

# Measurement Results

1-8220/19-01-02\_Annex\_MR\_A\_1

[Test logging](#)

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## Table of Content

IUT Summary	3
1. Common2G4 Peak Output Power conducted 3MHz_3MHz ~ BT Classic Basic rate	4
2. FCC Part 15.247 Maximum Peak Conducted Output Power FHSS ~ BT Classic Basic rate	8
3. FCC Part 15.247 Number Of Hopping Channels FHSS ~ BT Classic Basic rate	12
4. FCC Part 15.247 Carrier Frequency Separation FHSS ~ BT Classic Basic rate	16
5. FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT Classic Basic rate	19
6. FCC Part 15.247 TX Spurious Conduced ~ BT Classic Basic rate	26
7. FCC Part 15.247 Maximum Peak Conducted Output Power FHSS ~ BT Classic EDR Pi/4DQPSK	30
8. FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT Classic EDR Pi/4DQPSK	34
9. FCC Part 15.247 TX Spurious Conduced ~ BT Classic EDR Pi/4DQPSK	41
10. FCC Part 15.247 Maximum Peak Conducted Output Power FHSS ~ BT Classic EDR 8DPSK	45
11. FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT Classic EDR 8DPSK	49
12. FCC Part 15.247 TX Spurious Conduced ~ BT Classic EDR 8DPSK	56

## IUT Summary

IUT DEFINITION & Common settings	
Manufacturer	Robert Bosch GmbH
Type	Center CM-C 19
Serial No.   Setup No.	BT Address: 7495ECCDAF80   1.0
SW Version   HW Version	NI   NI
Comment 1   2	
Tlow   Tmid   Thigh [°C]	-20   20   70
Vlow   Vmid   Vhigh [V] @Imax [A]	9   12   16 @2
Auto Control enabled Power Supply   Climatic Box	No   No
Antenna Gain [dBi]	0
Additional Path Loss [dB]	0.7

IUT Common Settings BT Classic	
Intermodulation Value N	3
Image Freq. Low   Mid   High [MHz]	0   0   0
Power Class	2
Power Control	No
Longest Supported Packet Type	DH5
RF Supported	Basic Rate True   EDR Pi/4DQPSK True   EDR 8DPSK True
Testmode	LOOPback
Perform Inquiry	Yes
IUT BT Address	0123456789AB
Signaling BT Address	BABEBEDADBAD
Switch Matrix & Pathcompensation enabled	Yes

## 1. Common2G4 Peak Output Power conducted 3MHz\_3MHz ~ BT Classic Basic rate

Test References	
TC Start	09.10.2019 11:50:19
System Version	1.0.0.21
Test Specification	None
Test Method	
Class / TC Version / TC ID	TC_VM_Common2G4_Peak_Output_Power_Conducted_3MHz_3MHz_V01 Version: 0.0.1   TCID_Common2G4_1
My Description	Peak Output Power conducted 3MHz/3MHz - BT Classic Basic Rate
Add. Information	

Test Parameter	
Technology to test	BT Classic Basic rate
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	True   Freq [MHz] 2402
Frequency mid to test	True   Freq [MHz] 2441
Frequency high to test	True   Freq [MHz] 2480
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.70   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.40

## Test at TX 2402 MHz

### RESULT: BT Classic Connection check

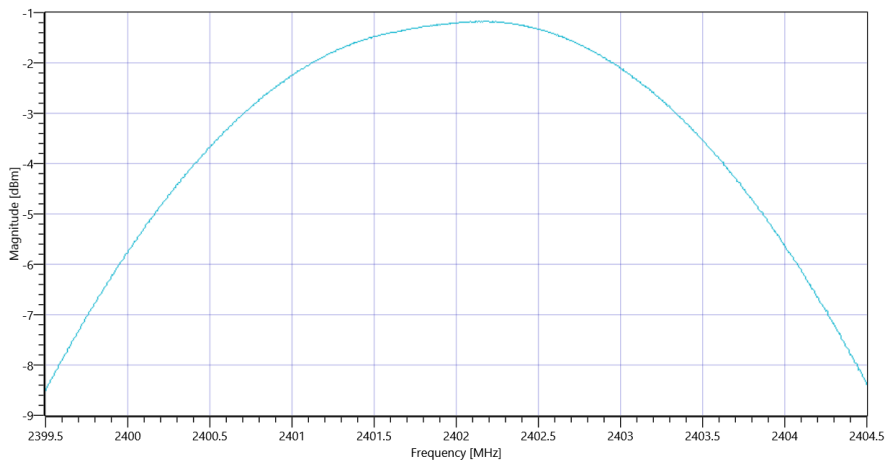
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Connection result	---	---	---	--	TCON

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	8.64   10.49   15				
Start [MHz]   Stop [MHz]	2399.500   2404.500				
RBW [MHz]   VBW [MHz]	3.000000   3.000000				
Detector   TraceMode	POS   MAXH				
Sweep: Time [ms]   Count   Points per Section   Type	1000   10   1001   SWE				

### RESULT: TC\_VM\_Common2G4\_Peak\_Output\_Power\_Conducted\_3MHz\_3MHz\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	---	-1.17	dBm	Information
Peak Power	---	---	0.763836	mW	Information
Frequency at Peak	---	---	2402.12	MHz	Information



Plot\_Common2G4 Peak Output Power conducted 3MHz\_3MHz ~ BT Classic Basic rate\_09102019\_115050.png

## Test at TX 2441 MHz

### RESULT: BT Classic Connection check

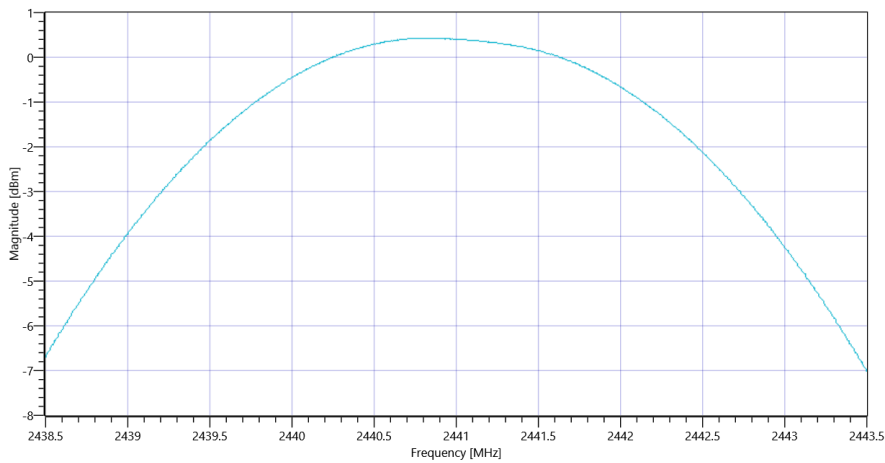
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Connection result	--	--	--	--	TCON

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	10.31   10.61   15				
Start [MHz]   Stop [MHz]	2438.500   2443.500				
RBW [MHz]   VBW [MHz]	3.000000   3.000000				
Detector   TraceMode	POS   MAXH				
Sweep: Time [ms]   Count   Points per Section   Type	1000   10   1001   SWE				

### RESULT: TC\_VM\_Common2G4\_Peak\_Output\_Power\_Conducted\_3MHz\_3MHz\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	--	--	0.43	dBm	Information
Peak Power	--	--	1.104079	mW	Information
Frequency at Peak	--	--	2440.815	MHz	Information



Plot\_Common2G4 Peak Output Power conducted 3MHz\_3MHz ~ BT Classic Basic rate\_09102019\_115114.png

## Test at TX 2480 MHz

### RESULT: BT Classic Connection check

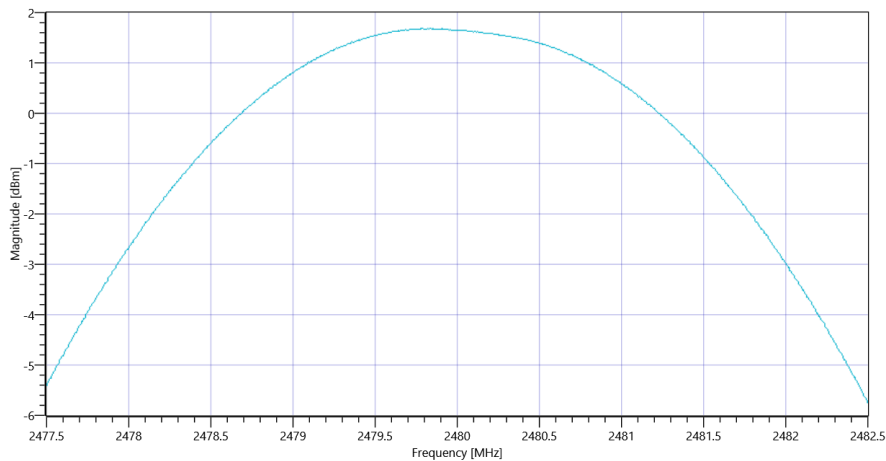
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Connection result	---	---	---	--	TCON

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	11.53   10.66   20				
Start [MHz]   Stop [MHz]	2477.500   2482.500				
RBW [MHz]   VBW [MHz]	3.000000   3.000000				
Detector   TraceMode	POS   MAXH				
Sweep: Time [ms]   Count   Points per Section   Type	1000   10   1001   SWE				

### RESULT: TC\_VM\_Common2G4\_Peak\_Output\_Power\_Conducted\_3MHz\_3MHz\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	---	1.68	dBm	Information
Peak Power	---	---	1.472313	mW	Information
Frequency at Peak	---	---	2479.91	MHz	Information



Plot\_Common2G4 Peak Output Power conducted 3MHz\_3MHz ~ BT Classic Basic rate\_09102019\_115138.png

### TEST FINISHED

General Verdict

09.10.2019 11:51:38 / RT: 78 s

PASS

## 2. FCC Part 15.247 Maximum Peak Conducted Output Power FHSS ~ BT Classic Basic rate

Test References	
TC Start	09.10.2019 11:51:42
System Version	1.0.0.21
Test Specification	FCC Part 15.247
Test Method	
Class / TC Version / TC ID	TC_VM_FCC15247_Maximum_Peak_Conducted_Output_Power_FHSS_V01 Version: 0.0.1   TCID_FCC15247_4
My Description	FCC 15.247 Maximum Peak Output Power Conducted FHSS - BT Classic Basic Rate
Add. Information	

Test Parameter	
Technology to test	BT Classic Basic rate
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	True   Freq [MHz] 2402
Frequency mid to test	True   Freq [MHz] 2441
Frequency high to test	True   Freq [MHz] 2480
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.70   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.40



## Test at TX 2402 MHz

RESULT: BT Classic Connection check

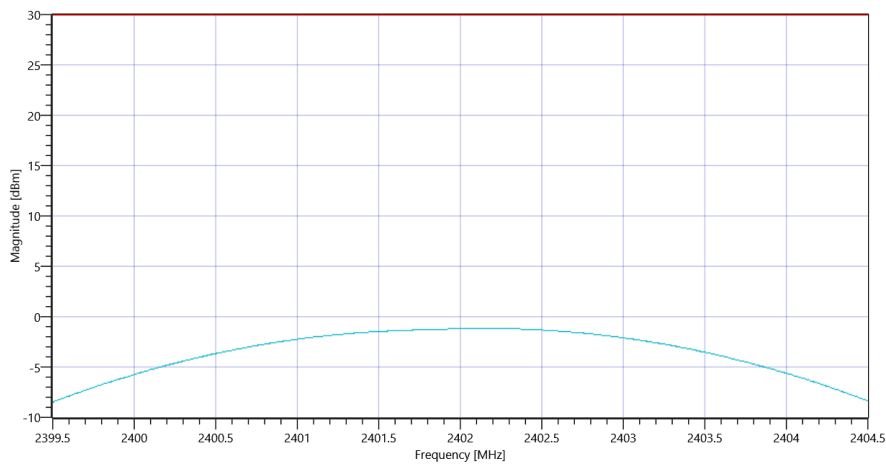
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Connection result	---	---	---	--	TCON

READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	8.64   10.49   15				
Start [MHz]   Stop [MHz]	2399.500   2404.500				
RBW [MHz]   VBW [MHz]	3.000000   10.000000				
Detector   TraceMode	POS   MAXH				
Sweep: Time [ms]   Count   Points per Section   Type	1000   10   1001   SWE				

RESULT: TC\_VM\_FCC15247\_Maximum\_Peak\_Conducted\_Output\_Power\_FHSS\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	30.00	-1.18	dBm	PASS
Peak Power	---	1000	0.762079	mW	PASS
Frequency at Peak	---	---	2402.085	MHz	Information



Plot\_FCC Part 15.247 Maximum Peak Conducted Output Power FHSS ~ BT Classic Basic rate\_09102019\_115212.png

## Test at TX 2441 MHz

RESULT: BT Classic Connection check

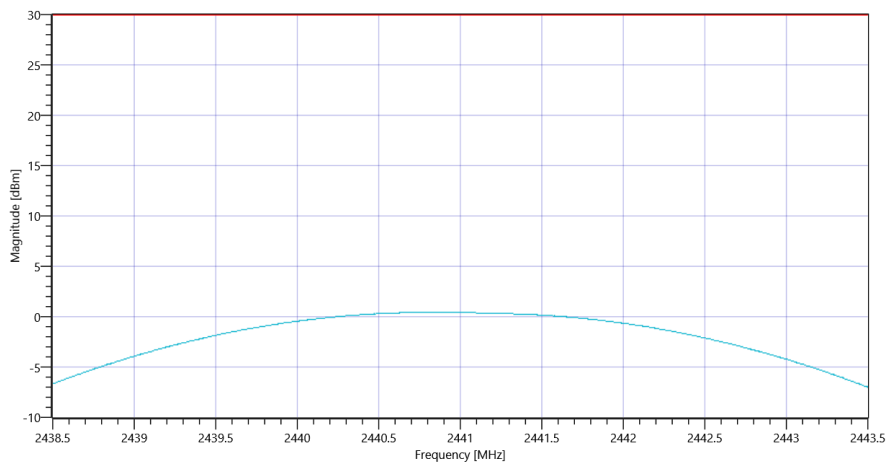
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Connection result	---	---	---	--	TCON

READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	10.30   10.61   15				
Start [MHz]   Stop [MHz]	2438.500   2443.500				
RBW [MHz]   VBW [MHz]	3.000000   10.000000				
Detector   TraceMode	POS   MAXH				
Sweep: Time [ms]   Count   Points per Section   Type	1000   10   1001   SWE				

RESULT: TC\_VM\_FCC15247\_Maximum\_Peak\_Conducted\_Output\_Power\_FHSS\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	30.00	0.43	dBm	PASS
Peak Power	---	1000	1.104079	mW	PASS
Frequency at Peak	---	---	2440.815	MHz	Information



Plot\_FCC Part 15.247 Maximum Peak Conducted Output Power FHSS ~ BT Classic Basic rate\_09102019\_115236.png

## Test at TX 2480 MHz

RESULT: BT Classic Connection check

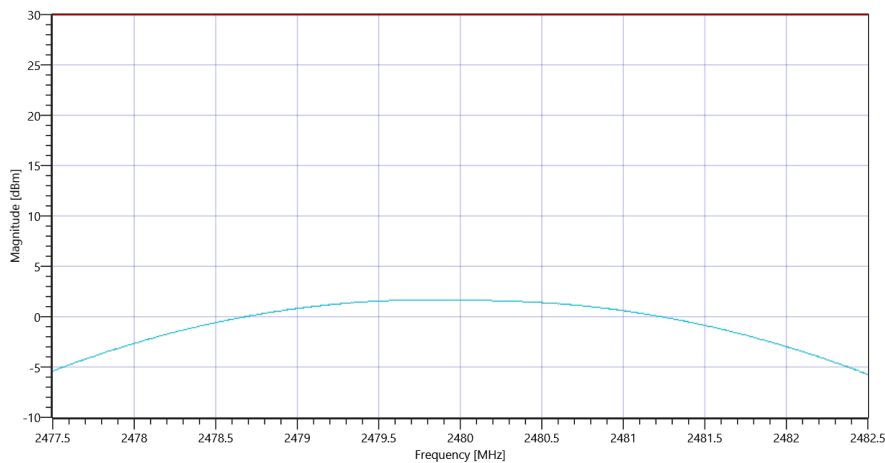
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Connection result	---	---	---	--	TCON

READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	11.48   10.66   20				
Start [MHz]   Stop [MHz]	2477.500   2482.500				
RBW [MHz]   VBW [MHz]	3.000000   10.000000				
Detector   TraceMode	POS   MAXH				
Sweep: Time [ms]   Count   Points per Section   Type	1000   10   1001   SWE				

RESULT: TC\_VM\_FCC15247\_Maximum\_Peak\_Conducted\_Output\_Power\_FHSS\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	30.00	1.68	dBm	PASS
Peak Power	---	1000	1.472313	mW	PASS
Frequency at Peak	---	---	2479.825	MHz	Information



Plot\_FCC Part 15.247 Maximum Peak Conducted Output Power FHSS ~ BT Classic Basic rate\_09102019\_115259.png

TEST FINISHED

General Verdict

09.10.2019 11:53:00 / RT: 77 s

PASS

### 3. FCC Part 15.247 Number Of Hopping Channels FHSS ~ BT Classic Basic rate

Test References	
TC Start	09.10.2019 11:53:03
System Version	1.0.0.21
Test Specification	FCC Part 15.247
Test Method	
Class / TC Version / TC ID	TC_VM_FCC15247_Number_of_hopping_channels_FHSS_V01 Version: 0.0.1   TCID_FCC15247_5
My Description	FCC 15.247 Number Of Hopping Channels FHSS - BT Classic Basic Rate
Add. Information	

Test Parameter	
Technology to test	BT Classic Basic rate
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	False   Freq [MHz] 2402
Frequency mid to test	False   Freq [MHz] 2441
Frequency high to test	False   Freq [MHz] 2480
Device in hopping mode	True
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.70   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.40

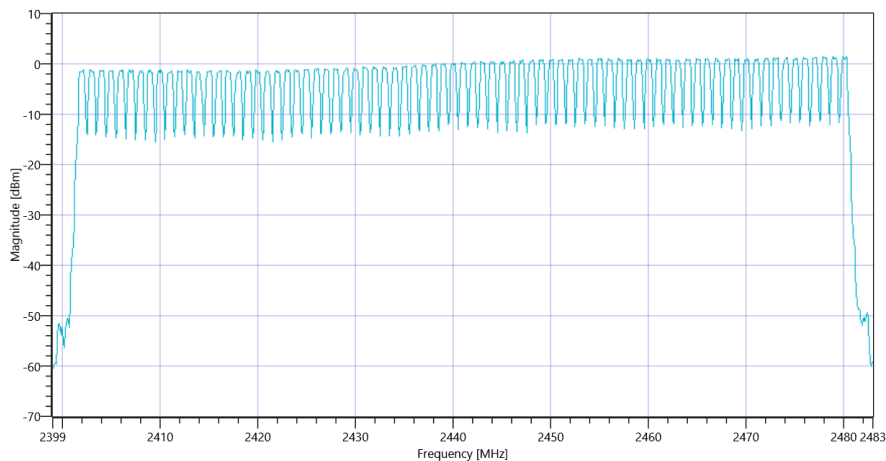
## Test at TX hopping MHz

RESULT: BT Classic Connection check					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Connection result	--	--	--	--	TCON

READ SA SETTINGS:	
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	6.47   10.61   15
Start [MHz]   Stop [MHz]	2399.000   2483.000
RBW [MHz]   VBW [MHz]	0.200000   0.500000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	1   10000   1001   SWE

RESULT: TC_VM_FCC15247_Number_of_hopping_channels_FHSS_V01					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Hopp channel (rounded)	--	--	2402	MHz	Information
Hopp channel (rounded)	--	--	2403	MHz	Information
Hopp channel (rounded)	--	--	2404	MHz	Information
Hopp channel (rounded)	--	--	2405	MHz	Information
Hopp channel (rounded)	--	--	2406	MHz	Information
Hopp channel (rounded)	--	--	2407	MHz	Information
Hopp channel (rounded)	--	--	2408	MHz	Information
Hopp channel (rounded)	--	--	2409	MHz	Information
Hopp channel (rounded)	--	--	2410	MHz	Information
Hopp channel (rounded)	--	--	2411	MHz	Information
Hopp channel (rounded)	--	--	2412	MHz	Information
Hopp channel (rounded)	--	--	2413	MHz	Information
Hopp channel (rounded)	--	--	2414	MHz	Information
Hopp channel (rounded)	--	--	2415	MHz	Information
Hopp channel (rounded)	--	--	2416	MHz	Information
Hopp channel (rounded)	--	--	2417	MHz	Information
Hopp channel (rounded)	--	--	2418	MHz	Information
Hopp channel (rounded)	--	--	2419	MHz	Information
Hopp channel (rounded)	--	--	2420	MHz	Information
Hopp channel (rounded)	--	--	2421	MHz	Information
Hopp channel (rounded)	--	--	2422	MHz	Information
Hopp channel (rounded)	--	--	2423	MHz	Information
Hopp channel (rounded)	--	--	2424	MHz	Information
Hopp channel (rounded)	--	--	2425	MHz	Information
Hopp channel (rounded)	--	--	2426	MHz	Information
Hopp channel (rounded)	--	--	2427	MHz	Information
Hopp channel (rounded)	--	--	2428	MHz	Information
Hopp channel (rounded)	--	--	2429	MHz	Information
Hopp channel (rounded)	--	--	2430	MHz	Information
Hopp channel (rounded)	--	--	2431	MHz	Information
Hopp channel (rounded)	--	--	2432	MHz	Information
Hopp channel (rounded)	--	--	2433	MHz	Information
Hopp channel (rounded)	--	--	2434	MHz	Information
Hopp channel (rounded)	--	--	2435	MHz	Information
Hopp channel (rounded)	--	--	2436	MHz	Information
Hopp channel (rounded)	--	--	2437	MHz	Information
Hopp channel (rounded)	--	--	2438	MHz	Information
Hopp channel (rounded)	--	--	2439	MHz	Information
Hopp channel (rounded)	--	--	2440	MHz	Information
Hopp channel (rounded)	--	--	2441	MHz	Information
Hopp channel (rounded)	--	--	2442	MHz	Information
Hopp channel (rounded)	--	--	2443	MHz	Information

Hopp channel (rounded)	--	--	2444	MHz	Information
Hopp channel (rounded)	--	--	2445	MHz	Information
Hopp channel (rounded)	--	--	2446	MHz	Information
Hopp channel (rounded)	--	--	2447	MHz	Information
Hopp channel (rounded)	--	--	2448	MHz	Information
Hopp channel (rounded)	--	--	2449	MHz	Information
Hopp channel (rounded)	--	--	2450	MHz	Information
Hopp channel (rounded)	--	--	2451	MHz	Information
Hopp channel (rounded)	--	--	2452	MHz	Information
Hopp channel (rounded)	--	--	2453	MHz	Information
Hopp channel (rounded)	--	--	2454	MHz	Information
Hopp channel (rounded)	--	--	2455	MHz	Information
Hopp channel (rounded)	--	--	2456	MHz	Information
Hopp channel (rounded)	--	--	2457	MHz	Information
Hopp channel (rounded)	--	--	2458	MHz	Information
Hopp channel (rounded)	--	--	2459	MHz	Information
Hopp channel (rounded)	--	--	2460	MHz	Information
Hopp channel (rounded)	--	--	2461	MHz	Information
Hopp channel (rounded)	--	--	2462	MHz	Information
Hopp channel (rounded)	--	--	2463	MHz	Information
Hopp channel (rounded)	--	--	2464	MHz	Information
Hopp channel (rounded)	--	--	2465	MHz	Information
Hopp channel (rounded)	--	--	2466	MHz	Information
Hopp channel (rounded)	--	--	2467	MHz	Information
Hopp channel (rounded)	--	--	2468	MHz	Information
Hopp channel (rounded)	--	--	2469	MHz	Information
Hopp channel (rounded)	--	--	2470	MHz	Information
Hopp channel (rounded)	--	--	2471	MHz	Information
Hopp channel (rounded)	--	--	2472	MHz	Information
Hopp channel (rounded)	--	--	2473	MHz	Information
Hopp channel (rounded)	--	--	2474	MHz	Information
Hopp channel (rounded)	--	--	2475	MHz	Information
Hopp channel (rounded)	--	--	2476	MHz	Information
Hopp channel (rounded)	--	--	2477	MHz	Information
Hopp channel (rounded)	--	--	2478	MHz	Information
Hopp channel (rounded)	--	--	2479	MHz	Information
Hopp channel (rounded)	--	--	2480	MHz	Information
Σ Hopping channels	15	--	79	Number	PASS



Plot\_FCC Part 15.247 Number Of Hopping Channels FHSS ~ BT Classic Basic rate\_09102019\_115349.png

TEST FINISHED

General Verdict

09.10.2019 11:53:49 / RT: 45 s

PASS

## 4. FCC Part 15.247 Carrier Frequency Separation FHSS ~ BT Classic Basic rate

Test References	
TC Start	09.10.2019 11:53:53
System Version	1.0.0.21
Test Specification	FCC Part 15.247
Test Method	
Class / TC Version / TC ID	TC_VM_FCC15247_Carrier_Frequency_Separation_FHSS_V01 Version: 0.0.1   TCID_FCC15247_9
My Description	FCC 15.247 Carrier Frequency Separation FHSS - BT Classic Basic Rate
Add. Information	

Test Parameter	
Technology to test	BT Classic Basic rate
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	False   Freq [MHz] 2402
Frequency mid to test	False   Freq [MHz] 2441
Frequency high to test	False   Freq [MHz] 2480
Device in hopping mode	True
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.70   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.40

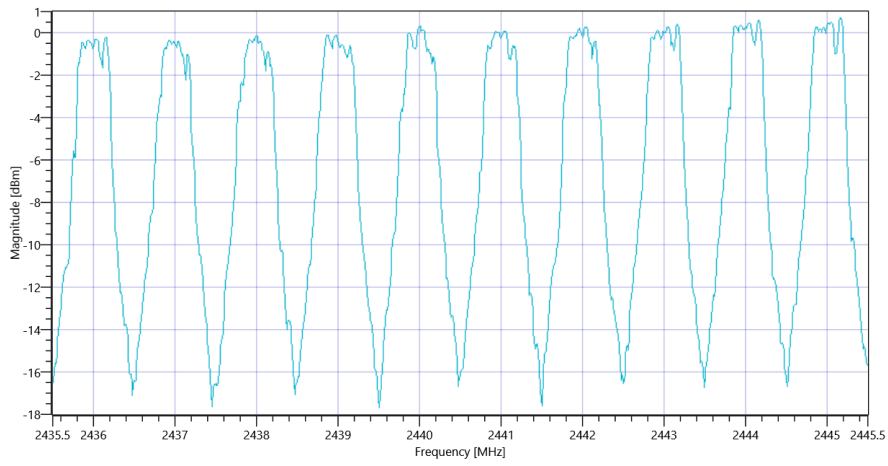


## Test at TX hopping MHz

RESULT: BT Classic Connection check					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Connection result	---	---	---	--	TCON

READ SA SETTINGS:	
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	6.46   10.61   15
Start [MHz]   Stop [MHz]	2435.500   2445.500
RBW [MHz]   VBW [MHz]	0.100000   0.300000
Detector   TraceMode	POS   MAXH
Sweep: Time [ms]   Count   Points per Section   Type	1   20000   1001   SWE

RESULT: TC_VM_FCC15247_Carrier_Frequency_Separation_FHSS_V01					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
1 CFS n to n+1 (rnd)	0.025	---	1	MHz	PASS
1 CFS n to n+1 (rnd)	0.667 (2/3 Nom.BW)	---	1	MHz	PASS
2 CFS n to n+1 (rnd)	0.025	---	1	MHz	PASS
2 CFS n to n+1 (rnd)	0.667 (2/3 Nom.BW)	---	1	MHz	PASS
3 CFS n to n+1 (rnd)	0.025	---	1	MHz	PASS
3 CFS n to n+1 (rnd)	0.667 (2/3 Nom.BW)	---	1	MHz	PASS
4 CFS n to n+1 (rnd)	0.025	---	1	MHz	PASS
4 CFS n to n+1 (rnd)	0.667 (2/3 Nom.BW)	---	1	MHz	PASS
5 CFS n to n+1 (rnd)	0.025	---	1	MHz	PASS
5 CFS n to n+1 (rnd)	0.667 (2/3 Nom.BW)	---	1	MHz	PASS
6 CFS n to n+1 (rnd)	0.025	---	1	MHz	PASS
6 CFS n to n+1 (rnd)	0.667 (2/3 Nom.BW)	---	1	MHz	PASS
7 CFS n to n+1 (rnd)	0.025	---	1	MHz	PASS
7 CFS n to n+1 (rnd)	0.667 (2/3 Nom.BW)	---	1	MHz	PASS
8 CFS n to n+1 (rnd)	0.025	---	1	MHz	PASS
8 CFS n to n+1 (rnd)	0.667 (2/3 Nom.BW)	---	1	MHz	PASS
9 CFS n to n+1 (rnd)	0.025	---	1	MHz	PASS
9 CFS n to n+1 (rnd)	0.667 (2/3 Nom.BW)	---	1	MHz	PASS
Carrier Freq. (rnd)	---	---	2436	MHz	Information
Carrier Freq. (rnd)	---	---	2437	MHz	Information
Carrier Freq. (rnd)	---	---	2438	MHz	Information
Carrier Freq. (rnd)	---	---	2439	MHz	Information
Carrier Freq. (rnd)	---	---	2440	MHz	Information
Carrier Freq. (rnd)	---	---	2441	MHz	Information
Carrier Freq. (rnd)	---	---	2442	MHz	Information
Carrier Freq. (rnd)	---	---	2443	MHz	Information
Carrier Freq. (rnd)	---	---	2444	MHz	Information
Carrier Freq. (rnd)	---	---	2445	MHz	Information



Plot\_FCC Part 15.247 Carrier Frequency Separation FHSS ~ BT Classic Basic rate\_09102019\_115548.png

TEST FINISHED

General Verdict

09.10.2019 11:55:48 / RT: 115 s

PASS

## 5. FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT Classic Basic rate

Test References	
TC Start	09.10.2019 11:55:52
System Version	1.0.0.21
Test Specification	FCC Part 15.247
Test Method	
Class / TC Version / TC ID	TC_VM_FCC15247_Bandwidth_99PCT_20dB_DTS_FHSS_V01 Version: 0.0.2   TCID_FCC15247_2
My Description	FCC 15.247 Bandwidth 99PCT - 20dB FHSS - BT Classic Basic Rate
Add. Information	

Test Parameter	
Technology to test	BT Classic Basic rate
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	True   Freq [MHz] 2402
Frequency mid to test	True   Freq [MHz] 2441
Frequency high to test	True   Freq [MHz] 2480
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.70   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.40

## Test at TX 2402 MHz

**RESULT: BT Classic Connection check**

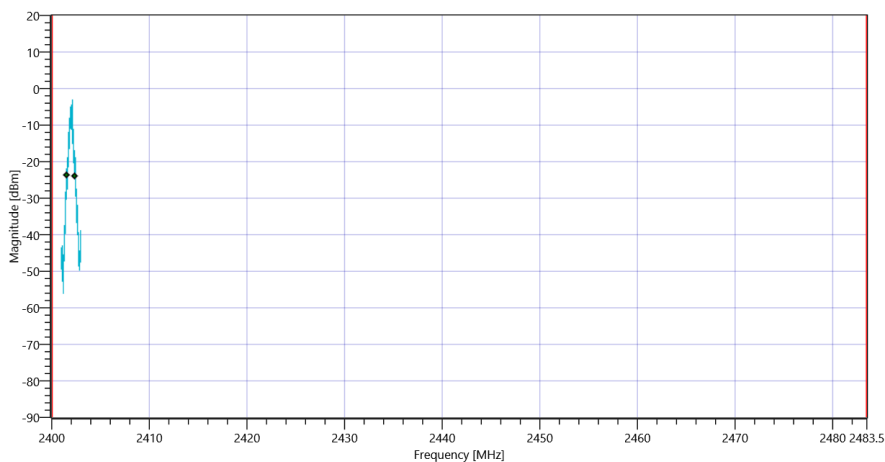
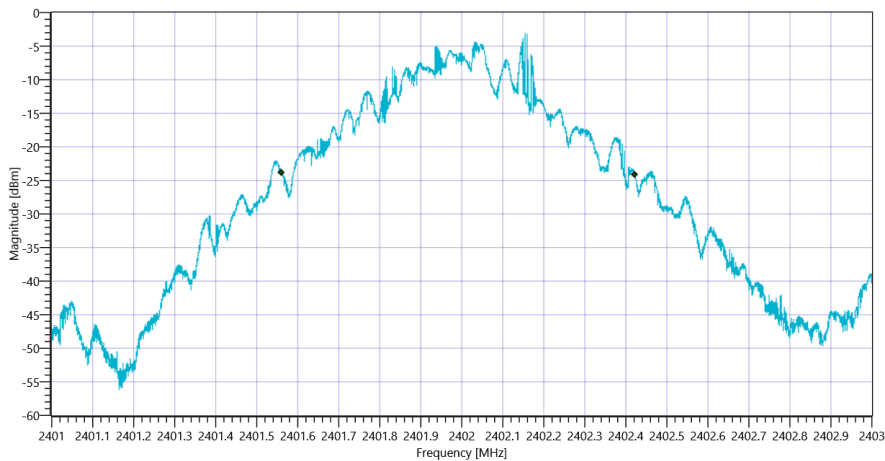
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Connection result	---	---	---	--	TCON

**READ SA SETTINGS:**

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	3.60   10.49   10				
Start [MHz]   Stop [MHz]	2401.000   2403.000				
RBW [MHz]   VBW [MHz]	0.020000   0.050000				
Detector   TraceMode	POS   MAXH				
Sweep: Time [ms]   Count   Points per Section   Type	50   200   10001   SWE				

**RESULT: TC\_VM\_FCC15247\_Bandwidth\_99PCT\_20dB\_DTS\_FHSS\_V01**

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	862	kHz	Information
T1 99%	2400.000000	---	2401.5604	MHz	PASS
T2 99%	---	2483.500000	2402.4220	MHz	PASS



**RESULT: TC\_VM\_FCC15247\_Bandwidth\_99PCT\_20dB\_DTS\_FHSS\_V01**

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	868	kHz	Information
T1 20dB	2400.000000	---	2401.5392	MHz	PASS

T2 20dB

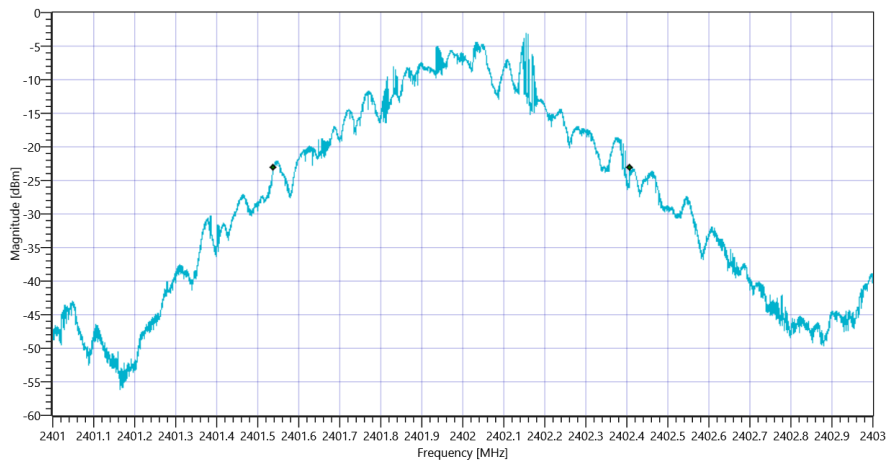
—

2483.50000

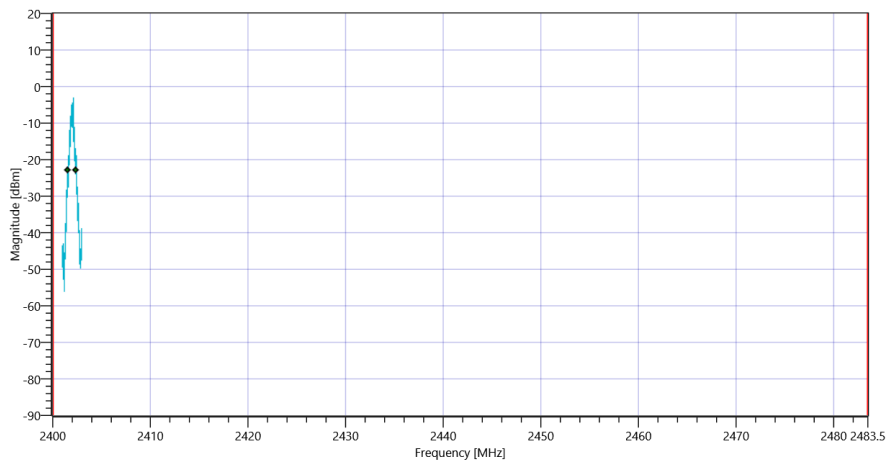
2402.4076

MHz

PASS



Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT Classic Basic rate 20dB\_09102019\_115631.png



Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT Classic Basic rate\_09102019\_115634.png

## Test at TX 2441 MHz

**RESULT: BT Classic Connection check**

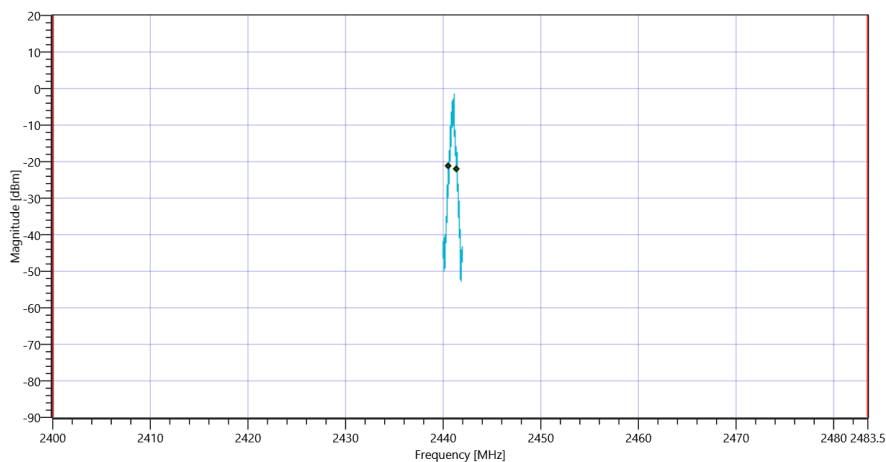
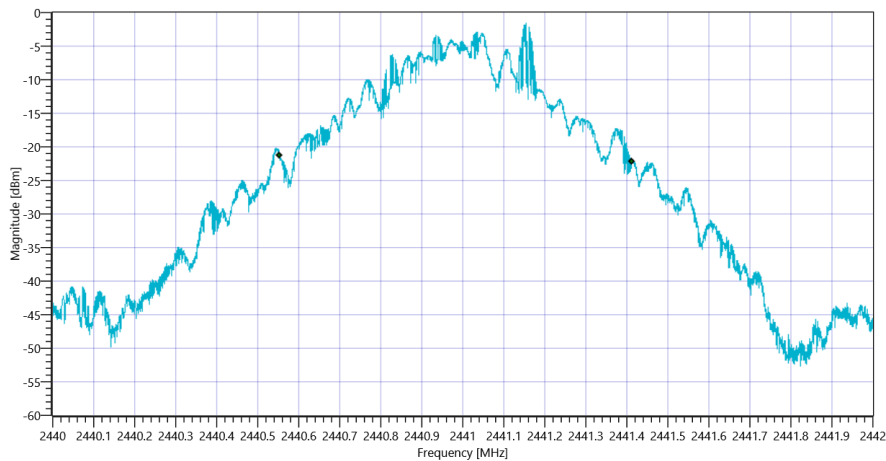
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Connection result	---	---	---	--	TCON

**READ SA SETTINGS:**

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	5.30   10.61   10				
Start [MHz]   Stop [MHz]	2440.000   2442.000				
RBW [MHz]   VBW [MHz]	0.020000   0.050000				
Detector   TraceMode	POS   MAXH				
Sweep: Time [ms]   Count   Points per Section   Type	50   200   10001   SWE				

**RESULT: TC\_VM\_FCC15247\_Bandwidth\_99PCT\_20dB\_DTS\_FHSS\_V01**

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	858	kHz	Information
T1 99%	2400.000000	---	2440.5542	MHz	PASS
T2 99%	---	2483.500000	2441.4126	MHz	PASS



**RESULT: TC\_VM\_FCC15247\_Bandwidth\_99PCT\_20dB\_DTS\_FHSS\_V01**

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	869	kHz	Information
T1 20dB	2400.000000	---	2440.5372	MHz	PASS

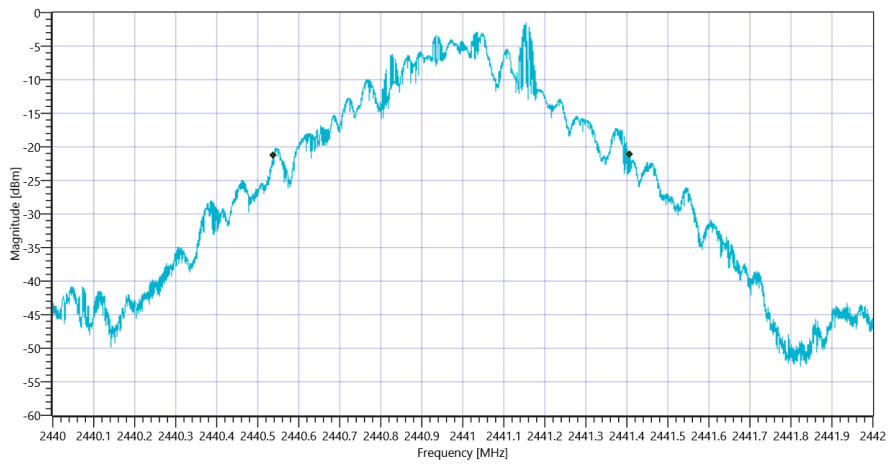
T2 20dB

2483.50000

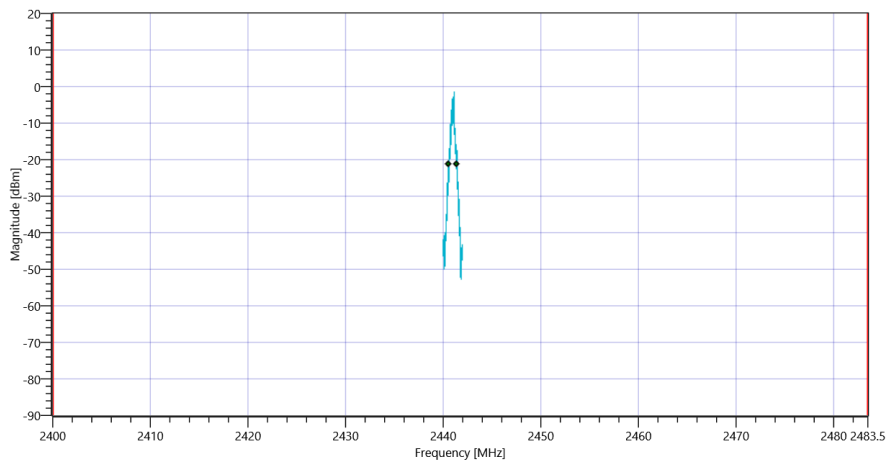
2441.4062

MHz

PASS



Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT Classic Basic rate 20dB\_09102019\_115706.png



Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT Classic Basic rate\_09102019\_115709.png

## Test at TX 2480 MHz

**RESULT: BT Classic Connection check**

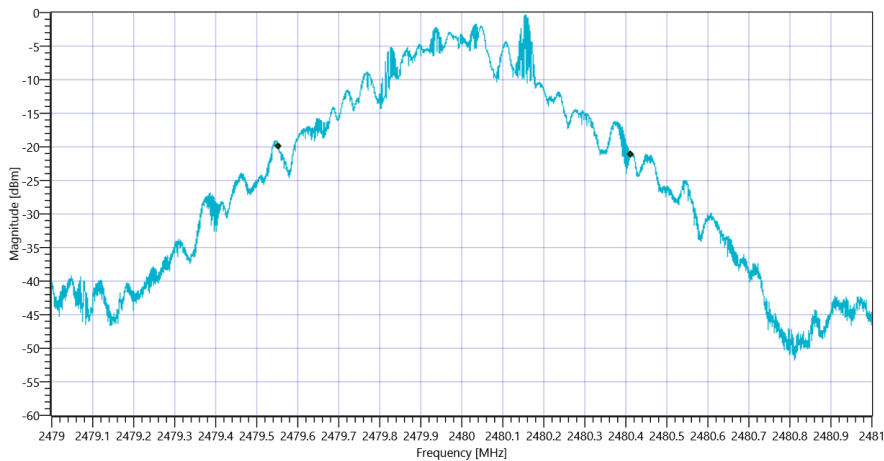
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Connection result	---	---	---	--	TCON

**READ SA SETTINGS:**

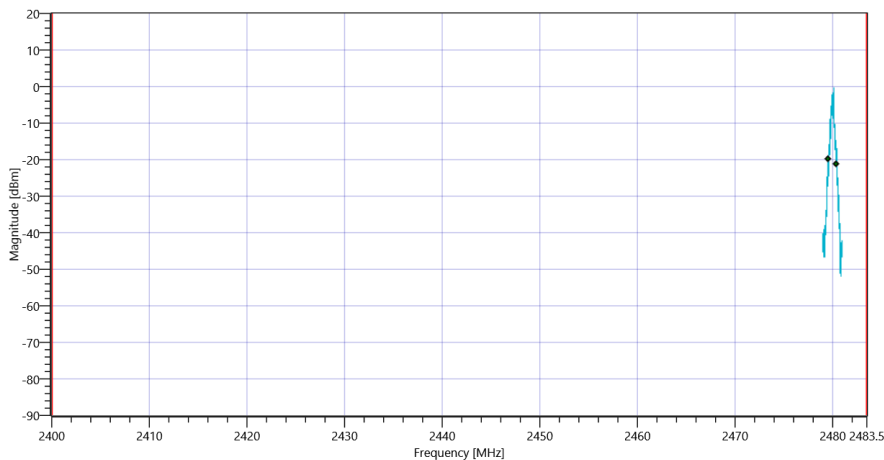
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	6.49   10.66   15				
Start [MHz]   Stop [MHz]	2479.000   2481.000				
RBW [MHz]   VBW [MHz]	0.020000   0.050000				
Detector   TraceMode	POS   MAXH				
Sweep: Time [ms]   Count   Points per Section   Type	50   200   10001   SWE				

**RESULT: TC\_VM\_FCC15247\_Bandwidth\_99PCT\_20dB\_DTS\_FHSS\_V01**

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	859	kHz	Information
T1 99%	2400.000000	---	2479.5530	MHz	PASS
T2 99%	---	2483.500000	2480.4118	MHz	PASS



Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT Classic Basic rate 99PCT\_09102019\_115734.png



Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT Classic Basic rate\_09102019\_115737.png

**RESULT: TC\_VM\_FCC15247\_Bandwidth\_99PCT\_20dB\_DTS\_FHSS\_V01**

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	868	kHz	Information
T1 20dB	2400.000000	---	2479.5368	MHz	PASS



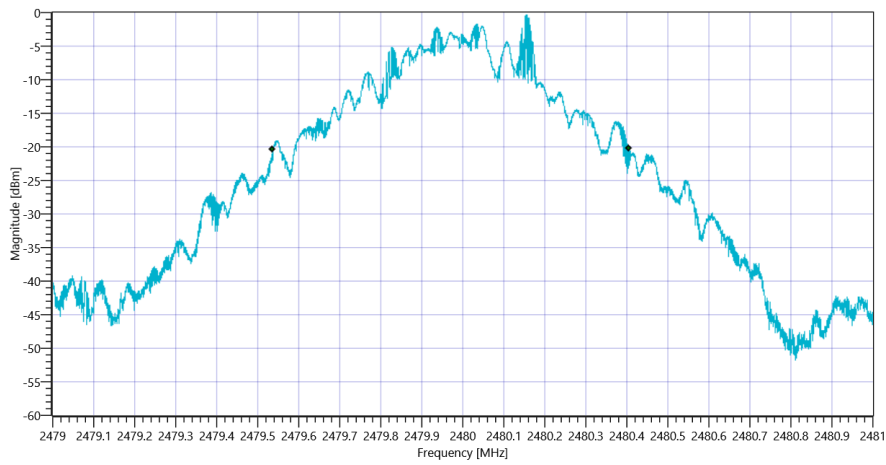
T2 20dB

2483.50000

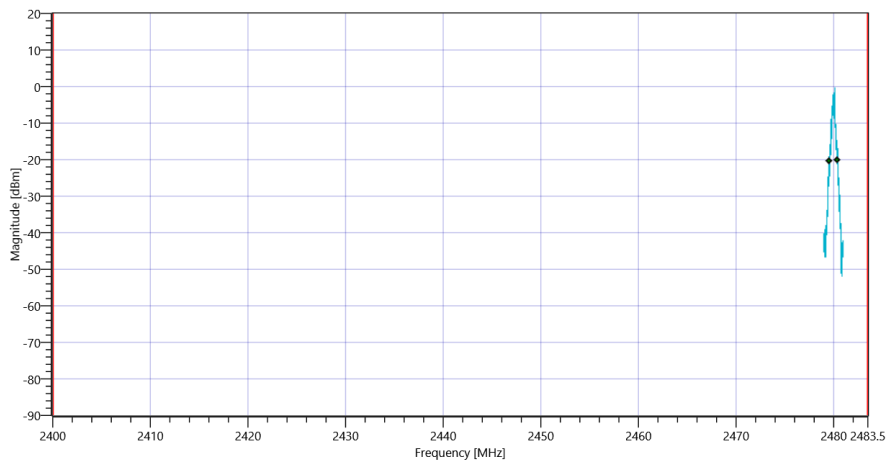
2480.4052

MHz

PASS



Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT Classic Basic rate 20dB\_09102019\_115741.png



Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT Classic Basic rate\_09102019\_115744.png

TEST FINISHED

General Verdict

09.10.2019 11:57:44 / RT: 112 s

PASS

## 6. FCC Part 15.247 TX Spurious Conducted ~ BT Classic Basic rate

Test References	
TC Start	09.10.2019 12:56:24
System Version	1.0.0.21
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.
Class / TC Version / TC ID	TC_VM_FCC15247_TX_Emissions_Conducted_V01 Version: 0.0.1   TCID_FCC15247_8
My Description	FCC 15.247 TX Emissions Conducted FHSS - BT Classic Basic Rate
Add. Information	

Test Parameter	
Technology to test	BT Classic Basic rate
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	True   Freq [MHz] 2402
Frequency mid to test	True   Freq [MHz] 2441
Frequency high to test	True   Freq [MHz] 2480
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.70   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.40

## Test at TX 2402 MHz

RESULT: BT Classic Connection check

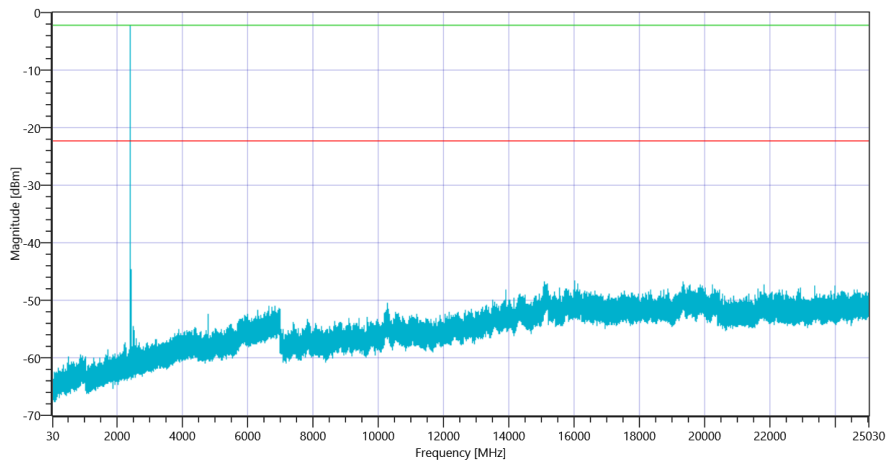
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Connection result	---	---	---	--	TCON

READ SA SETTINGS:

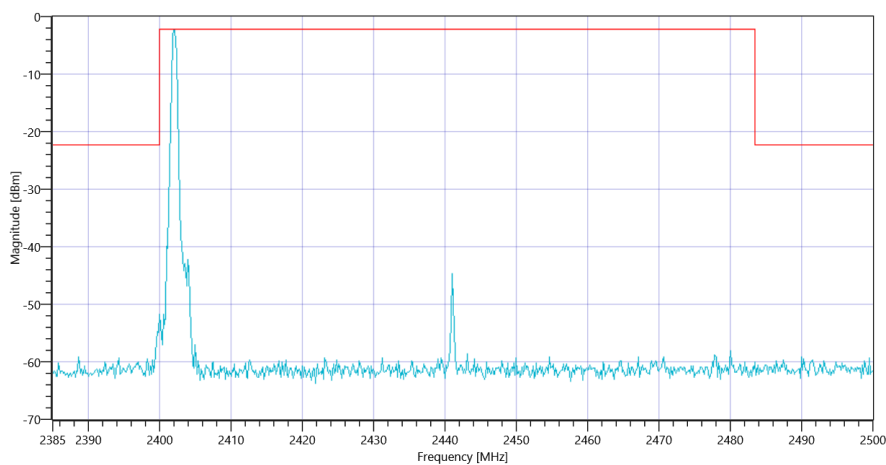
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	4.09   0   20				
Start [MHz]   Stop [MHz]	24530.000   25030.000				
RBW [MHz]   VBW [MHz]	0.100000   0.300000				
Detector   TraceMode	POS   MAXH				
Sweep: Time [ms]   Count   Points per Section   Type	500   8   3001   SWE				

RESULT: TC\_VM\_FCC15247\_TX\_Emissions\_Conducted\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2402.00 MHz	---	---	-2.22	dBm	Information
No peaks detected	---	---			PASS



Plot\_FCC Part 15.247 TX Spurious Conducted ~ BT Classic Basic rate 2402\_09102019\_130112.png



Plot\_FCC Part 15.247 TX Spurious Conducted ~ BT Classic Basic rate 2402\_09102019\_130114.png

## Test at TX 2441 MHz

RESULT: BT Classic Connection check

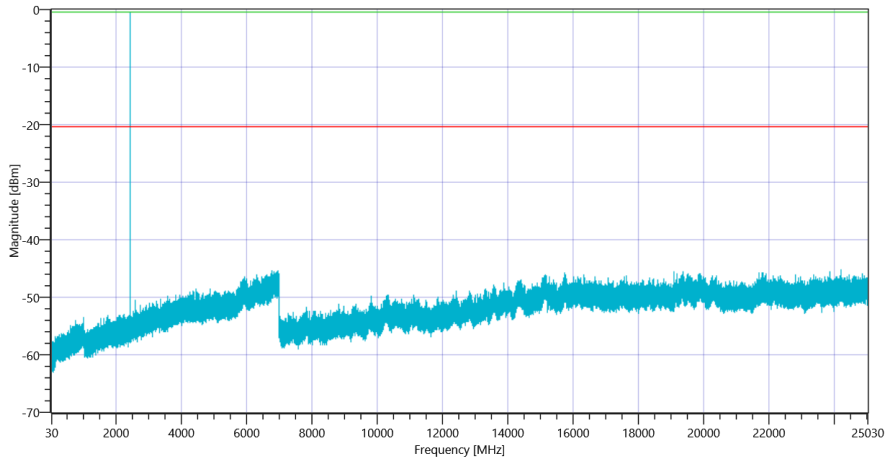
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Connection result	---	---	---	--	TCON

READ SA SETTINGS:

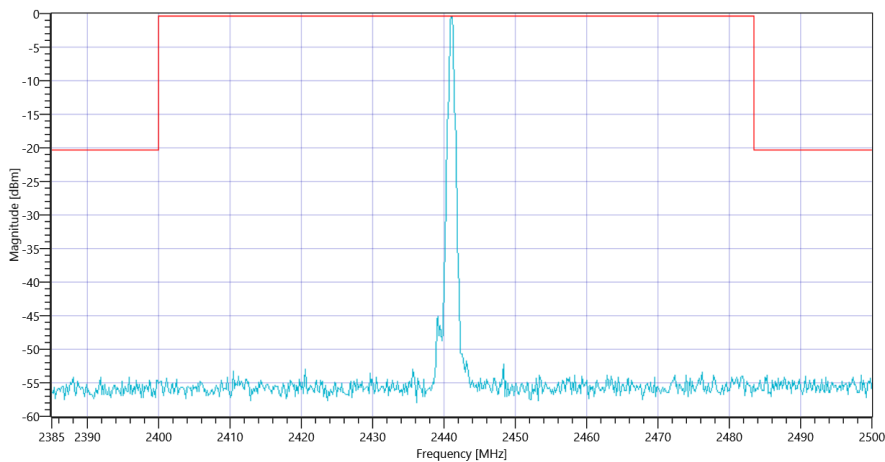
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	5.70   0   25				
Start [MHz]   Stop [MHz]	24530.000   25030.000				
RBW [MHz]   VBW [MHz]	0.100000   0.300000				
Detector   TraceMode	POS   MAXH				
Sweep: Time [ms]   Count   Points per Section   Type	500   8   3001   SWE				

RESULT: TC\_VM\_FCC15247\_TX\_Emissions\_Conducted\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2441.17 MHz	---	---	-0.36	dBm	Information
No peaks detected	---	---			PASS



Plot\_FCC Part 15.247 TX Spurious Conducted ~ BT Classic Basic rate 2441\_09102019\_130556.png



Plot\_FCC Part 15.247 TX Spurious Conducted ~ BT Classic Basic rate 2441\_09102019\_130559.png

## Test at TX 2480 MHz

RESULT: BT Classic Connection check

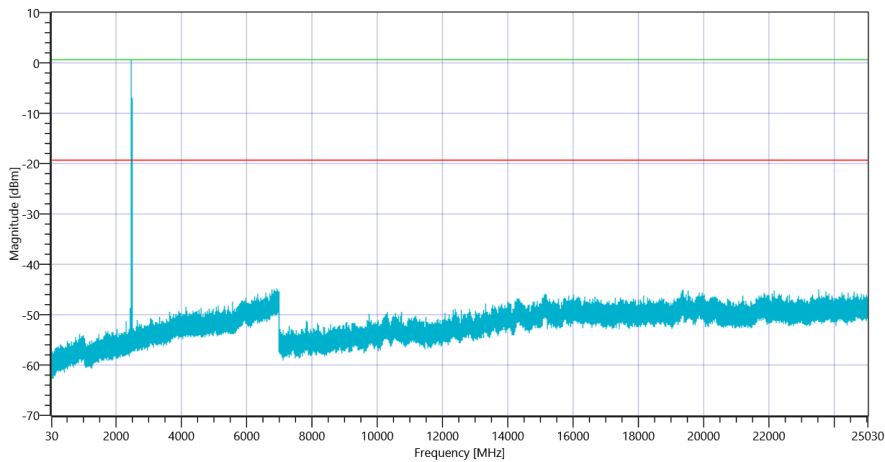
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Connection result	---	---	---	--	TCON

READ SA SETTINGS:

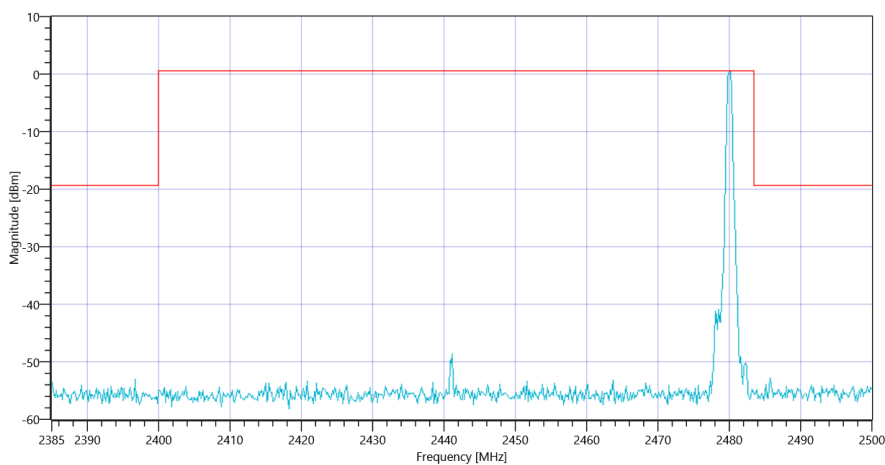
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	6.69   0   25				
Start [MHz]   Stop [MHz]	24530.000   25030.000				
RBW [MHz]   VBW [MHz]	0.100000   0.300000				
Detector   TraceMode	POS   MAXH				
Sweep: Time [ms]   Count   Points per Section   Type	500   8   3001   SWE				

RESULT: TC\_VM\_FCC15247\_TX\_Emissions\_Conducted\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2480.00 MHz	---	---	0.61	dBm	Information
No peaks detected	---	---			PASS



Plot\_FCC Part 15.247 TX Spurious Conducted ~ BT Classic Basic rate 2480\_09102019\_131041.png



Plot\_FCC Part 15.247 TX Spurious Conducted ~ BT Classic Basic rate 2480\_09102019\_131043.png

TEST FINISHED

General Verdict	09.10.2019 13:10:44 / RT: 860 s	PASS
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## 7. FCC Part 15.247 Maximum Peak Conducted Output Power FHSS ~ BT Classic EDR Pi/4DQPSK

Test References	
TC Start	09.10.2019 13:12:11
System Version	1.0.0.21
Test Specification	FCC Part 15.247
Test Method	
Class / TC Version / TC ID	TC_VM_FCC15247_Maximum_Peak_Conducted_Output_Power_FHSS_V01 Version: 0.0.1   TCID_FCC15247_4
My Description	FCC 15.247 Maximum Peak Output Power Conducted FHSS - BT Classic EDR Pi/4DQPSK
Add. Information	

Test Parameter	
Technology to test	BT Classic EDR Pi/4DQPSK
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	True   Freq [MHz] 2402
Frequency mid to test	True   Freq [MHz] 2441
Frequency high to test	True   Freq [MHz] 2480
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.70   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.40

## Test at TX 2402 MHz

RESULT: BT Classic Connection check

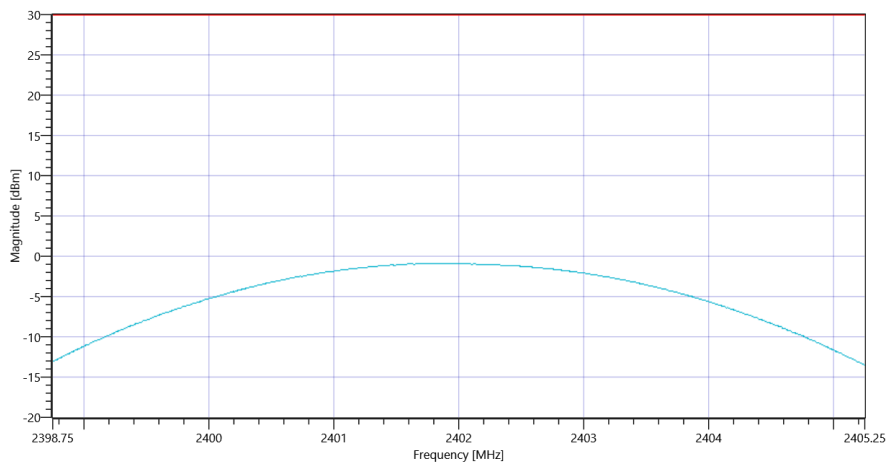
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Connection result	---	---	---	--	TCON

READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	8.27   10.49   15				
Start [MHz]   Stop [MHz]	2398.750   2405.250				
RBW [MHz]   VBW [MHz]	3.000000   10.000000				
Detector   TraceMode	POS   MAXH				
Sweep: Time [ms]   Count   Points per Section   Type	1000   10   1001   SWE				

RESULT: TC\_VM\_FCC15247\_Maximum\_Peak\_Conducted\_Output\_Power\_FHSS\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	30.00	-0.88	dBm	PASS
Peak Power	---	1000	0.816582	mW	PASS
Frequency at Peak	---	---	2401.903	MHz	Information



Plot\_FCC Part 15.247 Maximum Peak Conducted Output Power FHSS ~ BT Classic EDR Pi-4DQPSK\_09102019\_131240.png

## Test at TX 2441 MHz

RESULT: BT Classic Connection check

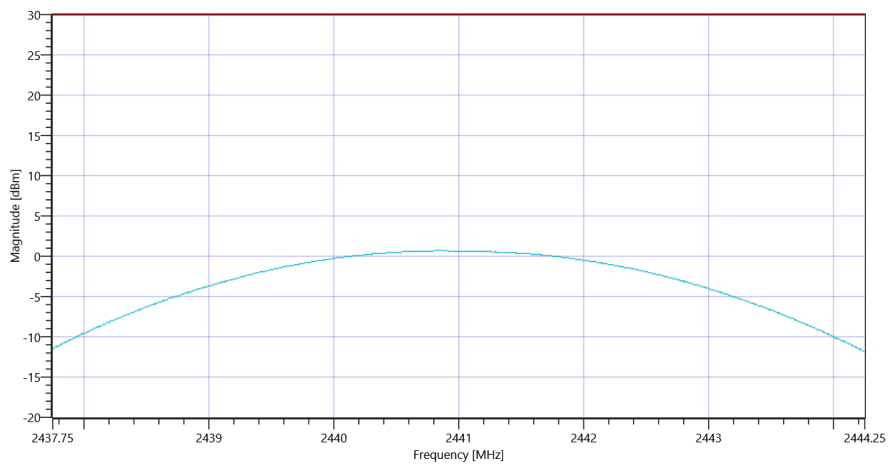
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Connection result	---	---	---	--	TCON

READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	9.98   10.61   15				
Start [MHz]   Stop [MHz]	2437.750   2444.250				
RBW [MHz]   VBW [MHz]	3.000000   10.000000				
Detector   TraceMode	POS   MAXH				
Sweep: Time [ms]   Count   Points per Section   Type	1000   10   1001   SWE				

RESULT: TC\_VM\_FCC15247\_Maximum\_Peak\_Conducted\_Output\_Power\_FHSS\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	30.00	0.68	dBm	PASS
Peak Power	---	1000	1.169499	mW	PASS
Frequency at Peak	---	---	2440.838	MHz	Information



Plot\_FCC Part 15.247 Maximum Peak Conducted Output Power FHSS ~ BT Classic EDR Pi-4DQPSK\_09102019\_131304.png



## Test at TX 2480 MHz

**RESULT: BT Classic Connection check**

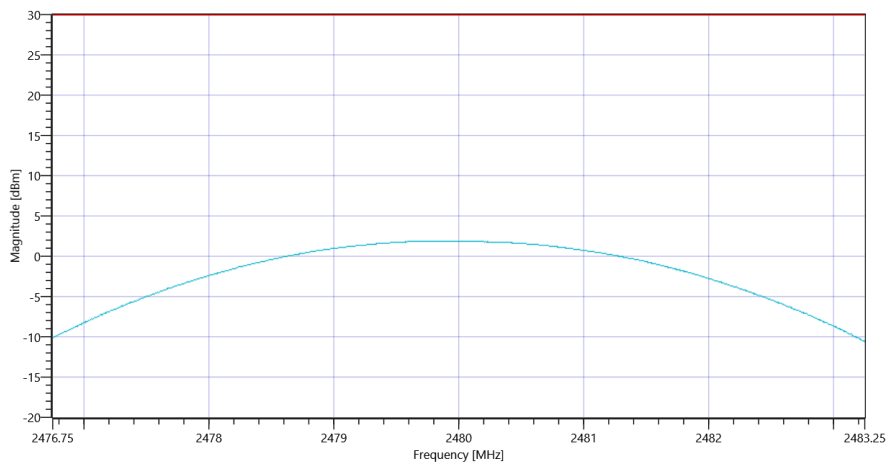
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Connection result	---	---	---	--	TCON

**READ SA SETTINGS:**

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	11.17   10.66   20				
Start [MHz]   Stop [MHz]	2476.750   2483.250				
RBW [MHz]   VBW [MHz]	3.000000   10.000000				
Detector   TraceMode	POS   MAXH				
Sweep: Time [ms]   Count   Points per Section   Type	1000   10   1001   SWE				

**RESULT: TC\_VM\_FCC15247\_Maximum\_Peak\_Conducted\_Output\_Power\_FHSS\_V01**

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	30.00	1.88	dBm	PASS
Peak Power	---	1000	1.5417	mW	PASS
Frequency at Peak	---	---	2479.825	MHz	Information



Plot\_FCC Part 15.247 Maximum Peak Conducted Output Power FHSS ~ BT Classic EDR Pi-4DQPSK\_09102019\_131328.png

**TEST FINISHED**

General Verdict

09.10.2019 13:13:28 / RT: 77 s

PASS

## 8. FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT Classic EDR Pi/4DQPSK

Test References	
TC Start	09.10.2019 13:16:27
System Version	1.0.0.21
Test Specification	FCC Part 15.247
Test Method	
Class / TC Version / TC ID	TC_VM_FCC15247_Bandwidth_99PCT_20dB_DTS_FHSS_V01 Version: 0.0.2   TCID_FCC15247_2
My Description	FCC 15.247 Bandwidth 99PCT - 20dB FHSS - BT Classic EDR Pi/4DQPSK
Add. Information	

Test Parameter	
Technology to test	BT Classic EDR Pi/4DQPSK
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	True   Freq [MHz] 2402
Frequency mid to test	True   Freq [MHz] 2441
Frequency high to test	True   Freq [MHz] 2480
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.70   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.40

## Test at TX 2402 MHz

RESULT: BT Classic Connection check

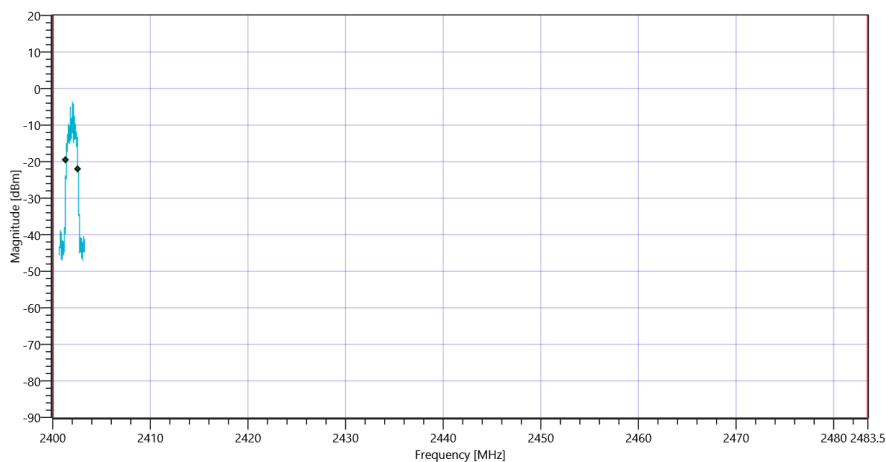
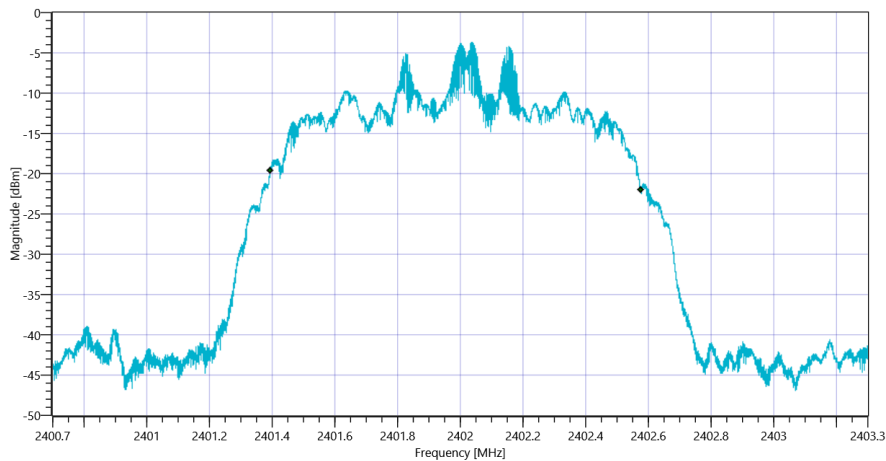
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Connection result	---	---	---	--	TCON

READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	3.40   10.49   10				
Start [MHz]   Stop [MHz]	2400.700   2403.300				
RBW [MHz]   VBW [MHz]	0.030000   0.100000				
Detector   TraceMode	POS   MAXH				
Sweep: Time [ms]   Count   Points per Section   Type	50   200   10001   SWE				

RESULT: TC\_VM\_FCC15247\_Bandwidth\_99PCT\_20dB\_DTS\_FHSS\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	1182	kHz	Information
T1 99%	2400.000000	---	2401.3948	MHz	PASS
T2 99%	---	2483.500000	2402.5771	MHz	PASS



RESULT: TC\_VM\_FCC15247\_Bandwidth\_99PCT\_20dB\_DTS\_FHSS\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	1270	kHz	Information
T1 20dB	2400.000000	---	2401.3620	MHz	PASS

T2 20dB

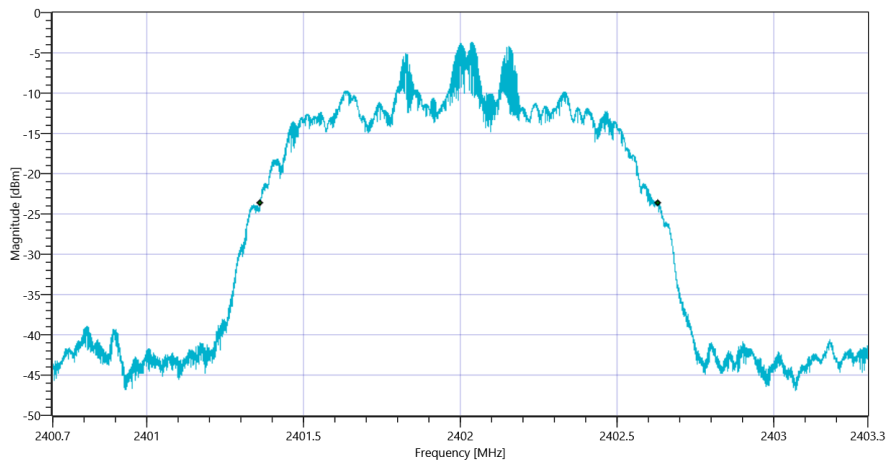
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2483.50000

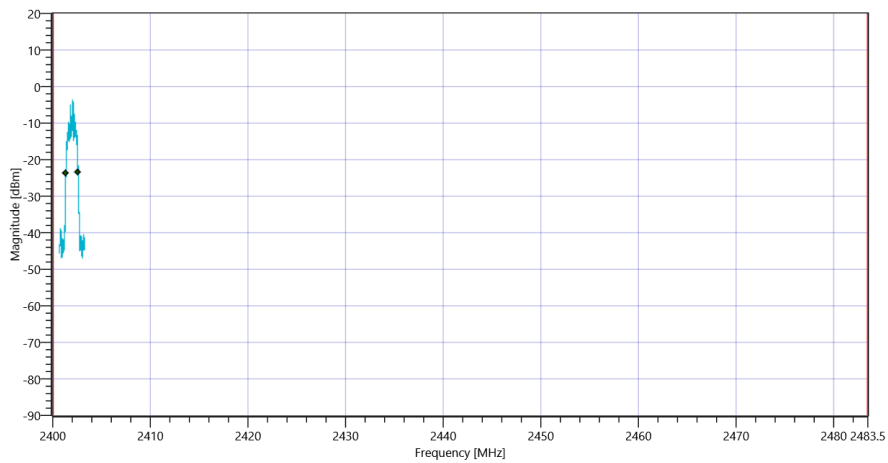
2402.6315

MHz

PASS



Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT Classic EDR Pi-4DQPSK 20dB\_09102019\_131708.png



Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT Classic EDR Pi-4DQPSK\_09102019\_131711.png

## Test at TX 2441 MHz

### RESULT: BT Classic Connection check

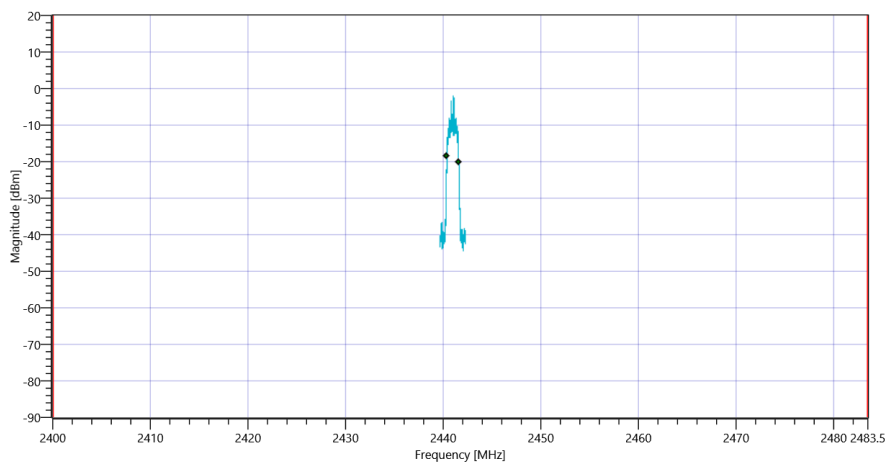
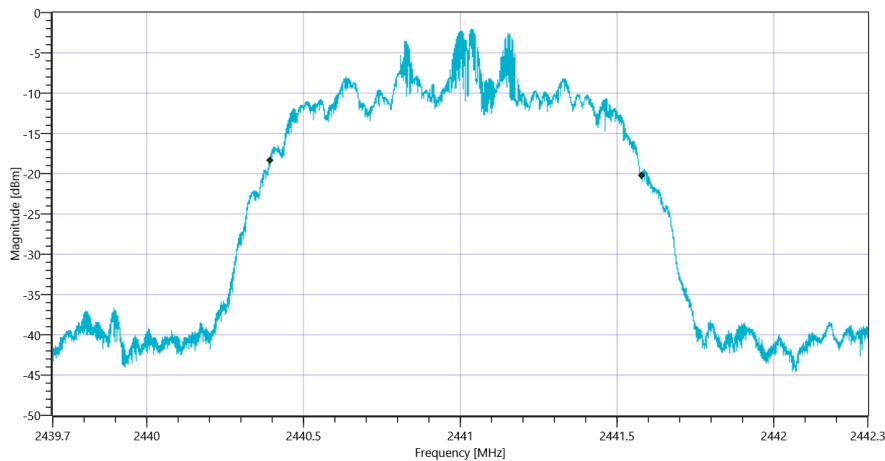
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Connection result	---	---	---	--	TCON

### READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	4.90   10.61   10				
Start [MHz]   Stop [MHz]	2439.700   2442.300				
RBW [MHz]   VBW [MHz]	0.030000   0.100000				
Detector   TraceMode	POS   MAXH				
Sweep: Time [ms]   Count   Points per Section   Type	50   200   10001   SWE				

### RESULT: TC\_VM\_FCC15247\_Bandwidth\_99PCT\_20dB\_DTS\_FHSS\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	1187	kHz	Information
T1 99%	2400.000000	---	2440.3932	MHz	PASS
T2 99%	---	2483.500000	2441.5805	MHz	PASS



### RESULT: TC\_VM\_FCC15247\_Bandwidth\_99PCT\_20dB\_DTS\_FHSS\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	1271	kHz	Information
T1 20dB	2400.000000	---	2440.3620	MHz	PASS

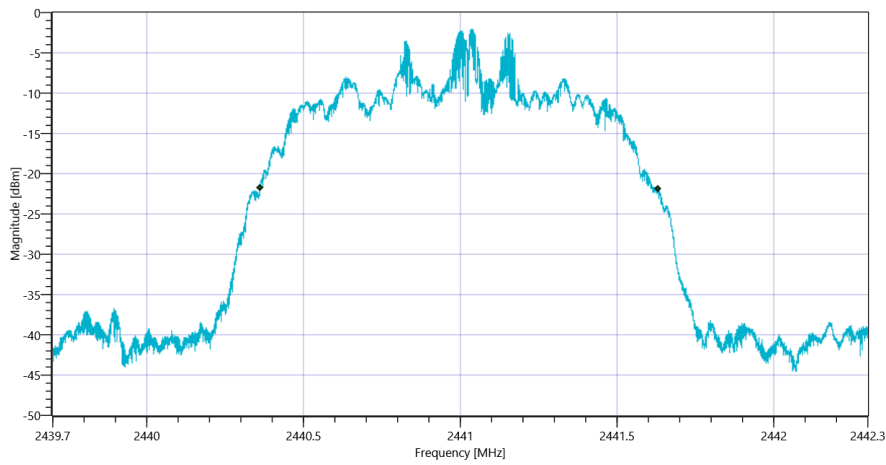
T2 20dB

2483.50000

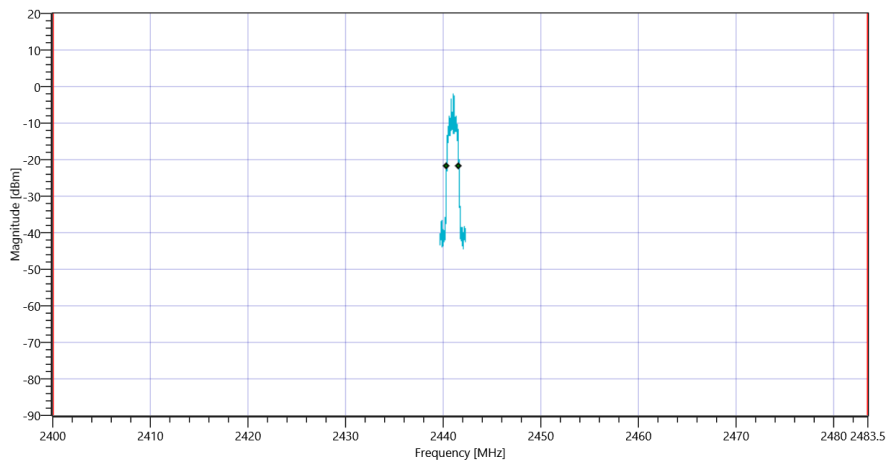
2441.6328

MHz

PASS



Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT Classic EDR Pi-4DQPSK 20dB\_09102019\_131742.png



Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT Classic EDR Pi-4DQPSK\_09102019\_131745.png

## Test at TX 2480 MHz

RESULT: BT Classic Connection check

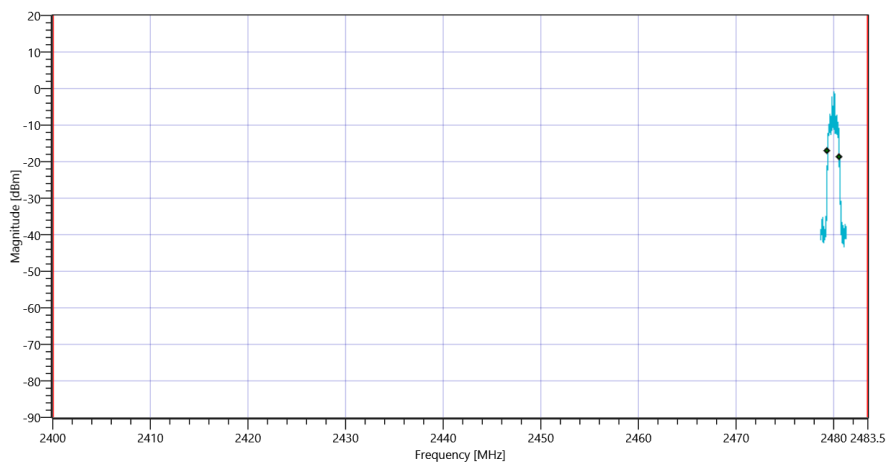
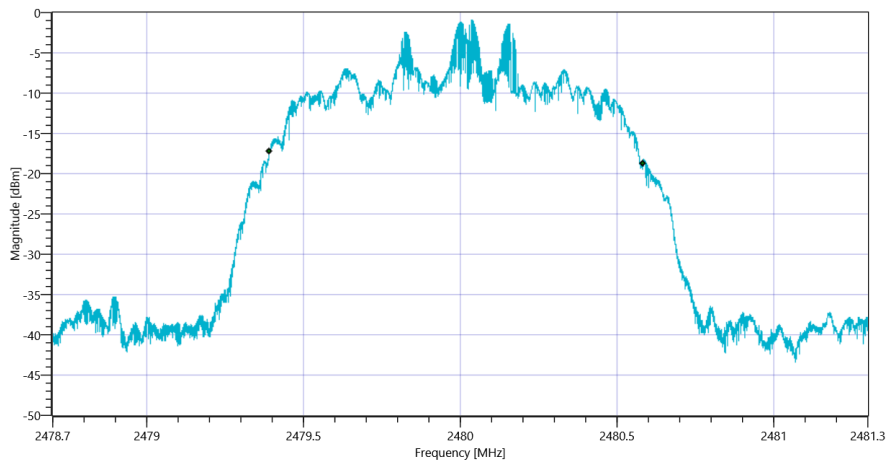
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Connection result	---	---	---	--	TCON

READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	5.96   10.66   15				
Start [MHz]   Stop [MHz]	2478.700   2481.300				
RBW [MHz]   VBW [MHz]	0.030000   0.100000				
Detector   TraceMode	POS   MAXH				
Sweep: Time [ms]   Count   Points per Section   Type	50   200   10001   SWE				

RESULT: TC\_VM\_FCC15247\_Bandwidth\_99PCT\_20dB\_DTS\_FHSS\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	1189	kHz	Information
T1 99%	2400.000000	---	2479.3924	MHz	PASS
T2 99%	---	2483.500000	2480.5818	MHz	PASS



RESULT: TC\_VM\_FCC15247\_Bandwidth\_99PCT\_20dB\_DTS\_FHSS\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	1273	kHz	Information
T1 20dB	2400.000000	---	2479.3622	MHz	PASS

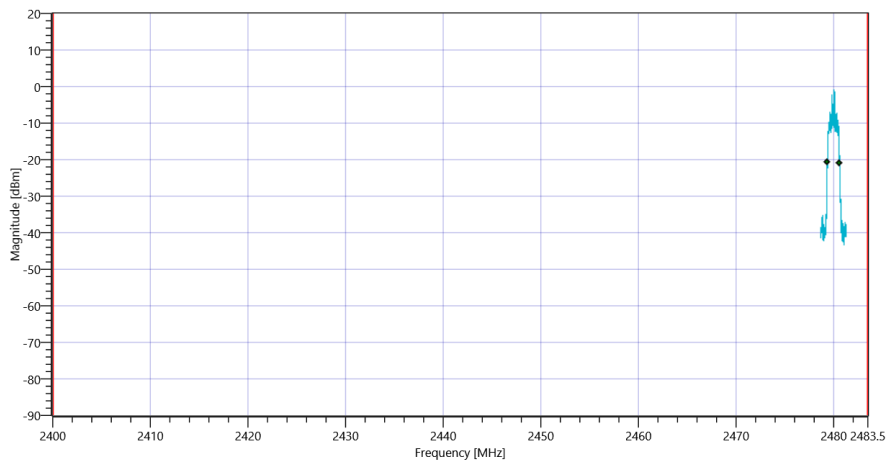
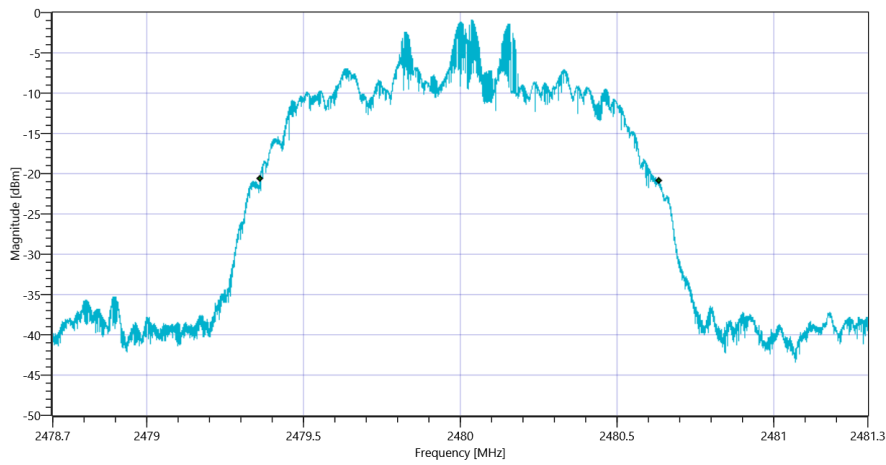
T2 20dB

2483.50000

2480.6354

MHz

PASS



TEST FINISHED

General Verdict

09.10.2019 13:18:21 / RT: 114 s

PASS



## 9. FCC Part 15.247 TX Spurious Conducted ~ BT Classic EDR Pi/4DQPSK

Test References	
TC Start	09.10.2019 14:02:56
System Version	1.0.0.21
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.
Class / TC Version / TC ID	TC_VM_FCC15247_TX_Emissions_Conducted_V01 Version: 0.0.1   TCID_FCC15247_8
My Description	FCC 15.247 TX Emissions Conducted FHSS - BT Classic EDR Pi/4DQPSK
Add. Information	

Test Parameter	
Technology to test	BT Classic EDR Pi/4DQPSK
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	True   Freq [MHz] 2402
Frequency mid to test	True   Freq [MHz] 2441
Frequency high to test	True   Freq [MHz] 2480
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.70   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.40

## Test at TX 2402 MHz

RESULT: BT Classic Connection check

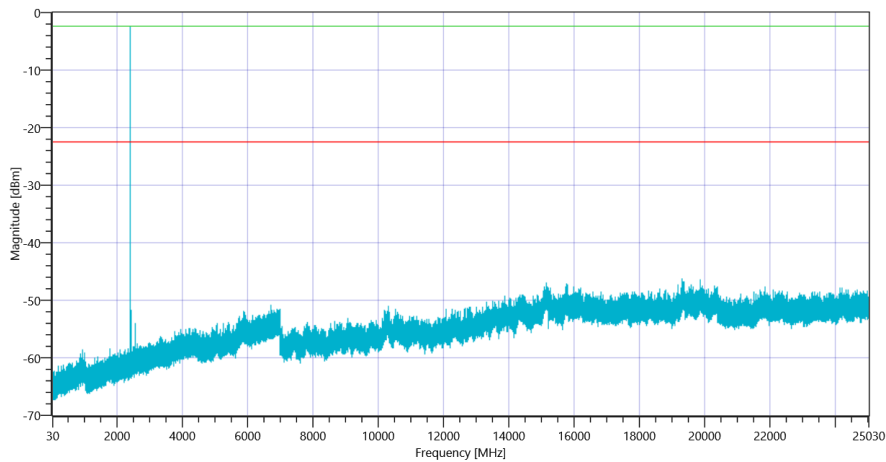
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Connection result	---	---	---	--	TCON

READ SA SETTINGS:

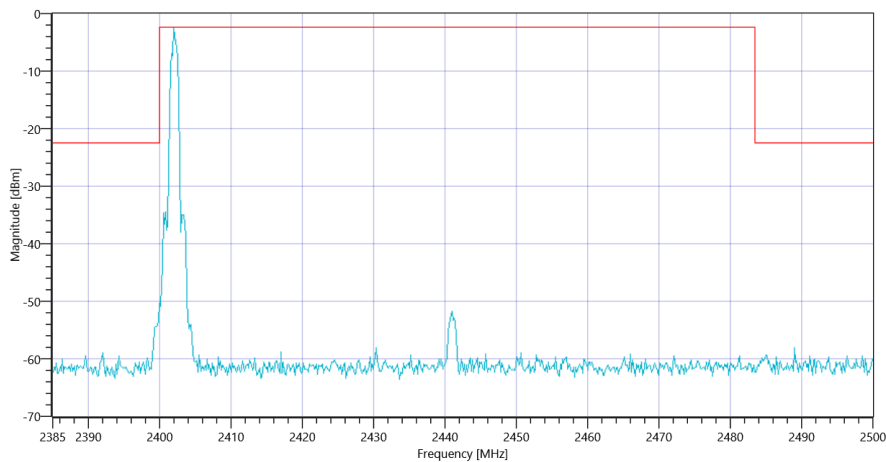
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	3.29   0   20				
Start [MHz]   Stop [MHz]	24530.000   25030.000				
RBW [MHz]   VBW [MHz]	0.100000   0.300000				
Detector   TraceMode	POS   MAXH				
Sweep: Time [ms]   Count   Points per Section   Type	500   8   3001   SWE				

RESULT: TC\_VM\_FCC15247\_TX\_Emissions\_Conducted\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2402.00 MHz	---	---	-2.42	dBm	Information
No peaks detected	---	---			PASS



Plot\_FCC Part 15.247 TX Spurious Conducted ~ BT Classic EDR Pi-4QPSK 2402\_09102019\_140743.png



Plot\_FCC Part 15.247 TX Spurious Conducted ~ BT Classic EDR Pi-4QPSK 2402\_09102019\_140745.png

## Test at TX 2441 MHz

RESULT: BT Classic Connection check

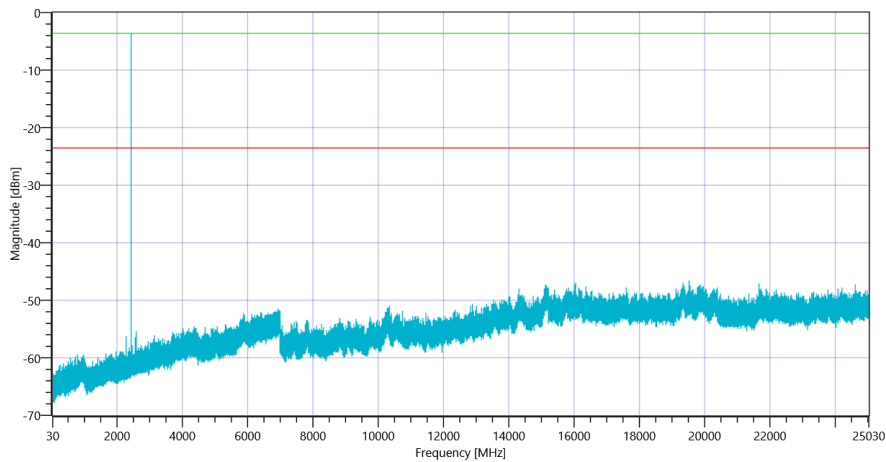
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Connection result	---	---	---	--	TCON

READ SA SETTINGS:

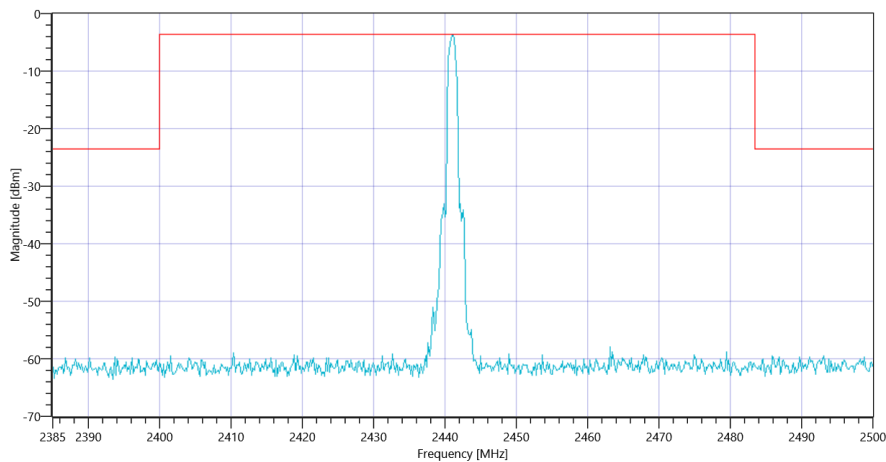
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	4.95   0   20				
Start [MHz]   Stop [MHz]	24530.000   25030.000				
RBW [MHz]   VBW [MHz]	0.100000   0.300000				
Detector   TraceMode	POS   MAXH				
Sweep: Time [ms]   Count   Points per Section   Type	500   8   3001   SWE				

RESULT: TC\_VM\_FCC15247\_TX\_Emissions\_Conducted\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2441.00 MHz	---	---	-3.57	dBm	Information
No peaks detected	---	---			PASS



Plot\_FCC Part 15.247 TX Spurious Conducted ~ BT Classic EDR Pi-4QPSK 2441\_09102019\_141227.png



Plot\_FCC Part 15.247 TX Spurious Conducted ~ BT Classic EDR Pi-4QPSK 2441\_09102019\_141230.png

## Test at TX 2480 MHz

RESULT: BT Classic Connection check

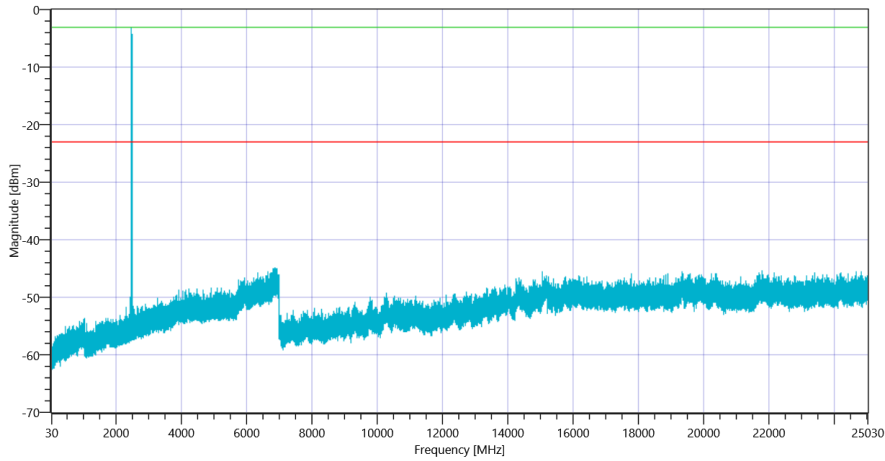
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Connection result	---	---	---	--	TCON

READ SA SETTINGS:

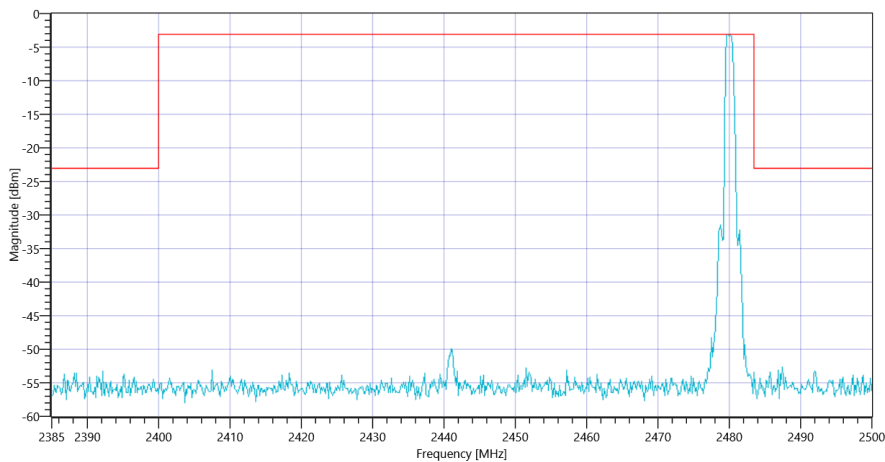
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	6.05   0   25				
Start [MHz]   Stop [MHz]	24530.000   25030.000				
RBW [MHz]   VBW [MHz]	0.100000   0.300000				
Detector   TraceMode	POS   MAXH				
Sweep: Time [ms]   Count   Points per Section   Type	500   8   3001   SWE				

RESULT: TC\_VM\_FCC15247\_TX\_Emissions\_Conducted\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2479.83 MHz	---	---	-3.05	dBm	Information
No peaks detected	---	---			PASS



Plot\_FCC Part 15.247 TX Spurious Conducted ~ BT Classic EDR Pi-4QPSK 2480\_09102019\_141712.png



Plot\_FCC Part 15.247 TX Spurious Conducted ~ BT Classic EDR Pi-4QPSK 2480\_09102019\_141715.png

TEST FINISHED

General Verdict

09.10.2019 14:17:16 / RT: 860 s

PASS

## 10. FCC Part 15.247 Maximum Peak Conducted Output Power FHSS ~ BT Classic EDR 8DPSK

Test References	
TC Start	09.10.2019 13:30:06
System Version	1.0.0.21
Test Specification	FCC Part 15.247
Test Method	
Class / TC Version / TC ID	TC_VM_FCC15247_Maximum_Peak_Conducted_Output_Power_FHSS_V01 Version: 0.0.1   TCID_FCC15247_4
My Description	FCC 15.247 Maximum Peak Output Power Conducted FHSS - BT Classic EDR 8DPSK
Add. Information	

Test Parameter	
Technology to test	BT Classic EDR 8DPSK
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	True   Freq [MHz] 2402
Frequency mid to test	True   Freq [MHz] 2441
Frequency high to test	True   Freq [MHz] 2480
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.70   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.40

## Test at TX 2402 MHz

RESULT: BT Classic Connection check

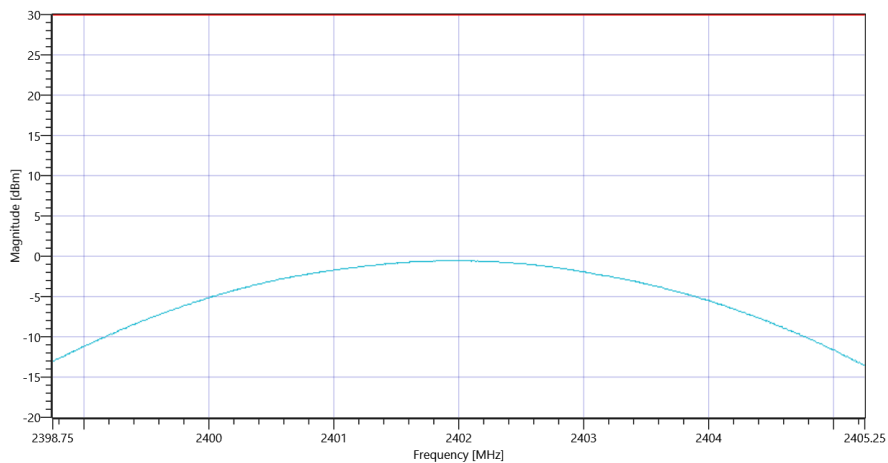
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Connection result	---	---	---	--	TCON

READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	7.98   10.49   15				
Start [MHz]   Stop [MHz]	2398.750   2405.250				
RBW [MHz]   VBW [MHz]	3.000000   10.000000				
Detector   TraceMode	POS   MAXH				
Sweep: Time [ms]   Count   Points per Section   Type	1000   10   1001   SWE				

RESULT: TC\_VM\_FCC15247\_Maximum\_Peak\_Conducted\_Output\_Power\_FHSS\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	30.00	-0.55	dBm	PASS
Peak Power	---	1000	0.881049	mW	PASS
Frequency at Peak	---	---	2401.974	MHz	Information



Plot\_FCC Part 15.247 Maximum Peak Conducted Output Power FHSS ~ BT Classic EDR 8DPSK\_09102019\_133042.png

## Test at TX 2441 MHz

RESULT: BT Classic Connection check

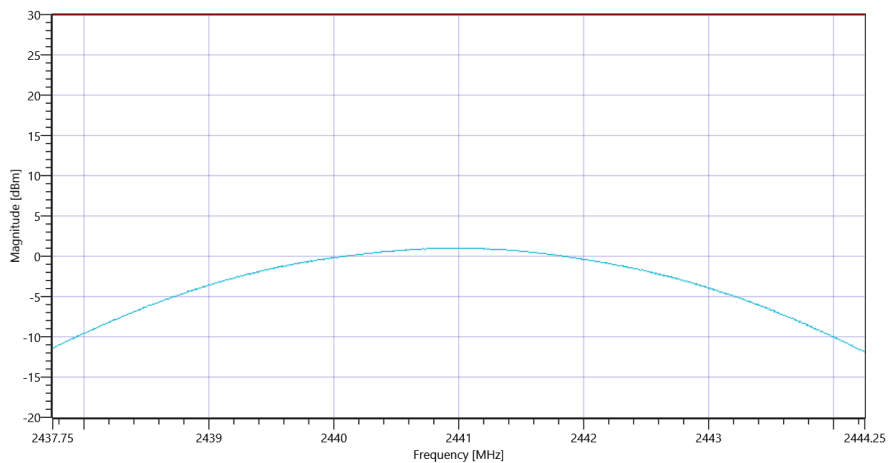
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Connection result	---	---	---	--	TCON

READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	9.85   10.61   15				
Start [MHz]   Stop [MHz]	2437.750   2444.250				
RBW [MHz]   VBW [MHz]	3.000000   10.000000				
Detector   TraceMode	POS   MAXH				
Sweep: Time [ms]   Count   Points per Section   Type	1000   10   1001   SWE				

RESULT: TC\_VM\_FCC15247\_Maximum\_Peak\_Conducted\_Output\_Power\_FHSS\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	30.00	1	dBm	PASS
Peak Power	---	1000	1.258925	mW	PASS
Frequency at Peak	---	---	2440.974	MHz	Information



Plot\_FCC Part 15.247 Maximum Peak Conducted Output Power FHSS ~ BT Classic EDR 8DPSK\_09102019\_133106.png

## Test at TX 2480 MHz

RESULT: BT Classic Connection check

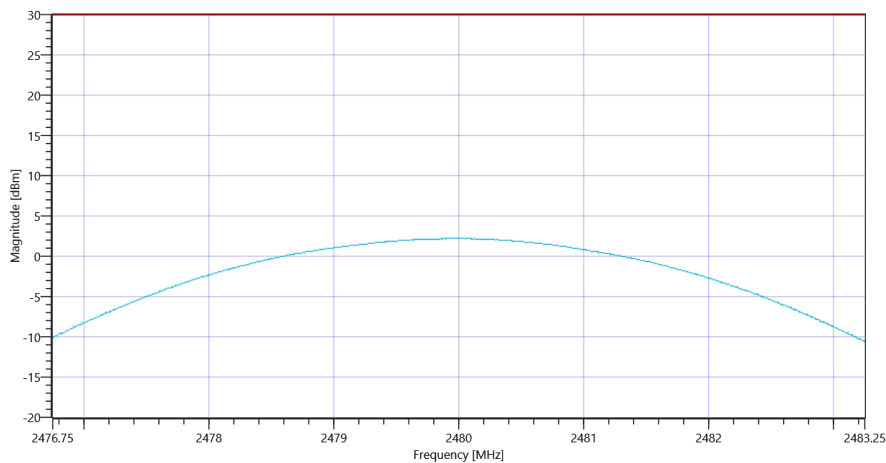
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Connection result	---	---	---	--	TCON

READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	10.94   10.66   20				
Start [MHz]   Stop [MHz]	2476.750   2483.250				
RBW [MHz]   VBW [MHz]	3.000000   10.000000				
Detector   TraceMode	POS   MAXH				
Sweep: Time [ms]   Count   Points per Section   Type	1000   10   1001   SWE				

RESULT: TC\_VM\_FCC15247\_Maximum\_Peak\_Conducted\_Output\_Power\_FHSS\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	30.00	2.2	dBm	PASS
Peak Power	---	1000	1.659587	mW	PASS
Frequency at Peak	---	---	2480	MHz	Information



TEST FINISHED

General Verdict

09.10.2019 13:31:30 / RT: 84 s

PASS



## 11. FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT Classic EDR 8DPSK

Test References	
TC Start	09.10.2019 13:34:33
System Version	1.0.0.21
Test Specification	FCC Part 15.247
Test Method	
Class / TC Version / TC ID	TC_VM_FCC15247_Bandwidth_99PCT_20dB_DTS_FHSS_V01 Version: 0.0.2   TCID_FCC15247_2
My Description	FCC 15.247 Bandwidth 99PCT - 20dB FHSS - BT Classic EDR 8DPSK
Add. Information	

Test Parameter	
Technology to test	BT Classic EDR 8DPSK
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	True   Freq [MHz] 2402
Frequency mid to test	True   Freq [MHz] 2441
Frequency high to test	True   Freq [MHz] 2480
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.70   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.40

## Test at TX 2402 MHz

RESULT: BT Classic Connection check

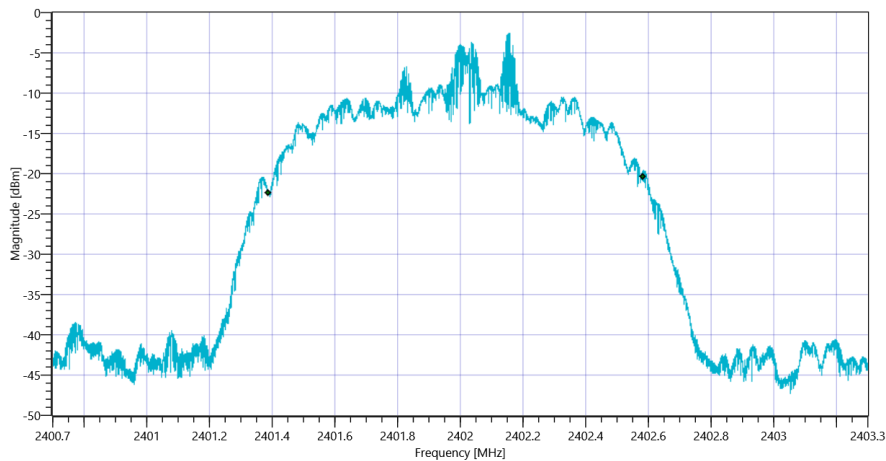
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Connection result	---	---	---	--	TCON

READ SA SETTINGS:

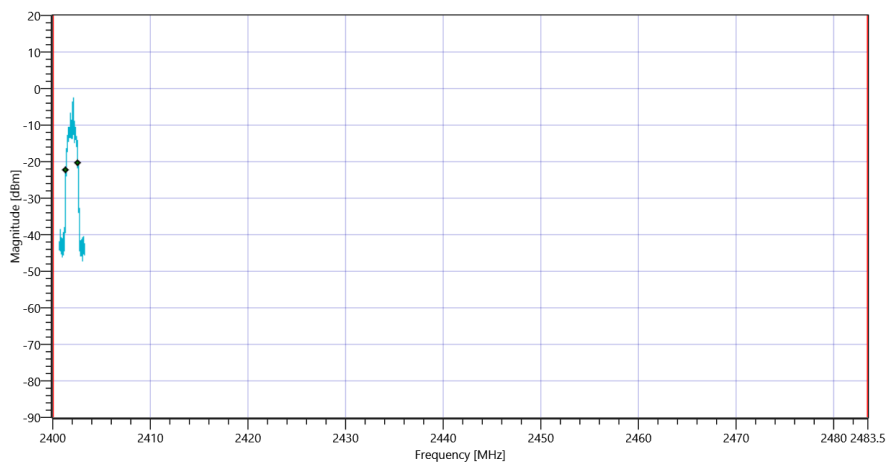
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	3.09   10.49   10				
Start [MHz]   Stop [MHz]	2400.700   2403.300				
RBW [MHz]   VBW [MHz]	0.030000   0.100000				
Detector   TraceMode	POS   MAXH				
Sweep: Time [ms]   Count   Points per Section   Type	50   200   10001   SWE				

RESULT: TC\_VM\_FCC15247\_Bandwidth\_99PCT\_20dB\_DTS\_FHSS\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	1194	kHz	Information
T1 99%	2400.000000	---	2401.3880	MHz	PASS
T2 99%	---	2483.500000	2402.5816	MHz	PASS



Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT Classic EDR 8DPSK\_09102019\_133507.png



Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT Classic EDR 8DPSK\_09102019\_133510.png

RESULT: TC\_VM\_FCC15247\_Bandwidth\_99PCT\_20dB\_DTS\_FHSS\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	1255	kHz	Information
T1 20dB	2400.000000	---	2401.3503	MHz	PASS

T2 20dB

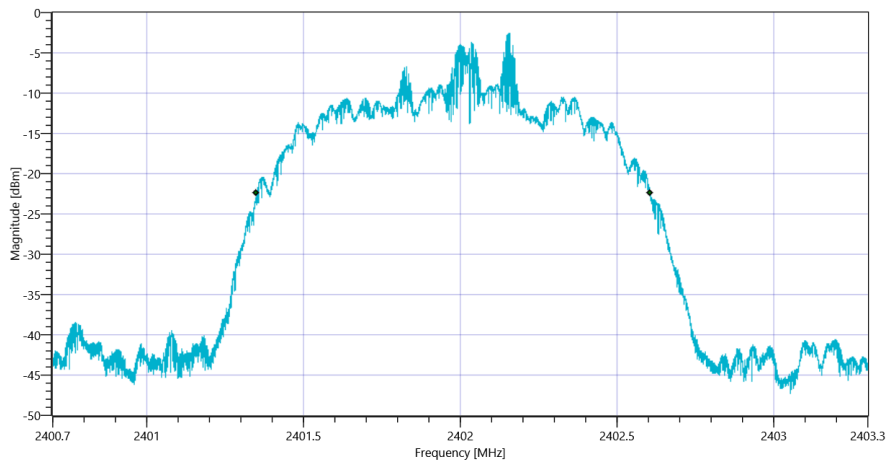
--

2483.50000

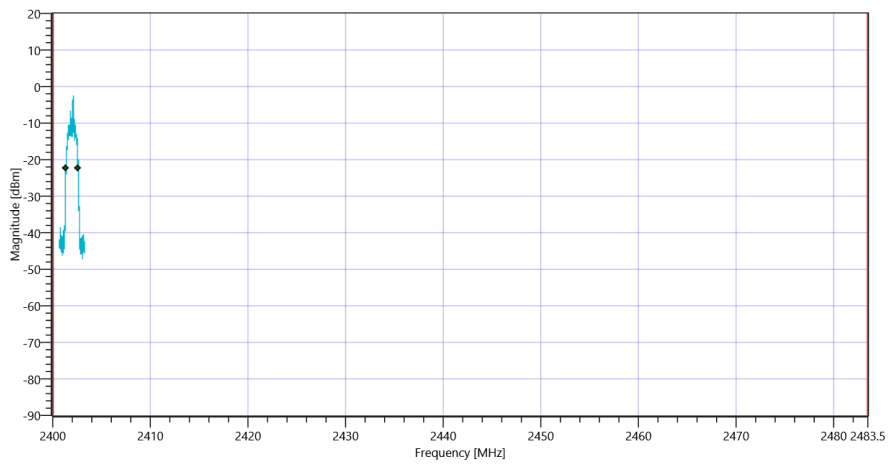
2402.6053

MHz

PASS



Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT Classic EDR 8DPSK 20dB\_09102019\_133514.png



Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT Classic EDR 8DPSK\_09102019\_133517.png

## Test at TX 2441 MHz

RESULT: BT Classic Connection check

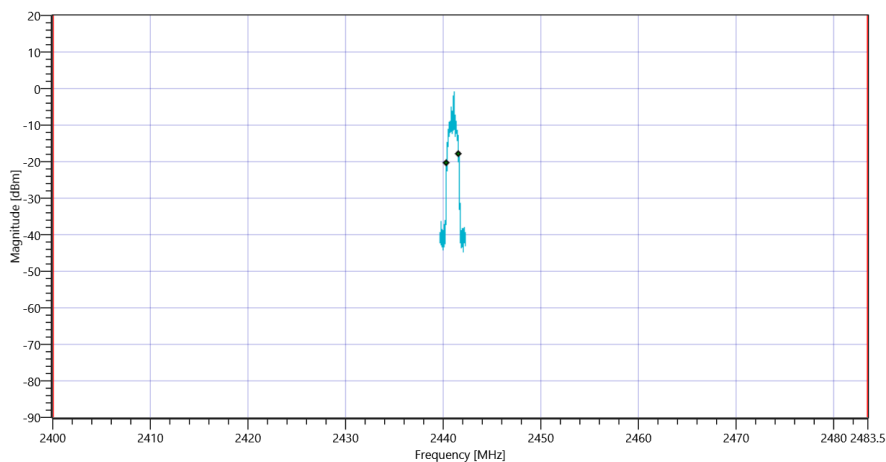
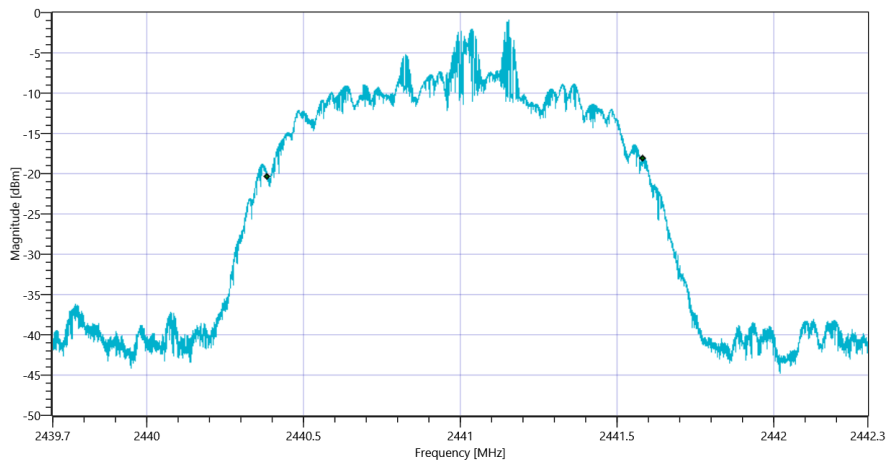
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Connection result	---	---	---	--	TCON

READ SA SETTINGS:

RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	4.64   10.61   10				
Start [MHz]   Stop [MHz]	2439.700   2442.300				
RBW [MHz]   VBW [MHz]	0.030000   0.100000				
Detector   TraceMode	POS   MAXH				
Sweep: Time [ms]   Count   Points per Section   Type	50   200   10001   SWE				

RESULT: TC\_VM\_FCC15247\_Bandwidth\_99PCT\_20dB\_DTS\_FHSS\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	1200	kHz	Information
T1 99%	2400.000000	---	2440.3839	MHz	PASS
T2 99%	---	2483.500000	2441.5842	MHz	PASS



RESULT: TC\_VM\_FCC15247\_Bandwidth\_99PCT\_20dB\_DTS\_FHSS\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	1257	kHz	Information
T1 20dB	2400.000000	---	2440.3492	MHz	PASS

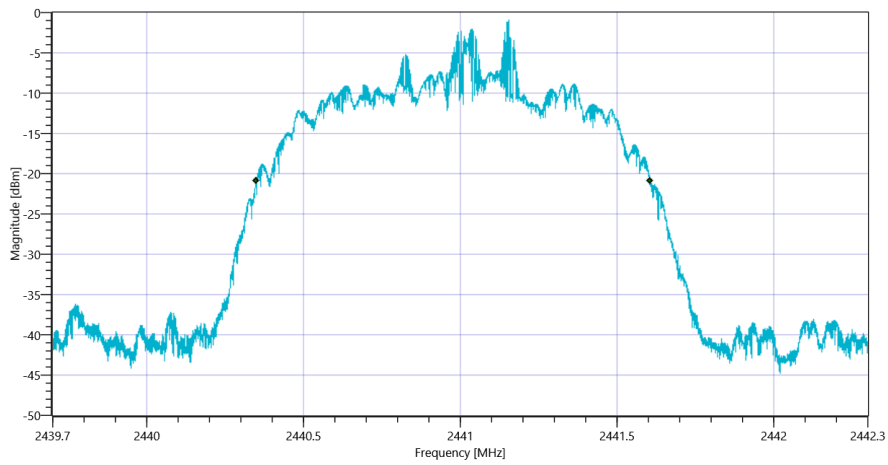
T2 20dB

2483.50000

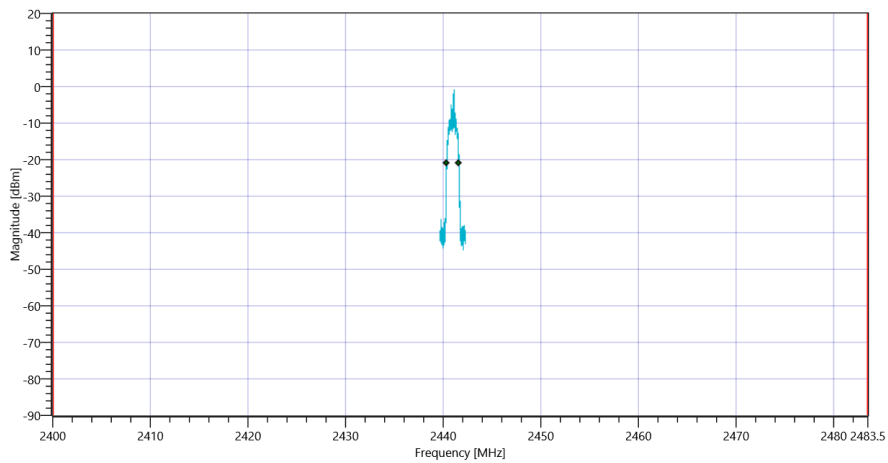
2441.6061

MHz

PASS



Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT Classic EDR 8DPSK 20dB\_09102019\_133549.png



Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT Classic EDR 8DPSK\_09102019\_133552.png

## Test at TX 2480 MHz

RESULT: BT Classic Connection check

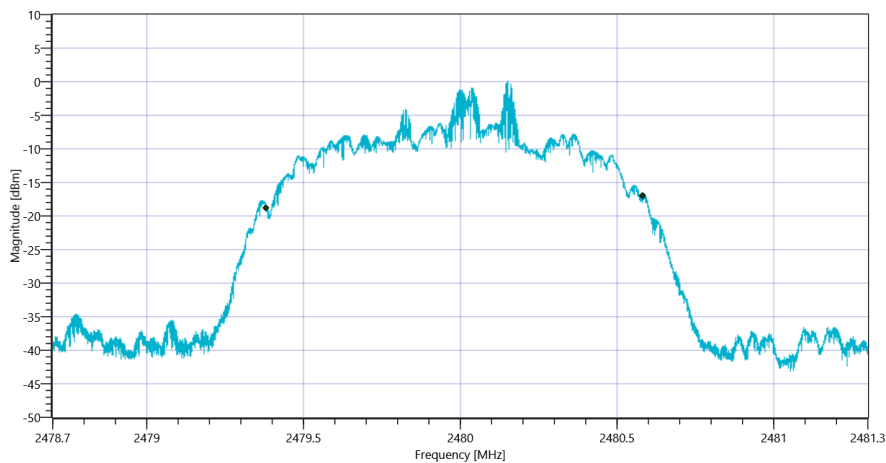
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Connection result	---	---	---	--	TCON

READ SA SETTINGS:

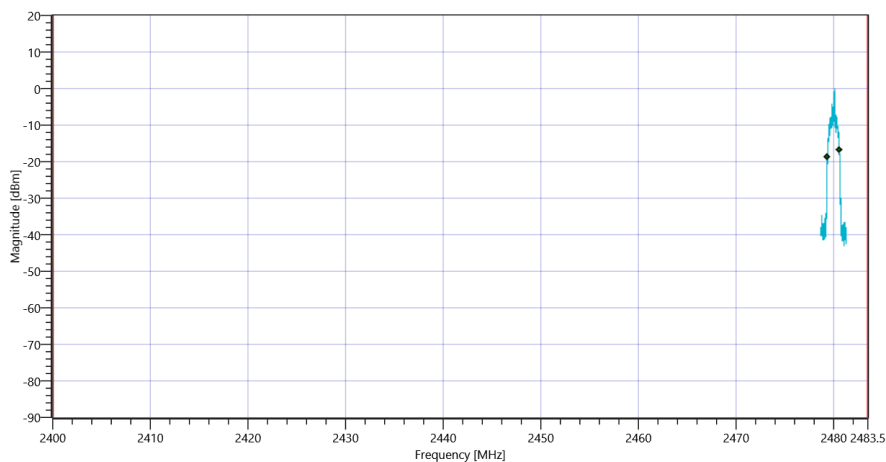
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	5.94   10.66   15				
Start [MHz]   Stop [MHz]	2478.700   2481.300				
RBW [MHz]   VBW [MHz]	0.030000   0.100000				
Detector   TraceMode	POS   MAXH				
Sweep: Time [ms]   Count   Points per Section   Type	50   200   10001   SWE				

RESULT: TC\_VM\_FCC15247\_Bandwidth\_99PCT\_20dB\_DTS\_FHSS\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	1201	kHz	Information
T1 99%	2400.000000	---	2479.3828	MHz	PASS
T2 99%	---	2483.500000	2480.5834	MHz	PASS



Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT Classic EDR 8DPSK\_09102019\_133617.png



Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT Classic EDR 8DPSK\_09102019\_133620.png

RESULT: TC\_VM\_FCC15247\_Bandwidth\_99PCT\_20dB\_DTS\_FHSS\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	1258	kHz	Information
T1 20dB	2400.000000	---	2479.3484	MHz	PASS

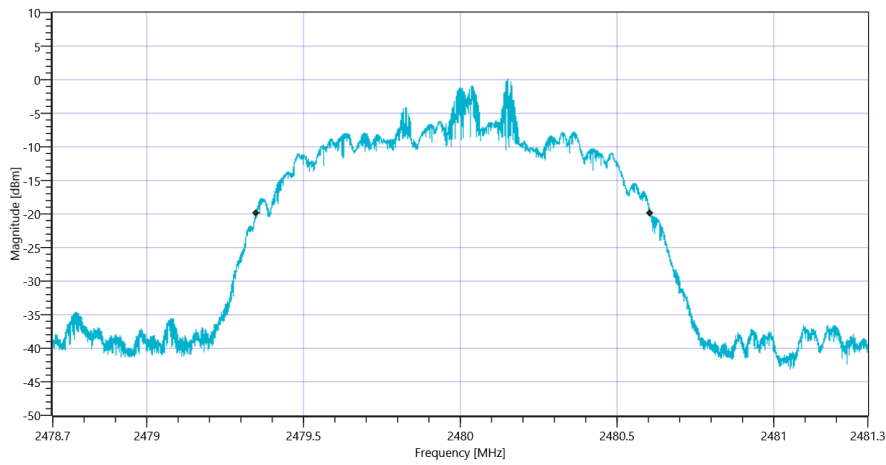
T2 20dB

2483.50000

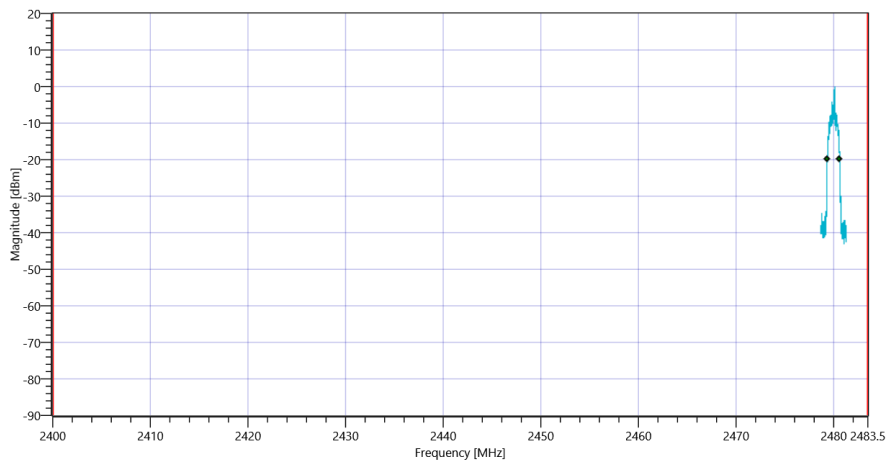
2480.6061

MHz

PASS



Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT Classic EDR 8DPSK 20dB\_09102019\_133624.png



Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT Classic EDR 8DPSK\_09102019\_133628.png

TEST FINISHED

General Verdict

09.10.2019 13:36:28 / RT: 114 s

PASS

## 12. FCC Part 15.247 TX Spurious Conducted ~ BT Classic EDR 8DPSK

Test References	
TC Start	09.10.2019 13:36:32
System Version	1.0.0.21
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.
Class / TC Version / TC ID	TC_VM_FCC15247_TX_Emissions_Conducted_V01 Version: 0.0.1   TCID_FCC15247_8
My Description	FCC 15.247 TX Emissions Conducted FHSS - BT Classic EDR 8DPSK
Add. Information	

Test Parameter	
Technology to test	BT Classic EDR 8DPSK
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	True   Freq [MHz] 2402
Frequency mid to test	True   Freq [MHz] 2441
Frequency high to test	True   Freq [MHz] 2480
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.70   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.40



## Test at TX 2402 MHz

RESULT: BT Classic Connection check

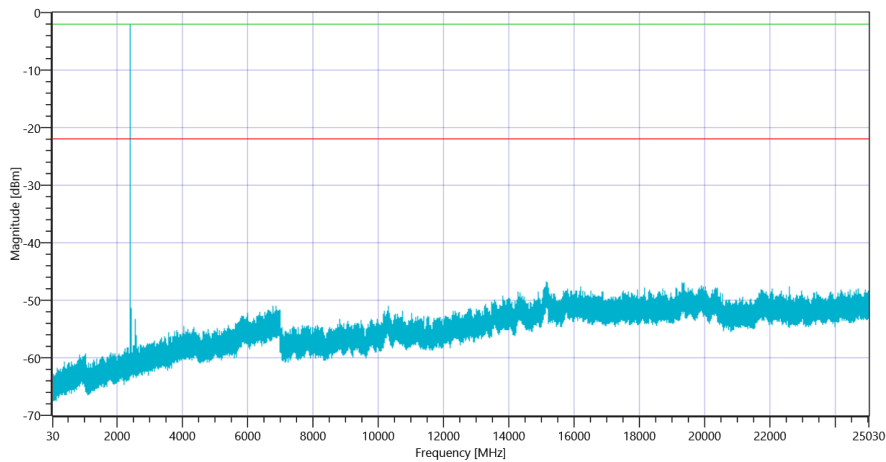
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Connection result	---	---	---	--	TCON

READ SA SETTINGS:

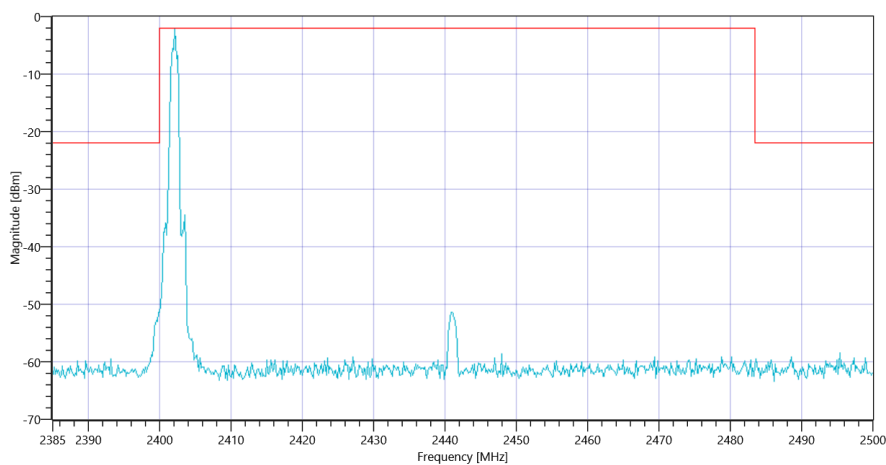
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	3.54   0   20				
Start [MHz]   Stop [MHz]	24530.000   25030.000				
RBW [MHz]   VBW [MHz]	0.100000   0.300000				
Detector   TraceMode	POS   MAXH				
Sweep: Time [ms]   Count   Points per Section   Type	500   8   3001   SWE				

RESULT: TC\_VM\_FCC15247\_TX\_Emissions\_Conducted\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2402.17 MHz	---	---	-2.04	dBm	Information
No peaks detected	---	---			PASS



Plot\_FCC Part 15.247 TX Spurious Conducted ~ BT Classic EDR 8DPSK 2402\_09102019\_134124.png



Plot\_FCC Part 15.247 TX Spurious Conducted ~ BT Classic EDR 8DPSK 2402\_09102019\_134127.png

## Test at TX 2441 MHz

RESULT: BT Classic Connection check

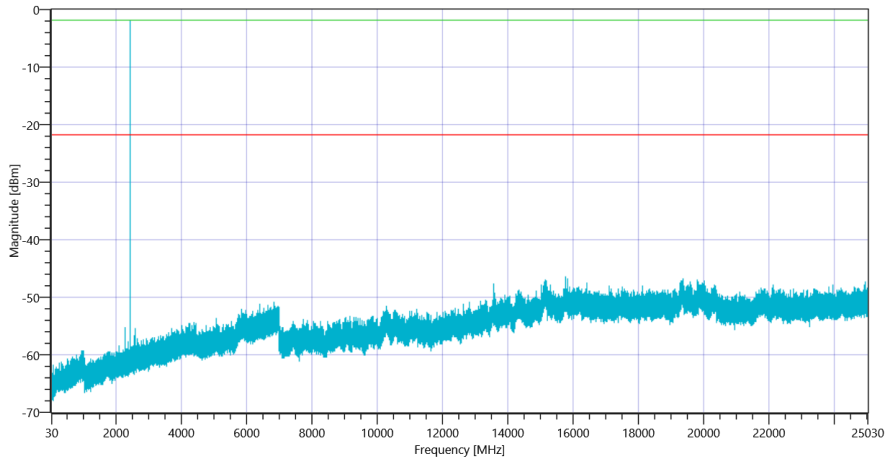
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Connection result	---	---	---	--	TCON

READ SA SETTINGS:

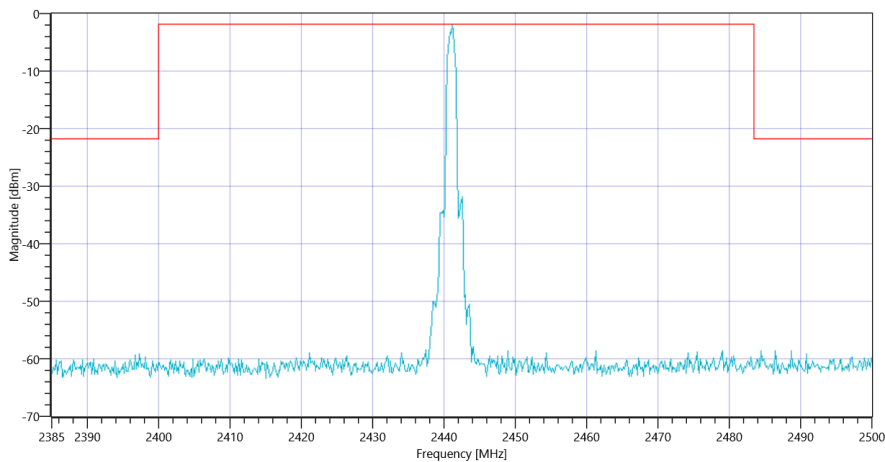
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	4.89   0   20				
Start [MHz]   Stop [MHz]	24530.000   25030.000				
RBW [MHz]   VBW [MHz]	0.100000   0.300000				
Detector   TraceMode	POS   MAXH				
Sweep: Time [ms]   Count   Points per Section   Type	500   8   3001   SWE				

RESULT: TC\_VM\_FCC15247\_TX\_Emissions\_Conducted\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2441.17 MHz	---	---	-1.78	dBm	Information
No peaks detected	---	---			PASS



Plot\_FCC Part 15.247 TX Spurious Conducted ~ BT Classic EDR 8DPSK 2441\_09102019\_134609.png



Plot\_FCC Part 15.247 TX Spurious Conducted ~ BT Classic EDR 8DPSK 2441\_09102019\_134611.png

## Test at TX 2480 MHz

RESULT: BT Classic Connection check

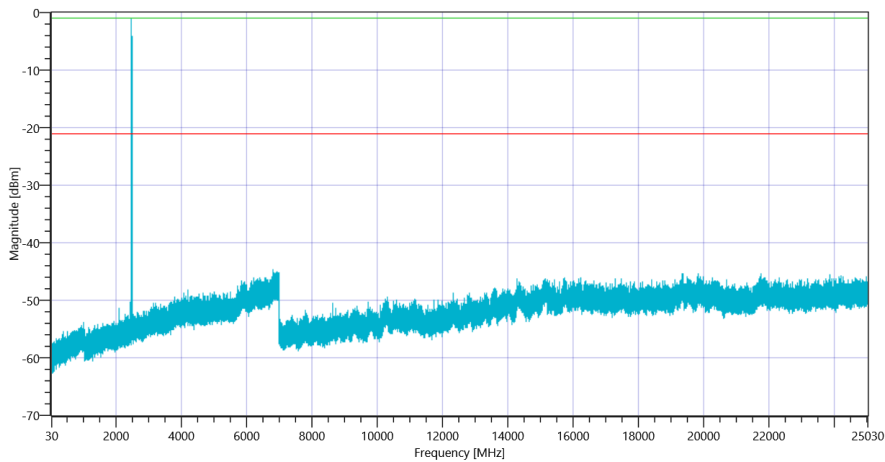
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Connection result	---	---	---	--	TCON

READ SA SETTINGS:

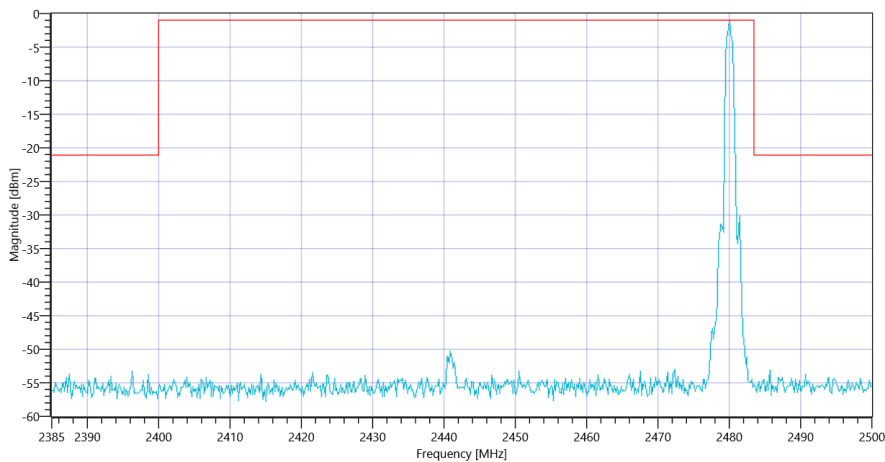
RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]	5.96   0   25				
Start [MHz]   Stop [MHz]	24530.000   25030.000				
RBW [MHz]   VBW [MHz]	0.100000   0.300000				
Detector   TraceMode	POS   MAXH				
Sweep: Time [ms]   Count   Points per Section   Type	500   8   3001   SWE				

RESULT: TC\_VM\_FCC15247\_TX\_Emissions\_Conducted\_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2480.00 MHz	---	---	-1.06	dBm	Information
No peaks detected	---	---			PASS



Plot\_FCC Part 15.247 TX Spurious Conducted ~ BT Classic EDR 8DPSK 2480\_09102019\_135054.png



Plot\_FCC Part 15.247 TX Spurious Conducted ~ BT Classic EDR 8DPSK 2480\_09102019\_135056.png

TEST FINISHED

General Verdict	09.10.2019 13:50:57 / RT: 865 s	PASS
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