Measurement Results

1-4063/17-01-10_log1_conducted

Test logging

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Document authorized:

cn=Mihail Dorongovskij, o=CTC advanced GmbH, ou=DOR-281116, email=Mihail.Dorongovskij@ctcadvanced.com, c=DE
2019.02.07 12:11:32 +01'00'

Mihail Dorongovskij
Lab Manager
Radio Communications & EMC

Table of Content

IUT Summary

IUT DEFINITION	
Manufacturer	Sennheiser electronic GmbH
Type	M3AEBTXL
Serial No.	Muster 2
Setup No.	NI
SW Version	1.0.0.181
HW Version	1.0
Comment 1	NI
Comment 2	NI

IUT Common Settings	
Tlow [°C]	0
Tmid [°C]	20
Thigh [°C]	55
Vlow [V]	3.4
Vmid [V]	3.7
Vhigh [V]	4.2
Imax [A]	1
Auto Control enabled Power Supply | Climatic Box	No | No
Antenna Gain [dBi]	0
Additional Path Loss [dB]	0

IUT Common Settings BT Low Energy	
Intermodulation Value N	3
Image Freq. Low | Mid | High [MHz]	0 | 0 | 0
Power Class	2
1 Mbps supported	True | TXpayload 37 | RXpayload 37
2 Mbps supported	False | TXpayload 255 | RXpayload 255
Longrange S8 supported	False | TXpayload 255 | RXpayload 255
Longrange S2 supported	False | TXpayload 255 | RXpayload 255
Signaling Settings	None | HCI | 1 | B24K | None | S1 | None | On
Signaling RF Settings	RF1com | 0 | 0 | On |
User Interaction	Yes
Switch Matrix & Pathcompensation enabled	Yes

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

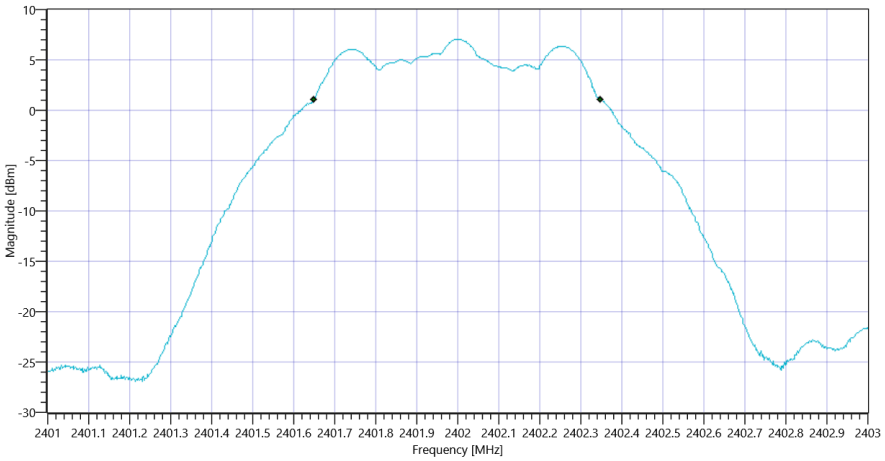
Test References	
TC Start	01.02.2019 15:34:10
System Version	1.0.0.13
Test Specification	FCC Part 15.247
Test Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.1 RBW ≥ DTS Bandwidth
Class / TC Version / TC ID	TC_VM_FCC15247_Maximum_Peak_Conducted_Output_Power_DTS_V01 Version: 0.0.1 | TCID_FCC15247_3
My Description	FCC 15.247 Maximum Peak Output Power Conducted DTS - BT LE 1 Msps
Add. Information	

Test Parameter	
Technology to test	BT LE 1 Msps
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	True | Freq [MHz] 2402
Frequency mid to test	True | Freq [MHz] 2440
Frequency high to test	True | Freq [MHz] 2480
Pattern	PRBS9
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

READ SA SETTINGS:	
Ref. Level [dBm]	12.34
Ref. Lev. offs [dB]	9.79
Input Attenuation [dB]	20
Freq. Start [MHz]	2401.000
Freq. Stop [MHz]	2403.000
Resolution BW. [MHz]	0.100000
Video BW. [MHz]	0.300000
Detector	POS
Sweep Time [ms]	1000
Sweep Points/Section	1001
Sweep Count	10
Sweep Mode	MAXH
Used Sweep Type	SWE

RESULT: DTS Bandwidth					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	---	---	0.698	MHz	Information

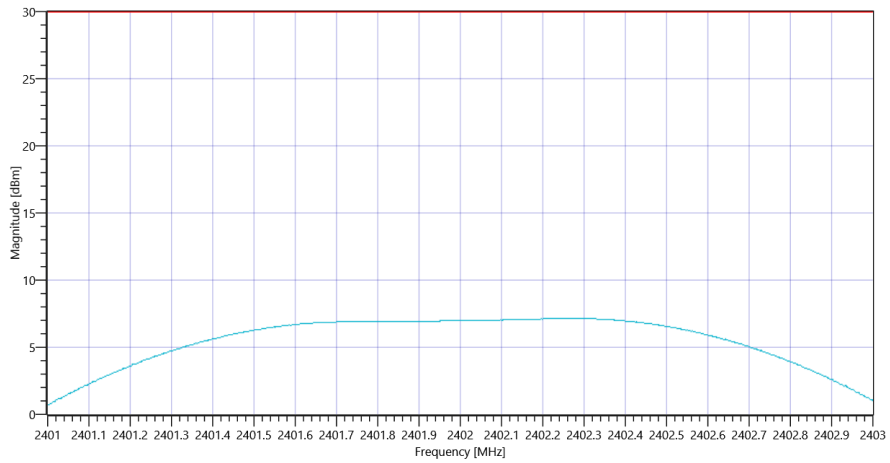


Plot_FCC Part 15.247 Maximum Peak Conducted Output Power DTS BT LE 1 Msps DTS BW _01022019_153456.png

READ SA SETTINGS:	
Ref. Level [dBm]	17.34
Ref. Lev. offs [dB]	9.79
Input Attenuation [dB]	25
Freq. Start [MHz]	2401.000
Freq. Stop [MHz]	2403.000
Resolution BW. [MHz]	1.000000
Video BW. [MHz]	5.000000
Detector	POS
Sweep Time [ms]	1000
Sweep Points/Section	1001
Sweep Count	10
Sweep Mode	MAXH
Used Sweep Type	SWE

RESULT: TC_VM_FCC15247_Maximum_Peak_Conducted_Output_Power_DTS_V01					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	30.00	7.15	dBm	PASS
Peak Power	---	1000	5.188	mW	PASS

Frequency at Peak	---	---	2402.304	MHz	Information

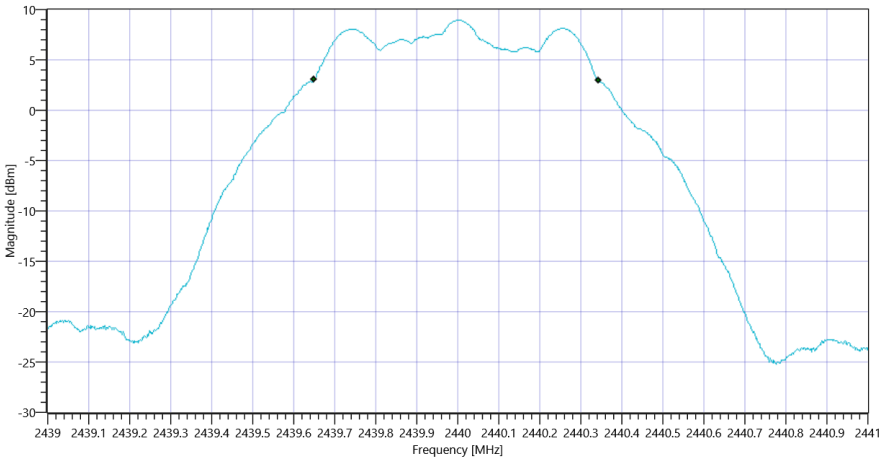


Plot_FCC Part 15.247 Maximum Peak Conducted Output Power DTS BT LE 1 Msps_01022019_153511.png

Test at TX 2440 MHz

READ SA SETTINGS:	
Ref. Level [dBm]	14.20
Ref. Lev. offs [dB]	9.9
Input Attenuation [dB]	20
Freq. Start [MHz]	2439.000
Freq. Stop [MHz]	2441.000
Resolution BW. [MHz]	0.100000
Video BW. [MHz]	0.300000
Detector	POS
Sweep Time [ms]	1000
Sweep Points/Section	1001
Sweep Count	10
Sweep Mode	MAXH
Used Sweep Type	SWE

RESULT: DTS Bandwidth					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	---	---	0.694	MHz	Information

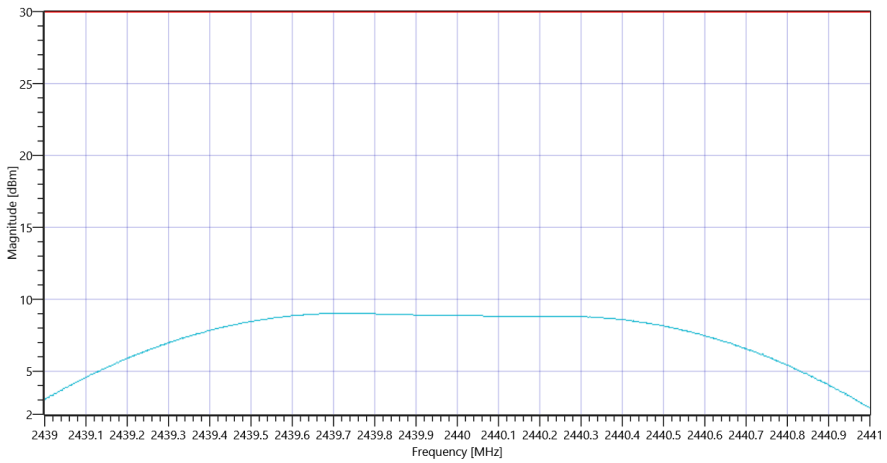


Plot_FCC Part 15.247 Maximum Peak Conducted Output Power DTS BT LE 1 Msps DTS BW _01022019_153801.png

READ SA SETTINGS:	
Ref. Level [dBm]	19.20
Ref. Lev. offs [dB]	9.9
Input Attenuation [dB]	25
Freq. Start [MHz]	2439.000
Freq. Stop [MHz]	2441.000
Resolution BW. [MHz]	1.000000
Video BW. [MHz]	5.000000
Detector	POS
Sweep Time [ms]	1000
Sweep Points/Section	1001
Sweep Count	10
Sweep Mode	MAXH
Used Sweep Type	SWE

RESULT: TC_VM_FCC15247_Maximum_Peak_Conducted_Output_Power_DTS_V01					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	30.00	9.04	dBm	PASS
Peak Power	---	1000	8.016781	mW	PASS

Frequency at Peak	---	---	2439.744	MHz	Information

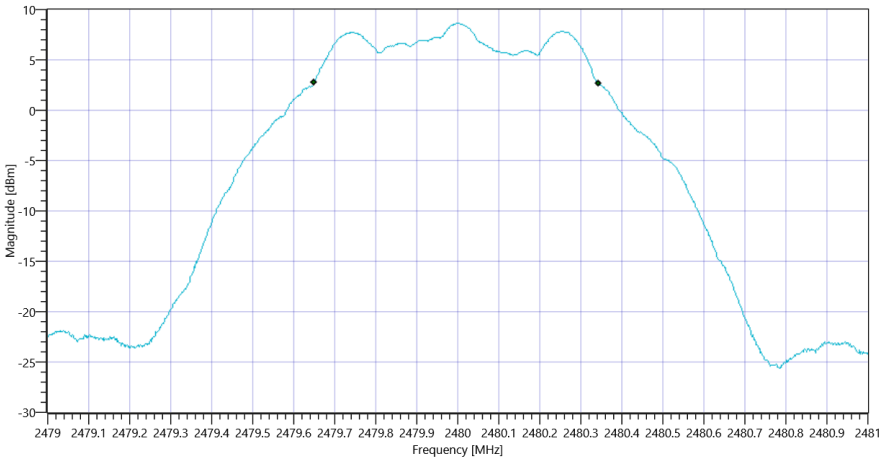


Plot_FCC Part 15.247 Maximum Peak Conducted Output Power DTS BT LE 1 Msps_01022019_153816.png

Test at TX 2480 MHz

READ SA SETTINGS:	
Ref. Level [dBm]	13.70
Ref. Lev. offs [dB]	9.96
Input Attenuation [dB]	20
Freq. Start [MHz]	2479.000
Freq. Stop [MHz]	2481.000
Resolution BW. [MHz]	0.100000
Video BW. [MHz]	0.300000
Detector	POS
Sweep Time [ms]	1000
Sweep Points/Section	1001
Sweep Count	10
Sweep Mode	MAXH
Used Sweep Type	SWE

RESULT: DTS Bandwidth					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	---	---	0.694	MHz	Information

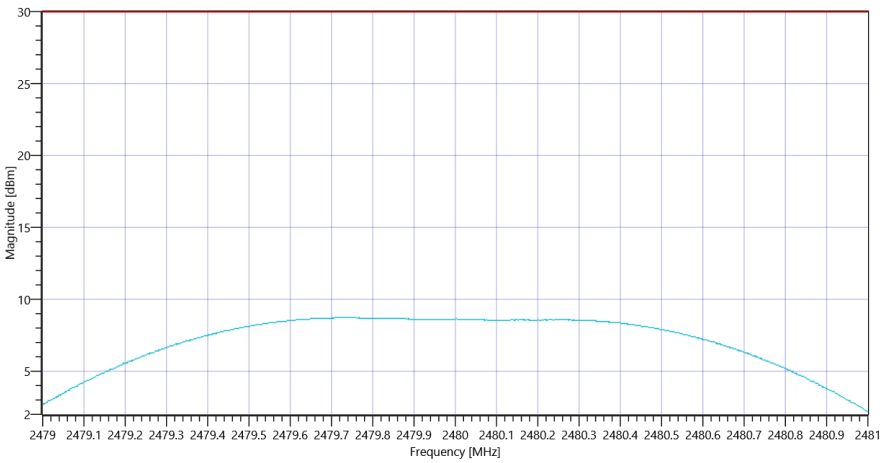


Plot_FCC Part 15.247 Maximum Peak Conducted Output Power DTS BT LE 1 Msps DTS BW _01022019_154447.png

READ SA SETTINGS:	
Ref. Level [dBm]	18.70
Ref. Lev. offs [dB]	9.96
Input Attenuation [dB]	25
Freq. Start [MHz]	2479.000
Freq. Stop [MHz]	2481.000
Resolution BW. [MHz]	1.000000
Video BW. [MHz]	5.000000
Detector	POS
Sweep Time [ms]	1000
Sweep Points/Section	1001
Sweep Count	10
Sweep Mode	MAXH
Used Sweep Type	SWE

RESULT: TC_VM_FCC15247_Maximum_Peak_Conducted_Output_Power_DTS_V01					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	30.00	8.72	dBm	PASS
Peak Power	---	1000	7.44732	mW	PASS

Frequency at Peak	---	---	2479.738	MHz	Information



Plot_FCC Part 15.247 Maximum Peak Conducted Output Power DTS BT LE 1 Msps_01022019_154502.png

TEST FINISHED		
General Verdict	01.02.2019 15:45:02 / RT: 652 s	PASS

2. FCC Part 15.247 Bandwidth 6dB DTS BT LE 1 Msps

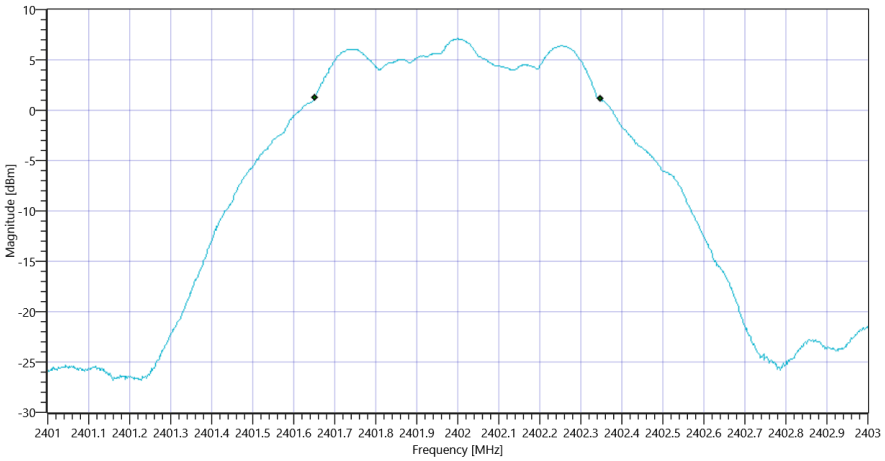
Test References	
TC Start	01.02.2019 15:45:03
System Version	1.0.0.13
Test Specification	FCC Part 15.247
Test Method	DTS: KDB 558074 D01 V05 - Chapter 8.2 DTS Bandwidth
Class / TC Version / TC ID	TC_VM_FCC15247_Bandwidth_6dB_DTS_V01 Version: 0.0.1 | TCID_FCC15247_1
My Description	FCC 15.247 Bandwidth 6dB DTS - BT LE 1 Msps
Add. Information	

Test Parameter	
Technology to test	BT LE 1 Msps
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	True | Freq [MHz] 2402
Frequency mid to test	True | Freq [MHz] 2440
Frequency high to test	True | Freq [MHz] 2480
Pattern	PRBS9
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

READ SA SETTINGS:	
Ref. Level [dBm]	12.36
Ref. Lev. offs [dB]	9.79
Input Attenuation [dB]	20
Freq. Start [MHz]	2401.000
Freq. Stop [MHz]	2403.000
Resolution BW. [MHz]	0.100000
Video BW. [MHz]	0.300000
Detector	POS
Sweep Time [ms]	1000
Sweep Points/Section	1001
Sweep Count	10
Sweep Mode	MAXH
Used Sweep Type	SWE

RESULT: TC_VM_FCC15247_Bandwidth_6dB_DTS_V01					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	0.500	---	0.696	MHz	PASS



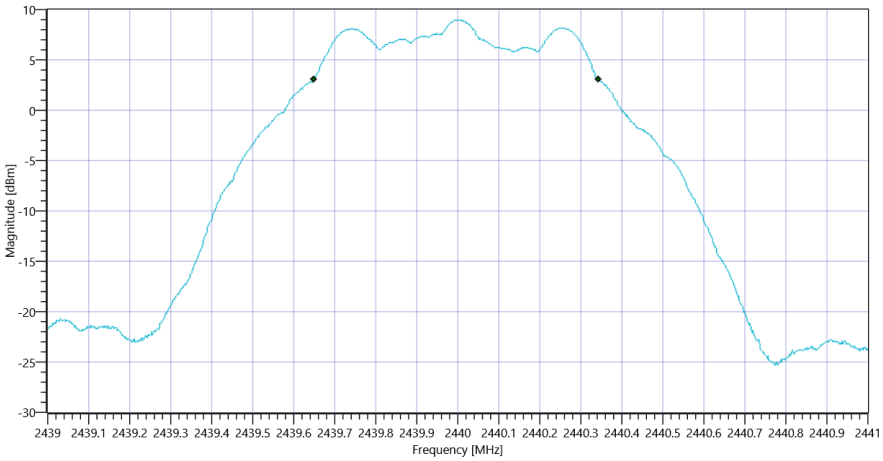
Plot_FCC Part 15.247 Bandwidth 6dB DTS BT LE 1 Msps_01022019_155046.png

Test at TX 2440 MHz

READ SA SETTINGS:	
Ref. Level [dBm]	14.28
Ref. Lev. offs [dB]	9.9
Input Attenuation [dB]	20
Freq. Start [MHz]	2439.000
Freq. Stop [MHz]	2441.000
Resolution BW. [MHz]	0.100000
Video BW. [MHz]	0.300000
Detector	POS
Sweep Time [ms]	1000
Sweep Points/Section	1001
Sweep Count	10
Sweep Mode	MAXH
Used Sweep Type	SWE

RESULT: TC_VM_FCC15247_Bandwidth_6dB_DTS_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	0.500	---	0.694	MHz	PASS



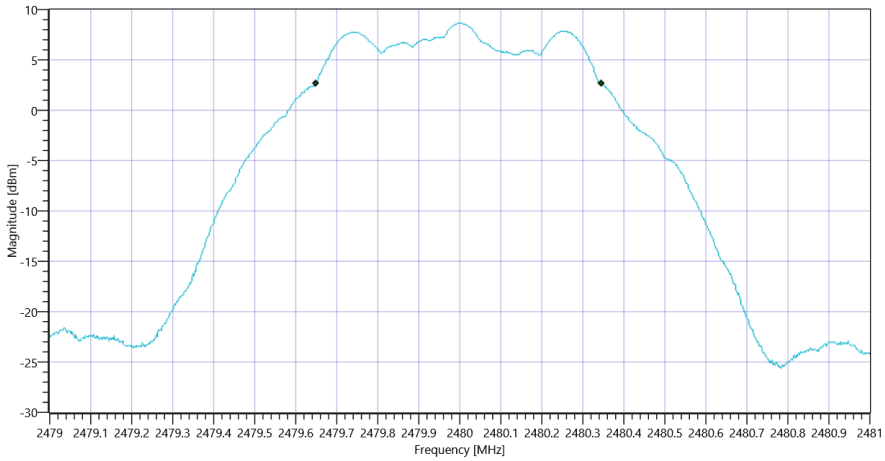
Plot_FCC Part 15.247 Bandwidth 6dB DTS BT LE 1 Msps_01022019_155137.png

Test at TX 2480 MHz

READ SA SETTINGS:	
Ref. Level [dBm]	13.75
Ref. Lev. offs [dB]	9.96
Input Attenuation [dB]	20
Freq. Start [MHz]	2479.000
Freq. Stop [MHz]	2481.000
Resolution BW. [MHz]	0.100000
Video BW. [MHz]	0.300000
Detector	POS
Sweep Time [ms]	1000
Sweep Points/Section	1001
Sweep Count	10
Sweep Mode	MAXH
Used Sweep Type	SWE

RESULT: TC_VM_FCC15247_Bandwidth_6dB_DTS_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	0.500	---	0.696	MHz	PASS



Plot_FCC Part 15.247 Bandwidth 6dB DTS BT LE 1 Msps_01022019_155214.png

TEST FINISHED		
General Verdict	01.02.2019 15:52:14 / RT: 430 s	PASS

3. FCC Part 15.247 Peak Power Spectral Density DTS BT LE 1 Msps

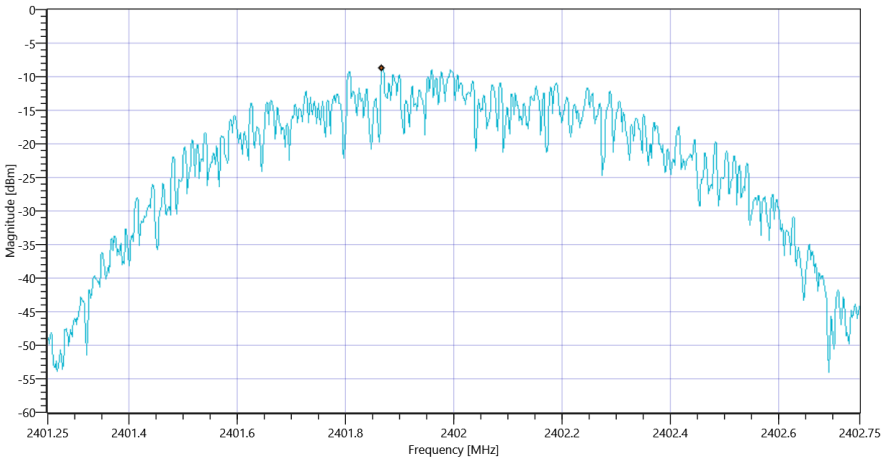
Test References	
TC Start	01.02.2019 15:52:16
System Version	1.0.0.13
Test Specification	FCC Part 15.247
Test Method	DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission
Class / TC Version / TC ID	TC_VM_FCC15247_Peak_Power_Spectral_Density_DTS_V01 Version: 0.0.1 | TCID_FCC15247_6
My Description	FCC 15.247 Peak Power Spectral Density DTS - BT LE 1 Msps
Add. Information	

Test Parameter	
Technology to test	BT LE 1 Msps
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	True | Freq [MHz] 2402
Frequency mid to test	True | Freq [MHz] 2440
Frequency high to test	True | Freq [MHz] 2480
Pattern	PRBS9
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

READ SA SETTINGS:	
Ref. Level [dBm]	12.38
Ref. Lev. offs [dB]	9.79
Input Attenuation [dB]	20
Freq. Start [MHz]	2401.250
Freq. Stop [MHz]	2402.750
Resolution BW. [MHz]	0.003000
Video BW. [MHz]	0.010000
Detector	POS
Sweep Time [ms]	1000
Sweep Points/Section	1001
Sweep Count	20
Sweep Mode	MAXH
Used Sweep Type	SWE

RESULT: TC_VM_FCC15247_Peak_Power_Spectral_Density_DTS_V01					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Peak power Density	---	8	-8.75	dBm/3KHz	PASS



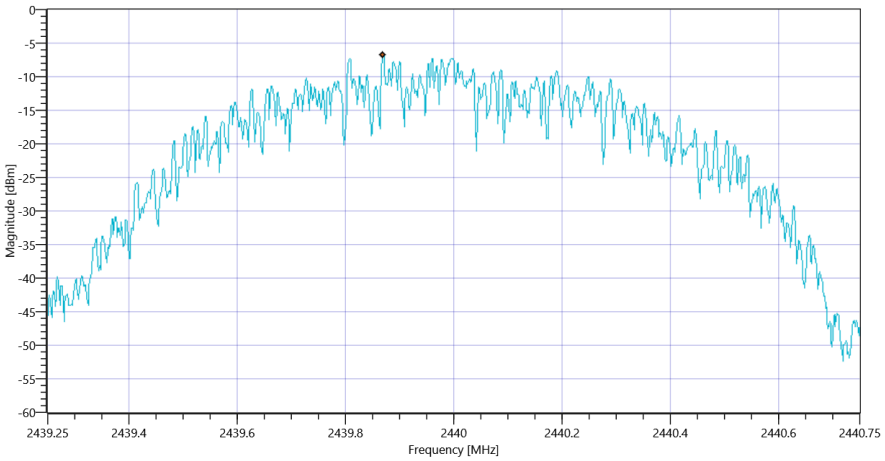
Plot_FCC Part 15.247 Peak Power Spectral Density DTS BT LE 1 Msps_01022019_155304.png

Test at TX 2440 MHz

READ SA SETTINGS:	
Ref. Level [dBm]	14.27
Ref. Lev. offs [dB]	9.9
Input Attenuation [dB]	20
Freq. Start [MHz]	2439.250
Freq. Stop [MHz]	2440.750
Resolution BW. [MHz]	0.003000
Video BW. [MHz]	0.010000
Detector	POS
Sweep Time [ms]	1000
Sweep Points/Section	1001
Sweep Count	20
Sweep Mode	MAXH
Used Sweep Type	SWE

RESULT: TC_VM_FCC15247_Peak_Power_Spectral_Density_DTS_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Peak power Density	---	8	-6.75	dBm/3KHz	PASS



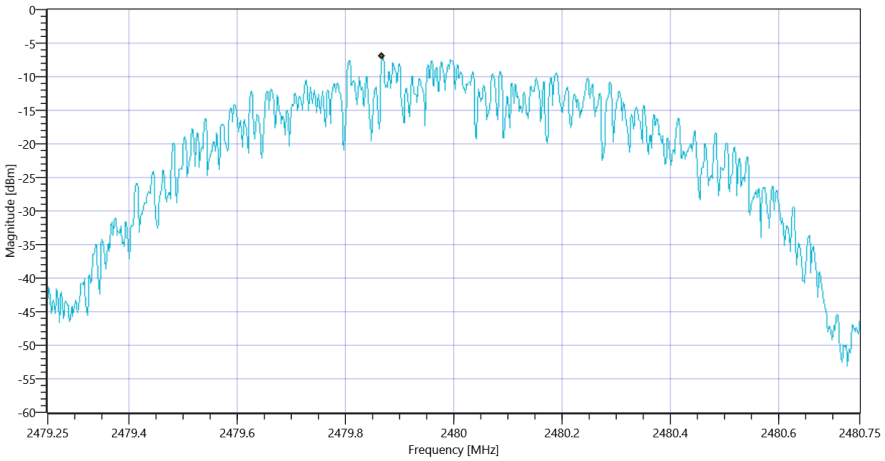
Plot_FCC Part 15.247 Peak Power Spectral Density DTS BT LE 1 Msps_01022019_155421.png

Test at TX 2480 MHz

READ SA SETTINGS:	
Ref. Level [dBm]	13.74
Ref. Lev. offs [dB]	9.96
Input Attenuation [dB]	20
Freq. Start [MHz]	2479.250
Freq. Stop [MHz]	2480.750
Resolution BW. [MHz]	0.003000
Video BW. [MHz]	0.010000
Detector	POS
Sweep Time [ms]	1000
Sweep Points/Section	1001
Sweep Count	20
Sweep Mode	MAXH
Used Sweep Type	SWE

RESULT: TC_VM_FCC15247_Peak_Power_Spectral_Density_DTS_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Peak power Density	---	8	-7.02	dBm/3KHz	PASS



Plot_FCC Part 15.247 Peak Power Spectral Density DTS BT LE 1 Msps_01022019_155507.png

TEST FINISHED		
General Verdict	01.02.2019 15:55:08 / RT: 171 s	PASS

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

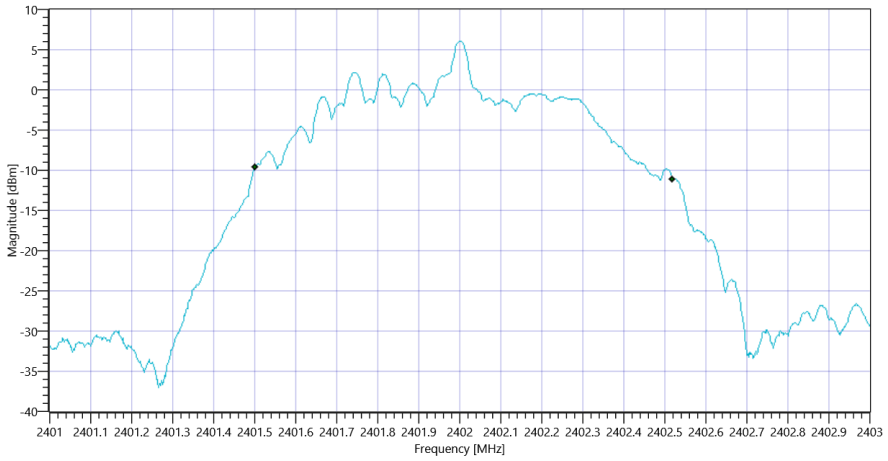
Test References	
TC Start	01.02.2019 15:55:09
System Version	1.0.0.13
Test Specification	FCC Part 15.247
Test Method	
Class / TC Version / TC ID	TC_VM_FCC15247_Bandwidth_99PCT_20dB_DTS_FHSS_V01 Version: 0.0.2 | TCID_FCC15247_2
My Description	FCC 15.247 Bandwidth 99PCT - 20dB DTS - BT LE 1 Msps
Add. Information	

Test Parameter	
Technology to test	BT LE 1 Msps
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	True | Freq [MHz] 2402
Frequency mid to test	True | Freq [MHz] 2440
Frequency high to test	True | Freq [MHz] 2480
Pattern	PRBS9
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

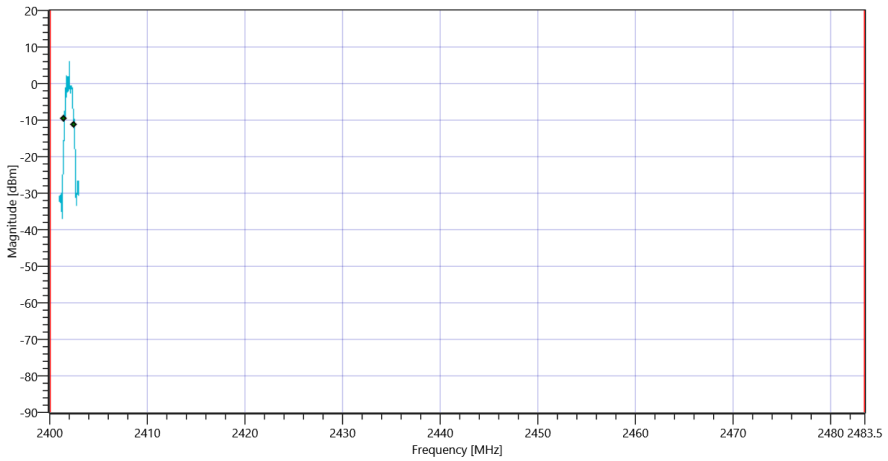
Test at TX 2402 MHz

READ SA SETTINGS:	
Ref. Level [dBm]	12.40
Ref. Lev. offs [dB]	9.79
Input Attenuation [dB]	20
Freq. Start [MHz]	2401.000
Freq. Stop [MHz]	2403.000
Resolution BW. [MHz]	0.030000
Video BW. [MHz]	0.100000
Detector	POS
Sweep Time [ms]	1000
Sweep Points/Section	1001
Sweep Count	10
Sweep Mode	MAXH
Used Sweep Type	SWE

RESULT: TC_VM_FCC15247_Bandwidth_99PCT_20dB_DTS_FHSS_V01					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	1.019	MHz	Information
T1	2400.000000	---	2401.5005	MHz	PASS
T2	---	2483.500000	2402.5195	MHz	PASS

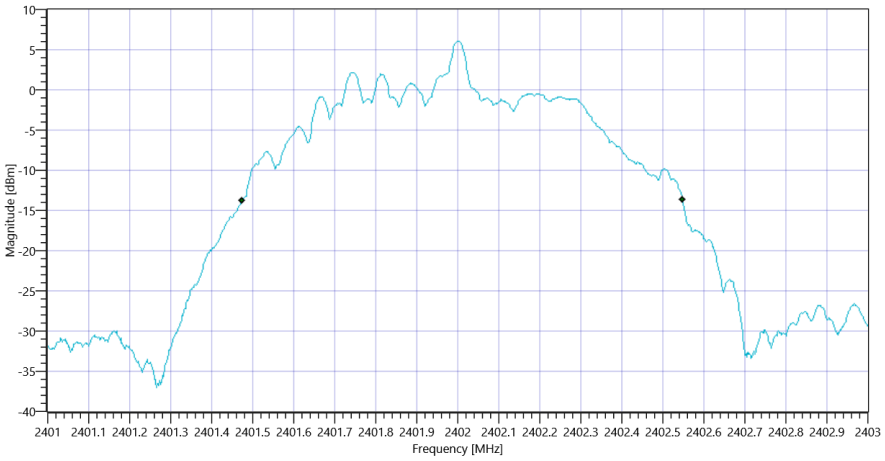


Plot_FCC Part 15.247 Bandwidth 99PCT - 20dB BT LE 1 Msps 99PCT_01022019_155547.png

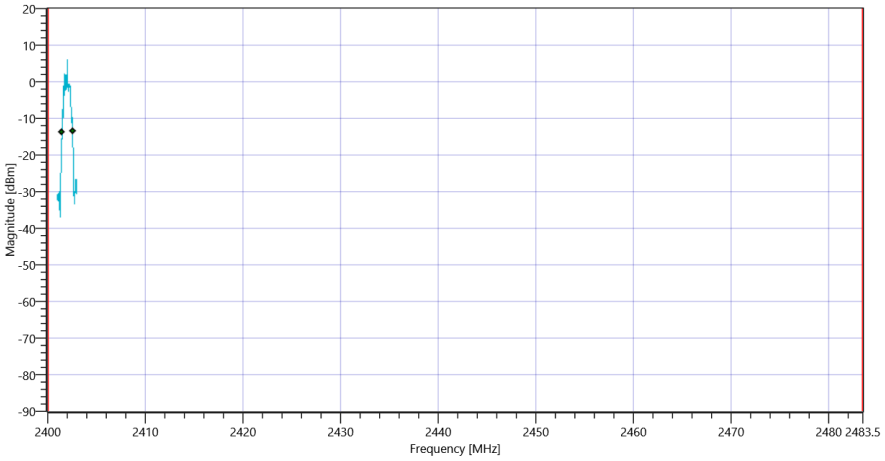


Plot_FCC Part 15.247 Bandwidth 99PCT - 20dB BT LE 1 Msps_01022019_155549.png

RESULT: TC_VM_FCC15247_Bandwidth_99PCT_20dB_DTS_FHSS_V01					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	1.074	MHz	Information
T1 20dB	2400.000000	---	2401.4740	MHz	PASS
T2 20dB	---	2483.500000	2402.5480	MHz	PASS



Plot_FCC Part 15.247 Bandwidth 99PCT - 20dB BT LE 1 Msps 20dB_01022019_155553.png



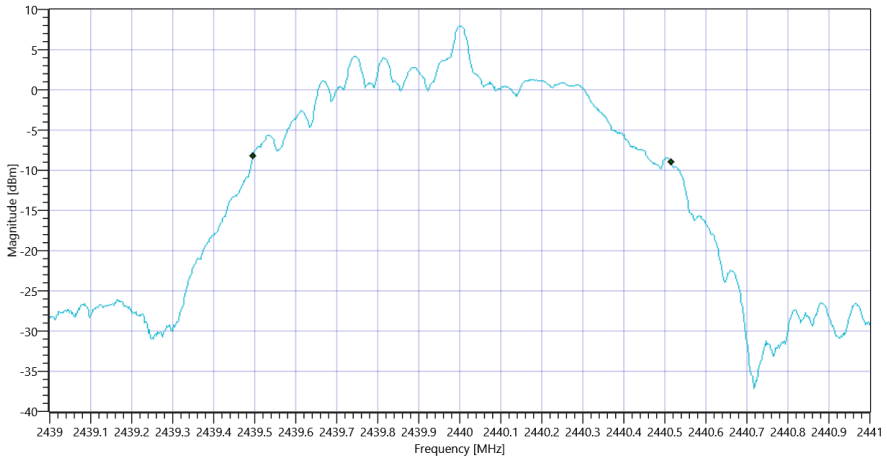
Plot_FCC Part 15.247 Bandwidth 99PCT - 20dB BT LE 1 Msps_01022019_155556.png

Test at TX 2440 MHz

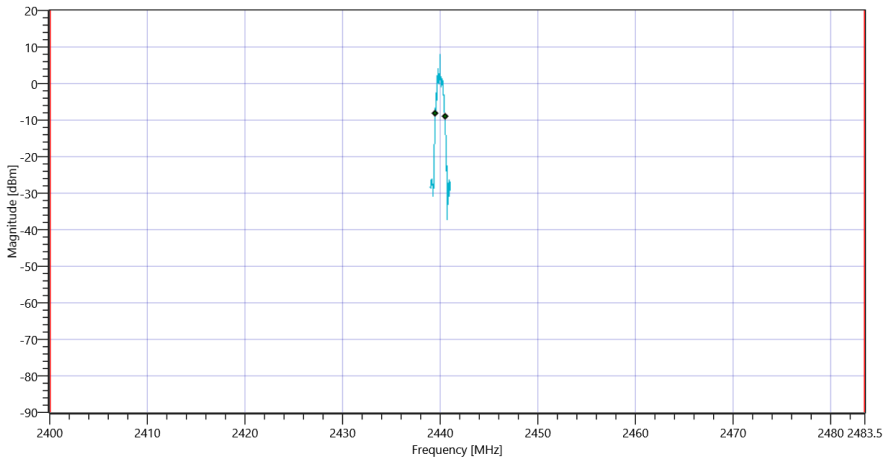
READ SA SETTINGS:	
Ref. Level [dBm]	14.30
Ref. Lev. offs [dB]	9.9
Input Attenuation [dB]	20
Freq. Start [MHz]	2439.000
Freq. Stop [MHz]	2441.000
Resolution BW. [MHz]	0.030000
Video BW. [MHz]	0.100000
Detector	POS
Sweep Time [ms]	1000
Sweep Points/Section	1001
Sweep Count	10
Sweep Mode	MAXH
Used Sweep Type	SWE

RESULT: TC_VM_FCC15247_Bandwidth_99PCT_20dB_DTS_FHSS_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	1.019	MHz	Information
T1	2400.000000	---	2439.4965	MHz	PASS
T2	---	2483.500000	2440.5155	MHz	PASS

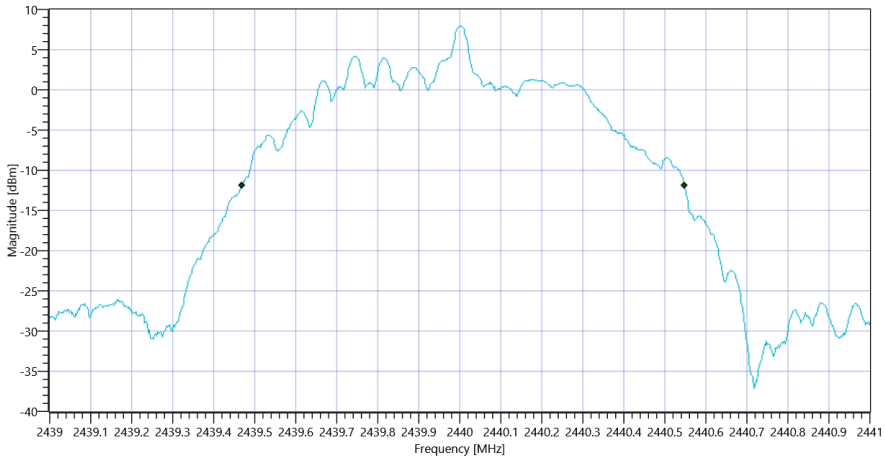


Plot_FCC Part 15.247 Bandwidth 99PCT - 20dB BT LE 1 Msps 99PCT_01022019_155633.png

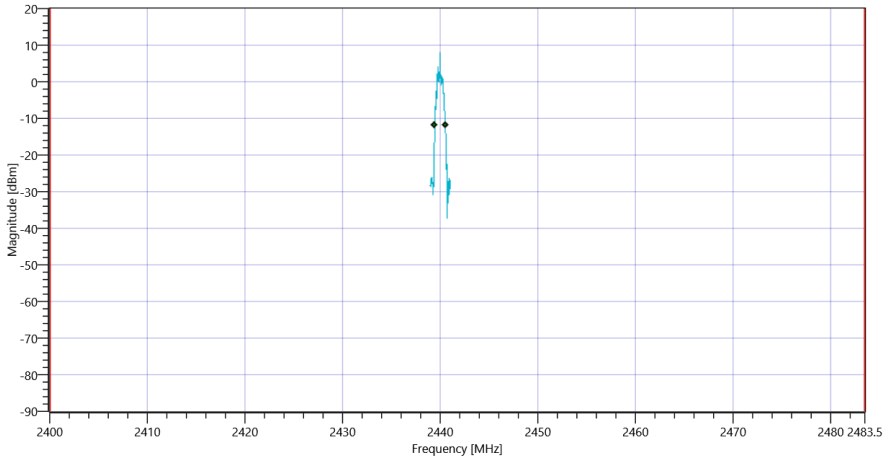


Plot_FCC Part 15.247 Bandwidth 99PCT - 20dB BT LE 1 Msps_01022019_155636.png

RESULT: TC_VM_FCC15247_Bandwidth_99PCT_20dB_DTS_FHSS_V01					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	1.08	MHz	Information
T1 20dB	2400.000000	---	2439.4680	MHz	PASS
T2 20dB	---	2483.500000	2440.5480	MHz	PASS



Plot_FCC Part 15.247 Bandwidth 99PCT - 20dB BT LE 1 Msps 20dB_01022019_155640.png



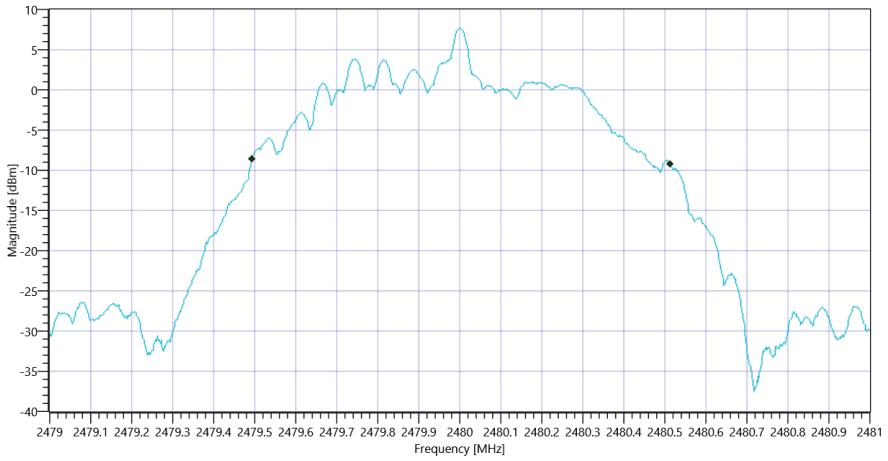
Plot_FCC Part 15.247 Bandwidth 99PCT - 20dB BT LE 1 Msps_01022019_155643.png

Test at TX 2480 MHz

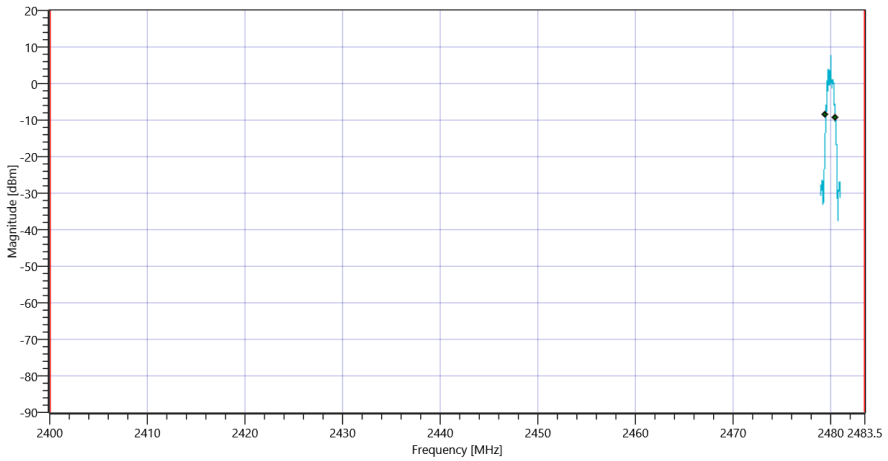
READ SA SETTINGS:	
Ref. Level [dBm]	13.84
Ref. Lev. offs [dB]	9.96
Input Attenuation [dB]	20
Freq. Start [MHz]	2479.000
Freq. Stop [MHz]	2481.000
Resolution BW. [MHz]	0.030000
Video BW. [MHz]	0.100000
Detector	POS
Sweep Time [ms]	1000
Sweep Points/Section	1001
Sweep Count	10
Sweep Mode	MAXH
Used Sweep Type	SWE

RESULT: TC_VM_FCC15247_Bandwidth_99PCT_20dB_DTS_FHSS_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	1.019	MHz	Information
T1	2400.000000	---	2479.4945	MHz	PASS
T2	---	2483.500000	2480.5135	MHz	PASS

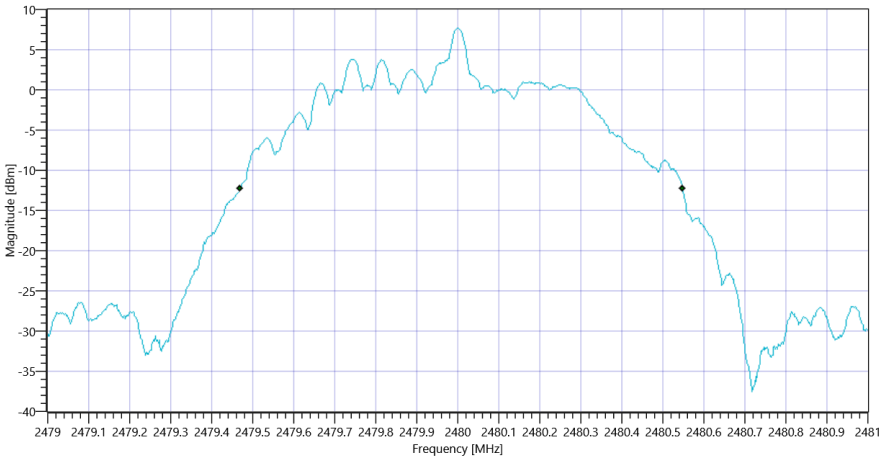


Plot_FCC Part 15.247 Bandwidth 99PCT - 20dB BT LE 1 Msps 99PCT_01022019_155720.png

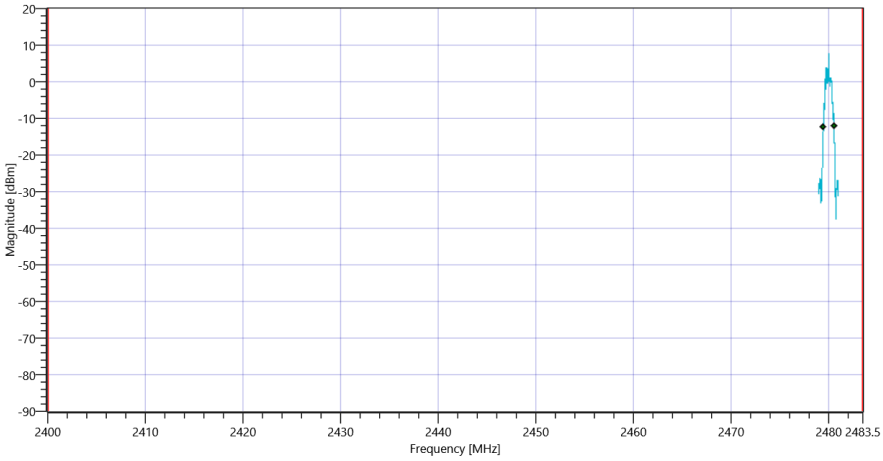


Plot_FCC Part 15.247 Bandwidth 99PCT - 20dB BT LE 1 Msps_01022019_155723.png

RESULT: TC_VM_FCC15247_Bandwidth_99PCT_20dB_DTS_FHSS_V01					
Test Description	**Lower Limit**	**Upper Limit**	**Measured**	**Unit**	**Verdict**
Bandwidth 20dB	---	---	1.078	MHz	Information
T1 20dB	2400.000000	---	2479.4700	MHz	PASS
T2 20dB	---	2483.500000	2480.5480	MHz	PASS



Plot_FCC Part 15.247 Bandwidth 99PCT - 20dB BT LE 1 Msps 20dB_01022019_155726.png



Plot_FCC Part 15.247 Bandwidth 99PCT - 20dB BT LE 1 Msps_01022019_155729.png

TEST FINISHED		
General Verdict	01.02.2019 15:57:30 / RT: 140 s	PASS

5. FCC Part 15.247 TX Spurious Conduced BT LE 1 Msps

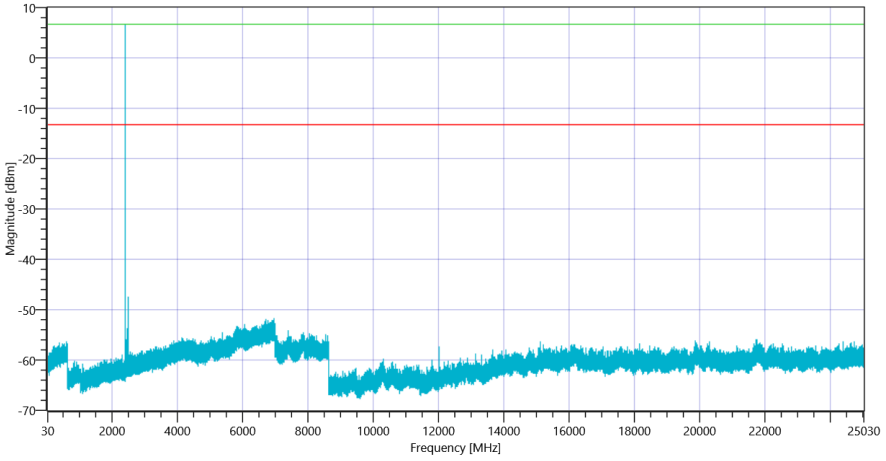
Test References	
TC Start	01.02.2019 15:57:31
System Version	1.0.0.13
Test Specification	FCC Part 15.247
Test Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable.
Class / TC Version / TC ID	TC_VM_FCC15247_TX_Emissions_Conducted_V01 Version: 0.0.1 | TCID_FCC15247_8
My Description	FCC 15.247 TX Emissions Conducted DTS - BT LE 1 Msps
Add. Information	

Test Parameter	
Technology to test	BT LE 1 Msps
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	True | Freq [MHz] 2402
Frequency mid to test	True | Freq [MHz] 2440
Frequency high to test	True | Freq [MHz] 2480
Pattern	PRBS9
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

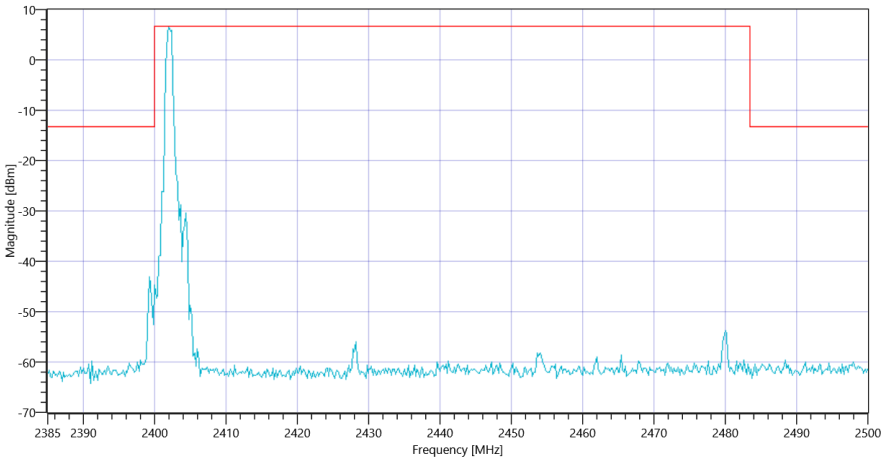
Test at TX 2402 MHz

READ SA SETTINGS:	
Ref. Level [dBm]	12.42
Resolution BW. [MHz]	0.100000
Video BW. [MHz]	0.300000
Detector	POS
Sweep Time [ms]	500
Sweep Points/Section	1001
Sweep Count	6
Sweep Mode	MAXH
Used Sweep Type	SWE

RESULT: TC_VM_FCC15247_TX_Emissions_Conducted_V01					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2402.00 MHz	---	---	6.63	dBm	Information
No peaks detected	---	---			PASS



Plot_FCC Part 15.247 TX Spurious Conduced BT LE 1 Msps 2402_01022019_160646.png

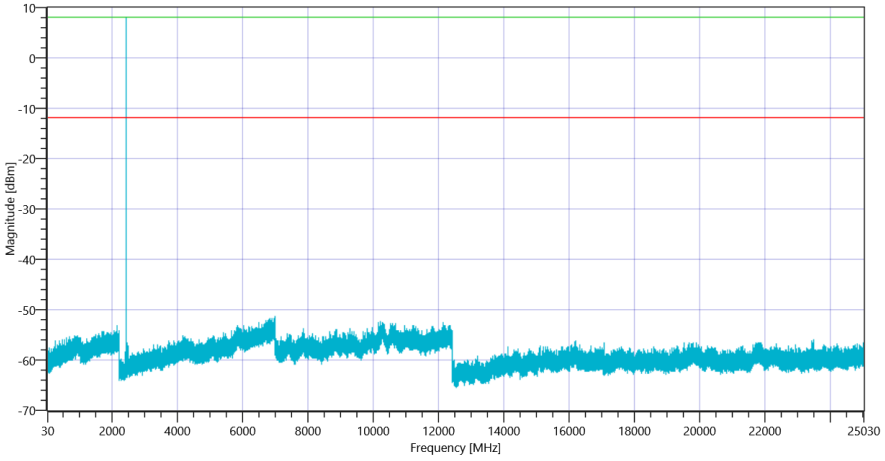


Plot_FCC Part 15.247 TX Spurious Conduced BT LE 1 Msps 2402_01022019_160649.png

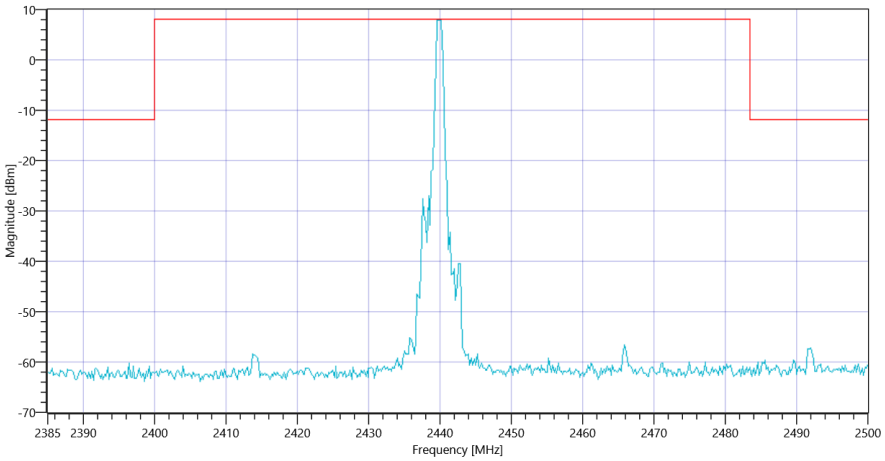
Test at TX 2440 MHz

READ SA SETTINGS:	
Ref. Level [dBm]	14.27
Resolution BW. [MHz]	0.100000
Video BW. [MHz]	0.300000
Detector	POS
Sweep Time [ms]	500
Sweep Points/Section	1001
Sweep Count	6
Sweep Mode	MAXH
Used Sweep Type	SWE

RESULT: TC_VM_FCC15247_TX_Emissions_Conducted_V01					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2439.60 MHz	---	---	8.09	dBm	Information
No peaks detected	---	---			PASS



Plot_FCC Part 15.247 TX Spurious Conduced BT LE 1 Msps 2440_01022019_161607.png

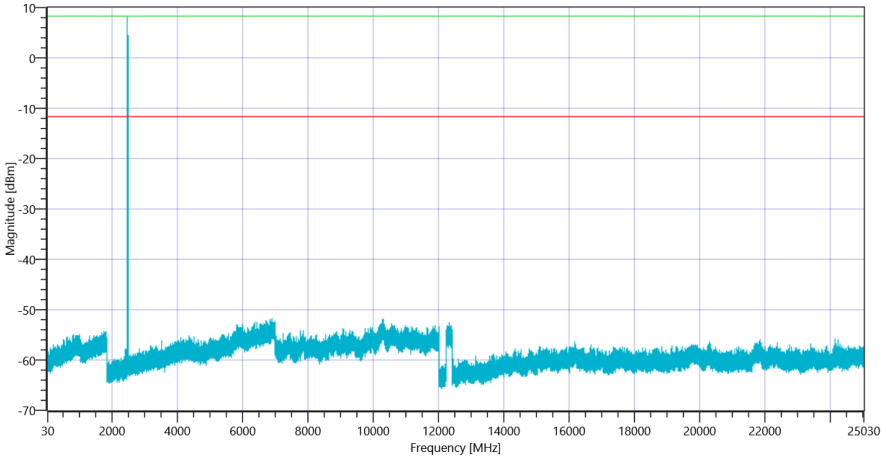


Plot_FCC Part 15.247 TX Spurious Conduced BT LE 1 Msps 2440_01022019_161610.png

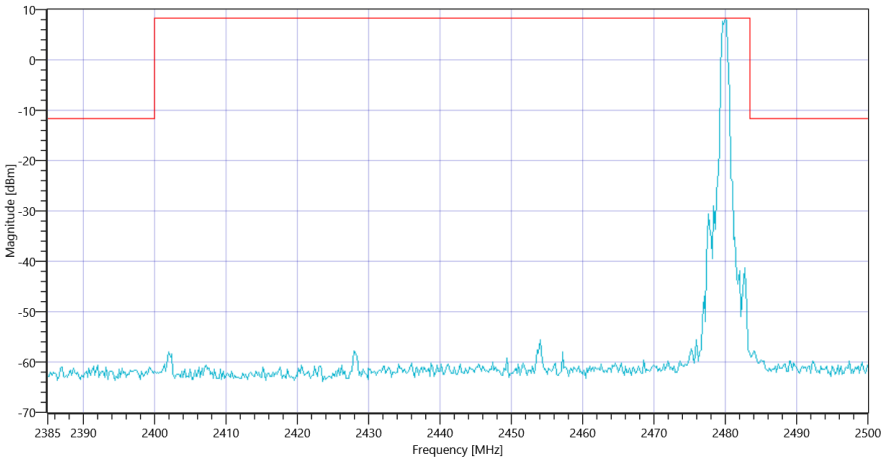
Test at TX 2480 MHz

READ SA SETTINGS:	
Ref. Level [dBm]	13.84
Resolution BW. [MHz]	0.100000
Video BW. [MHz]	0.300000
Detector	POS
Sweep Time [ms]	500
Sweep Points/Section	1001
Sweep Count	6
Sweep Mode	MAXH
Used Sweep Type	SWE

RESULT: TC_VM_FCC15247_TX_Emissions_Conducted_V01					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2480.00 MHz	---	---	8.36	dBm	Information
No peaks detected	---	---			PASS



Plot_FCC Part 15.247 TX Spurious Conduced BT LE 1 Msps 2480_01022019_163124.png



Plot_FCC Part 15.247 TX Spurious Conduced BT LE 1 Msps 2480_01022019_163126.png

TEST FINISHED		
General Verdict	01.02.2019 16:31:27 / RT: 2035 s	PASS

6. FCC Part 15.247 Restricted Band Edge Conducted Peak DTS BT LE 1 Msps

Test References	
TC Start	01.02.2019 16:31:29
System Version	1.0.0.13
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
Class / TC Version / TC ID	TC_VM_FCC15247_Restricted_Band_Edge_Conducted_Peak_V01 Version: 0.0.1 | TCID_FCC15247_7
My Description	FCC 15.247 Restricted Band Edge Conducted Peak DTS - BT LE 1 Msps
Add. Information	

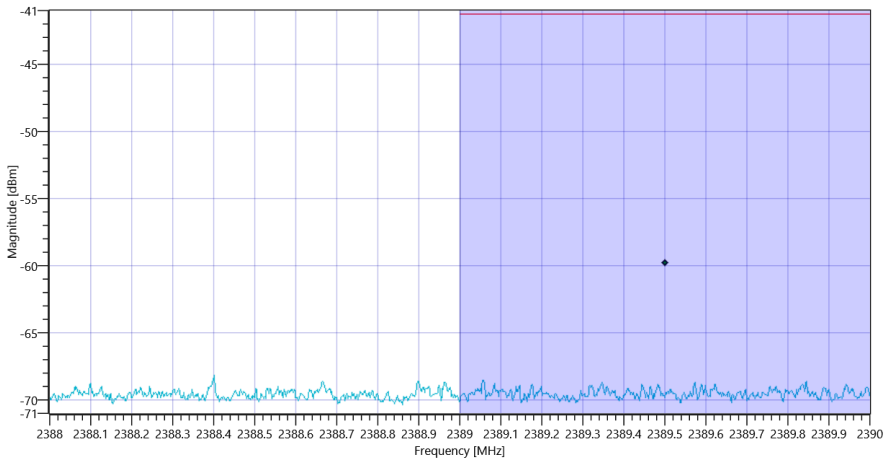
Test Parameter	
Technology to test	BT LE 1 Msps
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	True | Freq [MHz] 2402
Frequency mid to test	False | Freq [MHz] 2440
Frequency high to test	True | Freq [MHz] 2480
Pattern	PRBS9
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices 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

READ SA SETTINGS:	
Ref. Level [dBm]	12.47
Ref. Lev. offs [dB]	9.79
Input Attenuation [dB]	20
Freq. Start [MHz]	2388.000
Freq. Stop [MHz]	2390.000
Resolution BW. [MHz]	0.100000
Video BW. [MHz]	0.002000
Detector	POS
Sweep Time [ms]	8
Sweep Points/Section	1001
Sweep Count	300
Sweep Mode	MAXH
Used Sweep Type	SWE
Marker Method	Band Power

RESULT: TC_VM_FCC15247_Restricted_Band_Edge_Conducted_Peak_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Band Power without Antenna Gain	---	-41.23	-59.79	dBm	Information
Band Power incl. Antenna Gain	---	-41.23	-59.79	dBm	PASS



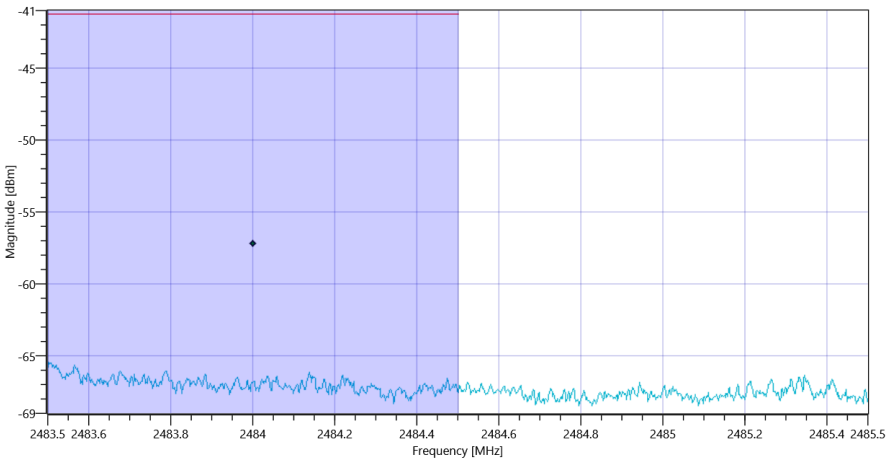
Plot_FCC Part 15.247 Restricted Band Edge Conducted Peak DTS BT LE 1 Msps_01022019_163200.png

Test at TX 2480 MHz

READ SA SETTINGS:	
Ref. Level [dBm]	13.82
Ref. Lev. offs [dB]	9.96
Input Attenuation [dB]	20
Freq. Start [MHz]	2483.500
Freq. Stop [MHz]	2485.500
Resolution BW. [MHz]	0.100000
Video BW. [MHz]	0.002000
Detector	POS
Sweep Time [ms]	8
Sweep Points/Section	1001
Sweep Count	300
Sweep Mode	MAXH
Used Sweep Type	SWE
Marker Method	Band Power

RESULT: TC_VM_FCC15247_Restricted_Band_Edge_Conducted_Peak_V01

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Band Power without Antenna Gain	---	-41.23	-57.22	dBm	Information
Band Power incl. Antenna Gain	---	-41.23	-57.22	dBm	PASS



Plot_FCC Part 15.247 Restricted Band Edge Conducted Peak DTS BT LE 1 Msps_01022019_163231.png

TEST FINISHED		
General Verdict	01.02.2019 16:32:31 / RT: 61 s	PASS

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