

# Measurement Results

No.1-2944/21-01-06\_Annex\_MR

---

## Test logging

This document is electronically signed and valid without handwritten signature.  
For verification of the electronic signatures, the public keys can be requested at the testing laboratory.

Document authorized:

---

---

Jörg Warken  
Lab Manager  
Radio Communications

## Table of Content

EUT Information	3
FCC Part 15.247 Bandwidth 6dB DTS ~ BT LE 1 Msps	4
FCC Part 15.247 Bandwidth 6dB DTS ~ BT LE 2 Msps	8
FCC Part 15.247 Bandwidth 6dB DTS ~ BT LE coded S2	12
FCC Part 15.247 Bandwidth 6dB DTS ~ BT LE coded S8	16
FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 1 Msps	20
FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 2 Msps	30
FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE coded S2	40
FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE coded S8	50
FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE 1 Msps	60
FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE 2 Msps	67
FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE coded S2	74
FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE coded S8	81
FCC Part 15.247 Peak Power Spectral Density DTS ~ BT LE 1 Msps	88
FCC Part 15.247 Peak Power Spectral Density DTS ~ BT LE 2 Msps	92
FCC Part 15.247 Peak Power Spectral Density DTS ~ BT LE coded S2	96
FCC Part 15.247 Peak Power Spectral Density DTS ~ BT LE coded S8	100
FCC Part 15.247 Restricted Band Edge Conducted Peak DTS Video Avg ~ BT LE 1 Msps	104
FCC Part 15.247 Restricted Band Edge Conducted Peak DTS Video Avg ~ BT LE 2 Msps	108
FCC Part 15.247 Restricted Band Edge Conducted Peak DTS Video Avg ~ BT LE coded S2	112
FCC Part 15.247 Restricted Band Edge Conducted Peak DTS Video Avg ~ BT LE coded S8	116
FCC Part 15.247 TX Spurious Conducted 20dBc ~ BT LE 1 Msps	120
FCC Part 15.247 TX Spurious Conducted 20dBc ~ BT LE 2 Msps	127
FCC Part 15.247 TX Spurious Conducted 20dBc ~ BT LE coded S2	134
FCC Part 15.247 TX Spurious Conducted 20dBc ~ BT LE coded S8	141

## EUT Information

EUT DEFINITION	
Manufacturer	Panasonic Industrial Devices Europe GmbH
Type	PAN1782
Serial Number	NI
Setup Number	1.0
Version SW	01
Version FW	01
Version HW	NI
Comment 1	
Comment 2	
Temperature [°C] Min	-40
Temperature [°C] Nom	20
Temperature [°C] Max	85
Voltage [V] Min	1.7
Voltage [V] Nom	3
Voltage [V] Max	5.5

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

Test References	
TC Start	16.05.2022 10:32:16
Ambit Temp [°C]   Humidity [rel%]	22.5   48
System Version	3.0.6.3
Test Specification	FCC Part 15.247
Test Method	99
TC Version	0.0.1
My Description	FCC 15.247 Bandwidth 6dB DTS - BT LE 1 Msps
Add. Information	

EUT Common Settings BT Low Energy	
Intermodulation Value N	3
Image Freq. Low   Mid   High [MHz]	0   0   0
Power Class	2
1 Mbps supported	True   TXpayload 255   RXpayload 255
2 Mbps supported	True   TXpayload 255   RXpayload 255
Longrange S8 supported	True   TXpayload 255   RXpayload 255
Longrange S2 supported	True   TXpayload 255   RXpayload 255
Signaling Settings	USB_RS232   TWO   15   19200   None   S1   None   On
Signaling RF Settings	RF1com   0   0   On
User Interaction	No
Switch Matrix & Pathcompensation enabled	Yes

Test Parameter	
Technology to test	BT LE 1 Msps
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True   Freq [MHz] 2402
Frequency mid to test	True   Freq [MHz] 2440
Frequency high to test	True   Freq [MHz] 2480
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	1.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

## Test at TX 2402 MHz

### RESULT: Reference Power cond.

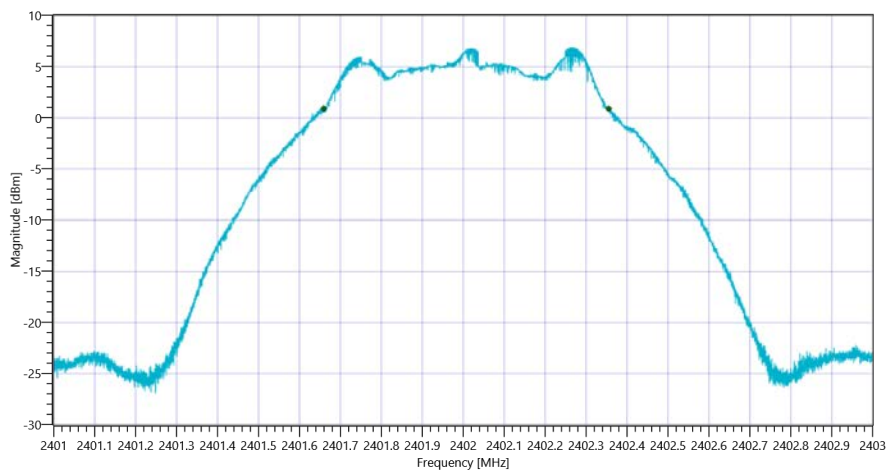
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.06	dBm	INFO
Ref. Frequency	---	---	2401.700	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.06   11.59   20
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	500	---	696	kHz	PASS



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

## Test at TX 2440 MHz

### RESULT: Reference Power cond.

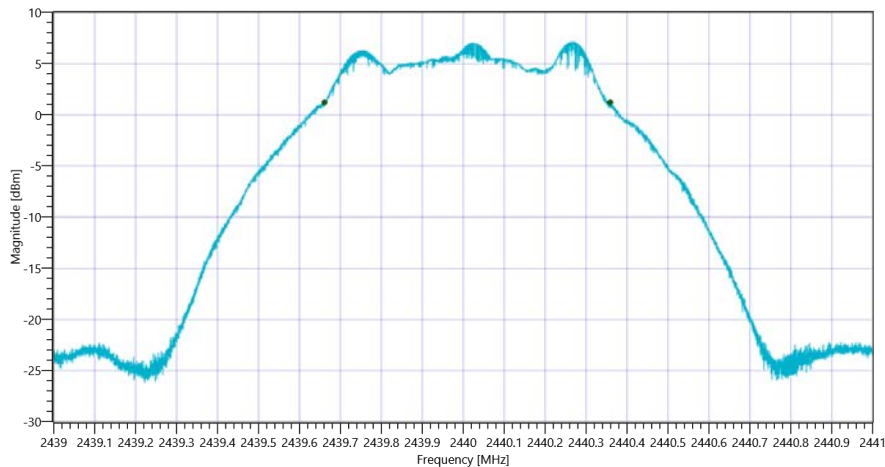
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.27	dBm	INFO
Ref. Frequency	---	---	2439.800	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.27   11.6   20
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	500	---	698	kHz	PASS



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

## Test at TX 2480 MHz

### RESULT: Reference Power cond.

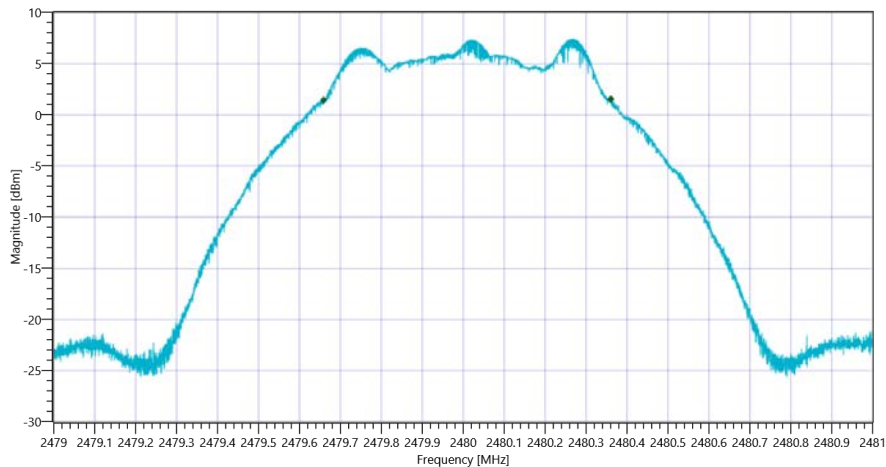
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.54	dBm	INFO
Ref. Frequency	---	---	2479.700	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.54   11.65   20
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	500	---	702	kHz	PASS



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

General verdict

PASS

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

Test References	
TC Start	16.05.2022 11:07:04
Ambit Temp [°C]   Humidity [rel%]	22.3   47
System Version	3.0.6.3
Test Specification	FCC Part 15.247
Test Method	99
TC Version	0.0.1
My Description	FCC 15.247 Bandwidth 6dB DTS - BT LE 2 Msps
Add. Information	

EUT Common Settings BT Low Energy	
Intermodulation Value N	3
Image Freq. Low   Mid   High [MHz]	0   0   0
Power Class	2
1 Mbps supported	True   TXpayload 255   RXpayload 255
2 Mbps supported	True   TXpayload 255   RXpayload 255
Longrange S8 supported	True   TXpayload 255   RXpayload 255
Longrange S2 supported	True   TXpayload 255   RXpayload 255
Signaling Settings	USB_RS232   TWO   15   19200   None   S1   None   On
Signaling RF Settings	RF1com   0   0   On
User Interaction	No
Switch Matrix & Pathcompensation enabled	Yes

Test Parameter	
Technology to test	BT LE 2 Msps
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True   Freq [MHz] 2404
Frequency mid to test	True   Freq [MHz] 2440
Frequency high to test	True   Freq [MHz] 2478
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	1.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	



## Test at TX 2404 MHz

### RESULT: Reference Power cond.

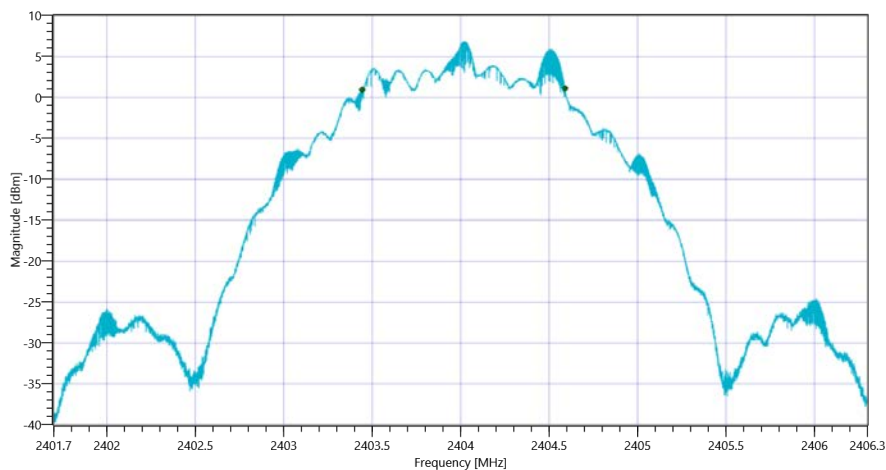
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.11	dBm	INFO
Ref. Frequency	---	---	2403.500	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.11   11.6   20
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	500	---	1147	kHz	PASS



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

## Test at TX 2440 MHz

### RESULT: Reference Power cond.

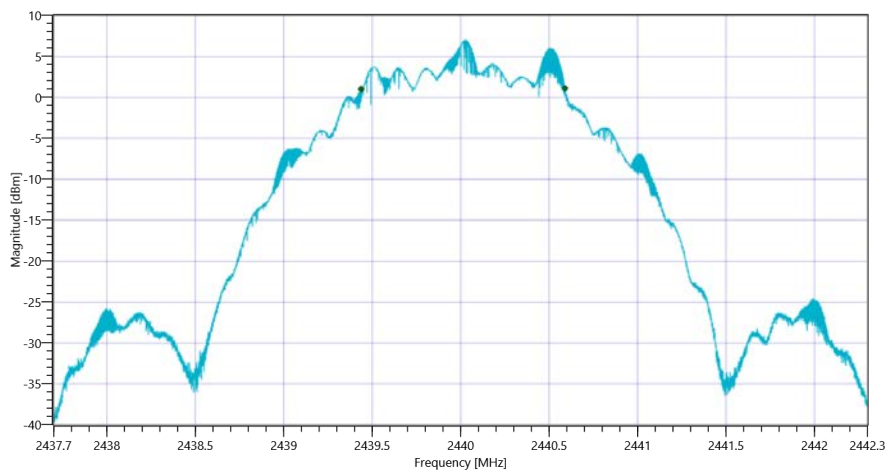
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.29	dBm	INFO
Ref. Frequency	---	---	2439.500	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.29   11.6   20
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	500	---	1152	kHz	PASS



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

## Test at TX 2478 MHz

### RESULT: Reference Power cond.

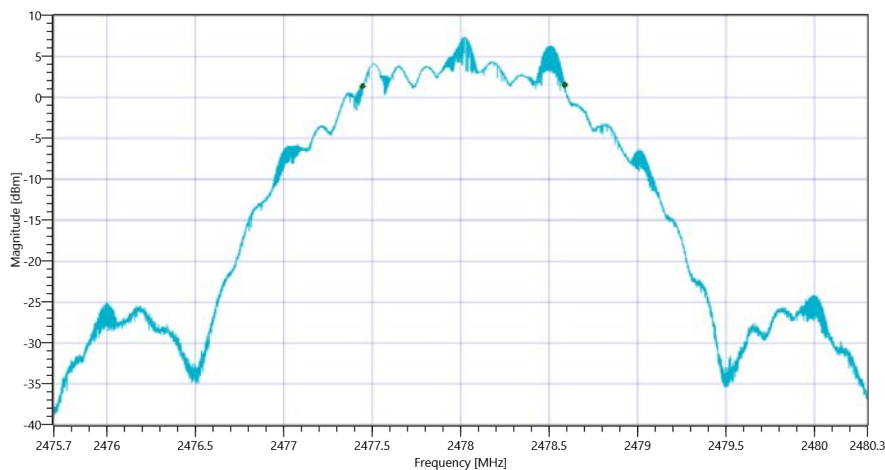
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.60	dBm	INFO
Ref. Frequency	---	---	2477.500	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.60   11.65   20
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	500	---	1143	kHz	PASS



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

General verdict

PASS

## FCC Part 15.247 Bandwidth 6dB DTS ~ BT LE coded S2

Test References	
TC Start	16.05.2022 12:17:54
Ambit Temp [°C]   Humidity [rel%]	21.5   46
System Version	3.0.6.3
Test Specification	FCC Part 15.247
Test Method	99
TC Version	0.0.1
My Description	FCC 15.247 Bandwidth 6dB DTS - BT LE coded S2
Add. Information	

EUT Common Settings BT Low Energy	
Intermodulation Value N	3
Image Freq. Low   Mid   High [MHz]	0   0   0
Power Class	2
1 Mbps supported	True   TXpayload 255   RXpayload 255
2 Mbps supported	True   TXpayload 255   RXpayload 255
Longrange S8 supported	True   TXpayload 255   RXpayload 255
Longrange S2 supported	True   TXpayload 255   RXpayload 255
Signaling Settings	USB_RS232   TWO   15   19200   None   S1   None   On
Signaling RF Settings	RF1com   0   0   On
User Interaction	No
Switch Matrix & Pathcompensation enabled	Yes

Test Parameter	
Technology to test	BT LE coded S2
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True   Freq [MHz] 2402
Frequency mid to test	True   Freq [MHz] 2440
Frequency high to test	True   Freq [MHz] 2480
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	1.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

## Test at TX 2402 MHz

### RESULT: Reference Power cond.

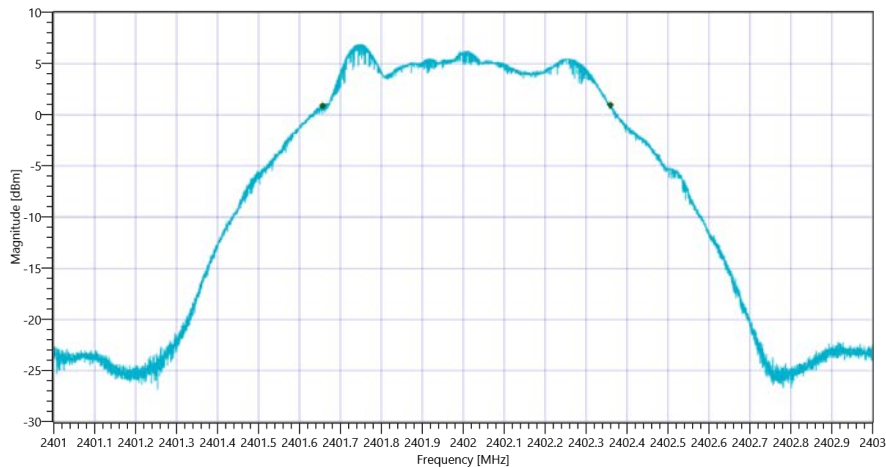
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.08	dBm	INFO
Ref. Frequency	---	---	2401.700	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.08   11.59   20
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	500	---	703	kHz	PASS



FCC Part 15.247 Bandwidth 6dB DTS ~ BT LE coded S2

## Test at TX 2440 MHz

### RESULT: Reference Power cond.

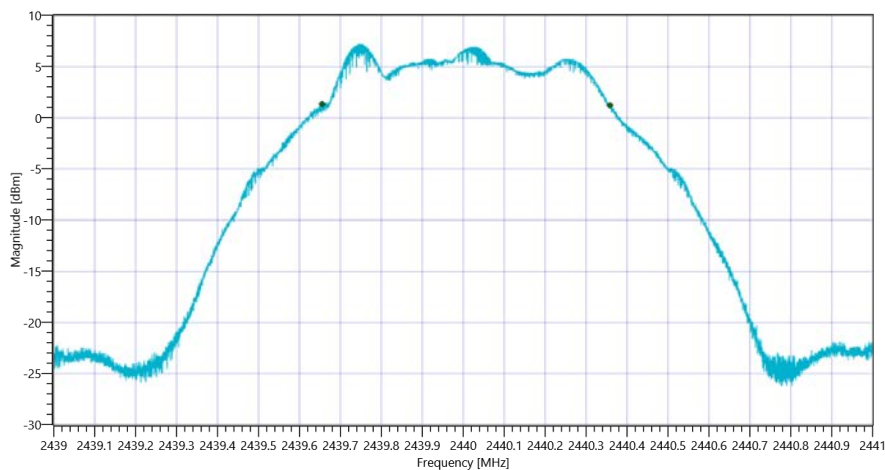
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.35	dBm	INFO
Ref. Frequency	---	---	2439.800	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.35   11.6   20
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	500	---	703	kHz	PASS



FCC Part 15.247 Bandwidth 6dB DTS ~ BT LE coded S2

## Test at TX 2480 MHz

### RESULT: Reference Power cond.

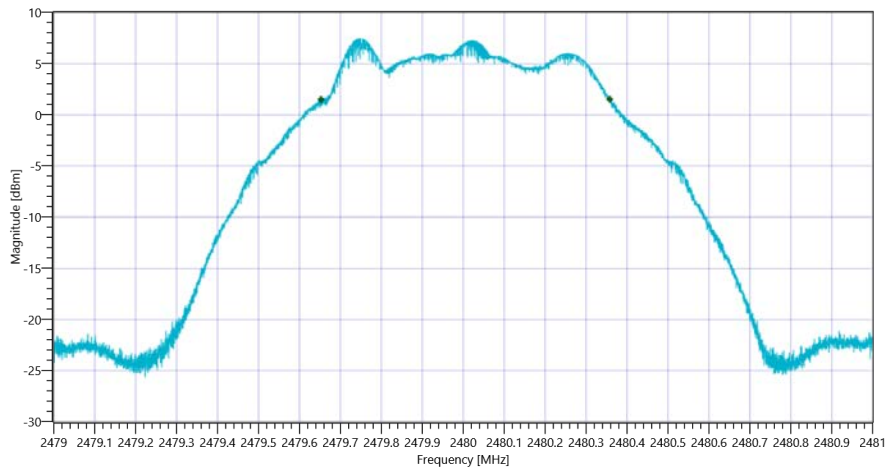
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.61	dBm	INFO
Ref. Frequency	---	---	2479.800	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.61   11.65   20
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	500	---	705	kHz	PASS



FCC Part 15.247 Bandwidth 6dB DTS ~ BT LE coded S2

General verdict

PASS

## FCC Part 15.247 Bandwidth 6dB DTS ~ BT LE coded S8

Test References	
TC Start	16.05.2022 11:42:03
Ambit Temp [°C]   Humidity [rel%]	22.3   46
System Version	3.0.6.3
Test Specification	FCC Part 15.247
Test Method	99
TC Version	0.0.1
My Description	FCC 15.247 Bandwidth 6dB DTS - BT LE coded S8
Add. Information	

EUT Common Settings BT Low Energy	
Intermodulation Value N	3
Image Freq. Low   Mid   High [MHz]	0   0   0
Power Class	2
1 Mbps supported	True   TXpayload 255   RXpayload 255
2 Mbps supported	True   TXpayload 255   RXpayload 255
Longrange S8 supported	True   TXpayload 255   RXpayload 255
Longrange S2 supported	True   TXpayload 255   RXpayload 255
Signaling Settings	USB_RS232   TWO   15   19200   None   S1   None   On
Signaling RF Settings	RF1com   0   0   On
User Interaction	No
Switch Matrix & Pathcompensation enabled	Yes

Test Parameter	
Technology to test	BT LE coded S8
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True   Freq [MHz] 2402
Frequency mid to test	True   Freq [MHz] 2440
Frequency high to test	True   Freq [MHz] 2480
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	1.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	



## Test at TX 2402 MHz

### RESULT: Reference Power cond.

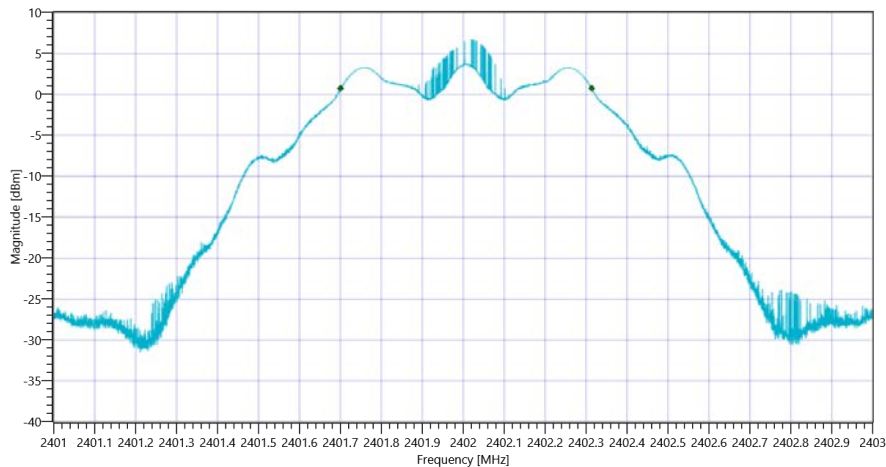
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.04	dBm	INFO
Ref. Frequency	---	---	2401.800	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.04   11.59   20
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	500	---	613	kHz	PASS



FCC Part 15.247 Bandwidth 6dB DTS ~ BT LE coded S8

## Test at TX 2440 MHz

### RESULT: Reference Power cond.

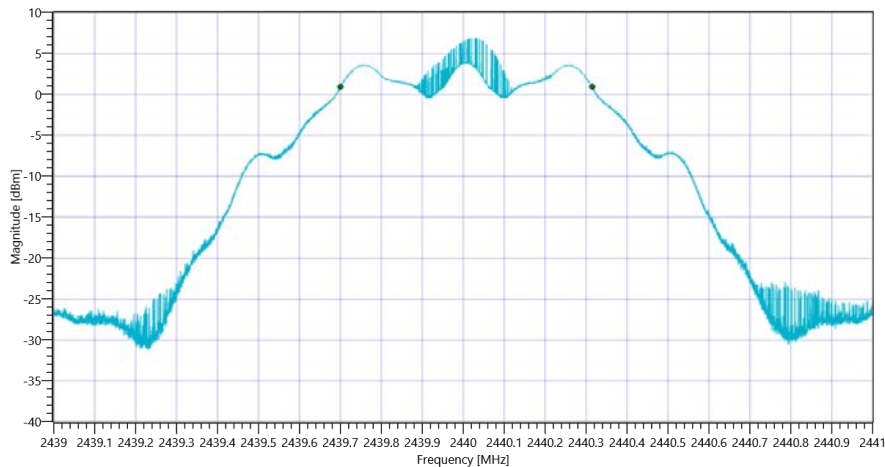
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.30	dBm	INFO
Ref. Frequency	---	---	2439.800	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.30   11.6   20
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	500	---	615	kHz	PASS



FCC Part 15.247 Bandwidth 6dB DTS ~ BT LE coded S8

## Test at TX 2480 MHz

### RESULT: Reference Power cond.

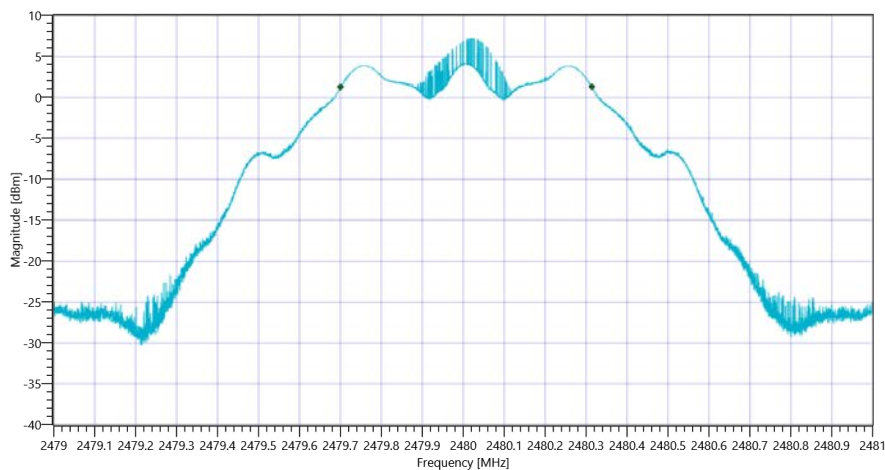
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.55	dBm	INFO
Ref. Frequency	---	---	2479.800	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.55   11.65   20
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	500	---	614	kHz	PASS



FCC Part 15.247 Bandwidth 6dB DTS ~ BT LE coded S8

General verdict

PASS

## FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 1 Msp

Test References	
TC Start	16.05.2022 10:36:14
Ambit Temp [°C]   Humidity [rel%]	22.6   47
System Version	3.0.6.3
Test Specification	FCC Part 15.247
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - BT LE 1 Msp
Add. Information	

EUT Common Settings BT Low Energy	
Intermodulation Value N	3
Image Freq. Low   Mid   High [MHz]	0   0   0
Power Class	2
1 Mbps supported	True   TXpayload 255   RXpayload 255
2 Mbps supported	True   TXpayload 255   RXpayload 255
Longrange S8 supported	True   TXpayload 255   RXpayload 255
Longrange S2 supported	True   TXpayload 255   RXpayload 255
Signaling Settings	USB_RS232   TWO   15   19200   None   S1   None   On
Signaling RF Settings	RF1com   0   0   On
User Interaction	No
Switch Matrix & Pathcompensation enabled	Yes

Test Parameter	
Technology to test	BT LE 1 Msp
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True   Freq [MHz] 2402
Frequency mid to test	True   Freq [MHz] 2440
Frequency high to test	True   Freq [MHz] 2480
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	1.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

## Test at TX 2402 MHz

### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.01	dBm	INFO
Ref. Frequency	---	---	2402.300	MHz	INFO

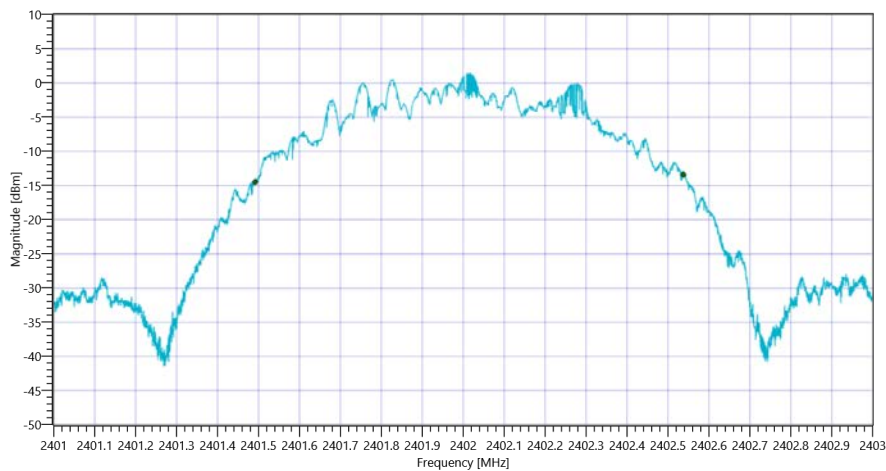
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.01   11.59   20
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

### RESULT

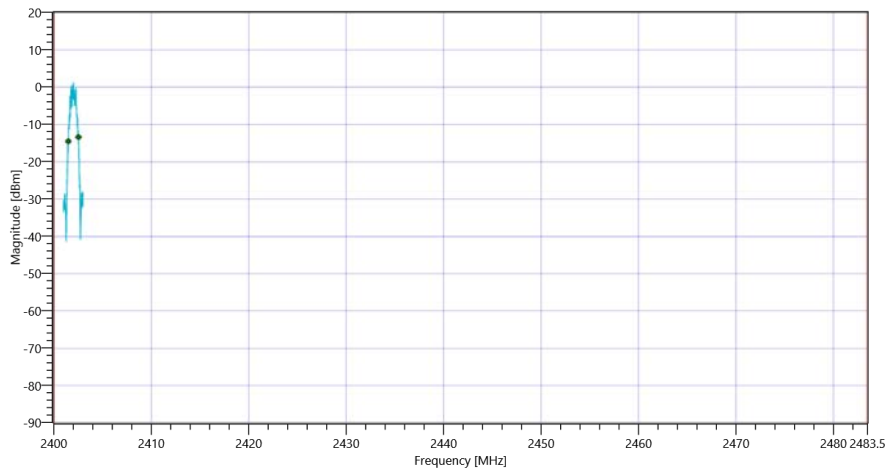
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	1045.495	kHz	INFO
T1 99%	2400.000000	---	2401.4919	MHz	PASS
T2 99%	---	2483.500000	2402.5373	MHz	PASS

### Plot: Bandwidth only



FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 1 Msps 99PCT

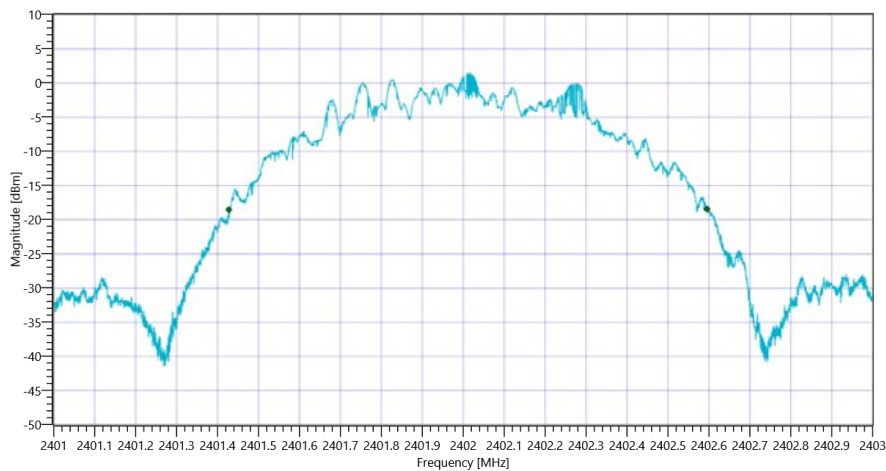
### Plot: Bandwidth within Band



FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 1 Msp

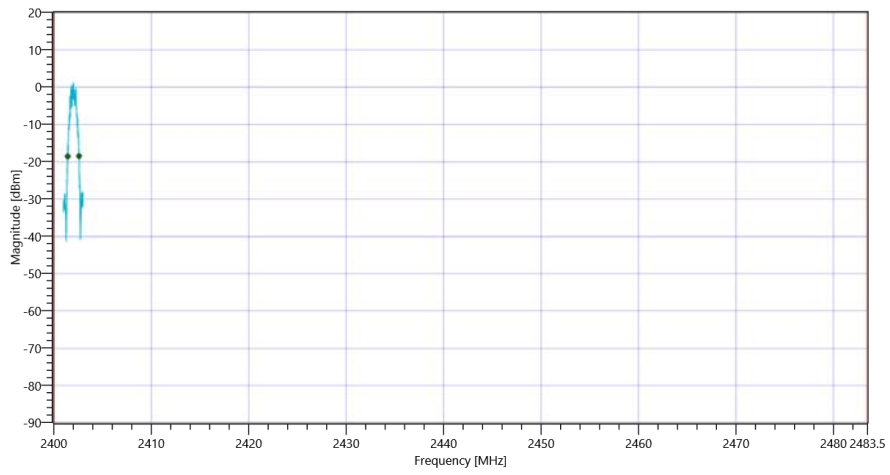
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	1168	kHz	INFO
T1 20dB	2400.000000	---	2401.4274	MHz	PASS
T2 20dB	---	2483.500000	2402.5950	MHz	PASS

Plot: Bandwidth only



FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 1 Msp 20dB

Plot: Bandwidth within Band



FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 1 Msps

## Test at TX 2440 MHz

### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.30	dBm	INFO
Ref. Frequency	---	---	2439.700	MHz	INFO

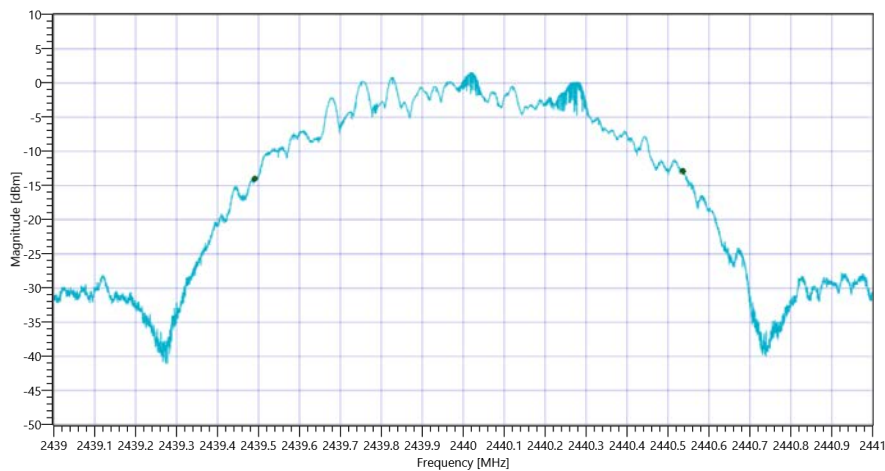
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.30   11.6   20
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

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	1046.095	kHz	INFO
T1 99%	2400.000000	---	2439.4907	MHz	PASS
T2 99%	---	2483.500000	2440.5367	MHz	PASS

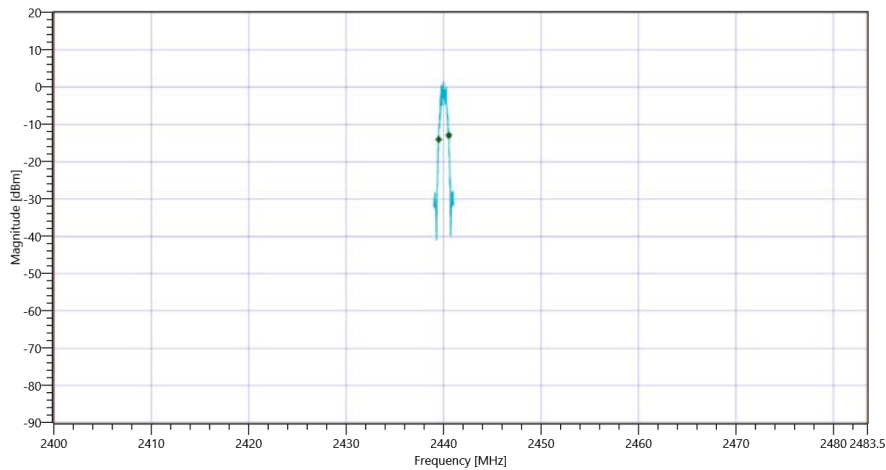
### Plot: Bandwidth only



FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 1 Msps 99PCT

### Plot: Bandwidth within Band

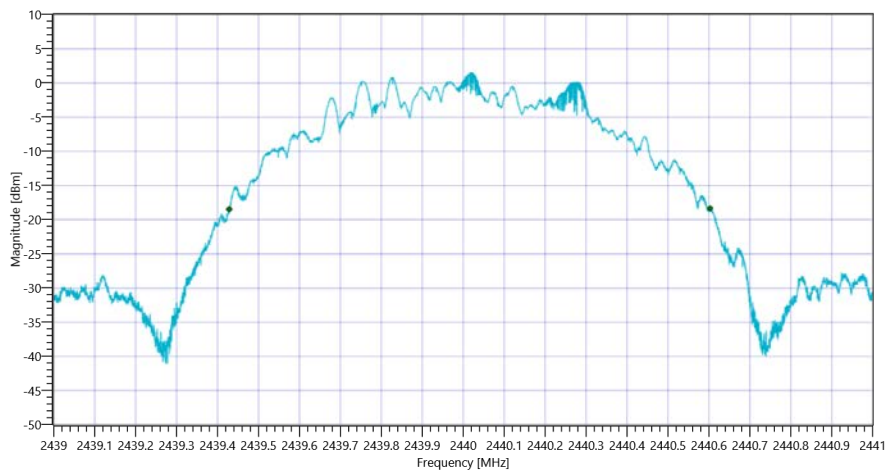




FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 1 MspS

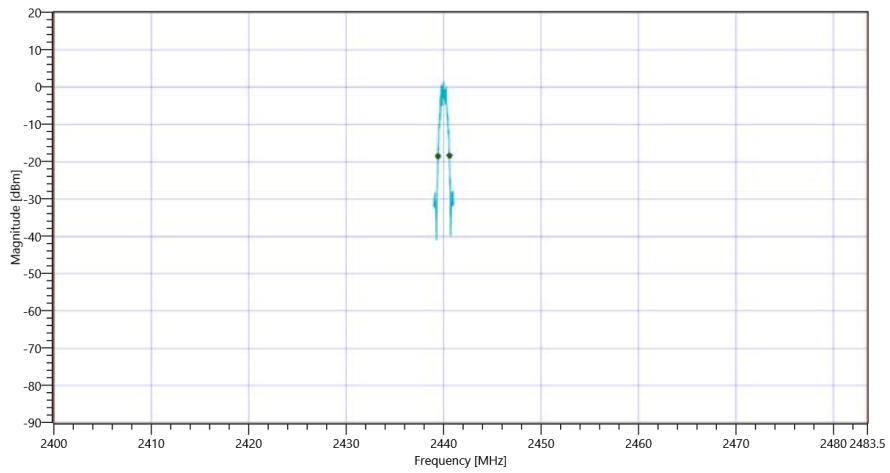
RESULT						
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict	
Bandwidth 20dB	---	---	1174	kHz	INFO	
T1 20dB	2400.000000	---	2439.4284	MHz	PASS	
T2 20dB	---	2483.500000	2440.6028	MHz	PASS	

Plot: Bandwidth only



FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 1 MspS 20dB

Plot: Bandwidth within Band



FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 1 Msps

## Test at TX 2480 MHz

### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.57	dBm	INFO
Ref. Frequency	---	---	2479.700	MHz	INFO

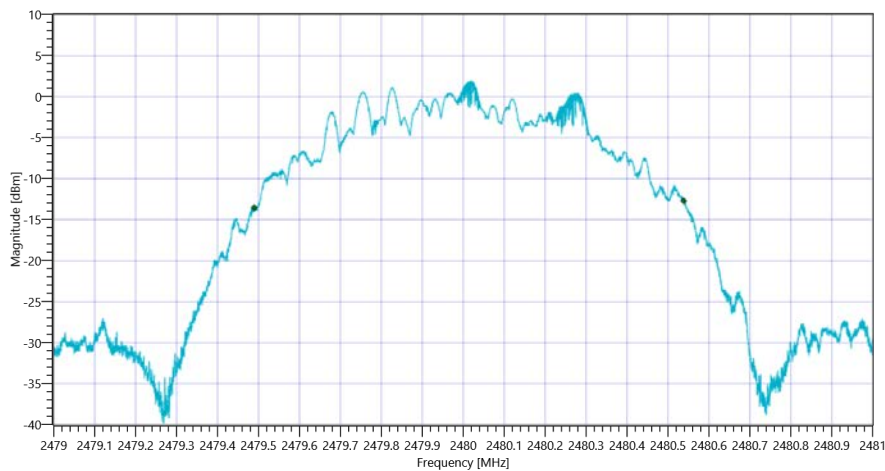
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.57   11.65   20
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

### RESULT

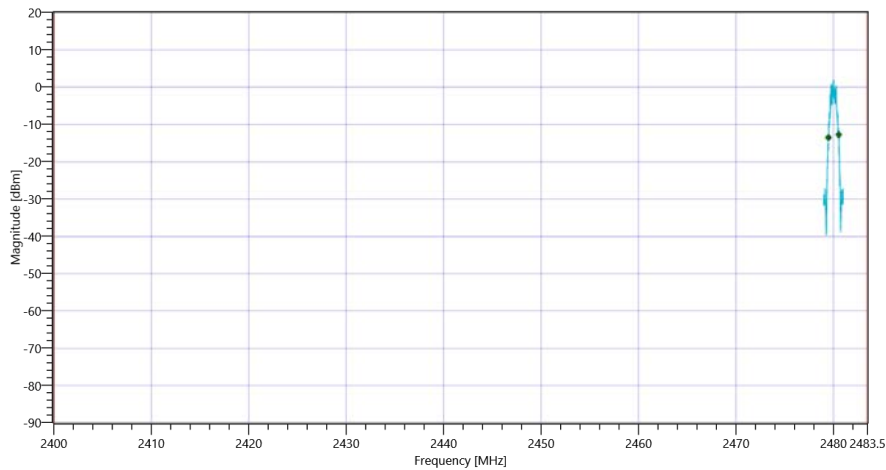
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	1048.895	kHz	INFO
T1 99%	2400.000000	---	2479.4895	MHz	PASS
T2 99%	---	2483.500000	2480.5383	MHz	PASS

### Plot: Bandwidth only



FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 1 Msps 99PCT

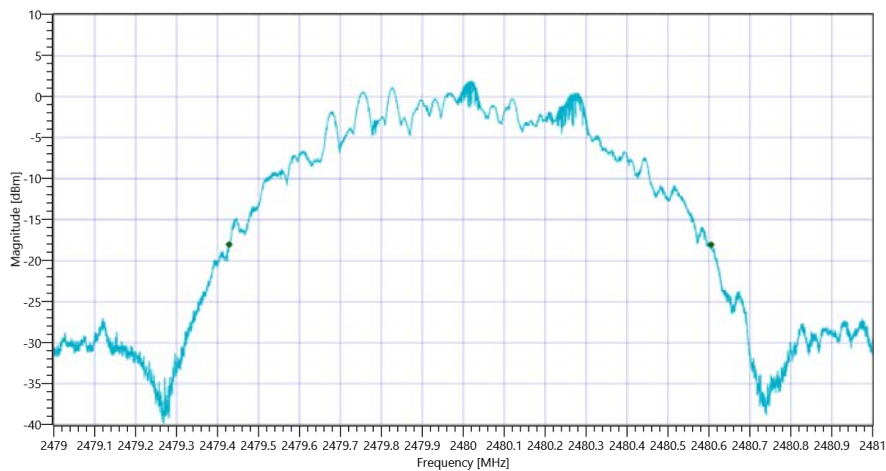
### Plot: Bandwidth within Band



FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 1 Msp

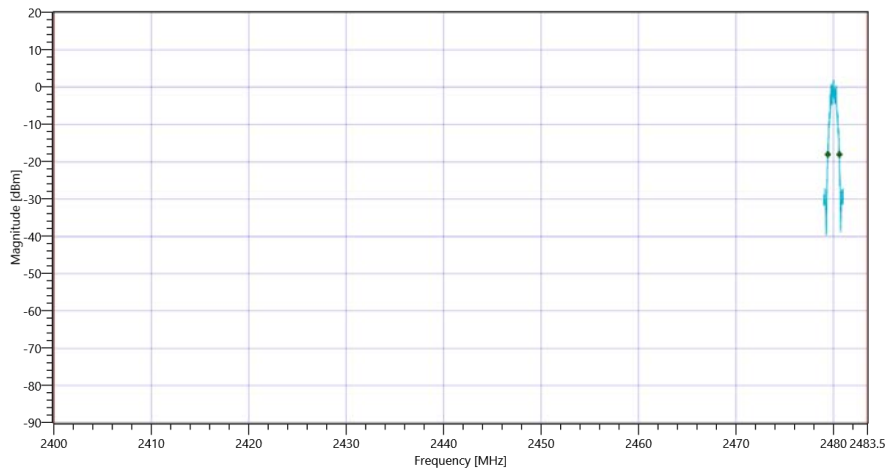
RESULT						
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict	
Bandwidth 20dB	---	---	1177	kHz	INFO	
T1 20dB	2400.000000	---	2479.4284	MHz	PASS	
T2 20dB	---	2483.500000	2480.6054	MHz	PASS	

Plot: Bandwidth only



FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 1 Msp 20dB

Plot: Bandwidth within Band



FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 1 Msps

General verdict

PASS

## FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 2 Msps

Test References	
TC Start	16.05.2022 11:11:06
Ambit Temp [°C]   Humidity [rel%]	22.3   47
System Version	3.0.6.3
Test Specification	FCC Part 15.247
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - BT LE 2 Msps
Add. Information	

EUT Common Settings BT Low Energy	
Intermodulation Value N	3
Image Freq. Low   Mid   High [MHz]	0   0   0
Power Class	2
1 Mbps supported	True   TXpayload 255   RXpayload 255
2 Mbps supported	True   TXpayload 255   RXpayload 255
Longrange S8 supported	True   TXpayload 255   RXpayload 255
Longrange S2 supported	True   TXpayload 255   RXpayload 255
Signaling Settings	USB_RS232   TWO   15   19200   None   S1   None   On
Signaling RF Settings	RF1com   0   0   On
User Interaction	No
Switch Matrix & Pathcompensation enabled	Yes

Test Parameter	
Technology to test	BT LE 2 Msps
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True   Freq [MHz] 2404
Frequency mid to test	True   Freq [MHz] 2440
Frequency high to test	True   Freq [MHz] 2478
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	1.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

## Test at TX 2404 MHz

### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.14	dBm	INFO
Ref. Frequency	---	---	2403.500	MHz	INFO

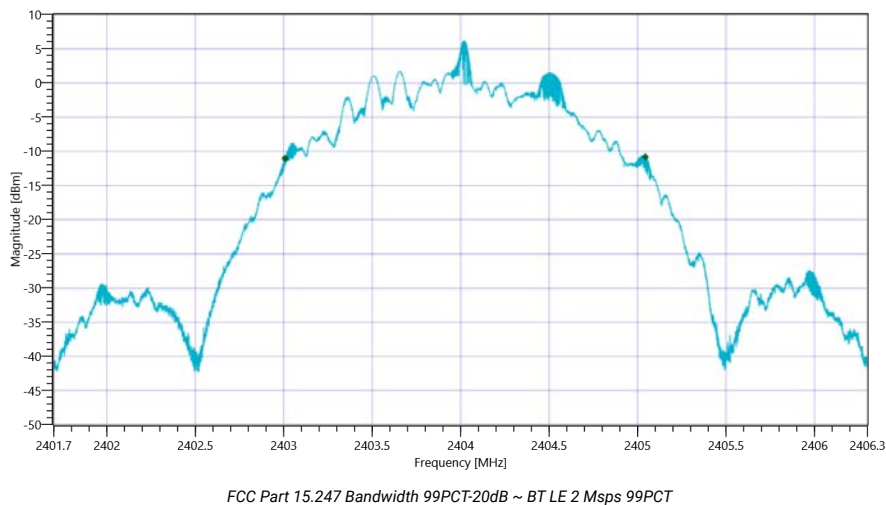
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.14   11.6   20
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

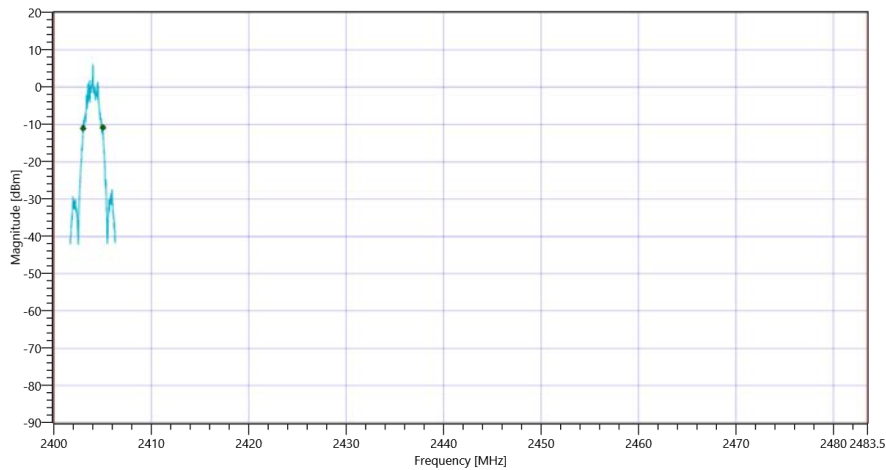
### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	2037.596	kHz	INFO
T1 99%	2400.000000	---	2403.0070	MHz	PASS
T2 99%	---	2483.500000	2405.0446	MHz	PASS

### Plot: Bandwidth only



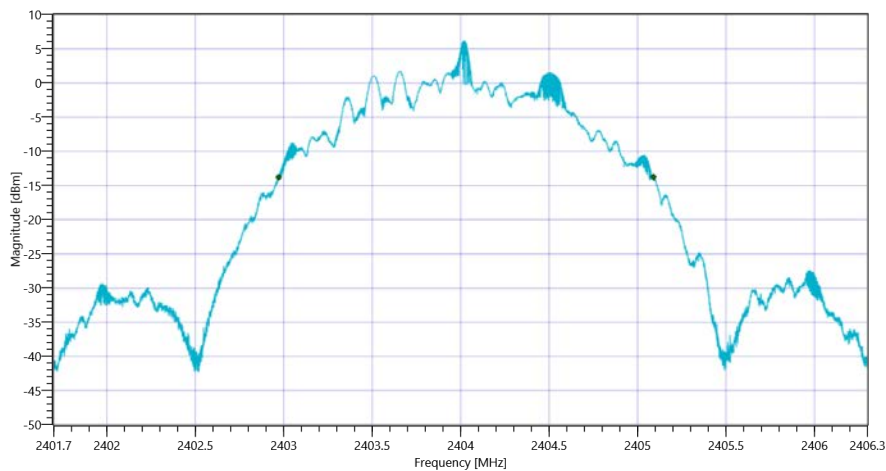
### Plot: Bandwidth within Band



FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 2 Msps

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	2119	kHz	INFO
T1 20dB	2400.000000	---	2402.9710	MHz	PASS
T2 20dB	---	2483.500000	2405.0897	MHz	PASS

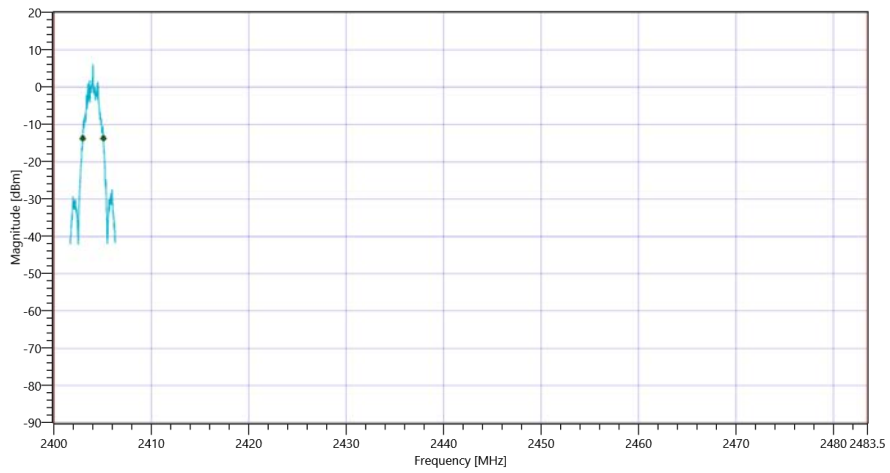
Plot: Bandwidth only



FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 2 Msps 20dB

Plot: Bandwidth within Band





FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 2 Msps

## Test at TX 2440 MHz

### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.35	dBm	INFO
Ref. Frequency	---	---	2439.500	MHz	INFO

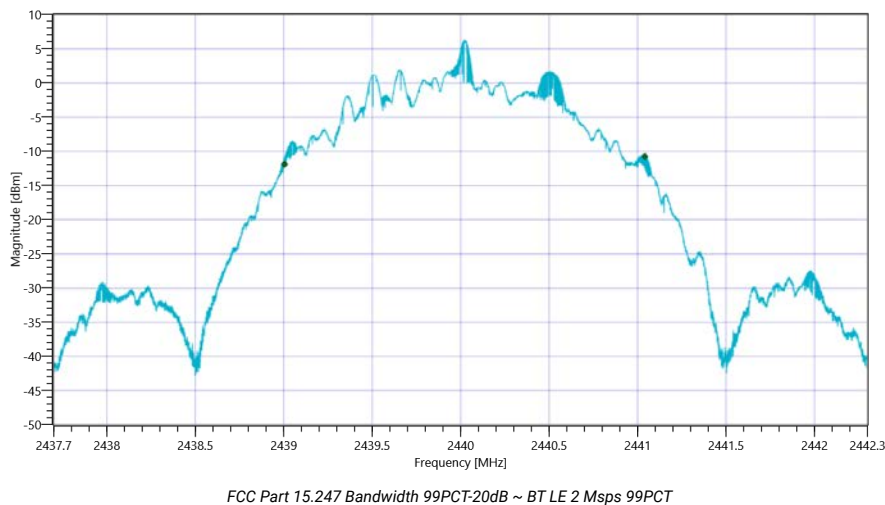
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.35   11.6   20
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

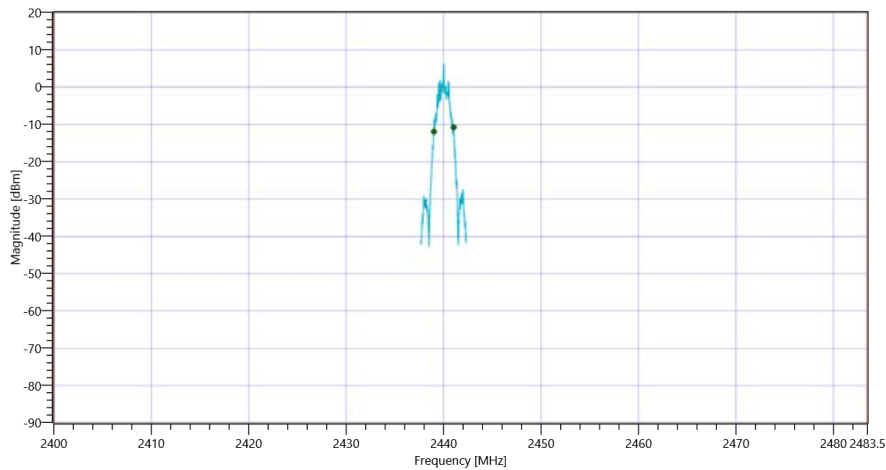
### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	2036.676	kHz	INFO
T1 99%	2400.000000	---	2439.0051	MHz	PASS
T2 99%	---	2483.500000	2441.0418	MHz	PASS

### Plot: Bandwidth only



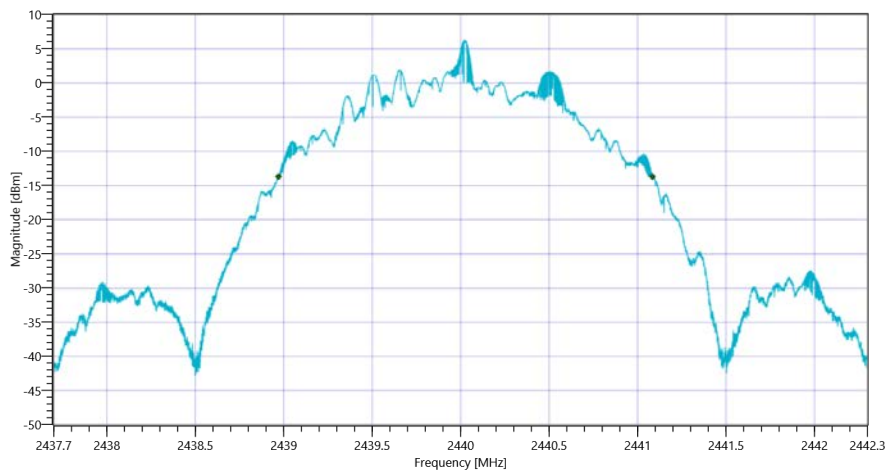
### Plot: Bandwidth within Band



FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 2 Msps

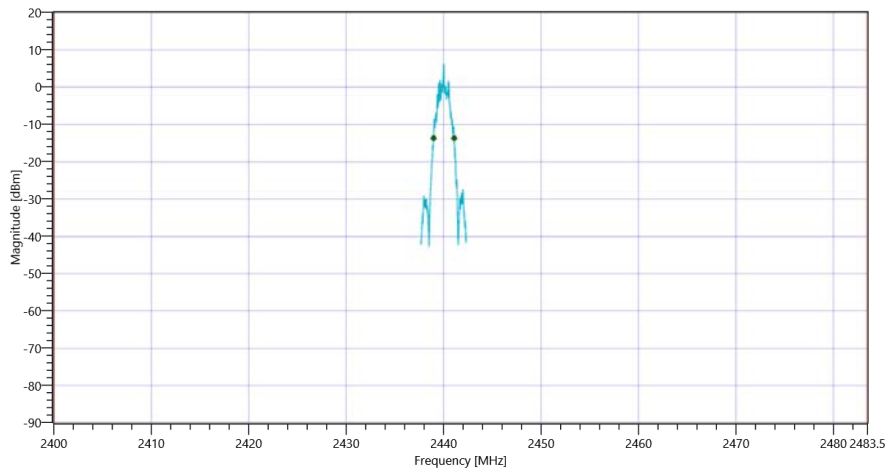
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	2114	kHz	INFO
T1 20dB	2400.000000	---	2438.9701	MHz	PASS
T2 20dB	---	2483.500000	2441.0842	MHz	PASS

Plot: Bandwidth only



FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 2 Msps 20dB

Plot: Bandwidth within Band



FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 2 Msps

## Test at TX 2478 MHz

### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.58	dBm	INFO
Ref. Frequency	---	---	2477.500	MHz	INFO

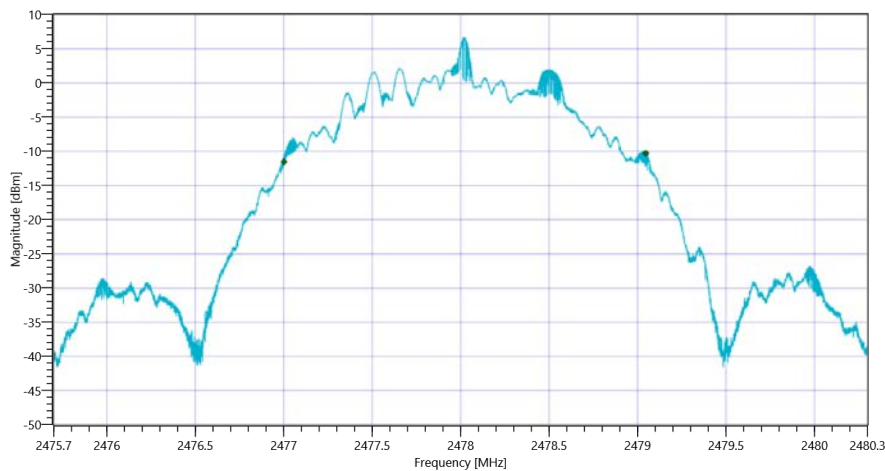
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.58   11.65   20
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

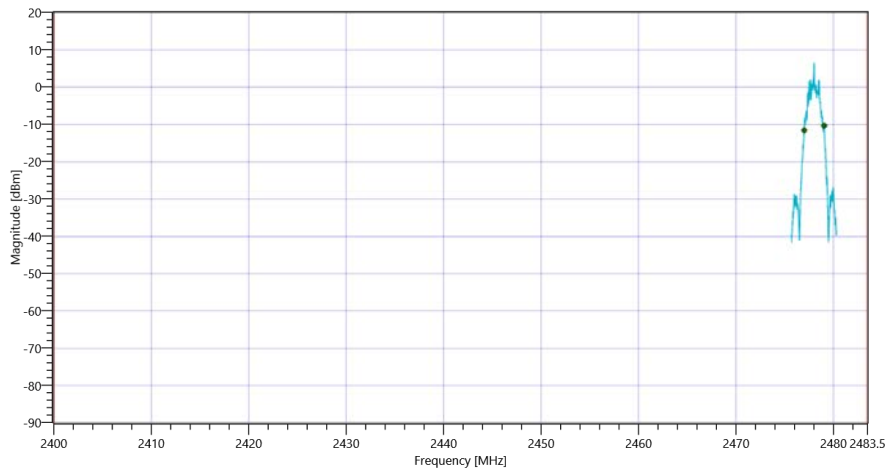
### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	2044.956	kHz	INFO
T1 99%	2400.000000	---	2477.0019	MHz	PASS
T2 99%	---	2483.500000	2479.0469	MHz	PASS

### Plot: Bandwidth only



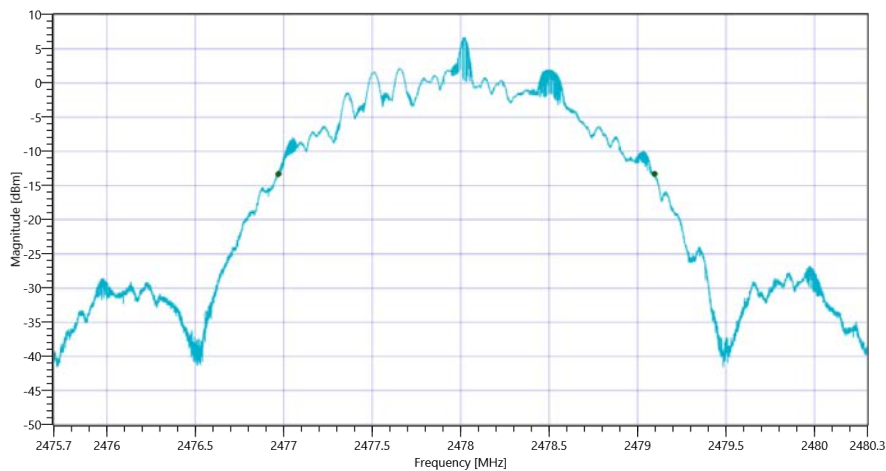
### Plot: Bandwidth within Band



FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 2 Msps

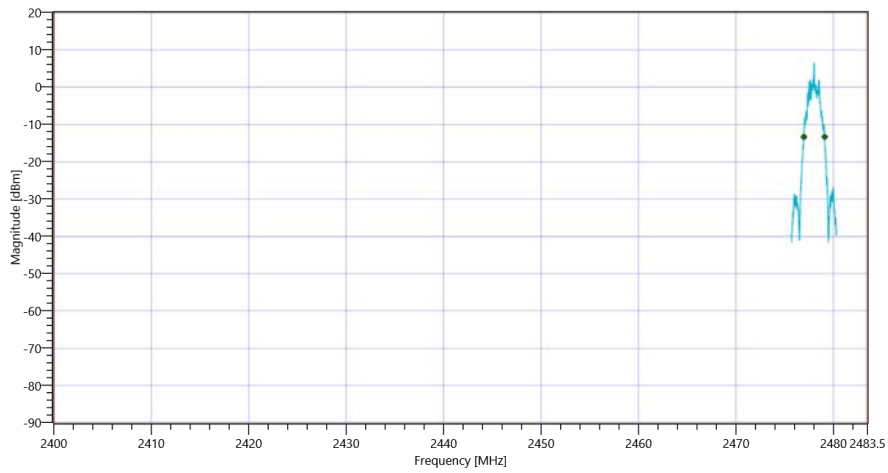
RESULT						
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict	
Bandwidth 20dB	---	---	2127	kHz	INFO	
T1 20dB	2400.000000	---	2476.9696	MHz	PASS	
T2 20dB	---	2483.500000	2479.0966	MHz	PASS	

Plot: Bandwidth only



FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 2 Msps 20dB

Plot: Bandwidth within Band



General verdict

PASS

## FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE coded S2

Test References	
TC Start	16.05.2022 12:21:58
Ambit Temp [°C]   Humidity [rel%]	21.5   47
System Version	3.0.6.3
Test Specification	FCC Part 15.247
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - BT LE coded S2
Add. Information	

EUT Common Settings BT Low Energy	
Intermodulation Value N	3
Image Freq. Low   Mid   High [MHz]	0   0   0
Power Class	2
1 Mbps supported	True   TXpayload 255   RXpayload 255
2 Mbps supported	True   TXpayload 255   RXpayload 255
Longrange S8 supported	True   TXpayload 255   RXpayload 255
Longrange S2 supported	True   TXpayload 255   RXpayload 255
Signaling Settings	USB_RS232   TWO   15   19200   None   S1   None   On
Signaling RF Settings	RF1com   0   0   On
User Interaction	No
Switch Matrix & Pathcompensation enabled	Yes

Test Parameter	
Technology to test	BT LE coded S2
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True   Freq [MHz] 2402
Frequency mid to test	True   Freq [MHz] 2440
Frequency high to test	True   Freq [MHz] 2480
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	1.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	



## Test at TX 2402 MHz

### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.09	dBm	INFO
Ref. Frequency	---	---	2401.700	MHz	INFO

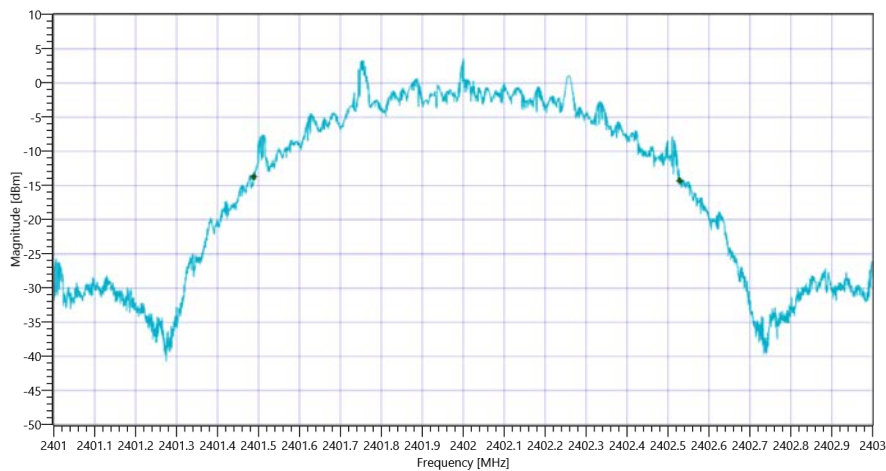
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.09   11.59   20
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

### RESULT

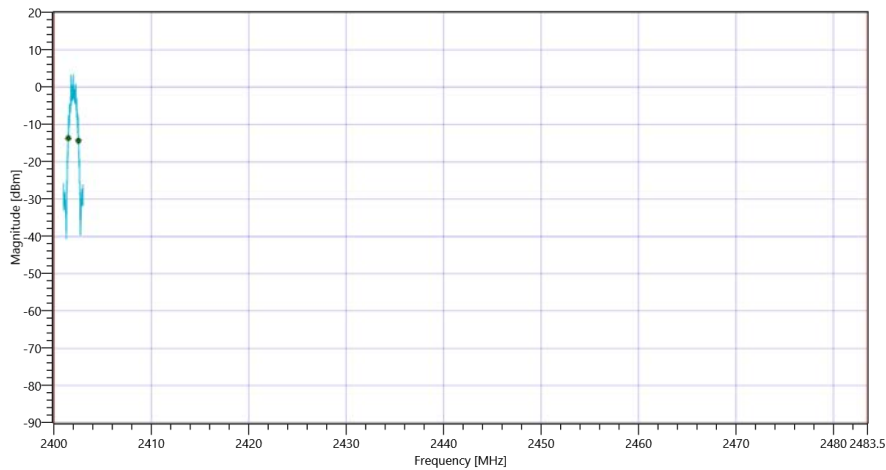
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	1040.096	kHz	INFO
T1 99%	2400.000000	---	2401.4885	MHz	PASS
T2 99%	---	2483.500000	2402.5285	MHz	PASS

### Plot: Bandwidth only



FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE coded S2 99PCT

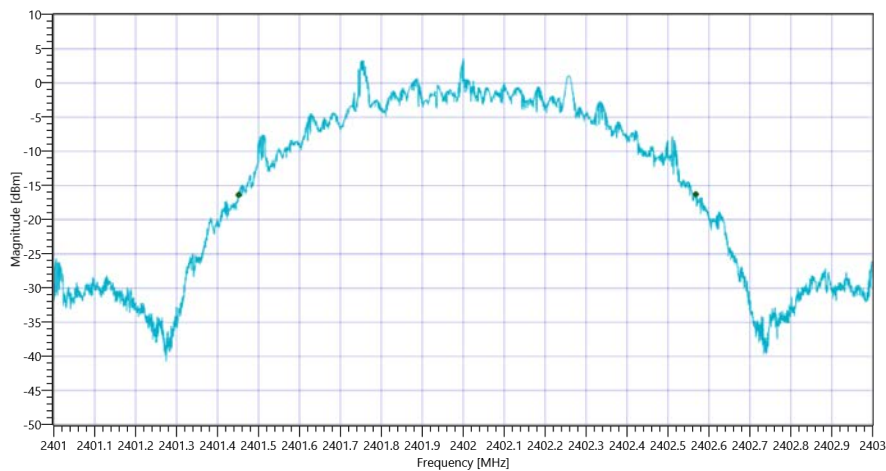
### Plot: Bandwidth within Band



FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE coded S2

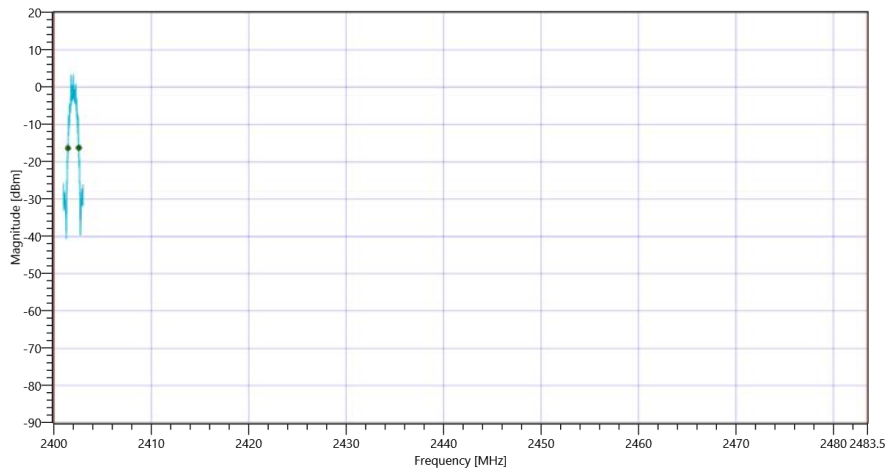
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	1116	kHz	INFO
T1 20dB	2400.000000	---	2401.4516	MHz	PASS
T2 20dB	---	2483.500000	2402.5680	MHz	PASS

Plot: Bandwidth only



FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE coded S2 20dB

Plot: Bandwidth within Band



FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE coded S2

## Test at TX 2440 MHz

### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.36	dBm	INFO
Ref. Frequency	---	---	2439.800	MHz	INFO

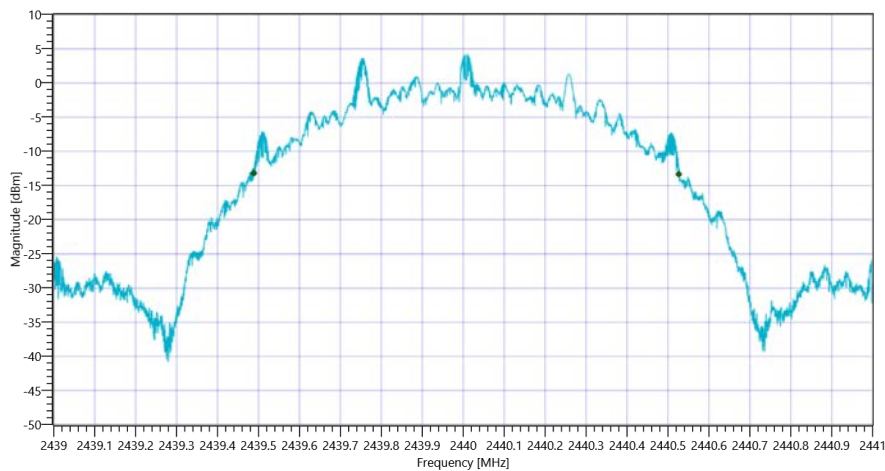
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.36   11.6   20
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

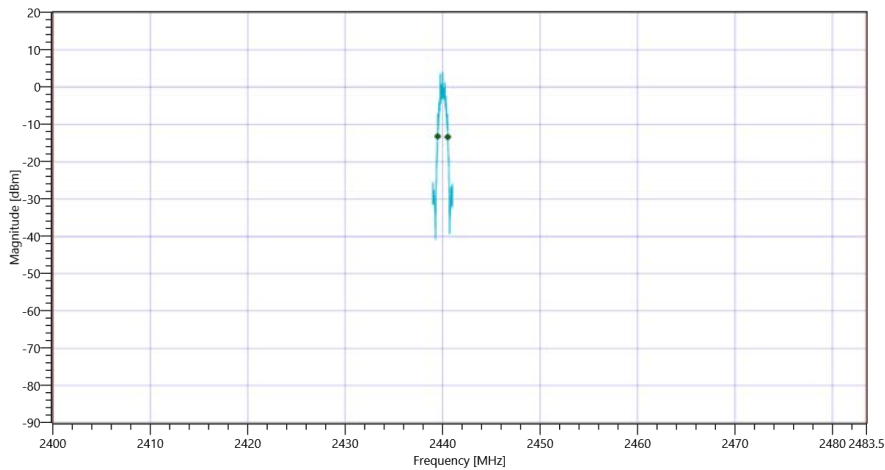
### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	1037.496	kHz	INFO
T1 99%	2400.000000	---	2439.4887	MHz	PASS
T2 99%	---	2483.500000	2440.5261	MHz	PASS

### Plot: Bandwidth only



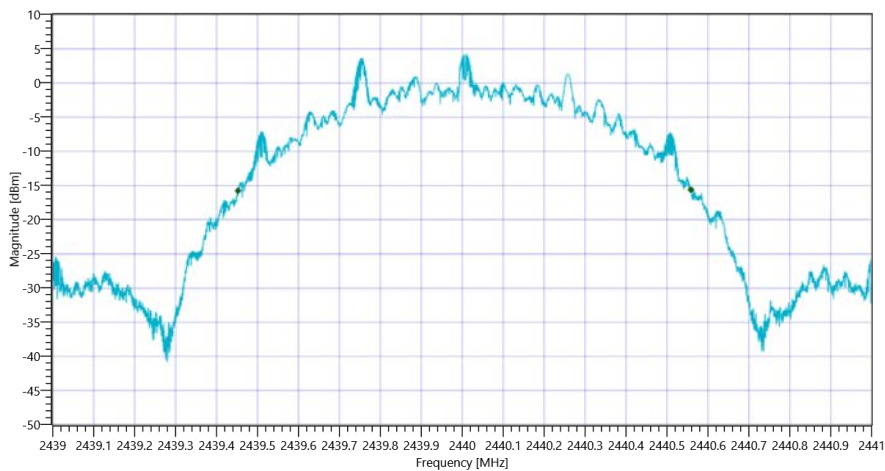
### Plot: Bandwidth within Band



FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE coded S2

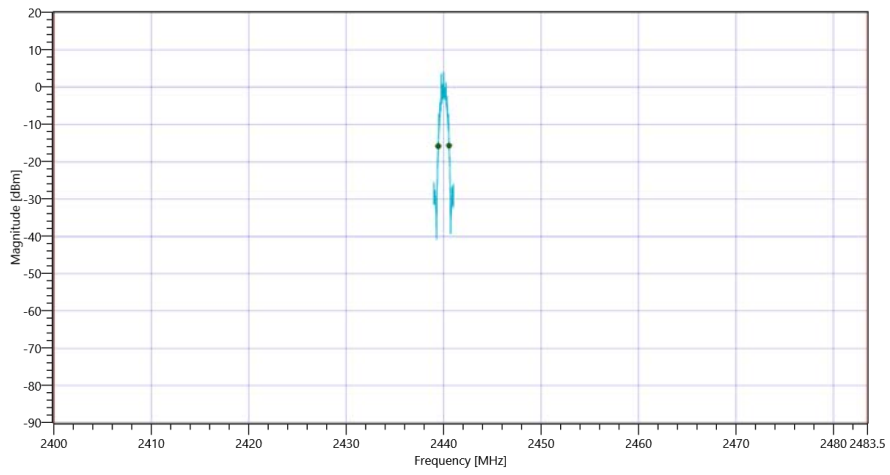
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	1106	kHz	INFO
T1 20dB	2400.000000	---	2439.4524	MHz	PASS
T2 20dB	---	2483.500000	2440.5586	MHz	PASS

Plot: Bandwidth only



FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE coded S2 20dB

Plot: Bandwidth within Band



FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE coded S2

## Test at TX 2480 MHz

### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.63	dBm	INFO
Ref. Frequency	---	---	2479.700	MHz	INFO

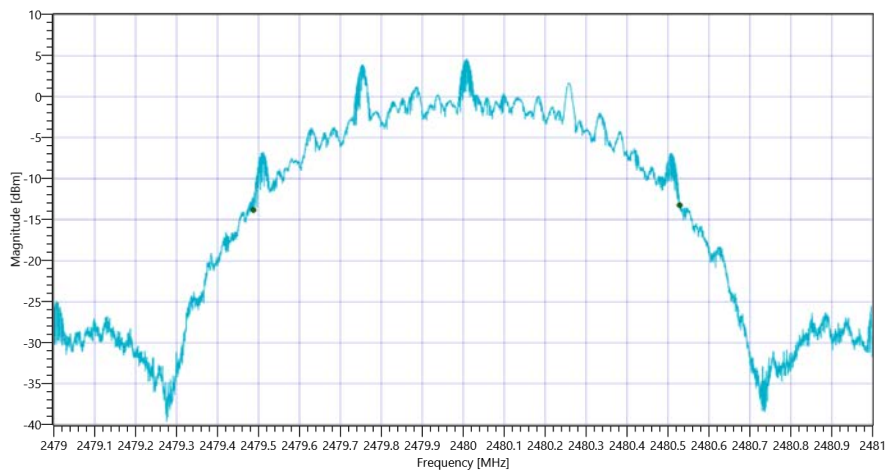
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.63   11.65   20
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

### RESULT

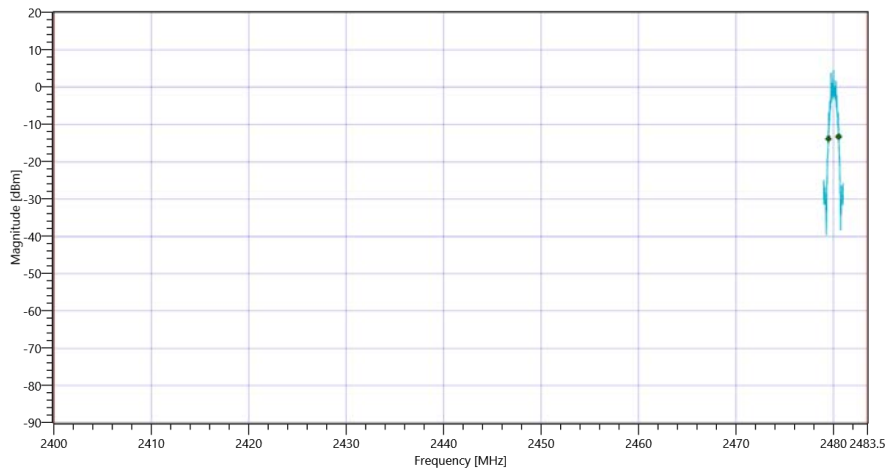
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	1040.696	kHz	INFO
T1 99%	2400.000000	---	2479.4877	MHz	PASS
T2 99%	---	2483.500000	2480.5283	MHz	PASS

### Plot: Bandwidth only



FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE coded S2 99PCT

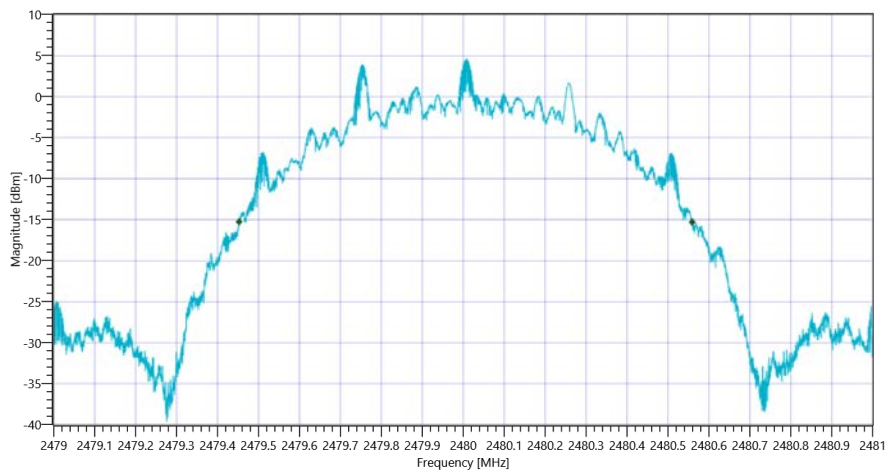
### Plot: Bandwidth within Band



FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE coded S2

RESULT						
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict	
Bandwidth 20dB	---	---	1107	kHz	INFO	
T1 20dB	2400.000000	---	2479.4526	MHz	PASS	
T2 20dB	---	2483.500000	2480.5592	MHz	PASS	

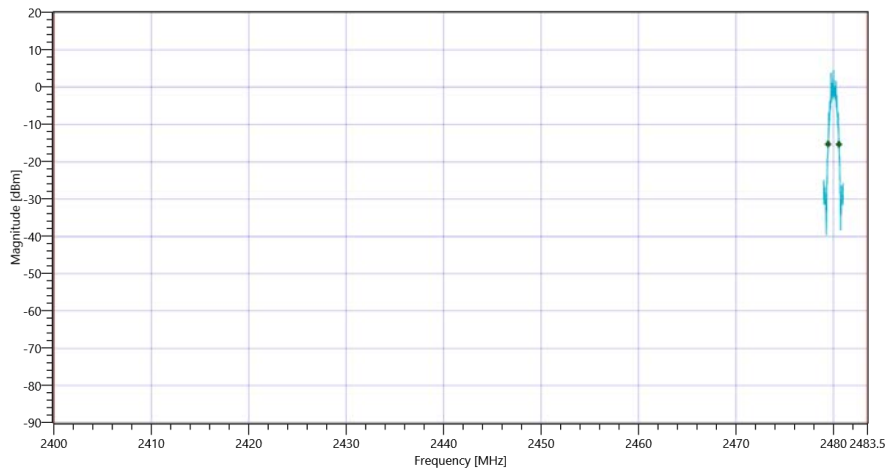
Plot: Bandwidth only



FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE coded S2 20dB

Plot: Bandwidth within Band





FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE coded S2

General verdict

PASS

## FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE coded S8

Test References	
TC Start	16.05.2022 11:46:05
Ambit Temp [°C]   Humidity [rel%]	22.0   45
System Version	3.0.6.3
Test Specification	FCC Part 15.247
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - BT LE coded S8
Add. Information	

EUT Common Settings BT Low Energy	
Intermodulation Value N	3
Image Freq. Low   Mid   High [MHz]	0   0   0
Power Class	2
1 Mbps supported	True   TXpayload 255   RXpayload 255
2 Mbps supported	True   TXpayload 255   RXpayload 255
Longrange S8 supported	True   TXpayload 255   RXpayload 255
Longrange S2 supported	True   TXpayload 255   RXpayload 255
Signaling Settings	USB_RS232   TWO   15   19200   None   S1   None   On
Signaling RF Settings	RF1com   0   0   On
User Interaction	No
Switch Matrix & Pathcompensation enabled	Yes

Test Parameter	
Technology to test	BT LE coded S8
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True   Freq [MHz] 2402
Frequency mid to test	True   Freq [MHz] 2440
Frequency high to test	True   Freq [MHz] 2480
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	1.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

## Test at TX 2402 MHz

### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.04	dBm	INFO
Ref. Frequency	---	---	2401.700	MHz	INFO

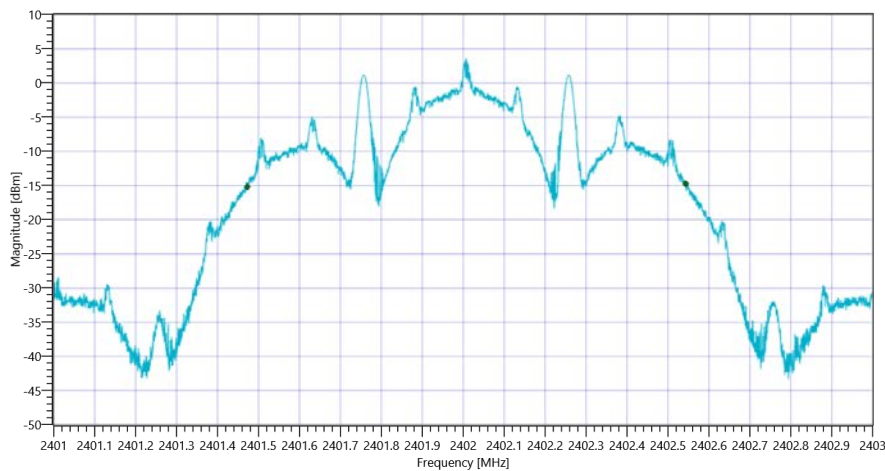
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.04   11.59   20
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

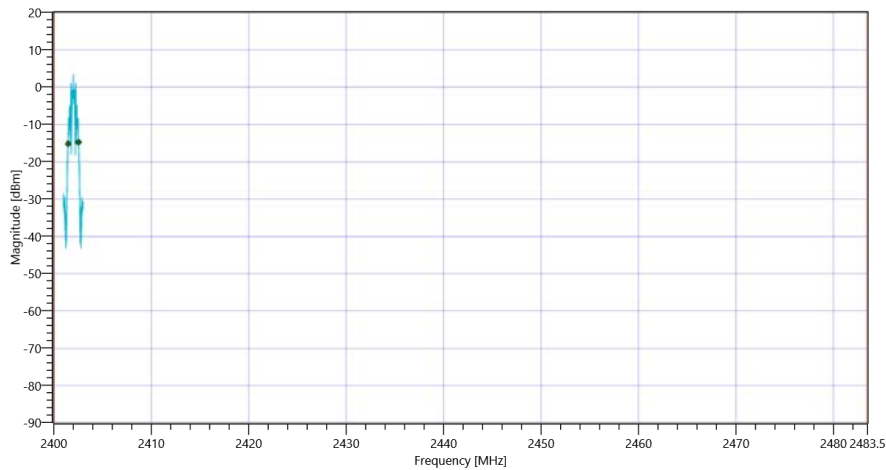
### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	1070.693	kHz	INFO
T1 99%	2400.000000	---	2401.4727	MHz	PASS
T2 99%	---	2483.500000	2402.5433	MHz	PASS

### Plot: Bandwidth only



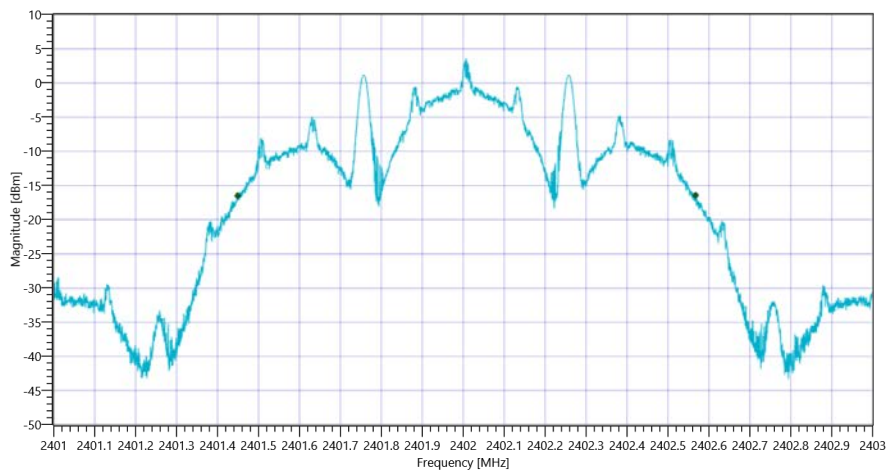
### Plot: Bandwidth within Band



FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE coded S8

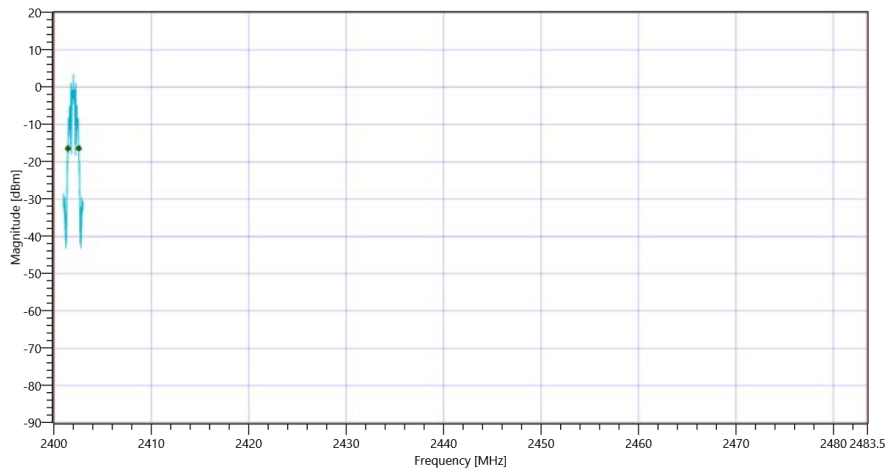
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	1119	kHz	INFO
T1 20dB	2400.000000	---	2401.4488	MHz	PASS
T2 20dB	---	2483.500000	2402.5674	MHz	PASS

Plot: Bandwidth only



FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE coded S8 20dB

Plot: Bandwidth within Band



## Test at TX 2440 MHz

### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.31	dBm	INFO
Ref. Frequency	---	---	2439.700	MHz	INFO

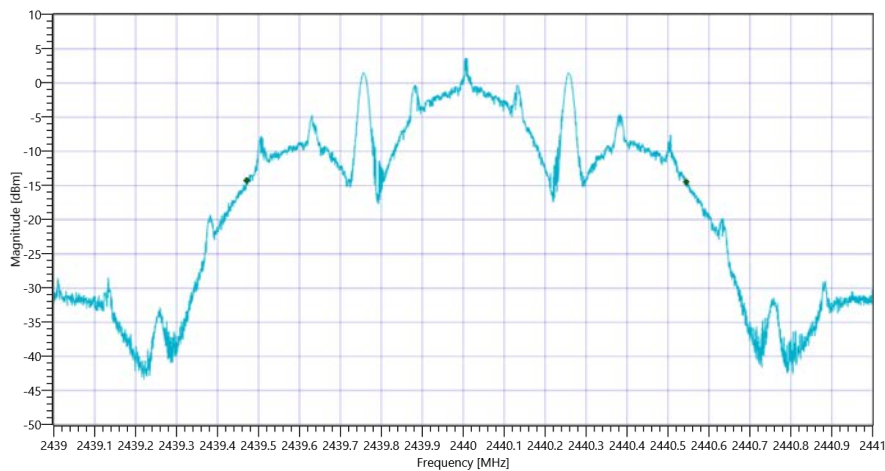
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.31   11.6   20
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

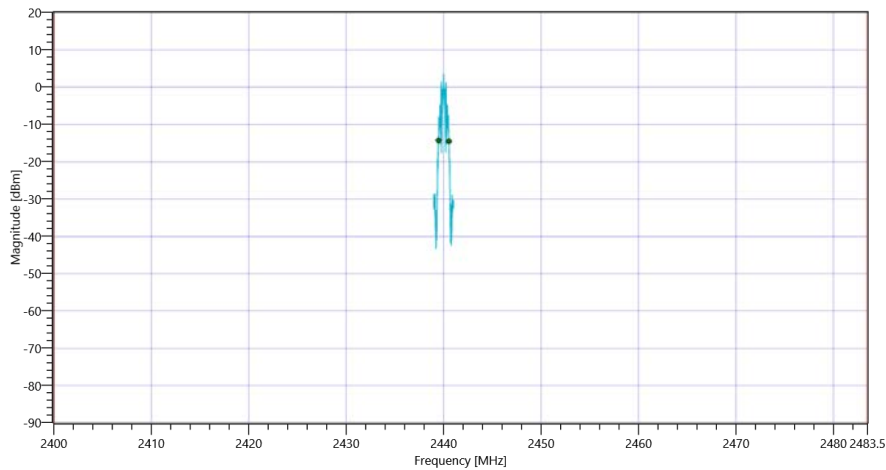
### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	1073.493	kHz	INFO
T1 99%	2400.000000	---	2439.4709	MHz	PASS
T2 99%	---	2483.500000	2440.5443	MHz	PASS

### Plot: Bandwidth only



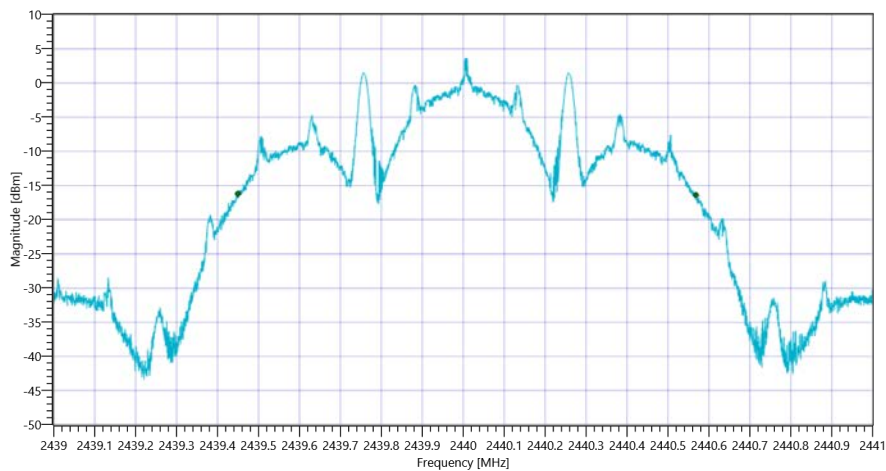
### Plot: Bandwidth within Band



FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE coded S8

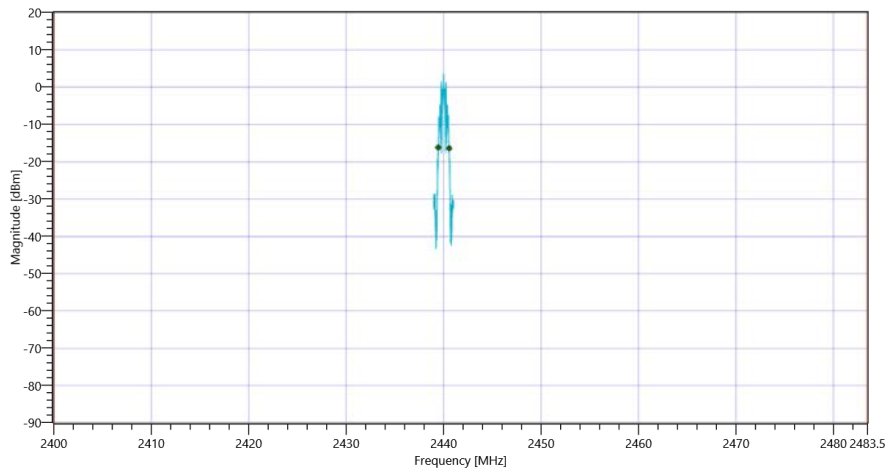
RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	1119	kHz	INFO
T1 20dB	2400.000000	---	2439.4494	MHz	PASS
T2 20dB	---	2483.500000	2440.5684	MHz	PASS

Plot: Bandwidth only



FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE coded S8 20dB

Plot: Bandwidth within Band





## Test at TX 2480 MHz

### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.58	dBm	INFO
Ref. Frequency	---	---	2479.700	MHz	INFO

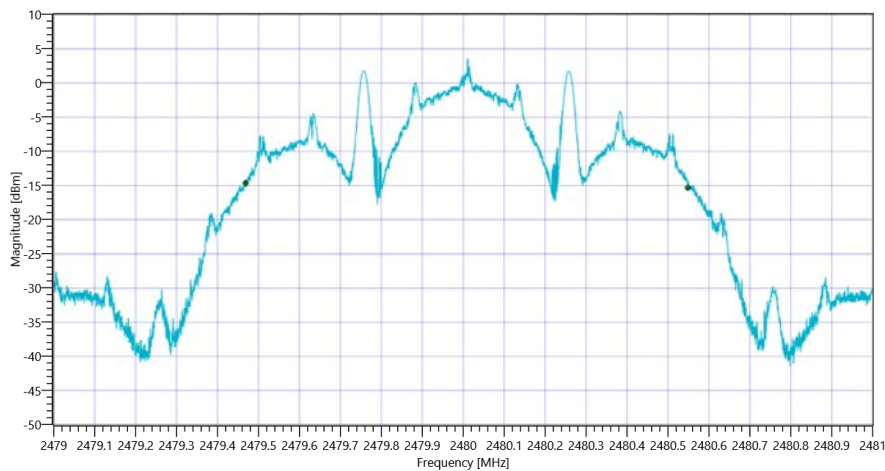
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.58   11.65   20
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

### RESULT

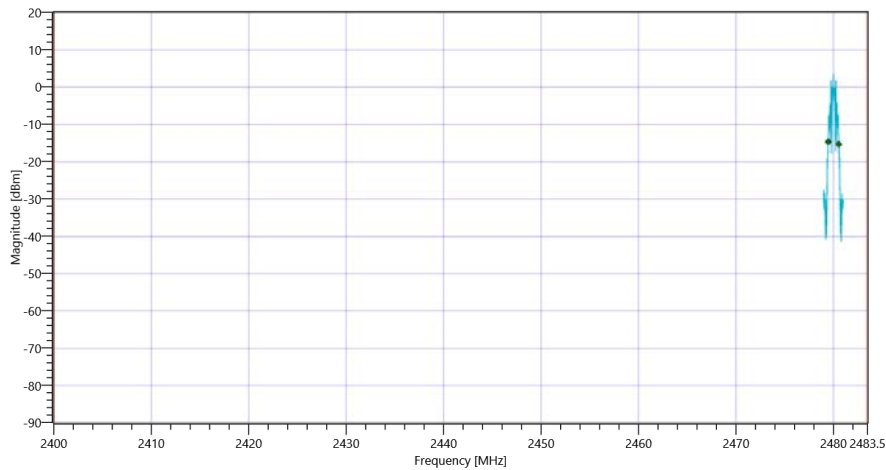
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	1079.692	kHz	INFO
T1 99%	2400.000000	---	2479.4685	MHz	PASS
T2 99%	---	2483.500000	2480.5481	MHz	PASS

### Plot: Bandwidth only



FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE coded S8 99PCT

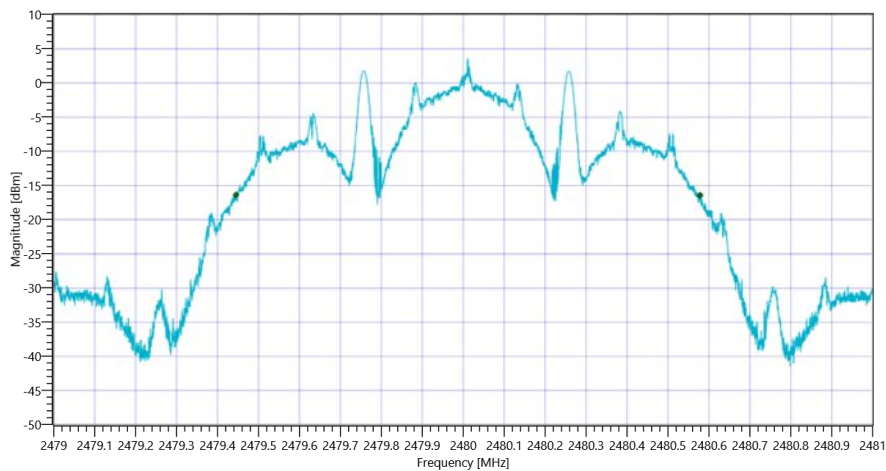
### Plot: Bandwidth within Band



FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE coded S8

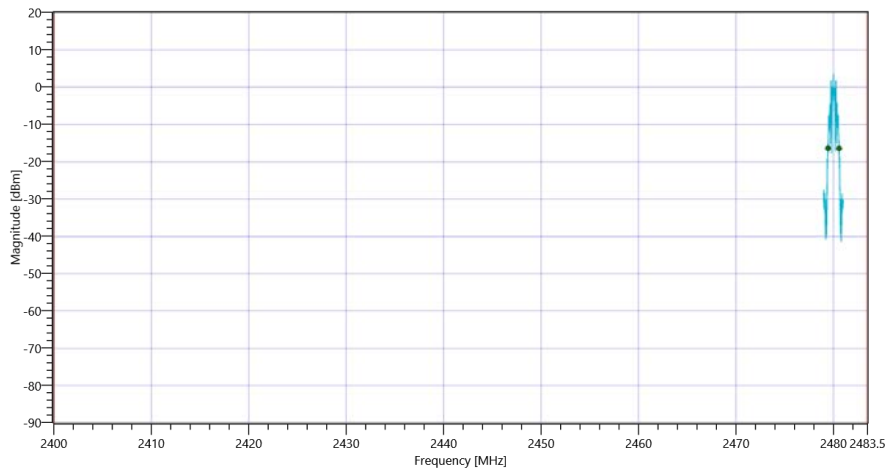
RESULT						
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict	
Bandwidth 20dB	---	---	1134	kHz	INFO	
T1 20dB	2400.000000	---	2479.4446	MHz	PASS	
T2 20dB	---	2483.500000	2480.5786	MHz	PASS	

Plot: Bandwidth only



FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE coded S8 20dB

Plot: Bandwidth within Band



FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE coded S8

General verdict

PASS

## FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE 1 Msps

Test References	
TC Start	16.05.2022 10:29:36
Ambit Temp [°C]   Humidity [rel%]	22.5   48
System Version	3.0.6.3
Test Specification	FCC Part 15.247
Test Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.1 RBW ≥ DTS Bandwidth
TC Version	0.0.1
My Description	FCC 15.247 Maximum Peak Output Power Conducted DTS - BT LE 1 Msps
Add. Information	

EUT Common Settings BT Low Energy	
Intermodulation Value N	3
Image Freq. Low   Mid   High [MHz]	0   0   0
Power Class	2
1 Mbps supported	True   TXpayload 255   RXpayload 255
2 Mbps supported	True   TXpayload 255   RXpayload 255
Longrange S8 supported	True   TXpayload 255   RXpayload 255
Longrange S2 supported	True   TXpayload 255   RXpayload 255
Signaling Settings	USB_RS232   TWO   15   19200   None   S1   None   On
Signaling RF Settings	RF1com   0   0   On
User Interaction	No
Switch Matrix & Pathcompensation enabled	Yes

Test Parameter	
Technology to test	BT LE 1 Msps
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True   Freq [MHz] 2402
Frequency mid to test	True   Freq [MHz] 2440
Frequency high to test	True   Freq [MHz] 2480
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	1.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

## Test at TX 2402 MHz

### RESULT: Reference Power cond.

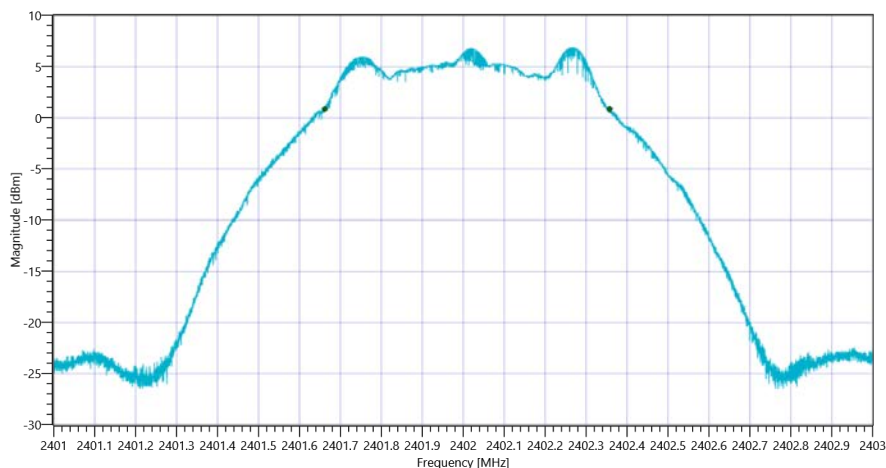
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.03	dBm	INFO
Ref. Frequency	---	---	2401.700	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.03   11.59   20
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	---	---	696	kHz	INFO



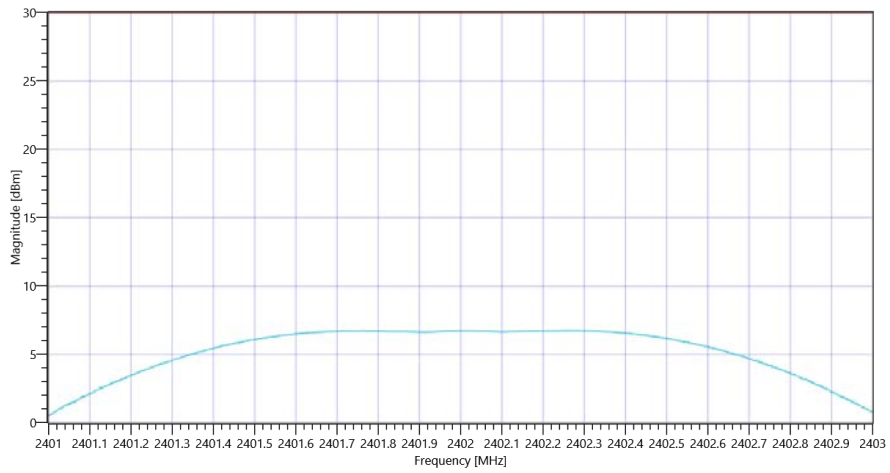
FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE 1 Msps DTS BW

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	17.03   11.59   25
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

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	30.00	6.73	dBm	PASS
Peak Power	---	1000	4.709773	mW	PASS
Frequency at Peak	---	---	2402.264	MHz	INFO



FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE 1 Msp

## Test at TX 2440 MHz

### RESULT: Reference Power cond.

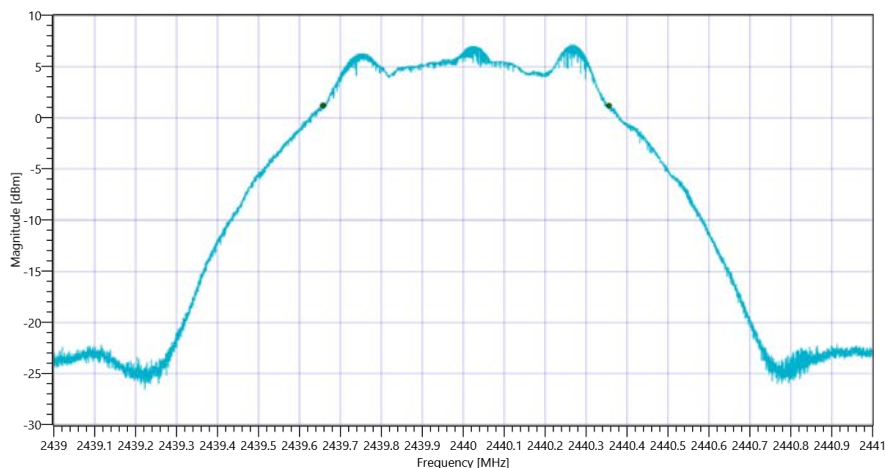
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.29	dBm	INFO
Ref. Frequency	---	---	2439.700	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.29   11.6   20
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	---	---	699	kHz	INFO



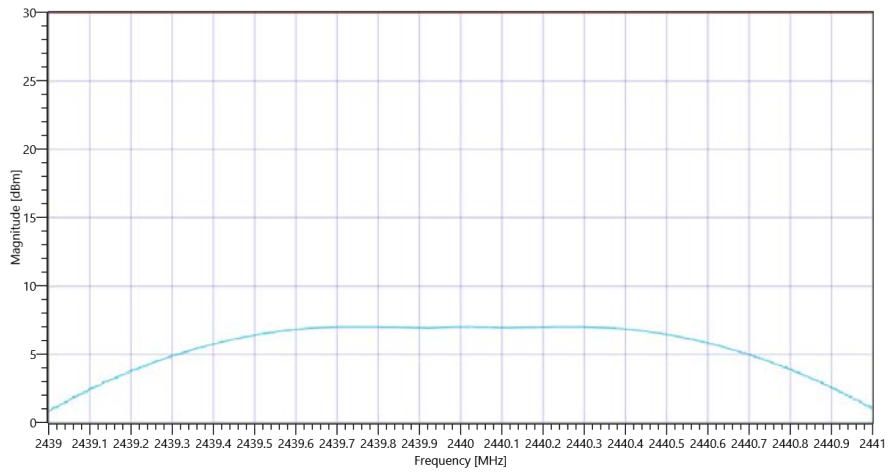
FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE 1 Msps DTS BW

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	17.29   11.6   25
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

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	30.00	7.02	dBm	PASS
Peak Power	---	1000	5.035006	mW	PASS
Frequency at Peak	---	---	2440.024	MHz	INFO



FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE 1 Msp



## Test at TX 2480 MHz

### RESULT: Reference Power cond.

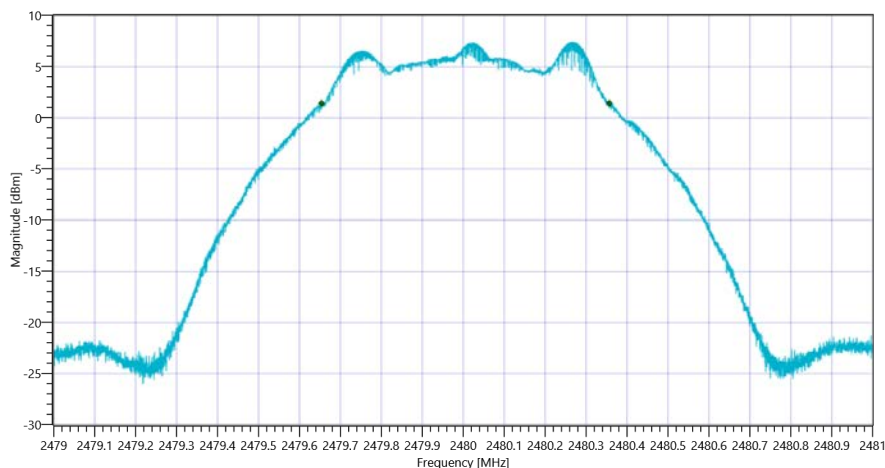
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.54	dBm	INFO
Ref. Frequency	---	---	2479.700	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.54   11.65   20
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	---	---	703	kHz	INFO



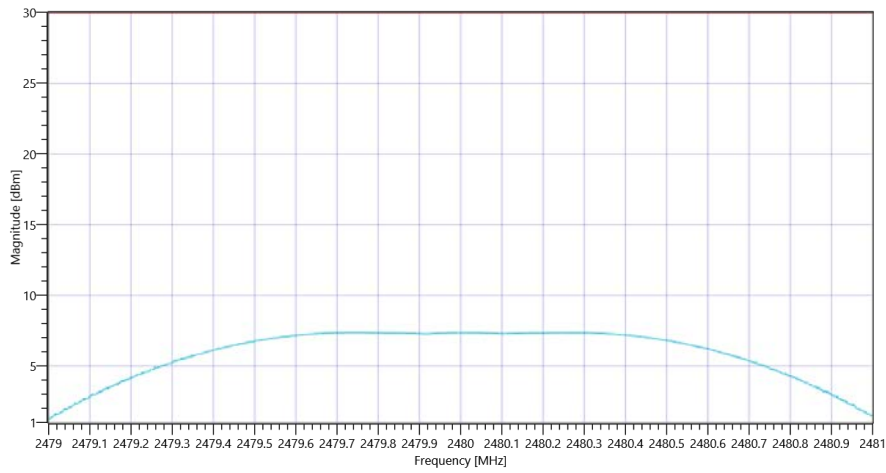
FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE 1 Msps DTS BW

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	17.54   11.65   25
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

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	30.00	7.37	dBm	PASS
Peak Power	---	1000	5.457579	mW	PASS
Frequency at Peak	---	---	2479.742	MHz	INFO



FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE 1 Msp

General verdict

PASS

## FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE 2 Msps

Test References	
TC Start	16.05.2022 11:04:23
Ambit Temp [°C]   Humidity [rel%]	22.3   47
System Version	3.0.6.3
Test Specification	FCC Part 15.247
Test Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.1 RBW ≥ DTS Bandwidth
TC Version	0.0.1
My Description	FCC 15.247 Maximum Peak Output Power Conducted DTS - BT LE 2 Msps
Add. Information	

EUT Common Settings BT Low Energy	
Intermodulation Value N	3
Image Freq. Low   Mid   High [MHz]	0   0   0
Power Class	2
1 Mbps supported	True   TXpayload 255   RXpayload 255
2 Mbps supported	True   TXpayload 255   RXpayload 255
Longrange S8 supported	True   TXpayload 255   RXpayload 255
Longrange S2 supported	True   TXpayload 255   RXpayload 255
Signaling Settings	USB_RS232   TWO   15   19200   None   S1   None   On
Signaling RF Settings	RF1com   0   0   On
User Interaction	No
Switch Matrix & Pathcompensation enabled	Yes

Test Parameter	
Technology to test	BT LE 2 Msps
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True   Freq [MHz] 2404
Frequency mid to test	True   Freq [MHz] 2440
Frequency high to test	True   Freq [MHz] 2478
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	1.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

## Test at TX 2404 MHz

### RESULT: Reference Power cond.

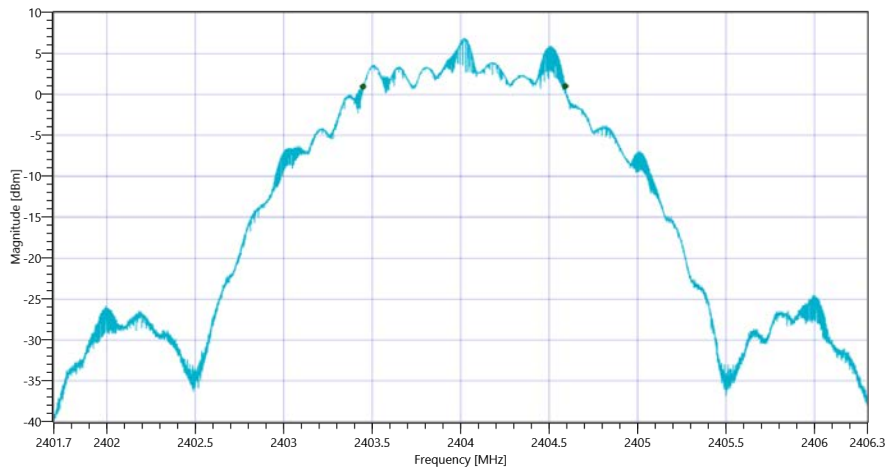
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.11	dBm	INFO
Ref. Frequency	---	---	2403.500	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.11   11.6   20
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	---	---	1144	kHz	INFO



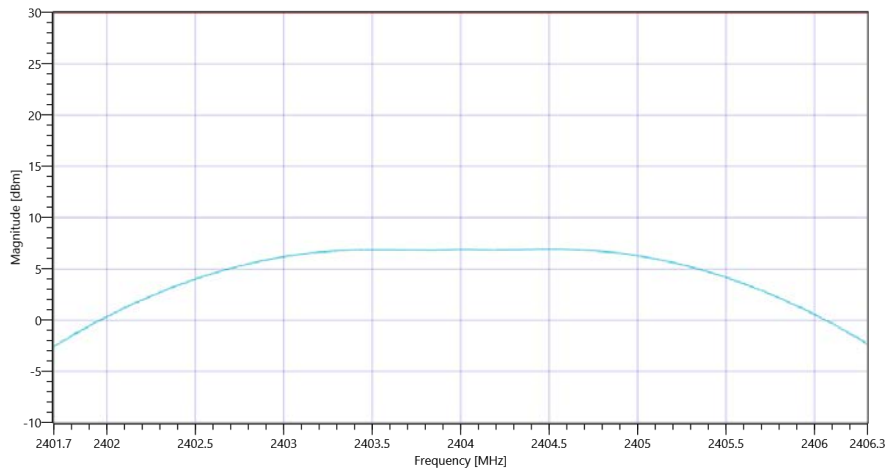
FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE 2 Msps DTS BW

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	17.11   11.6   25
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

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	30.00	6.93	dBm	PASS
Peak Power	---	1000	4.931738	mW	PASS
Frequency at Peak	---	---	2404.482	MHz	INFO



FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE 2 Msps

## Test at TX 2440 MHz

### RESULT: Reference Power cond.

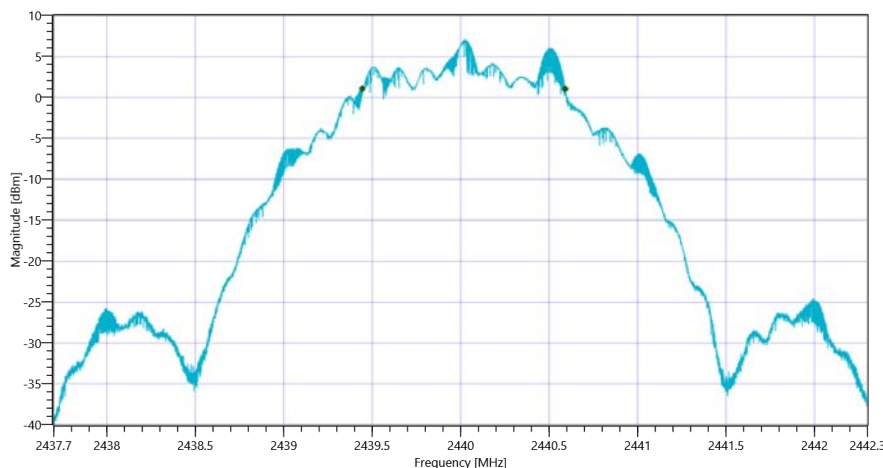
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.32	dBm	INFO
Ref. Frequency	---	---	2439.500	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.32   11.6   20
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	---	---	1147	kHz	INFO



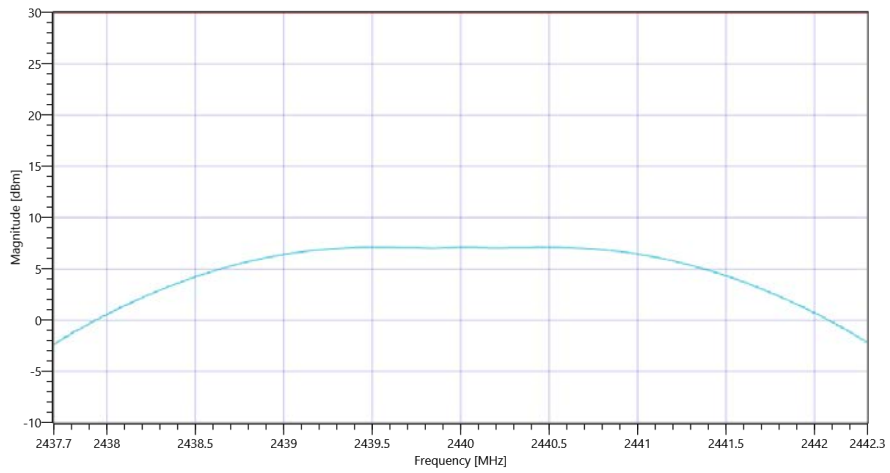
FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE 2 Msps DTS BW

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	17.32   11.6   25
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

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	30.00	7.12	dBm	PASS
Peak Power	---	1000	5.152286	mW	PASS
Frequency at Peak	---	---	2439.545	MHz	INFO



FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE 2 Msps

## Test at TX 2478 MHz

### RESULT: Reference Power cond.

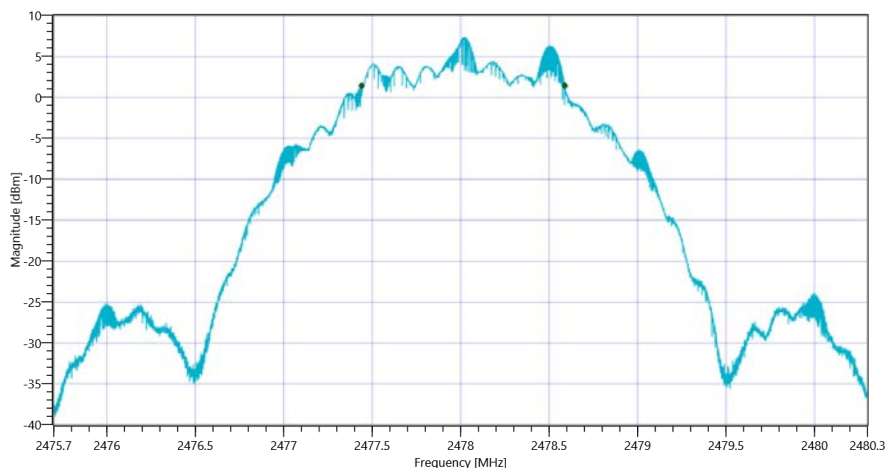
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.58	dBm	INFO
Ref. Frequency	---	---	2477.500	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.58   11.65   20
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	---	---	1149	kHz	INFO



FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE 2 Msps DTS BW

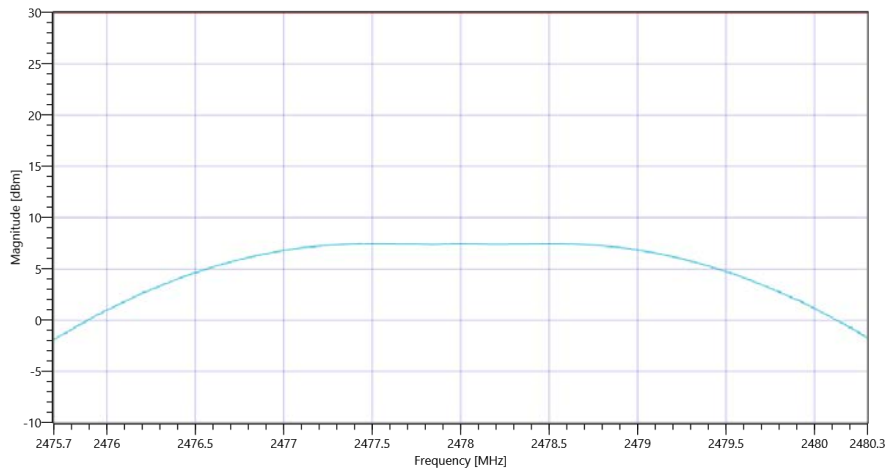
### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	17.58   11.65   25
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

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	30.00	7.49	dBm	PASS
Peak Power	---	1000	5.61048	mW	PASS
Frequency at Peak	---	---	2477.522	MHz	INFO





FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE 2 Msps

General verdict

PASS

## FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE coded S2

Test References	
TC Start	16.05.2022 12:15:10
Ambit Temp [°C]   Humidity [rel%]	21.5   46
System Version	3.0.6.3
Test Specification	FCC Part 15.247
Test Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.1 RBW ≥ DTS Bandwidth
TC Version	0.0.1
My Description	FCC 15.247 Maximum Peak Output Power Conducted DTS - BT LE coded S2
Add. Information	

EUT Common Settings BT Low Energy	
Intermodulation Value N	3
Image Freq. Low   Mid   High [MHz]	0   0   0
Power Class	2
1 Mbps supported	True   TXpayload 255   RXpayload 255
2 Mbps supported	True   TXpayload 255   RXpayload 255
Longrange S8 supported	True   TXpayload 255   RXpayload 255
Longrange S2 supported	True   TXpayload 255   RXpayload 255
Signaling Settings	USB_RS232   TWO   15   19200   None   S1   None   On
Signaling RF Settings	RF1com   0   0   On
User Interaction	No
Switch Matrix & Pathcompensation enabled	Yes

Test Parameter	
Technology to test	BT LE coded S2
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True   Freq [MHz] 2402
Frequency mid to test	True   Freq [MHz] 2440
Frequency high to test	True   Freq [MHz] 2480
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	1.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

## Test at TX 2402 MHz

### RESULT: Reference Power cond.

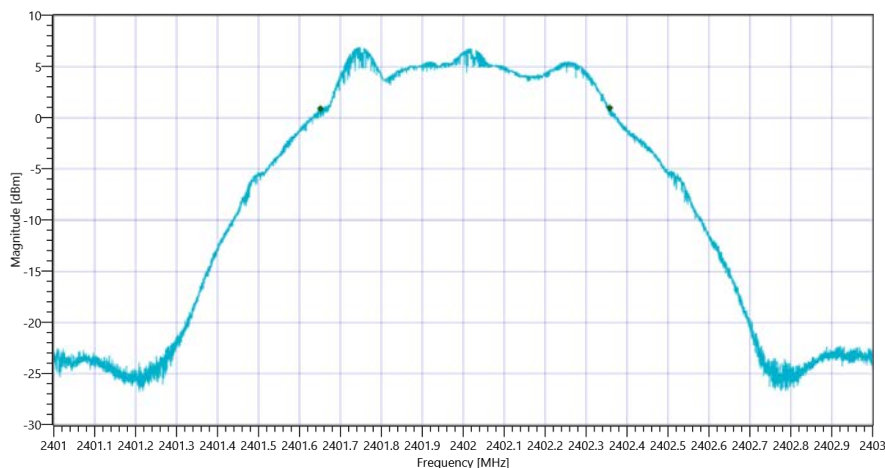
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.08	dBm	INFO
Ref. Frequency	---	---	2401.700	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.08   11.59   20
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	---	---	707	kHz	INFO



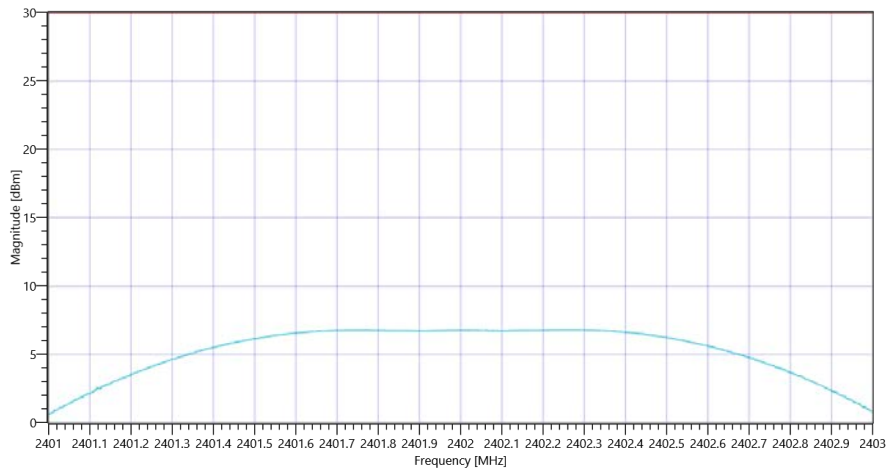
FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE coded S2 DTS BW

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	17.08   11.59   25
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

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	30.00	6.79	dBm	PASS
Peak Power	---	1000	4.775293	mW	PASS
Frequency at Peak	---	---	2402.236	MHz	INFO



FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE coded S2

## Test at TX 2440 MHz

### RESULT: Reference Power cond.

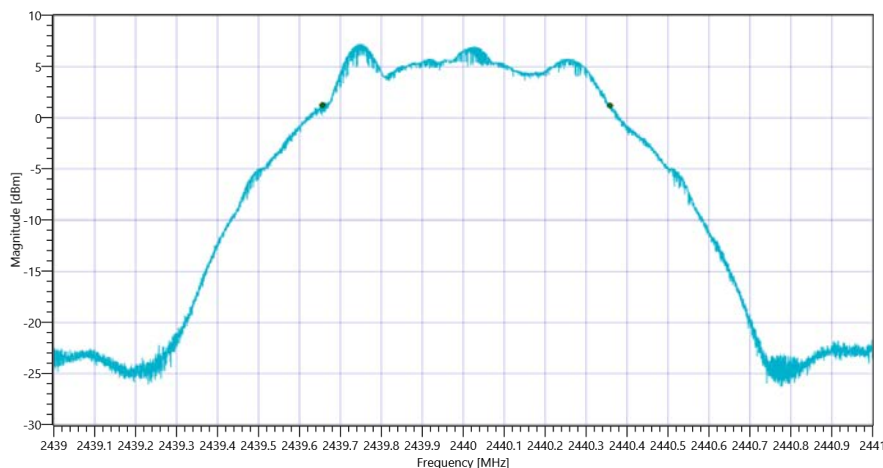
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.35	dBm	INFO
Ref. Frequency	---	---	2439.700	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.35   11.6   20
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	---	---	703	kHz	INFO



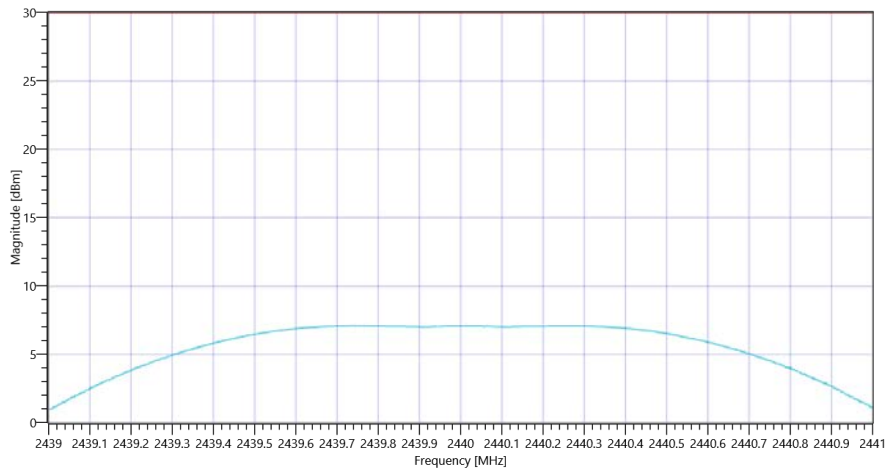
FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE coded S2 DTS BW

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	17.35   11.6   25
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

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	30.00	7.08	dBm	PASS
Peak Power	---	1000	5.10505	mW	PASS
Frequency at Peak	---	---	2439.75	MHz	INFO



FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE coded S2

## Test at TX 2480 MHz

### RESULT: Reference Power cond.

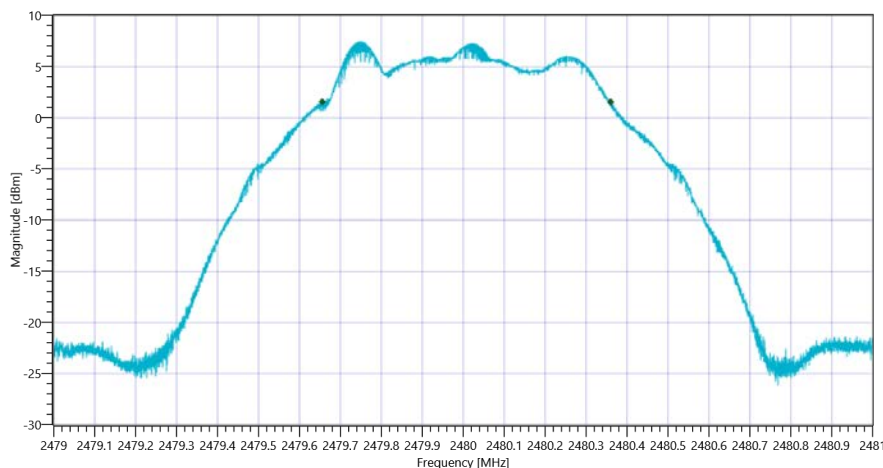
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.60	dBm	INFO
Ref. Frequency	---	---	2479.700	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.60   11.65   20
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	---	---	704	kHz	INFO



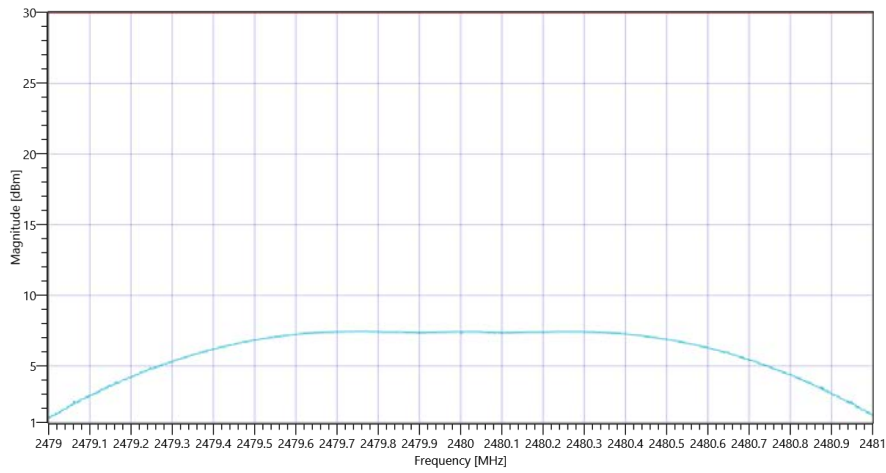
FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE coded S2 DTS BW

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	17.60   11.65   25
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

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	30.00	7.44	dBm	PASS
Peak Power	---	1000	5.546257	mW	PASS
Frequency at Peak	---	---	2479.728	MHz	INFO



FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE coded S2

General verdict

PASS



## FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE coded S8

Test References	
TC Start	16.05.2022 11:39:20
Ambit Temp [°C]   Humidity [rel%]	22.4   47
System Version	3.0.6.3
Test Specification	FCC Part 15.247
Test Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.1 RBW ≥ DTS Bandwidth
TC Version	0.0.1
My Description	FCC 15.247 Maximum Peak Output Power Conducted DTS - BT LE coded S8
Add. Information	

EUT Common Settings BT Low Energy	
Intermodulation Value N	3
Image Freq. Low   Mid   High [MHz]	0   0   0
Power Class	2
1 Mbps supported	True   TXpayload 255   RXpayload 255
2 Mbps supported	True   TXpayload 255   RXpayload 255
Longrange S8 supported	True   TXpayload 255   RXpayload 255
Longrange S2 supported	True   TXpayload 255   RXpayload 255
Signaling Settings	USB_RS232   TWO   15   19200   None   S1   None   On
Signaling RF Settings	RF1com   0   0   On
User Interaction	No
Switch Matrix & Pathcompensation enabled	Yes

Test Parameter	
Technology to test	BT LE coded S8
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True   Freq [MHz] 2402
Frequency mid to test	True   Freq [MHz] 2440
Frequency high to test	True   Freq [MHz] 2480
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	1.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

## Test at TX 2402 MHz

### RESULT: Reference Power cond.

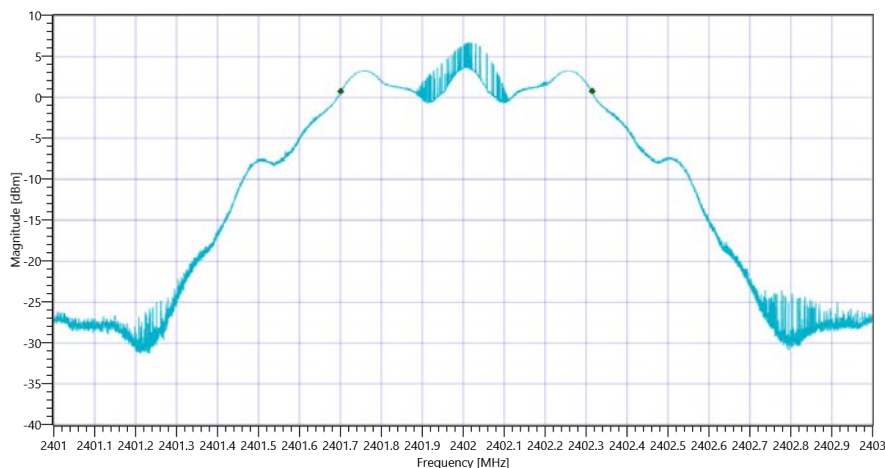
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.05	dBm	INFO
Ref. Frequency	---	---	2401.700	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.05   11.59   20
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	---	---	614	kHz	INFO



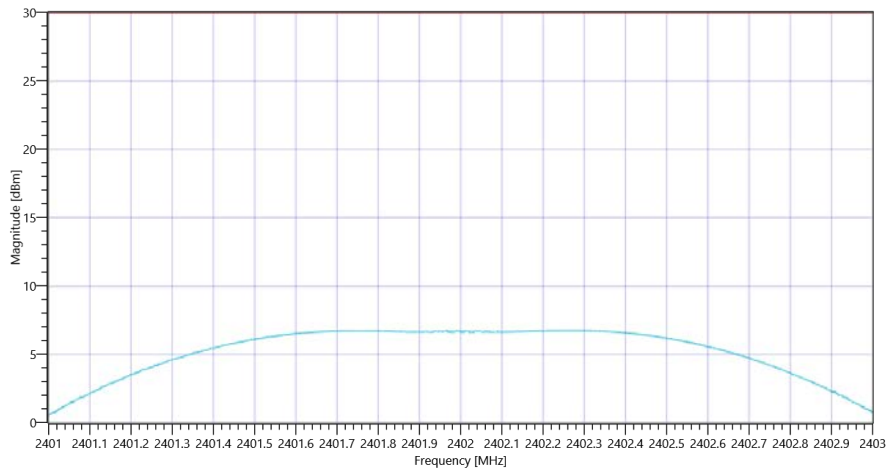
FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE coded S8 DTS BW

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	17.05   11.59   25
Start [MHz]   Stop [MHz]	2401.000   2403.000
RBW [MHz]   VBW [MHz]	1.000000   3.000000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	50   200   1001   SWE

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	30.00	6.74	dBm	PASS
Peak Power	---	1000	4.72063	mW	PASS
Frequency at Peak	---	---	2402.246	MHz	INFO



FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE coded S8

## Test at TX 2440 MHz

### RESULT: Reference Power cond.

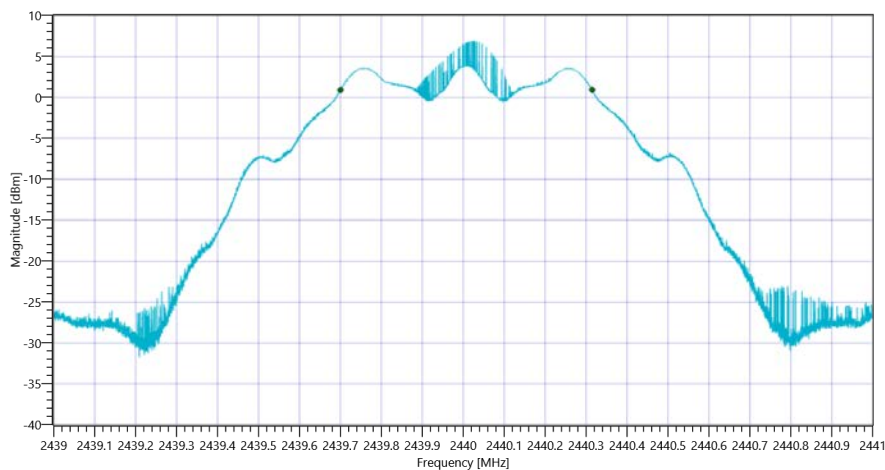
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.30	dBm	INFO
Ref. Frequency	---	---	2439.700	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.30   11.6   20
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	---	---	615	kHz	INFO



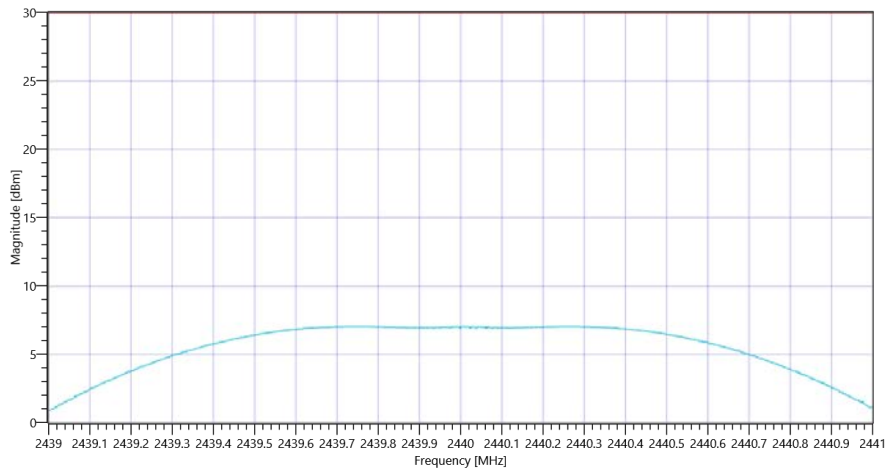
FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE coded S8 DTS BW

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	17.30   11.6   25
Start [MHz]   Stop [MHz]	2439.000   2441.000
RBW [MHz]   VBW [MHz]	1.000000   3.000000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	50   200   1001   SWE

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	30.00	7.03	dBm	PASS
Peak Power	---	1000	5.046613	mW	PASS
Frequency at Peak	---	---	2439.738	MHz	INFO



FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE coded S8

## Test at TX 2480 MHz

### RESULT: Reference Power cond.

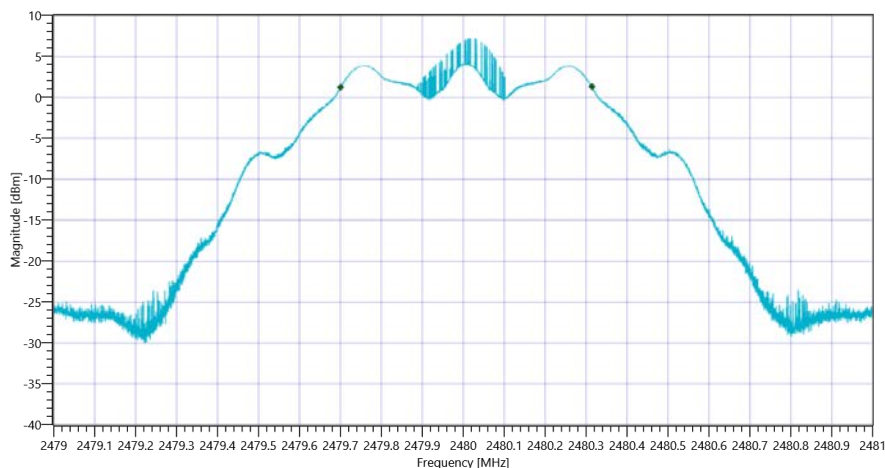
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.55	dBm	INFO
Ref. Frequency	---	---	2479.700	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.55   11.65   20
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	---	---	614	kHz	INFO



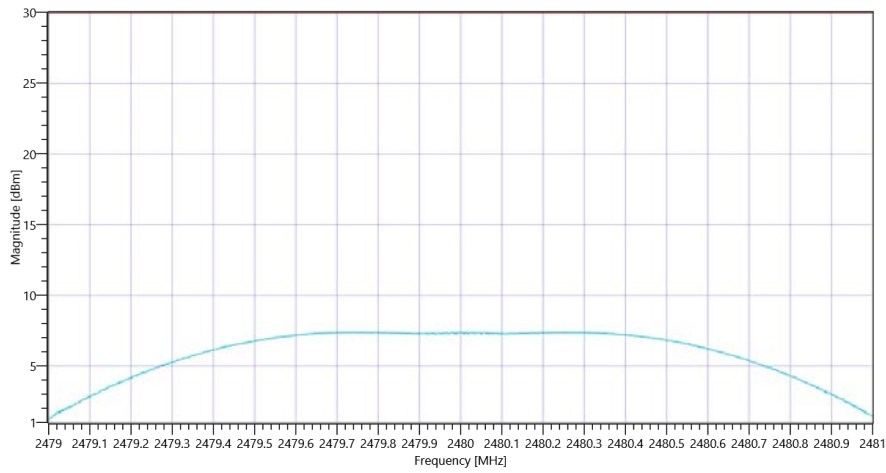
FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE coded S8 DTS BW

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	17.55   11.65   25
Start [MHz]   Stop [MHz]	2479.000   2481.000
RBW [MHz]   VBW [MHz]	1.000000   3.000000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	50   200   1001   SWE

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	30.00	7.39	dBm	PASS
Peak Power	---	1000	5.48277	mW	PASS
Frequency at Peak	---	---	2479.742	MHz	INFO



FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE coded S8

General verdict

PASS

## FCC Part 15.247 Peak Power Spectral Density DTS ~ BT LE 1 Msps

Test References	
TC Start	16.05.2022 10:34:01
Ambit Temp [°C]   Humidity [rel%]	22.5   47
System Version	3.0.6.3
Test Specification	FCC Part 15.247
Test Method	DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission
TC Version	0.0.1
My Description	FCC 15.247 Peak Power Spectral Density DTS - BT LE 1 Msps
Add. Information	

EUT Common Settings BT Low Energy	
Intermodulation Value N	3
Image Freq. Low   Mid   High [MHz]	0   0   0
Power Class	2
1 Mbps supported	True   TXpayload 255   RXpayload 255
2 Mbps supported	True   TXpayload 255   RXpayload 255
Longrange S8 supported	True   TXpayload 255   RXpayload 255
Longrange S2 supported	True   TXpayload 255   RXpayload 255
Signaling Settings	USB_RS232   TWO   15   19200   None   S1   None   On
Signaling RF Settings	RF1com   0   0   On
User Interaction	No
Switch Matrix & Pathcompensation enabled	Yes

Test Parameter	
Technology to test	BT LE 1 Msps
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True   Freq [MHz] 2402
Frequency mid to test	True   Freq [MHz] 2440
Frequency high to test	True   Freq [MHz] 2480
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	1.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	



## Test at TX 2402 MHz

### RESULT: Reference Power cond.

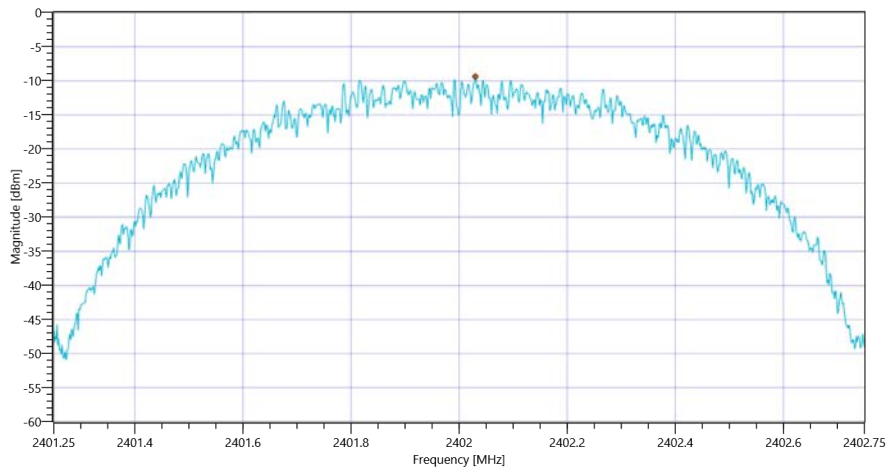
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.02	dBm	INFO
Ref. Frequency	---	---	2401.700	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.02   11.59   20
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Peak power Density	---	8	-9.38	dBm/3KHz	PASS



FCC Part 15.247 Peak Power Spectral Density DTS ~ BT LE 1 Msp

## Test at TX 2440 MHz

### RESULT: Reference Power cond.

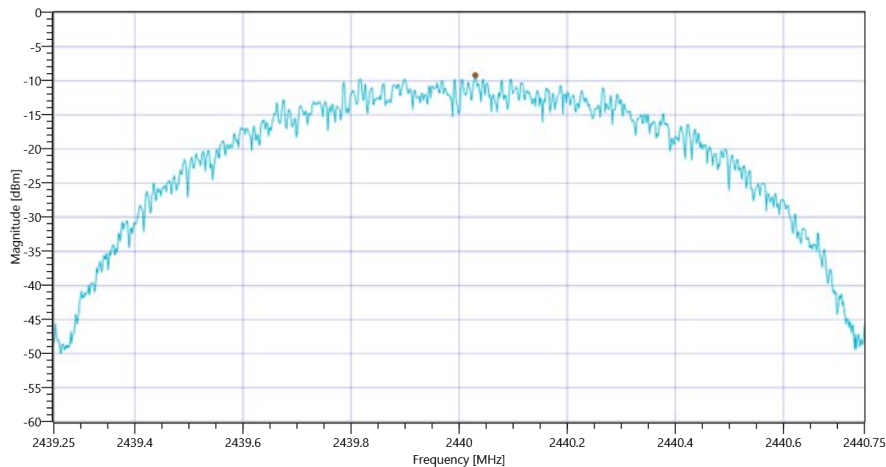
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.27	dBm	INFO
Ref. Frequency	---	---	2439.800	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.27   11.6   20
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Peak power Density	---	8	-9.17	dBm/3KHz	PASS



FCC Part 15.247 Peak Power Spectral Density DTS ~ BT LE 1 Msp

## Test at TX 2480 MHz

### RESULT: Reference Power cond.

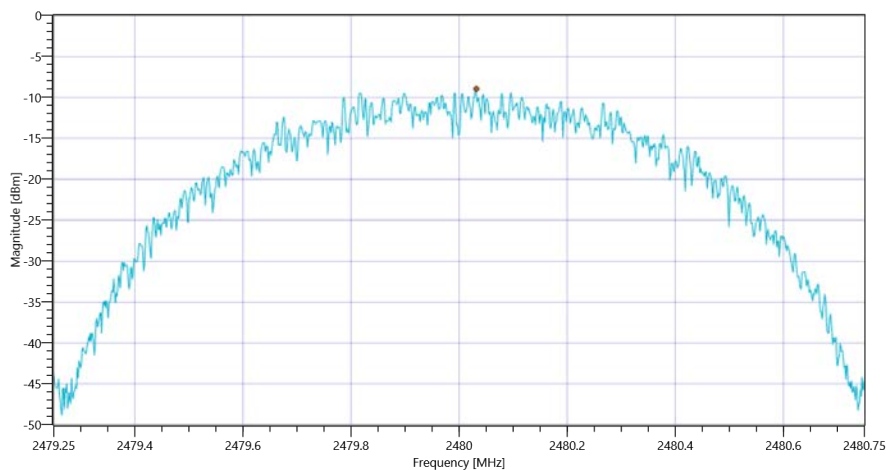
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.55	dBm	INFO
Ref. Frequency	---	---	2479.700	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.55   11.65   20
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Peak power Density	---	8	-8.94	dBm/3KHz	PASS



FCC Part 15.247 Peak Power Spectral Density DTS ~ BT LE 1 Msp

General verdict

PASS

## FCC Part 15.247 Peak Power Spectral Density DTS ~ BT LE 2 Msps

Test References	
TC Start	16.05.2022 11:08:50
Ambit Temp [°C]   Humidity [rel%]	22.3   47
System Version	3.0.6.3
Test Specification	FCC Part 15.247
Test Method	DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission
TC Version	0.0.1
My Description	FCC 15.247 Peak Power Spectral Density DTS - BT LE 2 Msps
Add. Information	

EUT Common Settings BT Low Energy	
Intermodulation Value N	3
Image Freq. Low   Mid   High [MHz]	0   0   0
Power Class	2
1 Mbps supported	True   TXpayload 255   RXpayload 255
2 Mbps supported	True   TXpayload 255   RXpayload 255
Longrange S8 supported	True   TXpayload 255   RXpayload 255
Longrange S2 supported	True   TXpayload 255   RXpayload 255
Signaling Settings	USB_RS232   TWO   15   19200   None   S1   None   On
Signaling RF Settings	RF1com   0   0   On
User Interaction	No
Switch Matrix & Pathcompensation enabled	Yes

Test Parameter	
Technology to test	BT LE 2 Msps
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True   Freq [MHz] 2404
Frequency mid to test	True   Freq [MHz] 2440
Frequency high to test	True   Freq [MHz] 2478
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	1.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

## Test at TX 2404 MHz

### RESULT: Reference Power cond.

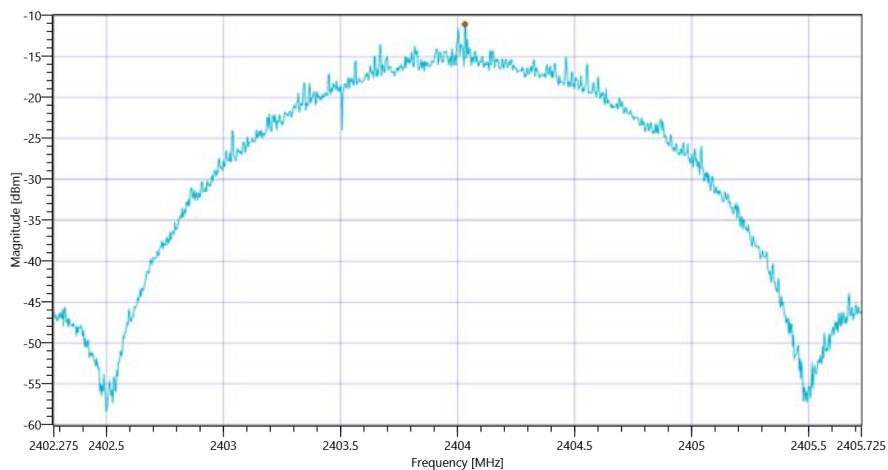
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.13	dBm	INFO
Ref. Frequency	---	---	2403.500	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.13   11.6   20
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Peak power Density	---	8	-11.05	dBm/3KHz	PASS



FCC Part 15.247 Peak Power Spectral Density DTS ~ BT LE 2 Msp

## Test at TX 2440 MHz

### RESULT: Reference Power cond.

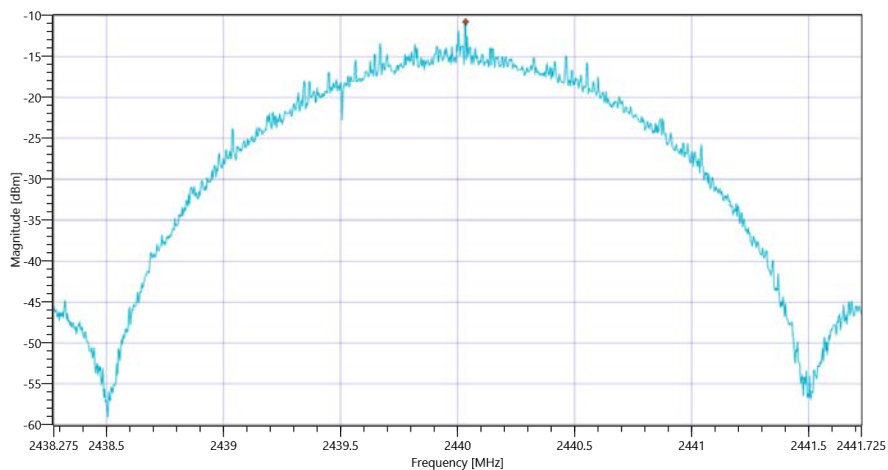
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.28	dBm	INFO
Ref. Frequency	---	---	2439.500	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.28   11.6   20
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Peak power Density	---	8	-10.76	dBm/3KHz	PASS



FCC Part 15.247 Peak Power Spectral Density DTS ~ BT LE 2 Msp

## Test at TX 2478 MHz

### RESULT: Reference Power cond.

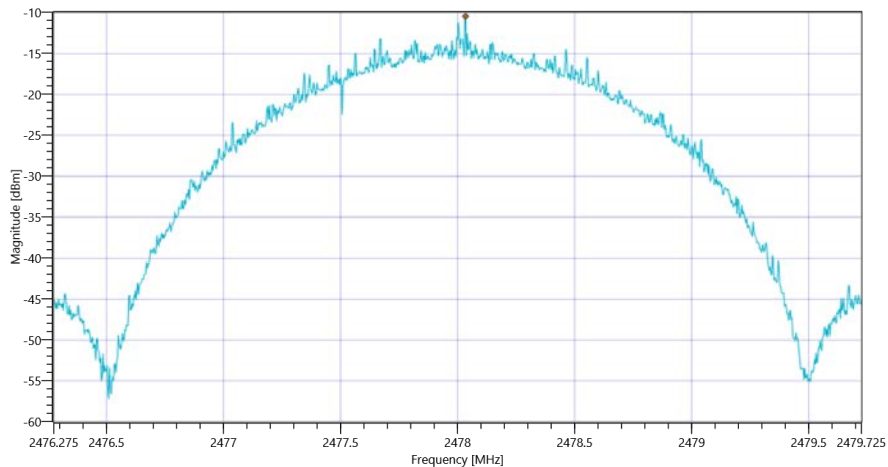
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.59	dBm	INFO
Ref. Frequency	---	---	2477.500	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.59   11.65   20
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Peak power Density	---	8	-10.45	dBm/3KHz	PASS



FCC Part 15.247 Peak Power Spectral Density DTS ~ BT LE 2 Msps

General verdict

PASS

## FCC Part 15.247 Peak Power Spectral Density DTS ~ BT LE coded S2

Test References	
TC Start	16.05.2022 12:19:42
Ambit Temp [°C]   Humidity [rel%]	21.4   47
System Version	3.0.6.3
Test Specification	FCC Part 15.247
Test Method	DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission
TC Version	0.0.1
My Description	FCC 15.247 Peak Power Spectral Density DTS - BT LE coded S2
Add. Information	

EUT Common Settings BT Low Energy	
Intermodulation Value N	3
Image Freq. Low   Mid   High [MHz]	0   0   0
Power Class	2
1 Mbps supported	True   TXpayload 255   RXpayload 255
2 Mbps supported	True   TXpayload 255   RXpayload 255
Longrange S8 supported	True   TXpayload 255   RXpayload 255
Longrange S2 supported	True   TXpayload 255   RXpayload 255
Signaling Settings	USB_RS232   TWO   15   19200   None   S1   None   On
Signaling RF Settings	RF1com   0   0   On
User Interaction	No
Switch Matrix & Pathcompensation enabled	Yes

Test Parameter	
Technology to test	BT LE coded S2
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True   Freq [MHz] 2402
Frequency mid to test	True   Freq [MHz] 2440
Frequency high to test	True   Freq [MHz] 2480
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	1.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	



## Test at TX 2402 MHz

### RESULT: Reference Power cond.

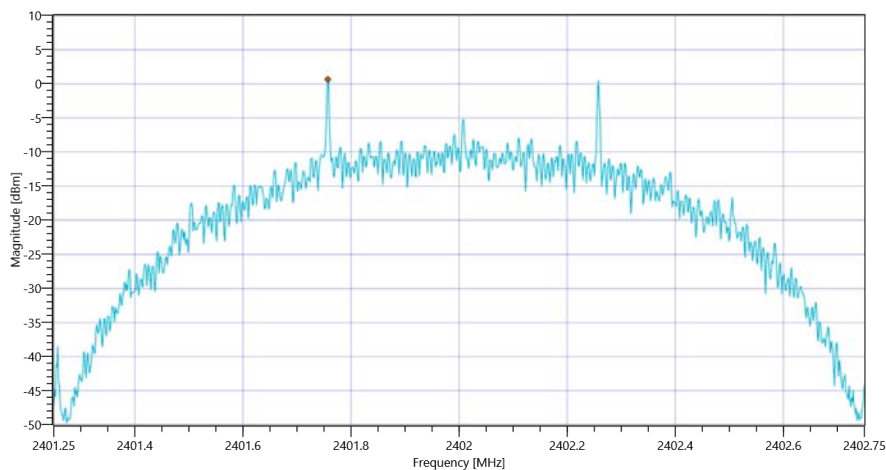
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.09	dBm	INFO
Ref. Frequency	---	---	2402.300	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.09   11.59   20
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Peak power Density	---	8	0.65	dBm/3KHz	PASS



FCC Part 15.247 Peak Power Spectral Density DTS ~ BT LE coded S2

## Test at TX 2440 MHz

### RESULT: Reference Power cond.

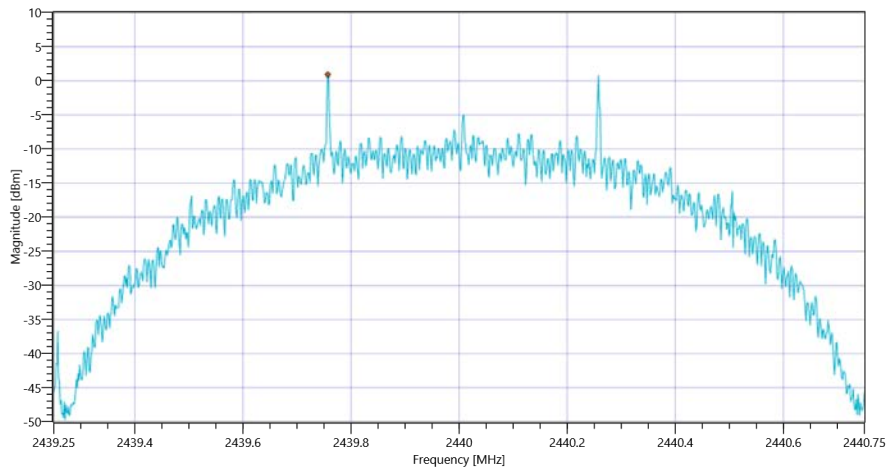
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.35	dBm	INFO
Ref. Frequency	---	---	2439.800	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.35   11.6   20
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Peak power Density	---	8	0.93	dBm/3KHz	PASS



FCC Part 15.247 Peak Power Spectral Density DTS ~ BT LE coded S2

## Test at TX 2480 MHz

### RESULT: Reference Power cond.

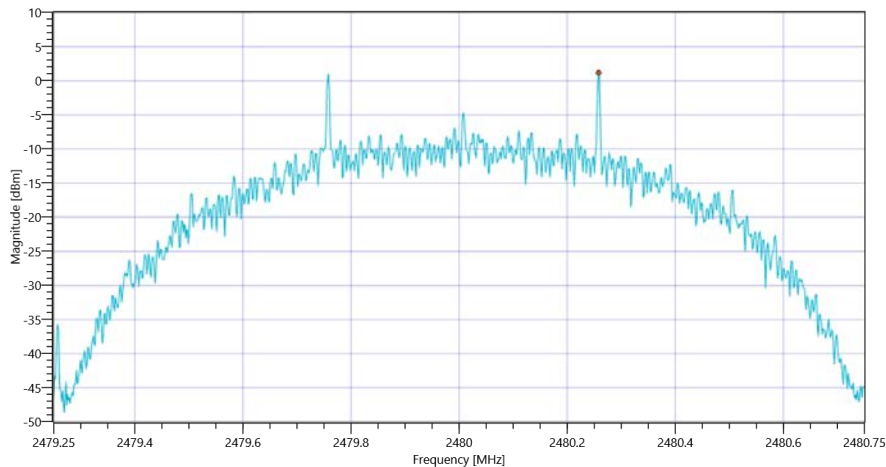
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.63	dBm	INFO
Ref. Frequency	---	---	2479.800	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.63   11.65   20
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Peak power Density	---	8	1.18	dBm/3KHz	PASS



FCC Part 15.247 Peak Power Spectral Density DTS ~ BT LE coded S2

General verdict

PASS

## FCC Part 15.247 Peak Power Spectral Density DTS ~ BT LE coded S8

Test References	
TC Start	16.05.2022 11:43:50
Ambit Temp [°C]   Humidity [rel%]	22.1   46
System Version	3.0.6.3
Test Specification	FCC Part 15.247
Test Method	DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission
TC Version	0.0.1
My Description	FCC 15.247 Peak Power Spectral Density DTS - BT LE coded S8
Add. Information	

EUT Common Settings BT Low Energy	
Intermodulation Value N	3
Image Freq. Low   Mid   High [MHz]	0   0   0
Power Class	2
1 Mbps supported	True   TXpayload 255   RXpayload 255
2 Mbps supported	True   TXpayload 255   RXpayload 255
Longrange S8 supported	True   TXpayload 255   RXpayload 255
Longrange S2 supported	True   TXpayload 255   RXpayload 255
Signaling Settings	USB_RS232   TWO   15   19200   None   S1   None   On
Signaling RF Settings	RF1com   0   0   On
User Interaction	No
Switch Matrix & Pathcompensation enabled	Yes

Test Parameter	
Technology to test	BT LE coded S8
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True   Freq [MHz] 2402
Frequency mid to test	True   Freq [MHz] 2440
Frequency high to test	True   Freq [MHz] 2480
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	1.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

## Test at TX 2402 MHz

### RESULT: Reference Power cond.

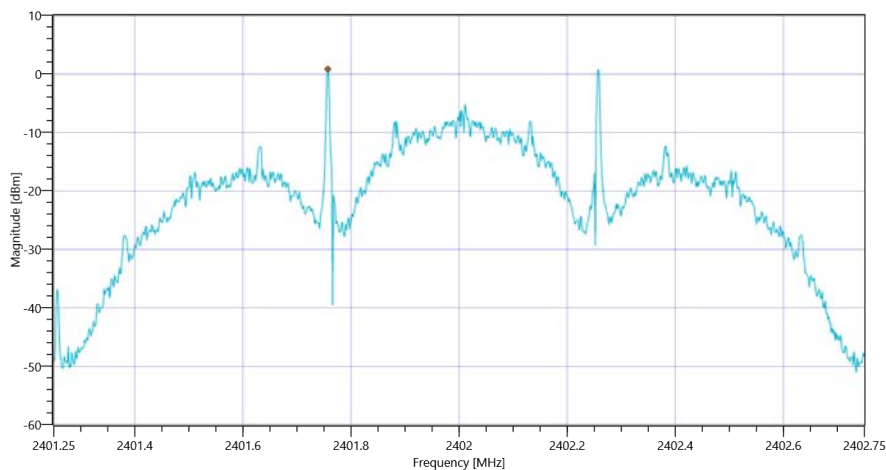
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.06	dBm	INFO
Ref. Frequency	---	---	2401.800	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.06   11.59   20
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Peak power Density	---	8	0.86	dBm/3KHz	PASS



FCC Part 15.247 Peak Power Spectral Density DTS ~ BT LE coded S8

## Test at TX 2440 MHz

### RESULT: Reference Power cond.

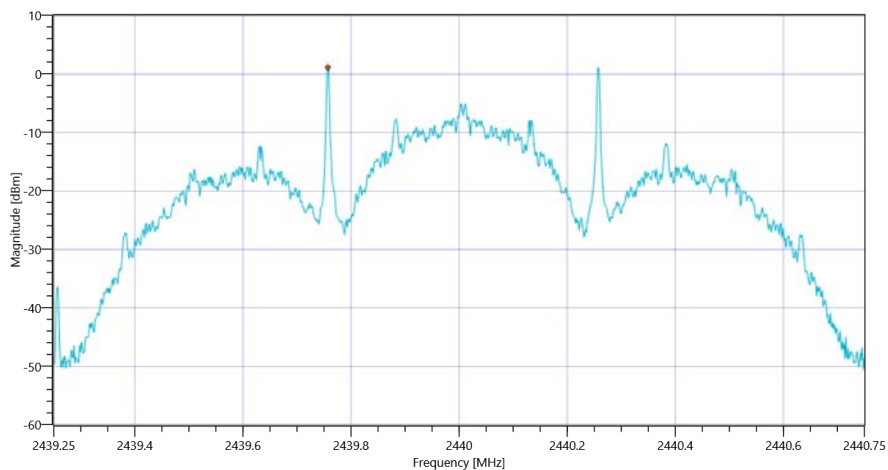
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.31	dBm	INFO
Ref. Frequency	---	---	2439.700	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.31   11.6   20
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Peak power Density	---	8	1.16	dBm/3KHz	PASS



FCC Part 15.247 Peak Power Spectral Density DTS ~ BT LE coded S8

## Test at TX 2480 MHz

### RESULT: Reference Power cond.

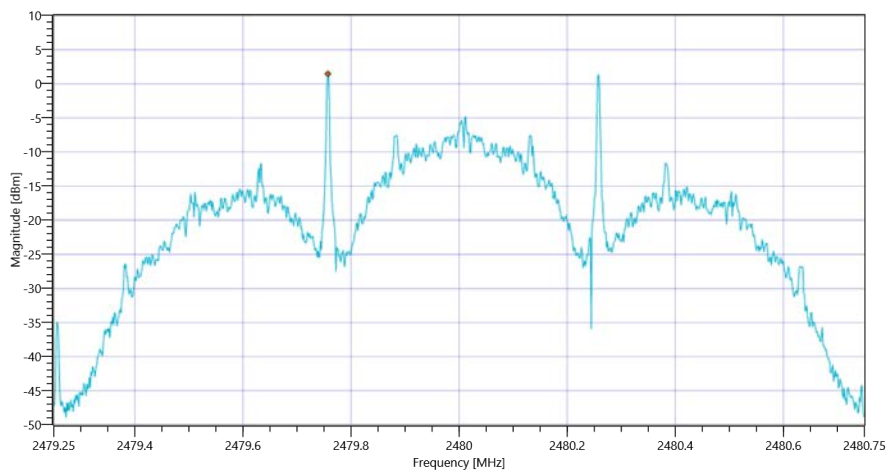
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.57	dBm	INFO
Ref. Frequency	---	---	2479.800	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.57   11.65   20
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Peak power Density	---	8	1.48	dBm/3KHz	PASS



FCC Part 15.247 Peak Power Spectral Density DTS ~ BT LE coded S8

General verdict

PASS

## FCC Part 15.247 Restricted Band Edge Conducted Peak DTS Video Avg ~ BT LE 1 Msps

Test References	
TC Start	17.05.2022 10:19:23
Ambit Temp [°C]   Humidity [rel%]	24.5   49
System Version	3.0.6.3
Test Specification	FCC Part 15.247
Test Method	DTS: KDB 558074 D01 V05 - 8.7.3 Integration Method; ANSI C63.10-2013 11.13.3.2 Peak Detection
TC Version	0.0.1
My Description	FCC 15.247 Restricted Band Edge Conducted Peak DTS - BT LE 1 Msps
Add. Information	

EUT Common Settings BT Low Energy	
Intermodulation Value N	3
Image Freq. Low   Mid   High [MHz]	0   0   0
Power Class	2
1 Mbps supported	True   TXpayload 255   RXpayload 255
2 Mbps supported	True   TXpayload 255   RXpayload 255
Longrange S8 supported	True   TXpayload 255   RXpayload 255
Longrange S2 supported	True   TXpayload 255   RXpayload 255
Signaling Settings	USB_RS232   TWO   15   19200   None   S1   None   On
Signaling RF Settings	RF1com   0   0   On
User Interaction	No
Switch Matrix & Pathcompensation enabled	Yes

Test Parameter	
Technology to test	BT LE 1 Msps
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True   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]	1.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

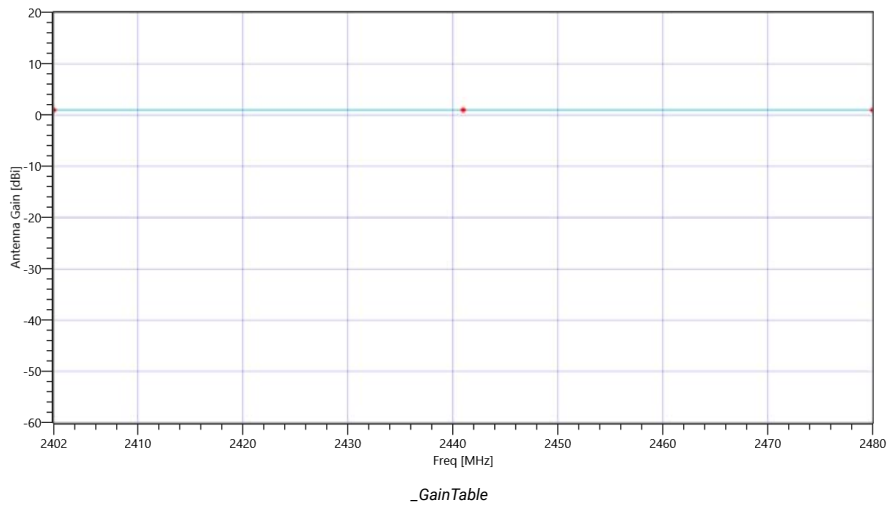
Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

Antenna Gain Table	
Freq [MHz]	Gain [dBi]
2402	1



Antenna Gain Table

2441	1
2480	1



## Test at TX 2402 MHz

### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.15	dBm	INFO
Ref. Frequency	---	---	2401.700	MHz	INFO

### READ SA SETTINGS:

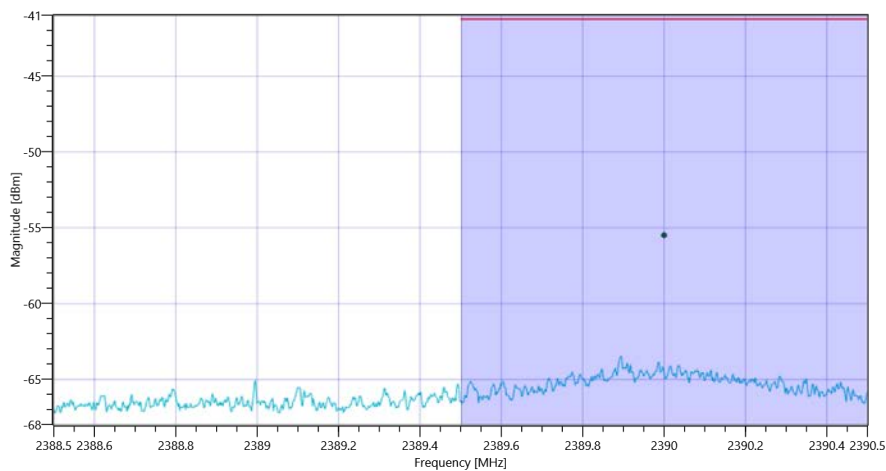
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.15   11.59   20
Start [MHz]   Stop [MHz]	2388.500   2390.500
RBW [MHz]   VBW [MHz]	0.100000   0.002000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	8   300   1001   SWE

### Antenna Gain

Considered Antenna Gain: [dBi]: 1 @ 2390MHz

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Band Power	---	-41.23	-55.49	dBm	PASS



FCC Part 15.247 Restricted Band Edge Conducted Peak DTS Video Avg (eirp) ~ BT LE 1 Msp

## Test at TX 2480 MHz

### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.64	dBm	INFO
Ref. Frequency	---	---	2479.800	MHz	INFO

### READ SA SETTINGS:

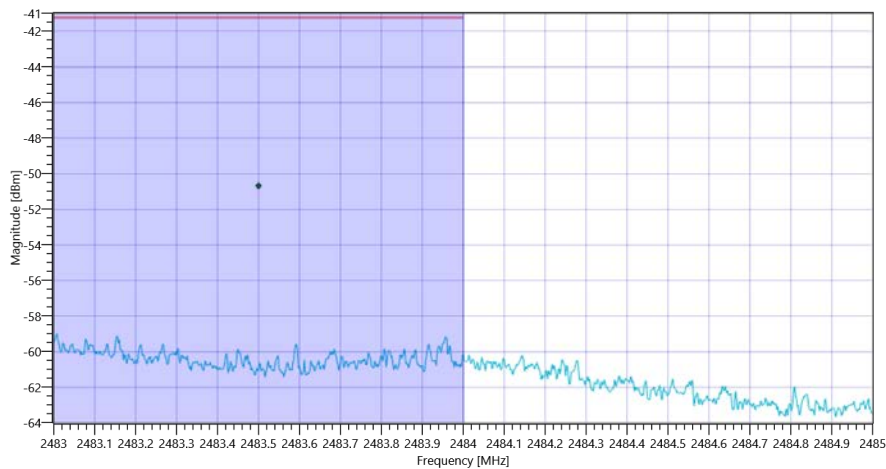
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.64   11.65   20
Start [MHz]   Stop [MHz]	2483.000   2485.000
RBW [MHz]   VBW [MHz]	0.100000   0.002000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	8   300   1001   SWE

### Antenna Gain

Considered Antenna Gain: [dBi]: 1 @ 2483.5MHz

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Band Power	---	-41.23	-50.67	dBm	PASS



FCC Part 15.247 Restricted Band Edge Conducted Peak DTS Video Avg (eirp) ~ BT LE 1 Msp

General verdict

PASS

## FCC Part 15.247 Restricted Band Edge Conducted Peak DTS Video Avg ~ BT LE 2 Msps

### Test References

TC Start	17.05.2022 10:20:26
Ambit Temp [°C]   Humidity [rel%]	24.6   49
System Version	3.0.6.3
Test Specification	FCC Part 15.247
Test Method	DTS: KDB 558074 D01 V05 - 8.7.3 Integration Method; ANSI C63.10-2013 11.13.3.2 Peak Detection
TC Version	0.0.1
My Description	FCC 15.247 Restricted Band Edge Conducted Peak DTS - BT LE 2 Msps
Add. Information	

### EUT Common Settings BT Low Energy

Intermodulation Value N	3
Image Freq. Low   Mid   High [MHz]	0   0   0
Power Class	2
1 Mbps supported	True   TXpayload 255   RXpayload 255
2 Mbps supported	True   TXpayload 255   RXpayload 255
Longrange S8 supported	True   TXpayload 255   RXpayload 255
Longrange S2 supported	True   TXpayload 255   RXpayload 255
Signaling Settings	USB_RS232   TWO   15   19200   None   S1   None   On
Signaling RF Settings	RF1com   0   0   On
User Interaction	No
Switch Matrix & Pathcompensation enabled	Yes

### Test Parameter

Technology to test	BT LE 2 Msps
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True   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]	1.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

### Test Equipment

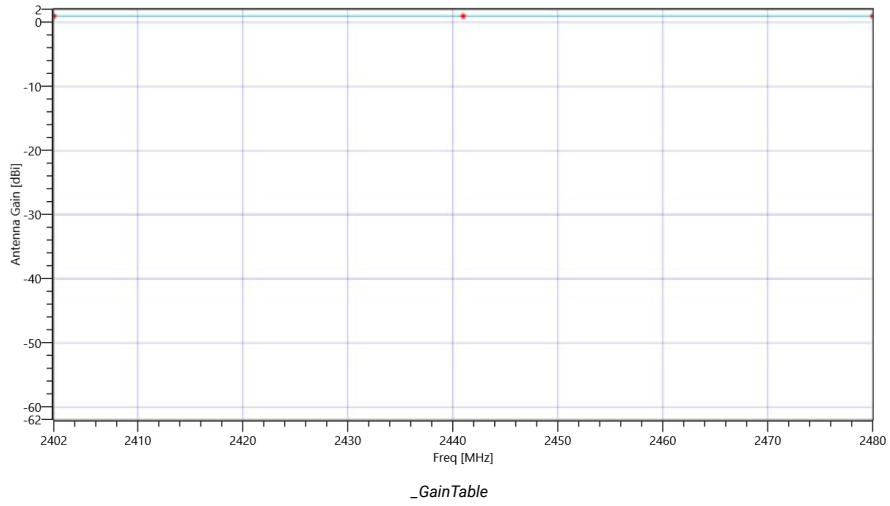
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI

### Antenna Gain Table

Freq [MHz]	Gain [dBi]
2402	1

Antenna Gain Table

2441	1
2480	1



## Test at TX 2404 MHz

### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.24	dBm	INFO
Ref. Frequency	---	---	2403.500	MHz	INFO

### READ SA SETTINGS:

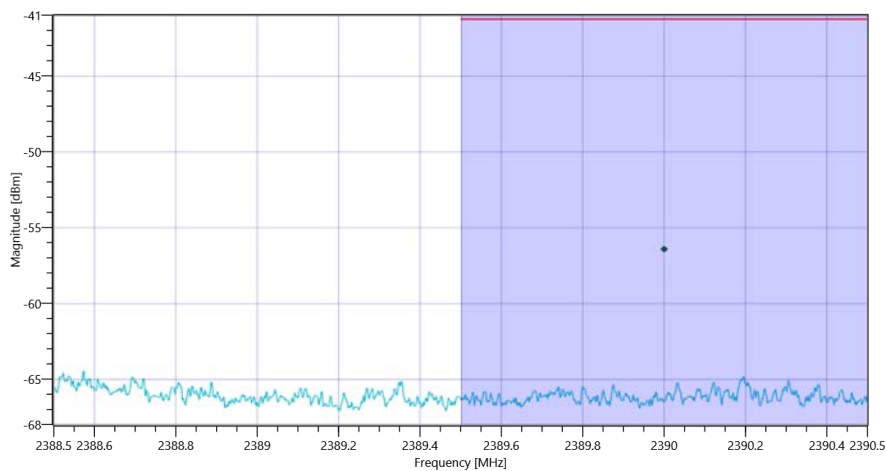
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.24   11.6   20
Start [MHz]   Stop [MHz]	2388.500   2390.500
RBW [MHz]   VBW [MHz]	0.100000   0.002000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	8   300   1001   SWE

### Antenna Gain

Considered Antenna Gain: [dBi]: 1 @ 2390MHz

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Band Power	---	-41.23	-56.4	dBm	PASS



FCC Part 15.247 Restricted Band Edge Conducted Peak DTS Video Avg (eirp) ~ BT LE 2 Msps

## Test at TX 2478 MHz

### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.69	dBm	INFO
Ref. Frequency	---	---	2477.500	MHz	INFO

### READ SA SETTINGS:

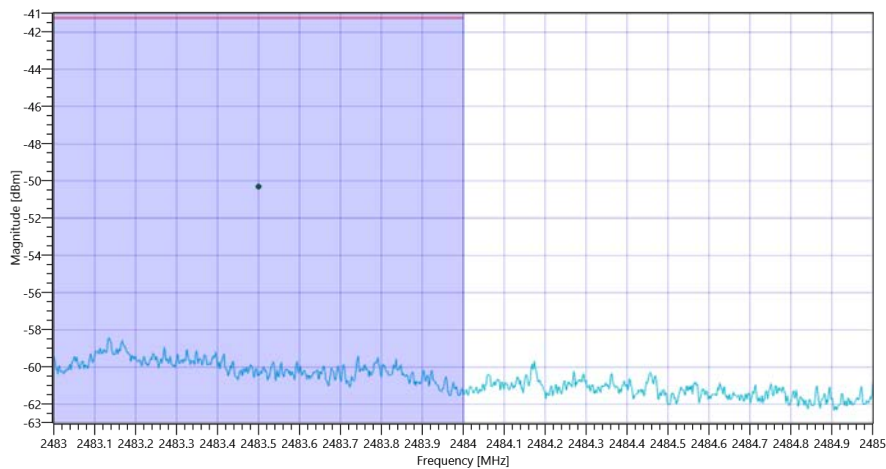
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.69   11.65   20
Start [MHz]   Stop [MHz]	2483.000   2485.000
RBW [MHz]   VBW [MHz]	0.100000   0.002000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	8   300   1001   SWE

### Antenna Gain

Considered Antenna Gain: [dBi]: 1 @ 2483.5MHz

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Band Power	---	-41.23	-50.29	dBm	PASS



FCC Part 15.247 Restricted Band Edge Conducted Peak DTS Video Avg (eirp) ~ BT LE 2 Msps

General verdict

PASS

## FCC Part 15.247 Restricted Band Edge Conducted Peak DTS Video Avg ~ BT LE coded S2

Test References	
TC Start	17.05.2022 10:23:18
Ambit Temp [°C]   Humidity [rel%]	24.6   49
System Version	3.0.6.3
Test Specification	FCC Part 15.247
Test Method	DTS: KDB 558074 D01 V05 - 8.7.3 Integration Method; ANSI C63.10-2013 11.13.3.2 Peak Detection
TC Version	0.0.1
My Description	FCC 15.247 Restricted Band Edge Conducted Peak DTS - BT LE coded S2
Add. Information	

EUT Common Settings BT Low Energy	
Intermodulation Value N	3
Image Freq. Low   Mid   High [MHz]	0   0   0
Power Class	2
1 Mbps supported	True   TXpayload 255   RXpayload 255
2 Mbps supported	True   TXpayload 255   RXpayload 255
Longrange S8 supported	True   TXpayload 255   RXpayload 255
Longrange S2 supported	True   TXpayload 255   RXpayload 255
Signaling Settings	USB_RS232   TWO   15   19200   None   S1   None   On
Signaling RF Settings	RF1com   0   0   On
User Interaction	No
Switch Matrix & Pathcompensation enabled	Yes

Test Parameter	
Technology to test	BT LE coded S2
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True   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]	1.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

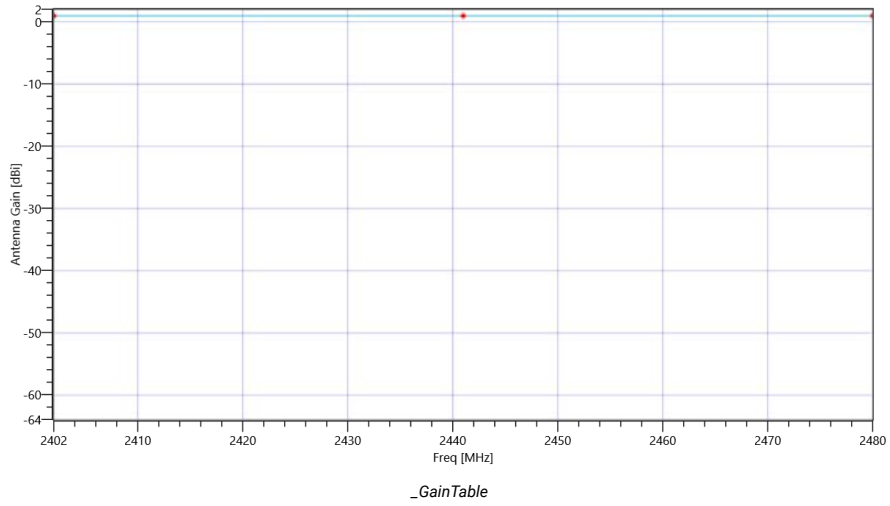
Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

Antenna Gain Table	
Freq [MHz]	Gain [dBi]
2402	1



Antenna Gain Table

2441	1
2480	1



## Test at TX 2402 MHz

### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.16	dBm	INFO
Ref. Frequency	---	---	2401.800	MHz	INFO

### READ SA SETTINGS:

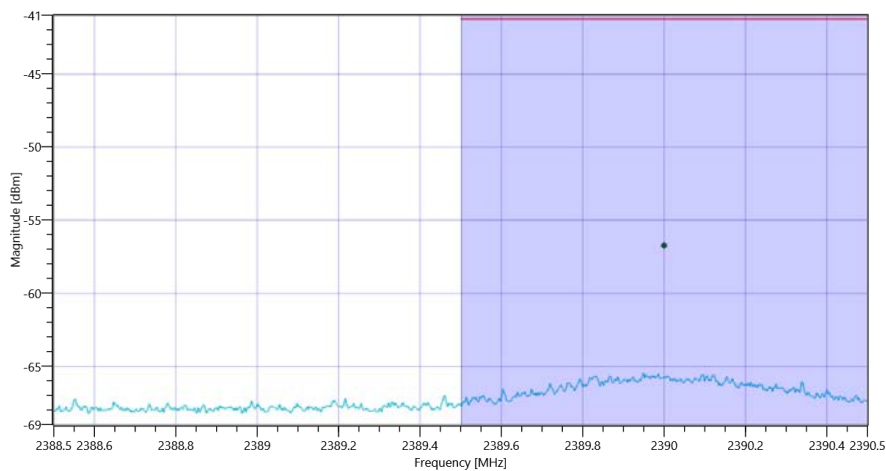
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.16   11.59   20
Start [MHz]   Stop [MHz]	2388.500   2390.500
RBW [MHz]   VBW [MHz]	0.100000   0.000500
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	31   300   1001   SWE

### Antenna Gain

Considered Antenna Gain: [dBi]: 1 @ 2390MHz

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Band Power	---	-41.23	-56.73	dBm	PASS



FCC Part 15.247 Restricted Band Edge Conducted Peak DTS Video Avg (eirp) ~ BT LE coded S2

## Test at TX 2480 MHz

### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.60	dBm	INFO
Ref. Frequency	---	---	2479.800	MHz	INFO

### READ SA SETTINGS:

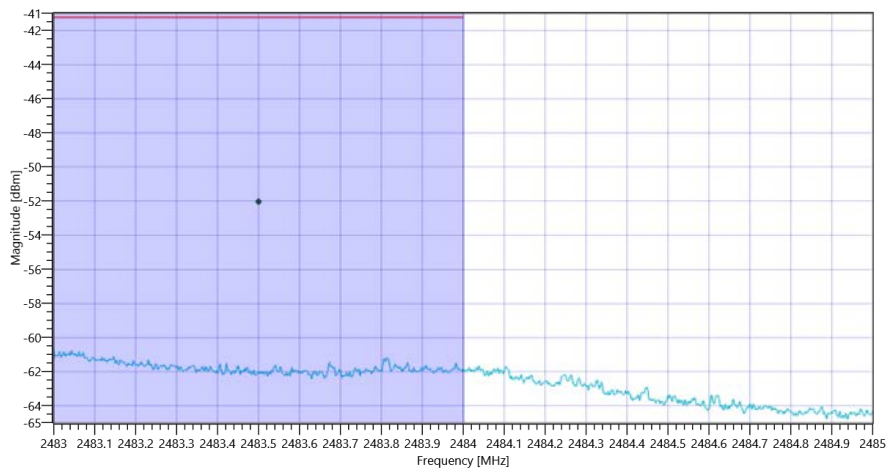
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.60   11.65   20
Start [MHz]   Stop [MHz]	2483.000   2485.000
RBW [MHz]   VBW [MHz]	0.100000   0.000500
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	31   300   1001   SWE

### Antenna Gain

Considered Antenna Gain: [dBi]: 1 @ 2483.5MHz

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Band Power	---	-41.23	-52.02	dBm	PASS



FCC Part 15.247 Restricted Band Edge Conducted Peak DTS Video Avg (eirp) ~ BT LE coded S2

General verdict

PASS

# FCC Part 15.247 Restricted Band Edge Conducted Peak DTS Video Avg ~ BT LE coded S8

Test References	
TC Start	17.05.2022 10:21:29
Ambit Temp [°C]   Humidity [rel%]	24.6   49
System Version	3.0.6.3
Test Specification	FCC Part 15.247
Test Method	DTS: KDB 558074 D01 V05 - 8.7.3 Integration Method; ANSI C63.10-2013 11.13.3.2 Peak Detection
TC Version	0.0.1
My Description	FCC 15.247 Restricted Band Edge Conducted Peak DTS - BT LE coded S8
Add. Information	

EUT Common Settings BT Low Energy	
Intermodulation Value N	3
Image Freq. Low   Mid   High [MHz]	0   0   0
Power Class	2
1 Mbps supported	True   TXpayload 255   RXpayload 255
2 Mbps supported	True   TXpayload 255   RXpayload 255
Longrange S8 supported	True   TXpayload 255   RXpayload 255
Longrange S2 supported	True   TXpayload 255   RXpayload 255
Signaling Settings	USB_RS232   TWO   15   19200   None   S1   None   On
Signaling RF Settings	RF1com   0   0   On
User Interaction	No
Switch Matrix & Pathcompensation enabled	Yes

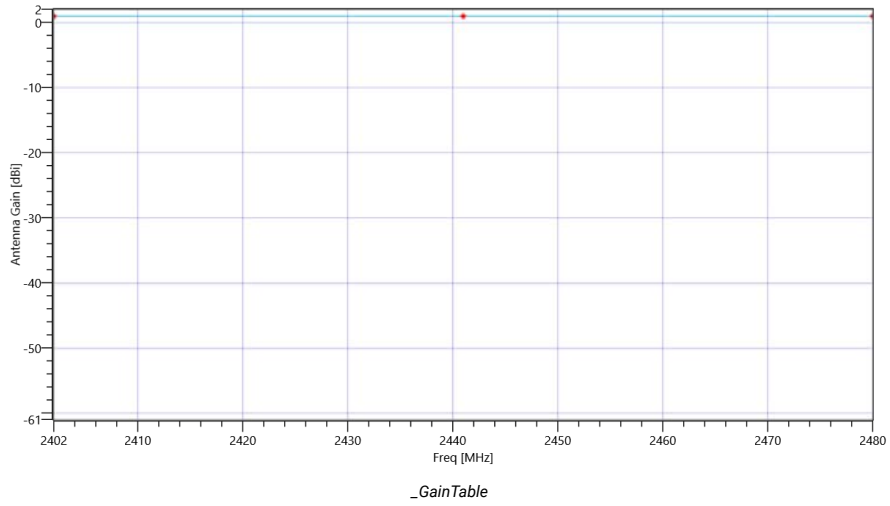
Test Parameter	
Technology to test	BT LE coded S8
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True   Freq [MHz] 2402
Frequency mid to test	False   Freq [MHz] 2440
Frequency high to test	True   Freq [MHz] 2480
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	1.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

Antenna Gain Table	
Freq [MHz]	Gain [dBi]
2402	1

Antenna Gain Table

2441	1
2480	1



## Test at TX 2402 MHz

### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.15	dBm	INFO
Ref. Frequency	---	---	2401.700	MHz	INFO

### READ SA SETTINGS:

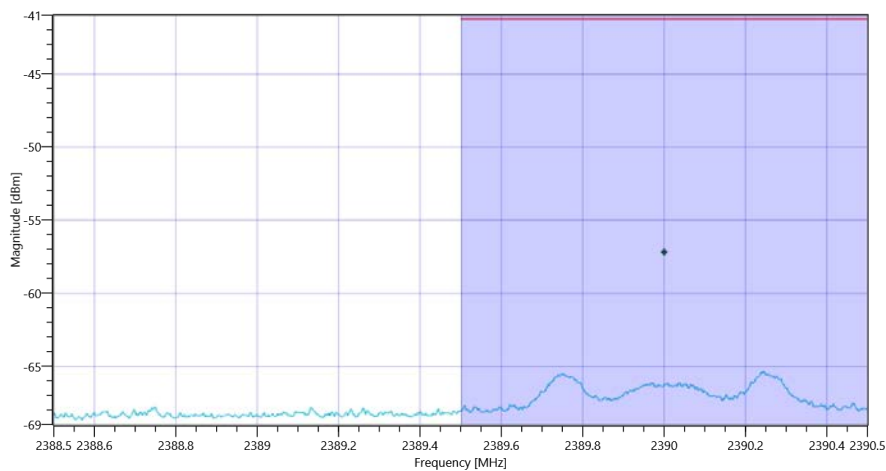
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.15   11.59   20
Start [MHz]   Stop [MHz]	2388.500   2390.500
RBW [MHz]   VBW [MHz]	0.100000   0.000200
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	78   300   1001   SWE

### Antenna Gain

Considered Antenna Gain: [dBi]: 1 @ 2390MHz

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Band Power	---	-41.23	-57.17	dBm	PASS



FCC Part 15.247 Restricted Band Edge Conducted Peak DTS Video Avg (eirp) ~ BT LE coded S8

## Test at TX 2480 MHz

### RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.64	dBm	INFO
Ref. Frequency	---	---	2479.800	MHz	INFO

### READ SA SETTINGS:

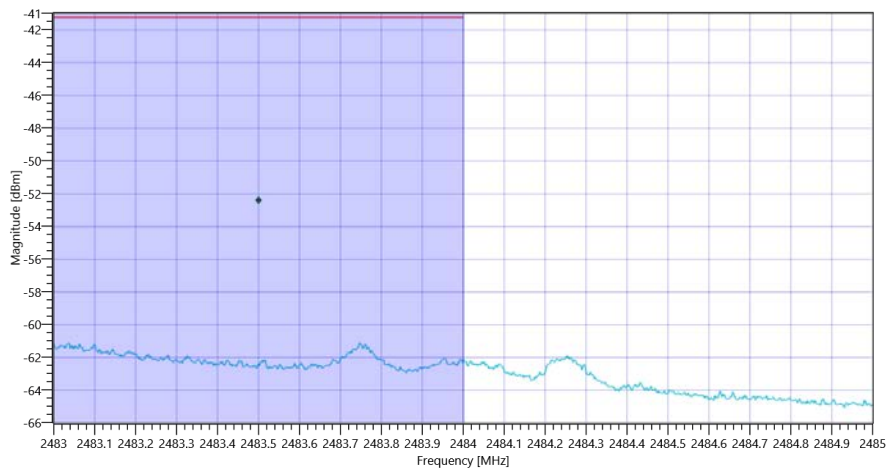
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	12.64   11.65   20
Start [MHz]   Stop [MHz]	2483.000   2485.000
RBW [MHz]   VBW [MHz]	0.100000   0.000200
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	78   300   1001   SWE

### Antenna Gain

Considered Antenna Gain: [dBi]: 1 @ 2483.5MHz

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Band Power	---	-41.23	-52.4	dBm	PASS



FCC Part 15.247 Restricted Band Edge Conducted Peak DTS Video Avg (eirp) ~ BT LE coded S8

General verdict

PASS

## FCC Part 15.247 TX Spurious Conducted 20dBc ~ BT LE 1 Msps

Test References	
TC Start	16.05.2022 10:39:10
Ambit Temp [°C]   Humidity [rel%]	22.6   47
System Version	3.0.6.3
Test Specification	FCC Part 15.247
Test Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable.
TC Version	0.0.1
My Description	FCC 15.247 TX Emissions Conducted DTS - BT LE 1 Msps
Add. Information	

EUT Common Settings BT Low Energy	
Intermodulation Value N	3
Image Freq. Low   Mid   High [MHz]	0   0   0
Power Class	2
1 Mbps supported	True   TXpayload 255   RXpayload 255
2 Mbps supported	True   TXpayload 255   RXpayload 255
Longrange S8 supported	True   TXpayload 255   RXpayload 255
Longrange S2 supported	True   TXpayload 255   RXpayload 255
Signaling Settings	USB_RS232   TWO   15   19200   None   S1   None   On
Signaling RF Settings	RF1com   0   0   On
User Interaction	No
Switch Matrix & Pathcompensation enabled	Yes

Test Parameter	
Technology to test	BT LE 1 Msps
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True   Freq [MHz] 2402
Frequency mid to test	True   Freq [MHz] 2440
Frequency high to test	True   Freq [MHz] 2480
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	1.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	



## Test at TX 2402 MHz

### RESULT: Reference Power cond.

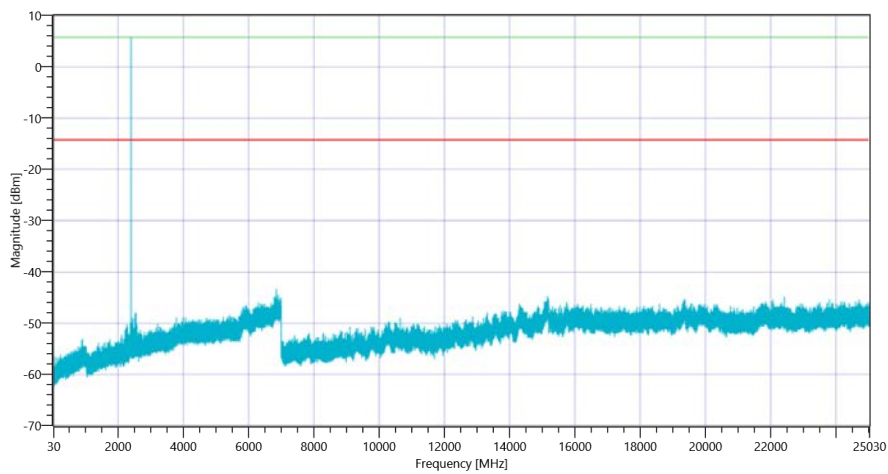
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.04	dBm	INFO
Ref. Frequency	---	---	2401.800	MHz	INFO

### READ SA SETTINGS:

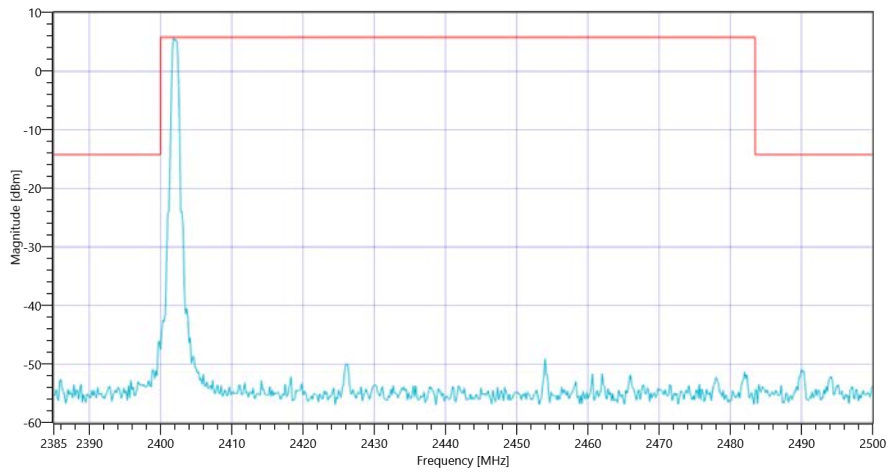
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	7.04   0   25
Start [MHz]   Stop [MHz]	24530.000   25030.000
RBW [MHz]   VBW [MHz]	0.100000   0.300000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	200   25   3001   SWE

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2401.83 MHz	---	---	5.76	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 6848.333 MHz	0	---	29.05	dB	INFO



FCC Part 15.247 TX Spurious Conducted 20dBc ~ BT LE 1 Msps 2402



FCC Part 15.247 TX Spurious Conducted 20dBc ~ BT LE 1 Msps 2402

## Test at TX 2440 MHz

### RESULT: Reference Power cond.

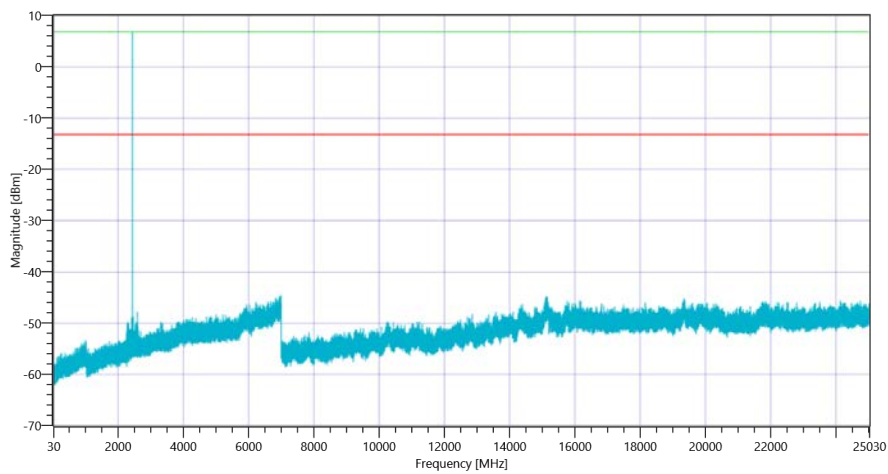
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.27	dBm	INFO
Ref. Frequency	---	---	2439.700	MHz	INFO

### READ SA SETTINGS:

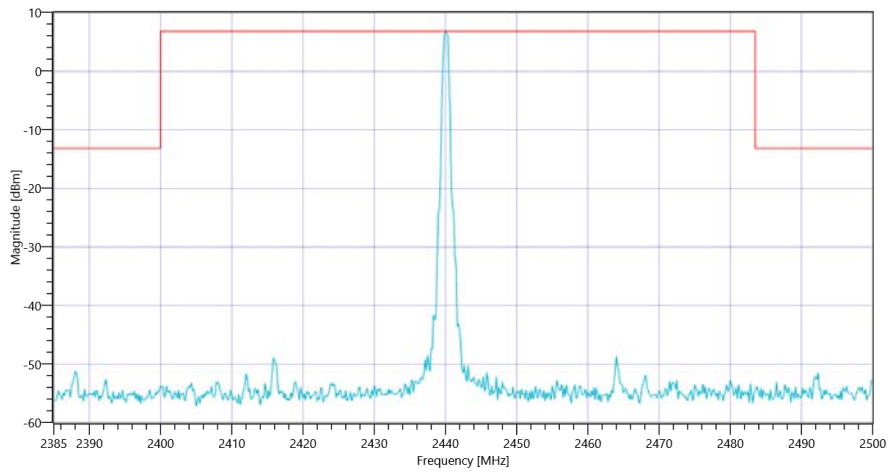
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	7.27   0   25
Start [MHz]   Stop [MHz]	24530.000   25030.000
RBW [MHz]   VBW [MHz]	0.100000   0.300000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	200   25   3001   SWE

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2440.00 MHz	---	---	6.84	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 6993.167 MHz	0	---	31.29	dB	INFO



FCC Part 15.247 TX Spurious Conducted 20dBc ~ BT LE 1 Msps 2440



FCC Part 15.247 TX Spurious Conducted 20dBc ~ BT LE 1 Msps 2440

## Test at TX 2480 MHz

### RESULT: Reference Power cond.

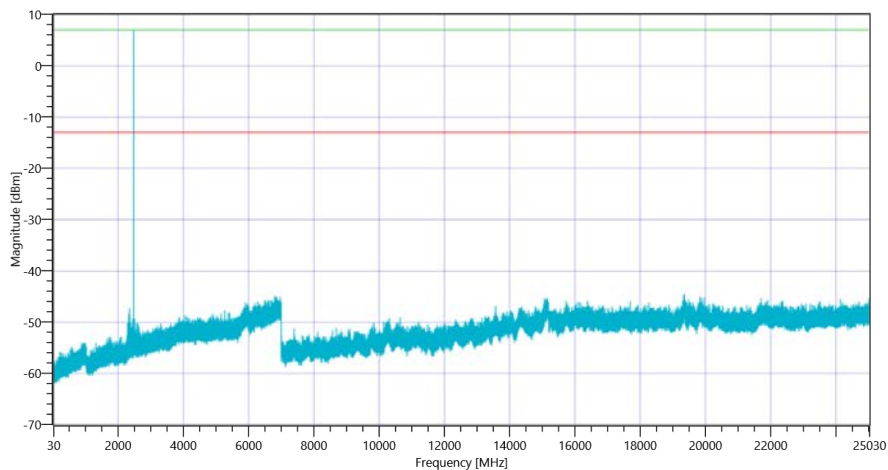
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.57	dBm	INFO
Ref. Frequency	---	---	2479.800	MHz	INFO

### READ SA SETTINGS:

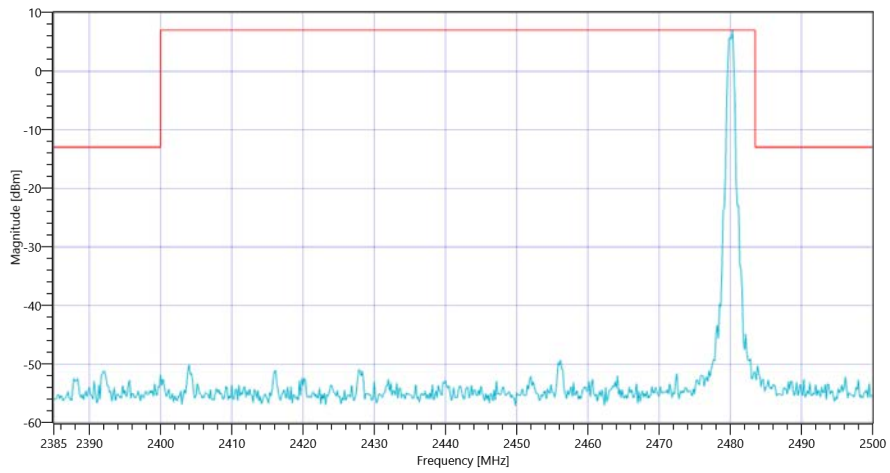
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	7.57   0   25
Start [MHz]   Stop [MHz]	24530.000   25030.000
RBW [MHz]   VBW [MHz]	0.100000   0.300000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	200   25   3001   SWE

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2480.33 MHz	---	---	7.02	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 19356.667 MHz	0	---	31.48	dB	INFO



FCC Part 15.247 TX Spurious Conducted 20dBc ~ BT LE 1 Msps 2480



FCC Part 15.247 TX Spurious Conducted 20dBc ~ BT LE 1 Msps 2480

General verdict

PASS

## FCC Part 15.247 TX Spurious Conducted 20dBc ~ BT LE 2 Msps

Test References	
TC Start	16.05.2022 11:14:03
Ambit Temp [°C]   Humidity [rel%]	22.3   47
System Version	3.0.6.3
Test Specification	FCC Part 15.247
Test Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable.
TC Version	0.0.1
My Description	FCC 15.247 TX Emissions Conducted DTS - BT LE 2 Msps
Add. Information	

EUT Common Settings BT Low Energy	
Intermodulation Value N	3
Image Freq. Low   Mid   High [MHz]	0   0   0
Power Class	2
1 Mbps supported	True   TXpayload 255   RXpayload 255
2 Mbps supported	True   TXpayload 255   RXpayload 255
Longrange S8 supported	True   TXpayload 255   RXpayload 255
Longrange S2 supported	True   TXpayload 255   RXpayload 255
Signaling Settings	USB_RS232   TWO   15   19200   None   S1   None   On
Signaling RF Settings	RF1com   0   0   On
User Interaction	No
Switch Matrix & Pathcompensation enabled	Yes

Test Parameter	
Technology to test	BT LE 2 Msps
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True   Freq [MHz] 2404
Frequency mid to test	True   Freq [MHz] 2440
Frequency high to test	True   Freq [MHz] 2478
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	1.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

## Test at TX 2404 MHz

### RESULT: Reference Power cond.

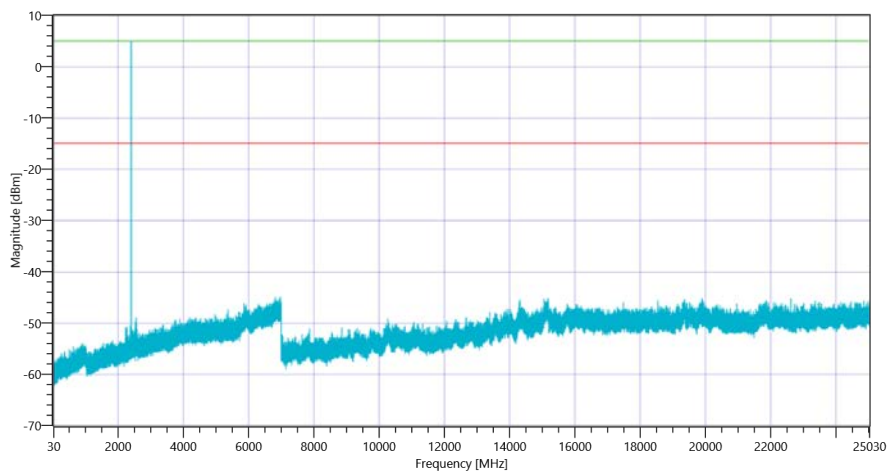
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.13	dBm	INFO
Ref. Frequency	---	---	2403.500	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	7.13   0   25
Start [MHz]   Stop [MHz]	24530.000   25030.000
RBW [MHz]   VBW [MHz]	0.100000   0.300000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	200   25   3001   SWE

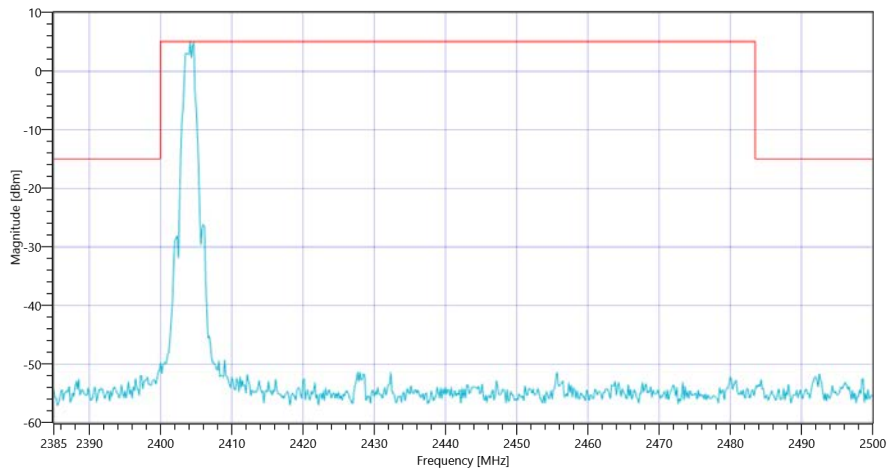
### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2404.17 MHz	---	---	5.06	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 30 MHz	0	---	-140.27	dB	INFO



FCC Part 15.247 TX Spurious Conducted 20dBc ~ BT LE 2 Msps 2404





FCC Part 15.247 TX Spurious Conducted 20dBc ~ BT LE 2 Msps 2404

## Test at TX 2440 MHz

### RESULT: Reference Power cond.

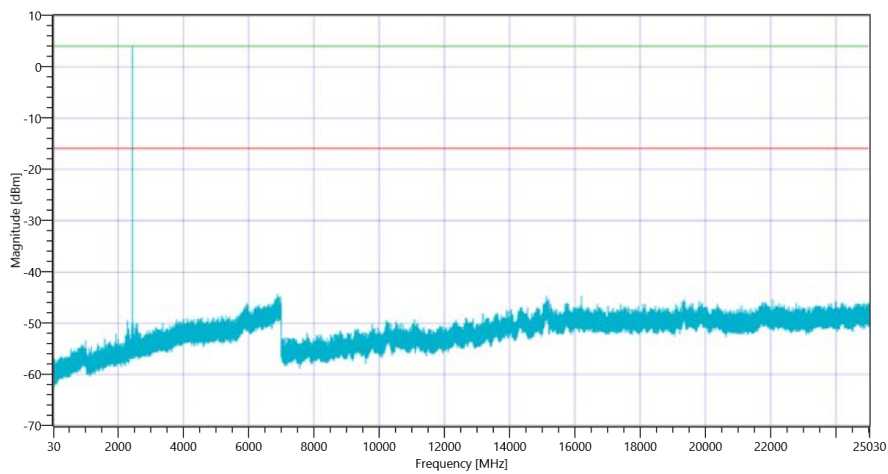
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.33	dBm	INFO
Ref. Frequency	---	---	2439.500	MHz	INFO

### READ SA SETTINGS:

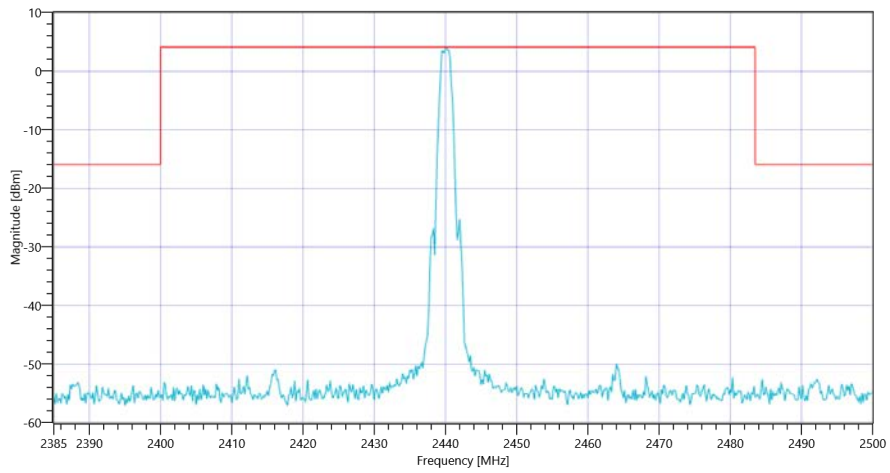
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	7.33   0   25
Start [MHz]   Stop [MHz]	24530.000   25030.000
RBW [MHz]   VBW [MHz]	0.100000   0.300000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	200   25   3001   SWE

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2440.17 MHz	---	---	4.08	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 6883 MHz	0	---	28.38	dB	INFO



FCC Part 15.247 TX Spurious Conducted 20dBc ~ BT LE 2 Msps 2440



FCC Part 15.247 TX Spurious Conducted 20dBc ~ BT LE 2 Msps 2440

## Test at TX 2478 MHz

### RESULT: Reference Power cond.

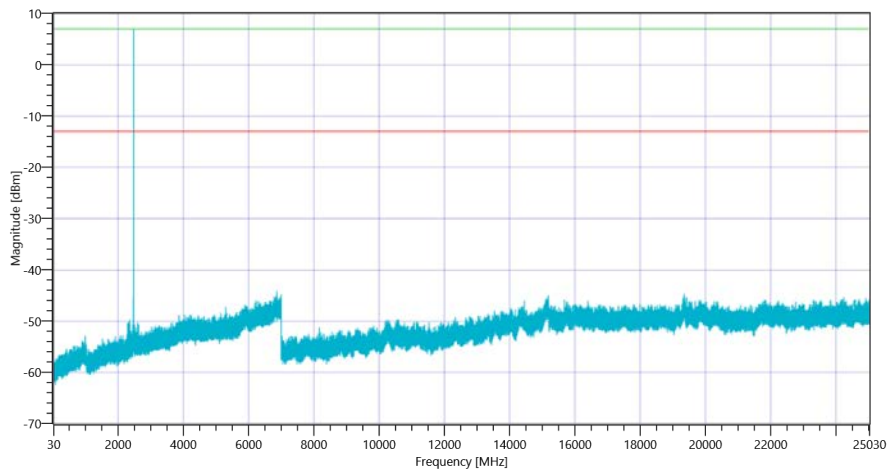
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.55	dBm	INFO
Ref. Frequency	---	---	2477.500	MHz	INFO

### READ SA SETTINGS:

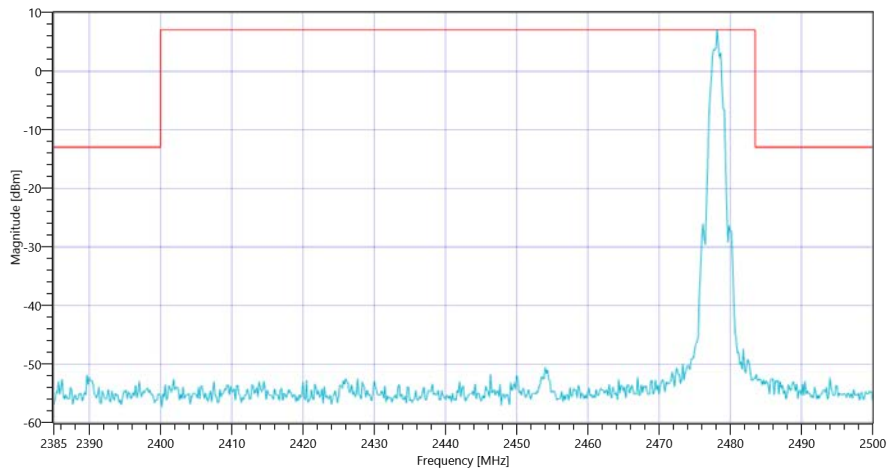
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	7.55   0   25
Start [MHz]   Stop [MHz]	24530.000   25030.000
RBW [MHz]   VBW [MHz]	0.100000   0.300000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	200   25   3001   SWE

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2478.17 MHz	---	---	7.03	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 30 MHz	0	---	-140.63	dB	INFO



FCC Part 15.247 TX Spurious Conducted 20dBc ~ BT LE 2 Msps 2478



FCC Part 15.247 TX Spurious Conducted 20dBc ~ BT LE 2 Msps 2478

General verdict

PASS

## FCC Part 15.247 TX Spurious Conducted 20dBc ~ BT LE coded S2

Test References	
TC Start	16.05.2022 12:25:00
Ambit Temp [°C]   Humidity [rel%]	21.4   47
System Version	3.0.6.3
Test Specification	FCC Part 15.247
Test Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable.
TC Version	0.0.1
My Description	FCC 15.247 TX Emissions Conducted DTS - BT LE coded S2
Add. Information	

EUT Common Settings BT Low Energy	
Intermodulation Value N	3
Image Freq. Low   Mid   High [MHz]	0   0   0
Power Class	2
1 Mbps supported	True   TXpayload 255   RXpayload 255
2 Mbps supported	True   TXpayload 255   RXpayload 255
Longrange S8 supported	True   TXpayload 255   RXpayload 255
Longrange S2 supported	True   TXpayload 255   RXpayload 255
Signaling Settings	USB_RS232   TWO   15   19200   None   S1   None   On
Signaling RF Settings	RF1com   0   0   On
User Interaction	No
Switch Matrix & Pathcompensation enabled	Yes

Test Parameter	
Technology to test	BT LE coded S2
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True   Freq [MHz] 2402
Frequency mid to test	True   Freq [MHz] 2440
Frequency high to test	True   Freq [MHz] 2480
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	1.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

## Test at TX 2402 MHz

### RESULT: Reference Power cond.

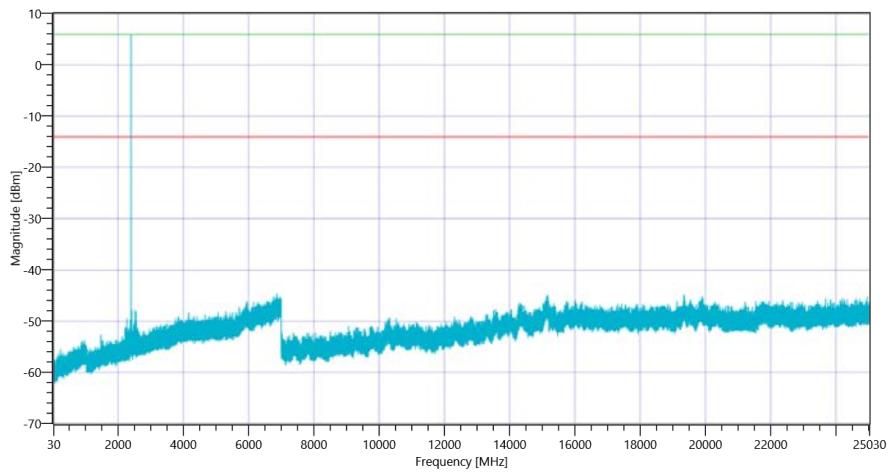
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.09	dBm	INFO
Ref. Frequency	---	---	2401.800	MHz	INFO

### READ SA SETTINGS:

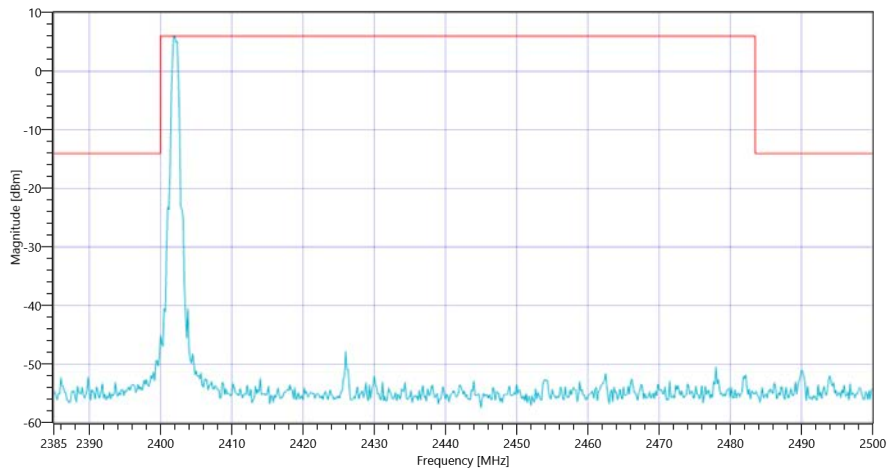
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	7.09   0   25
Start [MHz]   Stop [MHz]	24530.000   25030.000
RBW [MHz]   VBW [MHz]	0.100000   0.300000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	200   25   3001   SWE

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2402.00 MHz	---	---	5.98	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 6873 MHz	0	---	30.52	dB	INFO



FCC Part 15.247 TX Spurious Conducted 20dBc ~ BT LE coded S2 2402



FCC Part 15.247 TX Spurious Conducted 20dBc ~ BT LE coded S2 2402



## Test at TX 2440 MHz

### RESULT: Reference Power cond.

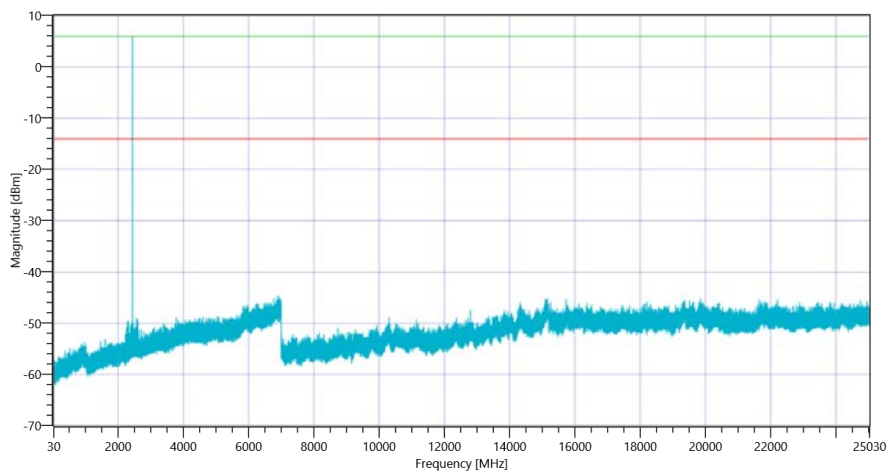
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.36	dBm	INFO
Ref. Frequency	---	---	2439.700	MHz	INFO

### READ SA SETTINGS:

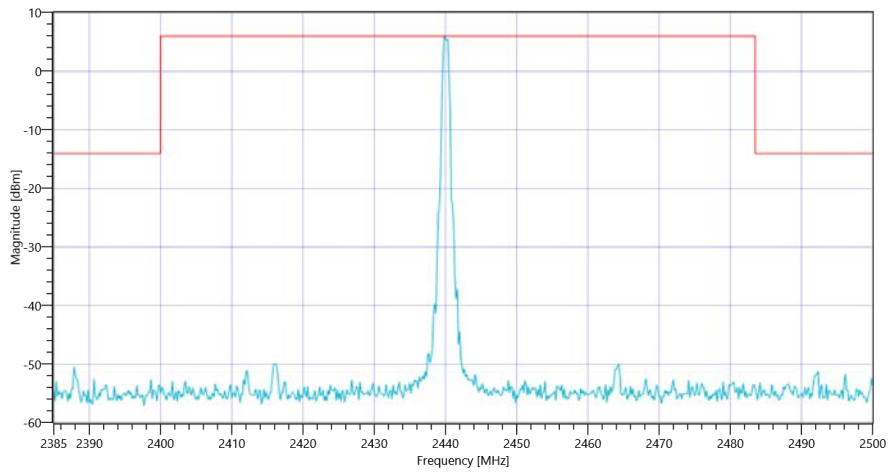
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	7.36   0   25
Start [MHz]   Stop [MHz]	24530.000   25030.000
RBW [MHz]   VBW [MHz]	0.100000   0.300000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	200   25   3001   SWE

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2439.83 MHz	---	---	5.97	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 6915.167 MHz	0	---	30.53	dB	INFO



FCC Part 15.247 TX Spurious Conducted 20dBc ~ BT LE coded S2 2440



FCC Part 15.247 TX Spurious Conducted 20dBc ~ BT LE coded S2 2440

## Test at TX 2480 MHz

### RESULT: Reference Power cond.

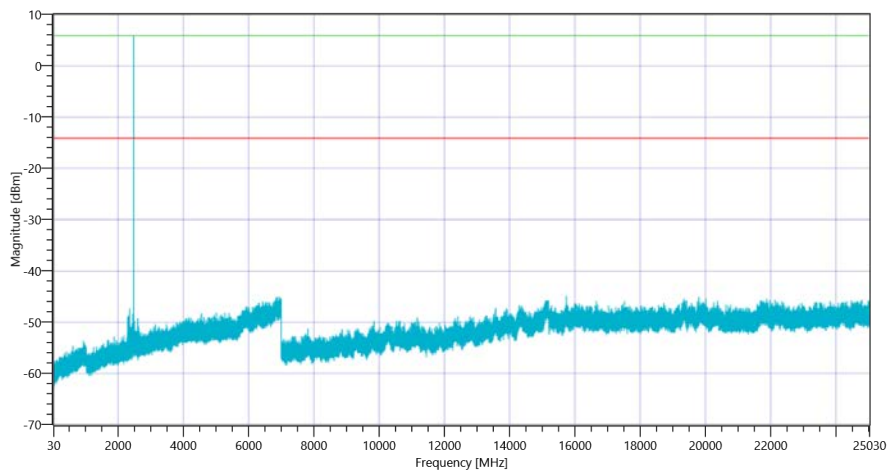
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.64	dBm	INFO
Ref. Frequency	---	---	2479.700	MHz	INFO

### READ SA SETTINGS:

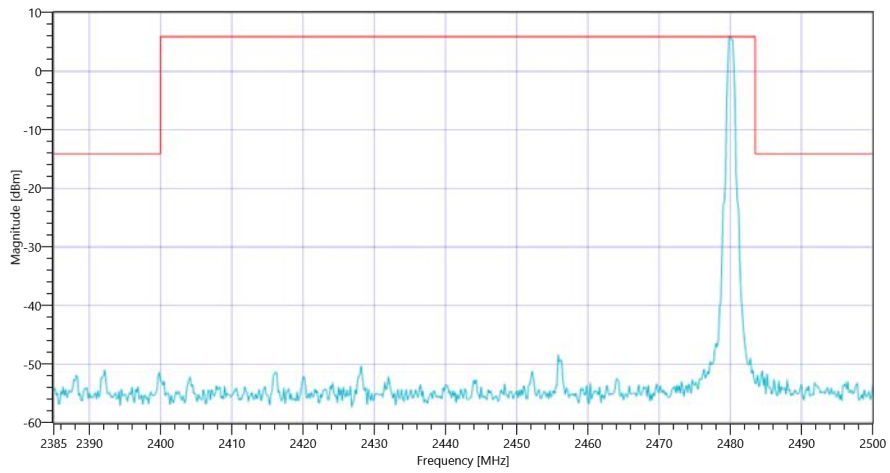
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	7.64   0   25
Start [MHz]   Stop [MHz]	24530.000   25030.000
RBW [MHz]   VBW [MHz]	0.100000   0.300000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	200   25   3001   SWE

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2479.83 MHz	---	---	5.92	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 15737.333 MHz	0	---	30.68	dB	INFO



FCC Part 15.247 TX Spurious Conducted 20dBc ~ BT LE coded S2 2480



FCC Part 15.247 TX Spurious Conducted 20dBc ~ BT LE coded S2 2480

General verdict

PASS

## FCC Part 15.247 TX Spurious Conducted 20dBc ~ BT LE coded S8

Test References	
TC Start	16.05.2022 11:49:05
Ambit Temp [°C]   Humidity [rel%]	22.0   46
System Version	3.0.6.3
Test Specification	FCC Part 15.247
Test Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable.
TC Version	0.0.1
My Description	FCC 15.247 TX Emissions Conducted DTS - BT LE coded S8
Add. Information	

EUT Common Settings BT Low Energy	
Intermodulation Value N	3
Image Freq. Low   Mid   High [MHz]	0   0   0
Power Class	2
1 Mbps supported	True   TXpayload 255   RXpayload 255
2 Mbps supported	True   TXpayload 255   RXpayload 255
Longrange S8 supported	True   TXpayload 255   RXpayload 255
Longrange S2 supported	True   TXpayload 255   RXpayload 255
Signaling Settings	USB_RS232   TWO   15   19200   None   S1   None   On
Signaling RF Settings	RF1com   0   0   On
User Interaction	No
Switch Matrix & Pathcompensation enabled	Yes

Test Parameter	
Technology to test	BT LE coded S8
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True   Freq [MHz] 2402
Frequency mid to test	True   Freq [MHz] 2440
Frequency high to test	True   Freq [MHz] 2480
Auto Control enabled Power Supply   Climatic Box	No   No
Additional Path Loss [dB]	1.5
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70	
Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.61	
Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI	

## Test at TX 2402 MHz

### RESULT: Reference Power cond.

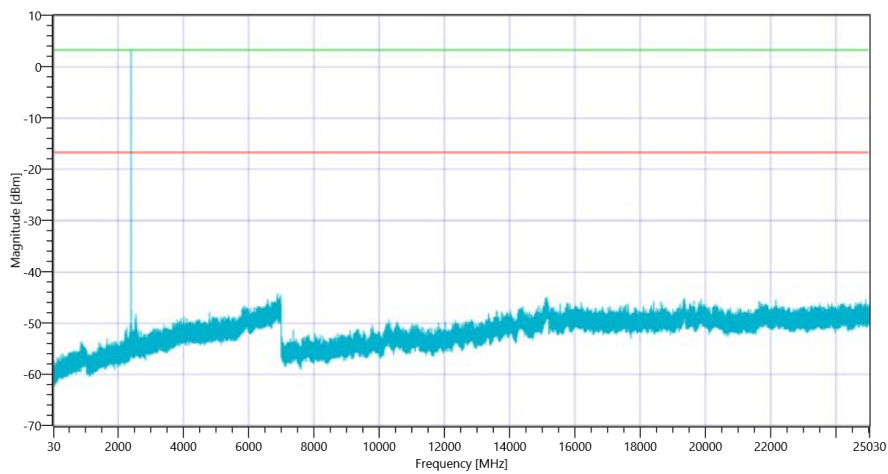
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.05	dBm	INFO
Ref. Frequency	---	---	2401.800	MHz	INFO

### READ SA SETTINGS:

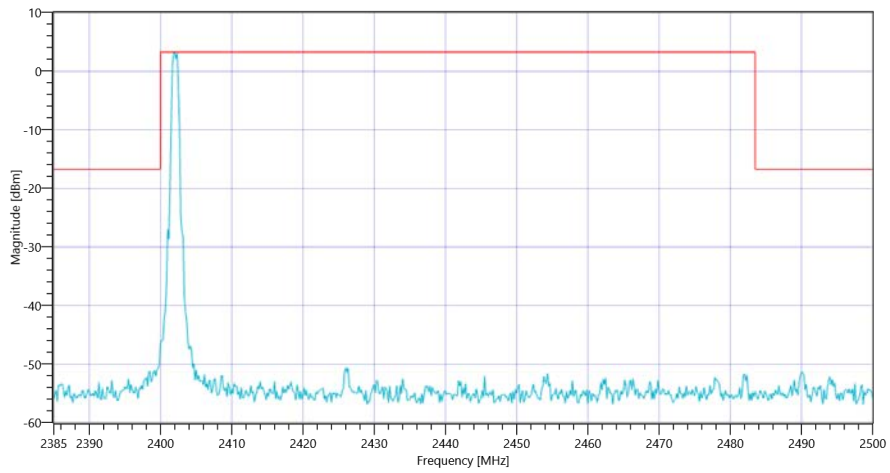
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	7.05   0   25
Start [MHz]   Stop [MHz]	24530.000   25030.000
RBW [MHz]   VBW [MHz]	0.100000   0.300000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	200   25   3001   SWE

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2402.00 MHz	---	---	3.28	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 6887 MHz	0	---	27.36	dB	INFO



FCC Part 15.247 TX Spurious Conducted 20dBc ~ BT LE coded S8 2402



FCC Part 15.247 TX Spurious Conducted 20dBc ~ BT LE coded S8 2402

## Test at TX 2440 MHz

### RESULT: Reference Power cond.

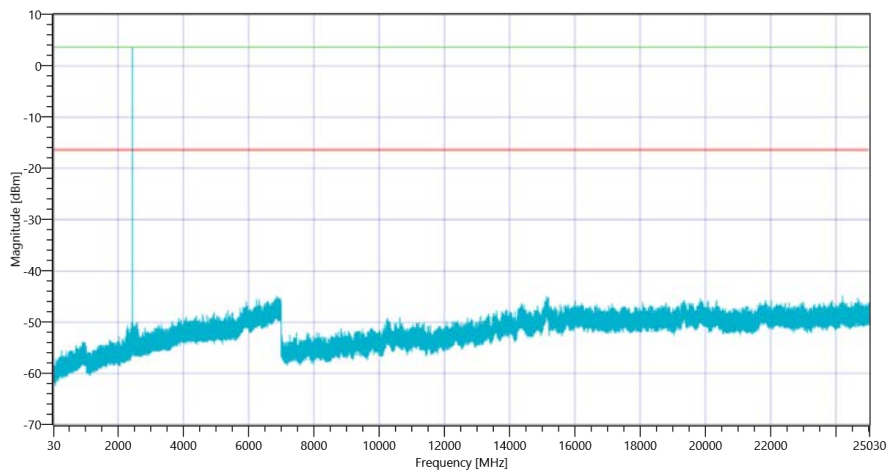
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.33	dBm	INFO
Ref. Frequency	---	---	2439.800	MHz	INFO

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	7.33   0   25
Start [MHz]   Stop [MHz]	24530.000   25030.000
RBW [MHz]   VBW [MHz]	0.100000   0.300000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	200   25   3001   SWE

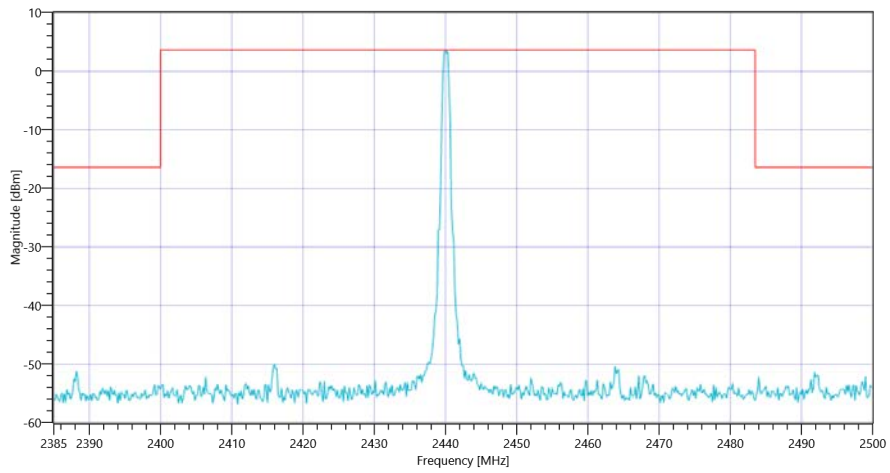
### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2440.00 MHz	---	---	3.60	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 24200.167 MHz	0	---	28.37	dB	INFO



FCC Part 15.247 TX Spurious Conducted 20dBc ~ BT LE coded S8 2440





FCC Part 15.247 TX Spurious Conducted 20dBc ~ BT LE coded S8 2440

## Test at TX 2480 MHz

### RESULT: Reference Power cond.

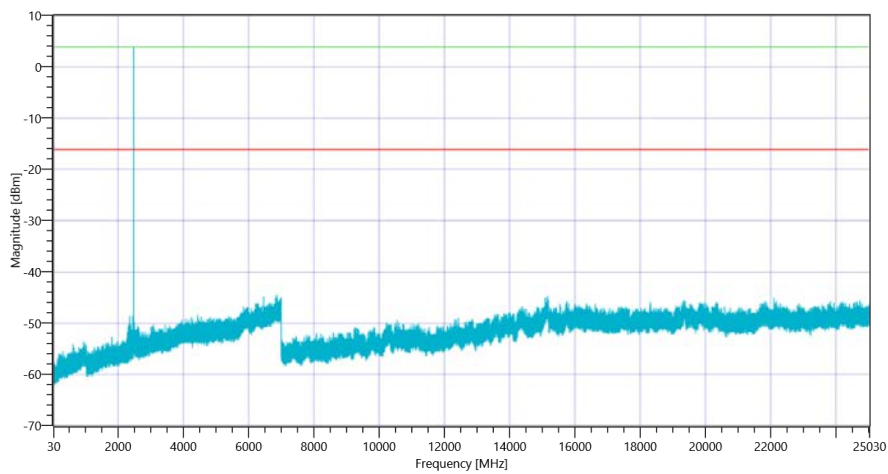
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	7.59	dBm	INFO
Ref. Frequency	---	---	2479.800	MHz	INFO

### READ SA SETTINGS:

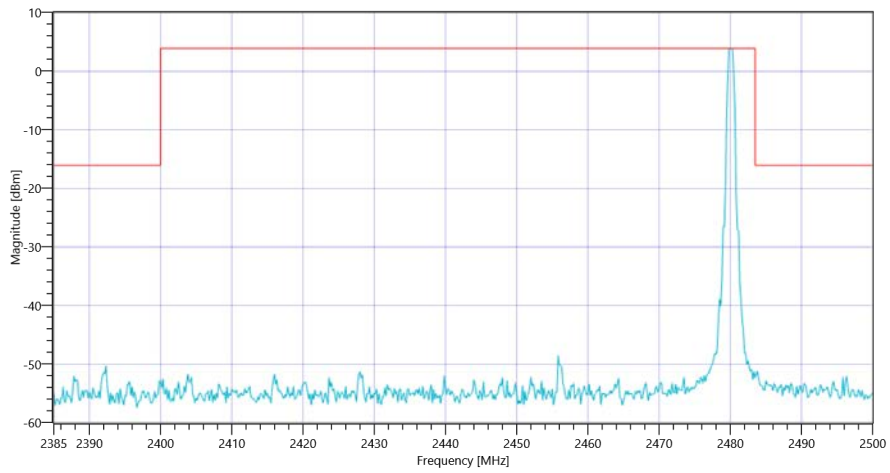
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	7.59   0   25
Start [MHz]   Stop [MHz]	24530.000   25030.000
RBW [MHz]   VBW [MHz]	0.100000   0.300000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	200   25   3001   SWE

### RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2480.00 MHz	---	---	3.91	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 30 MHz	0	---	-140.29	dB	INFO



FCC Part 15.247 TX Spurious Conducted 20dBc ~ BT LE coded S8 2480



FCC Part 15.247 TX Spurious Conducted 20dBc ~ BT LE coded S8 2480

General verdict

PASS

- END OF DOCUMENT -