

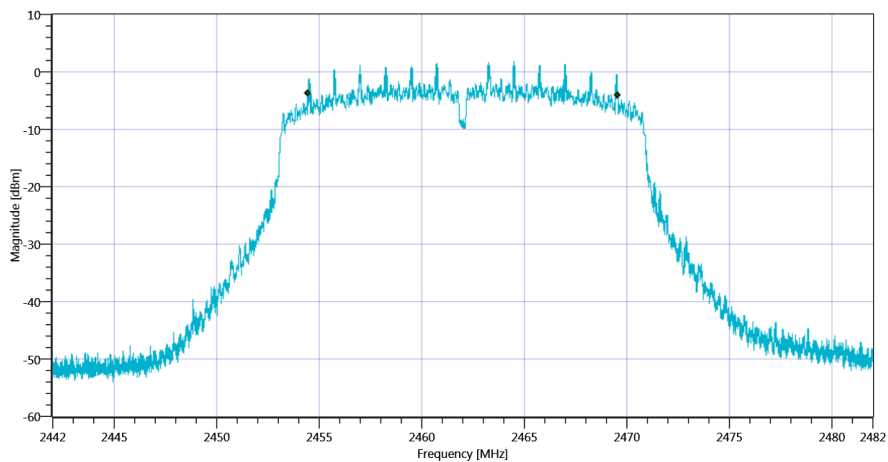
Test at TX 2462 MHz

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	13.78 12.82 20
Start [MHz] Stop [MHz]	2442.000 2482.000
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	---	15128	kHz	PASS



Plot_FCC Part 15.247 Bandwidth 6dB DTS ~ WLAN2G4 nHT20-mode_25022020_140750.png

TEST FINISHED

General Verdict	25.02.2020 14:07:51 / RT: 31 s	PASS
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50. FCC Part 15.247 Peak Power Spectral Density DTS ~ WLAN2G4 nHT20-mode

Test References	
TC Start	25.02.2020 14:07:55
System Version	1.0.0.33
Test Specification	FCC Part 15.247
Test Method	DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission
Class / TC Version	TC_VM_FCC15247_Peak_Power_Spectral_Density_DTS_V01 Version: 0.0.1
My Description	FCC 15.247 Peak Power Spectral Density DTS - WLAN 2G4 nHT20_mode
Add. Information	

Test Parameter	
Technology to test	WLAN2G4 nHT20-mode
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2462
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SA: Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.60

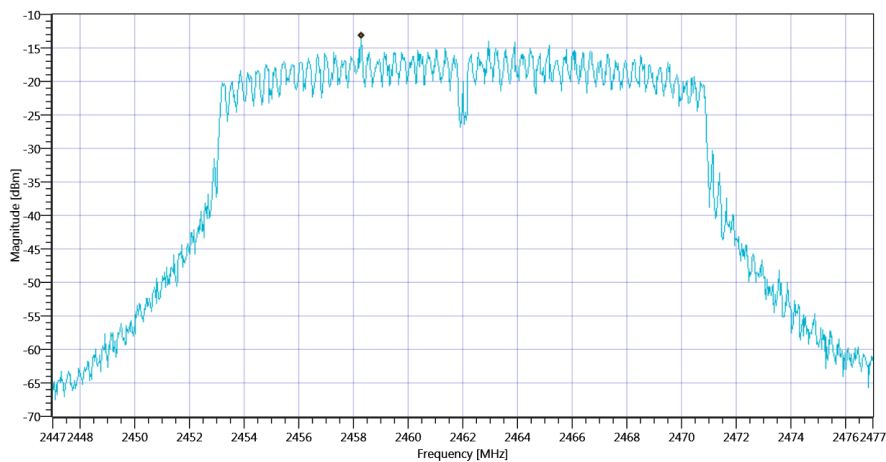
Test at TX 2462 MHz

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	14.01 12.82 20
Start [MHz] Stop [MHz]	2447.000 2477.000
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	-13.22	dBm/3KHz	PASS



TEST FINISHED

General Verdict	25.02.2020 14:08:34 / RT: 39 s	PASS
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51. FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 nHT20-mode

Test References	
TC Start	25.02.2020 14:08:39
System Version	1.0.0.33
Test Specification	FCC Part 15.247
Test Method	
Class / TC Version	TC_VM_FCC15247_Bandwidth_99PCT_20dB_DTS_FHSS_V01 Version: 0.0.2
My Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - WLAN 2G4 nHT20_mode
Add. Information	

Test Parameter	
Technology to test	WLAN2G4 nHT20-mode
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2462
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SA: Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.60

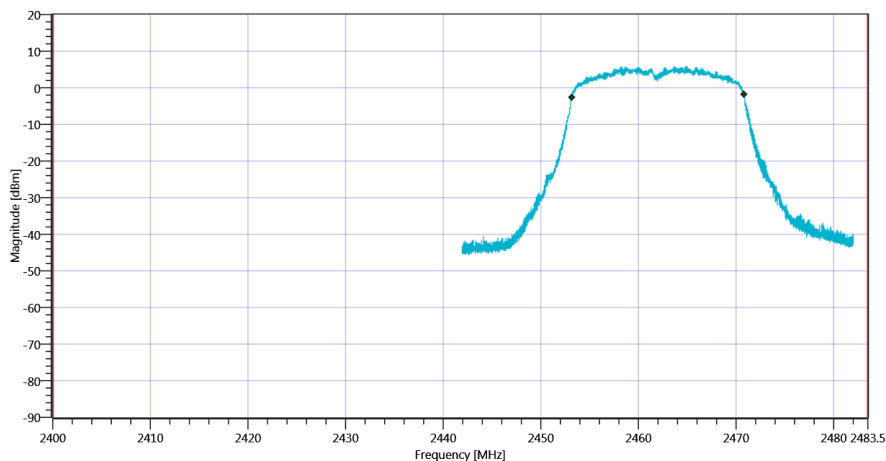
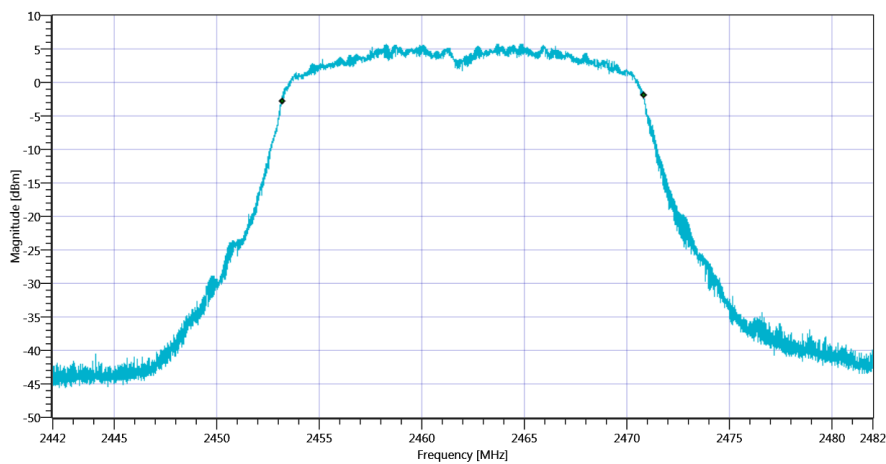
Test at TX 2462 MHz

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	13.76 12.82 20
Start [MHz] Stop [MHz]	2442.000 2482.000
RBW [MHz] VBW [MHz]	0.500000 1.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	50 200 10001 SWE

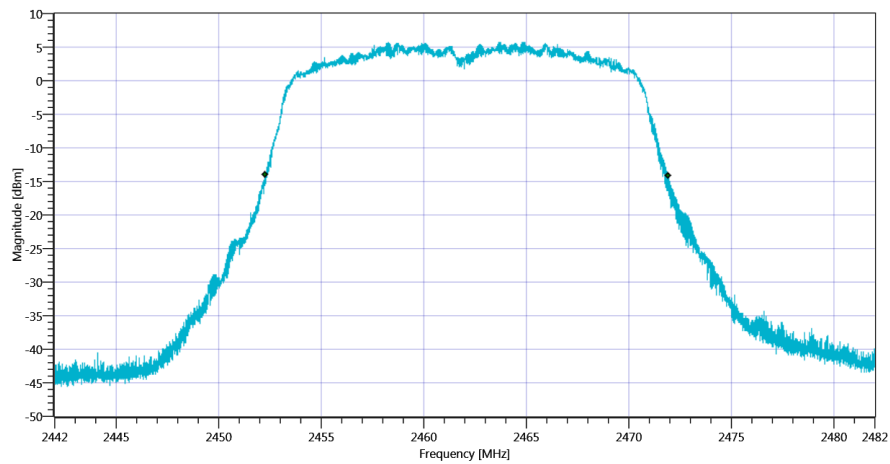
RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	17590	kHz	INFO
T1 99%	2400.000000	---	2453.2329	MHz	PASS
T2 99%	---	2483.500000	2470.8231	MHz	PASS

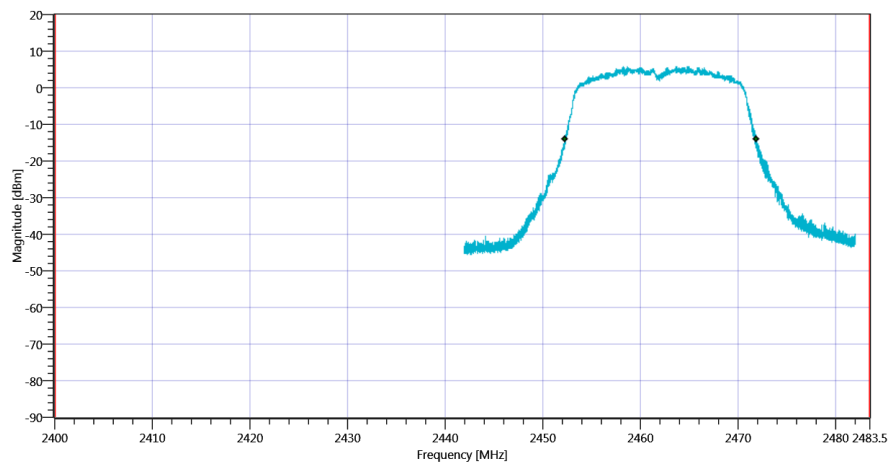


RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 20dB	---	---	19640	kHz	INFO
T1 20dB	2400.000000	---	2452.2720	MHz	PASS
T2 20dB	---	2483.500000	2471.9120	MHz	PASS



Plot_FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 nHT20-mode 20dB_25022020_140917.png



Plot_FCC Part 15.247 Bandwidth 99PCT-20dB ~ WLAN2G4 nHT20-mode_25022020_140921.png

TEST FINISHED

General Verdict

25.02.2020 14:09:22 / RT: 43 s

PASS

52. FCC Part 15.247 TX Spurious Conducted ~ WLAN2G4 nHT20-mode

Test References	
TC Start	25.02.2020 14:09:26
System Version	1.0.0.33
Test Specification	FCC Part 15.247
Test Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable.
Class / TC Version	TC_VM_FCC15247_TX_Emissions_Conducted_V01 Version: 0.0.1
My Description	FCC 15.247 TX Emissions Conducted DTS - WLAN 2G4 nHT20_mode
Add. Information	

Test Parameter	
Technology to test	WLAN2G4 nHT20-mode
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2462
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SA: Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.60

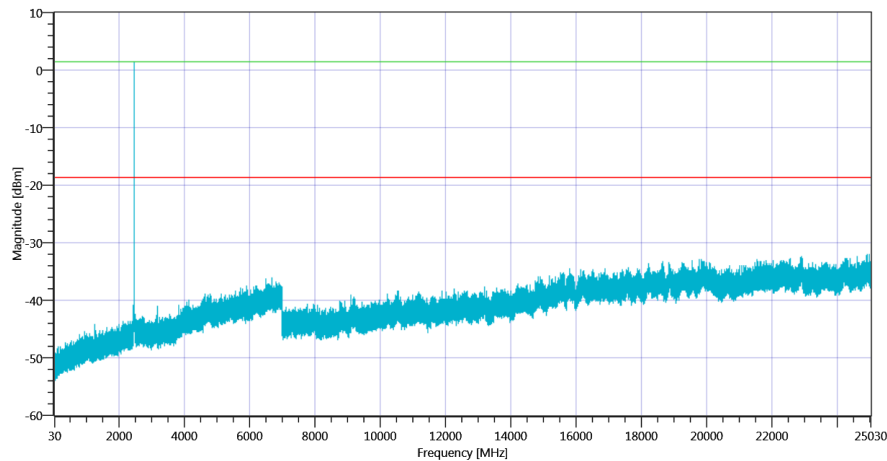
Test at TX 2462 MHz

READ SA SETTINGS:

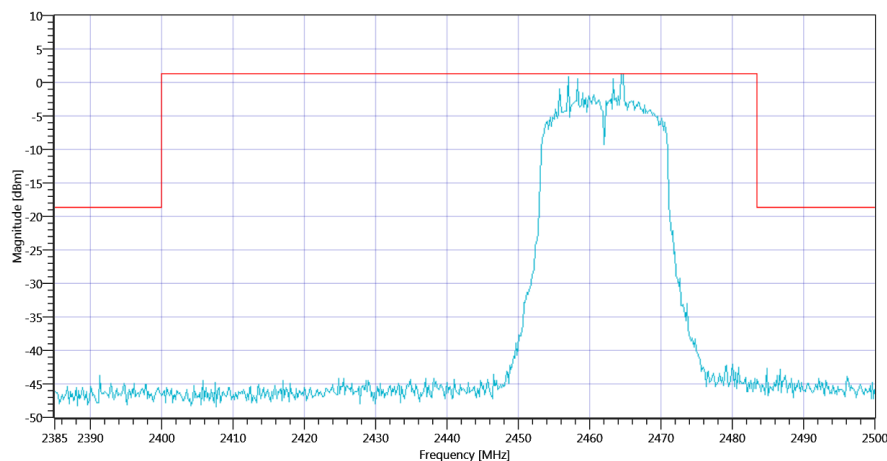
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	13.78 0 30
Start [MHz] Stop [MHz]	24530.000 25030.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	500 8 3001 SWE

RESULT

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Reference @ 2464.50 MHz	---	---	1.38	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 24968 MHz	0	---	13.43	dB	INFO



Plot_FCC Part 15.247 TX Spurious Conducted ~ WLAN2G4 nHT20-mode 2462_25022020_141415.png



Plot_FCC Part 15.247 TX Spurious Conducted ~ WLAN2G4 nHT20-mode 2462_25022020_141418.png

TEST FINISHED

General Verdict 25.02.2020 14:14:19 / RT: 292 s

PASS

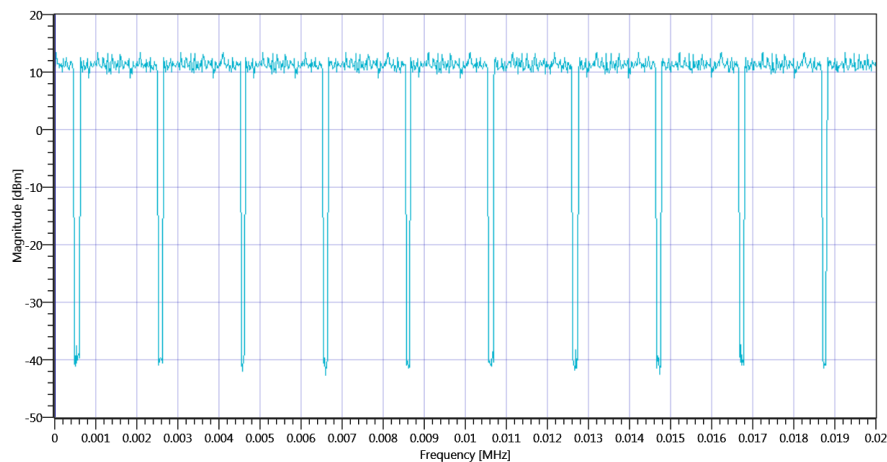
53. FCC Part 15.247 Restricted Band Edge Conducted Avg DC corrected DTS ~ WLAN2G4 nHT20-mode

Test References	
TC Start	25.02.2020 14:14:24
System Version	1.0.0.33
Test Specification	FCC Part 15.247
Test Method	DTS: KDB 558074 D01 V05 - 8.7.3 Integration Method; ANSI C63.10-2013 11.13.3.4 Trace averaging across on- and off-times of the EUT transmissions followed by duty cycle correction
Class / TC Version	TC_VM_FCC15247_Restricted_Band_Edge_Conducted_Avg_DC_corrected_V01 Version: 0.0.1
My Description	FCC 15.247 Restricted Band Edge Cond. Avg DC corrected DTS - WLAN 2G4 nHT20_mode
Add. Information	

Test Parameter	
Technology to test	WLAN2G4 nHT20-mode
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2462
Switched Path	IUT - SignalingUnit - SpectrumAnalyzer
Devices in use	SA: Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.60

Test at TX 2462 MHz

Duty Cycle evaluation					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Result Duty Cycles					
Duty Cycle (Burst Ratio) 1	---	---	0.921	---	Information
Duty Cycle (Burst Ratio) 2	---	---	0.93	---	Information
Duty Cycle (Burst Ratio) 3	---	---	0.921	---	Information
Duty Cycle (Burst Ratio) 4	---	---	0.93	---	Information
Duty Cycle (Burst Ratio) 5	---	---	0.912	---	Information
Duty Cycle (Burst Ratio) 6	---	---	0.913	---	Information
Duty Cycle (Burst Ratio) 7	---	---	0.921	---	Information
Duty Cycle (Burst Ratio) 8	---	---	0.921	---	Information
Duty Cycle (Burst Ratio) max	---	---	0.93	---	Information
Duty Cycle max	---	---	0.315	dB	Information
Duty Cycle (Burst Ratio) min	---	---	0.912	---	Information
Duty Cycle min	---	---	0.4	dB	Information

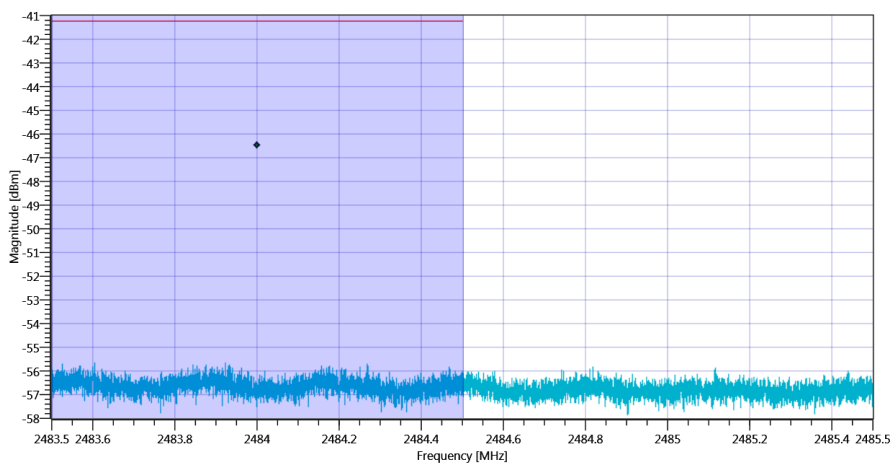


Plot_FCC Part 15.247 Restricted Band Edge Conducted Avg DC corrected DTS ~ WLAN2G4 nHT20-mode 2462 MHz - Duty Cycle_25022020_141441.png

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	18.58 12.82 25
Start [MHz] Stop [MHz]	2483.500 2485.500
RBW [MHz] VBW [MHz]	0.100000 0.500000
Detector TraceMode	RMS AVER
Sweep: Time [ms] Count Points per Section Type	32 300 32000 SWE

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Duty Cycle worst case	---	---	0.4	dB	Information
Band Power without Antenna Gain Avg	---	---	-46.9	dBm	Information
Band Power without Antenna Gain Avg DC corrected	---	---	-46.5	dBm	Information
Band Power incl. Antenna Gain Avg DC corrected	---	-41.23	-46.5	dBm	PASS



Plot_FCC Part 15.247 Restricted Band Edge Conducted Avg DC corrected DTS ~ WLAN2G4 nHT20-mode_25022020_141506.png

TEST FINISHED		
General Verdict	25.02.2020 14:15:06 / RT: 42 s	PASS

54. FCC Part 15.247 Maximum Peak Conducted Output Power Powermeter DTS ~ WLAN2G4 nHT20-mode

Test References	
TC Start	25.02.2020 14:15:11
System Version	1.0.0.33
Test Specification	FCC Part 15.247
Test Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.3 PKPM1 Peak-reading Power Meter Method
Class / TC Version	TC_VM_FCC15247_Maximum_Peak_Conducted_Output_Power_Powermeter_DTS_V01 Version: 0.0.1
My Description	FCC 15.247 Maximum Peak Output Power Powermeter Conducted DTS - WLAN 2G4 nHT20-mode
Add. Information	

Test Parameter	
Technology to test	WLAN2G4 nHT20-mode
Antenna Port used	1
Temperature	mid
Voltage	mid
Frequency low to test	False Freq [MHz] 2412
Frequency mid to test	False Freq [MHz] 2437
Frequency high to test	True Freq [MHz] 2462
Switched Path	IUT - SignalingUnit - PowerMeter
Devices in use	PM: Keysight Technologies,U2021XA,MY59190010,A.04.06

Test at TX 2462 MHz

RESULT					
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Found Peak cond.	---	---	19.7	dBm	PASS

TEST FINISHED		
General Verdict	25.02.2020 14:15:18 / RT: 7 s	PASS

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