Measurement Results

1-2039/21-01-02_log1_conducted

Test logging

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EUT Summary

EUT DEFINITION	
Manufacturer	Signify Netherland B.V.
Type	LRI8135/00
Kind	Outdoor Street Light Controller with Zhaga Bo
Serial Number | Setup Number	DUT3 | 1.0
Version SW | FW | HW	2.9 | 3.3 | 913701057803
Comment 1 | 2	|
Temperature [°C] Min | Nom | Max	-40 | 20 | 70
Voltage [V] Min | Nom | Max @Current Max [A]	115 AC

EUT Common Settings 2G4	
Hopping supported	No
Burst length [ms]	10
Nominal Bandwidth [MHz]	2.4
User Interaction	No

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

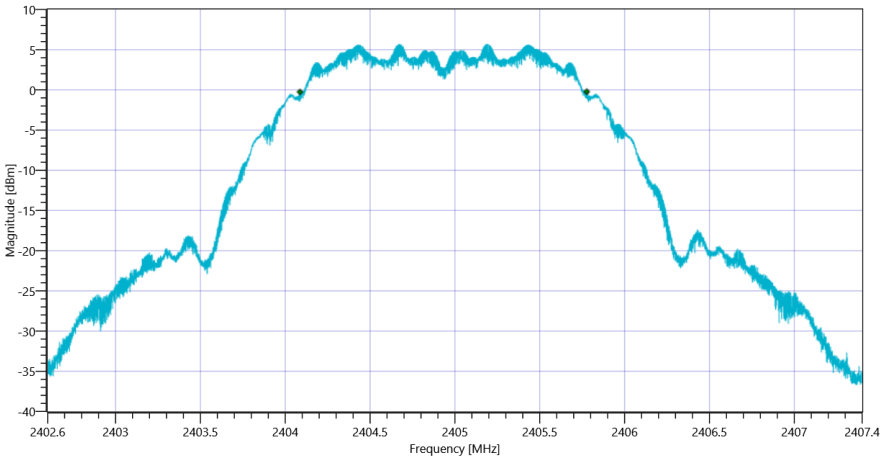
Test References	
TC Start	02.03.2021 14:57:25
Ambit Temp [°C] | Humidity [rel%]	23.4 | 24
System Version	2.0.0.3
Test Specification	FCC Part 15.247
Test Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.1 RBW ≥ DTS Bandwidth
TC Version	0.0.1
My Description	FCC 15.247 Maximum Peak Output Power Conducted DTS4 - Generic 2G4
Add. Information	

Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2405
Frequency mid to test	False | Freq [MHz] 2440
Frequency high to test	False | Freq [MHz] 2475
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.171 | SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70

Test at TX 2405 MHz

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	14.80 | 10.8 | 20
Start [MHz] | Stop [MHz]	2402.600 | 2407.400
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	50 | 200 | 10001 | SWE

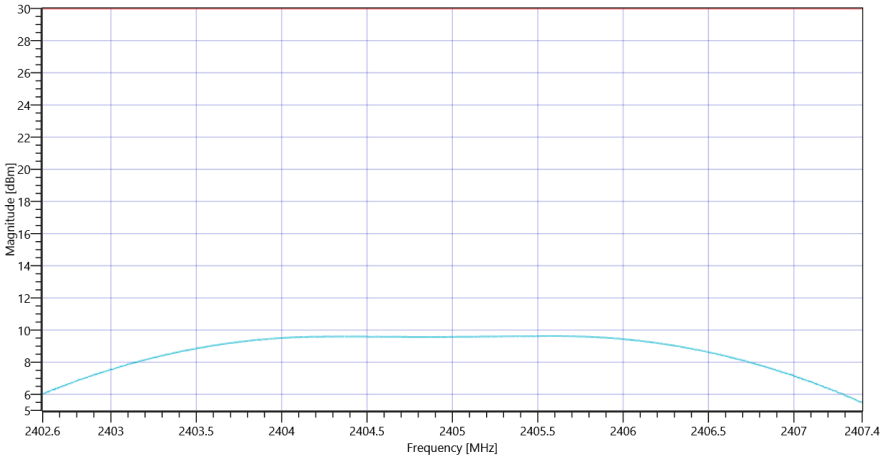
DTS Bandwidth					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	---	---	1691	kHz	INFO



Plot_FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ Generic 2G4 DTS BW_02032021_145752.png

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	19.80 | 10.8 | 25
Start [MHz] | Stop [MHz]	2402.600 | 2407.400
RBW [MHz] | VBW [MHz]	3.000000 | 10.000000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	50 | 200 | 1001 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	30.00	9.63	dBm	PASS
Peak Power	---	1000	9.183326	mW	PASS
Frequency at Peak	---	---	2405.59	MHz	INFO



Plot_FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ Generic 2G4_02032021_145810.png

TEST FINISHED	
General Verdict	PASS

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

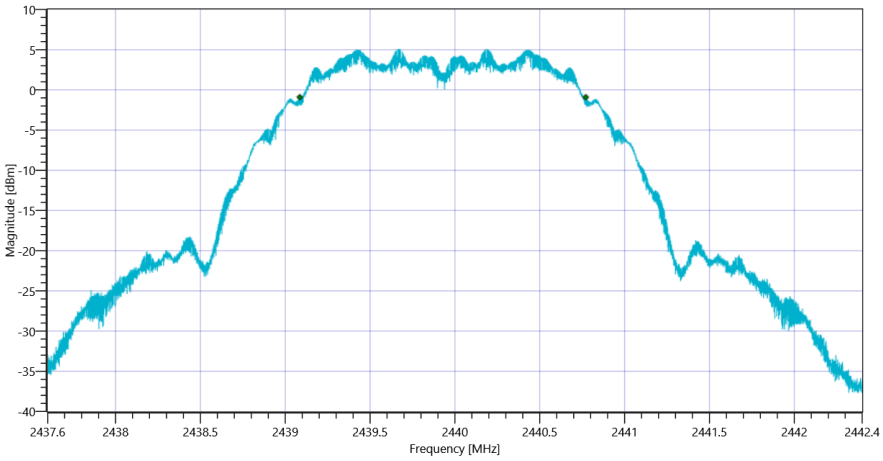
Test References	
TC Start	02.03.2021 15:10:27
Ambit Temp [°C] | Humidity [rel%]	23.4 | 24
System Version	2.0.0.3
Test Specification	FCC Part 15.247
Test Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.1 RBW ≥ DTS Bandwidth
TC Version	0.0.1
My Description	FCC 15.247 Maximum Peak Output Power Conducted DTS4 - Generic 2G4
Add. Information	

Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2405
Frequency mid to test	True | Freq [MHz] 2440
Frequency high to test	False | Freq [MHz] 2480
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.171 | SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70

Test at TX 2440 MHz

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	14.20 | 10.8 | 20
Start [MHz] | Stop [MHz]	2437.600 | 2442.400
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	50 | 200 | 10001 | SWE

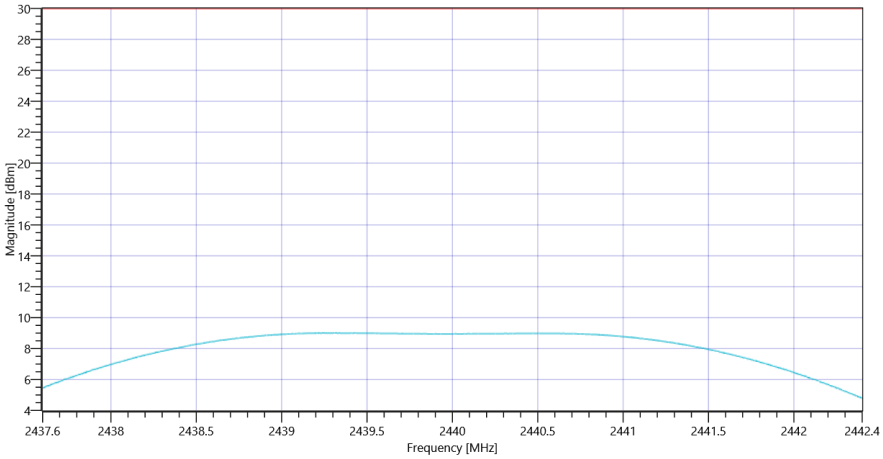
DTS Bandwidth					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	---	---	1685	kHz	INFO



Plot_FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ Generic 2G4 DTS BW_02032021_151055.png

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	19.20 | 10.8 | 25
Start [MHz] | Stop [MHz]	2437.600 | 2442.400
RBW [MHz] | VBW [MHz]	3.000000 | 10.000000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	50 | 200 | 1001 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	30.00	9.01	dBm	PASS
Peak Power	---	1000	7.961594	mW	PASS
Frequency at Peak	---	---	2439.242	MHz	INFO



Plot_FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ Generic 2G4_02032021_151113.png

TEST FINISHED	
General Verdict	PASS

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

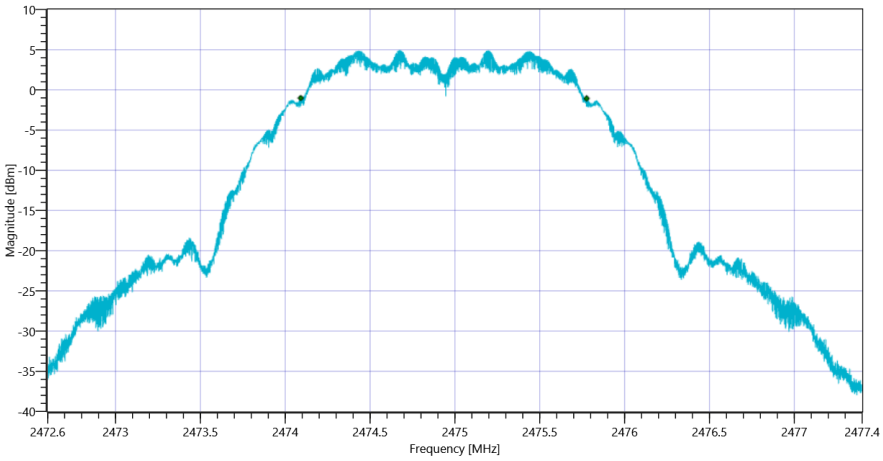
Test References	
TC Start	02.03.2021 15:48:50
Ambit Temp [°C] | Humidity [rel%]	23.4 | 24
System Version	2.0.0.3
Test Specification	FCC Part 15.247
Test Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.1 RBW ≥ DTS Bandwidth
TC Version	0.0.1
My Description	FCC 15.247 Maximum Peak Output Power Conducted DTS4 - Generic 2G4
Add. Information	

Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2405
Frequency mid to test	False | Freq [MHz] 2440
Frequency high to test	True | Freq [MHz] 2475
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.171 | SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70

Test at TX 2475 MHz

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	14.05 | 10.84 | 20
Start [MHz] | Stop [MHz]	2472.600 | 2477.400
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	50 | 200 | 10001 | SWE

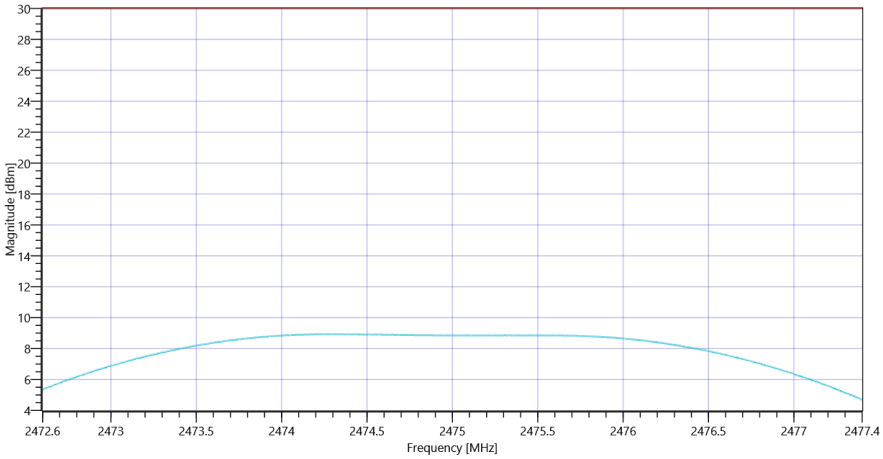
DTS Bandwidth					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	---	---	1685	kHz	INFO



Plot_FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ Generic 2G4 DTS BW_02032021_154919.png

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	19.05 | 10.84 | 25
Start [MHz] | Stop [MHz]	2472.600 | 2477.400
RBW [MHz] | VBW [MHz]	3.000000 | 10.000000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	50 | 200 | 1001 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	30.00	8.93	dBm	PASS
Peak Power	---	1000	7.816278	mW	PASS
Frequency at Peak	---	---	2474.266	MHz	INFO



Plot_FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ Generic 2G4_02032021_154937.png

TEST FINISHED	
General Verdict	PASS

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

Test References	
TC Start	02.03.2021 14:58:15
Ambit Temp [°C] | Humidity [rel%]	23.5 | 24
System Version	2.0.0.3
Test Specification	FCC Part 15.247
Test Method	99
TC Version	0.0.1
My Description	FCC 15.247 Bandwidth 6DB DTS - Generic 2G4
Add. Information	

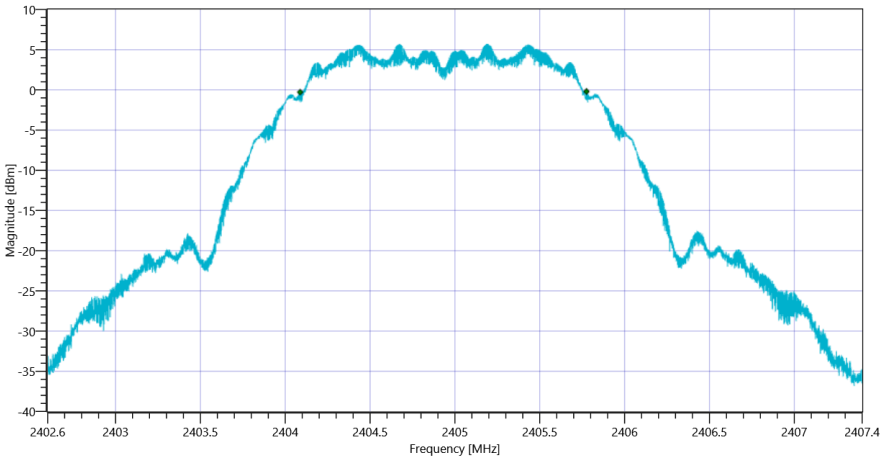
Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2405
Frequency mid to test	False | Freq [MHz] 2440
Frequency high to test	False | Freq [MHz] 2475
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.171 | SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70

Test at TX 2405 MHz

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	14.82 | 10.8 | 20
Start [MHz] | Stop [MHz]	2402.600 | 2407.400
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	50 | 200 | 10001 | SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	500	---	1688	kHz	PASS



Plot_FCC Part 15.247 Bandwidth 6dB DTS ~ Generic 2G4_02032021_145843.png

TEST FINISHED	
General Verdict	PASS

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

Test References	
TC Start	02.03.2021 15:11:18
Ambit Temp [°C] | Humidity [rel%]	23.4 | 24
System Version	2.0.0.3
Test Specification	FCC Part 15.247
Test Method	99
TC Version	0.0.1
My Description	FCC 15.247 Bandwidth 6DB DTS - Generic 2G4
Add. Information	

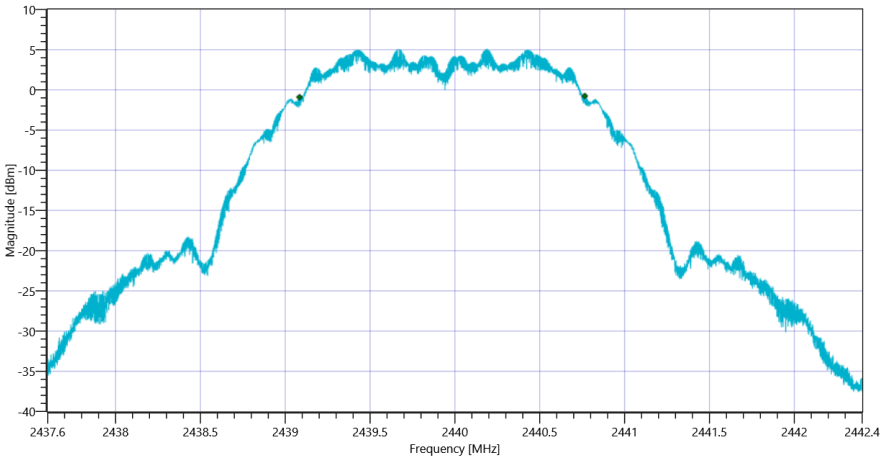
Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2405
Frequency mid to test	True | Freq [MHz] 2440
Frequency high to test	False | Freq [MHz] 2480
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.171 | SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70

Test at TX 2440 MHz

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	14.22 | 10.8 | 20
Start [MHz] | Stop [MHz]	2437.600 | 2442.400
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	50 | 200 | 10001 | SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	500	---	1681	kHz	PASS



Plot_FCC Part 15.247 Bandwidth 6dB DTS ~ Generic 2G4_02032021_151146.png

TEST FINISHED	
General Verdict	PASS

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

Test References	
TC Start	02.03.2021 15:49:43
Ambit Temp [°C] | Humidity [rel%]	23.4 | 24
System Version	2.0.0.3
Test Specification	FCC Part 15.247
Test Method	99
TC Version	0.0.1
My Description	FCC 15.247 Bandwidth 6DB DTS - Generic 2G4
Add. Information	

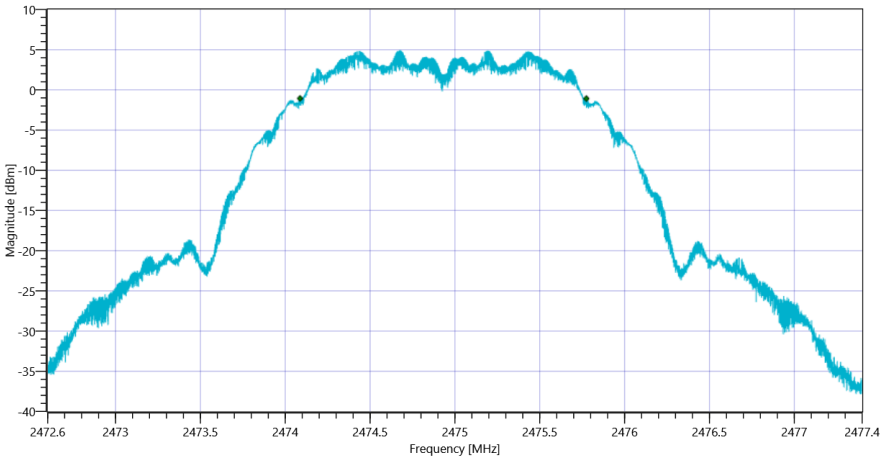
Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2405
Frequency mid to test	False | Freq [MHz] 2440
Frequency high to test	True | Freq [MHz] 2475
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.171 | SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70

Test at TX 2475 MHz

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	14.01 | 10.84 | 20
Start [MHz] | Stop [MHz]	2472.600 | 2477.400
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	50 | 200 | 10001 | SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	500	---	1687	kHz	PASS



Plot_FCC Part 15.247 Bandwidth 6dB DTS ~ Generic 2G4_02032021_155012.png

TEST FINISHED	
General Verdict	PASS

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

Test References	
TC Start	02.03.2021 14:58:48
Ambit Temp [°C] | Humidity [rel%]	23.5 | 24
System Version	2.0.0.3
Test Specification	FCC Part 15.247
Test Method	DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission
TC Version	0.0.1
My Description	FCC 15.247 Peak Power Spectral Density DTS - Generic 2G4
Add. Information	

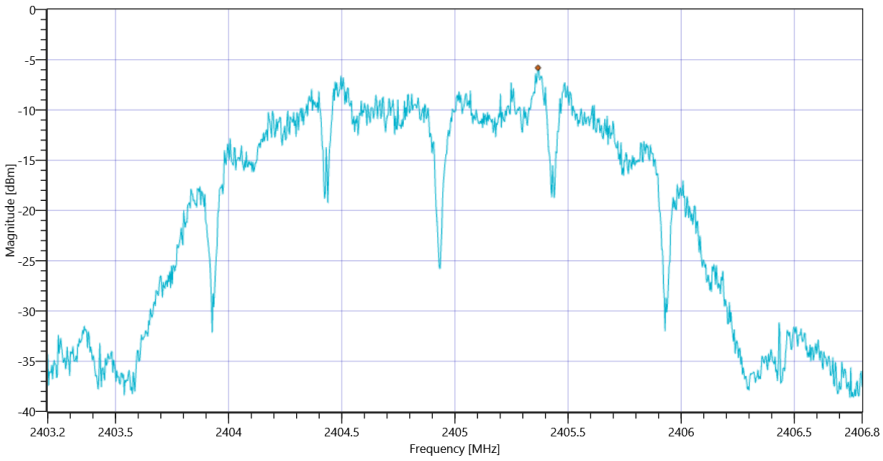
Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2405
Frequency mid to test	False | Freq [MHz] 2440
Frequency high to test	False | Freq [MHz] 2475
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.171 | SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70

Test at TX 2405 MHz

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	14.79 | 10.8 | 20
Start [MHz] | Stop [MHz]	2403.200 | 2406.800
RBW [MHz] | VBW [MHz]	0.003000 | 0.010000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	1000 | 20 | 1001 | SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Peak power Density	---	8	-5.8	dBm/3KHz	PASS



Plot_FCC Part 15.247 Peak Power Spectral Density DTS ~ Generic 2G4_02032021_145925.png

TEST FINISHED	
General Verdict	PASS

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

Test References	
TC Start	02.03.2021 15:11:51
Ambit Temp [°C] | Humidity [rel%]	23.4 | 24
System Version	2.0.0.3
Test Specification	FCC Part 15.247
Test Method	DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission
TC Version	0.0.1
My Description	FCC 15.247 Peak Power Spectral Density DTS - Generic 2G4
Add. Information	

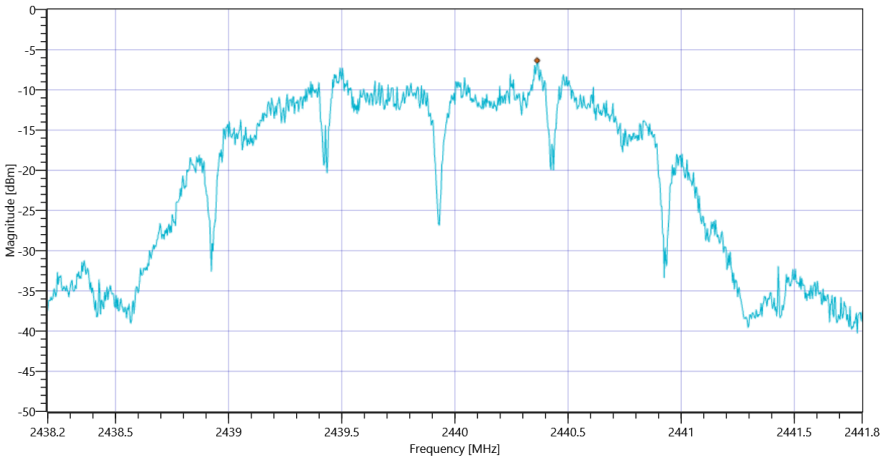
Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2405
Frequency mid to test	True | Freq [MHz] 2440
Frequency high to test	False | Freq [MHz] 2480
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.171 | SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70

Test at TX 2440 MHz

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	14.20 | 10.8 | 20
Start [MHz] | Stop [MHz]	2438.200 | 2441.800
RBW [MHz] | VBW [MHz]	0.003000 | 0.010000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	1000 | 20 | 1001 | SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Peak power Density	---	8	-6.34	dBm/3KHz	PASS



Plot_FCC Part 15.247 Peak Power Spectral Density DTS ~ Generic 2G4_02032021_151229.png

TEST FINISHED	
General Verdict	PASS

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

Test References	
TC Start	02.03.2021 15:50:17
Ambit Temp [°C] | Humidity [rel%]	23.4 | 24
System Version	2.0.0.3
Test Specification	FCC Part 15.247
Test Method	DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission
TC Version	0.0.1
My Description	FCC 15.247 Peak Power Spectral Density DTS - Generic 2G4
Add. Information	

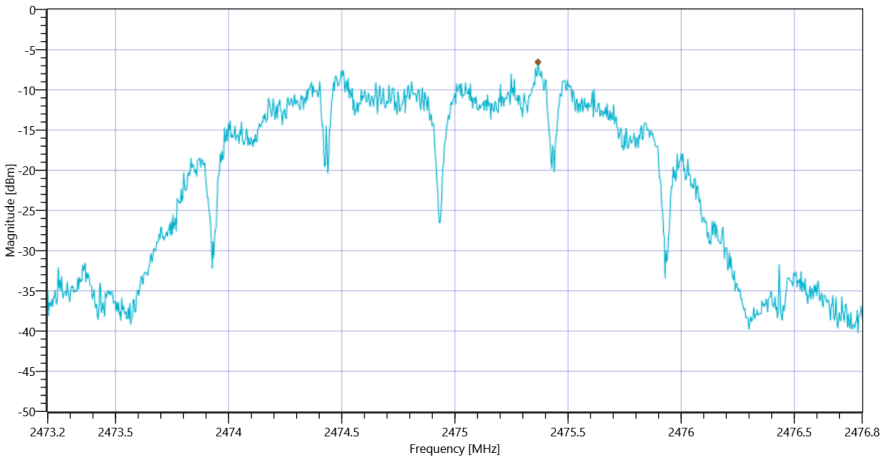
Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2405
Frequency mid to test	False | Freq [MHz] 2440
Frequency high to test	True | Freq [MHz] 2475
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.171 | SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70

Test at TX 2475 MHz

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	14.00 | 10.84 | 20
Start [MHz] | Stop [MHz]	2473.200 | 2476.800
RBW [MHz] | VBW [MHz]	0.003000 | 0.010000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	1000 | 20 | 1001 | SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Max Peak power Density	---	8	-6.55	dBm/3KHz	PASS



Plot_FCC Part 15.247 Peak Power Spectral Density DTS ~ Generic 2G4_02032021_155055.png

TEST FINISHED	
General Verdict	PASS

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

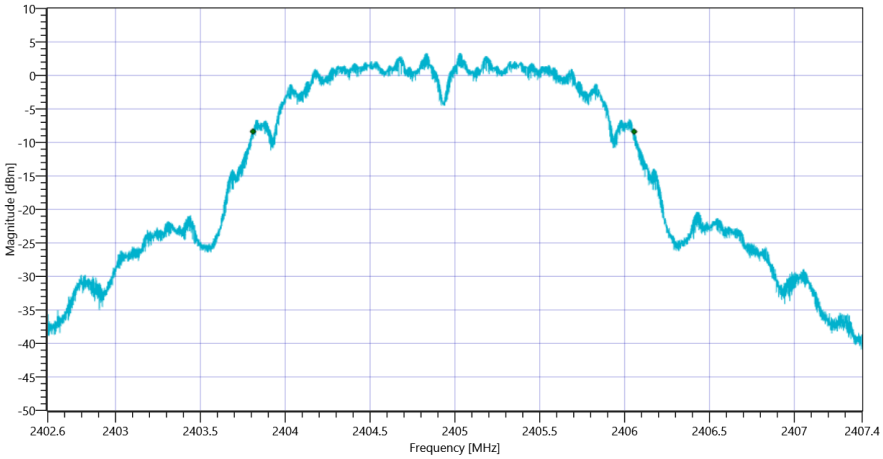
Test References	
TC Start	02.03.2021 14:59:30
Ambit Temp [°C] | Humidity [rel%]	23.5 | 24
System Version	2.0.0.3
Test Specification	FCC Part 15.247
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20DB DTS - Generic 2G4
Add. Information	

Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2405
Frequency mid to test	False | Freq [MHz] 2440
Frequency high to test	False | Freq [MHz] 2475
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.171 | SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70

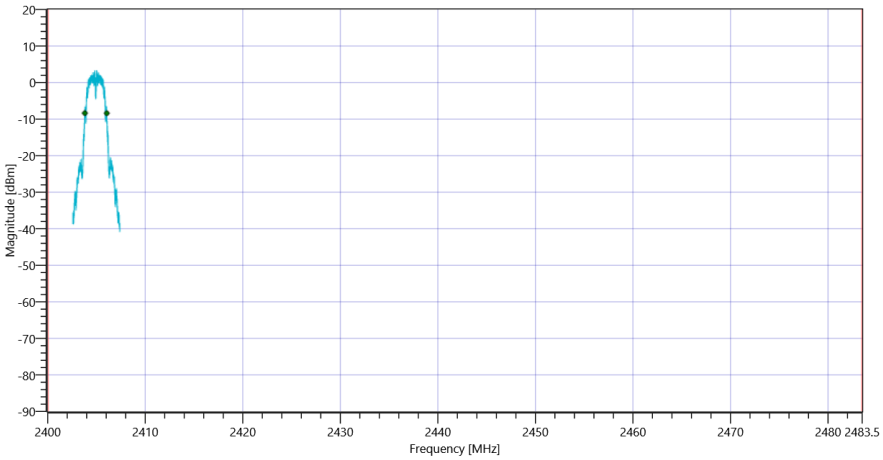
Test at TX 2405 MHz

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	14.77 | 10.8 | 20
Start [MHz] | Stop [MHz]	2402.600 | 2407.400
RBW [MHz] | VBW [MHz]	0.050000 | 0.200000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	50 | 200 | 10001 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	2246.655	kHz	INFO
T1 99%	2400.000000	---	2403.8097	MHz	PASS
T2 99%	---	2483.500000	2406.0564	MHz	PASS

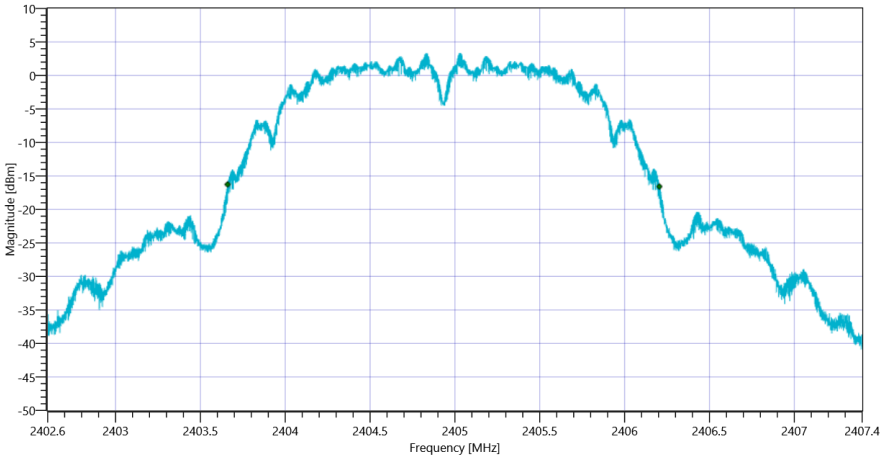


Plot_FCC Part 15.247 Bandwidth 99PCT-20dB ~ Generic 2G4 99PCT_02032021_145959.png

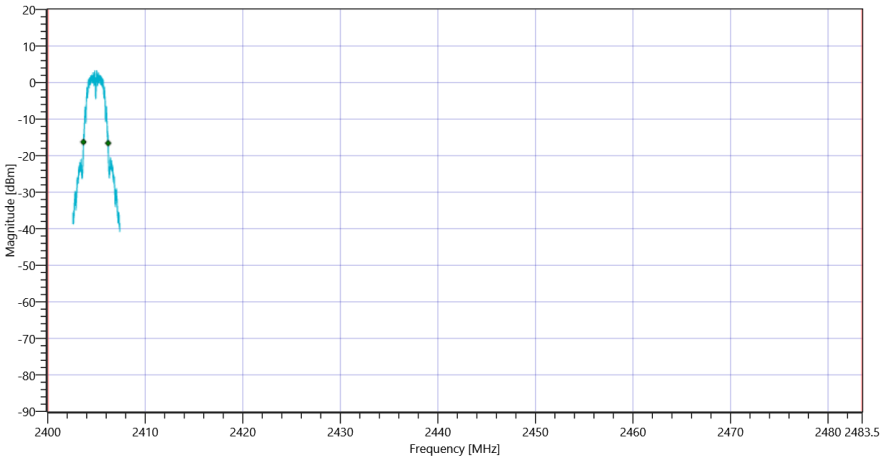


Plot_FCC Part 15.247 Bandwidth 99PCT-20dB ~ Generic 2G4_02032021_150005.png

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	2544	kHz	INFO
T1 20DB	2400.000000	---	2403.6603	MHz	PASS
T2 20dB	---	2483.500000	2406.2048	MHz	PASS



Plot_FCC Part 15.247 Bandwidth 99PCT-20dB ~ Generic 2G4 20dB_02032021_150012.png



Plot_FCC Part 15.247 Bandwidth 99PCT-20dB ~ Generic 2G4_02032021_150018.png

TEST FINISHED	
General Verdict	PASS

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

Test References	
TC Start	02.03.2021 15:12:34
Ambit Temp [°C] | Humidity [rel%]	23.4 | 24
System Version	2.0.0.3
Test Specification	FCC Part 15.247
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20DB DTS - Generic 2G4
Add. Information	

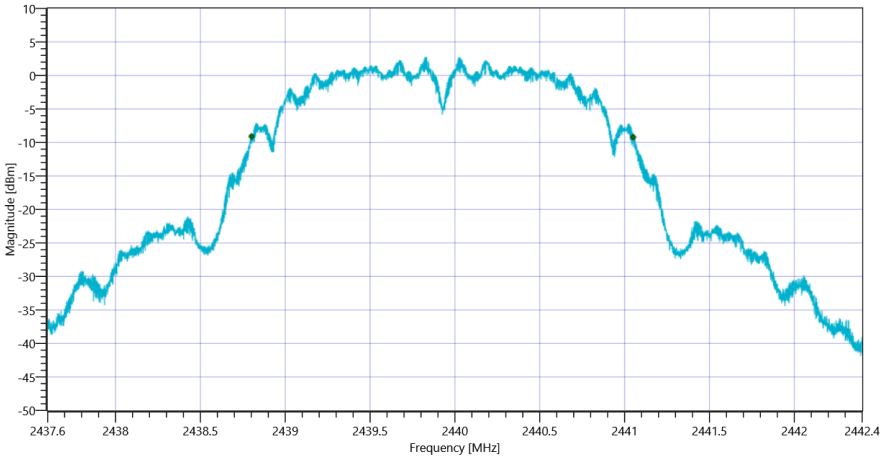
Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2405
Frequency mid to test	True | Freq [MHz] 2440
Frequency high to test	False | Freq [MHz] 2480
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.171 | SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70

Test at TX 2440 MHz

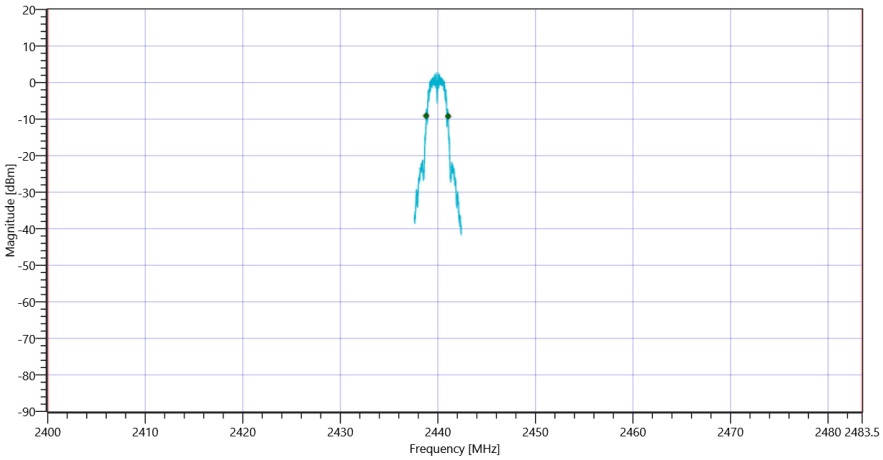
READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	14.21 | 10.8 | 20
Start [MHz] | Stop [MHz]	2437.600 | 2442.400
RBW [MHz] | VBW [MHz]	0.050000 | 0.200000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	50 | 200 | 10001 | SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	2249.535	kHz	INFO
T1 99%	2400.000000	---	2438.8011	MHz	PASS
T2 99%	---	2483.500000	2441.0506	MHz	PASS



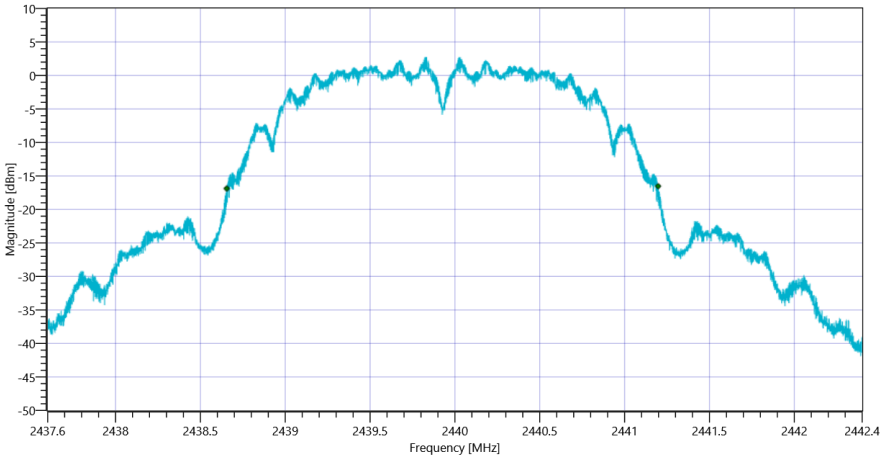
Plot_FCC Part 15.247 Bandwidth 99PCT-20dB ~ Generic 2G4 99PCT_02032021_151303.png



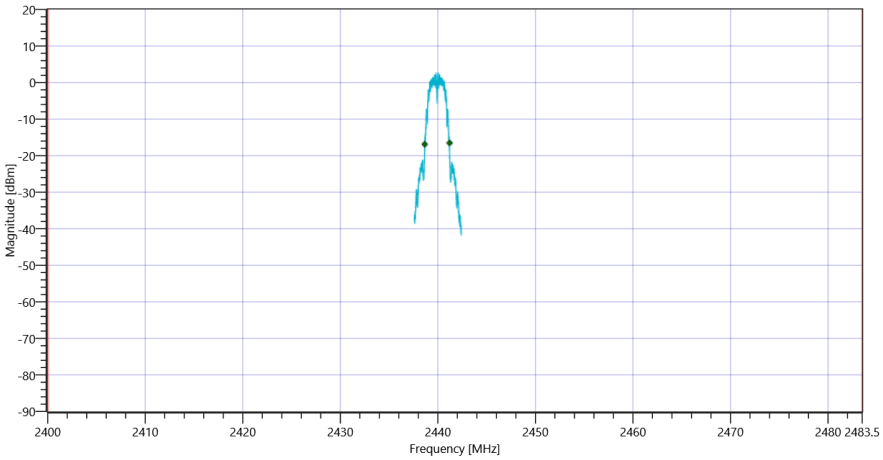
Plot_FCC Part 15.247 Bandwidth 99PCT-20dB ~ Generic 2G4_02032021_151309.png

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	2543	kHz	INFO
T1 20DB	2400.000000	---	2438.6550	MHz	PASS
T2 20dB	---	2483.500000	2441.1976	MHz	PASS



Plot_FCC Part 15.247 Bandwidth 99PCT-20dB ~ Generic 2G4 20dB_02032021_151316.png



Plot_FCC Part 15.247 Bandwidth 99PCT-20dB ~ Generic 2G4_02032021_151322.png

TEST FINISHED	
General Verdict	PASS

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

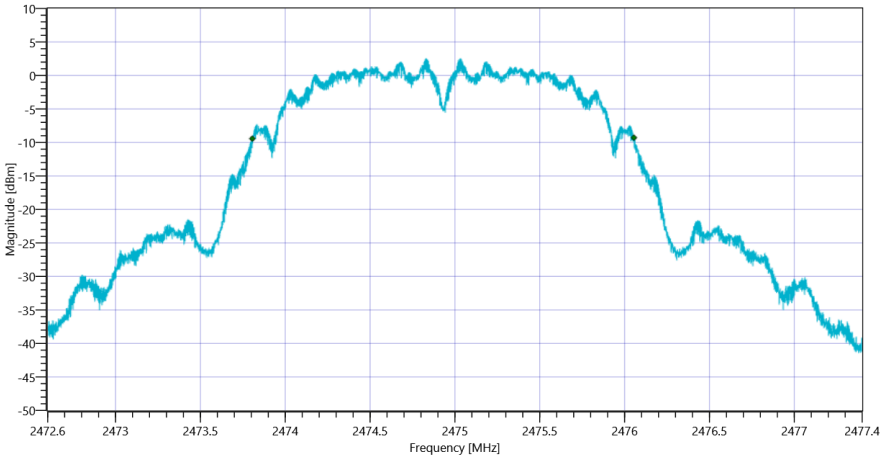
Test References	
TC Start	02.03.2021 15:51:00
Ambit Temp [°C] | Humidity [rel%]	23.4 | 24
System Version	2.0.0.3
Test Specification	FCC Part 15.247
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20DB DTS - Generic 2G4
Add. Information	

Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2405
Frequency mid to test	False | Freq [MHz] 2440
Frequency high to test	True | Freq [MHz] 2475
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.171 | SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70

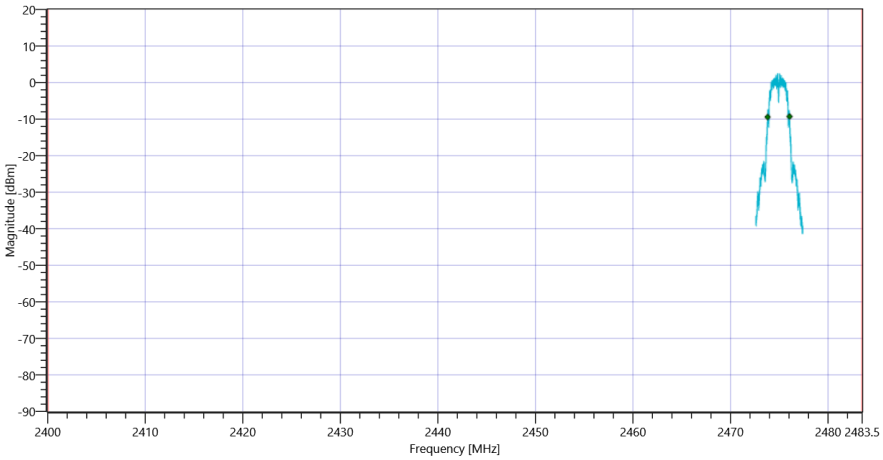
Test at TX 2475 MHz

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	13.99 | 10.84 | 20
Start [MHz] | Stop [MHz]	2472.600 | 2477.400
RBW [MHz] | VBW [MHz]	0.050000 | 0.200000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	50 | 200 | 10001 | SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	2249.055	kHz	INFO
T1 99%	2400.000000	---	2473.8059	MHz	PASS
T2 99%	---	2483.500000	2476.0549	MHz	PASS

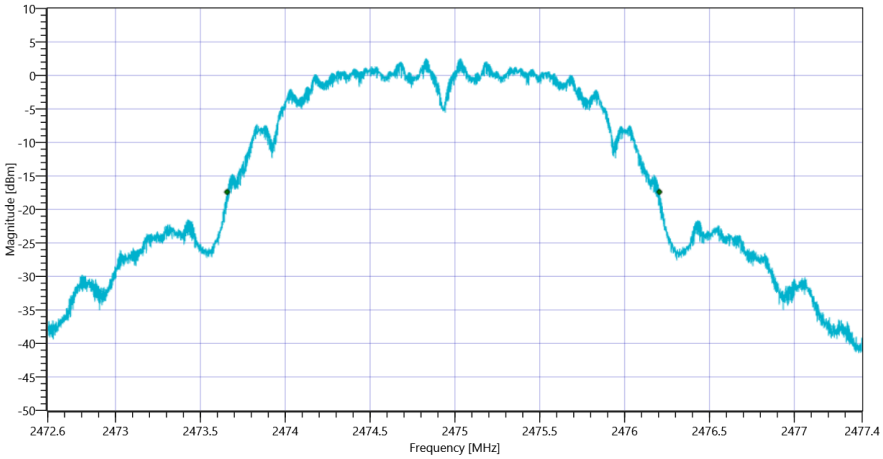


Plot_FCC Part 15.247 Bandwidth 99PCT-20dB ~ Generic 2G4 99PCT_02032021_155130.png

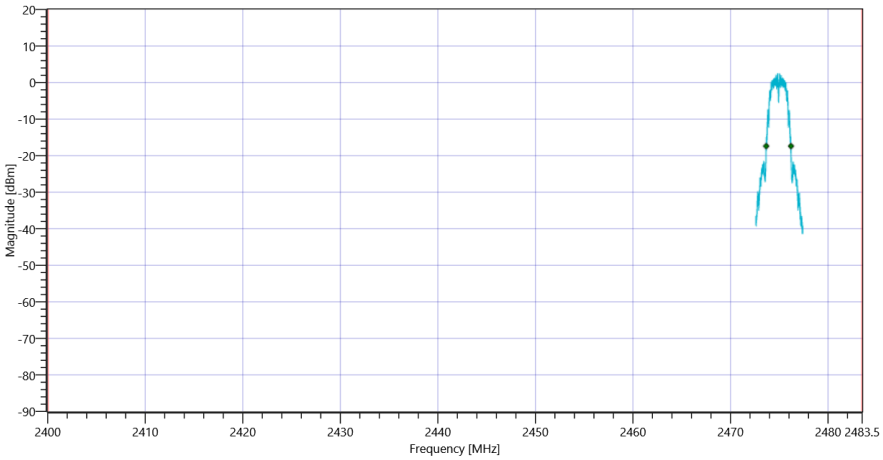


Plot_FCC Part 15.247 Bandwidth 99PCT-20dB ~ Generic 2G4_02032021_155137.png

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	2548	kHz	INFO
T1 20DB	2400.000000	---	2473.6570	MHz	PASS
T2 20dB	---	2483.500000	2476.2048	MHz	PASS



Plot_FCC Part 15.247 Bandwidth 99PCT-20dB ~ Generic 2G4 20dB_02032021_155144.png



Plot_FCC Part 15.247 Bandwidth 99PCT-20dB ~ Generic 2G4_02032021_155150.png

TEST FINISHED	
General Verdict	PASS

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

Test References	
TC Start	02.03.2021 15:00:23
Ambit Temp [°C] | Humidity [rel%]	23.5 | 24
System Version	2.0.0.3
Test Specification	FCC Part 15.247
Test Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable.
TC Version	0.0.1
My Description	FCC 15.247 TX Emissions Conducted DTS - Generic 2G4
Add. Information	

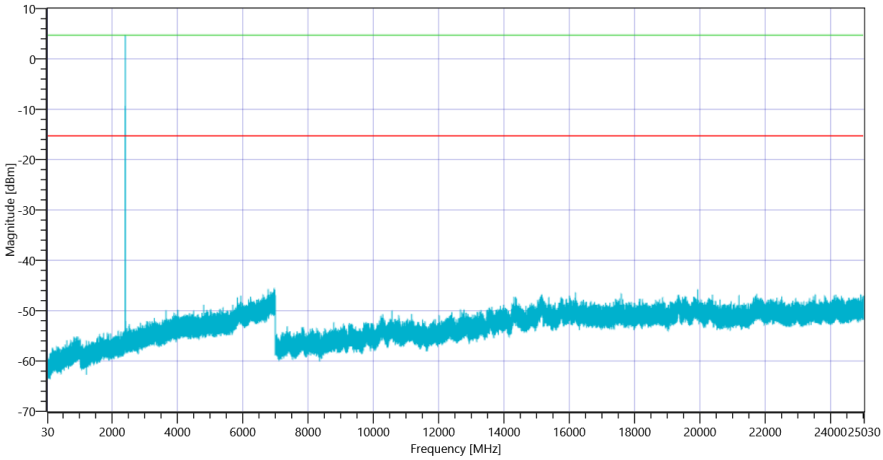
Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2405
Frequency mid to test	False | Freq [MHz] 2440
Frequency high to test	False | Freq [MHz] 2475
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.171 | SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70

Test at TX 2405 MHz

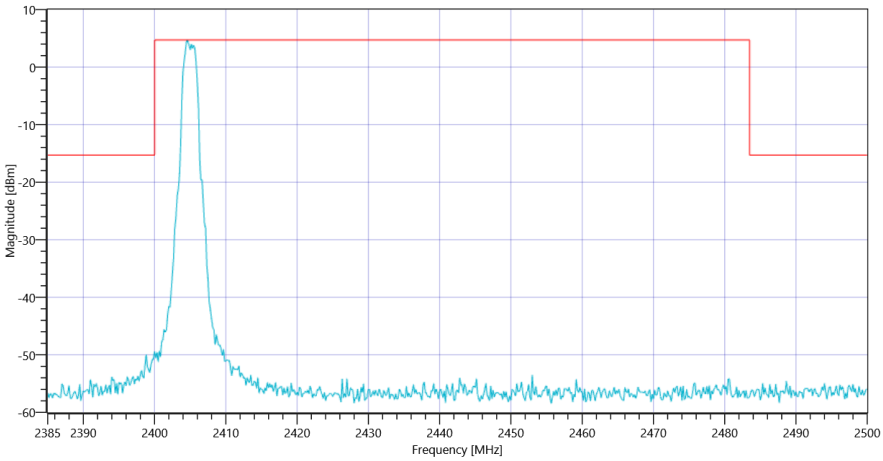
READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	9.76 | 0 | 25
Start [MHz] | Stop [MHz]	24530.000 | 25030.000
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	500 | 8 | 3001 | SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2404.50 MHz	---	---	4.72	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 6965.167 MHz	0	---	30.26	dB	INFO



Plot_FCC Part 15.247 TX Spurious Conduced ~ Generic 2G4 2405_02032021_150555.png



Plot_FCC Part 15.247 TX Spurious Conduced ~ Generic 2G4 2405_02032021_150600.png

TEST FINISHED	
General Verdict	PASS

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

Test References	
TC Start	02.03.2021 15:13:28
Ambit Temp [°C] | Humidity [rel%]	23.4 | 24
System Version	2.0.0.3
Test Specification	FCC Part 15.247
Test Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable.
TC Version	0.0.1
My Description	FCC 15.247 TX Emissions Conducted DTS - Generic 2G4
Add. Information	

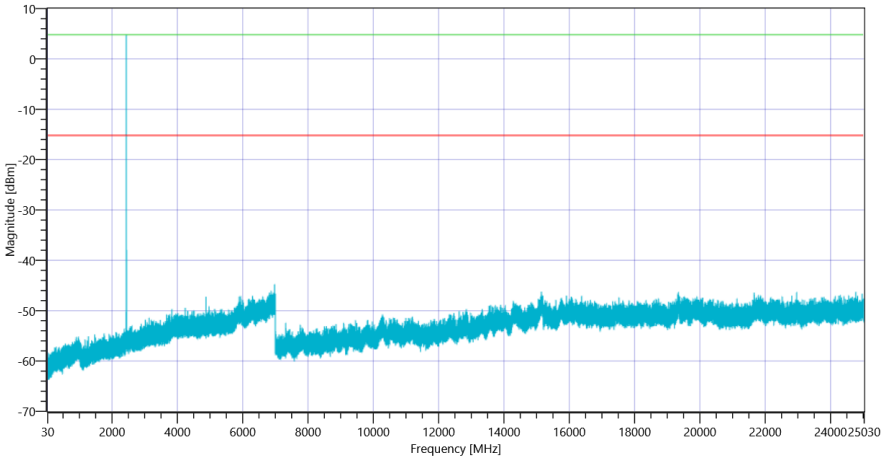
Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2405
Frequency mid to test	True | Freq [MHz] 2440
Frequency high to test	False | Freq [MHz] 2480
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.171 | SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70

Test at TX 2440 MHz

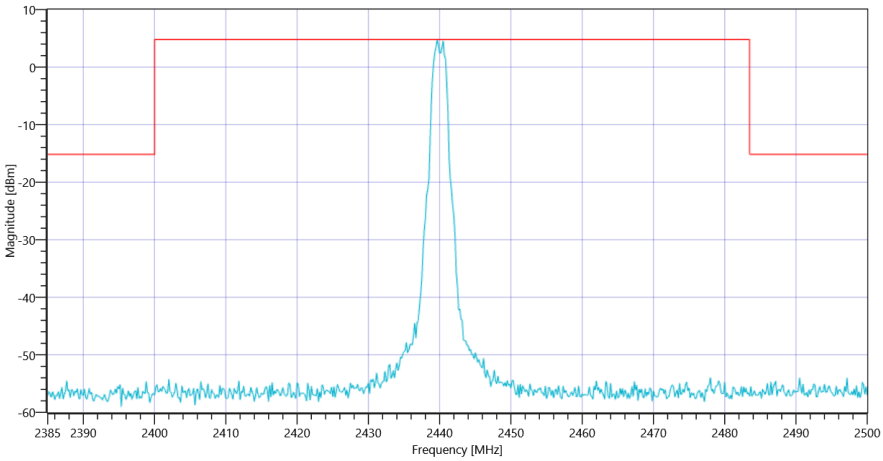
READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	9.19 | 0 | 25
Start [MHz] | Stop [MHz]	24530.000 | 25030.000
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	500 | 8 | 3001 | SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2439.67 MHz	---	---	4.81	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 6975 MHz	0	---	29.59	dB	INFO



Plot_FCC Part 15.247 TX Spurious Conduced ~ Generic 2G4 2440_02032021_151859.png



Plot_FCC Part 15.247 TX Spurious Conduced ~ Generic 2G4 2440_02032021_151904.png

TEST FINISHED	
General Verdict	PASS

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

Test References	
TC Start	02.03.2021 15:51:55
Ambit Temp [°C] | Humidity [rel%]	23.4 | 24
System Version	2.0.0.3
Test Specification	FCC Part 15.247
Test Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable.
TC Version	0.0.1
My Description	FCC 15.247 TX Emissions Conducted DTS - Generic 2G4
Add. Information	

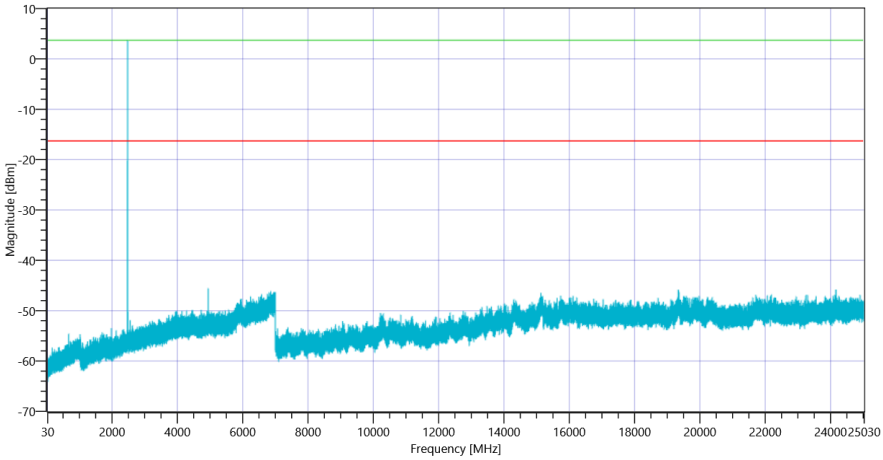
Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2405
Frequency mid to test	False | Freq [MHz] 2440
Frequency high to test	True | Freq [MHz] 2475
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.171 | SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70

Test at TX 2475 MHz

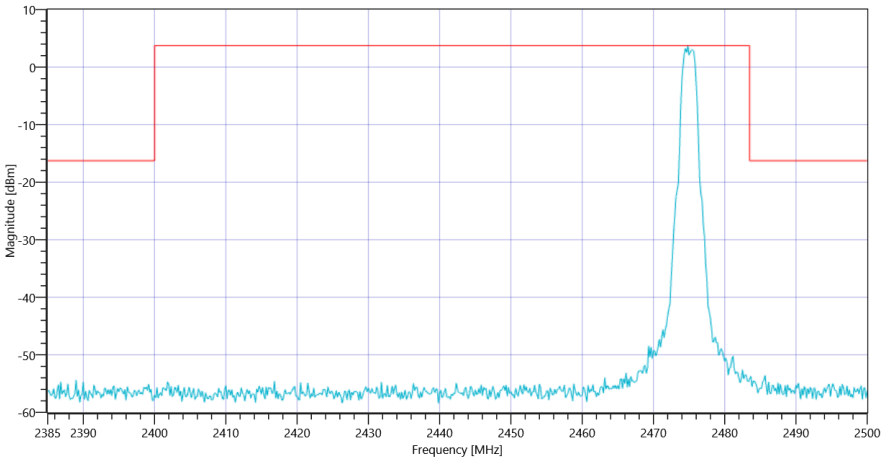
READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	8.97 | 0 | 25
Start [MHz] | Stop [MHz]	24530.000 | 25030.000
RBW [MHz] | VBW [MHz]	0.100000 | 0.300000
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	500 | 8 | 3001 | SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2474.83 MHz	---	---	3.72	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 4950.833 MHz	0	---	29.26	dB	INFO



Plot_FCC Part 15.247 TX Spurious Conduced ~ Generic 2G4 2475_02032021_155726.png



Plot_FCC Part 15.247 TX Spurious Conduced ~ Generic 2G4 2475_02032021_155731.png

TEST FINISHED	
General Verdict	PASS

16. FCC Part 15.247 Restricted Band Edge Conducted Peak DTS Video Avg (cond) ~ Generic 2G4

Test References	
TC Start	02.03.2021 15:06:06
Ambit Temp [°C] | Humidity [rel%]	23.4 | 24
System Version	2.0.0.3
Test Specification	FCC Part 15.247
Test Method	DTS: KDB 558074 D01 V05 - 8.7.3 Integration Method; ANSI C63.10-2013 11.13.3.2 Peak Detection
TC Version	0.0.1
My Description	FCC 15.247 Restricted Band Edge Conducted Peak DTS - Generic 2G4
Add. Information	

Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2405
Frequency mid to test	False | Freq [MHz] 2440
Frequency high to test	False | Freq [MHz] 2475
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.171 | SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70

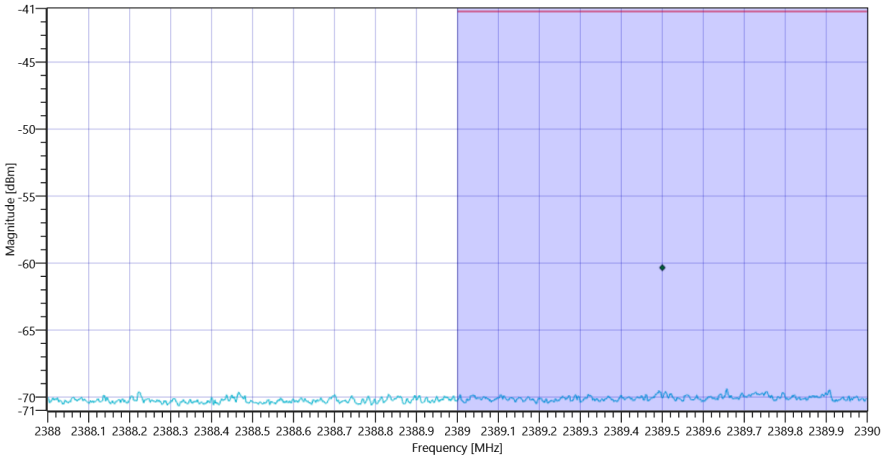
Test at TX 2405 MHz

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	14.77 | 10.8 | 20
Start [MHz] | Stop [MHz]	2388.000 | 2390.000
RBW [MHz] | VBW [MHz]	0.100000 | 0.000500
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	31 | 300 | 1001 | SWE

Antenna Gain	
Considered Antenna Gain: [dBi]:	0

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Band Power	---	-41.23	-60.34	dBm	INCON



Plot_FCC Part 15.247 Restricted Band Edge Conducted Peak DTS Video Avg (cond) ~ Generic 2G4_02032021_150635.png

TEST FINISHED	
General Verdict	INCON

17. FCC Part 15.247 Restricted Band Edge Conducted Peak DTS Video Avg (cond) ~ Generic 2G4

Test References	
TC Start	02.03.2021 15:57:38
Ambit Temp [°C] | Humidity [rel%]	23.3 | 24
System Version	2.0.0.3
Test Specification	FCC Part 15.247
Test Method	DTS: KDB 558074 D01 V05 - 8.7.3 Integration Method; ANSI C63.10-2013 11.13.3.2 Peak Detection
TC Version	0.0.1
My Description	FCC 15.247 Restricted Band Edge Conducted Peak DTS - Generic 2G4
Add. Information	

Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2405
Frequency mid to test	False | Freq [MHz] 2440
Frequency high to test	True | Freq [MHz] 2475
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.171 | SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70

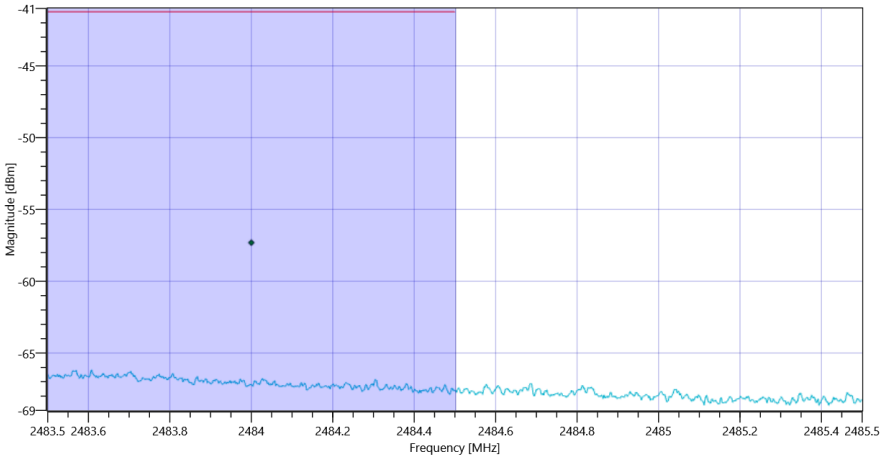
Test at TX 2475 MHz

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	13.94 | 10.84 | 20
Start [MHz] | Stop [MHz]	2483.500 | 2485.500
RBW [MHz] | VBW [MHz]	0.100000 | 0.000500
Detector | TraceMode	POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type	31 | 300 | 1001 | SWE

Antenna Gain	
Considered Antenna Gain: [dBi]:	0

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Band Power	---	-41.23	-57.31	dBm	INCON



Plot_FCC Part 15.247 Restricted Band Edge Conducted Peak DTS Video Avg (cond) ~ Generic 2G4_02032021_155807.png

TEST FINISHED	
General Verdict	INCON

18. Common2G4 Peak OP 3MHz/3MHz ~ Generic 2G4

Test References	
TC Start	02.03.2021 14:56:52
Ambit Temp [°C] | Humidity [rel%]	23.4 | 24
System Version	2.0.0.3
Test Specification	None
Test Method	
TC Version	0.0.1
My Description	Peak Output Power conducted 3MHz/3MHz - Generic 2G4
Add. Information	

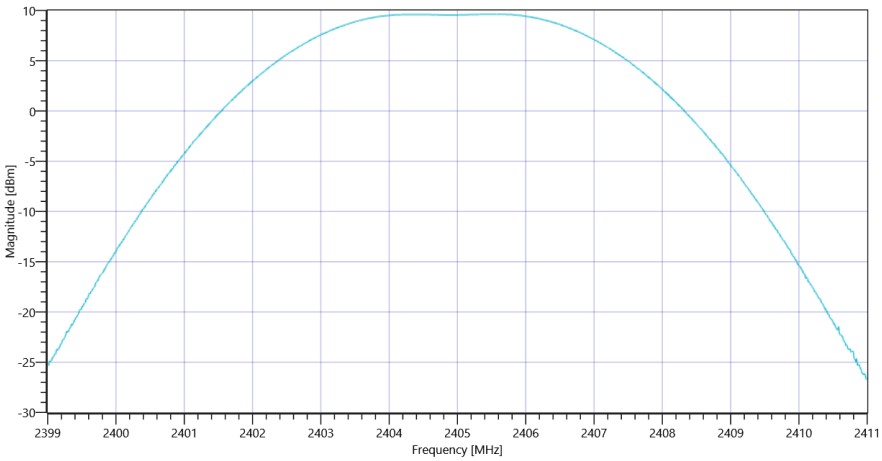
Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True | Freq [MHz] 2405
Frequency mid to test	False | Freq [MHz] 2440
Frequency high to test	False | Freq [MHz] 2475
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.171 | SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70

Test at TX 2405 MHz

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	19.79 | 10.8 | 25
Start [MHz] | Stop [MHz]	2399.000 | 2411.000
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	---	9.63	dBm	Info
Peak Power	---	---	9.183326	mW	Info
Frequency at Peak	---	---	2405.599	MHz	Info



Plot_Common2G4 Peak OP 3MHz-3MHz ~ Generic 2G4_02032021_145719.png

TEST FINISHED	
General Verdict	PASS

19. Common2G4 Peak OP 3MHz/3MHz ~ Generic 2G4

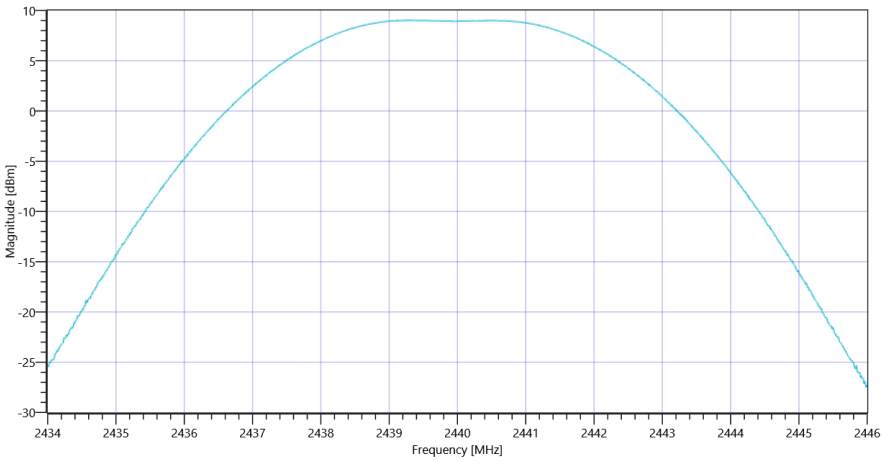
Test References	
TC Start	02.03.2021 15:09:55
Ambit Temp [°C] | Humidity [rel%]	23.4 | 24
System Version	2.0.0.3
Test Specification	None
Test Method	
TC Version	0.0.1
My Description	Peak Output Power conducted 3MHz/3MHz - Generic 2G4
Add. Information	

Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2405
Frequency mid to test	True | Freq [MHz] 2440
Frequency high to test	False | Freq [MHz] 2480
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.171 | SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70

Test at TX 2440 MHz

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	19.20 | 10.8 | 25
Start [MHz] | Stop [MHz]	2434.000 | 2446.000
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					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	---	9.01	dBm	Info
Peak Power	---	---	7.961594	mW	Info
Frequency at Peak	---	---	2439.245	MHz	Info



Plot_Common2G4 Peak OP 3MHz-3MHz ~ Generic 2G4_02032021_151022.png

TEST FINISHED	
General Verdict	PASS

20. Common2G4 Peak OP 3MHz/3MHz ~ Generic 2G4

Test References	
TC Start	02.03.2021 15:48:17
Ambit Temp [°C] | Humidity [rel%]	23.4 | 24
System Version	2.0.0.3
Test Specification	None
Test Method	
TC Version	0.0.1
My Description	Peak Output Power conducted 3MHz/3MHz - Generic 2G4
Add. Information	

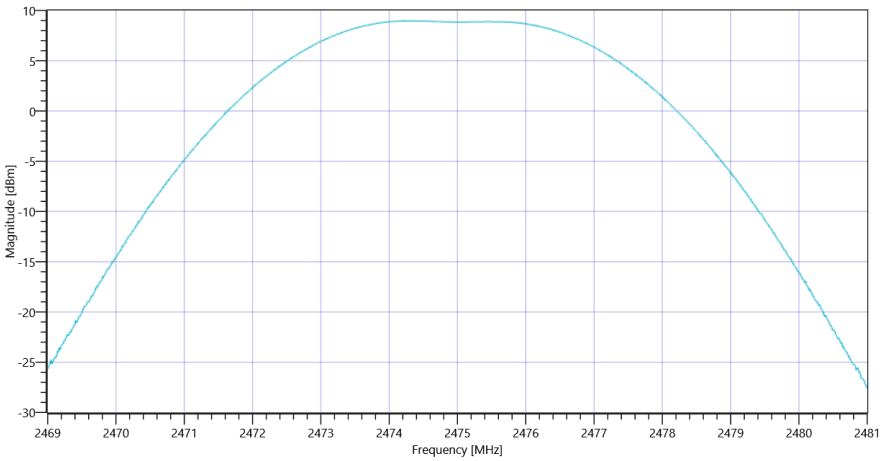
Test Parameter	
Technology to test	Generic 2G4
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False | Freq [MHz] 2405
Frequency mid to test	False | Freq [MHz] 2440
Frequency high to test	True | Freq [MHz] 2475
Auto Control enabled Power Supply | Climatic Box	No | No
Additional Path Loss [dB]	0.7
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.171 | SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70

Test at TX 2475 MHz

READ SA SETTINGS:	
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB]	19.06 | 10.84 | 25
Start [MHz] | Stop [MHz]	2469.000 | 2481.000
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

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peak Power	---	---	8.96	dBm	Info
Peak Power	---	---	7.870458	mW	Info
Frequency at Peak	---	---	2474.269	MHz	Info



Plot_Common2G4 Peak OP 3MHz-3MHz ~ Generic 2G4_02032021_154845.png

TEST FINISHED	
General Verdict	PASS

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