

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40

Test References

TC Start	06.12.2022 08:53:58
Ambit Temp [°C] Humidity [rel%]	23.8 28
System Version	3.3.3.0
Test Specification	FCC 15.247, ISED RSS247 -
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 ax-HE40
Add. Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	4
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 ax-HE40
Antenna Port used	4
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2422
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2452
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2422 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	19.77	dBm	INFO
Ref. Frequency	---	---	2413.010	MHz	INFO

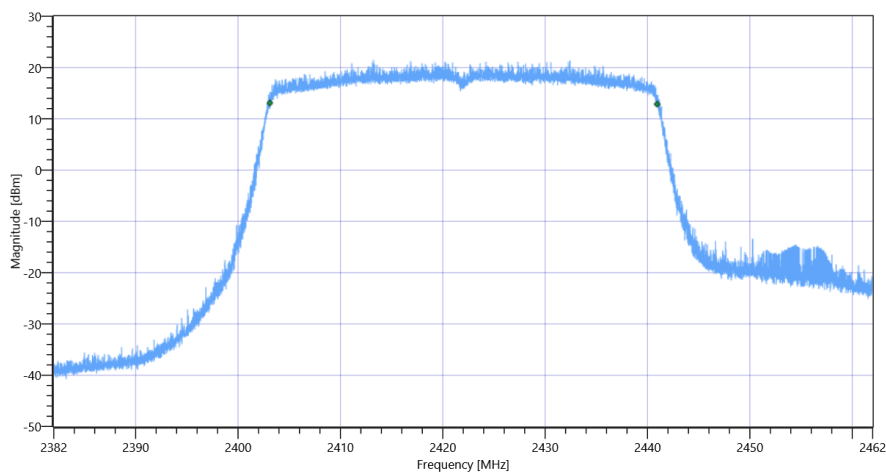
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	24.77 5.13 35
Start [MHz] Stop [MHz]	2382.000 2462.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	50 200 10001 SWE

RESULT

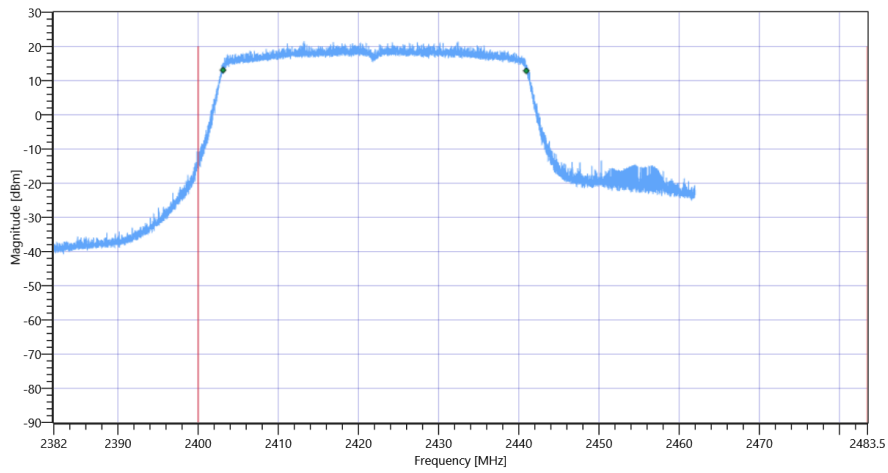
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	37820.000	kHz	INFO
T1 99%	2400.000000	---	2403.1139	MHz	PASS
T2 99%	---	2483.500000	2440.9341	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40 99PCT

Plot: Bandwidth within Band

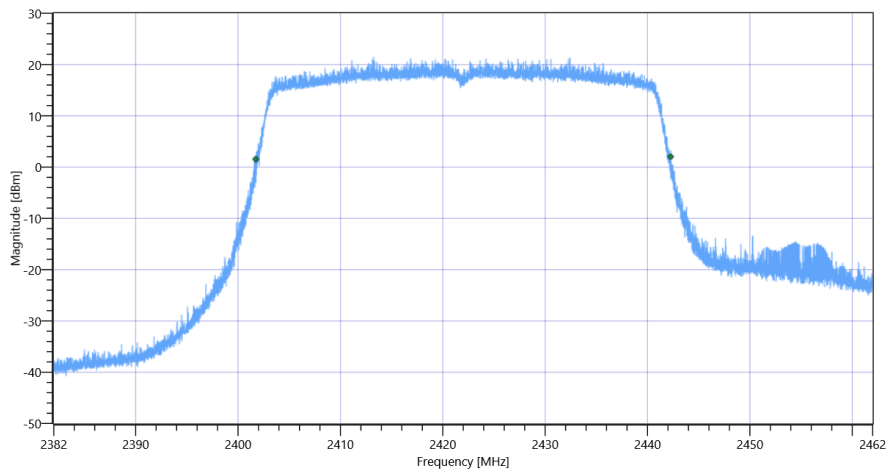


FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40

RESULT

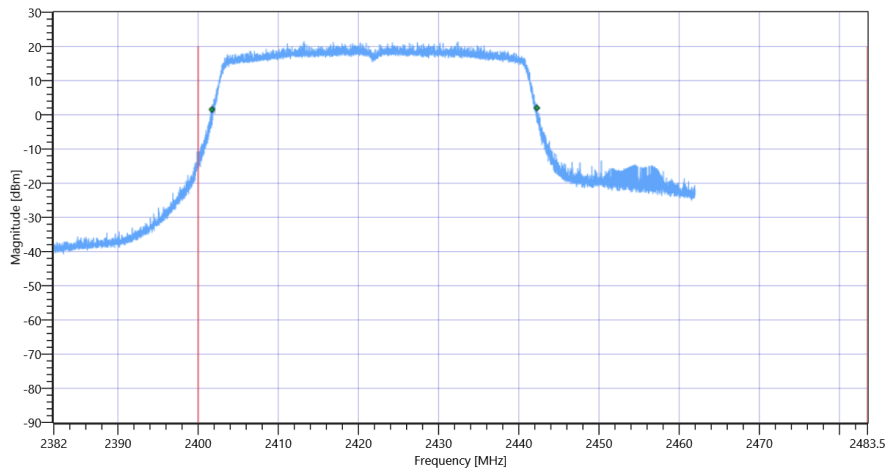
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	40528	kHz	INFO
T1 20dB	2400.000000	---	2401.7280	MHz	PASS
T2 20dB	---	2483.500000	2442.2560	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40 20dB

Plot: Bandwidth within Band



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40

FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 ax-HE40

Test References

TC Start	06.12.2022 08:52:11
Ambit Temp [°C] Humidity [rel%]	23.8 28
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	ANSI C63.10-2013 Chapter 11.10.5 or.3
TC Version	0.0.1
My Description	FCC 15.247 Avg Power Spectral Density DTS - WLAN2G4 ax-HE40
Add. Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	4
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 ax-HE40
Antenna Port used	4
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2422
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2452
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2422 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	19.90	dBm	INFO
Ref. Frequency	--	--	2419.000	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Duty Cycle min	--	--	0	dB	DC > 98% defined

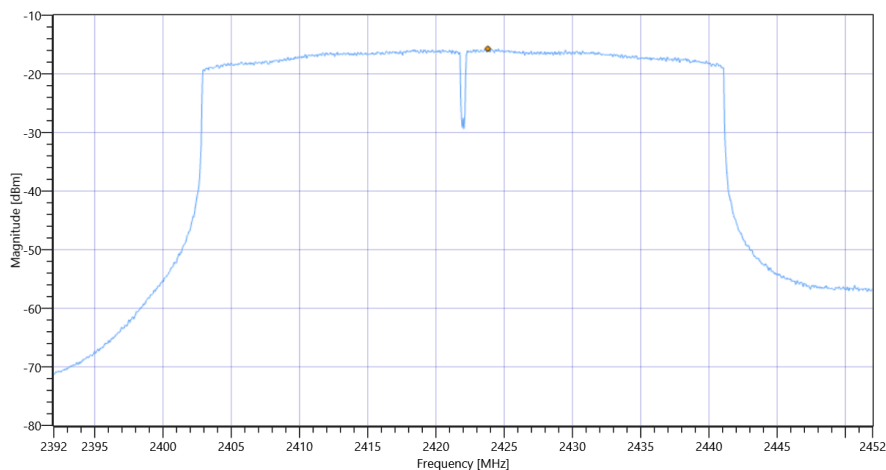
Avg. PSD

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	24.90 5.13 35
Start [MHz] Stop [MHz]	2392.000 2452.000
RBW [MHz] VBW [MHz]	0.003000 0.010000
Detector TraceMode	RMS AVER
Sweep: Time [ms] Count Points per Section Type	667 100 1001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Avg PSD uncorrected	--	--	-15.71	dBm	INFO
Duty cycle correction	--	--	0	dB	INFO
Avg PSD DC corrected	--	8	-15.71	dBm/3kHz	PASS



FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 ax-HE40

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 ax-HE40

Test References

TC Start	06.12.2022 08:51:34
Ambit Temp [°C] Humidity [rel%]	23.8 28
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 ax-HE40
Add. Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	4
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 ax-HE40
Antenna Port used	4
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2422
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2452
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2422 MHz

RESULT: Reference Power cond.

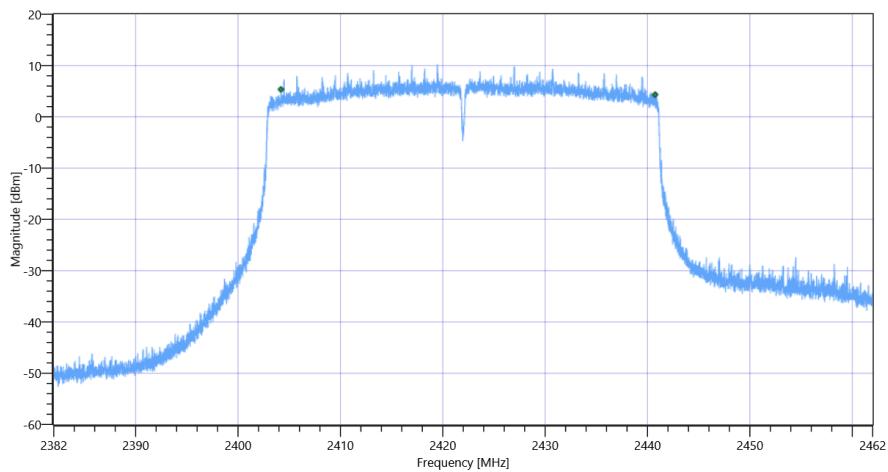
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	18.96	dBm	INFO
Ref. Frequency	---	---	2429.590	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	23.96 5.13 35
Start [MHz] Stop [MHz]	2382.000 2462.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	50 200 10001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	500	---	36560	kHz	PASS



FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 ax-HE40

FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE40

Test References

TC Start	06.12.2022 08:41:12
Ambit Temp [°C] Humidity [rel%]	23.8 29
System Version	3.3.3.0
Test Specification	FCC 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 30dBc DTS DTS - WLAN2G4 ax-HE40
Add. Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	4
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 ax-HE40
Antenna Port used	3
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2422
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2452
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2422 MHz

RESULT: Reference Power cond.

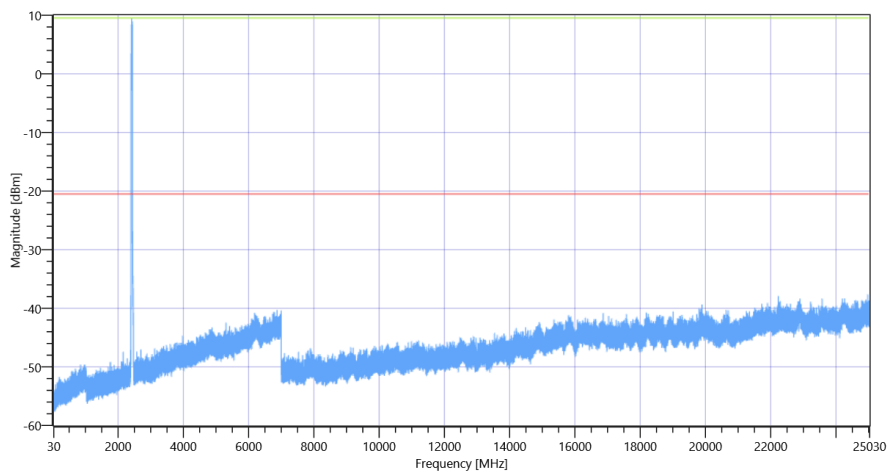
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	19.42	dBm	INFO
Ref. Frequency	---	---	2412.510	MHz	INFO

READ SA SETTINGS:

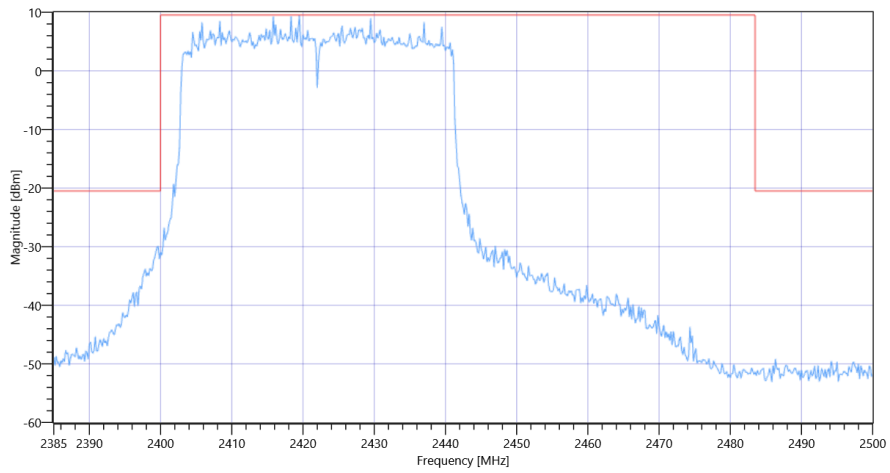
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	19.42 0 35
Start [MHz] Stop [MHz]	24530.000 25030.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	200 25 3001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2419.50 MHz	---	---	9.50	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 2399.667 MHz	0	---	9.4	dB	INFO



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE40 2422



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE40 2422

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40

Test References

TC Start	06.12.2022 08:40:12
Ambit Temp [°C] Humidity [rel%]	23.7 29
System Version	3.3.3.0
Test Specification	FCC 15.247, ISED RSS247 -
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 ax-HE40
Add. Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	4
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 ax-HE40
Antenna Port used	3
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2422
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2452
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2422 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	19.73	dBm	INFO
Ref. Frequency	---	---	2430.390	MHz	INFO

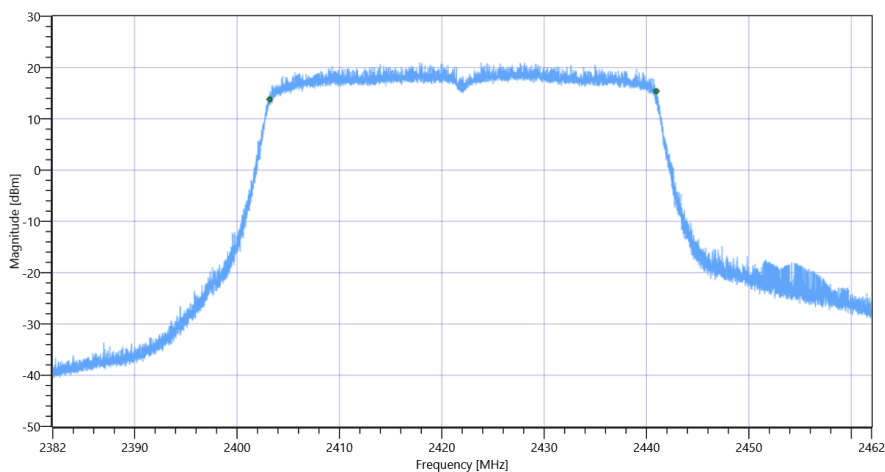
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	24.73 5.13 35
Start [MHz] Stop [MHz]	2382.000 2462.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	50 200 10001 SWE

RESULT

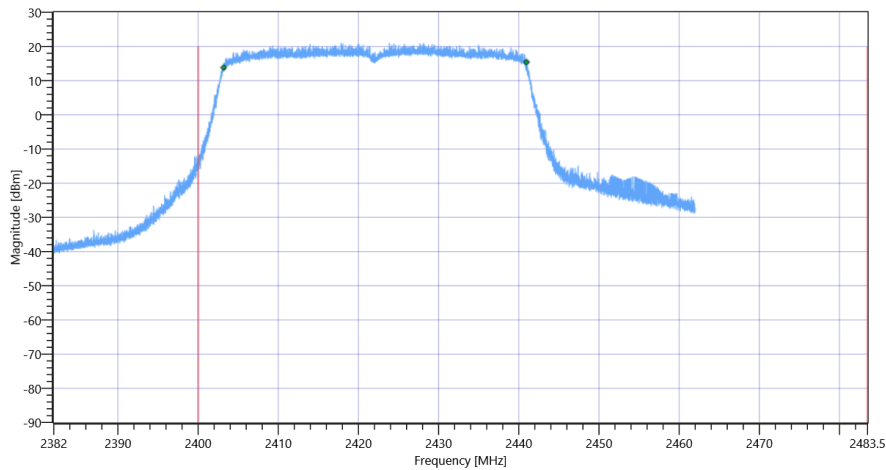
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	37788.000	kHz	INFO
T1 99%	2400.000000	---	2403.1779	MHz	PASS
T2 99%	---	2483.500000	2440.9661	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40 99PCT

Plot: Bandwidth within Band

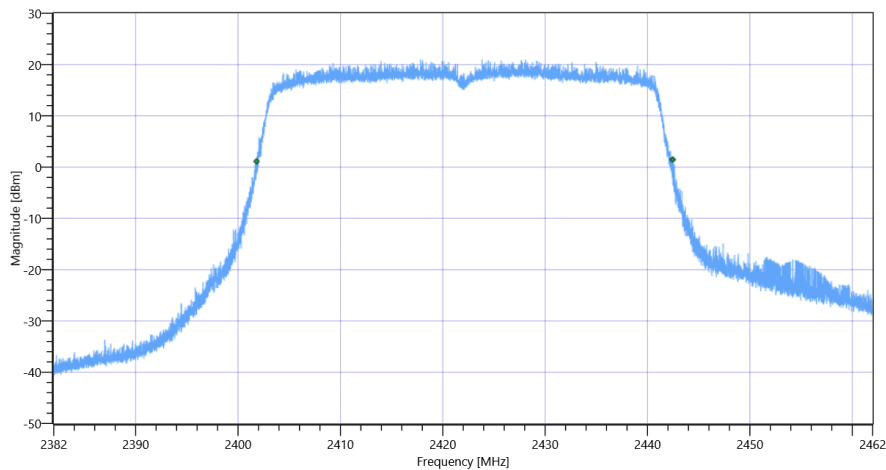


FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40

RESULT

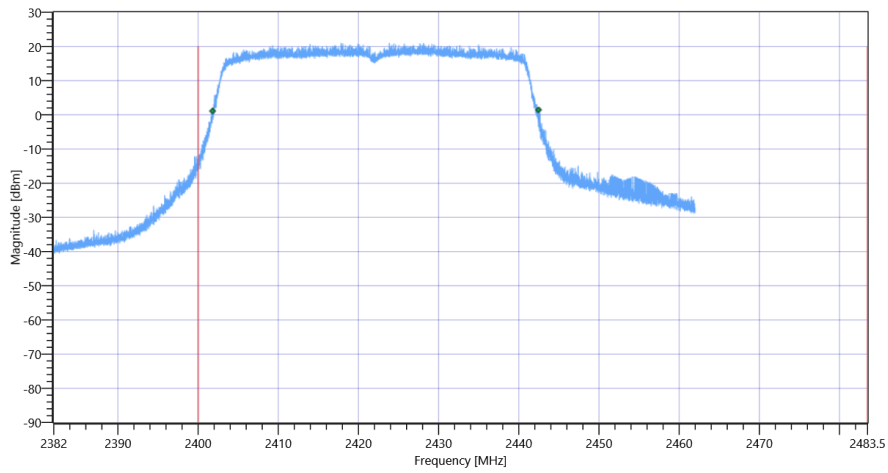
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	40656	kHz	INFO
T1 20dB	2400.000000	---	2401.8000	MHz	PASS
T2 20dB	---	2483.500000	2442.4560	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40 20dB

Plot: Bandwidth within Band



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40

FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 ax-HE40

Test References

TC Start	06.12.2022 08:38:24
Ambit Temp [°C] Humidity [rel%]	23.7 29
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	ANSI C63.10-2013 Chapter 11.10.5 or.3
TC Version	0.0.1
My Description	FCC 15.247 Avg Power Spectral Density DTS - WLAN2G4 ax-HE40
Add. Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	4
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 ax-HE40
Antenna Port used	3
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2422
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2452
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2422 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	18.88	dBm	INFO
Ref. Frequency	--	--	2416.010	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Duty Cycle min	--	--	0	dB	DC > 98% defined

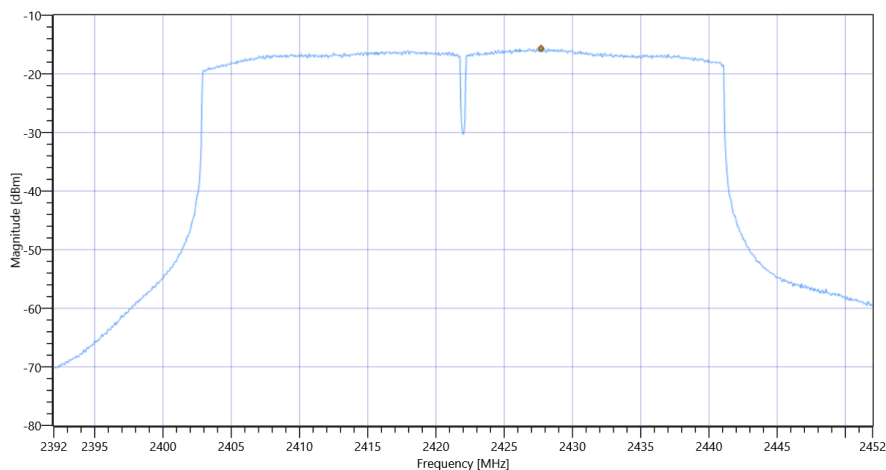
Avg. PSD

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	23.88 5.13 35
Start [MHz] Stop [MHz]	2392.000 2452.000
RBW [MHz] VBW [MHz]	0.003000 0.010000
Detector TraceMode	RMS AVER
Sweep: Time [ms] Count Points per Section Type	667 100 1001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Avg PSD uncorrected	--	--	-15.64	dBm	INFO
Duty cycle correction	--	--	0	dB	INFO
Avg PSD DC corrected	--	8	-15.64	dBm/3kHz	PASS



FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 ax-HE40

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 ax-HE40

Test References

TC Start	06.12.2022 08:37:48
Ambit Temp [°C] Humidity [rel%]	23.7 29
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 ax-HE40
Add. Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	4
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 ax-HE40
Antenna Port used	3
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2422
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2452
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2422 MHz

RESULT: Reference Power cond.

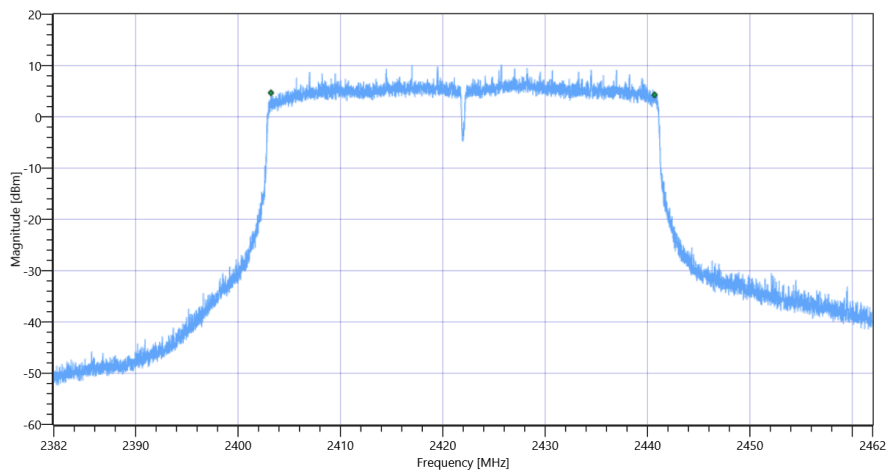
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	19.41	dBm	INFO
Ref. Frequency	--	--	2419.500	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	24.41 5.13 35
Start [MHz] Stop [MHz]	2382.000 2462.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	50 200 10001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	500	--	37480	kHz	PASS



FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 ax-HE40

FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE40

Test References

TC Start	06.12.2022 08:27:27
Ambit Temp [°C] Humidity [rel%]	23.8 29
System Version	3.3.3.0
Test Specification	FCC 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 30dBc DTS DTS - WLAN2G4 ax-HE40
Add. Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	4
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 ax-HE40
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2422
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2452
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2422 MHz

RESULT: Reference Power cond.

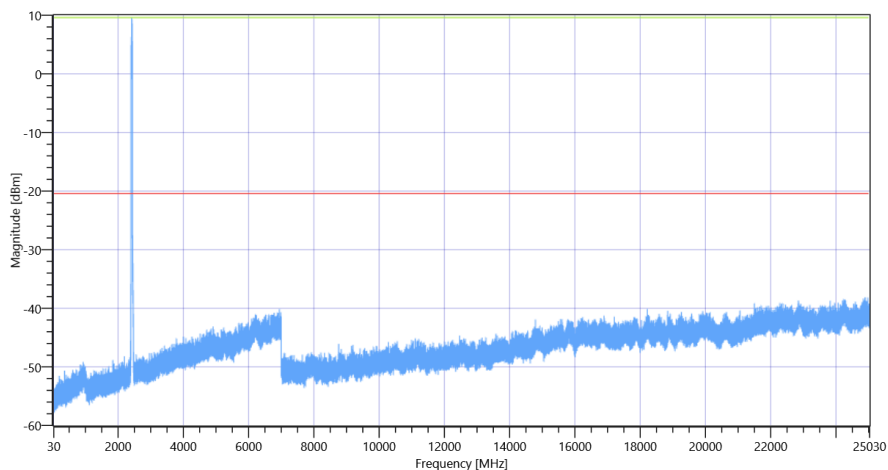
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	19.09	dBm	INFO
Ref. Frequency	---	---	2430.190	MHz	INFO

READ SA SETTINGS:

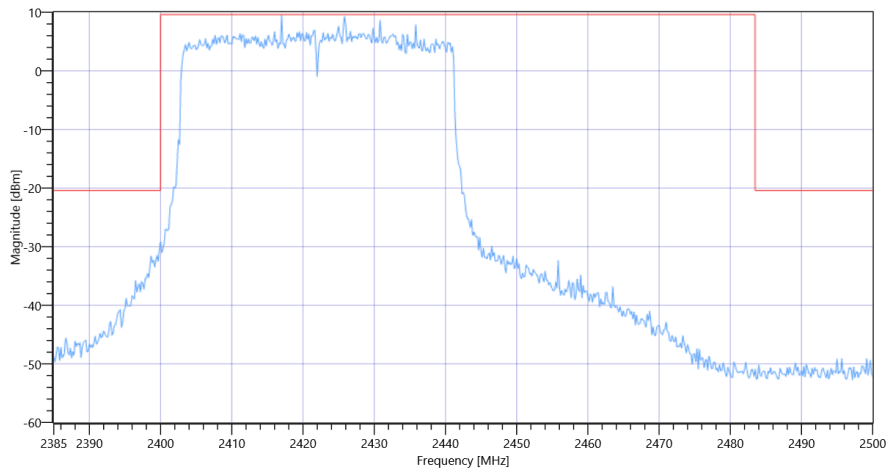
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	19.09 0 35
Start [MHz] Stop [MHz]	24530.000 25030.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	200 25 3001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2417.00 MHz	---	---	9.59	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 2399.833 MHz	0	---	10.01	dB	INFO



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE40 2422



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE40 2422

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40

Test References

TC Start	06.12.2022 08:26:27
Ambit Temp [°C] Humidity [rel%]	23.8 28
System Version	3.3.3.0
Test Specification	FCC 15.247, ISED RSS247 -
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 ax-HE40
Add. Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	4
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 ax-HE40
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2422
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2452
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2422 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	18.70	dBm	INFO
Ref. Frequency	---	---	2416.410	MHz	INFO

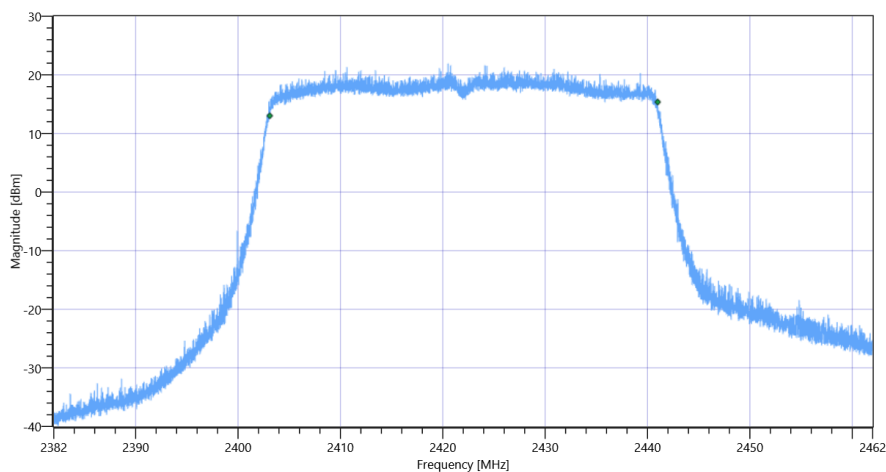
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	23.70 5.13 35
Start [MHz] Stop [MHz]	2382.000 2462.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	50 200 10001 SWE

RESULT

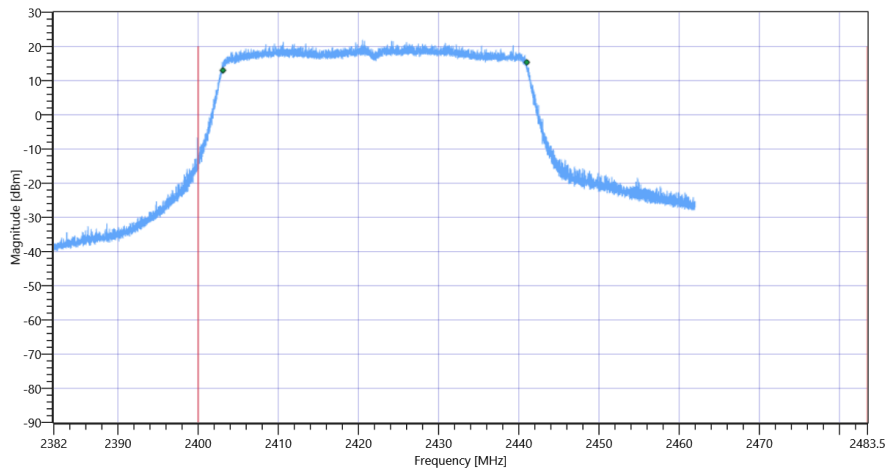
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	37900.000	kHz	INFO
T1 99%	2400.000000	---	2403.0979	MHz	PASS
T2 99%	---	2483.500000	2440.9981	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40 99PCT

Plot: Bandwidth within Band

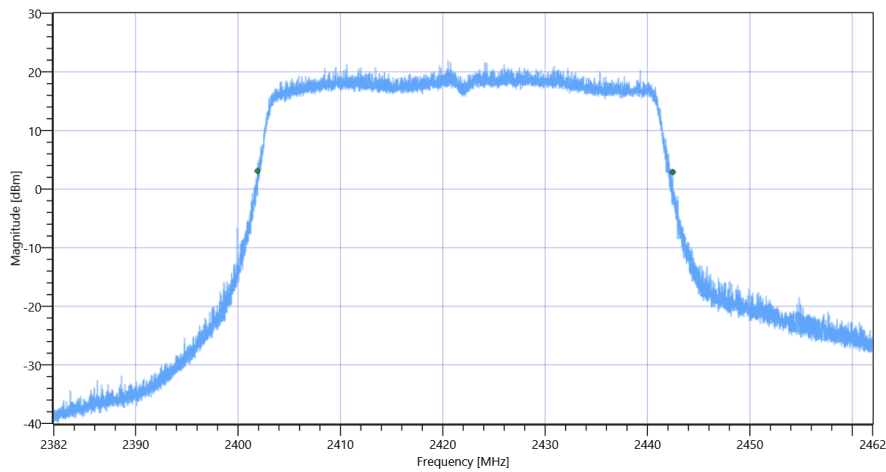


FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40

RESULT

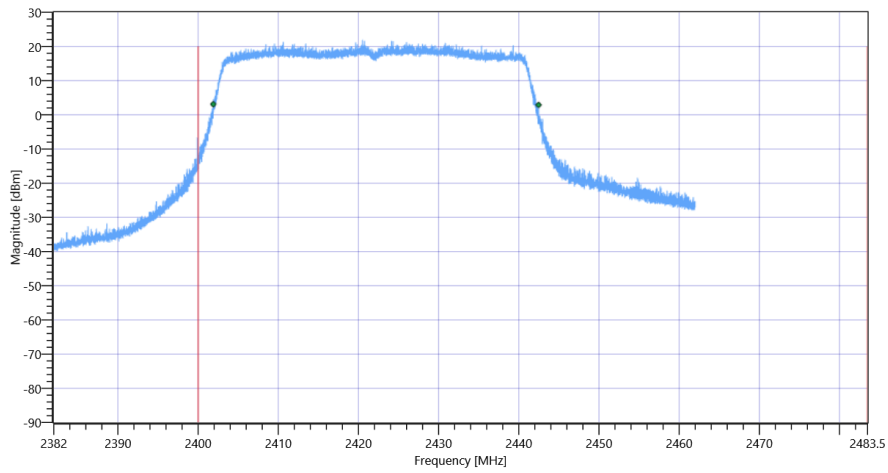
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	40568	kHz	INFO
T1 20dB	2400.000000	---	2401.8960	MHz	PASS
T2 20dB	---	2483.500000	2442.4640	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40 20dB

Plot: Bandwidth within Band



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40

FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 ax-HE40

Test References

TC Start	06.12.2022 08:24:40
Ambit Temp [°C] Humidity [rel%]	23.8 28
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	ANSI C63.10-2013 Chapter 11.10.5 or.3
TC Version	0.0.1
My Description	FCC 15.247 Avg Power Spectral Density DTS - WLAN2G4 ax-HE40
Add. Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	4
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 ax-HE40
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2422
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2452
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2422 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	19.93	dBm	INFO
Ref. Frequency	--	--	2427.590	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Duty Cycle min	--	--	0	dB	DC > 98% defined

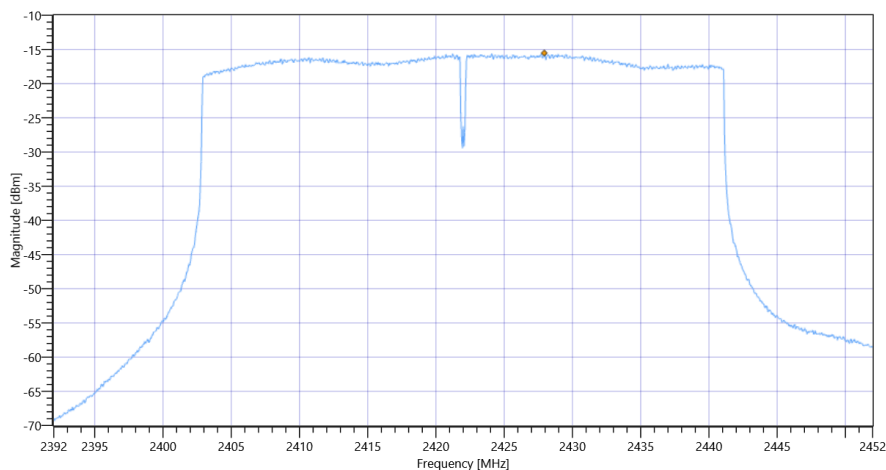
Avg. PSD

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	24.93 5.13 35
Start [MHz] Stop [MHz]	2392.000 2452.000
RBW [MHz] VBW [MHz]	0.003000 0.010000
Detector TraceMode	RMS AVER
Sweep: Time [ms] Count Points per Section Type	667 100 1001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Avg PSD uncorrected	--	--	-15.52	dBm	INFO
Duty cycle correction	--	--	0	dB	INFO
Avg PSD DC corrected	--	8	-15.52	dBm/3kHz	PASS



FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 ax-HE40

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 ax-HE40

Test References

TC Start	06.12.2022 08:24:03
Ambit Temp [°C] Humidity [rel%]	23.8 28
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 ax-HE40
Add. Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	4
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 ax-HE40
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2422
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2452
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2422 MHz

RESULT: Reference Power cond.

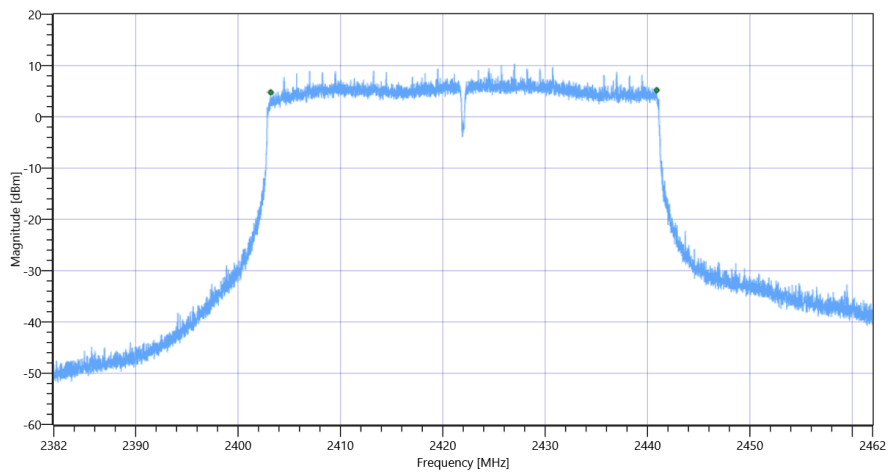
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	18.63	dBm	INFO
Ref. Frequency	--	--	2418.700	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	23.63 5.13 35
Start [MHz] Stop [MHz]	2382.000 2462.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	50 200 10001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	500	--	37704	kHz	PASS



FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 ax-HE40

FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE40

Test References

TC Start	06.12.2022 08:13:44
Ambit Temp [°C] Humidity [rel%]	23.8 28
System Version	3.3.3.0
Test Specification	FCC 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 30dBc DTS DTS - WLAN2G4 ax-HE40
Add. Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	4
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 ax-HE40
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2422
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2452
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2422 MHz

RESULT: Reference Power cond.

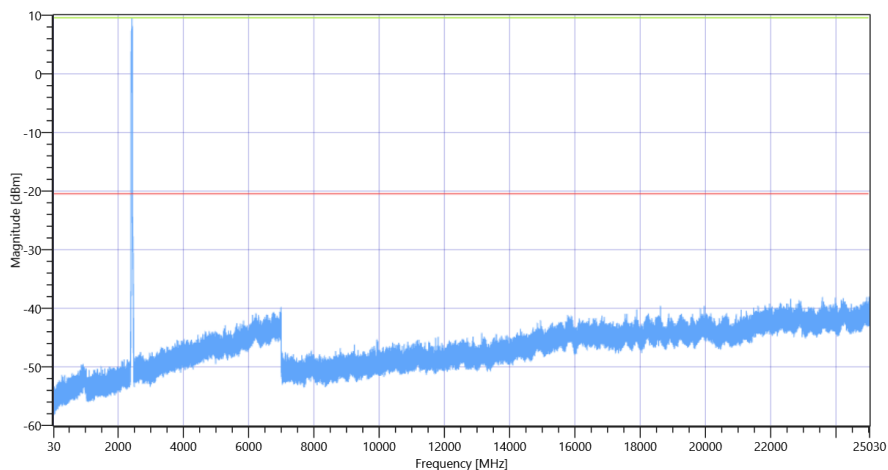
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	19.57	dBm	INFO
Ref. Frequency	---	---	2425.100	MHz	INFO

READ SA SETTINGS:

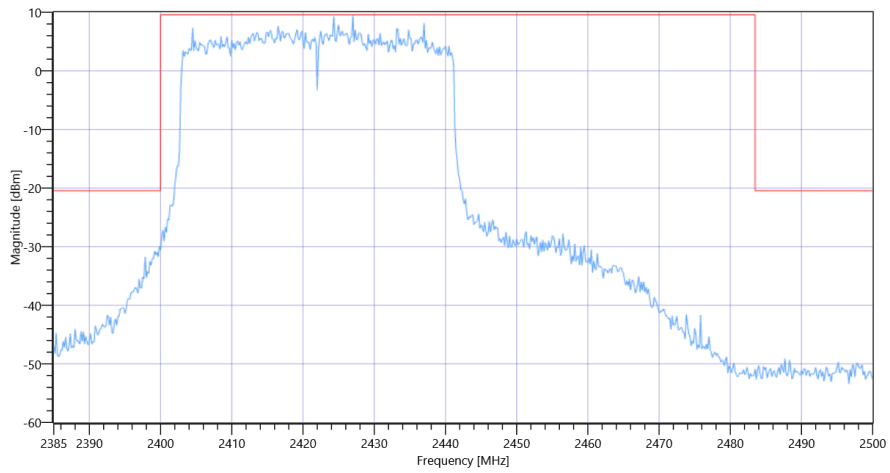
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	19.57 0 35
Start [MHz] Stop [MHz]	24530.000 25030.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	200 25 3001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2427.00 MHz	---	---	9.56	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 2399.833 MHz	0	---	9.5	dB	INFO



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE40 2422



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE40 2422

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40

Test References

TC Start	06.12.2022 08:12:44
Ambit Temp [°C] Humidity [rel%]	23.8 28
System Version	3.3.3.0
Test Specification	FCC 15.247, ISED RSS247 -
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 ax-HE40
Add. Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	4
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 ax-HE40
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2422
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2452
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2422 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	18.53	dBm	INFO
Ref. Frequency	---	---	2426.800	MHz	INFO

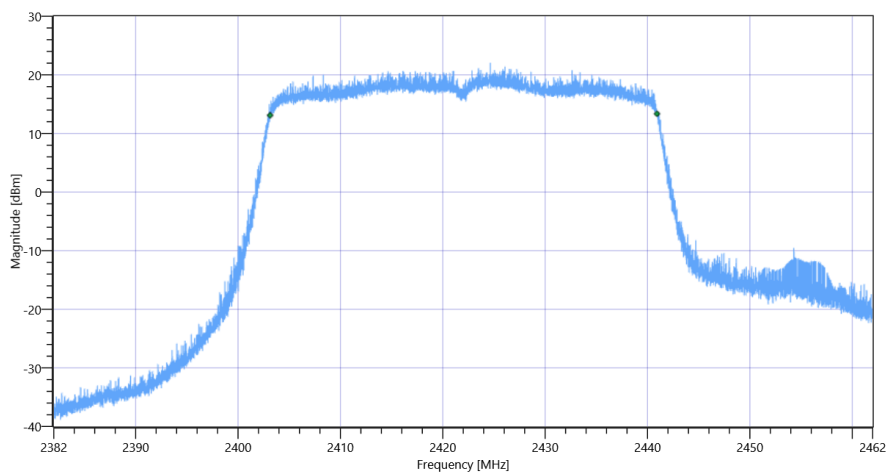
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	23.53 5.13 35
Start [MHz] Stop [MHz]	2382.000 2462.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	50 200 10001 SWE

RESULT

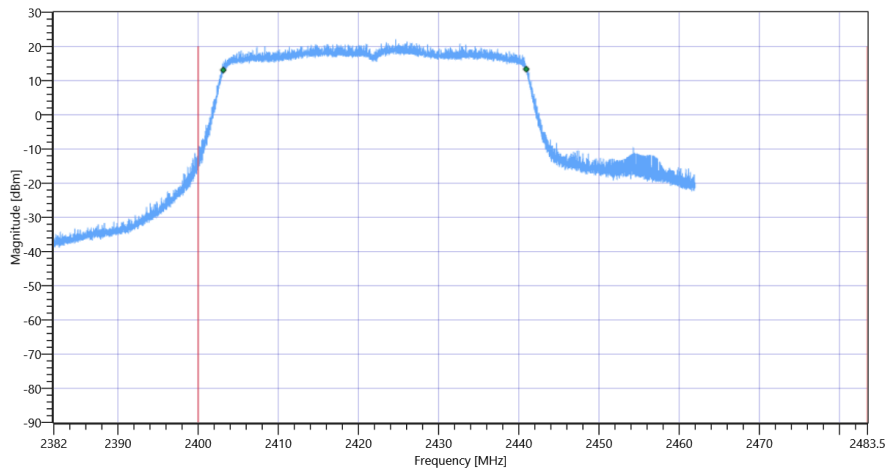
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	37788.000	kHz	INFO
T1 99%	2400.000000	---	2403.1379	MHz	PASS
T2 99%	---	2483.500000	2440.9261	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40 99PCT

Plot: Bandwidth within Band

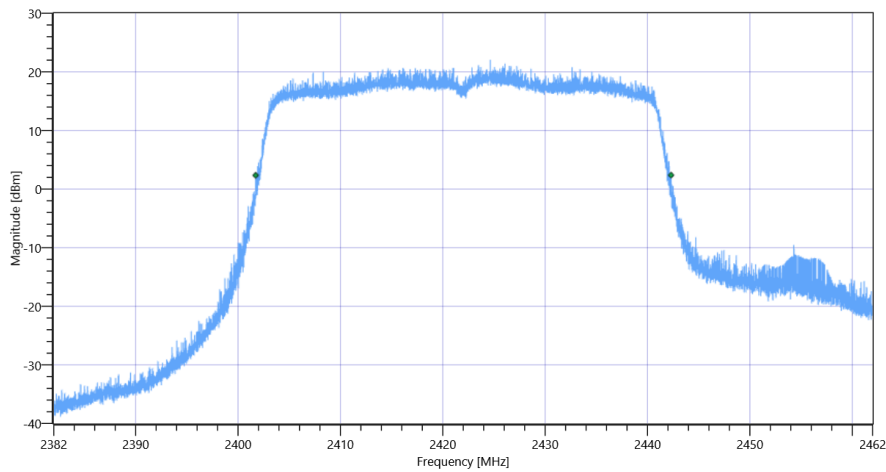


FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40

RESULT

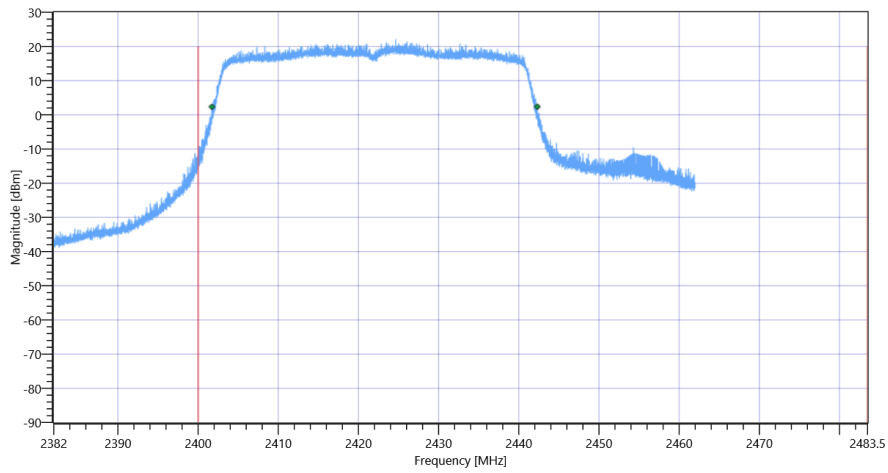
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	40584	kHz	INFO
T1 20dB	2400.000000	---	2401.7200	MHz	PASS
T2 20dB	---	2483.500000	2442.3040	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40 20dB

Plot: Bandwidth within Band



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40

FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 ax-HE40

Test References

TC Start	06.12.2022 08:10:57
Ambit Temp [°C] Humidity [rel%]	23.9 27
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	ANSI C63.10-2013 Chapter 11.10.5 or.3
TC Version	0.0.1
My Description	FCC 15.247 Avg Power Spectral Density DTS - WLAN2G4 ax-HE40
Add. Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	4
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 ax-HE40
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2422
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2452
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2422 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	20.41	dBm	INFO
Ref. Frequency	--	--	2423.200	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Duty Cycle min	--	--	0	dB	DC > 98% defined

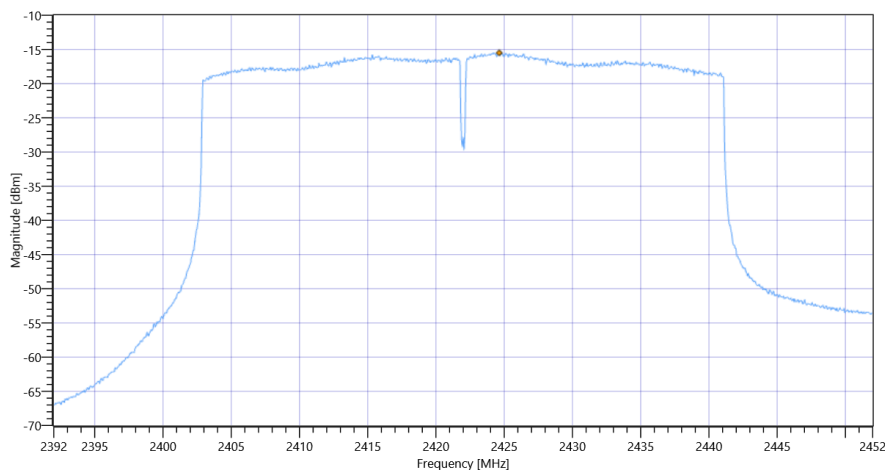
Avg. PSD

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.41 5.13 40
Start [MHz] Stop [MHz]	2392.000 2452.000
RBW [MHz] VBW [MHz]	0.003000 0.010000
Detector TraceMode	RMS AVER
Sweep: Time [ms] Count Points per Section Type	667 100 1001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Avg PSD uncorrected	--	--	-15.49	dBm	INFO
Duty cycle correction	--	--	0	dB	INFO
Avg PSD DC corrected	--	8	-15.49	dBm/3kHz	PASS



FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 ax-HE40

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 ax-HE40

Test References

TC Start	06.12.2022 08:10:21
Ambit Temp [°C] Humidity [rel%]	23.9 27
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 ax-HE40
Add. Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	4
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 ax-HE40
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2422
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2452
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2422 MHz

RESULT: Reference Power cond.

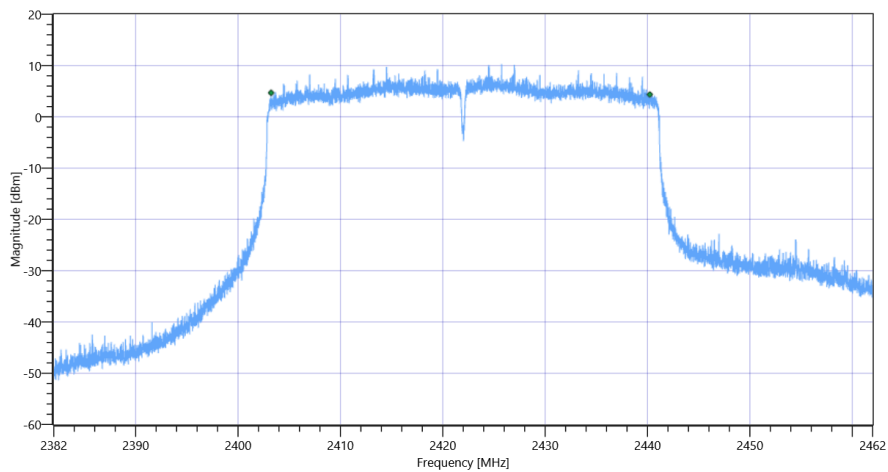
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	20.02	dBm	INFO
Ref. Frequency	---	---	2425.800	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.02 5.13 35
Start [MHz] Stop [MHz]	2382.000 2462.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	50 200 10001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	500	---	36992	kHz	PASS



FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 ax-HE40

FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE40

Test References

TC Start	06.12.2022 21:48:32
Ambit Temp [°C] Humidity [rel%]	22.9 31
System Version	3.3.3.0
Test Specification	FCC 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 30dBc DTS DTS - WLAN2G4 ax-HE40
Add. Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	4
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 ax-HE40
Antenna Port used	4
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2427
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2447
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2447 MHz

RESULT: Reference Power cond.

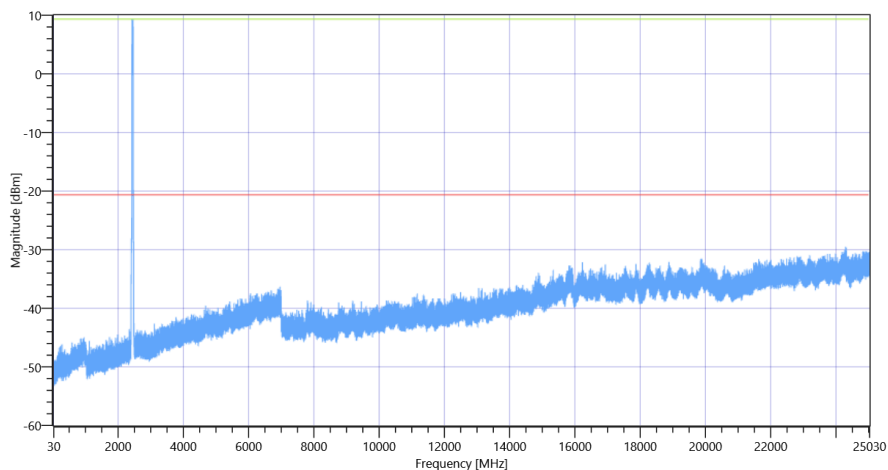
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	21.36	dBm	INFO
Ref. Frequency	---	---	2439.110	MHz	INFO

READ SA SETTINGS:

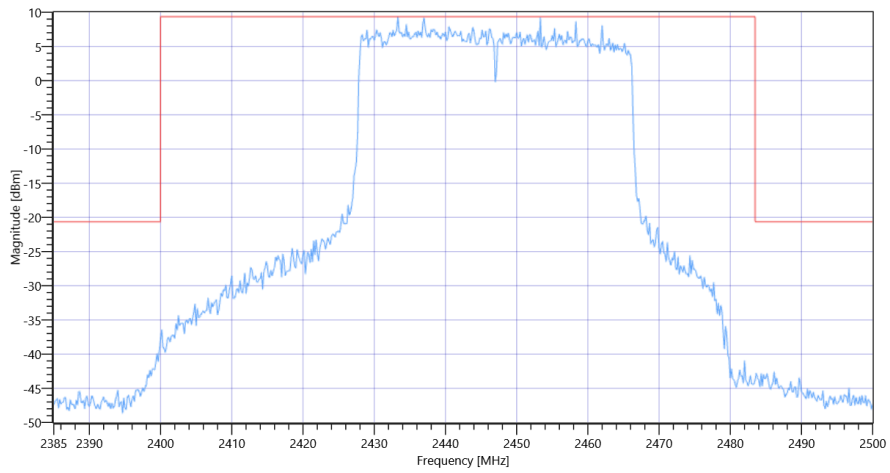
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	21.36 0 40
Start [MHz] Stop [MHz]	24530.000 25030.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	200 25 3001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2433.33 MHz	---	---	9.35	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 24294.5 MHz	0	---	8.83	dB	INFO



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE40 2447



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE40 2447

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40

Test References

TC Start	06.12.2022 21:47:31
Ambit Temp [°C] Humidity [rel%]	22.9 31
System Version	3.3.3.0
Test Specification	FCC 15.247, ISED RSS247 -
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 ax-HE40
Add. Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	4
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 ax-HE40
Antenna Port used	4
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2427
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2447
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2447 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	22.40	dBm	INFO
Ref. Frequency	---	---	2431.420	MHz	INFO

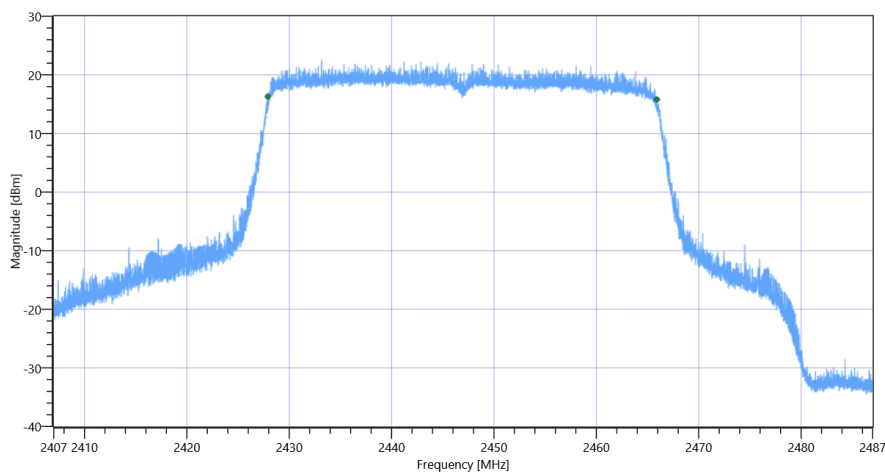
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.40 4.9 40
Start [MHz] Stop [MHz]	2407.000 2487.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	50 200 10001 SWE

RESULT

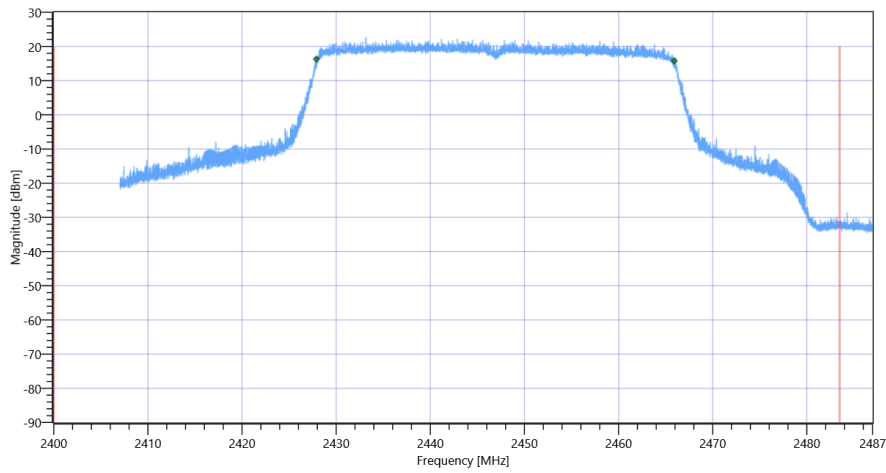
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	38020.000	kHz	INFO
T1 99%	2400.000000	---	2427.8979	MHz	PASS
T2 99%	---	2483.500000	2465.9181	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40 99PCT

Plot: Bandwidth within Band

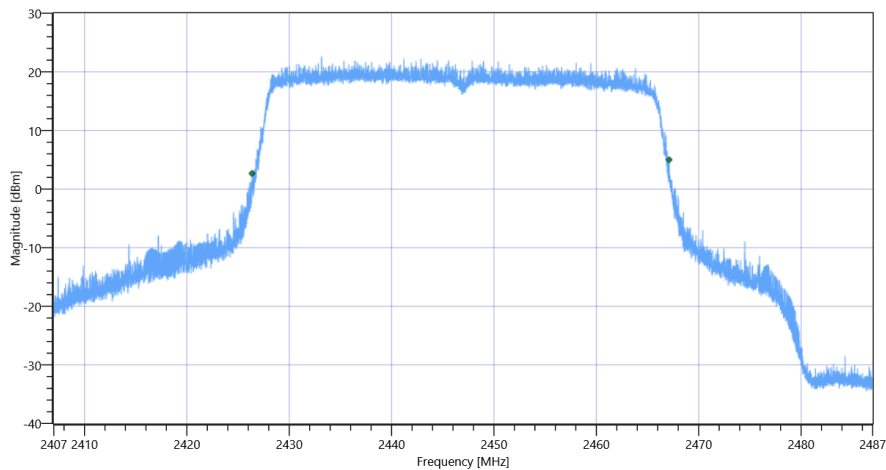


FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40

RESULT

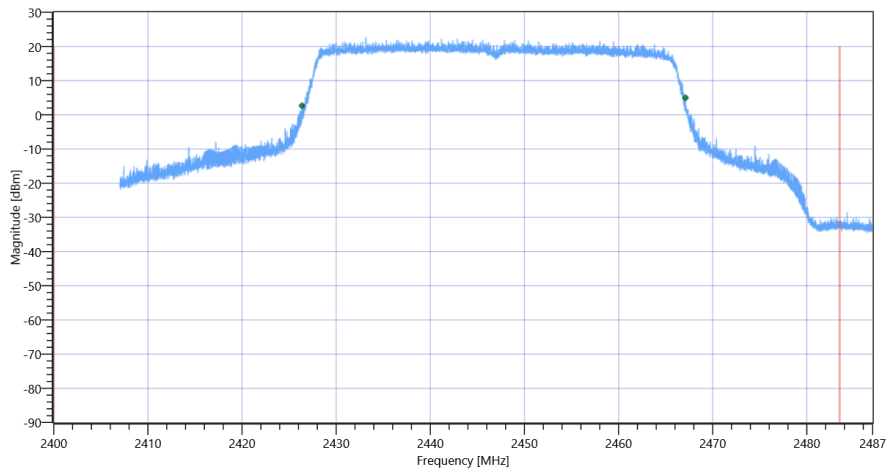
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	40752	kHz	INFO
T1 20dB	2400.000000	---	2426.3600	MHz	PASS
T2 20dB	---	2483.500000	2467.1120	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40 20dB

Plot: Bandwidth within Band



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40

FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 ax-HE40

Test References

TC Start	06.12.2022 21:45:43
Ambit Temp [°C] Humidity [rel%]	22.9 31
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	ANSI C63.10-2013 Chapter 11.10.5 or.3
TC Version	0.0.1
My Description	FCC 15.247 Avg Power Spectral Density DTS - WLAN2G4 ax-HE40
Add. Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	4
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 ax-HE40
Antenna Port used	4
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2427
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2447
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2447 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	21.03	dBm	INFO
Ref. Frequency	--	--	2457.390	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Duty Cycle min	--	--	0	dB	DC > 98% defined

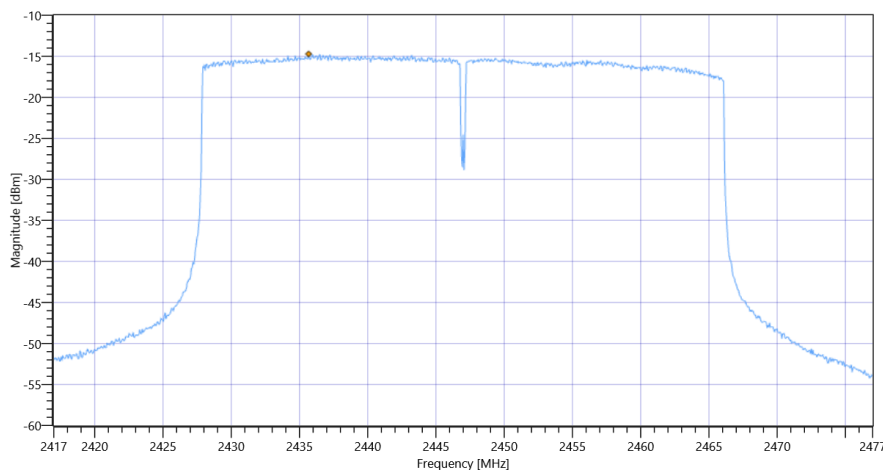
Avg. PSD

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	26.03 4.9 40
Start [MHz] Stop [MHz]	2417.000 2477.000
RBW [MHz] VBW [MHz]	0.003000 0.010000
Detector TraceMode	RMS AVER
Sweep: Time [ms] Count Points per Section Type	667 100 1001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Avg PSD uncorrected	--	--	-14.71	dBm	INFO
Duty cycle correction	--	--	0	dB	INFO
Avg PSD DC corrected	--	8	-14.71	dBm/3kHz	PASS



FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 ax-HE40

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 ax-HE40

Test References

TC Start	06.12.2022 21:45:06
Ambit Temp [°C] Humidity [rel%]	22.8 31
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 ax-HE40
Add. Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	4
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 ax-HE40
Antenna Port used	4
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2427
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2447
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2447 MHz

RESULT: Reference Power cond.

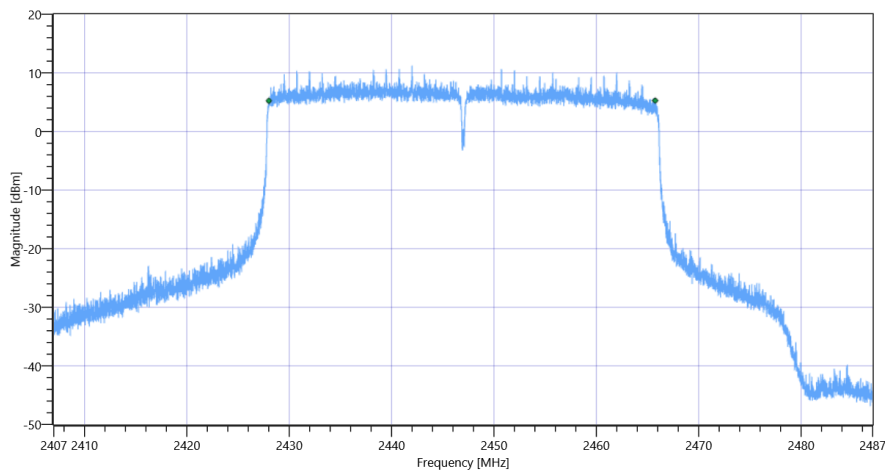
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	20.76	dBm	INFO
Ref. Frequency	--	--	2458.490	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.76 4.9 40
Start [MHz] Stop [MHz]	2407.000 2487.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	50 200 10001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	500	--	37744	kHz	PASS



FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 ax-HE40

FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE40

Test References

TC Start	06.12.2022 21:34:44
Ambit Temp [°C] Humidity [rel%]	22.9 31
System Version	3.3.3.0
Test Specification	FCC 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 30dBc DTS DTS - WLAN2G4 ax-HE40
Add. Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	4
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 ax-HE40
Antenna Port used	3
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2427
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2447
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2447 MHz

RESULT: Reference Power cond.

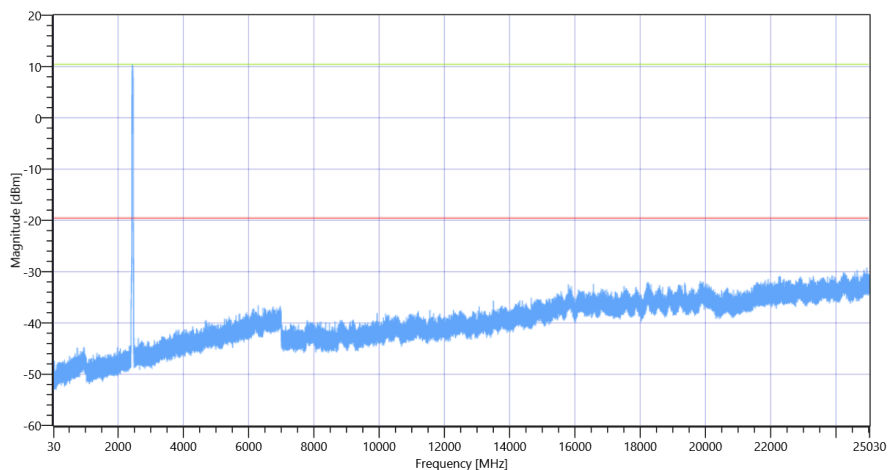
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	20.06	dBm	INFO
Ref. Frequency	---	---	2442.600	MHz	INFO

READ SA SETTINGS:

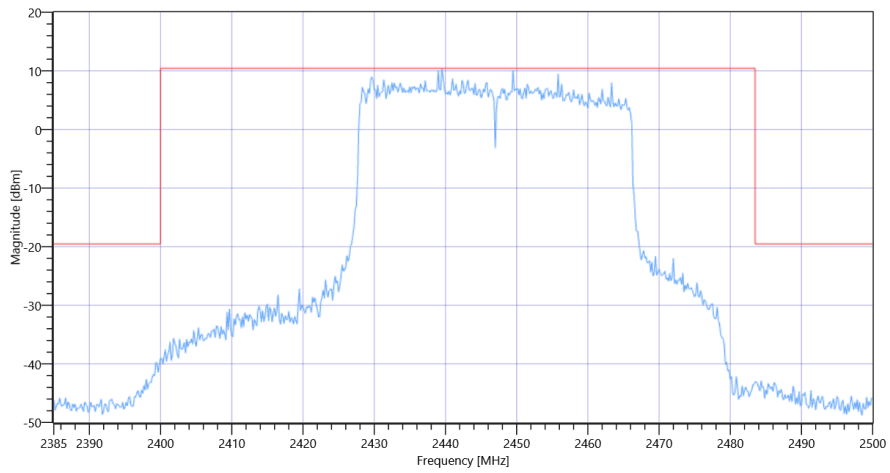
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	20.06 0 40
Start [MHz] Stop [MHz]	24530.000 25030.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	200 25 3001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2439.50 MHz	---	---	10.44	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 24942 MHz	0	---	9.66	dB	INFO



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE40 2447



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE40 2447

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40

Test References

TC Start	06.12.2022 21:33:43
Ambit Temp [°C] Humidity [rel%]	22.8 31
System Version	3.3.3.0
Test Specification	FCC 15.247, ISED RSS247 -
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 ax-HE40
Add. Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	4
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 ax-HE40
Antenna Port used	3
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2427
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2447
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2447 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	19.63	dBm	INFO
Ref. Frequency	---	---	2435.710	MHz	INFO

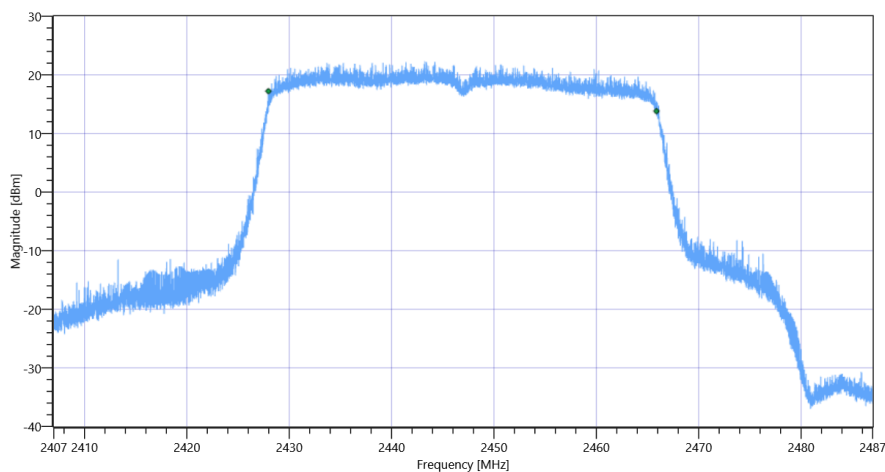
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	24.63 4.9 35
Start [MHz] Stop [MHz]	2407.000 2487.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	50 200 10001 SWE

RESULT

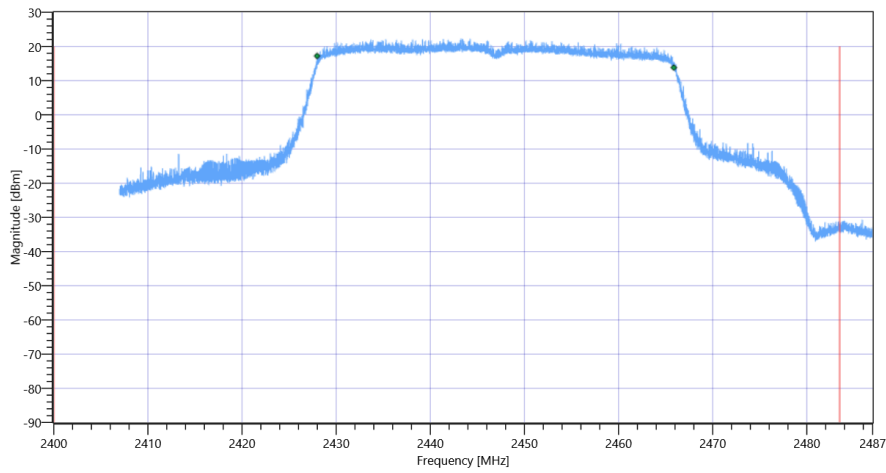
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	37900.000	kHz	INFO
T1 99%	2400.000000	---	2427.9699	MHz	PASS
T2 99%	---	2483.500000	2465.8701	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40 99PCT

Plot: Bandwidth within Band

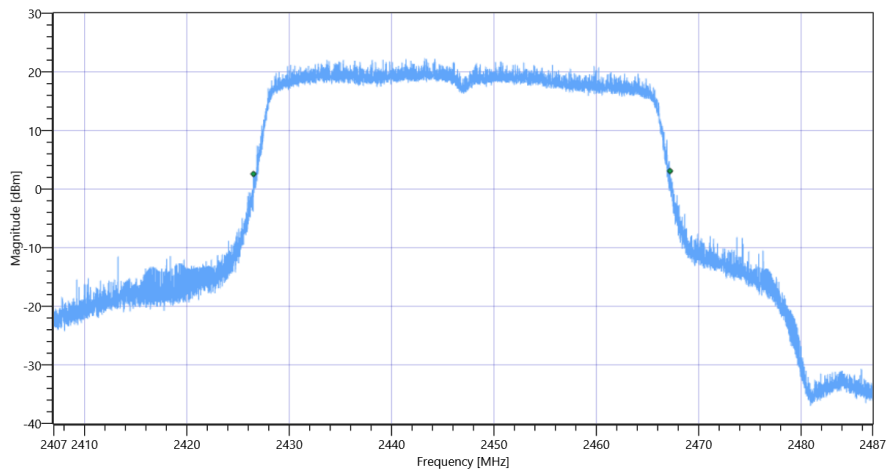


FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40

RESULT

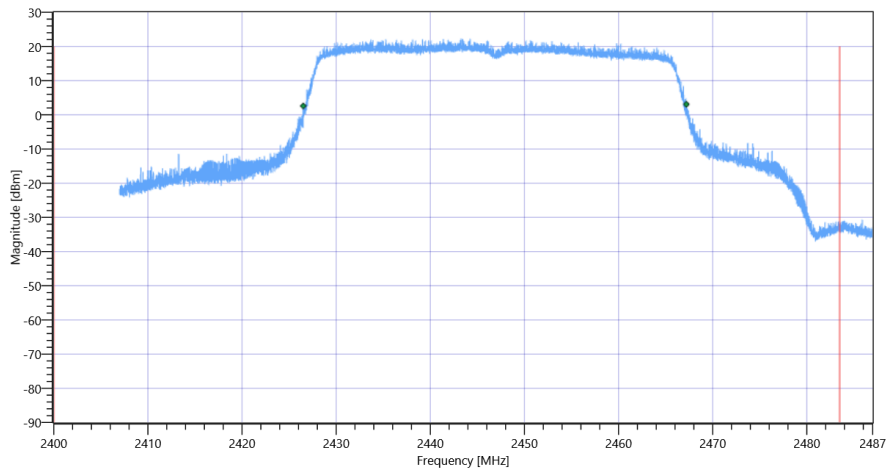
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	40696	kHz	INFO
T1 20dB	2400.000000	---	2426.5040	MHz	PASS
T2 20dB	---	2483.500000	2467.2000	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40 20dB

Plot: Bandwidth within Band



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40

FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 ax-HE40

Test References

TC Start	06.12.2022 21:31:55
Ambit Temp [°C] Humidity [rel%]	22.8 31
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	ANSI C63.10-2013 Chapter 11.10.5 or.3
TC Version	0.0.1
My Description	FCC 15.247 Avg Power Spectral Density DTS - WLAN2G4 ax-HE40
Add. Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	4
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 ax-HE40
Antenna Port used	3
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2427
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2447
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2447 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	20.40	dBm	INFO
Ref. Frequency	--	--	2437.510	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Duty Cycle min	--	--	0	dB	DC > 98% defined

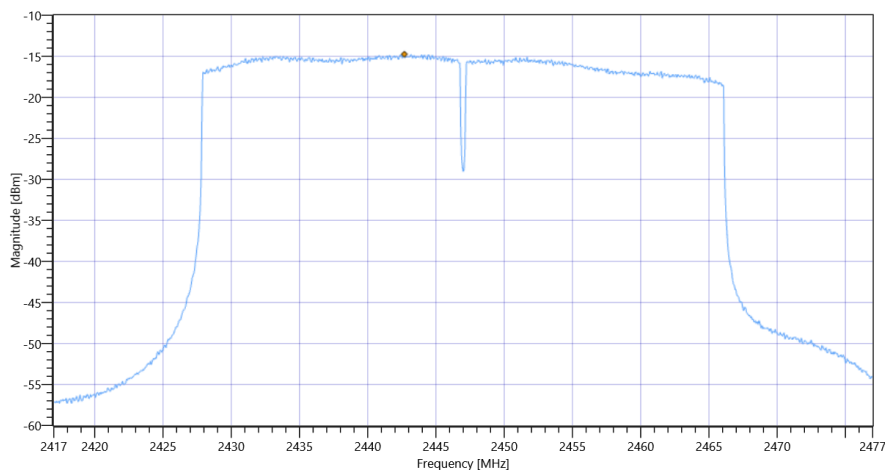
Avg. PSD

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.40 4.9 40
Start [MHz] Stop [MHz]	2417.000 2477.000
RBW [MHz] VBW [MHz]	0.003000 0.010000
Detector TraceMode	RMS AVER
Sweep: Time [ms] Count Points per Section Type	667 100 1001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Avg PSD uncorrected	--	--	-14.75	dBm	INFO
Duty cycle correction	--	--	0	dB	INFO
Avg PSD DC corrected	--	8	-14.75	dBm/3kHz	PASS



FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 ax-HE40

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 ax-HE40

Test References

TC Start	06.12.2022 21:31:18
Ambit Temp [°C] Humidity [rel%]	22.9 31
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 ax-HE40
Add. Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	4
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 ax-HE40
Antenna Port used	3
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2427
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2447
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2447 MHz

RESULT: Reference Power cond.

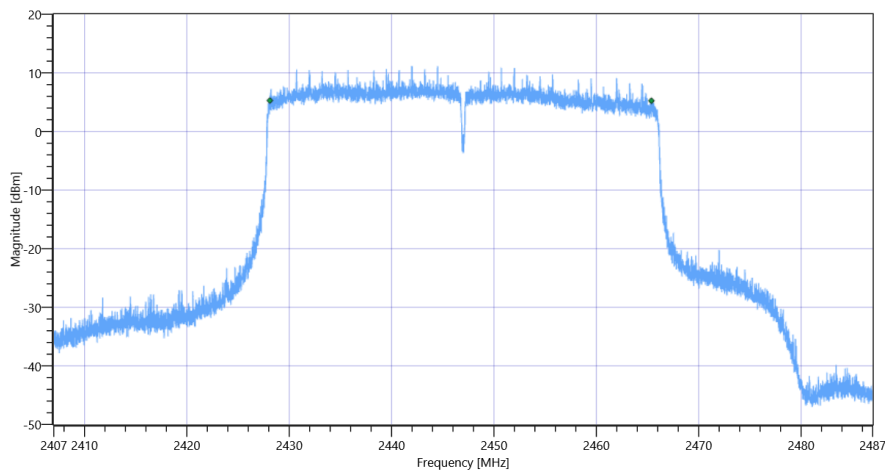
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	19.99	dBm	INFO
Ref. Frequency	---	---	2440.410	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	24.99 4.9 40
Start [MHz] Stop [MHz]	2407.000 2487.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	50 200 10001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	500	---	37272	kHz	PASS



FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 ax-HE40

FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE40

Test References

TC Start	06.12.2022 21:20:57
Ambit Temp [°C] Humidity [rel%]	22.9 31
System Version	3.3.3.0
Test Specification	FCC 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 30dBc DTS DTS - WLAN2G4 ax-HE40
Add. Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	4
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 ax-HE40
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2427
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2447
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2447 MHz

RESULT: Reference Power cond.

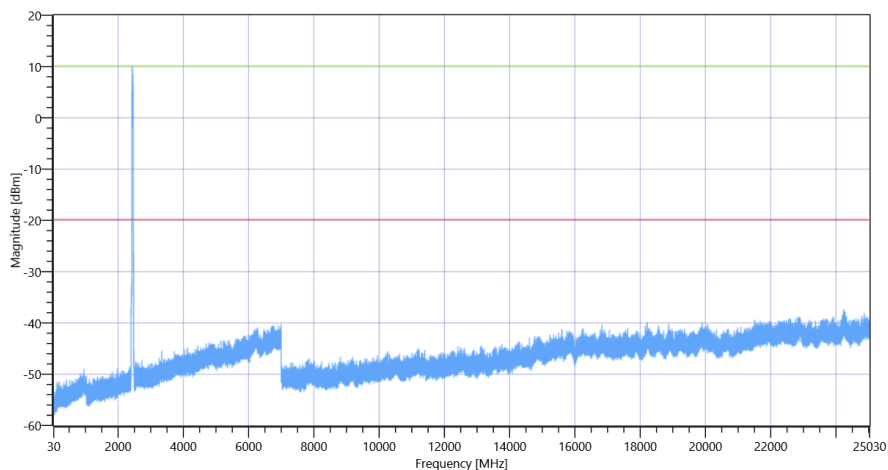
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	19.44	dBm	INFO
Ref. Frequency	--	--	2448.600	MHz	INFO

READ SA SETTINGS:

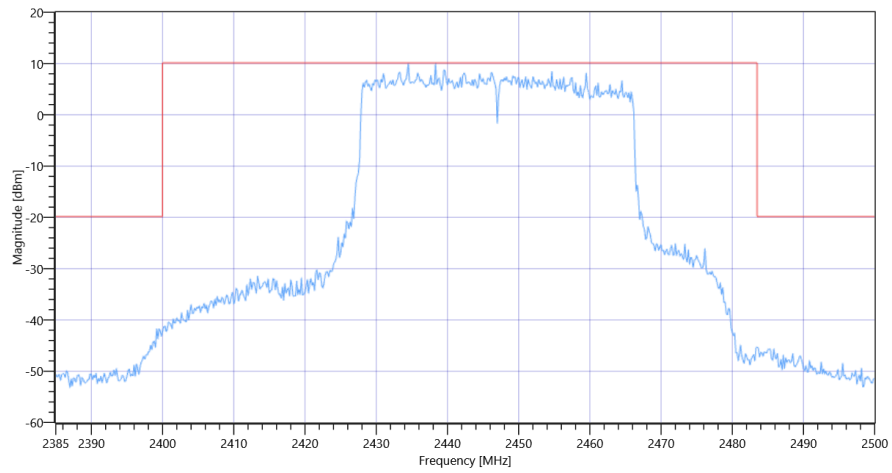
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	19.44 0 35
Start [MHz] Stop [MHz]	24530.000 25030.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	200 25 3001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2434.50 MHz	--	--	10.15	dBm	INFO
No peaks detected	--	--			PASS
Lowest margin to limit 24231.167 MHz	0	--	17.4	dB	INFO



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE40 2447



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE40 2447

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40

Test References

TC Start	06.12.2022 21:19:56
Ambit Temp [°C] Humidity [rel%]	22.9 31
System Version	3.3.3.0
Test Specification	FCC 15.247, ISED RSS247 -
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 ax-HE40
Add. Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	4
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 ax-HE40
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2427
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2447
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2447 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	19.81	dBm	INFO
Ref. Frequency	---	---	2443.500	MHz	INFO

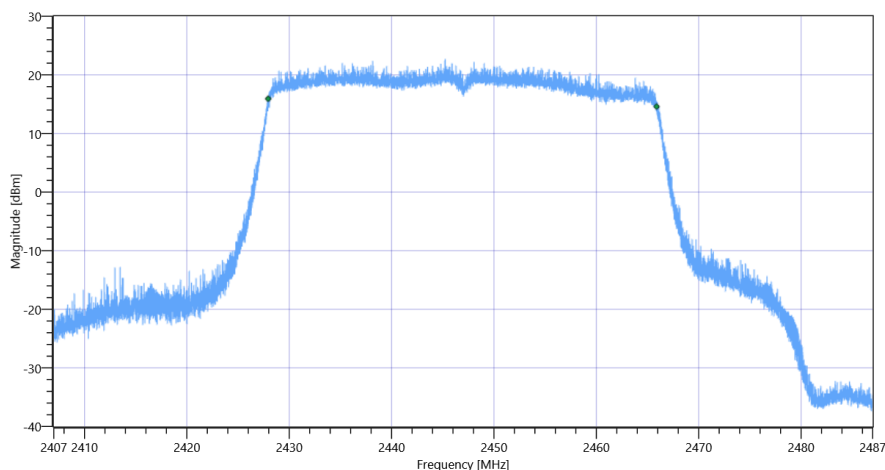
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	24.81 4.9 35
Start [MHz] Stop [MHz]	2407.000 2487.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	50 200 10001 SWE

RESULT

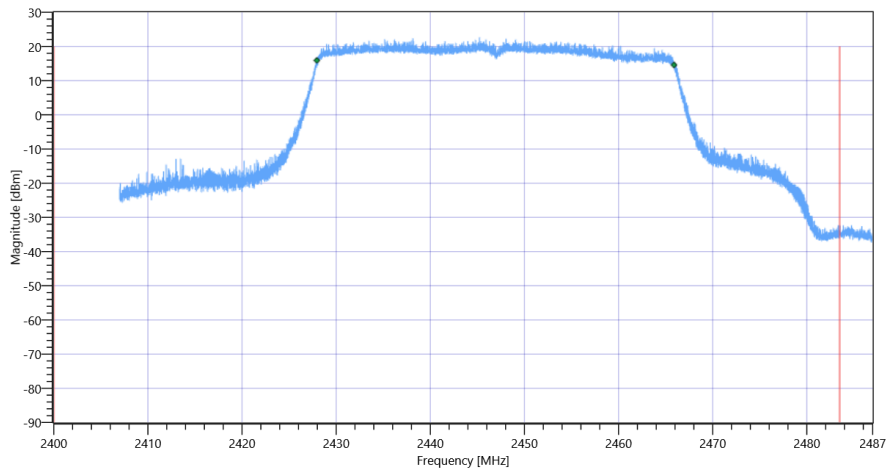
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	37940.000	kHz	INFO
T1 99%	2400.000000	---	2427.9459	MHz	PASS
T2 99%	---	2483.500000	2465.8861	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40 99PCT

Plot: Bandwidth within Band

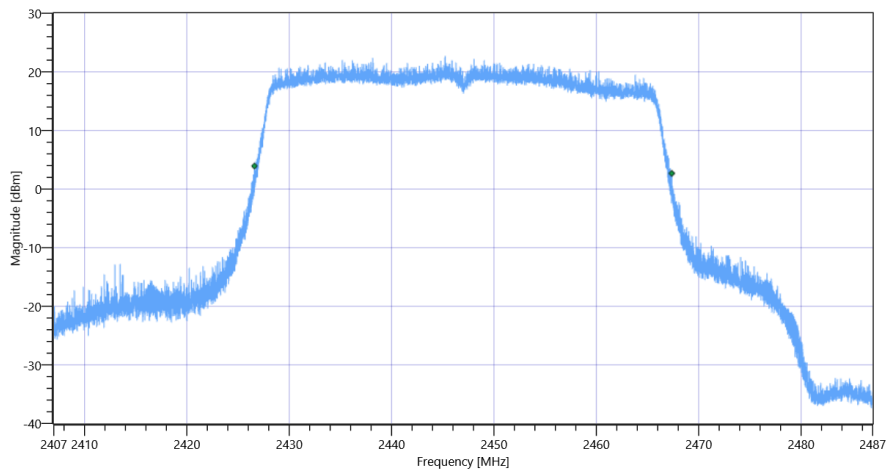


FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40

RESULT

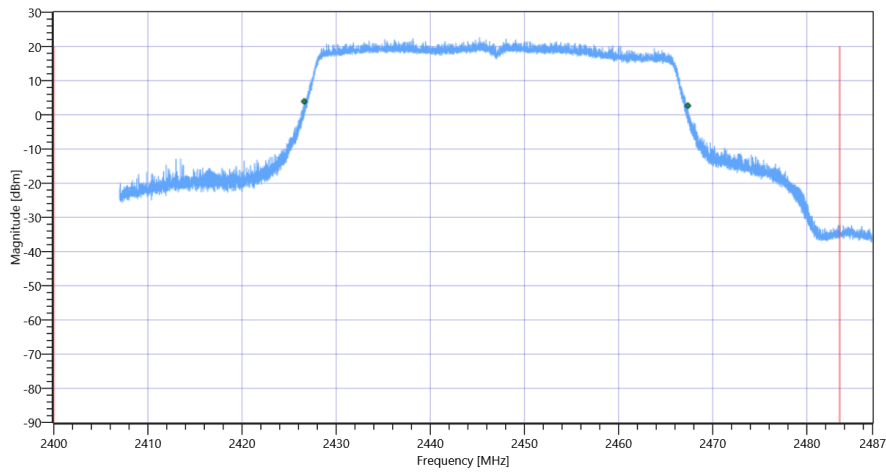
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	40768	kHz	INFO
T1 20dB	2400.000000	---	2426.6000	MHz	PASS
T2 20dB	---	2483.500000	2467.3680	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40 20dB

Plot: Bandwidth within Band



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40

FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 ax-HE40

Test References

TC Start	06.12.2022 21:18:08
Ambit Temp [°C] Humidity [rel%]	22.9 31
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	ANSI C63.10-2013 Chapter 11.10.5 or.3
TC Version	0.0.1
My Description	FCC 15.247 Avg Power Spectral Density DTS - WLAN2G4 ax-HE40
Add. Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	4
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 ax-HE40
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2427
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2447
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2447 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	19.71	dBm	INFO
Ref. Frequency	--	--	2450.300	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Duty Cycle min	--	--	0	dB	DC > 98% defined

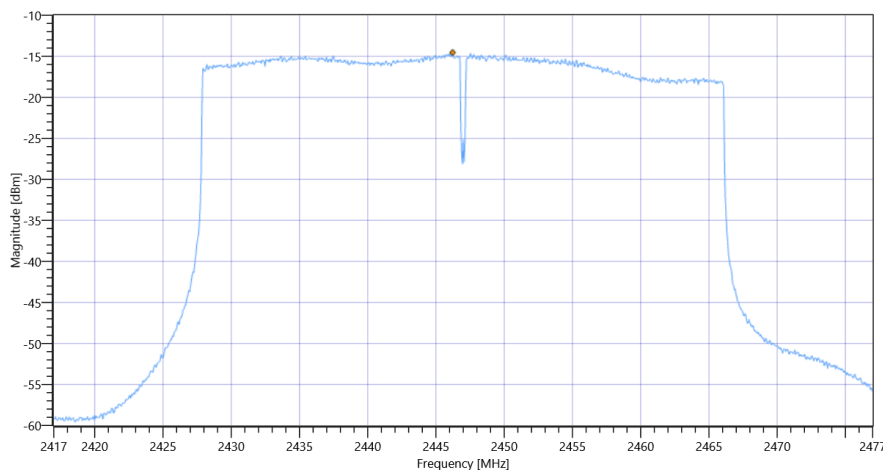
Avg. PSD

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	24.71 4.9 35
Start [MHz] Stop [MHz]	2417.000 2477.000
RBW [MHz] VBW [MHz]	0.003000 0.010000
Detector TraceMode	RMS AVER
Sweep: Time [ms] Count Points per Section Type	667 100 1001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Avg PSD uncorrected	--	--	-14.54	dBm	INFO
Duty cycle correction	--	--	0	dB	INFO
Avg PSD DC corrected	--	8	-14.54	dBm/3kHz	PASS



FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 ax-HE40

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 ax-HE40

Test References

TC Start	06.12.2022 21:17:32
Ambit Temp [°C] Humidity [rel%]	22.9 31
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 ax-HE40
Add. Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	4
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 ax-HE40
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2427
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2447
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2447 MHz

RESULT: Reference Power cond.

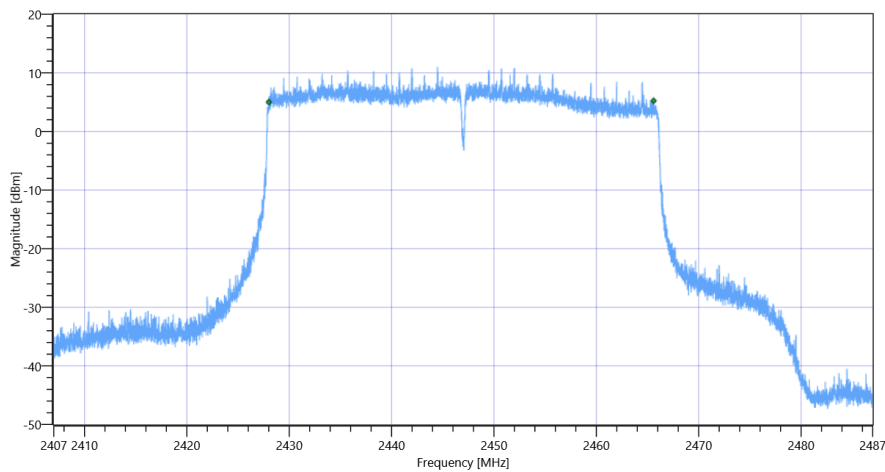
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	20.60	dBm	INFO
Ref. Frequency	---	---	2449.600	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.60 4.9 40
Start [MHz] Stop [MHz]	2407.000 2487.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	50 200 10001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	500	---	37584	kHz	PASS



FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 ax-HE40

FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE40

Test References

TC Start	06.12.2022 21:07:12
Ambit Temp [°C] Humidity [rel%]	22.9 31
System Version	3.3.3.0
Test Specification	FCC 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 30dBc DTS DTS - WLAN2G4 ax-HE40
Add. Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	4
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 ax-HE40
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2427
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2447
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2447 MHz

RESULT: Reference Power cond.

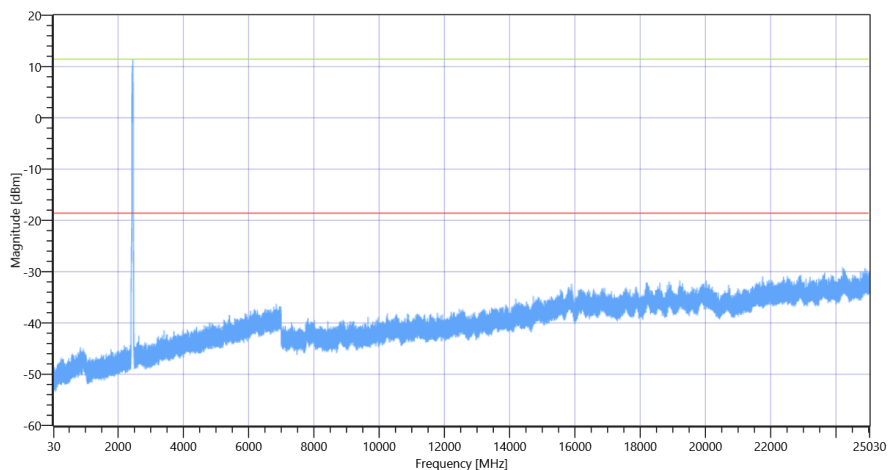
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	20.12	dBm	INFO
Ref. Frequency	---	---	2452.290	MHz	INFO

READ SA SETTINGS:

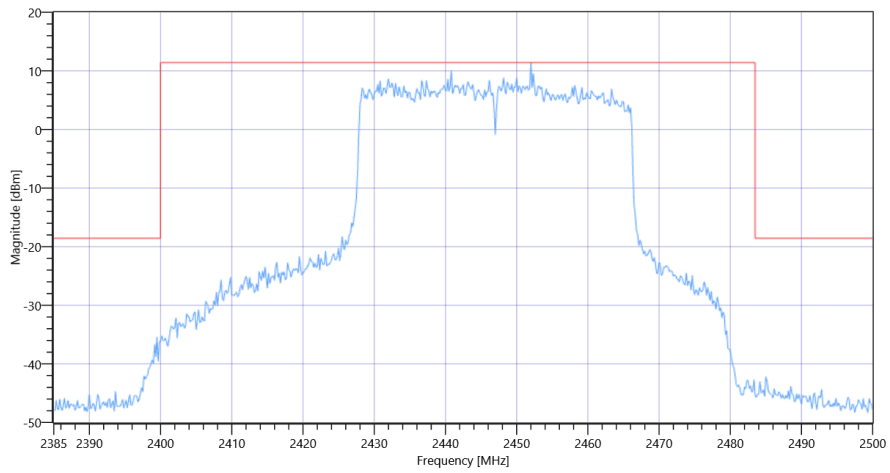
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	20.12 0 40
Start [MHz] Stop [MHz]	24530.000 25030.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	200 25 3001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2452.00 MHz	---	---	11.41	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 24210.667 MHz	0	---	10.55	dB	INFO



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE40 2447



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE40 2447

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40

Test References

TC Start	06.12.2022 21:06:11
Ambit Temp [°C] Humidity [rel%]	22.9 31
System Version	3.3.3.0
Test Specification	FCC 15.247, ISED RSS247 -
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 ax-HE40
Add. Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	4
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 ax-HE40
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2427
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2447
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2447 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	22.23	dBm	INFO
Ref. Frequency	---	---	2450.200	MHz	INFO

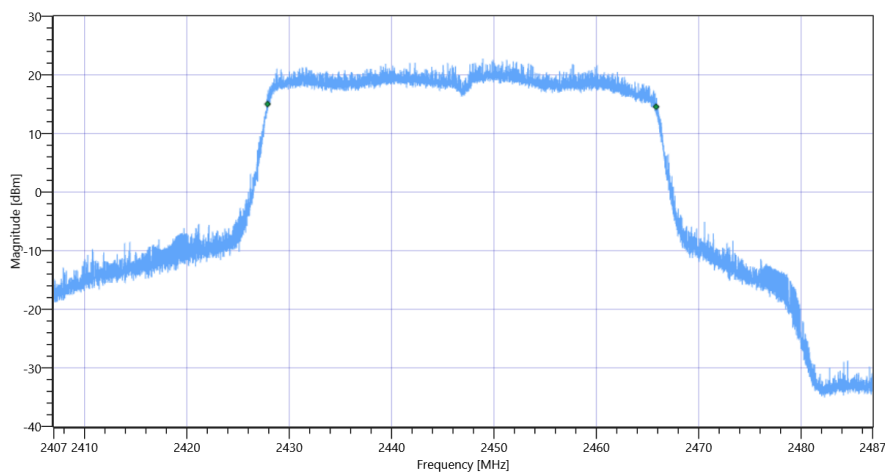
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	27.23 4.9 40
Start [MHz] Stop [MHz]	2407.000 2487.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	50 200 10001 SWE

RESULT

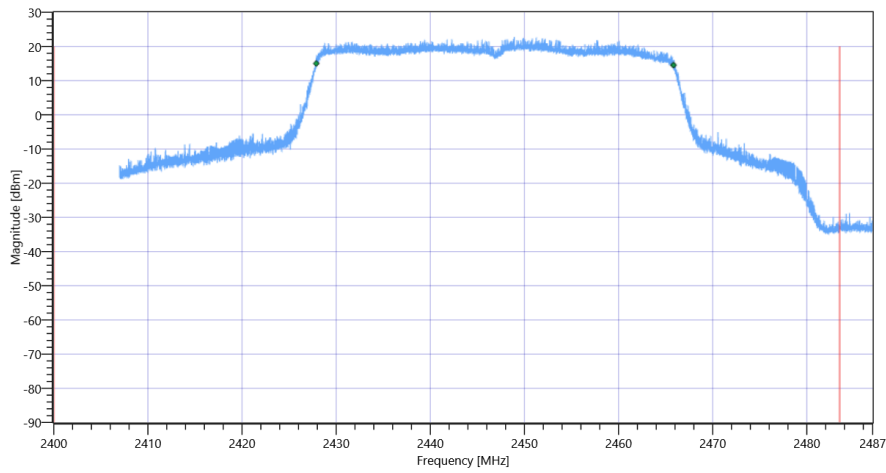
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	37956.000	kHz	INFO
T1 99%	2400.000000	---	2427.8819	MHz	PASS
T2 99%	---	2483.500000	2465.8381	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40 99PCT

Plot: Bandwidth within Band

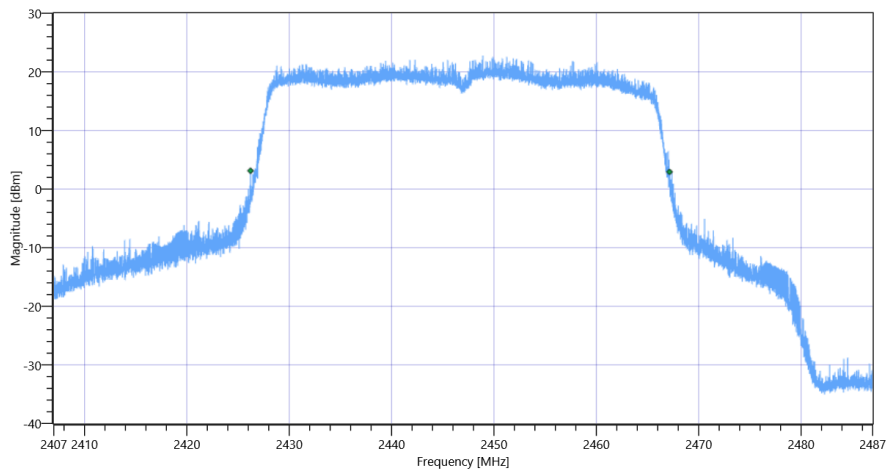


FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40

RESULT

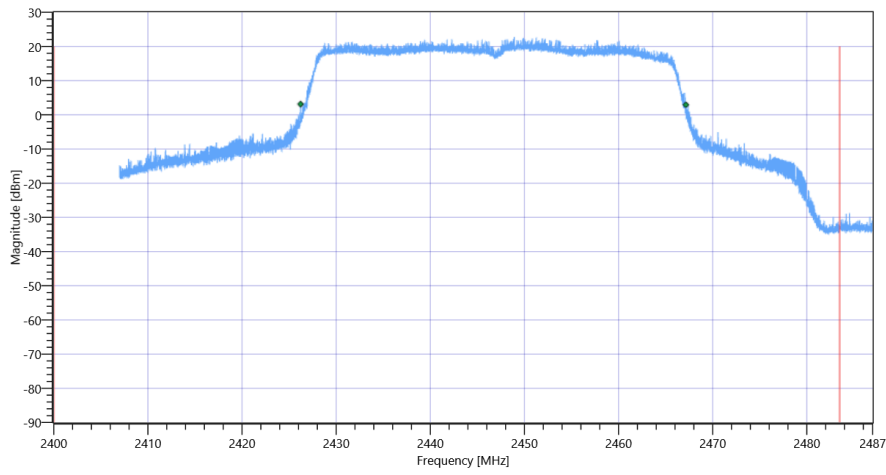
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	40936	kHz	INFO
T1 20dB	2400.000000	---	2426.2160	MHz	PASS
T2 20dB	---	2483.500000	2467.1520	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40 20dB

Plot: Bandwidth within Band



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40

FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 ax-HE40

Test References

TC Start	06.12.2022 21:04:24
Ambit Temp [°C] Humidity [rel%]	22.9 31
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	ANSI C63.10-2013 Chapter 11.10.5 or.3
TC Version	0.0.1
My Description	FCC 15.247 Avg Power Spectral Density DTS - WLAN2G4 ax-HE40
Add. Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	4
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 ax-HE40
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2427
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2447
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2447 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	23.00	dBm	INFO
Ref. Frequency	--	--	2448.900	MHz	INFO

Evaluation max. Duty Cycle

Duty Cycle evaluation

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Duty Cycle min	--	--	0	dB	DC > 98% defined

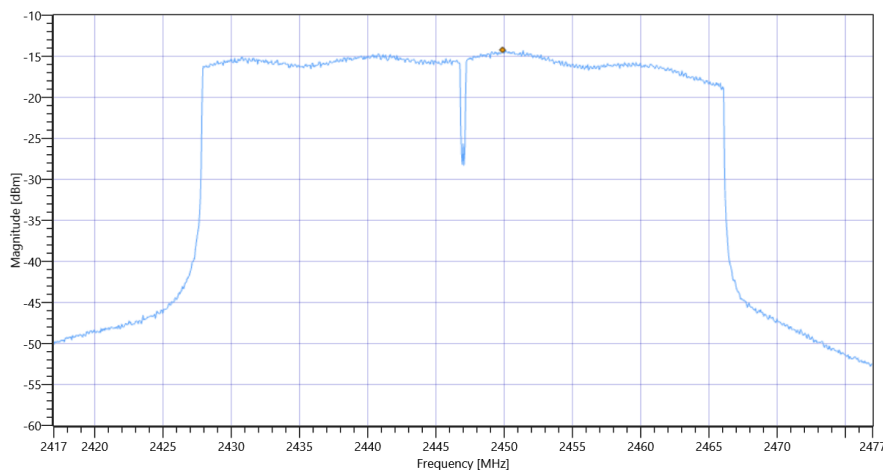
Avg. PSD

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	28.00 4.9 40
Start [MHz] Stop [MHz]	2417.000 2477.000
RBW [MHz] VBW [MHz]	0.003000 0.010000
Detector TraceMode	RMS AVER
Sweep: Time [ms] Count Points per Section Type	667 100 1001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Avg PSD uncorrected	--	--	-14.22	dBm	INFO
Duty cycle correction	--	--	0	dB	INFO
Avg PSD DC corrected	--	8	-14.22	dBm/3kHz	PASS



FCC 15.247 # Avg power spectral density DTS ~ WLAN2G4 ax-HE40

FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 ax-HE40

Test References

TC Start	06.12.2022 21:03:48
Ambit Temp [°C] Humidity [rel%]	22.9 31
System Version	3.3.3.0
Test Specification	FCC 15.247 -
Test Method	
TC Version	0.0.1
My Description	FCC 15.247 Bandwidth 6dB DTS - WLAN2G4 ax-HE40
Add. Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	4
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 ax-HE40
Antenna Port used	1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2427
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2447
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2447 MHz

RESULT: Reference Power cond.

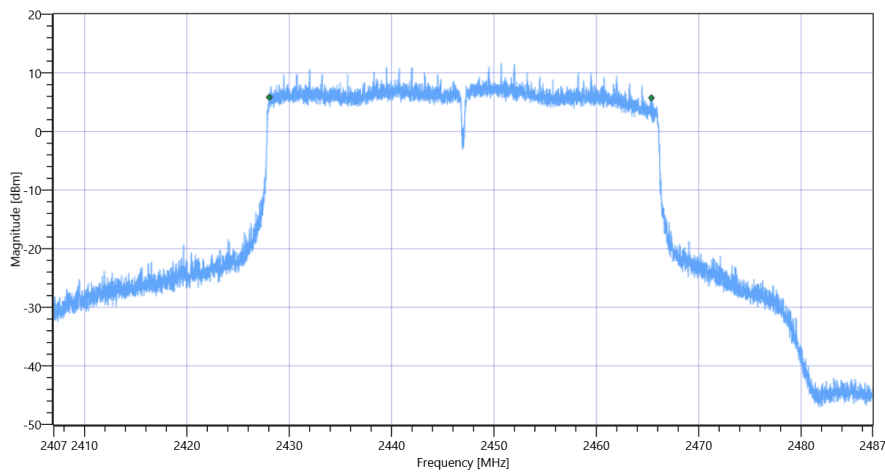
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	--	--	20.13	dBm	INFO
Ref. Frequency	--	--	2457.790	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.13 4.9 40
Start [MHz] Stop [MHz]	2407.000 2487.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	50 200 10001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
DTS Bandwidth (6dB)	500	--	37328	kHz	PASS



FCC 15.247 # Bandwidth 6dB DTS ~ WLAN2G4 ax-HE40

FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE40

Test References

TC Start	06.12.2022 18:50:13
Ambit Temp [°C] Humidity [rel%]	22.9 31
System Version	3.3.3.0
Test Specification	FCC 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 30dBc DTS DTS - WLAN2G4 ax-HE40
Add. Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	4
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 ax-HE40
Antenna Port used	4
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2427
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2447
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2427 MHz

RESULT: Reference Power cond.

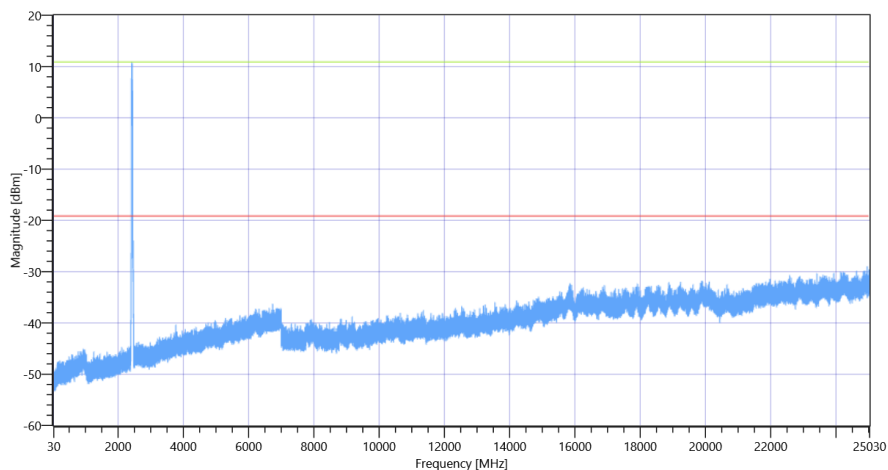
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	21.19	dBm	INFO
Ref. Frequency	---	---	2417.010	MHz	INFO

READ SA SETTINGS:

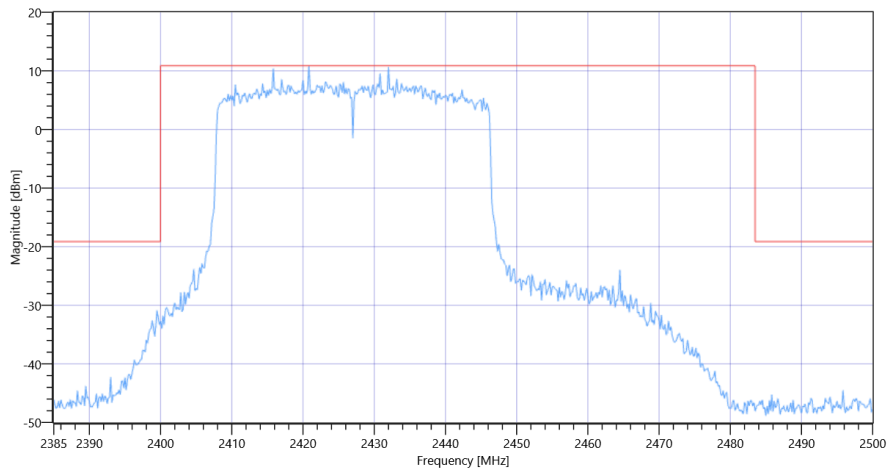
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	21.19 0 40
Start [MHz] Stop [MHz]	24530.000 25030.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	200 25 3001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2420.83 MHz	---	---	10.86	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 30 MHz	0	---	-149.36	dB	INFO



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE40 2427



FCC 15.247 # TX spurious conducted 30dBc ~ WLAN2G4 ax-HE40 2427

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40

Test References

TC Start	06.12.2022 18:49:12
Ambit Temp [°C] Humidity [rel%]	23.0 31
System Version	3.3.3.0
Test Specification	FCC 15.247, ISED RSS247 -
Test Method	
TC Version	0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN2G4 ax-HE40
Add. Information	

EUT Common Settings WLAN2G4

Number of Antenna Ports	4
User Interaction	No

Test Parameter

Technology to test	WLAN2G4 ax-HE40
Antenna Port used	4
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2427
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	False Freq [MHz] 2447
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	-10
Switched Path	EUT - SignalingUnit - SpectrumAnalyzer

Test Equipment

Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70
Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI

Test at TX 2427 MHz

RESULT: Reference Power cond.

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Ref. Power 1MHz/1MHz cond.	---	---	20.80	dBm	INFO
Ref. Frequency	---	---	2430.200	MHz	INFO

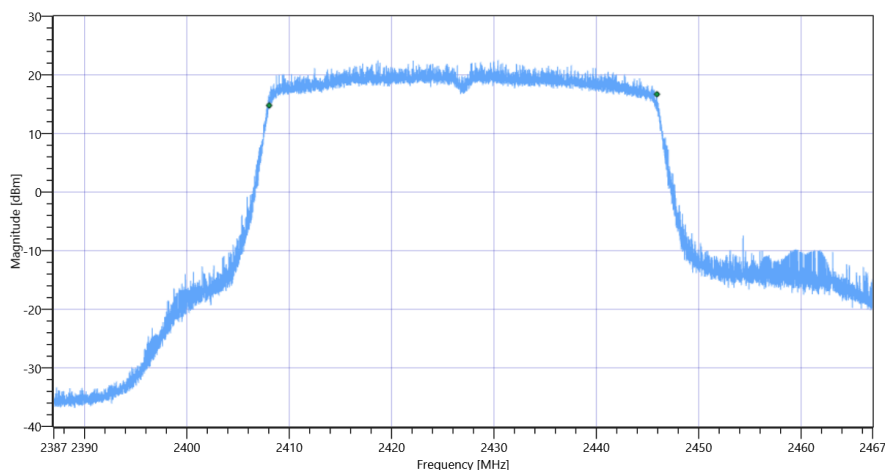
READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	25.80 5.09 40
Start [MHz] Stop [MHz]	2387.000 2467.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
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%	---	---	37876.000	kHz	INFO
T1 99%	2400.000000	---	2408.0419	MHz	PASS
T2 99%	---	2483.500000	2445.9181	MHz	PASS

Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ WLAN2G4 ax-HE40 99PCT

Plot: Bandwidth within Band