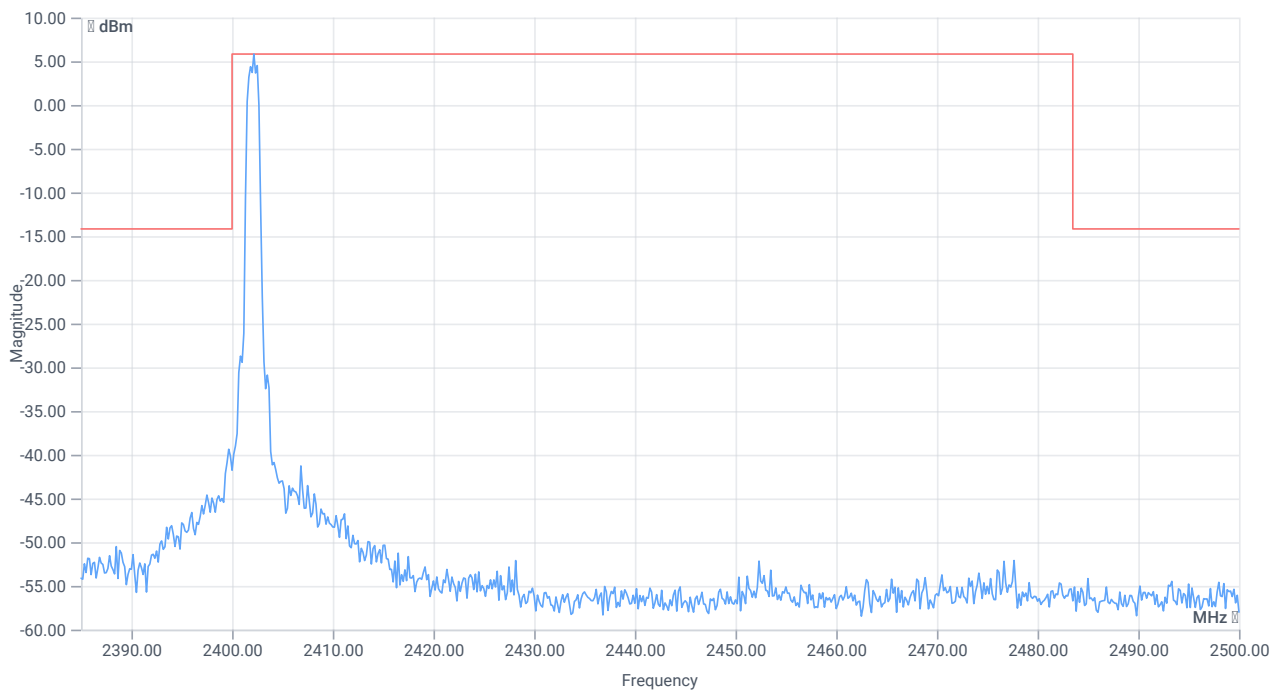
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	9.62	dBm	INFO
Ref. Frequency	---	---	2402.300	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	9.62 0 25
Start [MHz] Stop [MHz]	24530.000 25030.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	200 10 3001 SWE



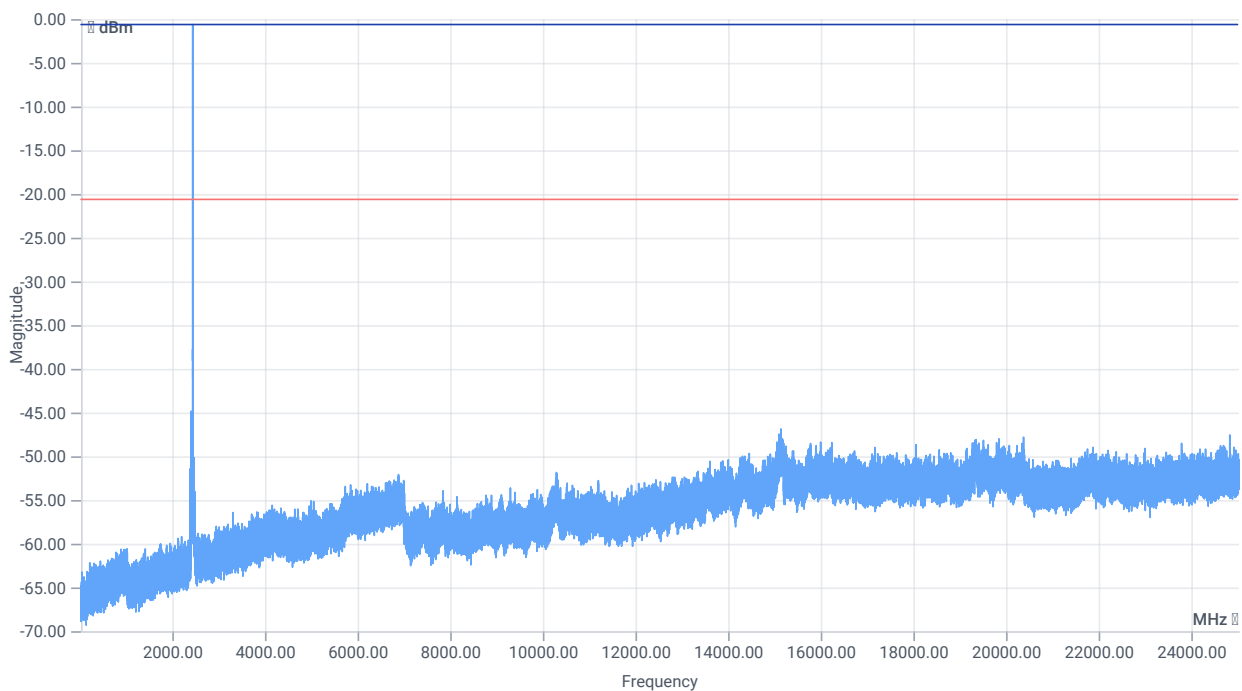
RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2402.17 MHz	---	---	5.82	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 2399.667 MHz	0	---	25.19	dB	INFO

Test at TX 2441 MHz

RESULT: Reference Power cond.

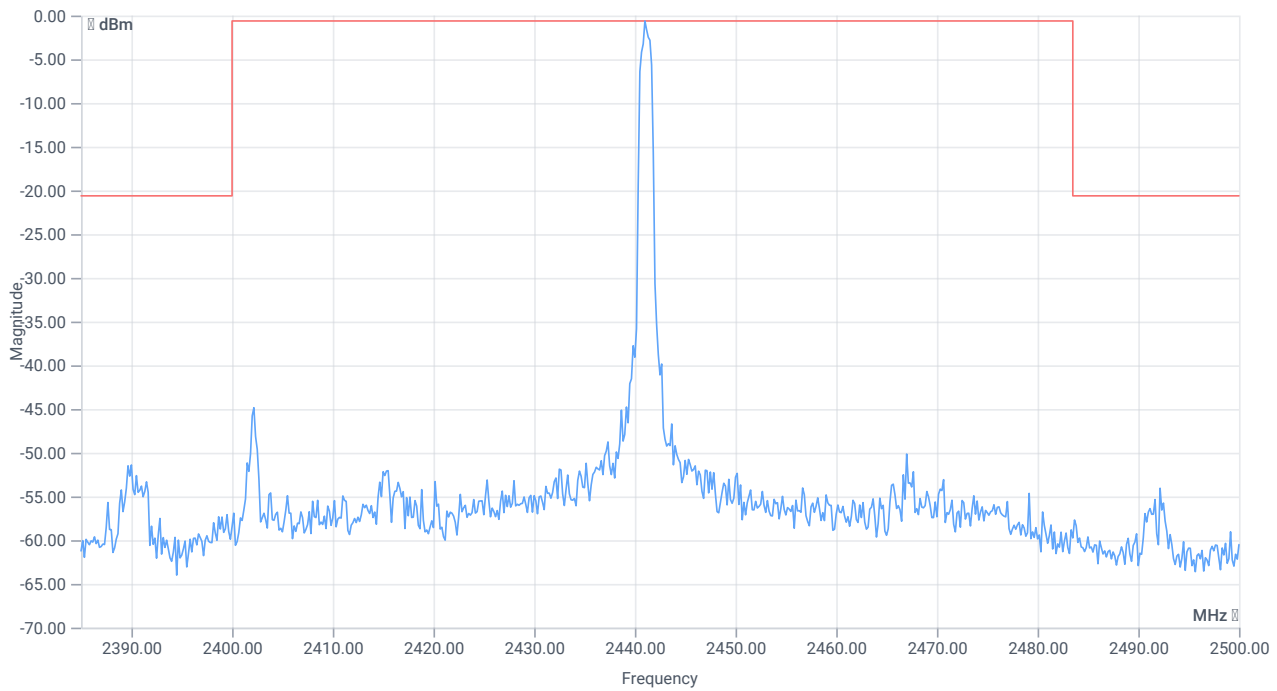
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	2.17	dBm	INFO
Ref. Frequency	---	---	2440.900	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	2.17 0 20
Start [MHz] Stop [MHz]	24530.000 25030.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	200 10 3001 SWE



TX emissions band zoomed

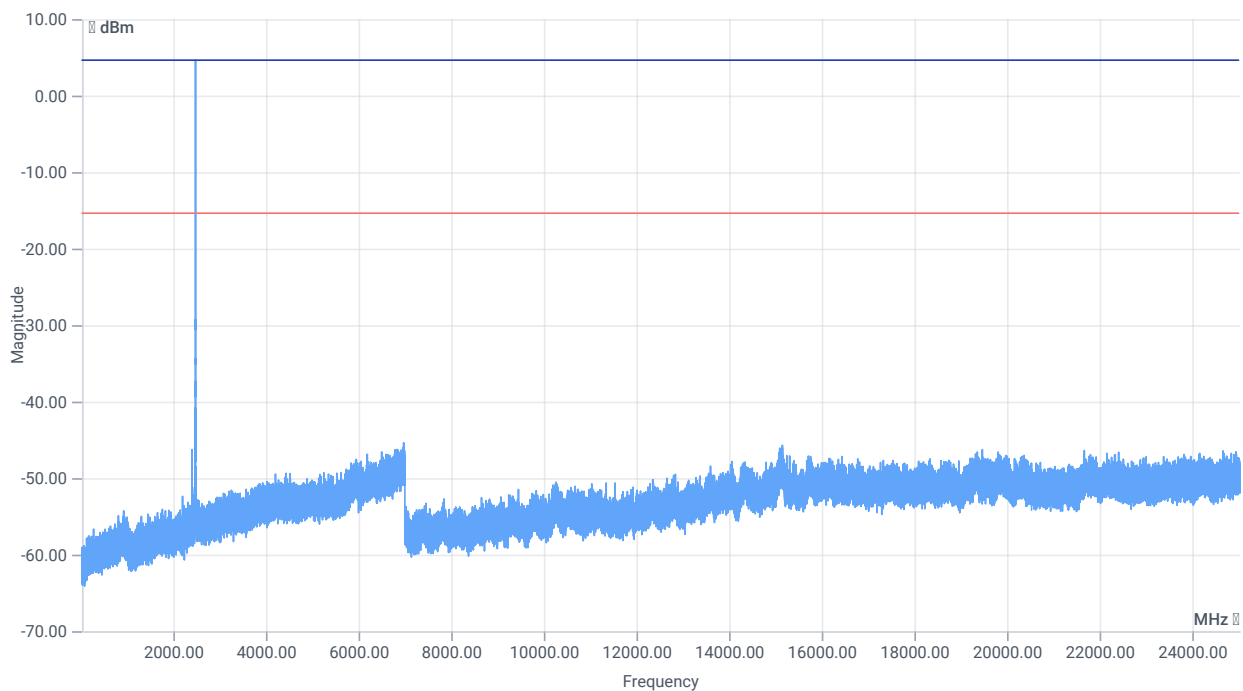
RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2441.00 MHz	---	---	-0.62	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 15140.833 MHz	0	---	26.25	dB	INFO

Test at TX 2480 MHz

RESULT: Reference Power cond.

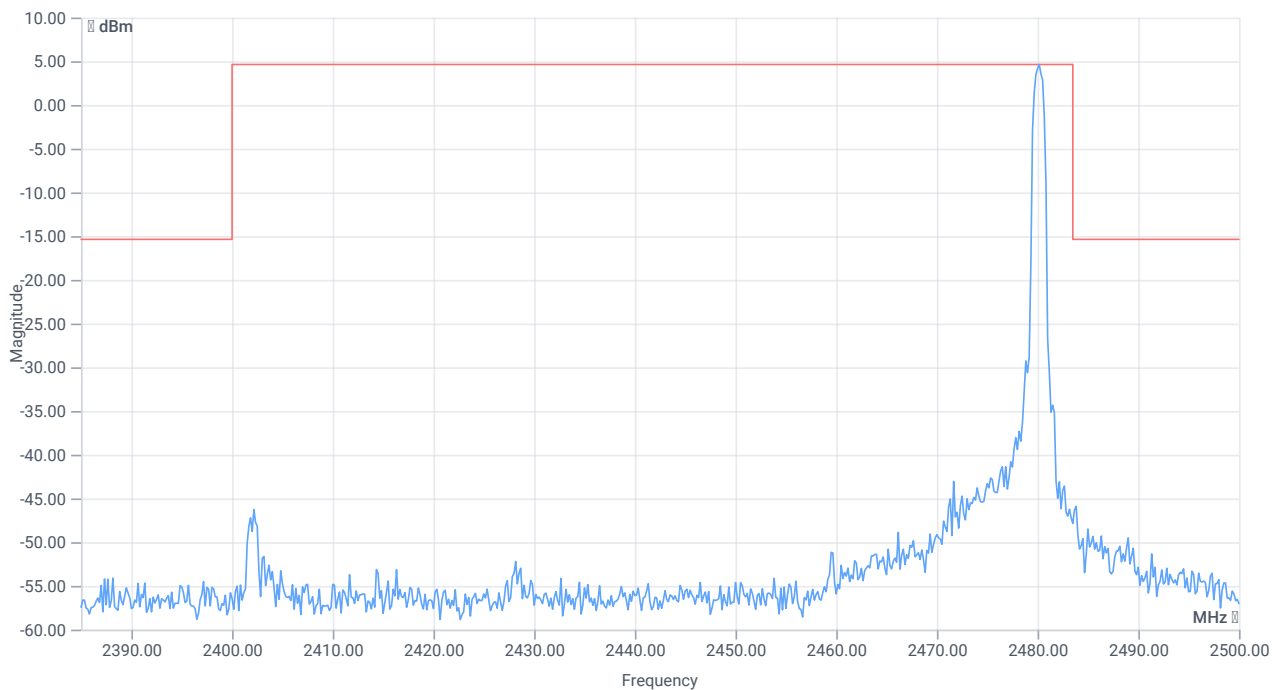
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	8.25	dBm	INFO
Ref. Frequency	---	---	2480.300	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	8.25 0 25
Start [MHz] Stop [MHz]	24530.000 25030.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	200 10 3001 SWE



RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2480.17 MHz	---	---	4.63	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 6974.167 MHz	0	---	29.99	dB	INFO

Verdict

PASS

FCC 15.247 # TX spurious conducted 20dBc ~ BT Classic EDR 8DPSK

Test References

TC Start	12.12.2022 17:04:10
Ambit Temp [°C] Humidity [rel%]	24.3 25
System Version	3.3.3.4
Test Specification	FCC 15.247 -
Test Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
TC Version	0.0.1
My Description	FCC 15.247 TX Emissions Conducted FHSS - BT Classic EDR 8DPSK
Add. Information	

EUT Common Settings BT Classic

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Image Freq. Low Mid High [MHz]	0 0 0
Power Class	1
Power Control	No
Longest Supported Packet Type	DH5
RF Supported	Basic Rate True EDR Pi/4DQPSK True EDR 8DPSK True
Testmode	None
Perform Inquiry	Yes
EUT BT Address (if Inquiry No)	0123456789AB
Signaling BT Address	BABEBEDADBAD
Switch Matrix & Pathcompensation enabled	Yes

Test Parameter

Technology to test	BT Classic EDR 8DPSK
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2402
Frequency mid to test	True Freq [MHz] 2441
Frequency high to test	True Freq [MHz] 2480
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	0
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Test Equipment

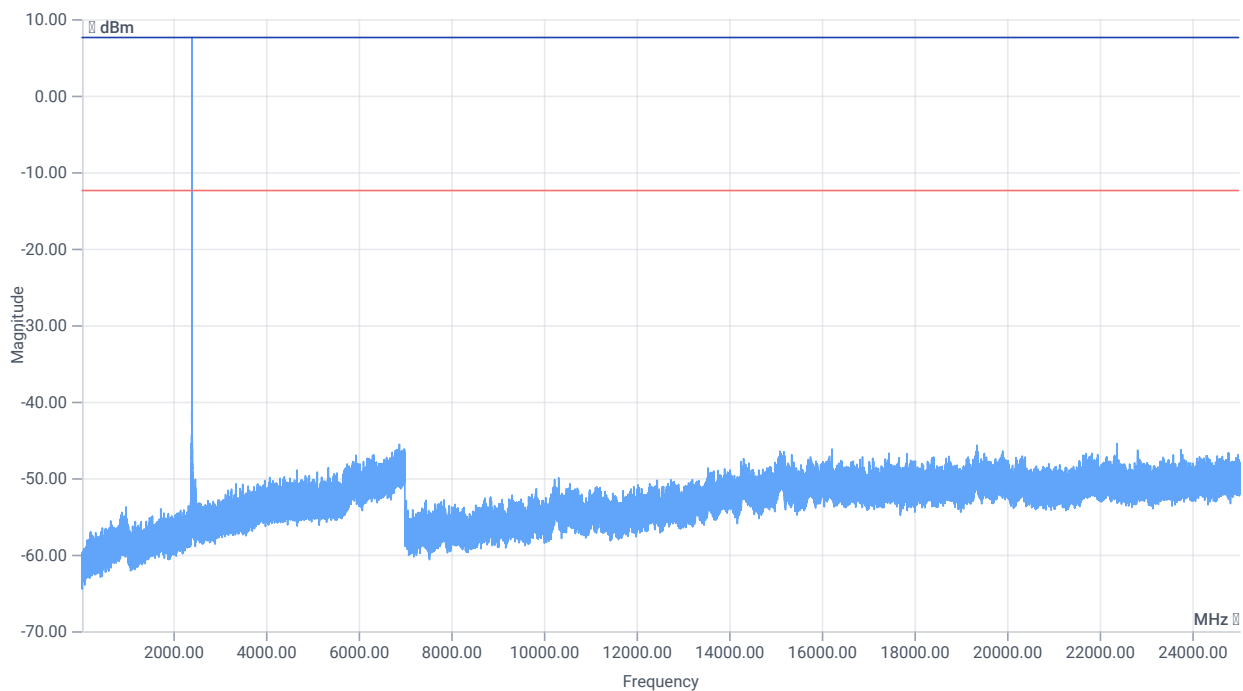
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70

Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI

Test at TX 2402 MHz

RESULT: Reference Power cond.

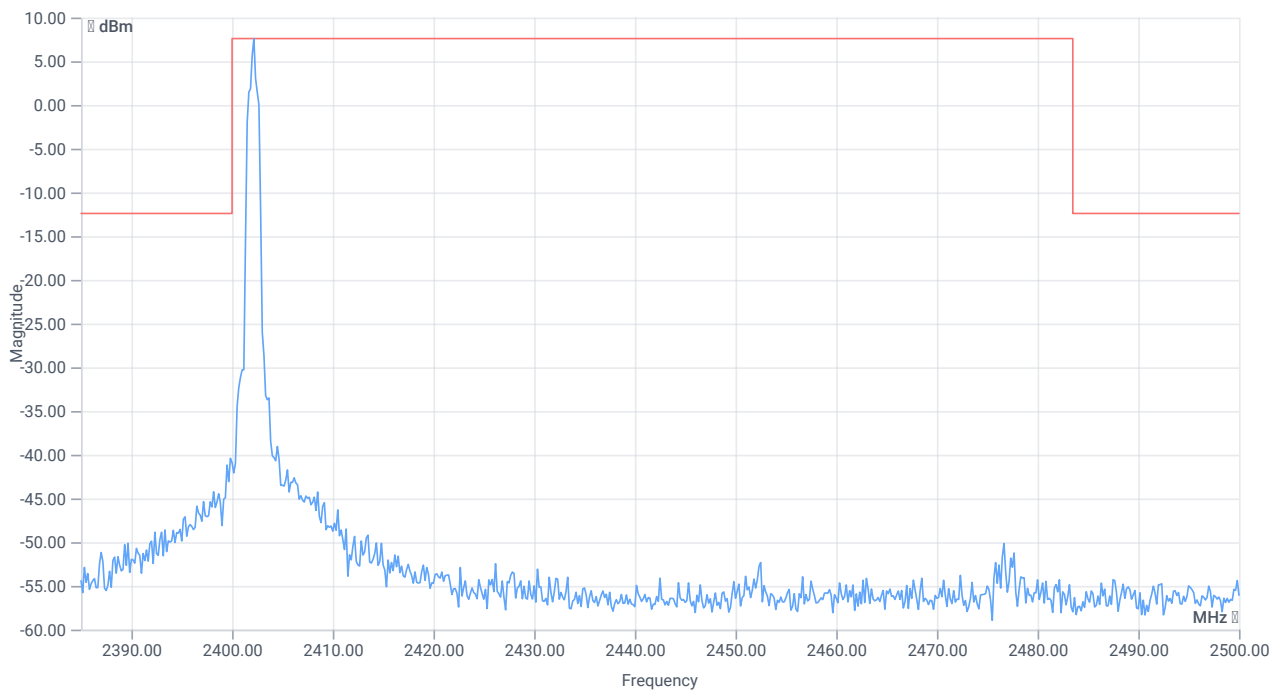
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	9.66	dBm	INFO
Ref. Frequency	---	---	2402.200	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	9.66 0 25
Start [MHz] Stop [MHz]	24530.000 25030.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	200 10 3001 SWE



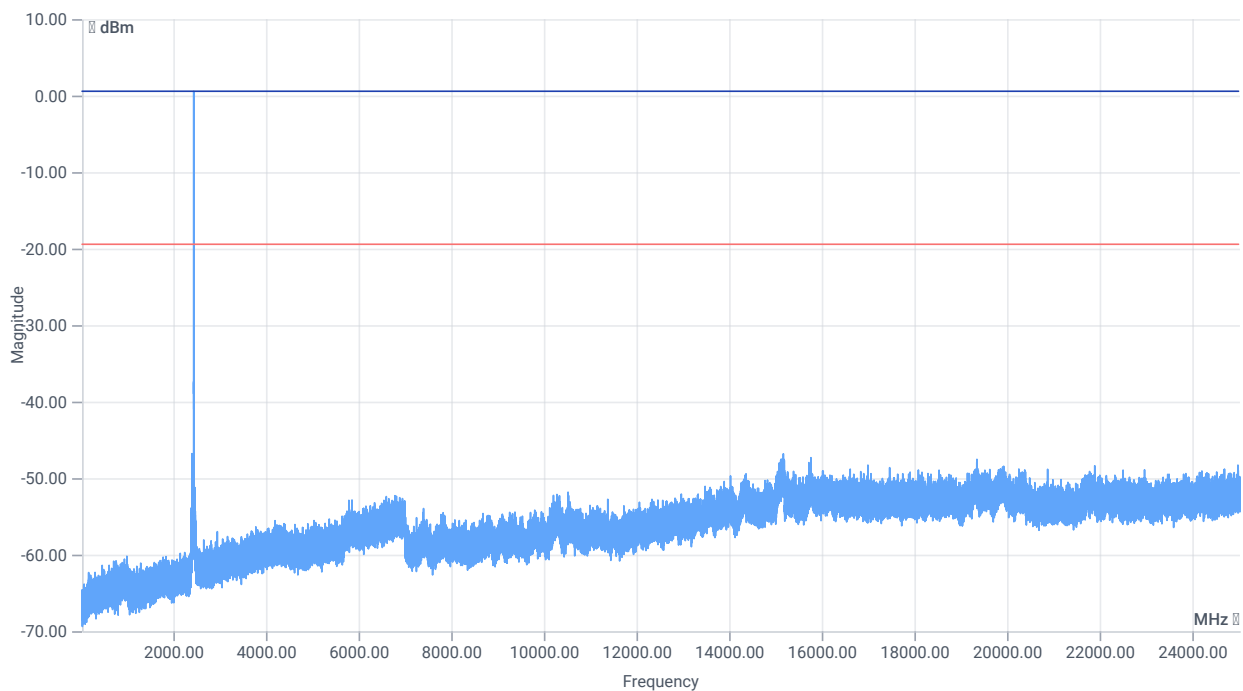
RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2402.17 MHz	---	---	7.59	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 2399.833 MHz	0	---	27.99	dB	INFO

Test at TX 2441 MHz

RESULT: Reference Power cond.

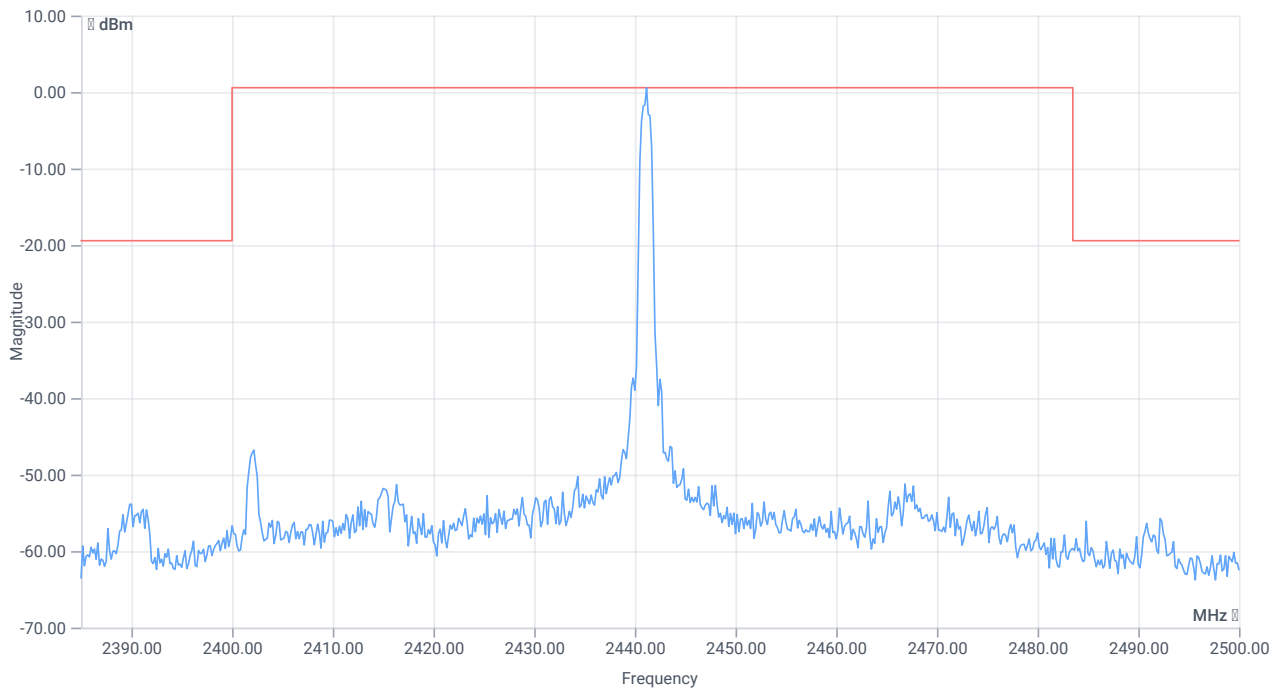
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	1.77	dBm	INFO
Ref. Frequency	---	---	2441.100	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	1.77 0 20
Start [MHz] Stop [MHz]	24530.000 25030.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	200 10 3001 SWE



TX emissions band zoomed

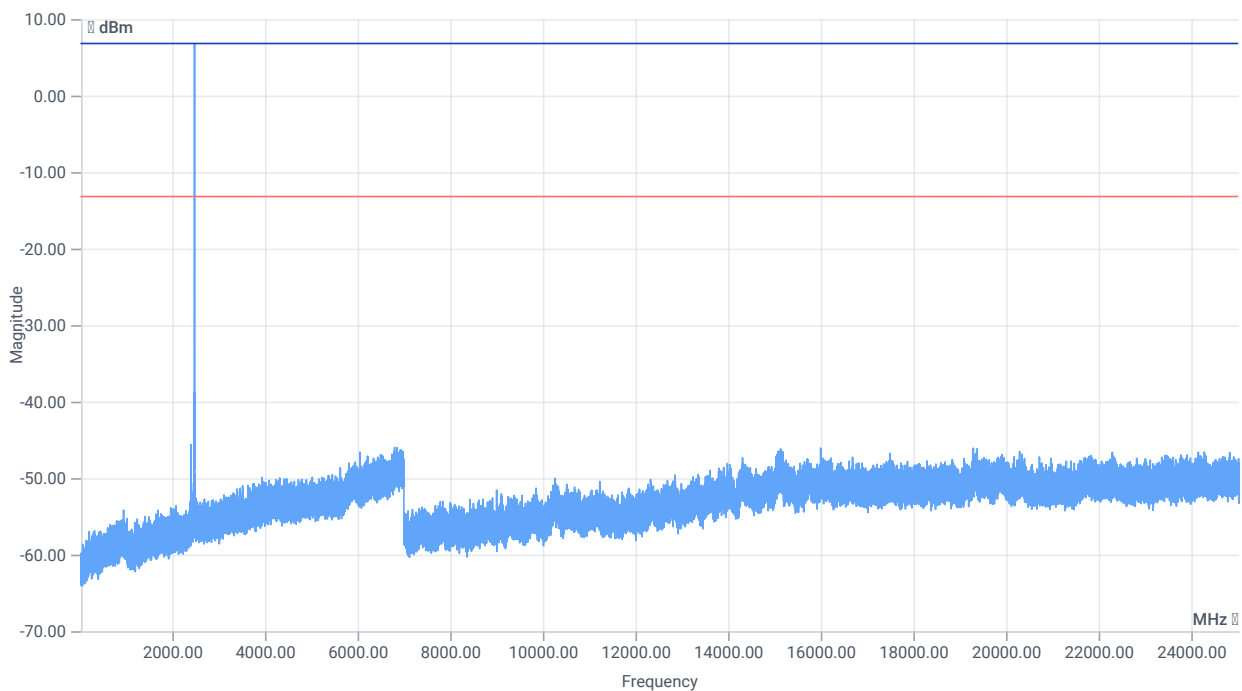
RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2441.17 MHz	---	---	0.57	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 30 MHz	0	---	-134.85	dB	INFO

Test at TX 2480 MHz

RESULT: Reference Power cond.

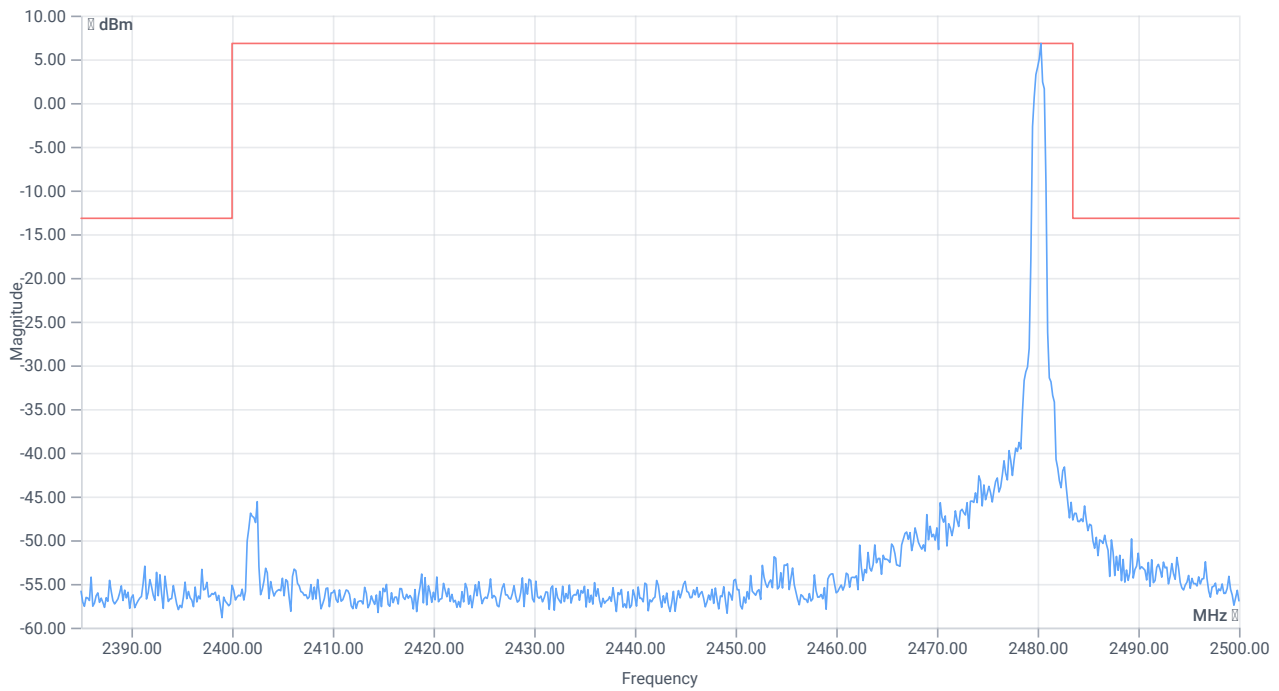
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	8.00	dBm	INFO
Ref. Frequency	---	---	2480.400	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	8.00 0 25
Start [MHz] Stop [MHz]	24530.000 25030.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	200 10 3001 SWE



RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2480.33 MHz	---	---	6.81	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 30 MHz	0	---	-138.81	dB	INFO

Verdict

PASS

- END OF DOCUMENT -