

Measurement Results

No.1-3977/22-02-17_Annex_MR_A1

Test logging

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Test/s performed:

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EUT Information

EUT DEFINITION	
Manufacturer	Sagemcom Broadband SAS
Type	Fast 5688W
Serial Number	DM2205259000045
Setup Number	1.0
Version SW	SG520TMDAR01A04M4G_BETA_20220524A_01.001.01.001
Version FW	SG520TMDAR01A04M4G_BETA_20220524A_01.001.01.001
Version HW	V1.0
Comment 1	
Comment 2	
Temperature [°C] Min	0
Temperature [°C] Nom	20
Temperature [°C] Max	50
Voltage [V] Min	102
Voltage [V] Nom	120
Voltage [V] Max	138

FCC, ISED # Block edge conducted ~ NR Band_41 Ant-2 SCS-30

Test References	
TC Start	01.07.2022 09:07:51
Ambit Temp [°C] Humidity [rel%]	22.2 50
System Version	3.2.0.2
Test Specification	FCC, ISED -
Test Method	
TC Version	0.0.1
My Description	FCC/ISED MobileRadio Block edge conducted - NR Band_41
Add. Information	

Test Parameter	
Technology to test	NR
Band	Band_41
SCS [kHz]	30
Waveform	CPOFDM
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False
Frequency mid to test	False
Frequency high to test	True
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	0
Switched Path	None

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70	

Test at BW [MHz]: 70

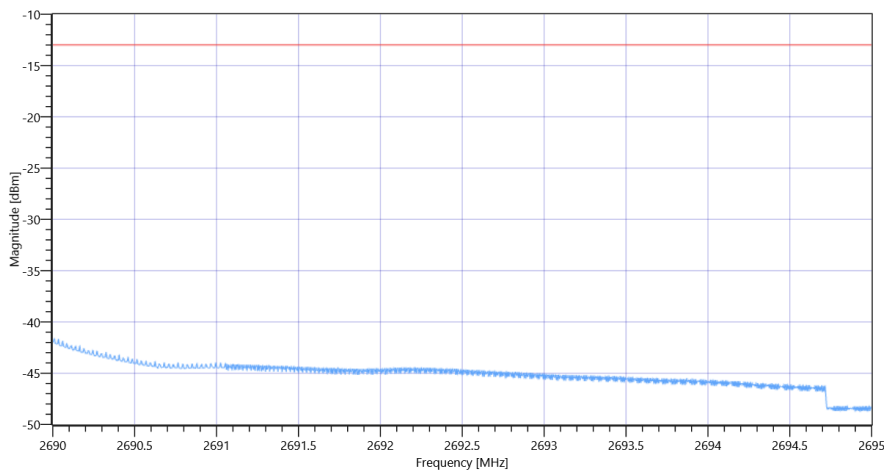
Test freq: high, UL[MHz]/CH 2655/0, CBW [MHz]: 70, RB_100PCT, Mod: QPSK

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	11.18 0 30
Start [MHz] Stop [MHz]	2690.000 2695.000
RBW [MHz] VBW [MHz]	0.500000 2.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	30000 1 1001 SWE

RESULT upper band

Test description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Band power 1MHz					
Frequency [MHz] 2690.5	---	-13	-40.87	dBm	PASS
Frequency [MHz] 2691.5	---	-13	-41.84	dBm	PASS
Frequency [MHz] 2692.5	---	-13	-42.16	dBm	PASS
Frequency [MHz] 2693.5	---	-13	-42.86	dBm	PASS
Frequency [MHz] 2694.5	---	-13	-44	dBm	PASS



FCC, ISED # Block edge conducted ~ NR Band_41 Ant-2 SCS-30

Test freq: high, UL[MHz]/CH 2655/0, CBW [MHz]: 70, RB_100PCT, Mod: 16QAM

READ SA SETTINGS:

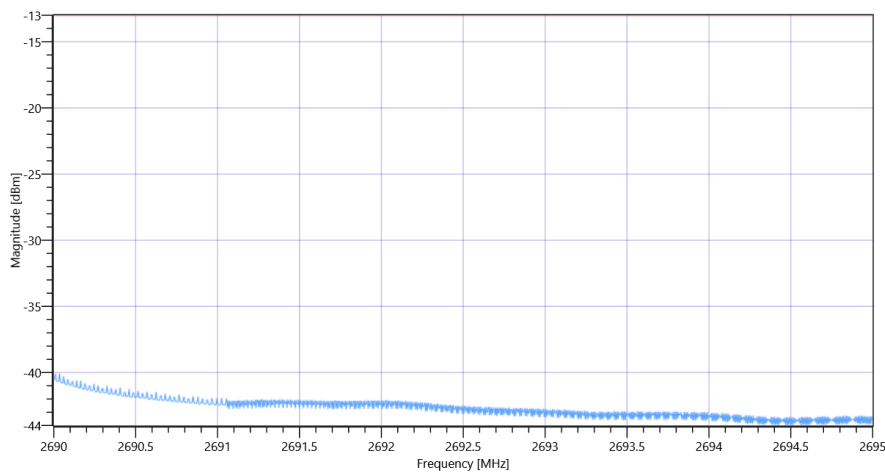
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	11.18 0 30
Start [MHz] Stop [MHz]	2690.000 2695.000
RBW [MHz] VBW [MHz]	0.500000 2.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	30000 1 1001 SWE

RESULT upper band

Test description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Band power 1MHz					

RESULT upper band

Test description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Frequency [MHz] 2690.5	---	-13	-38.88	dBm	PASS
Frequency [MHz] 2691.5	---	-13	-39.6	dBm	PASS
Frequency [MHz] 2692.5	---	-13	-39.98	dBm	PASS
Frequency [MHz] 2693.5	---	-13	-40.46	dBm	PASS
Frequency [MHz] 2694.5	---	-13	-40.82	dBm	PASS



FCC, ISED # Block edge conducted ~ NR Band_41 Ant-2 SCS-30

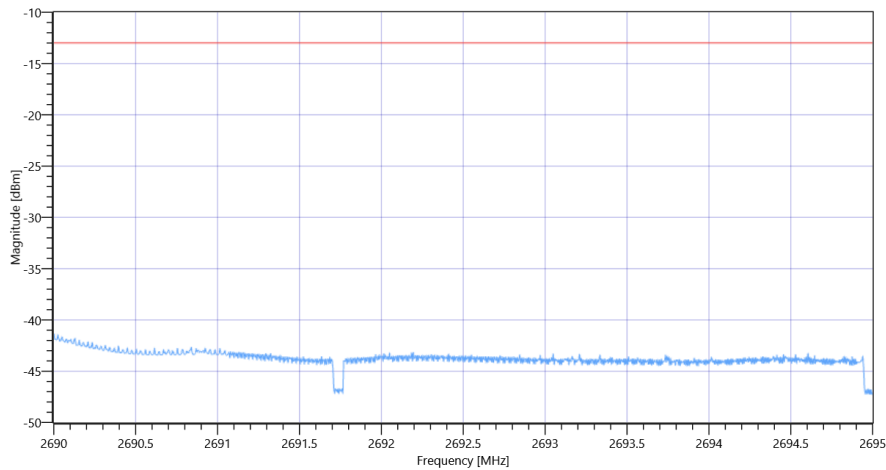
Test freq: high, UL[MHz]/CH 2655/0, CBW [MHz]: 70, RB_100PCT, Mod: 64QAM

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.85 0 30
Start [MHz] Stop [MHz]	2690.000 2695.000
RBW [MHz] VBW [MHz]	0.500000 2.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	30000 1 1001 SWE

RESULT upper band

Test description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Band power 1MHz					
Frequency [MHz] 2690.5	---	-13	-40.13	dBm	PASS
Frequency [MHz] 2691.5	---	-13	-41.12	dBm	PASS
Frequency [MHz] 2692.5	---	-13	-41.03	dBm	PASS
Frequency [MHz] 2693.5	---	-13	-41.29	dBm	PASS
Frequency [MHz] 2694.5	---	-13	-41.35	dBm	PASS



FCC, ISED # Block edge conducted ~ NR Band_41 Ant-2 SCS-30

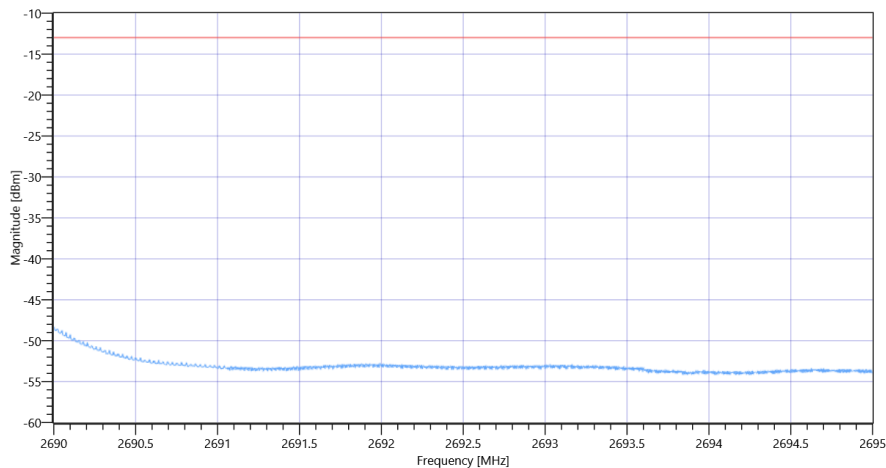
Test freq: high, UL[MHz]/CH 2655/0, CBW [MHz]: 70, RB_100PCT, Mod: 256QAM

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	9.06 0 25
Start [MHz] Stop [MHz]	2690.000 2695.000
RBW [MHz] VBW [MHz]	0.500000 2.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	30000 1 1001 SWE

RESULT upper band

Test description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Band power 1MHz					
Frequency [MHz] 2690.5	---	-13	-48.86	dBm	PASS
Frequency [MHz] 2691.5	---	-13	-50.53	dBm	PASS
Frequency [MHz] 2692.5	---	-13	-50.47	dBm	PASS
Frequency [MHz] 2693.5	---	-13	-50.73	dBm	PASS
Frequency [MHz] 2694.5	---	-13	-51.03	dBm	PASS



FCC, ISED # Block edge conducted ~ NR Band_41 Ant-2 SCS-30

General verdict

PASS

FCC, ISED # Block edge conducted ~ NR Band_41 Ant-2 SCS-30

Test References	
TC Start	01.07.2022 07:57:04
Ambit Temp [°C] Humidity [rel%]	22.0 51
System Version	3.2.0.2
Test Specification	FCC, ISED -
Test Method	
TC Version	0.0.1
My Description	FCC/ISED MobileRadio Block edge conducted - NR Band_41
Add. Information	

Test Parameter	
Technology to test	NR
Band	Band_41
SCS [kHz]	30
Waveform	CPOFDM
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True
Frequency mid to test	False
Frequency high to test	False
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	0
Switched Path	None

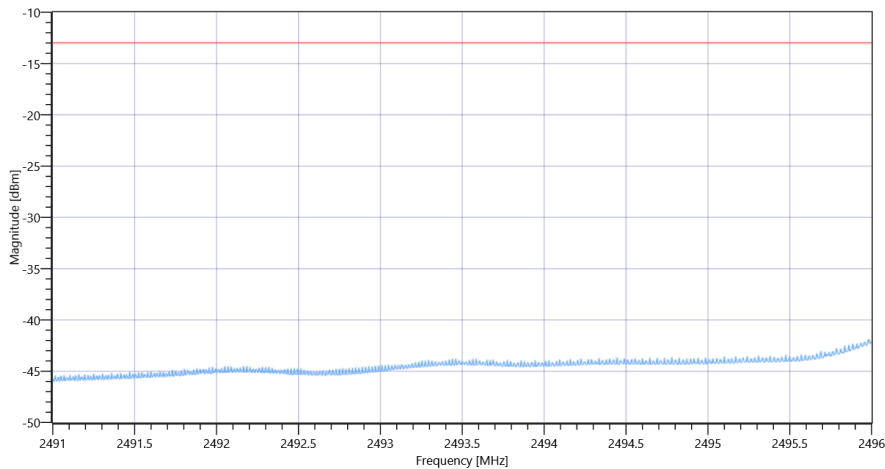
Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70	

Test at BW [MHz]: 70

Test freq: low, UL[MHz]/CH 2531/0, CBW [MHz]: 70, RB_100PCT, Mod: QPSK

READ SA SETTINGS:	
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.16 0 30
Start [MHz] Stop [MHz]	2491.000 2496.000
RBW [MHz] VBW [MHz]	0.500000 2.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	30000 1 1001 SWE

RESULT lower band					
Test description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Band power 1MHz					
Frequency [MHz] 2496.5	---	-13	-40.84	dBm	PASS
Frequency [MHz] 2497.5	---	-13	-41.46	dBm	PASS
Frequency [MHz] 2498.5	---	-13	-41.65	dBm	PASS
Frequency [MHz] 2499.5	---	-13	-42.32	dBm	PASS
Frequency [MHz] 2500.5	---	-13	-42.72	dBm	PASS



FCC, ISED # Block edge conducted ~ NR Band_41 Ant-2 SCS-30

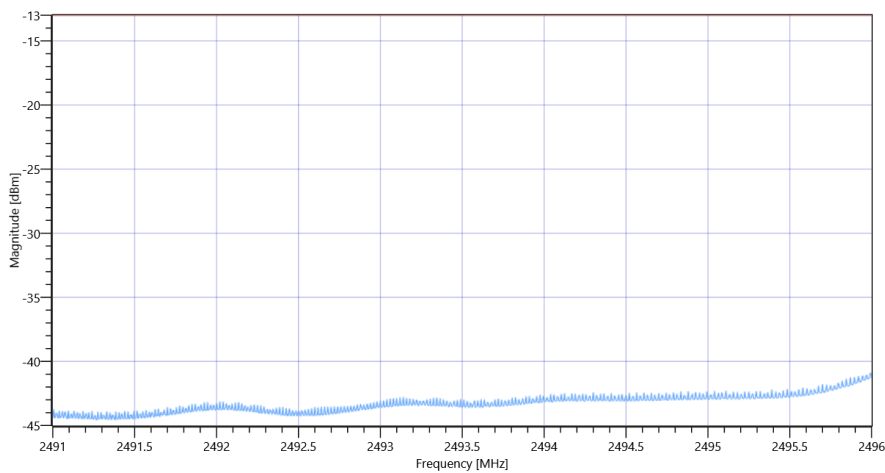
Test freq: low, UL[MHz]/CH 2531/0, CBW [MHz]: 70, RB_100PCT, Mod: 16QAM

READ SA SETTINGS:	
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.63 0 30
Start [MHz] Stop [MHz]	2491.000 2496.000
RBW [MHz] VBW [MHz]	0.500000 2.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	30000 1 1001 SWE

RESULT lower band					
Test description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Band power 1MHz					

RESULT lower band

Test description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Frequency [MHz] 2496.5	---	-13	-39.63	dBm	PASS
Frequency [MHz] 2497.5	---	-13	-40.16	dBm	PASS
Frequency [MHz] 2498.5	---	-13	-40.55	dBm	PASS
Frequency [MHz] 2499.5	---	-13	-41.08	dBm	PASS
Frequency [MHz] 2500.5	---	-13	-41.37	dBm	PASS



FCC, ISED # Block edge conducted ~ NR Band_41 Ant-2 SCS-30

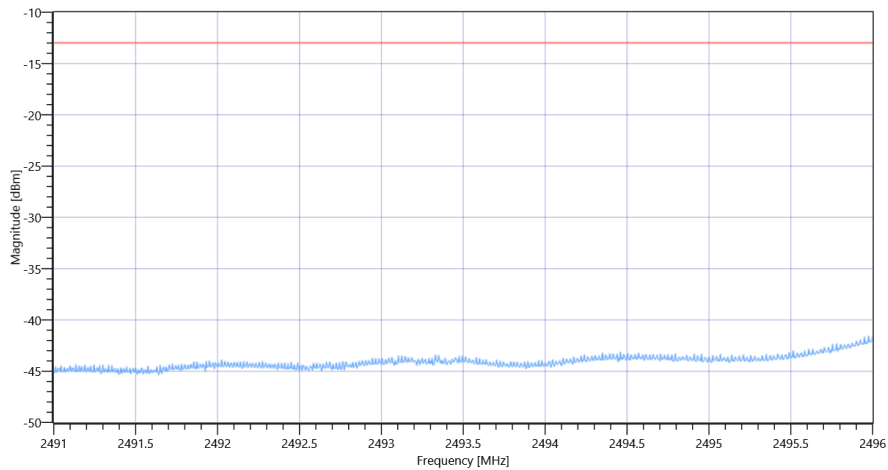
Test freq: low, UL[MHz]/CH 2531/0, CBW [MHz]: 70, RB_100PCT, Mod: 64QAM

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.40 0 30
Start [MHz] Stop [MHz]	2491.000 2496.000
RBW [MHz] VBW [MHz]	0.500000 2.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	30000 1 1001 SWE

RESULT lower band

Test description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Band power 1MHz					
Frequency [MHz] 2496.5	---	-13	-40.54	dBm	PASS
Frequency [MHz] 2497.5	---	-13	-41.08	dBm	PASS
Frequency [MHz] 2498.5	---	-13	-41.42	dBm	PASS
Frequency [MHz] 2499.5	---	-13	-41.73	dBm	PASS
Frequency [MHz] 2500.5	---	-13	-42.06	dBm	PASS



FCC, ISED # Block edge conducted ~ NR Band_41 Ant-2 SCS-30

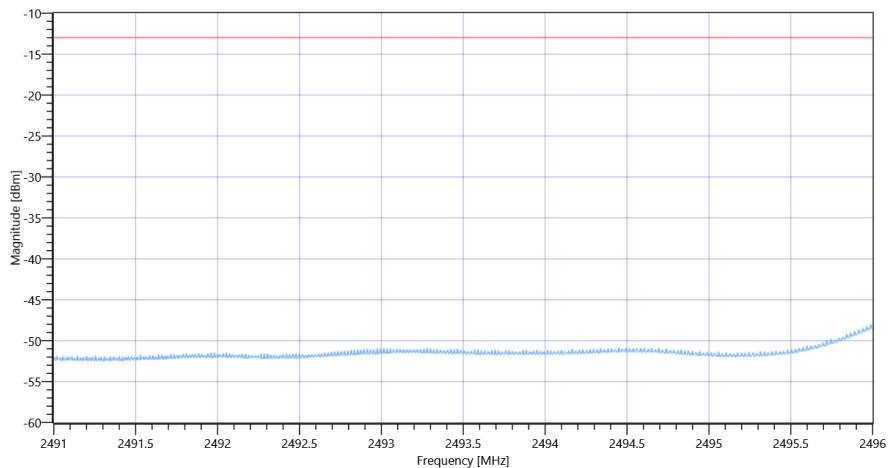
Test freq: low, UL[MHz]/CH 2531/0, CBW [MHz]: 70, RB_100PCT, Mod: 256QAM

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	9.23 0 25
Start [MHz] Stop [MHz]	2491.000 2496.000
RBW [MHz] VBW [MHz]	0.500000 2.000000
Detector TraceMode	RMS MAXH
Sweep: Time [ms] Count Points per Section Type	30000 1 1001 SWE

RESULT lower band

Test description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Band power 1MHz					
Frequency [MHz] 2496.5	---	-13	-48.02	dBm	PASS
Frequency [MHz] 2497.5	---	-13	-48.66	dBm	PASS
Frequency [MHz] 2498.5	---	-13	-48.7	dBm	PASS
Frequency [MHz] 2499.5	---	-13	-49.07	dBm	PASS
Frequency [MHz] 2500.5	---	-13	-49.39	dBm	PASS



FCC, ISED # Block edge conducted ~ NR Band_41 Ant-2 SCS-30

General verdict

PASS

FCC, ISED # TX Emissions conducted ~ NR Band_41 Ant-2 SCS-30

Test References	
TC Start	01.07.2022 09:11:22
Ambit Temp [°C] Humidity [rel%]	22.2 50
System Version	3.2.0.2
Test Specification	FCC, ISED -
Test Method	
TC Version	0.0.1
My Description	FCC/ISED MobileRadio TX Emissions conducted - NR Band_41
Add. Information	

Test Parameter	
Technology to test	NR
Band	Band_41
SCS [kHz]	30
Waveform	CPOFDM
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False
Frequency mid to test	False
Frequency high to test	True
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	0
Switched Path	None

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70	

Test at BW [MHz]: 70

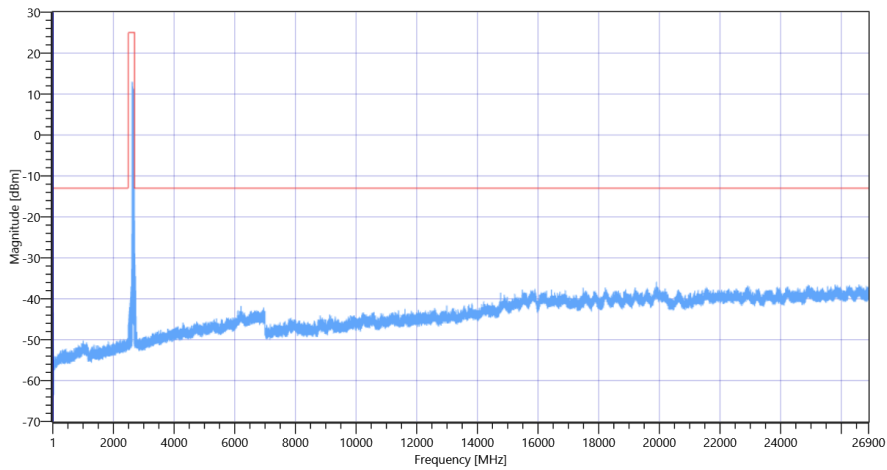
Test freq: high, UL[MHz]/CH 2655/0, CBW [MHz]: 70, RB_100PCT, Mod: QPSK

READ SA SETTINGS:

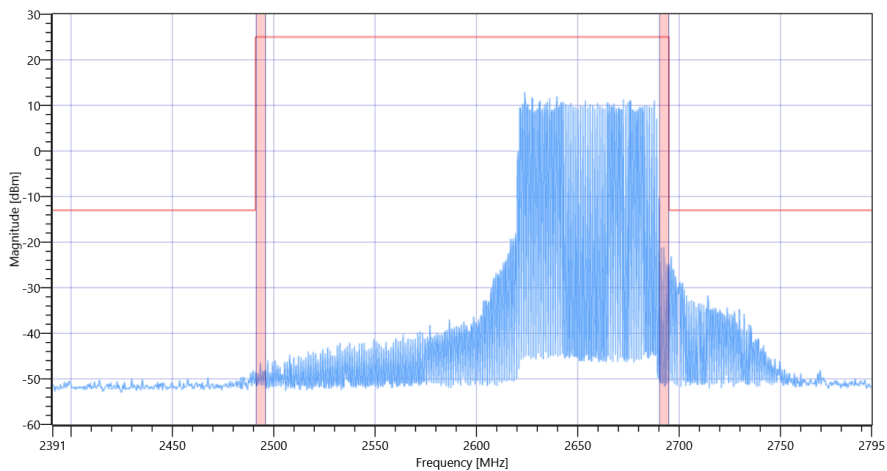
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	0.37 0 20
Start [MHz] Stop [MHz]	1.000 401.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1600 1 1001 SWE

RESULT Test freq: high, UL[MHz]/CH 2655/0, CBW [MHz]: 70, RB_100PCT, Mod: QPSK

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peaks higher limit	---	0	0	no	PASS



FCC, ISED # TX Emissions conducted ~ NR Band_41 Ant-2 SCS-30 2655 MHz



FCC, ISED # TX Emissions conducted ~ NR Band_41 Ant-2 SCS-30 2655

Test freq: high, UL[MHz]/CH 2655/0, CBW [MHz]: 70, RB_100PCT, Mod: 16QAM

READ SA SETTINGS:

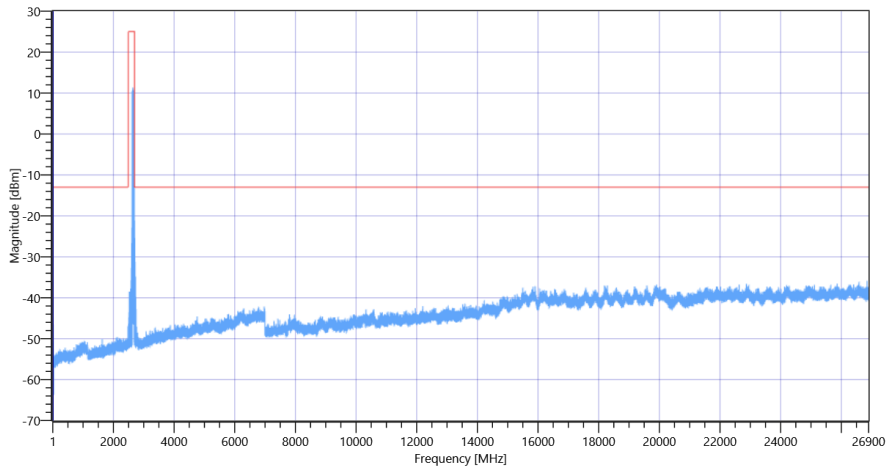
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	0.18 0 20
Start [MHz] Stop [MHz]	1.000 401.000
RBW [MHz] VBW [MHz]	1.000000 3.000000

READ SA SETTINGS:

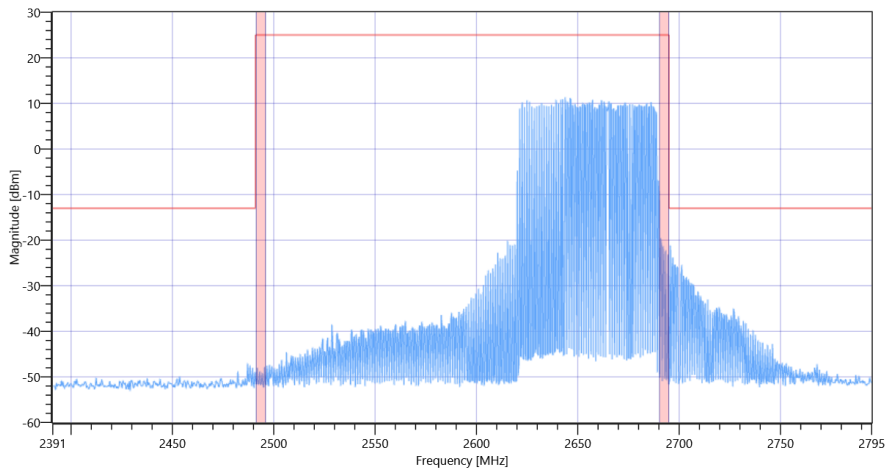
Detector | TraceMode POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type 1600 | 1 | 1001 | SWE

RESULT Test freq: high, UL[MHz]/CH 2655/0, CBW [MHz]: 70, RB_100PCT, Mod: 16QAM

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peaks higher limit	---	0	0	no	PASS



FCC, ISED # TX Emissions conducted ~ NR Band_41 Ant-2 SCS-30 2655 MHz



FCC, ISED # TX Emissions conducted ~ NR Band_41 Ant-2 SCS-30 2655

Test freq: high, UL[MHz]/CH 2655/0, CBW [MHz]: 70, RB_100PCT, Mod: 64QAM

READ SA SETTINGS:

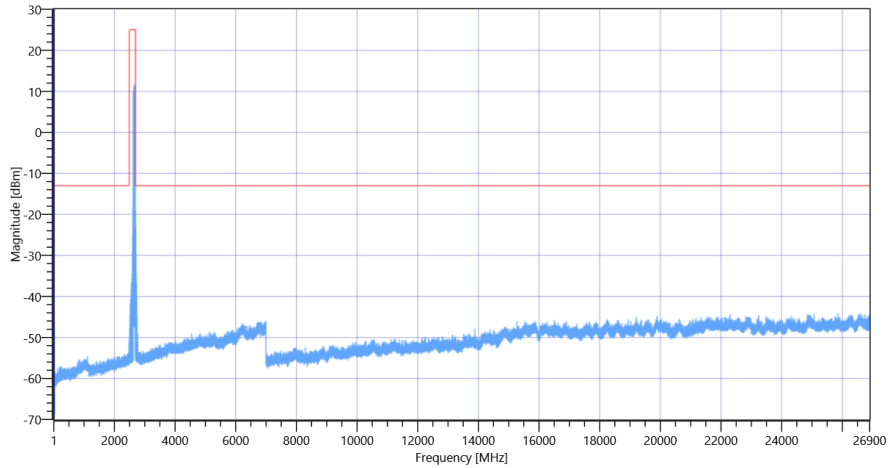
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB] -0.09 | 0 | 15
Start [MHz] | Stop [MHz] 1.000 | 401.000
RBW [MHz] | VBW [MHz] 1.000000 | 3.000000
Detector | TraceMode POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type 1600 | 1 | 1001 | SWE

RESULT Test freq: high, UL[MHz]/CH 2655/0, CBW [MHz]: 70, RB_100PCT, Mod: 64QAM

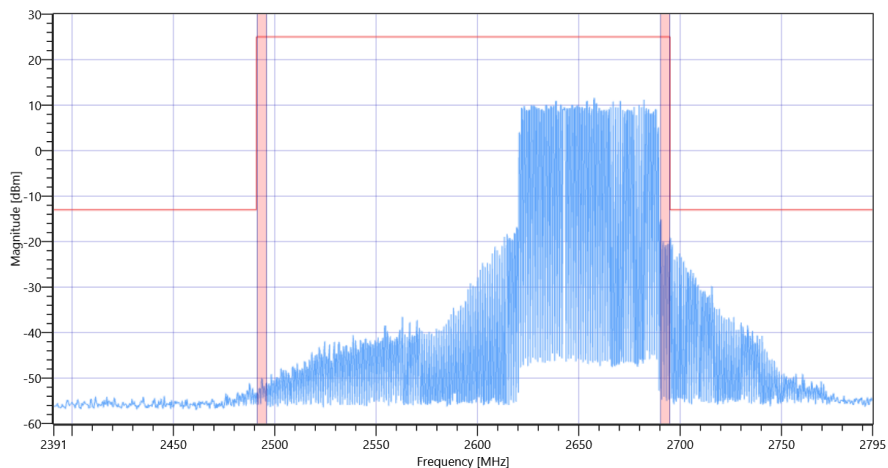
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
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RESULT Test freq: high, UL[MHz]/CH 2655/0, CBW [MHz]: 70, RB_100PCT, Mod: 64QAM

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peaks higher limit	---	0	0	no	PASS



FCC, ISED # TX Emissions conducted ~ NR Band_41 Ant-2 SCS-30 2655 MHz



FCC, ISED # TX Emissions conducted ~ NR Band_41 Ant-2 SCS-30 2655

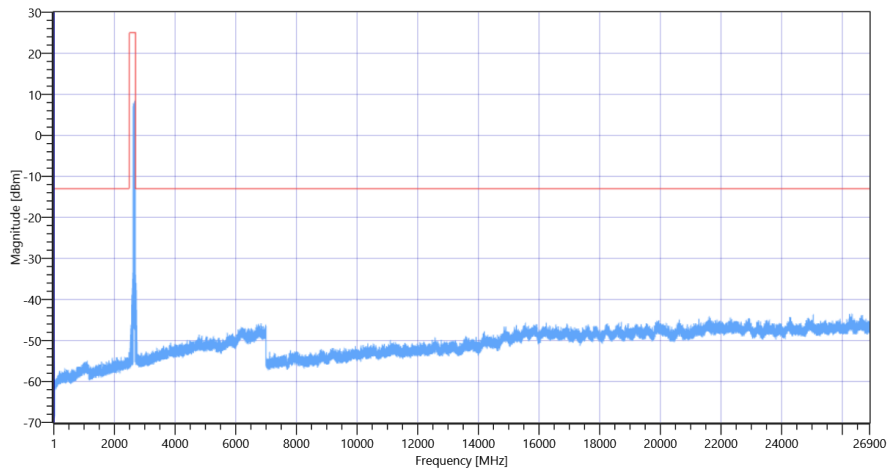
Test freq: high, UL[MHz]/CH 2655/0, CBW [MHz]: 70, RB_100PCT, Mod: 256QAM

READ SA SETTINGS:

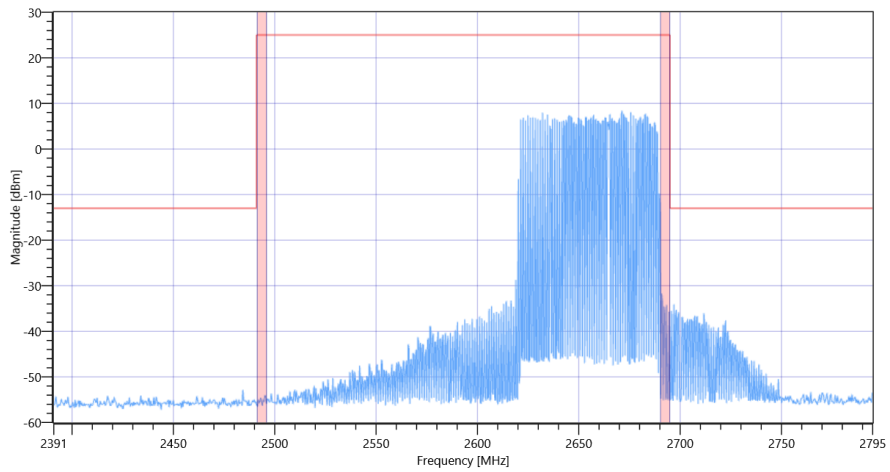
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	-2.17 0 15
Start [MHz] Stop [MHz]	1.000 401.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1600 1 1001 SWE

RESULT Test freq: high, UL[MHz]/CH 2655/0, CBW [MHz]: 70, RB_100PCT, Mod: 256QAM

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peaks higher limit	---	0	0	no	PASS



FCC, ISED # TX Emissions conducted ~ NR Band_41 Ant-2 SCS-30 2655 MHz



FCC, ISED # TX Emissions conducted ~ NR Band_41 Ant-2 SCS-30 2655

General verdict

PASS

FCC, ISED # TX Emissions conducted ~ NR Band_41 Ant-2 SCS-30

Test References	
TC Start	01.07.2022 08:15:13
Ambit Temp [°C] Humidity [rel%]	22.1 50
System Version	3.2.0.2
Test Specification	FCC, ISED -
Test Method	
TC Version	0.0.1
My Description	FCC/ISED MobileRadio TX Emissions conducted - NR Band_41
Add. Information	

Test Parameter	
Technology to test	NR
Band	Band_41
SCS [kHz]	30
Waveform	CPOFDM
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False
Frequency mid to test	True
Frequency high to test	False
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	0
Switched Path	None

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70	

Test at BW [MHz]: 70

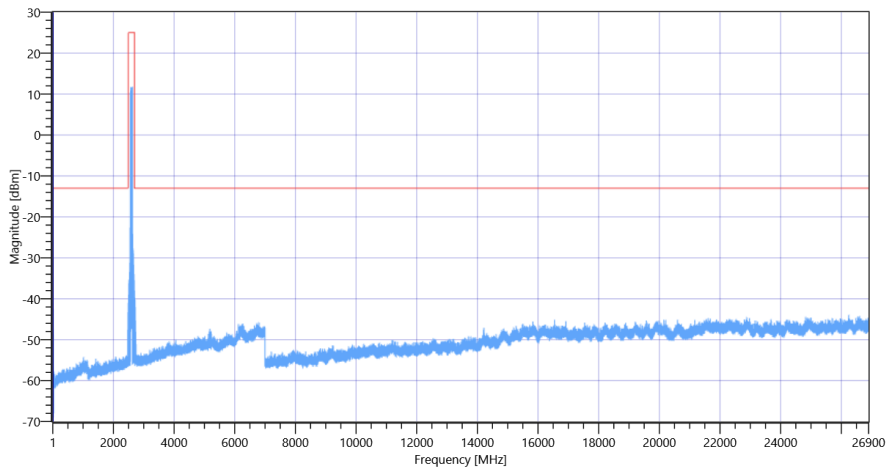
Test freq: mid, UL[MHz]/CH 2593/0, CBW [MHz]: 70, RB_100PCT, Mod: QPSK

READ SA SETTINGS:

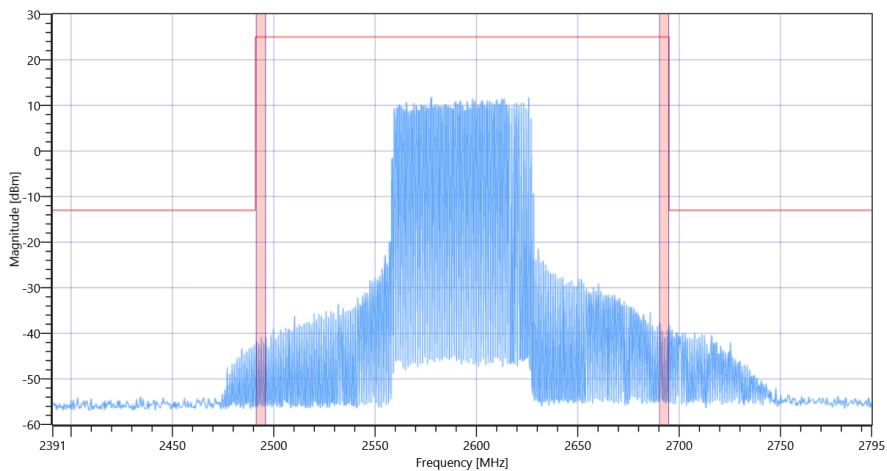
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	-0.76 0 15
Start [MHz] Stop [MHz]	1.000 401.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1600 1 1001 SWE

RESULT Test freq: mid, UL[MHz]/CH 2593/0, CBW [MHz]: 70, RB_100PCT, Mod: QPSK

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peaks higher limit	---	0	0	no	PASS



FCC, ISED # TX Emissions conducted ~ NR Band_41 Ant-2 SCS-30 2593 MHz



FCC, ISED # TX Emissions conducted ~ NR Band_41 Ant-2 SCS-30 2593

Test freq: mid, UL[MHz]/CH 2593/0, CBW [MHz]: 70, RB_100PCT, Mod: 16QAM

READ SA SETTINGS:

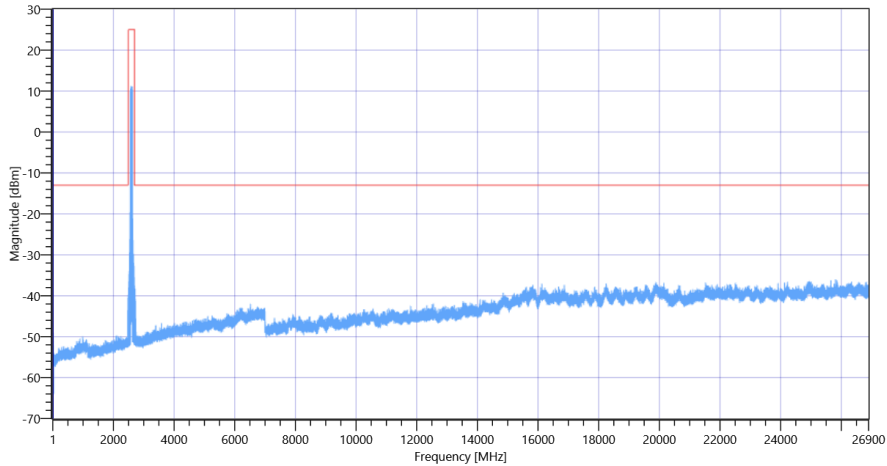
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	0.41 0 20
Start [MHz] Stop [MHz]	1.000 401.000
RBW [MHz] VBW [MHz]	1.000000 3.000000

READ SA SETTINGS:

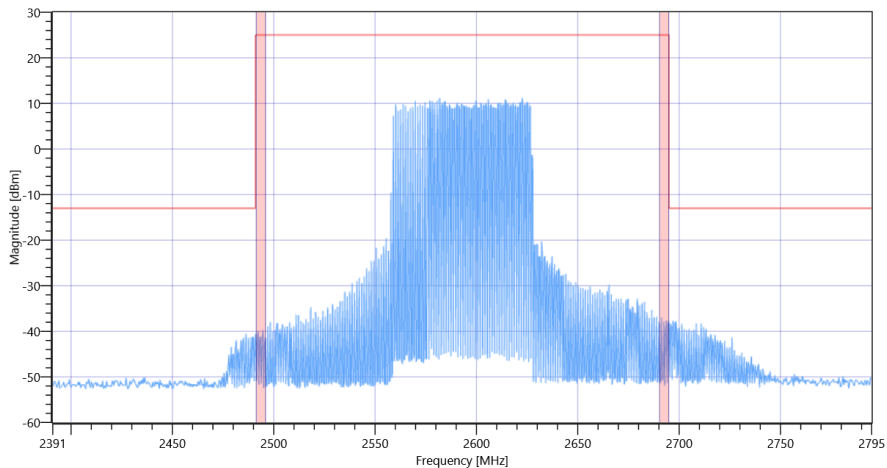
Detector | TraceMode POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type 1600 | 1 | 1001 | SWE

RESULT Test freq: mid, UL[MHz]/CH 2593/0, CBW [MHz]: 70, RB_100PCT, Mod: 16QAM

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peaks higher limit	---	0	0	no	PASS



FCC, ISED # TX Emissions conducted ~ NR Band_41 Ant-2 SCS-30 2593 MHz



FCC, ISED # TX Emissions conducted ~ NR Band_41 Ant-2 SCS-30 2593

Test freq: mid, UL[MHz]/CH 2593/0, CBW [MHz]: 70, RB_100PCT, Mod: 64QAM

READ SA SETTINGS:

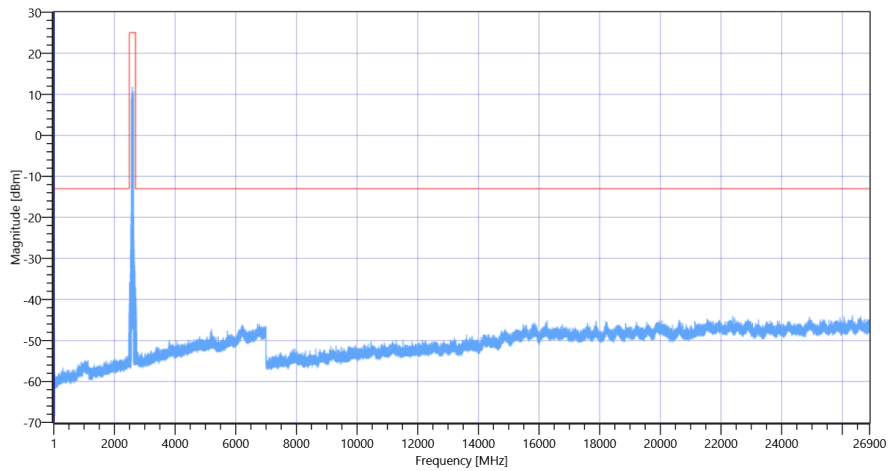
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB] -0.08 | 0 | 15
Start [MHz] | Stop [MHz] 1.000 | 401.000
RBW [MHz] | VBW [MHz] 1.000000 | 3.000000
Detector | TraceMode POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type 1600 | 1 | 1001 | SWE

RESULT Test freq: mid, UL[MHz]/CH 2593/0, CBW [MHz]: 70, RB_100PCT, Mod: 64QAM

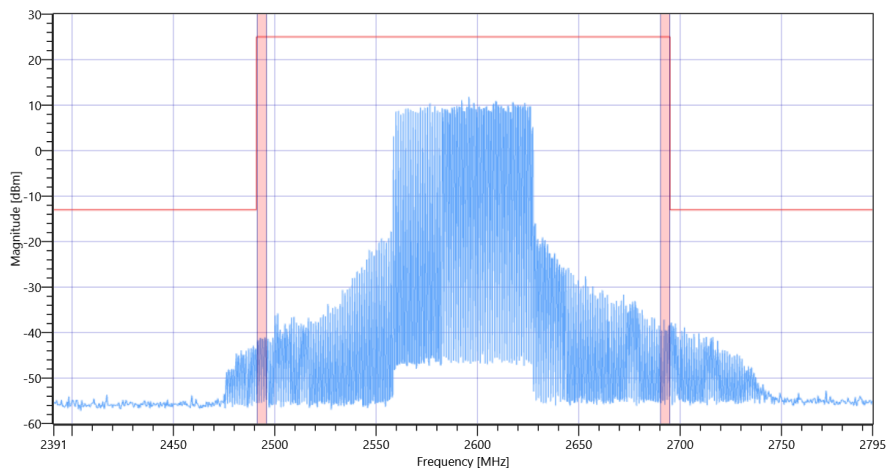
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
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RESULT Test freq: mid, UL[MHz]/CH 2593/0, CBW [MHz]: 70, RB_100PCT, Mod: 64QAM

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peaks higher limit	---	0	0	no	PASS



FCC, ISED # TX Emissions conducted ~ NR Band_41 Ant-2 SCS-30 2593 MHz



FCC, ISED # TX Emissions conducted ~ NR Band_41 Ant-2 SCS-30 2593

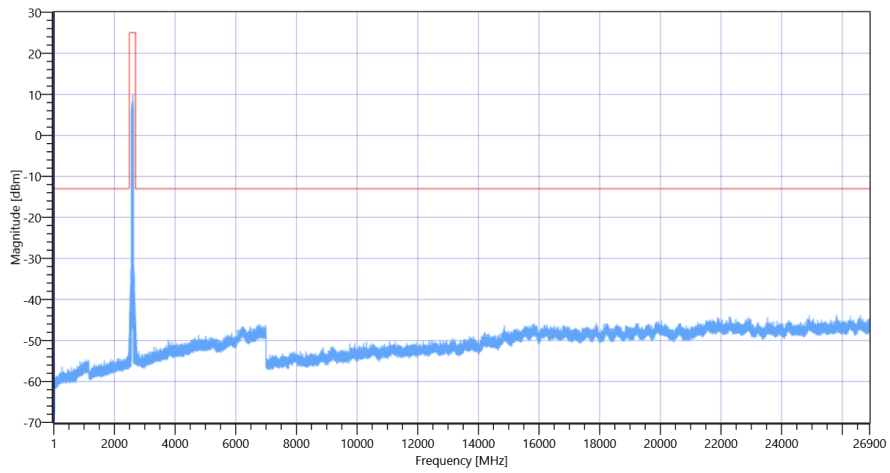
Test freq: mid, UL[MHz]/CH 2593/0, CBW [MHz]: 70, RB_100PCT, Mod: 256QAM

READ SA SETTINGS:

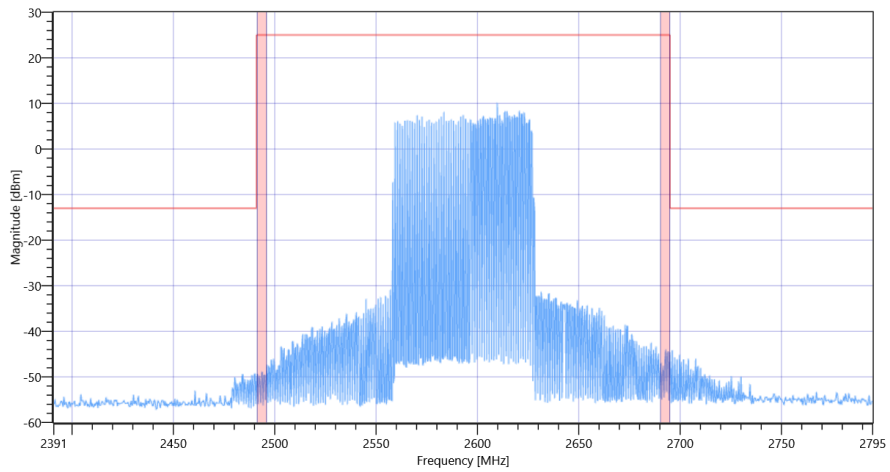
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	-1.47 0 15
Start [MHz] Stop [MHz]	1.000 401.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1600 1 1001 SWE

RESULT Test freq: mid, UL[MHz]/CH 2593/0, CBW [MHz]: 70, RB_100PCT, Mod: 256QAM

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peaks higher limit	---	0	0	no	PASS



FCC, ISED # TX Emissions conducted ~ NR Band_41 Ant-2 SCS-30 2593 MHz



FCC, ISED # TX Emissions conducted ~ NR Band_41 Ant-2 SCS-30 2593

General verdict

PASS

FCC, ISED # TX Emissions conducted ~ NR Band_41 Ant-2 SCS-30

Test References	
TC Start	01.07.2022 08:00:30
Ambit Temp [°C] Humidity [rel%]	22.0 51
System Version	3.2.0.2
Test Specification	FCC, ISED -
Test Method	
TC Version	0.0.1
My Description	FCC/ISED MobileRadio TX Emissions conducted - NR Band_41
Add. Information	

Test Parameter	
Technology to test	NR
Band	Band_41
SCS [kHz]	30
Waveform	CPOFDM
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True
Frequency mid to test	False
Frequency high to test	False
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	0
Switched Path	None

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70	

Test at BW [MHz]: 70

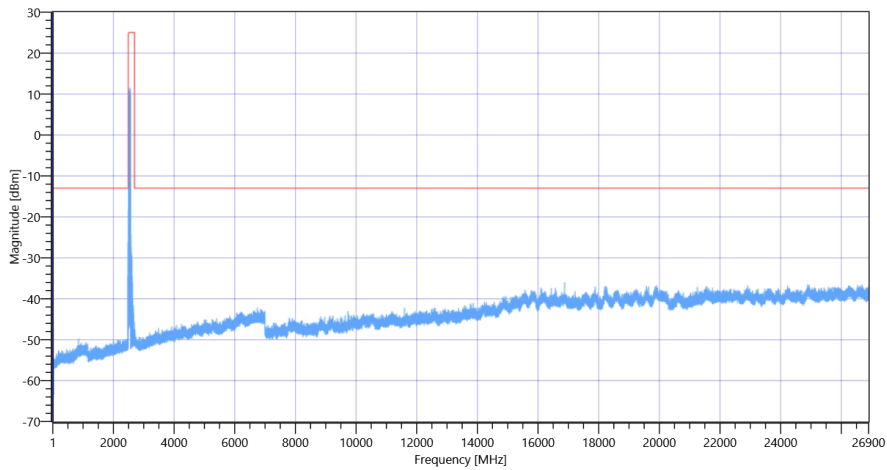
Test freq: low, UL[MHz]/CH 2531/0, CBW [MHz]: 70, RB_100PCT, Mod: QPSK

READ SA SETTINGS:

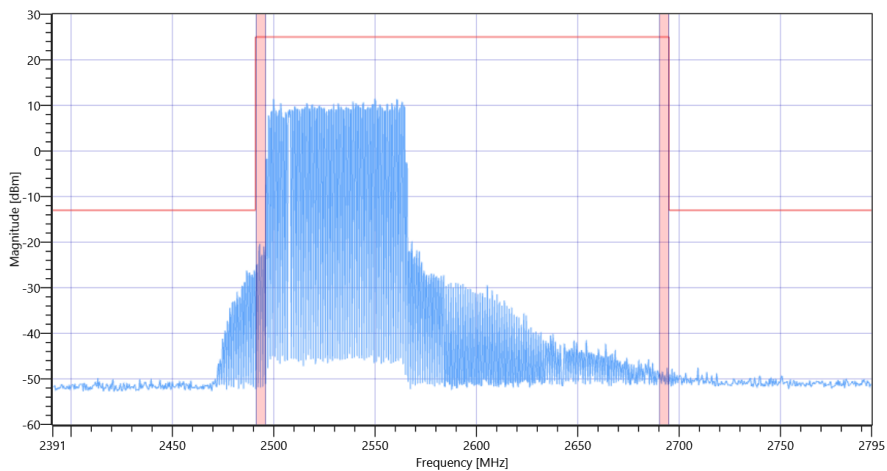
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	0.42 0 20
Start [MHz] Stop [MHz]	1.000 401.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1600 1 1001 SWE

RESULT Test freq: low, UL[MHz]/CH 2531/0, CBW [MHz]: 70, RB_100PCT, Mod: QPSK

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peaks higher limit	---	0	0	no	PASS



FCC, ISED # TX Emissions conducted ~ NR Band_41 Ant-2 SCS-30 2531 MHz



FCC, ISED # TX Emissions conducted ~ NR Band_41 Ant-2 SCS-30 2531

Test freq: low, UL[MHz]/CH 2531/0, CBW [MHz]: 70, RB_100PCT, Mod: 16QAM

READ SA SETTINGS:

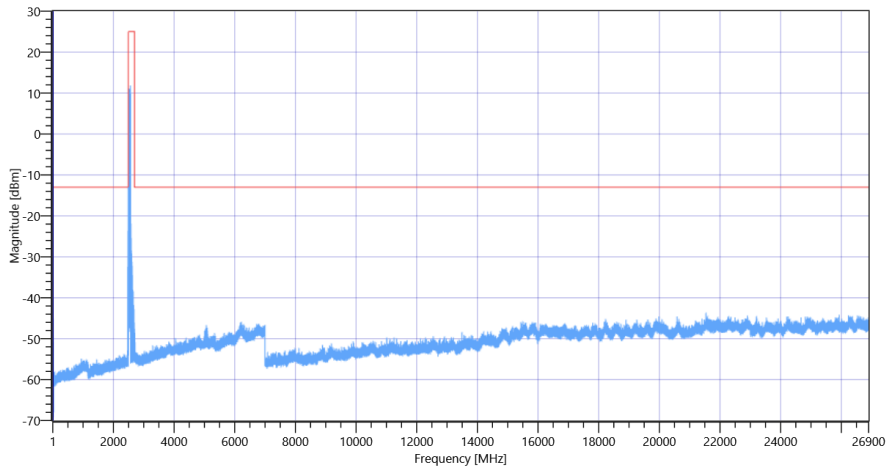
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	-0.12 0 15
Start [MHz] Stop [MHz]	1.000 401.000
RBW [MHz] VBW [MHz]	1.000000 3.000000

READ SA SETTINGS:

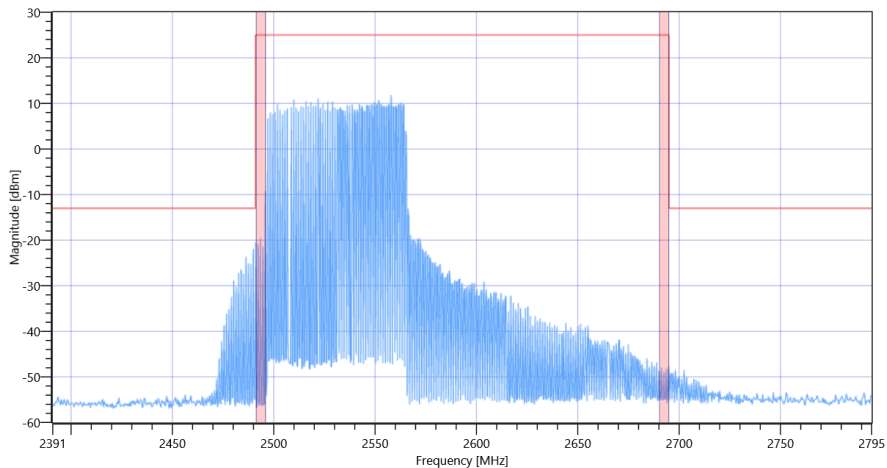
Detector | TraceMode POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type 1600 | 1 | 1001 | SWE

RESULT Test freq: low, UL[MHz]/CH 2531/0, CBW [MHz]: 70, RB_100PCT, Mod: 16QAM

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peaks higher limit	---	0	0	no	PASS



FCC, ISED # TX Emissions conducted ~ NR Band_41 Ant-2 SCS-30 2531 MHz



FCC, ISED # TX Emissions conducted ~ NR Band_41 Ant-2 SCS-30 2531

Test freq: low, UL[MHz]/CH 2531/0, CBW [MHz]: 70, RB_100PCT, Mod: 64QAM

READ SA SETTINGS:

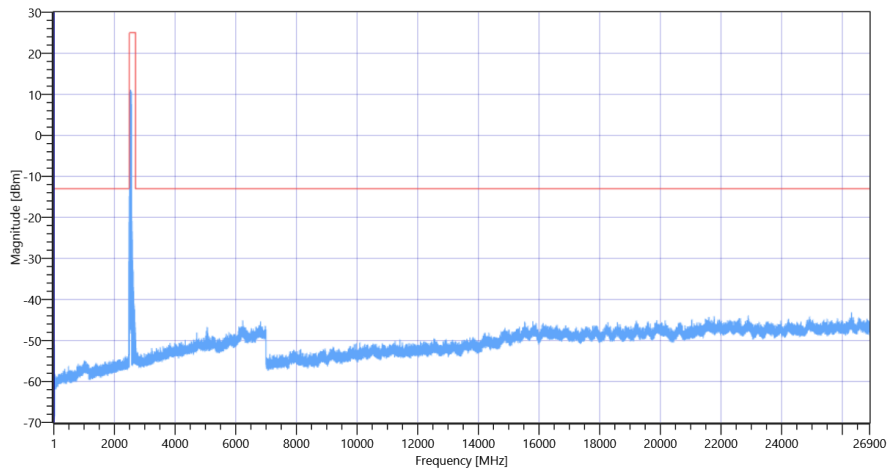
RefLevel [dBm] | RefLevelOffset [dB] | InpAtt [dB] -0.56 | 0 | 15
Start [MHz] | Stop [MHz] 1.000 | 401.000
RBW [MHz] | VBW [MHz] 1.000000 | 3.000000
Detector | TraceMode POS | MAXH
Sweep: Time [ms] | Count | Points per Section | Type 1600 | 1 | 1001 | SWE

RESULT Test freq: low, UL[MHz]/CH 2531/0, CBW [MHz]: 70, RB_100PCT, Mod: 64QAM

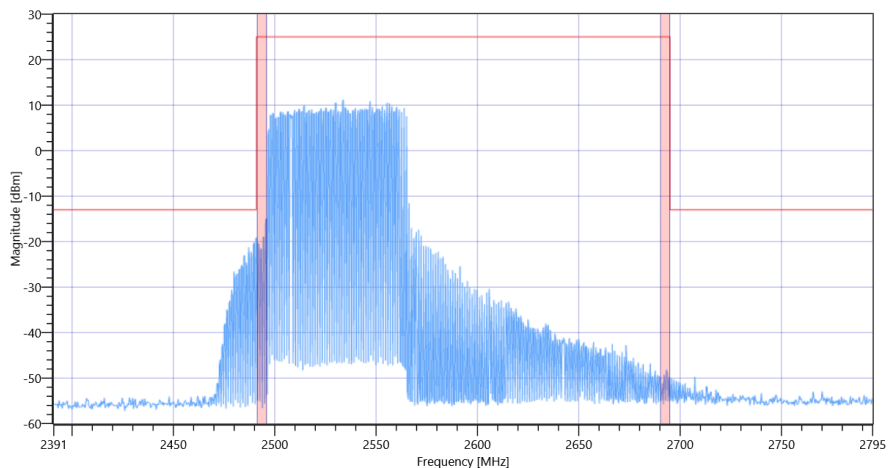
Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
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RESULT Test freq: low, UL[MHz]/CH 2531/0, CBW [MHz]: 70, RB_100PCT, Mod: 64QAM

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peaks higher limit	---	0	0	no	PASS



FCC, ISED # TX Emissions conducted ~ NR Band_41 Ant-2 SCS-30 2531 MHz



FCC, ISED # TX Emissions conducted ~ NR Band_41 Ant-2 SCS-30 2531

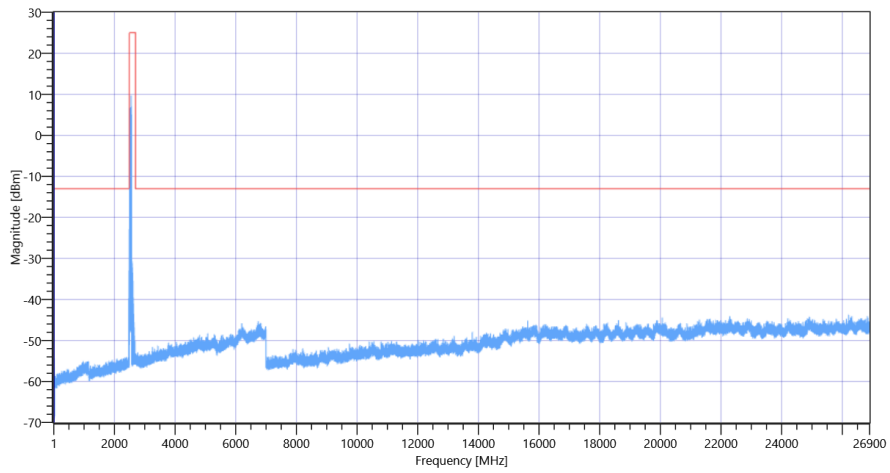
Test freq: low, UL[MHz]/CH 2531/0, CBW [MHz]: 70, RB_100PCT, Mod: 256QAM

READ SA SETTINGS:

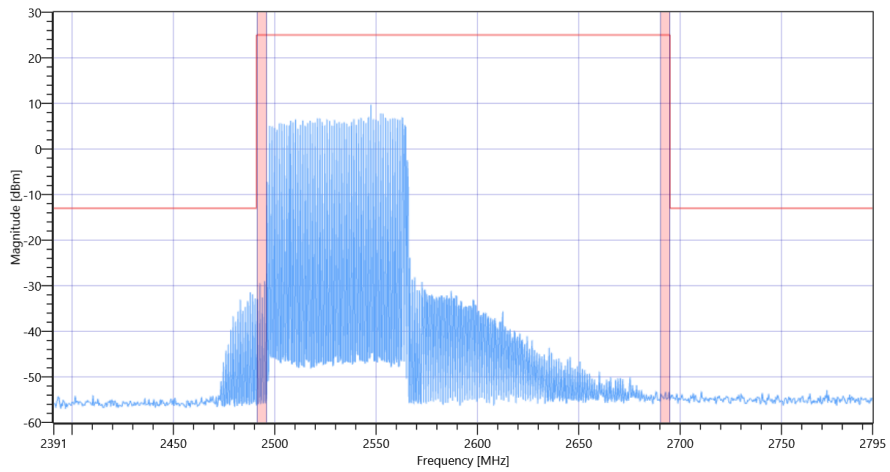
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	-1.81 0 15
Start [MHz] Stop [MHz]	1.000 401.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1600 1 1001 SWE

RESULT Test freq: low, UL[MHz]/CH 2531/0, CBW [MHz]: 70, RB_100PCT, Mod: 256QAM

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Peaks higher limit	---	0	0	no	PASS



FCC, ISED # TX Emissions conducted ~ NR Band_41 Ant-2 SCS-30 2531 MHz



FCC, ISED # TX Emissions conducted ~ NR Band_41 Ant-2 SCS-30 2531

General verdict

PASS

FCC, ISED # Bandwidth 99PCT and 26dB ~ NR Band_41 Ant-2 SCS-30

Test References	
TC Start	01.07.2022 09:04:32
Ambit Temp [°C] Humidity [rel%]	22.2 50
System Version	3.2.0.2
Test Specification	FCC, ISED -
Test Method	
TC Version	0.0.1
My Description	FCC/ISED Bandwidths 99PCT and 26dB - NR Band_41
Add. Information	

Test Parameter	
Technology to test	NR
Band	Band_41
SCS [kHz]	30
Waveform	CPOFDM
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	False
Frequency mid to test	False
Frequency high to test	True
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	0
Switched Path	None

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70	

Test at BW [MHz]: 70

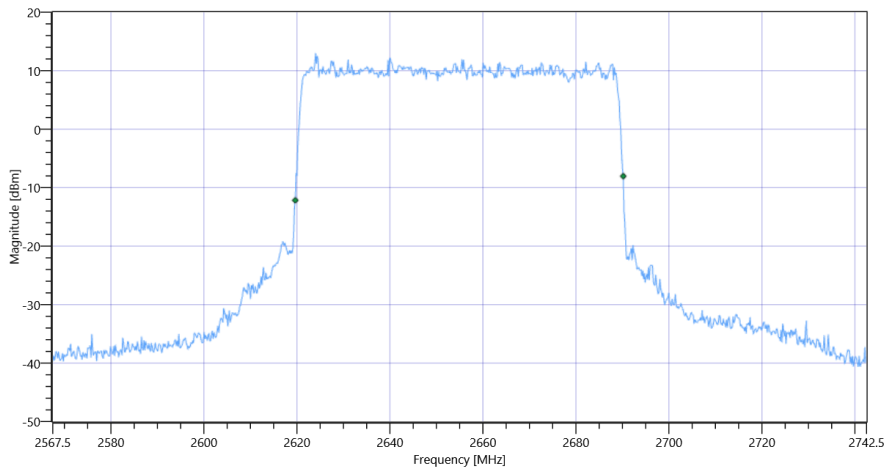
Test freq: high, UL[MHz]/CH 2655/0, CBW [MHz]: 70, RB_100PCT, Mod: QPSK

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	11.06 0 30
Start [MHz] Stop [MHz]	2567.500 2742.500
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	2 1500 1001 SWE

RESULT 26 dB

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	70.525	MHz	INFO



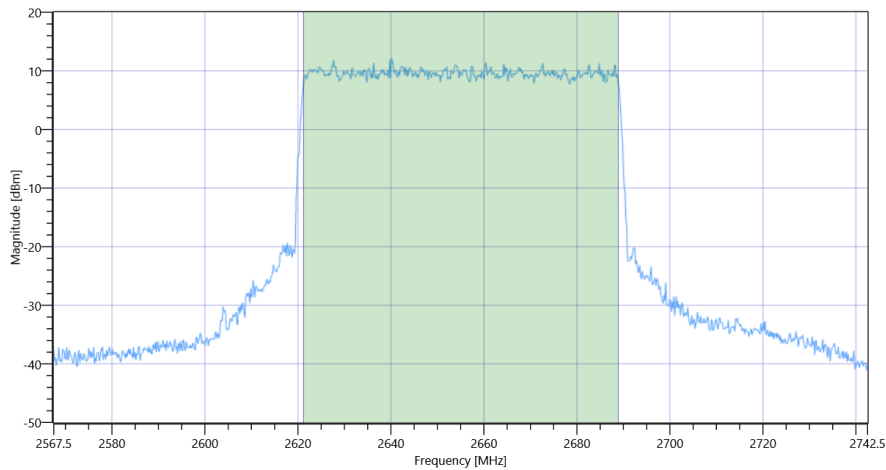
FCC, ISED # Bandwidth 99PCT and 26dB ~ NR Band_41 Ant-2 SCS-30 26dB

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	11.06 0 30
Start [MHz] Stop [MHz]	2567.500 2742.500
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1 1500 1001 SWE

RESULT 99%

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	67.483	MHz	INFO



FCC, ISED # Bandwidth 99PCT and 26dB ~ NR Band_41 Ant-2 SCS-30 26dB

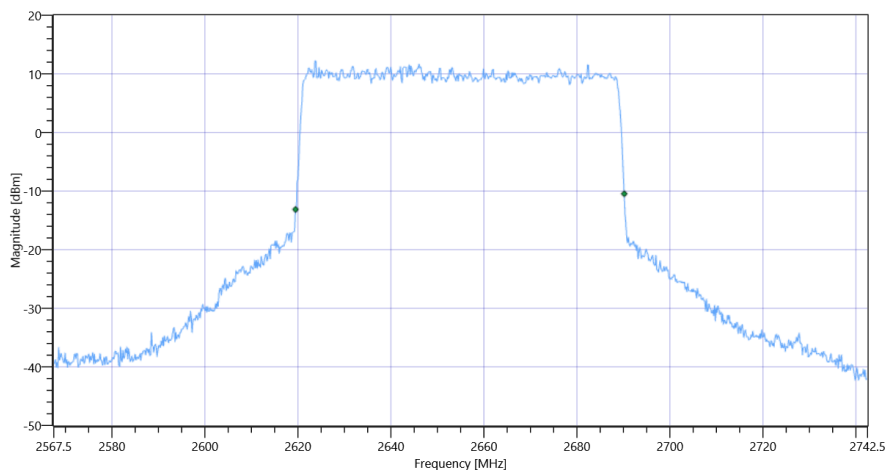
Test freq: high, UL[MHz]/CH 2655/0, CBW [MHz]: 70, RB_100PCT, Mod: 16QAM

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.97 0 25
Start [MHz] Stop [MHz]	2567.500 2742.500
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	2 1500 1001 SWE

RESULT 26 dB

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	70.7	MHz	INFO



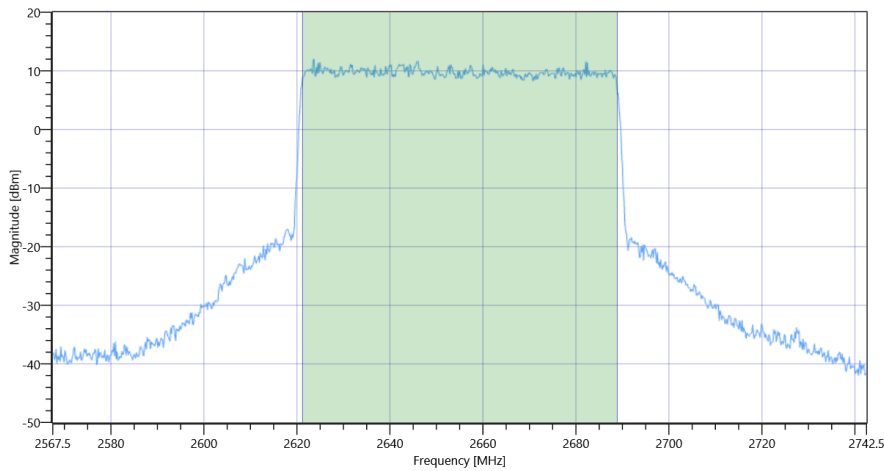
FCC, ISED # Bandwidth 99PCT and 26dB ~ NR Band_41 Ant-2 SCS-30 26dB

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.97 0 25
Start [MHz] Stop [MHz]	2567.500 2742.500
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	2 1500 1001 SWE

RESULT 99%

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	67.483	MHz	INFO



FCC, ISED # Bandwidth 99PCT and 26dB ~ NR Band_41 Ant-2 SCS-30 26dB

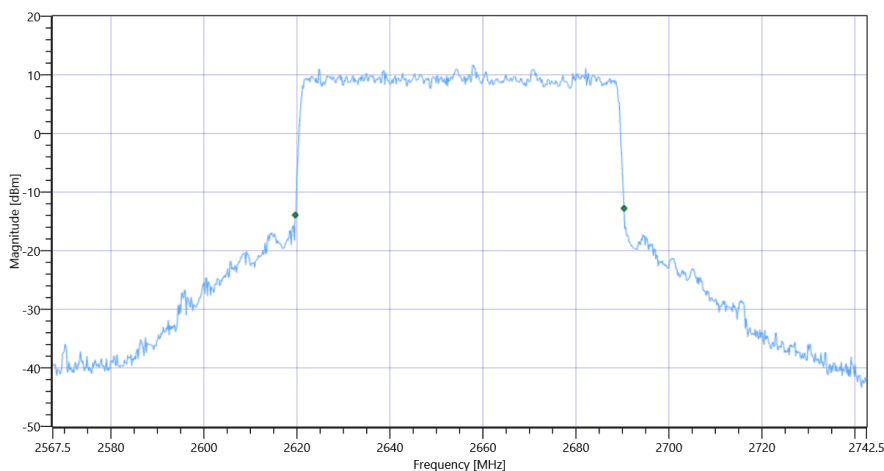
Test freq: high, UL[MHz]/CH 2655/0, CBW [MHz]: 70, RB_100PCT, Mod: 64QAM

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.74 0 25
Start [MHz] Stop [MHz]	2567.500 2742.500
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	2 1500 1001 SWE

RESULT 26 dB

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	70.7	MHz	INFO



FCC, ISED # Bandwidth 99PCT and 26dB ~ NR Band_41 Ant-2 SCS-30 26dB

READ SA SETTINGS:

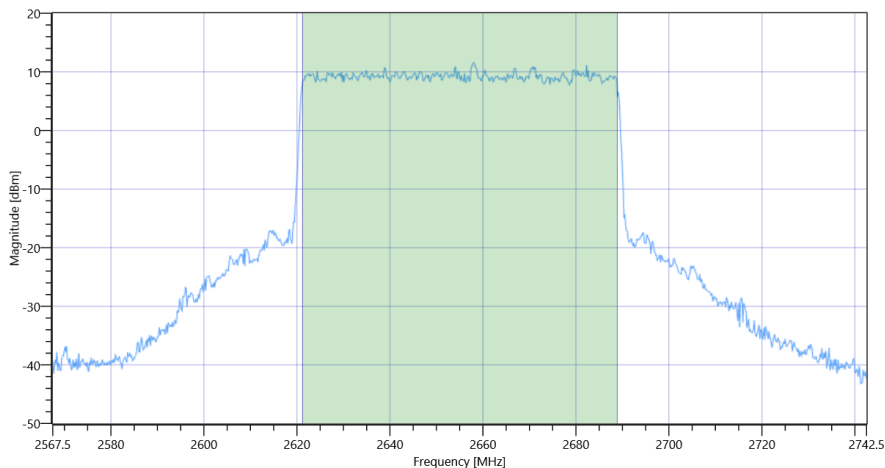
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.74 0 25
--	----------------

READ SA SETTINGS:

Start [MHz] Stop [MHz]	2567.500 2742.500
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	2 1500 1001 SWE

RESULT 99%

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	67.483	MHz	INFO



FCC, ISED # Bandwidth 99PCT and 26dB ~ NR Band_41 Ant-2 SCS-30 26dB

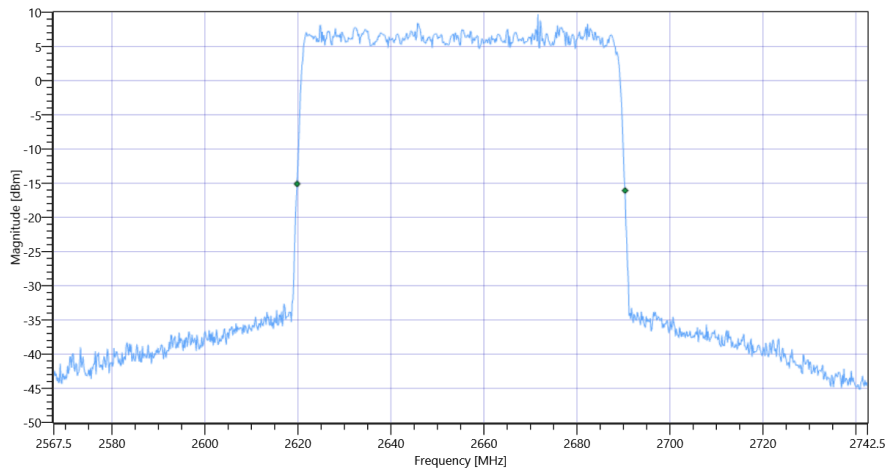
Test freq: high, UL[MHz]/CH 2655/0, CBW [MHz]: 70, RB_100PCT, Mod: 256QAM

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	9.03 0 25
Start [MHz] Stop [MHz]	2567.500 2742.500
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	2 1500 1001 SWE

RESULT 26 dB

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	70.525	MHz	INFO



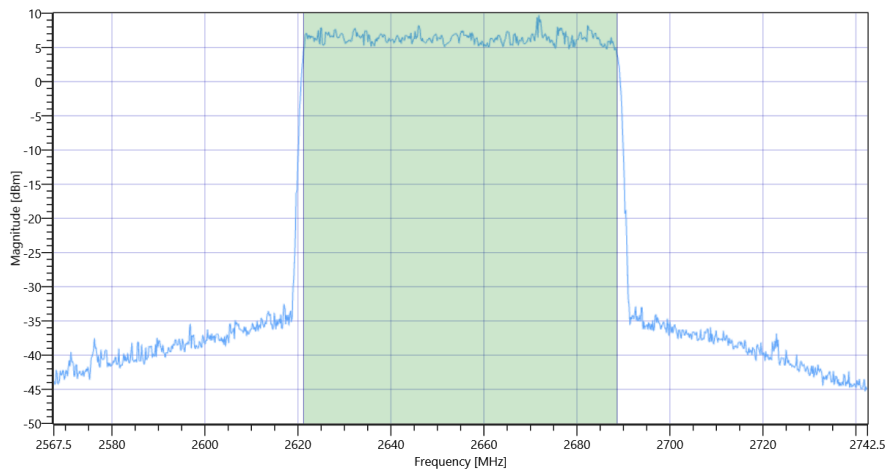
FCC, ISED # Bandwidth 99PCT and 26dB ~ NR Band_41 Ant-2 SCS-30 26dB

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	9.03 0 25
Start [MHz] Stop [MHz]	2567.500 2742.500
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	2 1500 1001 SWE

RESULT 99%

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	67.308	MHz	INFO



FCC, ISED # Bandwidth 99PCT and 26dB ~ NR Band_41 Ant-2 SCS-30 26dB

General verdict

PASS

FCC, ISED # Bandwidth 99PCT and 26dB ~ NR Band_41 Ant-2 SCS-30

Test References	
TC Start	01.07.2022 07:54:07
Ambit Temp [°C] Humidity [rel%]	22.0 51
System Version	3.2.0.2
Test Specification	FCC, ISED -
Test Method	
TC Version	0.0.1
My Description	FCC/ISED Bandwidths 99PCT and 26dB - NR Band_41
Add. Information	

Test Parameter	
Technology to test	NR
Band	Band_41
SCS [kHz]	30
Waveform	CPOFDM
Antenna Port used	2
Temperature	nom
Voltage	nom
Frequency low to test	True
Frequency mid to test	False
Frequency high to test	False
Auto Control enabled Power Supply Climatic Box	No No
Additional Path Loss [dB]	0
Switched Path	None

Test Equipment	
Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70	

Test at BW [MHz]: 70

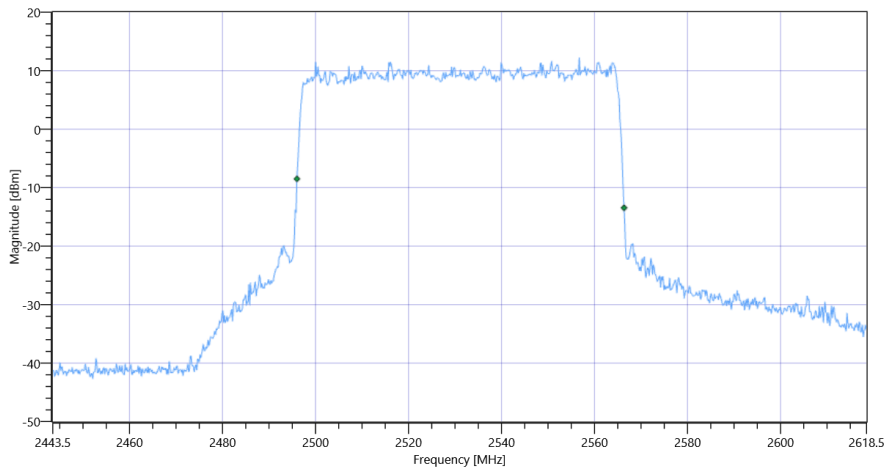
Test freq: low, UL[MHz]/CH 2531/0, CBW [MHz]: 70, RB_100PCT, Mod: QPSK

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	11.14 0 30
Start [MHz] Stop [MHz]	2443.500 2618.500
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	2 1500 1001 SWE

RESULT 26 dB

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	70.35	MHz	INFO



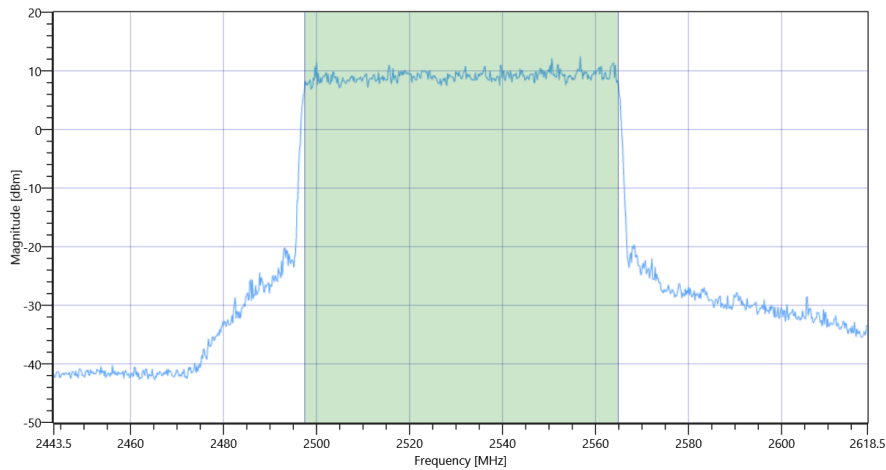
FCC, ISED # Bandwidth 99PCT and 26dB ~ NR Band_41 Ant-2 SCS-30 26dB

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	11.14 0 30
Start [MHz] Stop [MHz]	2443.500 2618.500
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	1 1500 1001 SWE

RESULT 99%

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	67.483	MHz	INFO



FCC, ISED # Bandwidth 99PCT and 26dB ~ NR Band_41 Ant-2 SCS-30 26dB

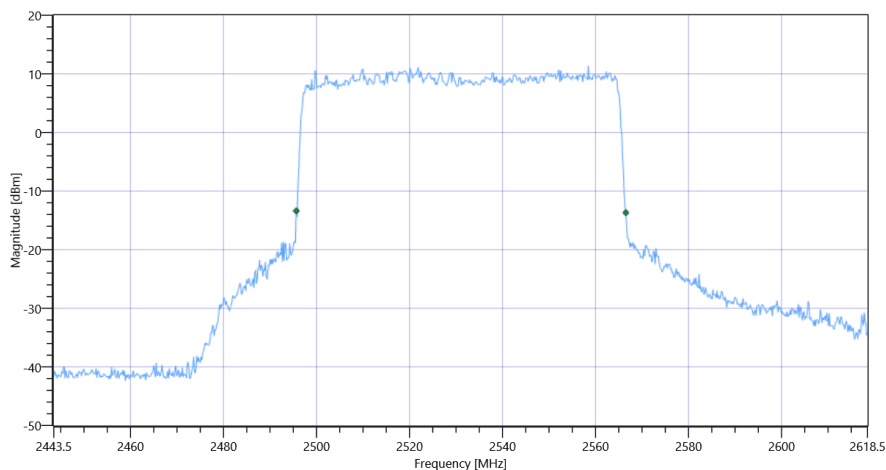
Test freq: low, UL[MHz]/CH 2531/0, CBW [MHz]: 70, RB_100PCT, Mod: 16QAM

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	11.09 0 30
Start [MHz] Stop [MHz]	2443.500 2618.500
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	2 1500 1001 SWE

RESULT 26 dB

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	70.875	MHz	INFO



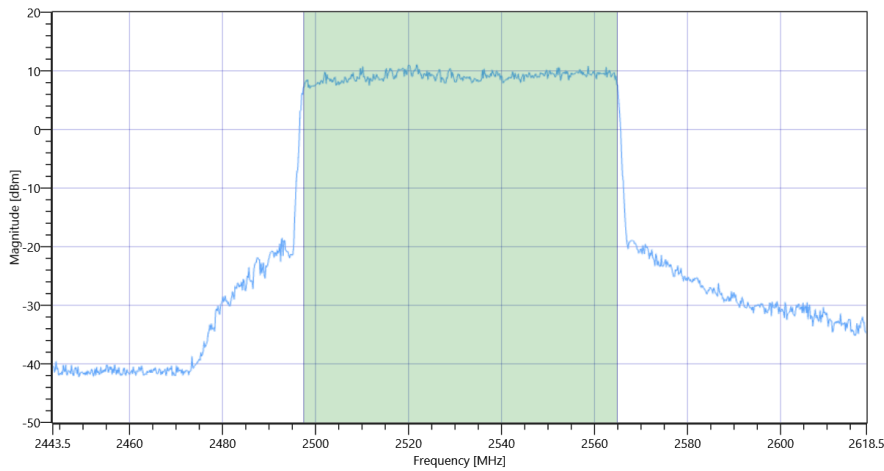
FCC, ISED # Bandwidth 99PCT and 26dB ~ NR Band_41 Ant-2 SCS-30 26dB

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	11.09 0 30
Start [MHz] Stop [MHz]	2443.500 2618.500
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	2 1500 1001 SWE

RESULT 99%

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	67.308	MHz	INFO



FCC, ISED # Bandwidth 99PCT and 26dB ~ NR Band_41 Ant-2 SCS-30 26dB

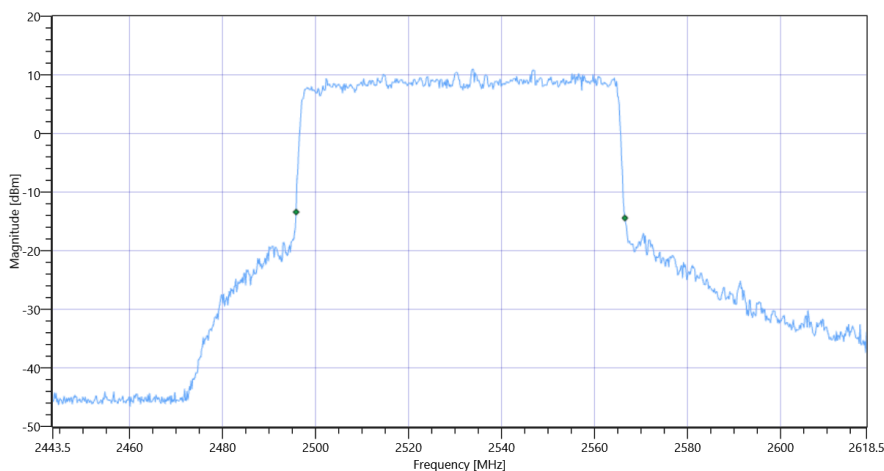
Test freq: low, UL[MHz]/CH 2531/0, CBW [MHz]: 70, RB_100PCT, Mod: 64QAM

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.23 0 25
Start [MHz] Stop [MHz]	2443.500 2618.500
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	2 1500 1001 SWE

RESULT 26 dB

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	70.7	MHz	INFO



FCC, ISED # Bandwidth 99PCT and 26dB ~ NR Band_41 Ant-2 SCS-30 26dB

READ SA SETTINGS:

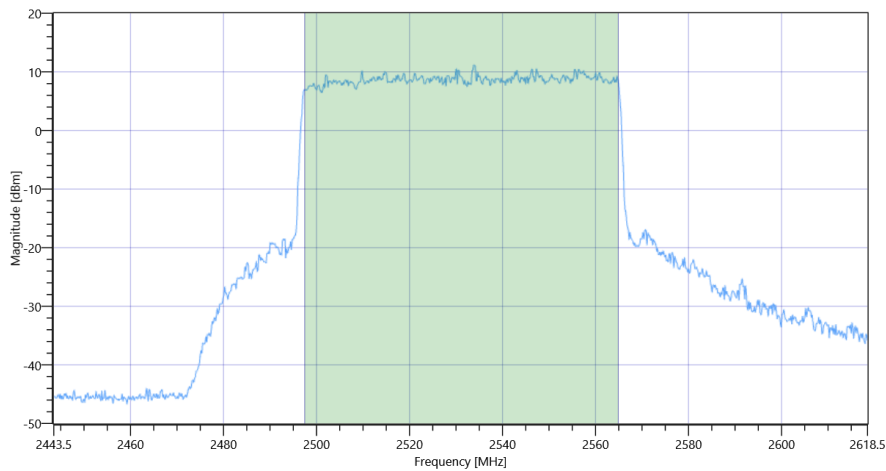
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.23 0 25
--	----------------

READ SA SETTINGS:

Start [MHz] Stop [MHz]	2443.500 2618.500
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	2 1500 1001 SWE

RESULT 99%

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	67.483	MHz	INFO



FCC, ISED # Bandwidth 99PCT and 26dB ~ NR Band_41 Ant-2 SCS-30 26dB

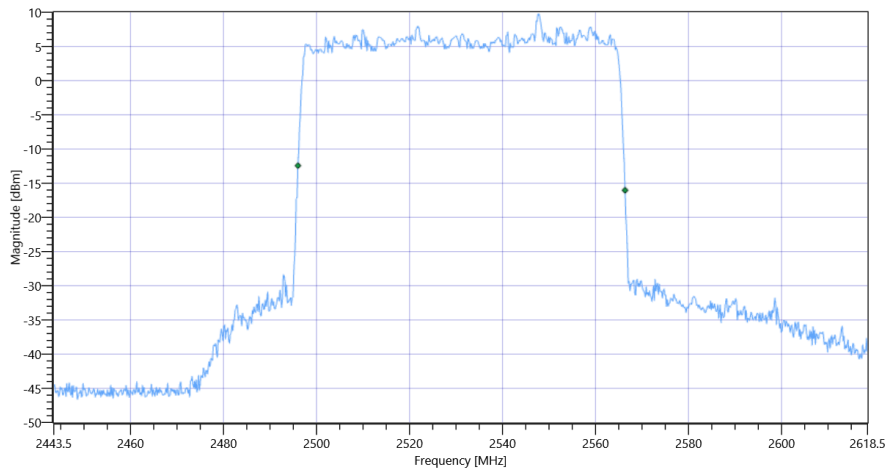
Test freq: low, UL[MHz]/CH 2531/0, CBW [MHz]: 70, RB_100PCT, Mod: 256QAM

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	9.19 0 25
Start [MHz] Stop [MHz]	2443.500 2618.500
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	2 1500 1001 SWE

RESULT 26 dB

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 26dB	---	---	70.35	MHz	INFO



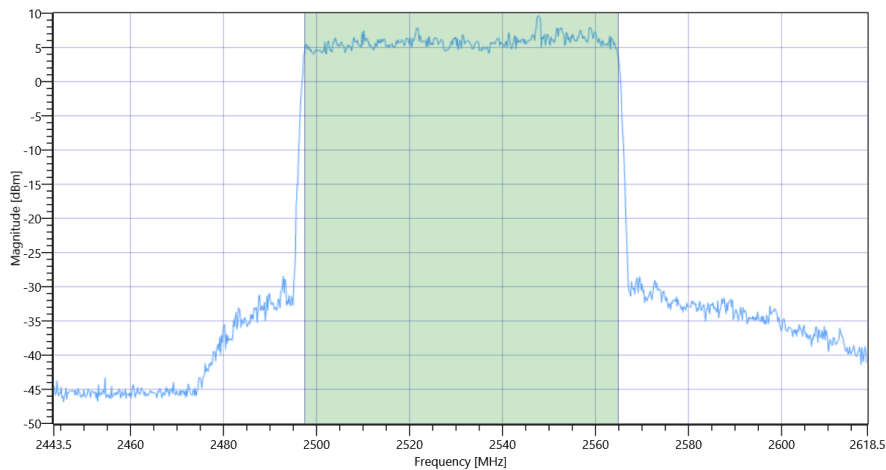
FCC, ISED # Bandwidth 99PCT and 26dB ~ NR Band_41 Ant-2 SCS-30 26dB

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	9.19 0 25
Start [MHz] Stop [MHz]	2443.500 2618.500
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: Time [ms] Count Points per Section Type	2 1500 1001 SWE

RESULT 99%

Test Description	Lower Limit	Upper Limit	Measured	Unit	Verdict
Bandwidth 99%	---	---	67.308	MHz	INFO



FCC, ISED # Bandwidth 99PCT and 26dB ~ NR Band_41 Ant-2 SCS-30 26dB

General verdict

PASS

- END OF DOCUMENT -