

Conducted test results

No.1-1337-25-02-07_TR1-A201-R01

December 12, 2025

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

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Authorized

Salih Öztan
Lab Manager
Radio Labs

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FCC 15.247 # Bandwidth 6dB DTS ~ BT LE 2 Msps	134
FCC 15.247 # Maximum peak conducted output power DTS ~ BT LE 2 Msps	137

FCC 15.247 # Restricted band edge conducted peak DTS video avg (eirp) ~ BT LE 1 Msps

References

TC start	11.12.2025 11:48:13
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	6.0.5.0
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - 8.7.3 Integration Method; ANSI C63.10-2013 11.13.3.2 Peak Detection
Description	FCC 15.247 Restricted band edge conducted peak DTS - BT LE 1 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	True TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	Yes

Equipment

Signal analyzer,Rohde&Schwarz,FSV3030,1330.5000K30/101247,1.90
Switch matrix,cetecom advanced GmbH,USM,D001,1.0.0

Test Parameter

Technology to test	BT LE 1 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2402
Frequency mid to test	False Freq [MHz] 2440
Frequency high to test	False Freq [MHz] 2480
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.9

Test Parameter

Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/
Switch bits	00000001:00000001:00000000:00000110

Antenna gain table

Freq [MHz]	Gain [dBi]
2400	3.4
2480	3.4

Test at TX 2402 MHz

RESULT: Reference power cond.

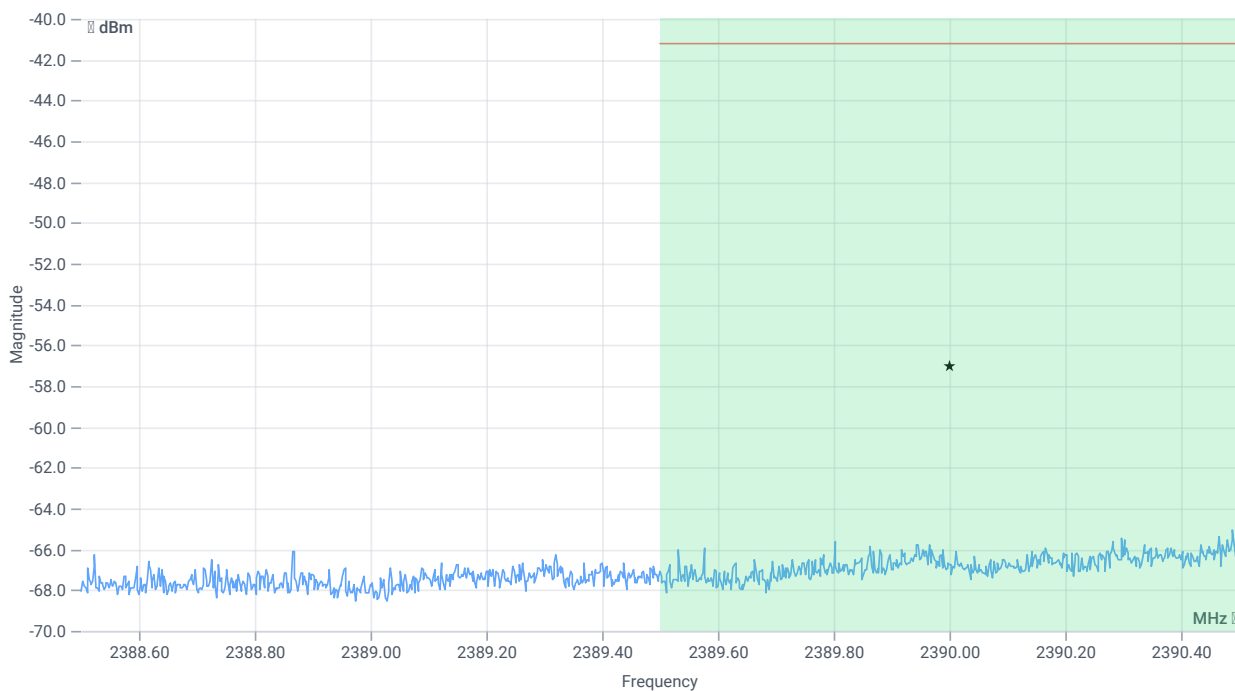
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.74	dBm	INFO
Ref. frequency	---	---	2401.700	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.74 3.92 17
Start [MHz] Stop [MHz]	2388.500 2390.500
RBW [MHz] VBW [MHz]	0.100000 0.002000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	85 300 1001 SWE

Antenna gain

Considered antenna gain [dBi]:	3.4 @ 2390 MHz
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Restricted band edge

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Band Power	---	-41.23	-57.01	dBm	PASS

Verdict

PASS

FCC 15.247 # TX spurious conducted 20dBc ~ BT LE 1 Msps

References

TC start	11.12.2025 11:36:29
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	6.0.5.0
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 DTS - BT LE 1 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	True TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	Yes

Equipment

Signal analyzer,Rohde&Schwarz,FSV3030,1330.5000K30/101247,1.90
Switch matrix,cetecom advanced GmbH,USM,D001,1.0.0

Test Parameter

Technology to test	BT LE 1 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2402
Frequency mid to test	False Freq [MHz] 2440
Frequency high to test	False Freq [MHz] 2480
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.9
Full path type	EUT_SA_GEN_SIG

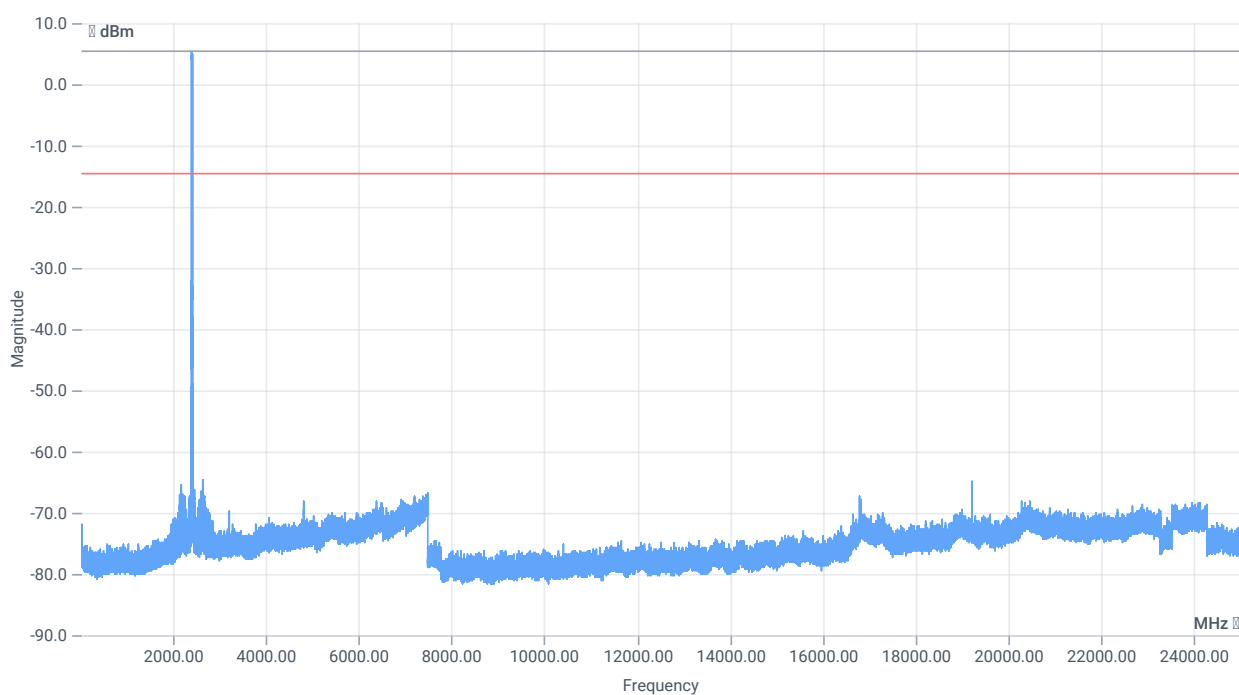
Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/
Switch bits	00000001:00000001:00000000:00000110

Test at TX 2402 MHz

RESULT: Reference power cond.

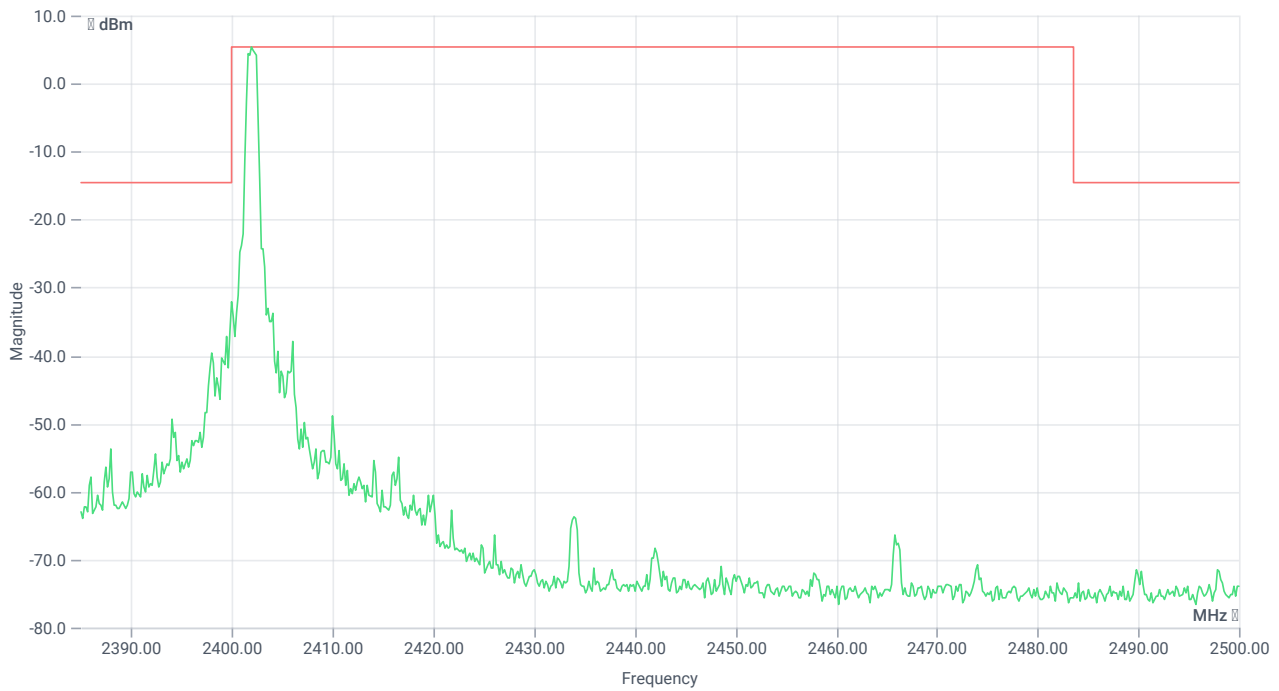
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.74	dBm	INFO
Ref. frequency	---	---	2401.800	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	5.74 12.31 4
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 @ 2402.00 MHz	---	---	5.47	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 2399.833 MHz	0	---	22.03	dB	INFO

Verdict

PASS

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ BT LE 1 Msps

References

TC start	11.12.2025 11:35:41
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	6.0.5.0
Standard Version	FCC 15.247, ISED RSS247 NI
Method	
Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - BT LE 1 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	True TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	Yes

Equipment

Signal analyzer,Rohde&Schwarz,FSV3030,1330.5000K30/101247,1.90
Switch matrix,cetecom advanced GmbH,USM,D001,1.0.0

Test Parameter

Technology to test	BT LE 1 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2402
Frequency mid to test	False Freq [MHz] 2440
Frequency high to test	False Freq [MHz] 2480
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.9
Full path type	EUT_SA_GEN_SIG

Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/
Switch bits	00000001:00000001:00000000:00000110

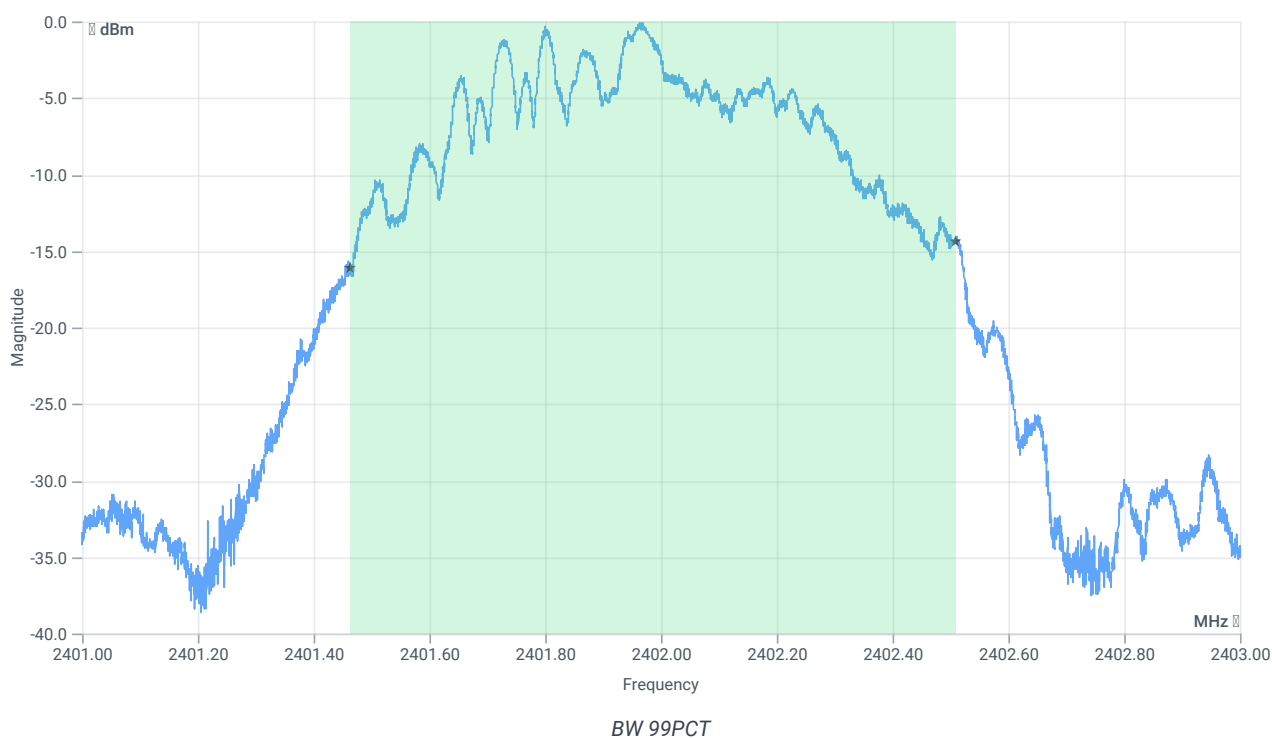
Test at TX 2402 MHz

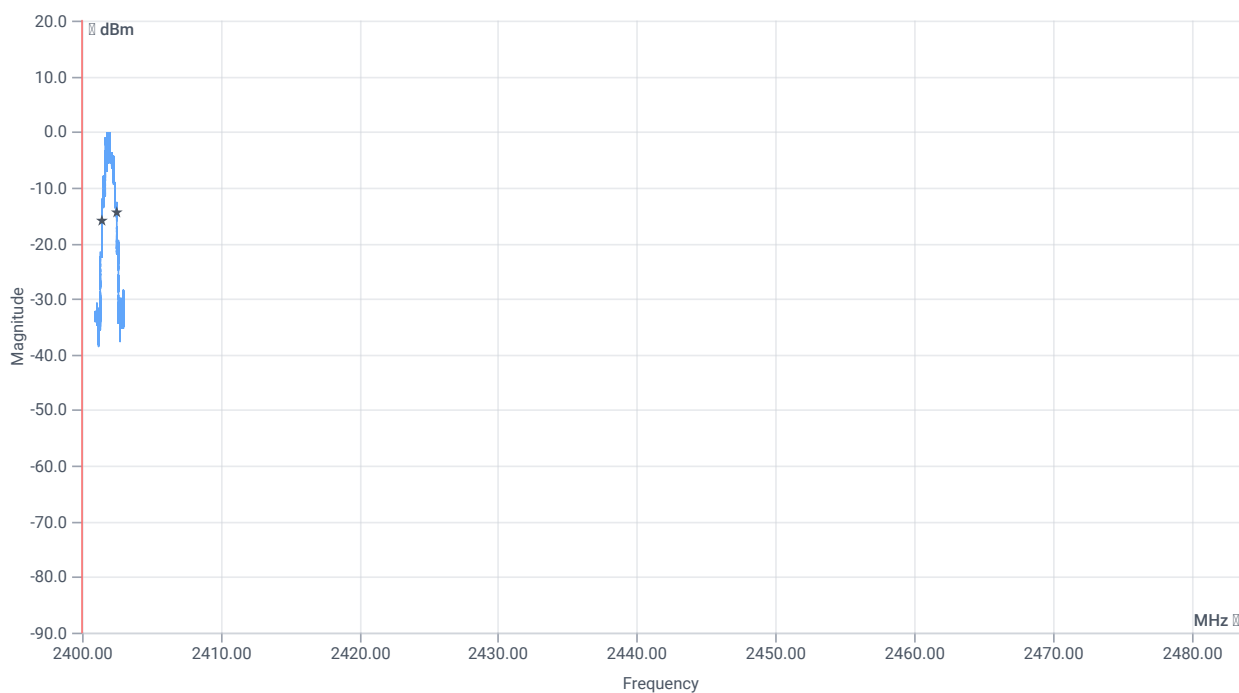
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.74	dBm	INFO
Ref. frequency	---	---	2401.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.74 3.92 17
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

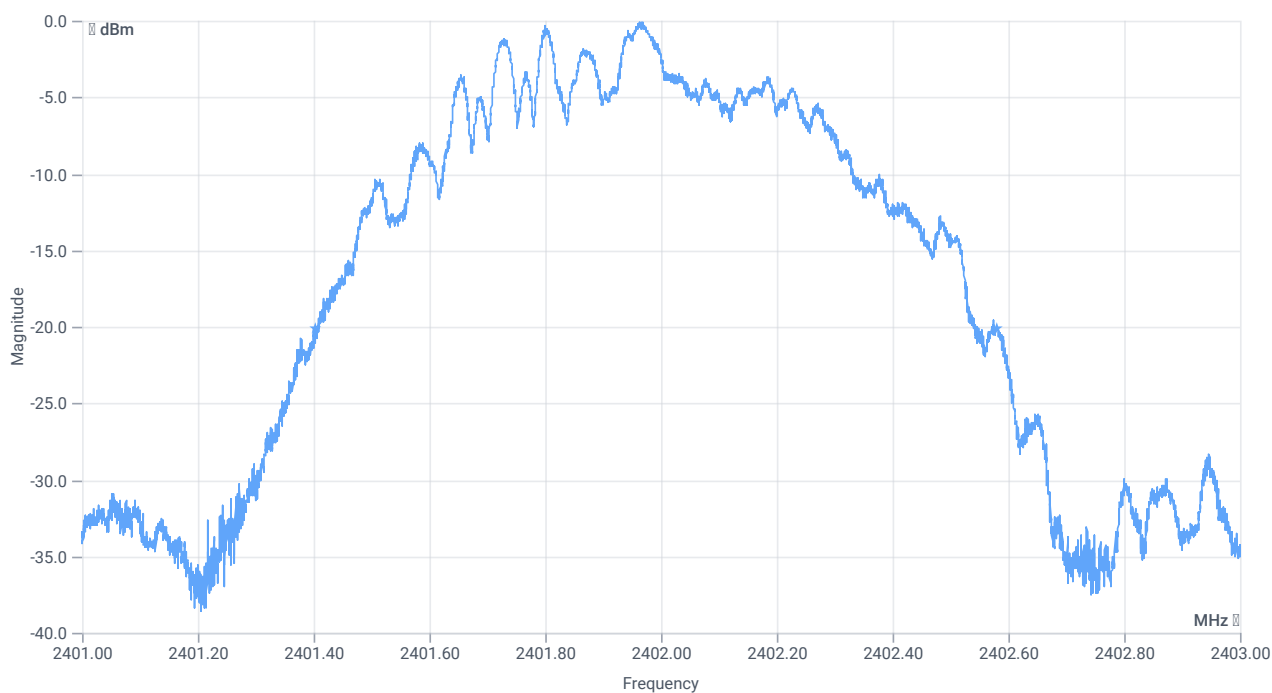




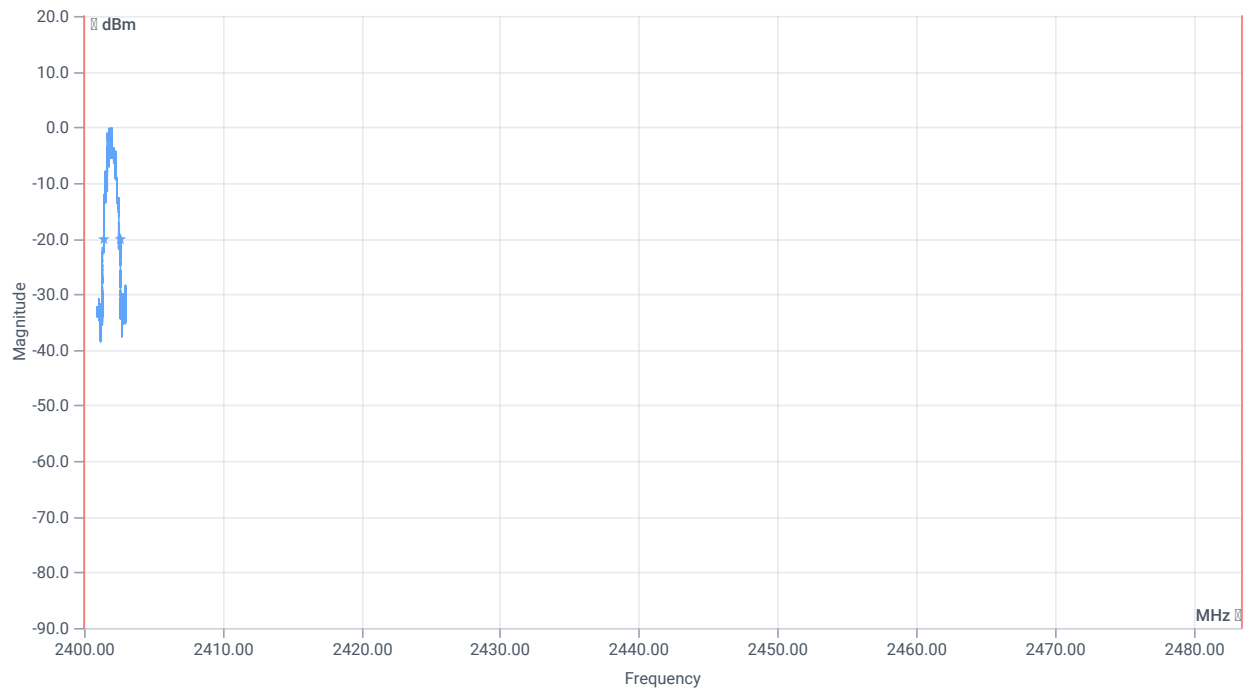
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	1046.000	kHz	INFO
T1 99%	2400.000000	---	2401.4632	MHz	PASS
T2 99%	---	2483.500000	2402.5092	MHz	PASS



BW 20dB



BW within band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	1177	kHz	INFO
T1 20dB	2400.000000	---	2401.4038	MHz	PASS
T2 20dB	---	2483.500000	2402.5808	MHz	PASS

Verdict

PASS

FCC 15.247 # Peak psd DTS ~ BT LE 1 Msps

References

TC start	11.12.2025 11:34:11
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	6.0.5.0
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 - BT LE 1 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	True TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	Yes

Equipment

Signal analyzer,Rohde&Schwarz,FSV3030,1330.5000K30/101247,1.90
Switch matrix,cetecom advanced GmbH,USM,D001,1.0.0

Test Parameter

Technology to test	BT LE 1 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2402
Frequency mid to test	False Freq [MHz] 2440
Frequency high to test	False Freq [MHz] 2480
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.9
Full path type	EUT_SA_GEN_SIG

Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/
Switch bits	00000001:00000001:00000000:00000110

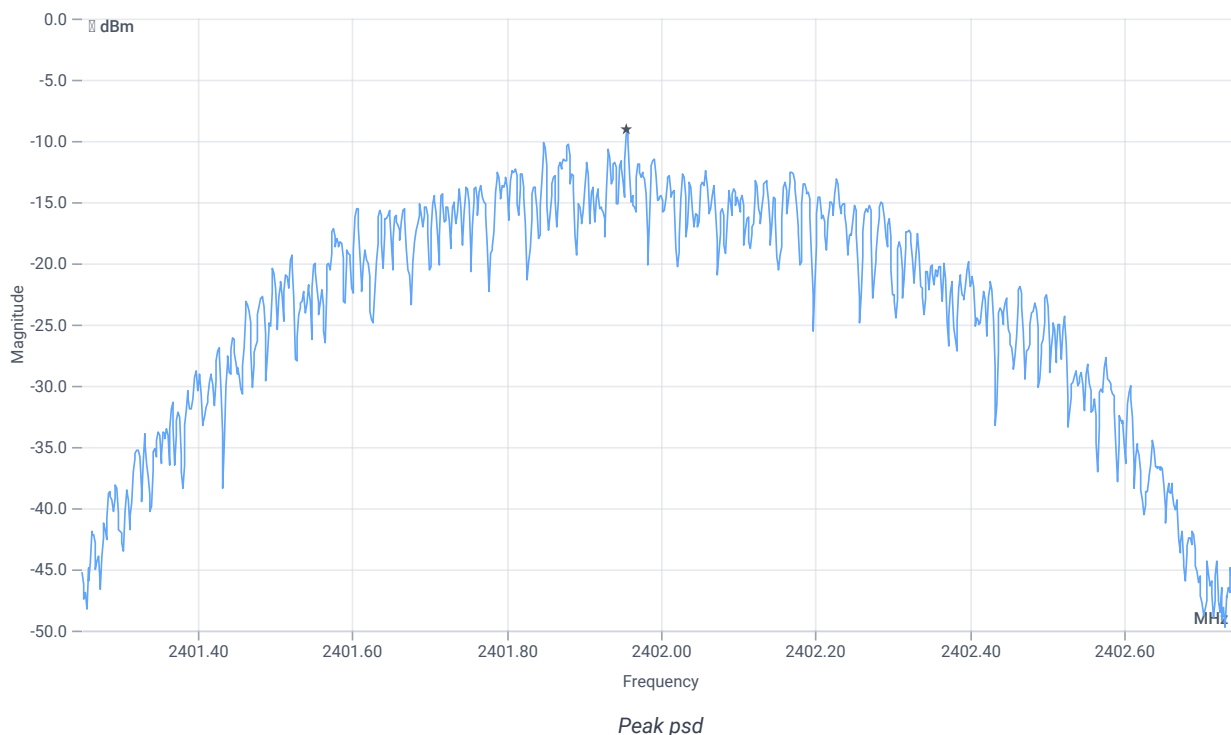
Test at TX 2402 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.73	dBm	INFO
Ref. frequency	---	---	2401.700	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.73 3.92 17
Start [MHz] Stop [MHz]	2401.250 2402.750
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	-9.06	dBm/3KHz	PASS

Verdict

PASS

FCC 15.247 # Bandwidth 6dB DTS ~ BT LE 1 Msps

References

TC start	11.12.2025 11:33:38
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	6.0.5.0
Standard Version	FCC 15.247 NI
Method	
Description	FCC 15.247 Bandwidth 6dB DTS - BT LE 1 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	True TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	Yes

Equipment

Signal analyzer,Rohde&Schwarz,FSV3030,1330.5000K30/101247,1.90
Switch matrix,cetecom advanced GmbH,USM,D001,1.0.0

Test Parameter

Technology to test	BT LE 1 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2402
Frequency mid to test	False Freq [MHz] 2440
Frequency high to test	False Freq [MHz] 2480
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.9
Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/

Test Parameter

Switch bits

00000001:00000001:00000000:00000110

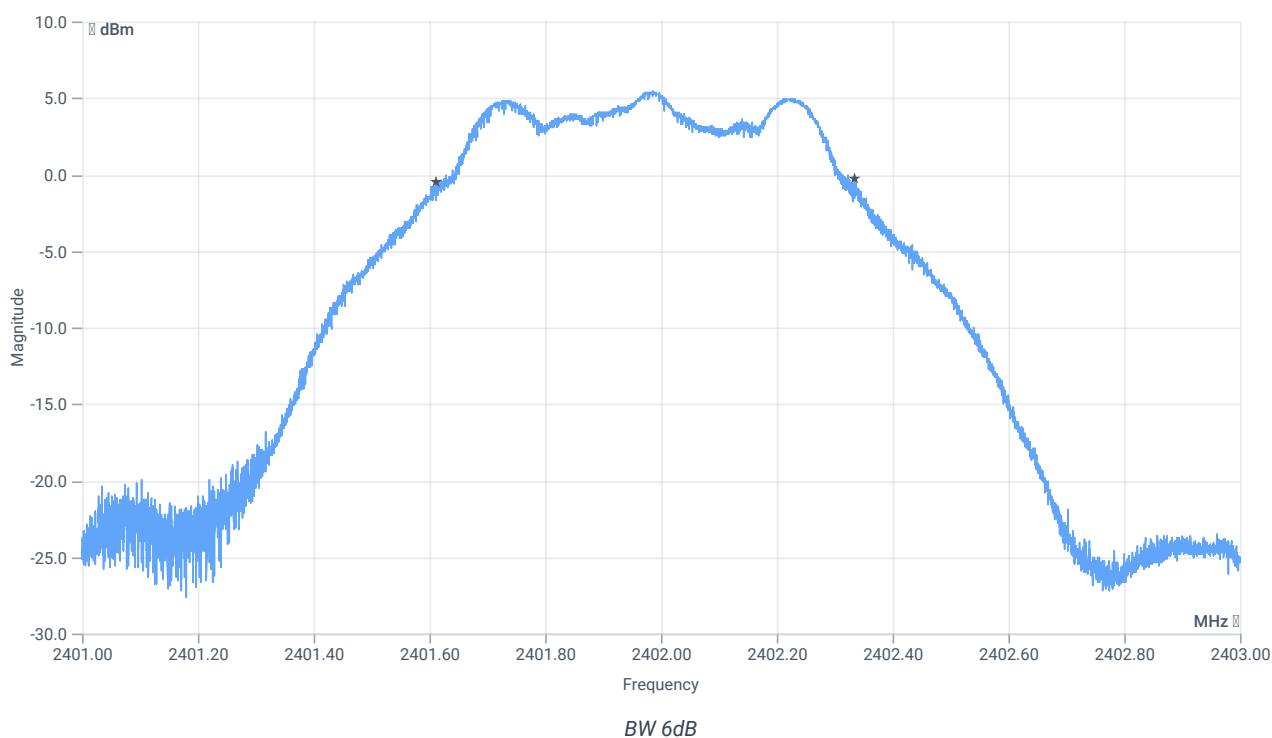
Test at TX 2402 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.74	dBm	INFO
Ref. frequency	---	---	2401.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.74 3.92 17
Start [MHz] Stop [MHz]	2401.000 2403.000
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	---	721	kHz	PASS

Verdict

PASS

FCC 15.247 # Maximum peak conducted output power DTS ~ BT LE 1 Msps

References

TC start	11.12.2025 11:32:52
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	6.0.5.0
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.1 RBW ≥ DTS Bandwidth
Description	FCC 15.247 Maximum peak output power conducted DTS - BT LE 1 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	True TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	Yes

Equipment

Signal analyzer,Rohde&Schwarz,FSV3030,1330.5000K30/101247,1.90
Switch matrix,cetecom advanced GmbH,USM,D001,1.0.0

Test Parameter

Technology to test	BT LE 1 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2402
Frequency mid to test	False Freq [MHz] 2440
Frequency high to test	False Freq [MHz] 2480
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.9

Test Parameter

Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/
Switch bits	00000001:00000001:00000000:00000110

Test at TX 2402 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.74	dBm	INFO
Ref. frequency	---	---	2401.800	MHz	INFO

READ SA SETTINGS:

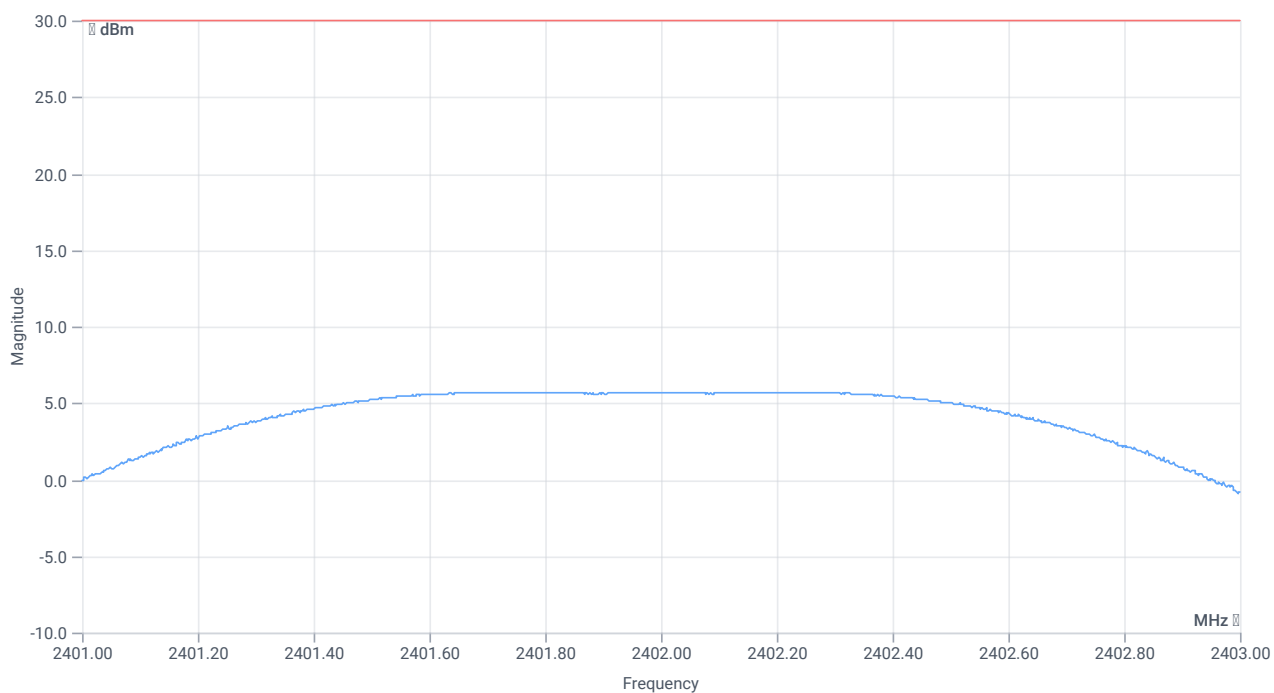
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.74 3.92 17
Start [MHz] Stop [MHz]	2401.000 2403.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

DTS bandwidth

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS bandwidth (6dB)	---	---	722	kHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	15.74 3.92 22
Start [MHz] Stop [MHz]	2401.000 2403.000
RBW [MHz] VBW [MHz]	1.000000 5.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 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	---	---	2401.75	MHz	INFO

Verdict

PASS

FCC 15.247 # Restricted band edge conducted peak DTS video avg (eirp) ~ BT LE 1 Msps

References

TC start	11.12.2025 12:05:22
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	6.0.5.0
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - 8.7.3 Integration Method; ANSI C63.10-2013 11.13.3.2 Peak Detection
Description	FCC 15.247 Restricted band edge conducted peak DTS - BT LE 1 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	True TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	Yes

Equipment

Signal analyzer,Rohde&Schwarz,FSV3030,1330.5000K30/101247,1.90
Switch matrix,cetecom advanced GmbH,USM,D001,1.0.0

Test Parameter

Technology to test	BT LE 1 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2402
Frequency mid to test	True Freq [MHz] 2440
Frequency high to test	False Freq [MHz] 2480
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.9

Test Parameter

Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MPSIG1/EUT1.SA/
Switch bits	00000001:00000001:00000000:00000110

Antenna gain table

Freq [MHz]	Gain [dBi]
2400	3.4
2480	3.4

Test at TX 2440 MHz

RESULT: Reference power cond.

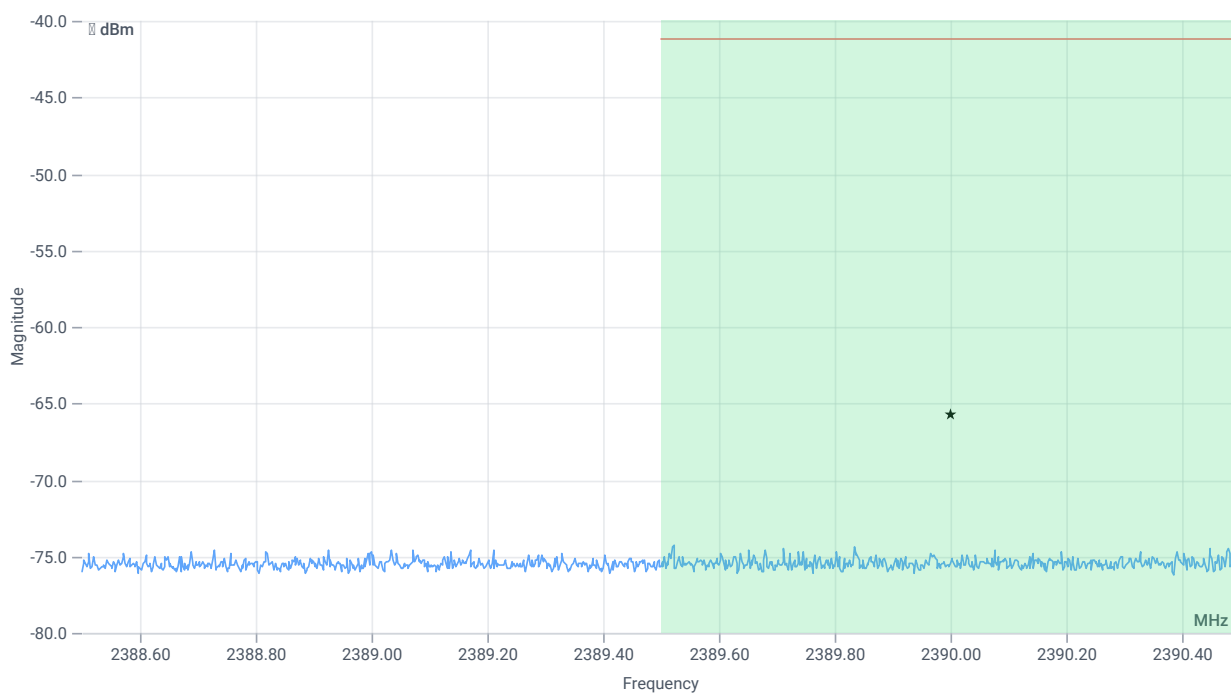
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.41	dBm	INFO
Ref. frequency	---	---	2439.700	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.41 3.97 17
Start [MHz] Stop [MHz]	2388.500 2390.500
RBW [MHz] VBW [MHz]	0.100000 0.002000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	85 300 1001 SWE

Antenna gain

Considered antenna gain [dBi]:	3.4 @ 2390 MHz
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Restricted band edge

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Band Power	---	-41.23	-65.69999999999999	dBm	PASS

Verdict

PASS

FCC 15.247 # TX spurious conducted 20dBc ~ BT LE 1 Msps

References

TC start	11.12.2025 11:53:38
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	6.0.5.0
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 DTS - BT LE 1 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	True TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	Yes

Equipment

Signal analyzer,Rohde&Schwarz,FSV3030,1330.5000K30/101247,1.90
Switch matrix,cetecom advanced GmbH,USM,D001,1.0.0

Test Parameter

Technology to test	BT LE 1 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2402
Frequency mid to test	True Freq [MHz] 2440
Frequency high to test	False Freq [MHz] 2480
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.9
Full path type	EUT_SA_GEN_SIG

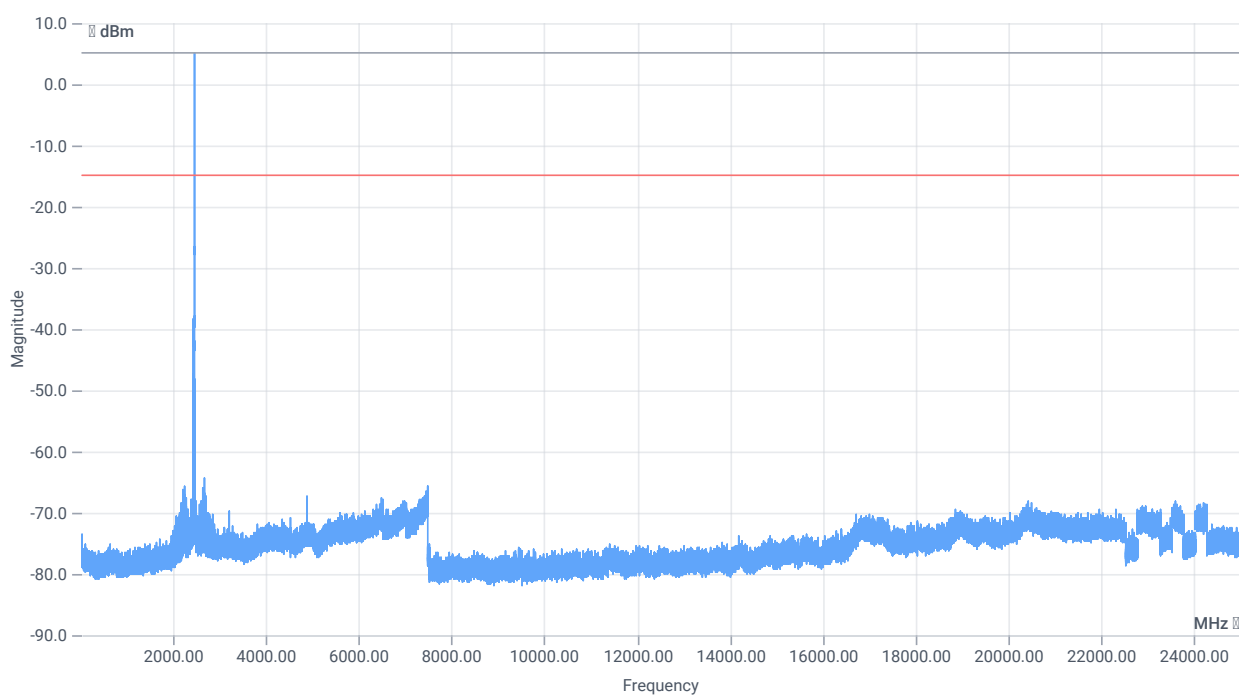
Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/
Switch bits	00000001:00000001:00000000:00000110

Test at TX 2440 MHz

RESULT: Reference power cond.

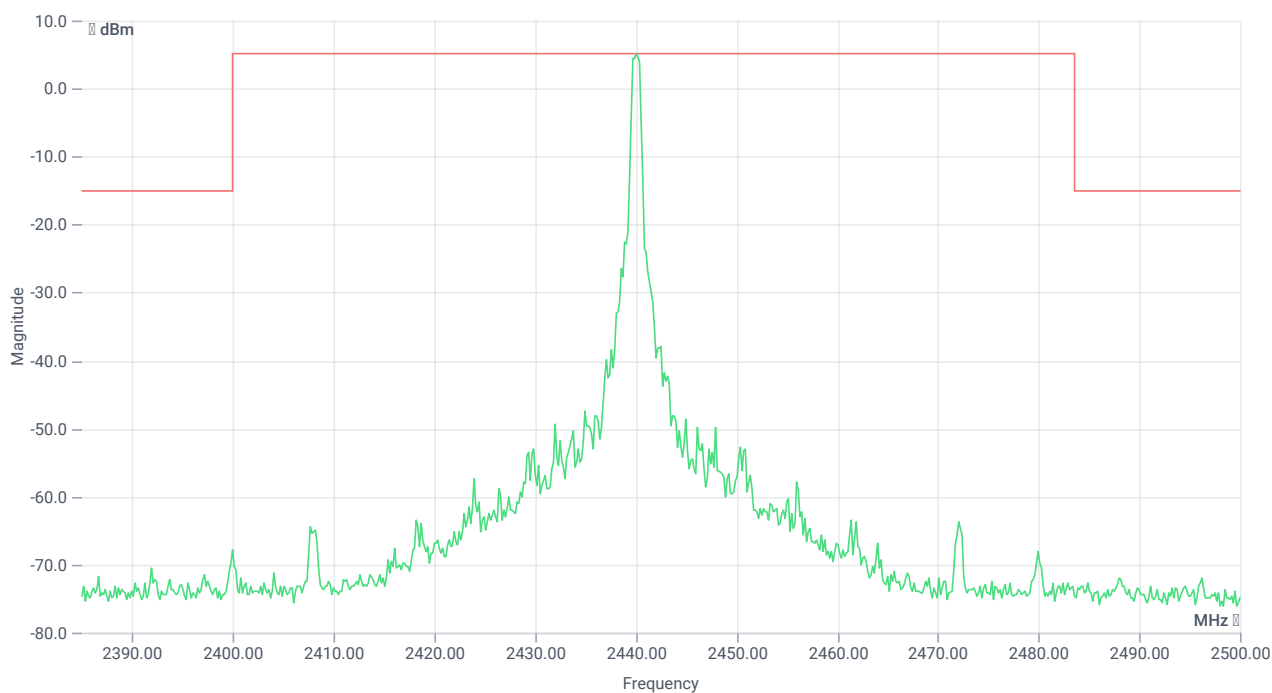
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.43	dBm	INFO
Ref. frequency	---	---	2439.800	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	5.43 12.31 4
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 @ 2440.00 MHz	---	---	5.06	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 2664.167 MHz	0	---	49.49	dB	INFO

Verdict

PASS

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ BT LE 1 Msps

References

TC start	11.12.2025 11:52:56
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	6.0.5.0
Standard Version	FCC 15.247, ISED RSS247 NI
Method	
Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - BT LE 1 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	True TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	Yes

Equipment

Signal analyzer,Rohde&Schwarz,FSV3030,1330.5000K30/101247,1.90
Switch matrix,cetecom advanced GmbH,USM,D001,1.0.0

Test Parameter

Technology to test	BT LE 1 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2402
Frequency mid to test	True Freq [MHz] 2440
Frequency high to test	False Freq [MHz] 2480
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.9
Full path type	EUT_SA_GEN_SIG

Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/
Switch bits	00000001:00000001:00000000:00000110

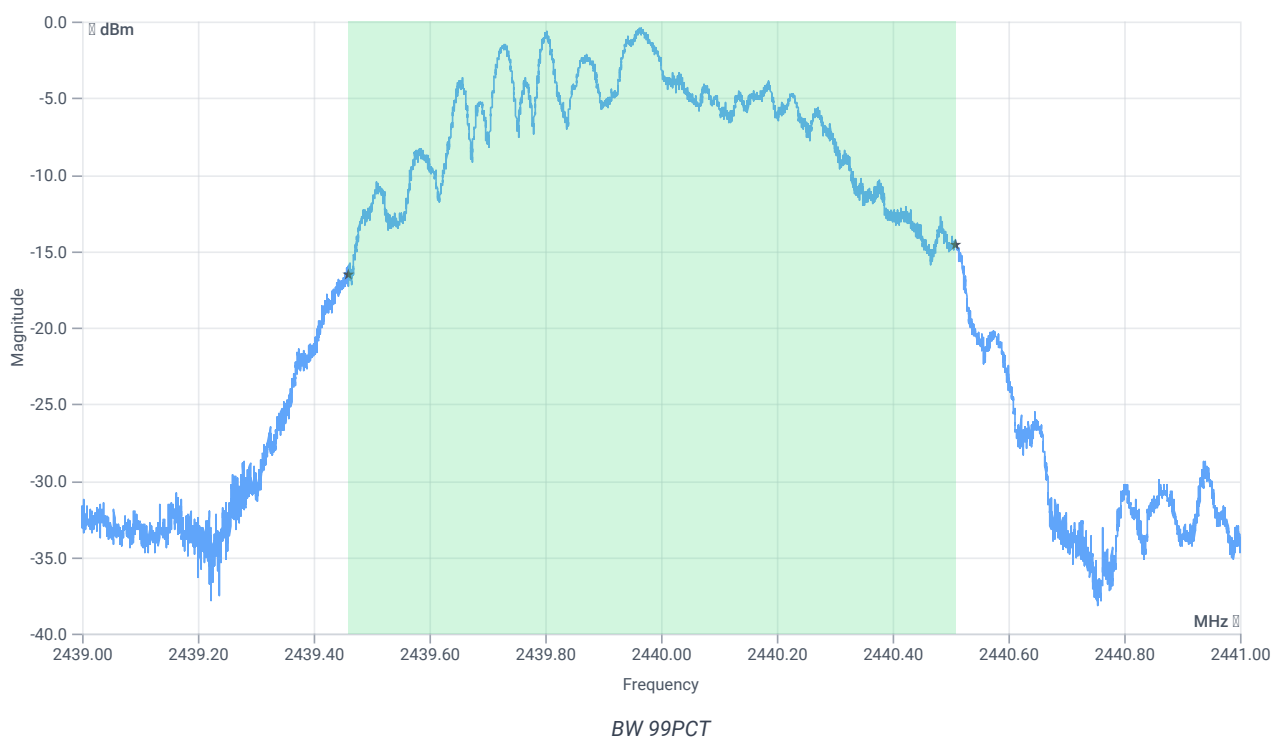
Test at TX 2440 MHz

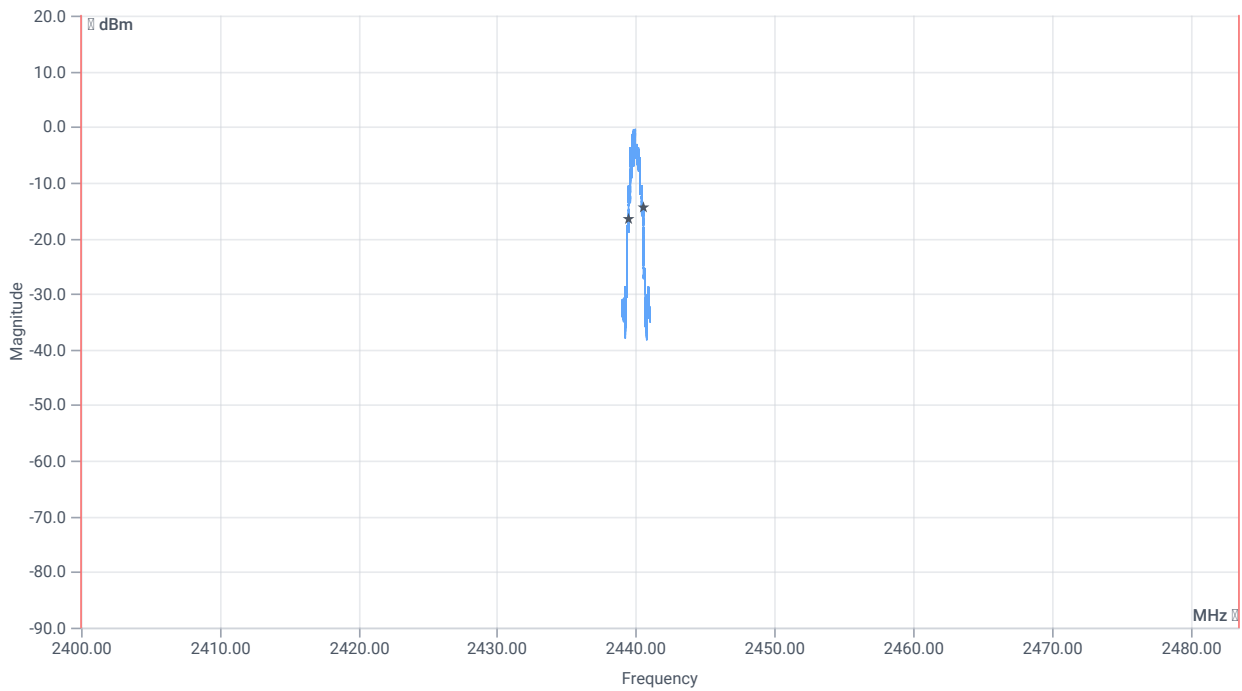
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.43	dBm	INFO
Ref. frequency	---	---	2439.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.43 3.97 17
Start [MHz] Stop [MHz]	2439.000 2441.000
RBW [MHz] VBW [MHz]	0.020000 0.100000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

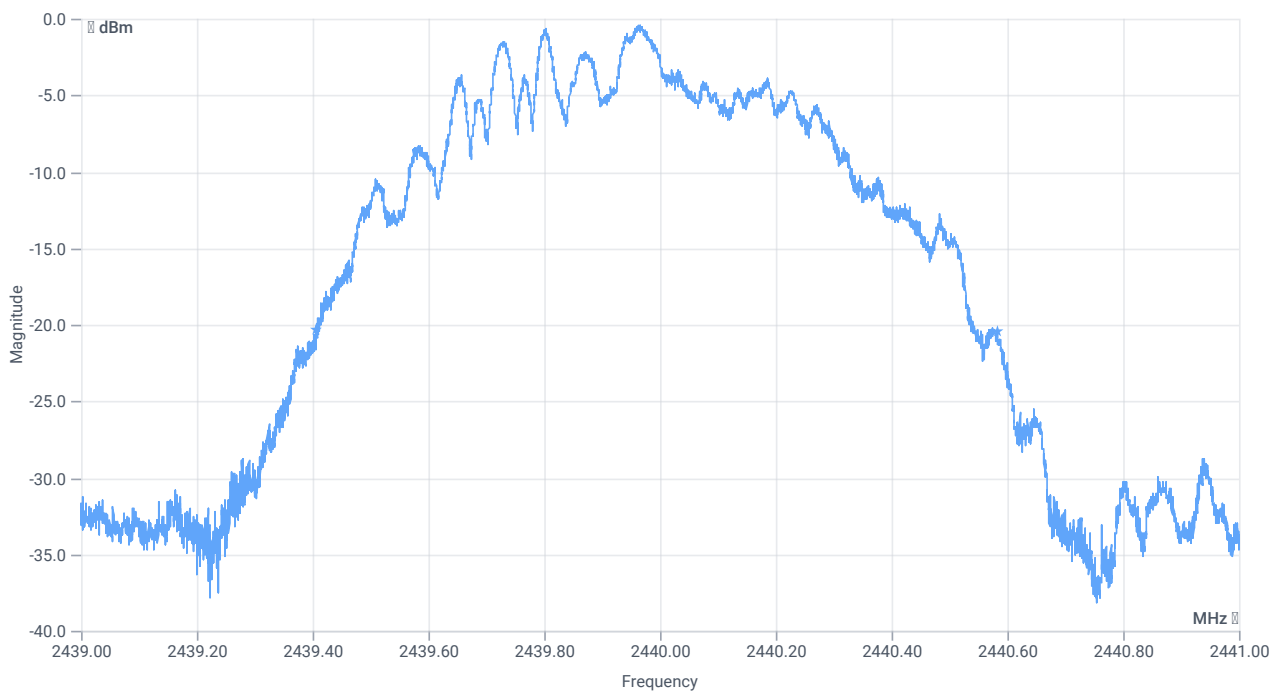




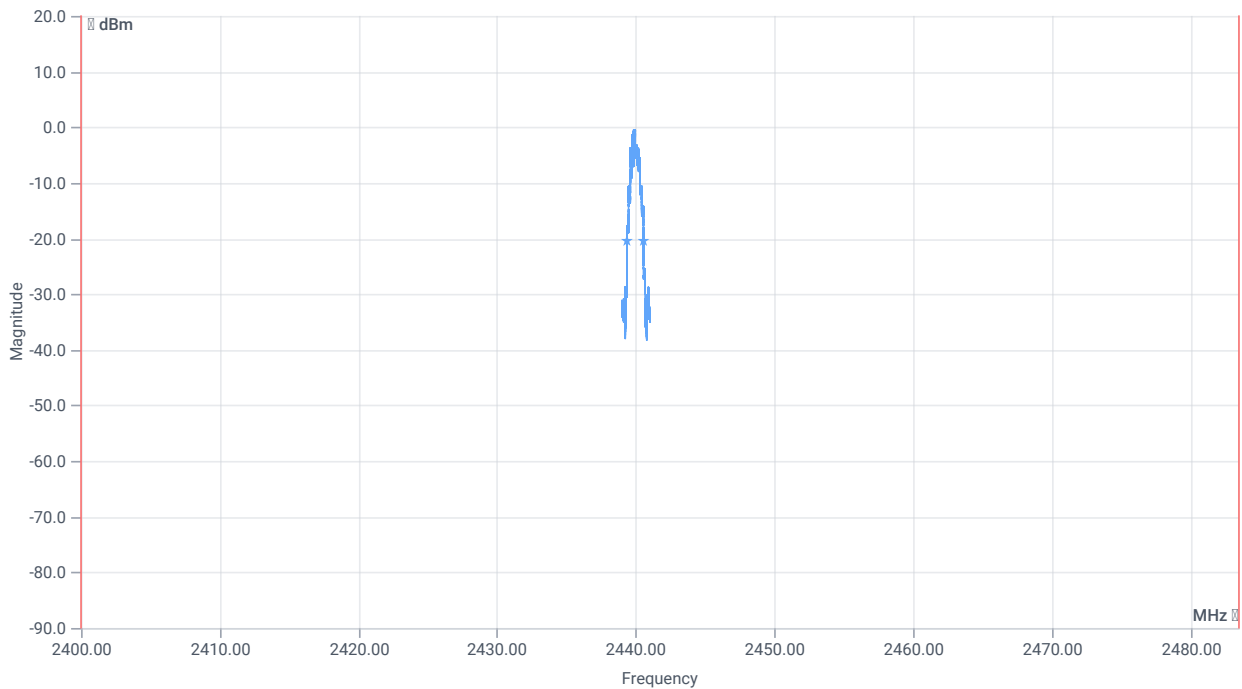
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	1048.000	kHz	INFO
T1 99%	2400.000000	---	2439.4613	MHz	PASS
T2 99%	---	2483.500000	2440.5095	MHz	PASS



BW 20dB



BW within band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	1178	kHz	INFO
T1 20dB	2400.000000	---	2439.4050	MHz	PASS
T2 20dB	---	2483.500000	2440.5828	MHz	PASS

Verdict

PASS

FCC 15.247 # Peak psd DTS ~ BT LE 1 Msps

References

TC start	11.12.2025 11:52:14
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	6.0.5.0
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 - BT LE 1 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	True TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	Yes

Equipment

Signal analyzer,Rohde&Schwarz,FSV3030,1330.5000K30/101247,1.90
Switch matrix,cetecom advanced GmbH,USM,D001,1.0.0

Test Parameter

Technology to test	BT LE 1 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2402
Frequency mid to test	True Freq [MHz] 2440
Frequency high to test	False Freq [MHz] 2480
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.9
Full path type	EUT_SA_GEN_SIG

Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/
Switch bits	00000001:00000001:00000000:00000110

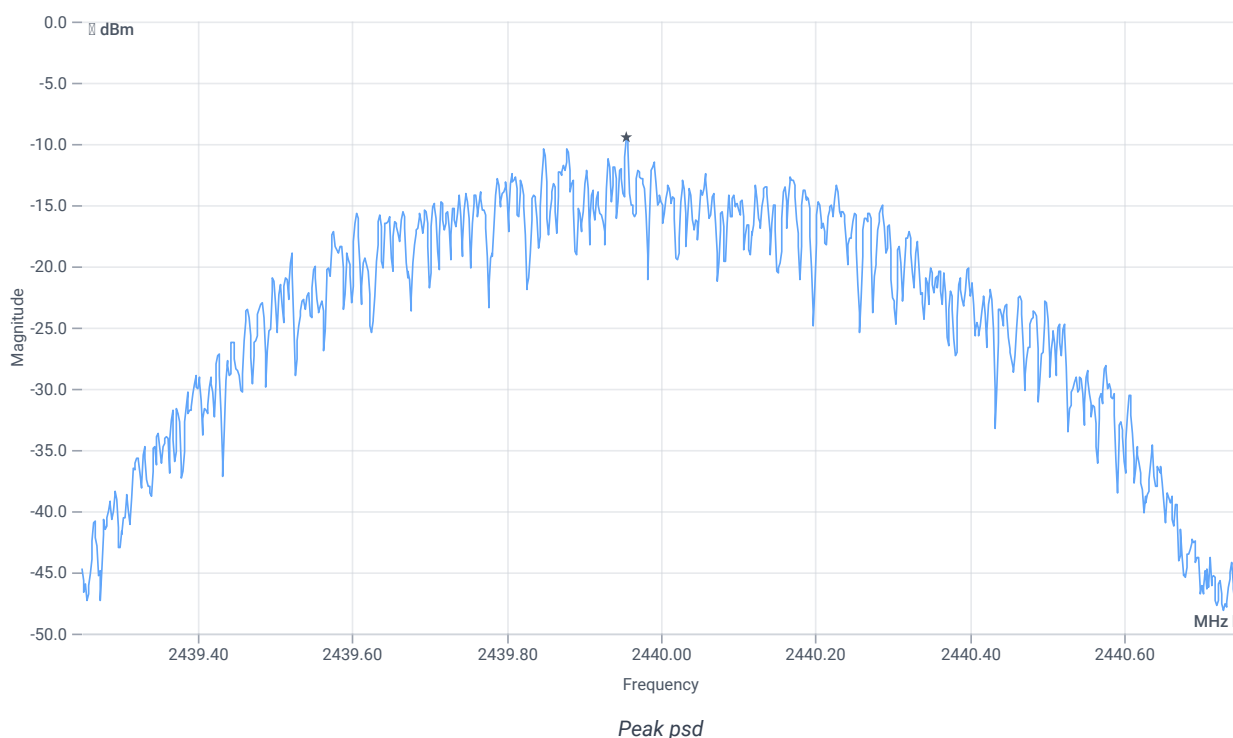
Test at TX 2440 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.41	dBm	INFO
Ref. frequency	---	---	2439.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.41 3.97 17
Start [MHz] Stop [MHz]	2439.250 2440.750
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	-9.43	dBm/3KHz	PASS

Verdict

PASS

FCC 15.247 # Bandwidth 6dB DTS ~ BT LE 1 Msps

References

TC start	11.12.2025 11:51:31
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	6.0.5.0
Standard Version	FCC 15.247 NI
Method	
Description	FCC 15.247 Bandwidth 6dB DTS - BT LE 1 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	True TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	Yes

Equipment

Signal analyzer,Rohde&Schwarz,FSV3030,1330.5000K30/101247,1.90
Switch matrix,cetecom advanced GmbH,USM,D001,1.0.0

Test Parameter

Technology to test	BT LE 1 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2402
Frequency mid to test	True Freq [MHz] 2440
Frequency high to test	False Freq [MHz] 2480
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.9
Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/

Test Parameter

Switch bits

00000001:00000001:00000000:00000110

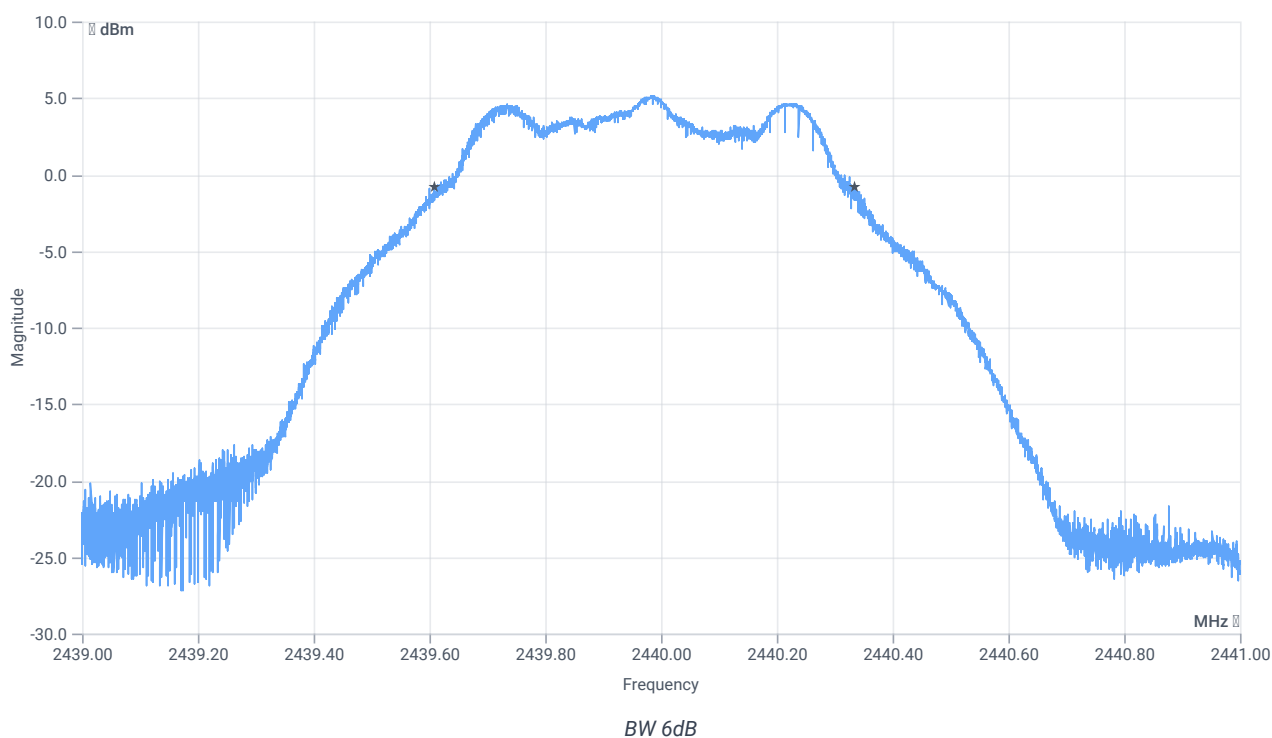
Test at TX 2440 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.42	dBm	INFO
Ref. frequency	---	---	2439.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.42 3.97 17
Start [MHz] Stop [MHz]	2439.000 2441.000
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	---	726	kHz	PASS

Verdict

PASS

FCC 15.247 # Maximum peak conducted output power DTS ~ BT LE 1 Msps

References

TC start	11.12.2025 11:50:46
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	6.0.5.0
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.1 RBW ≥ DTS Bandwidth
Description	FCC 15.247 Maximum peak output power conducted DTS - BT LE 1 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	True TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	Yes

Equipment

Signal analyzer,Rohde&Schwarz,FSV3030,1330.5000K30/101247,1.90
Switch matrix,cetecom advanced GmbH,USM,D001,1.0.0

Test Parameter

Technology to test	BT LE 1 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2402
Frequency mid to test	True Freq [MHz] 2440
Frequency high to test	False Freq [MHz] 2480
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.9

Test Parameter

Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/
Switch bits	00000001:00000001:00000000:00000110

Test at TX 2440 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.41	dBm	INFO
Ref. frequency	---	---	2439.700	MHz	INFO

READ SA SETTINGS:

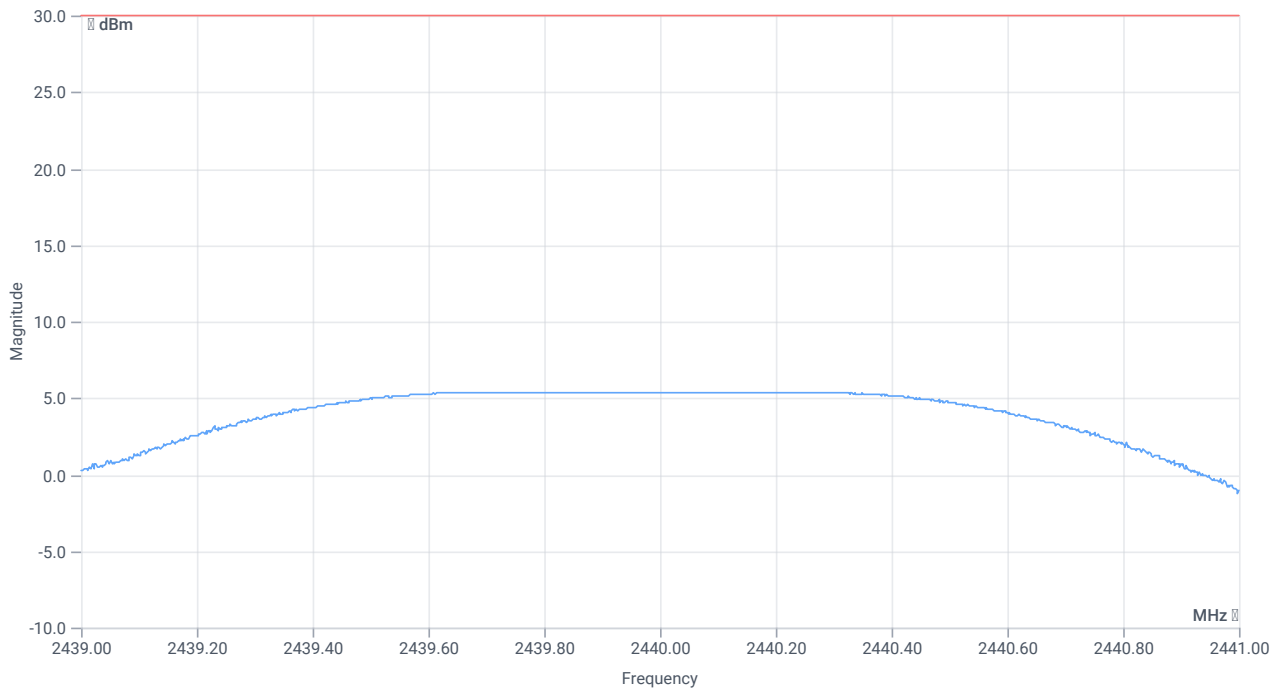
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.41 3.97 17
Start [MHz] Stop [MHz]	2439.000 2441.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

DTS bandwidth

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS bandwidth (6dB)	---	---	727	kHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	15.41 3.97 22
Start [MHz] Stop [MHz]	2439.000 2441.000
RBW [MHz] VBW [MHz]	1.000000 5.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 1001 SWE



Peak output power

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	30.00	5.38	dBm	PASS
Peak power	---	1000	3.451437	mW	PASS
Frequency at peak	---	---	2439.774	MHz	INFO

Verdict

PASS

FCC 15.247 # Restricted band edge conducted peak DTS video avg (eirp) ~ BT LE 1 Msps

References

TC start	11.12.2025 13:14:22
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	6.0.5.0
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - 8.7.3 Integration Method; ANSI C63.10-2013 11.13.3.2 Peak Detection
Description	FCC 15.247 Restricted band edge conducted peak DTS - BT LE 1 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	True TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	Yes

Equipment

Signal analyzer,Rohde&Schwarz,FSV3030,1330.5000K30/101247,1.90
Switch matrix,cetecom advanced GmbH,USM,D001,1.0.0

Test Parameter

Technology to test	BT LE 1 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2402
Frequency mid to test	False Freq [MHz] 2440
Frequency high to test	True Freq [MHz] 2480
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.9

Test Parameter

Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/
Switch bits	00000001:00000001:00000000:00000110

Antenna gain table

Freq [MHz]	Gain [dBi]
2400	3.4
2480	3.4

Test at TX 2480 MHz

RESULT: Reference power cond.

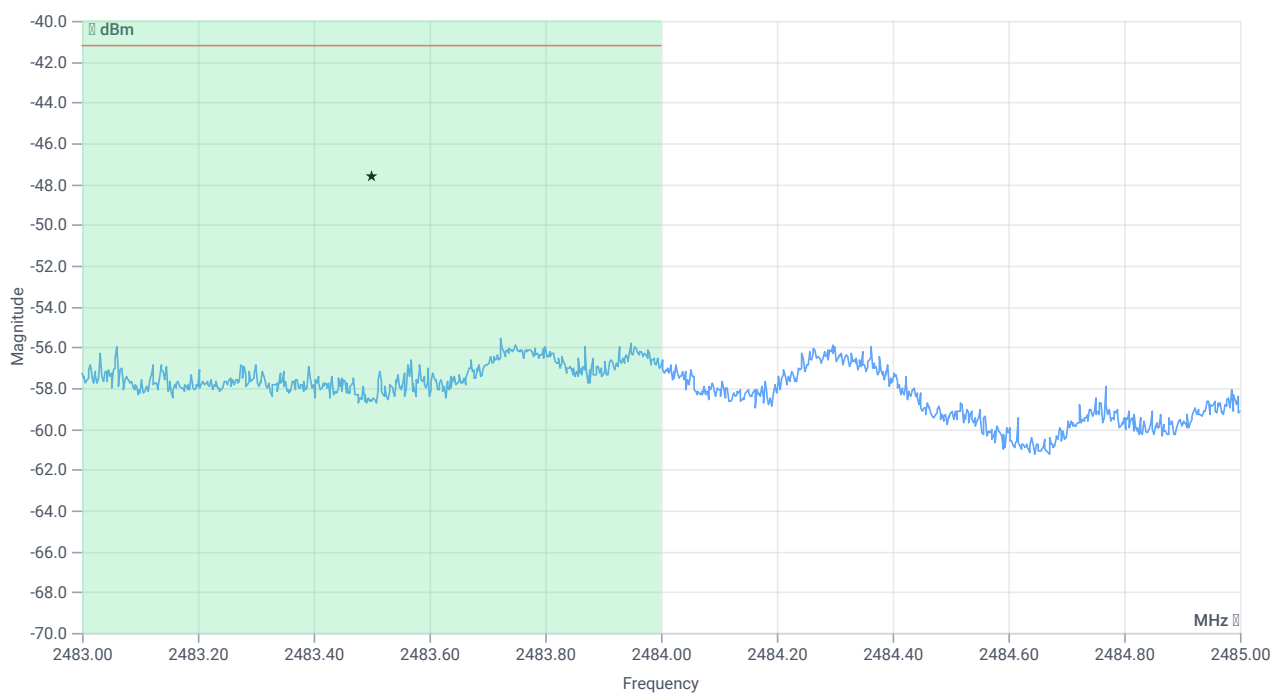
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.44	dBm	INFO
Ref. frequency	---	---	2480.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.44 3.98 17
Start [MHz] Stop [MHz]	2483.000 2485.000
RBW [MHz] VBW [MHz]	0.100000 0.002000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	85 300 1001 SWE

Antenna gain

Considered antenna gain [dBi]:	3.4 @ 2483.5 MHz
--------------------------------	------------------



Restricted band edge

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Band Power	---	-41.23	-47.620000000000005	dBm	PASS

Verdict

PASS

FCC 15.247 # TX spurious conducted 20dBc ~ BT LE 1 Msps

References

TC start	11.12.2025 13:02:35
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	6.0.5.0
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 DTS - BT LE 1 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	True TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	Yes

Equipment

Signal analyzer,Rohde&Schwarz,FSV3030,1330.5000K30/101247,1.90
Switch matrix,cetecom advanced GmbH,USM,D001,1.0.0

Test Parameter

Technology to test	BT LE 1 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2402
Frequency mid to test	False Freq [MHz] 2440
Frequency high to test	True Freq [MHz] 2480
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.9
Full path type	EUT_SA_GEN_SIG

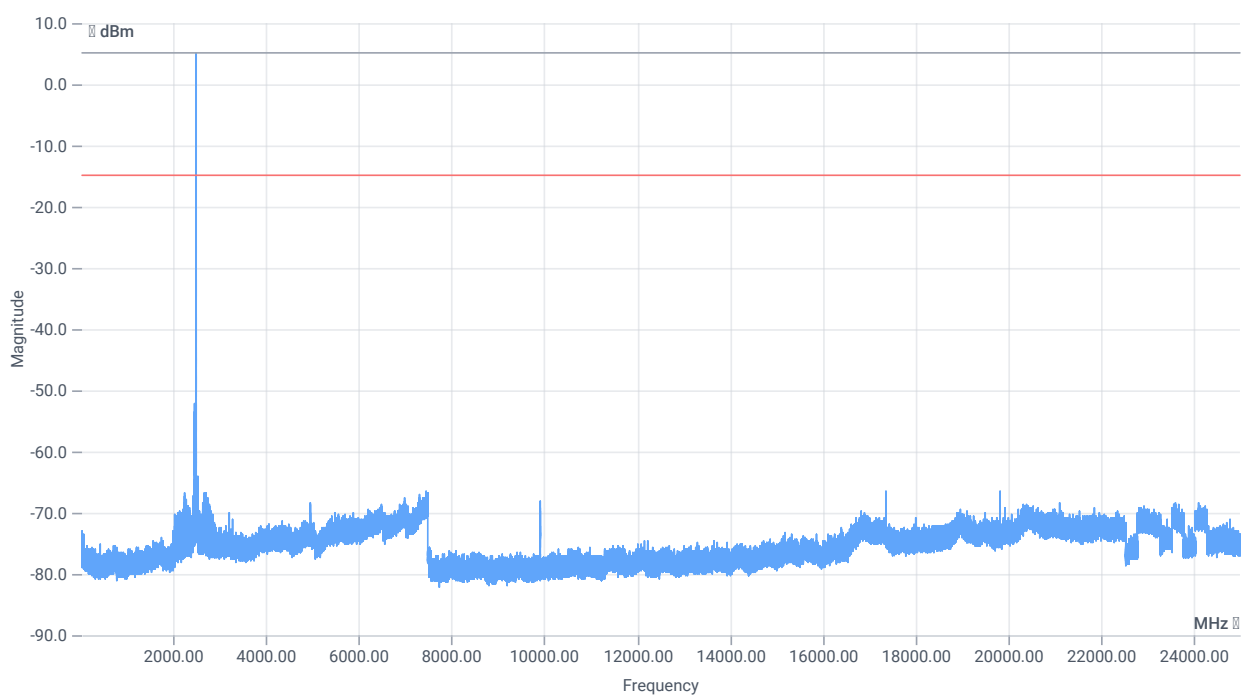
Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/
Switch bits	00000001:00000001:00000000:00000110

Test at TX 2480 MHz

RESULT: Reference power cond.

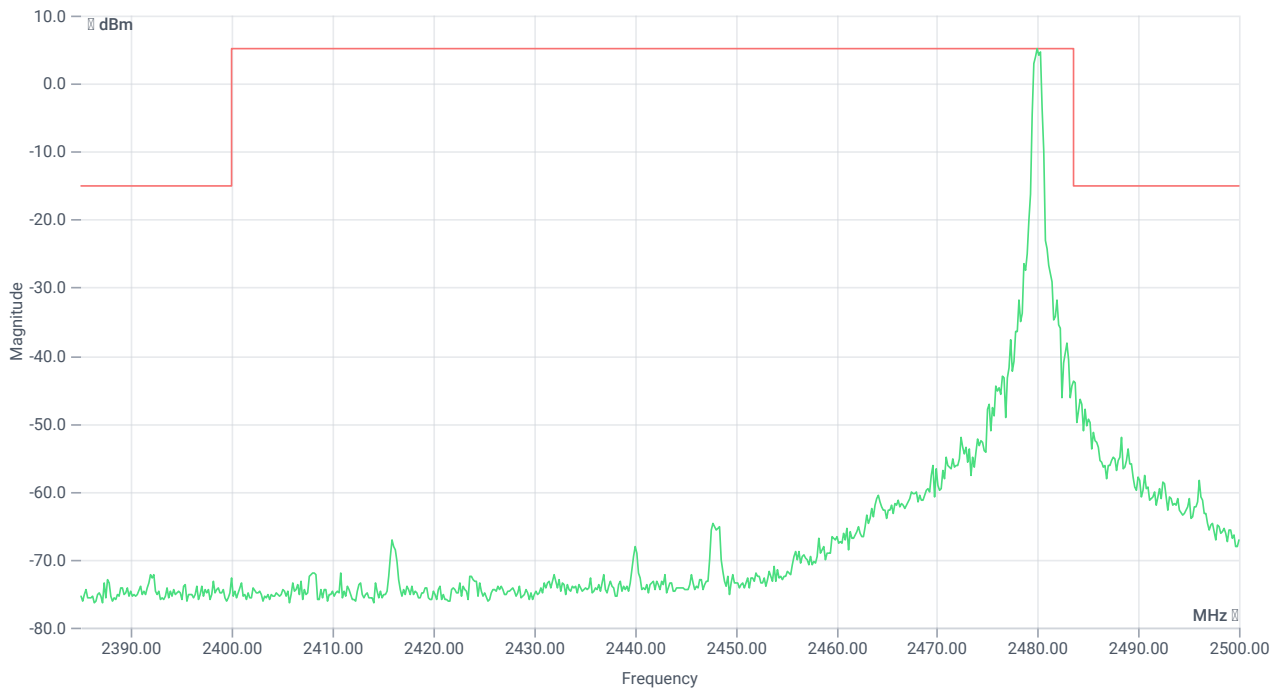
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.44	dBm	INFO
Ref. frequency	---	---	2479.800	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	5.44 12.31 4
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 @ 2480.00 MHz	---	---	5.05	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 2483.667 MHz	0	---	29.15	dB	INFO

Verdict

PASS

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ BT LE 1 Msps

References

TC start	11.12.2025 13:01:55
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	6.0.5.0
Standard Version	FCC 15.247, ISED RSS247 NI
Method	
Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - BT LE 1 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	True TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	Yes

Equipment

Signal analyzer,Rohde&Schwarz,FSV3030,1330.5000K30/101247,1.90
Switch matrix,cetecom advanced GmbH,USM,D001,1.0.0

Test Parameter

Technology to test	BT LE 1 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2402
Frequency mid to test	False Freq [MHz] 2440
Frequency high to test	True Freq [MHz] 2480
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.9
Full path type	EUT_SA_GEN_SIG

Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/
Switch bits	00000001:00000001:00000000:00000110

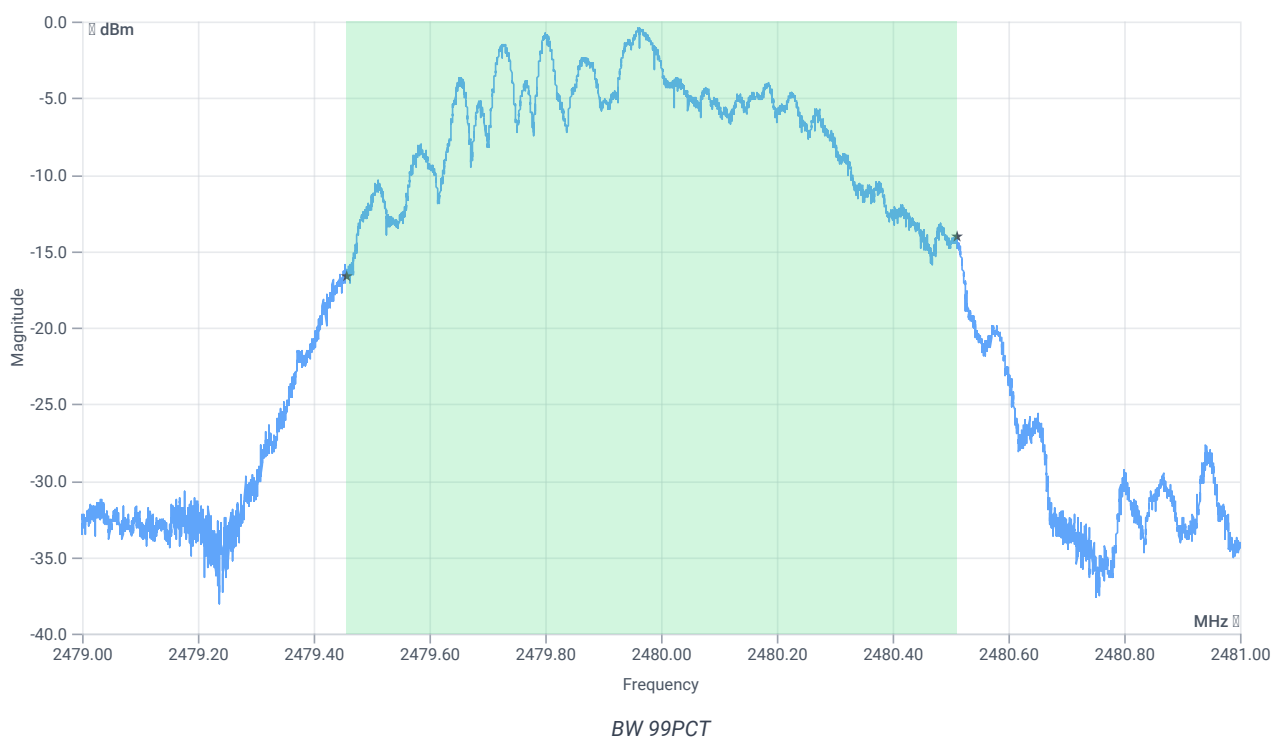
Test at TX 2480 MHz

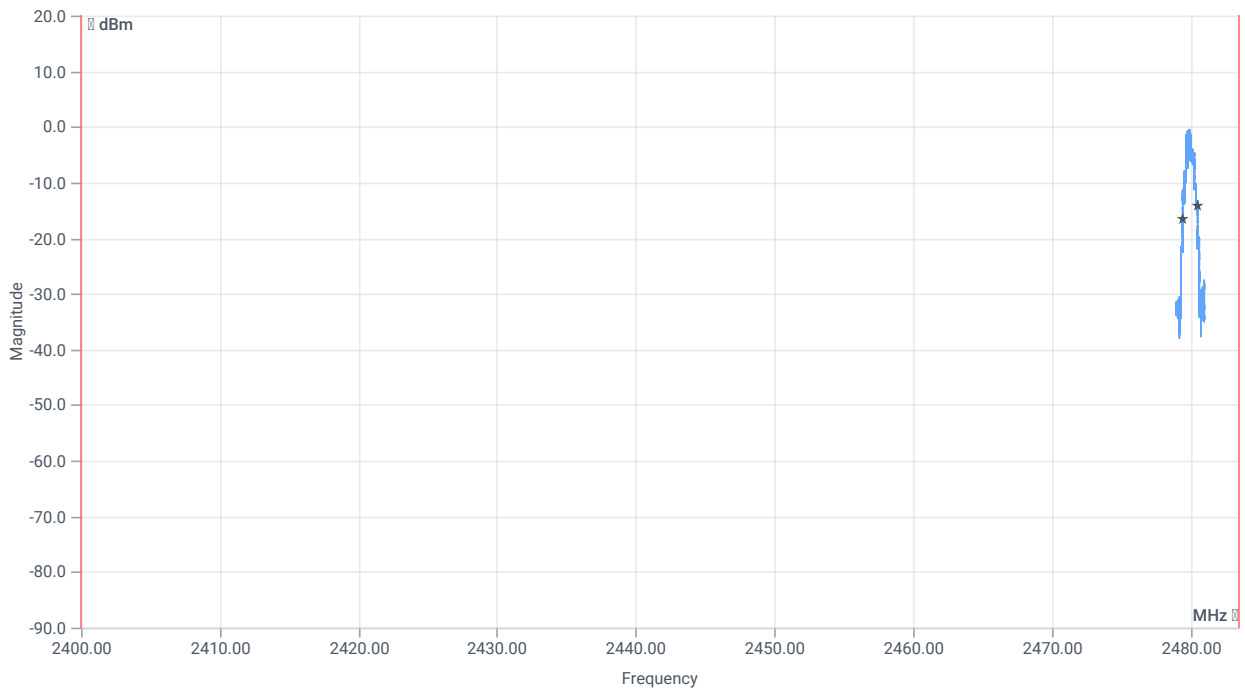
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.45	dBm	INFO
Ref. frequency	---	---	2479.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.45 3.98 17
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

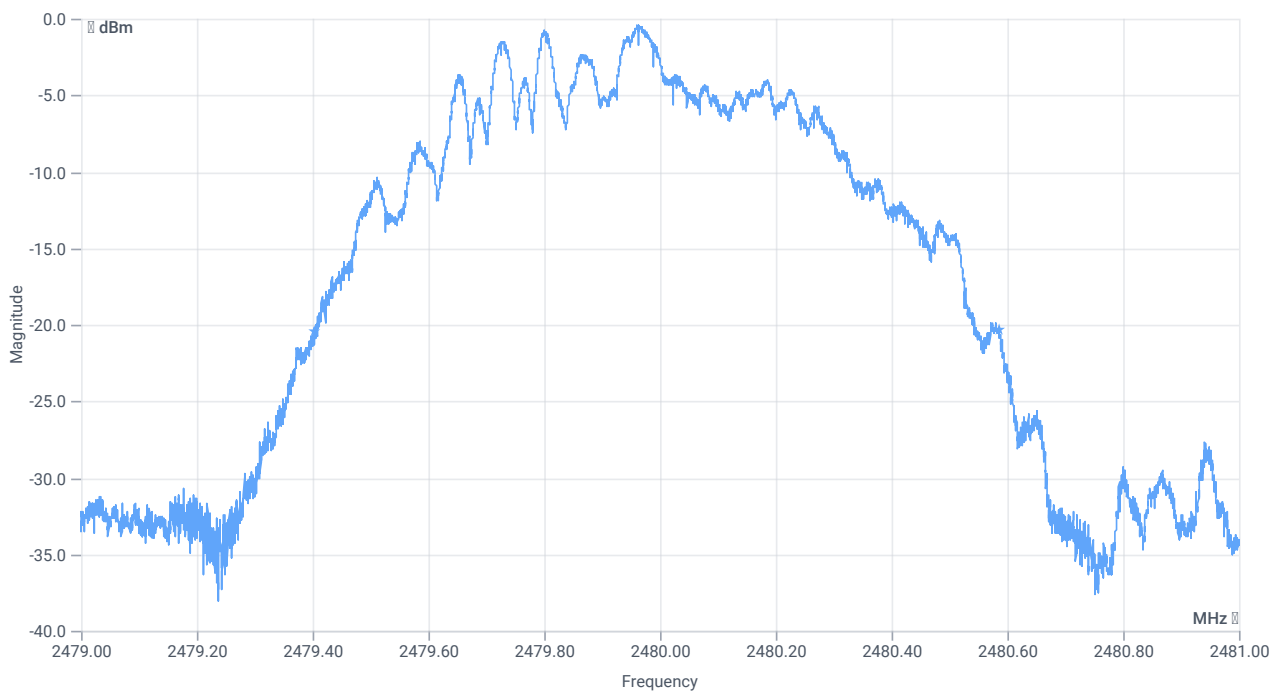




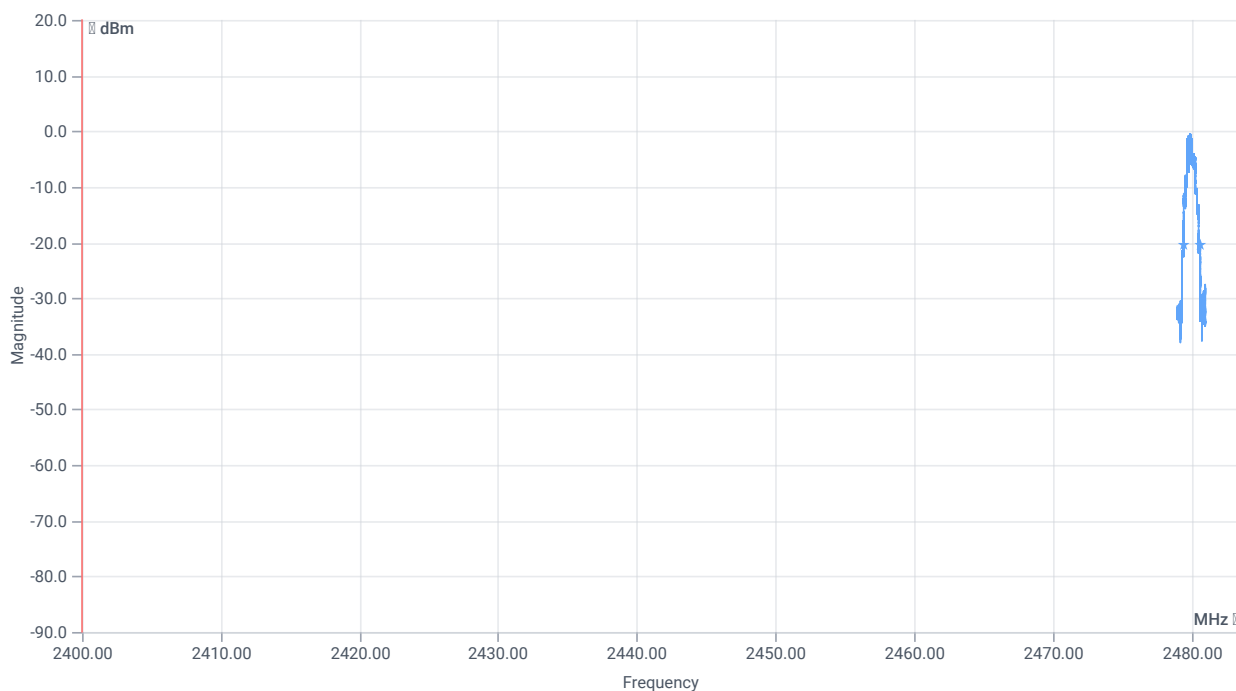
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	1053.000	kHz	INFO
T1 99%	2400.000000	---	2479.4580	MHz	PASS
T2 99%	---	2483.500000	2480.5114	MHz	PASS



BW 20dB



BW within band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	1183	kHz	INFO
T1 20dB	2400.000000	---	2479.4026	MHz	PASS
T2 20dB	---	2483.500000	2480.5854	MHz	PASS

Verdict

PASS

FCC 15.247 # Peak psd DTS ~ BT LE 1 Msps

References

TC start	11.12.2025 13:01:13
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	6.0.5.0
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 - BT LE 1 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	True TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	Yes

Equipment

Signal analyzer,Rohde&Schwarz,FSV3030,1330.5000K30/101247,1.90
Switch matrix,cetecom advanced GmbH,USM,D001,1.0.0

Test Parameter

Technology to test	BT LE 1 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2402
Frequency mid to test	False Freq [MHz] 2440
Frequency high to test	True Freq [MHz] 2480
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.9
Full path type	EUT_SA_GEN_SIG

Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/
Switch bits	00000001:00000001:00000000:00000110

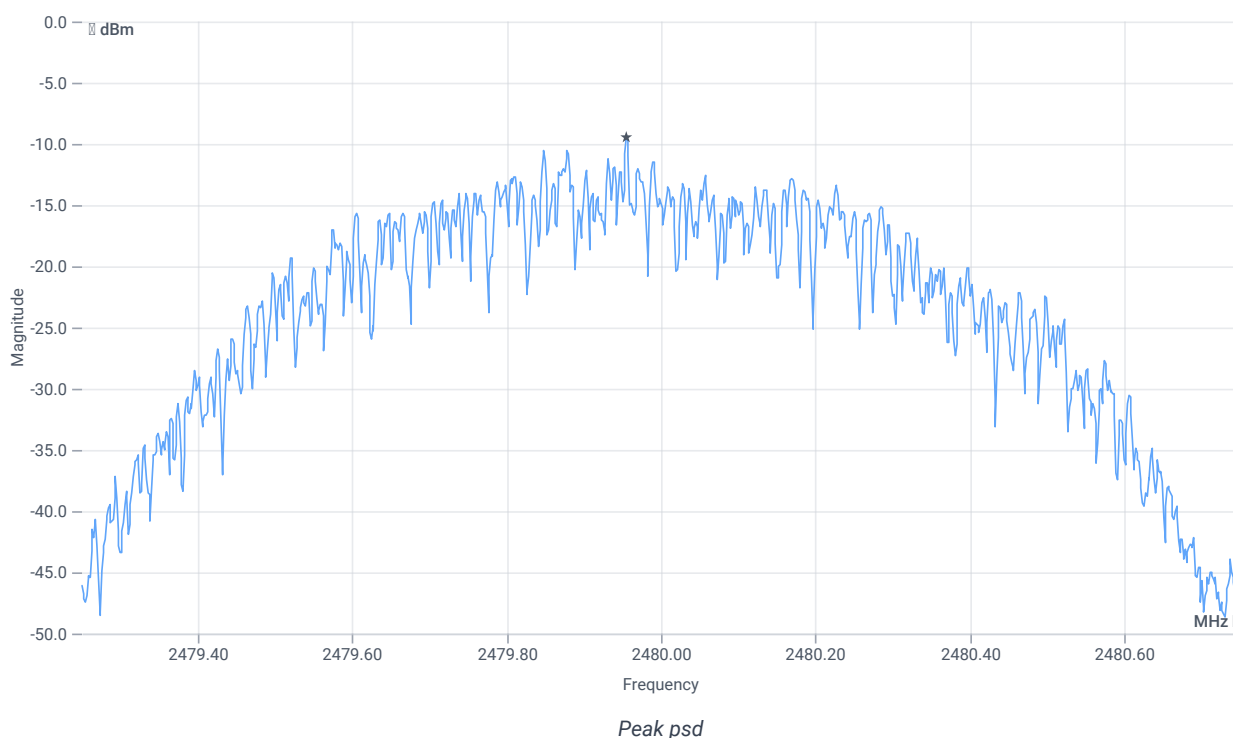
Test at TX 2480 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.44	dBm	INFO
Ref. frequency	---	---	2480.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.44 3.98 17
Start [MHz] Stop [MHz]	2479.250 2480.750
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	-9.48	dBm/3KHz	PASS

Verdict

PASS

FCC 15.247 # Bandwidth 6dB DTS ~ BT LE 1 Msps

References

TC start	11.12.2025 13:00:42
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	6.0.5.0
Standard Version	FCC 15.247 NI
Method	
Description	FCC 15.247 Bandwidth 6dB DTS - BT LE 1 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	True TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	Yes

Equipment

Signal analyzer,Rohde&Schwarz,FSV3030,1330.5000K30/101247,1.90
Switch matrix,cetecom advanced GmbH,USM,D001,1.0.0

Test Parameter

Technology to test	BT LE 1 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2402
Frequency mid to test	False Freq [MHz] 2440
Frequency high to test	True Freq [MHz] 2480
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.9
Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/

Test Parameter

Switch bits

00000001:00000001:00000000:00000110

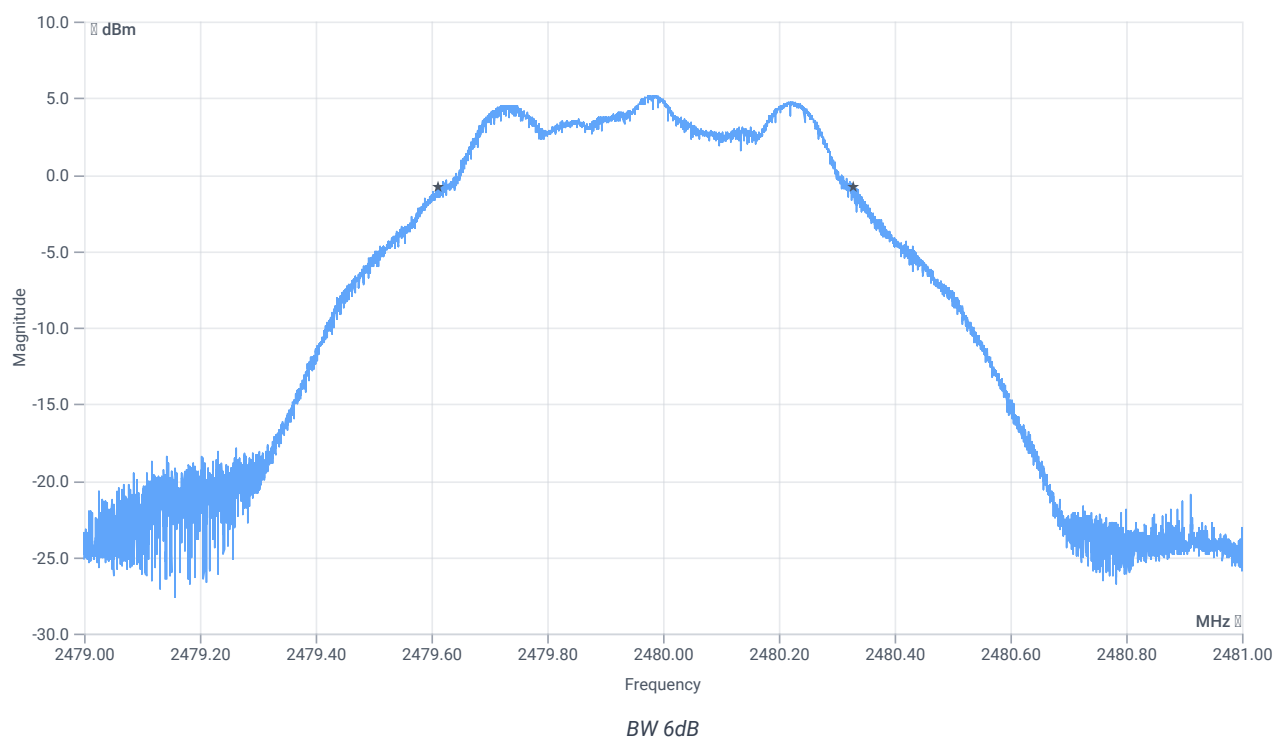
Test at TX 2480 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.45	dBm	INFO
Ref. frequency	---	---	2479.700	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.45 3.98 17
Start [MHz] Stop [MHz]	2479.000 2481.000
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	---	718	kHz	PASS

Verdict

PASS

FCC 15.247 # Maximum peak conducted output power DTS ~ BT LE 1 Msps

References

TC start	11.12.2025 12:59:56
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	6.0.5.0
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.1 RBW ≥ DTS Bandwidth
Description	FCC 15.247 Maximum peak output power conducted DTS - BT LE 1 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	True TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	Yes

Equipment

Signal analyzer,Rohde&Schwarz,FSV3030,1330.5000K30/101247,1.90
Switch matrix,cetecom advanced GmbH,USM,D001,1.0.0

Test Parameter

Technology to test	BT LE 1 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2402
Frequency mid to test	False Freq [MHz] 2440
Frequency high to test	True Freq [MHz] 2480
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.9

Test Parameter

Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/
Switch bits	00000001:00000001:00000000:00000110

Test at TX 2480 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.45	dBm	INFO
Ref. frequency	---	---	2480.300	MHz	INFO

READ SA SETTINGS:

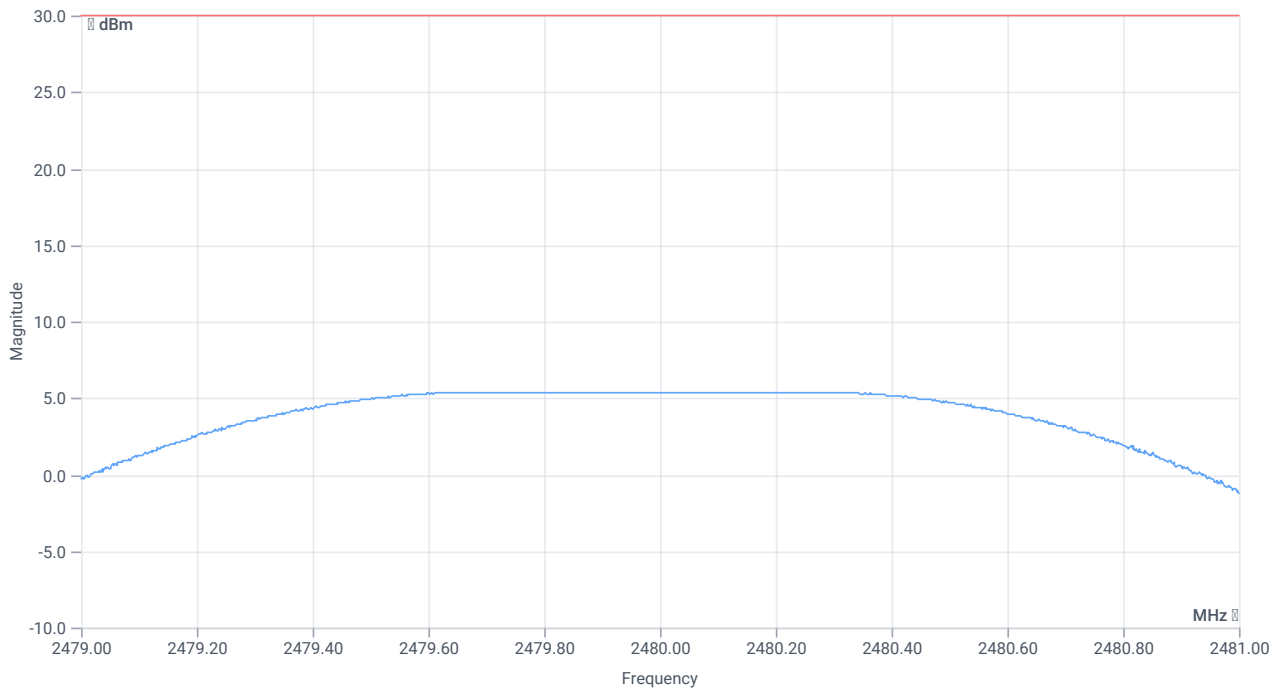
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.45 3.98 17
Start [MHz] Stop [MHz]	2479.000 2481.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

DTS bandwidth

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS bandwidth (6dB)	---	---	713	kHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	15.45 3.98 22
Start [MHz] Stop [MHz]	2479.000 2481.000
RBW [MHz] VBW [MHz]	1.000000 5.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 1001 SWE



Peak output power

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	30.00	5.41	dBm	PASS
Peak power	---	1000	3.475362	mW	PASS
Frequency at peak	---	---	2480.264	MHz	INFO

Verdict

PASS

FCC 15.247 # Restricted band edge conducted peak DTS video avg (eirp) ~ BT LE 2 Msps

References

TC start	12.12.2025 09:50:42
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	6.0.5.0
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - 8.7.3 Integration Method; ANSI C63.10-2013 11.13.3.2 Peak Detection
Description	FCC 15.247 Restricted band edge conducted Peak DTS - BT LE 2 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	True TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	Yes

Equipment

Signal analyzer,Rohde&Schwarz,FSV3030,1330.5000K30/101247,1.90
Switch matrix,cetecom advanced GmbH,USM,D001,1.0.0

Test Parameter

Technology to test	BT LE 2 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2404
Frequency mid to test	False Freq [MHz] 2440
Frequency high to test	False Freq [MHz] 2478
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.9

Test Parameter

Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/
Switch bits	00000001:00000001:00000000:00000110

Antenna gain table

Freq [MHz]	Gain [dBi]
2400	3.4
2480	3.4

Test at TX 2404 MHz

RESULT: Reference power cond.

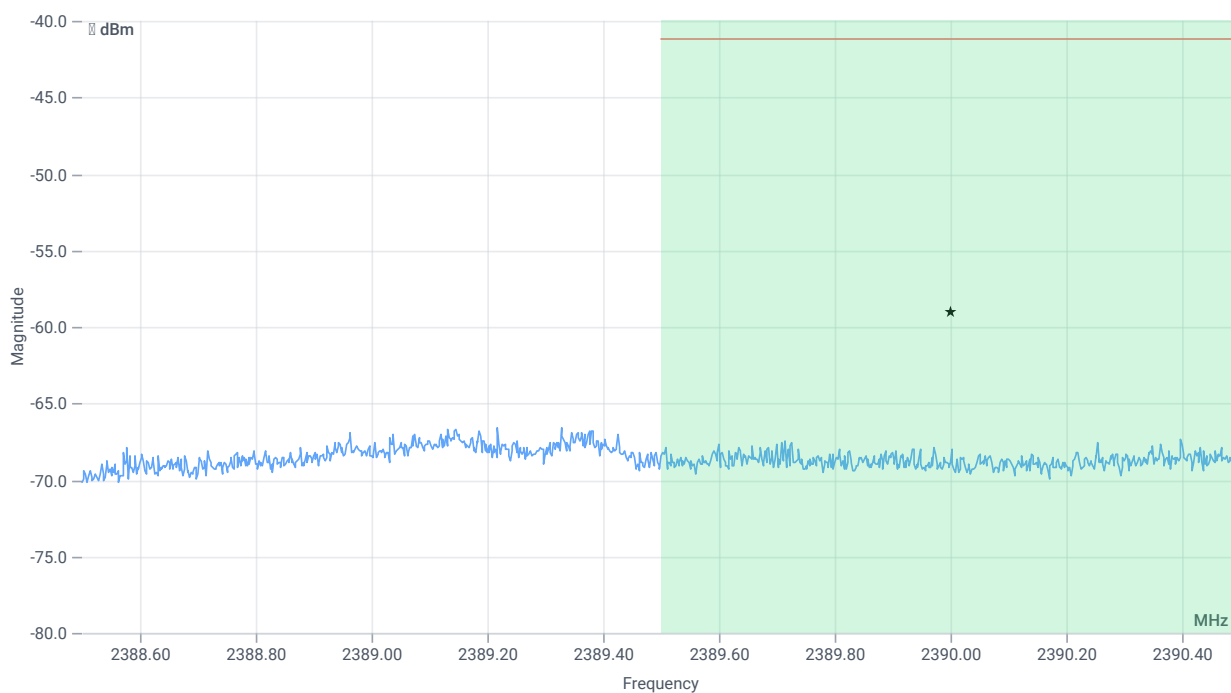
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.79	dBm	INFO
Ref. frequency	---	---	2404.500	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.79 3.92 17
Start [MHz] Stop [MHz]	2388.500 2390.500
RBW [MHz] VBW [MHz]	0.100000 0.002000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	85 300 1001 SWE

Antenna gain

Considered antenna gain [dBi]:	3.4 @ 2390 MHz
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Restricted band edge

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Band Power	---	-41.23	-59.01	dBm	PASS

Verdict

PASS

FCC 15.247 # TX spurious conducted 20dBc ~ BT LE 2 Msps

References

TC start	12.12.2025 09:38:57
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	6.0.5.0
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 DTS - BT LE 2 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	True TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	Yes

Equipment

Signal analyzer,Rohde&Schwarz,FSV3030,1330.5000K30/101247,1.90
Switch matrix,cetecom advanced GmbH,USM,D001,1.0.0

Test Parameter

Technology to test	BT LE 2 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2404
Frequency mid to test	False Freq [MHz] 2440
Frequency high to test	False Freq [MHz] 2478
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.9
Full path type	EUT_SA_GEN_SIG

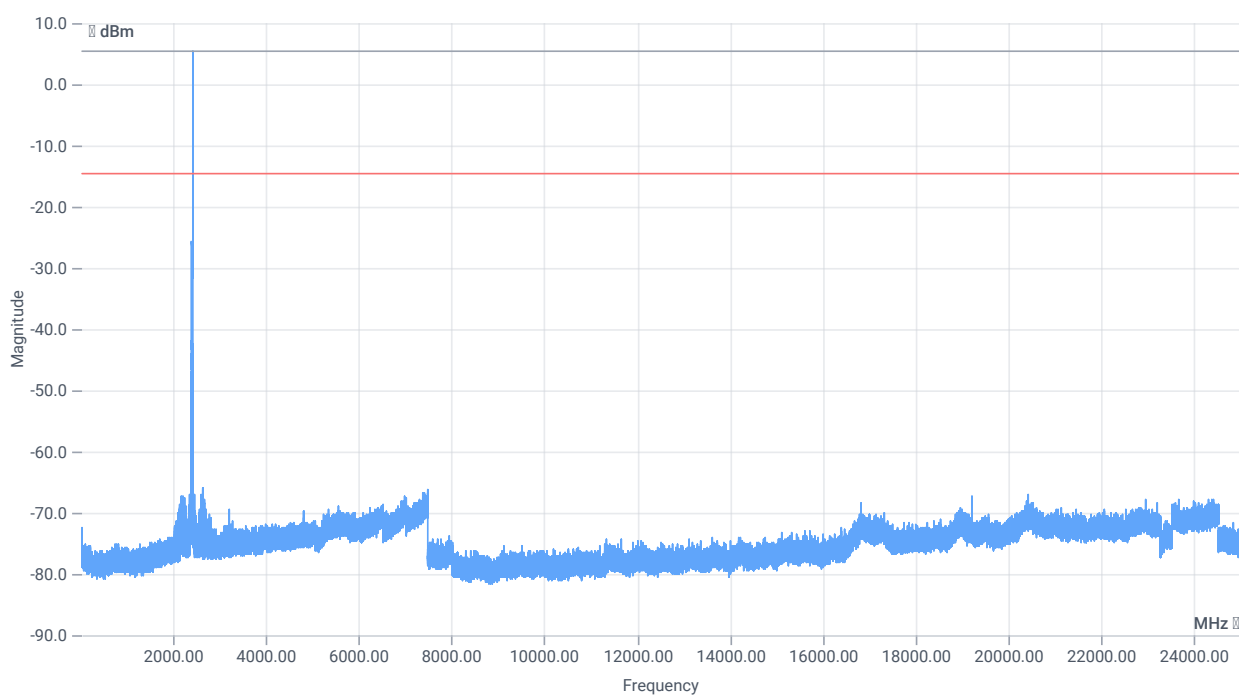
Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/
Switch bits	00000001:00000001:00000000:00000110

Test at TX 2404 MHz

RESULT: Reference power cond.

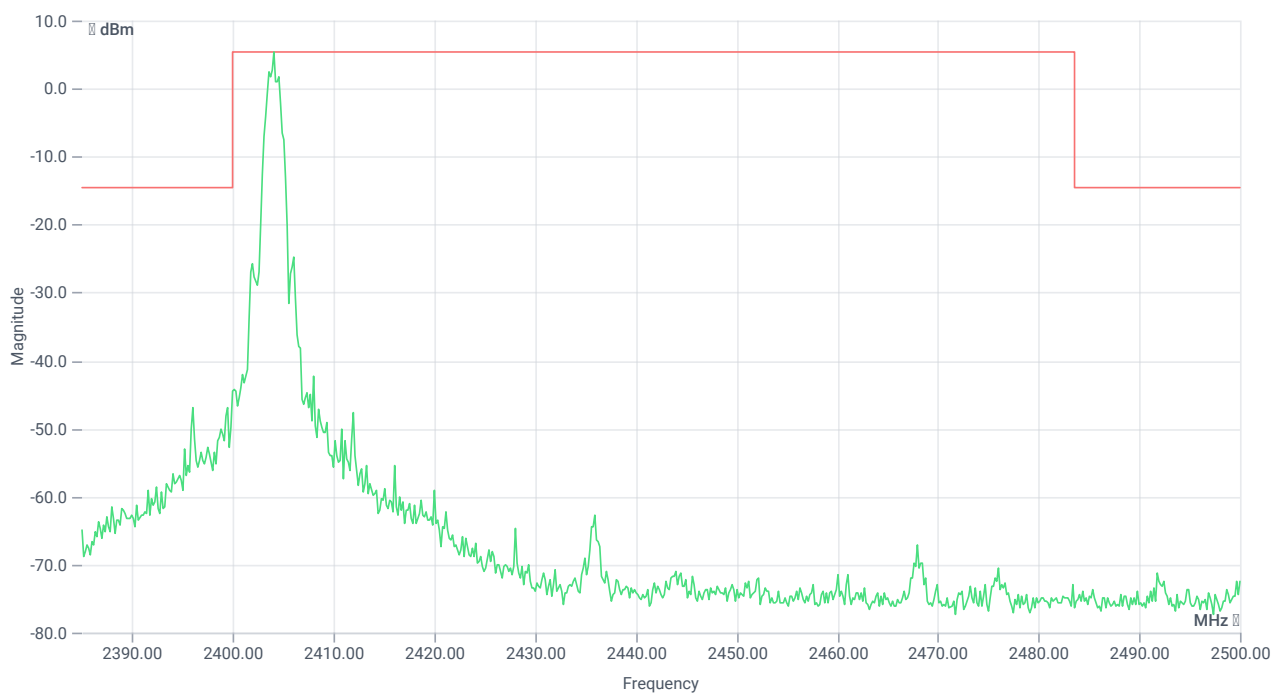
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.81	dBm	INFO
Ref. frequency	---	---	2403.500	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	5.81 12.31 4
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 @ 2404.00 MHz	---	---	5.40	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 2399.5 MHz	0	---	32.38	dB	INFO

Verdict

PASS

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ BT LE 2 Msps

References

TC start	12.12.2025 09:38:19
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	6.0.5.0
Standard Version	FCC 15.247, ISED RSS247 NI
Method	
Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - BT LE 2 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	True TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	Yes

Equipment

Signal analyzer,Rohde&Schwarz,FSV3030,1330.5000K30/101247,1.90
Switch matrix,cetecom advanced GmbH,USM,D001,1.0.0

Test Parameter

Technology to test	BT LE 2 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2404
Frequency mid to test	False Freq [MHz] 2440
Frequency high to test	False Freq [MHz] 2478
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.9
Full path type	EUT_SA_GEN_SIG

Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/
Switch bits	00000001:00000001:00000000:00000110

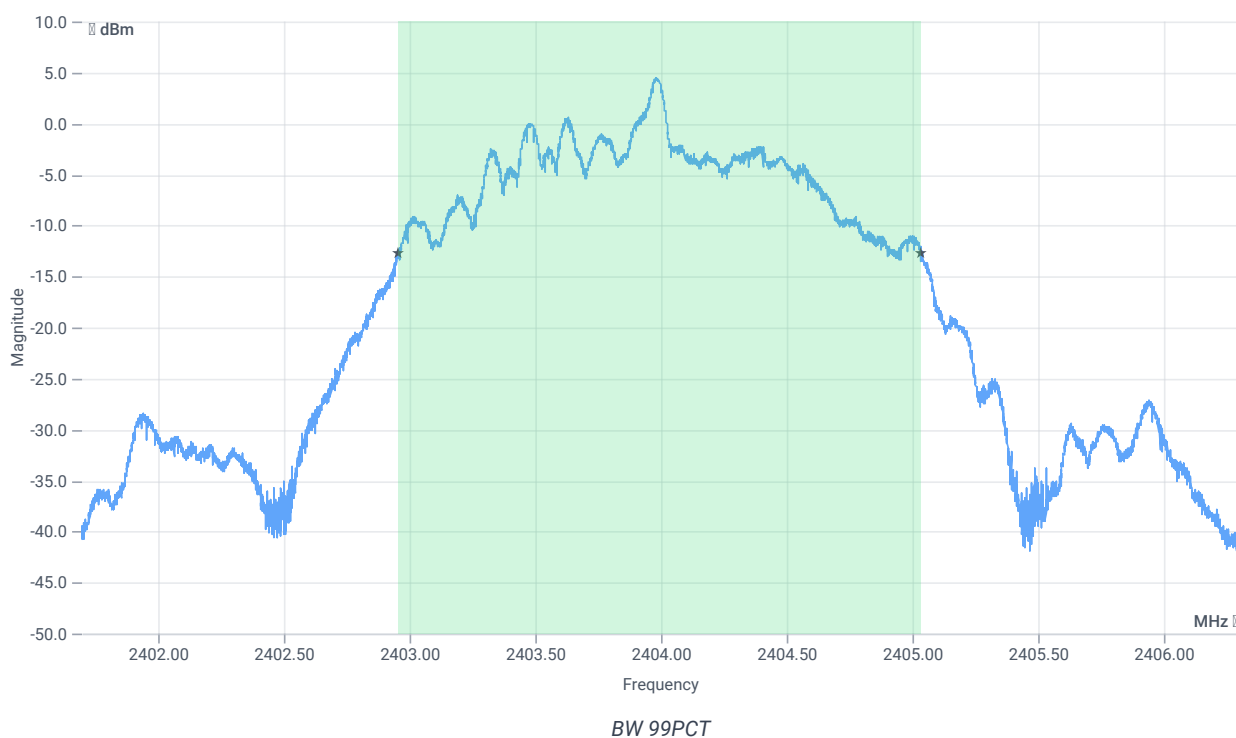
Test at TX 2404 MHz

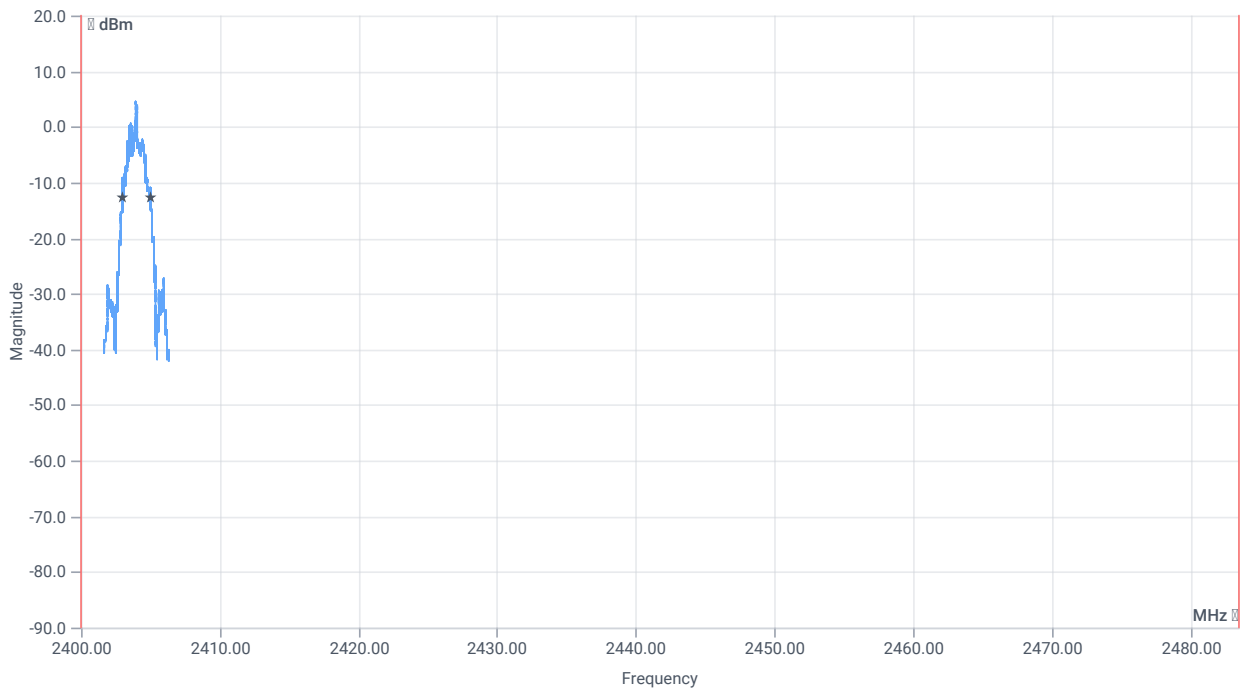
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.81	dBm	INFO
Ref. frequency	---	---	2404.500	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.81 3.92 17
Start [MHz] Stop [MHz]	2401.700 2406.300
RBW [MHz] VBW [MHz]	0.050000 0.200000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

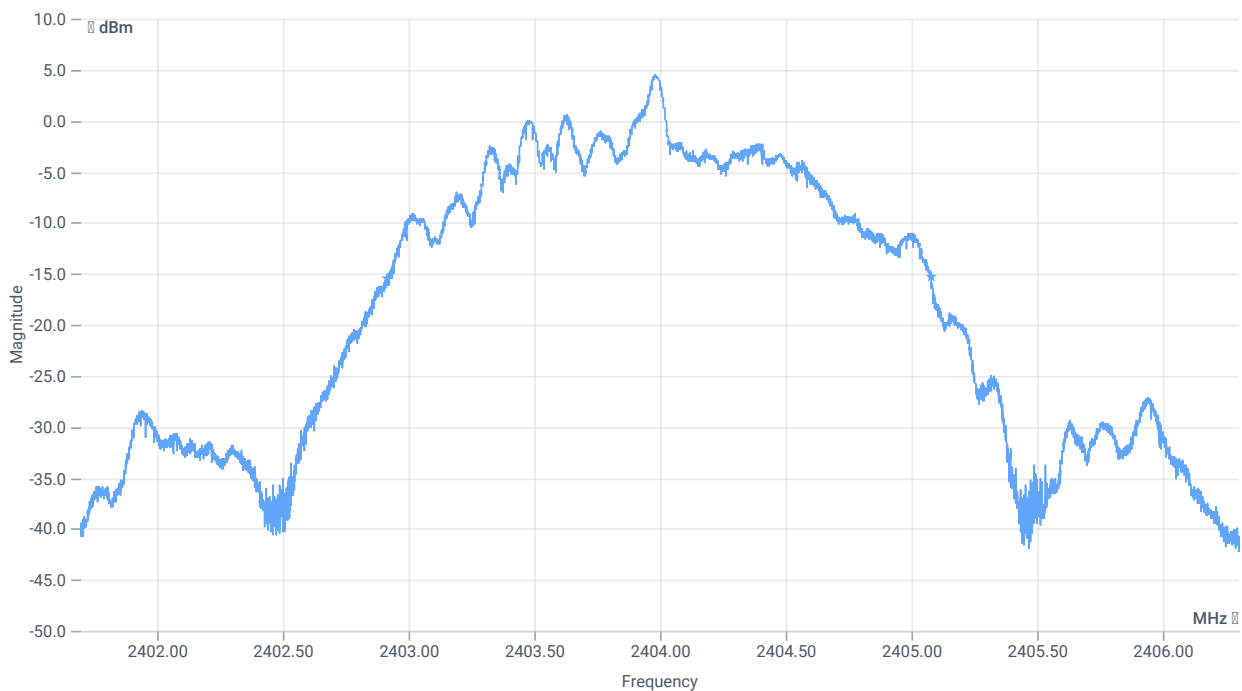




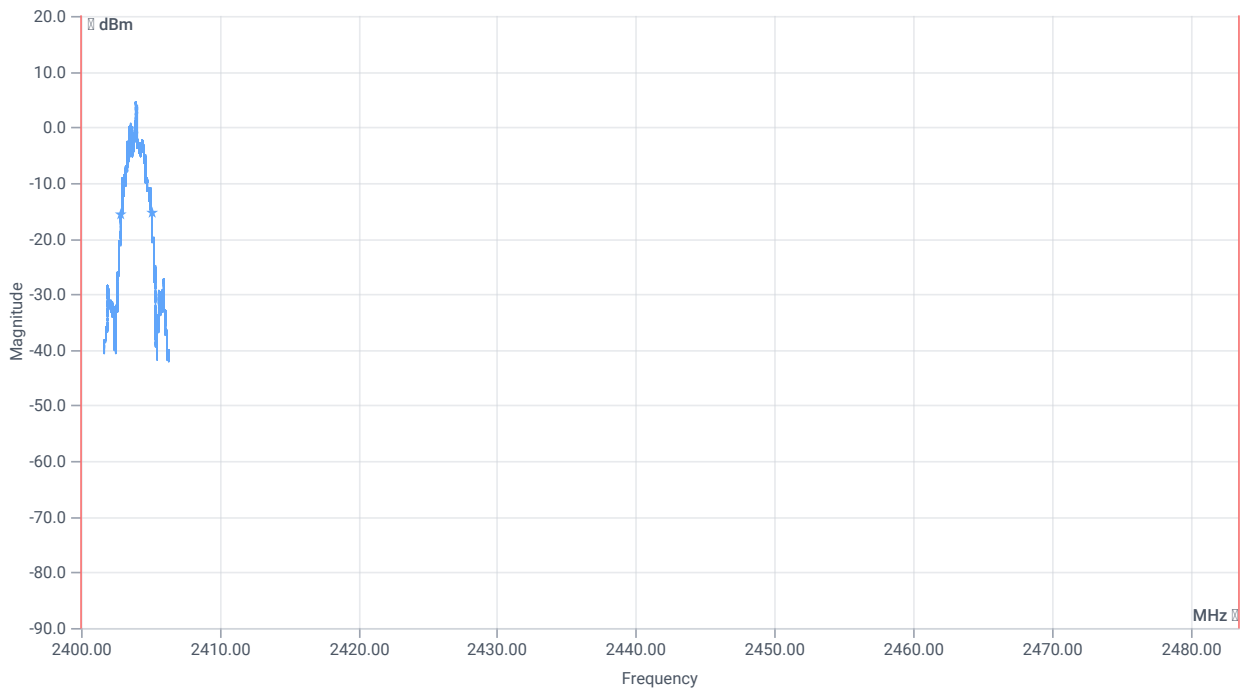
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	2076.000	kHz	INFO
T1 99%	2400.000000	---	2402.9546	MHz	PASS
T2 99%	---	2483.500000	2405.0309	MHz	PASS



BW 20dB



BW within band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	2160	kHz	INFO
T1 20dB	2400.000000	---	2402.9158	MHz	PASS
T2 20dB	---	2483.500000	2405.0759	MHz	PASS

Verdict

PASS

FCC 15.247 # Peak psd DTS ~ BT LE 2 Msps

References

TC start	12.12.2025 09:37:36
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	6.0.5.0
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 - BT LE 2 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	True TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	Yes

Equipment

Signal analyzer,Rohde&Schwarz,FSV3030,1330.5000K30/101247,1.90
Switch matrix,cetecom advanced GmbH,USM,D001,1.0.0

Test Parameter

Technology to test	BT LE 2 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2404
Frequency mid to test	False Freq [MHz] 2440
Frequency high to test	False Freq [MHz] 2478
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.9
Full path type	EUT_SA_GEN_SIG

Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/
Switch bits	00000001:00000001:00000000:00000110

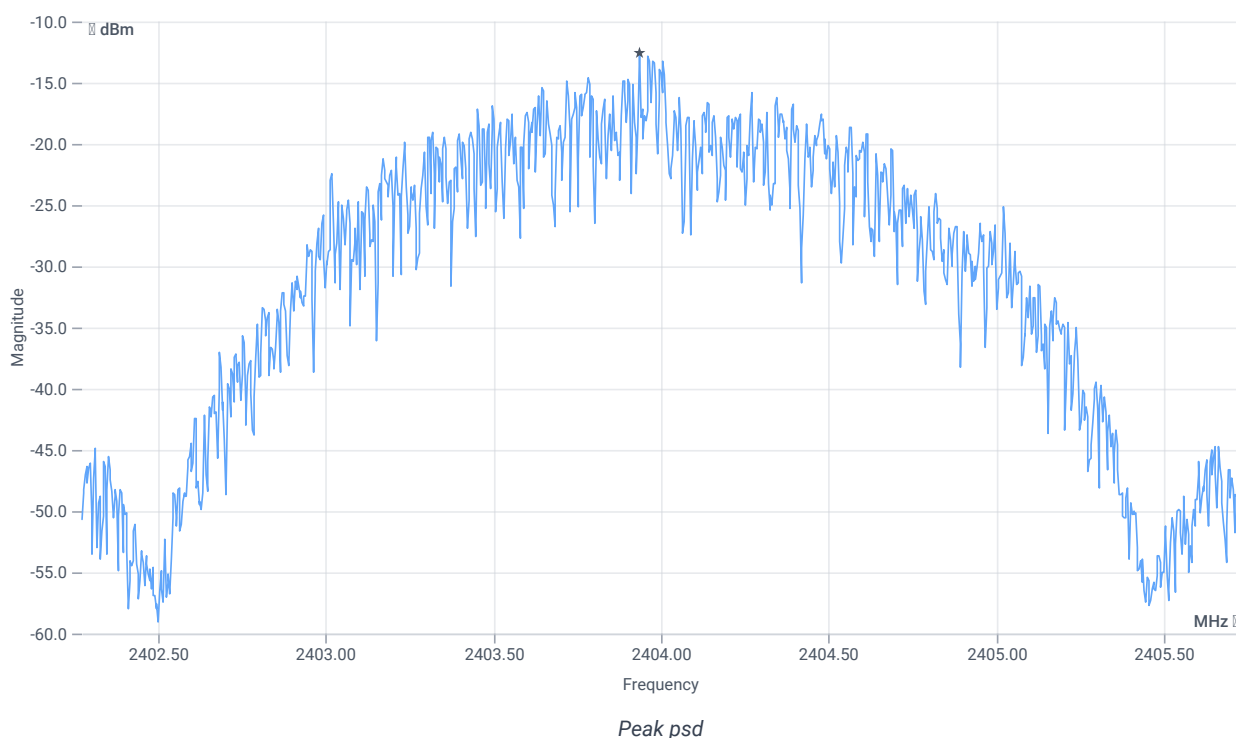
Test at TX 2404 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.82	dBm	INFO
Ref. frequency	---	---	2403.500	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.82 3.92 17
Start [MHz] Stop [MHz]	2402.275 2405.725
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	-12.51	dBm/3KHz	PASS

Verdict

PASS

FCC 15.247 # Bandwidth 6dB DTS ~ BT LE 2 Msps

References

TC start	12.12.2025 09:37:05
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	6.0.5.0
Standard Version	FCC 15.247 NI
Method	
Description	FCC 15.247 Bandwidth 6dB DTS - BT LE 2 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	True TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	Yes

Equipment

Signal analyzer,Rohde&Schwarz,FSV3030,1330.5000K30/101247,1.90
Switch matrix,cetecom advanced GmbH,USM,D001,1.0.0

Test Parameter

Technology to test	BT LE 2 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2404
Frequency mid to test	False Freq [MHz] 2440
Frequency high to test	False Freq [MHz] 2478
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.9
Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/

Test Parameter

Switch bits	00000001:00000001:00000000:00000110
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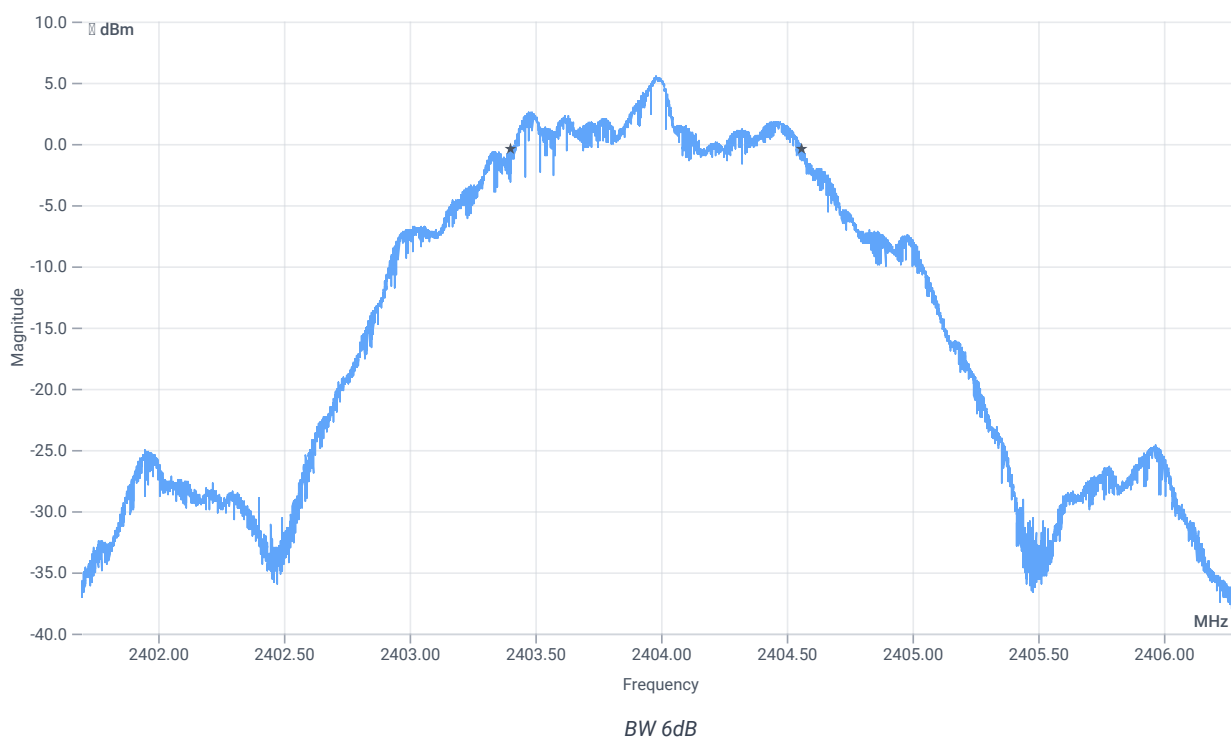
Test at TX 2404 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.80	dBm	INFO
Ref. frequency	---	---	2403.500	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.80 3.92 17
Start [MHz] Stop [MHz]	2401.700 2406.300
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	---	1163	kHz	PASS

Verdict

PASS

FCC 15.247 # Maximum peak conducted output power DTS ~ BT LE 2 Msps

References

TC start	12.12.2025 09:36:21
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	6.0.5.0
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.1 RBW ≥ DTS Bandwidth
Description	FCC 15.247 Maximum peak output power conducted DTS - BT LE 2 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	True TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	Yes

Equipment

Signal analyzer,Rohde&Schwarz,FSV3030,1330.5000K30/101247,1.90
Switch matrix,cetecom advanced GmbH,USM,D001,1.0.0

Test Parameter

Technology to test	BT LE 2 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2404
Frequency mid to test	False Freq [MHz] 2440
Frequency high to test	False Freq [MHz] 2478
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.9

Test Parameter

Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/
Switch bits	00000001:00000001:00000000:00000110

Test at TX 2404 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.81	dBm	INFO
Ref. frequency	---	---	2403.500	MHz	INFO

READ SA SETTINGS:

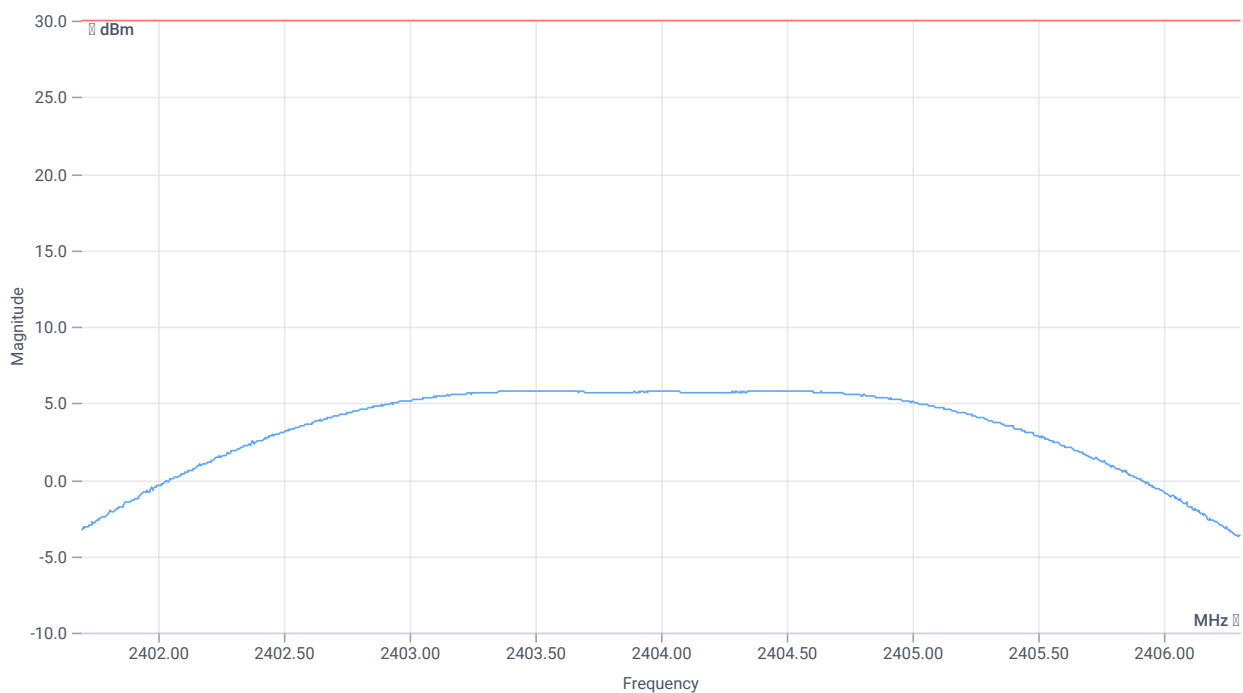
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.81 3.92 17
Start [MHz] Stop [MHz]	2401.700 2406.300
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

DTS bandwidth

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS bandwidth (6dB)	---	---	1157	kHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	15.81 3.92 22
Start [MHz] Stop [MHz]	2401.700 2406.300
RBW [MHz] VBW [MHz]	2.000000 5.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 1001 SWE



Peak output power

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	30.00	5.78	dBm	PASS
Peak power	---	1000	3.784426	mW	PASS
Frequency at peak	---	---	2403.494	MHz	INFO

Verdict

PASS

FCC 15.247 # Restricted band edge conducted peak DTS video avg (eirp) ~ BT LE 2 Msps

References

TC start	12.12.2025 10:06:43
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	6.0.5.0
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - 8.7.3 Integration Method; ANSI C63.10-2013 11.13.3.2 Peak Detection
Description	FCC 15.247 Restricted band edge conducted Peak DTS - BT LE 2 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	True TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	Yes

Equipment

Signal analyzer,Rohde&Schwarz,FSV3030,1330.5000K30/101247,1.90
Switch matrix,cetecom advanced GmbH,USM,D001,1.0.0

Test Parameter

Technology to test	BT LE 2 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2404
Frequency mid to test	True Freq [MHz] 2440
Frequency high to test	False Freq [MHz] 2478
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.9

Test Parameter

Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/
Switch bits	00000001:00000001:00000000:00000110

Antenna gain table

Freq [MHz]	Gain [dBi]
2400	3.4
2480	3.4

Test at TX 2440 MHz

RESULT: Reference power cond.

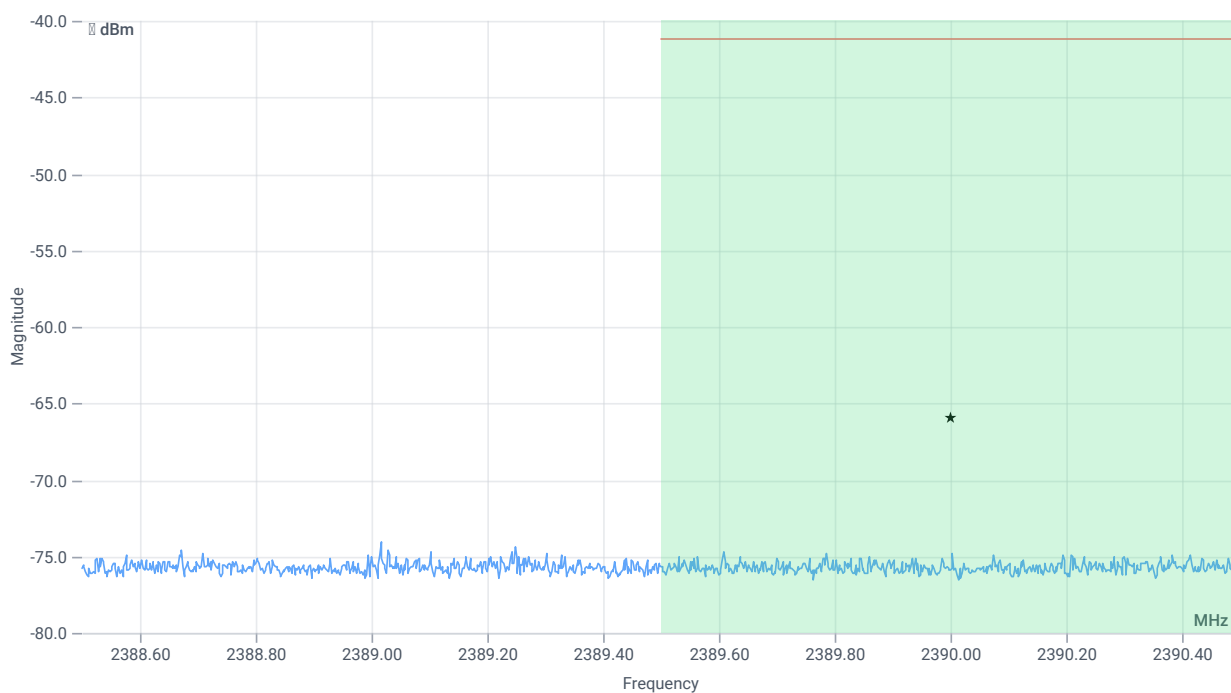
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.48	dBm	INFO
Ref. frequency	---	---	2439.500	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.48 3.97 17
Start [MHz] Stop [MHz]	2388.500 2390.500
RBW [MHz] VBW [MHz]	0.100000 0.002000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	85 300 1001 SWE

Antenna gain

Considered antenna gain [dBi]:	3.4 @ 2390 MHz
--------------------------------	----------------



Restricted band edge

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Band Power	---	-41.23	-65.99	dBm	PASS

Verdict

PASS

FCC 15.247 # TX spurious conducted 20dBc ~ BT LE 2 Msps

References

TC start	12.12.2025 09:54:55
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	6.0.5.0
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 DTS - BT LE 2 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	True TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	Yes

Equipment

Signal analyzer,Rohde&Schwarz,FSV3030,1330.5000K30/101247,1.90
Switch matrix,cetecom advanced GmbH,USM,D001,1.0.0

Test Parameter

Technology to test	BT LE 2 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2404
Frequency mid to test	True Freq [MHz] 2440
Frequency high to test	False Freq [MHz] 2478
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.9
Full path type	EUT_SA_GEN_SIG

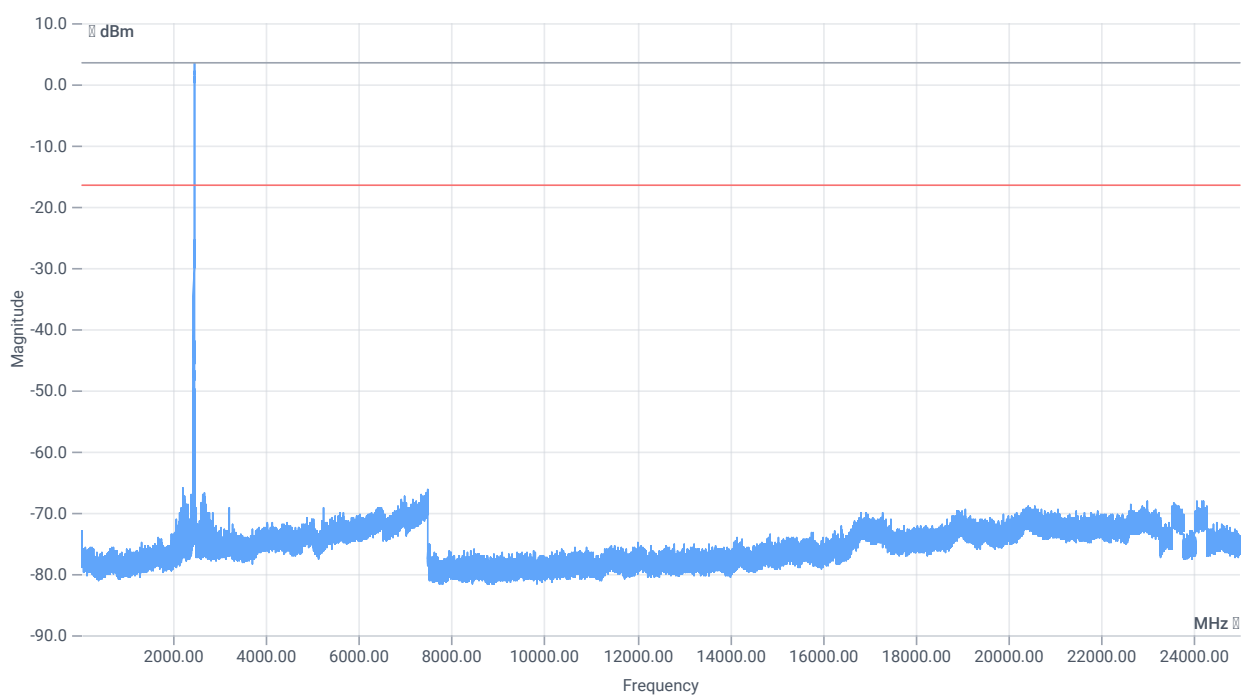
Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/
Switch bits	00000001:00000001:00000000:00000110

Test at TX 2440 MHz

RESULT: Reference power cond.

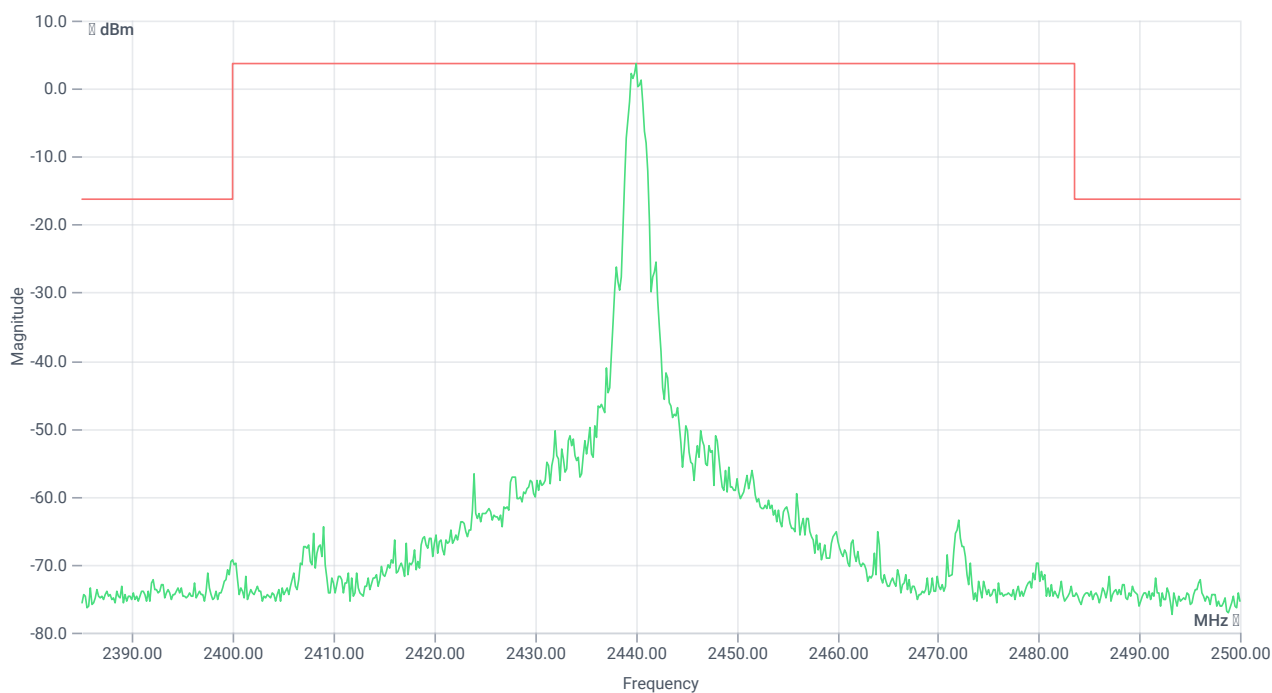
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.47	dBm	INFO
Ref. frequency	---	---	2439.500	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	5.47 12.31 4
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 @ 2440.00 MHz	---	---	3.63	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 2216 MHz	0	---	49.48	dB	INFO

Verdict

PASS

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ BT LE 2 Msps

References

TC start	12.12.2025 09:54:16
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	6.0.5.0
Standard Version	FCC 15.247, ISED RSS247 NI
Method	
Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - BT LE 2 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	True TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	Yes

Equipment

Signal analyzer,Rohde&Schwarz,FSV3030,1330.5000K30/101247,1.90
Switch matrix,cetecom advanced GmbH,USM,D001,1.0.0

Test Parameter

Technology to test	BT LE 2 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2404
Frequency mid to test	True Freq [MHz] 2440
Frequency high to test	False Freq [MHz] 2478
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.9
Full path type	EUT_SA_GEN_SIG

Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/
Switch bits	00000001:00000001:00000000:00000110

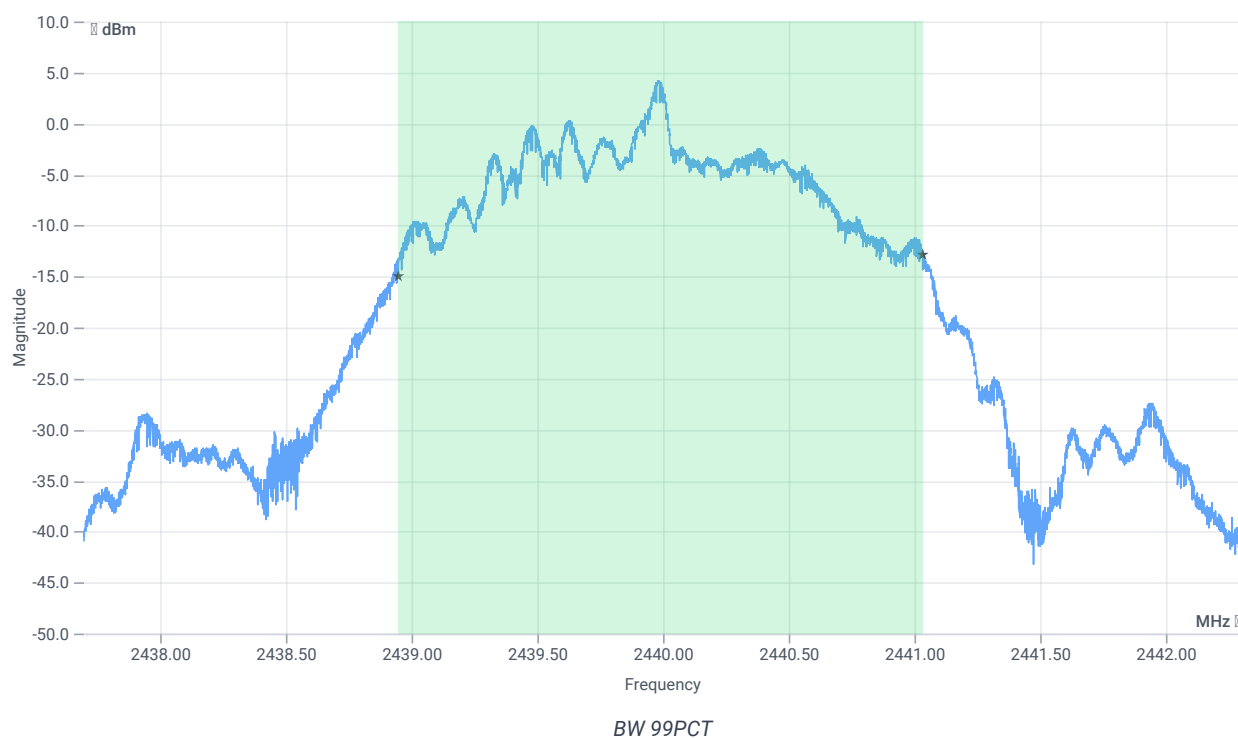
Test at TX 2440 MHz

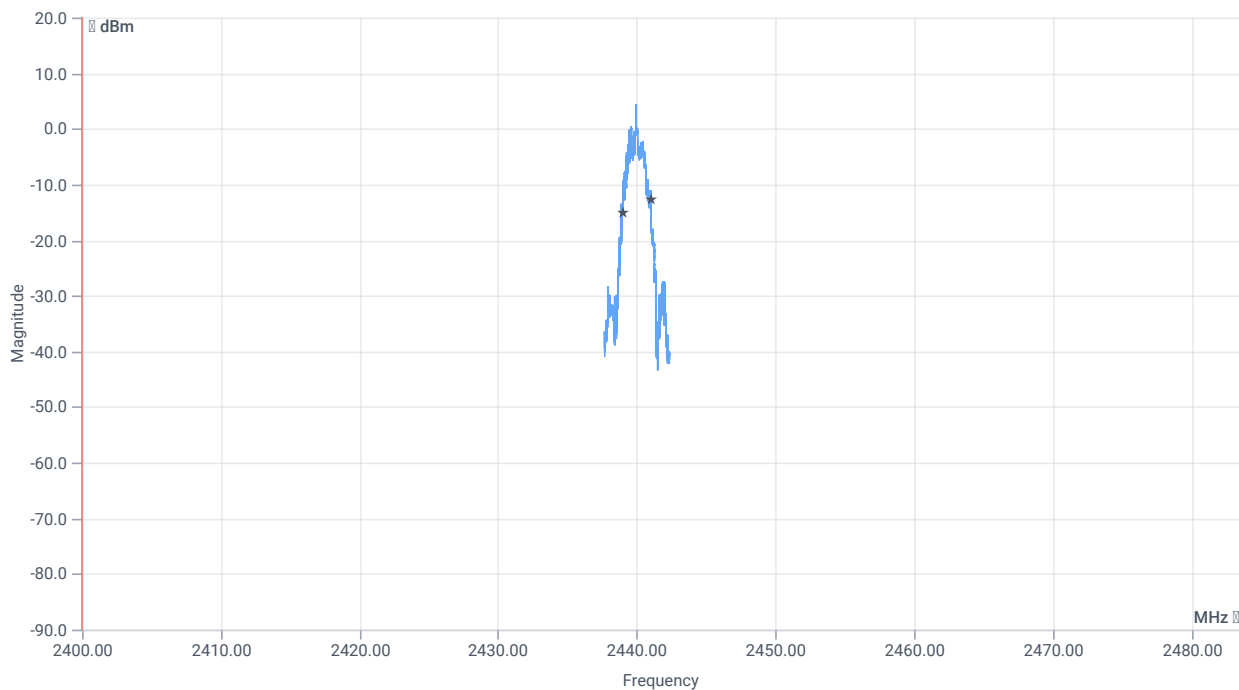
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.47	dBm	INFO
Ref. frequency	---	---	2439.500	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.47 3.97 17
Start [MHz] Stop [MHz]	2437.700 2442.300
RBW [MHz] VBW [MHz]	0.050000 0.200000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

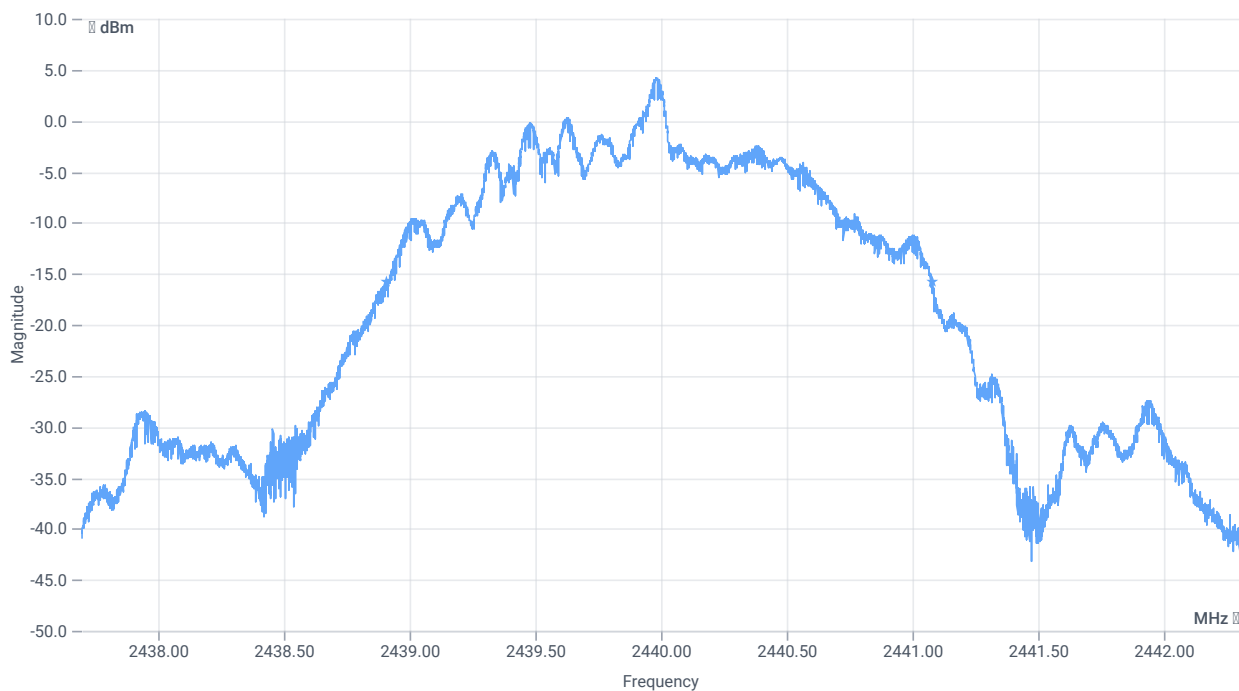




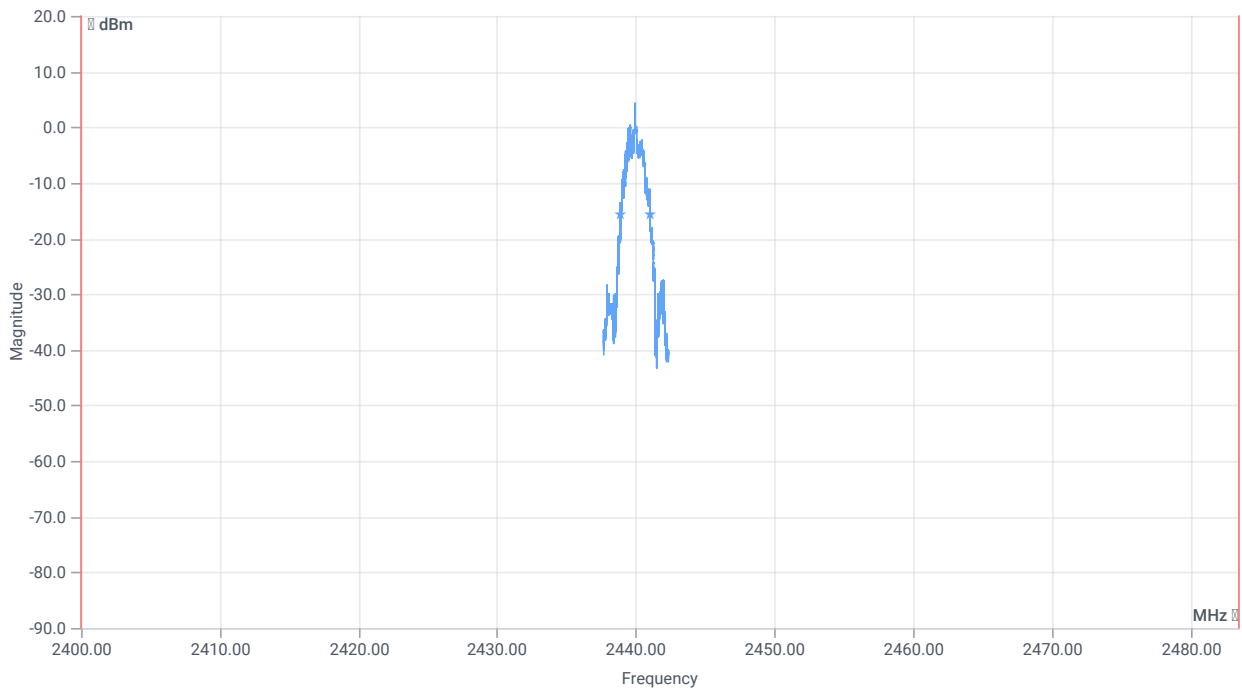
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	2082.000	kHz	INFO
T1 99%	2400.000000	---	2438.9505	MHz	PASS
T2 99%	---	2483.500000	2441.0329	MHz	PASS



BW 20dB



BW within band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	2169	kHz	INFO
T1 20dB	2400.000000	---	2438.9084	MHz	PASS
T2 20dB	---	2483.500000	2441.0773	MHz	PASS

Verdict

PASS

FCC 15.247 # Peak psd DTS ~ BT LE 2 Msps

References

TC start	12.12.2025 09:53:33
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	6.0.5.0
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 - BT LE 2 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	True TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	Yes

Equipment

Signal analyzer,Rohde&Schwarz,FSV3030,1330.5000K30/101247,1.90
Switch matrix,cetecom advanced GmbH,USM,D001,1.0.0

Test Parameter

Technology to test	BT LE 2 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2404
Frequency mid to test	True Freq [MHz] 2440
Frequency high to test	False Freq [MHz] 2478
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.9
Full path type	EUT_SA_GEN_SIG

Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/
Switch bits	00000001:00000001:00000000:00000110

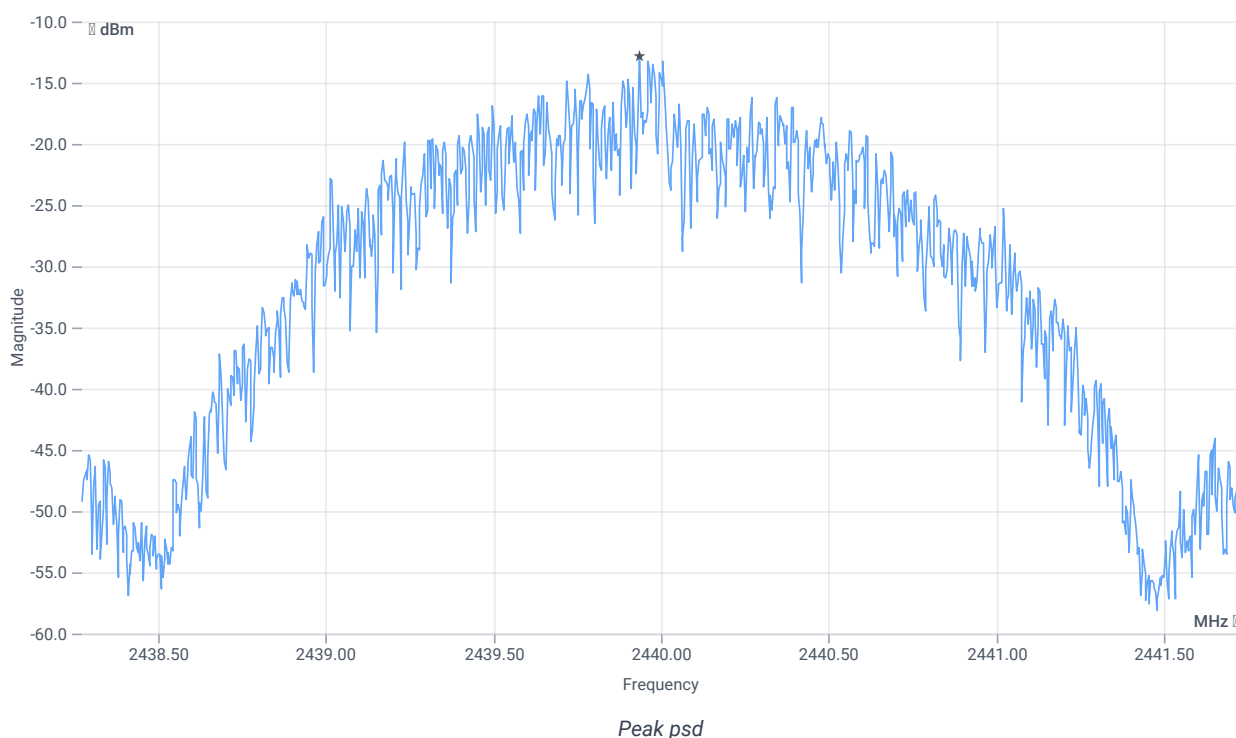
Test at TX 2440 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.47	dBm	INFO
Ref. frequency	---	---	2439.500	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.47 3.97 17
Start [MHz] Stop [MHz]	2438.275 2441.725
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	-12.78	dBm/3KHz	PASS

Verdict

PASS

FCC 15.247 # Bandwidth 6dB DTS ~ BT LE 2 Msps

References

TC start	12.12.2025 09:53:02
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	6.0.5.0
Standard Version	FCC 15.247 NI
Method	
Description	FCC 15.247 Bandwidth 6dB DTS - BT LE 2 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	True TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	Yes

Equipment

Signal analyzer,Rohde&Schwarz,FSV3030,1330.5000K30/101247,1.90
Switch matrix,cetecom advanced GmbH,USM,D001,1.0.0

Test Parameter

Technology to test	BT LE 2 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2404
Frequency mid to test	True Freq [MHz] 2440
Frequency high to test	False Freq [MHz] 2478
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.9
Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/

Test Parameter

Switch bits

00000001:00000001:00000000:00000110

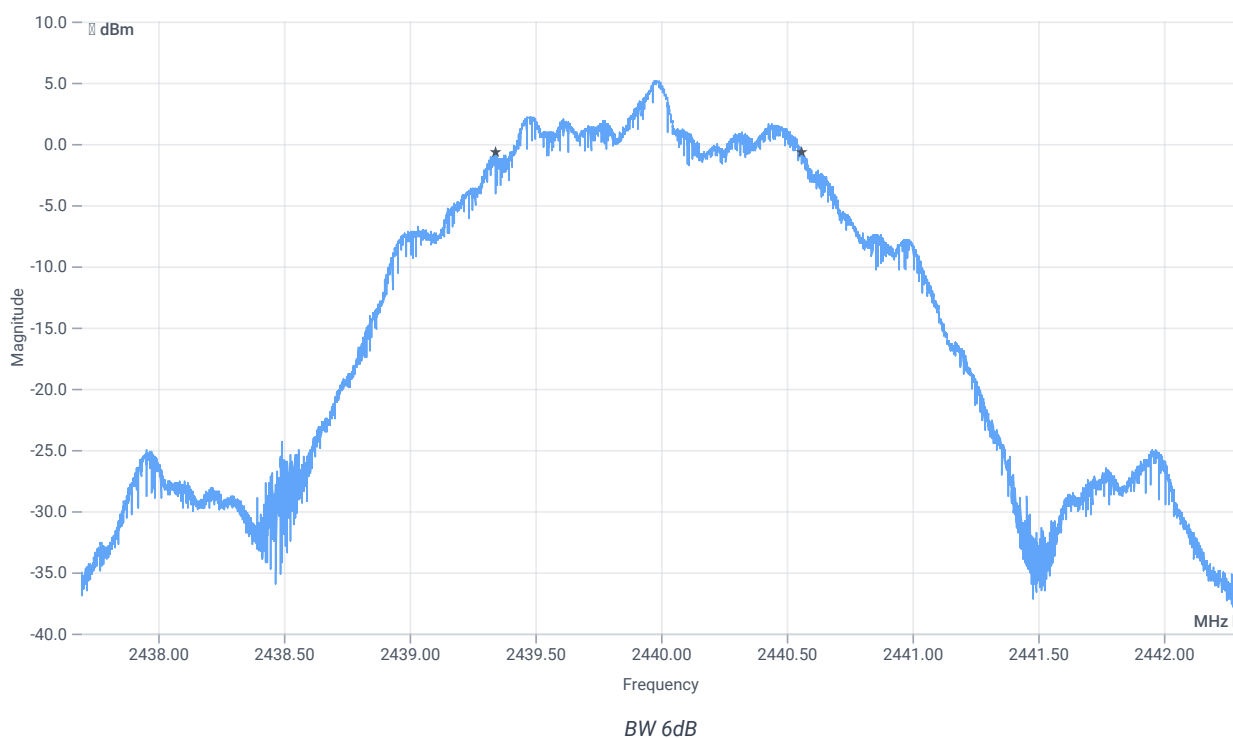
Test at TX 2440 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.47	dBm	INFO
Ref. frequency	---	---	2439.500	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.47 3.97 17
Start [MHz] Stop [MHz]	2437.700 2442.300
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	---	1216	kHz	PASS

Verdict

PASS

FCC 15.247 # Maximum peak conducted output power DTS ~ BT LE 2 Msps

References

TC start	12.12.2025 09:52:18
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	6.0.5.0
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.1 RBW ≥ DTS Bandwidth
Description	FCC 15.247 Maximum peak output power conducted DTS - BT LE 2 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	True TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	Yes

Equipment

Signal analyzer,Rohde&Schwarz,FSV3030,1330.5000K30/101247,1.90
Switch matrix,cetecom advanced GmbH,USM,D001,1.0.0

Test Parameter

Technology to test	BT LE 2 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2404
Frequency mid to test	True Freq [MHz] 2440
Frequency high to test	False Freq [MHz] 2478
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.9

Test Parameter

Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/
Switch bits	00000001:00000001:00000000:00000110

Test at TX 2440 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.49	dBm	INFO
Ref. frequency	---	---	2439.500	MHz	INFO

READ SA SETTINGS:

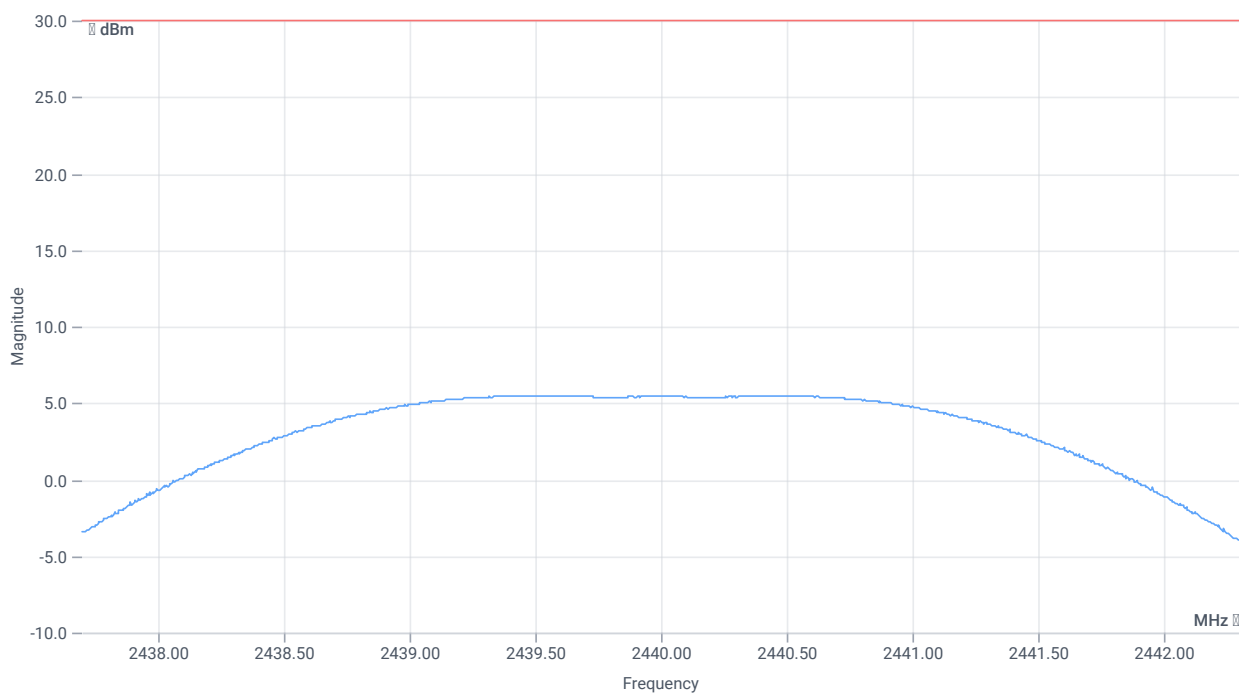
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.49 3.97 17
Start [MHz] Stop [MHz]	2437.700 2442.300
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

DTS bandwidth

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS bandwidth (6dB)	---	---	1216	kHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	15.49 3.97 22
Start [MHz] Stop [MHz]	2437.700 2442.300
RBW [MHz] VBW [MHz]	2.000000 5.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 1001 SWE



Peak output power

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	30.00	5.47	dBm	PASS
Peak power	---	1000	3.523709	mW	PASS
Frequency at peak	---	---	2439.504	MHz	INFO

Verdict

PASS

FCC 15.247 # Restricted band edge conducted peak DTS video avg (eirp) ~ BT LE 2 Msps

References

TC start	12.12.2025 10:23:48
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	6.0.5.0
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - 8.7.3 Integration Method; ANSI C63.10-2013 11.13.3.2 Peak Detection
Description	FCC 15.247 Restricted band edge conducted Peak DTS - BT LE 2 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	True TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	Yes

Equipment

Signal analyzer,Rohde&Schwarz,FSV3030,1330.5000K30/101247,1.90
Switch matrix,cetecom advanced GmbH,USM,D001,1.0.0

Test Parameter

Technology to test	BT LE 2 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2404
Frequency mid to test	False Freq [MHz] 2440
Frequency high to test	True Freq [MHz] 2478
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.9

Test Parameter

Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/
Switch bits	00000001:00000001:00000000:00000110

Antenna gain table

Freq [MHz]	Gain [dBi]
2400	3.4
2480	3.4

Test at TX 2478 MHz

RESULT: Reference power cond.

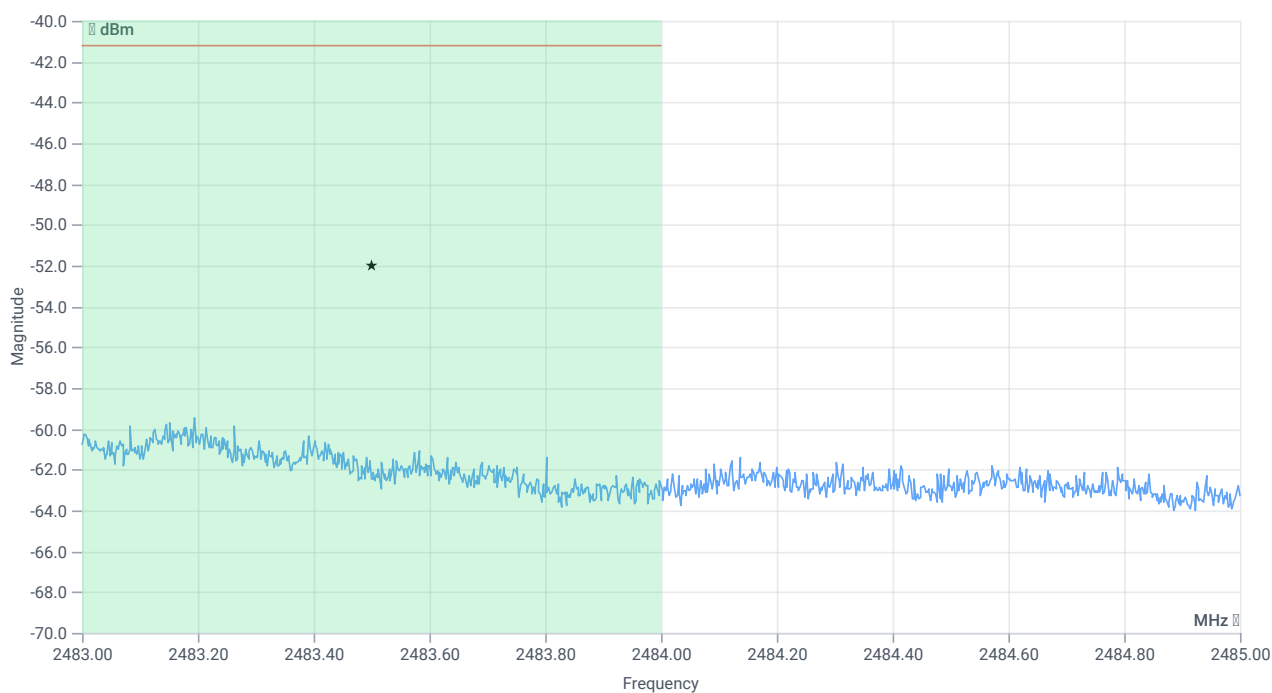
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.48	dBm	INFO
Ref. frequency	---	---	2478.500	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.48 3.98 17
Start [MHz] Stop [MHz]	2483.000 2485.000
RBW [MHz] VBW [MHz]	0.100000 0.002000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	85 300 1001 SWE

Antenna gain

Considered antenna gain [dBi]:	3.4 @ 2483.5 MHz
--------------------------------	------------------



Restricted band edge

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Band Power	---	-41.23	-52	dBm	PASS

Verdict

PASS

FCC 15.247 # TX spurious conducted 20dBc ~ BT LE 2 Msps

References

TC start	12.12.2025 10:11:58
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	6.0.5.0
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 DTS - BT LE 2 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	True TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	Yes

Equipment

Signal analyzer,Rohde&Schwarz,FSV3030,1330.5000K30/101247,1.90
Switch matrix,cetecom advanced GmbH,USM,D001,1.0.0

Test Parameter

Technology to test	BT LE 2 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2404
Frequency mid to test	False Freq [MHz] 2440
Frequency high to test	True Freq [MHz] 2478
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.9
Full path type	EUT_SA_GEN_SIG

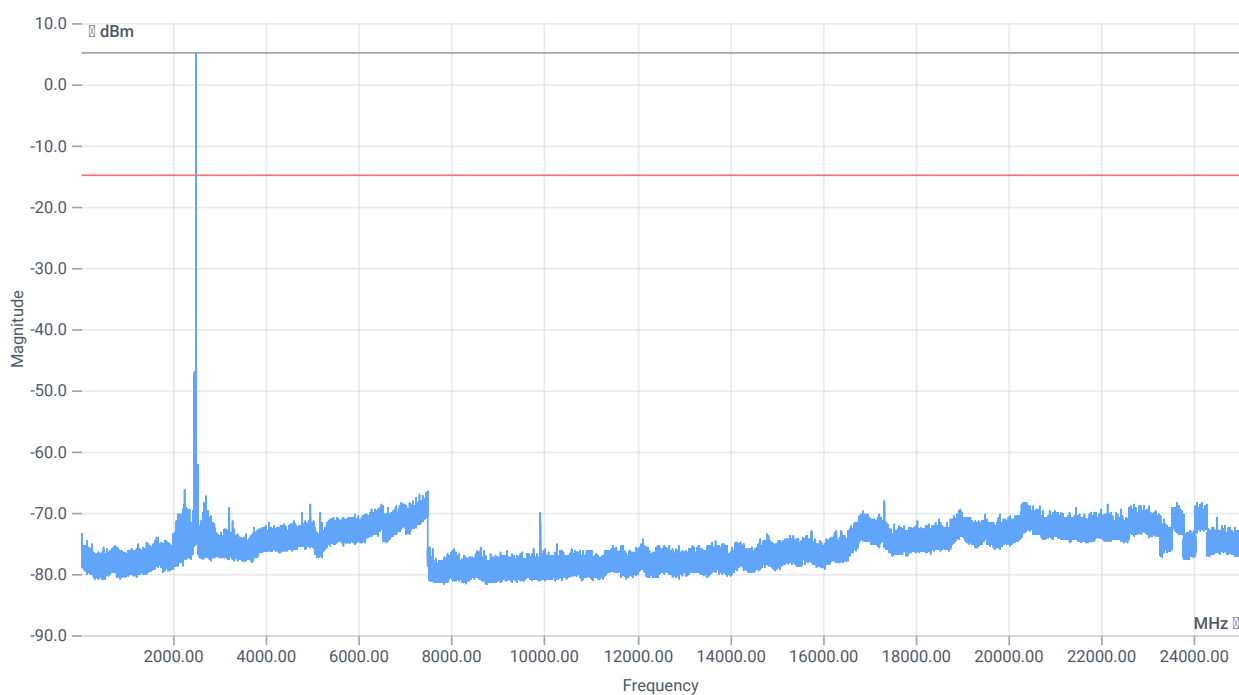
Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/
Switch bits	00000001:00000001:00000000:00000110

Test at TX 2478 MHz

RESULT: Reference power cond.

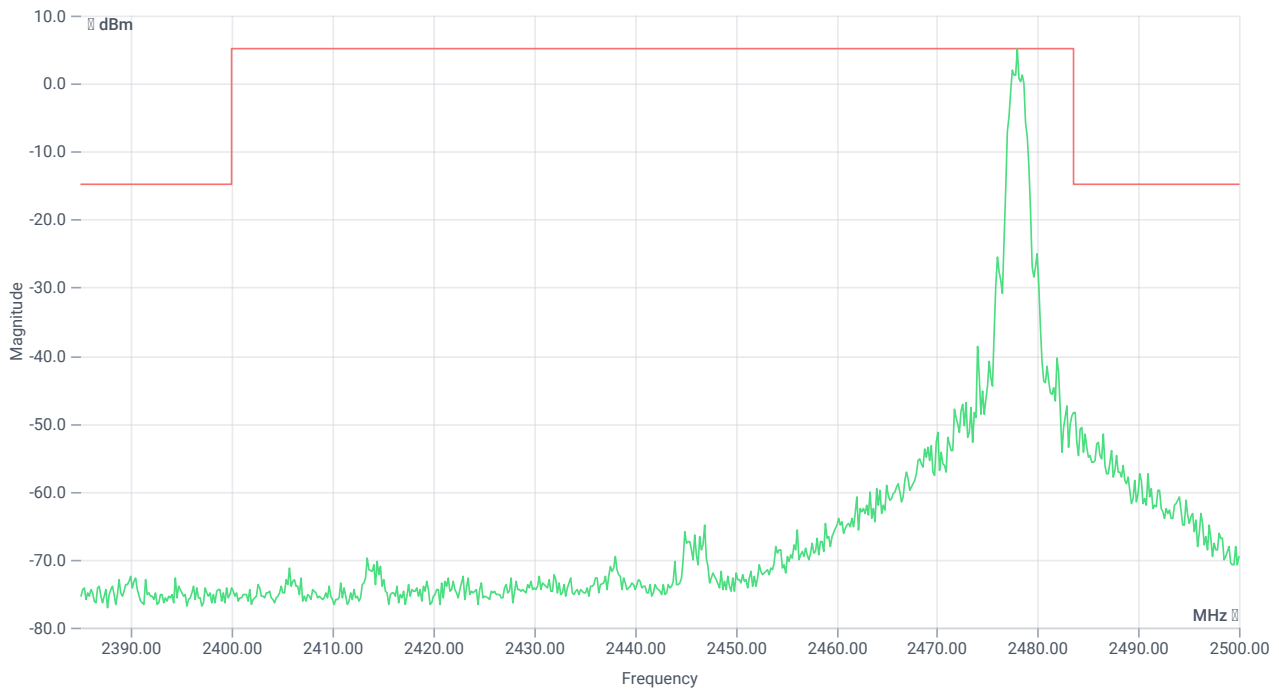
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.48	dBm	INFO
Ref. frequency	---	---	2478.500	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	5.48 12.31 4
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 @ 2478.00 MHz	---	---	5.08	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 2483.667 MHz	0	---	33.41	dB	INFO

Verdict

PASS

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ BT LE 2 Msps

References

TC start	12.12.2025 10:10:18
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	6.0.5.0
Standard Version	FCC 15.247, ISED RSS247 NI
Method	
Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - BT LE 2 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	True TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	Yes

Equipment

Signal analyzer,Rohde&Schwarz,FSV3030,1330.5000K30/101247,1.90
Switch matrix,cetecom advanced GmbH,USM,D001,1.0.0

Test Parameter

Technology to test	BT LE 2 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2404
Frequency mid to test	False Freq [MHz] 2440
Frequency high to test	True Freq [MHz] 2478
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.9
Full path type	EUT_SA_GEN_SIG

Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/
Switch bits	00000001:00000001:00000000:00000110

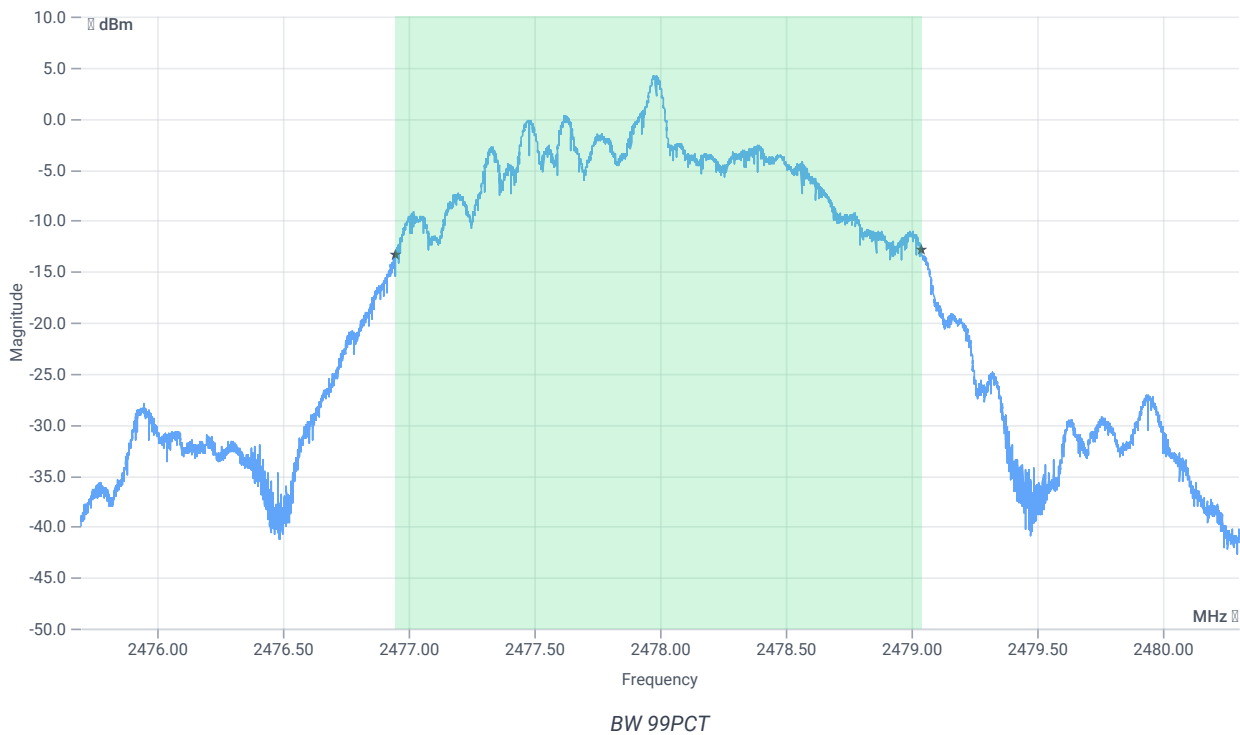
Test at TX 2478 MHz

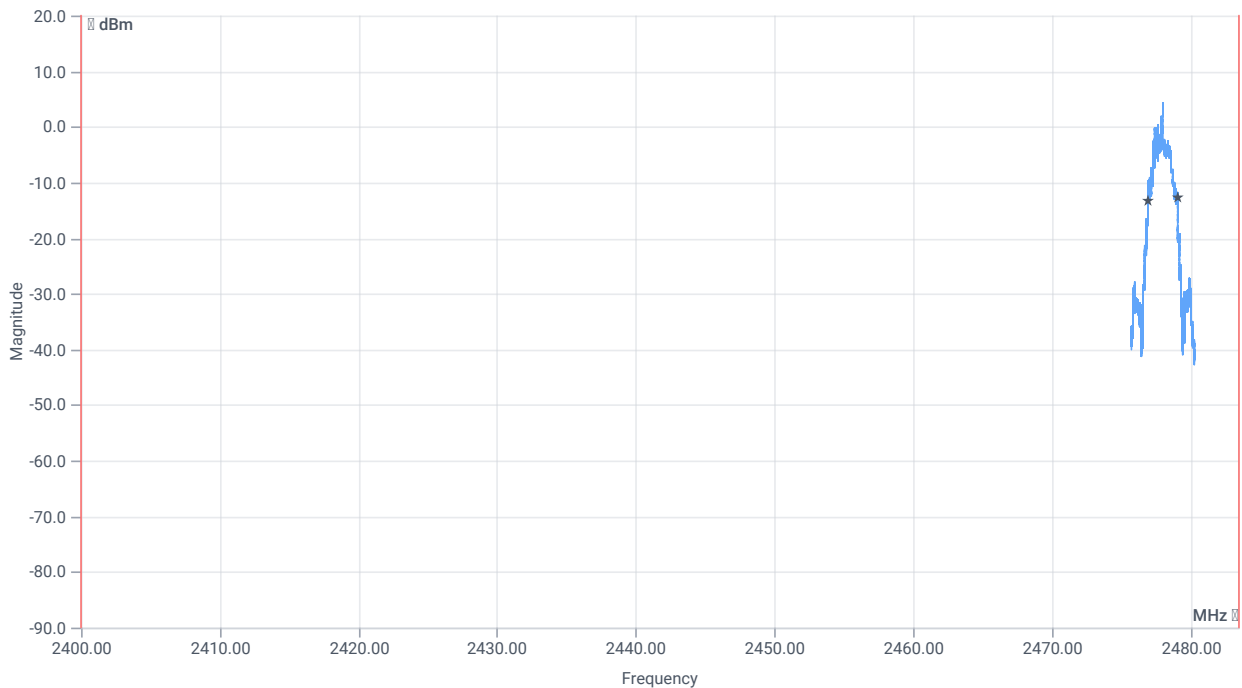
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.48	dBm	INFO
Ref. frequency	---	---	2478.500	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.48 3.98 17
Start [MHz] Stop [MHz]	2475.700 2480.300
RBW [MHz] VBW [MHz]	0.050000 0.200000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

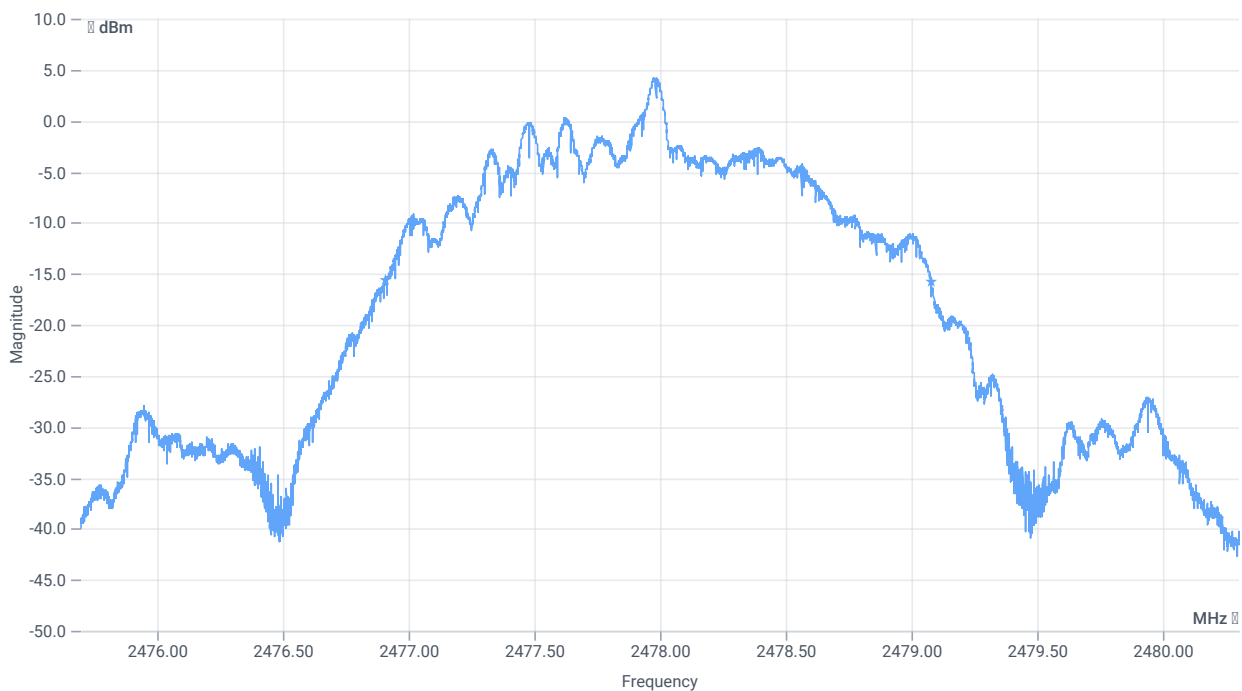




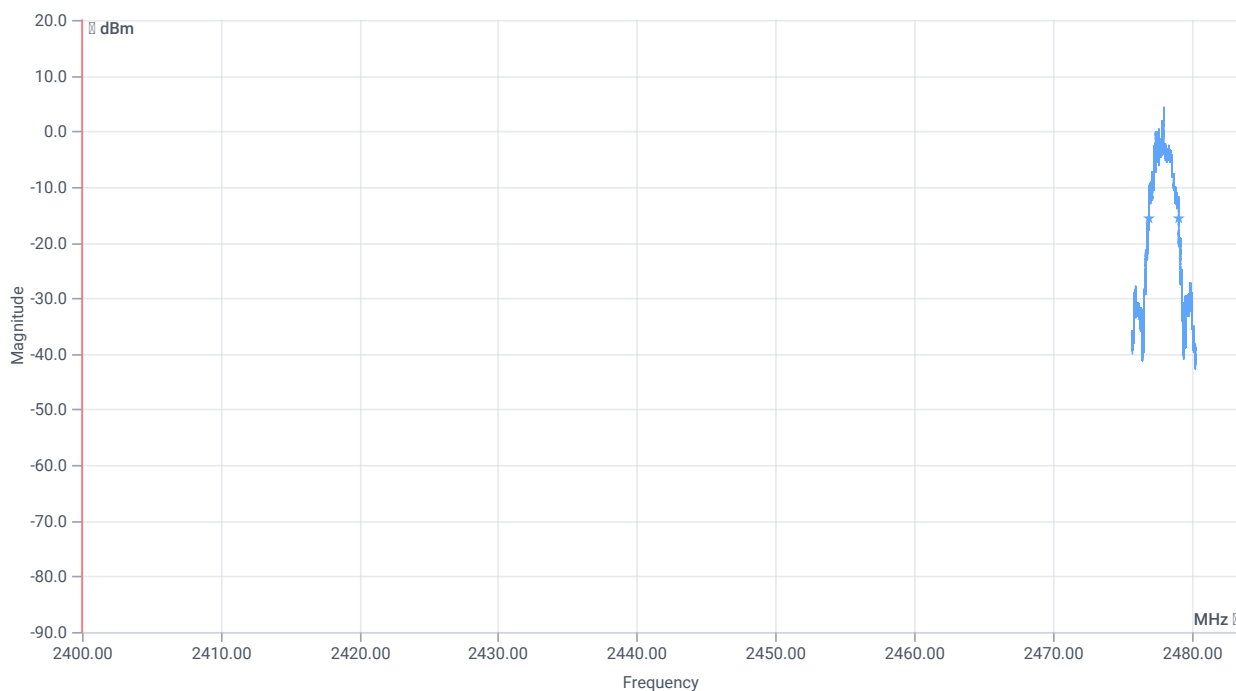
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	2086.000	kHz	INFO
T1 99%	2400.000000	---	2476.9501	MHz	PASS
T2 99%	---	2483.500000	2479.0361	MHz	PASS



BW 20dB



BW within band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	2167	kHz	INFO
T1 20dB	2400.000000	---	2476.9107	MHz	PASS
T2 20dB	---	2483.500000	2479.0778	MHz	PASS

Verdict

PASS

FCC 15.247 # Peak psd DTS ~ BT LE 2 Msps

References

TC start	12.12.2025 10:09:37
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	6.0.5.0
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 - BT LE 2 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	True TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	Yes

Equipment

Signal analyzer,Rohde&Schwarz,FSV3030,1330.5000K30/101247,1.90
Switch matrix,cetecom advanced GmbH,USM,D001,1.0.0

Test Parameter

Technology to test	BT LE 2 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2404
Frequency mid to test	False Freq [MHz] 2440
Frequency high to test	True Freq [MHz] 2478
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.9
Full path type	EUT_SA_GEN_SIG

Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/
Switch bits	00000001:00000001:00000000:00000110

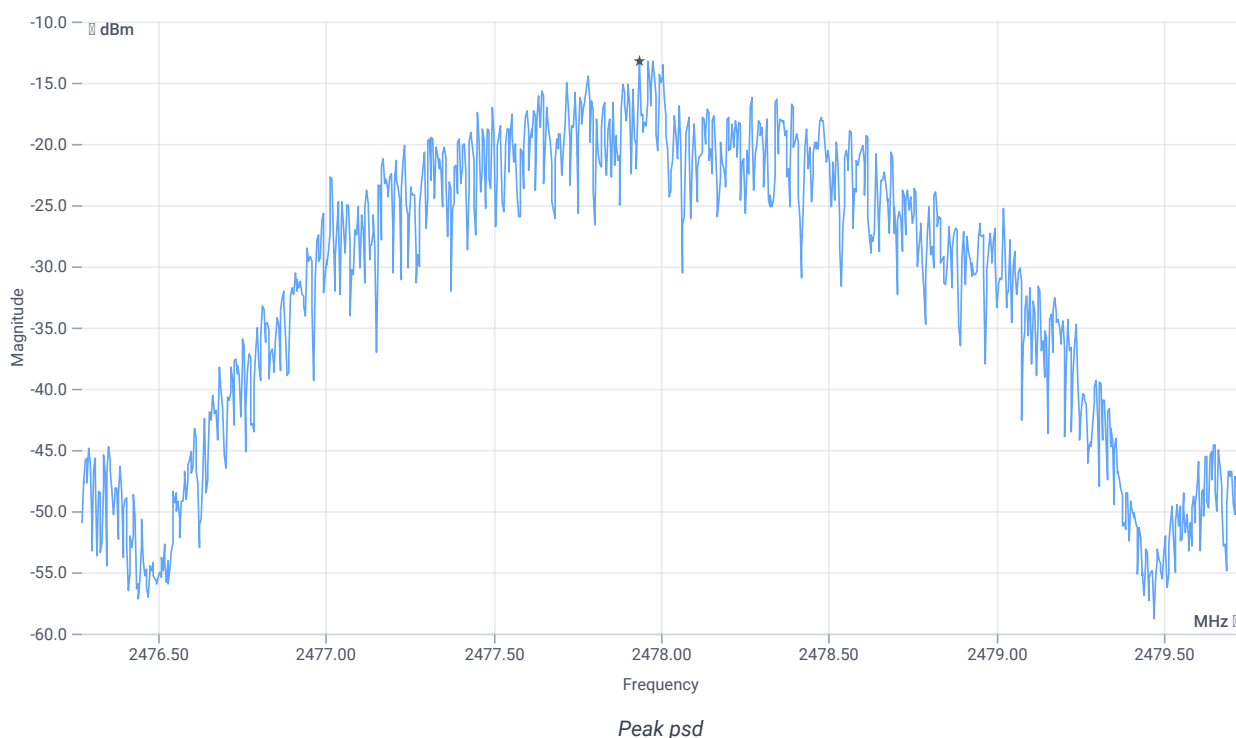
Test at TX 2478 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.48	dBm	INFO
Ref. frequency	---	---	2477.500	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.48 3.98 17
Start [MHz] Stop [MHz]	2476.275 2479.725
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	-13.23	dBm/3KHz	PASS

Verdict

PASS

FCC 15.247 # Bandwidth 6dB DTS ~ BT LE 2 Msps

References

TC start	12.12.2025 10:09:05
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	6.0.5.0
Standard Version	FCC 15.247 NI
Method	
Description	FCC 15.247 Bandwidth 6dB DTS - BT LE 2 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	True TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	Yes

Equipment

Signal analyzer,Rohde&Schwarz,FSV3030,1330.5000K30/101247,1.90
Switch matrix,cetecom advanced GmbH,USM,D001,1.0.0

Test Parameter

Technology to test	BT LE 2 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2404
Frequency mid to test	False Freq [MHz] 2440
Frequency high to test	True Freq [MHz] 2478
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.9
Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/

Test Parameter

Switch bits

00000001:00000001:00000000:00000110

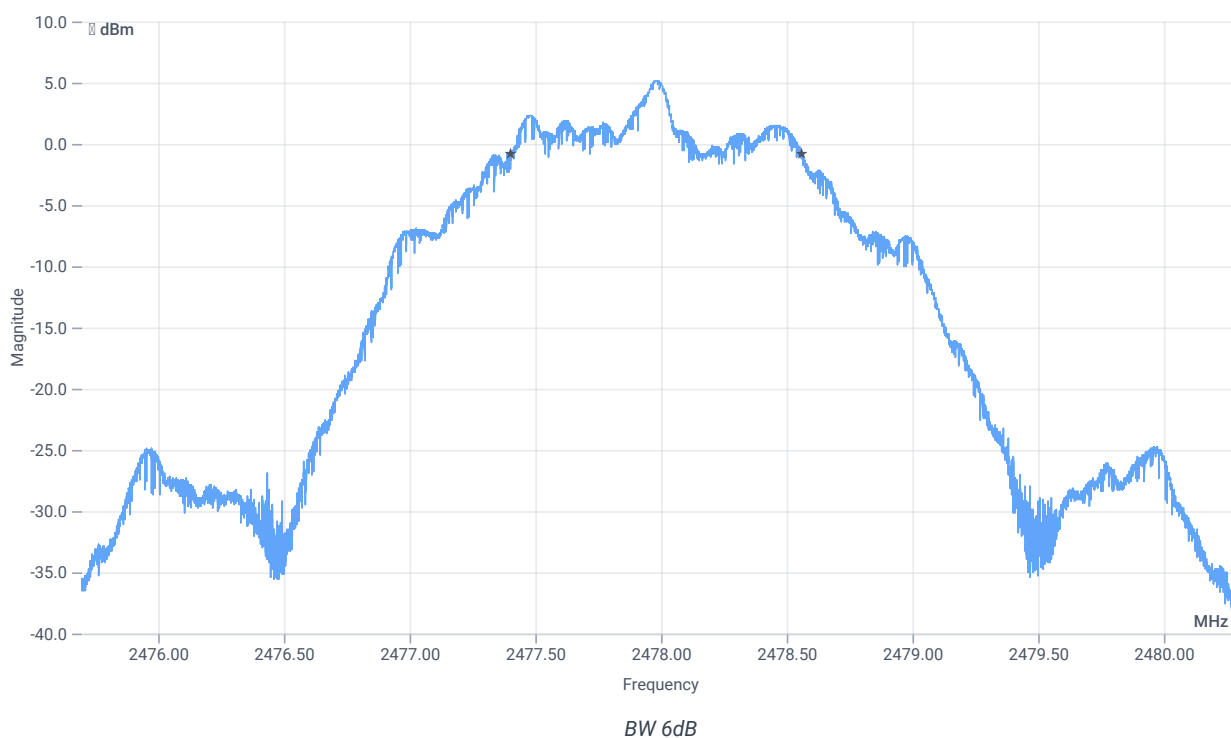
Test at TX 2478 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.48	dBm	INFO
Ref. frequency	---	---	2477.500	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.48 3.98 17
Start [MHz] Stop [MHz]	2475.700 2480.300
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	---	1157	kHz	PASS

Verdict

PASS

FCC 15.247 # Maximum peak conducted output power DTS ~ BT LE 2 Msps

References

TC start	12.12.2025 10:08:16
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	6.0.5.0
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.1 RBW ≥ DTS Bandwidth
Description	FCC 15.247 Maximum peak output power conducted DTS - BT LE 2 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	True TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	Yes

Equipment

Signal analyzer,Rohde&Schwarz,FSV3030,1330.5000K30/101247,1.90
Switch matrix,cetecom advanced GmbH,USM,D001,1.0.0

Test Parameter

Technology to test	BT LE 2 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2404
Frequency mid to test	False Freq [MHz] 2440
Frequency high to test	True Freq [MHz] 2478
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.9

Test Parameter

Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/
Switch bits	00000001:00000001:00000000:00000110

Test at TX 2478 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.49	dBm	INFO
Ref. frequency	---	---	2477.500	MHz	INFO

READ SA SETTINGS:

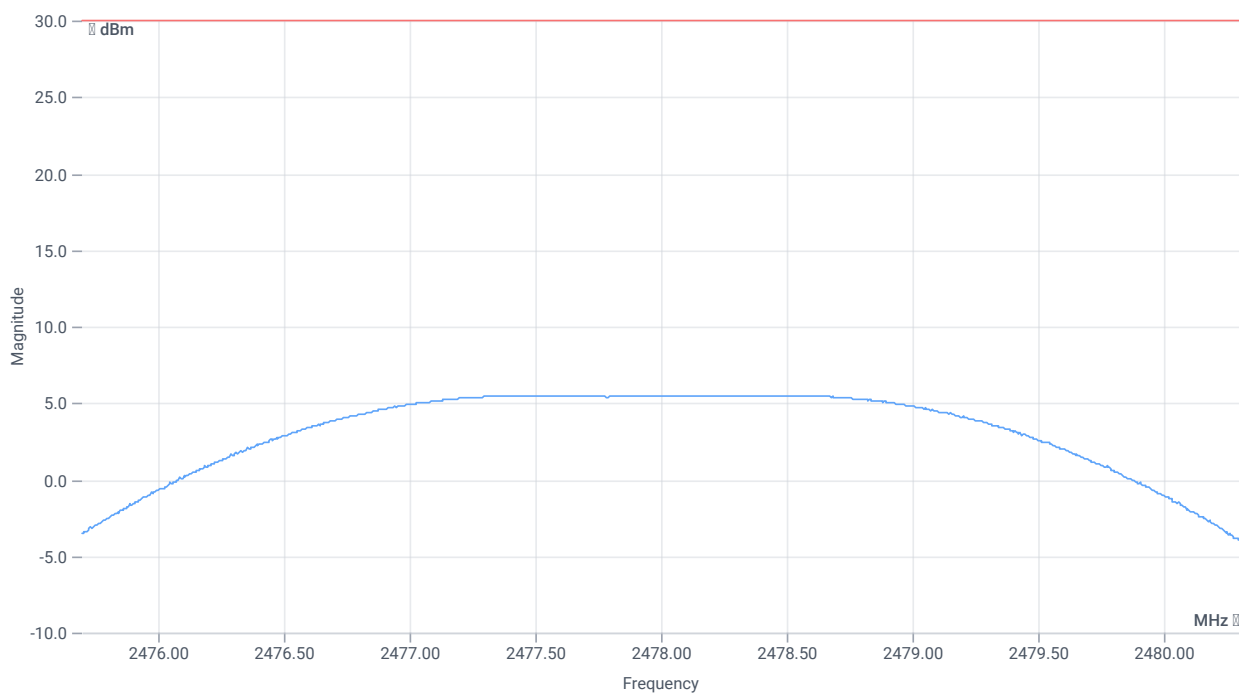
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.49 3.98 17
Start [MHz] Stop [MHz]	2475.700 2480.300
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

DTS bandwidth

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS bandwidth (6dB)	---	---	1225	kHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	15.49 3.98 22
Start [MHz] Stop [MHz]	2475.700 2480.300
RBW [MHz] VBW [MHz]	2.000000 5.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 1001 SWE



Peak output power

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	30.00	5.5	dBm	PASS
Peak power	---	1000	3.548134	mW	PASS
Frequency at peak	---	---	2478.487	MHz	INFO

Verdict

PASS

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