

FCC Test Report

ANNEX 7 LTE BAND 7

FCC ID: 2A5EP-S10

Applicant: SZ TPS CO., LTD
Address: Floor 2, Building 2, No.596, Zhoushi Road, Jiuwei Community, Hangcheng Street, Baoan District, Shenzhen, China

Manufacturer: SZ TPS CO., LTD
Address: Floor 2, Building 2, No.596, Zhoushi Road, Jiuwei Community, Hangcheng Street, Baoan District, Shenzhen, China

EUT: Tablet PC

Trade Mark: N/A

Model Number: S10, S8-9863A, S7-7731E, Q8-7731E, S10-9863A, W116, P30, M70, M50, SF116, SF133, K116, Q7, Q8, Q10, SQ8, 7 INCH KIDS, N10, W133B, W101, P10, W801, K8, W102, FS8-6753, N4120, A789, RK3126

Date of Receipt: Feb. 25, 2022

Test Date: Feb. 25, 2022 – Mar. 20, 2022

Date of Report: Mar. 20, 2022

Prepared By: Shenzhen DL Testing Technology Co., Ltd.
Address: 101-201, Building C, Shuanghuan, No.8, Baoqing Road, Baolong Industrial Zone, Baolong Street, Longgang District, Shenzhen, Guangdong, China

Applicable Standards: FCC CFR Title 47 Part22 Subpart H
FCC CFR Title 47 Part24 Subpart E
FCC CFR Title 47 Part27
ANSI/ TIA/ EIA-603-D-2010
FCC KDB 971168 D01 Power Meas. License Digital Systems v02v02
ANSI C63.26:2015

Test Result: Pass

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1. EMISSION TEST RESULTS

1.1. -26dB and 99% Occupied Bandwidth

1.1.1. Test Result

EUT Mode Bandwidth	Modulation	Frequency (MHz)	99% Occupy bandwidth (MHz)	-26dB bandwidth (MHz)
LTE Band 7 5MHz	QPSK	2502.5	4.5341	4.997
		2535.0	4.5222	4.997
		2567.5	4.5153	4.991
LTE Band 7 5MHz	16-QAM	2502.5	4.5258	4.998
		2535.0	4.5321	4.999
		2567.5	4.5417	4.994
LTE Band 7 10 MHz	QPSK	2505.5	8.9706	9.937
		2535.0	8.9474	9.780
		2565.5	8.9508	9.862
LTE Band 7 10 MHz	16-QAM	2505.5	8.9550	9.819
		2535.0	8.9577	9.818
		2565.5	8.9600	9.906
LTE Band 7 15 MHz	QPSK	2507.5	13.550	14.99
		2535.0	13.474	14.99
		2562.5	13.502	14.99
LTE Band 7 15 MHz	16-QAM	2507.5	13.524	14.99
		2535.0	13.509	14.99
		2562.5	13.529	14.99
LTE Band 7 20 MHz	QPSK	2510.0	17.930	19.54
		2535.0	17.923	19.55
		2560.0	17.959	19.64
LTE Band 7 20 MHz	16-QAM	2510.0	17.989	19.64
		2535.0	17.950	19.99
		2560.0	17.939	19.73

Note: Measurement Uncertainty: $\pm 20\text{Hz}$.

Test plot as follows:

LTE Band 7 Lowest channel

5 MHz QPSK



LTE Band 7 Middle channel

5 MHz QPSK



LTE Band 7 Highest channel:

5 MHz QPSK



LTE Band 7 Lowest channel

5 MHz 16-QAM



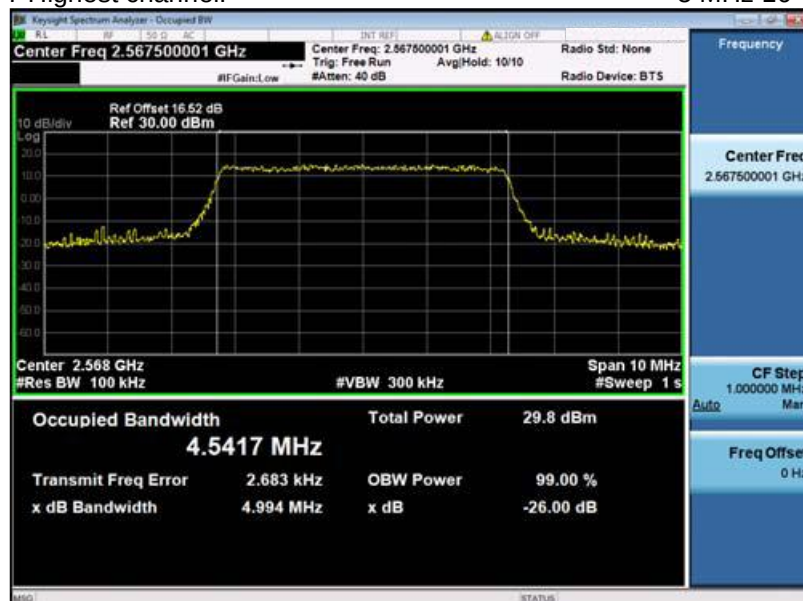
LTE Band 7 Middle channel

5 MHz 16-QAM



LTE Band 7 Highest channel:

5 MHz 16-QAM



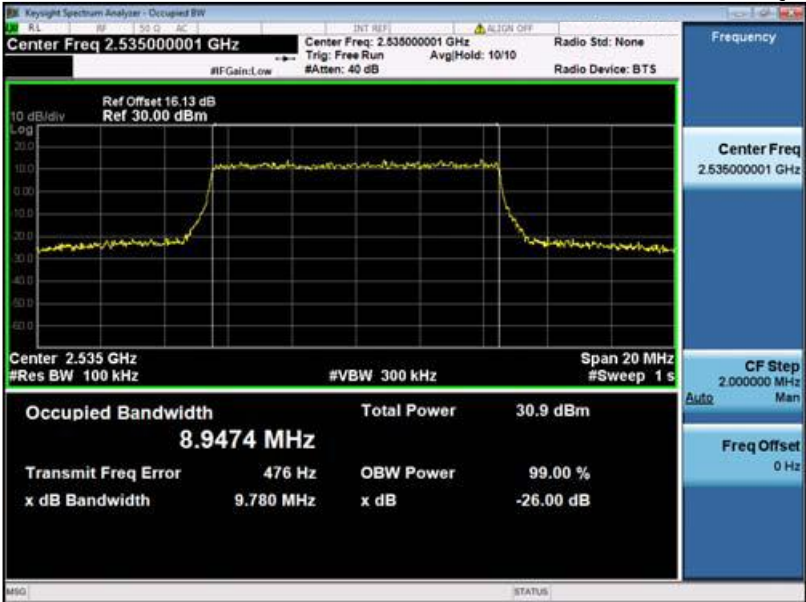
LTE Band 7 Lowest channel

10 MHz QPSK



LTE Band 7 Middle channel

10 MHz QPSK



LTE Band 7 Highest channel:

10 MHz QPSK



LTE Band 7 Lowest channel

10 MHz 16-QAM



LTE Band 7 Middle channel

10 MHz 16-QAM



LTE Band 7 Highest channel:

10 MHz 16-QAM



LTE Band 7 Lowest channel

15 MHz QPSK



LTE Band 7 Middle channel

15 MHz QPSK



LTE Band 7 Highest channel:

15 MHz QPSK



LTE Band 7 Lowest channel

15 MHz 16-QAM



LTE Band 7 Middle channel

15 MHz 16-QAM



LTE Band 7 Highest channel:

15 MHz 16-QAM



LTE Band 7 Lowest channel

20 MHz QPSK



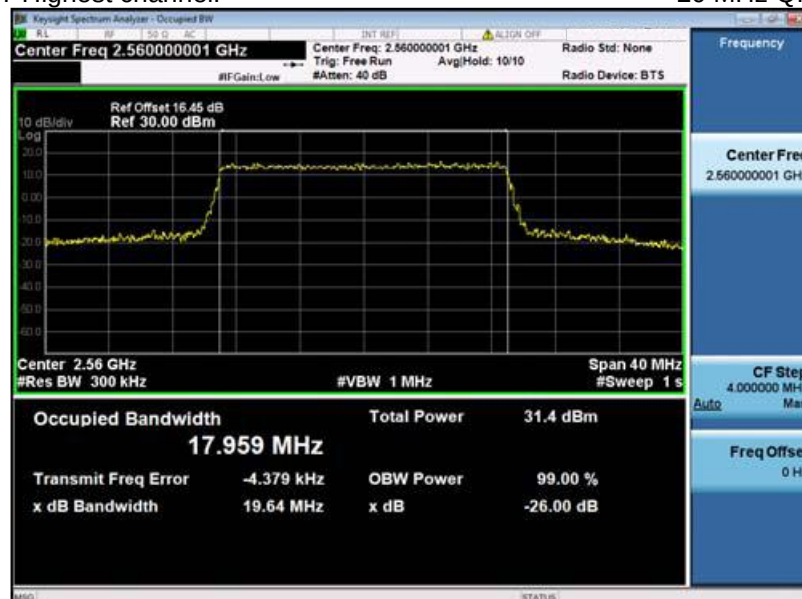
LTE Band 7 Middle channel

20 MHz QPSK



LTE Band 7 Highest channel:

20 MHz QPSK



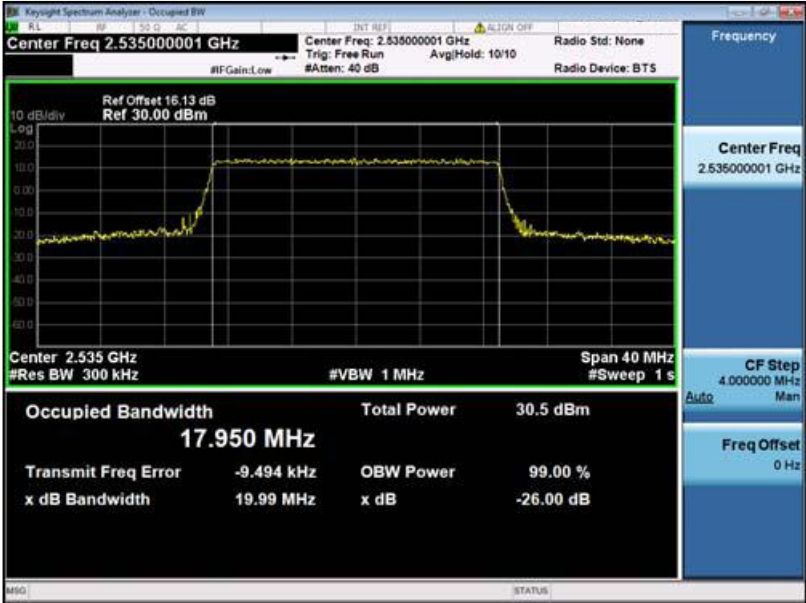
LTE Band 7 Lowest channel

20 MHz 16-QAM



LTE Band 7 Middle channel

20 MHz 16-QAM



LTE Band 7 Highest channel:

20 MHz 16-QAM



1.2. Conducted Spurious Emissions

1.2.1. Test Result

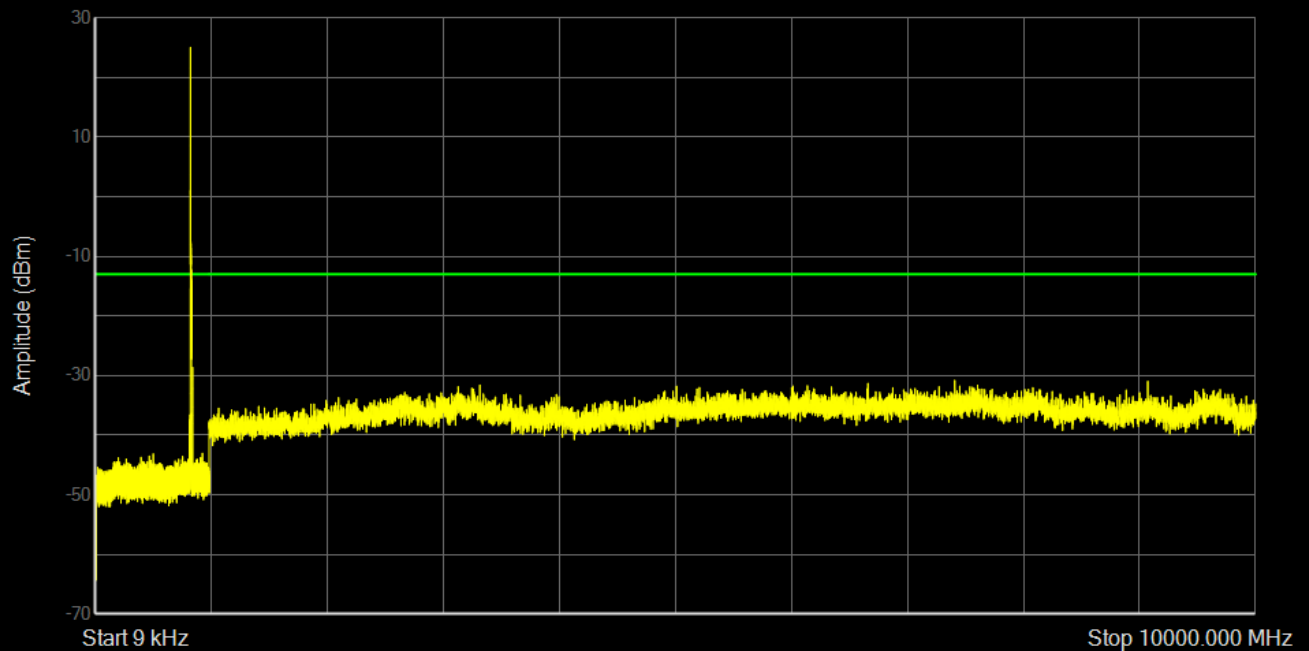
The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency. The lowest, middle and highest channels are tested to verify the out of band emissions.

For LTE mode, the plot only show the QPSK,RB100's data.

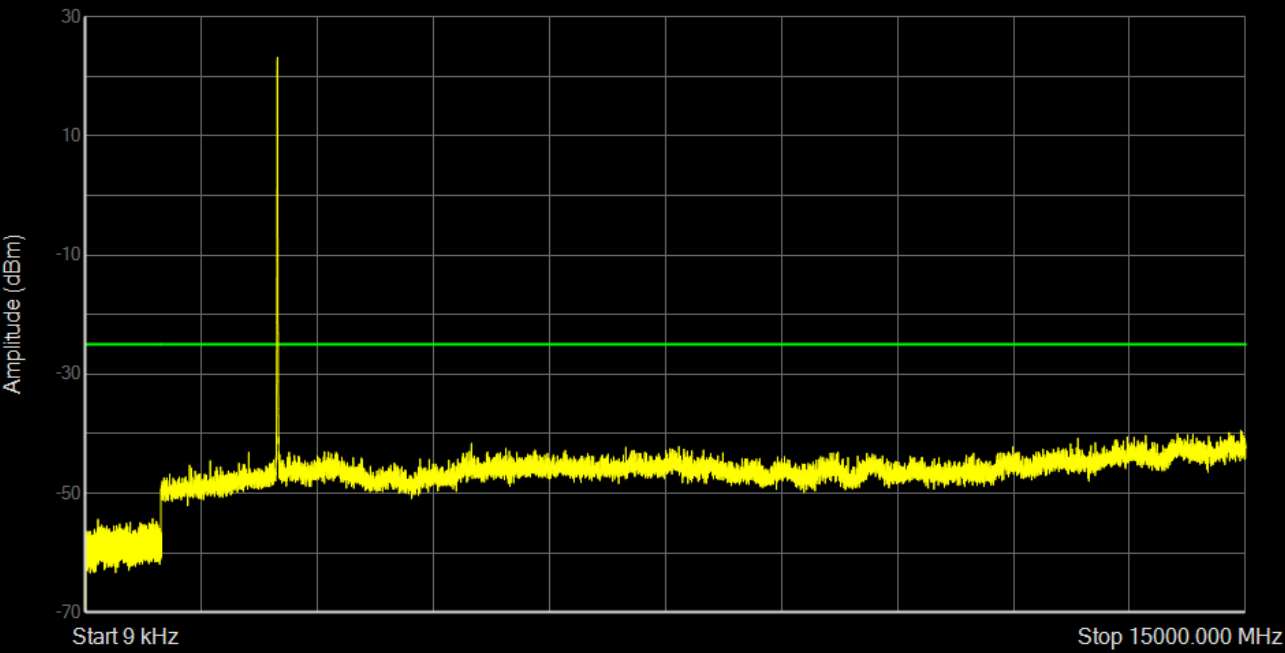
Pass, the table and plot please see annex.

LTE Band 7 Lowest channel

5 MHz



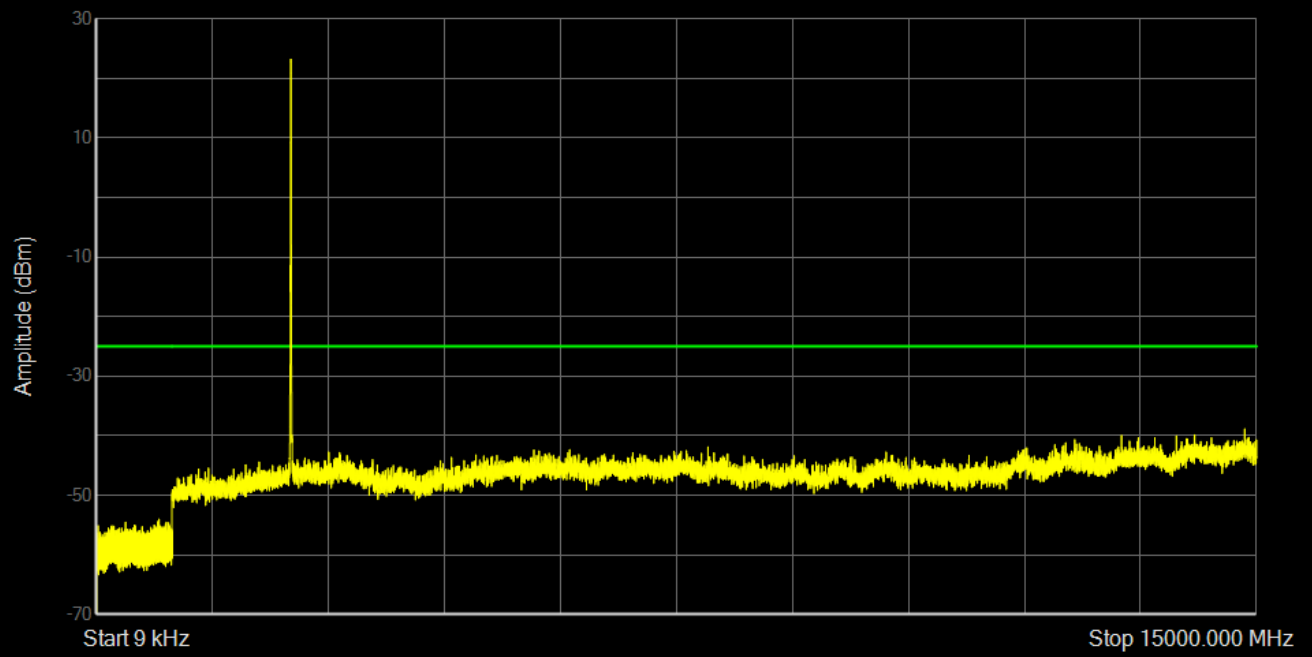
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.009	-31.72	-13
2	0.15	30	10	0.152985	-35.37	-13
3	30	1000	100	942.091	-43.03	-13
4	1000	10000	1000	7412.5	-30.81	-13



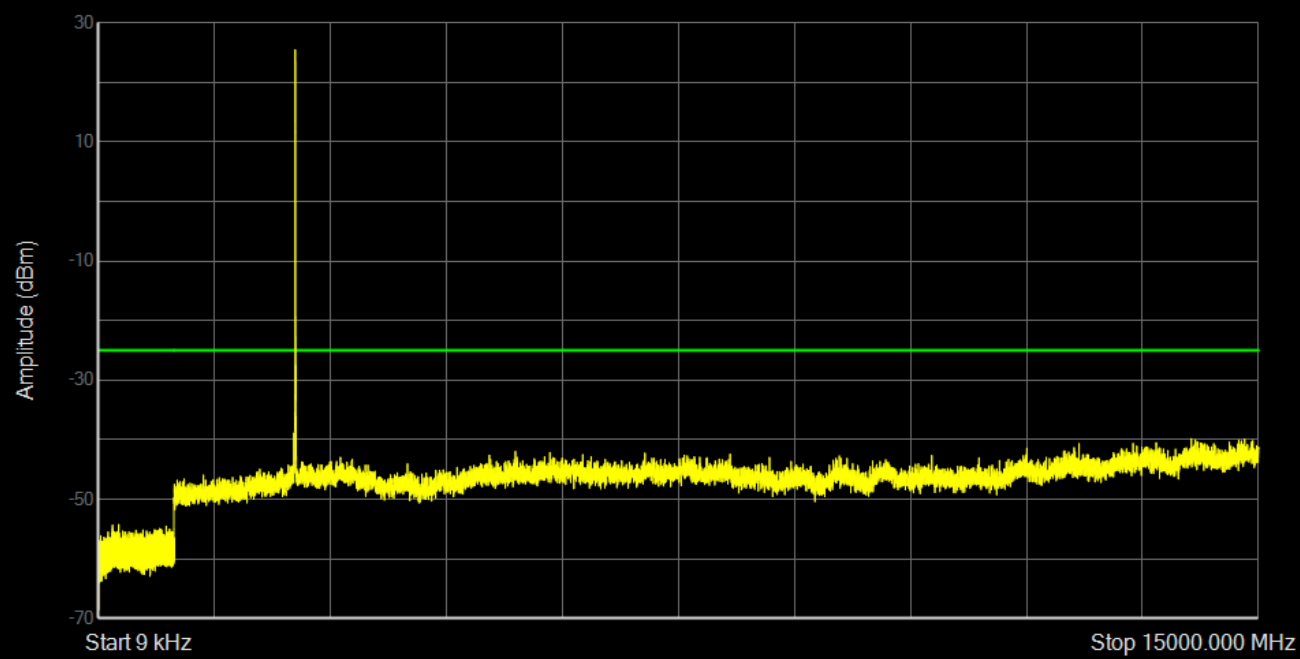
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0092961	-43.7	-25
2	0.15	30	10	0.15	-46.32	-25
3	30	1000	100	893.591	-54.25	-25
4	1000	15000	1000	14937	-39.46	-25

LTE Band 7 high channel

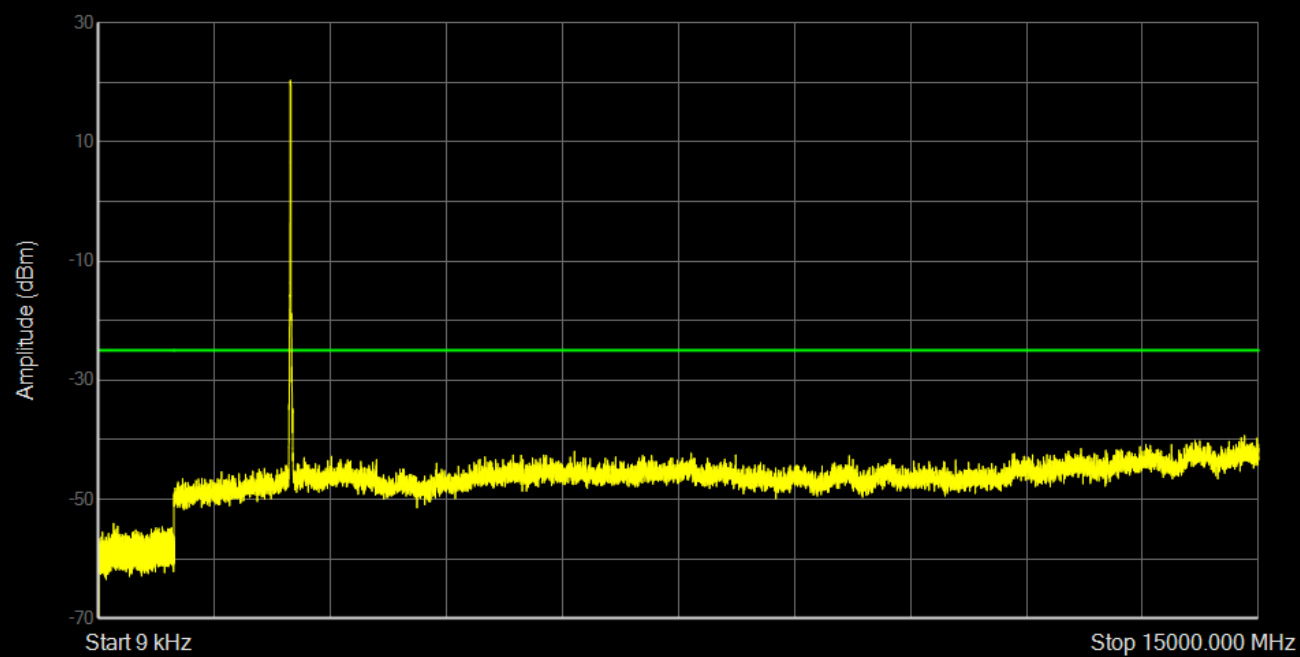
5 MHz



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0125109	-43.69	-25
2	0.15	30	10	0.15	-46.25	-25
3	30	1000	100	833.451	-54.01	-25
4	1000	15000	1000	14847.4	-38.86	-25



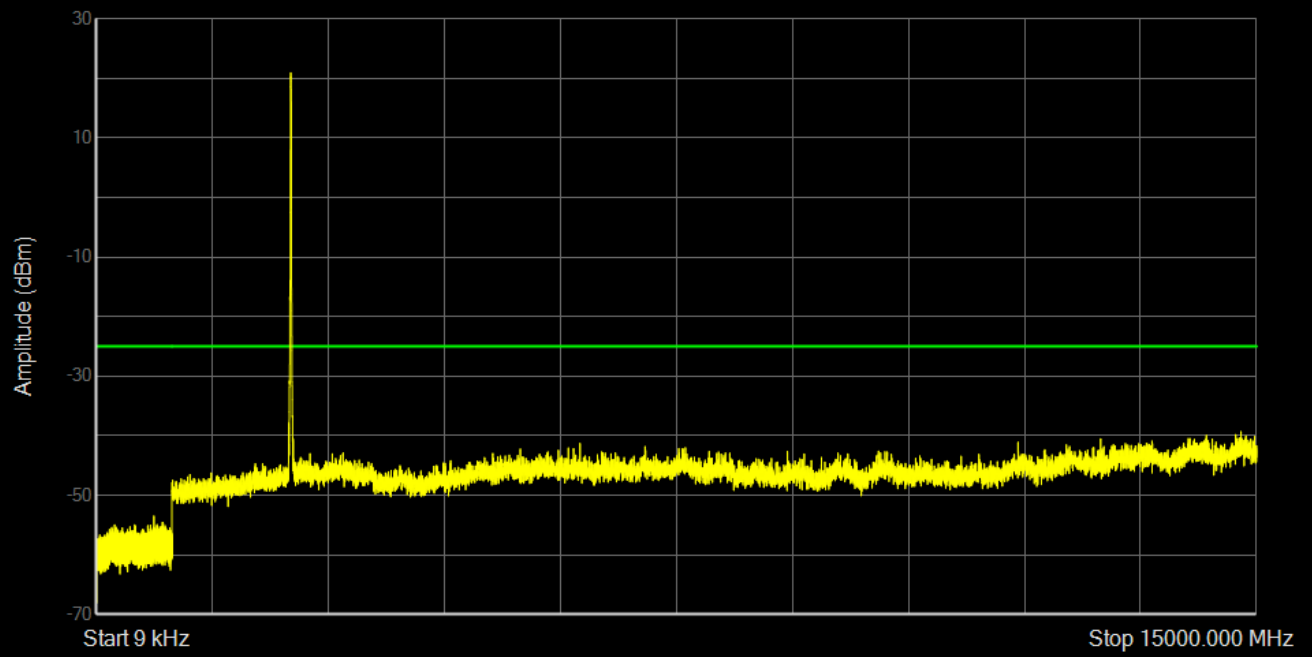
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0091551	-44.68	-25
2	0.15	30	10	0.15	-45.66	-25
3	30	1000	100	286.468	-54.24	-25
4	1000	15000	1000	14132	-39.82	-25



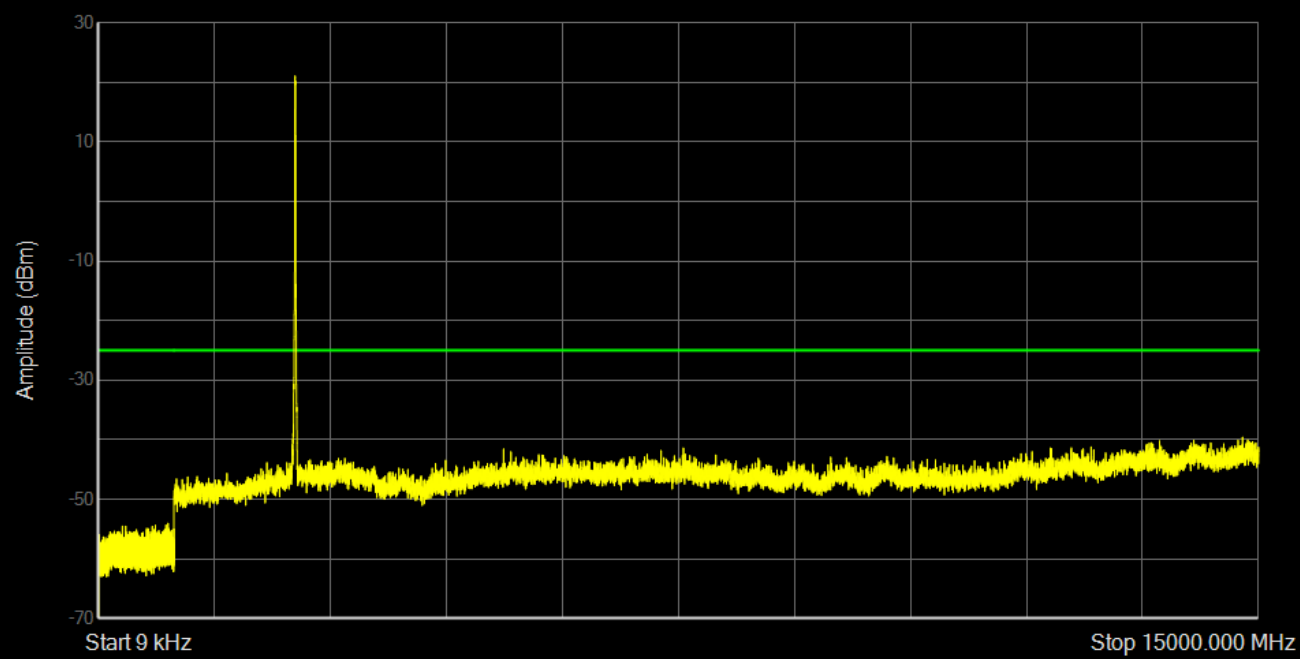
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0093807	-42.98	-25
2	0.15	30	10	0.152985	-46.75	-25
3	30	1000	100	221.672	-54.04	-25
4	1000	15000	1000	14818	-39.29	-25

LTE Band 7 high channel

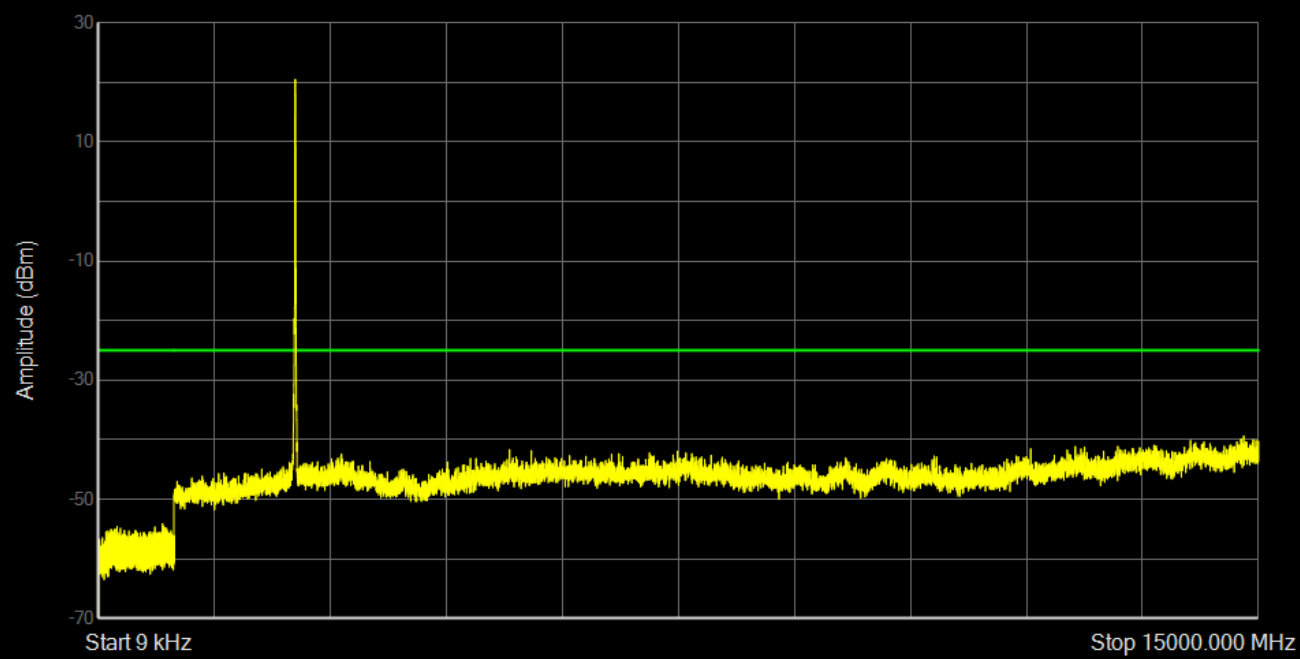
3MHz



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0112278	-43.83	-25
2	0.15	30	10	0.15	-46.52	-25
3	30	1000	100	766.909	-53.48	-25
4	1000	15000	1000	14798.4	-39.31	-25



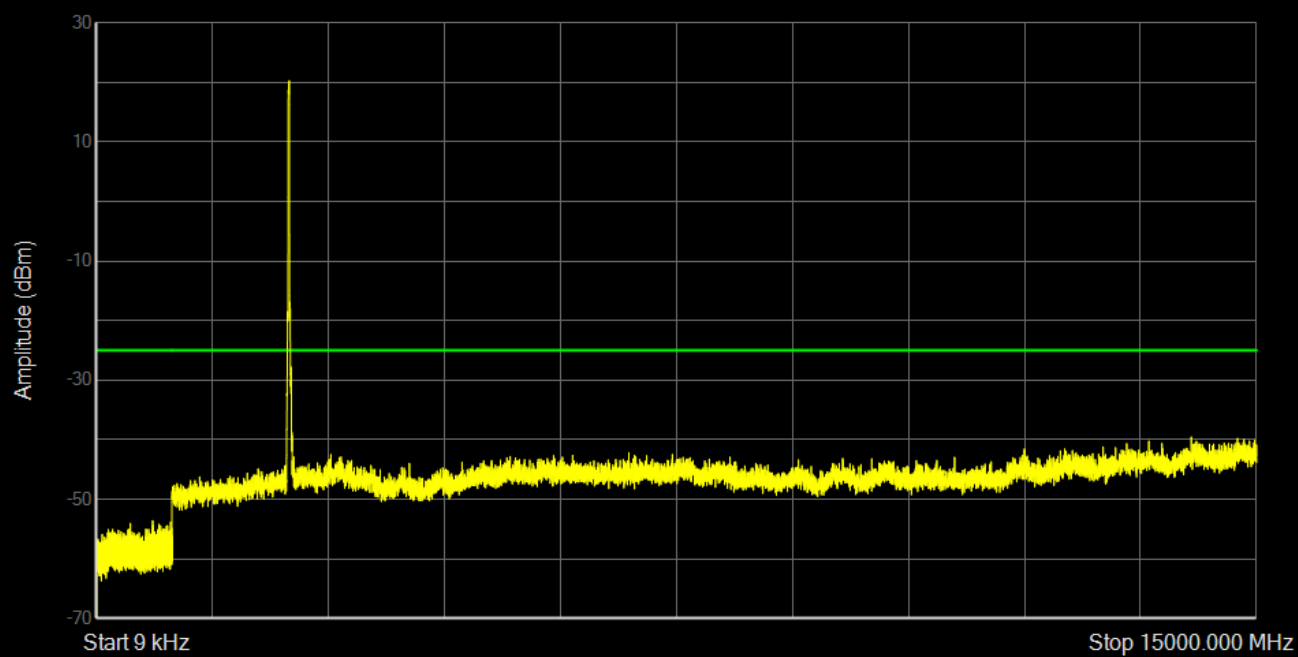
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0090282	-43.13	-25
2	0.15	30	10	0.152985	-47.67	-25
3	30	1000	100	923.176	-54.02	-25
4	1000	15000	1000	14792.8	-39.57	-25



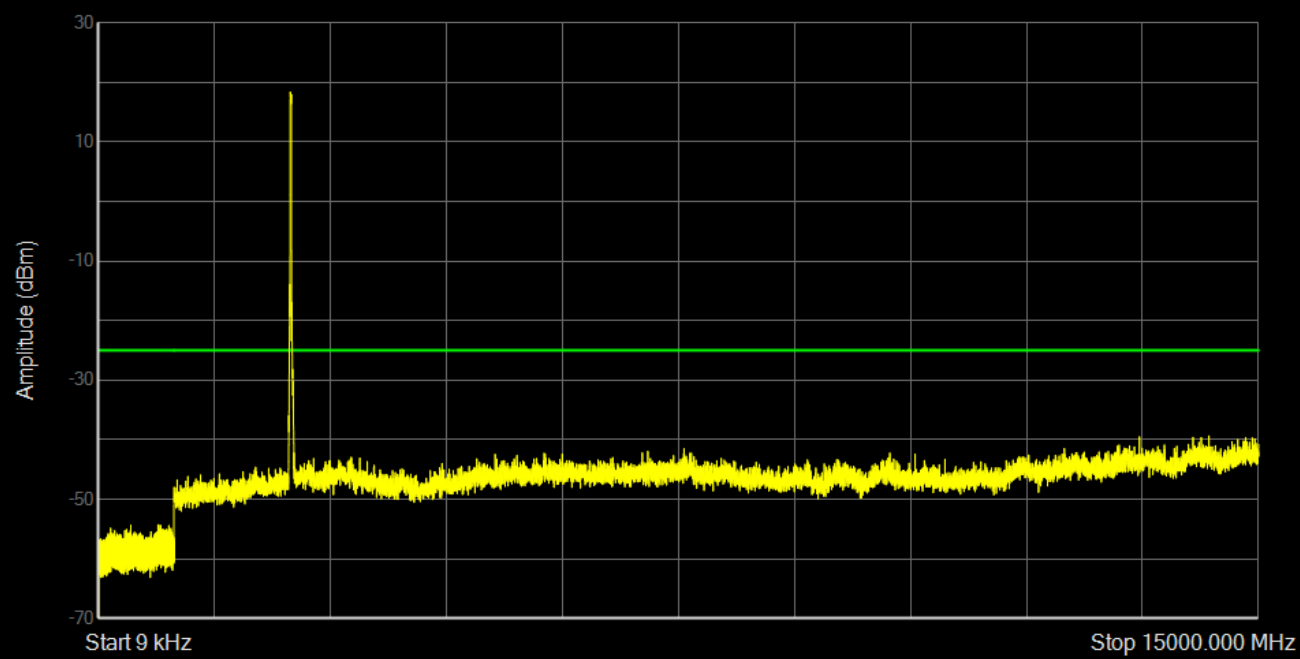
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.009141	-43.68	-25
2	0.15	30	10	0.158955	-47.66	-25
3	30	1000	100	854.015	-54.08	-25
4	1000	15000	1000	14808.2	-39.36	-25

LTE Band 7 high channel

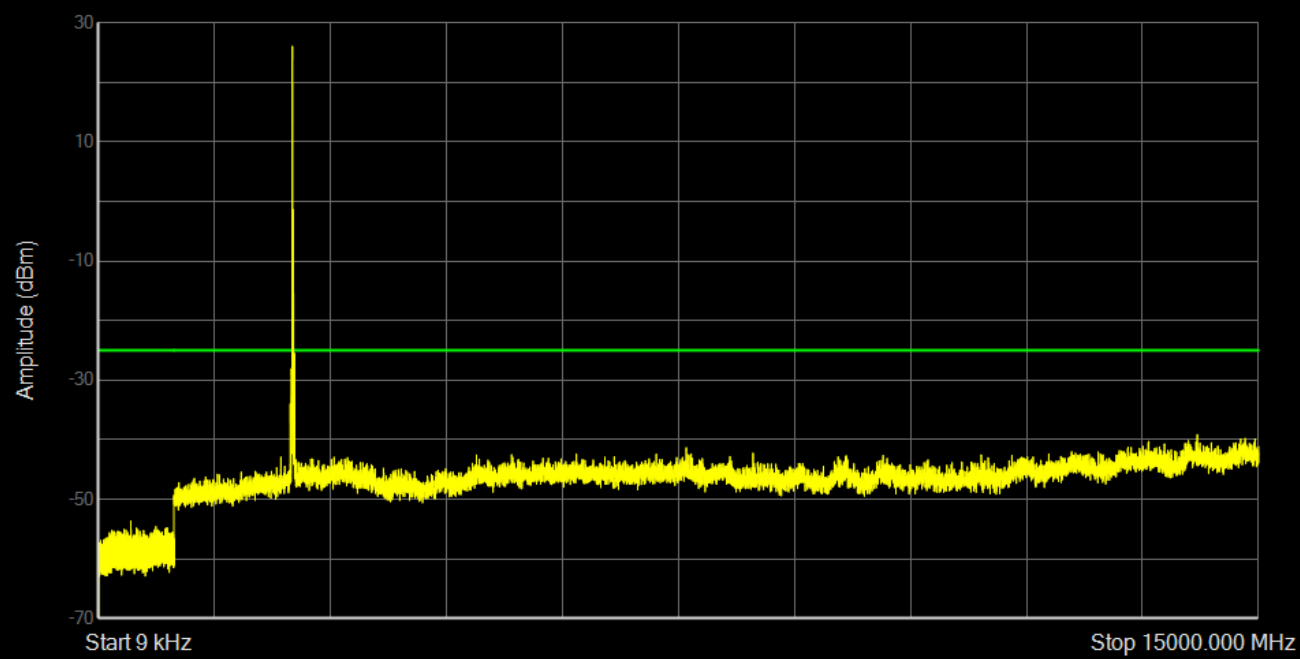
5MHz



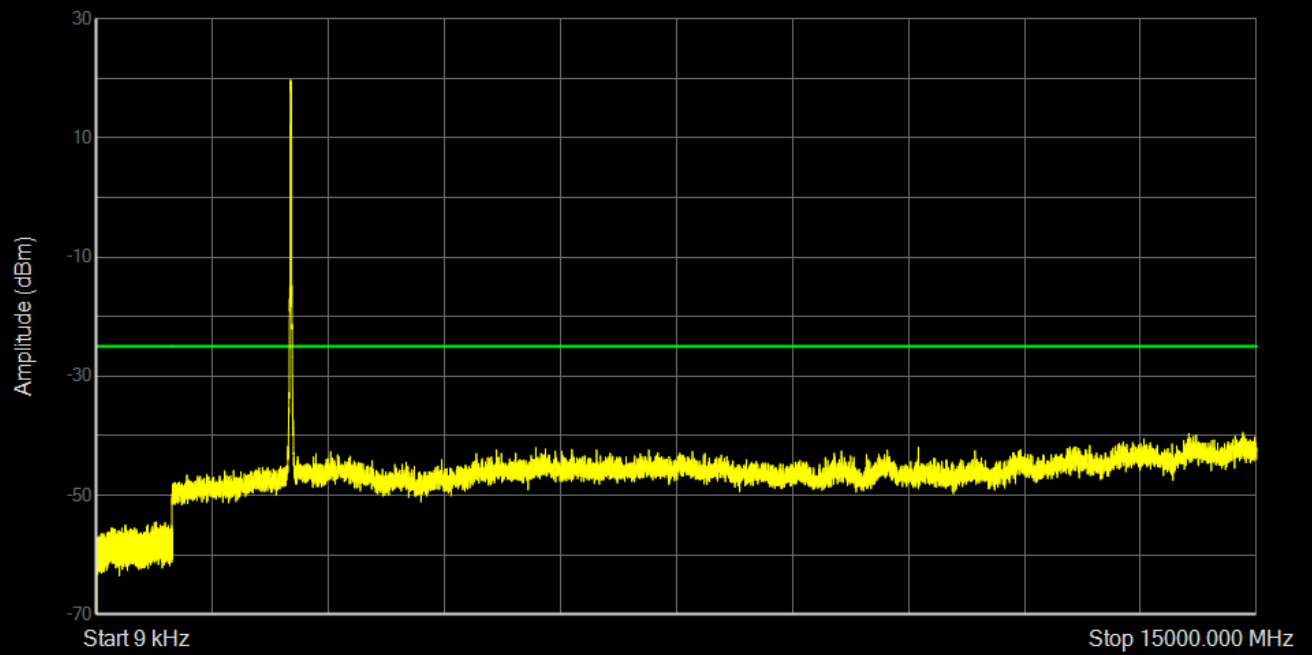
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0091692	-44.11	-25
2	0.15	30	10	0.152985	-47.64	-25
3	30	1000	100	752.262	-53.6	-25
4	1000	15000	1000	14157.2	-39.55	-25



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.009	-45.09	-25
2	0.15	30	10	0.15	-47.18	-25
3	30	1000	100	795.136	-54.27	-25
4	1000	15000	1000	14358.8	-39.36	-25



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0093807	-43.3	-25
2	0.15	30	10	0.16791	-48.06	-25
3	30	1000	100	443.414	-53.65	-25
4	1000	15000	1000	14209	-39.13	-25



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0091974	-43.38	-25
2	0.15	30	10	0.152985	-47.63	-25
3	30	1000	100	798.046	-54.47	-25
4	1000	15000	1000	14823.6	-39.48	-25

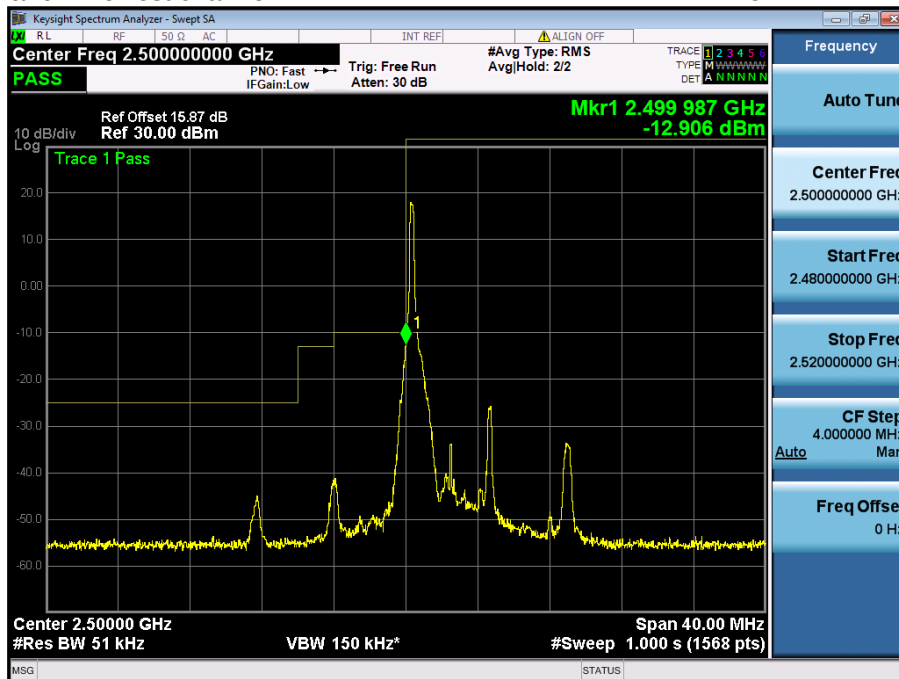
1.3. Conducted Out of Band Emissions

1.3.1. Test Result

The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency. The lowest, middle and highest channels are tested to verify the out of band emissions.

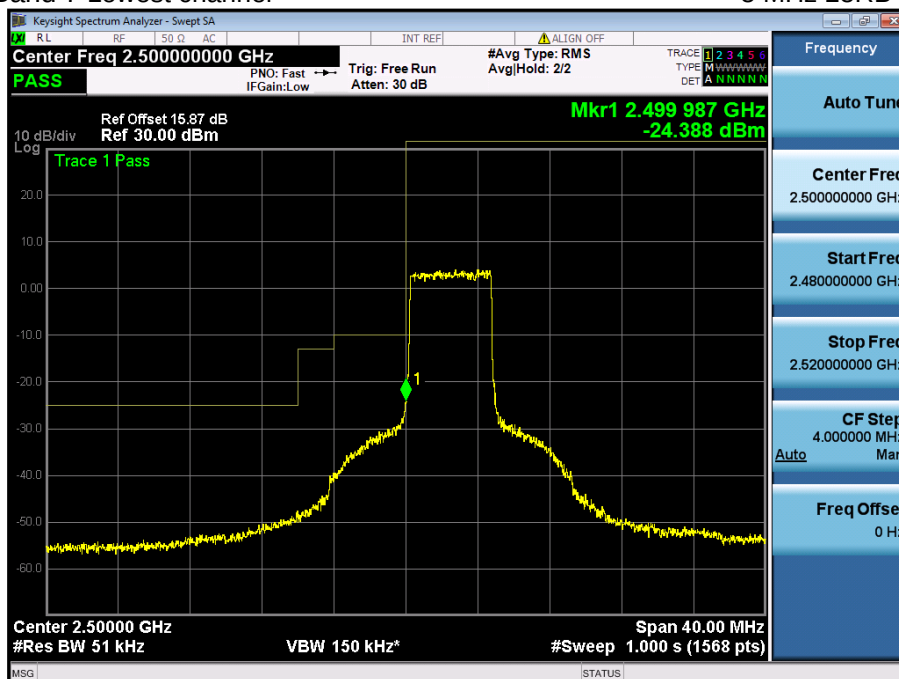
LTE Band 7 Lowest channel

5 MHz 1RB



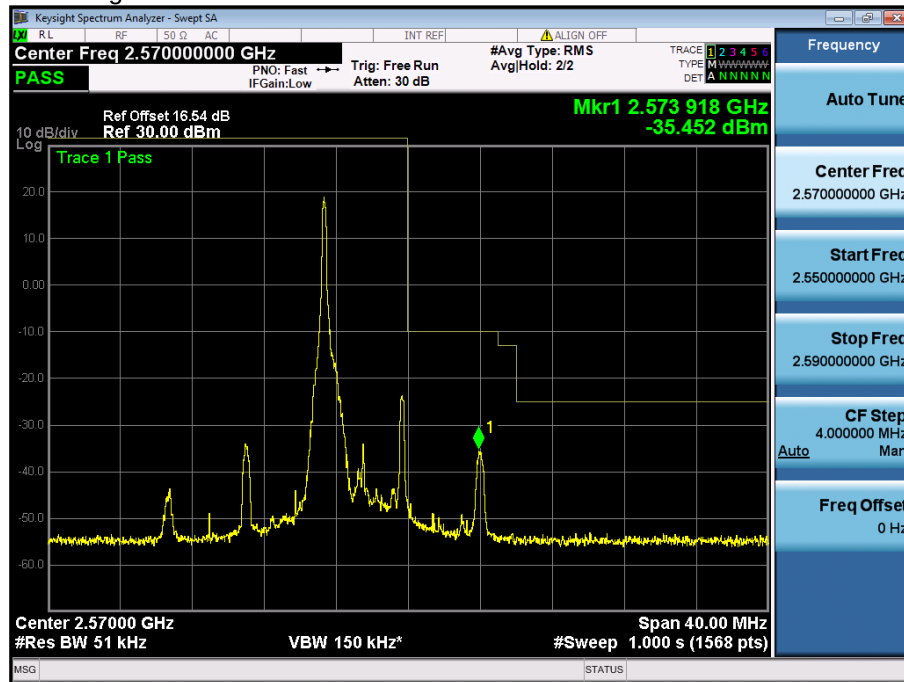
LTE Band 7 Lowest channel

5 MHz 25RB



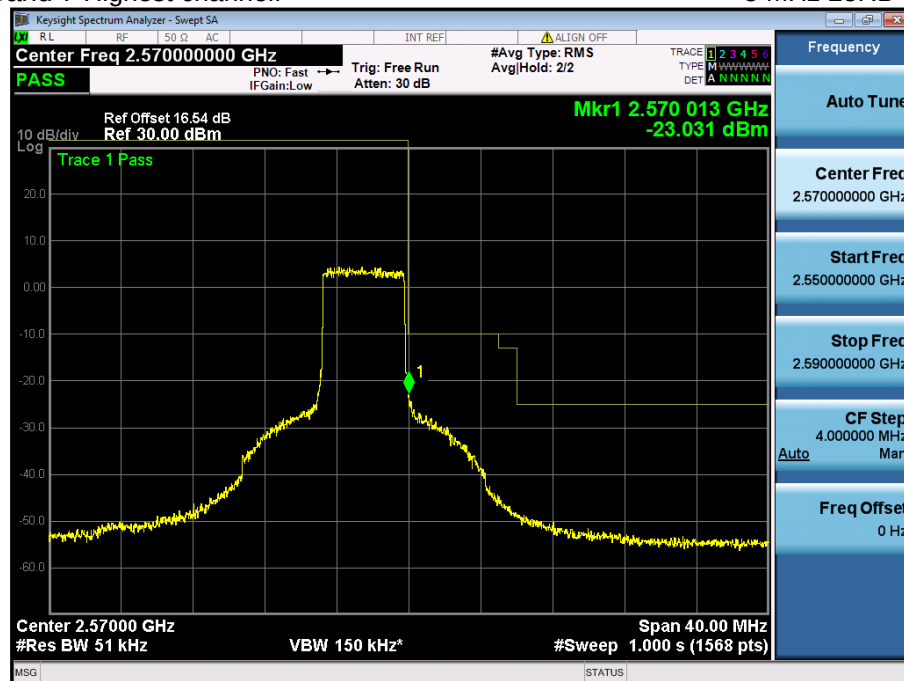
LTE Band 7 Highest channel:

5 MHz 1RB



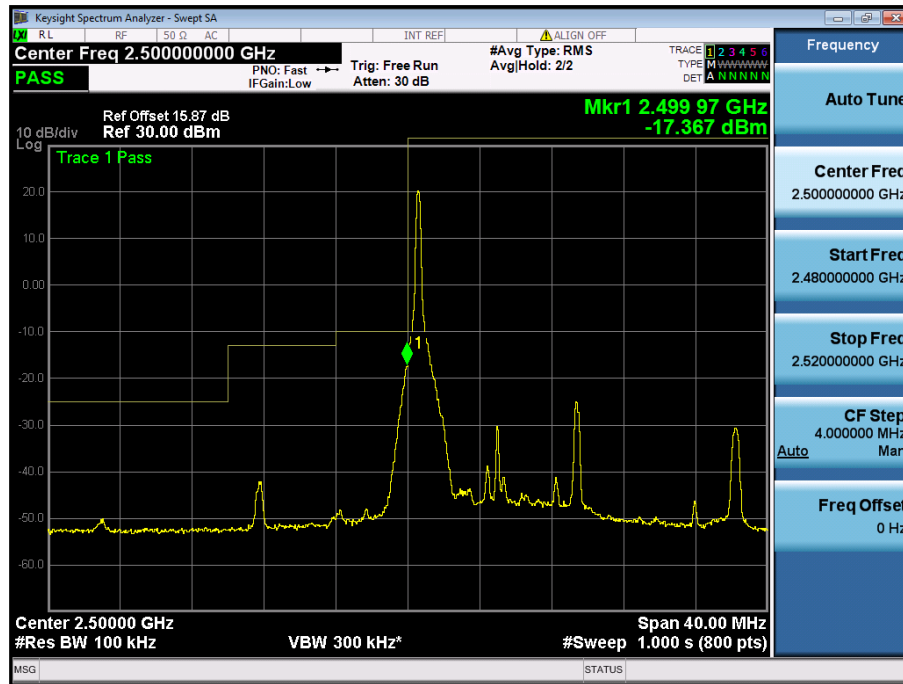
LTE Band 7 Highest channel:

5 MHz 25RB



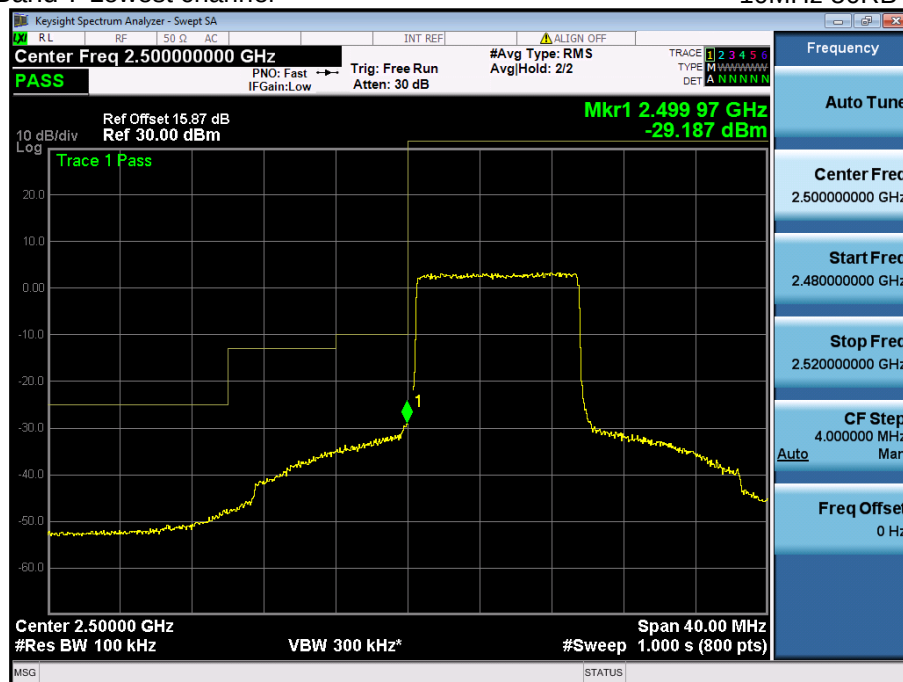
LTE Band 7 Lowest channel

10MHz 1RB



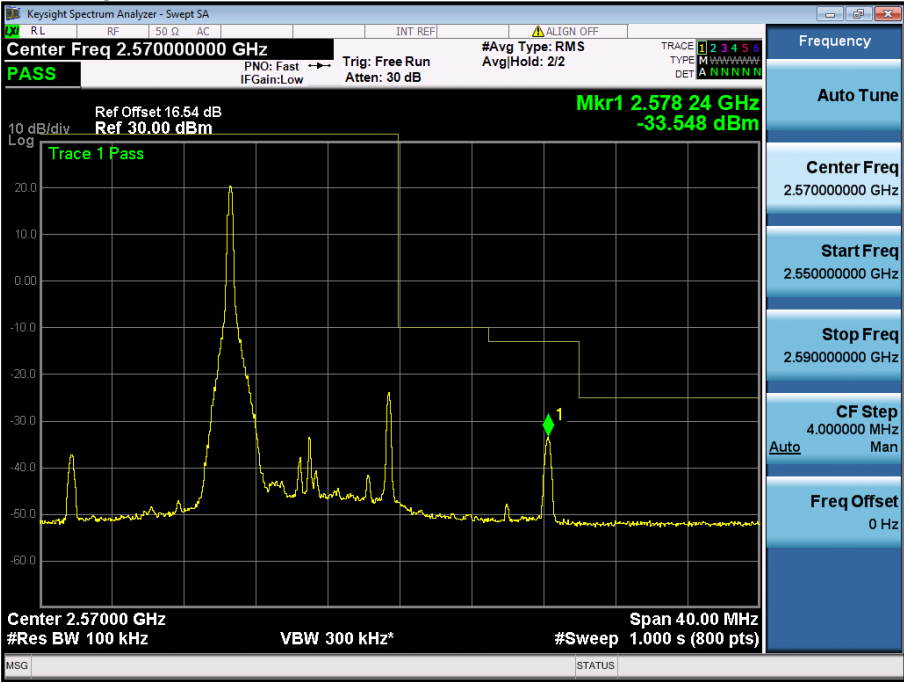
LTE Band 7 Lowest channel

10MHz 50RB



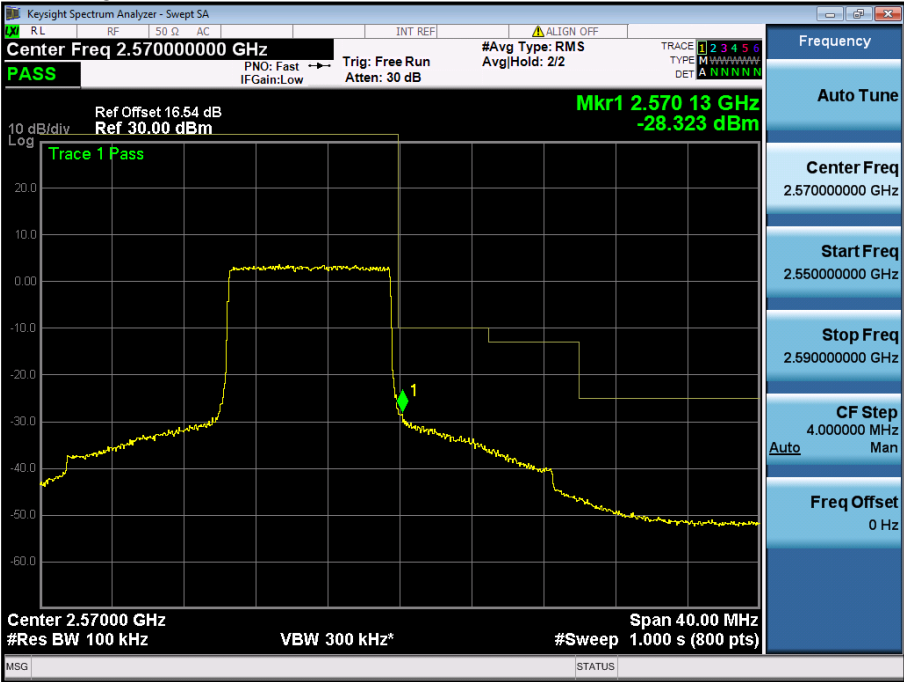
LTE Band 7 Highest channel:

10MHz 1RB



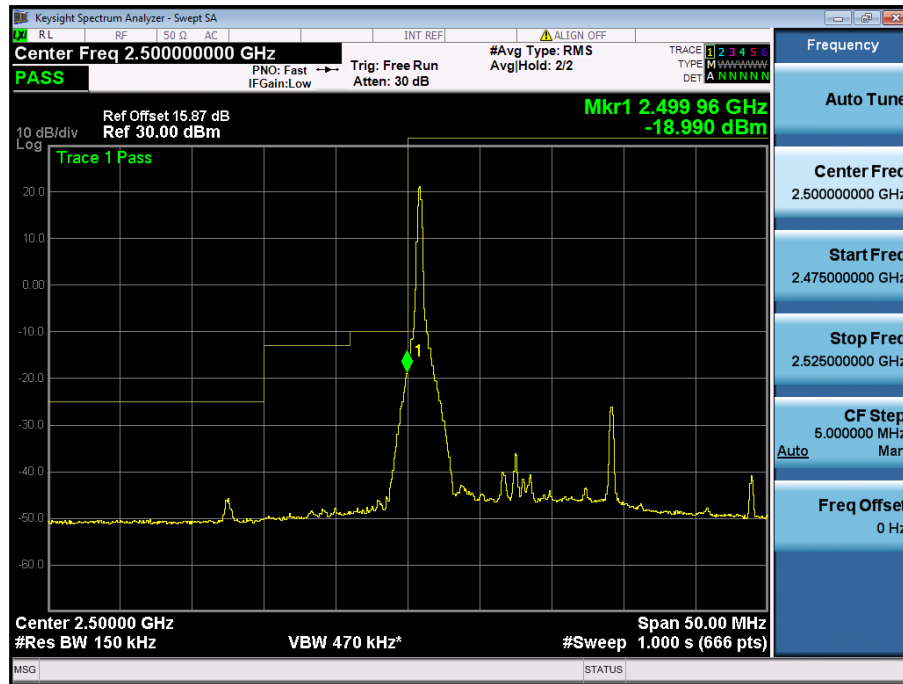
LTE Band 7 Highest channel:

10MHz 50RB



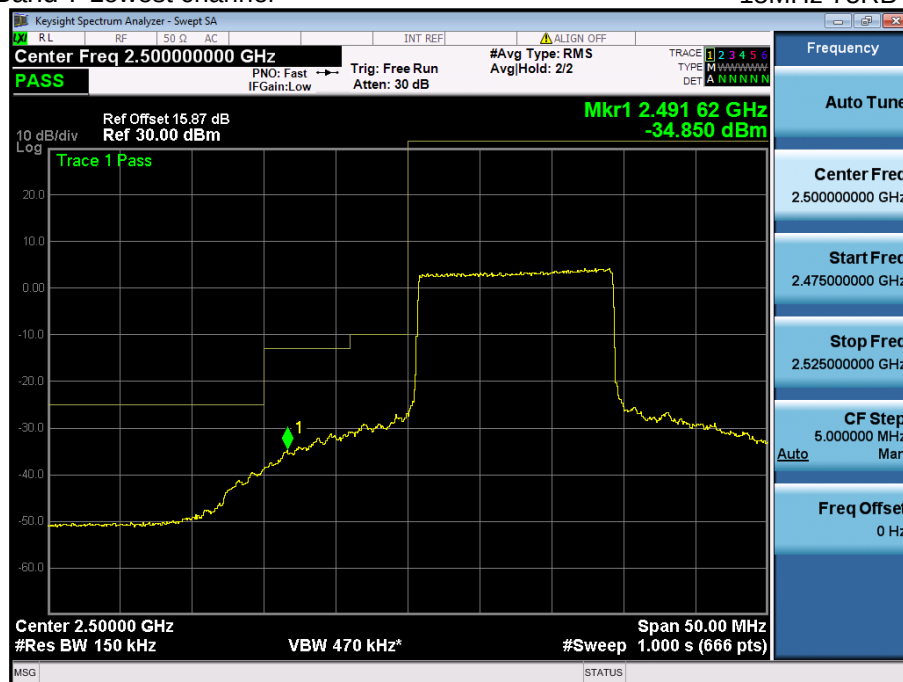
LTE Band 7 Lowest channel

15MHz 1RB



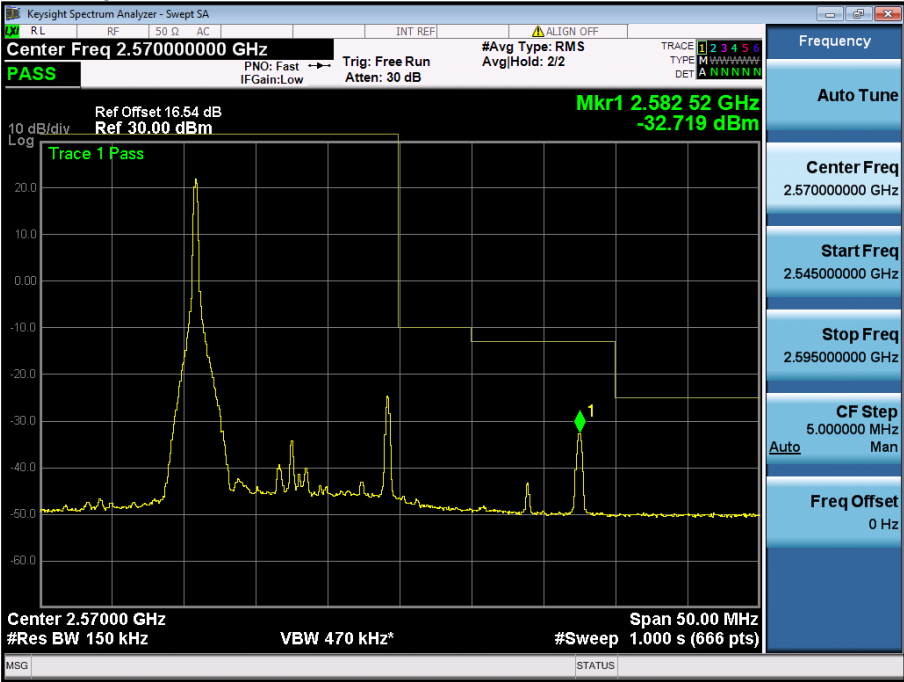
LTE Band 7 Lowest channel

15MHz 75RB



LTE Band 7 Highest channel:

15MHz 1RB



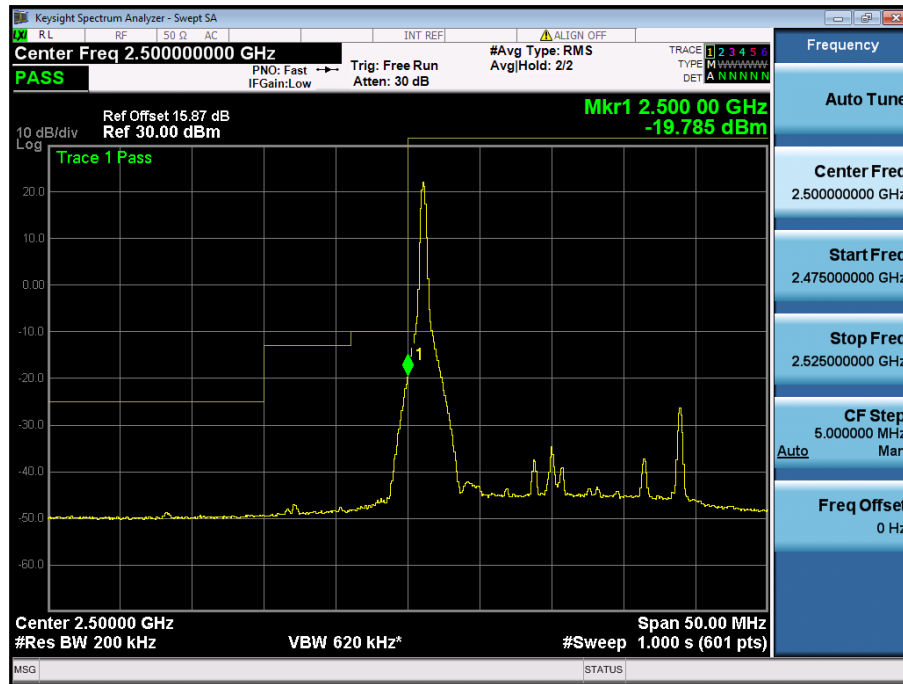
LTE Band 7 Highest channel:

15MHz 75RB



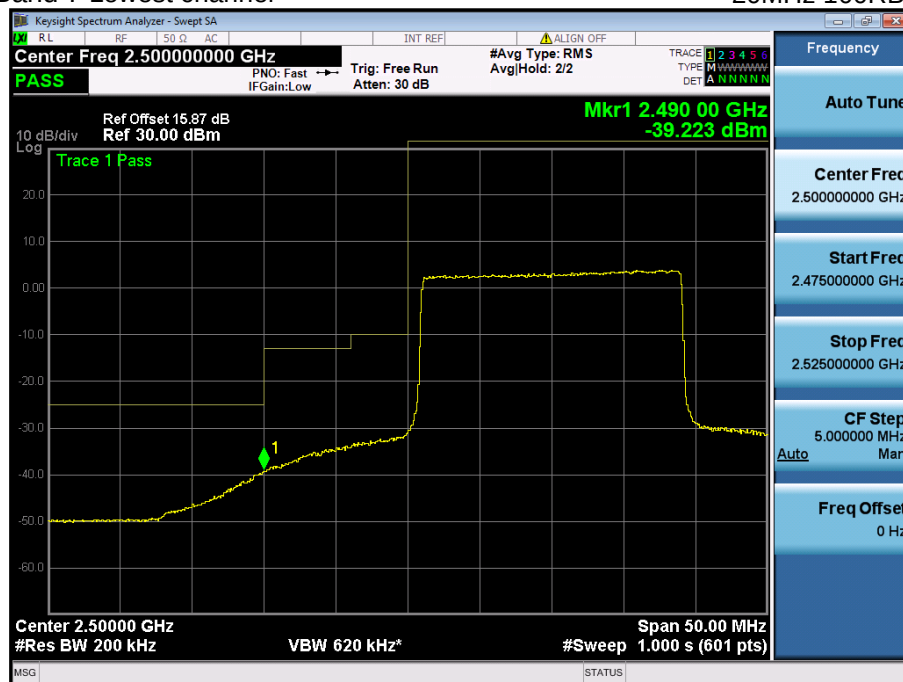
LTE Band 7 Lowest channel

20MHz 1RB



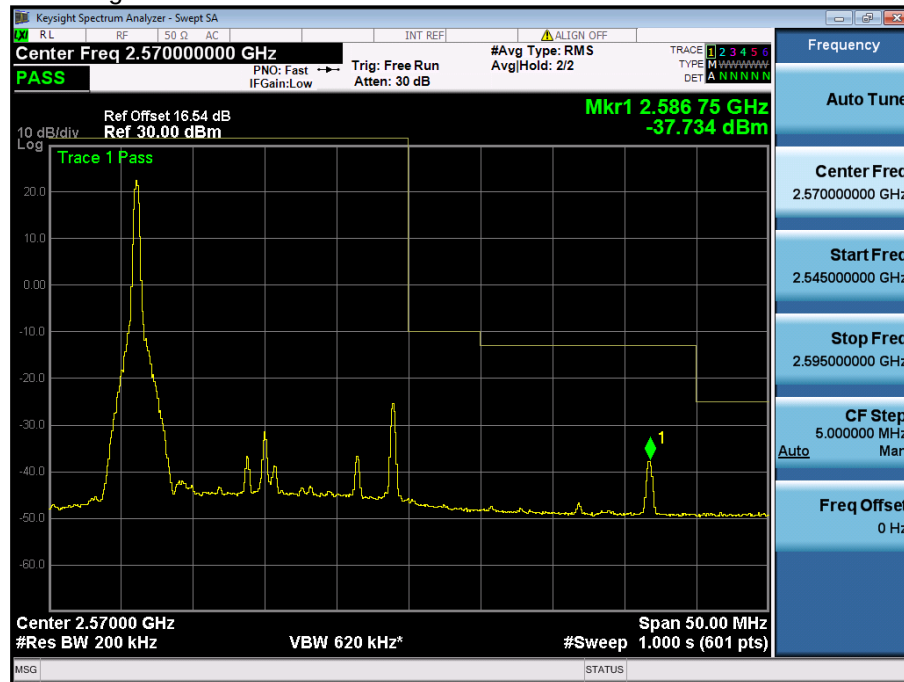
LTE Band 7 Lowest channel

20MHz 100RB



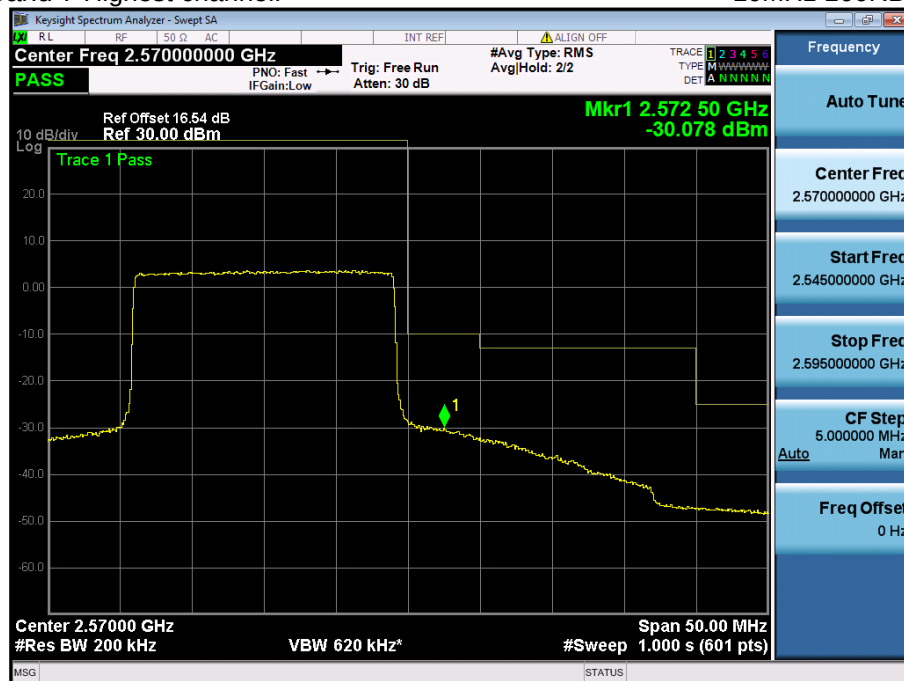
LTE Band 7 Highest channel:

20MHz 1RB



LTE Band 7 Highest channel:

10MHz 100RB



***** END *****