Measurement Results

1-7415_18-02-05_log1_conducted

Test logging

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1. FCC Part 15.247 Peak Power Spectral Density DTS ~ Generic 2G4

Test References	
TC Start	03.06.2019 13:37:40
System Version	1.0.0.15
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 - Generic 2G4
Add. Information	

IUT DEFINITION	
Manufacturer	NI
Type	NI
Serial No.	NI
Setup No.	NI
SW Version	NI
HW Version	NI
Comment 1	NI
Comment 2	NI

IUT Common Settings	
Tlow [°C]	-20
Tmid [°C]	20
Thigh [°C]	55
Vlow [V]	3.3
Vmid [V]	3.8
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 2G4 Init Values from IUT file	
Hopping supported	No
Frequency low [MHz]	2402
Frequency mid [MHz]	2442
Frequency high [MHz]	2478
Burst length [ms]	10
Nominal Bandwidth [MHz]	1.7
User Interaction	Yes

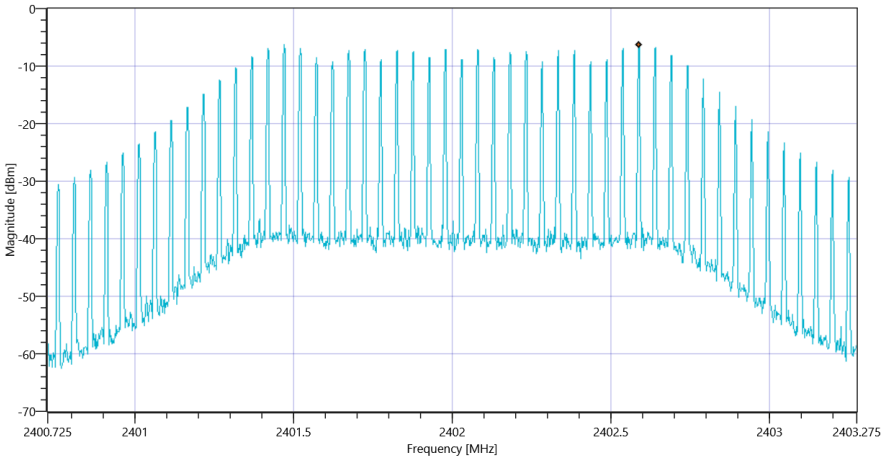
Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	True | Freq [MHz] 2402
Frequency mid to test	False | Freq [MHz] 2442
Frequency high to test	False | Freq [MHz] 2478
Pattern	PRBS9
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices 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

RESULT: Reference Power					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz	---	---	7.18	dBm	Information
Ref. Frequency	---	---	2401.650	MHz	Information

READ SA SETTINGS:	
Ref. Level [dBm]	12.18
Ref. Lev. offs [dB]	9.79
Input Attenuation [dB]	20
Freq. Start [MHz]	2400.725
Freq. Stop [MHz]	2403.275
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	-6.31	dBm/3KHz	PASS



Plot_FCC Part 15.247 Peak Power Spectral Density DTS ~ Generic 2G4_03062019_133818.png

TEST FINISHED		
General Verdict	03.06.2019 13:38:18 / RT: 37 s	PASS

2. FCC Part 15.247 Peak Power Spectral Density DTS ~ Generic 2G4

Test References	
TC Start	03.06.2019 14:58:20
System Version	1.0.0.15
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 - Generic 2G4
Add. Information	

IUT DEFINITION	
Manufacturer	NI
Type	NI
Serial No.	NI
Setup No.	NI
SW Version	NI
HW Version	NI
Comment 1	NI
Comment 2	NI

IUT Common Settings	
Tlow [°C]	-20
Tmid [°C]	20
Thigh [°C]	55
Vlow [V]	3.3
Vmid [V]	3.8
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 2G4 Init Values from IUT file	
Hopping supported	No
Frequency low [MHz]	2402
Frequency mid [MHz]	2442
Frequency high [MHz]	2478
Burst length [ms]	10
Nominal Bandwidth [MHz]	1.7
User Interaction	Yes

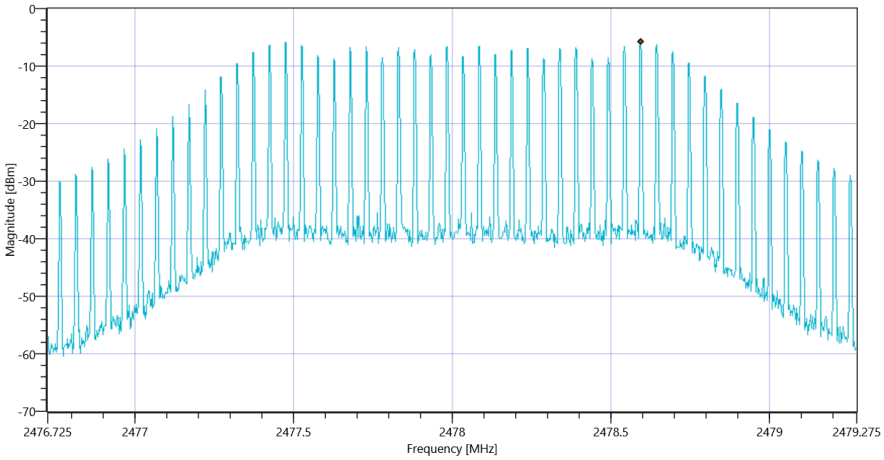
Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	False | Freq [MHz] 2402
Frequency mid to test	False | Freq [MHz] 2442
Frequency high to test	True | Freq [MHz] 2478
Pattern	PRBS9
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices 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 2478 MHz

RESULT: Reference Power					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz	---	---	7.63	dBm	Information
Ref. Frequency	---	---	2477.470	MHz	Information

READ SA SETTINGS:	
Ref. Level [dBm]	12.63
Ref. Lev. offs [dB]	9.96
Input Attenuation [dB]	20
Freq. Start [MHz]	2476.725
Freq. Stop [MHz]	2479.275
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	-5.77	dBm/3KHz	PASS



Plot_FCC Part 15.247 Peak Power Spectral Density DTS ~ Generic 2G4_03062019_145910.png

TEST FINISHED		
General Verdict	03.06.2019 14:59:10 / RT: 50 s	PASS

3. FCC Part 15.247 Peak Power Spectral Density DTS ~ Generic 2G4

Test References	
TC Start	03.06.2019 13:57:33
System Version	1.0.0.15
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 - Generic 2G4
Add. Information	

IUT DEFINITION	
Manufacturer	NI
Type	NI
Serial No.	NI
Setup No.	NI
SW Version	NI
HW Version	NI
Comment 1	NI
Comment 2	NI

IUT Common Settings	
Tlow [°C]	-20
Tmid [°C]	20
Thigh [°C]	55
Vlow [V]	3.3
Vmid [V]	3.8
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 2G4 Init Values from IUT file	
Hopping supported	No
Frequency low [MHz]	2402
Frequency mid [MHz]	2442
Frequency high [MHz]	2478
Burst length [ms]	10
Nominal Bandwidth [MHz]	1.7
User Interaction	Yes

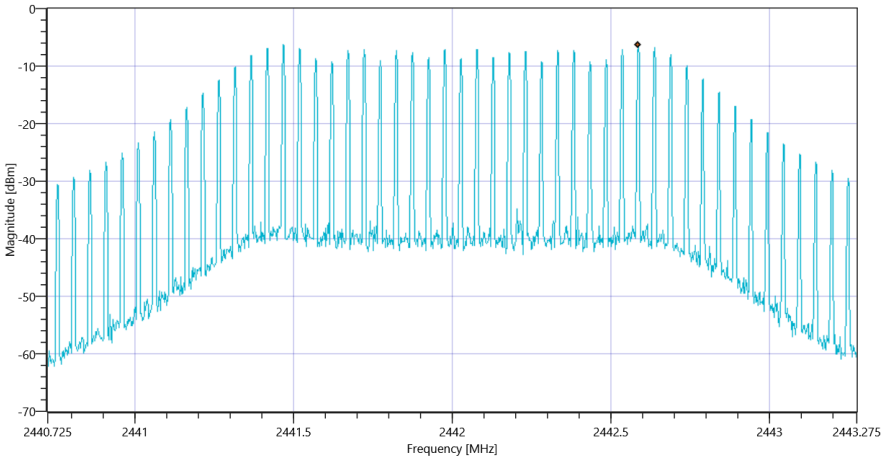
Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	False | Freq [MHz] 2402
Frequency mid to test	True | Freq [MHz] 2442
Frequency high to test	False | Freq [MHz] 2478
Pattern	PRBS9
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices 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 2442 MHz

RESULT: Reference Power					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz	---	---	7.10	dBm	Information
Ref. Frequency	---	---	2441.510	MHz	Information

READ SA SETTINGS:	
Ref. Level [dBm]	12.10
Ref. Lev. offs [dB]	9.91
Input Attenuation [dB]	20
Freq. Start [MHz]	2440.725
Freq. Stop [MHz]	2443.275
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	-6.3	dBm/3KHz	PASS



Plot_FCC Part 15.247 Peak Power Spectral Density DTS ~ Generic 2G4_03062019_135808.png

TEST FINISHED		
General Verdict	03.06.2019 13:58:08 / RT: 34 s	PASS

4. FCC Part 15.247 Bandwidth 6dB DTS ~ Generic 2G4

Test References	
TC Start	03.06.2019 13:37:11
System Version	1.0.0.15
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 - Generic 2G4
Add. Information	

IUT DEFINITION	
Manufacturer	NI
Type	NI
Serial No.	NI
Setup No.	NI
SW Version	NI
HW Version	NI
Comment 1	NI
Comment 2	NI

IUT Common Settings	
Tlow [°C]	-20
Tmid [°C]	20
Thigh [°C]	55
Vlow [V]	3.3
Vmid [V]	3.8
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 2G4 Init Values from IUT file	
Hopping supported	No
Frequency low [MHz]	2402
Frequency mid [MHz]	2442
Frequency high [MHz]	2478
Burst length [ms]	10
Nominal Bandwidth [MHz]	1.7
User Interaction	Yes

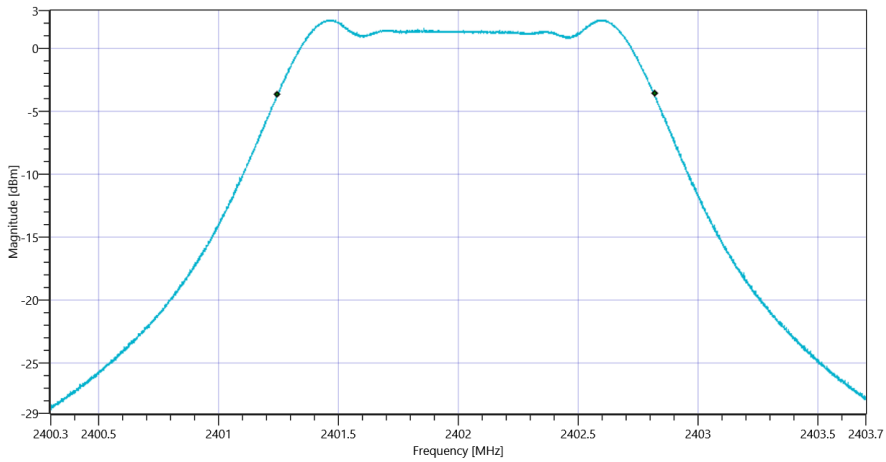
Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	True | Freq [MHz] 2402
Frequency mid to test	False | Freq [MHz] 2442
Frequency high to test	False | Freq [MHz] 2478
Pattern	PRBS9
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices 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

RESULT: Reference Power					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz	---	---	7.18	dBm	Information
Ref. Frequency	---	---	2402.550	MHz	Information

READ SA SETTINGS:	
Ref. Level [dBm]	12.18
Ref. Lev. offs [dB]	9.79
Input Attenuation [dB]	20
Freq. Start [MHz]	2400.300
Freq. Stop [MHz]	2403.700
Resolution BW. [MHz]	0.100000
Video BW. [MHz]	0.300000
Detector	POS
Sweep Time [ms]	50
Sweep Points/Section	10001
Sweep Count	200
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)	500	---	1575	kHz	PASS



Plot_FCC Part 15.247 Bandwidth 6dB DTS ~ Generic 2G4_03062019_133737.png

TEST FINISHED		
General Verdict	03.06.2019 13:37:37 / RT: 25 s	PASS

5. FCC Part 15.247 Bandwidth 6dB DTS ~ Generic 2G4

Test References	
TC Start	03.06.2019 13:57:04
System Version	1.0.0.15
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 - Generic 2G4
Add. Information	

IUT DEFINITION	
Manufacturer	NI
Type	NI
Serial No.	NI
Setup No.	NI
SW Version	NI
HW Version	NI
Comment 1	NI
Comment 2	NI

IUT Common Settings	
Tlow [°C]	-20
Tmid [°C]	20
Thigh [°C]	55
Vlow [V]	3.3
Vmid [V]	3.8
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 2G4 Init Values from IUT file	
Hopping supported	No
Frequency low [MHz]	2402
Frequency mid [MHz]	2442
Frequency high [MHz]	2478
Burst length [ms]	10
Nominal Bandwidth [MHz]	1.7
User Interaction	Yes

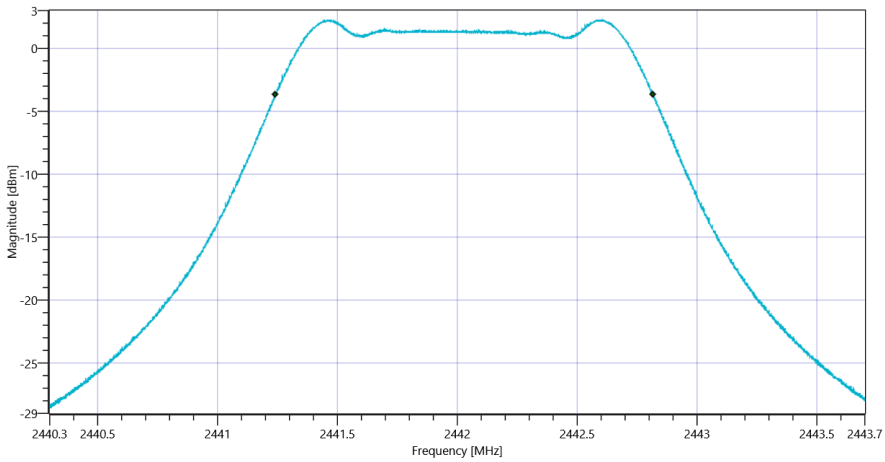
Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	False | Freq [MHz] 2402
Frequency mid to test	True | Freq [MHz] 2442
Frequency high to test	False | Freq [MHz] 2478
Pattern	PRBS9
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices 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 2442 MHz

RESULT: Reference Power					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz	---	---	7.10	dBm	Information
Ref. Frequency	---	---	2441.410	MHz	Information

READ SA SETTINGS:	
Ref. Level [dBm]	12.10
Ref. Lev. offs [dB]	9.91
Input Attenuation [dB]	20
Freq. Start [MHz]	2440.300
Freq. Stop [MHz]	2443.700
Resolution BW. [MHz]	0.100000
Video BW. [MHz]	0.300000
Detector	POS
Sweep Time [ms]	50
Sweep Points/Section	10001
Sweep Count	200
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)	500	---	1577	kHz	PASS



Plot_FCC Part 15.247 Bandwidth 6dB DTS ~ Generic 2G4_03062019_135729.png

TEST FINISHED		
General Verdict	03.06.2019 13:57:29 / RT: 25 s	PASS

6. FCC Part 15.247 Bandwidth 6dB DTS ~ Generic 2G4

Test References	
TC Start	03.06.2019 14:57:51
System Version	1.0.0.15
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 - Generic 2G4
Add. Information	

IUT DEFINITION	
Manufacturer	NI
Type	NI
Serial No.	NI
Setup No.	NI
SW Version	NI
HW Version	NI
Comment 1	NI
Comment 2	NI

IUT Common Settings	
Tlow [°C]	-20
Tmid [°C]	20
Thigh [°C]	55
Vlow [V]	3.3
Vmid [V]	3.8
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 2G4 Init Values from IUT file	
Hopping supported	No
Frequency low [MHz]	2402
Frequency mid [MHz]	2442
Frequency high [MHz]	2478
Burst length [ms]	10
Nominal Bandwidth [MHz]	1.7
User Interaction	Yes

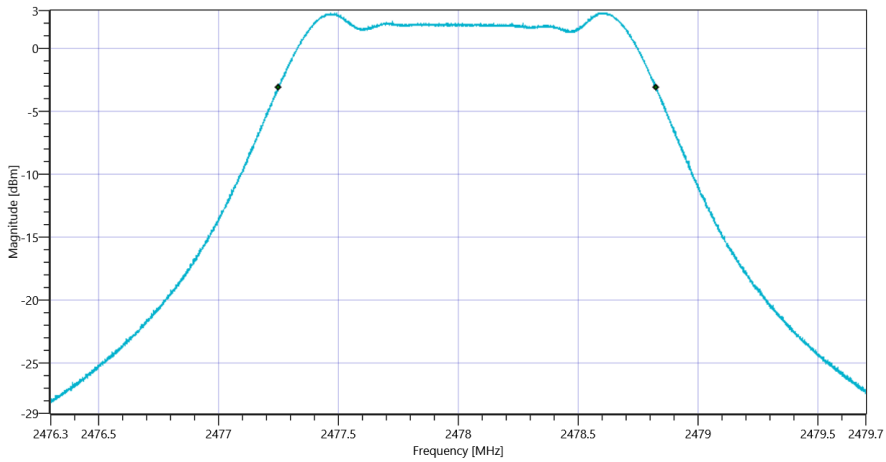
Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	False | Freq [MHz] 2402
Frequency mid to test	False | Freq [MHz] 2442
Frequency high to test	True | Freq [MHz] 2478
Pattern	PRBS9
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices 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 2478 MHz

RESULT: Reference Power					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz	---	---	7.64	dBm	Information
Ref. Frequency	---	---	2477.470	MHz	Information

READ SA SETTINGS:	
Ref. Level [dBm]	12.64
Ref. Lev. offs [dB]	9.96
Input Attenuation [dB]	20
Freq. Start [MHz]	2476.300
Freq. Stop [MHz]	2479.700
Resolution BW. [MHz]	0.100000
Video BW. [MHz]	0.300000
Detector	POS
Sweep Time [ms]	50
Sweep Points/Section	10001
Sweep Count	200
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)	500	---	1577	kHz	PASS



Plot_FCC Part 15.247 Bandwidth 6dB DTS ~ Generic 2G4_03062019_145816.png

TEST FINISHED		
General Verdict	03.06.2019 14:58:16 / RT: 25 s	PASS

7. FCC Part 15.247 Bandwidth 99PCT-20dB ~ Generic 2G4

Test References	
TC Start	03.06.2019 13:38:21
System Version	1.0.0.15
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 - Generic 2G4
Add. Information	

IUT DEFINITION	
Manufacturer	NI
Type	NI
Serial No.	NI
Setup No.	NI
SW Version	NI
HW Version	NI
Comment 1	NI
Comment 2	NI

IUT Common Settings	
Tlow [°C]	-20
Tmid [°C]	20
Thigh [°C]	55
Vlow [V]	3.3
Vmid [V]	3.8
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 2G4 Init Values from IUT file	
Hopping supported	No
Frequency low [MHz]	2402
Frequency mid [MHz]	2442
Frequency high [MHz]	2478
Burst length [ms]	10
Nominal Bandwidth [MHz]	1.7
User Interaction	Yes

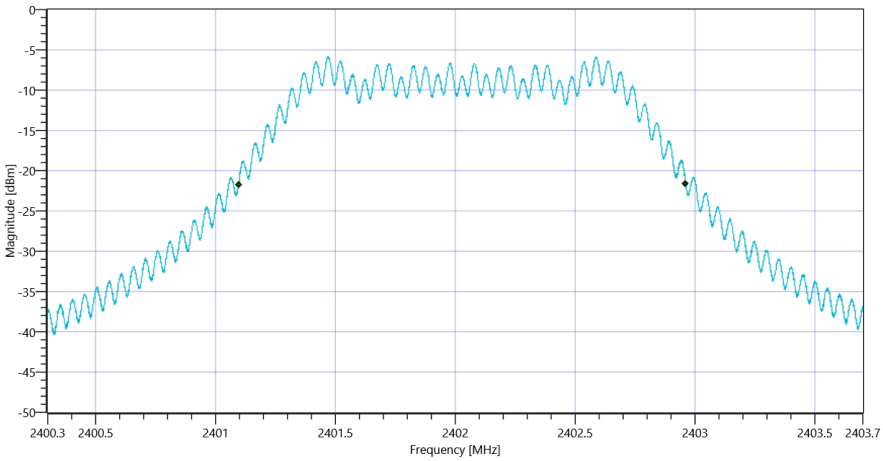
Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	True | Freq [MHz] 2402
Frequency mid to test	False | Freq [MHz] 2442
Frequency high to test	False | Freq [MHz] 2478
Pattern	PRBS9
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices 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

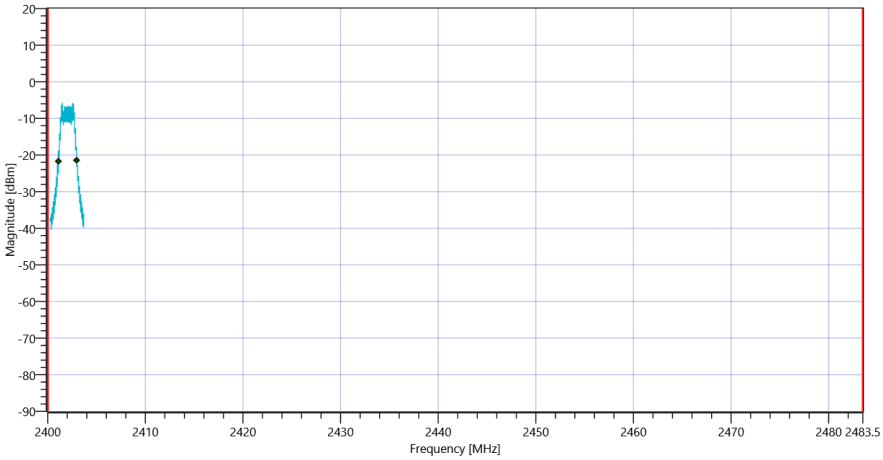
RESULT: Reference Power					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz	---	---	7.19	dBm	Information
Ref. Frequency	---	---	2401.750	MHz	Information

READ SA SETTINGS:	
Ref. Level [dBm]	12.19
Ref. Lev. offs [dB]	9.79
Input Attenuation [dB]	20
Freq. Start [MHz]	2400.300
Freq. Stop [MHz]	2403.700
Resolution BW. [MHz]	0.030000
Video BW. [MHz]	0.100000
Detector	POS
Sweep Time [ms]	50
Sweep Points/Section	10001
Sweep Count	200
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%	---	---	1865	kHz	Information
T1 99%	2400.000000	---	2401.0964	MHz	PASS
T2 99%	---	2483.500000	2402.9614	MHz	PASS

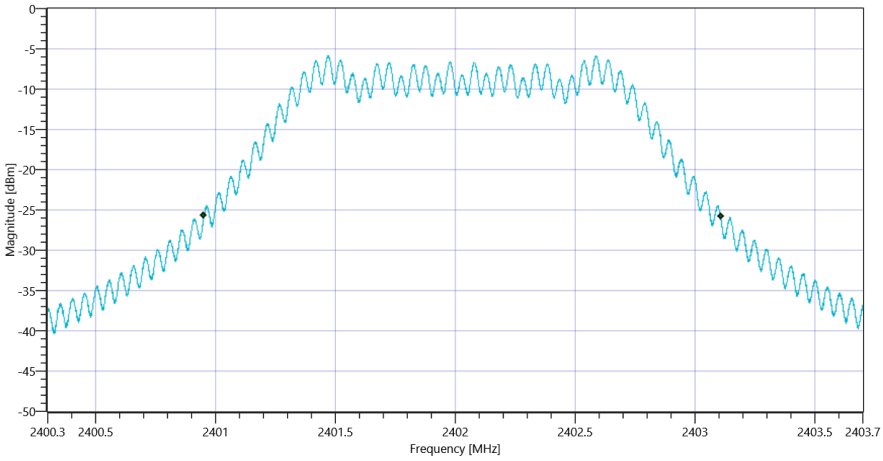


Plot_FCC Part 15.247 Bandwidth 99PCT-20dB ~ Generic 2G4 99PCT_03062019_133847.png

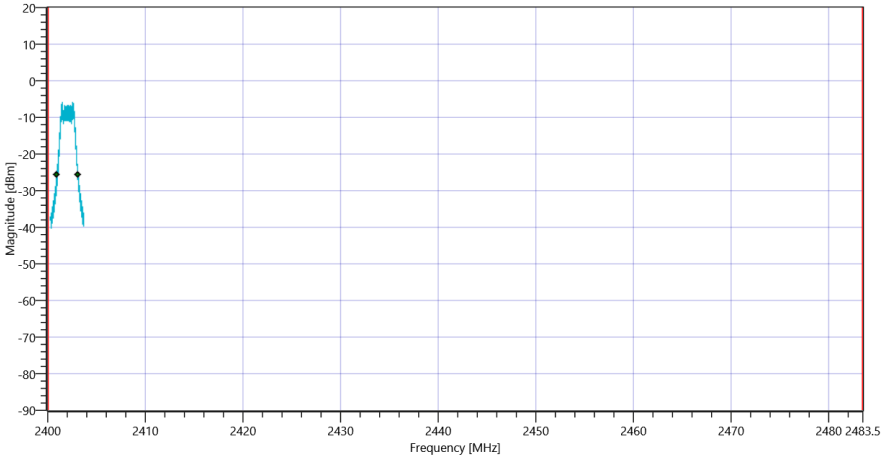


Plot_FCC Part 15.247 Bandwidth 99PCT-20dB ~ Generic 2G4_03062019_133850.png

RESULT: TC_VM_FCC15247_Bandwidth_99PCT_20dB_DTS_FHSS_V01					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	2155	kHz	Information
T1 20dB	2400.000000	---	2400.9518	MHz	PASS
T2 20dB	---	2483.500000	2403.1067	MHz	PASS



Plot_FCC Part 15.247 Bandwidth 99PCT-20dB ~ Generic 2G4 20dB_03062019_133854.png



Plot_FCC Part 15.247 Bandwidth 99PCT-20dB ~ Generic 2G4_03062019_133857.png

TEST FINISHED		
General Verdict	03.06.2019 13:38:57 / RT: 35 s	PASS

8. FCC Part 15.247 Bandwidth 99PCT-20dB ~ Generic 2G4

Test References	
TC Start	03.06.2019 13:58:12
System Version	1.0.0.15
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 - Generic 2G4
Add. Information	

IUT DEFINITION	
Manufacturer	NI
Type	NI
Serial No.	NI
Setup No.	NI
SW Version	NI
HW Version	NI
Comment 1	NI
Comment 2	NI

IUT Common Settings	
Tlow [°C]	-20
Tmid [°C]	20
Thigh [°C]	55
Vlow [V]	3.3
Vmid [V]	3.8
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 2G4 Init Values from IUT file	
Hopping supported	No
Frequency low [MHz]	2402
Frequency mid [MHz]	2442
Frequency high [MHz]	2478
Burst length [ms]	10
Nominal Bandwidth [MHz]	1.7
User Interaction	Yes

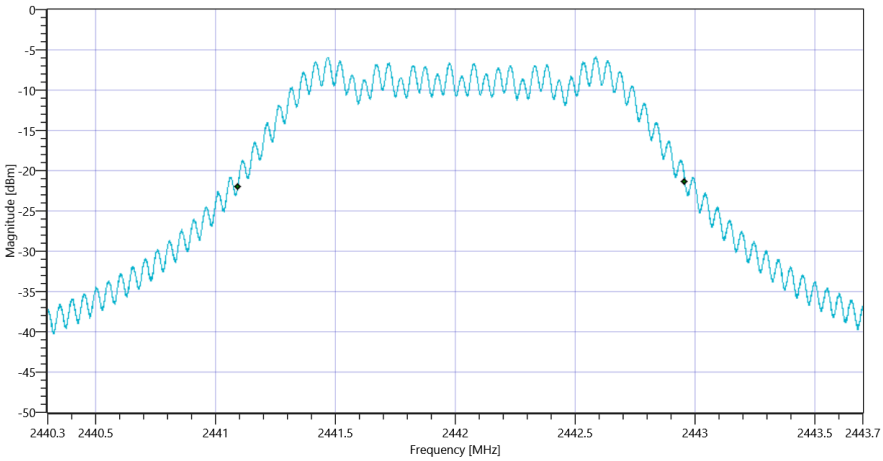
Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	False | Freq [MHz] 2402
Frequency mid to test	True | Freq [MHz] 2442
Frequency high to test	False | Freq [MHz] 2478
Pattern	PRBS9
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices 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 2442 MHz

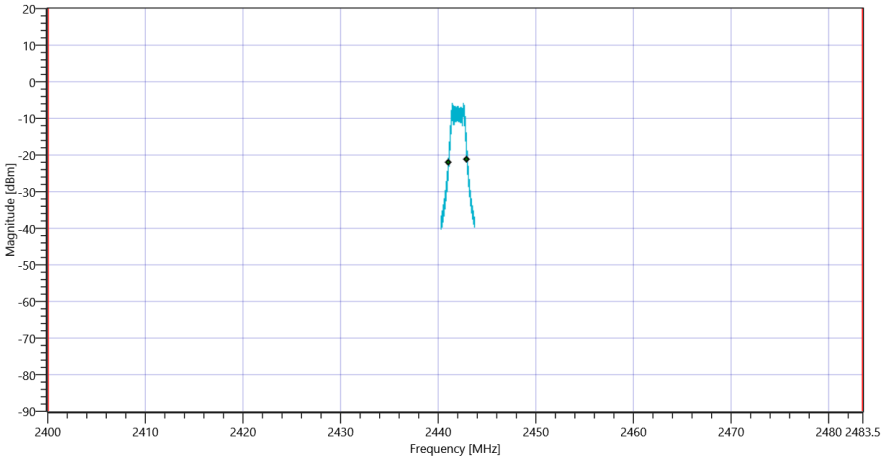
RESULT: Reference Power					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz	---	---	7.09	dBm	Information
Ref. Frequency	---	---	2441.410	MHz	Information

READ SA SETTINGS:	
Ref. Level [dBm]	12.09
Ref. Lev. offs [dB]	9.91
Input Attenuation [dB]	20
Freq. Start [MHz]	2440.300
Freq. Stop [MHz]	2443.700
Resolution BW. [MHz]	0.030000
Video BW. [MHz]	0.100000
Detector	POS
Sweep Time [ms]	50
Sweep Points/Section	10001
Sweep Count	200
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%	---	---	1865	kHz	Information
T1 99%	2400.000000	---	2441.0926	MHz	PASS
T2 99%	---	2483.500000	2442.9580	MHz	PASS

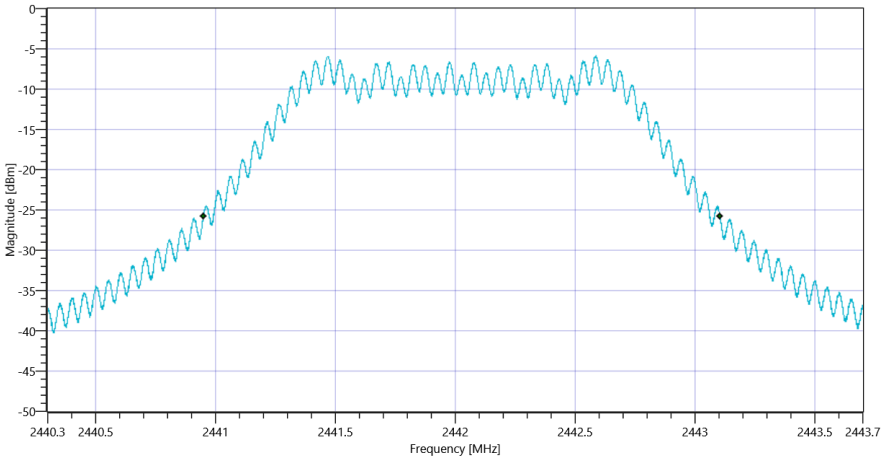


Plot_FCC Part 15.247 Bandwidth 99PCT-20dB ~ Generic 2G4 99PCT_03062019_135845.png

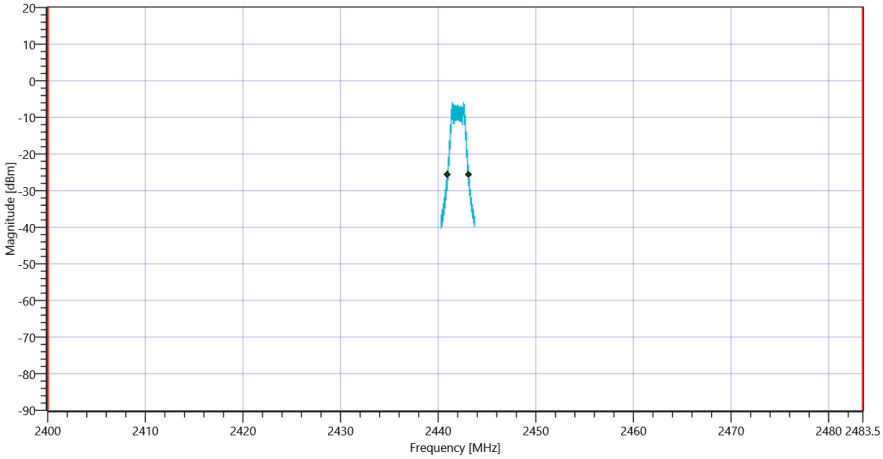


Plot_FCC Part 15.247 Bandwidth 99PCT-20dB ~ Generic 2G4_03062019_135848.png

RESULT: TC_VM_FCC15247_Bandwidth_99PCT_20dB_DTS_FHSS_V01					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	2156	kHz	Information
T1 20dB	2400.000000	---	2440.9491	MHz	PASS
T2 20dB	---	2483.500000	2443.1047	MHz	PASS



Plot_FCC Part 15.247 Bandwidth 99PCT-20dB ~ Generic 2G4 20dB_03062019_135852.png



Plot_FCC Part 15.247 Bandwidth 99PCT-20dB ~ Generic 2G4_03062019_135855.png

TEST FINISHED		
General Verdict	03.06.2019 13:58:55 / RT: 43 s	PASS

9. FCC Part 15.247 Bandwidth 99PCT-20dB ~ Generic 2G4

Test References	
TC Start	03.06.2019 14:59:14
System Version	1.0.0.15
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 - Generic 2G4
Add. Information	

IUT DEFINITION	
Manufacturer	NI
Type	NI
Serial No.	NI
Setup No.	NI
SW Version	NI
HW Version	NI
Comment 1	NI
Comment 2	NI

IUT Common Settings	
Tlow [°C]	-20
Tmid [°C]	20
Thigh [°C]	55
Vlow [V]	3.3
Vmid [V]	3.8
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 2G4 Init Values from IUT file	
Hopping supported	No
Frequency low [MHz]	2402
Frequency mid [MHz]	2442
Frequency high [MHz]	2478
Burst length [ms]	10
Nominal Bandwidth [MHz]	1.7
User Interaction	Yes

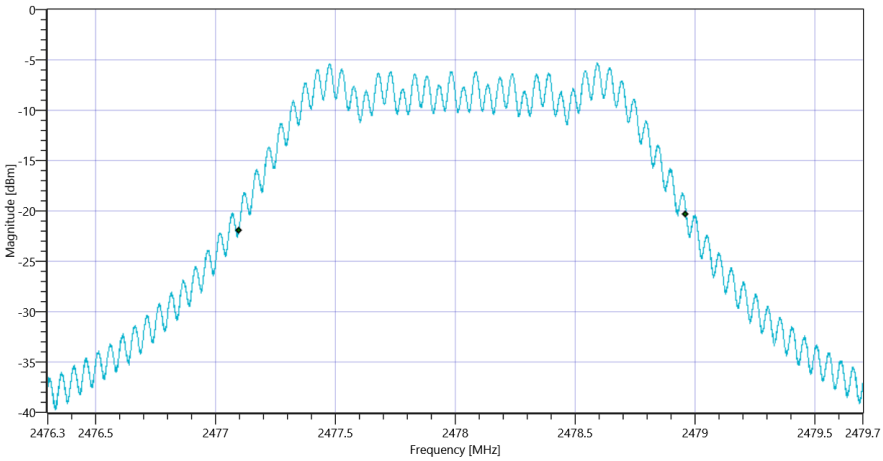
Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	False | Freq [MHz] 2402
Frequency mid to test	False | Freq [MHz] 2442
Frequency high to test	True | Freq [MHz] 2478
Pattern	PRBS9
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices 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 2478 MHz

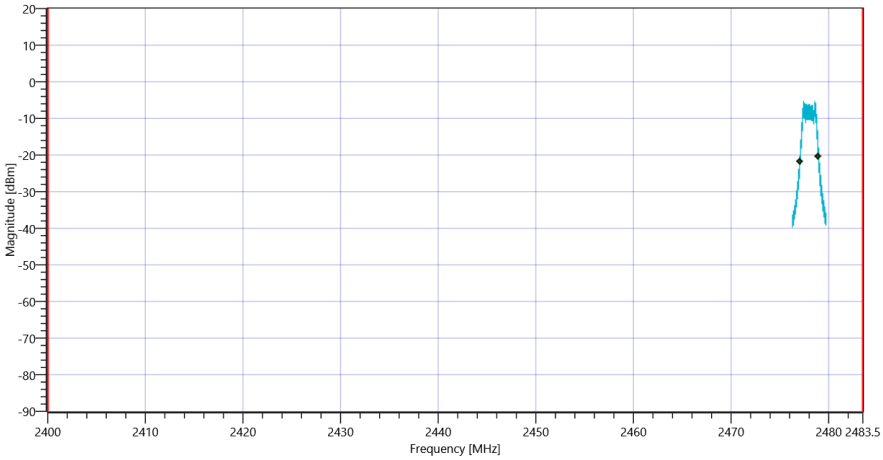
RESULT: Reference Power					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz	---	---	7.65	dBm	Information
Ref. Frequency	---	---	2477.470	MHz	Information

READ SA SETTINGS:	
Ref. Level [dBm]	12.65
Ref. Lev. offs [dB]	9.96
Input Attenuation [dB]	20
Freq. Start [MHz]	2476.300
Freq. Stop [MHz]	2479.700
Resolution BW. [MHz]	0.030000
Video BW. [MHz]	0.100000
Detector	POS
Sweep Time [ms]	50
Sweep Points/Section	10001
Sweep Count	200
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%	---	---	1864	kHz	Information
T1 99%	2400.000000	---	2477.0984	MHz	PASS
T2 99%	---	2483.500000	2478.9628	MHz	PASS

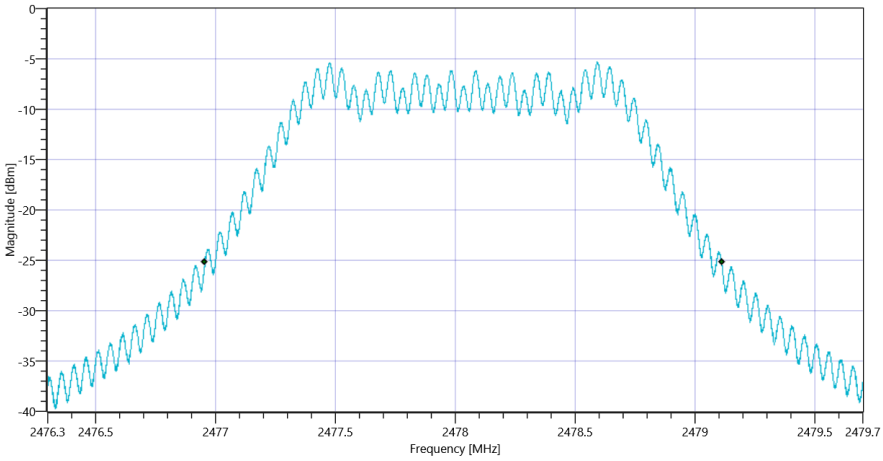


Plot_FCC Part 15.247 Bandwidth 99PCT-20dB ~ Generic 2G4 99PCT_03062019_145939.png

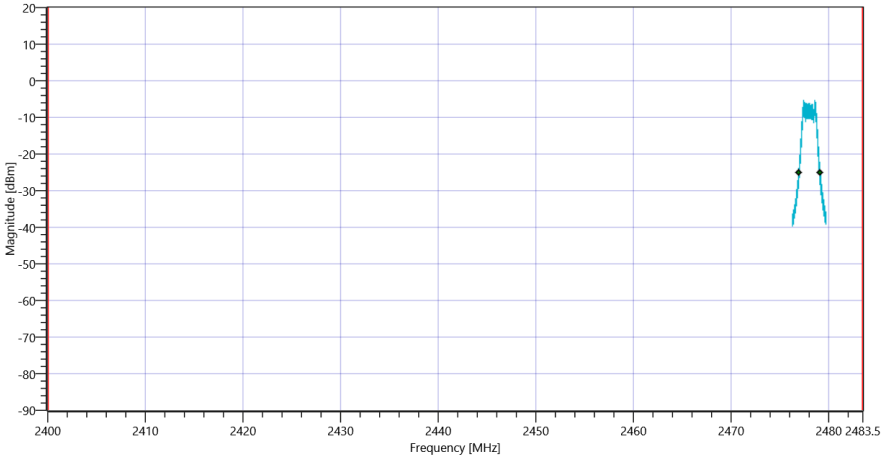


Plot_FCC Part 15.247 Bandwidth 99PCT-20dB ~ Generic 2G4_03062019_145942.png

RESULT: TC_VM_FCC15247_Bandwidth_99PCT_20dB_DTS_FHSS_V01					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	2155	kHz	Information
T1 20dB	2400.000000	---	2476.9565	MHz	PASS
T2 20dB	---	2483.500000	2479.1115	MHz	PASS



Plot_FCC Part 15.247 Bandwidth 99PCT-20dB ~ Generic 2G4 20dB_03062019_145946.png



Plot_FCC Part 15.247 Bandwidth 99PCT-20dB ~ Generic 2G4_03062019_145948.png

TEST FINISHED		
General Verdict	03.06.2019 14:59:48 / RT: 34 s	PASS

10. FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ Generic 2G4

Test References	
TC Start	03.06.2019 13:36:14
System Version	1.0.0.15
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 DTS4 - Generic 2G4
Add. Information	

IUT DEFINITION	
Manufacturer	NI
Type	NI
Serial No.	NI
Setup No.	NI
SW Version	NI
HW Version	NI
Comment 1	NI
Comment 2	NI

IUT Common Settings	
Tlow [°C]	-20
Tmid [°C]	20
Thigh [°C]	55
Vlow [V]	3.3
Vmid [V]	3.8
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 2G4 Init Values from IUT file	
Hopping supported	No
Frequency low [MHz]	2402
Frequency mid [MHz]	2442
Frequency high [MHz]	2478
Burst length [ms]	10
Nominal Bandwidth [MHz]	1.7
User Interaction	Yes

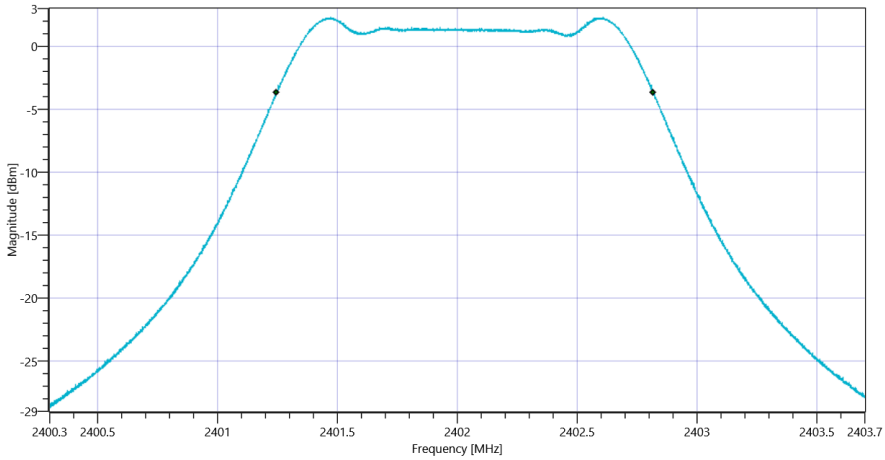
Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	True | Freq [MHz] 2402
Frequency mid to test	False | Freq [MHz] 2442
Frequency high to test	False | Freq [MHz] 2478
Pattern	PRBS9
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.70 | SA:

Test at TX 2402 MHz

RESULT: Reference Power					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz	---	---	7.17	dBm	Information
Ref. Frequency	---	---	2402.050	MHz	Information

READ SA SETTINGS:	
Ref. Level [dBm]	12.17
Ref. Lev. offs [dB]	9.79
Input Attenuation [dB]	20
Freq. Start [MHz]	2400.300
Freq. Stop [MHz]	2403.700
Resolution BW. [MHz]	0.100000
Video BW. [MHz]	0.300000
Detector	POS
Sweep Time [ms]	50
Sweep Points/Section	10001
Sweep Count	200
Sweep Mode	MAXH
Used Sweep Type	SWE

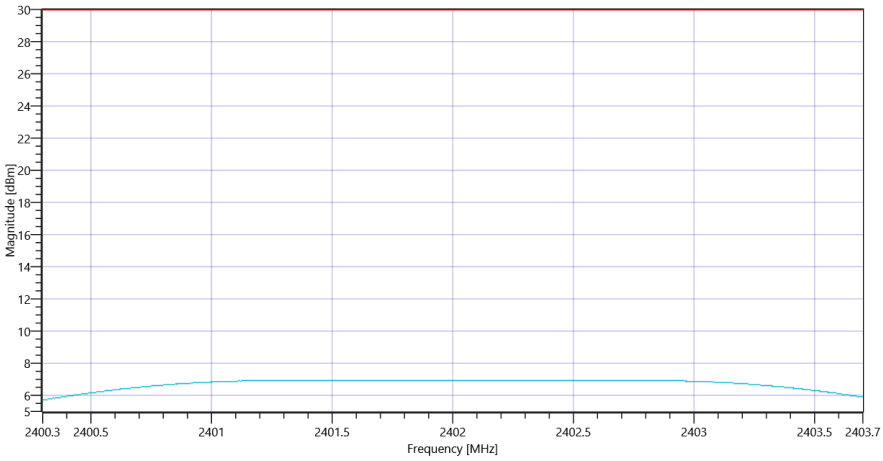
RESULT: DTS Bandwidth					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	---	---	1572	kHz	Information



Plot_FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ Generic 2G4 DTS BW _03062019_133640.png

READ SA SETTINGS:	
Ref. Level [dBm]	17.17
Ref. Lev. offs [dB]	9.79
Input Attenuation [dB]	25
Freq. Start [MHz]	2400.300
Freq. Stop [MHz]	2403.700
Resolution BW. [MHz]	3.000000
Video BW. [MHz]	10.000000
Detector	POS
Sweep Time [ms]	50
Sweep Points/Section	1001
Sweep Count	200
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	6.93	dBm	PASS
Peak Power	---	1000	4.931738	mW	PASS
Frequency at Peak	---	---	2401.946	MHz	Information



Plot_FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ Generic 2G4_03062019_133655.png

TEST FINISHED		
General Verdict	03.06.2019 13:36:55 / RT: 40 s	PASS

11. FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ Generic 2G4

Test References	
TC Start	03.06.2019 13:55:55
System Version	1.0.0.15
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 DTS4 - Generic 2G4
Add. Information	

IUT DEFINITION	
Manufacturer	NI
Type	NI
Serial No.	NI
Setup No.	NI
SW Version	NI
HW Version	NI
Comment 1	NI
Comment 2	NI

IUT Common Settings	
Tlow [°C]	-20
Tmid [°C]	20
Thigh [°C]	55
Vlow [V]	3.3
Vmid [V]	3.8
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 2G4 Init Values from IUT file	
Hopping supported	No
Frequency low [MHz]	2402
Frequency mid [MHz]	2442
Frequency high [MHz]	2478
Burst length [ms]	10
Nominal Bandwidth [MHz]	1.7
User Interaction	Yes

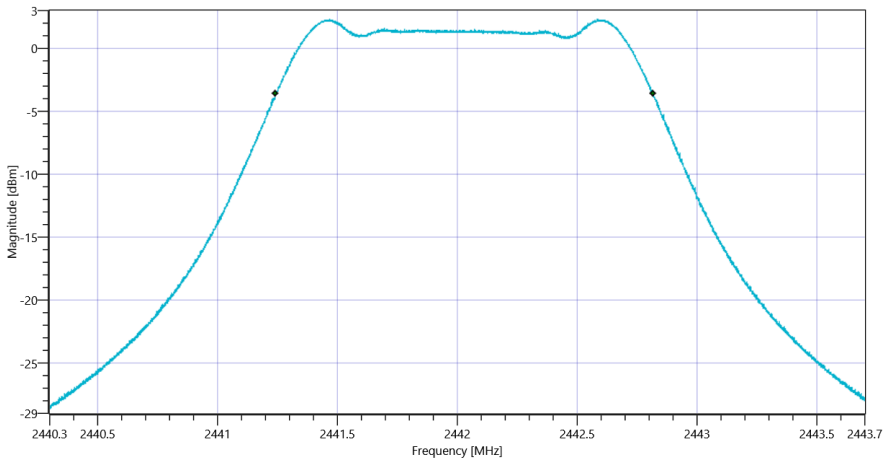
Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	False | Freq [MHz] 2402
Frequency mid to test	True | Freq [MHz] 2442
Frequency high to test	False | Freq [MHz] 2478
Pattern	PRBS9
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.70 | SA:

Test at TX 2442 MHz

RESULT: Reference Power					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz	---	---	7.14	dBm	Information
Ref. Frequency	---	---	2441.510	MHz	Information

READ SA SETTINGS:	
Ref. Level [dBm]	12.14
Ref. Lev. offs [dB]	9.91
Input Attenuation [dB]	20
Freq. Start [MHz]	2440.300
Freq. Stop [MHz]	2443.700
Resolution BW. [MHz]	0.100000
Video BW. [MHz]	0.300000
Detector	POS
Sweep Time [ms]	50
Sweep Points/Section	10001
Sweep Count	200
Sweep Mode	MAXH
Used Sweep Type	SWE

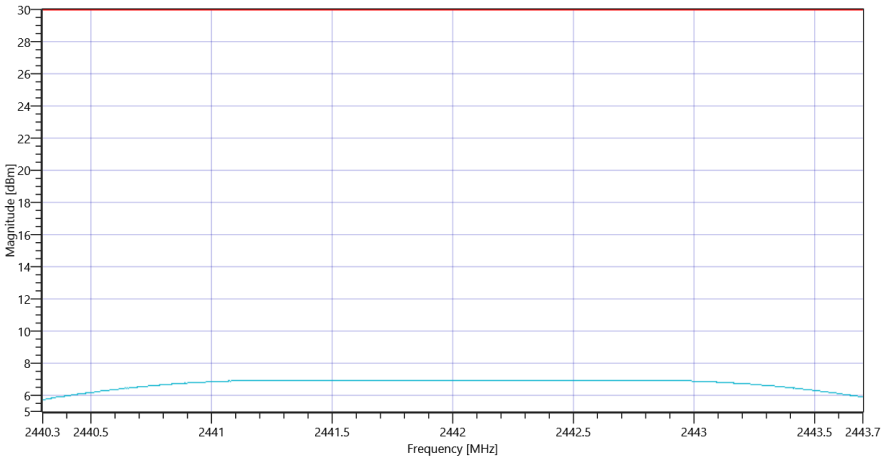
RESULT: DTS Bandwidth					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	---	---	1576	kHz	Information



Plot_FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ Generic 2G4 DTS BW _03062019_135620.png

READ SA SETTINGS:	
Ref. Level [dBm]	17.14
Ref. Lev. offs [dB]	9.91
Input Attenuation [dB]	25
Freq. Start [MHz]	2440.300
Freq. Stop [MHz]	2443.700
Resolution BW. [MHz]	3.000000
Video BW. [MHz]	10.000000
Detector	POS
Sweep Time [ms]	50
Sweep Points/Section	1001
Sweep Count	200
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	6.95	dBm	PASS
Peak Power	---	1000	4.954502	mW	PASS
Frequency at Peak	---	---	2442.017	MHz	Information



Plot_FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ Generic 2G4_03062019_135635.png

TEST FINISHED		
General Verdict	03.06.2019 13:56:35 / RT: 40 s	PASS

12. FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ Generic 2G4

Test References	
TC Start	03.06.2019 14:56:56
System Version	1.0.0.15
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 DTS4 - Generic 2G4
Add. Information	

IUT DEFINITION	
Manufacturer	NI
Type	NI
Serial No.	NI
Setup No.	NI
SW Version	NI
HW Version	NI
Comment 1	NI
Comment 2	NI

IUT Common Settings	
Tlow [°C]	-20
Tmid [°C]	20
Thigh [°C]	55
Vlow [V]	3.3
Vmid [V]	3.8
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 2G4 Init Values from IUT file	
Hopping supported	No
Frequency low [MHz]	2402
Frequency mid [MHz]	2442
Frequency high [MHz]	2478
Burst length [ms]	10
Nominal Bandwidth [MHz]	1.7
User Interaction	Yes

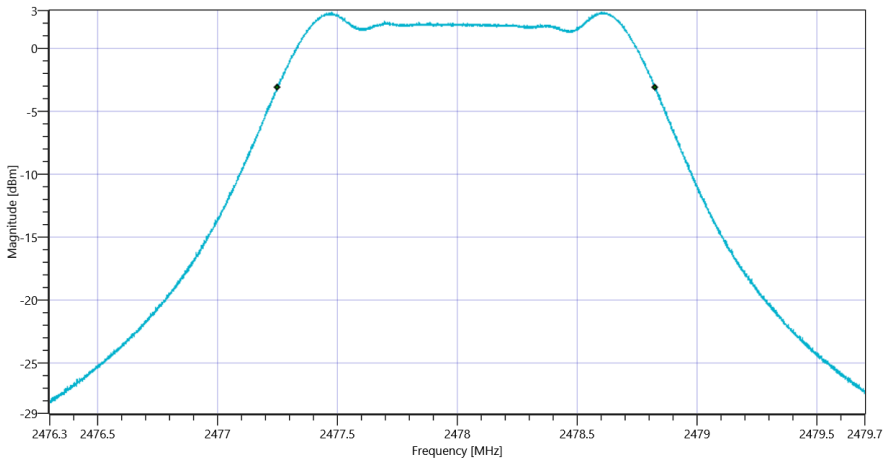
Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	False | Freq [MHz] 2402
Frequency mid to test	False | Freq [MHz] 2442
Frequency high to test	True | Freq [MHz] 2478
Pattern	PRBS9
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.70 | SA:

Test at TX 2478 MHz

RESULT: Reference Power					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz	---	---	7.63	dBm	Information
Ref. Frequency	---	---	2477.370	MHz	Information

READ SA SETTINGS:	
Ref. Level [dBm]	12.63
Ref. Lev. offs [dB]	9.96
Input Attenuation [dB]	20
Freq. Start [MHz]	2476.300
Freq. Stop [MHz]	2479.700
Resolution BW. [MHz]	0.100000
Video BW. [MHz]	0.300000
Detector	POS
Sweep Time [ms]	50
Sweep Points/Section	10001
Sweep Count	200
Sweep Mode	MAXH
Used Sweep Type	SWE

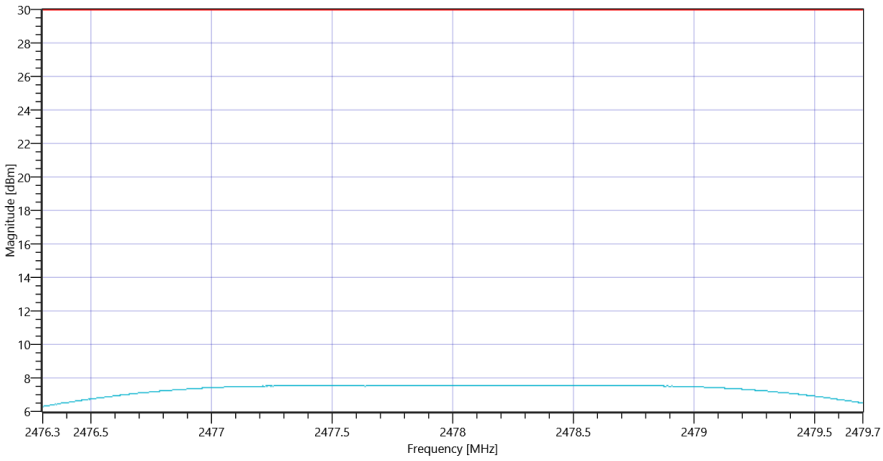
RESULT: DTS Bandwidth					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	---	---	1574	kHz	Information



Plot_FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ Generic 2G4 DTS BW _03062019_145721.png

READ SA SETTINGS:	
Ref. Level [dBm]	17.63
Ref. Lev. offs [dB]	9.96
Input Attenuation [dB]	25
Freq. Start [MHz]	2476.300
Freq. Stop [MHz]	2479.700
Resolution BW. [MHz]	3.000000
Video BW. [MHz]	10.000000
Detector	POS
Sweep Time [ms]	50
Sweep Points/Section	1001
Sweep Count	200
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	7.53	dBm	PASS
Peak Power	---	1000	5.662393	mW	PASS
Frequency at Peak	---	---	2478.282	MHz	Information



Plot_FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ Generic 2G4_03062019_145735.png

TEST FINISHED		
General Verdict	03.06.2019 14:57:35 / RT: 39 s	PASS

13. FCC Part 15.247 TX Spurious Conduced ~ Generic 2G4

Test References	
TC Start	03.06.2019 13:39:00
System Version	1.0.0.15
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 - Generic 2G4
Add. Information	

IUT DEFINITION	
Manufacturer	NI
Type	NI
Serial No.	NI
Setup No.	NI
SW Version	NI
HW Version	NI
Comment 1	NI
Comment 2	NI

IUT Common Settings	
Tlow [°C]	-20
Tmid [°C]	20
Thigh [°C]	55
Vlow [V]	3.3
Vmid [V]	3.8
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 2G4 Init Values from IUT file	
Hopping supported	No
Frequency low [MHz]	2402
Frequency mid [MHz]	2442
Frequency high [MHz]	2478
Burst length [ms]	10
Nominal Bandwidth [MHz]	1.7
User Interaction	Yes

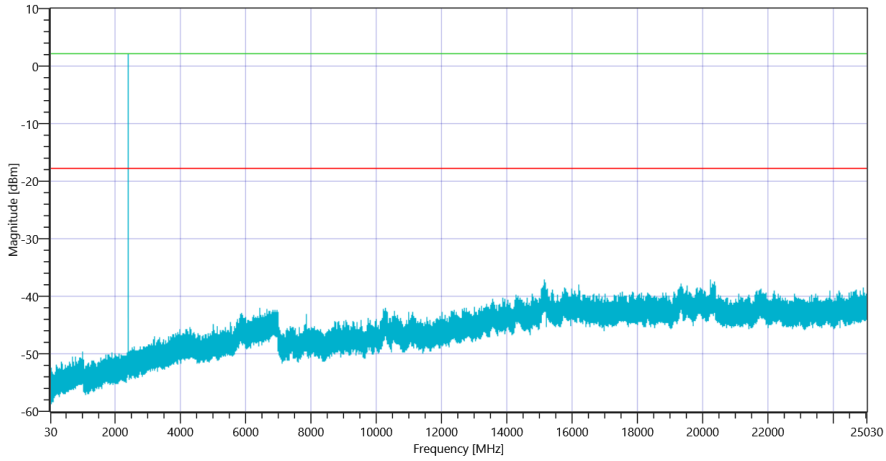
Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	True | Freq [MHz] 2402
Frequency mid to test	False | Freq [MHz] 2442
Frequency high to test	False | Freq [MHz] 2478
Pattern	PRBS9
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices 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

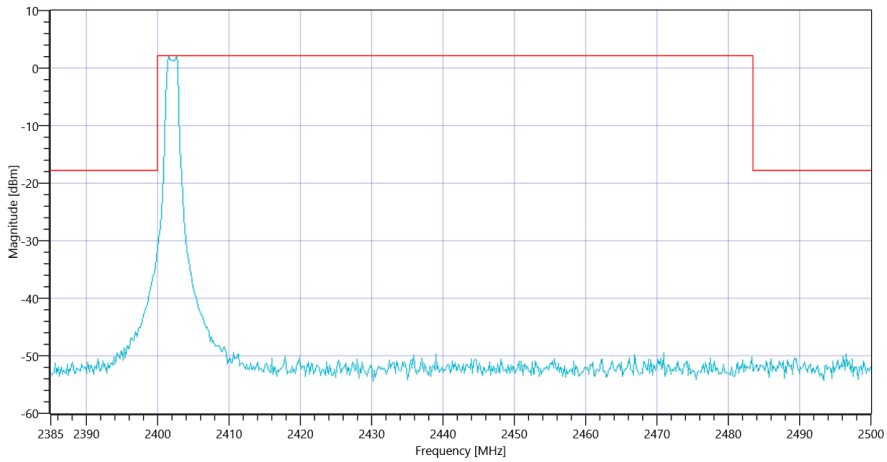
RESULT: Reference Power					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz	---	---	7.40	dBm	Information
Ref. Frequency	---	---	2402.750	MHz	Information

READ SA SETTINGS:	
Ref. Level [dBm]	12.40
Resolution BW. [MHz]	0.100000
Video BW. [MHz]	0.300000
Detector	POS
Sweep Time [ms]	500
Sweep Points/Section	3001
Sweep Count	8
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 @ 2402.67 MHz	---	---	2.20	dBm	Information
No peaks detected	---	---			PASS



Plot_FCC Part 15.247 TX Spurious Conduced ~ Generic 2G4 2402_03062019_134349.png



Plot_FCC Part 15.247 TX Spurious Conduced ~ Generic 2G4 2402_03062019_134351.png

TEST FINISHED		
General Verdict	03.06.2019 13:43:52 / RT: 291 s	PASS

14. FCC Part 15.247 TX Spurious Conduced ~ Generic 2G4

Test References	
TC Start	03.06.2019 13:58:59
System Version	1.0.0.15
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 - Generic 2G4
Add. Information	

IUT DEFINITION	
Manufacturer	NI
Type	NI
Serial No.	NI
Setup No.	NI
SW Version	NI
HW Version	NI
Comment 1	NI
Comment 2	NI

IUT Common Settings	
Tlow [°C]	-20
Tmid [°C]	20
Thigh [°C]	55
Vlow [V]	3.3
Vmid [V]	3.8
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 2G4 Init Values from IUT file	
Hopping supported	No
Frequency low [MHz]	2402
Frequency mid [MHz]	2442
Frequency high [MHz]	2478
Burst length [ms]	10
Nominal Bandwidth [MHz]	1.7
User Interaction	Yes

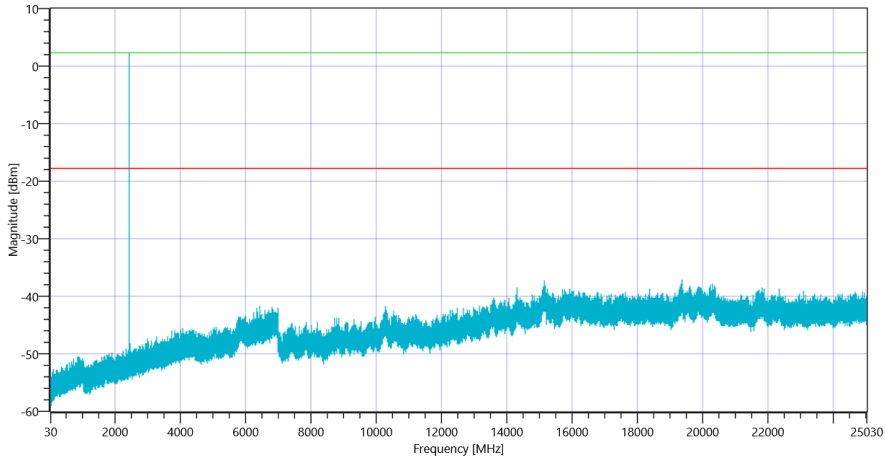
Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	False | Freq [MHz] 2402
Frequency mid to test	True | Freq [MHz] 2442
Frequency high to test	False | Freq [MHz] 2478
Pattern	PRBS9
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices 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 2442 MHz

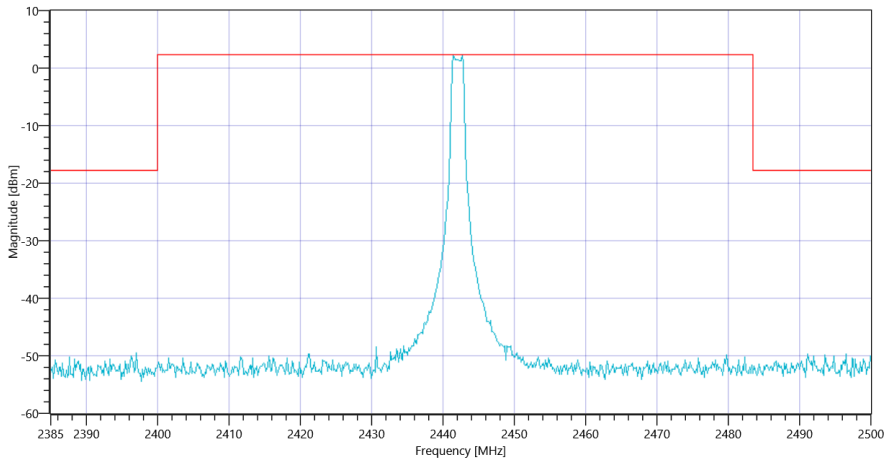
RESULT: Reference Power					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz	---	---	7.33	dBm	Information
Ref. Frequency	---	---	2441.510	MHz	Information

READ SA SETTINGS:	
Ref. Level [dBm]	12.33
Resolution BW. [MHz]	0.100000
Video BW. [MHz]	0.300000
Detector	POS
Sweep Time [ms]	500
Sweep Points/Section	3001
Sweep Count	8
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 @ 2442.67 MHz	---	---	2.26	dBm	Information
No peaks detected	---	---			PASS



Plot_FCC Part 15.247 TX Spurious Conduced ~ Generic 2G4 2442_03062019_140348.png



Plot_FCC Part 15.247 TX Spurious Conduced ~ Generic 2G4 2442_03062019_140351.png

TEST FINISHED		
General Verdict	03.06.2019 14:03:52 / RT: 293 s	PASS

15. FCC Part 15.247 TX Spurious Conduced ~ Generic 2G4

Test References	
TC Start	03.06.2019 14:59:52
System Version	1.0.0.15
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 - Generic 2G4
Add. Information	

IUT DEFINITION	
Manufacturer	NI
Type	NI
Serial No.	NI
Setup No.	NI
SW Version	NI
HW Version	NI
Comment 1	NI
Comment 2	NI

IUT Common Settings	
Tlow [°C]	-20
Tmid [°C]	20
Thigh [°C]	55
Vlow [V]	3.3
Vmid [V]	3.8
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 2G4 Init Values from IUT file	
Hopping supported	No
Frequency low [MHz]	2402
Frequency mid [MHz]	2442
Frequency high [MHz]	2478
Burst length [ms]	10
Nominal Bandwidth [MHz]	1.7
User Interaction	Yes

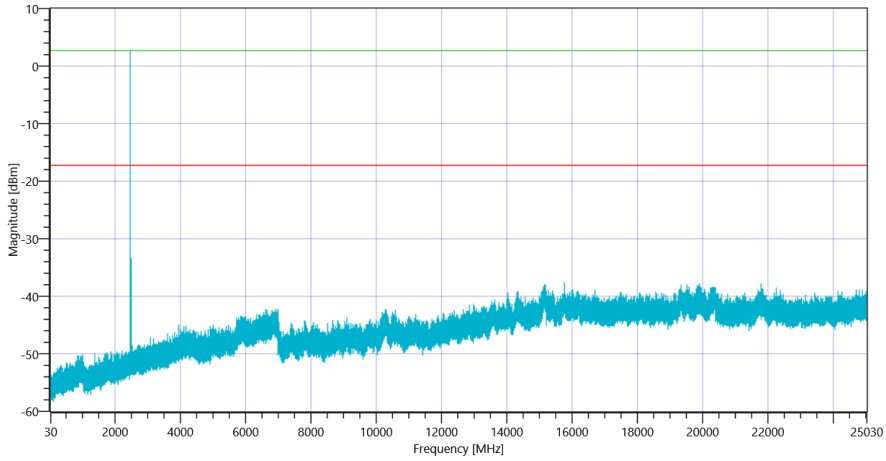
Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	False | Freq [MHz] 2402
Frequency mid to test	False | Freq [MHz] 2442
Frequency high to test	True | Freq [MHz] 2478
Pattern	PRBS9
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices 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 2478 MHz

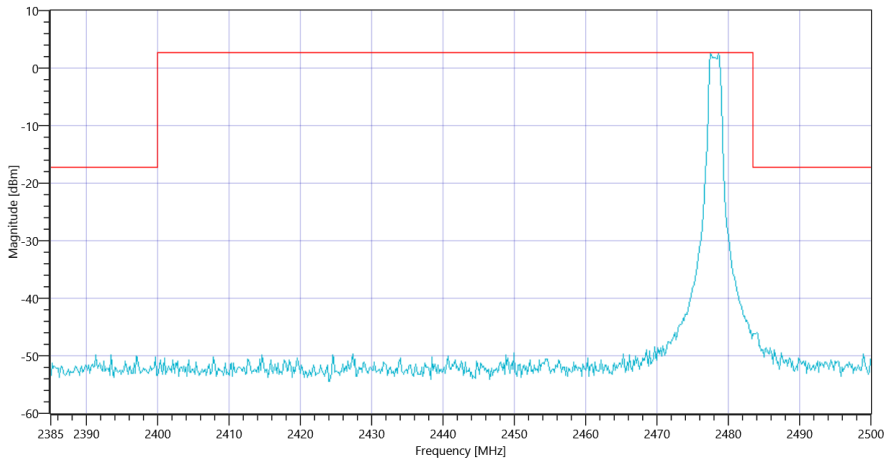
RESULT: Reference Power					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz	---	---	7.75	dBm	Information
Ref. Frequency	---	---	2478.470	MHz	Information

READ SA SETTINGS:	
Ref. Level [dBm]	12.75
Resolution BW. [MHz]	0.100000
Video BW. [MHz]	0.300000
Detector	POS
Sweep Time [ms]	500
Sweep Points/Section	3001
Sweep Count	8
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 @ 2478.67 MHz	---	---	2.68	dBm	Information
No peaks detected	---	---			PASS



Plot_FCC Part 15.247 TX Spurious Conduced ~ Generic 2G4 2478_03062019_150435.png



Plot_FCC Part 15.247 TX Spurious Conduced ~ Generic 2G4 2478_03062019_150438.png

TEST FINISHED		
General Verdict	03.06.2019 15:04:39 / RT: 286 s	PASS