

Conducted test results

No.1-8800-24-01-06_TR1-A201-R01

January 21, 2025

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

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Authorized

Andreas Curette
Lab Manager
Radio Labs

Table of Content

FCC 15.247 # Maximum peak conducted output power DTS ~ BT LE 1 Msps	3
FCC 15.247 # Maximum peak conducted output power DTS ~ BT LE 1 Msps	7
FCC 15.247 # Maximum peak conducted output power DTS ~ BT LE 1 Msps	11
FCC 15.247 # Maximum peak conducted output power DTS ~ BT LE 2 Msps	15
FCC 15.247 # Maximum peak conducted output power DTS ~ BT LE 2 Msps	19
FCC 15.247 # Maximum peak conducted output power DTS ~ BT LE 2 Msps	23
FCC 15.247 # Peak psd DTS ~ BT LE 1 Msps	27
FCC 15.247 # Peak psd DTS ~ BT LE 1 Msps	30
FCC 15.247 # Peak psd DTS ~ BT LE 1 Msps	33
FCC 15.247 # Peak psd DTS ~ BT LE 2 Msps	36
FCC 15.247 # Peak psd DTS ~ BT LE 2 Msps	39
FCC 15.247 # Peak psd DTS ~ BT LE 2 Msps	42
FCC 15.247 # Bandwidth 6dB DTS ~ BT LE 1 Msps	45
FCC 15.247 # Bandwidth 6dB DTS ~ BT LE 1 Msps	48
FCC 15.247 # Bandwidth 6dB DTS ~ BT LE 1 Msps	51
FCC 15.247 # Bandwidth 6dB DTS ~ BT LE 2 Msps	54
FCC 15.247 # Bandwidth 6dB DTS ~ BT LE 2 Msps	57
FCC 15.247 # Bandwidth 6dB DTS ~ BT LE 2 Msps	60
FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ BT LE 1 Msps	63
FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ BT LE 1 Msps	68
FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ BT LE 1 Msps	73
FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ BT LE 2 Msps	78
FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ BT LE 2 Msps	83
FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ BT LE 2 Msps	88
FCC 15.247 # TX spurious conducted 20dBc ~ BT LE 1 Msps	93
FCC 15.247 # TX spurious conducted 20dBc ~ BT LE 1 Msps	97
FCC 15.247 # TX spurious conducted 20dBc ~ BT LE 1 Msps	101
FCC 15.247 # TX spurious conducted 20dBc ~ BT LE 2 Msps	105
FCC 15.247 # TX spurious conducted 20dBc ~ BT LE 2 Msps	109
FCC 15.247 # TX spurious conducted 20dBc ~ BT LE 2 Msps	113

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

References

TC start	16.01.2025 13:20:20
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.5.0
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 37 RXpayload 37
2 Mbps supported	True TXpayload 37 RXpayload 37
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,FSV-30,1321.3008K30/103809,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

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]	0.7

Test Parameter

Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

Test at TX 2402 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	-1.74	dBm	INFO
Ref. frequency	---	---	2402.200	MHz	INFO

READ SA SETTINGS:

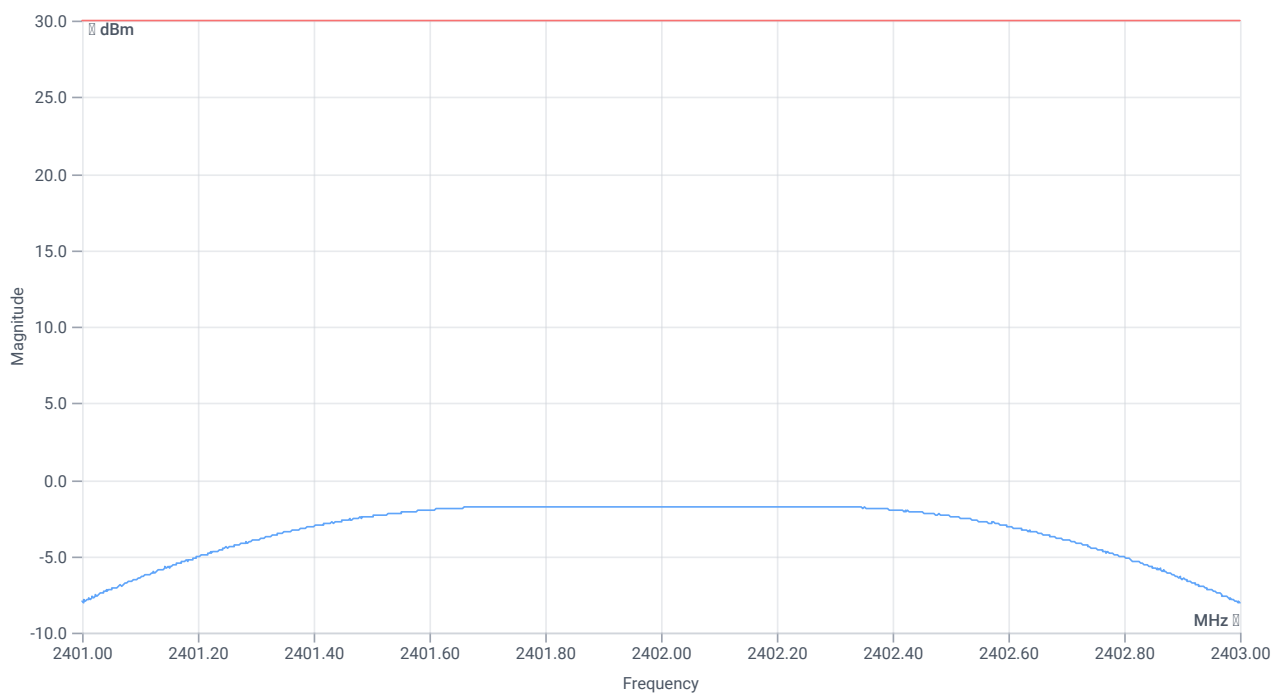
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	3.26 8.85 10
Start [MHz] Stop [MHz]	2401.000 2403.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

DTS bandwidth

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

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	8.26 8.85 15
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	-1.75	dBm	PASS
Peak power	---	1000	0.668344	mW	PASS
Frequency at peak	---	---	2402.248	MHz	INFO

Verdict

PASS

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

References

TC start	16.01.2025 13:39:11
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.5.0
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 37 RXpayload 37
2 Mbps supported	True TXpayload 37 RXpayload 37
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,FSV-30,1321.3008K30/103809,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

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]	0.7

Test Parameter

Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

Test at TX 2440 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	-1.30	dBm	INFO
Ref. frequency	---	---	2439.700	MHz	INFO

READ SA SETTINGS:

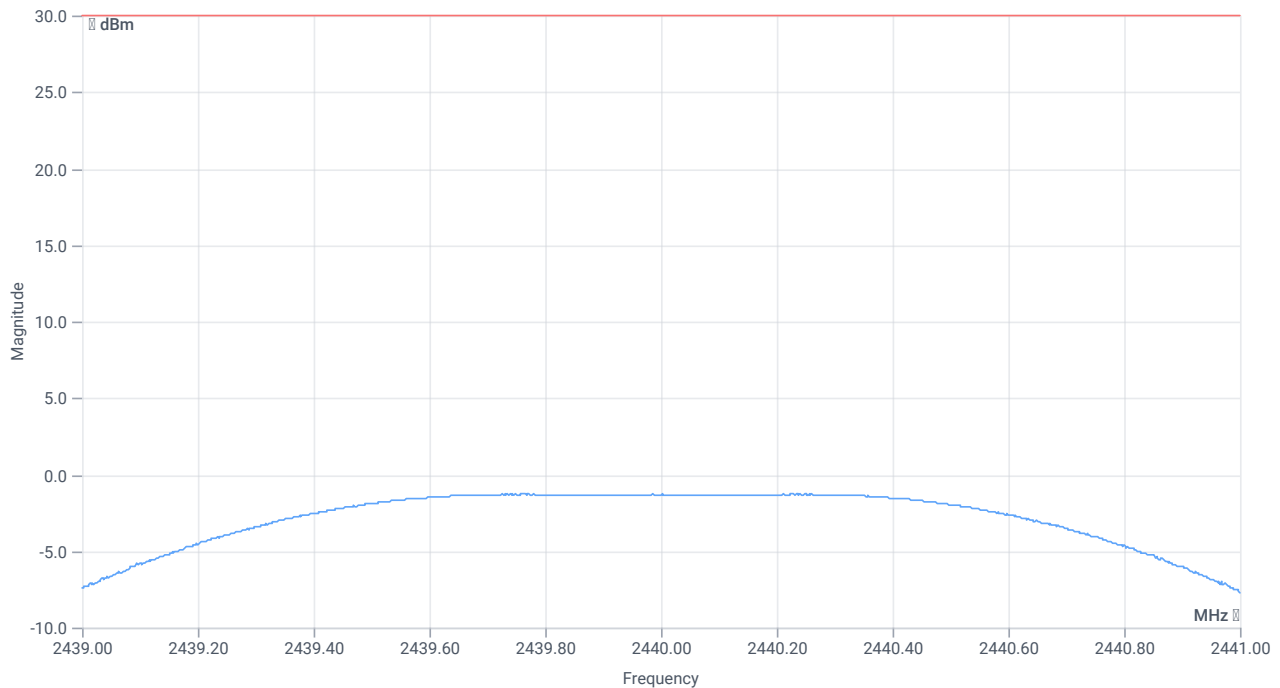
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	3.70 8.94 10
Start [MHz] Stop [MHz]	2439.000 2441.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

DTS bandwidth

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS bandwidth (6dB)	---	---	705	kHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	8.70 8.94 15
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	-1.28	dBm	PASS
Peak power	---	1000	0.744732	mW	PASS
Frequency at peak	---	---	2439.748	MHz	INFO

Verdict

PASS

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

References

TC start	16.01.2025 13:56:36
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.5.0
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 37 RXpayload 37
2 Mbps supported	True TXpayload 37 RXpayload 37
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,FSV-30,1321.3008K30/103809,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

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]	0.7

Test Parameter

Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

Test at TX 2480 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	-2.06	dBm	INFO
Ref. frequency	---	---	2479.800	MHz	INFO

READ SA SETTINGS:

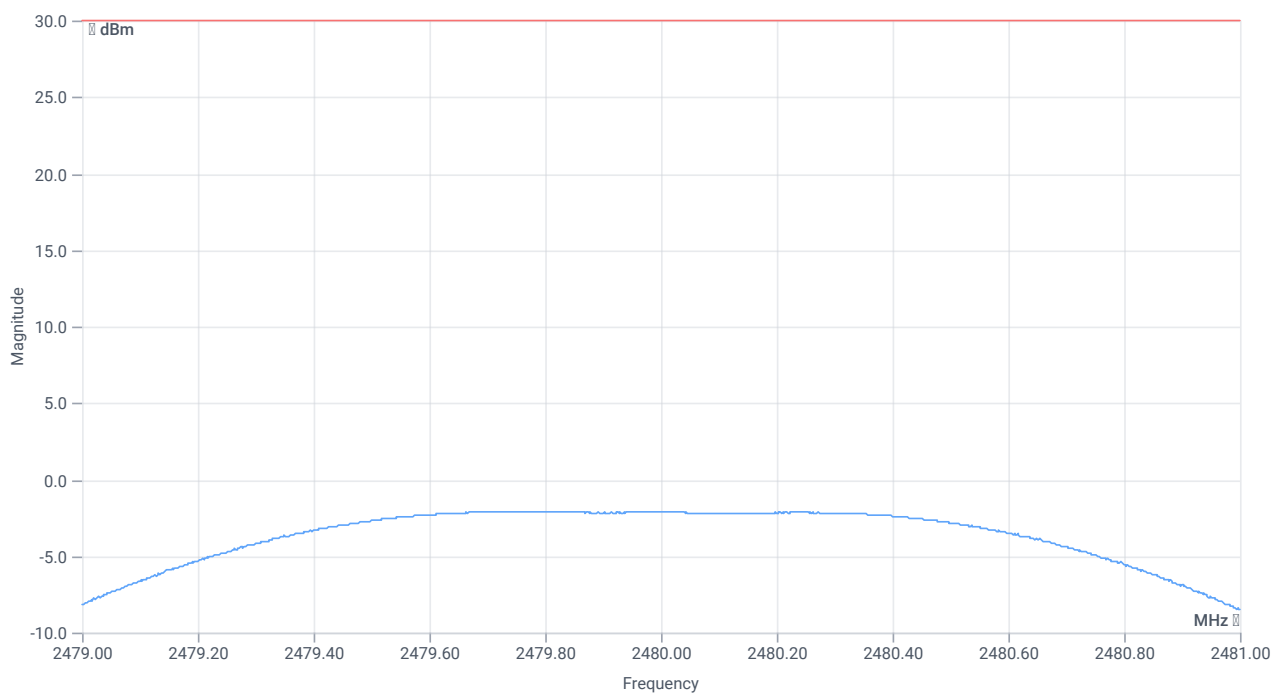
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	2.94 9.03 10
Start [MHz] Stop [MHz]	2479.000 2481.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

DTS bandwidth

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS bandwidth (6dB)	---	---	710	kHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	7.94 9.03 15
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	-2.11	dBm	PASS
Peak power	---	1000	0.615177	mW	PASS
Frequency at peak	---	---	2479.736	MHz	INFO

Verdict

PASS

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

References

TC start	16.01.2025 14:15:49
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.5.0
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 37 RXpayload 37
2 Mbps supported	True TXpayload 37 RXpayload 37
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,FSV-30,1321.3008K30/103809,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

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]	0.7

Test Parameter

Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

Test at TX 2404 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	-1.69	dBm	INFO
Ref. frequency	---	---	2404.500	MHz	INFO

READ SA SETTINGS:

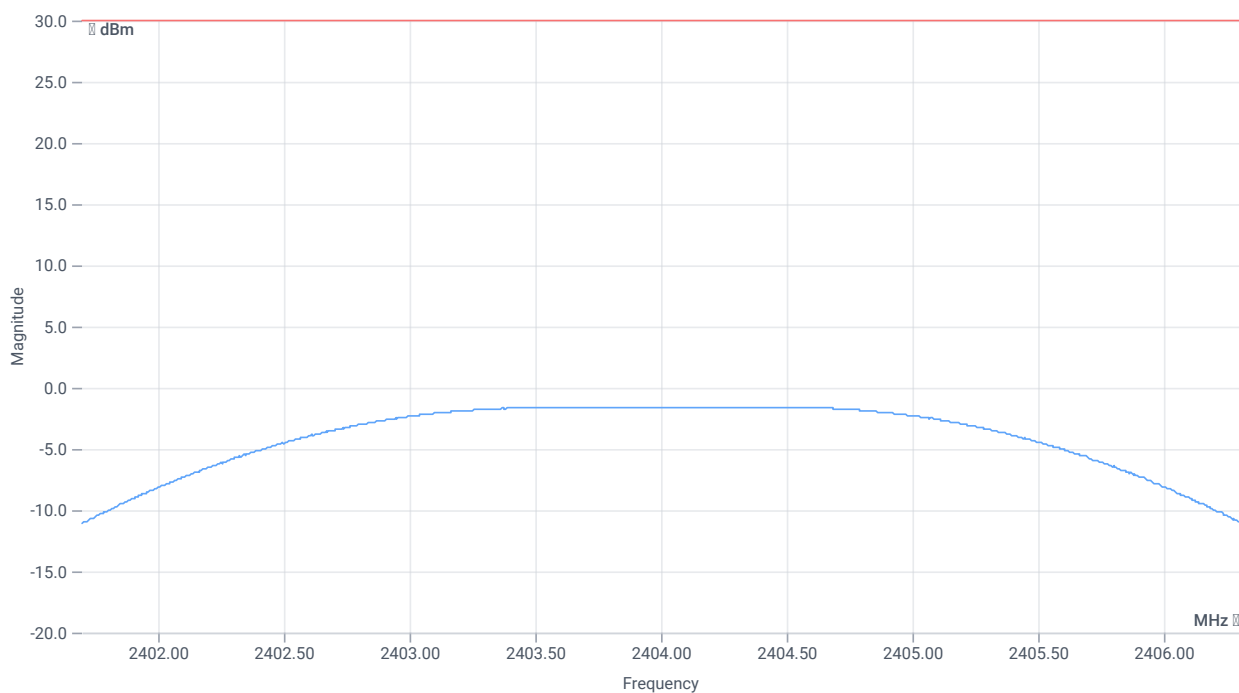
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	3.31 8.86 10
Start [MHz] Stop [MHz]	2401.700 2406.300
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

DTS bandwidth

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS bandwidth (6dB)	---	---	1164	kHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	8.31 8.86 15
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	-1.59	dBm	PASS
Peak power	---	1000	0.693426	mW	PASS
Frequency at peak	---	---	2404.492	MHz	INFO

Verdict

PASS

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

References

TC start	16.01.2025 14:37:00
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.5.0
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 37 RXpayload 37
2 Mbps supported	True TXpayload 37 RXpayload 37
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,FSV-30,1321.3008K30/103809,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

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]	0.7

Test Parameter

Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

Test at TX 2440 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	-1.47	dBm	INFO
Ref. frequency	---	---	2440.600	MHz	INFO

READ SA SETTINGS:

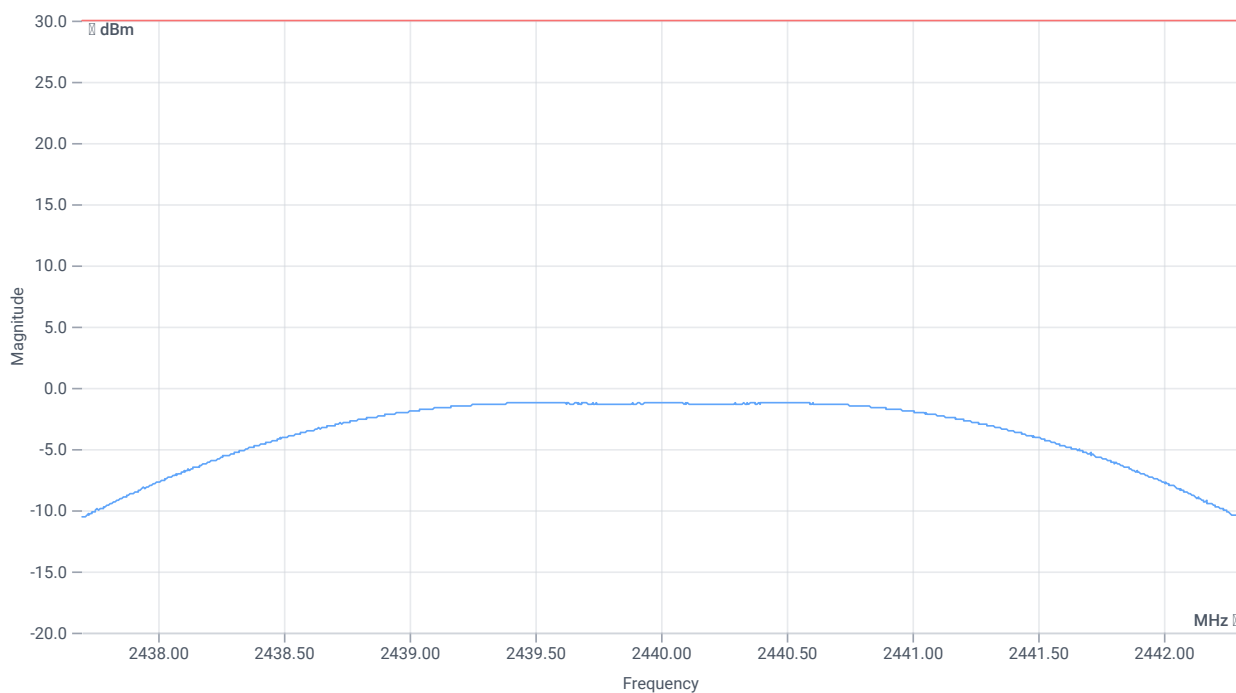
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	3.53 8.94 10
Start [MHz] Stop [MHz]	2437.700 2442.300
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

DTS bandwidth

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS bandwidth (6dB)	---	---	1167	kHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	8.53 8.94 15
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	-1.25	dBm	PASS
Peak power	---	1000	0.749894	mW	PASS
Frequency at peak	---	---	2439.472	MHz	INFO

Verdict

PASS

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

References

TC start	16.01.2025 14:54:25
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.5.0
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 37 RXpayload 37
2 Mbps supported	True TXpayload 37 RXpayload 37
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,FSV-30,1321.3008K30/103809,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

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]	0.7

Test Parameter

Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

Test at TX 2478 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	-2.06	dBm	INFO
Ref. frequency	---	---	2478.500	MHz	INFO

READ SA SETTINGS:

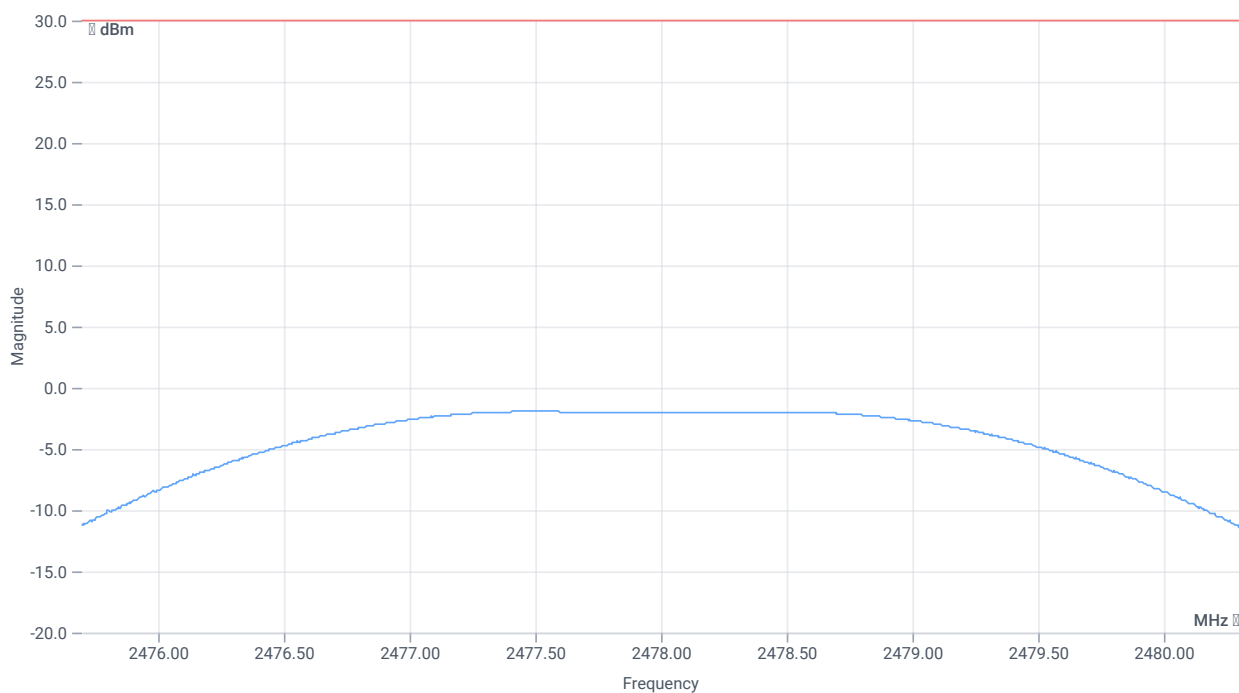
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	2.94 9.03 10
Start [MHz] Stop [MHz]	2475.700 2480.300
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

DTS bandwidth

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS bandwidth (6dB)	---	---	1167	kHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	7.94 9.03 15
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	-1.93	dBm	PASS
Peak power	---	1000	0.64121	mW	PASS
Frequency at peak	---	---	2477.485	MHz	INFO

Verdict

PASS

FCC 15.247 # Peak psd DTS ~ BT LE 1 Msps

References

TC start	16.01.2025 13:22:53
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.5.0
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 37 RXpayload 37
2 Mbps supported	True TXpayload 37 RXpayload 37
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,FSV-30,1321.3008K30/103809,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

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]	0.7
Full path type	EUT_SA_GEN_SIG

Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

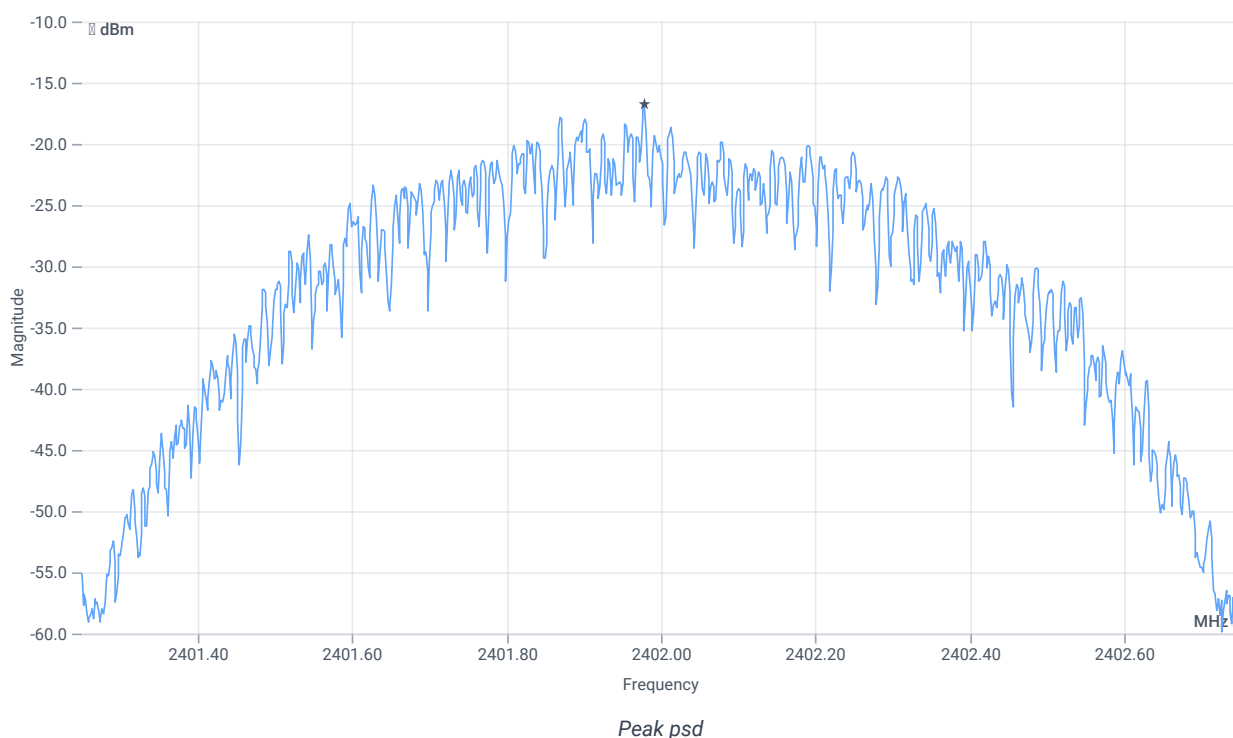
Test at TX 2402 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	-1.71	dBm	INFO
Ref. frequency	---	---	2402.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	3.29 8.85 10
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	-16.77	dBm/3KHz	PASS

Verdict

PASS

FCC 15.247 # Peak psd DTS ~ BT LE 1 Msps

References

TC start	16.01.2025 13:40:34
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.5.0
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 37 RXpayload 37
2 Mbps supported	True TXpayload 37 RXpayload 37
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,FSV-30,1321.3008K30/103809,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

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]	0.7
Full path type	EUT_SA_GEN_SIG

Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

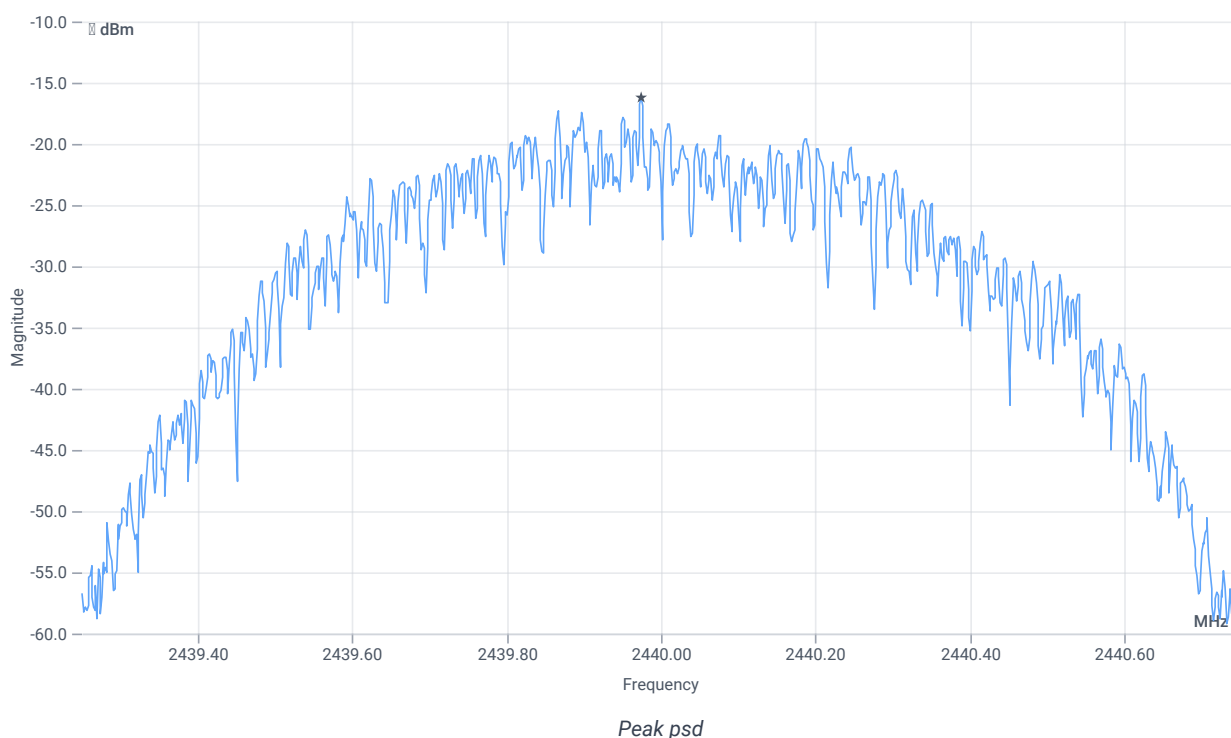
Test at TX 2440 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	-1.34	dBm	INFO
Ref. frequency	---	---	2439.700	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	3.66 8.94 10
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	-16.24	dBm/3KHz	PASS

Verdict

PASS

FCC 15.247 # Peak psd DTS ~ BT LE 1 Msps

References

TC start	16.01.2025 13:59:07
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.5.0
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 37 RXpayload 37
2 Mbps supported	True TXpayload 37 RXpayload 37
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,FSV-30,1321.3008K30/103809,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

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]	0.7
Full path type	EUT_SA_GEN_SIG

Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

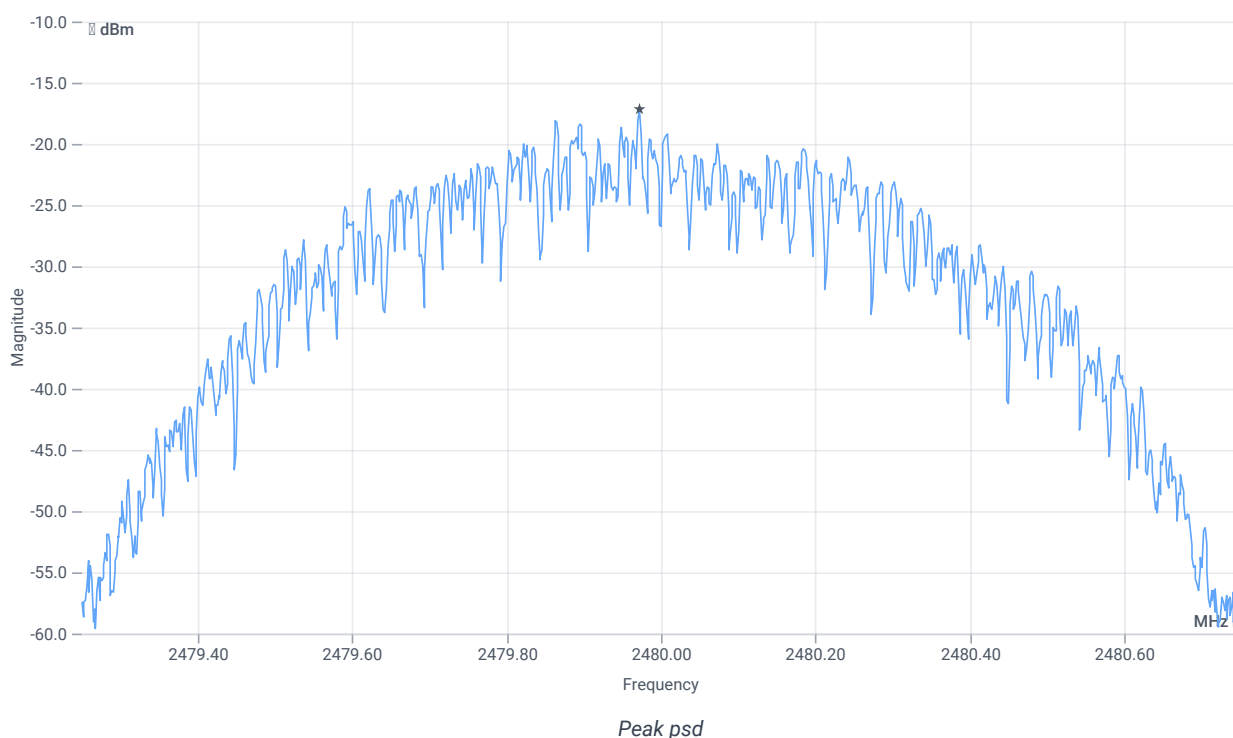
Test at TX 2480 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	-2.10	dBm	INFO
Ref. frequency	---	---	2479.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	2.90 9.03 10
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	-17.14	dBm/3KHz	PASS

Verdict

PASS

FCC 15.247 # Peak psd DTS ~ BT LE 2 Msps

References

TC start	16.01.2025 14:21:46
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.5.0
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 37 RXpayload 37
2 Mbps supported	True TXpayload 37 RXpayload 37
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,FSV-30,1321.3008K30/103809,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

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]	0.7
Full path type	EUT_SA_GEN_SIG

Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

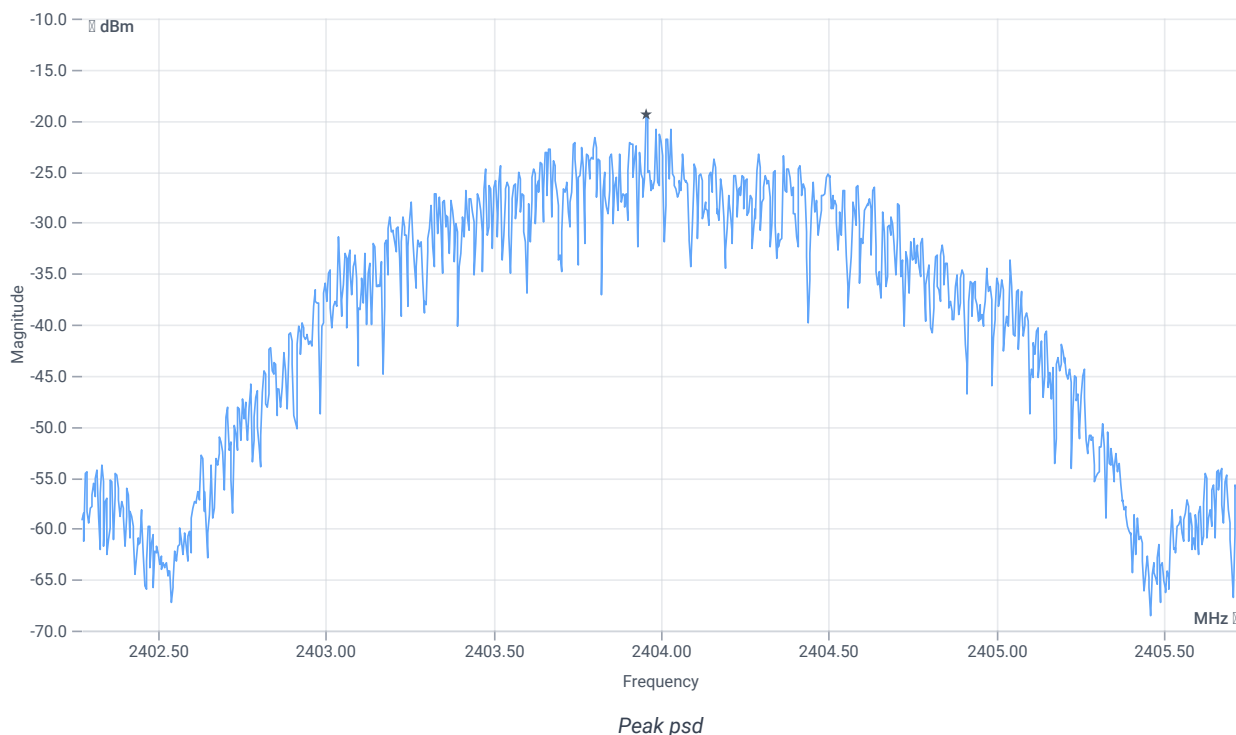
Test at TX 2404 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	-1.71	dBm	INFO
Ref. frequency	---	---	2403.500	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	3.29 8.86 10
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	-19.46	dBm/3KHz	PASS

Verdict

PASS

FCC 15.247 # Peak psd DTS ~ BT LE 2 Msps

References

TC start	16.01.2025 14:38:29
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.5.0
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 37 RXpayload 37
2 Mbps supported	True TXpayload 37 RXpayload 37
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,FSV-30,1321.3008K30/103809,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

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]	0.7
Full path type	EUT_SA_GEN_SIG

Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

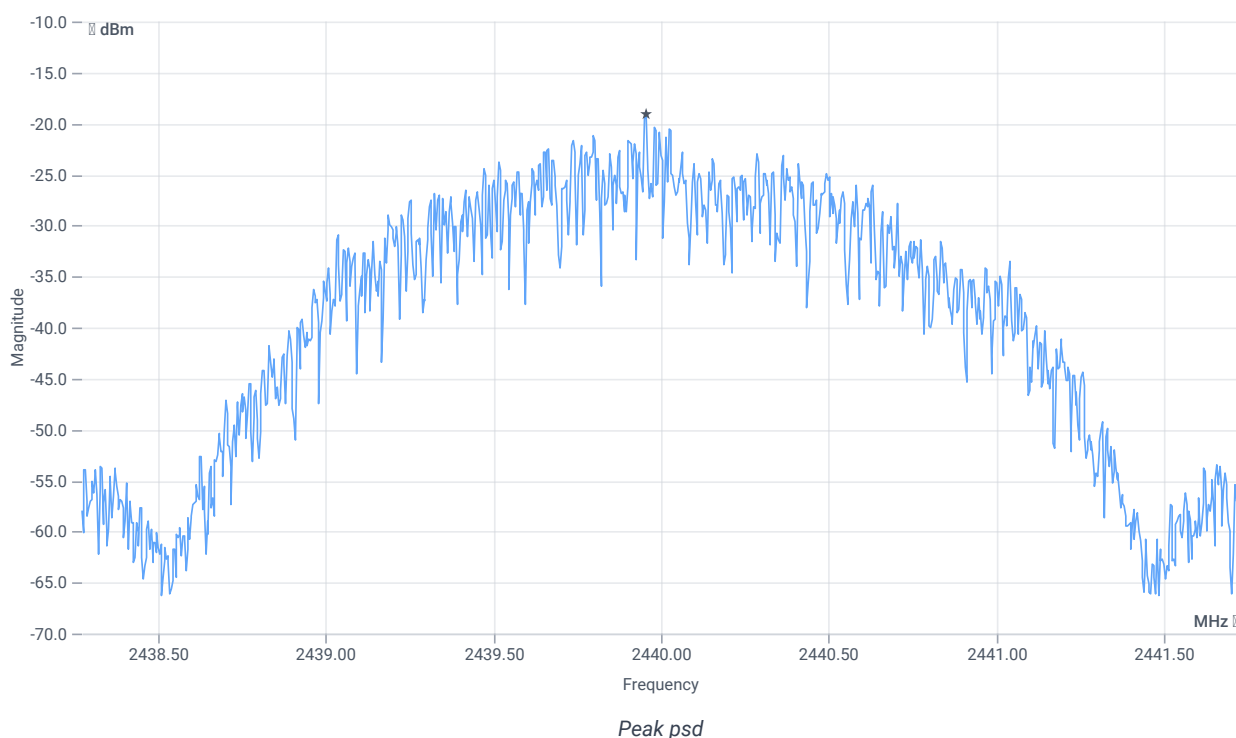
Test at TX 2440 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	-1.39	dBm	INFO
Ref. frequency	---	---	2440.600	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	3.61 8.94 10
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	-19.13	dBm/3KHz	PASS

Verdict

PASS

FCC 15.247 # Peak psd DTS ~ BT LE 2 Msps

References

TC start	16.01.2025 14:55:45
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.5.0
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 37 RXpayload 37
2 Mbps supported	True TXpayload 37 RXpayload 37
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,FSV-30,1321.3008K30/103809,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

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]	0.7
Full path type	EUT_SA_GEN_SIG

Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

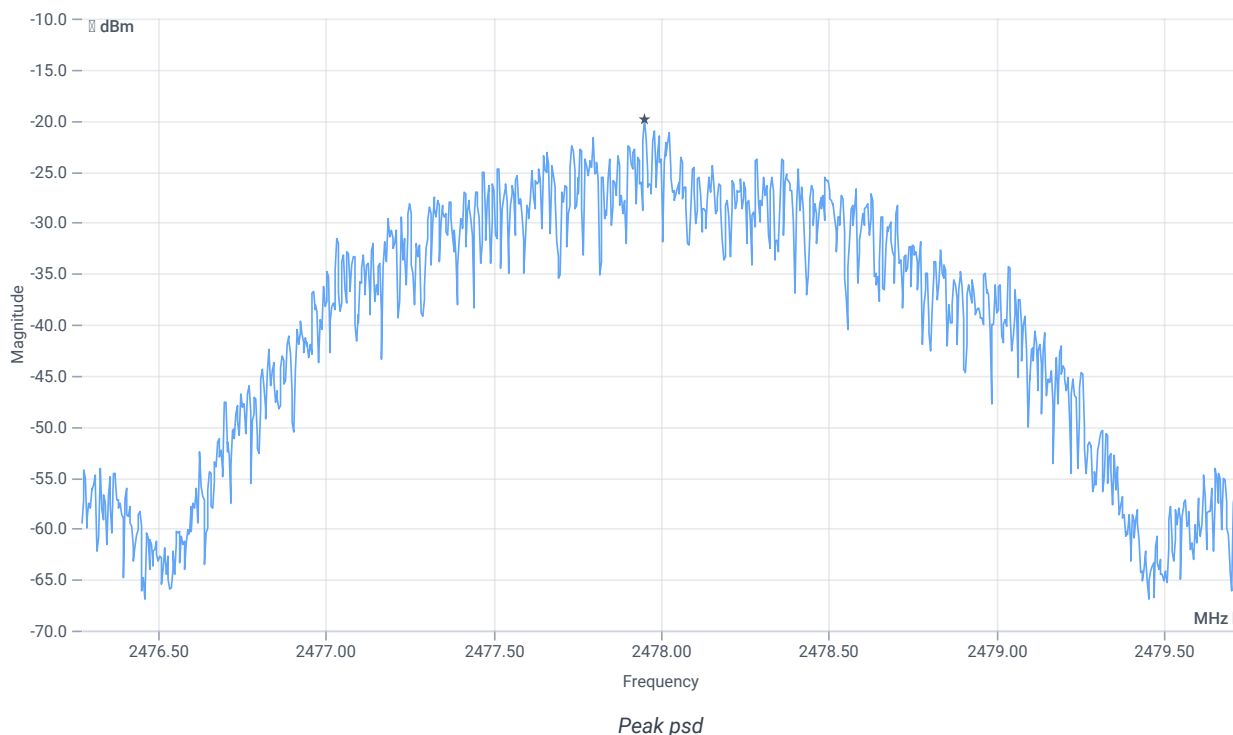
Test at TX 2478 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	-2.07	dBm	INFO
Ref. frequency	---	---	2477.400	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	2.93 9.03 10
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	-19.94	dBm/3KHz	PASS

Verdict

PASS

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

References

TC start	16.01.2025 13:21:38
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.5.0
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 37 RXpayload 37
2 Mbps supported	True TXpayload 37 RXpayload 37
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,FSV-30,1321.3008K30/103809,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

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]	0.7
Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/

Test Parameter

Switch bits	00010001:00010001:00000000:00000001
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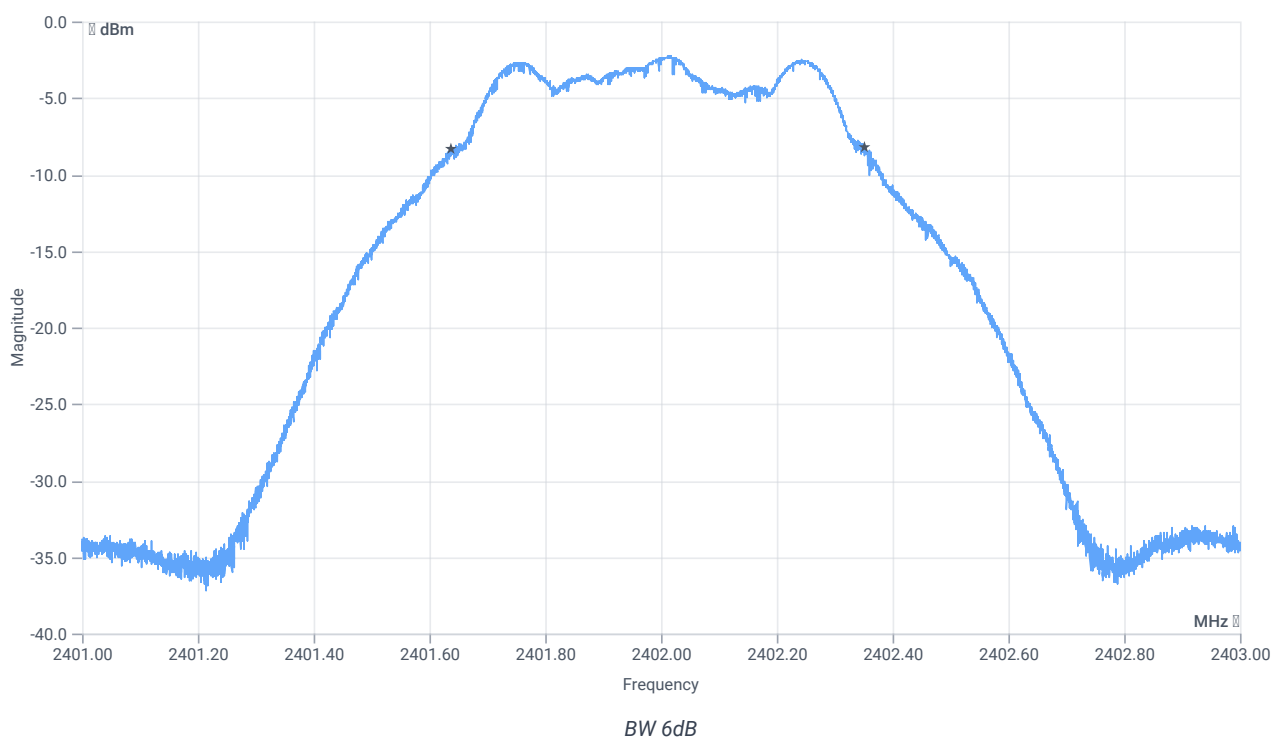
Test at TX 2402 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	-1.76	dBm	INFO
Ref. frequency	---	---	2401.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	3.25 8.85 10
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	---	715	kHz	PASS

Verdict

PASS

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

References

TC start	16.01.2025 13:40:01
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.5.0
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 37 RXpayload 37
2 Mbps supported	True TXpayload 37 RXpayload 37
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,FSV-30,1321.3008K30/103809,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

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]	0.7
Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/

Test Parameter

Switch bits	00010001:00010001:00000000:00000001
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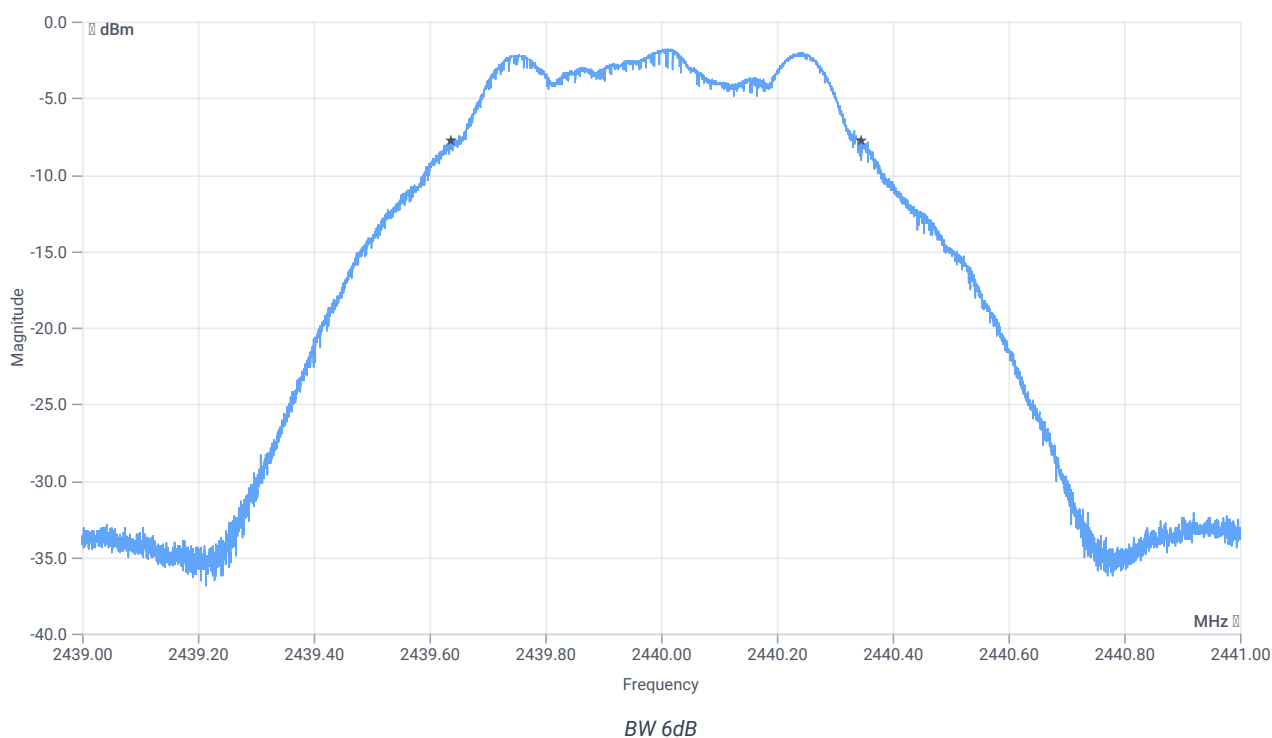
Test at TX 2440 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	-1.34	dBm	INFO
Ref. frequency	---	---	2440.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	3.66 8.94 10
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	---	707	kHz	PASS

Verdict

PASS

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

References

TC start	16.01.2025 13:57:50
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.5.0
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 37 RXpayload 37
2 Mbps supported	True TXpayload 37 RXpayload 37
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,FSV-30,1321.3008K30/103809,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

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]	0.7
Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/

Test Parameter

Switch bits

00010001:00010001:00000000:00000001

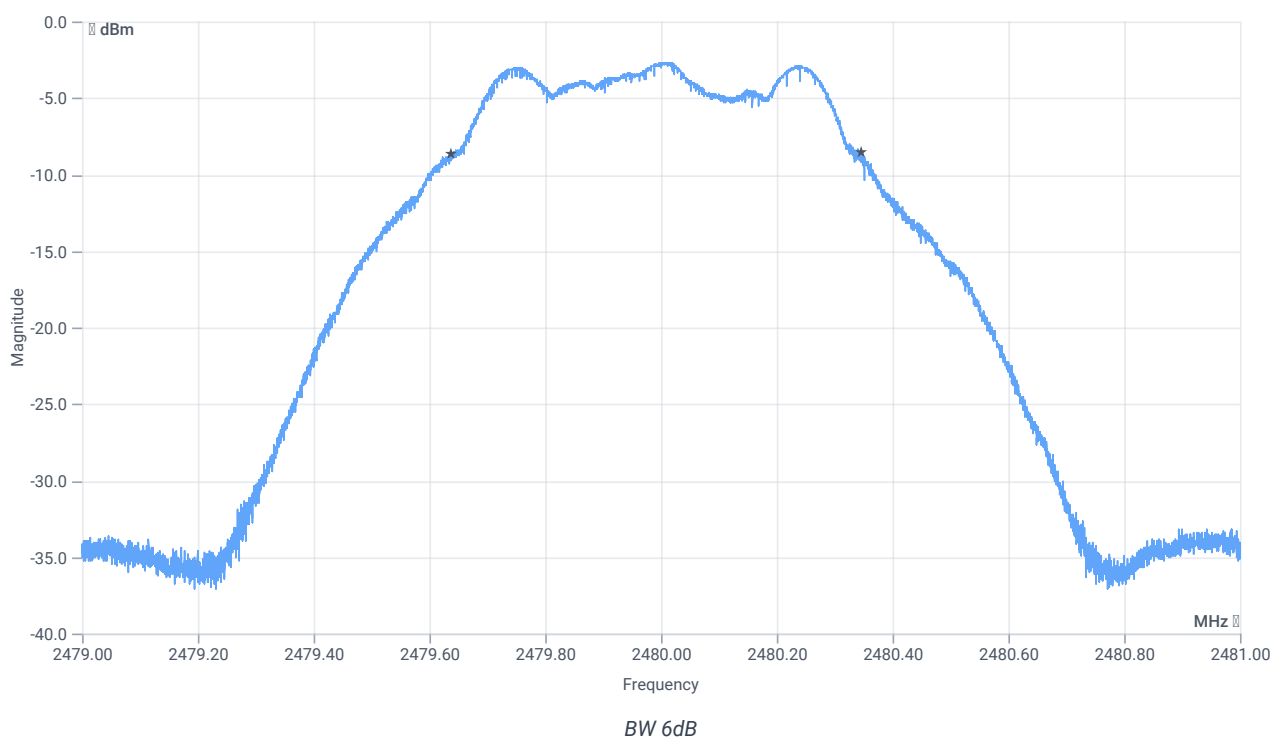
Test at TX 2480 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	-2.10	dBm	INFO
Ref. frequency	---	---	2479.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	2.90 9.03 10
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	---	707	kHz	PASS

Verdict

PASS

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

References

TC start	16.01.2025 14:16:45
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.5.0
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 37 RXpayload 37
2 Mbps supported	True TXpayload 37 RXpayload 37
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,FSV-30,1321.3008K30/103809,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

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]	0.7
Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/

Test Parameter

Switch bits	00010001:00010001:00000000:00000001
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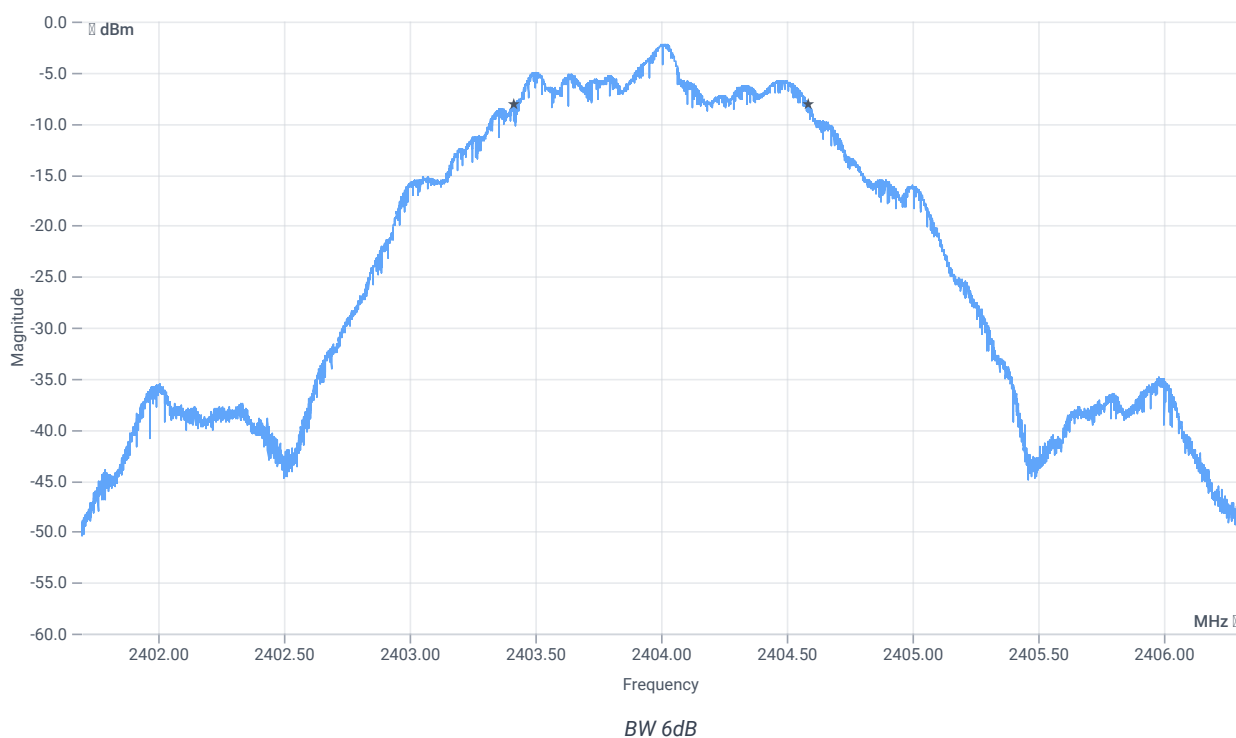
Test at TX 2404 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	-1.83	dBm	INFO
Ref. frequency	---	---	2404.600	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	3.17 8.86 10
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	---	1167	kHz	PASS

Verdict

PASS

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

References

TC start	16.01.2025 14:37:45
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.5.0
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 37 RXpayload 37
2 Mbps supported	True TXpayload 37 RXpayload 37
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,FSV-30,1321.3008K30/103809,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

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]	0.7
Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/

Test Parameter

Switch bits	00010001:00010001:00000000:00000001
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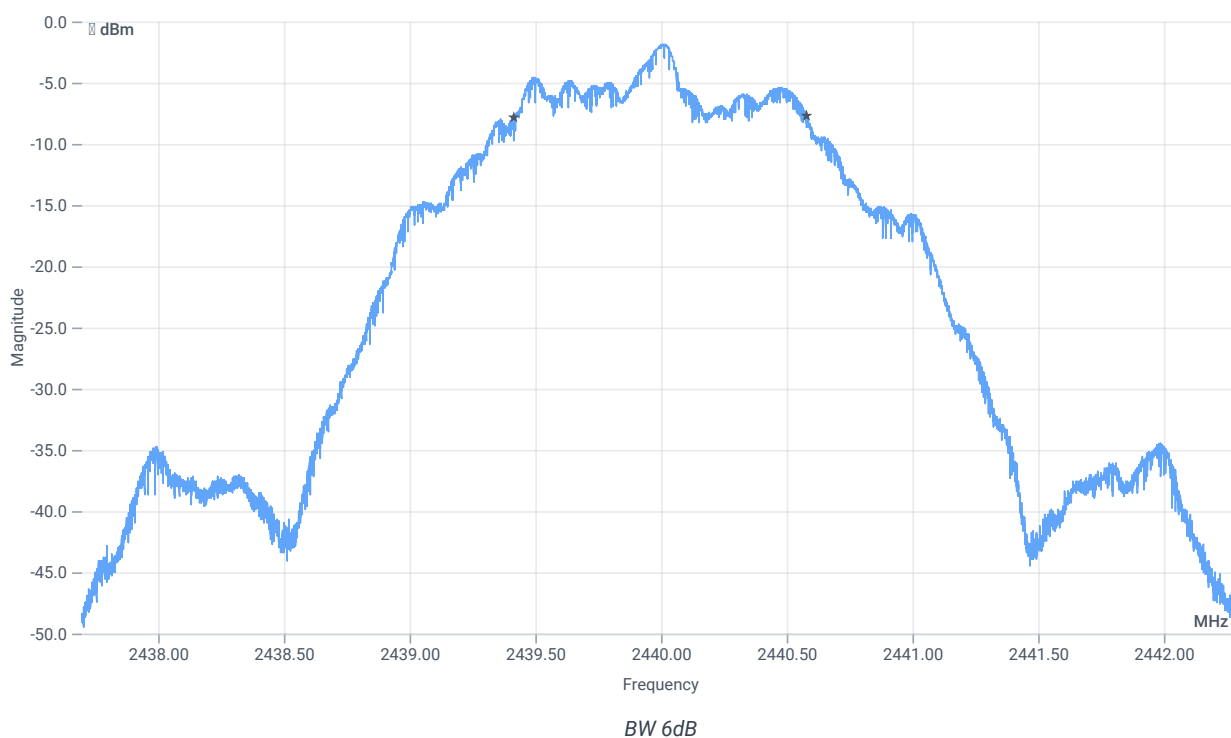
Test at TX 2440 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	-1.45	dBm	INFO
Ref. frequency	---	---	2439.400	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	3.55 8.94 10
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	---	1165	kHz	PASS

Verdict

PASS

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

References

TC start	16.01.2025 14:55:12
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.5.0
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 37 RXpayload 37
2 Mbps supported	True TXpayload 37 RXpayload 37
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,FSV-30,1321.3008K30/103809,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

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]	0.7
Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/

Test Parameter

Switch bits	00010001:00010001:00000000:00000001
-------------	-------------------------------------

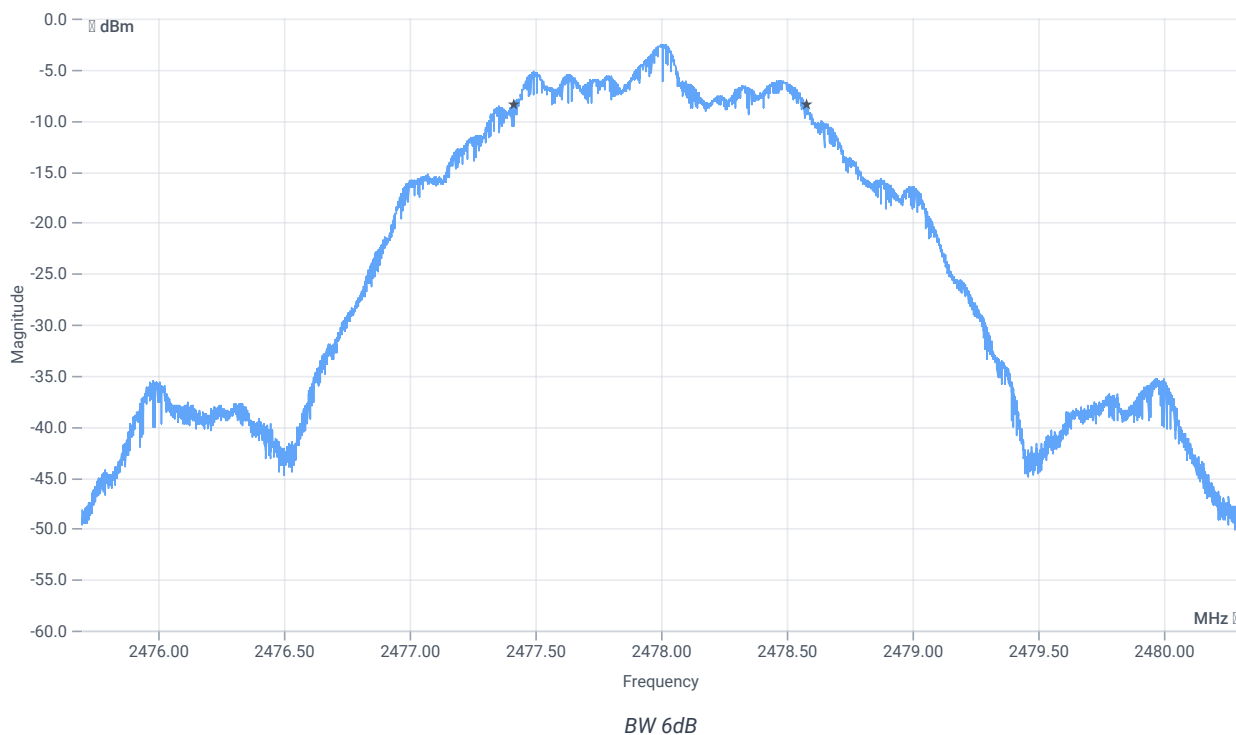
Test at TX 2478 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	-2.06	dBm	INFO
Ref. frequency	---	---	2477.400	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	2.94 9.03 10
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	---	1160	kHz	PASS

Verdict

PASS

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

References

TC start	16.01.2025 13:23:38
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.5.0
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 37 RXpayload 37
2 Mbps supported	True TXpayload 37 RXpayload 37
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,FSV-30,1321.3008K30/103809,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

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]	0.7
Full path type	EUT_SA_GEN_SIG

Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

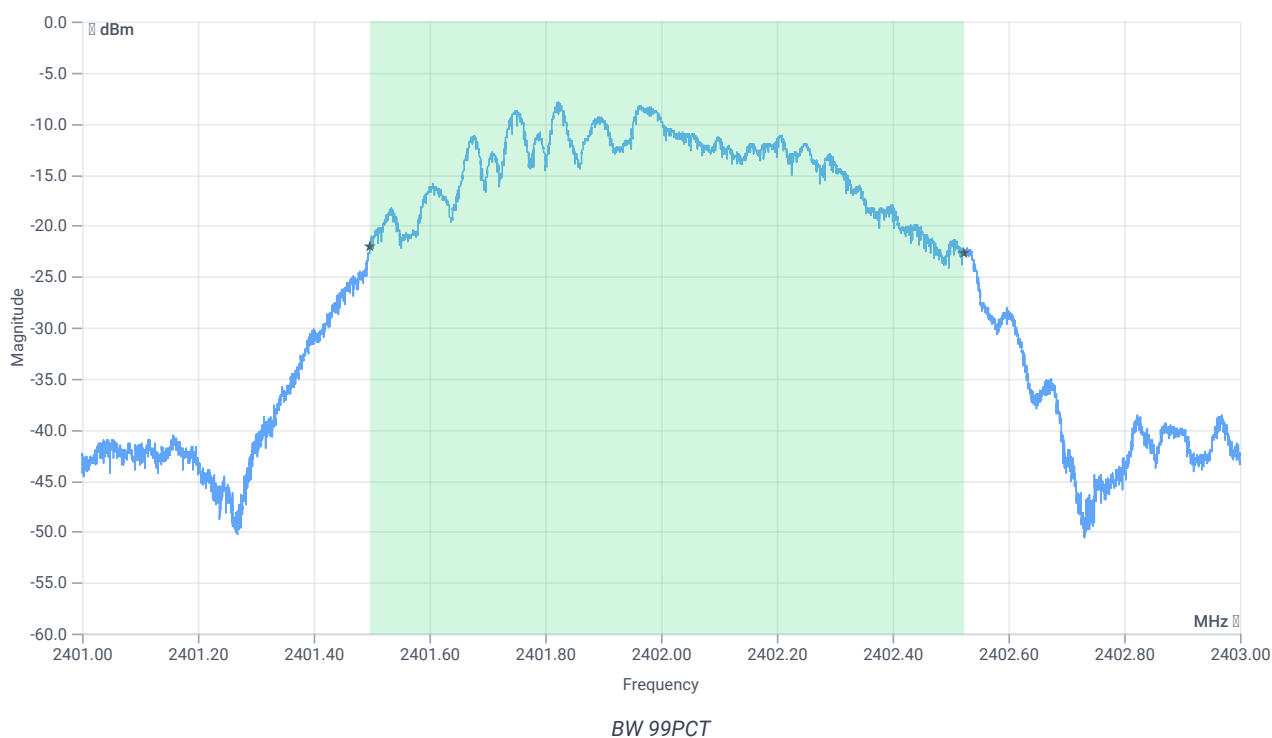
Test at TX 2402 MHz

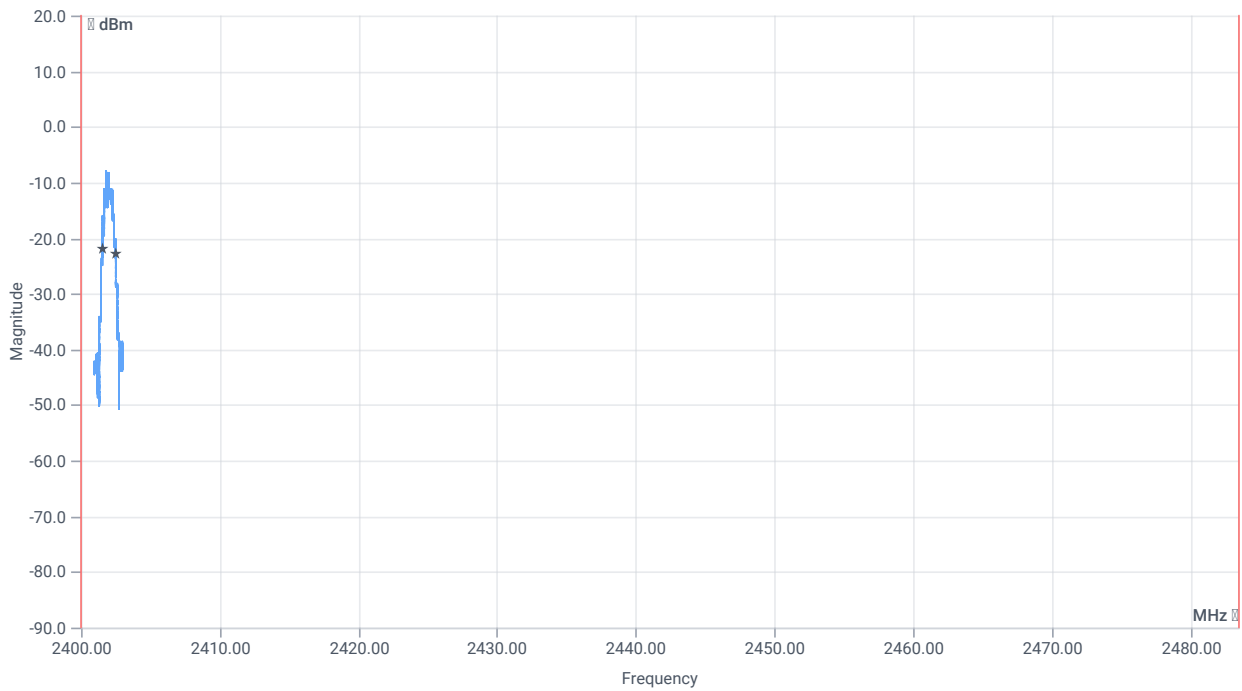
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	-1.79	dBm	INFO
Ref. frequency	---	---	2402.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	3.21 8.85 10
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

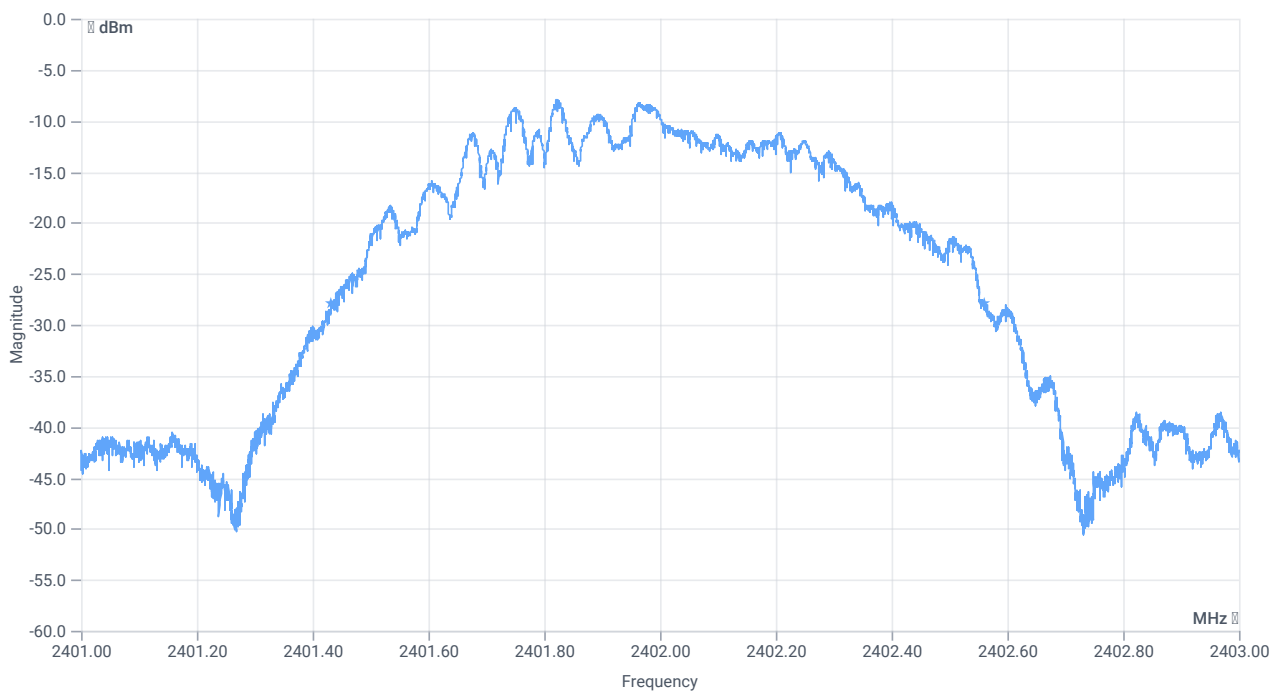




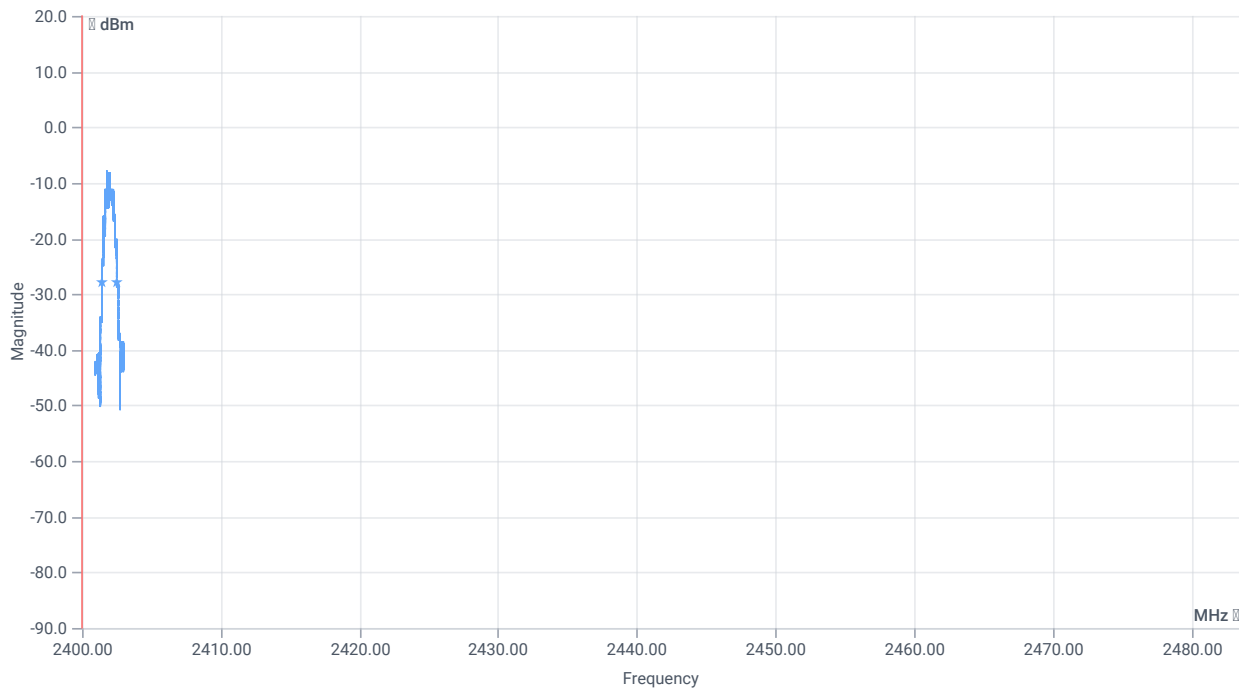
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	1024.000	kHz	INFO
T1 99%	2400.000000	---	2401.4975	MHz	PASS
T2 99%	---	2483.500000	2402.5217	MHz	PASS



BW 20dB



BW within band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	1128	kHz	INFO
T1 20dB	2400.000000	---	2401.4322	MHz	PASS
T2 20dB	---	2483.500000	2402.5604	MHz	PASS

Verdict

PASS

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

References

TC start	16.01.2025 13:41:17
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.5.0
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 37 RXpayload 37
2 Mbps supported	True TXpayload 37 RXpayload 37
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,FSV-30,1321.3008K30/103809,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

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]	0.7
Full path type	EUT_SA_GEN_SIG

Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

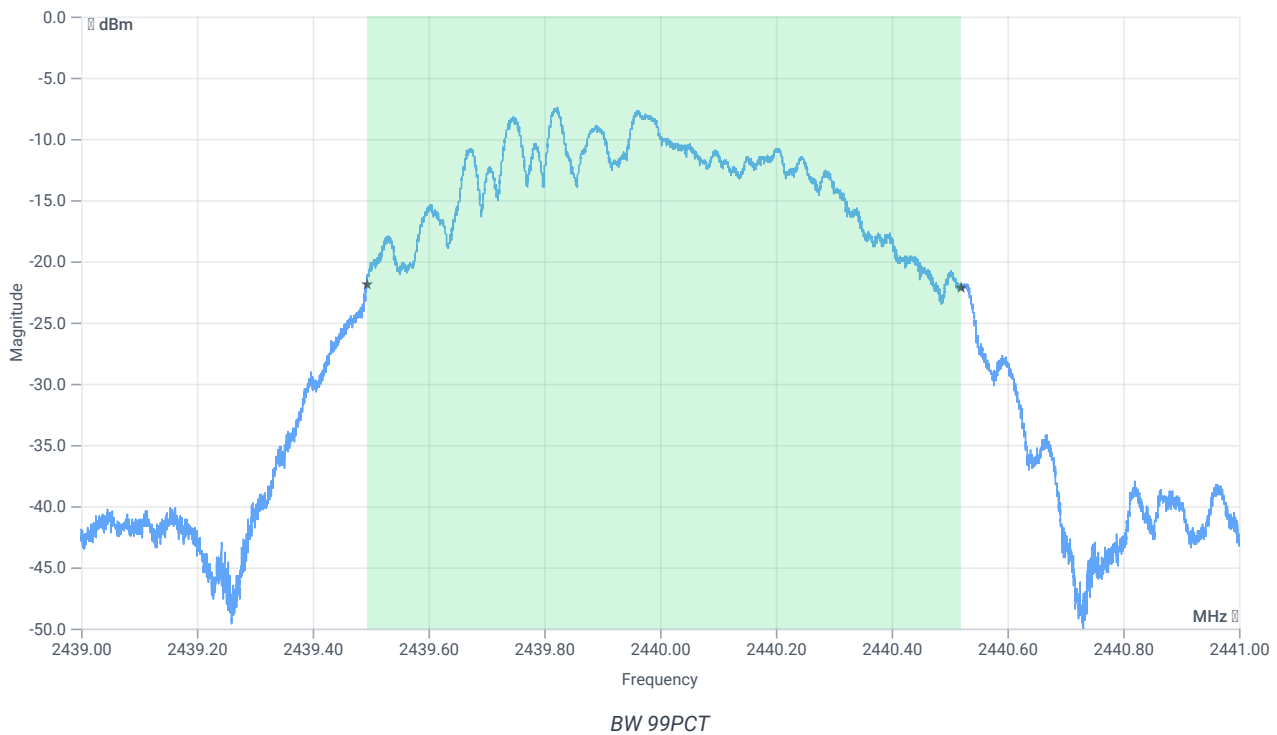
Test at TX 2440 MHz

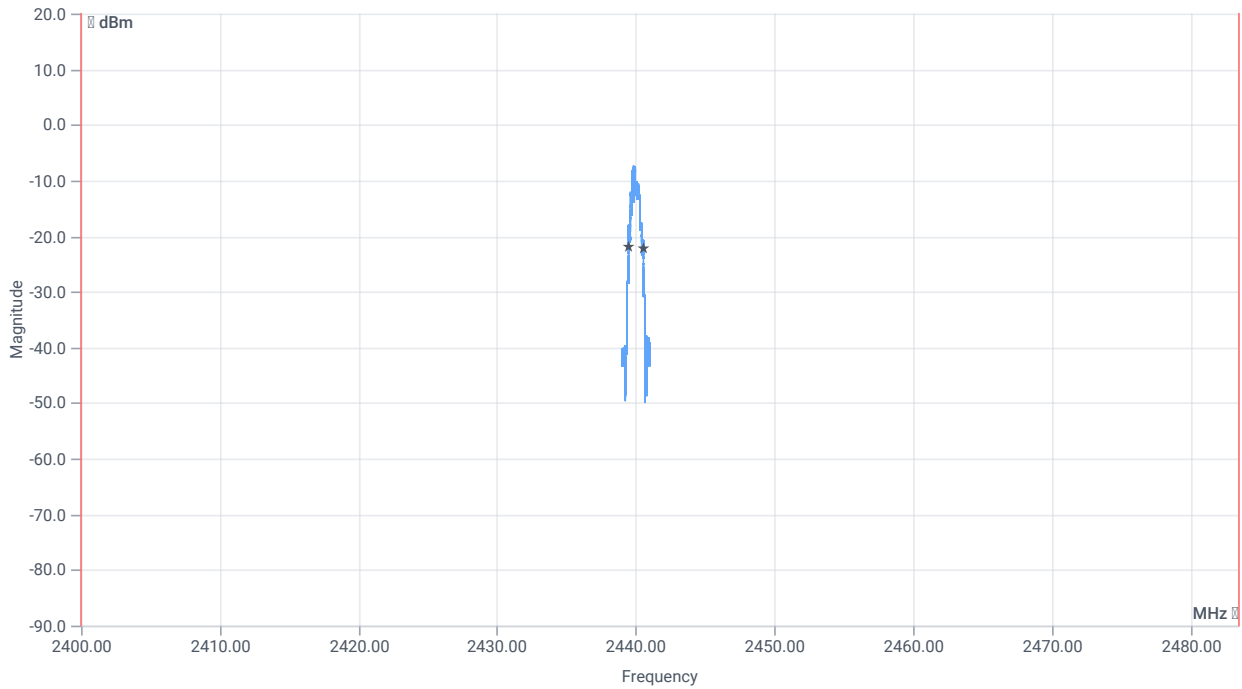
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	-1.30	dBm	INFO
Ref. frequency	---	---	2439.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	3.70 8.94 10
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

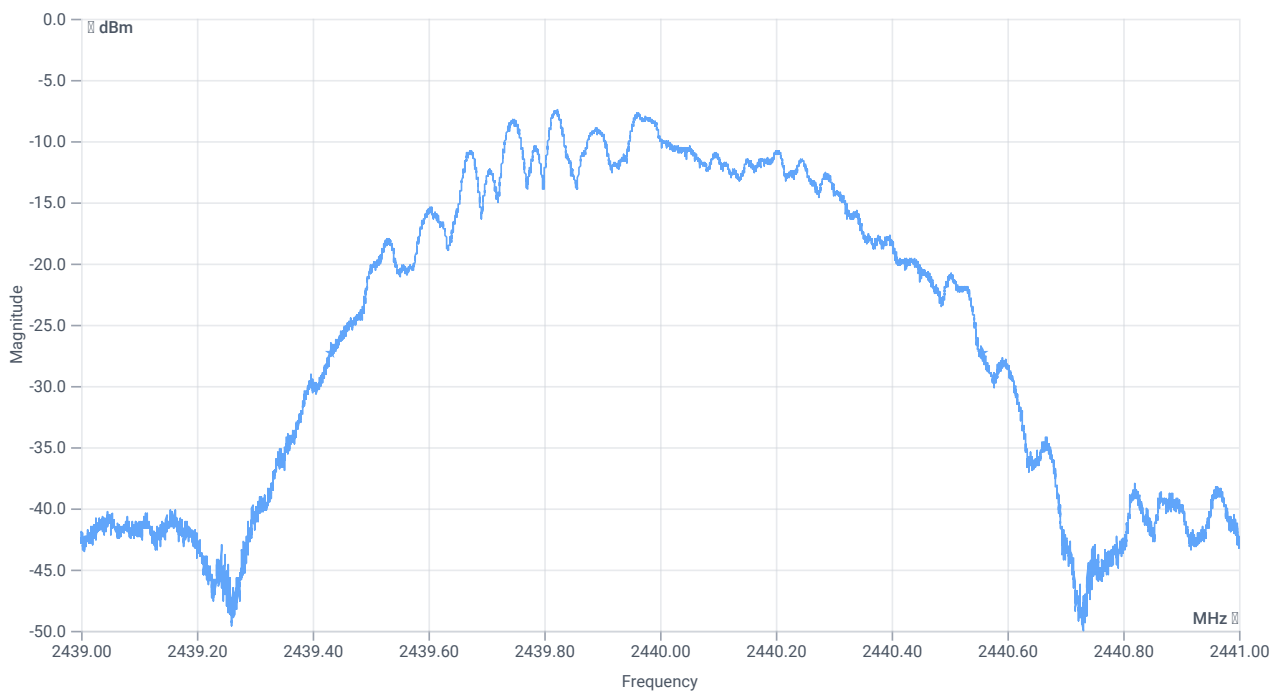




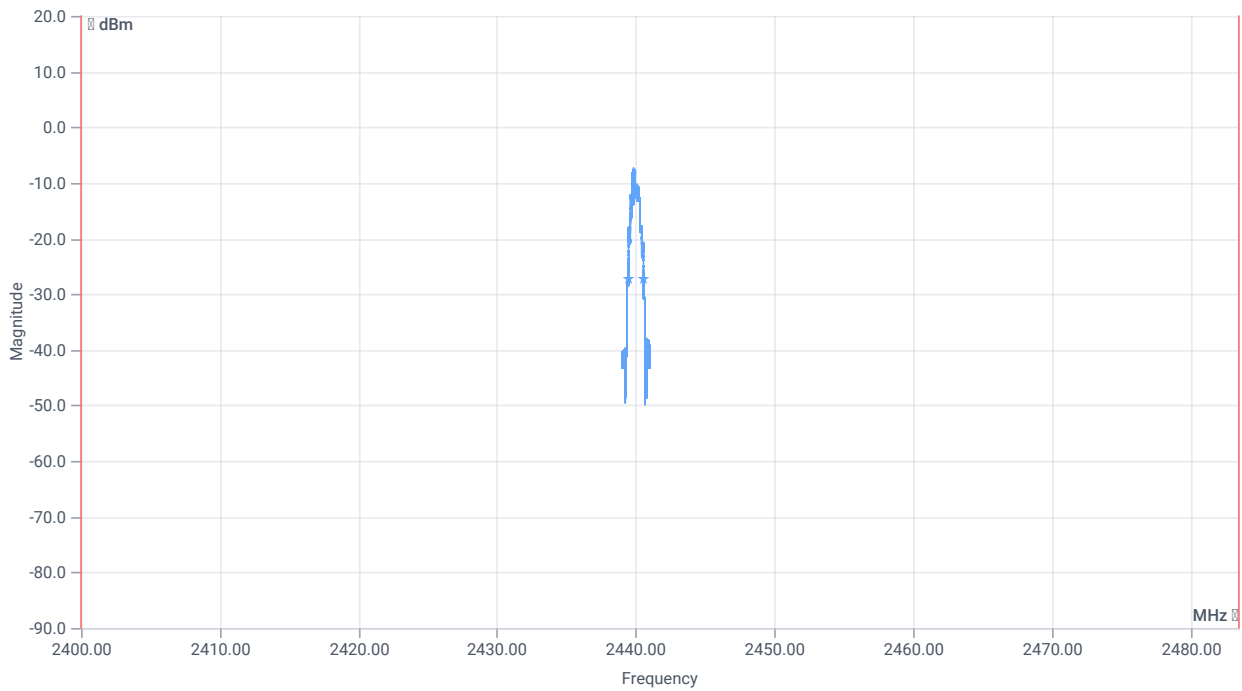
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	1025.000	kHz	INFO
T1 99%	2400.000000	---	2439.4937	MHz	PASS
T2 99%	---	2483.500000	2440.5187	MHz	PASS



BW 20dB



BW within band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	1127	kHz	INFO
T1 20dB	2400.000000	---	2439.4302	MHz	PASS
T2 20dB	---	2483.500000	2440.5568	MHz	PASS

Verdict

PASS

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

References

TC start	16.01.2025 14:00:38
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.5.0
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 37 RXpayload 37
2 Mbps supported	True TXpayload 37 RXpayload 37
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,FSV-30,1321.3008K30/103809,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

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]	0.7
Full path type	EUT_SA_GEN_SIG

Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

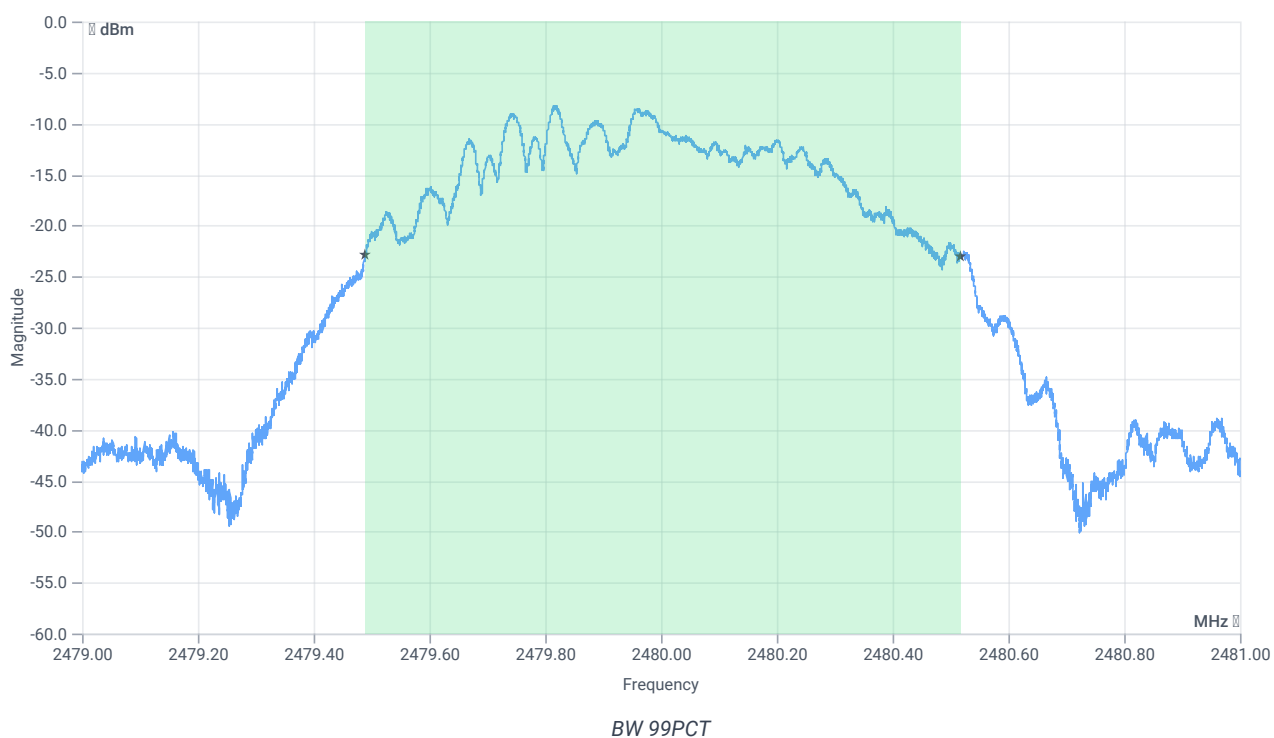
Test at TX 2480 MHz

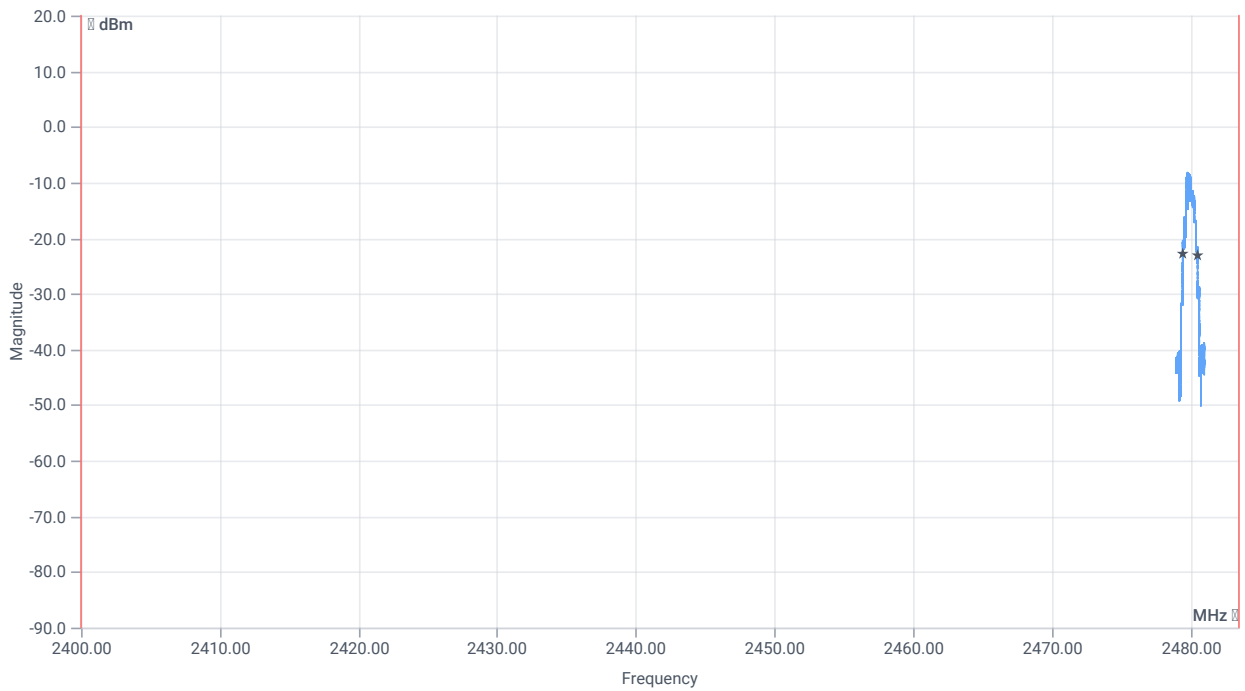
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	-2.09	dBm	INFO
Ref. frequency	---	---	2479.700	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	2.91 9.03 10
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

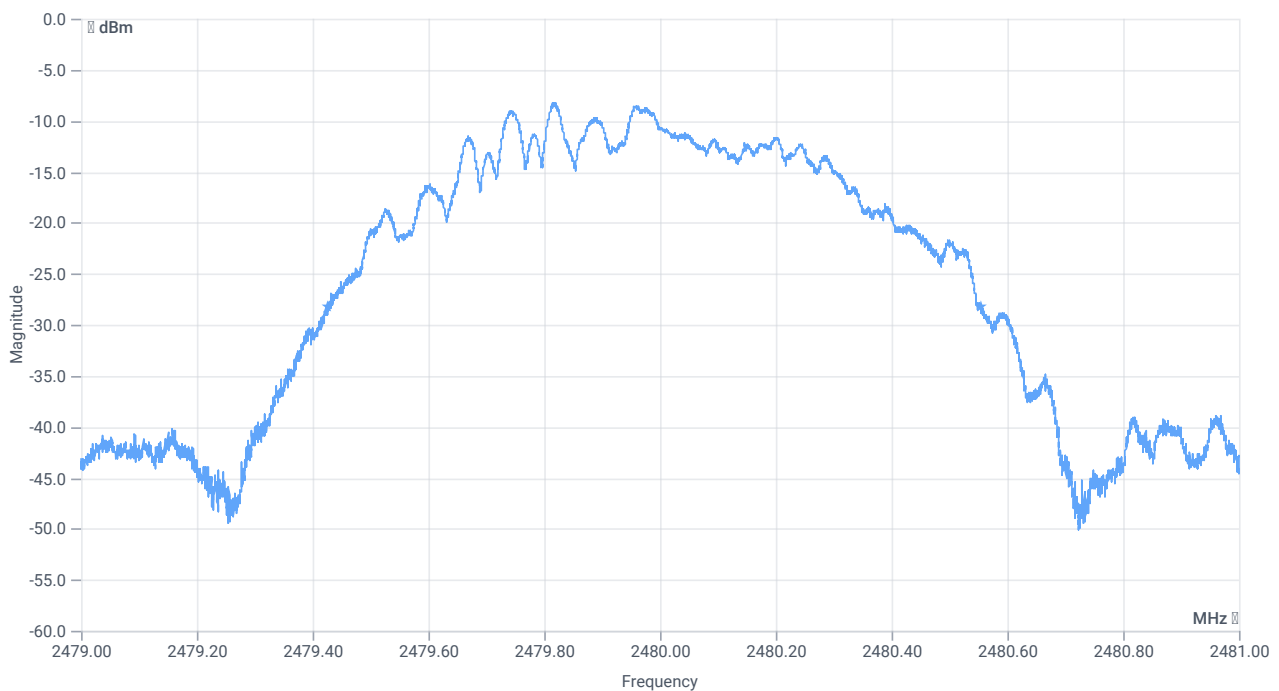




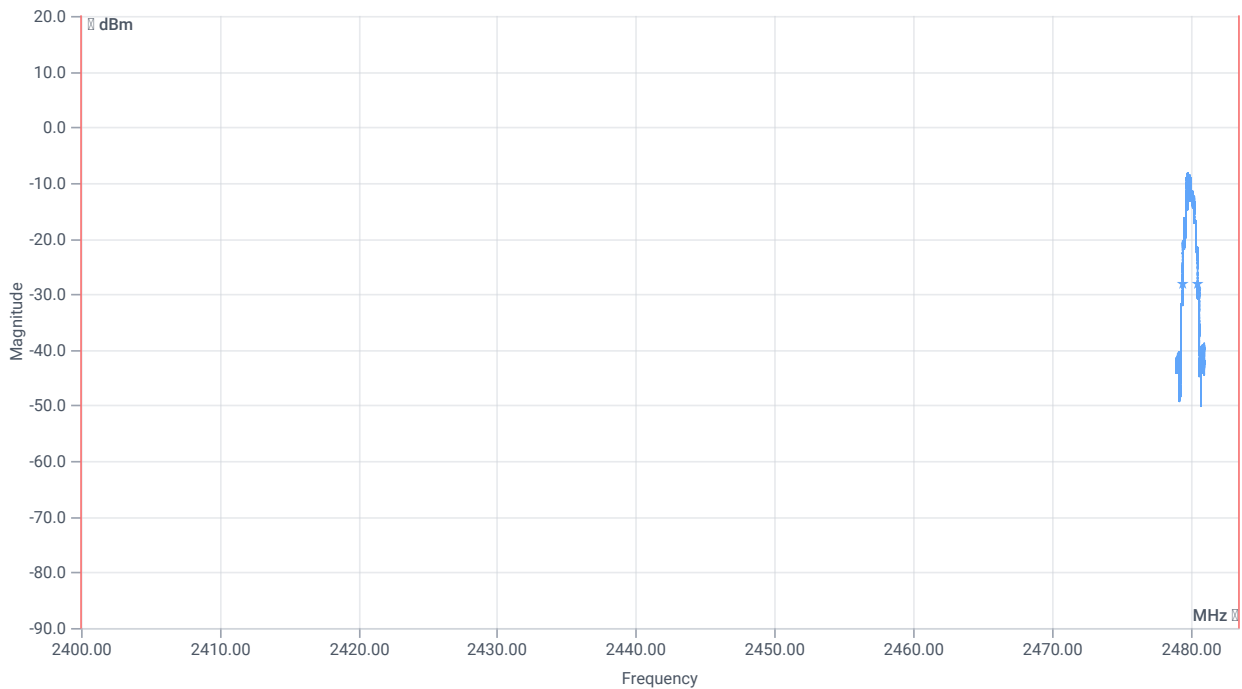
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	1026.000	kHz	INFO
T1 99%	2400.000000	---	2479.4895	MHz	PASS
T2 99%	---	2483.500000	2480.5157	MHz	PASS



BW 20dB



BW within band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	1128	kHz	INFO
T1 20dB	2400.000000	---	2479.4268	MHz	PASS
T2 20dB	---	2483.500000	2480.5544	MHz	PASS

Verdict

PASS

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

References

TC start	16.01.2025 14:22:30
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.5.0
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 37 RXpayload 37
2 Mbps supported	True TXpayload 37 RXpayload 37
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,FSV-30,1321.3008K30/103809,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

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]	0.7
Full path type	EUT_SA_GEN_SIG

Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

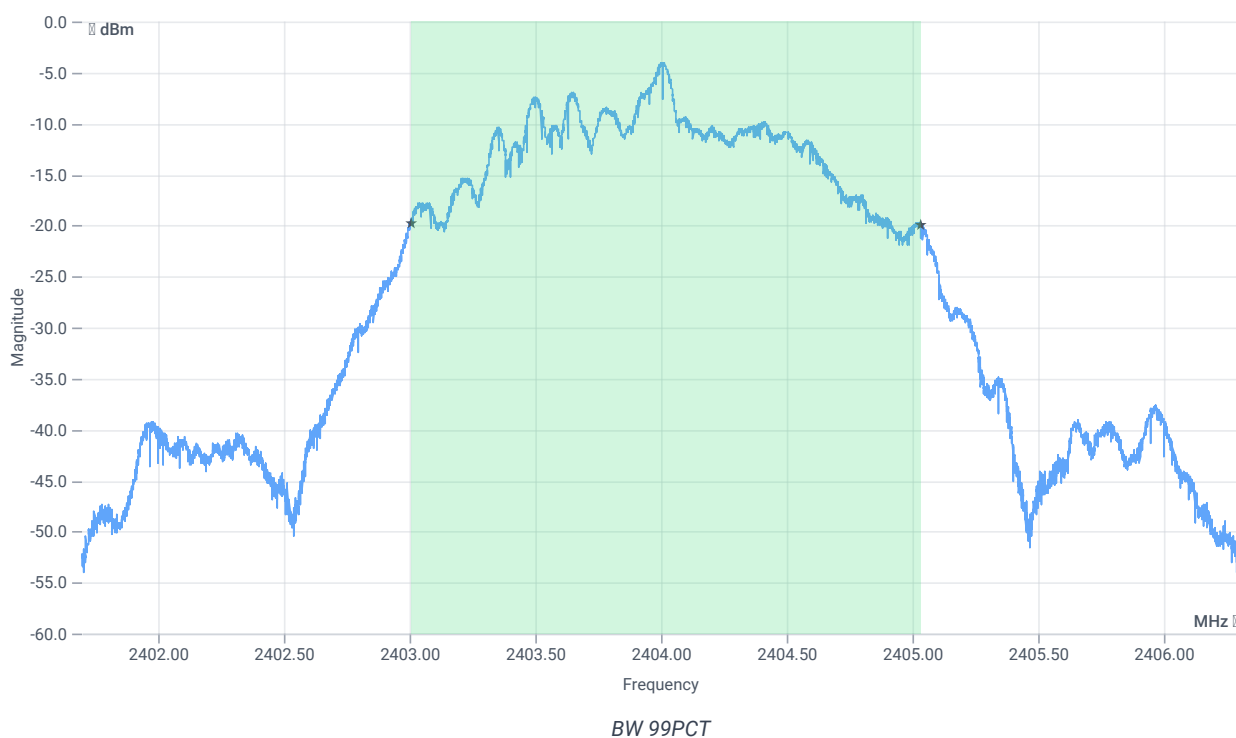
Test at TX 2404 MHz

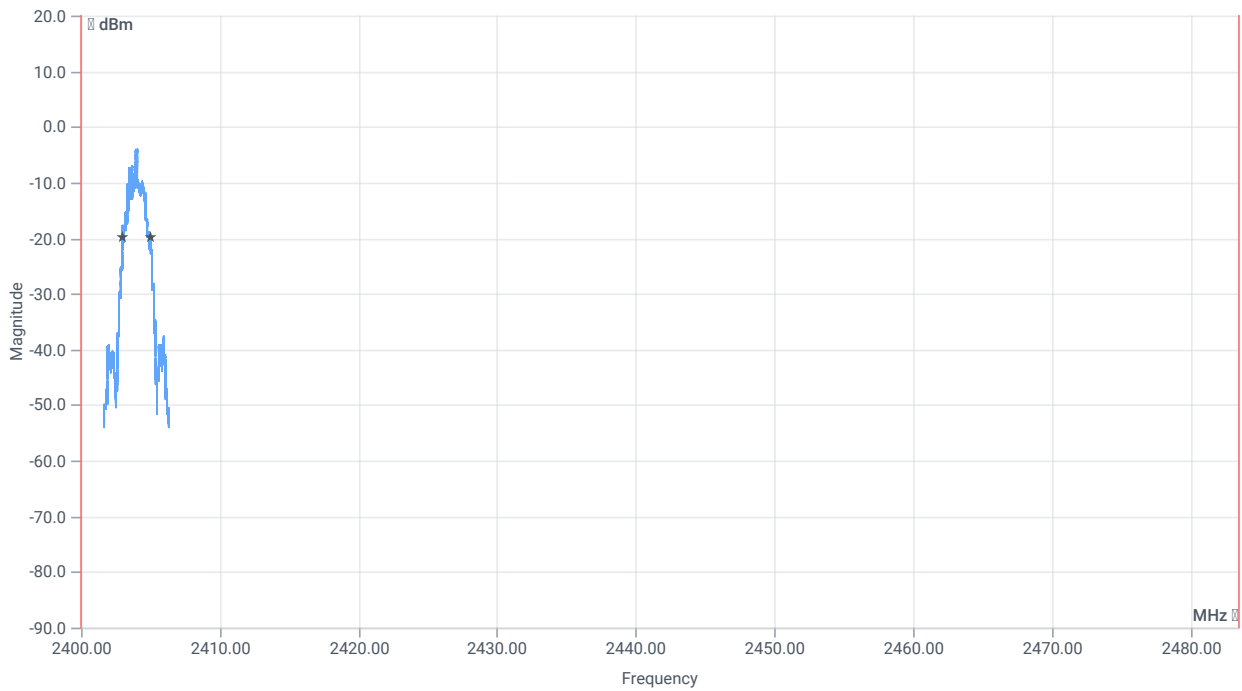
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	-1.72	dBm	INFO
Ref. frequency	---	---	2403.500	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	3.28 8.86 10
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

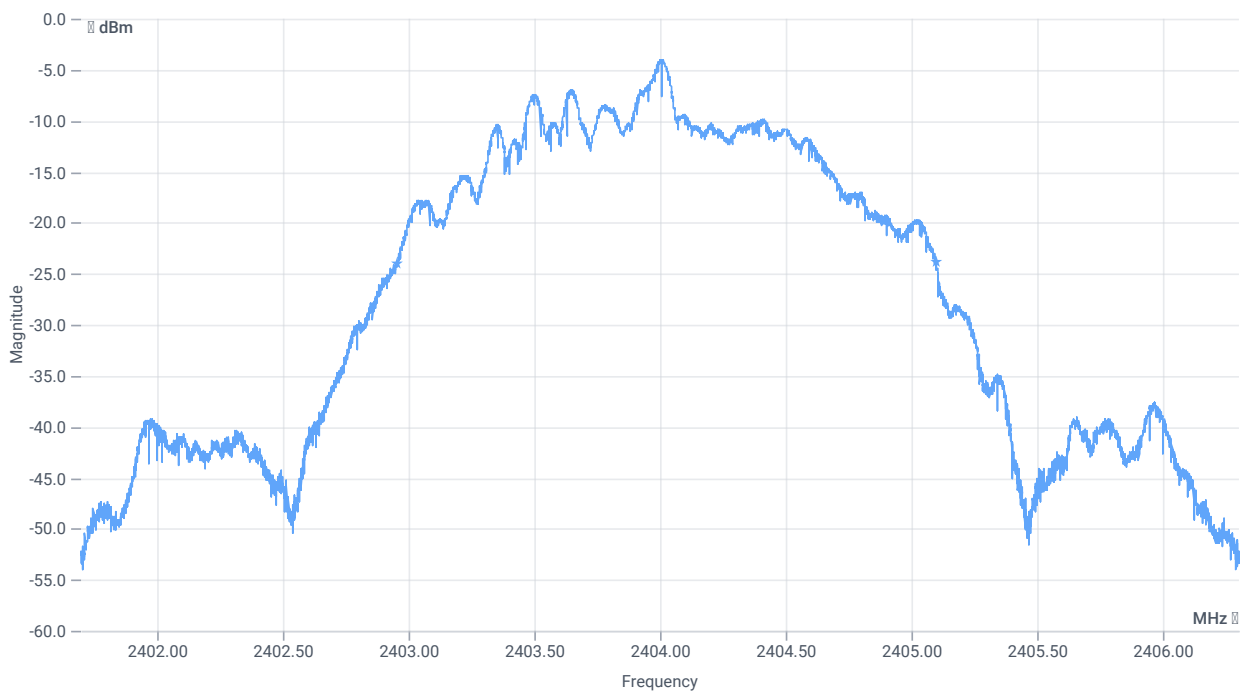




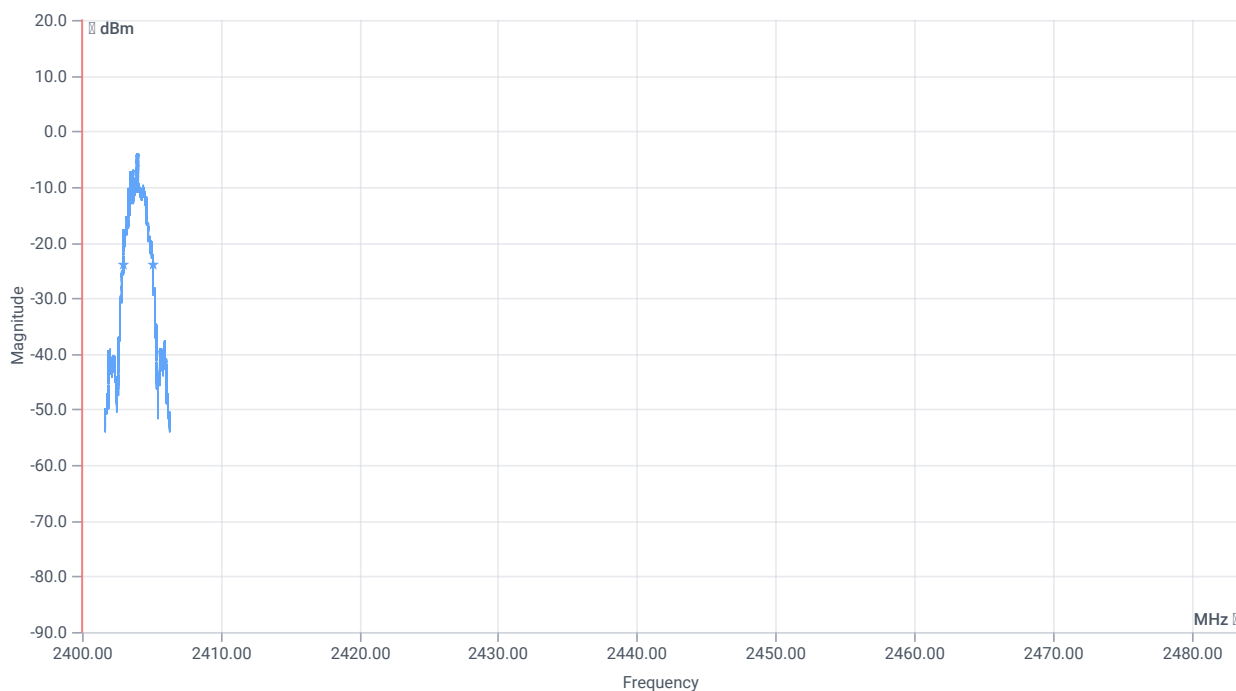
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	2023.000	kHz	INFO
T1 99%	2400.000000	---	2403.0065	MHz	PASS
T2 99%	---	2483.500000	2405.0298	MHz	PASS



BW 20dB



BW within band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	2144	kHz	INFO
T1 20dB	2400.000000	---	2402.9526	MHz	PASS
T2 20dB	---	2483.500000	2405.0962	MHz	PASS

Verdict

PASS

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

References

TC start	16.01.2025 14:39:19
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.5.0
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 37 RXpayload 37
2 Mbps supported	True TXpayload 37 RXpayload 37
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,FSV-30,1321.3008K30/103809,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

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]	0.7
Full path type	EUT_SA_GEN_SIG

Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

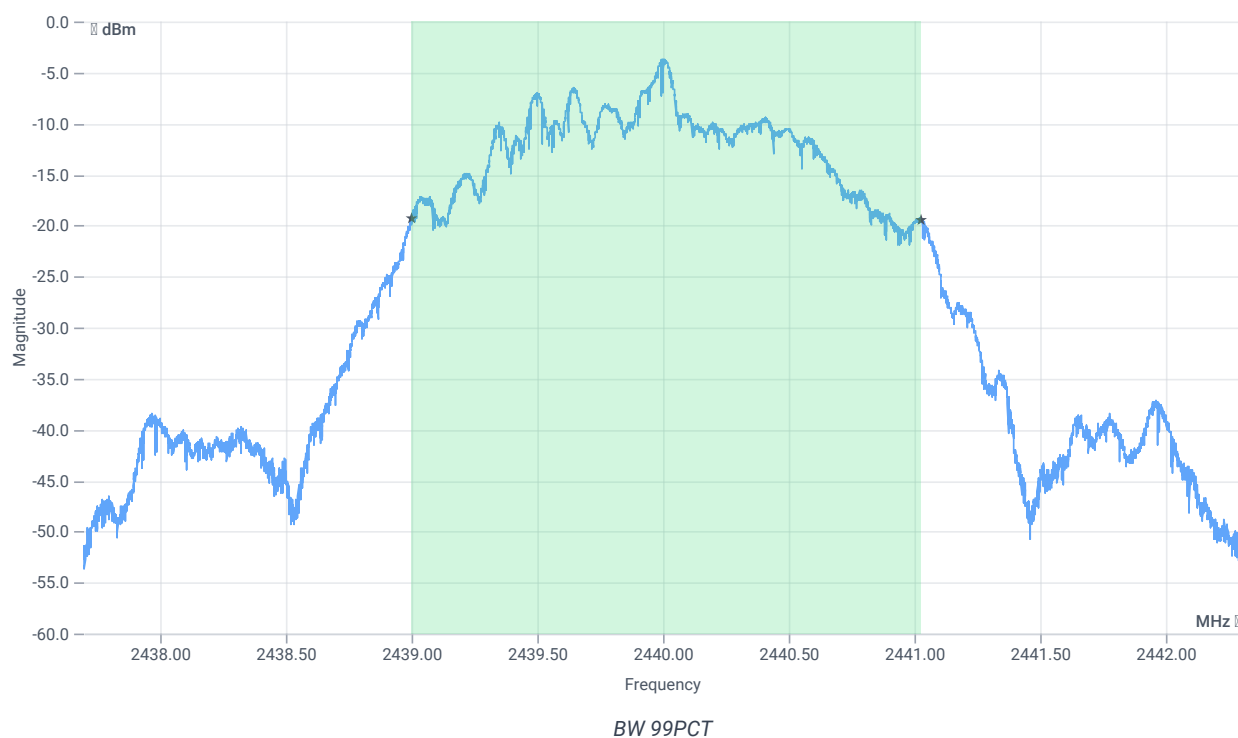
Test at TX 2440 MHz

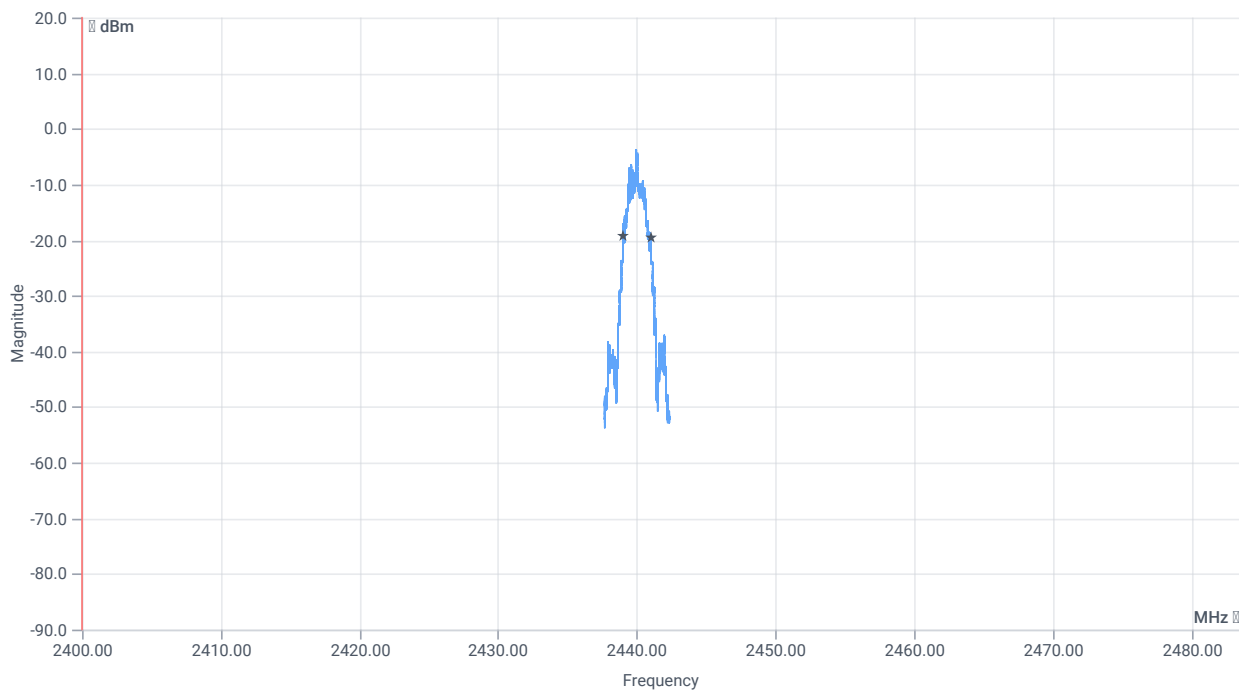
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	-1.42	dBm	INFO
Ref. frequency	---	---	2440.600	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	3.58 8.94 10
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

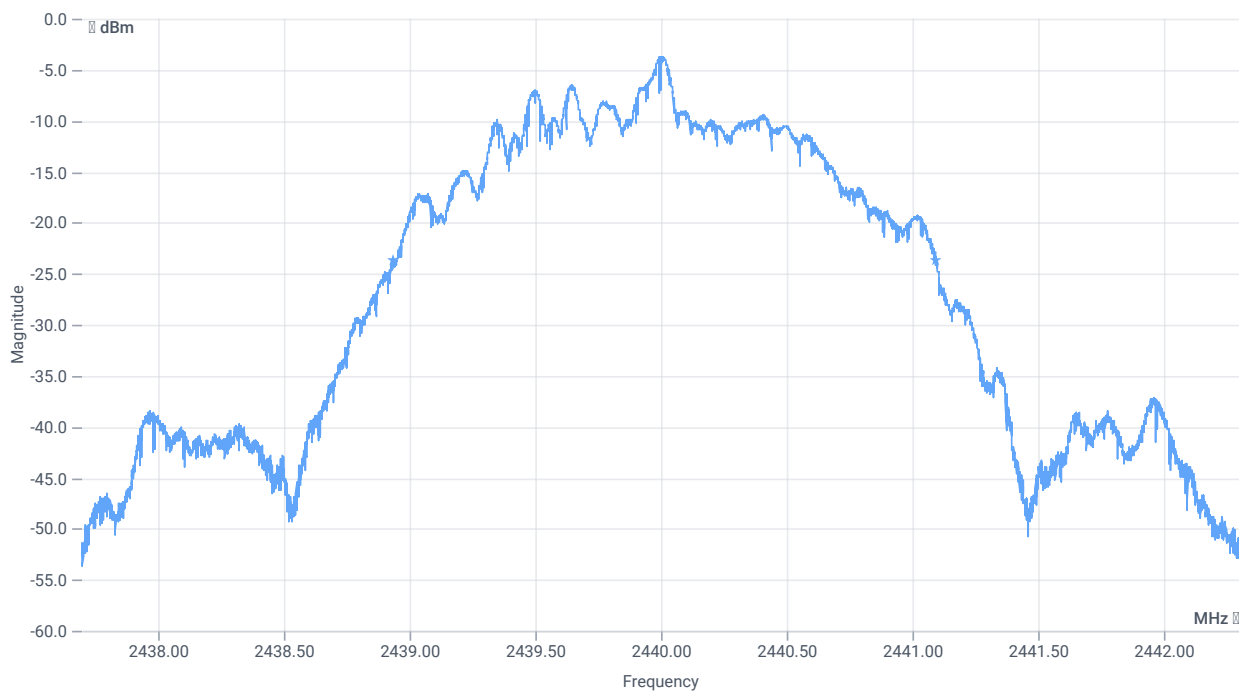




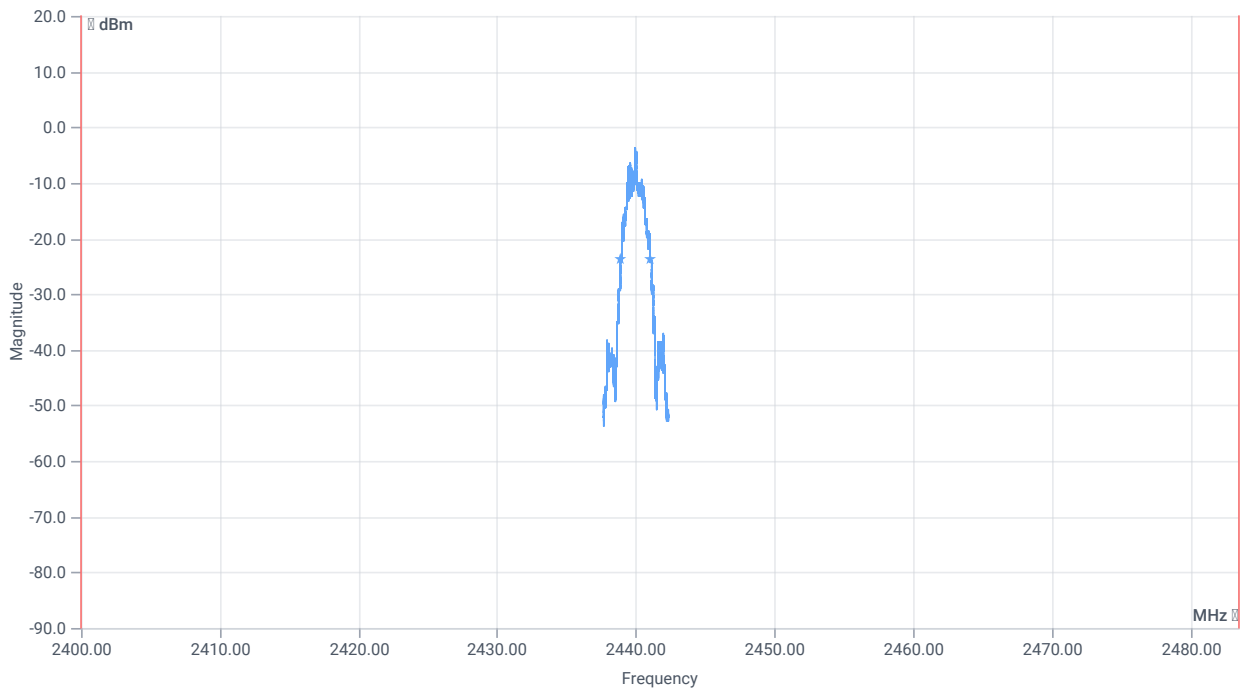
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	2025.000	kHz	INFO
T1 99%	2400.000000	---	2439.0014	MHz	PASS
T2 99%	---	2483.500000	2441.0266	MHz	PASS



BW 20dB



BW within band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	2156	kHz	INFO
T1 20dB	2400.000000	---	2438.9374	MHz	PASS
T2 20dB	---	2483.500000	2441.0934	MHz	PASS

Verdict

PASS

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

References

TC start	16.01.2025 14:56:29
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.5.0
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 37 RXpayload 37
2 Mbps supported	True TXpayload 37 RXpayload 37
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,FSV-30,1321.3008K30/103809,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

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]	0.7
Full path type	EUT_SA_GEN_SIG

Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

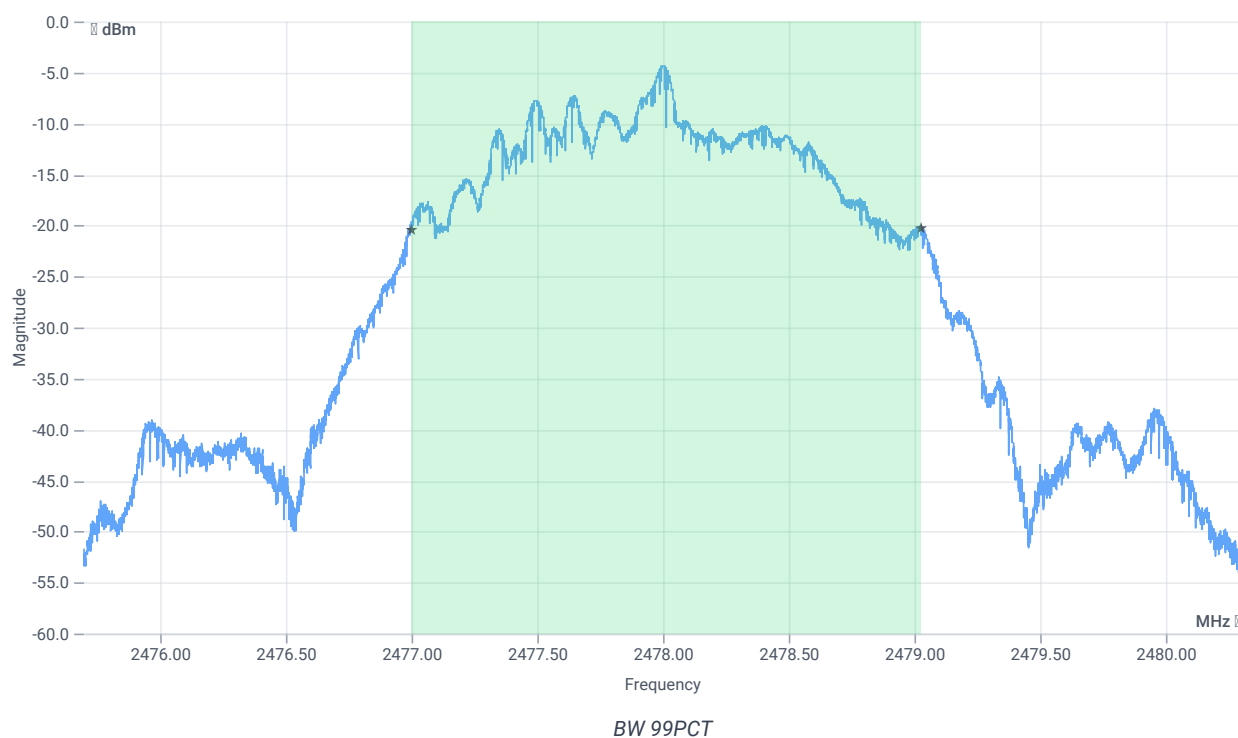
Test at TX 2478 MHz

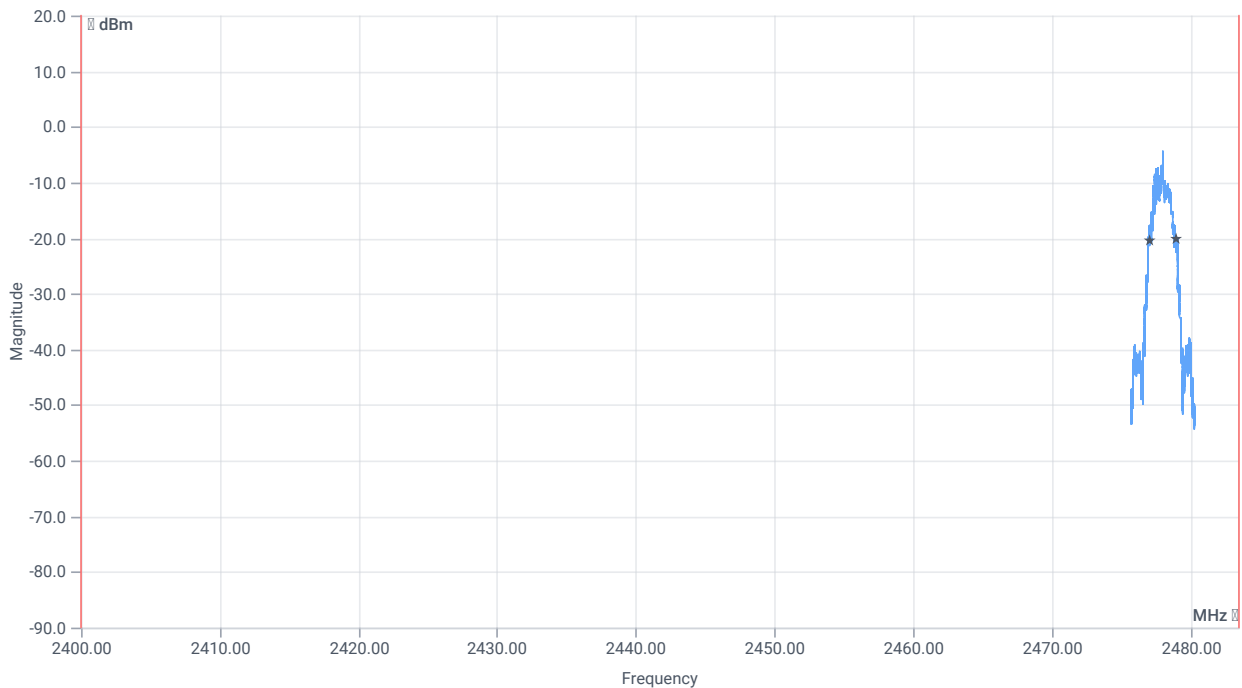
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	-2.08	dBm	INFO
Ref. frequency	---	---	2477.400	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	2.92 9.03 10
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

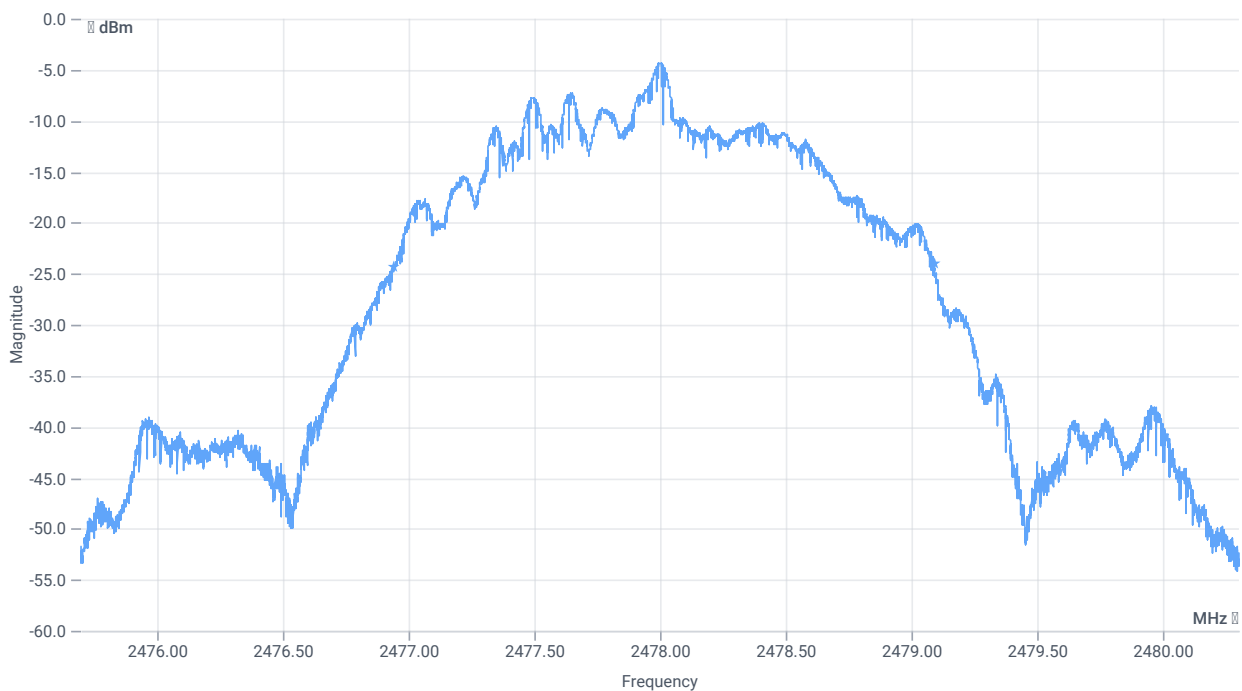




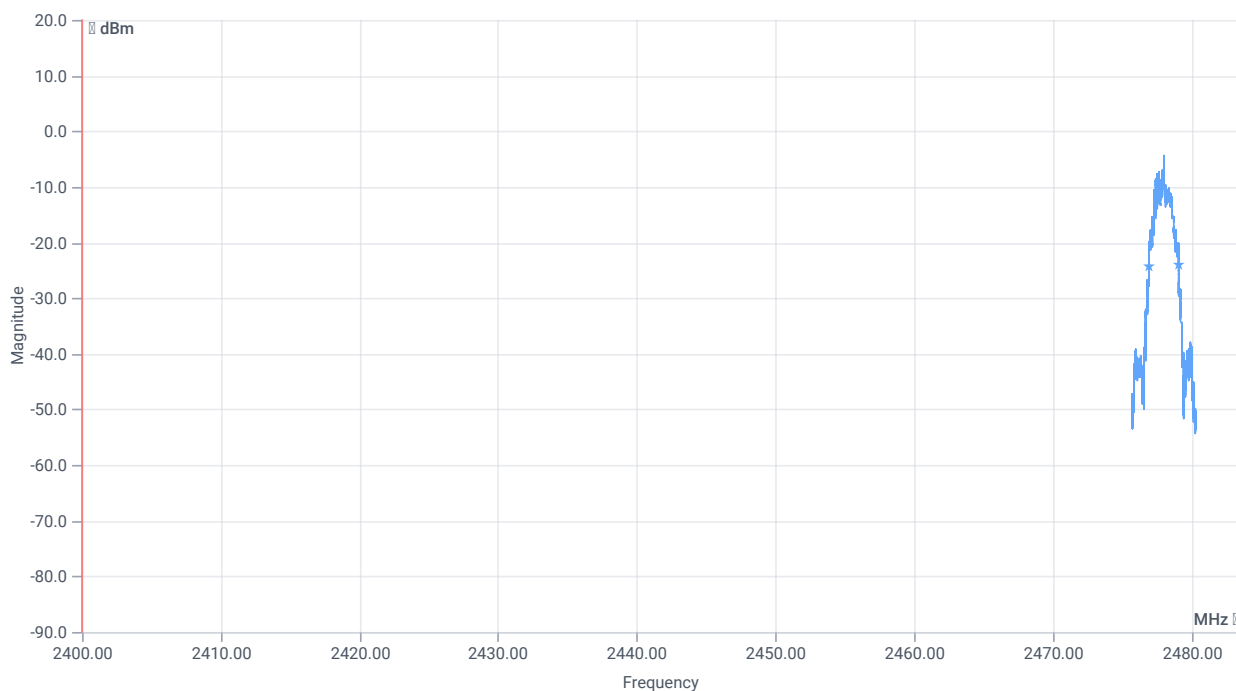
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	2024.000	kHz	INFO
T1 99%	2400.000000	---	2476.9991	MHz	PASS
T2 99%	---	2483.500000	2479.0234	MHz	PASS



BW 20dB



BW within band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	2150	kHz	INFO
T1 20dB	2400.000000	---	2476.9392	MHz	PASS
T2 20dB	---	2483.500000	2479.0888	MHz	PASS

Verdict

PASS

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

References

TC start	16.01.2025 13:24:20
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.5.0
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 37 RXpayload 37
2 Mbps supported	True TXpayload 37 RXpayload 37
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,FSV-30,1321.3008K30/103809,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

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]	0.7
Full path type	EUT_SA_GEN_SIG

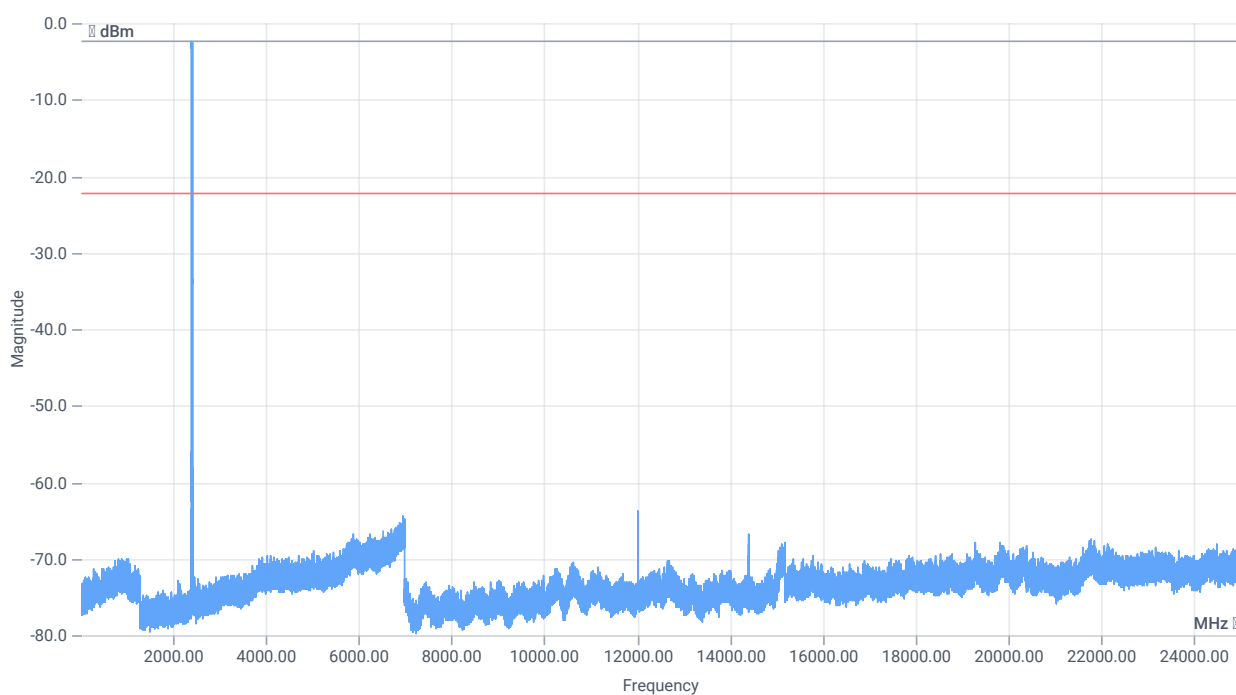
Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

Test at TX 2402 MHz

RESULT: Reference power cond.

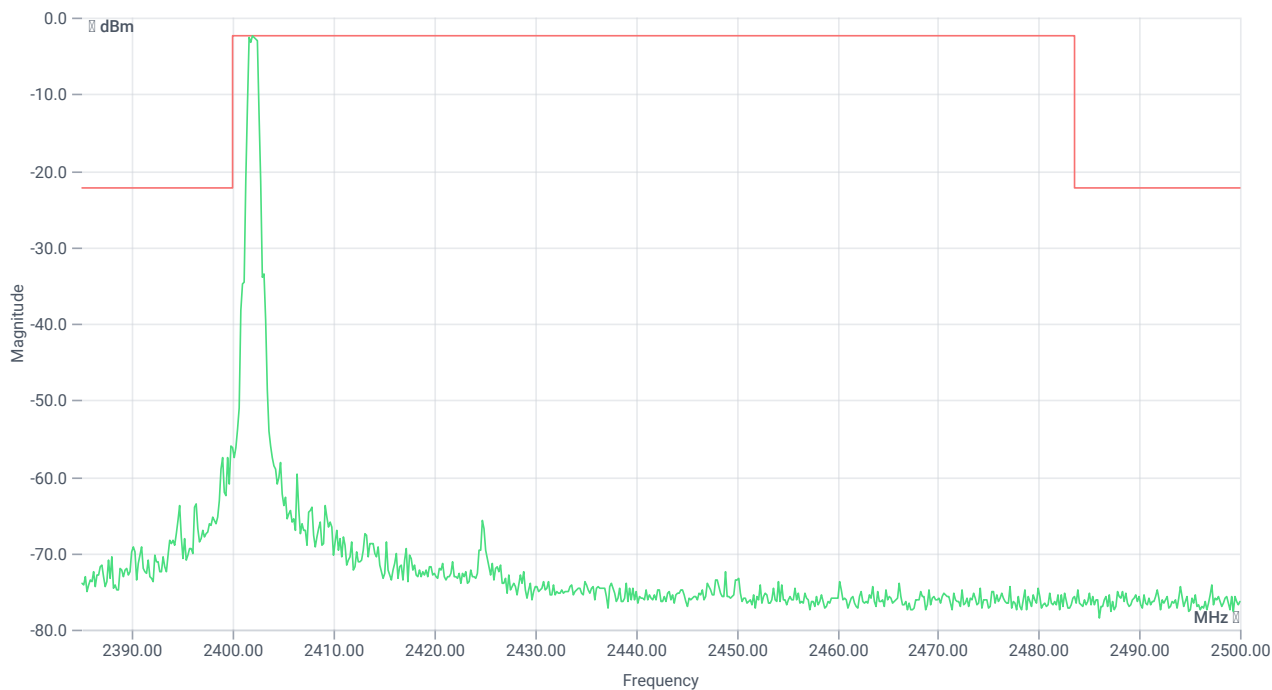
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	-1.76	dBm	INFO
Ref. frequency	---	---	2401.700	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	-1.76 17.03 0
Start [MHz] Stop [MHz]	24780.000 25000.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	200 25 1501 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2402.00 MHz	---	---	-2.33	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 30 MHz	0	---	-125.45	dB	INFO

Verdict

PASS

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

References

TC start	16.01.2025 13:42:00
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.5.0
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 37 RXpayload 37
2 Mbps supported	True TXpayload 37 RXpayload 37
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,FSV-30,1321.3008K30/103809,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

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]	0.7
Full path type	EUT_SA_GEN_SIG

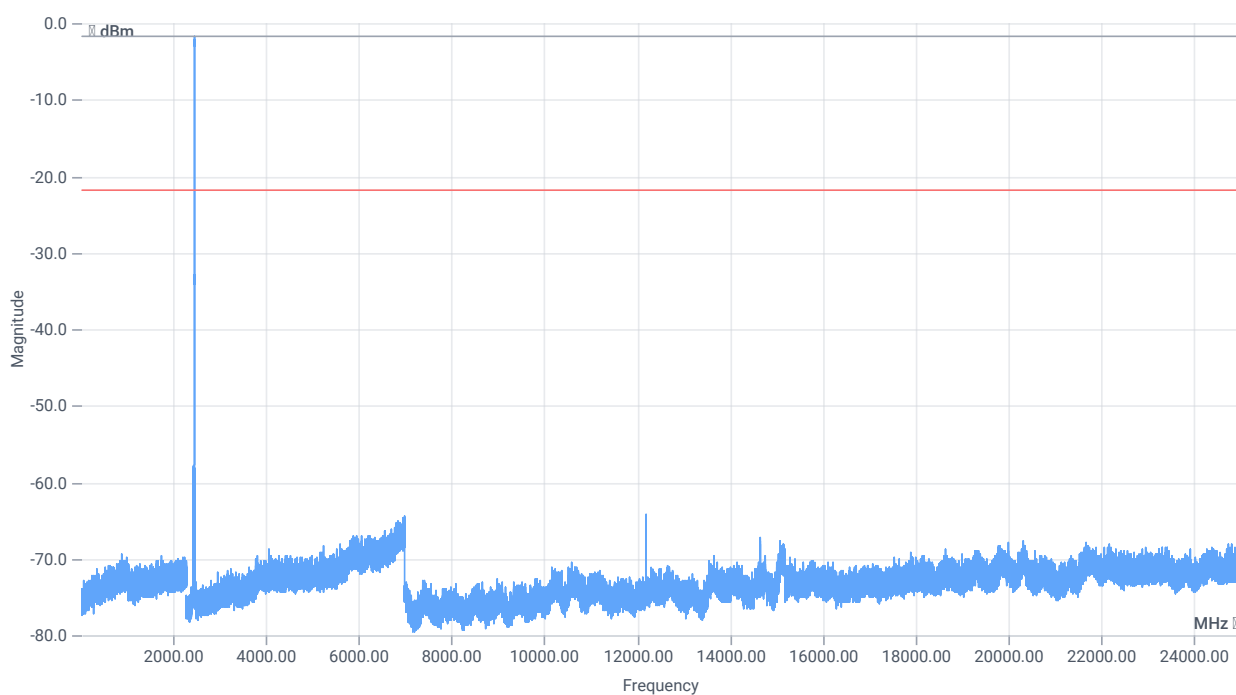
Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

Test at TX 2440 MHz

RESULT: Reference power cond.

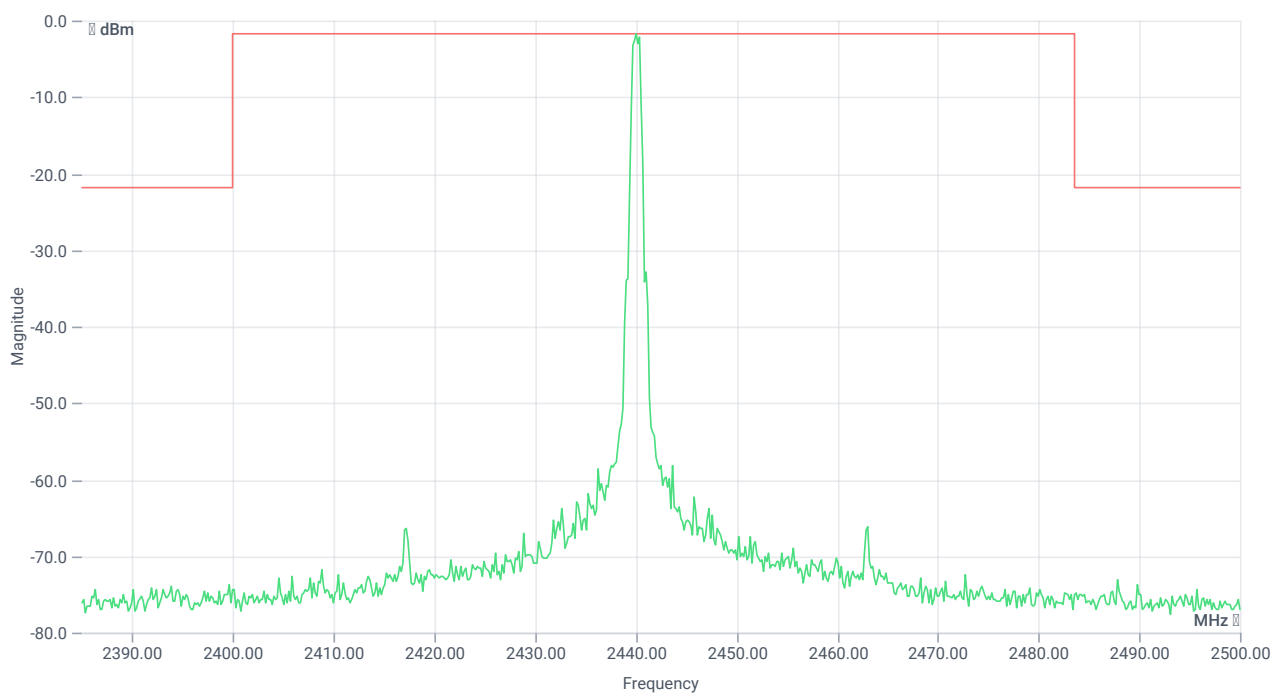
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	-1.25	dBm	INFO
Ref. frequency	---	---	2439.700	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	-1.25 17.03 0
Start [MHz] Stop [MHz]	24780.000 25000.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	200 25 1501 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2440.00 MHz	---	---	-1.79	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 12201.167 MHz	0	---	42.39	dB	INFO

Verdict

PASS

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

References

TC start	16.01.2025 14:01:28
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.5.0
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 37 RXpayload 37
2 Mbps supported	True TXpayload 37 RXpayload 37
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,FSV-30,1321.3008K30/103809,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

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]	0.7
Full path type	EUT_SA_GEN_SIG

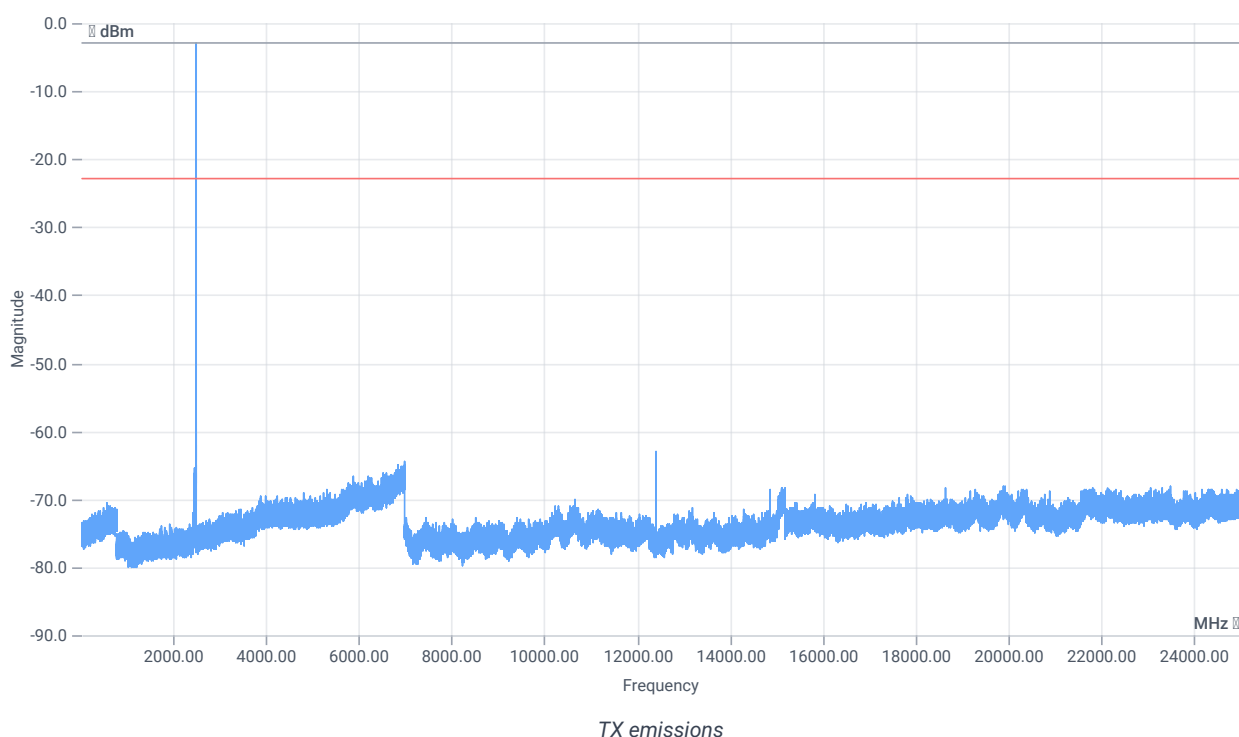
Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

Test at TX 2480 MHz

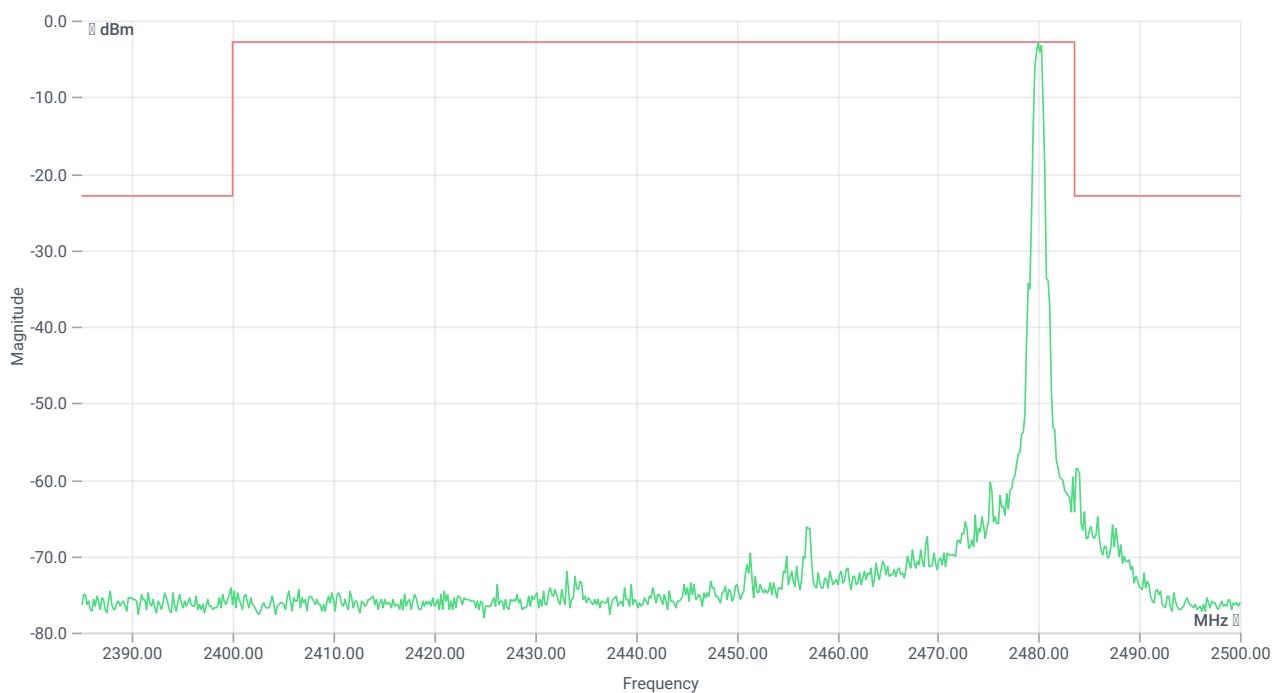
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	-2.10	dBm	INFO
Ref. frequency	---	---	2479.700	MHz	INFO



READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	-2.10 17.03 0
Start [MHz] Stop [MHz]	24780.000 25000.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	200 25 1501 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2480.00 MHz	---	---	-2.86	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 30 MHz	0	---	-124.39	dB	INFO

Verdict

PASS

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

References

TC start	16.01.2025 14:23:12
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.5.0
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 37 RXpayload 37
2 Mbps supported	True TXpayload 37 RXpayload 37
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,FSV-30,1321.3008K30/103809,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

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]	0.7
Full path type	EUT_SA_GEN_SIG

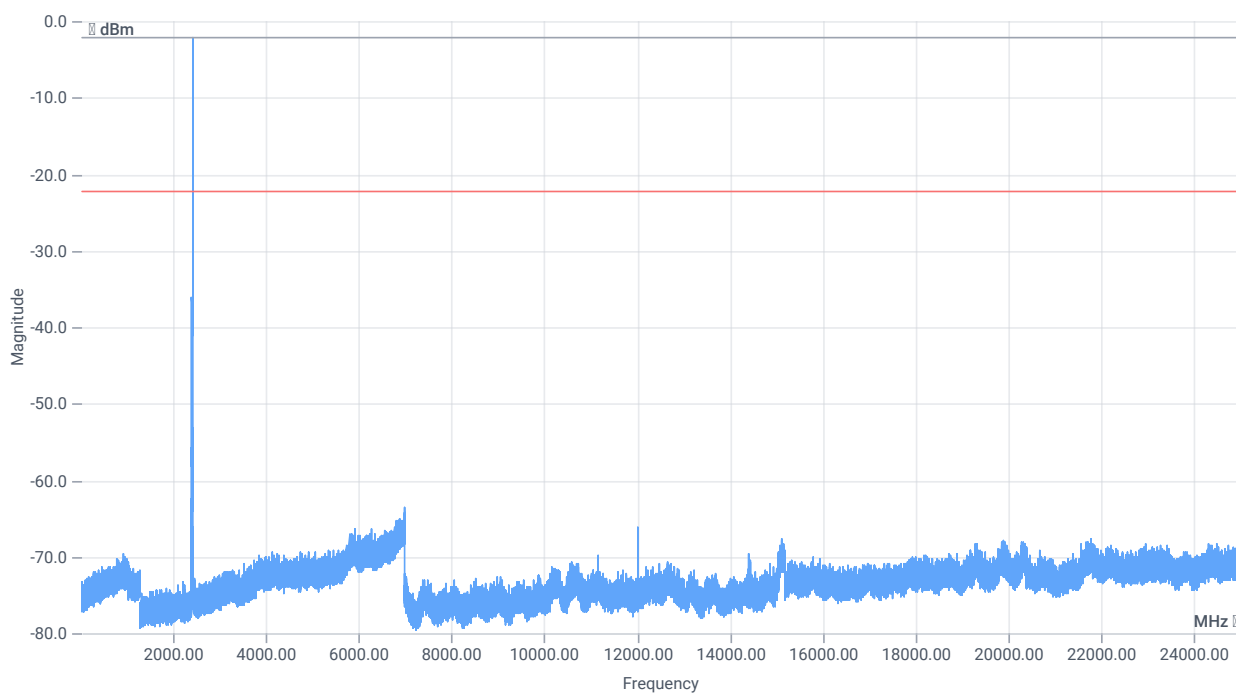
Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

Test at TX 2404 MHz

RESULT: Reference power cond.

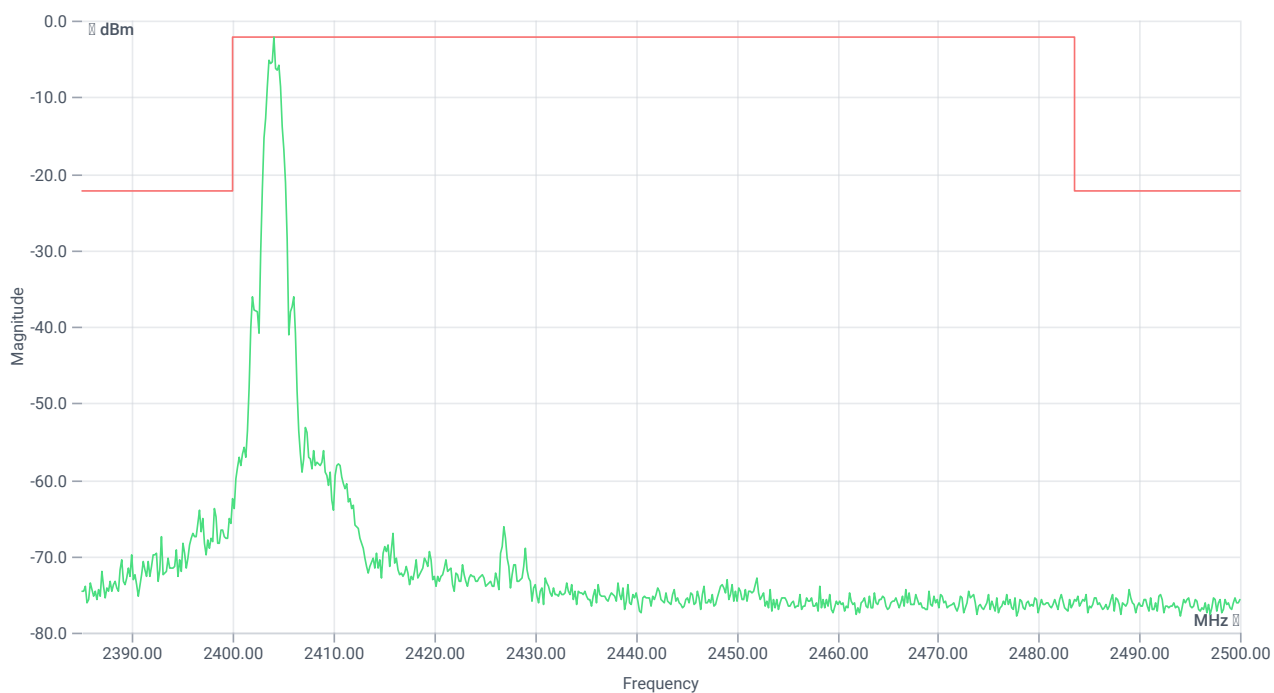
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	-1.77	dBm	INFO
Ref. frequency	---	---	2404.600	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	-1.77 17.03 0
Start [MHz] Stop [MHz]	24780.000 25000.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	200 25 1501 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2404.00 MHz	---	---	-2.24	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 6981.167 MHz	0	---	41.4	dB	INFO

Verdict

PASS

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

References

TC start	16.01.2025 14:40:10
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.5.0
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 37 RXpayload 37
2 Mbps supported	True TXpayload 37 RXpayload 37
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,FSV-30,1321.3008K30/103809,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

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]	0.7
Full path type	EUT_SA_GEN_SIG

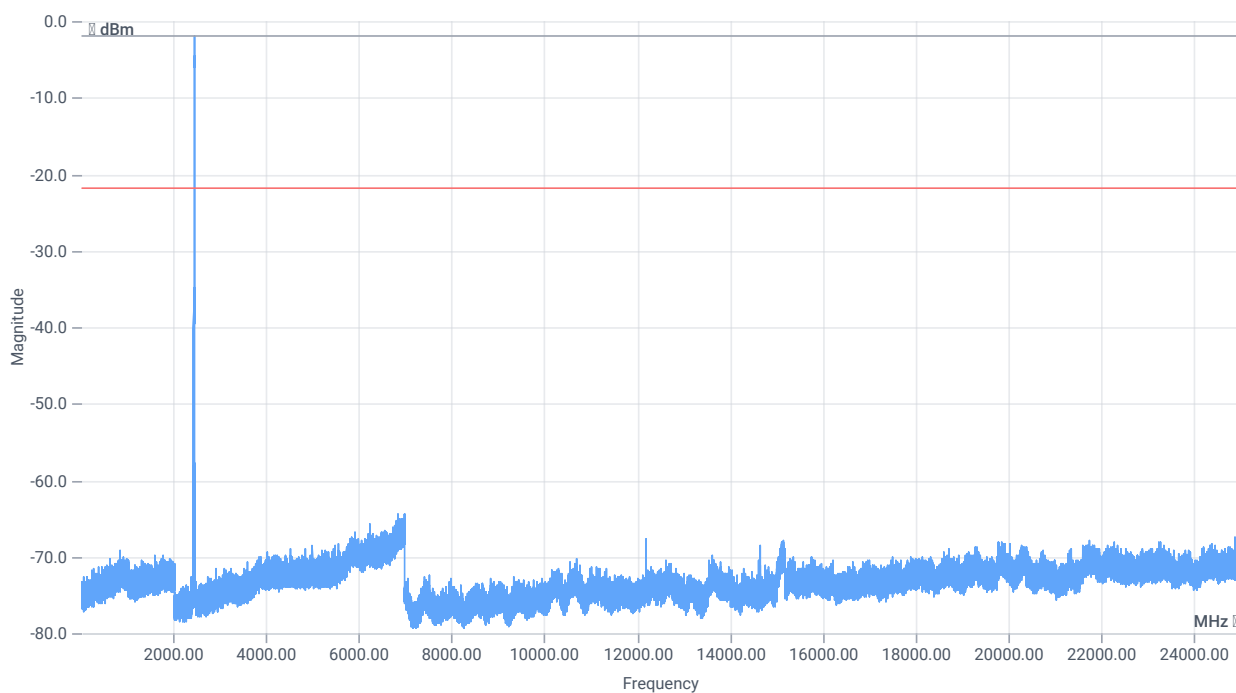
Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

Test at TX 2440 MHz

RESULT: Reference power cond.

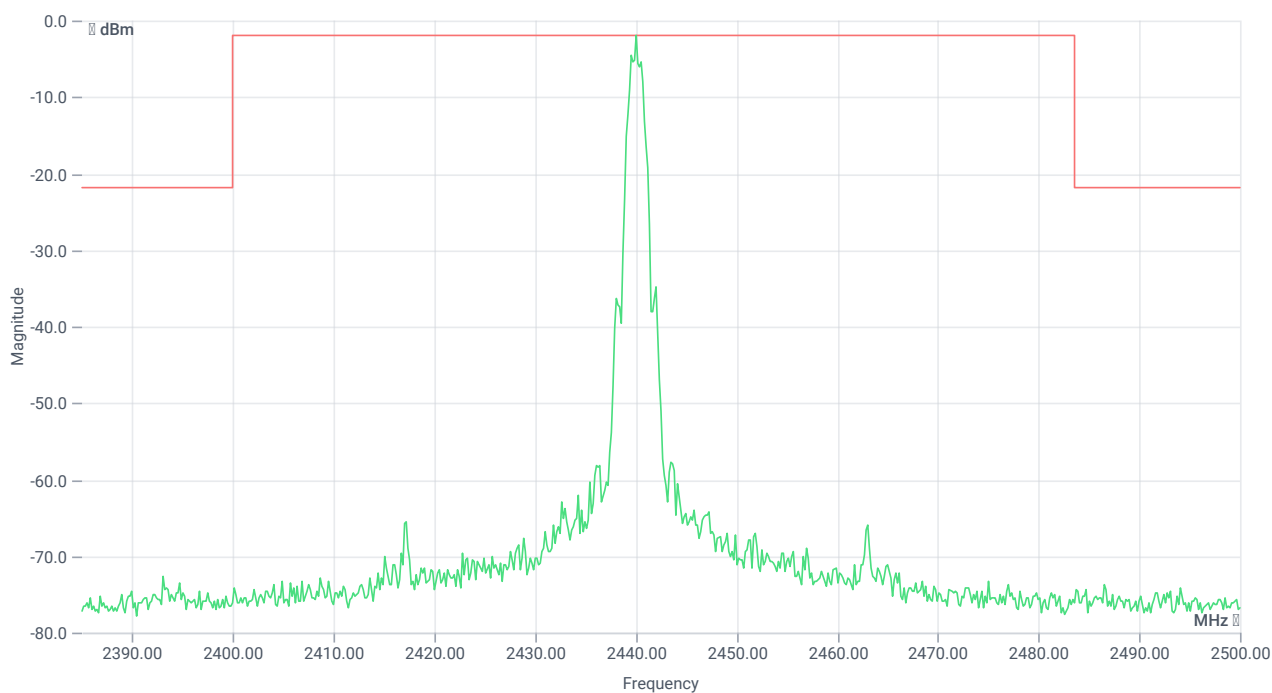
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	-1.39	dBm	INFO
Ref. frequency	---	---	2440.500	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	-1.39 17.03 0
Start [MHz] Stop [MHz]	24780.000 25000.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	200 25 1501 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2440.00 MHz	---	---	-1.92	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 6980.333 MHz	0	---	42.52	dB	INFO

Verdict

PASS

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

References

TC start	16.01.2025 14:57:11
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.5.0
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 37 RXpayload 37
2 Mbps supported	True TXpayload 37 RXpayload 37
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,FSV-30,1321.3008K30/103809,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

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]	0.7
Full path type	EUT_SA_GEN_SIG

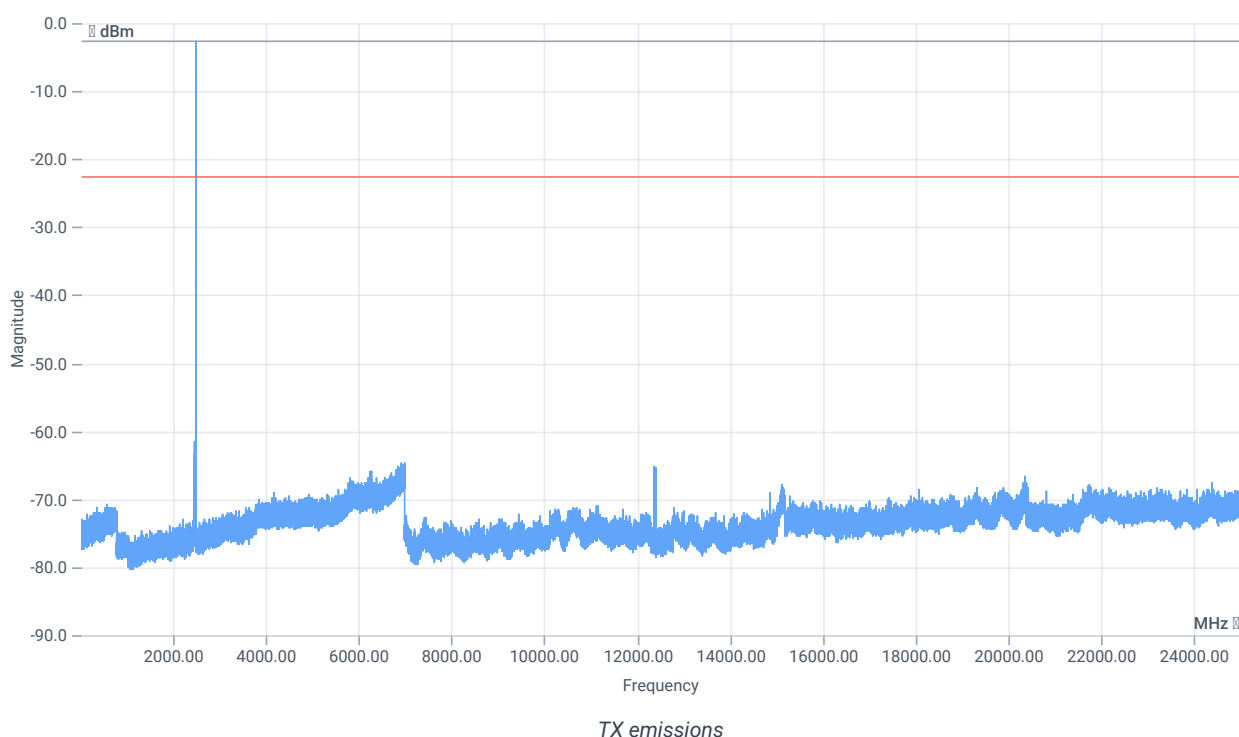
Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

Test at TX 2478 MHz

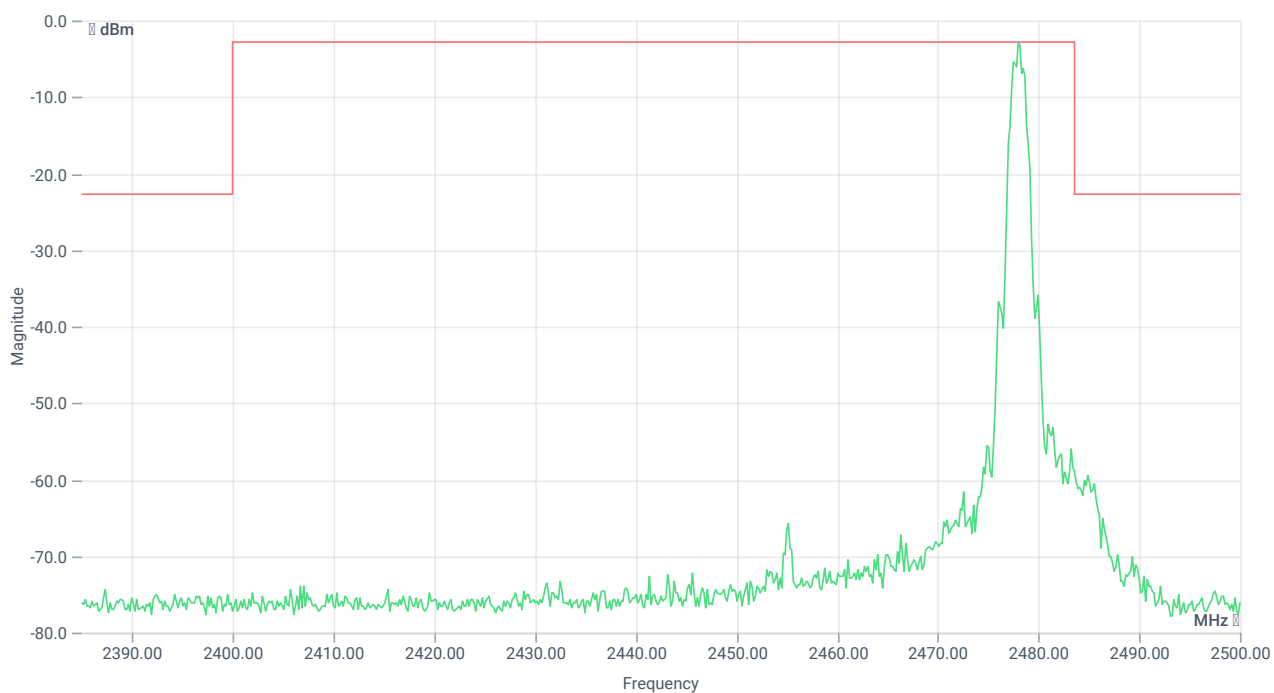
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	-2.10	dBm	INFO
Ref. frequency	---	---	2477.400	MHz	INFO



READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	-2.10 17.03 0
Start [MHz] Stop [MHz]	24780.000 25000.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	200 25 1501 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2478.00 MHz	---	---	-2.74	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 2484.833 MHz	0	---	36.77	dB	INFO

Verdict

PASS

- END OF DOCUMENT -