

Conducted test results

No.1-4198/22-01-02_TR1-A201-R1

March 13, 2024

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

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Authorized

Andreas Curette
Testing Manager
Radio Labs

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NA # Peak output power 3MHz/3MHz ~ BT LE 1 Msps

References

TC start	13.03.2024 12:15:33
Ambit temp [°C] humidity [rel%]	27.8 32
System version	5.0.3.4
Standard Version	NA NI
Method	
Description	Peak OP 3MHz/3MHz - 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	False 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	No

Equipment

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

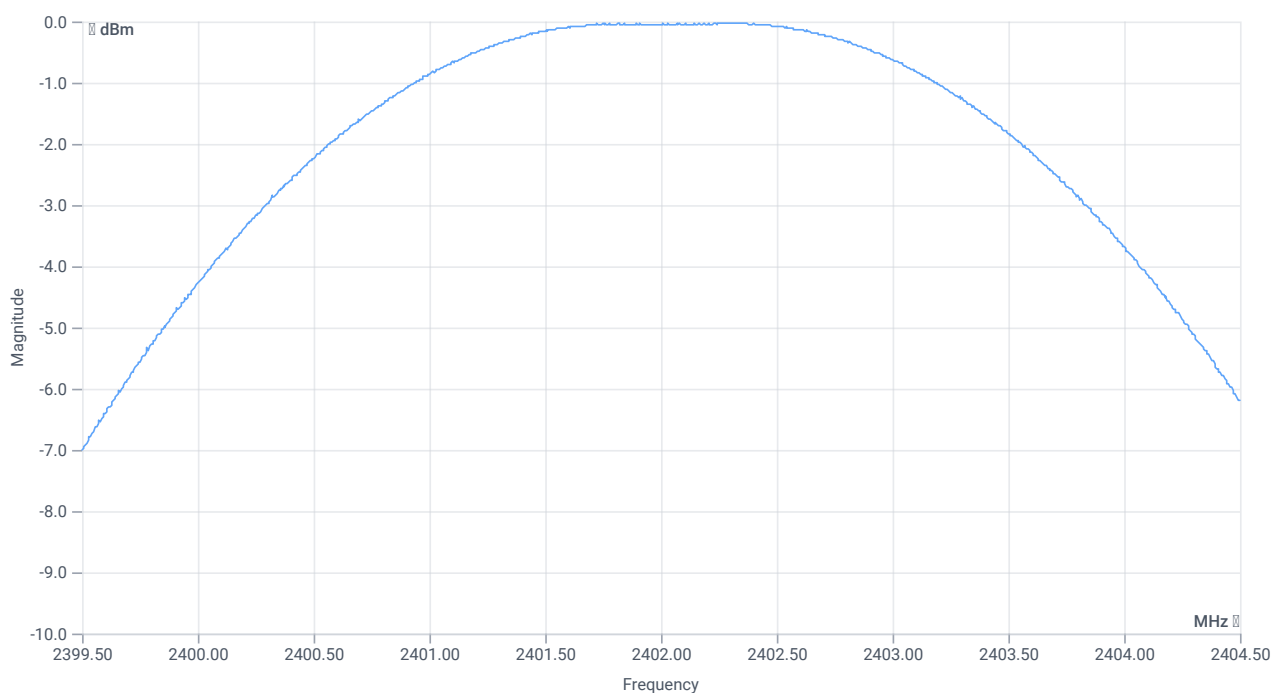
Test at TX 2402 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	0.08	dBm	INFO
Ref. frequency	---	---	2402.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.08 8.96 20
Start [MHz] Stop [MHz]	2399.500 2404.500
RBW [MHz] VBW [MHz]	3.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1000 10 1001 SWE



Peak output power

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	---	-0.02	dBm	INFO
Peak power	---	---	0.995405	mW	INFO
Frequency at peak	---	---	2402.32	MHz	INFO

Verdict

PASS

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

References

TC start	13.03.2024 12:16:03
Ambit temp [°C] humidity [rel%]	27.8 32
System version	5.0.3.4
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	False 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	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.60
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.	---	---	0.08	dBm	INFO
Ref. frequency	---	---	2402.300	MHz	INFO

READ SA SETTINGS:

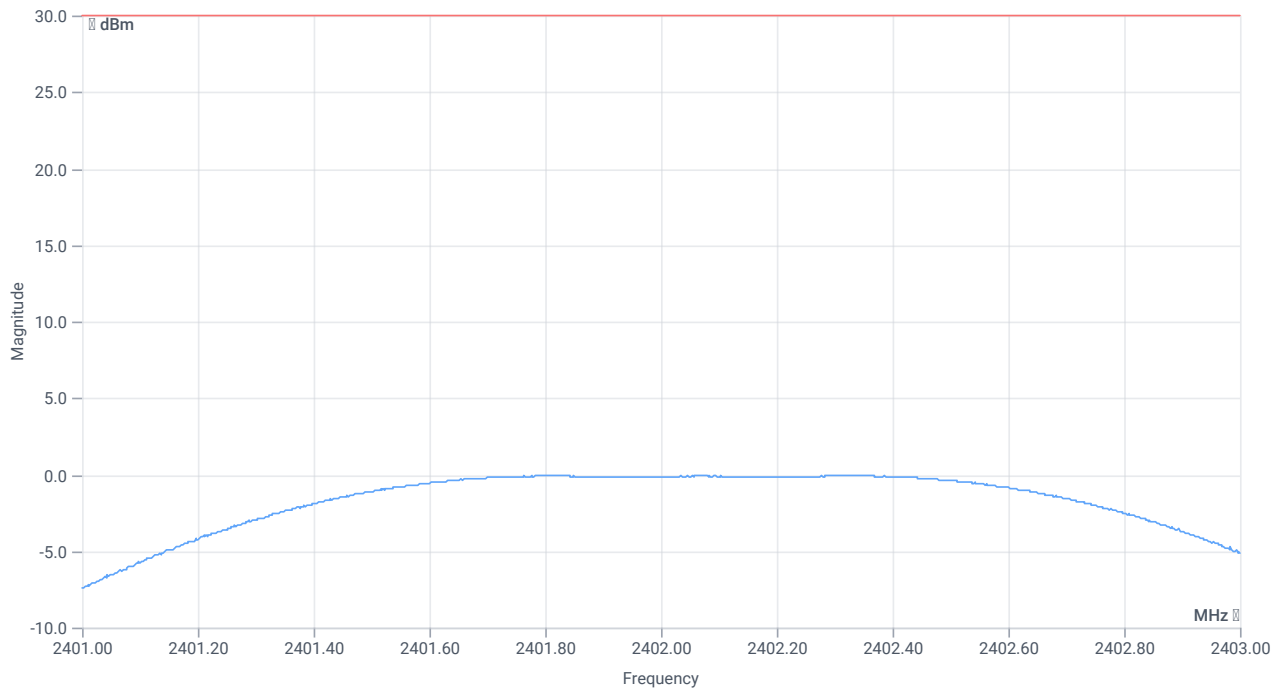
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	5.08 8.96 15
Start [MHz] Stop [MHz]	2401.000 2403.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

DTS bandwidth

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS bandwidth (6dB)	---	---	702	kHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.08 8.96 20
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	-0.08	dBm	PASS
Peak power	---	1000	0.981748	mW	PASS
Frequency at peak	---	---	2402.34	MHz	INFO

Verdict

PASS

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

References

TC start	13.03.2024 12:16:47
Ambit temp [°C] humidity [rel%]	27.8 32
System version	5.0.3.4
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	False 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	No

Equipment

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

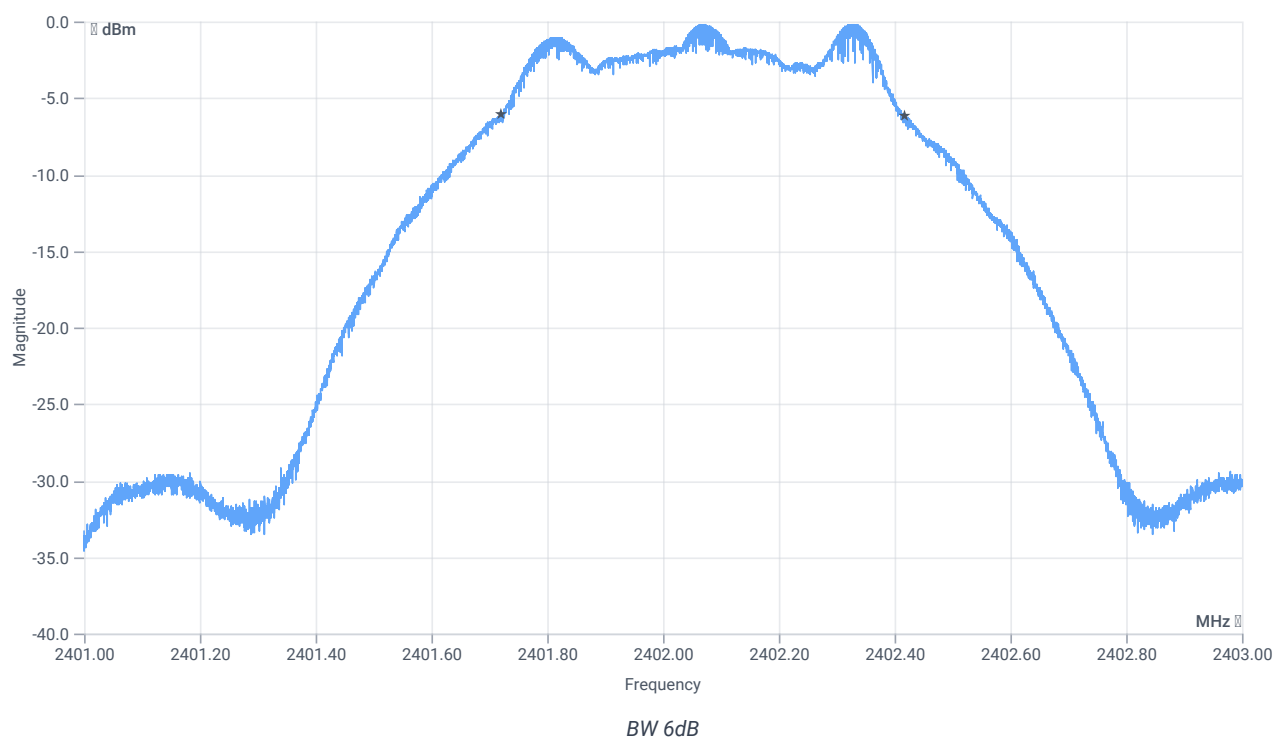
Test at TX 2402 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	0.09	dBm	INFO
Ref. frequency	---	---	2402.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	5.09 8.96 15
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	---	697	kHz	PASS

Verdict

PASS

FCC 15.247 # Peak psd DTS ~ BT LE 1 Msps

References

TC start	13.03.2024 12:17:20
Ambit temp [°C] humidity [rel%]	27.8 32
System version	5.0.3.4
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	False 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	No

Equipment

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

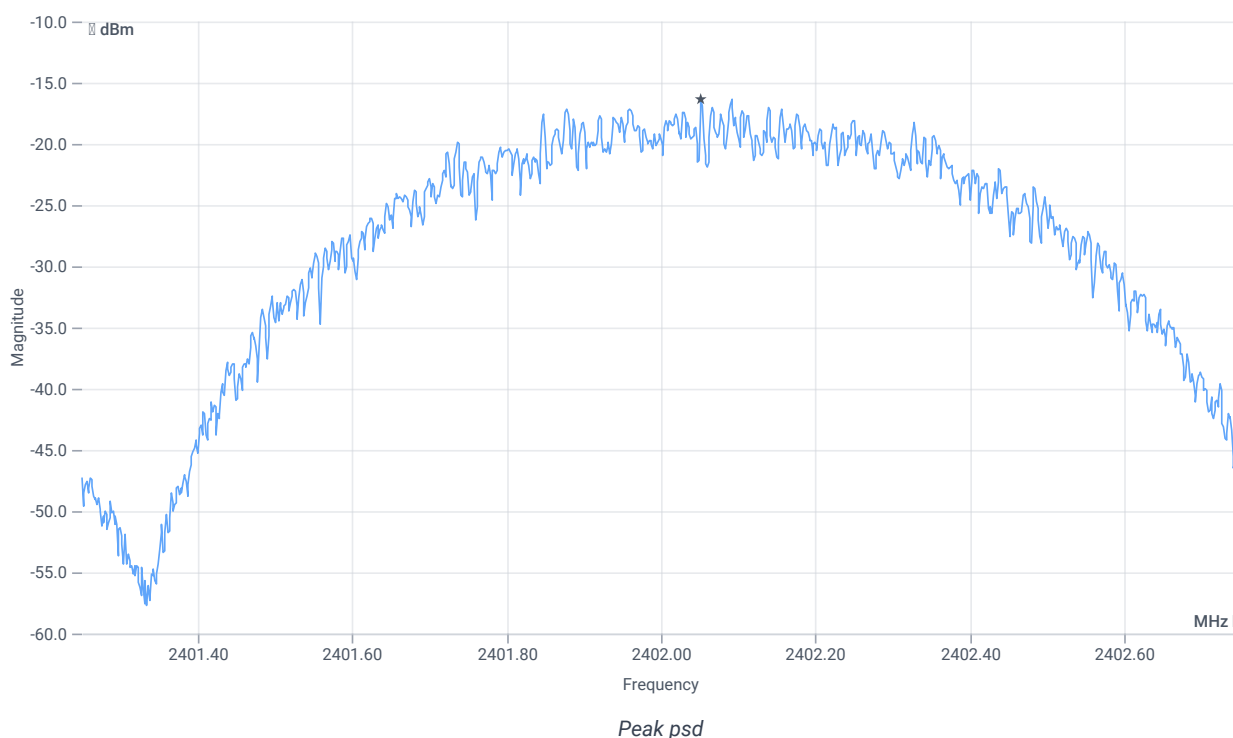
Test at TX 2402 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	0.05	dBm	INFO
Ref. frequency	---	---	2402.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	5.05 8.96 15
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	-16.4	dBm/3KHz	PASS

Verdict

PASS

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

References

TC start	13.03.2024 12:18:01
Ambit temp [°C] humidity [rel%]	27.8 32
System version	5.0.3.4
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	False 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	No

Equipment

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

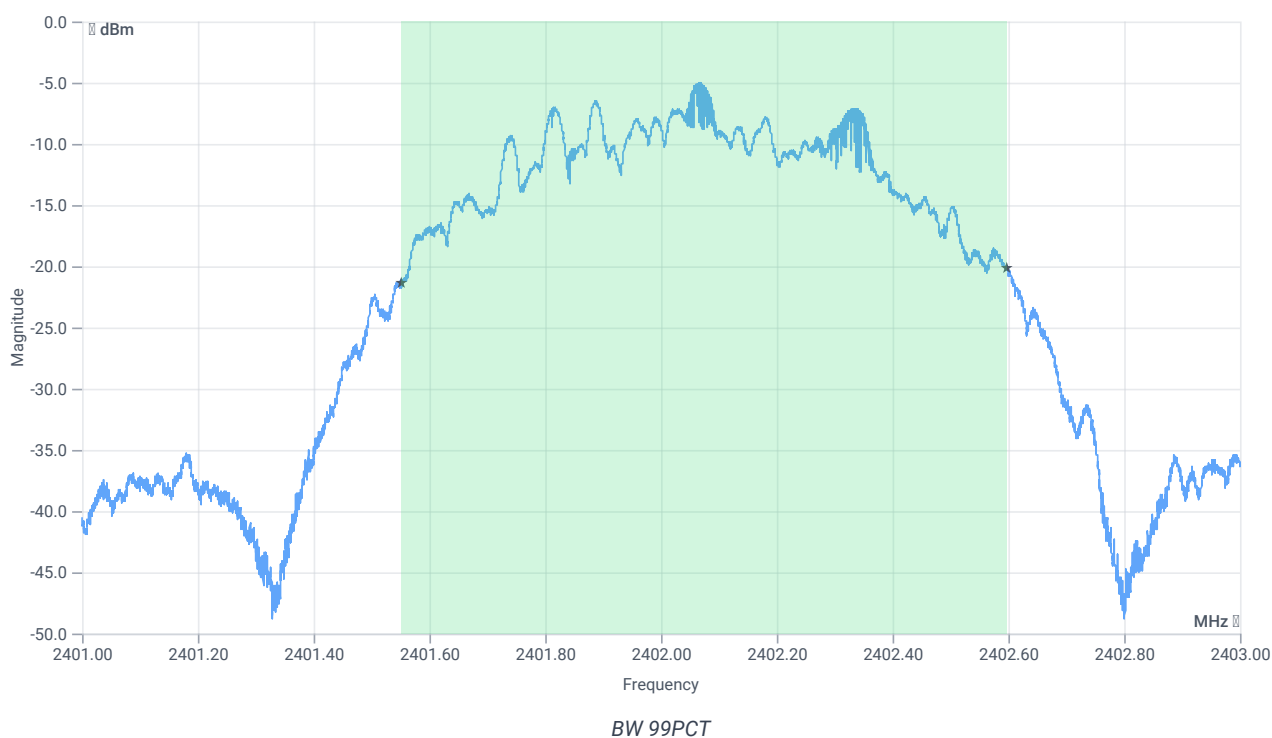
Test at TX 2402 MHz

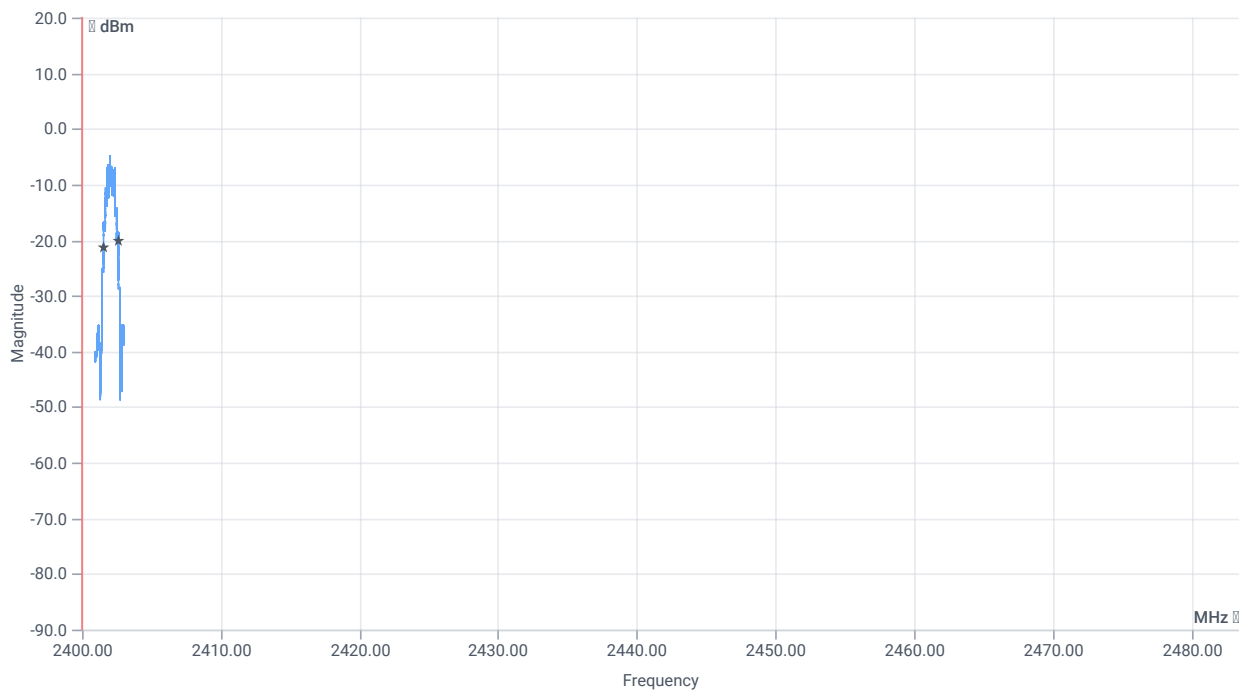
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	0.04	dBm	INFO
Ref. frequency	---	---	2402.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	5.04 8.96 15
Start [MHz] Stop [MHz]	2401.000 2403.000
RBW [MHz] VBW [MHz]	0.020000 0.100000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

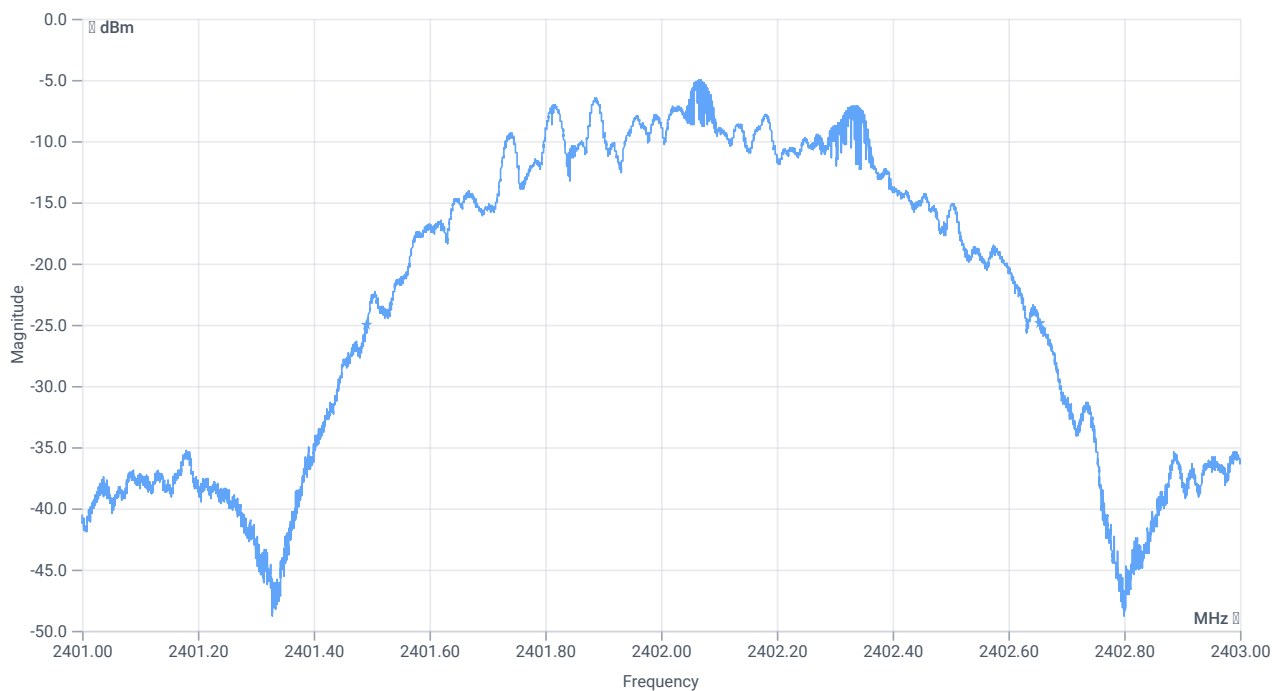




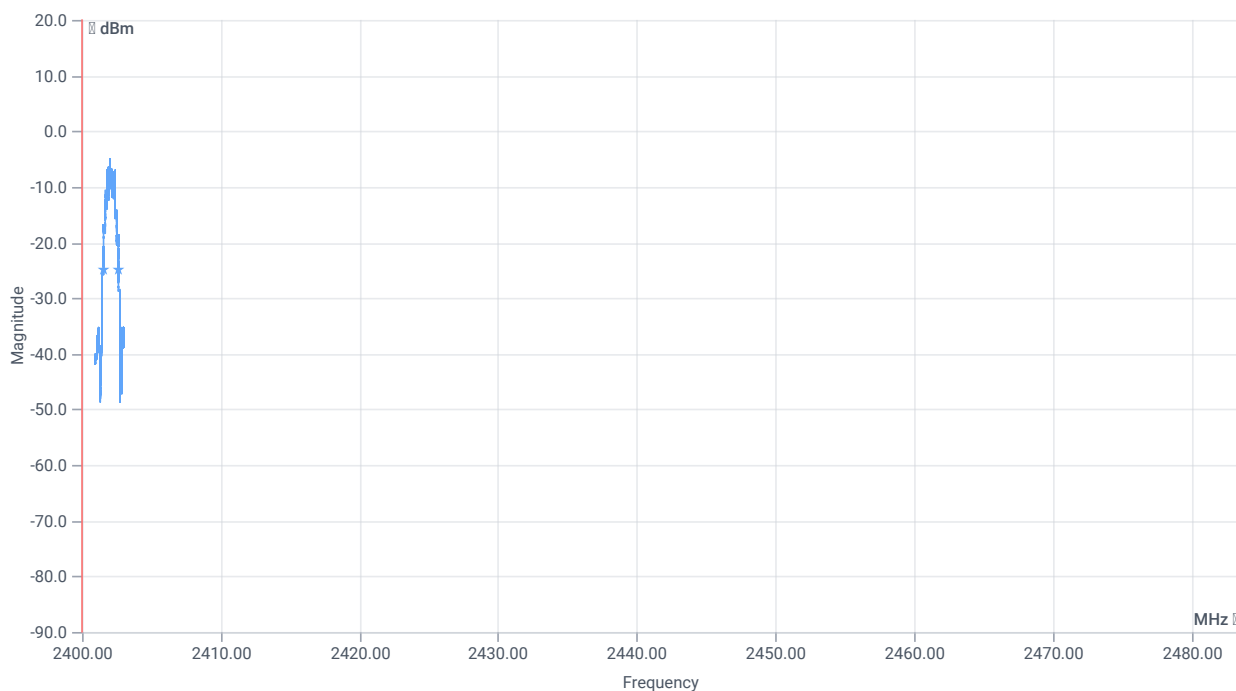
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	1047.000	kHz	INFO
T1 99%	2400.000000	---	2401.5502	MHz	PASS
T2 99%	---	2483.500000	2402.5969	MHz	PASS



BW 20dB



BW within band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	1163	kHz	INFO
T1 20dB	2400.000000	---	2401.4924	MHz	PASS
T2 20dB	---	2483.500000	2402.6552	MHz	PASS

Verdict

PASS

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

References

TC start	13.03.2024 12:18:38
Ambit temp [°C] humidity [rel%]	27.8 32
System version	5.0.3.4
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	False 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	No

Equipment

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

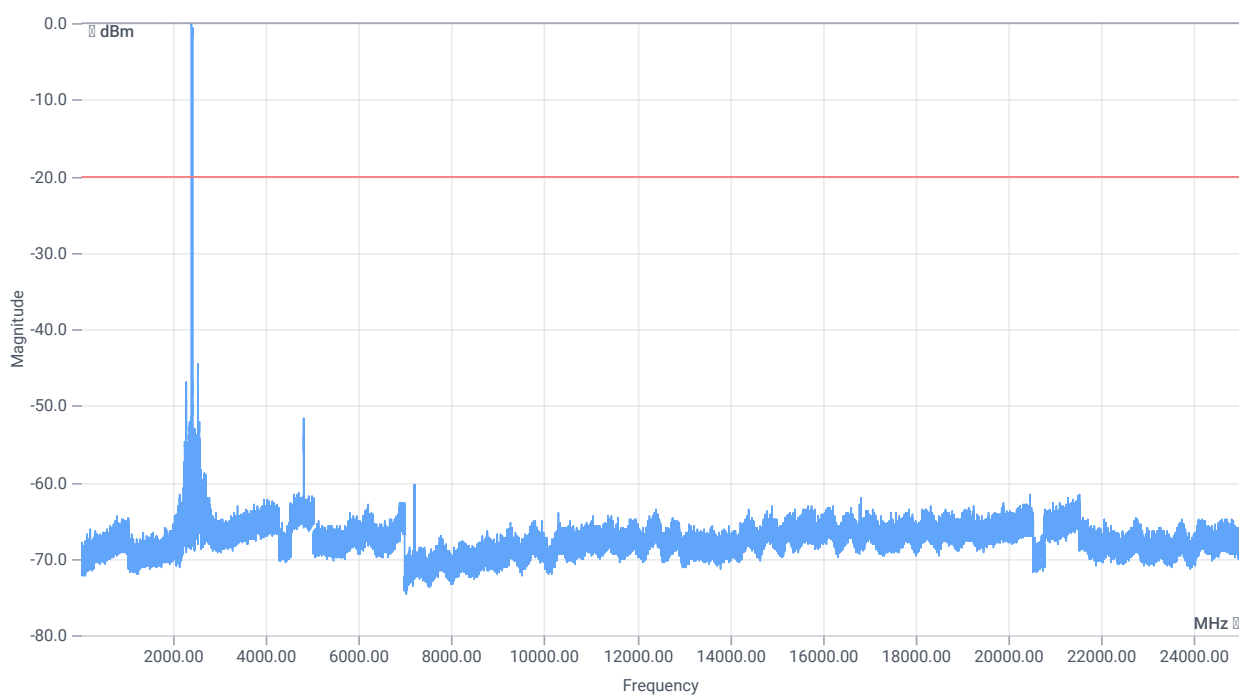
Test Parameter

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.

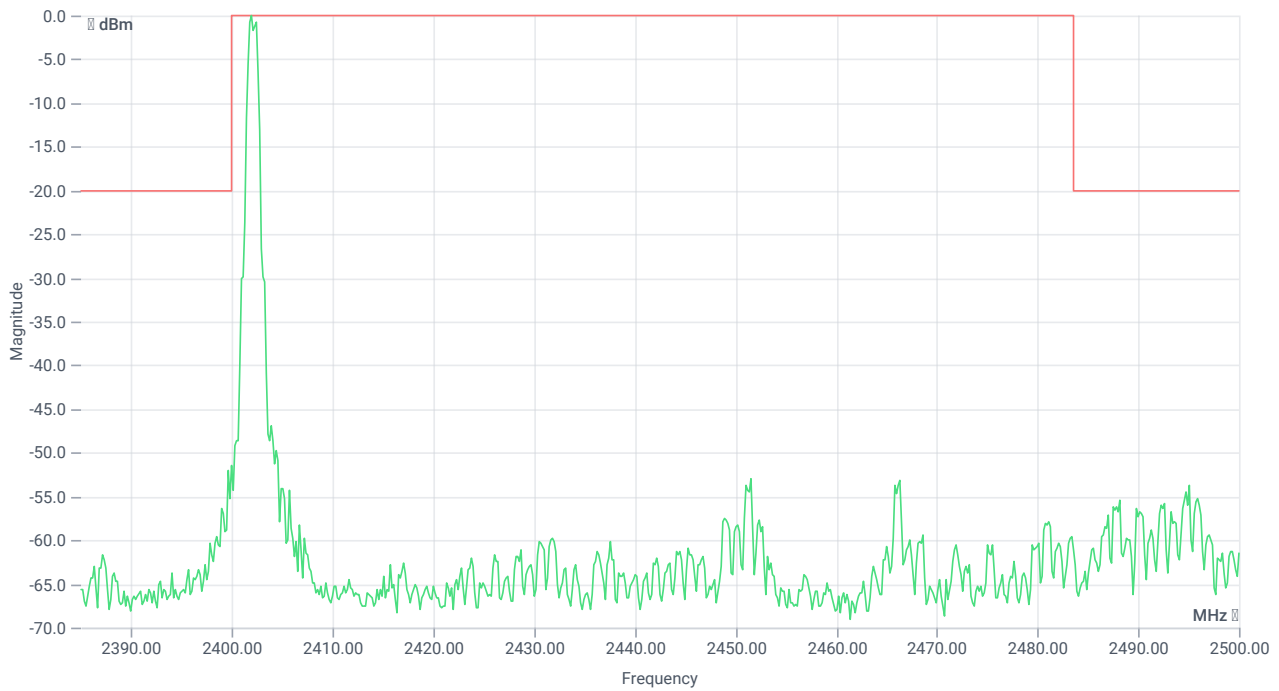
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	0.02	dBm	INFO
Ref. frequency	---	---	2402.300	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	0.02 15.92 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	---	---	-0.08	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 2530.167 MHz	0	---	24.56	dB	INFO

Verdict

PASS

NA # Peak output power 3MHz/3MHz ~ BT LE 1 Msps

References

TC start	13.03.2024 12:31:53
Ambit temp [°C] humidity [rel%]	27.7 32
System version	5.0.3.4
Standard Version	NA NI
Method	
Description	Peak OP 3MHz/3MHz - 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	False 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	No

Equipment

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

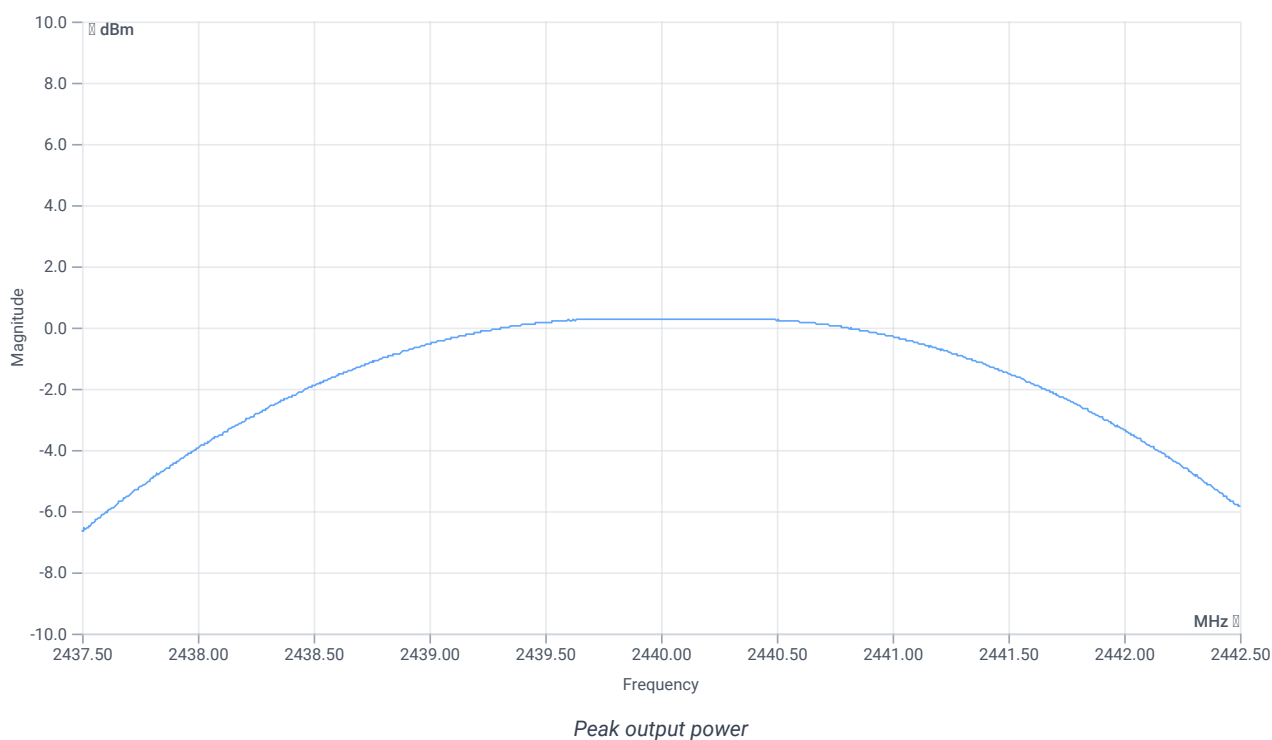
Test at TX 2440 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	0.42	dBm	INFO
Ref. frequency	---	---	2440.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.42 9 20
Start [MHz] Stop [MHz]	2437.500 2442.500
RBW [MHz] VBW [MHz]	3.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1000 10 1001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	---	0.29	dBm	INFO
Peak power	---	---	1.069055	mW	INFO
Frequency at peak	---	---	2440.345	MHz	INFO

Verdict

PASS

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

References

TC start	13.03.2024 12:32:23
Ambit temp [°C] humidity [rel%]	27.8 32
System version	5.0.3.4
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	False 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	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.60
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.	---	---	0.39	dBm	INFO
Ref. frequency	---	---	2440.300	MHz	INFO

READ SA SETTINGS:

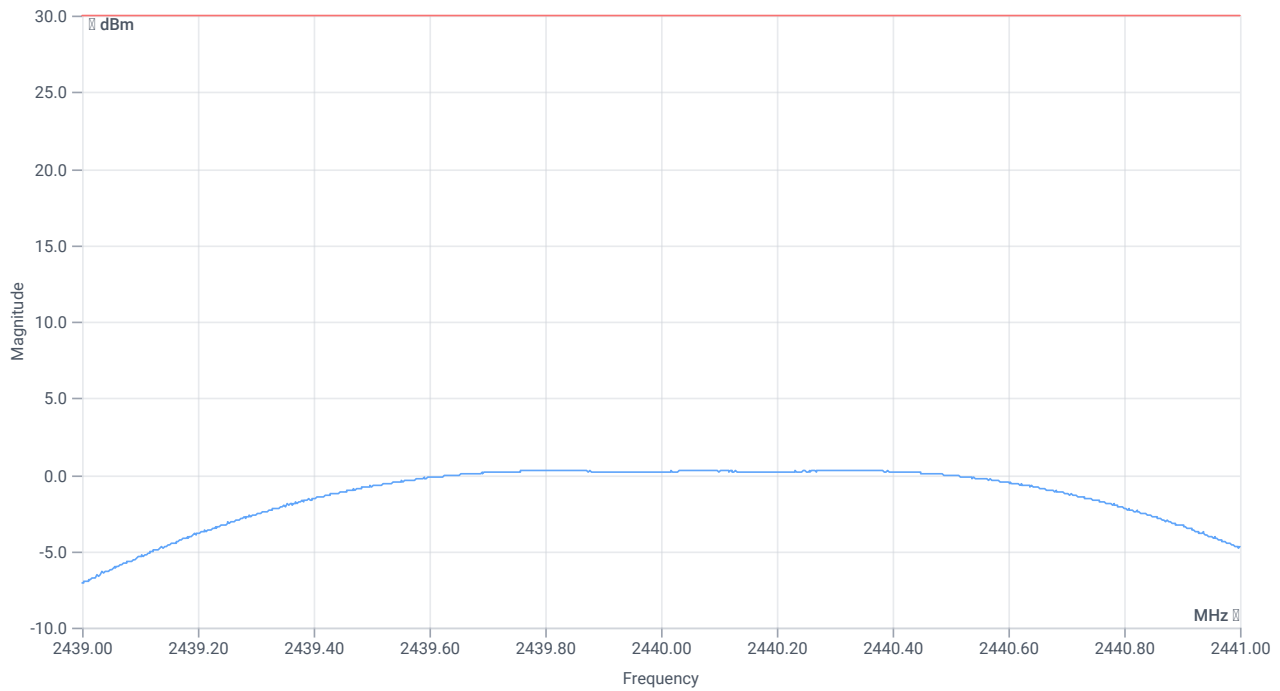
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	5.39 9 15
Start [MHz] Stop [MHz]	2439.000 2441.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

DTS bandwidth

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS bandwidth (6dB)	---	---	704	kHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.39 9 20
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	0.25	dBm	PASS
Peak power	---	1000	1.059254	mW	PASS
Frequency at peak	---	---	2439.79	MHz	INFO

Verdict

PASS

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

References

TC start	13.03.2024 12:33:07
Ambit temp [°C] humidity [rel%]	27.8 32
System version	5.0.3.4
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	False 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	No

Equipment

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

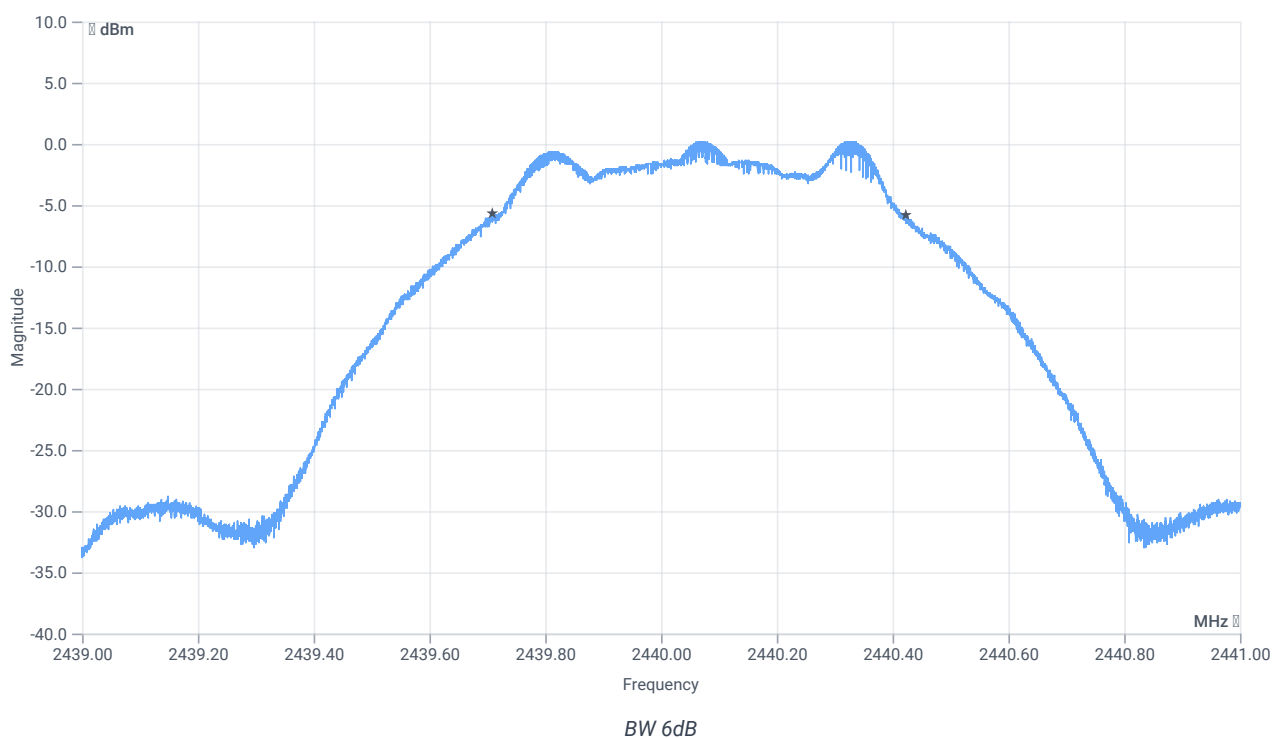
Test at TX 2440 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	0.38	dBm	INFO
Ref. frequency	---	---	2440.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	5.38 9 15
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	---	713	kHz	PASS

Verdict

PASS

FCC 15.247 # Peak psd DTS ~ BT LE 1 Msps

References

TC start	13.03.2024 12:33:40
Ambit temp [°C] humidity [rel%]	27.8 32
System version	5.0.3.4
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	False 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	No

Equipment

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

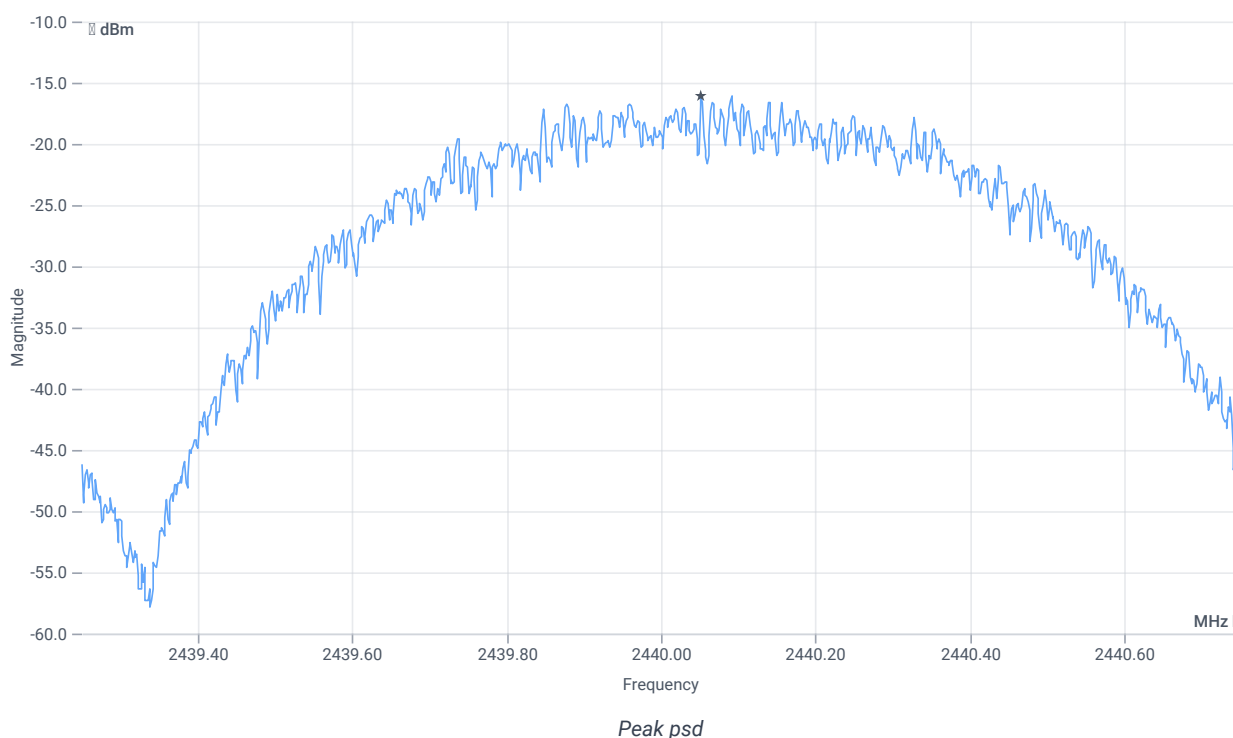
Test at TX 2440 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	0.42	dBm	INFO
Ref. frequency	---	---	2440.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	5.42 9 15
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	-16.14	dBm/3KHz	PASS

Verdict

PASS

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

References

TC start	13.03.2024 12:34:20
Ambit temp [°C] humidity [rel%]	27.8 32
System version	5.0.3.4
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	False 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	No

Equipment

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

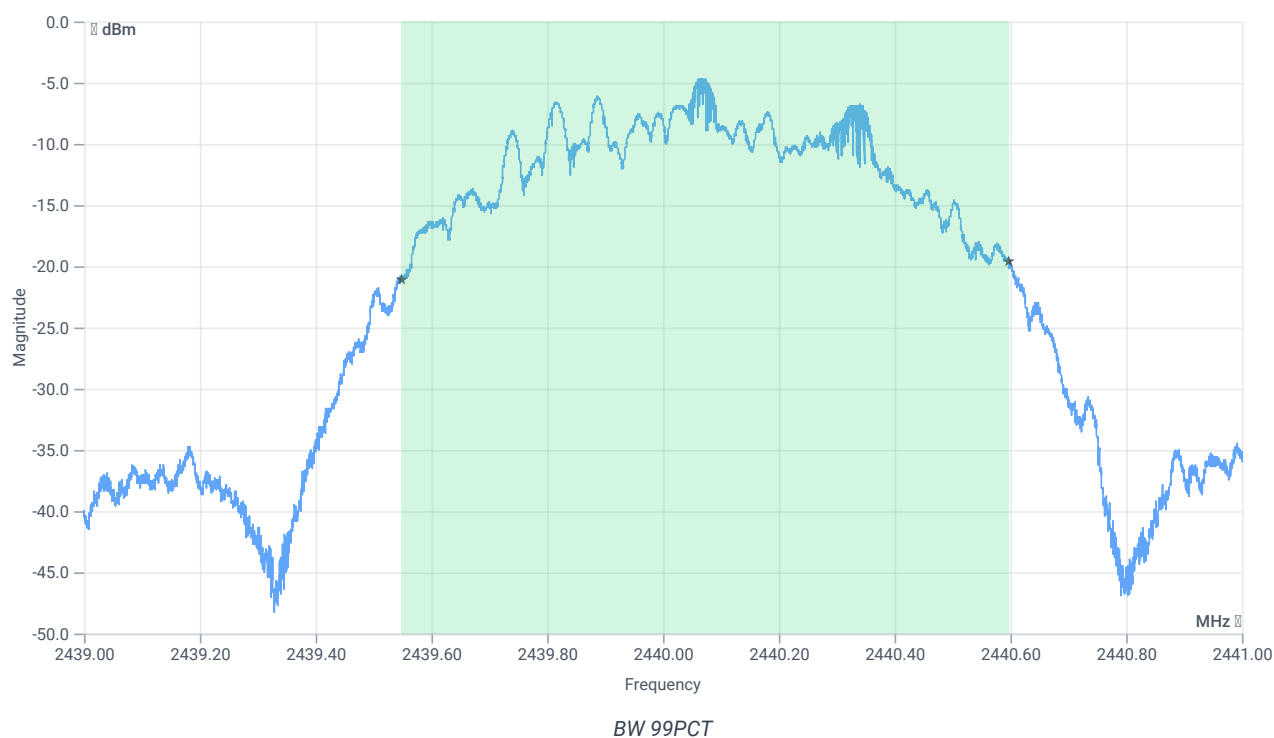
Test at TX 2440 MHz

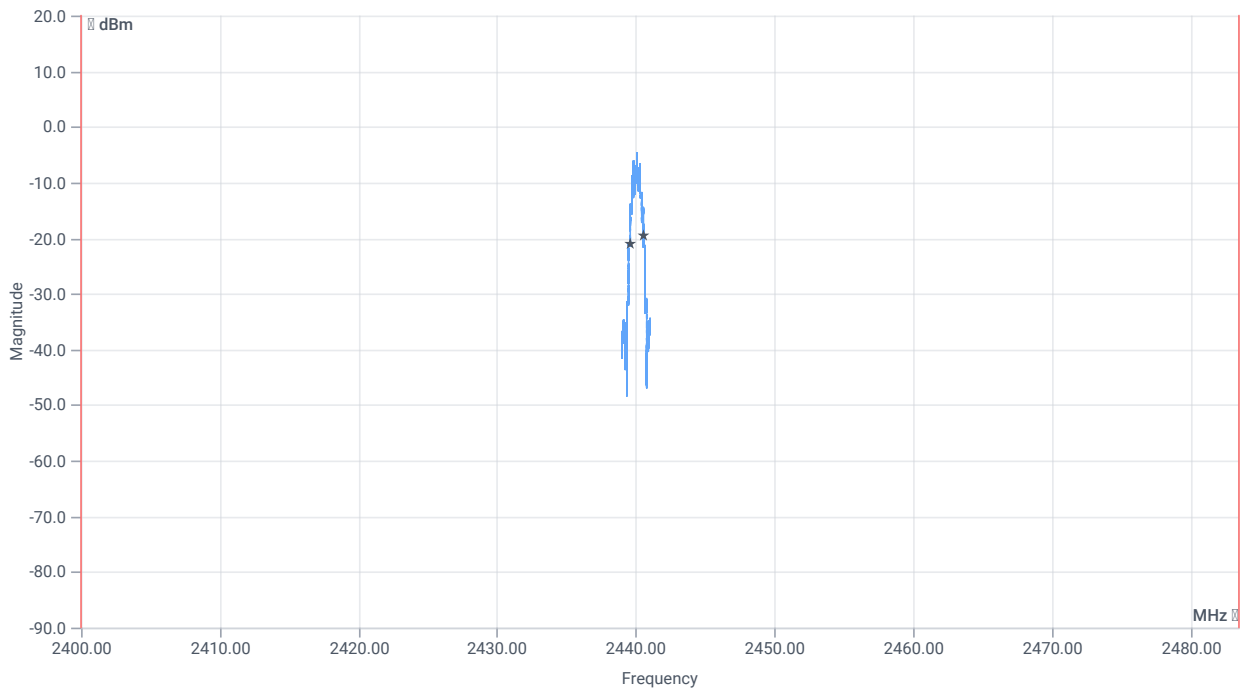
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	0.38	dBm	INFO
Ref. frequency	---	---	2440.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	5.38 9 15
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

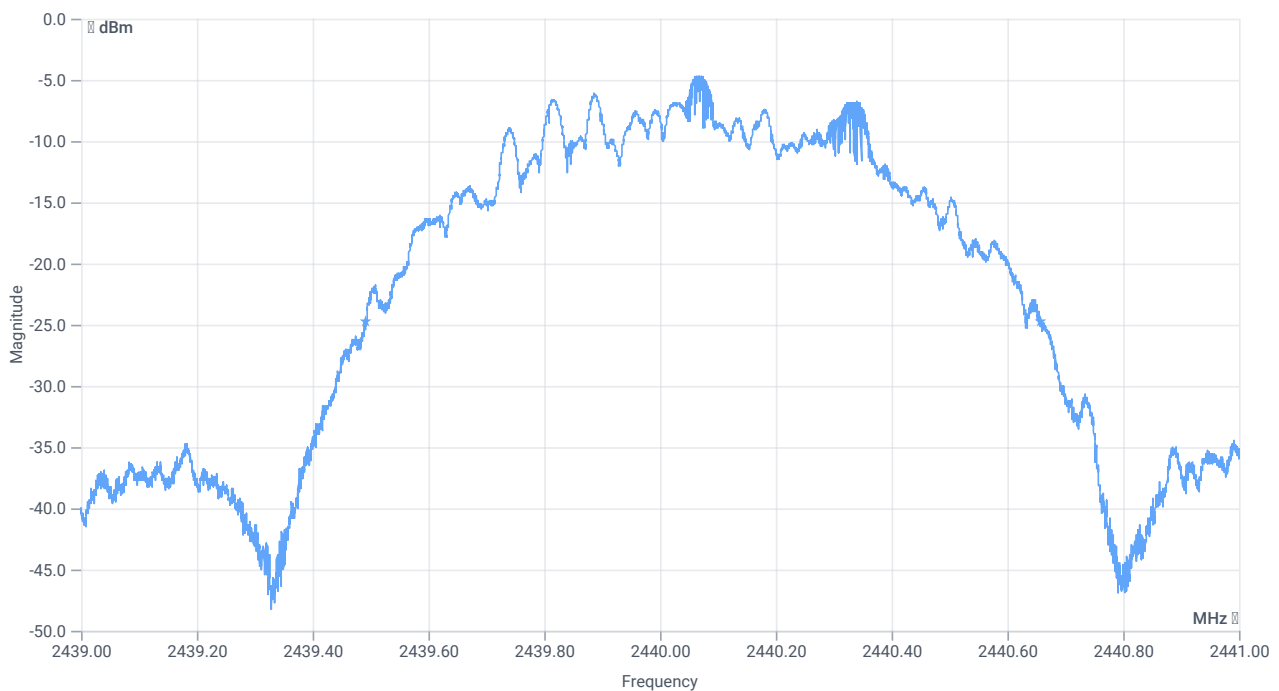




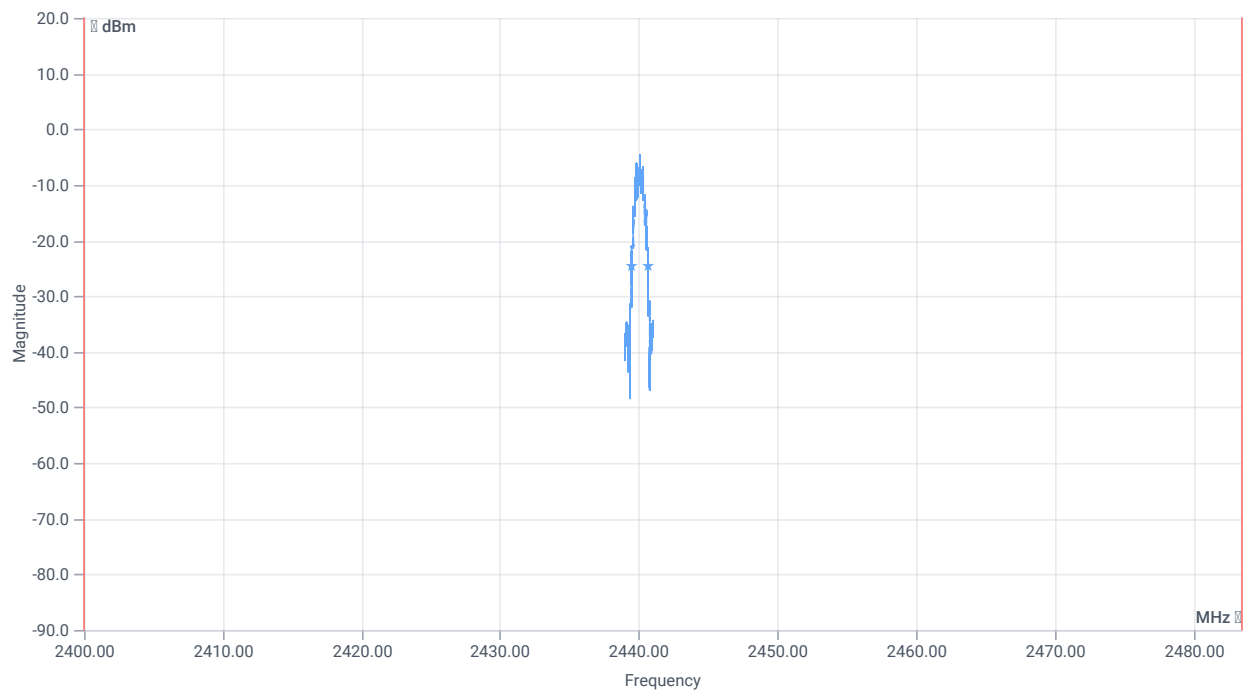
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	1049.000	kHz	INFO
T1 99%	2400.000000	---	2439.5488	MHz	PASS
T2 99%	---	2483.500000	2440.5983	MHz	PASS



BW 20dB



BW within band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	1164	kHz	INFO
T1 20dB	2400.000000	---	2439.4920	MHz	PASS
T2 20dB	---	2483.500000	2440.6564	MHz	PASS

Verdict
PASS

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

References

TC start	13.03.2024 12:34:58
Ambit temp [°C] humidity [rel%]	27.8 32
System version	5.0.3.4
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	False 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	No

Equipment

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

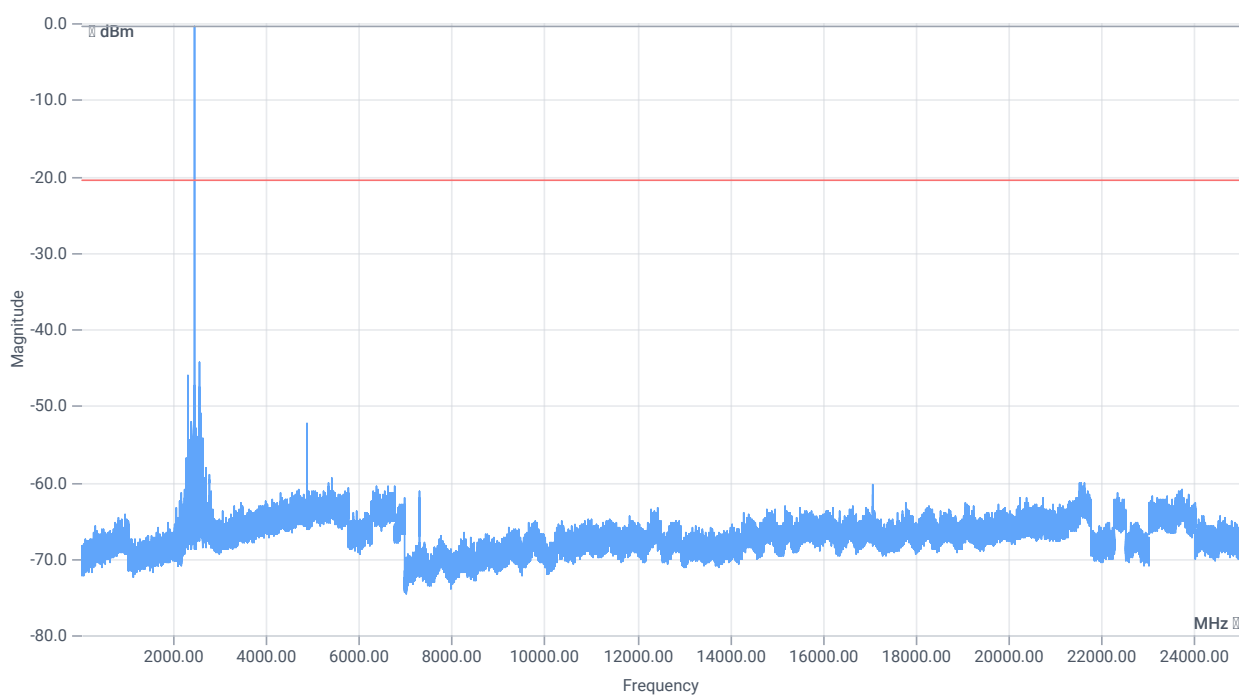
Test Parameter

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.

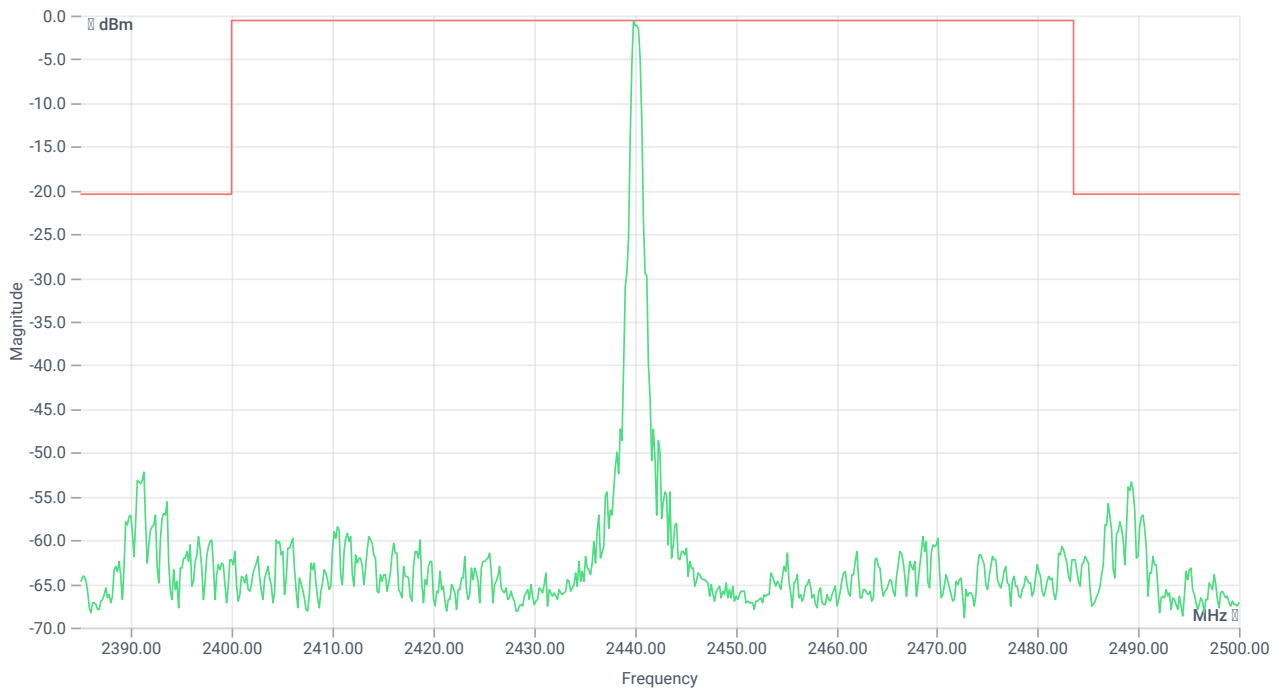
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	0.42	dBm	INFO
Ref. frequency	---	---	2440.300	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	0.42 15.92 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 @ 2439.83 MHz	---	---	-0.49	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 2568 MHz	0	---	23.92	dB	INFO

Verdict

PASS

NA # Peak output power 3MHz/3MHz ~ BT LE 1 Msps

References

TC start	13.03.2024 12:48:09
Ambit temp [°C] humidity [rel%]	27.8 32
System version	5.0.3.4
Standard Version	NA NI
Method	
Description	Peak OP 3MHz/3MHz - 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	False 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	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.60
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
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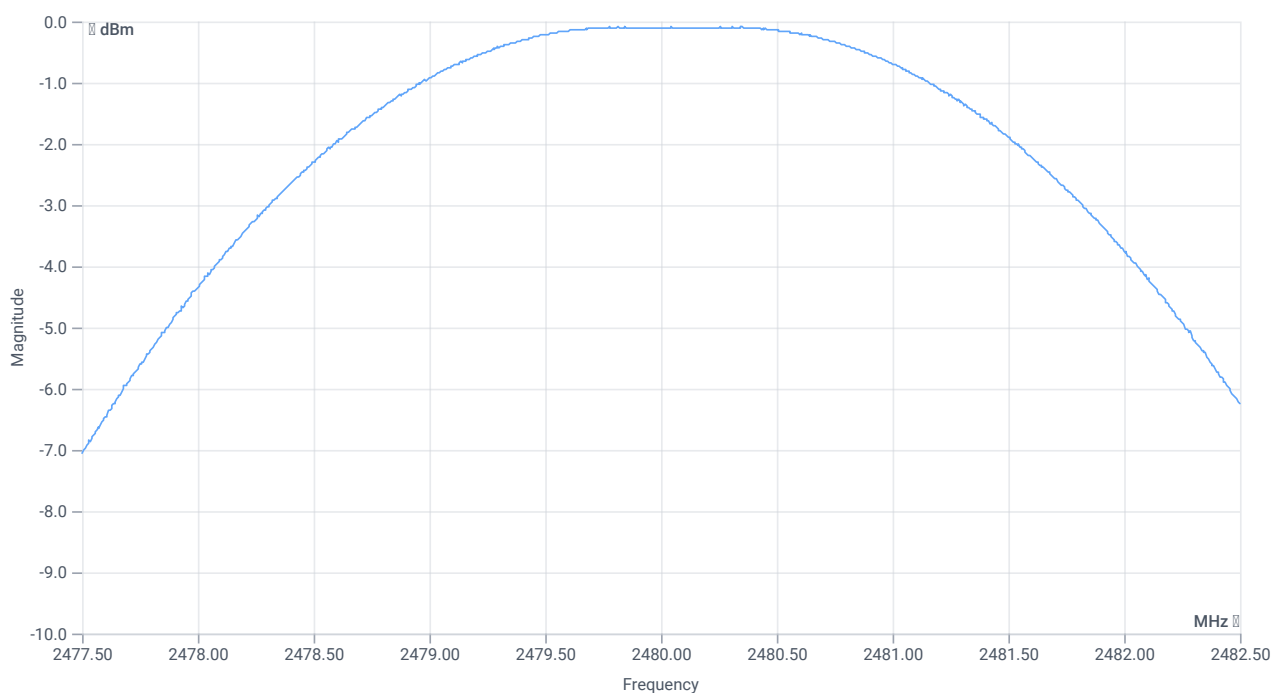
Test at TX 2480 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	0.02	dBm	INFO
Ref. frequency	---	---	2480.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.02 9.1 20
Start [MHz] Stop [MHz]	2477.500 2482.500
RBW [MHz] VBW [MHz]	3.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1000 10 1001 SWE



Peak output power

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	---	-0.09	dBm	INFO
Peak power	---	---	0.97949	mW	INFO
Frequency at peak	---	---	2479.815	MHz	INFO

Verdict

PASS

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

References

TC start	13.03.2024 12:48:39
Ambit temp [°C] humidity [rel%]	27.8 32
System version	5.0.3.4
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	False 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	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.60
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.	---	---	-0.01	dBm	INFO
Ref. frequency	---	---	2480.300	MHz	INFO

READ SA SETTINGS:

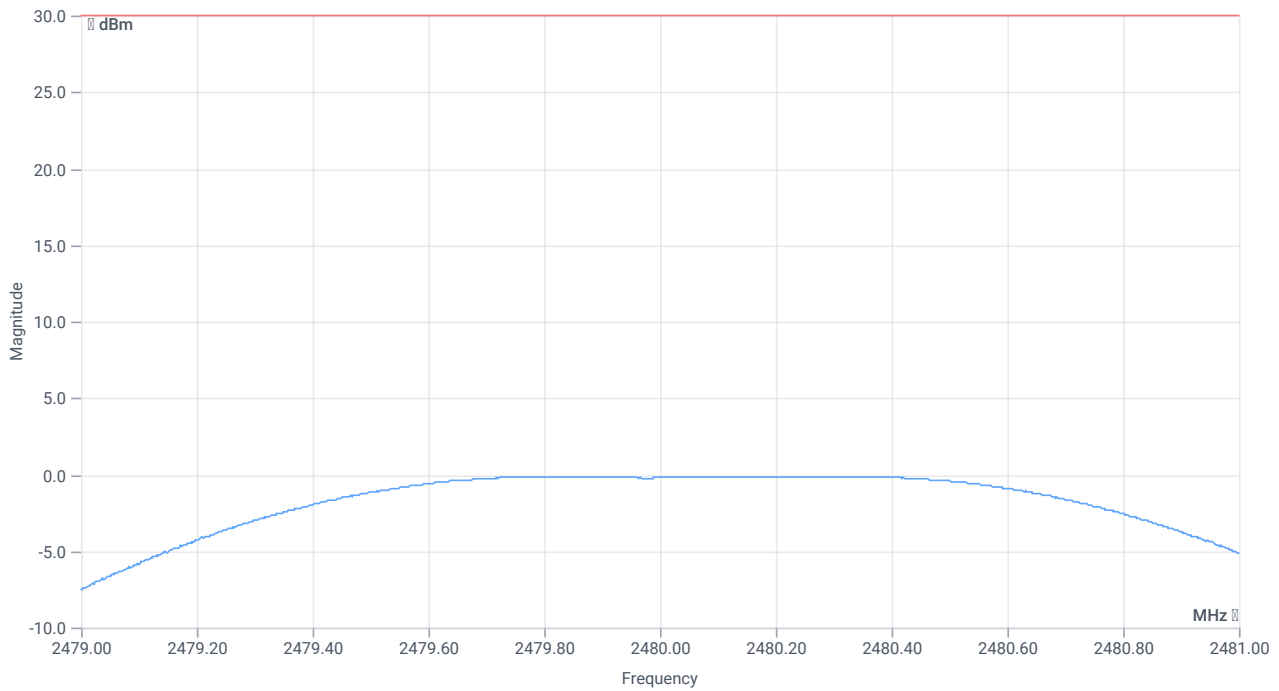
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	4.99 9.1 15
Start [MHz] Stop [MHz]	2479.000 2481.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

DTS bandwidth

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS bandwidth (6dB)	---	---	706	kHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	9.99 9.1 20
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	-0.13	dBm	PASS
Peak power	---	1000	0.97051	mW	PASS
Frequency at peak	---	---	2479.812	MHz	INFO

Verdict

PASS

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

References

TC start	13.03.2024 12:49:23
Ambit temp [°C] humidity [rel%]	27.8 32
System version	5.0.3.4
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	False 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	No

Equipment

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

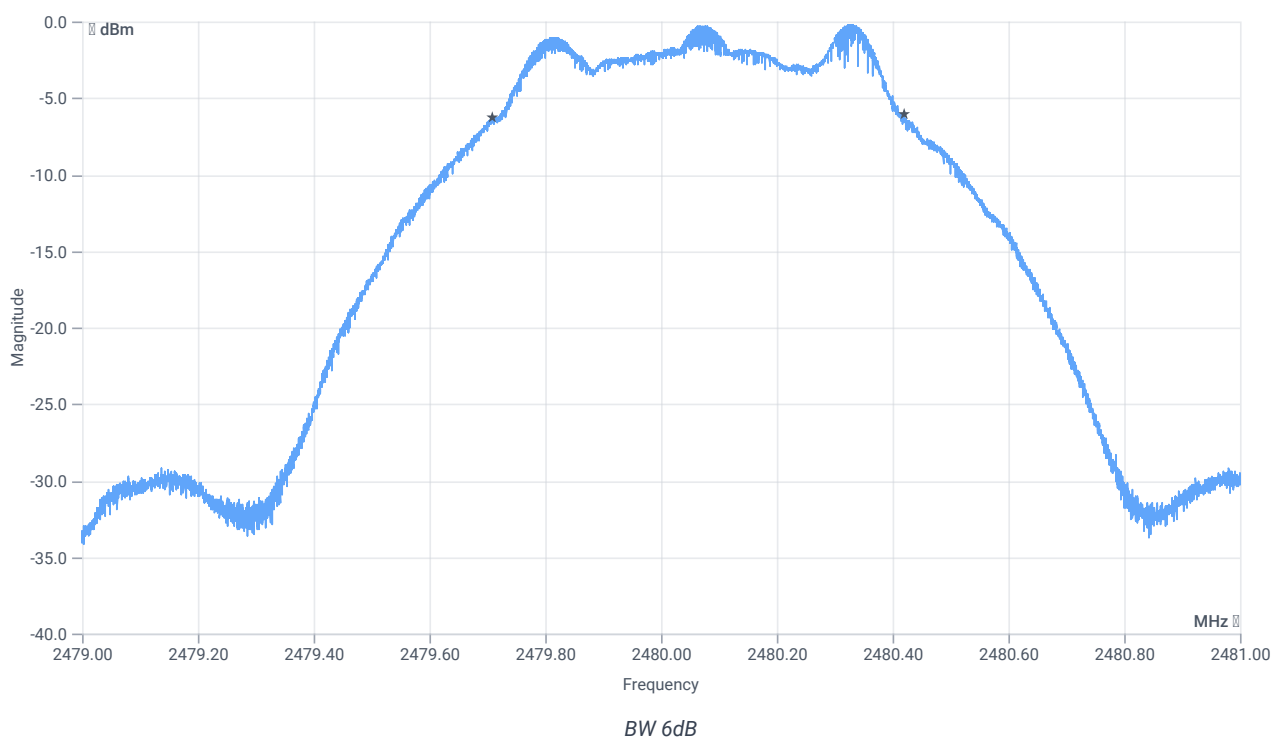
Test at TX 2480 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	-0.02	dBm	INFO
Ref. frequency	---	---	2480.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	4.98 9.1 15
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	---	710	kHz	PASS

Verdict

PASS

FCC 15.247 # Peak psd DTS ~ BT LE 1 Msps

References

TC start	13.03.2024 12:49:56
Ambit temp [°C] humidity [rel%]	27.8 32
System version	5.0.3.4
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	False 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	No

Equipment

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

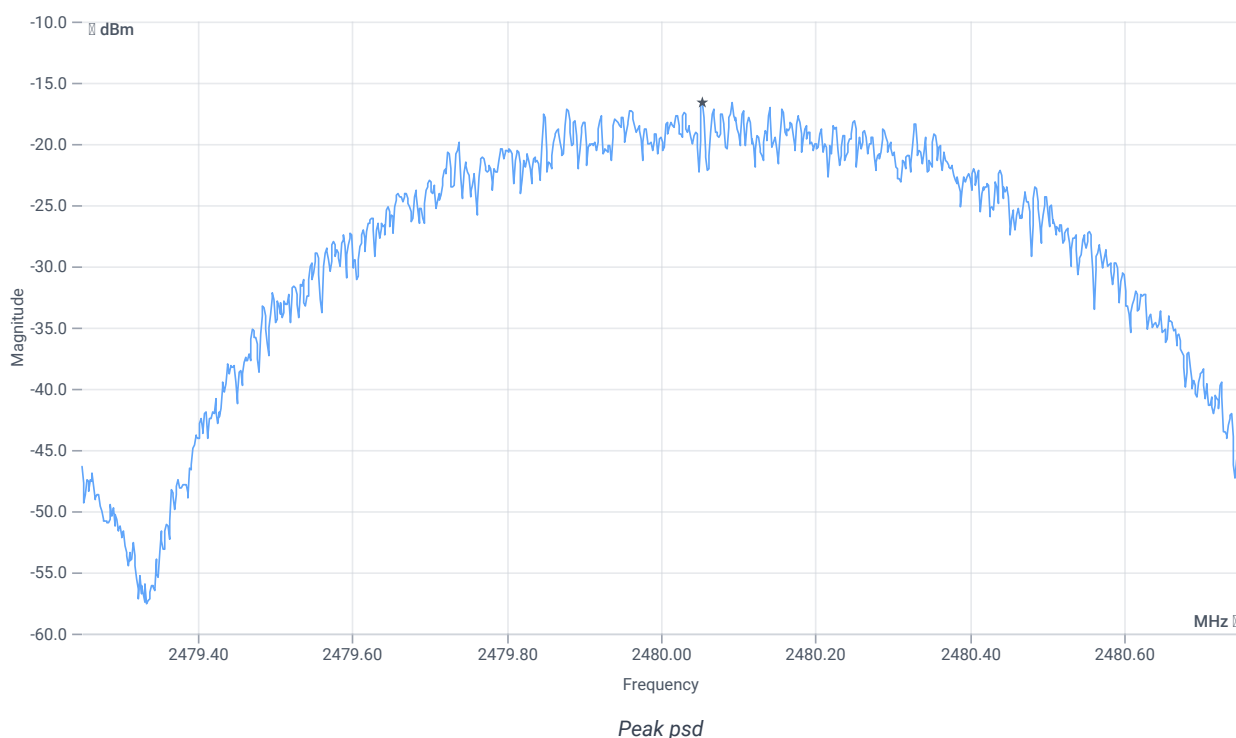
Test at TX 2480 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	0.00	dBm	INFO
Ref. frequency	---	---	2480.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	5.00 9.1 15
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	-16.56	dBm/3KHz	PASS

Verdict

PASS

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

References

TC start	13.03.2024 12:50:36
Ambit temp [°C] humidity [rel%]	27.8 32
System version	5.0.3.4
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	False 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	No

Equipment

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

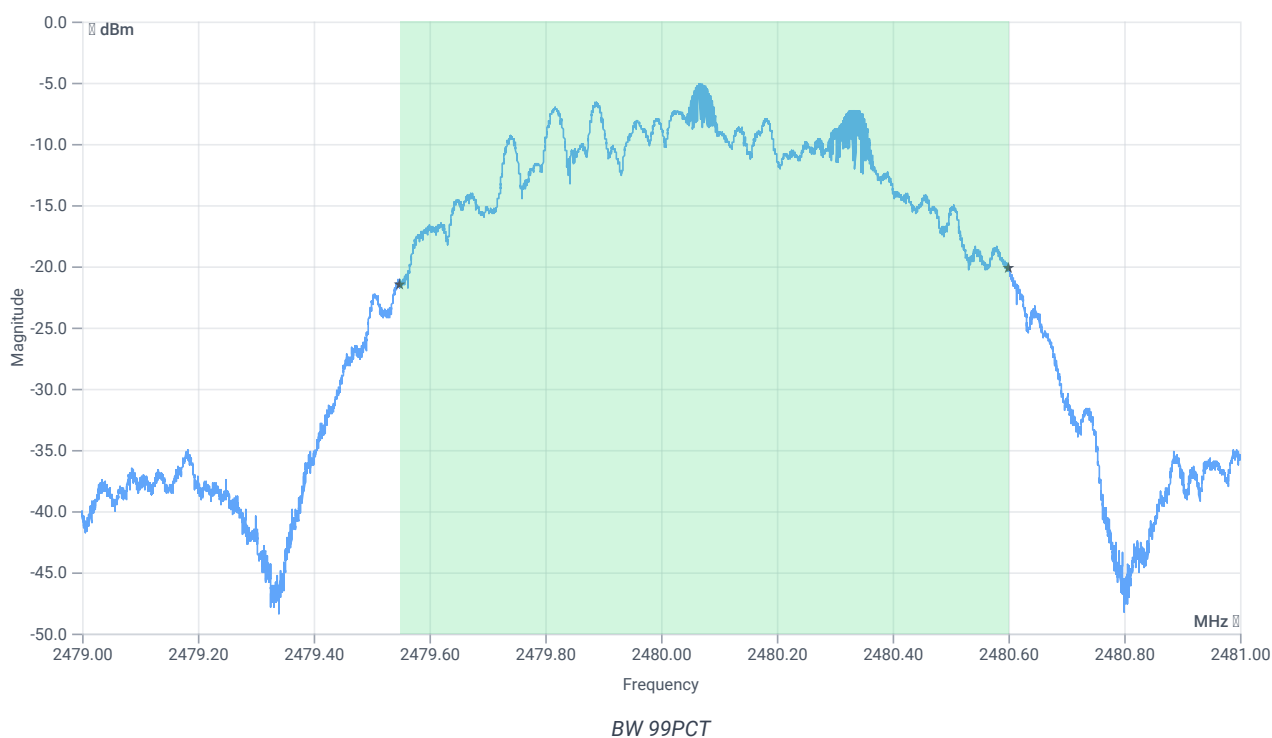
Test at TX 2480 MHz

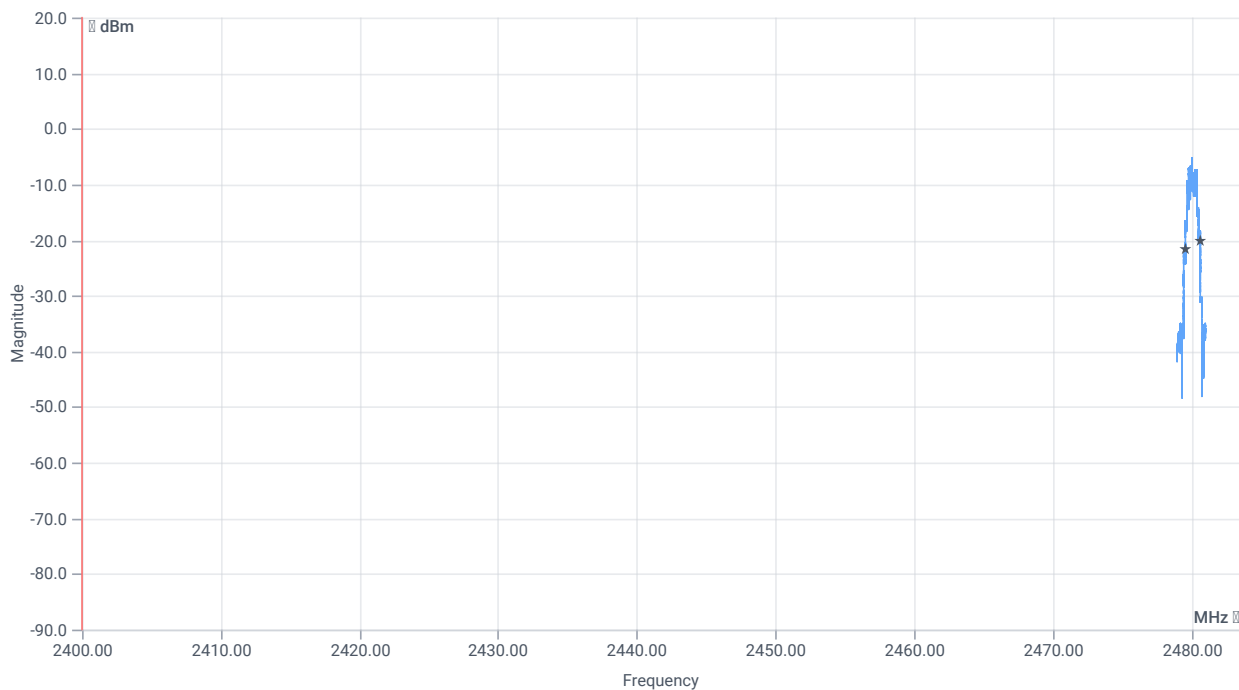
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	0.02	dBm	INFO
Ref. frequency	---	---	2480.300	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	5.02 9.1 15
Start [MHz] Stop [MHz]	2479.000 2481.000
RBW [MHz] VBW [MHz]	0.020000 0.100000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

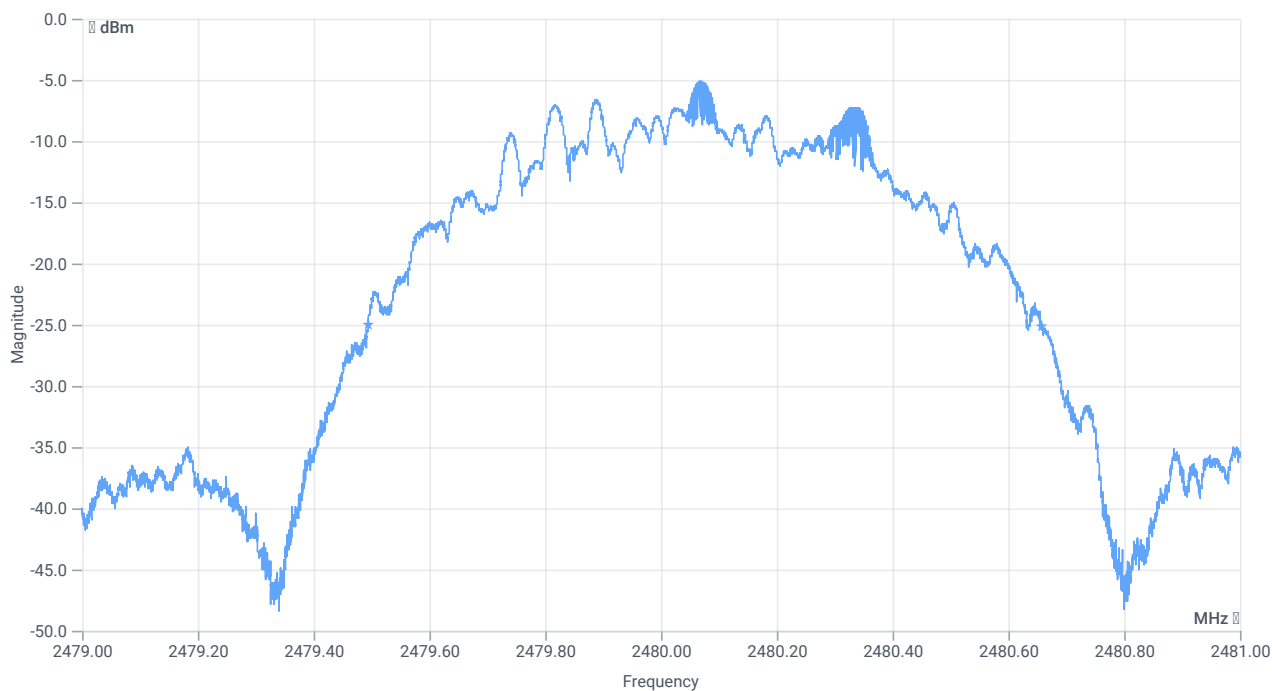




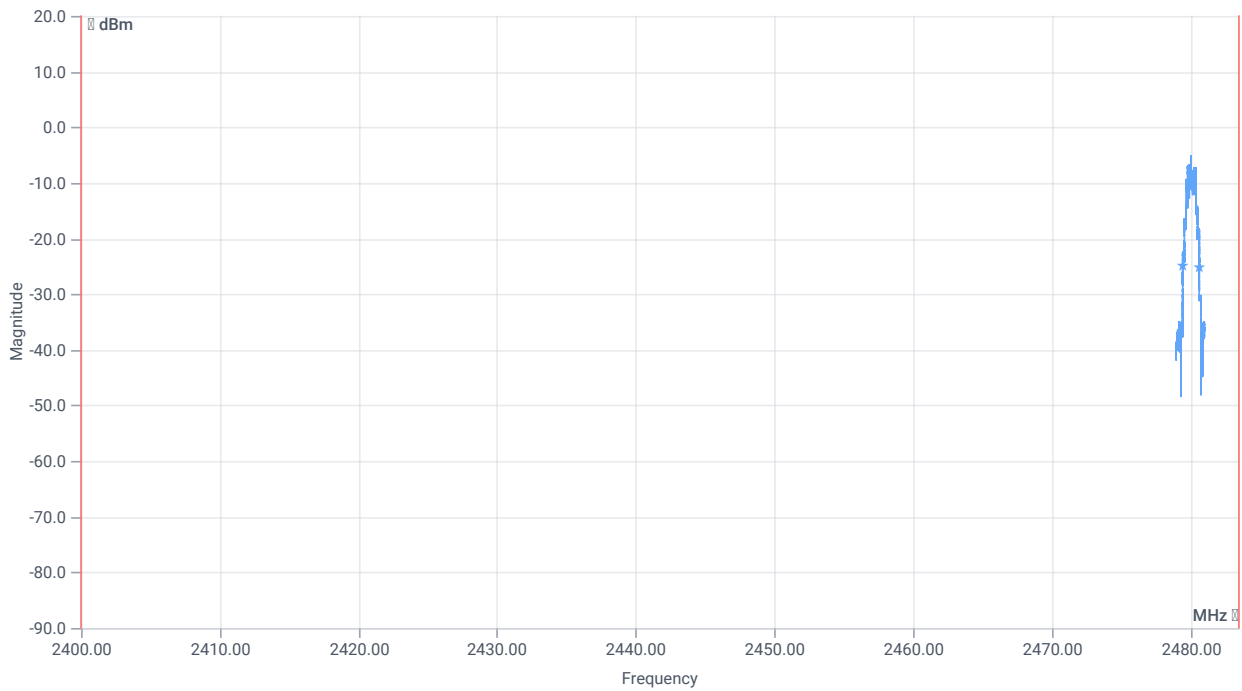
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	1051.000	kHz	INFO
T1 99%	2400.000000	---	2479.5488	MHz	PASS
T2 99%	---	2483.500000	2480.5997	MHz	PASS



BW 20dB



BW within band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	1164	kHz	INFO
T1 20dB	2400.000000	---	2479.4938	MHz	PASS
T2 20dB	---	2483.500000	2480.6582	MHz	PASS

Verdict

PASS

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

References

TC start	13.03.2024 12:51:13
Ambit temp [°C] humidity [rel%]	27.8 32
System version	5.0.3.4
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	False 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	No

Equipment

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

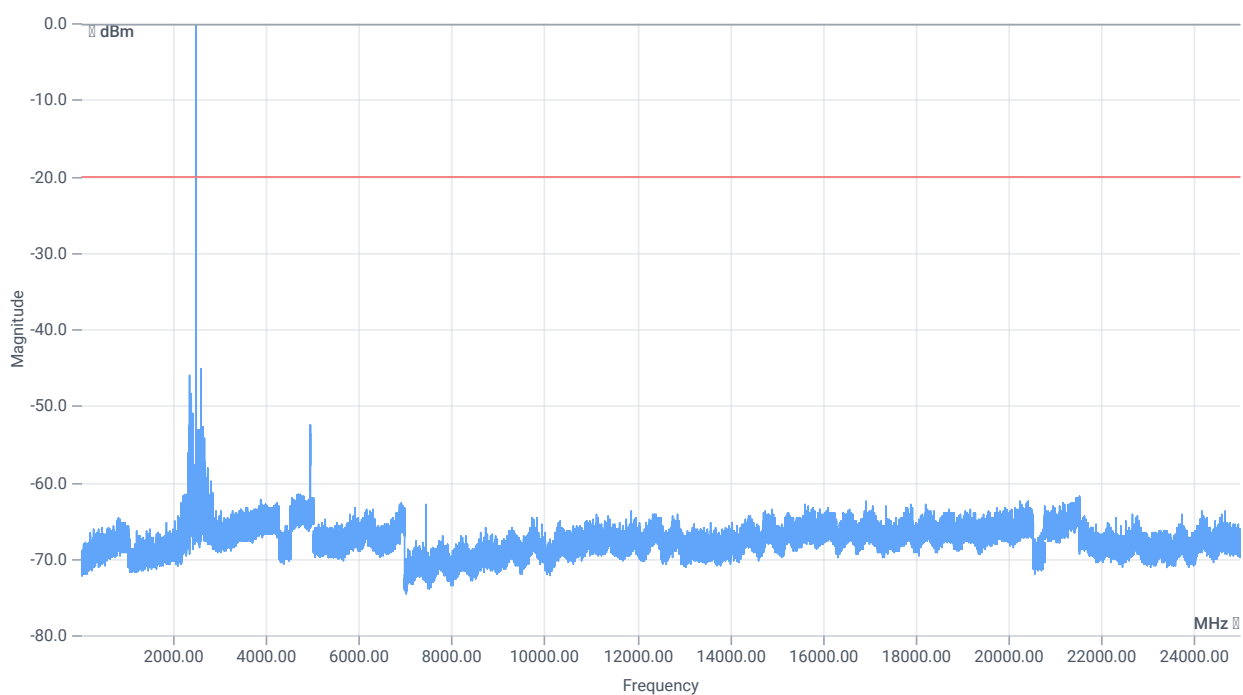
Test Parameter

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.

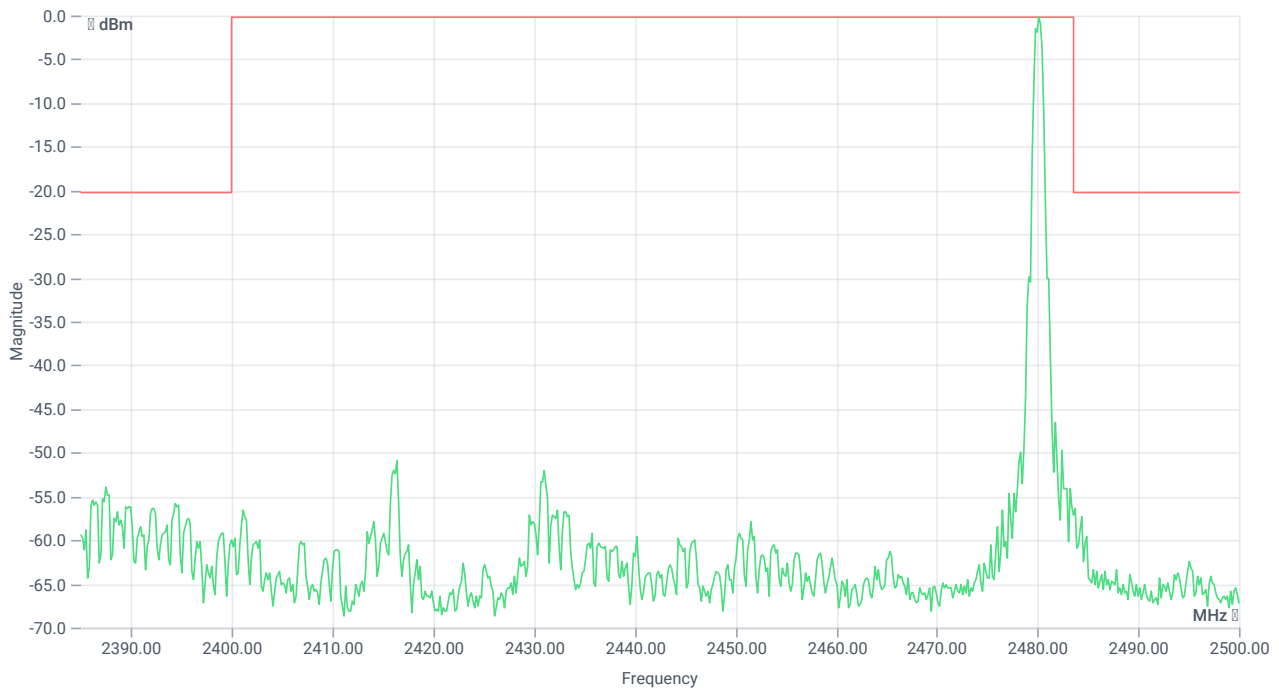
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	0.00	dBm	INFO
Ref. frequency	---	---	2480.300	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	0.00 15.92 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 @ 2480.17 MHz	---	---	-0.16	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 2608.333 MHz	0	---	24.92	dB	INFO

Verdict

PASS

- END OF DOCUMENT -