Conducted test results

No.1-6614/23-01-07_TR1-A201

October 10, 2023

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

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2023.10.10 15:38:54 +02'00'

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NA # Peak output power 3MHz/3MHz ~ BT Classic Basic rate

References

TC start	10.10.2023 10:48:15
Ambit temp [°C] | humidity [rel%]	0.0 | 0
System version	4.6.2.0
Standard | Version	NA | NI
Method	
Description	Peak OP 3MHz/3MHz - BT Classic Basic Rate
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	DH1
RF Supported	Basic Rate True | EDR Pi/4DQPSK True | EDR 8DPSK True
Testmode	LOOPback
Perform Inquiry	No
EUT BT Address (if Inqiury No)	101EDA943EEA
Signaling BT Address	123456789ABC
Switch Matrix & Pathcompensation enabled	Yes

Test Parameter

Technology to test	BT Classic Basic rate
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]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.60
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.190

Equipment

Switch matrix,CTCadvanced,RSM-1 NI DAQ,31534892,NI

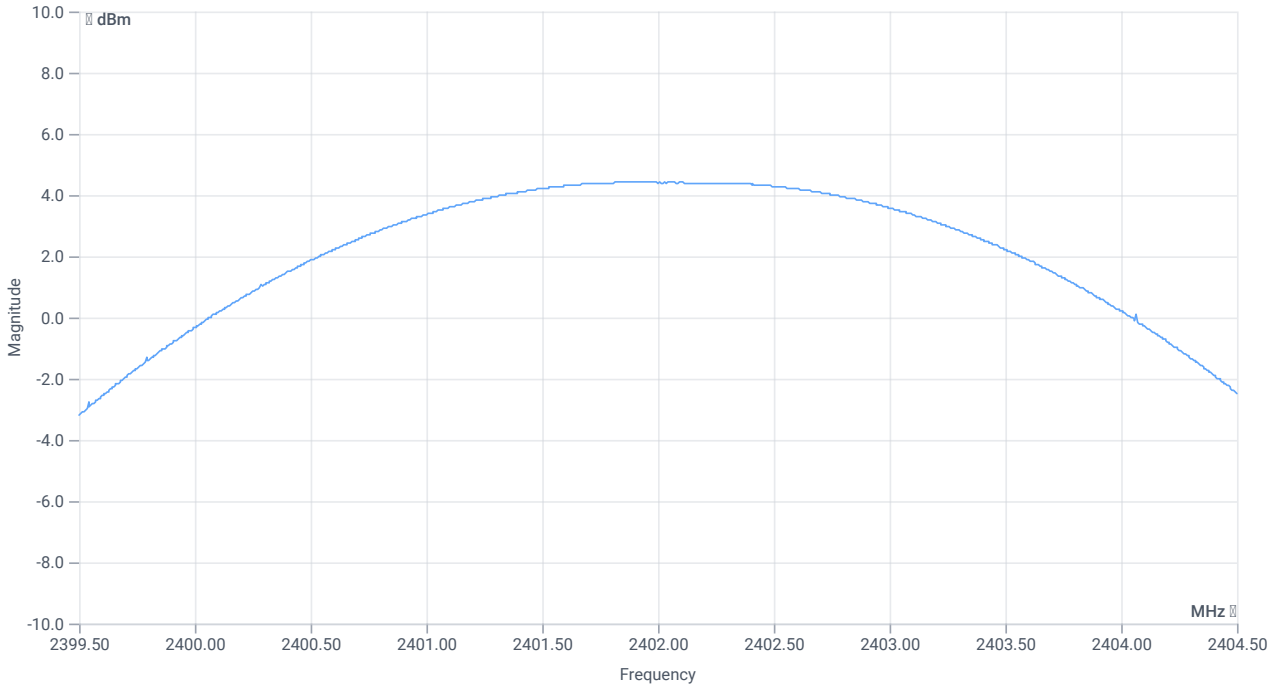
Test at TX 2402 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	4.39	dBm	INFO
Ref. Frequency	---	---	2402.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	14.39 | 11.29 | 20
Start [MHz] | Stop [MHz]	2399.500 | 2404.500
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	---	---	4.42	dBm	INFO
Peak Power	---	---	2.766942	mW	INFO
Frequency at Peak	---	---	2401.875	MHz	INFO

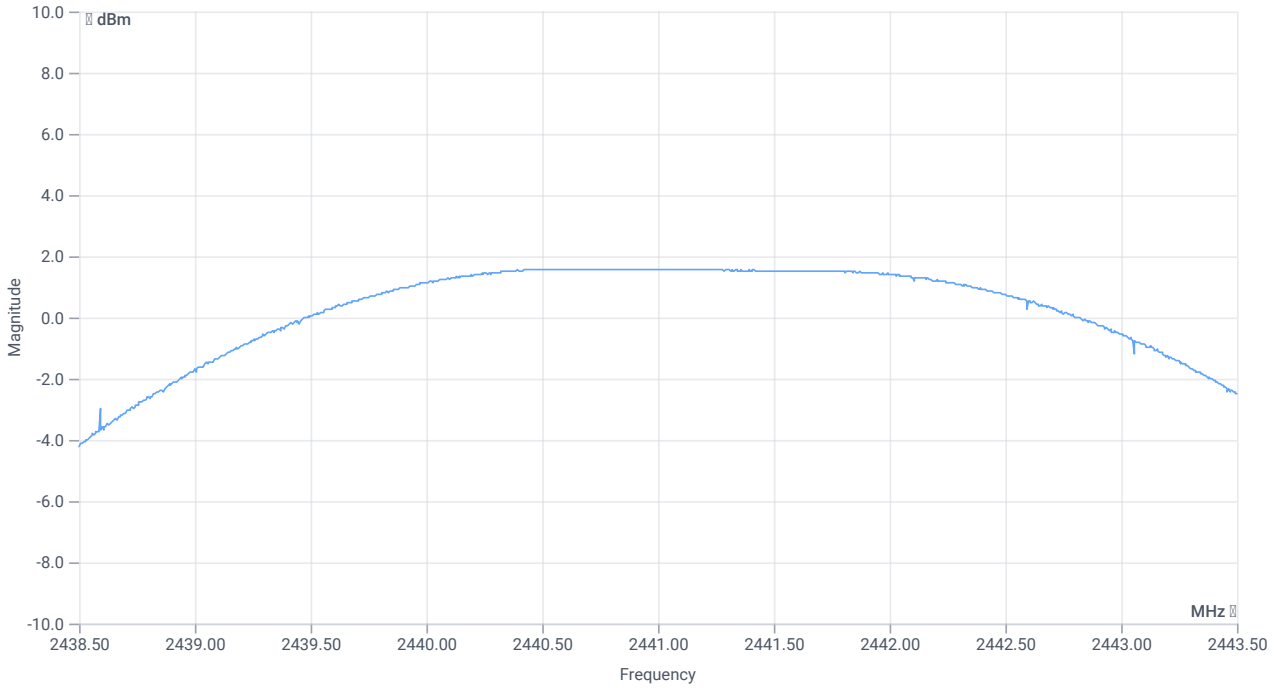
Test at TX 2441 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	1.57	dBm	INFO
Ref. Frequency	---	---	2441.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	11.57 | 11.36 | 20
Start [MHz] | Stop [MHz]	2438.500 | 2443.500
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	---	---	1.58	dBm	INFO
Peak Power	---	---	1.438799	mW	INFO
Frequency at Peak	---	---	2440.57	MHz	INFO

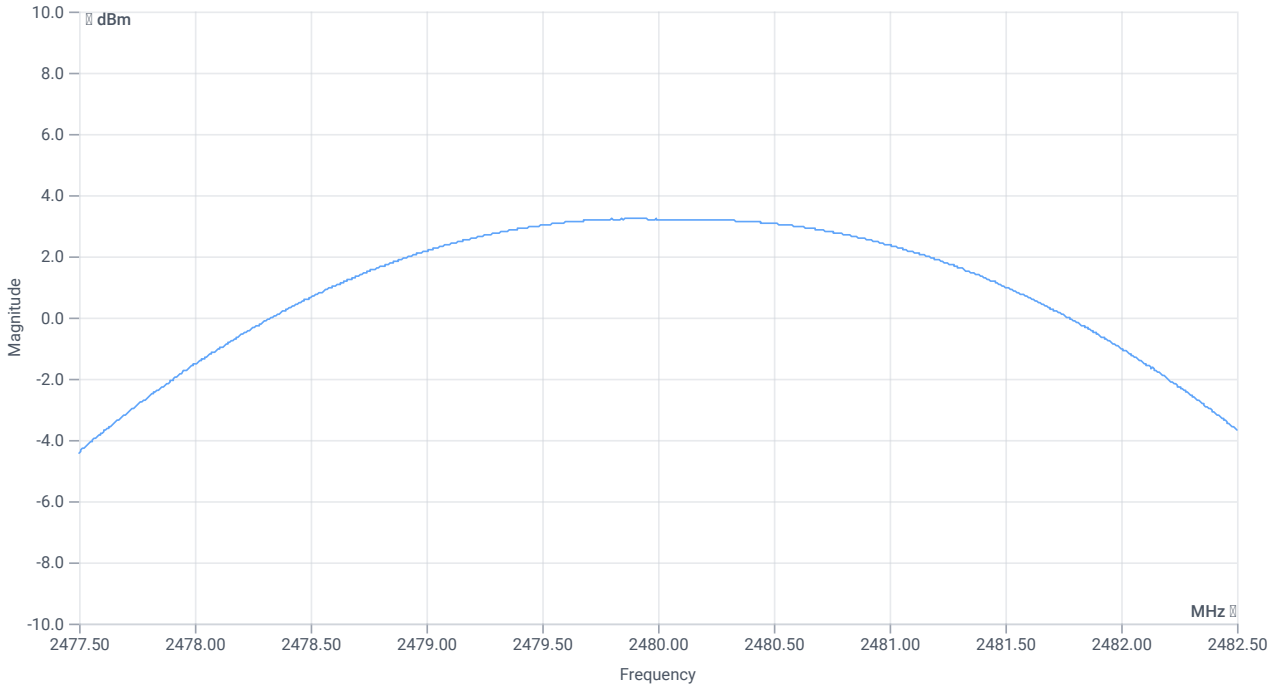
Test at TX 2480 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	3.16	dBm	INFO
Ref. Frequency	---	---	2480.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	13.16 | 11.41 | 20
Start [MHz] | Stop [MHz]	2477.500 | 2482.500
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	---	---	3.23	dBm	INFO
Peak Power	---	---	2.103778	mW	INFO
Frequency at Peak	---	---	2479.91	MHz	INFO

Verdict
PASS

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic Basic rate

References

TC start	10.10.2023 10:52:38
Ambit temp [°C] | humidity [rel%]	0.0 | 0
System version	4.6.2.0
Standard | Version	FCC 15.247, ISED RSS247 | NI
Method	
Description	FCC 15.247 Bandwidth 99PCT - 20dB FHSS - BT Classic Basic Rate
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	DH1
RF Supported	Basic Rate True | EDR Pi/4DQPSK True | EDR 8DPSK True
Testmode	LOOPback
Perform Inquiry	No
EUT BT Address (if Inqiury No)	101EDA943EEA
Signaling BT Address	123456789ABC
Switch Matrix & Pathcompensation enabled	Yes

Test Parameter

Technology to test	BT Classic Basic rate
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]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.60

Equipment

Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.190
Switch matrix,CTCadvanced,RSM-1 NI DAQ,31534892,NI

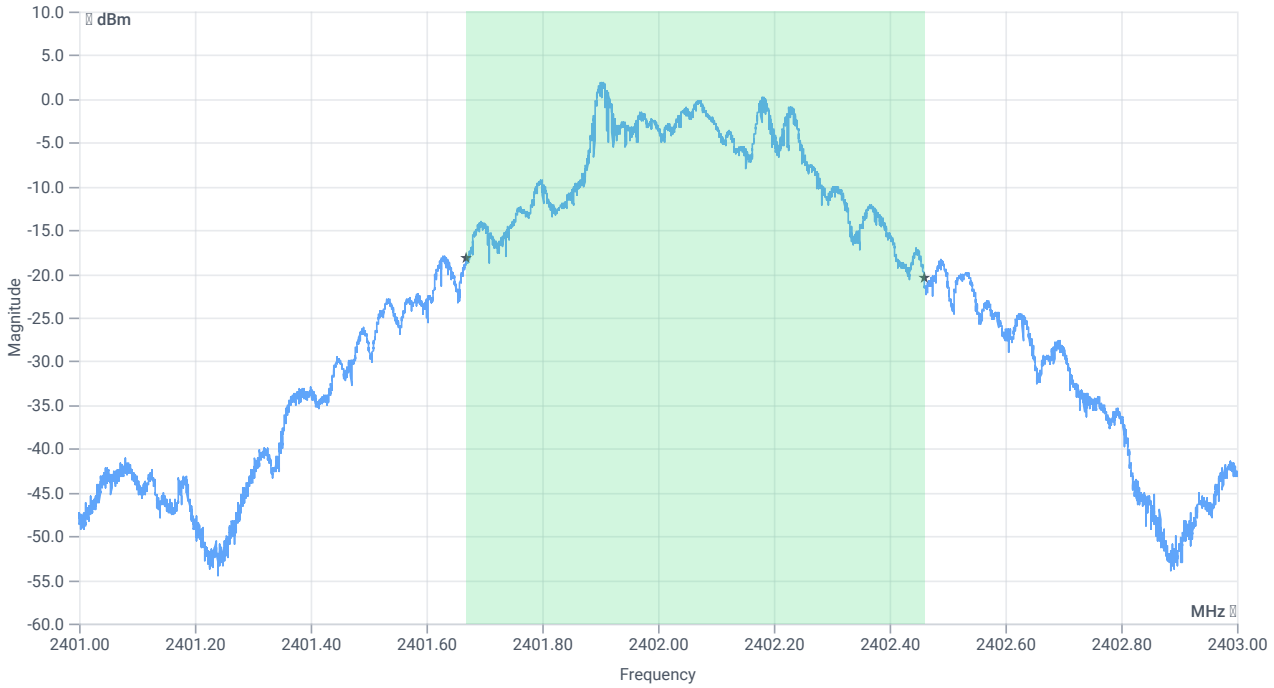
Test at TX 2402 MHz

RESULT: Reference Power cond.

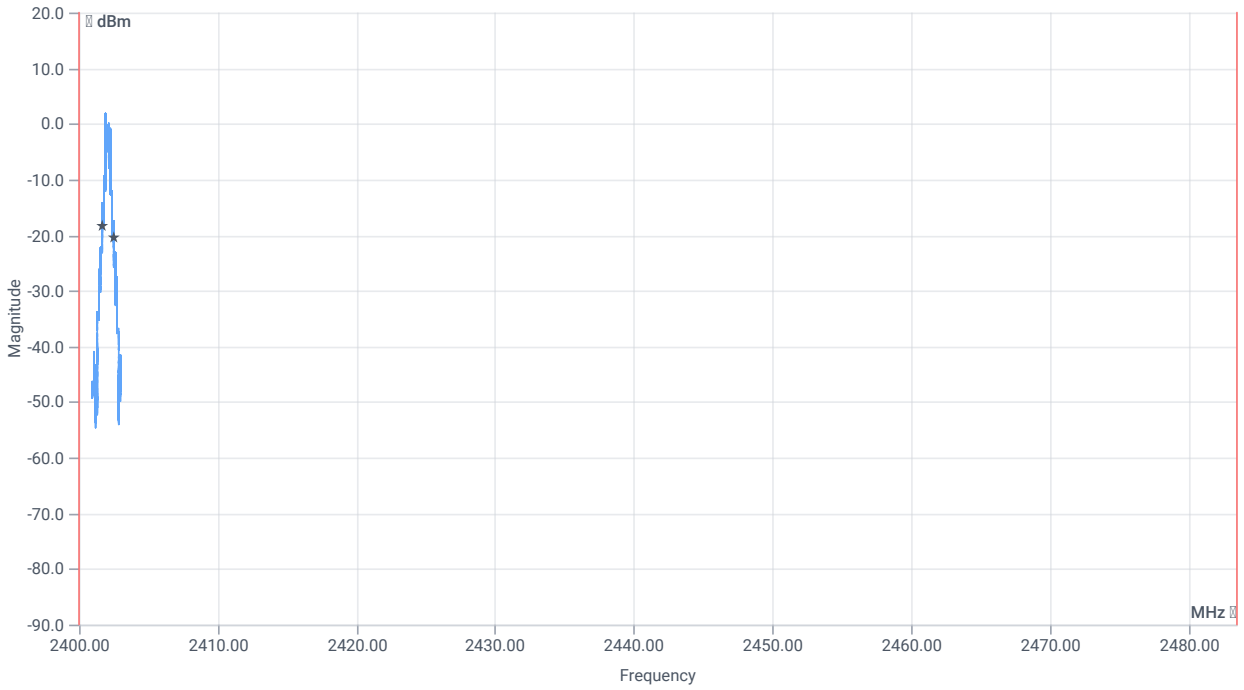
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	4.36	dBm	INFO
Ref. Frequency	---	---	2402.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	9.36 | 11.29 | 15
Start [MHz] | Stop [MHz]	2401.000 | 2403.000
RBW [MHz] | VBW [MHz]	0.020000 | 0.100000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	50 | 200 | 10001 | SWE



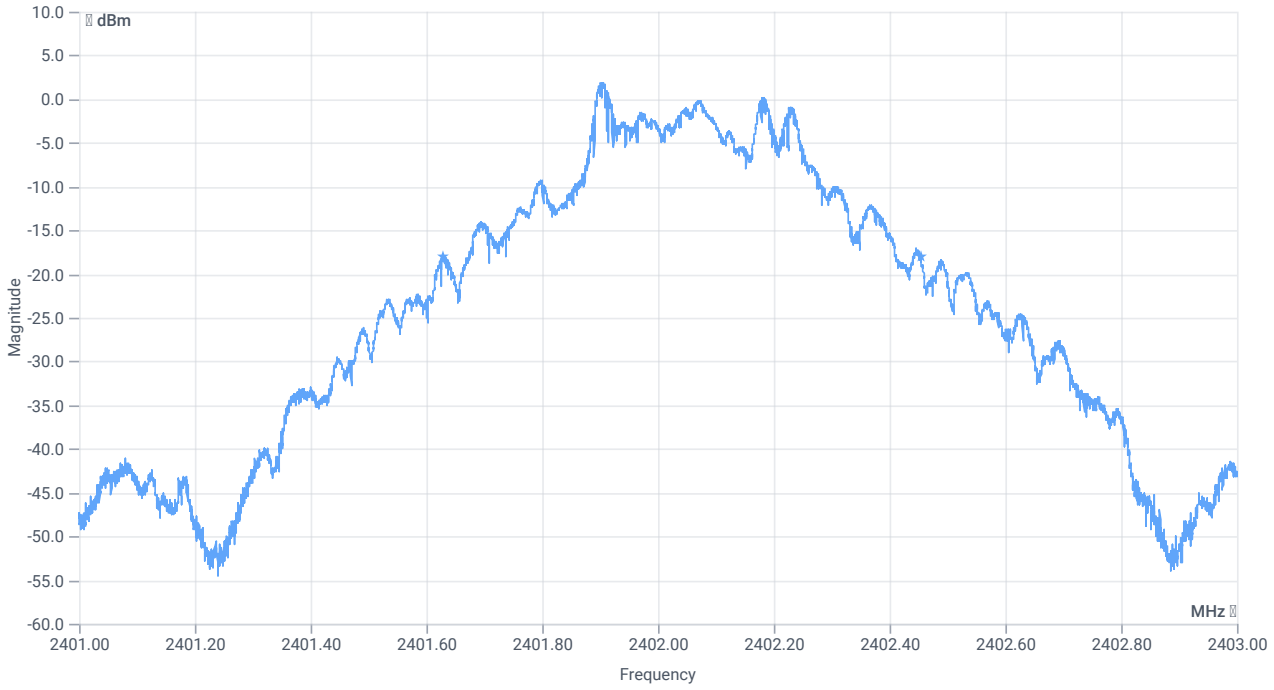
BW 99PCT



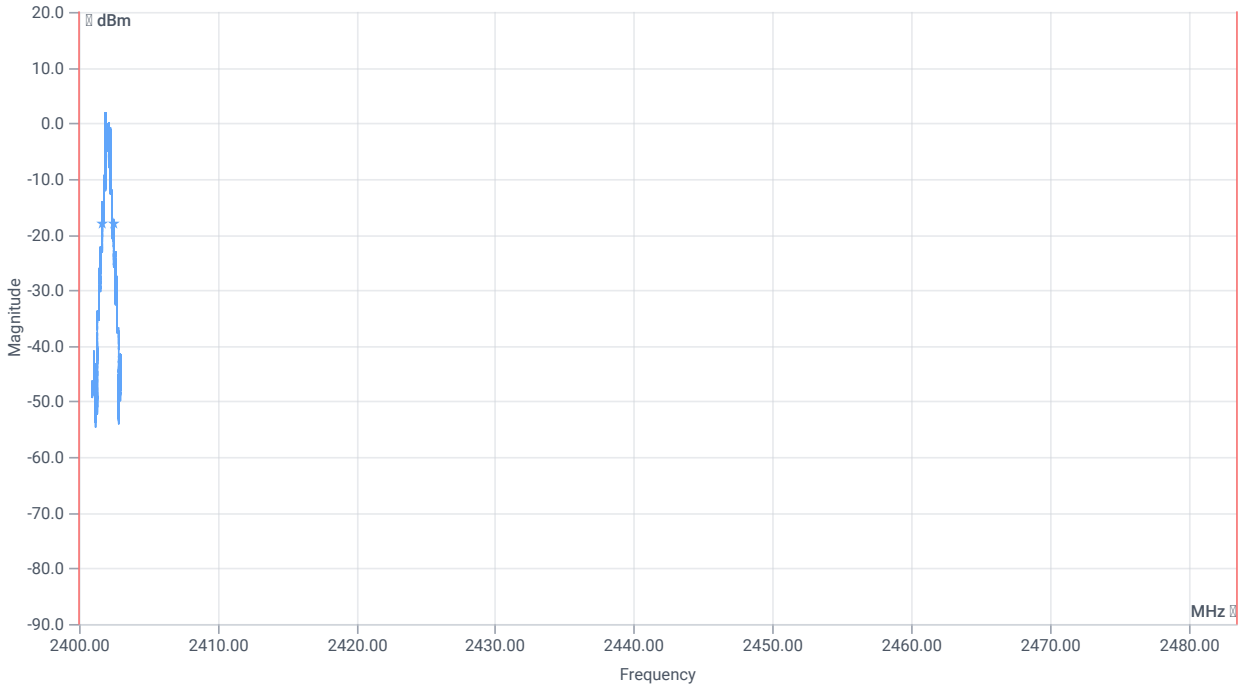
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	790.000	kHz	INFO
T1 99%	2400.000000	---	2401.6694	MHz	PASS
T2 99%	---	2483.500000	2402.4596	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	825	kHz	INFO
T1 20DB	2400.000000	---	2401.6284	MHz	PASS
T2 20dB	---	2483.500000	2402.4530	MHz	PASS

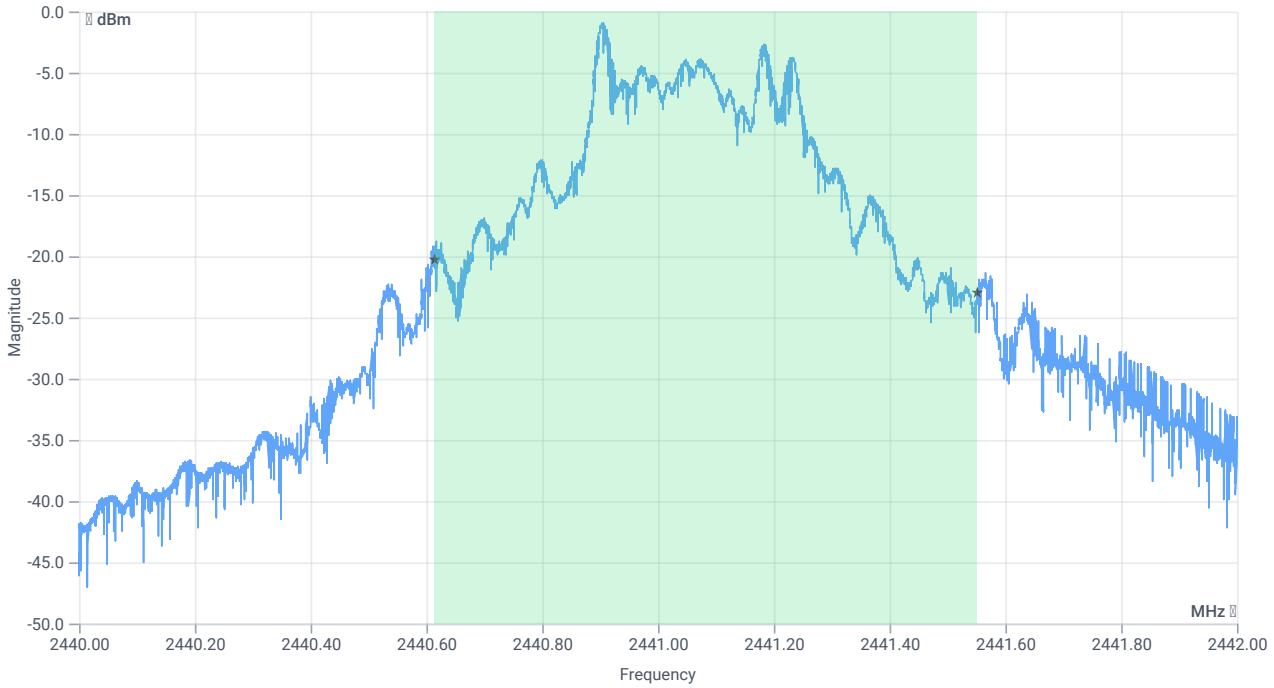
Test at TX 2441 MHz

RESULT: Reference Power cond.

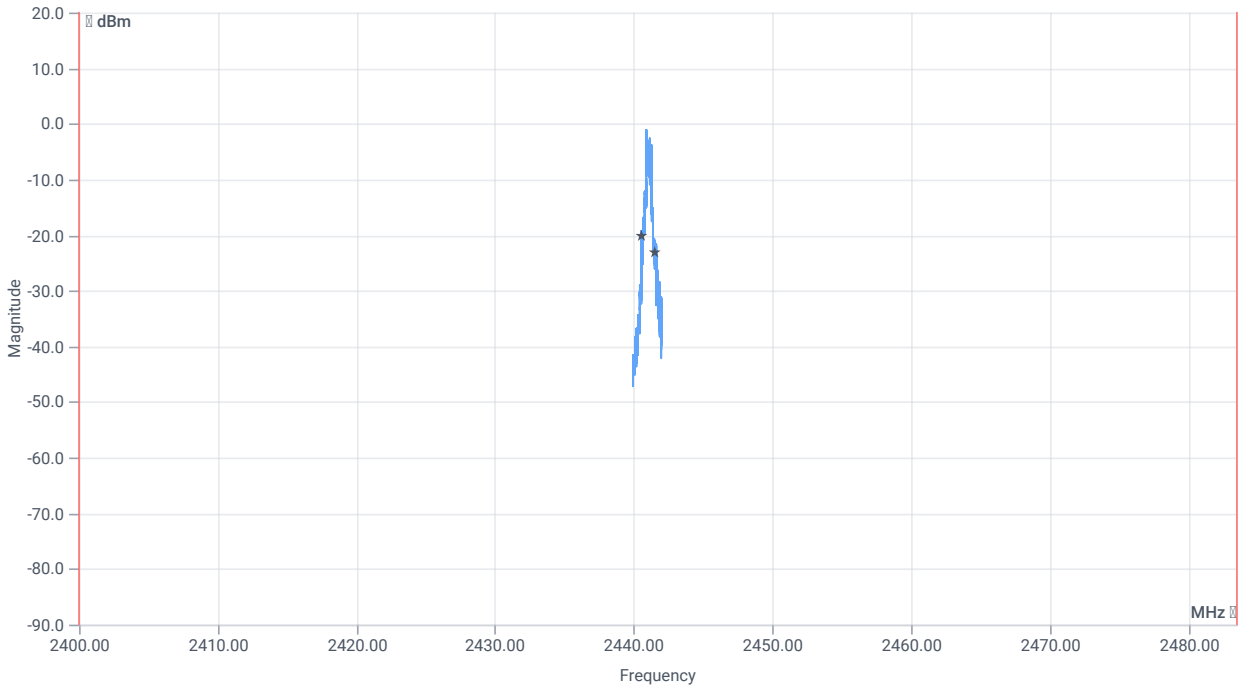
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	1.46	dBm	INFO
Ref. Frequency	---	---	2441.100	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	6.46 | 11.36 | 15
Start [MHz] | Stop [MHz]	2440.000 | 2442.000
RBW [MHz] | VBW [MHz]	0.020000 | 0.100000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	50 | 200 | 10001 | SWE



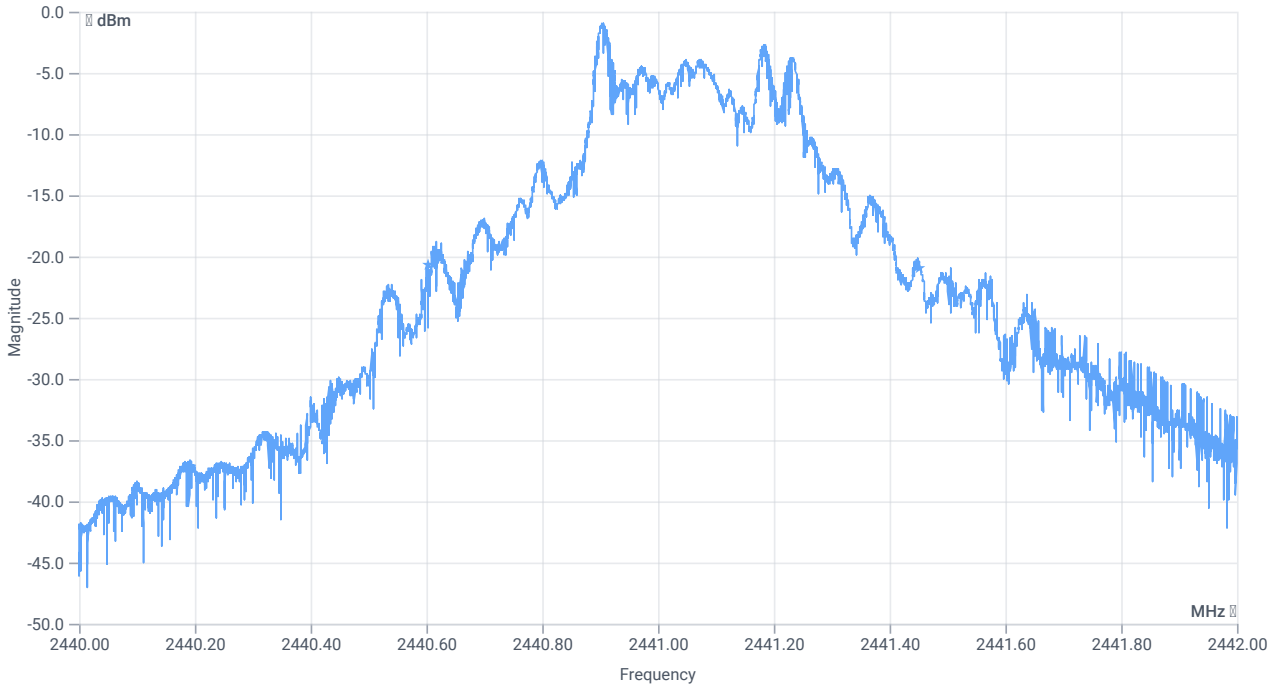
BW 99PCT



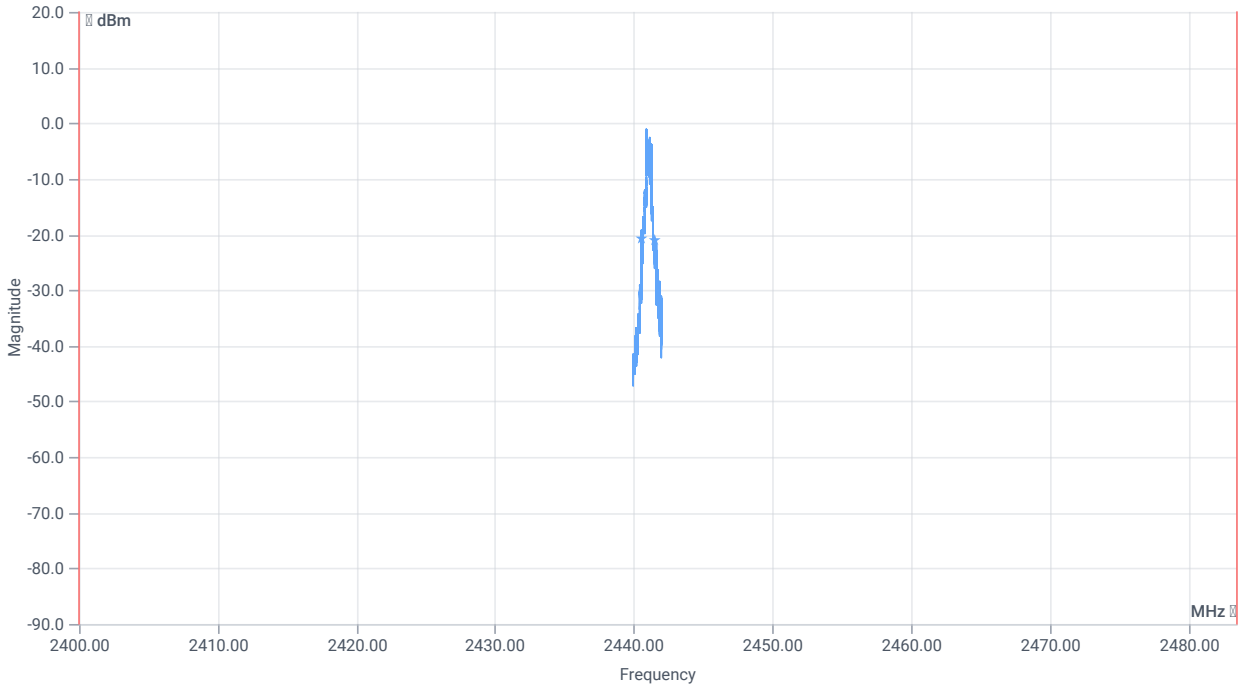
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	937.000	kHz	INFO
T1 99%	2400.000000	---	2440.6156	MHz	PASS
T2 99%	---	2483.500000	2441.5527	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	851	kHz	INFO
T1 20DB	2400.000000	---	2440.6020	MHz	PASS
T2 20dB	---	2483.500000	2441.4528	MHz	PASS

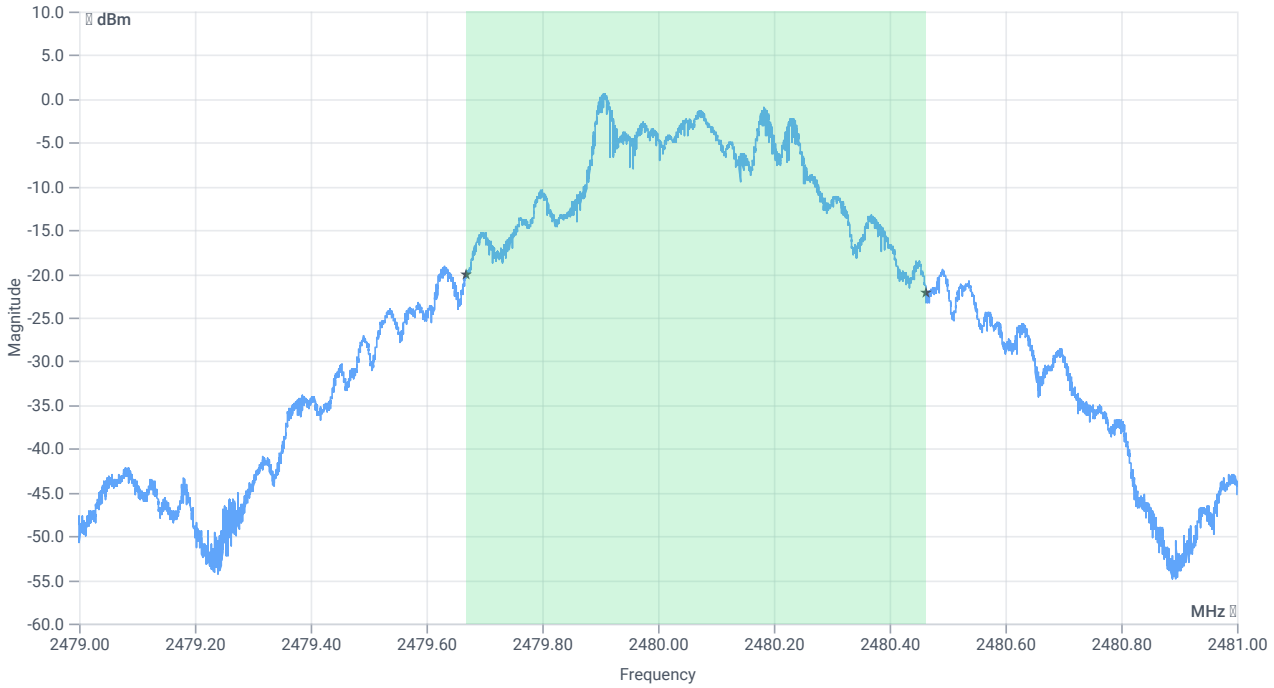
Test at TX 2480 MHz

RESULT: Reference Power cond.

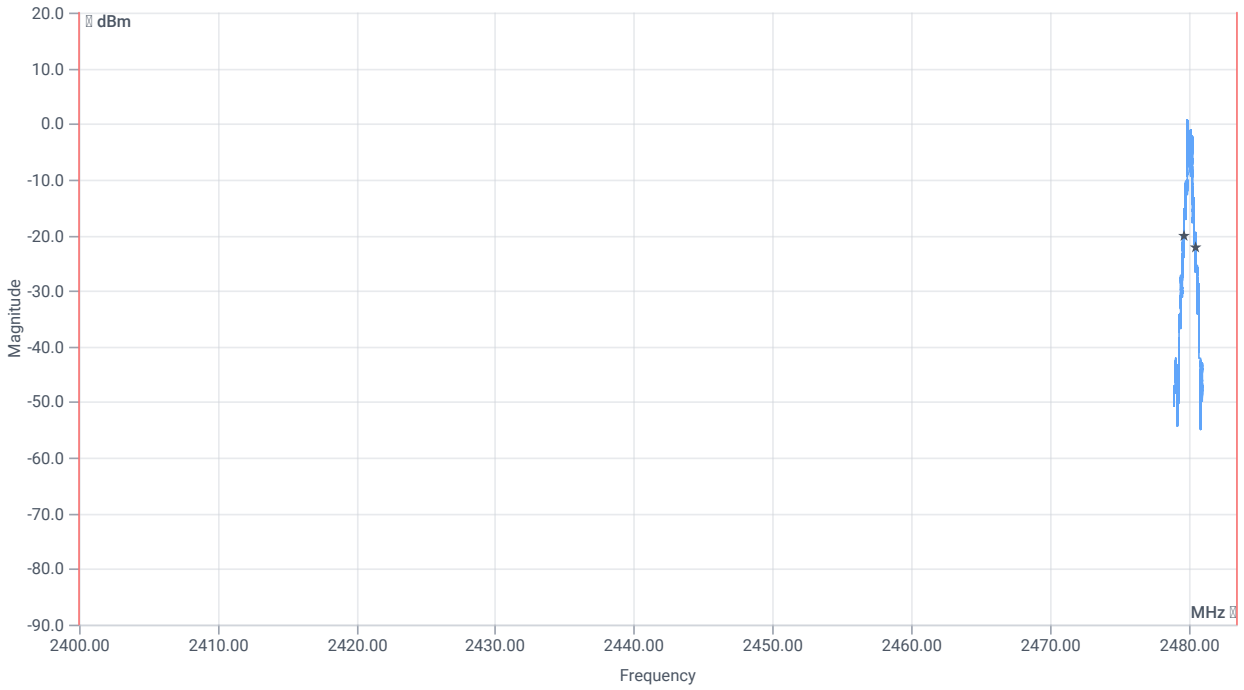
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	3.11	dBm	INFO
Ref. Frequency	---	---	2480.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	8.11 | 11.41 | 15
Start [MHz] | Stop [MHz]	2479.000 | 2481.000
RBW [MHz] | VBW [MHz]	0.020000 | 0.100000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	50 | 200 | 10001 | SWE



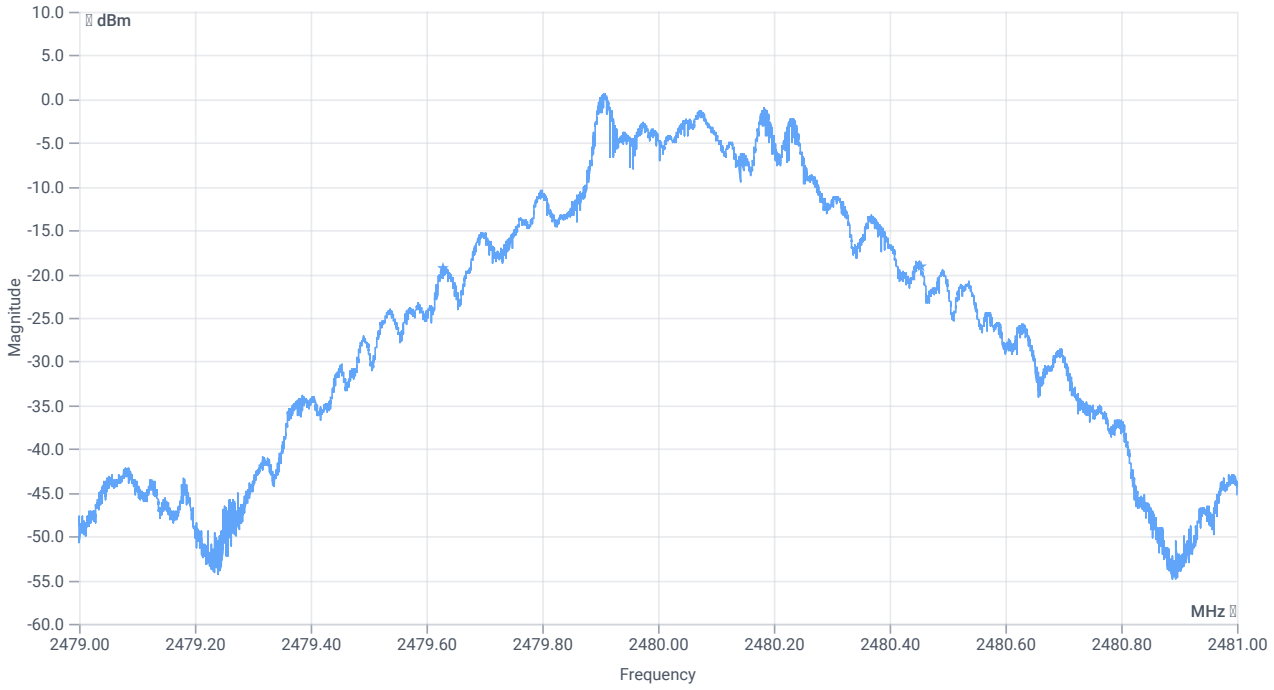
BW 99PCT



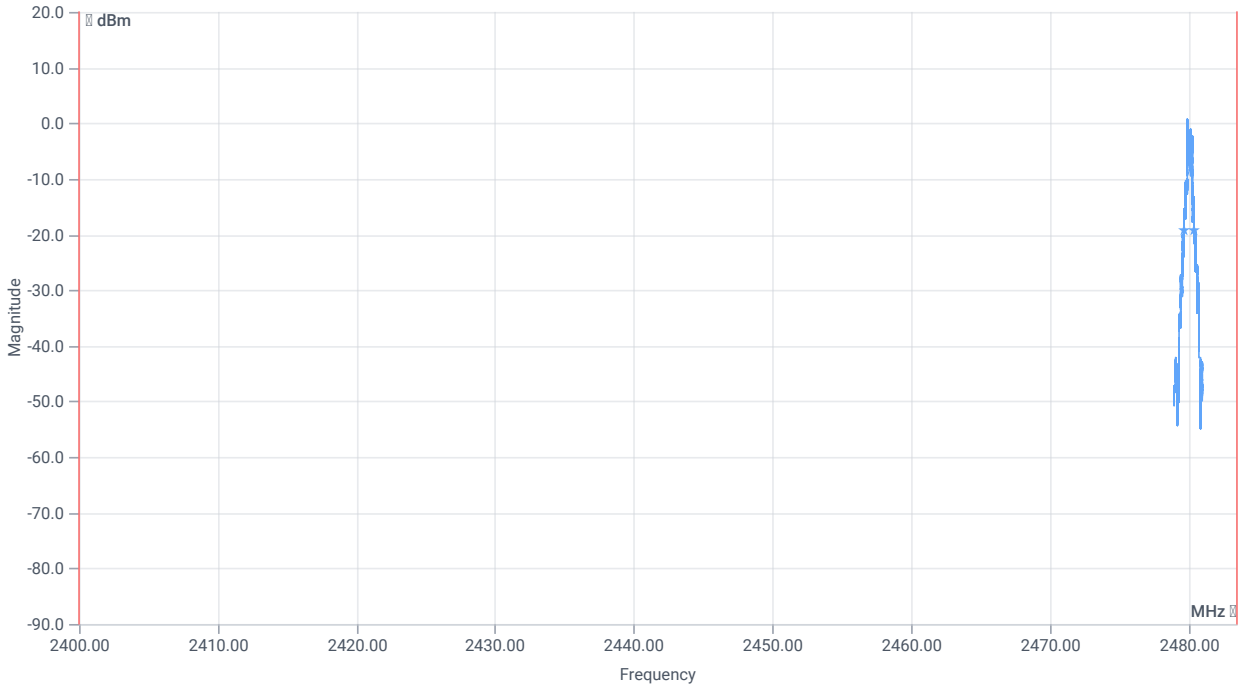
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	794.000	kHz	INFO
T1 99%	2400.000000	---	2479.6688	MHz	PASS
T2 99%	---	2483.500000	2480.4624	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	826	kHz	INFO
T1 20DB	2400.000000	---	2479.6278	MHz	PASS
T2 20dB	---	2483.500000	2480.4540	MHz	PASS

Verdict
PASS

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic EDR 8DPSK

References

TC start	10.10.2023 11:42:31
Ambit temp [°C] | humidity [rel%]	0.0 | 0
System version	4.6.2.0
Standard | Version	FCC 15.247, ISED RSS247 | NI
Method	
Description	FCC 15.247 Bandwidth 99PCT - 20dB FHSS - BT Classic EDR 8DPSK
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	DH1
RF Supported	Basic Rate True | EDR Pi/4DQPSK True | EDR 8DPSK True
Testmode	LOOPback
Perform Inquiry	No
EUT BT Address (if Inqiury No)	101EDA943EEA
Signaling BT Address	123456789ABC
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]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.60

Equipment

Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.190
Switch matrix,CTCadvanced,RSM-1 NI DAQ,31534892,NI

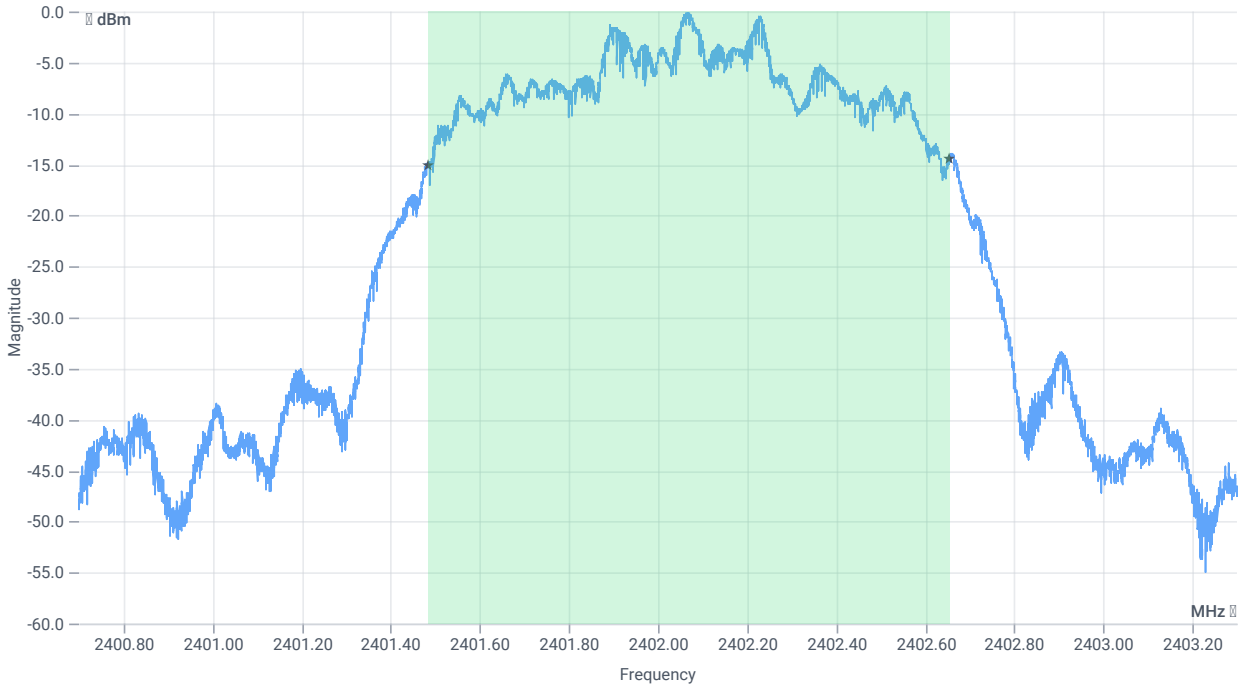
Test at TX 2402 MHz

RESULT: Reference Power cond.

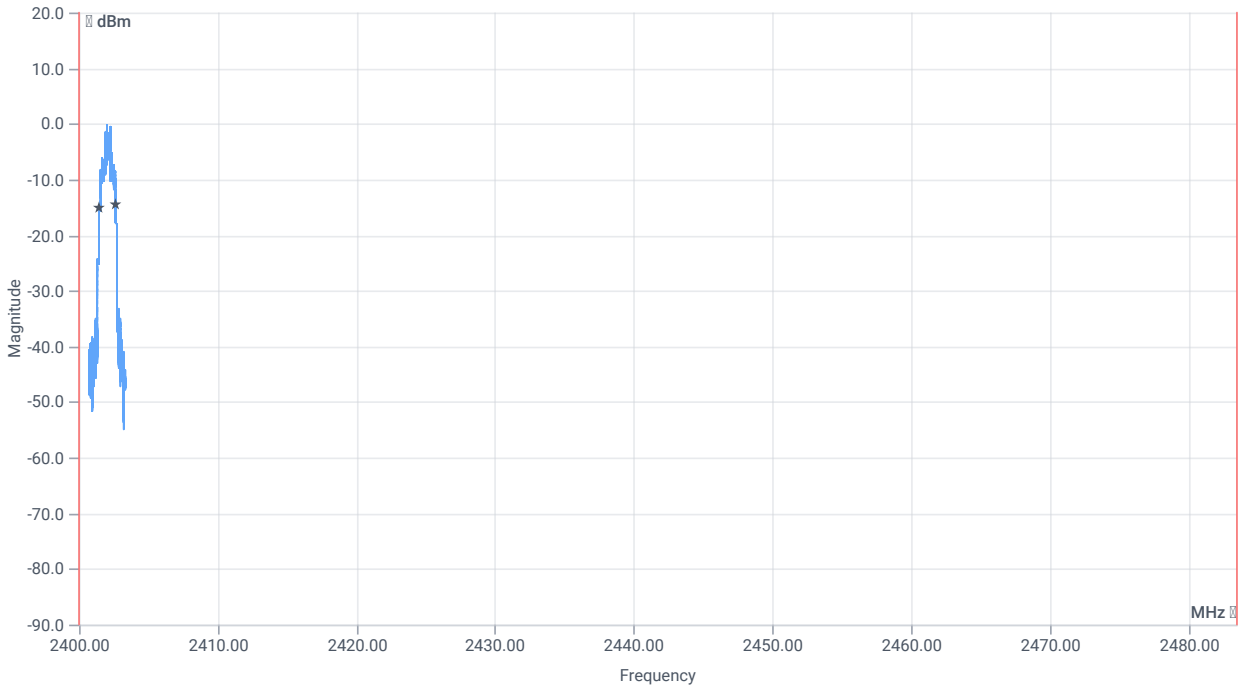
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	4.30	dBm	INFO
Ref. Frequency	---	---	2402.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	9.30 | 11.29 | 15
Start [MHz] | Stop [MHz]	2400.700 | 2403.300
RBW [MHz] | VBW [MHz]	0.030000 | 0.100000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	50 | 200 | 10001 | SWE



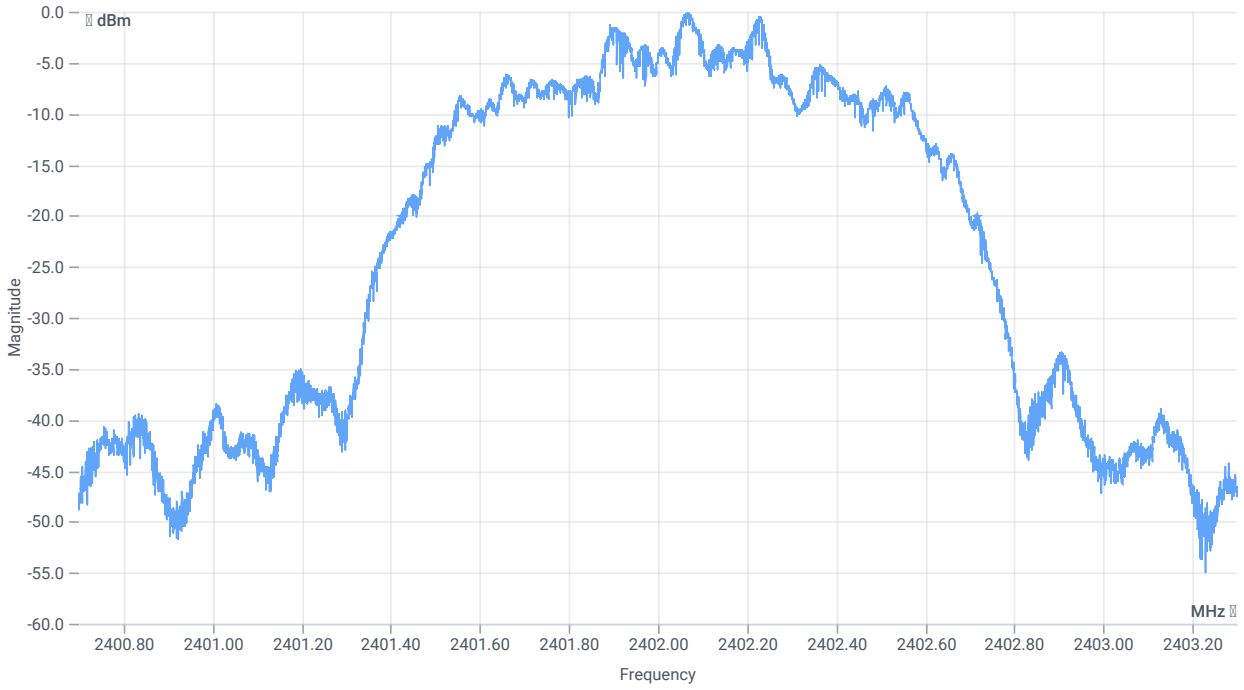
BW 99PCT



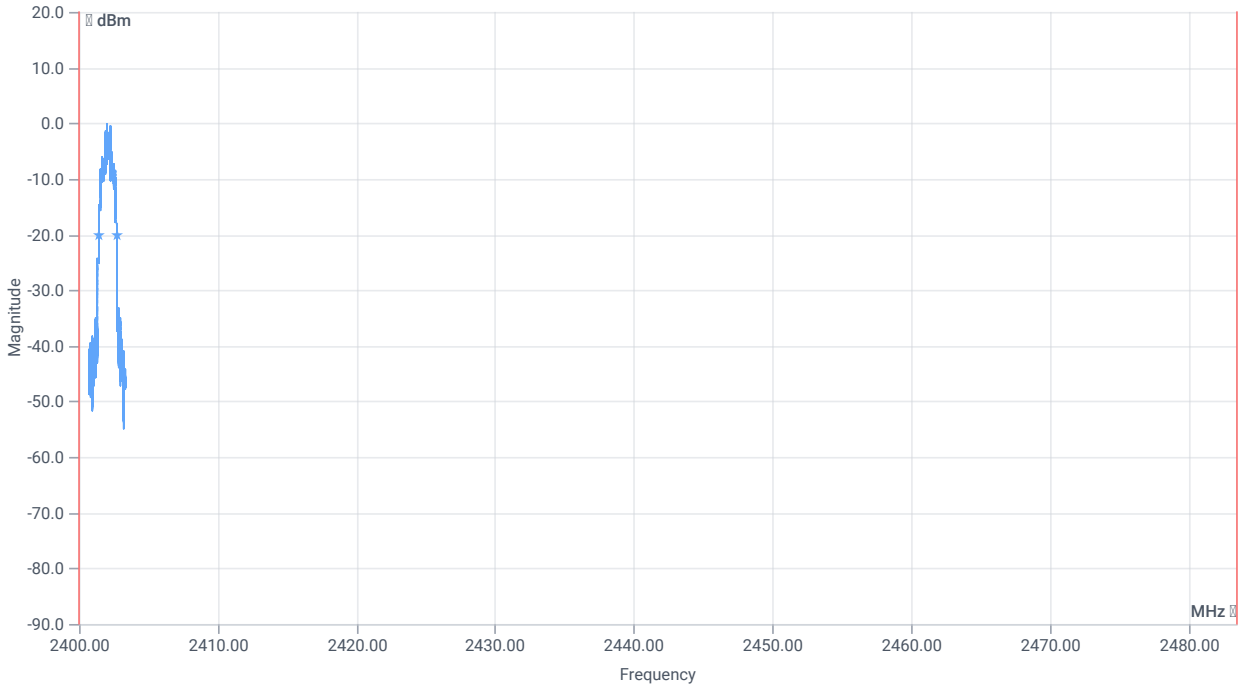
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	1170.000	kHz	INFO
T1 99%	2400.000000	---	2401.4855	MHz	PASS
T2 99%	---	2483.500000	2402.6554	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	1291	kHz	INFO
T1 20DB	2400.000000	---	2401.4257	MHz	PASS
T2 20dB	---	2483.500000	2402.7171	MHz	PASS

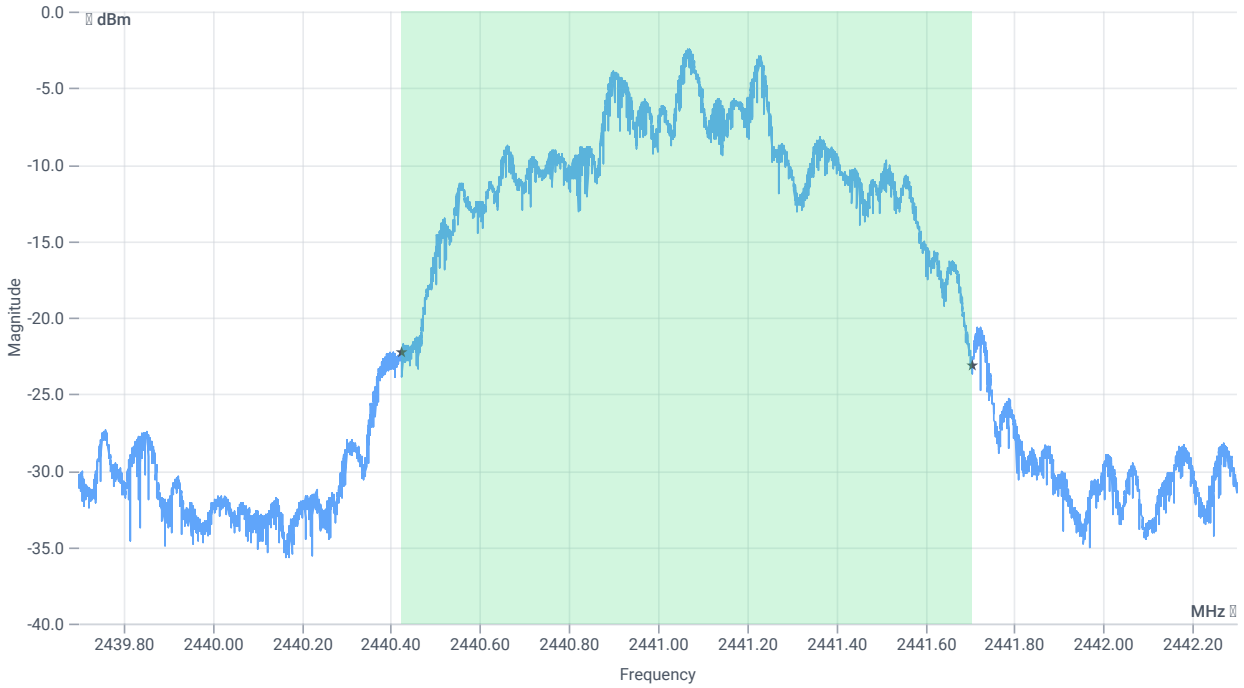
Test at TX 2441 MHz

RESULT: Reference Power cond.

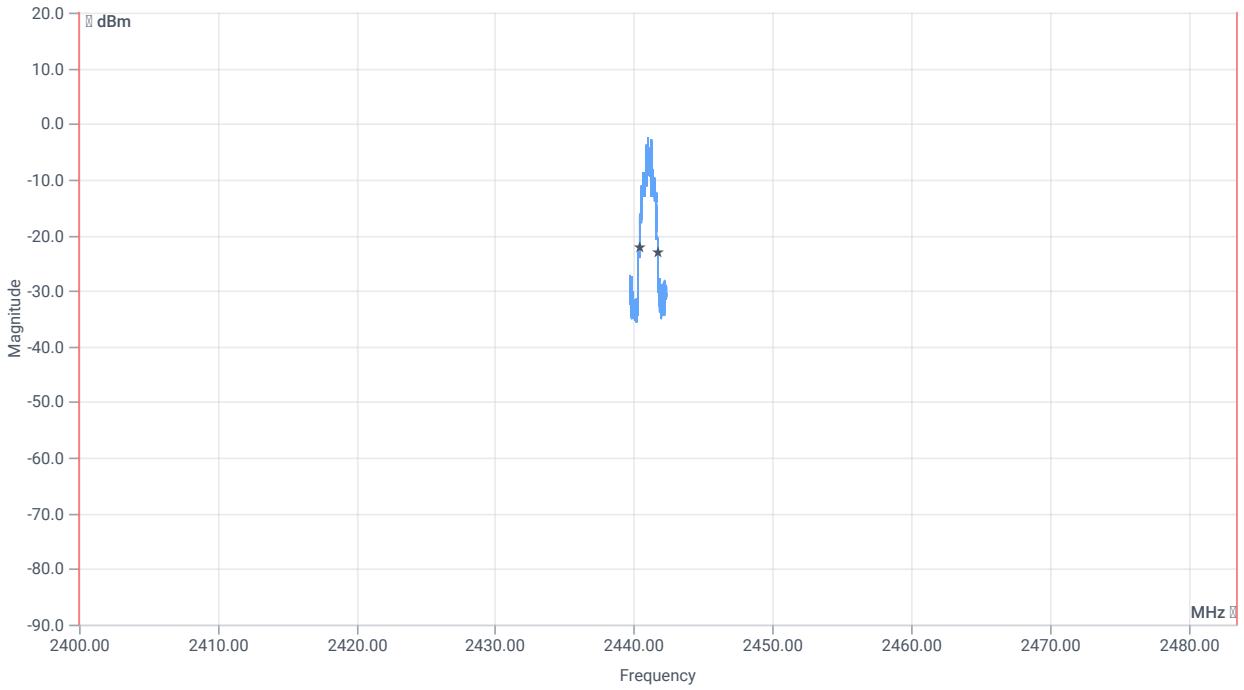
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	1.09	dBm	INFO
Ref. Frequency	---	---	2441.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	6.09 | 11.36 | 10
Start [MHz] | Stop [MHz]	2439.700 | 2442.300
RBW [MHz] | VBW [MHz]	0.030000 | 0.100000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	50 | 200 | 10001 | SWE



BW 99PCT

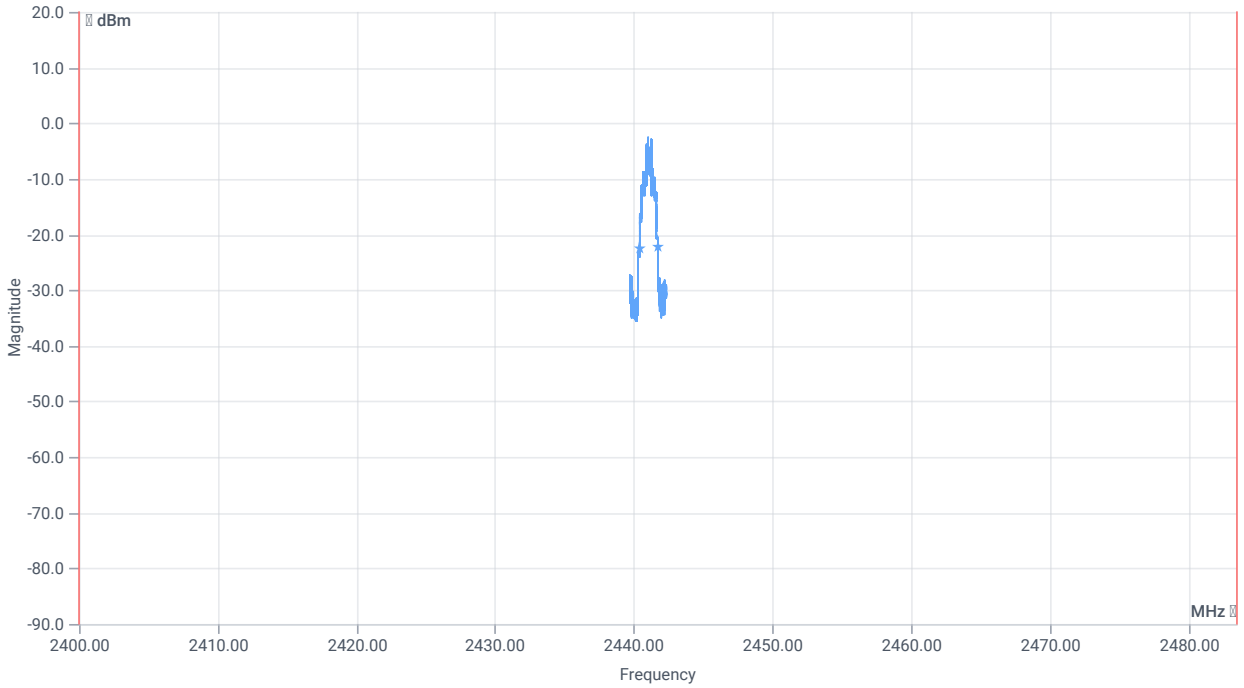


BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	1281.000	kHz	INFO
T1 99%	2400.000000	---	2440.4239	MHz	PASS
T2 99%	---	2483.500000	2441.7048	MHz	PASS

BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	1347	kHz	INFO
T1 20DB	2400.000000	---	2440.3908	MHz	PASS
T2 20dB	---	2483.500000	2441.7376	MHz	PASS

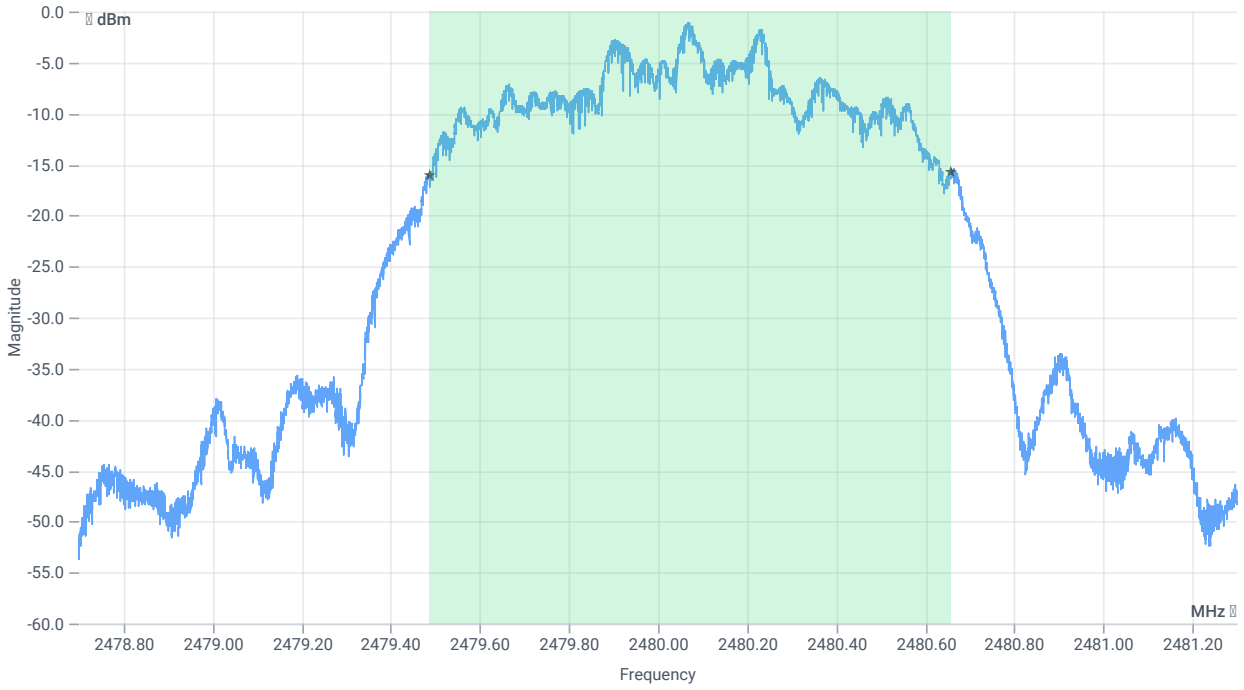
Test at TX 2480 MHz

RESULT: Reference Power cond.

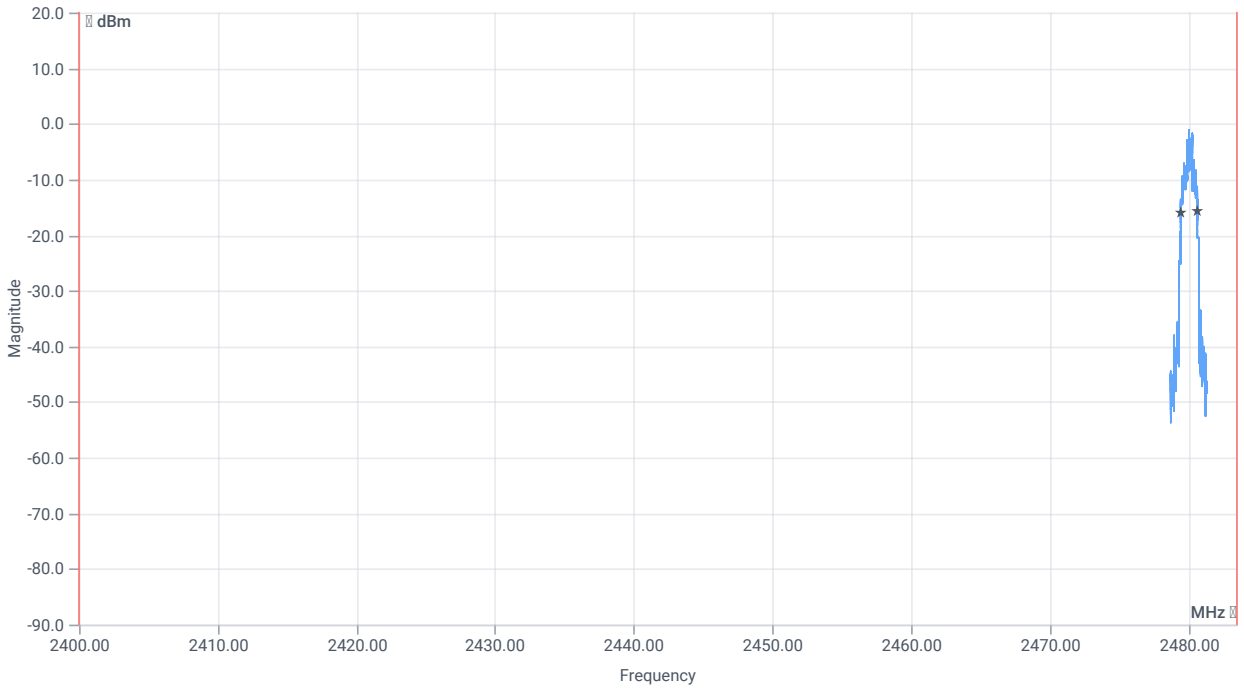
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	2.62	dBm	INFO
Ref. Frequency	---	---	2480.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	7.62 | 11.41 | 15
Start [MHz] | Stop [MHz]	2478.700 | 2481.300
RBW [MHz] | VBW [MHz]	0.030000 | 0.100000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	50 | 200 | 10001 | SWE



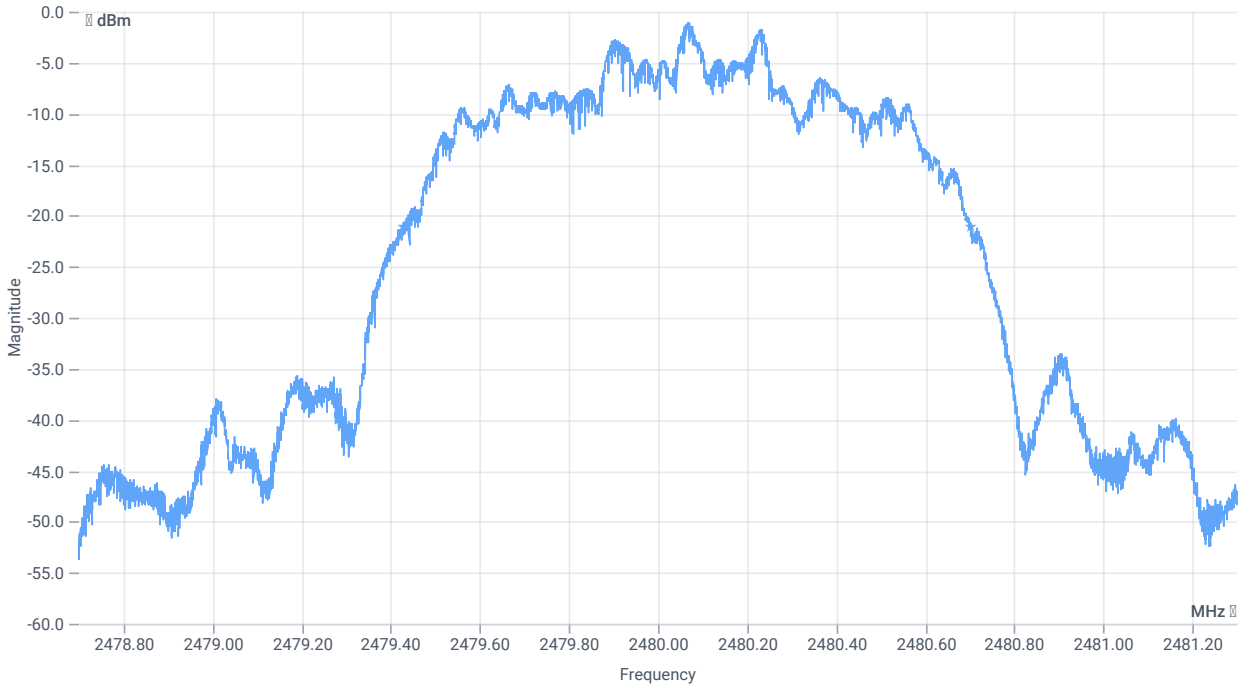
BW 99PCT



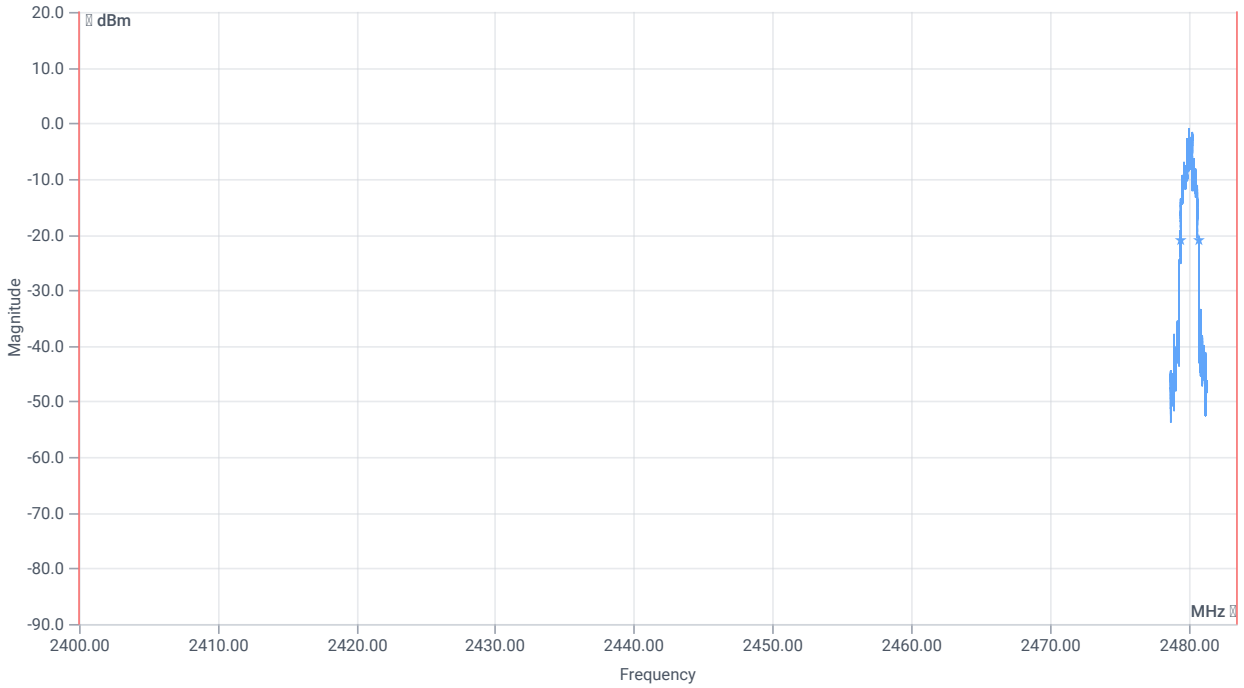
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	1169.000	kHz	INFO
T1 99%	2400.000000	---	2479.4873	MHz	PASS
T2 99%	---	2483.500000	2480.6562	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	1272	kHz	INFO
T1 20DB	2400.000000	---	2479.4298	MHz	PASS
T2 20dB	---	2483.500000	2480.7023	MHz	PASS

Verdict
PASS

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic EDR Pi/4DQPSK

References

TC start	10.10.2023 14:06:08
Ambit temp [°C] | humidity [rel%]	0.0 | 0
System version	4.6.2.0
Standard | Version	FCC 15.247, ISED RSS247 | NI
Method	
Description	FCC 15.247 Bandwidth 99PCT - 20dB FHSS - BT Classic EDR Pi/4DQPSK
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	DH1
RF Supported	Basic Rate True | EDR Pi/4DQPSK True | EDR 8DPSK True
Testmode	LOOPback
Perform Inquiry	No
EUT BT Address (if Inqiury No)	101EDA943EEA
Signaling BT Address	123456789ABC
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]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.60
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.190
Switch matrix,CTCadvanced,RSM-1 NI DAQ,31534892,NI

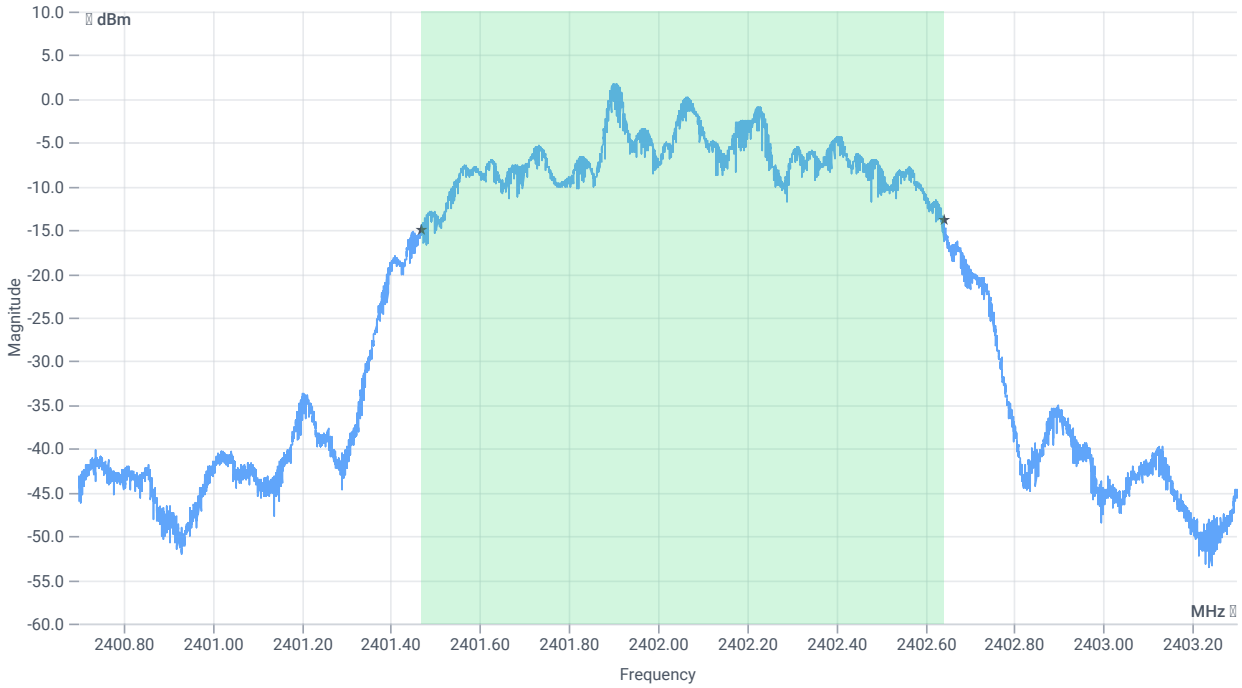
Test at TX 2402 MHz

RESULT: Reference Power cond.

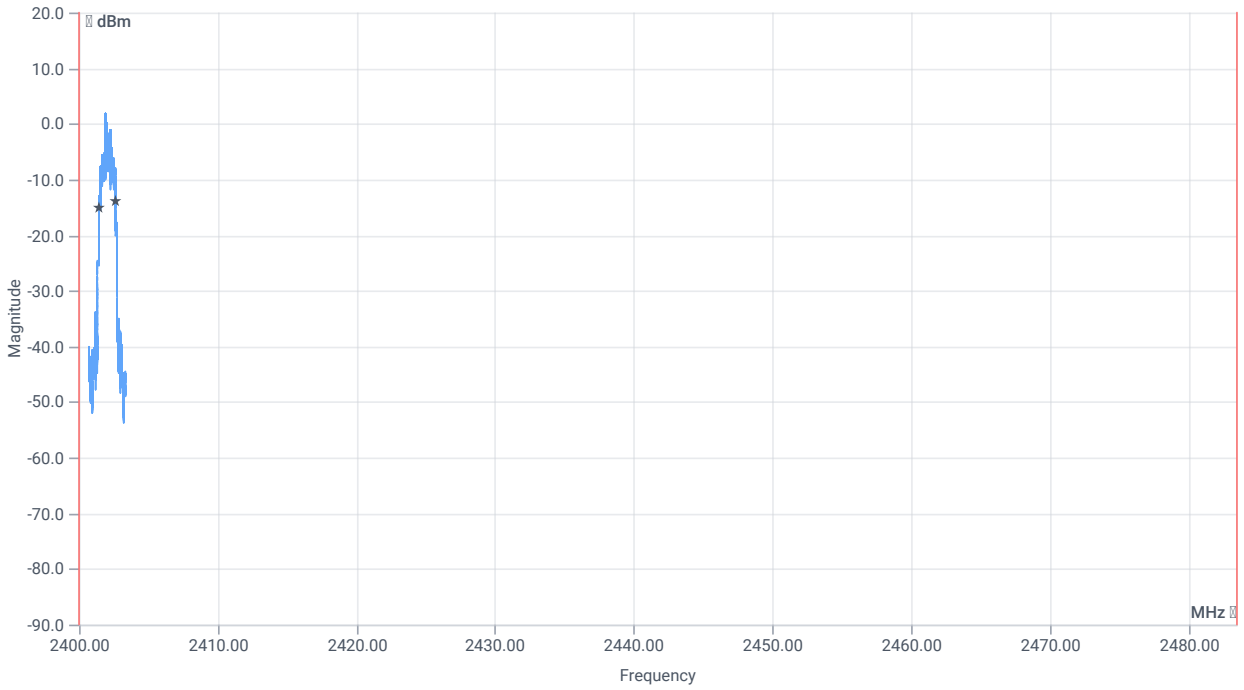
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	4.14	dBm	INFO
Ref. Frequency	---	---	2402.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	9.14 | 11.29 | 15
Start [MHz] | Stop [MHz]	2400.700 | 2403.300
RBW [MHz] | VBW [MHz]	0.030000 | 0.100000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	50 | 200 | 10001 | SWE



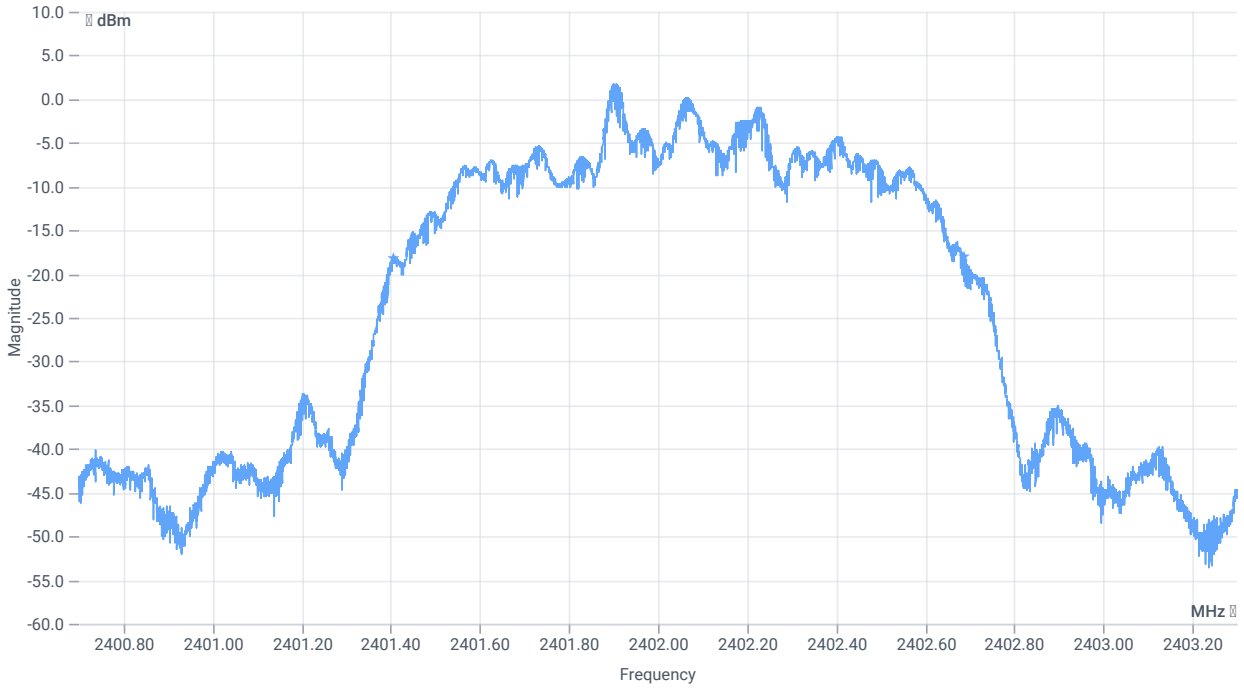
BW 99PCT



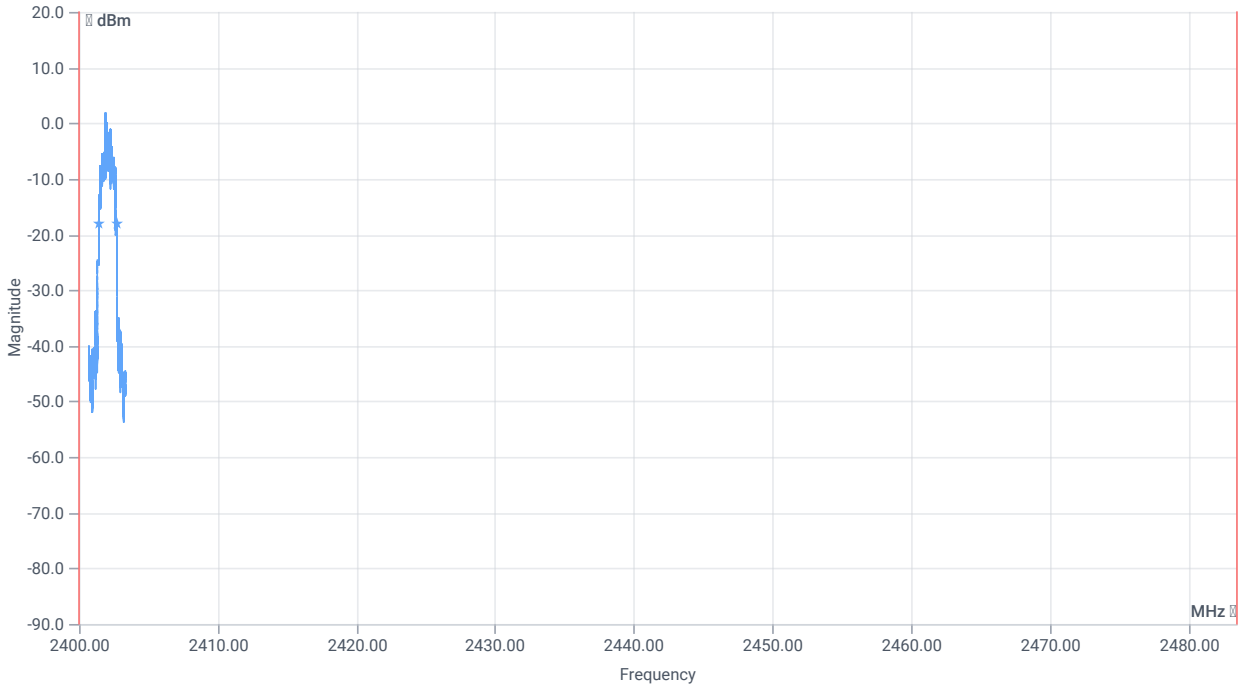
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	1175.000	kHz	INFO
T1 99%	2400.000000	---	2401.4673	MHz	PASS
T2 99%	---	2483.500000	2402.6419	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	1280	kHz	INFO
T1 20DB	2400.000000	---	2401.4072	MHz	PASS
T2 20dB	---	2483.500000	2402.6877	MHz	PASS

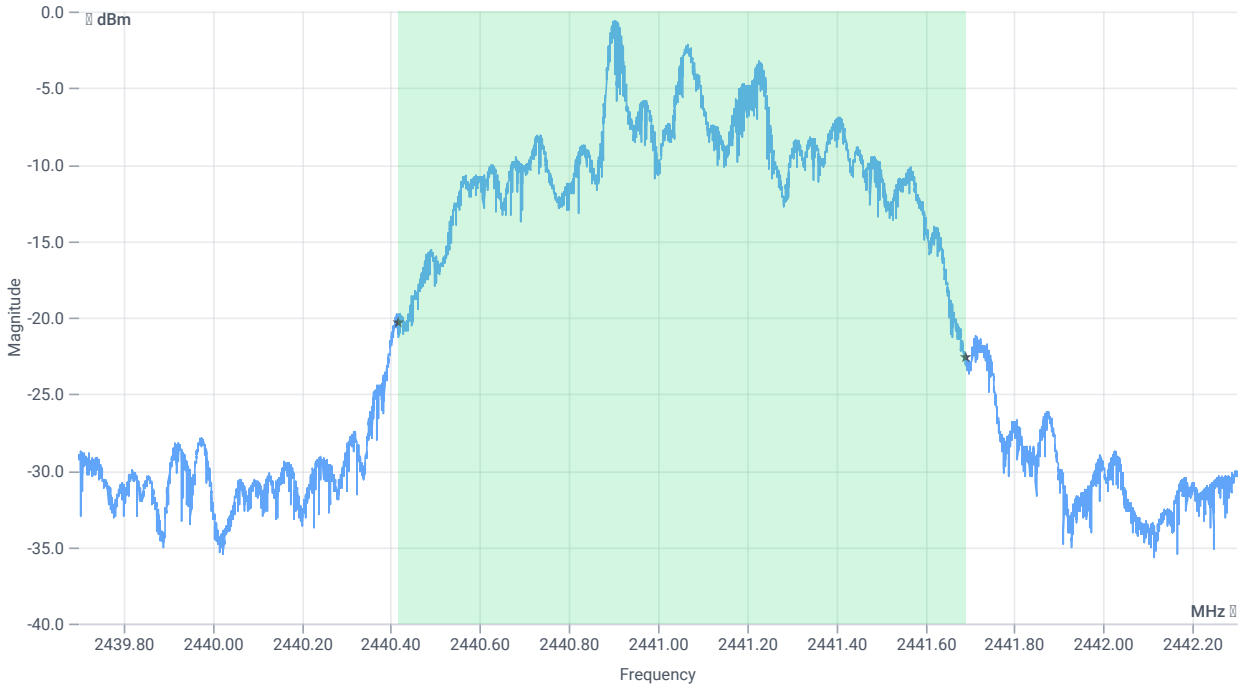
Test at TX 2441 MHz

RESULT: Reference Power cond.

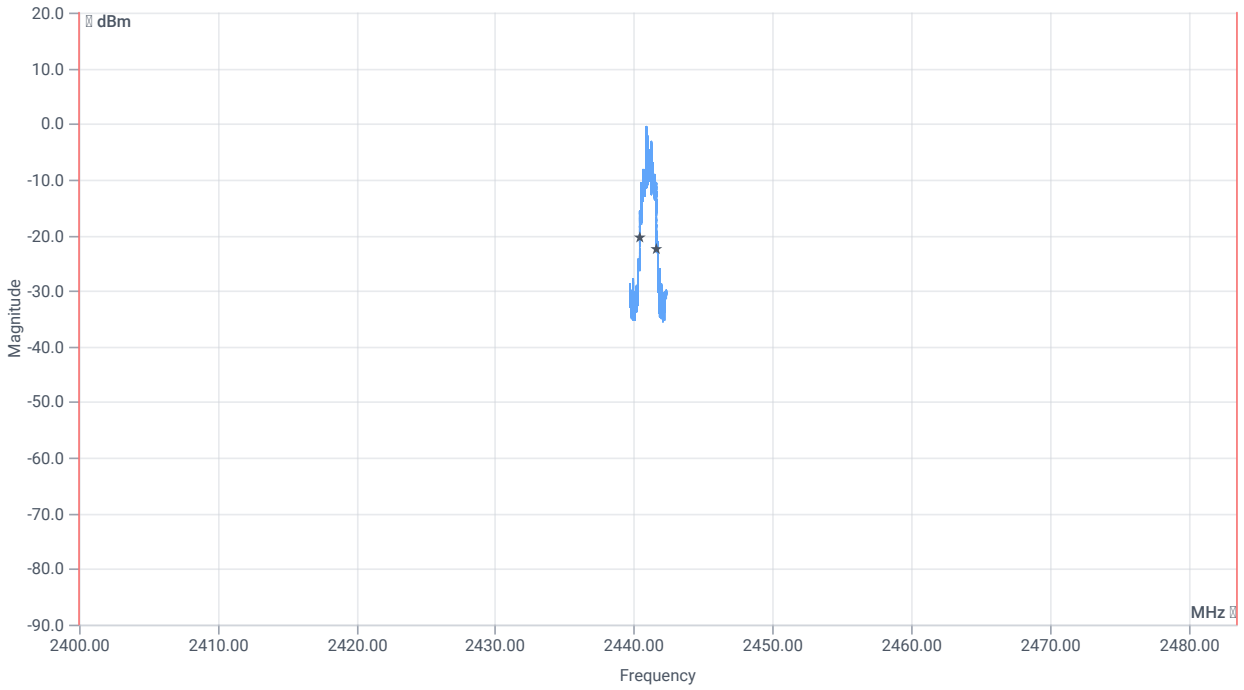
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	0.91	dBm	INFO
Ref. Frequency	---	---	2441.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	5.91 | 11.36 | 10
Start [MHz] | Stop [MHz]	2439.700 | 2442.300
RBW [MHz] | VBW [MHz]	0.030000 | 0.100000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	50 | 200 | 10001 | SWE



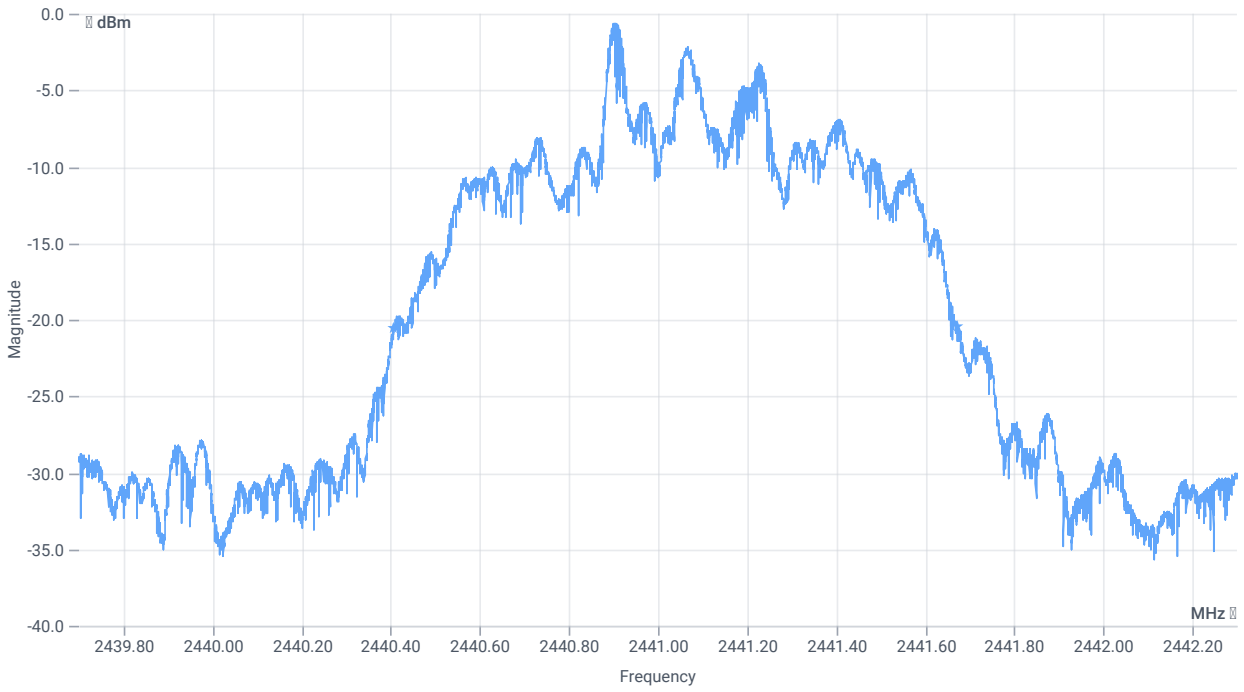
BW 99PCT



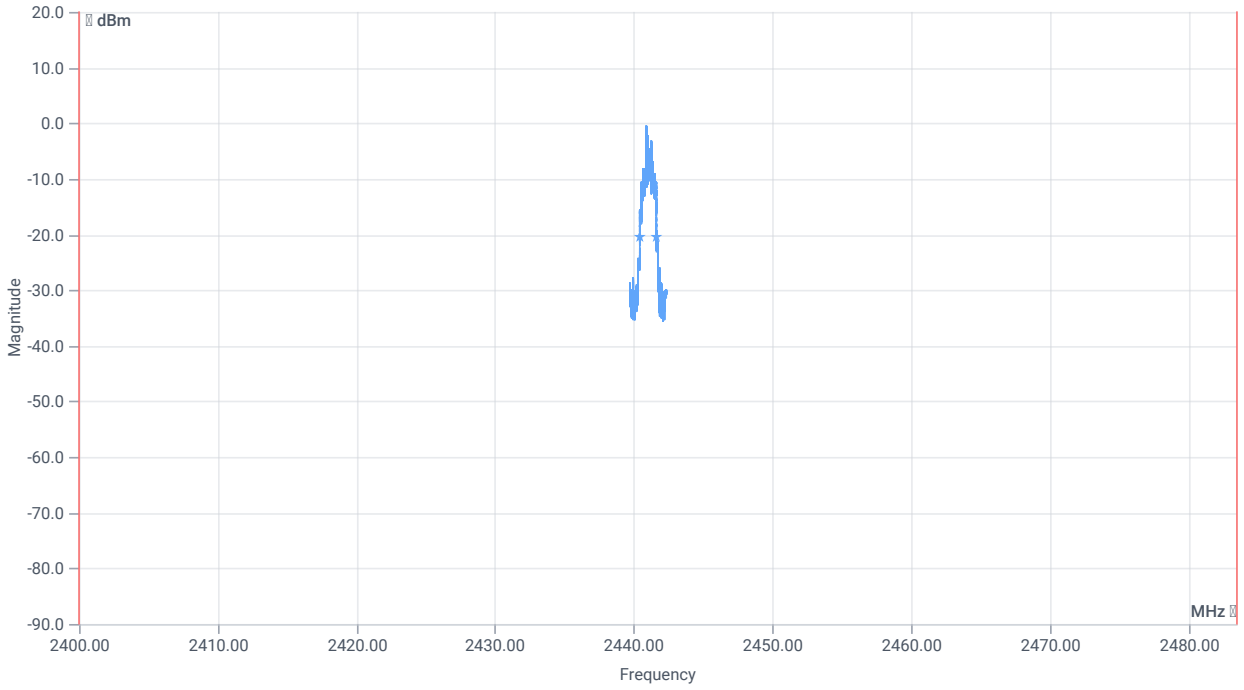
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	1273.000	kHz	INFO
T1 99%	2400.000000	---	2440.4166	MHz	PASS
T2 99%	---	2483.500000	2441.6892	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	1265	kHz	INFO
T1 20DB	2400.000000	---	2440.4067	MHz	PASS
T2 20dB	---	2483.500000	2441.6721	MHz	PASS

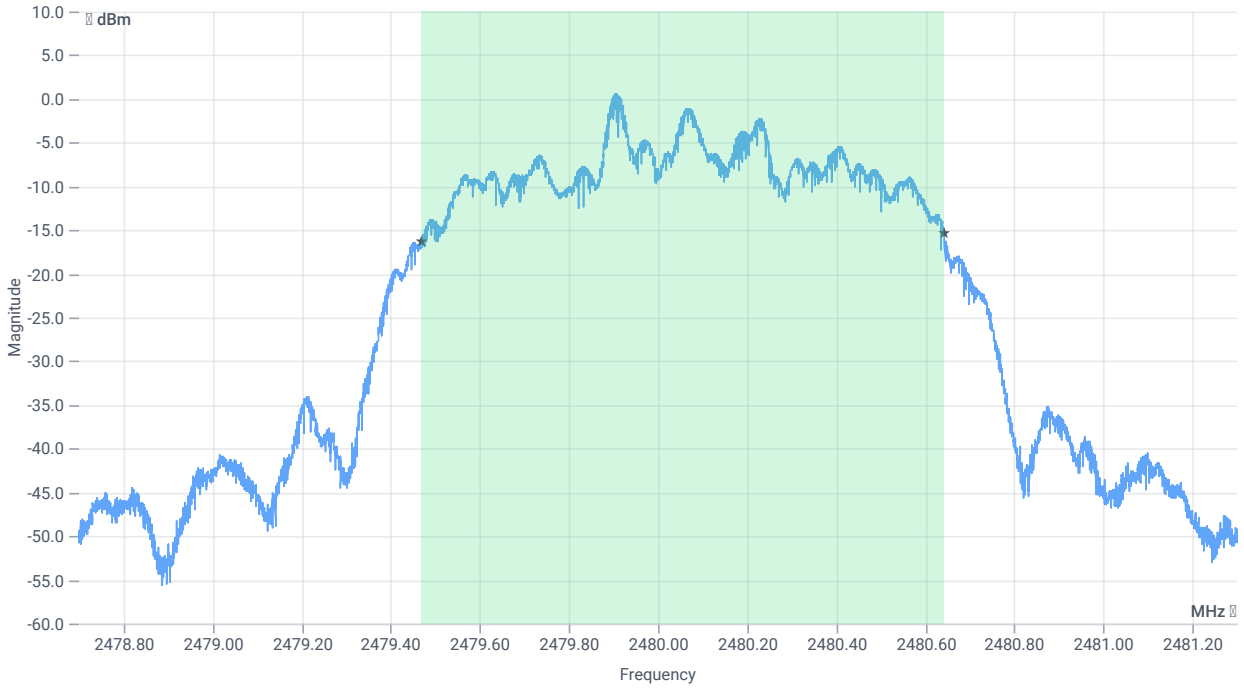
Test at TX 2480 MHz

RESULT: Reference Power cond.

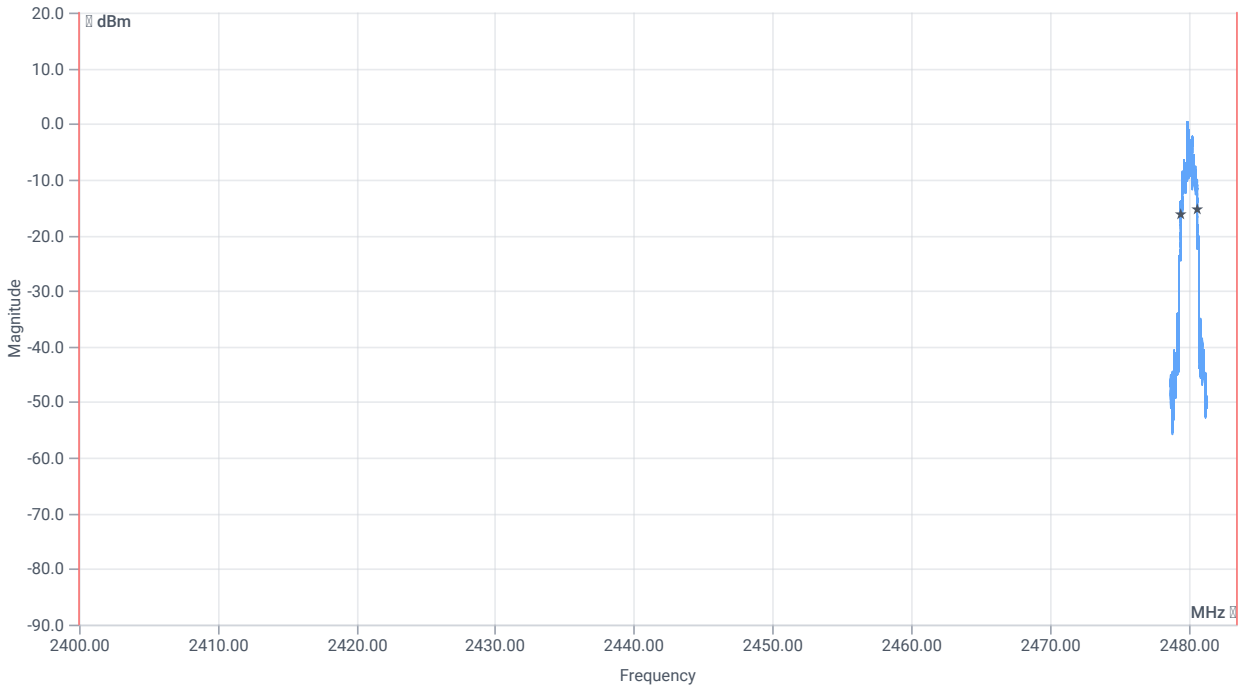
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	2.15	dBm	INFO
Ref. Frequency	---	---	2480.500	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	7.15 | 11.41 | 15
Start [MHz] | Stop [MHz]	2478.700 | 2481.300
RBW [MHz] | VBW [MHz]	0.030000 | 0.100000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	50 | 200 | 10001 | SWE



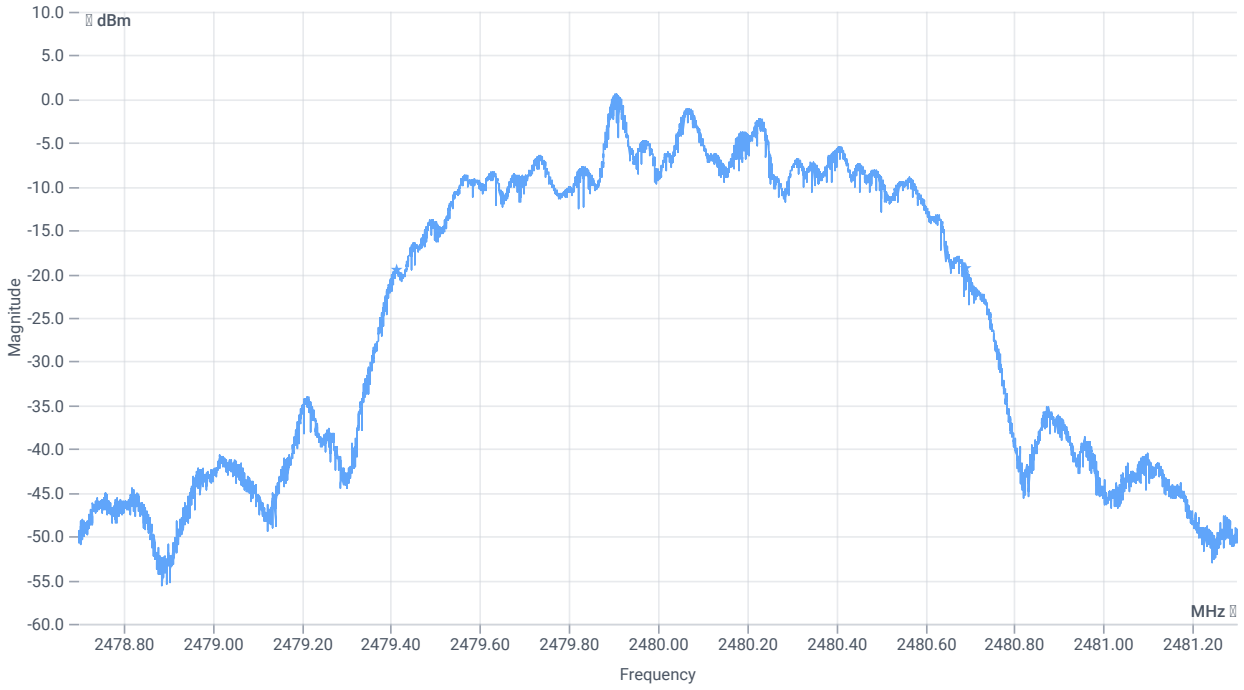
BW 99PCT



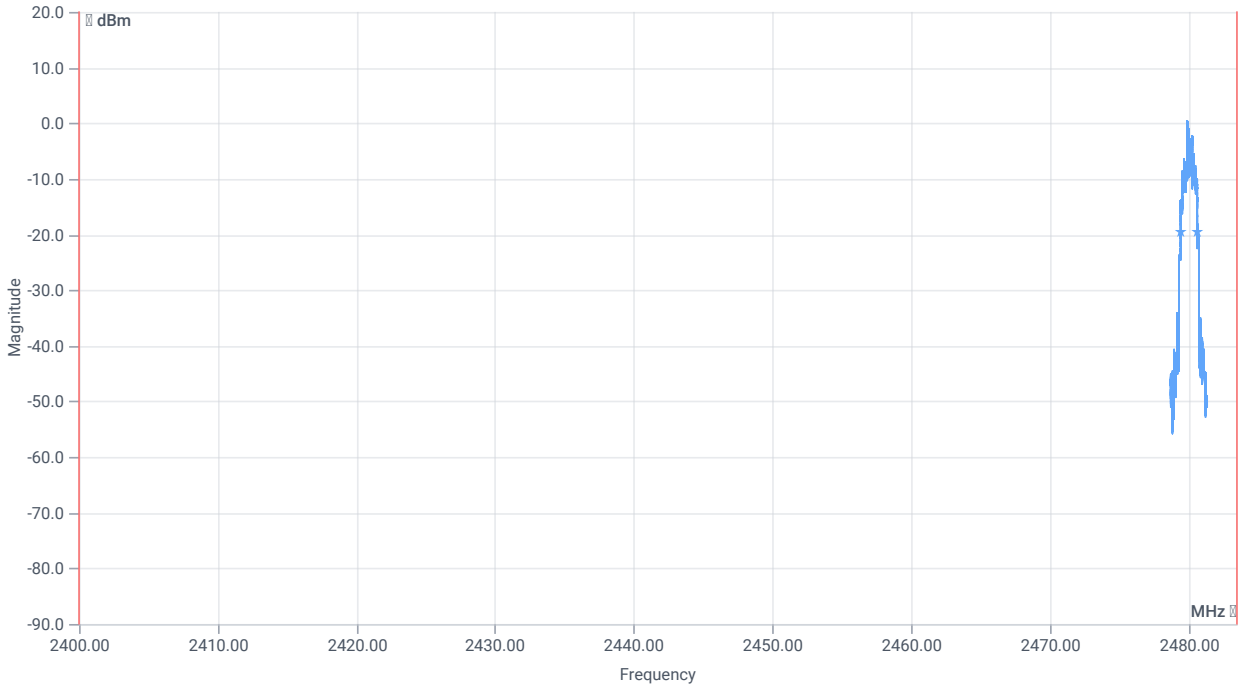
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	1172.000	kHz	INFO
T1 99%	2400.000000	---	2479.4686	MHz	PASS
T2 99%	---	2483.500000	2480.6411	MHz	PASS



BW 20dB



BW within Band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	1276	kHz	INFO
T1 20DB	2400.000000	---	2479.4145	MHz	PASS
T2 20dB	---	2483.500000	2480.6908	MHz	PASS

Verdict
PASS

FCC 15.247 # Maximum peak conducted output power FHSS ~ BT Classic Basic rate

References

TC start	10.10.2023 12:21:13
Ambit temp [°C] | humidity [rel%]	0.0 | 0
System version	4.6.2.0
Standard | Version	FCC 15.247 | NI
Method	
Description	FCC 15.247 Maximum Peak Output Power Conducted FHSS - BT Classic Basic Rate
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	DH1
RF Supported	Basic Rate True | EDR Pi/4DQPSK True | EDR 8DPSK True
Testmode	LOOPback
Perform Inquiry	No
EUT BT Address (if Inqiury No)	101EDA943EEA
Signaling BT Address	123456789ABC
Switch Matrix & Pathcompensation enabled	Yes

Test Parameter

Technology to test	BT Classic Basic rate
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]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.60
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.190
Switch matrix,CTCadvanced,RSM-1 NI DAQ,31534892,NI

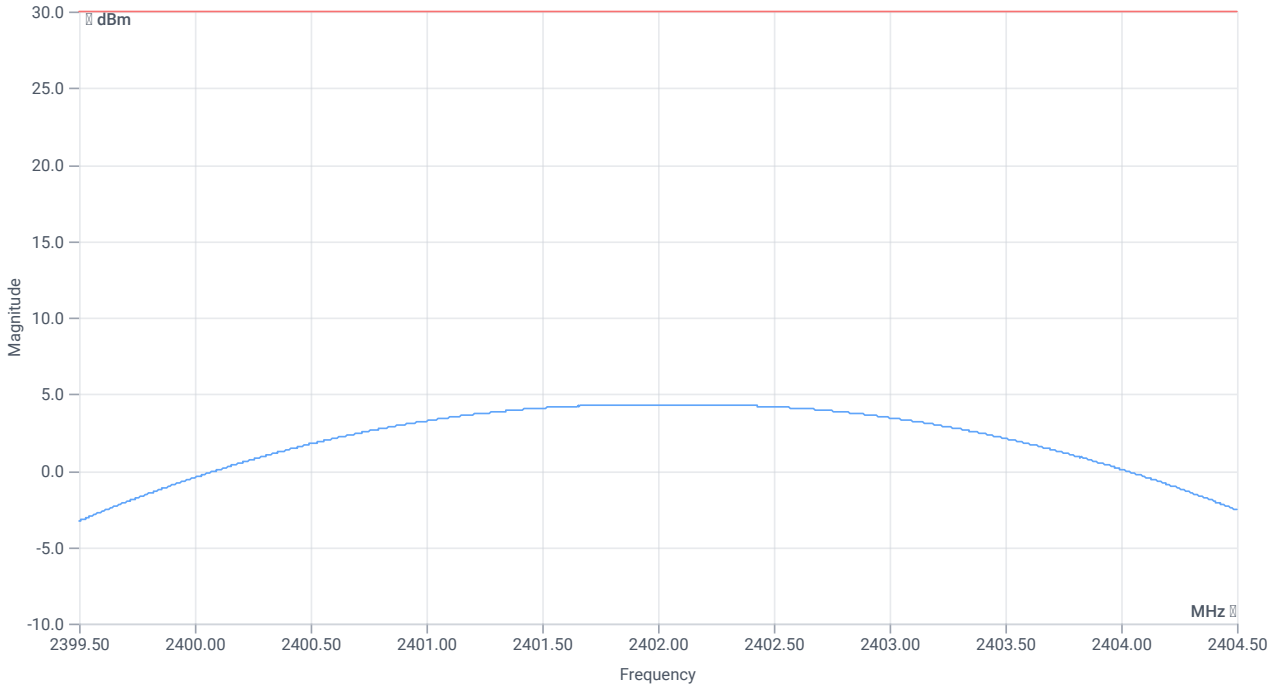
Test at TX 2402 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	4.30	dBm	INFO
Ref. Frequency	---	---	2402.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	14.30 | 11.29 | 20
Start [MHz] | Stop [MHz]	2399.500 | 2404.500
RBW [MHz] | VBW [MHz]	3.000000 | 10.000000
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	---	30.00	4.29	dBm	PASS
Peak Power	---	1000	2.685344	mW	PASS
Frequency at Peak	---	---	2401.925	MHz	INFO

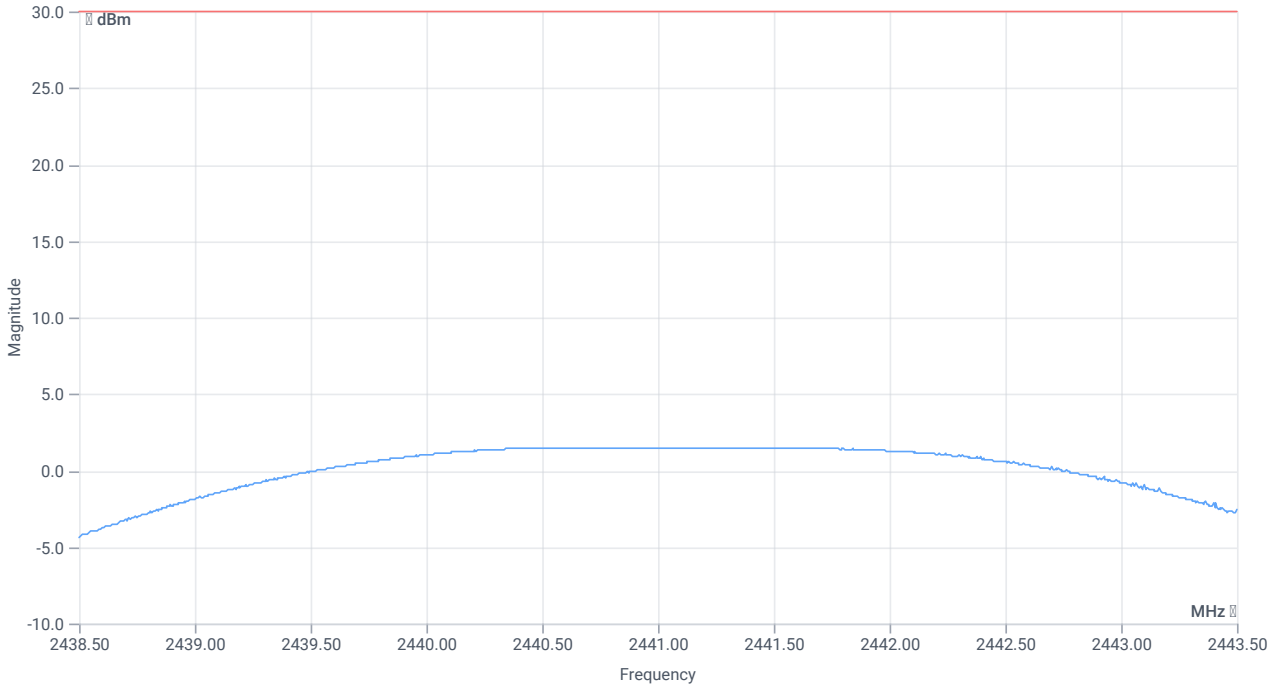
Test at TX 2441 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	1.48	dBm	INFO
Ref. Frequency	---	---	2441.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	11.48 | 11.36 | 20
Start [MHz] | Stop [MHz]	2438.500 | 2443.500
RBW [MHz] | VBW [MHz]	3.000000 | 10.000000
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	---	30.00	1.5	dBm	PASS
Peak Power	---	1000	1.412538	mW	PASS
Frequency at Peak	---	---	2440.67	MHz	INFO

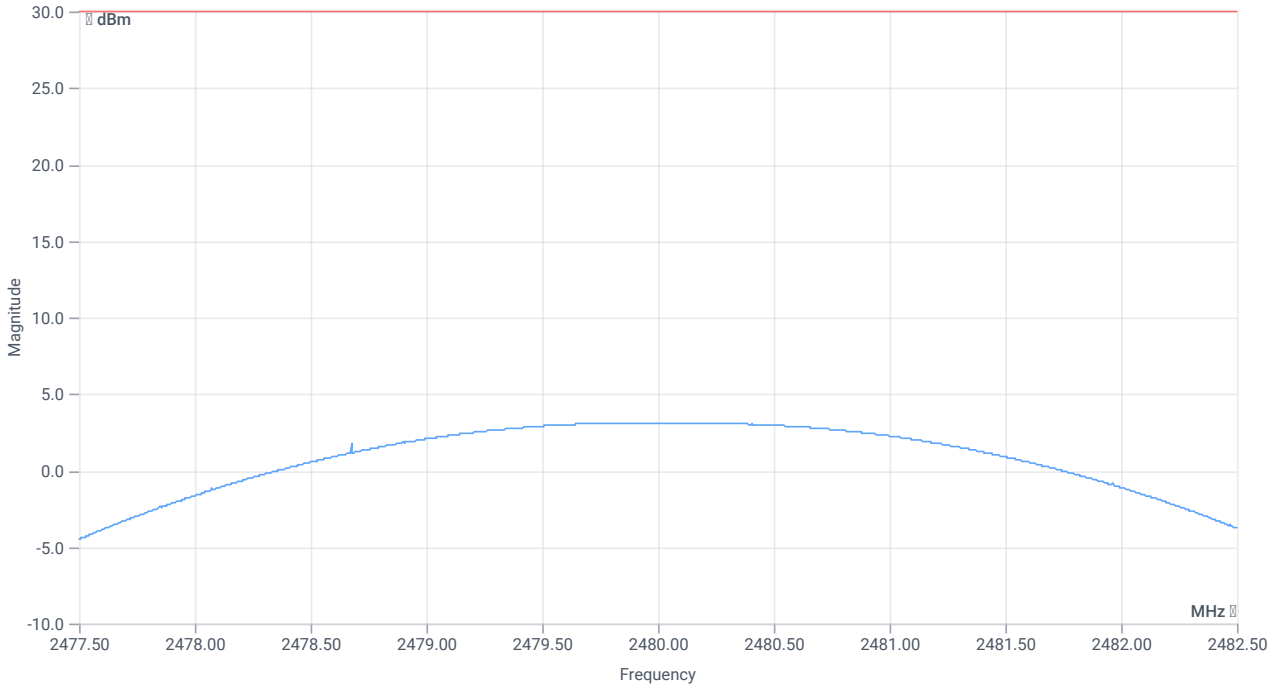
Test at TX 2480 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	3.11	dBm	INFO
Ref. Frequency	---	---	2480.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	13.11 | 11.41 | 20
Start [MHz] | Stop [MHz]	2477.500 | 2482.500
RBW [MHz] | VBW [MHz]	3.000000 | 10.000000
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	---	30.00	3.12	dBm	PASS
Peak Power	---	1000	2.051162	mW	PASS
Frequency at Peak	---	---	2479.915	MHz	INFO

Verdict
PASS

FCC 15.247 # Maximum peak conducted output power FHSS ~ BT Classic EDR Pi/4DQPSK

References

TC start	10.10.2023 15:19:01
Ambit temp [°C] | humidity [rel%]	0.0 | 0
System version	4.6.2.0
Standard | Version	FCC 15.247 | NI
Method	
Description	FCC 15.247 Maximum Peak Output Power Conducted FHSS - BT Classic EDR Pi/4DQPSK
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	DH1
RF Supported	Basic Rate True | EDR Pi/4DQPSK True | EDR 8DPSK True
Testmode	LOOPback
Perform Inquiry	No
EUT BT Address (if Inqiury No)	101EDA943EEA
Signaling BT Address	123456789ABC
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]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.60
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.190
Switch matrix,CTCadvanced,RSM-1 NI DAQ,31534892,NI

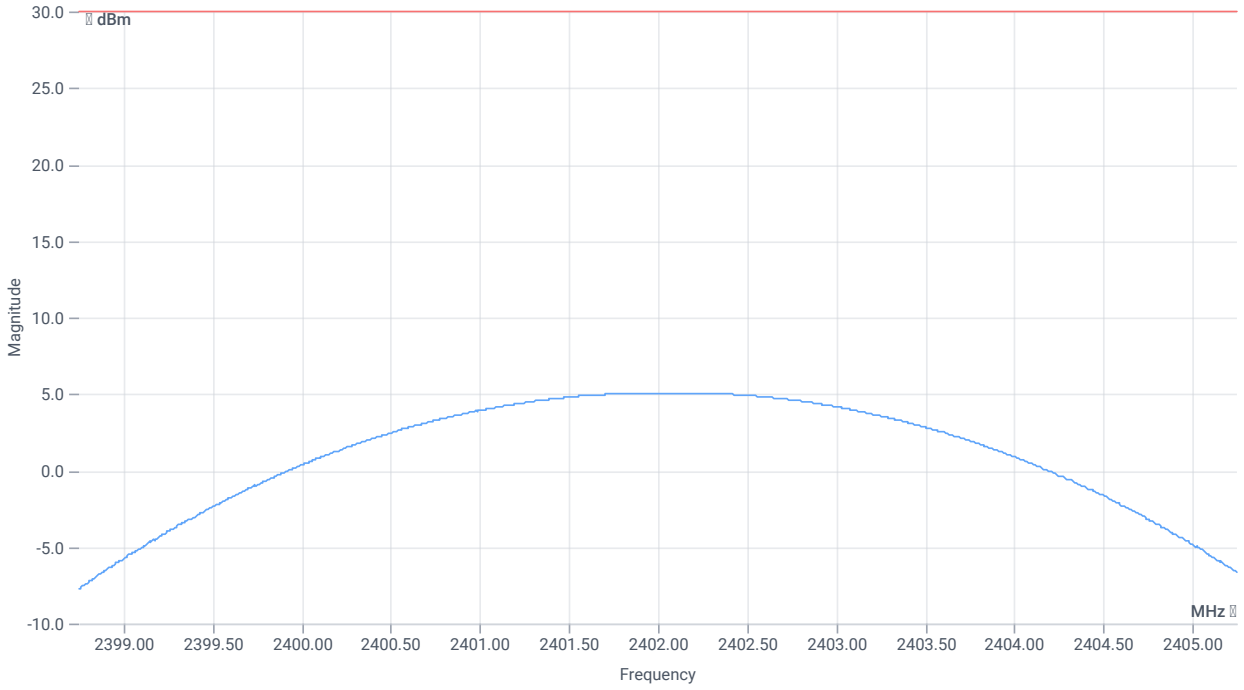
Test at TX 2402 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	3.66	dBm	INFO
Ref. Frequency	---	---	2402.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	13.66 | 11.29 | 20
Start [MHz] | Stop [MHz]	2398.750 | 2405.250
RBW [MHz] | VBW [MHz]	3.000000 | 10.000000
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	---	30.00	5.06	dBm	PASS
Peak Power	---	1000	3.206269	mW	PASS
Frequency at Peak	---	---	2402.13	MHz	INFO

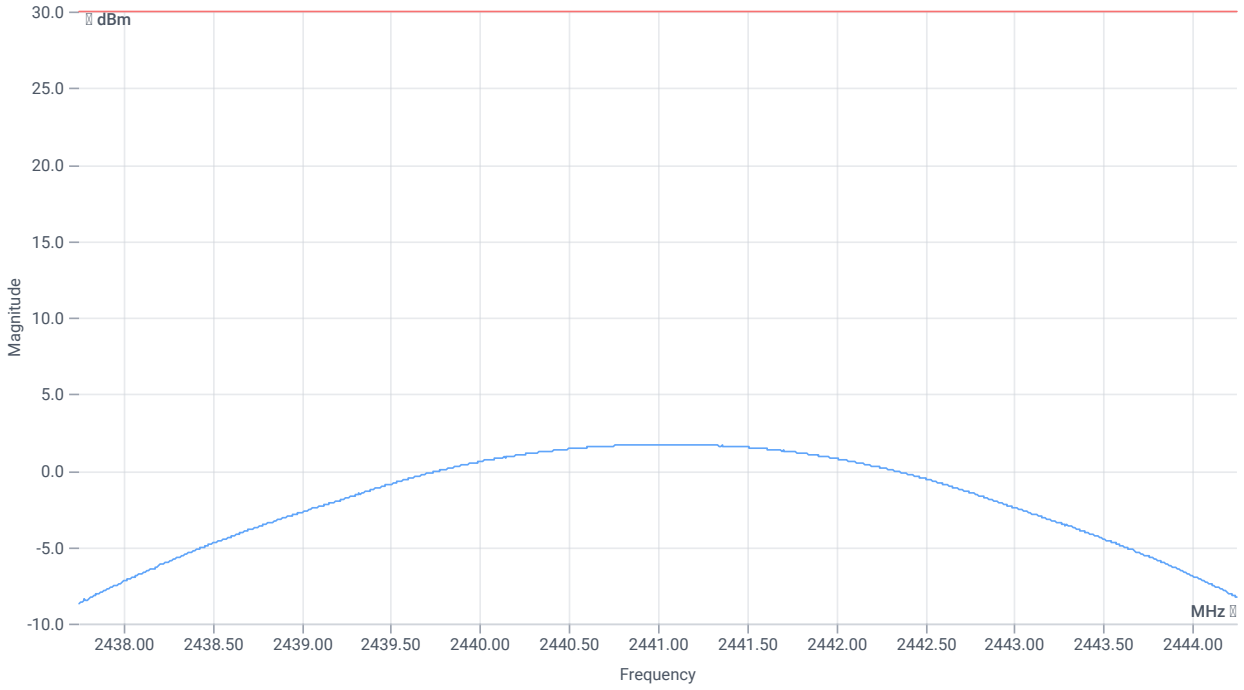
Test at TX 2441 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	0.97	dBm	INFO
Ref. Frequency	---	---	2441.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	10.97 | 11.36 | 15
Start [MHz] | Stop [MHz]	2437.750 | 2444.250
RBW [MHz] | VBW [MHz]	3.000000 | 10.000000
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	---	30.00	1.67	dBm	PASS
Peak Power	---	1000	1.468926	mW	PASS
Frequency at Peak	---	---	2440.916	MHz	INFO

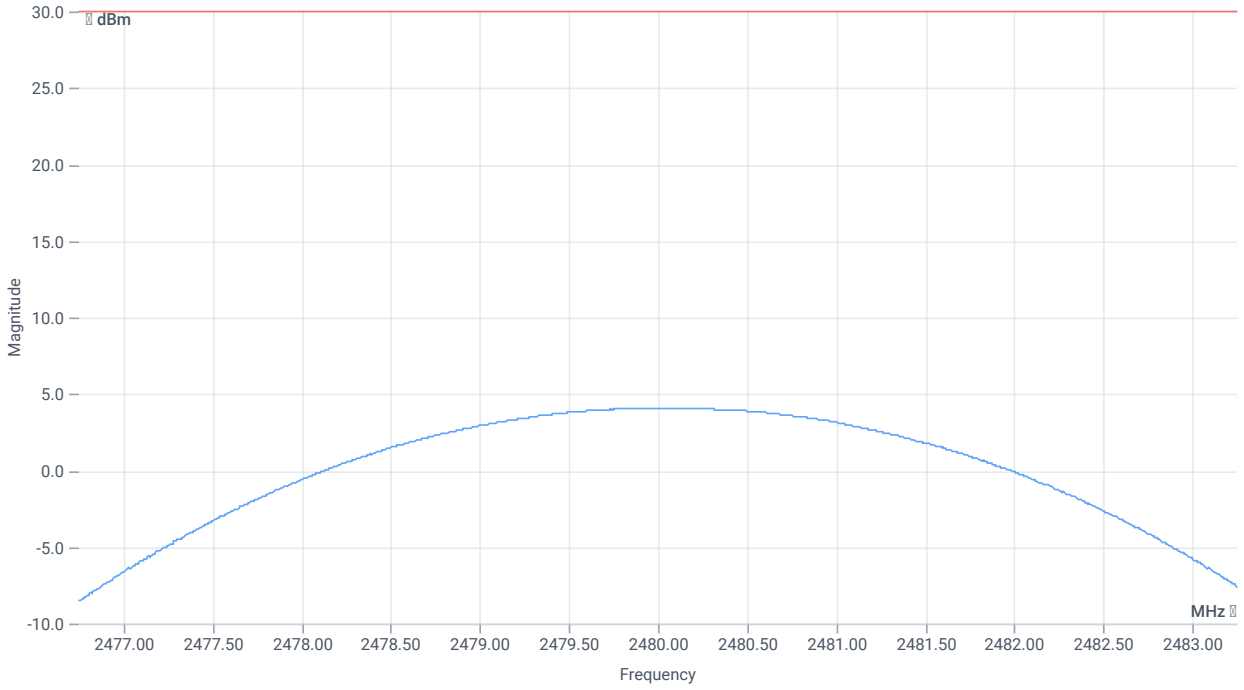
Test at TX 2480 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	2.65	dBm	INFO
Ref. Frequency	---	---	2480.100	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	12.65 | 11.41 | 20
Start [MHz] | Stop [MHz]	2476.750 | 2483.250
RBW [MHz] | VBW [MHz]	3.000000 | 10.000000
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	---	30.00	4.06	dBm	PASS
Peak Power	---	1000	2.54683	mW	PASS
Frequency at Peak	---	---	2479.98	MHz	INFO

Verdict
PASS

FCC 15.247 # Maximum peak conducted output power FHSS ~ BT Classic EDR 8DPSK

References

TC start	10.10.2023 13:24:13
Ambit temp [°C] | humidity [rel%]	0.0 | 0
System version	4.6.2.0
Standard | Version	FCC 15.247 | NI
Method	
Description	FCC 15.247 Maximum Peak Output Power Conducted FHSS - BT Classic EDR 8DPSK
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	DH1
RF Supported	Basic Rate True | EDR Pi/4DQPSK True | EDR 8DPSK True
Testmode	LOOPback
Perform Inquiry	No
EUT BT Address (if Inqiury No)	101EDA943EEA
Signaling BT Address	123456789ABC
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]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.60
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.190
Switch matrix,CTCadvanced,RSM-1 NI DAQ,31534892,NI

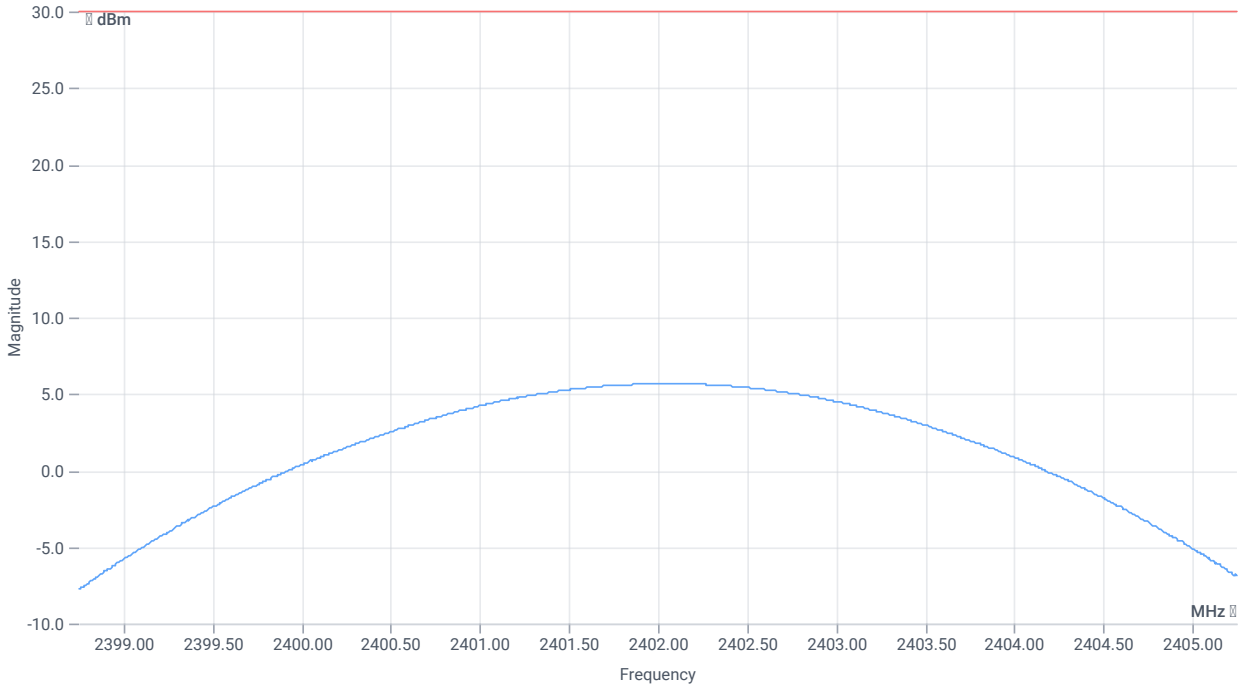
Test at TX 2402 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	4.33	dBm	INFO
Ref. Frequency	---	---	2402.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	14.33 | 11.29 | 20
Start [MHz] | Stop [MHz]	2398.750 | 2405.250
RBW [MHz] | VBW [MHz]	3.000000 | 10.000000
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	---	30.00	5.69	dBm	PASS
Peak Power	---	1000	3.706807	mW	PASS
Frequency at Peak	---	---	2402.052	MHz	INFO

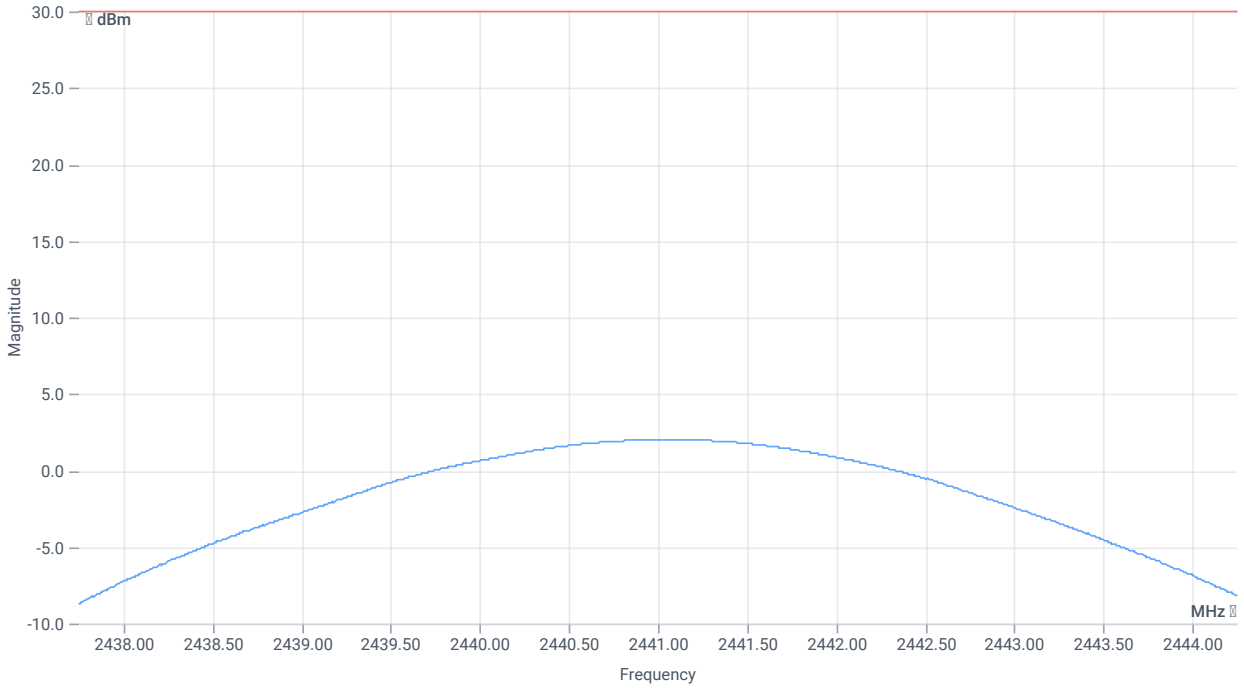
Test at TX 2441 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	0.87	dBm	INFO
Ref. Frequency	---	---	2441.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	10.87 | 11.36 | 15
Start [MHz] | Stop [MHz]	2437.750 | 2444.250
RBW [MHz] | VBW [MHz]	3.000000 | 10.000000
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	---	30.00	2.04	dBm	PASS
Peak Power	---	1000	1.599558	mW	PASS
Frequency at Peak	---	---	2441.013	MHz	INFO

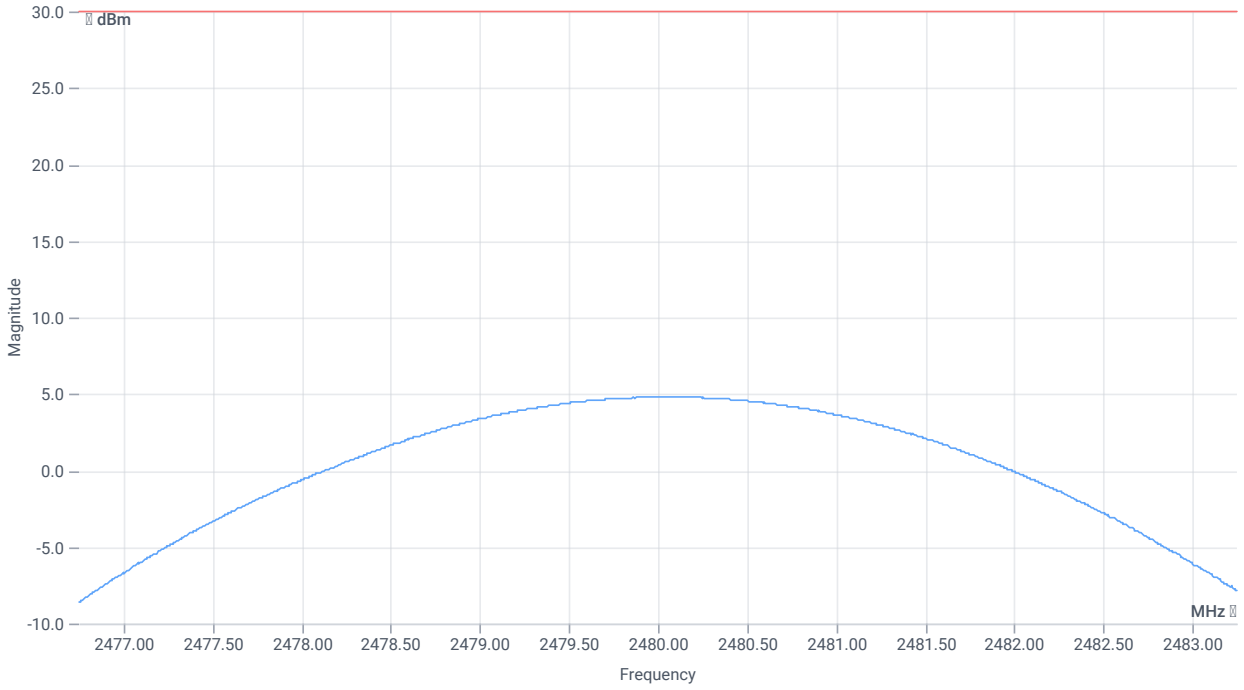
Test at TX 2480 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	3.28	dBm	INFO
Ref. Frequency	---	---	2480.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	13.28 | 11.41 | 20
Start [MHz] | Stop [MHz]	2476.750 | 2483.250
RBW [MHz] | VBW [MHz]	3.000000 | 10.000000
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	---	30.00	4.81	dBm	PASS
Peak Power	---	1000	3.026913	mW	PASS
Frequency at Peak	---	---	2480.13	MHz	INFO

Verdict
PASS

FCC 15.247 # Number of hopping channels FHSS ~ BT Classic Basic rate

References

TC start	10.10.2023 10:49:54
Ambit temp [°C] | humidity [rel%]	0.0 | 0
System version	4.6.2.0
Standard | Version	FCC 15.247 | NI
Method	
Description	FCC 15.247 Number Of Hopping Channels FHSS - BT Classic Basic Rate
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	DH1
RF Supported	Basic Rate True | EDR Pi/4DQPSK True | EDR 8DPSK True
Testmode	LOOPback
Perform Inquiry	No
EUT BT Address (if Inqiury No)	101EDA943EEA
Signaling BT Address	123456789ABC
Switch Matrix & Pathcompensation enabled	Yes

Test Parameter

Technology to test	BT Classic Basic rate
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2402
Frequency mid to test	False | Freq [MHz] 2441
Frequency high to test	False | Freq [MHz] 2480
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.60
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.190
Switch matrix,CTCadvanced,RSM-1 NI DAQ,31534892,NI

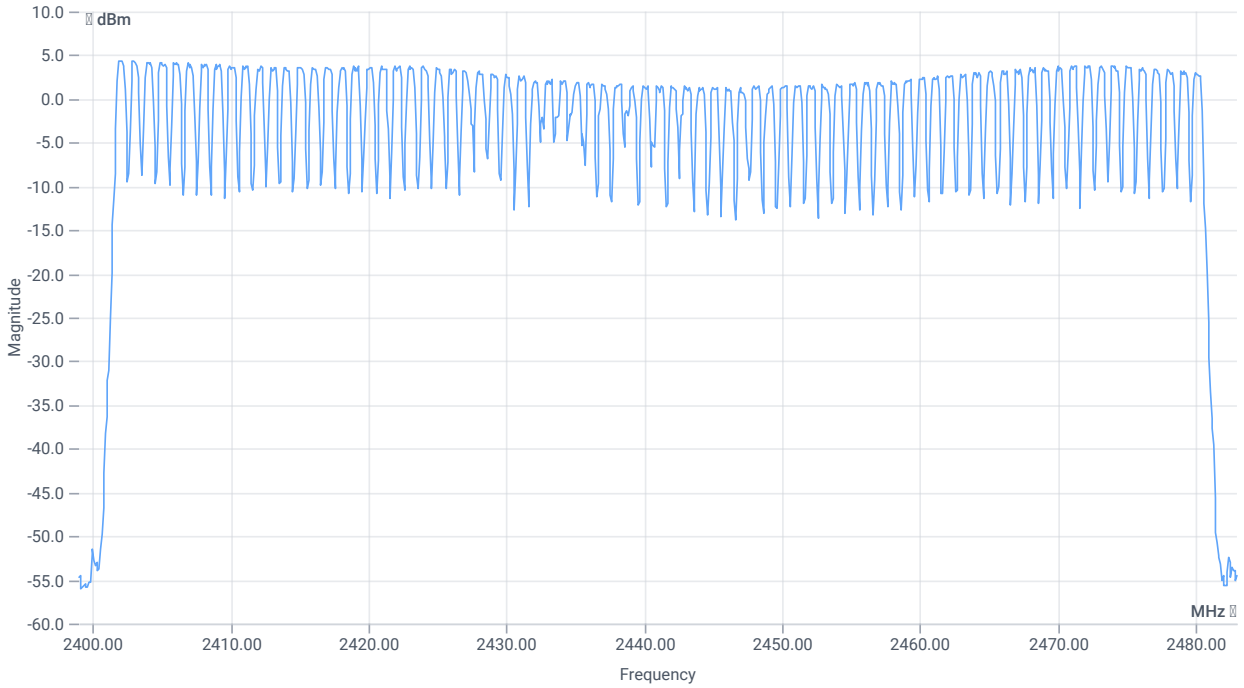
Test at TX hopping MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	4.48	dBm	INFO
Ref. Frequency	---	---	2404.240	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	9.48 | 11.36 | 15
Start [MHz] | Stop [MHz]	2399.000 | 2483.000
RBW [MHz] | VBW [MHz]	0.200000 | 0.500000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	1 | 10000 | 1001 | SWE



Number of hopping channels

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Hopp channel (rounded)	---	---	2402	MHz	INFO
Hopp channel (rounded)	---	---	2403	MHz	INFO
Hopp channel (rounded)	---	---	2404	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Hopp channel (rounded)	---	---	2405	MHz	INFO
Hopp channel (rounded)	---	---	2406	MHz	INFO
Hopp channel (rounded)	---	---	2407	MHz	INFO
Hopp channel (rounded)	---	---	2408	MHz	INFO
Hopp channel (rounded)	---	---	2409	MHz	INFO
Hopp channel (rounded)	---	---	2410	MHz	INFO
Hopp channel (rounded)	---	---	2411	MHz	INFO
Hopp channel (rounded)	---	---	2412	MHz	INFO
Hopp channel (rounded)	---	---	2413	MHz	INFO
Hopp channel (rounded)	---	---	2414	MHz	INFO
Hopp channel (rounded)	---	---	2415	MHz	INFO
Hopp channel (rounded)	---	---	2416	MHz	INFO
Hopp channel (rounded)	---	---	2417	MHz	INFO
Hopp channel (rounded)	---	---	2418	MHz	INFO
Hopp channel (rounded)	---	---	2419	MHz	INFO
Hopp channel (rounded)	---	---	2420	MHz	INFO
Hopp channel (rounded)	---	---	2421	MHz	INFO
Hopp channel (rounded)	---	---	2422	MHz	INFO
Hopp channel (rounded)	---	---	2423	MHz	INFO
Hopp channel (rounded)	---	---	2424	MHz	INFO
Hopp channel (rounded)	---	---	2425	MHz	INFO
Hopp channel (rounded)	---	---	2426	MHz	INFO
Hopp channel (rounded)	---	---	2427	MHz	INFO
Hopp channel (rounded)	---	---	2428	MHz	INFO
Hopp channel (rounded)	---	---	2429	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Hopp channel (rounded)	---	---	2430	MHz	INFO
Hopp channel (rounded)	---	---	2431	MHz	INFO
Hopp channel (rounded)	---	---	2432	MHz	INFO
Hopp channel (rounded)	---	---	2433	MHz	INFO
Hopp channel (rounded)	---	---	2434	MHz	INFO
Hopp channel (rounded)	---	---	2435	MHz	INFO
Hopp channel (rounded)	---	---	2436	MHz	INFO
Hopp channel (rounded)	---	---	2437	MHz	INFO
Hopp channel (rounded)	---	---	2438	MHz	INFO
Hopp channel (rounded)	---	---	2439	MHz	INFO
Hopp channel (rounded)	---	---	2440	MHz	INFO
Hopp channel (rounded)	---	---	2441	MHz	INFO
Hopp channel (rounded)	---	---	2442	MHz	INFO
Hopp channel (rounded)	---	---	2443	MHz	INFO
Hopp channel (rounded)	---	---	2444	MHz	INFO
Hopp channel (rounded)	---	---	2445	MHz	INFO
Hopp channel (rounded)	---	---	2446	MHz	INFO
Hopp channel (rounded)	---	---	2447	MHz	INFO
Hopp channel (rounded)	---	---	2448	MHz	INFO
Hopp channel (rounded)	---	---	2449	MHz	INFO
Hopp channel (rounded)	---	---	2450	MHz	INFO
Hopp channel (rounded)	---	---	2451	MHz	INFO
Hopp channel (rounded)	---	---	2452	MHz	INFO
Hopp channel (rounded)	---	---	2453	MHz	INFO
Hopp channel (rounded)	---	---	2454	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Hopp channel (rounded)	---	---	2455	MHz	INFO
Hopp channel (rounded)	---	---	2456	MHz	INFO
Hopp channel (rounded)	---	---	2457	MHz	INFO
Hopp channel (rounded)	---	---	2458	MHz	INFO
Hopp channel (rounded)	---	---	2459	MHz	INFO
Hopp channel (rounded)	---	---	2460	MHz	INFO
Hopp channel (rounded)	---	---	2461	MHz	INFO
Hopp channel (rounded)	---	---	2462	MHz	INFO
Hopp channel (rounded)	---	---	2463	MHz	INFO
Hopp channel (rounded)	---	---	2464	MHz	INFO
Hopp channel (rounded)	---	---	2465	MHz	INFO
Hopp channel (rounded)	---	---	2466	MHz	INFO
Hopp channel (rounded)	---	---	2467	MHz	INFO
Hopp channel (rounded)	---	---	2468	MHz	INFO
Hopp channel (rounded)	---	---	2469	MHz	INFO
Hopp channel (rounded)	---	---	2470	MHz	INFO
Hopp channel (rounded)	---	---	2471	MHz	INFO
Hopp channel (rounded)	---	---	2472	MHz	INFO
Hopp channel (rounded)	---	---	2473	MHz	INFO
Hopp channel (rounded)	---	---	2474	MHz	INFO
Hopp channel (rounded)	---	---	2475	MHz	INFO
Hopp channel (rounded)	---	---	2476	MHz	INFO
Hopp channel (rounded)	---	---	2477	MHz	INFO
Hopp channel (rounded)	---	---	2478	MHz	INFO
Hopp channel (rounded)	---	---	2479	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Hopp channel (rounded)	---	---	2480	MHz	INFO
Σ Hopping channels	15	---	79	Number	PASS

Verdict
PASS

FCC 15.247 # Carrier frequency separation FHSS ~ BT Classic Basic rate

References

TC start	10.10.2023 14:33:02
Ambit temp [°C] | humidity [rel%]	0.0 | 0
System version	4.6.2.0
Standard | Version	NA | NI
Method	
Description	Hardcopy spectrum analyzer
Information	

Test Parameter

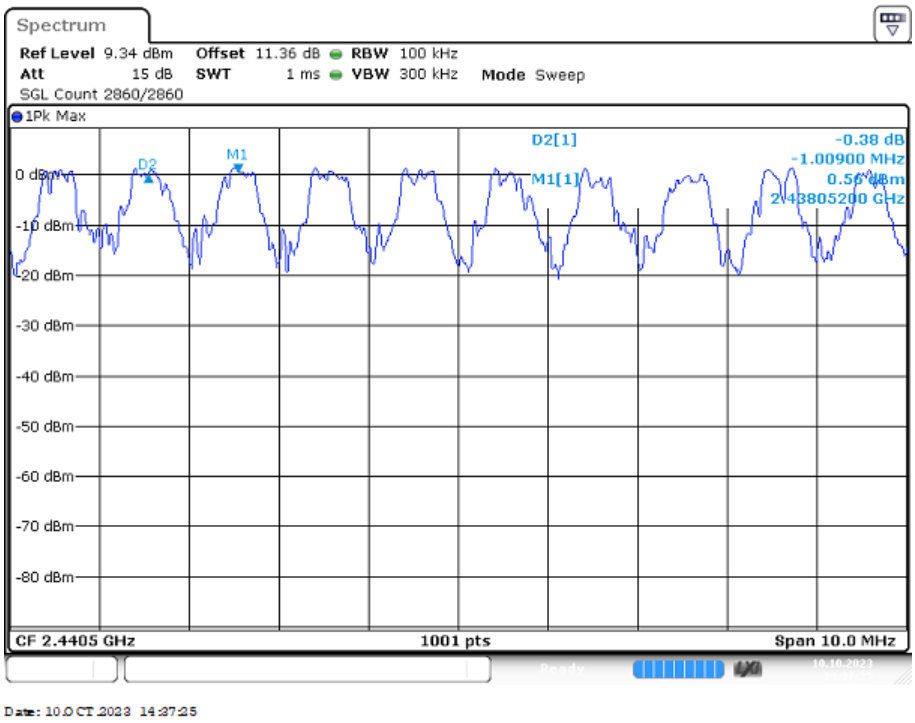
Technology to test	
Switched Path	None

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.60

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	9.34 | 11.36 | 15
Start [MHz] | Stop [MHz]	2435.500 | 2445.500
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	1 | 2860 | 1001 | SWE



NA # Hardcopy SA ~

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Marker Readout					
Marker 1 Freq.	---	---	2438.052000	MHz	INFO

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Delta Marker Readout					
Delta Marker 2 Freq.	---	---	-1.009000	MHz	INFO
Delta Marker 2 Level	---	---	-0.379	dB	INFO

Verdict
INFO

FCC 15.247 # TX Emissions on band edge FCC ~ BT Classic Basic rate

References

TC start	10.10.2023 14:17:40
Ambit temp [°C] | humidity [rel%]	0.0 | 0
System version	4.6.2.0
Standard | Version	FCC 15.247 | NI
Method	
Description	FCC 15.247 TX Emissions conducted on band edge FHSS - BT Classic Basic Rate
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	DH1
RF Supported	Basic Rate True | EDR Pi/4DQPSK True | EDR 8DPSK True
Testmode	LOOPback
Perform Inquiry	No
EUT BT Address (if Inqiury No)	101EDA943EEA
Signaling BT Address	123456789ABC
Switch Matrix & Pathcompensation enabled	Yes

Test Parameter

Technology to test	BT Classic Basic rate
Antenna port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2402
Frequency mid to test	False | Freq [MHz] 2441
Frequency high to test	False | Freq [MHz] 2480
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.60
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.190
Switch matrix,CTCadvanced,RSM-1 NI DAQ,31534892,NI

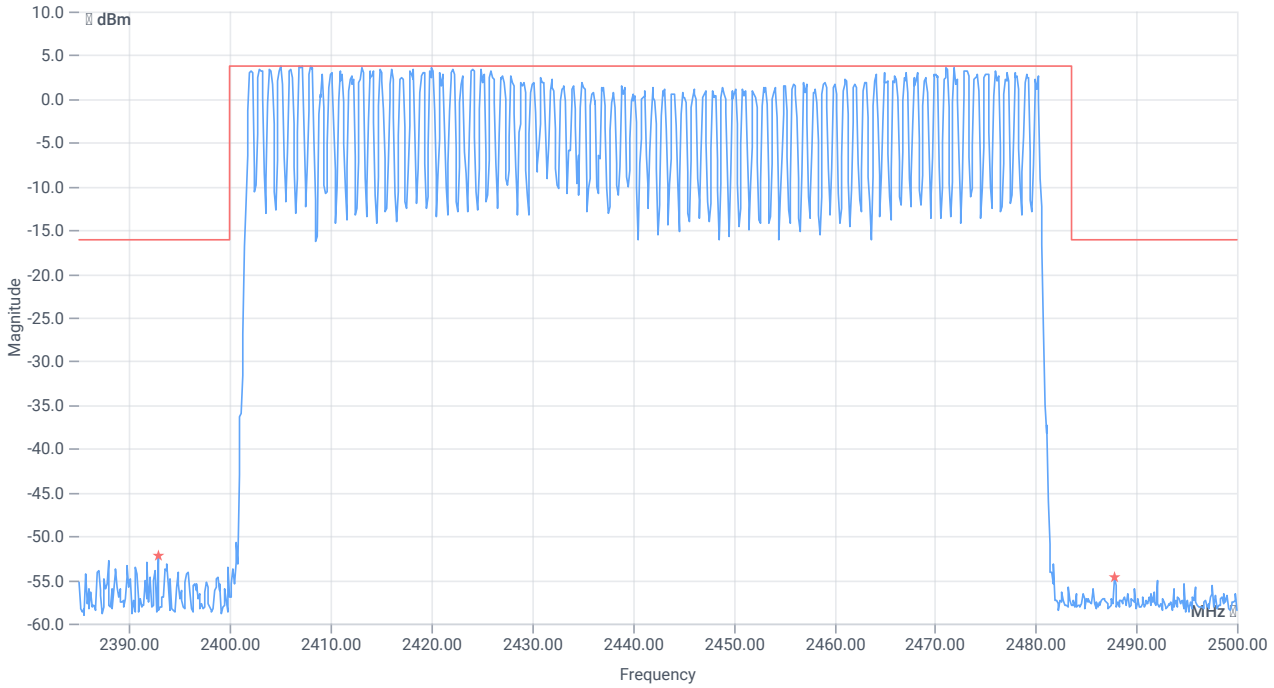
Test at TX hopping MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	4.33	dBm	INFO
Ref. Frequency	---	---	2404.140	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	9.33 | 11.36 | 15
Start [MHz] | Stop [MHz]	2385.000 | 2500.000
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	40 | 2500 | 1001 | SWE



TX emissions on band edge

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max peak lower Band	---	-16.16	-52.16	dBm	PASS
Max peak upper Band	---	-16.16	-54.68	dBm	PASS

Verdict

PASS

FCC 15.247 # TX Emissions on band edge FCC ~ BT Classic EDR Pi/4DQPSK

References

TC start	10.10.2023 14:19:59
Ambit temp [°C] | humidity [rel%]	0.0 | 0
System version	4.6.2.0
Standard | Version	FCC 15.247 | NI
Method	
Description	FCC 15.247 TX Emissions conducted on band edge FHSS - BT Classic EDR Pi/4DQPSK
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	DH1
RF Supported	Basic Rate True | EDR Pi/4DQPSK True | EDR 8DPSK True
Testmode	LOOPback
Perform Inquiry	No
EUT BT Address (if Inqiury No)	101EDA943EEA
Signaling BT Address	123456789ABC
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	False | Freq [MHz] 2402
Frequency mid to test	False | Freq [MHz] 2441
Frequency high to test	False | Freq [MHz] 2480
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.60
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.190
Switch matrix,CTCadvanced,RSM-1 NI DAQ,31534892,NI

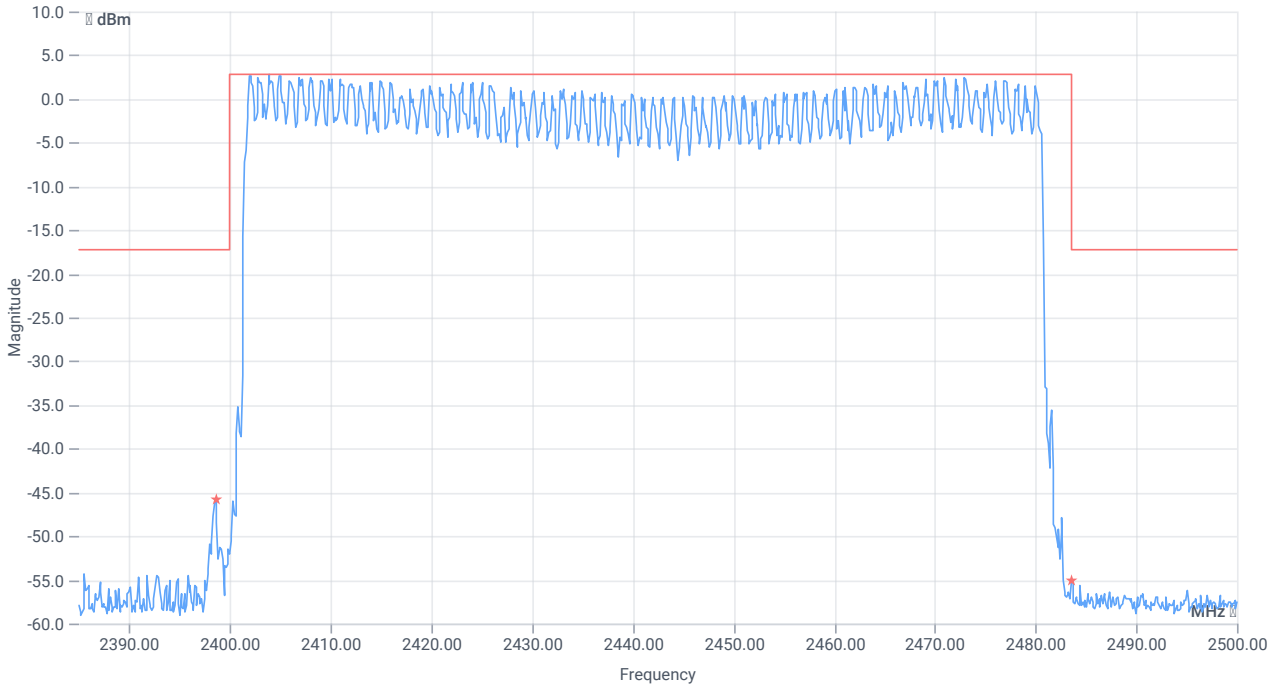
Test at TX hopping MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	4.40	dBm	INFO
Ref. Frequency	---	---	2404.240	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	9.40 | 11.36 | 15
Start [MHz] | Stop [MHz]	2385.000 | 2500.000
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	40 | 2500 | 1001 | SWE



TX emissions on band edge

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max peak lower Band	---	-17.19	-45.77	dBm	PASS
Max peak upper Band	---	-17.19	-55.13	dBm	PASS

Verdict

PASS

FCC 15.247 # TX Emissions on band edge FCC ~ BT Classic EDR 8DPSK

References

TC start	10.10.2023 14:22:17
Ambit temp [°C] | humidity [rel%]	0.0 | 0
System version	4.6.2.0
Standard | Version	FCC 15.247 | NI
Method	
Description	FCC 15.247 TX Emissions conducted on band edge FHSS - BT Classic EDR 8DPSK
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	DH1
RF Supported	Basic Rate True | EDR Pi/4DQPSK True | EDR 8DPSK True
Testmode	LOOPback
Perform Inquiry	No
EUT BT Address (if Inqiury No)	101EDA943EEA
Signaling BT Address	123456789ABC
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	False | Freq [MHz] 2402
Frequency mid to test	False | Freq [MHz] 2441
Frequency high to test	False | Freq [MHz] 2480
Auto control enabled power supply | Climatic Box	No | No
Additional path loss [dB]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.60
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.190
Switch matrix,CTCadvanced,RSM-1 NI DAQ,31534892,NI

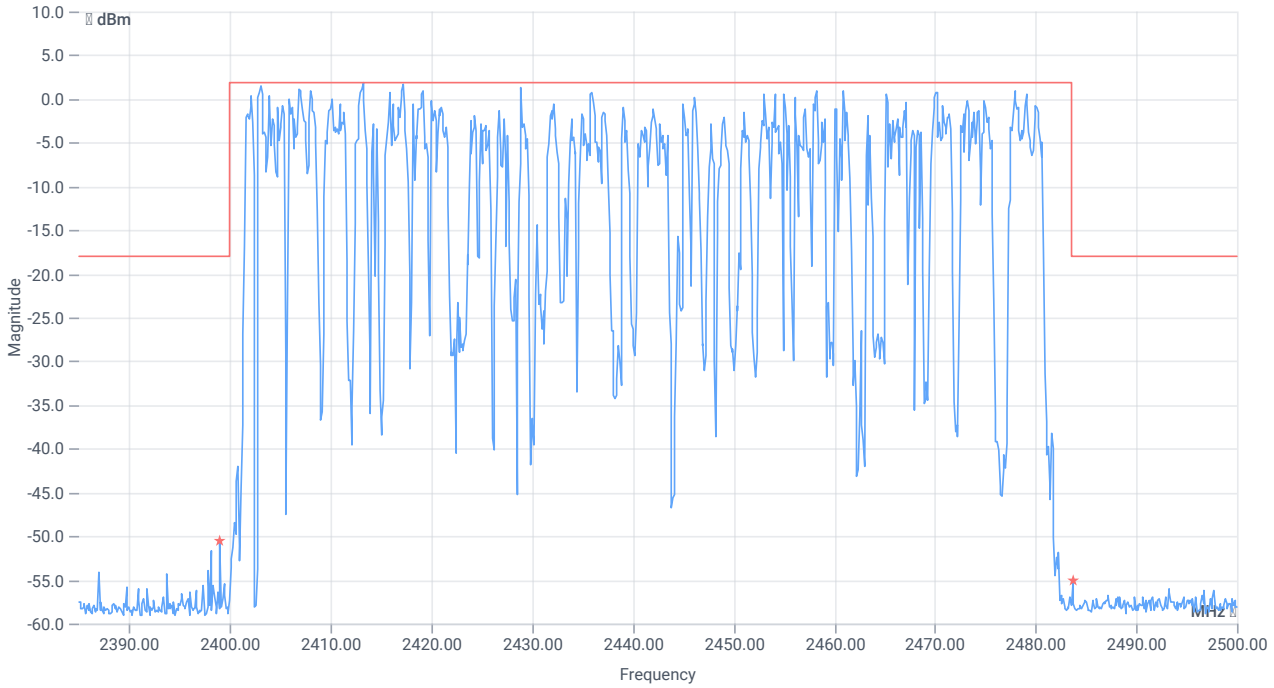
Test at TX hopping MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	4.59	dBm	INFO
Ref. Frequency	---	---	2404.940	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	9.59 | 11.36 | 15
Start [MHz] | Stop [MHz]	2385.000 | 2500.000
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: time [ms] | count | points per Section | type	40 | 2500 | 1001 | SWE



TX emissions on band edge

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Max peak lower Band	---	-18.08	-50.63	dBm	PASS
Max peak upper Band	---	-18.08	-55.17	dBm	PASS

Verdict

PASS

FCC 15.247 # TX spurious conducted 20dBc ~ BT Classic Basic rate

References

TC start	10.10.2023 10:54:26
Ambit temp [°C] | humidity [rel%]	0.0 | 0
System version	4.6.2.0
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 Conducted FHSS - BT Classic Basic Rate
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	DH1
RF Supported	Basic Rate True | EDR Pi/4DQPSK True | EDR 8DPSK True
Testmode	LOOPback
Perform Inquiry	No
EUT BT Address (if Inqiury No)	101EDA943EEA
Signaling BT Address	123456789ABC
Switch Matrix & Pathcompensation enabled	Yes

Test Parameter

Technology to test	BT Classic Basic rate
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]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.60

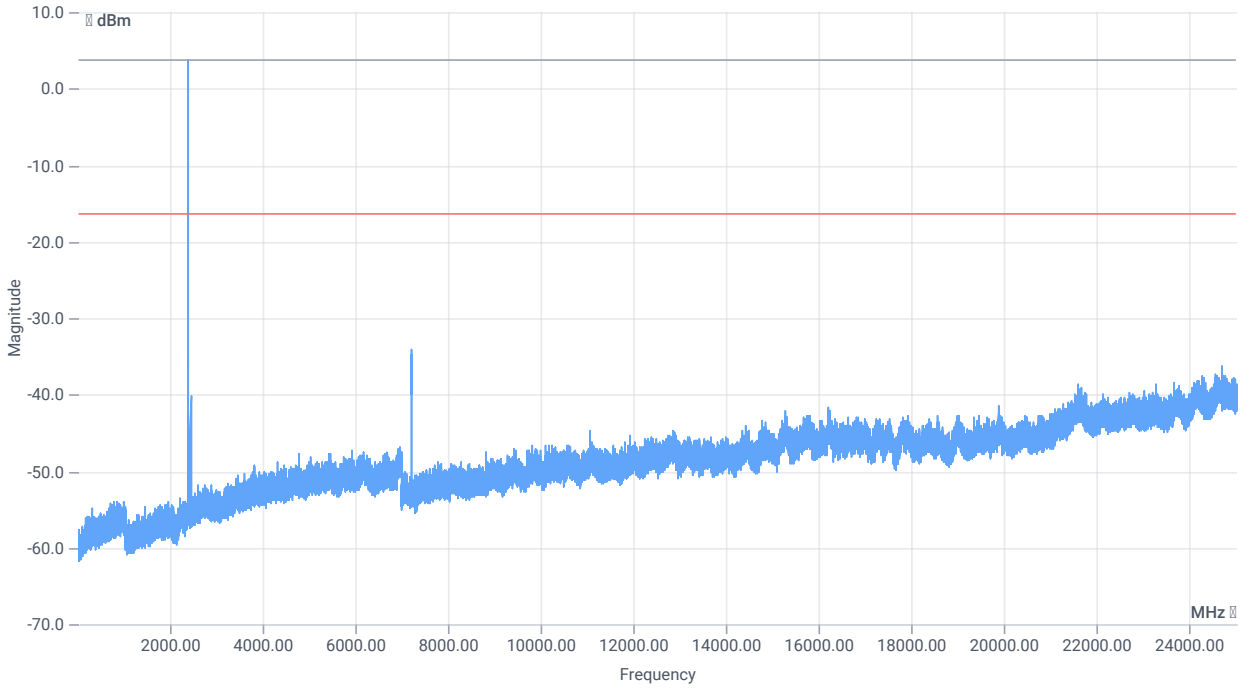
Equipment

Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.190
Switch matrix,CTCadvanced,RSM-1 NI DAQ,31534892,NI

Test at TX 2402 MHz

RESULT: Reference Power cond.

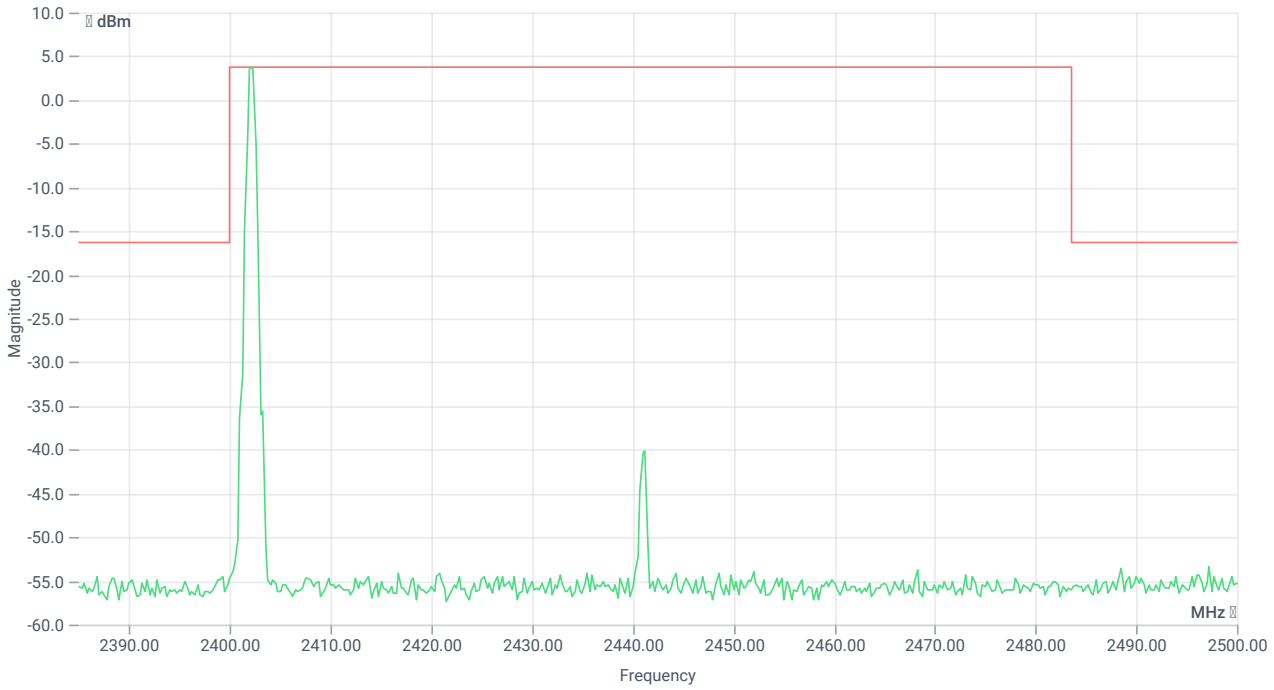
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	4.34	dBm	INFO
Ref. Frequency	---	---	2402.200	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	4.34 | 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 | 25 | 2001 | SWE



TX emissions band zoomed

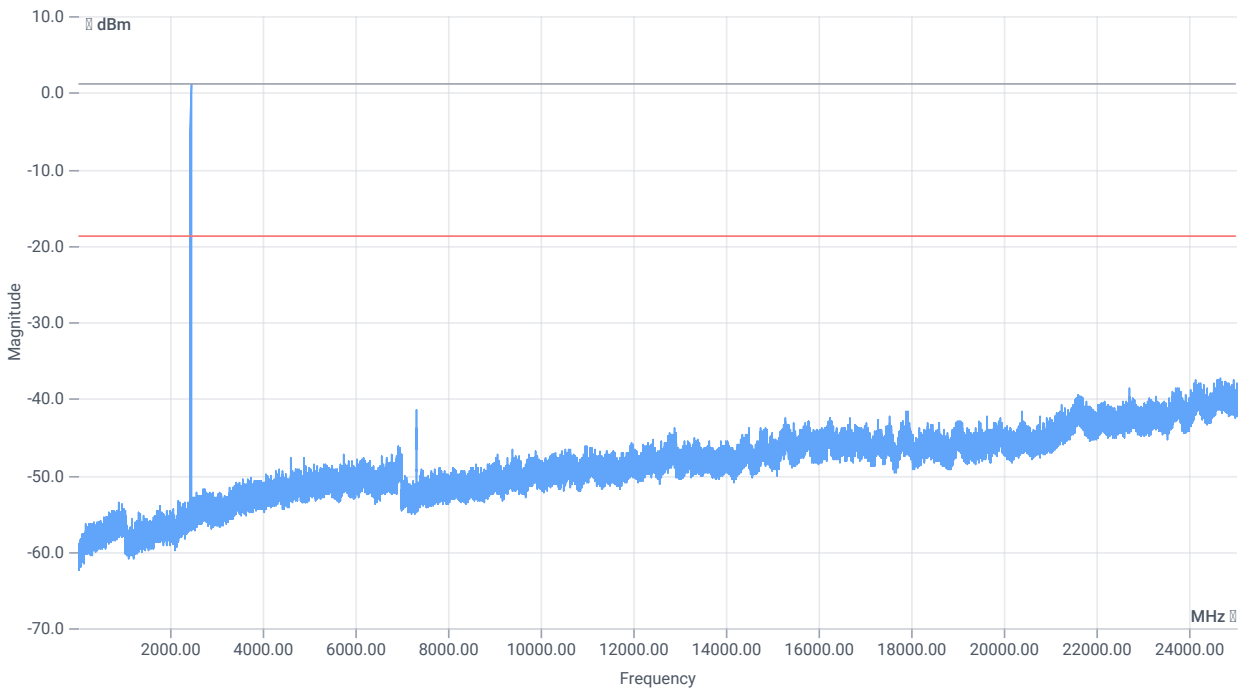
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2402.25 MHz	---	---	3.73	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 30 MHz	0	---	-141.01	dB	INFO

Test at TX 2441 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	1.46	dBm	INFO
Ref. Frequency	---	---	2441.200	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	1.46 | 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 | 25 | 2001 | SWE

TX emissions band zoomed

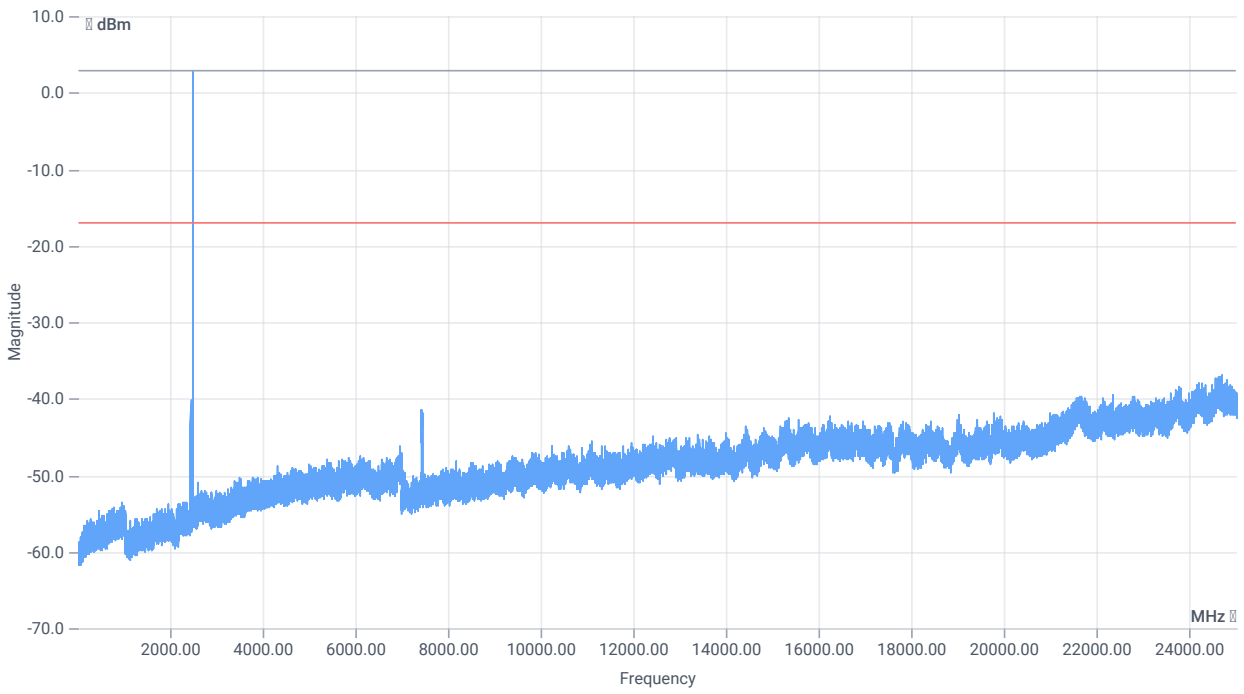
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2441.25 MHz	---	---	1.17	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 24669 MHz	0	---	18.48	dB	INFO

Test at TX 2480 MHz

RESULT: Reference Power cond.

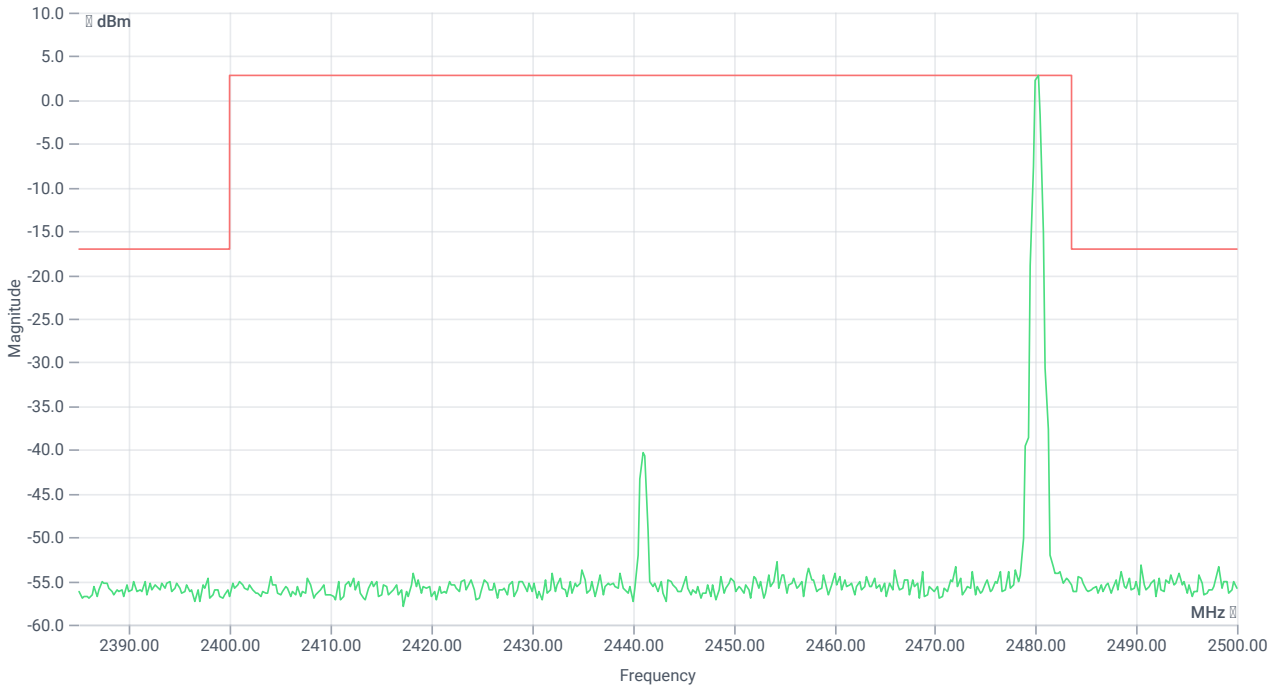
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	3.11	dBm	INFO
Ref. Frequency	---	---	2480.200	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	3.11 | 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 | 25 | 2001 | SWE



TX emissions band zoomed

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2480.25 MHz	---	---	2.89	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 24693.25 MHz	0	---	19.91	dB	INFO

Verdict
PASS

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

References

TC start	10.10.2023 11:15:13
Ambit temp [°C] | humidity [rel%]	0.0 | 0
System version	4.6.2.0
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 Conducted FHSS - BT Classic EDR Pi/4DQPSK
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	DH1
RF Supported	Basic Rate True | EDR Pi/4DQPSK True | EDR 8DPSK True
Testmode	LOOPback
Perform Inquiry	No
EUT BT Address (if Inqiury No)	101EDA943EEA
Signaling BT Address	123456789ABC
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]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

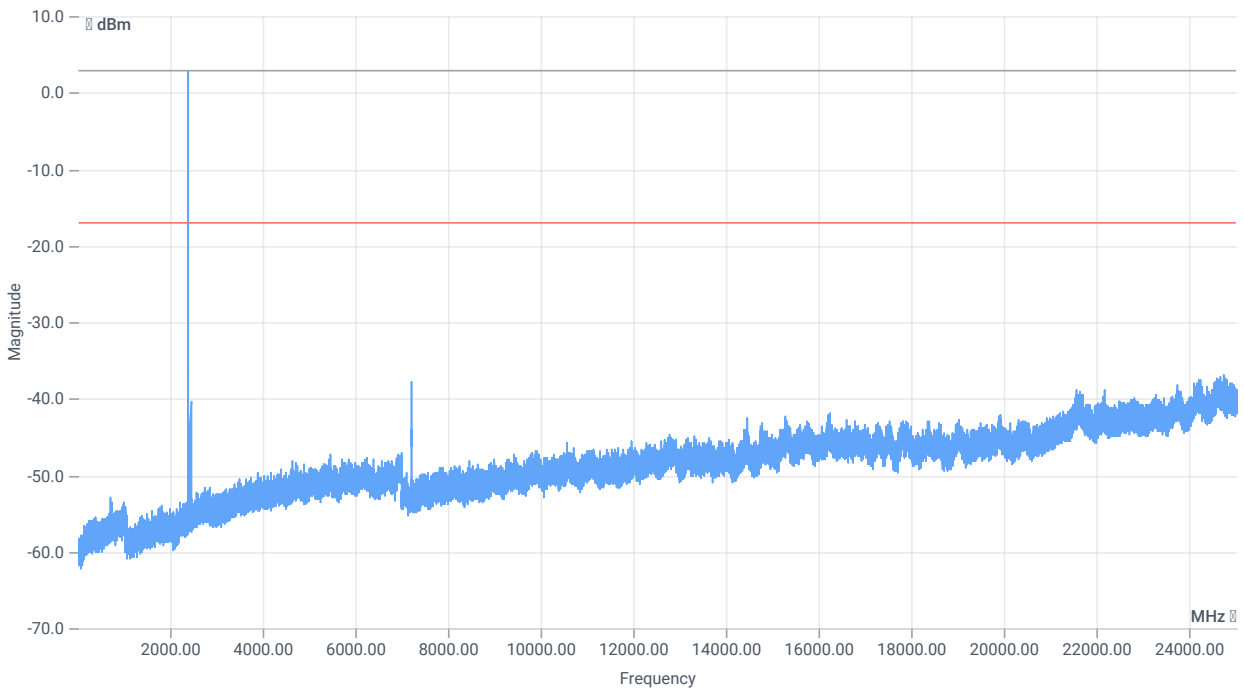
Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.60
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.190
Switch matrix,CTCadvanced,RSM-1 NI DAQ,31534892,NI

Test at TX 2402 MHz

RESULT: Reference Power cond.

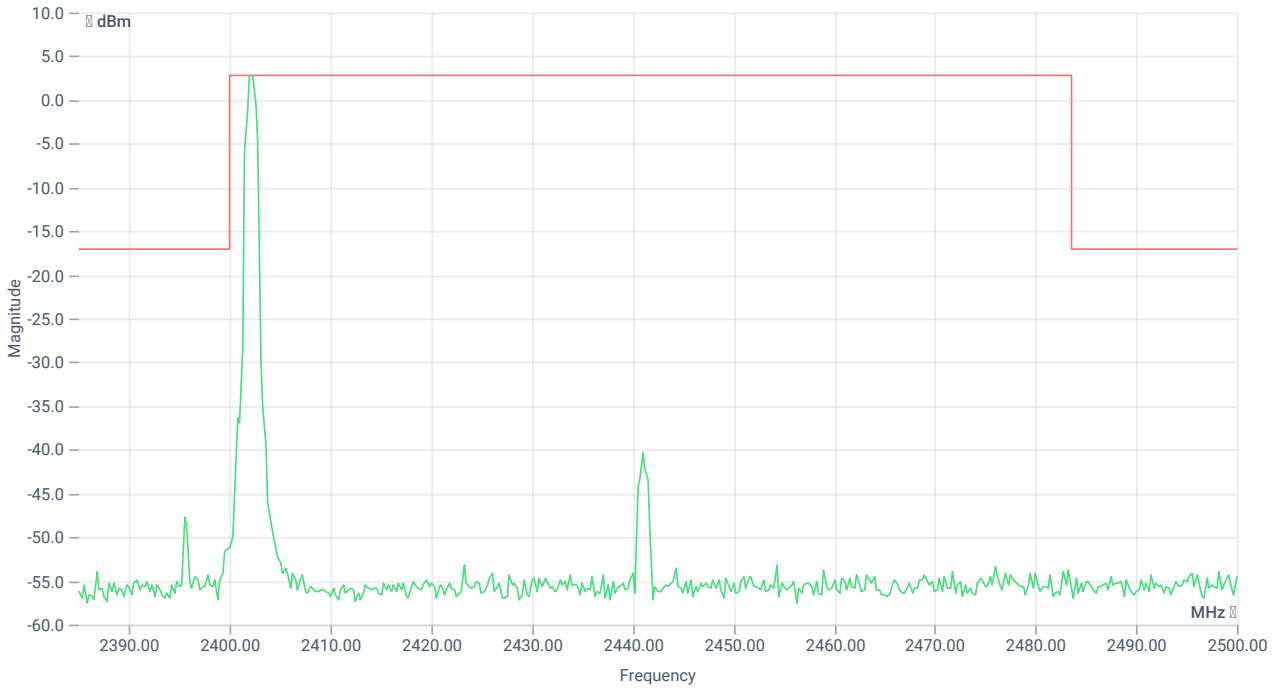
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	4.03	dBm	INFO
Ref. Frequency	---	---	2402.300	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	4.03 | 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 | 25 | 2001 | SWE



TX emissions band zoomed

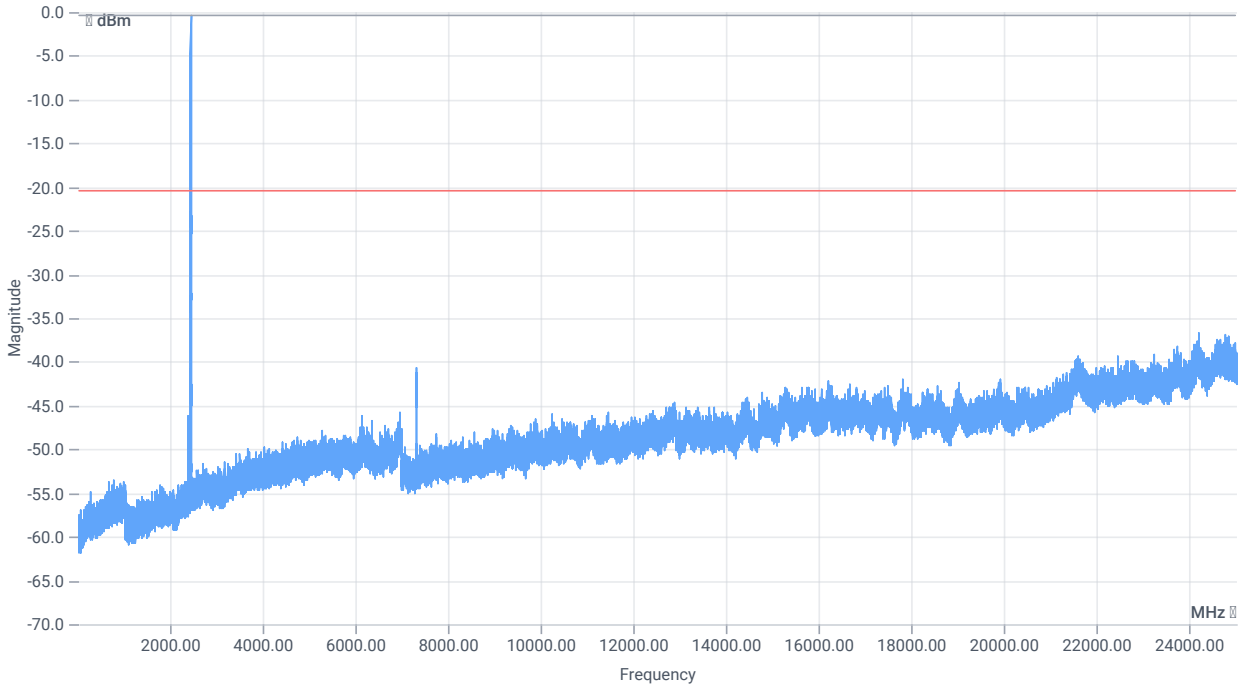
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2402.00 MHz	---	---	2.88	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 24749.75 MHz	0	---	19.9	dB	INFO

Test at TX 2441 MHz

RESULT: Reference Power cond.

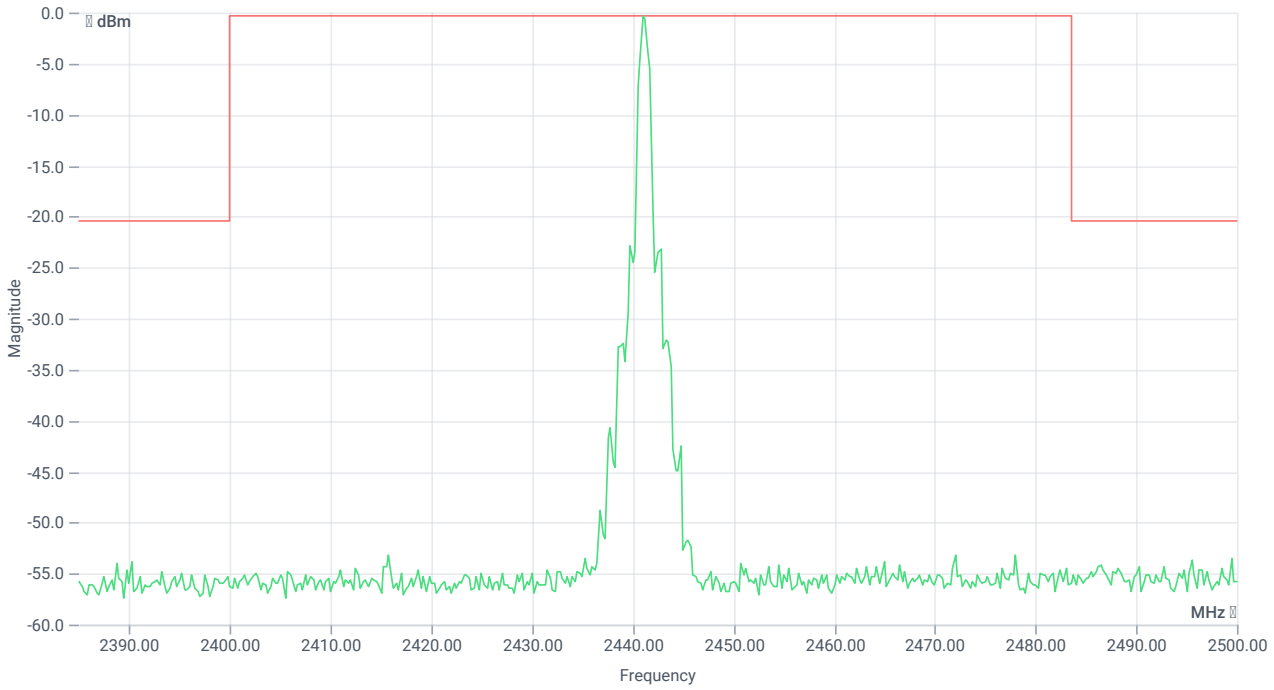
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	0.70	dBm	INFO
Ref. Frequency	---	---	2441.000	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	0.70 | 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 | 25 | 2001 | SWE



TX emissions band zoomed

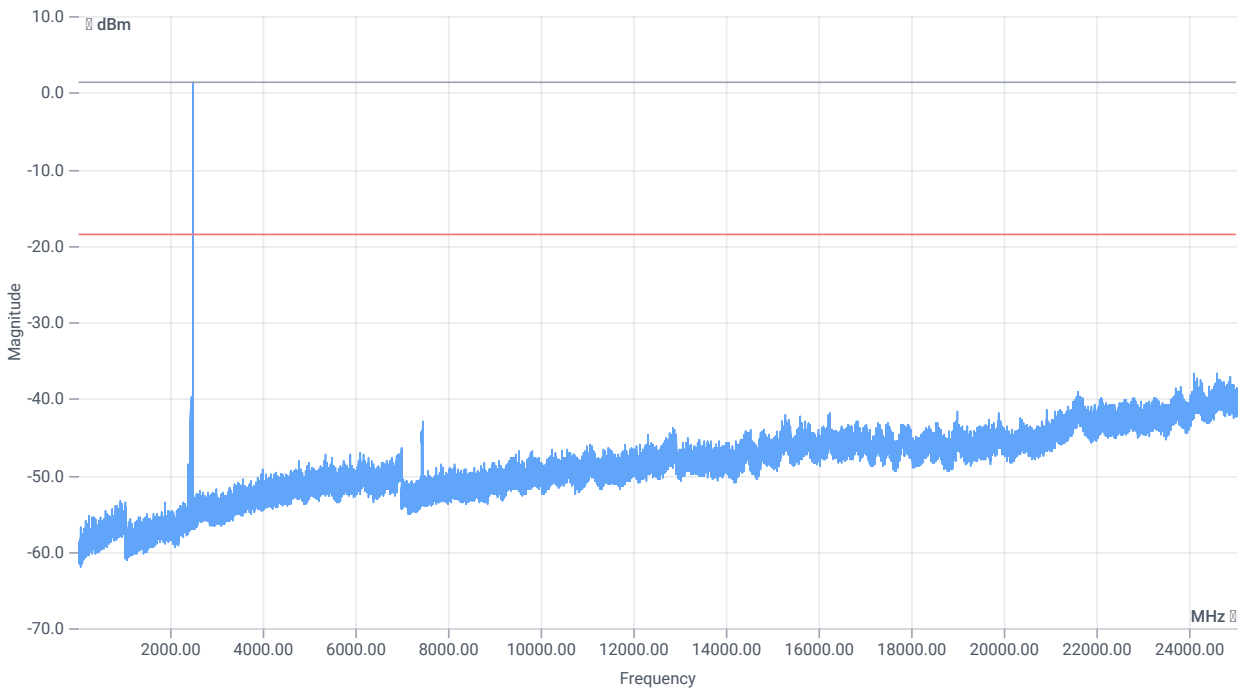
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2441.00 MHz	---	---	-0.37	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 24198.25 MHz	0	---	16.32	dB	INFO

Test at TX 2480 MHz

RESULT: Reference Power cond.

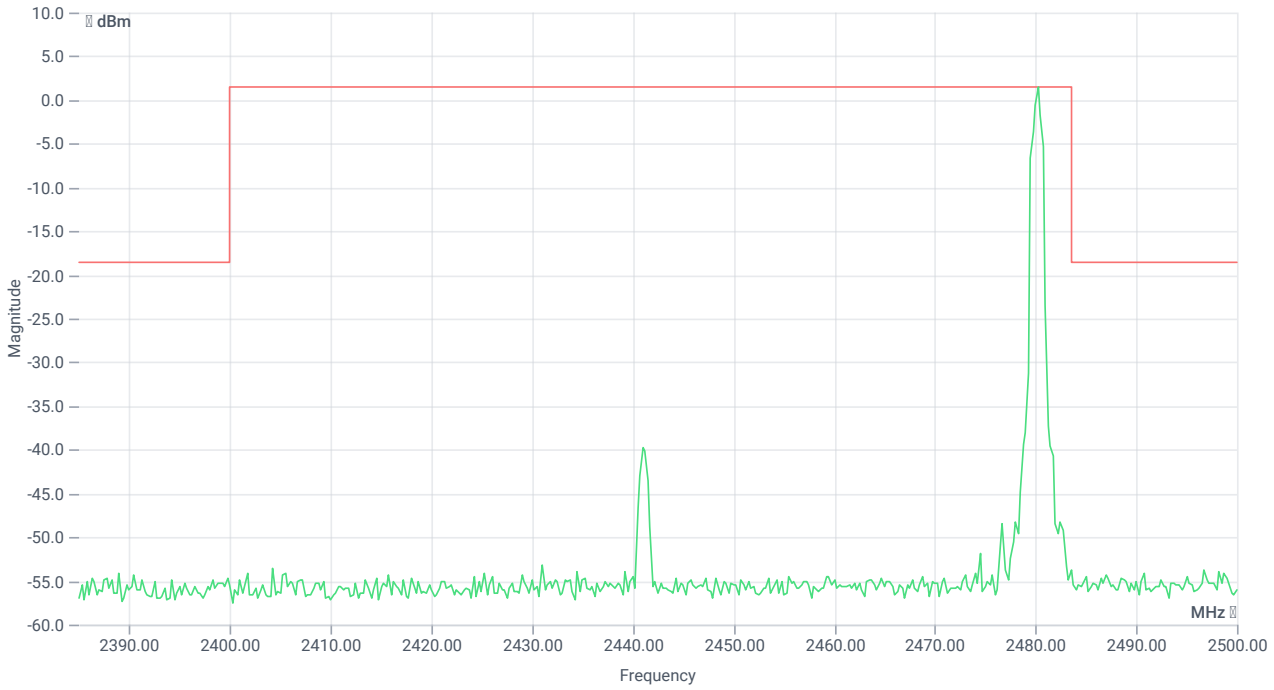
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	2.47	dBm	INFO
Ref. Frequency	---	---	2480.200	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	2.47 | 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 | 25 | 2001 | SWE



TX emissions band zoomed

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2480.25 MHz	---	---	1.43	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 24588 MHz	0	---	18.08	dB	INFO

Verdict
PASS

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

References

TC start	10.10.2023 13:44:47
Ambit temp [°C] | humidity [rel%]	0.0 | 0
System version	4.6.2.0
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 Conducted FHSS - BT Classic EDR 8DPSK
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	DH1
RF Supported	Basic Rate True | EDR Pi/4DQPSK True | EDR 8DPSK True
Testmode	LOOPback
Perform Inquiry	No
EUT BT Address (if Inqiury No)	101EDA943EEA
Signaling BT Address	123456789ABC
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]	0.7
Full path name | type	EUT - SignalingUnit - SpectrumAnalyzer

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.60

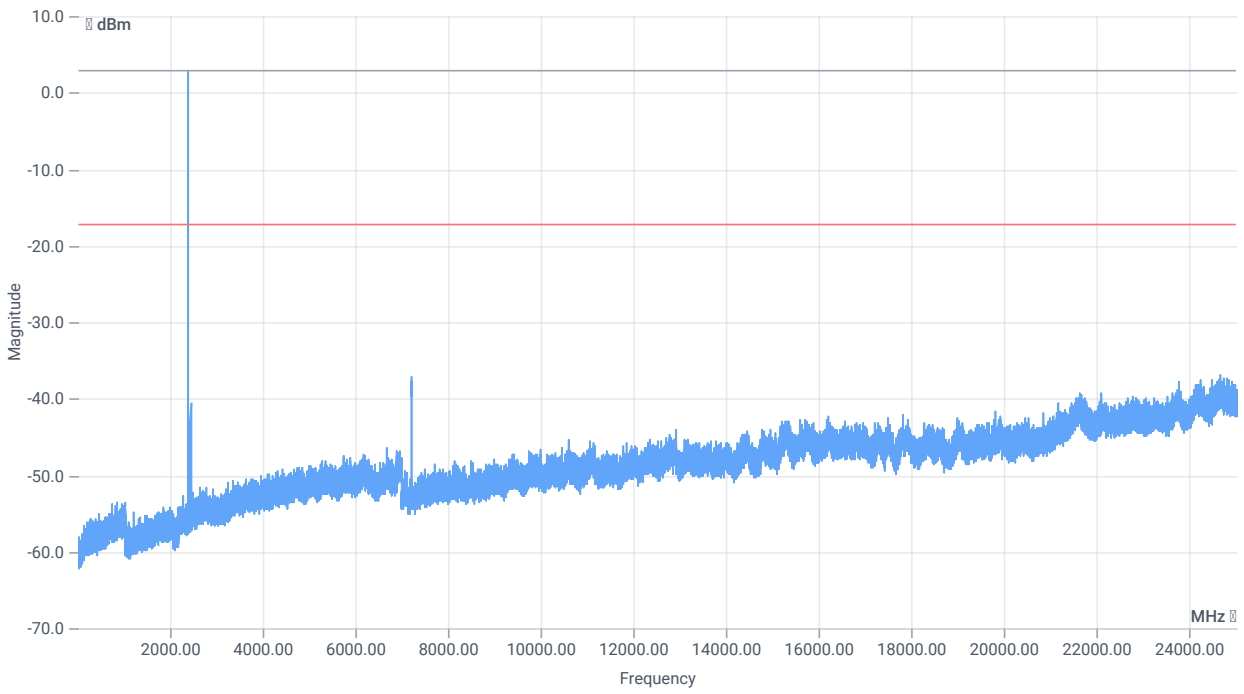
Equipment

Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.190
Switch matrix,CTCadvanced,RSM-1 NI DAQ,31534892,NI

Test at TX 2402 MHz

RESULT: Reference Power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	4.06	dBm	INFO
Ref. Frequency	---	---	2402.100	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	4.06 | 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 | 25 | 2001 | SWE

TX emissions band zoomed

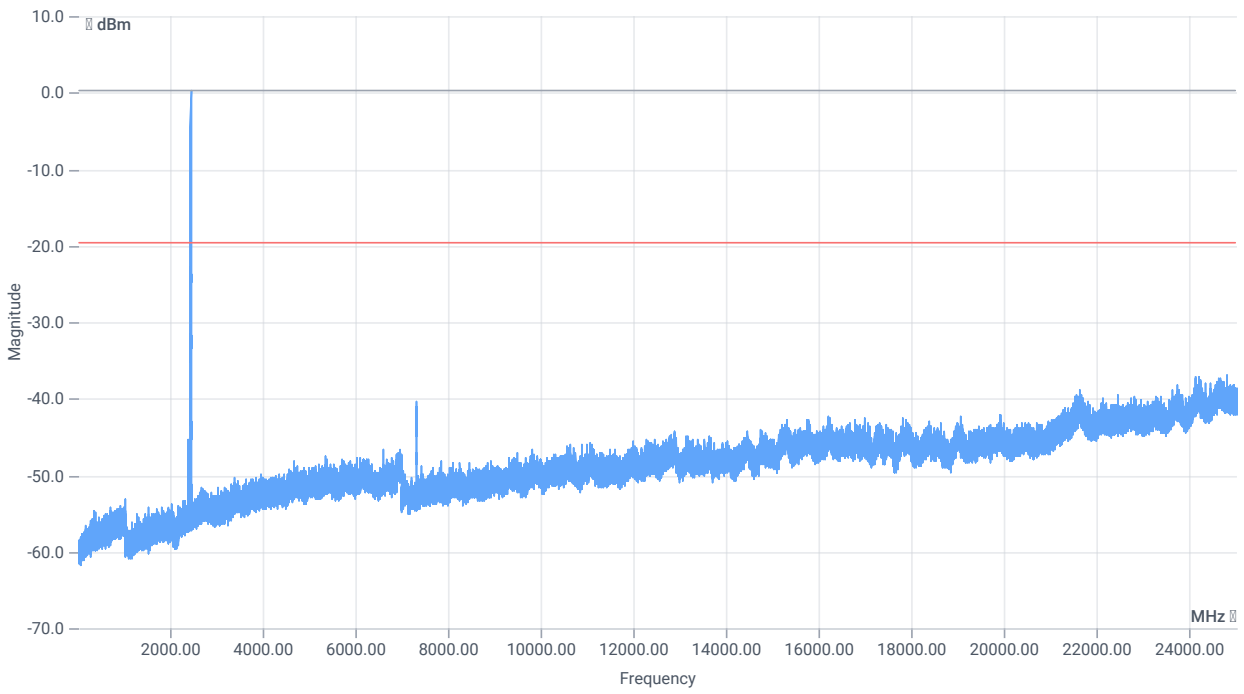
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2402.00 MHz	---	---	2.77	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 24685.75 MHz	0	---	19.7	dB	INFO

Test at TX 2441 MHz

RESULT: Reference Power cond.

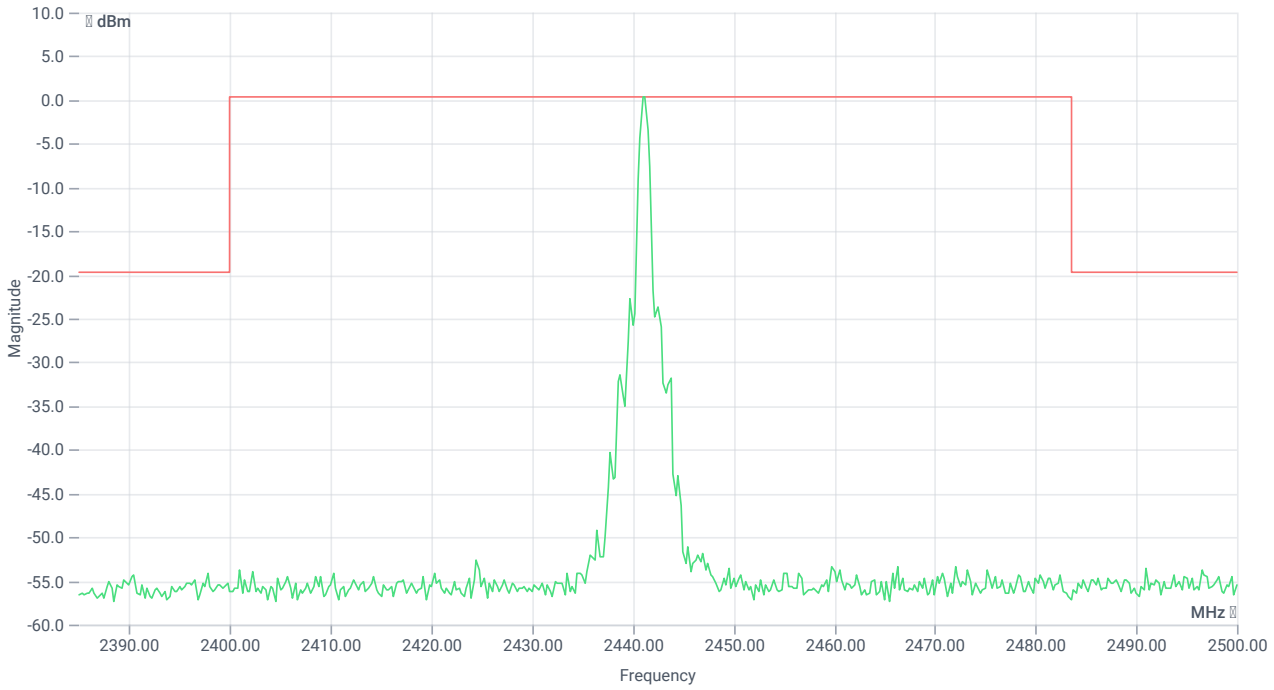
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	0.95	dBm	INFO
Ref. Frequency	---	---	2440.900	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	0.95 | 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 | 25 | 2001 | SWE



TX emissions band zoomed

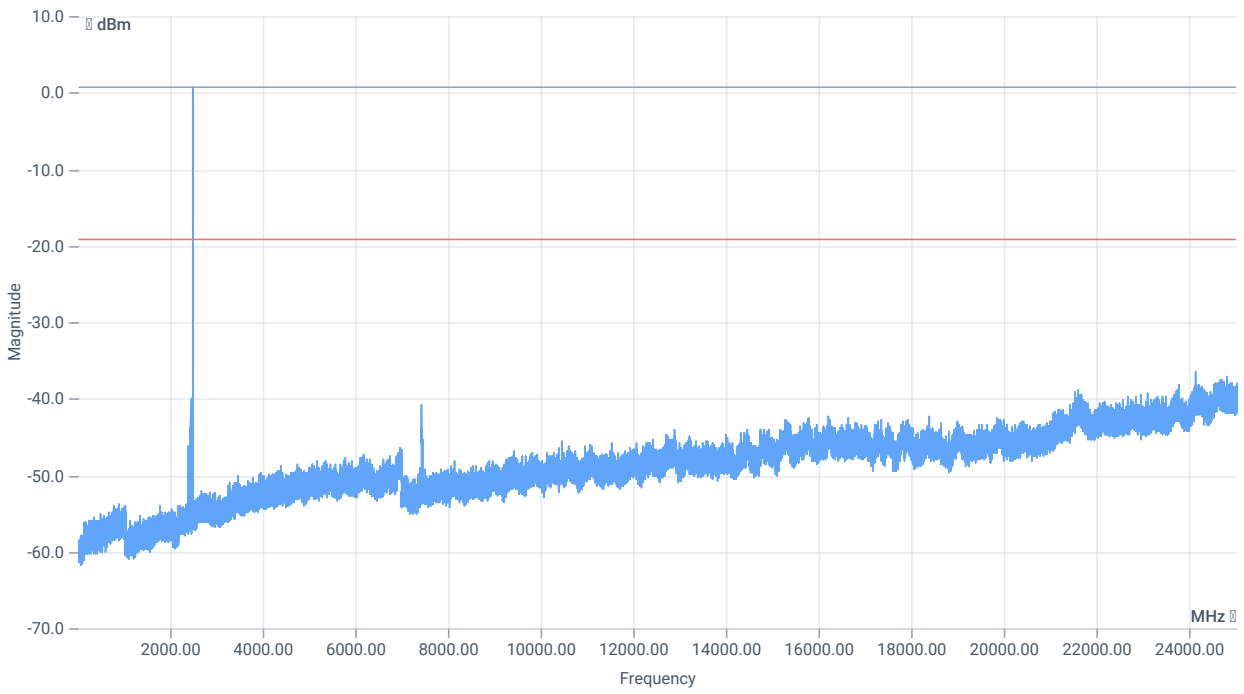
RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2441.00 MHz	---	---	0.32	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 24824.75 MHz	0	---	17.24	dB	INFO

Test at TX 2480 MHz

RESULT: Reference Power cond.

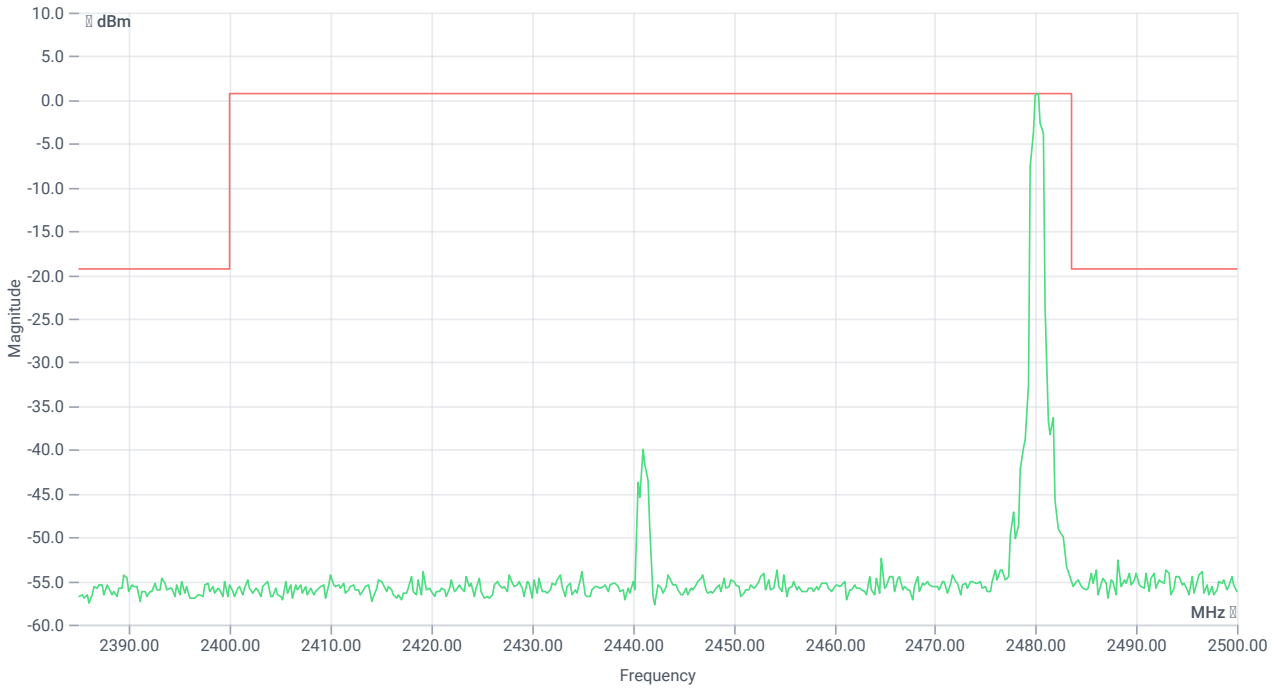
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. Power 1MHz/1MHz cond.	---	---	2.68	dBm	INFO
Ref. Frequency	---	---	2480.100	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	2.68 | 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 | 25 | 2001 | SWE



TX emissions band zoomed

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2480.25 MHz	---	---	0.76	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 24153.5 MHz	0	---	17.32	dB	INFO

Verdict
PASS

- END OF DOCUMENT -