

FCC Test Report

ANNEX 6 LTE BAND 5

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 5 1.4MHz	QPSK	824.7	1.0985	1.331
		836.5	1.0966	1.321
		848.3	1.1043	1.333
LTE Band 5 1.4 MHz	16-QAM	824.7	1.1004	1.300
		836.5	1.0909	1.282
		848.3	1.1012	1.329
LTE Band 5 3 MHz	QPSK	825.5	2.6796	2.850
		836.5	2.6825	2.857
		847.5	2.6886	2.992
LTE Band 5 3 MHz	16-QAM	825.5	2.6784	2.872
		836.5	2.6762	2.855
		847.5	2.6773	2.875
LTE Band 5 5 MHz	QPSK	826.5	4.5382	4.990
		836.5	4.5234	4.971
		846.5	4.5293	4.994
LTE Band 5 5 MHz	16-QAM	826.5	4.5219	4.990
		836.5	4.5286	4.999
		846.5	4.5479	4.996
LTE Band 5 10 MHz	QPSK	829	8.9629	10.110
		836.5	8.9466	9.848
		844	8.9611	9.990
LTE Band 5 10 MHz	16-QAM	829	8.9582	9.690
		836.5	8.9635	9.878
		844	8.9640	9.990

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

Test plot as follows:

LTE Band 5 Lowest channel

1.4 MHz QPSK



LTE Band 5 Middle channel

1.4 MHz QPSK



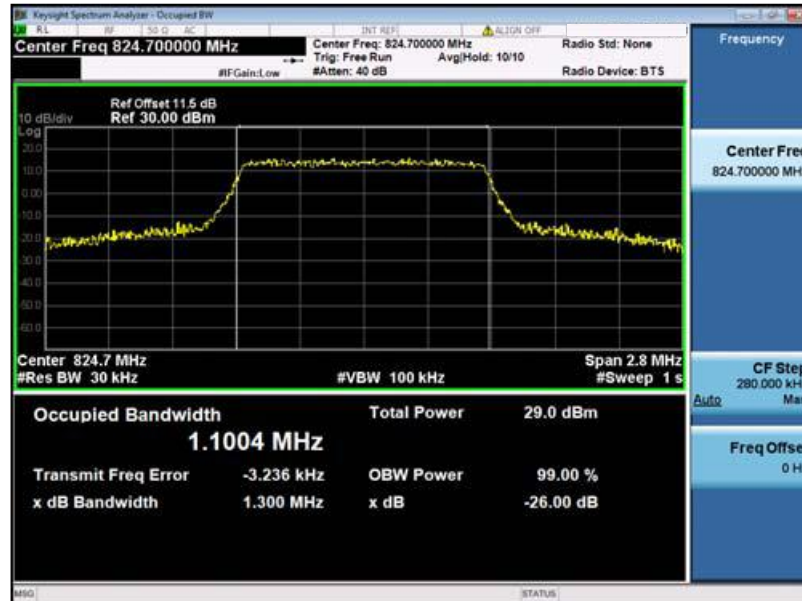
LTE Band 5 Highest channel:

1.4 MHz QPSK



LTE Band 5 Lowest channel

1.4 MHz 16-QAM



LTE Band 5 Middle channel

1.4 MHz 16-QAM



LTE Band 5 Highest channel:

1.4 MHz 16-QAM



LTE Band 5 Lowest channel

3 MHz QPSK



LTE Band 5 Middle channel

3 MHz QPSK



LTE Band 5 Highest channel:

3 MHz QPSK



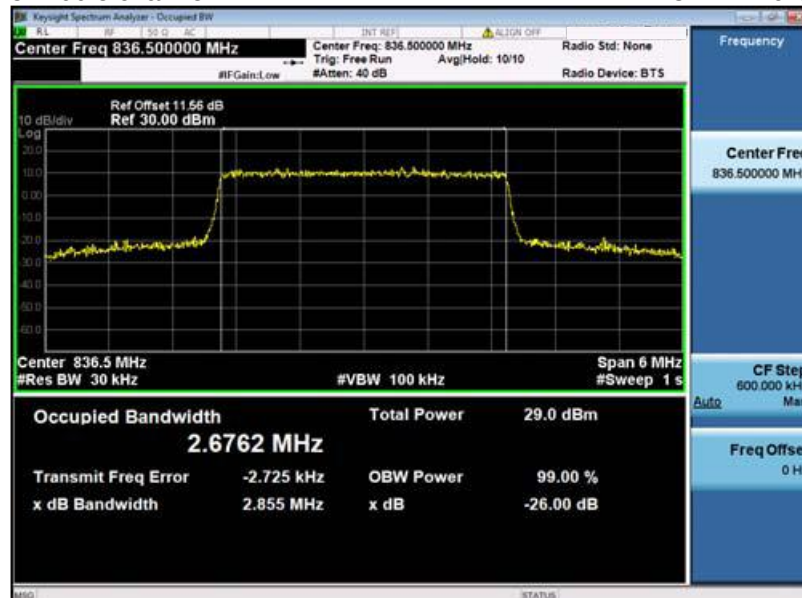
LTE Band 5 Lowest channel

3 MHz 16-QAM



LTE Band 5 Middle channel

3 MHz 16-QAM



LTE Band 5 Highest channel:

3 MHz 16-QAM



LTE Band 5 Lowest channel

5 MHz QPSK



LTE Band 5 Middle channel

5 MHz QPSK



LTE Band 5 Highest channel:

5 MHz QPSK



LTE Band 5 Lowest channel

5 MHz 16-QAM



LTE Band 5 Middle channel

5 MHz 16-QAM



LTE Band 5 Highest channel:

5 MHz 16-QAM



LTE Band 5 Lowest channel

10 MHz QPSK



LTE Band 5 Middle channel

10 MHz QPSK



LTE Band 5 Highest channel:

10 MHz QPSK



LTE Band 5 Lowest channel

10 MHz 16-QAM



LTE Band 5 Middle channel

10 MHz 16-QAM



LTE Band 5 Highest channel:

10 MHz 16-QAM



1.2. Conducted Spurious Emissions

1.2.1. Test Result

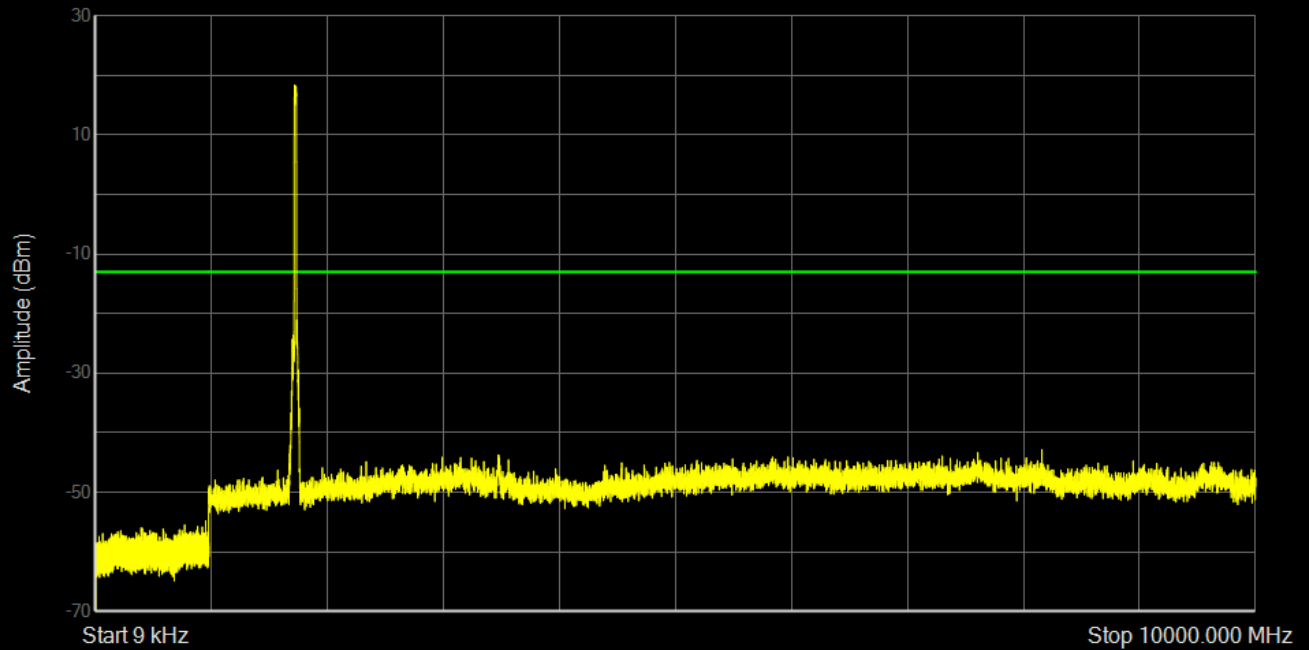
The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency. The lowest, middle and highest channels are tested to verify the out of band emissions.

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

Pass, the table and plot please see annex.

LTE Band 5 Lowest channel

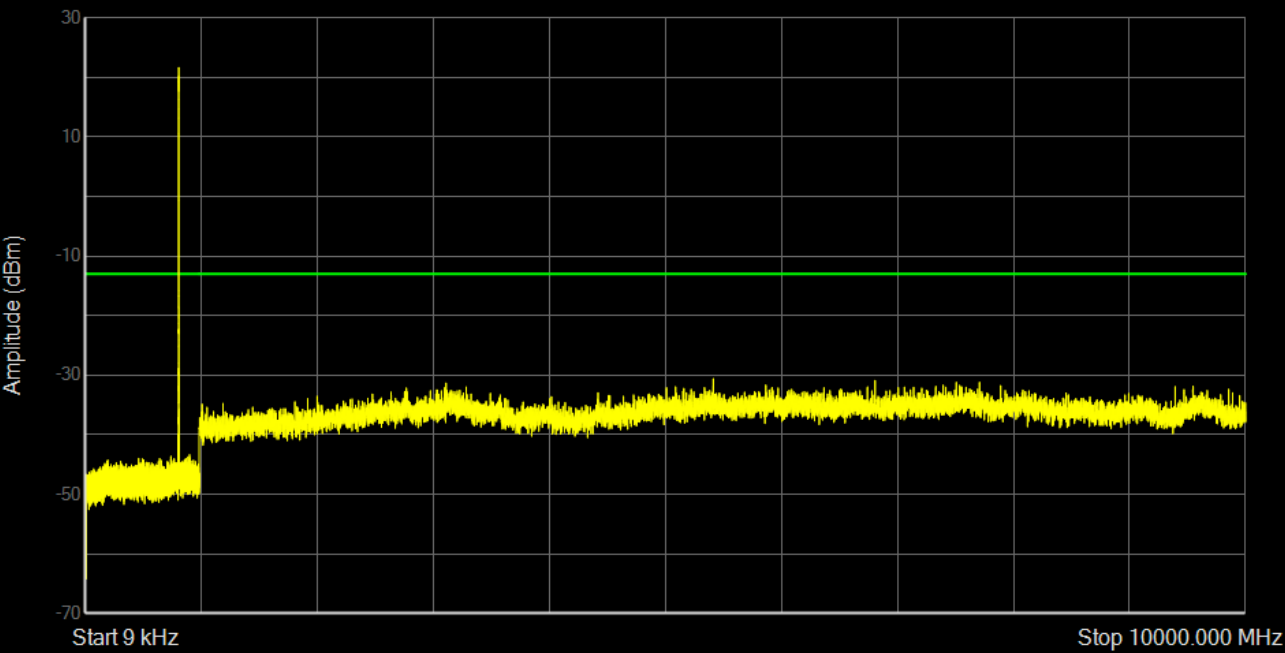
1.4MHz



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0090141	-45.41	-13
2	0.15	30	10	0.16194	-48.55	-13
3	30	1000	100	974.489	-54.8	-13
4	1000	10000	1000	8163.1	-42.81	-13

LTE Band 5 middle channel

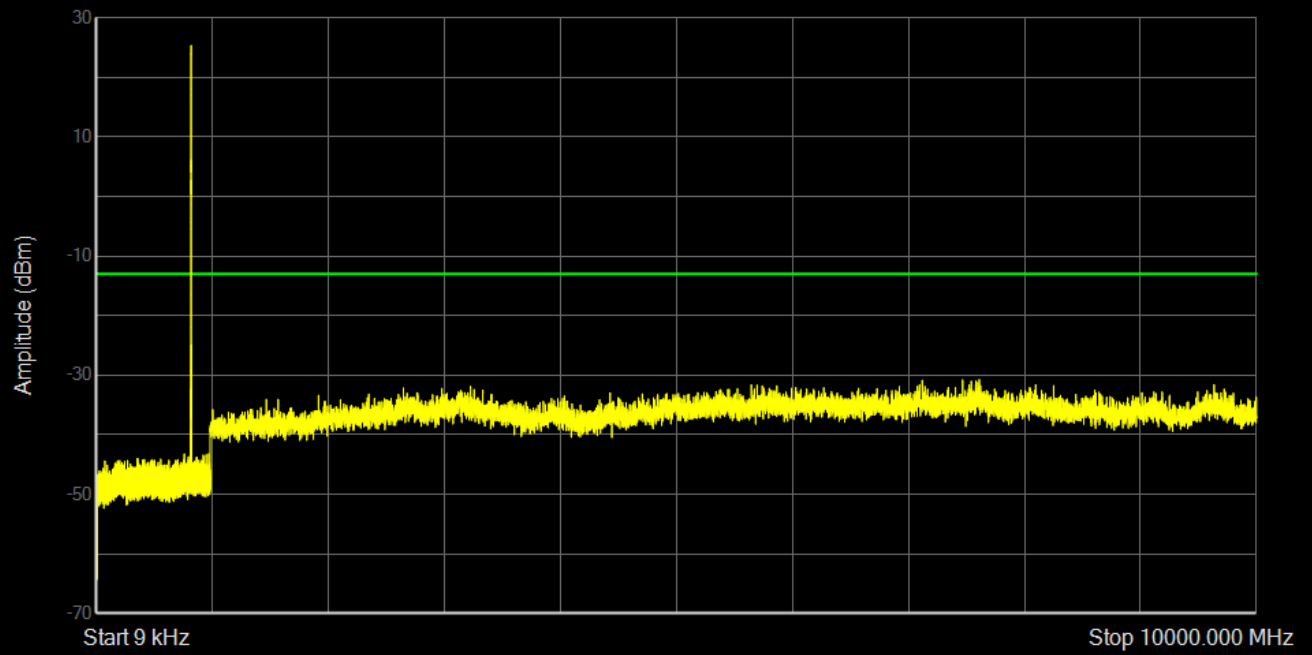
1.4MHz



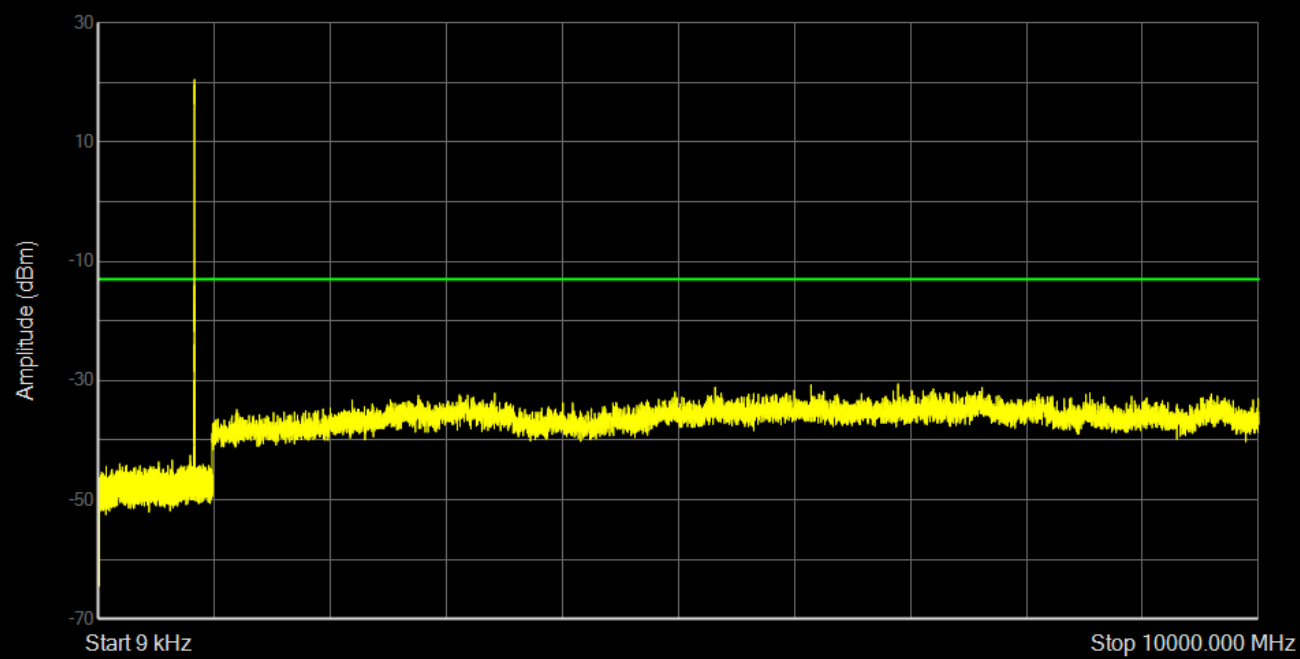
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0090282	-33.1	-13
2	0.15	30	10	0.152985	-35.67	-13
3	30	1000	100	917.647	-43.36	-13
4	1000	10000	1000	5421.7	-30.61	-13

LTE Band 5 high channel

1.4MHz



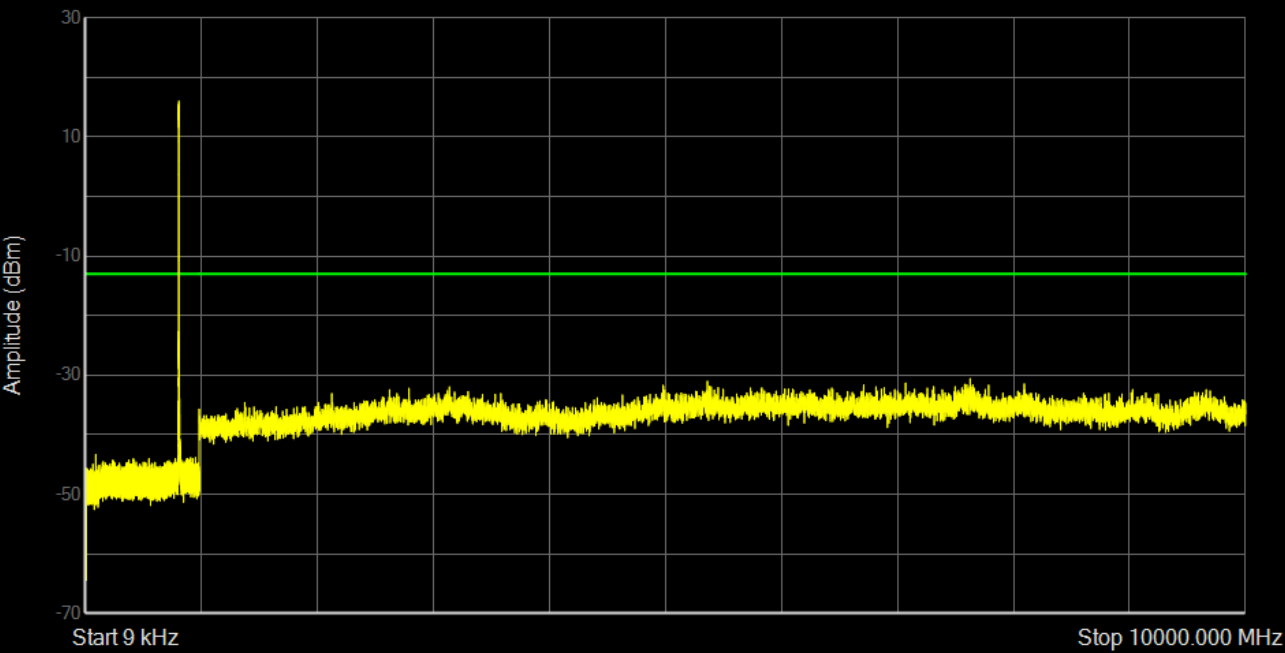
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.010692	-34.01	-13
2	0.15	30	10	0.16791	-35.39	-13
3	30	1000	100	988.457	-43.19	-13
4	1000	10000	1000	7615	-30.74	-13



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0111573	-32.87	-13
2	0.15	30	10	0.15597	-35.71	-13
3	30	1000	100	811.529	-42.53	-13
4	1000	10000	1000	6899.5	-30.56	-13

LTE Band 5 middle channel

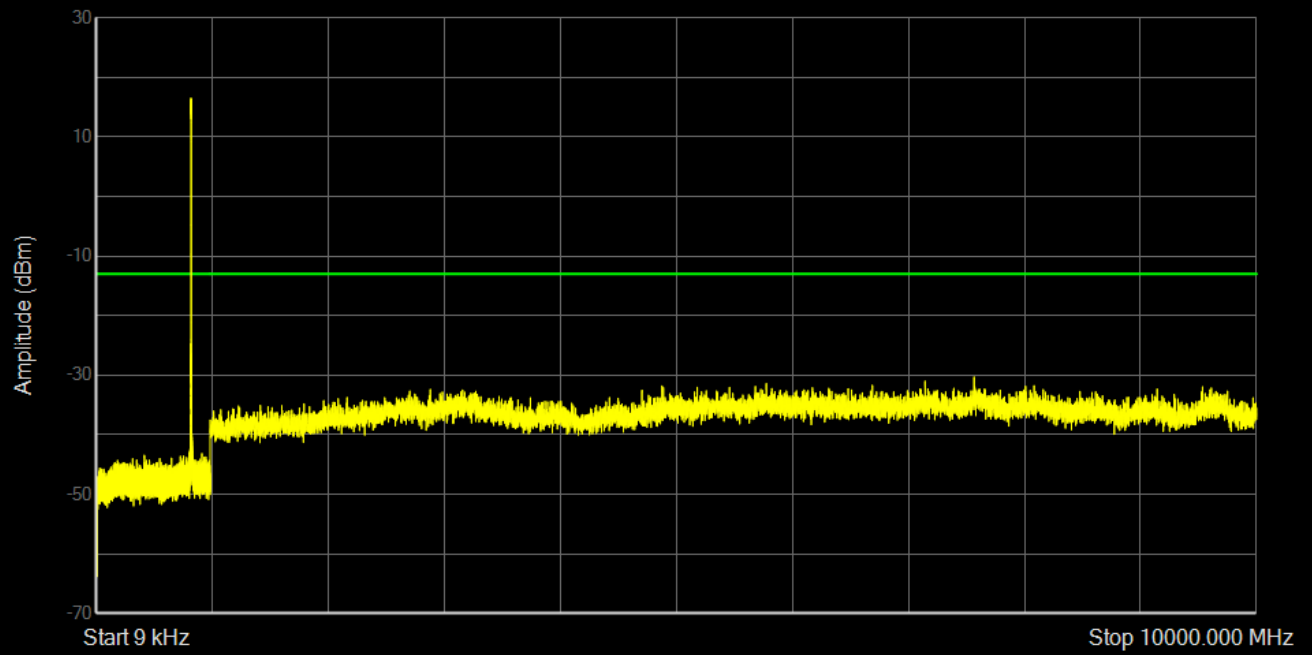
3MHz



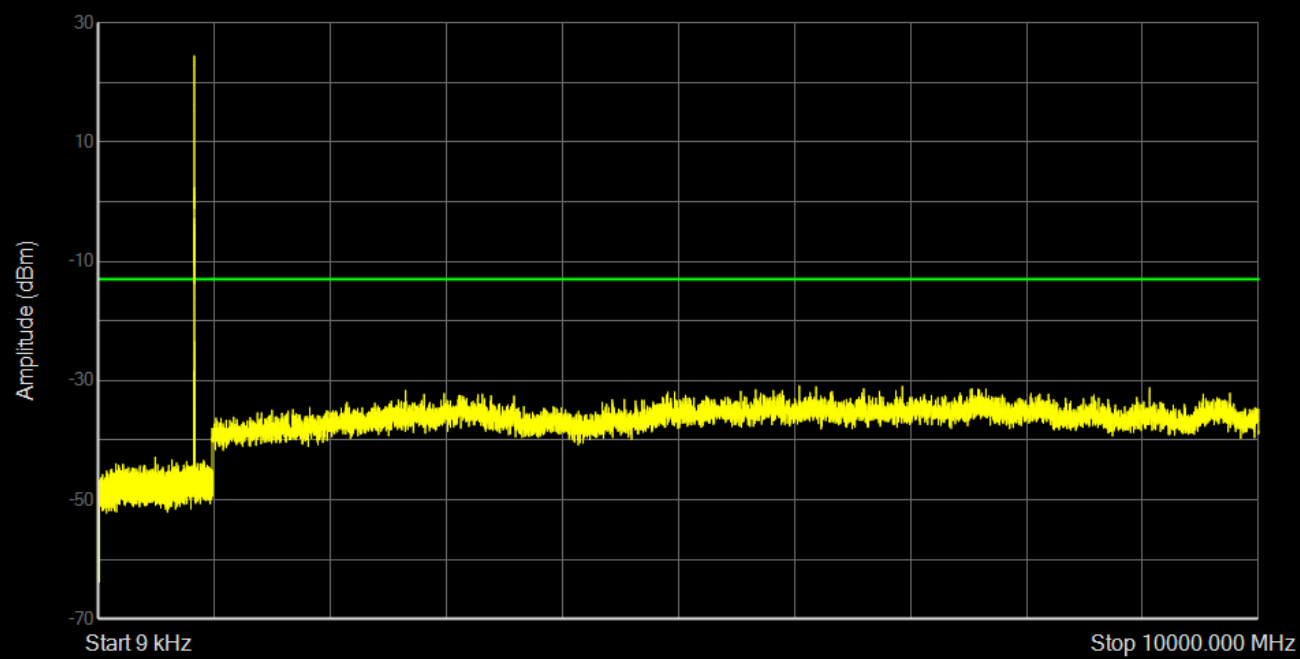
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.011961	-32.82	-13
2	0.15	30	10	0.16791	-36.84	-13
3	30	1000	100	111.674	-43.31	-13
4	1000	10000	1000	7631.2	-30.59	-13

LTE Band 5 high channel

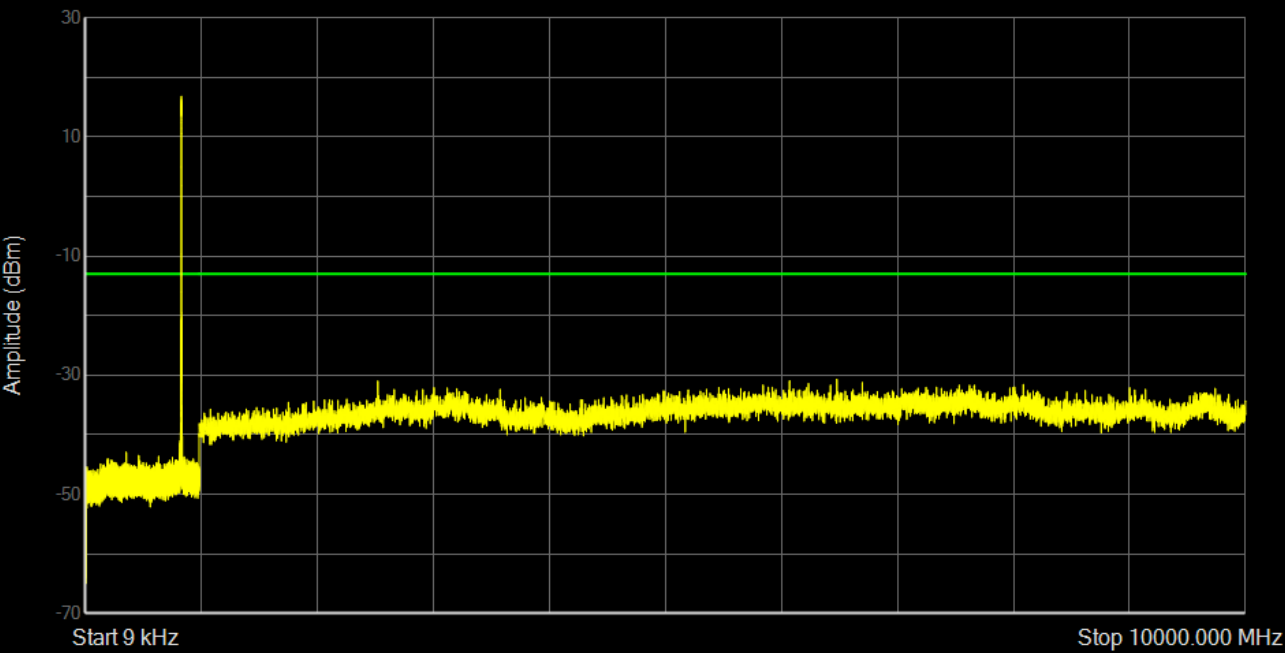
3MHz



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0099306	-30.73	-13
2	0.15	30	10	0.16194	-34.52	-13
3	30	1000	100	928.899	-43.16	-13
4	1000	10000	1000	7570	-30.32	-13



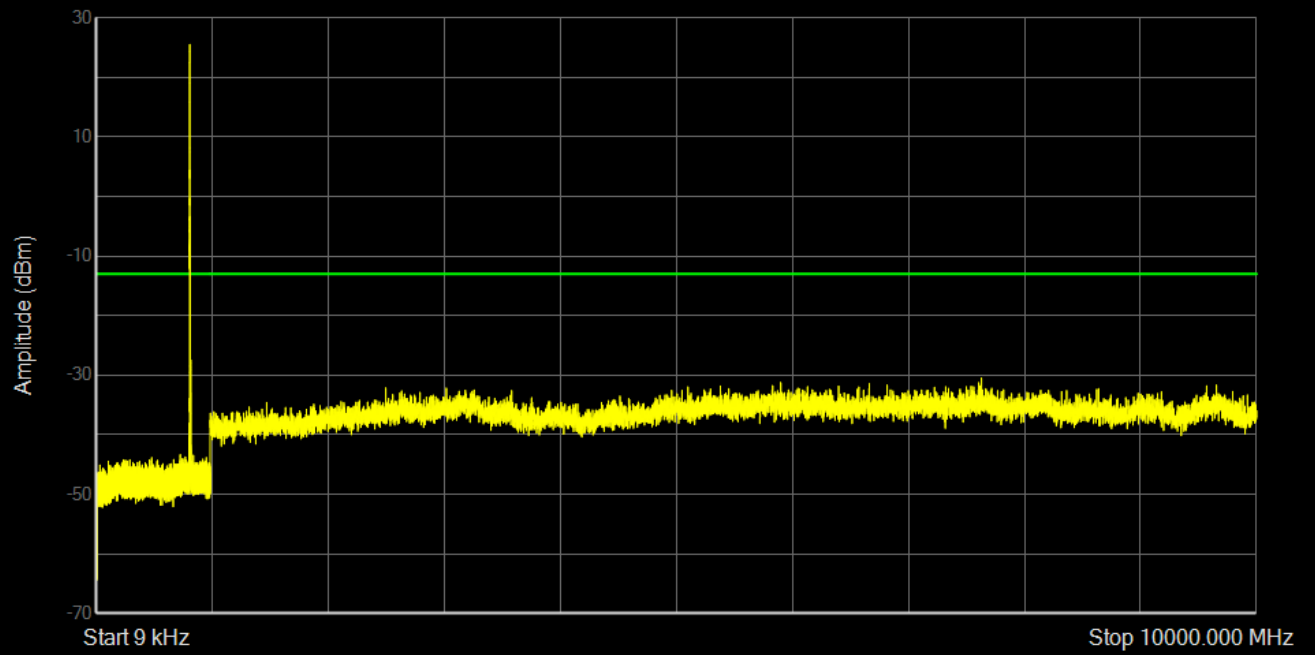
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.011256	-33.09	-13
2	0.15	30	10	0.152985	-35.84	-13
3	30	1000	100	511.12	-42.86	-13
4	1000	10000	1000	6049.9	-30.87	-13



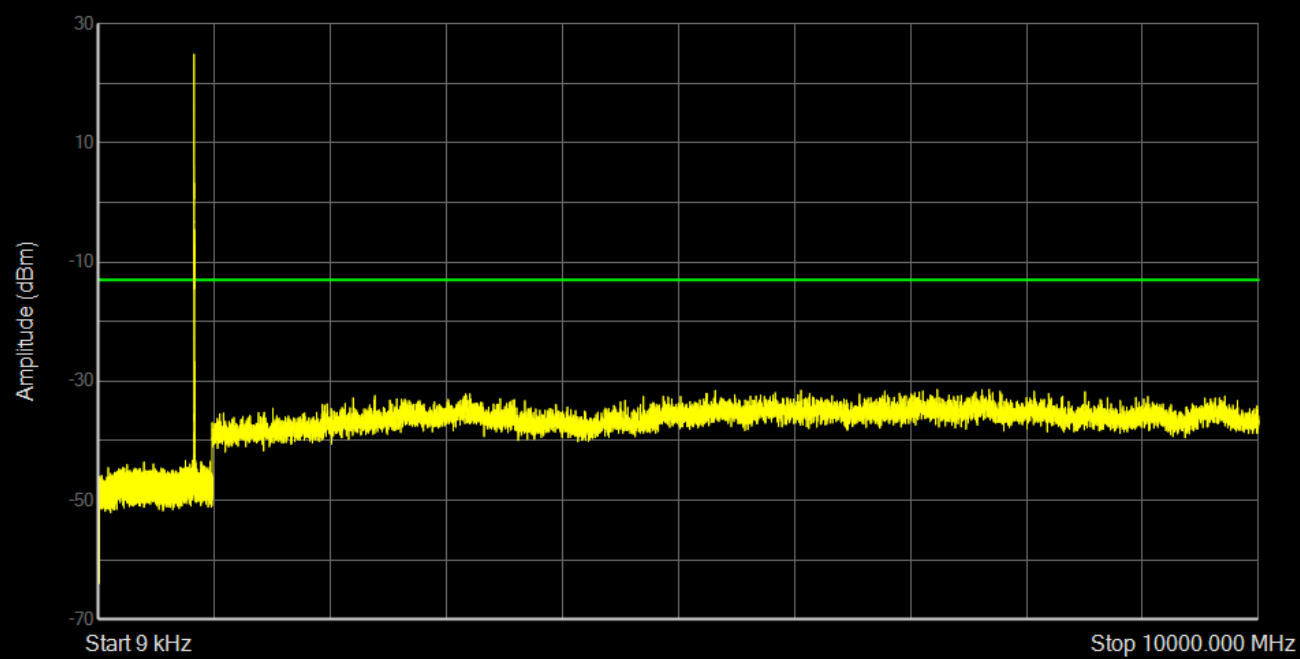
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.009	-32.42	-13
2	0.15	30	10	0.158955	-35.49	-13
3	30	1000	100	373.186	-42.93	-13
4	1000	10000	1000	6484.6	-30.69	-13

LTE Band 5 high channel

5MHz



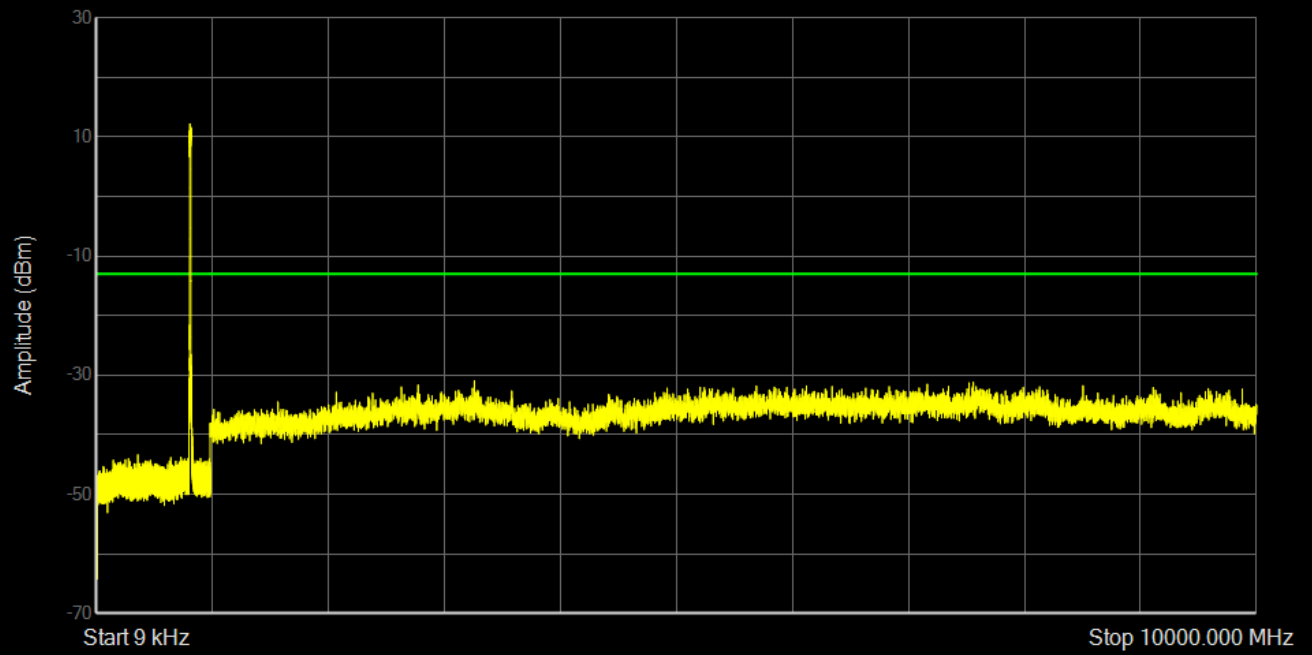
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.009	-34.25	-13
2	0.15	30	10	0.19179	-37.08	-13
3	30	1000	100	743.338	-43.34	-13
4	1000	10000	1000	7633	-30.46	-13



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0093807	-31.47	-13
2	0.15	30	10	0.15	-35.53	-13
3	30	1000	100	770.595	-43.37	-13
4	1000	10000	1000	7682.5	-31.38	-13

LTE Band 5 middle channel

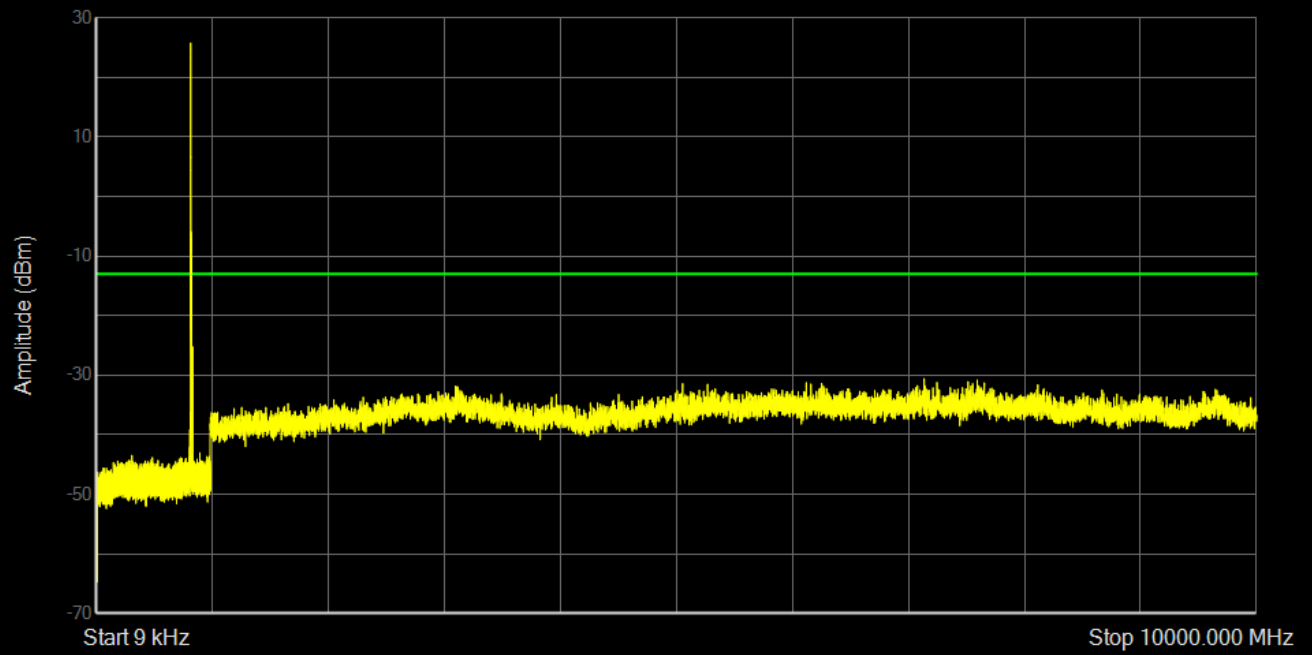
10MHz



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0094935	-34.17	-13
2	0.15	30	10	0.152985	-34.6	-13
3	30	1000	100	378.327	-43.4	-13
4	1000	10000	1000	3272.5	-30.93	-13

LTE Band 5 high channel

10MHz



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0098883	-31.92	-13
2	0.15	30	10	0.15597	-34.56	-13
3	30	1000	100	910.954	-43.05	-13
4	1000	10000	1000	7140.7	-30.6	-13

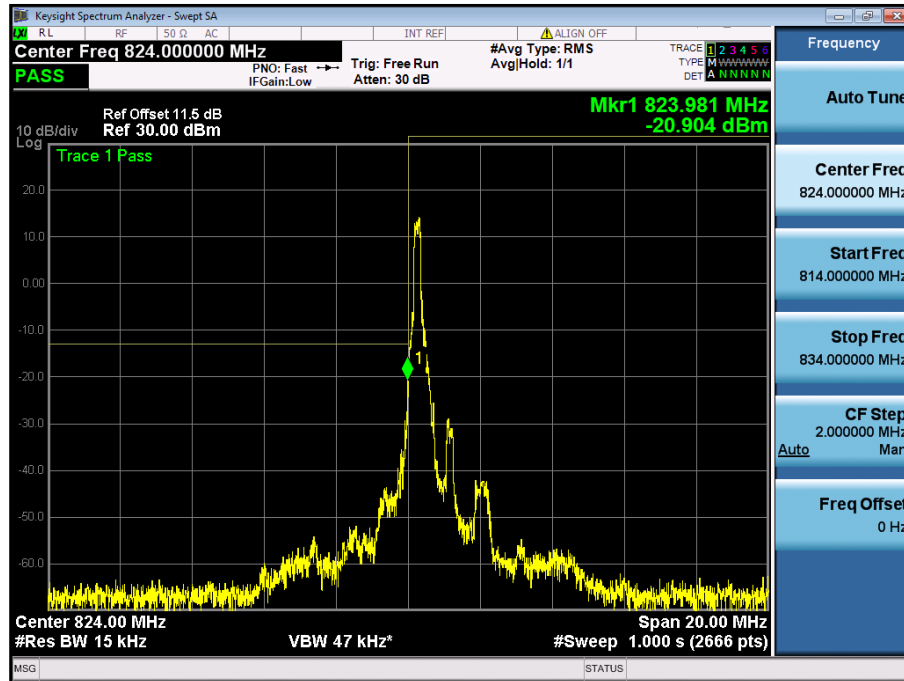
1.3. Conducted Out of Band Emissions

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.

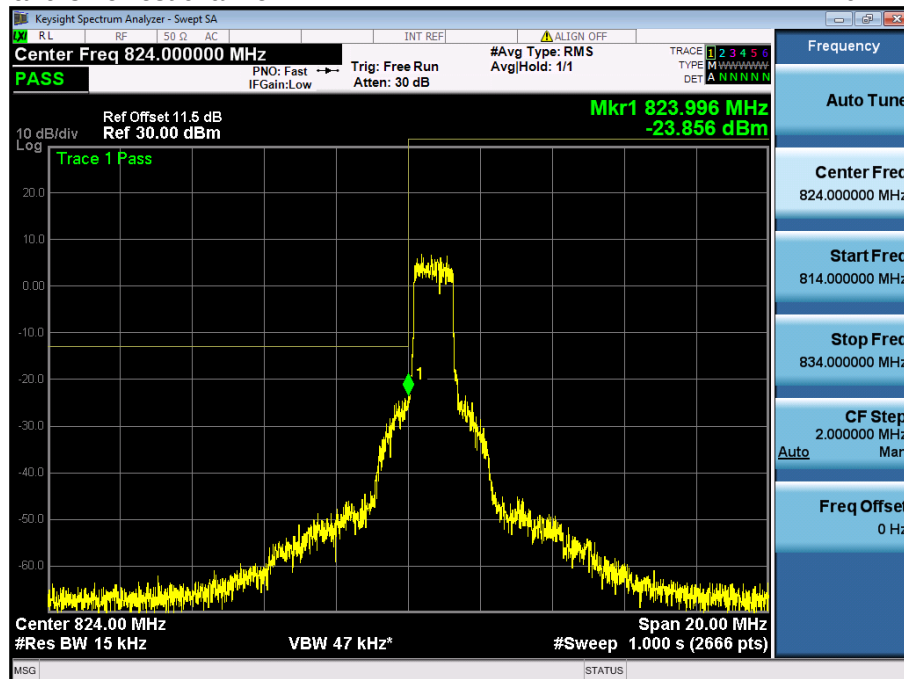
LTE Band 5 Lowest channel

1.4MHz 1RB



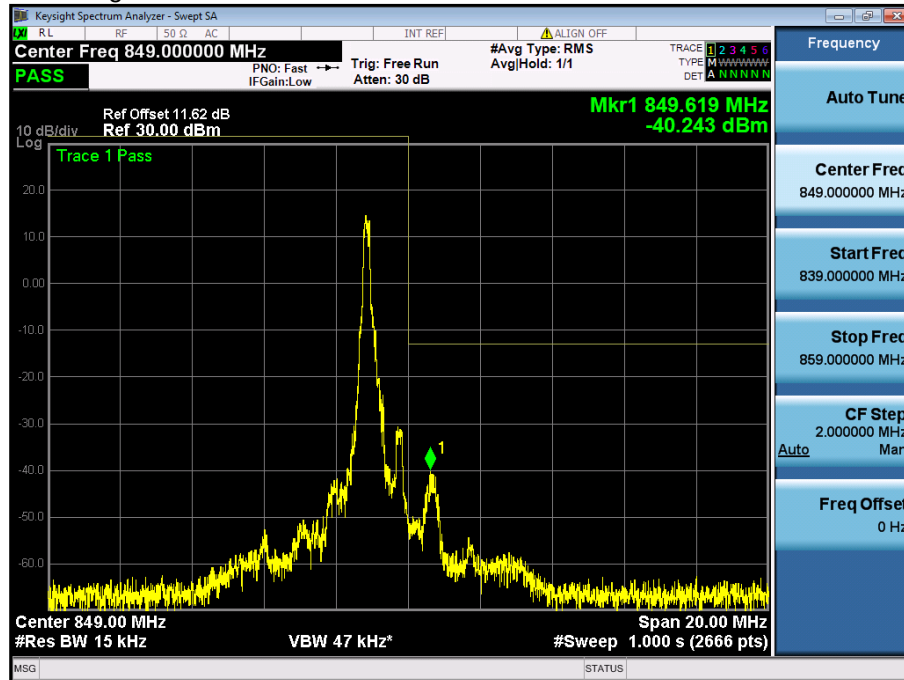
LTE Band 5 Lowest channel

1.4MHz 6RB



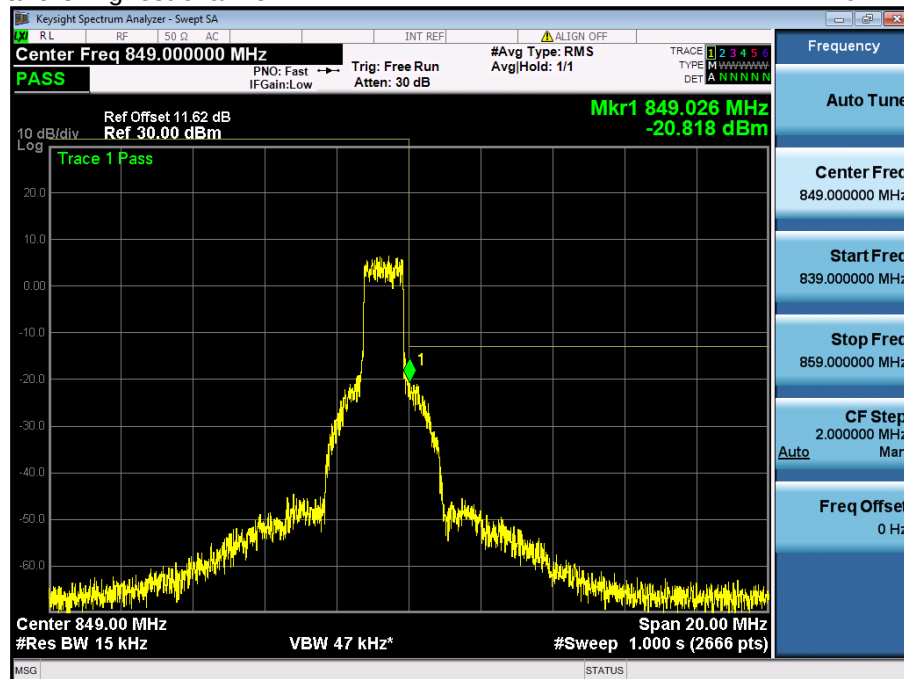
LTE Band 5 Highest channel:

1.4MHz 1RB



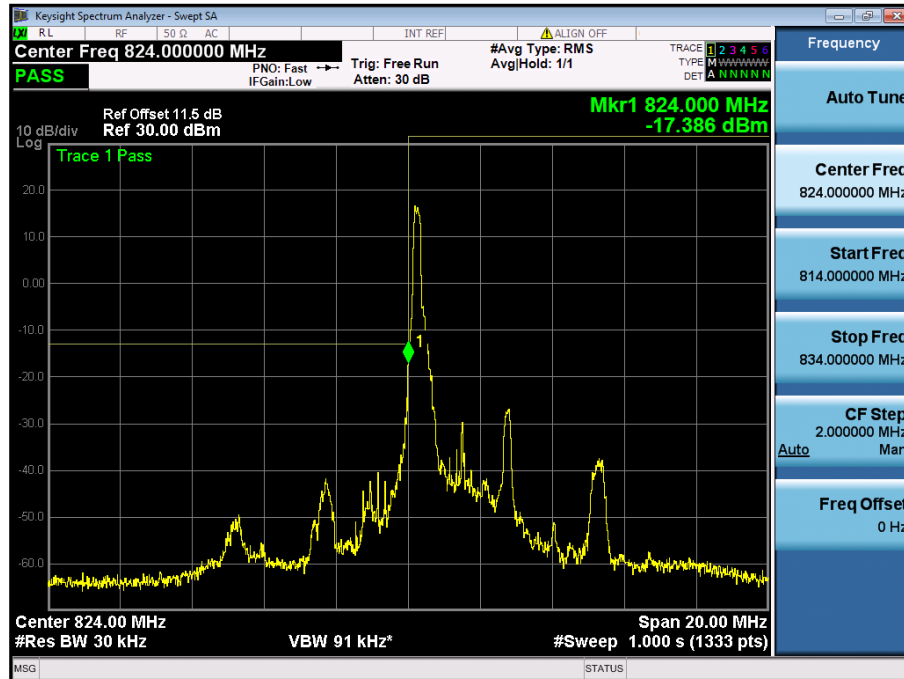
LTE Band 5 Highest channel:

1.4MHz 6RB



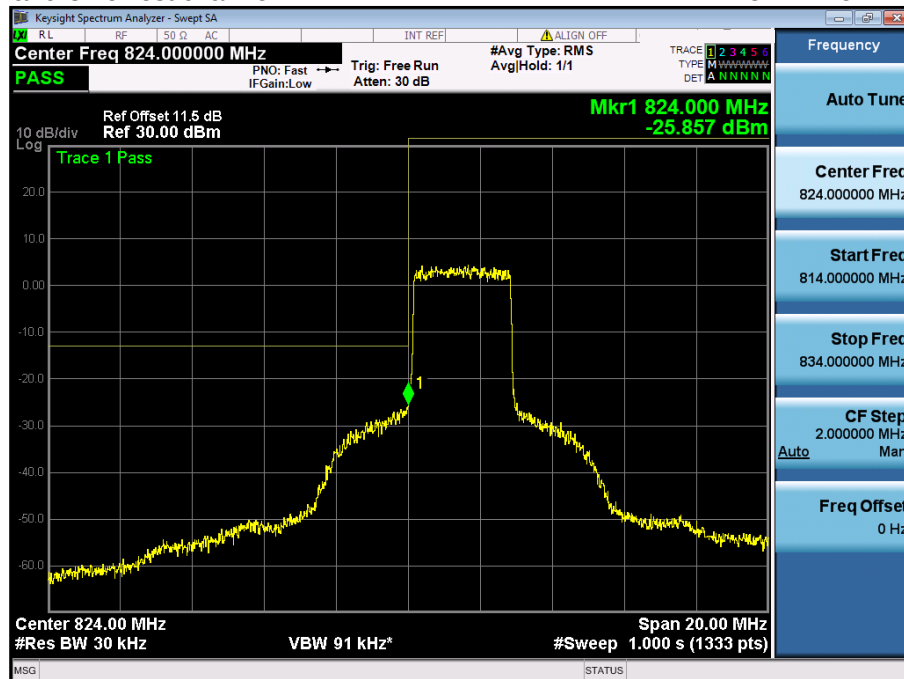
LTE Band 5 Lowest channel

3MHz 1RB



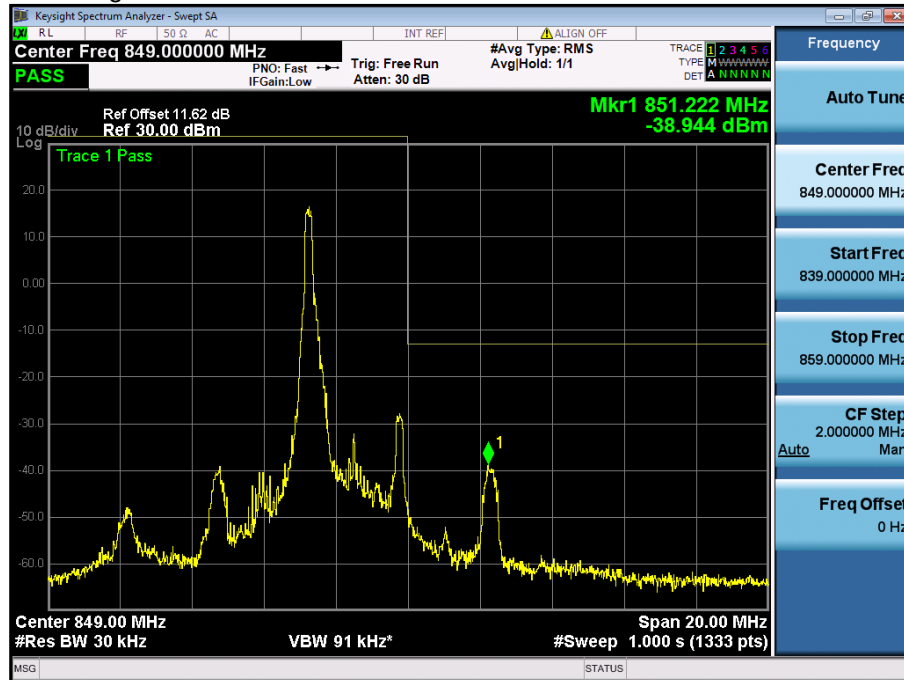
LTE Band 5 Lowest channel

3MHz 15RB



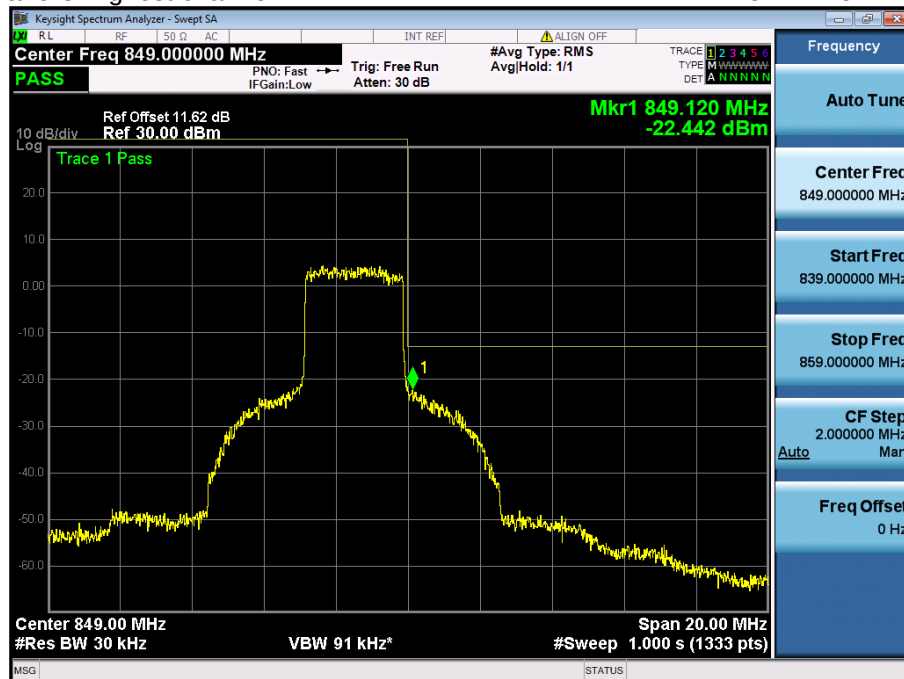
LTE Band 5 Highest channel:

3MHz 1RB



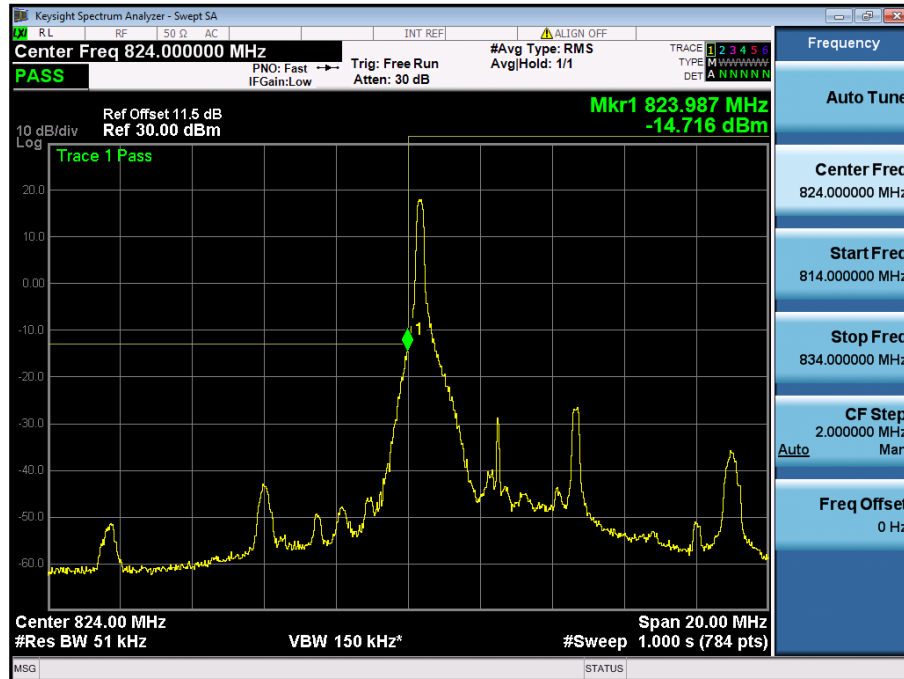
LTE Band 5 Highest channel:

3MHz 15RB



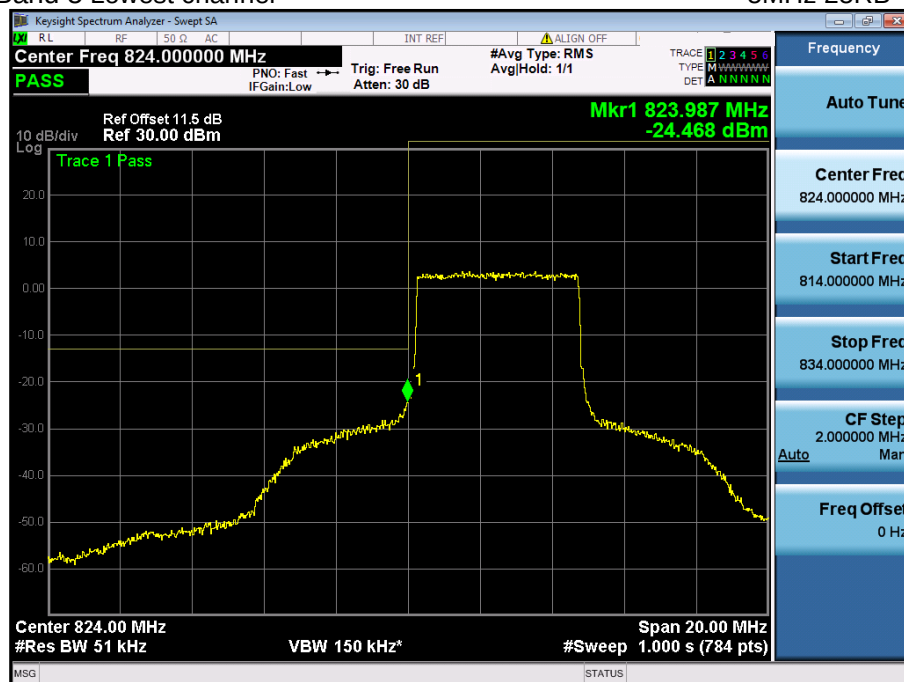
LTE Band 5 Lowest channel

5MHz 1RB



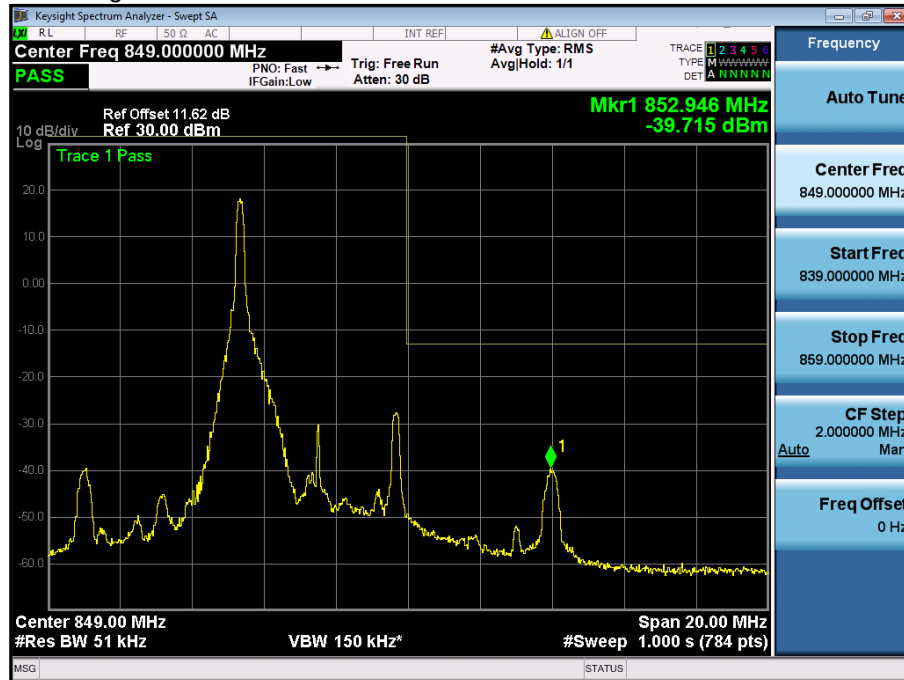
LTE Band 5 Lowest channel

5MHz 25RB



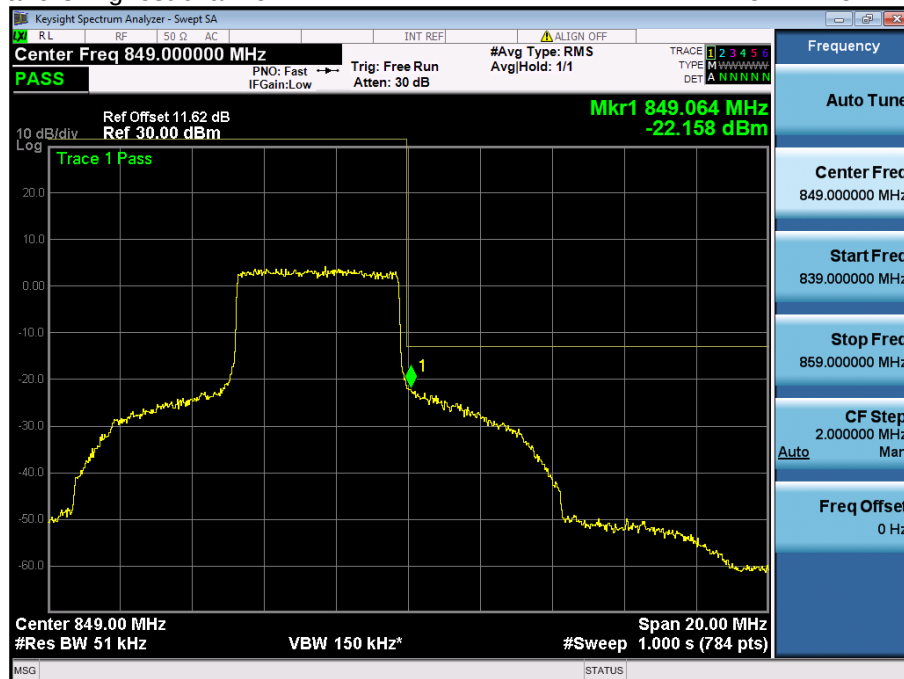
LTE Band 5 Highest channel:

5MHz 1RB



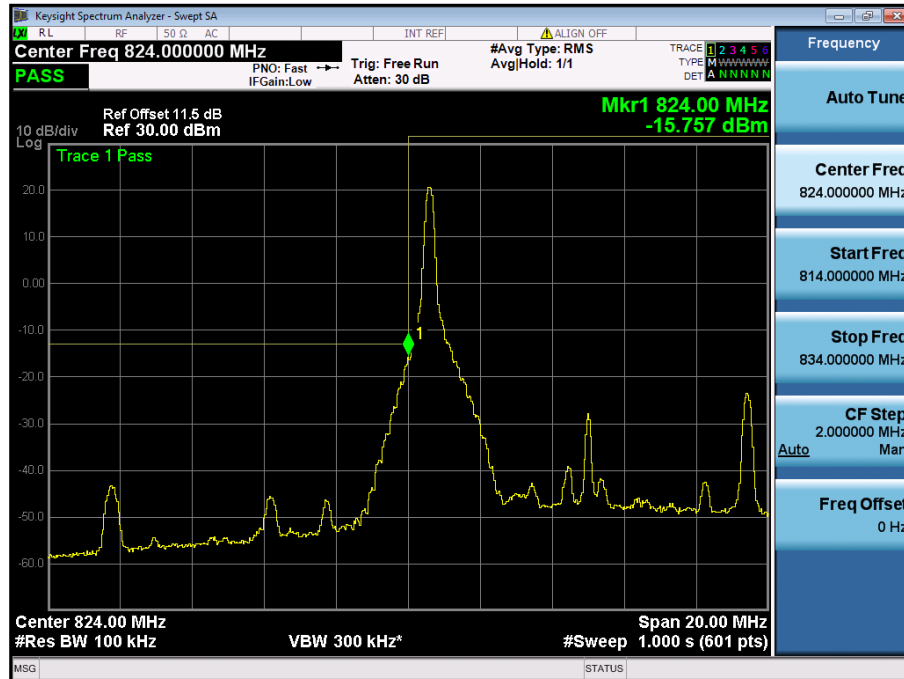
LTE Band 5 Highest channel:

5MHz 25RB



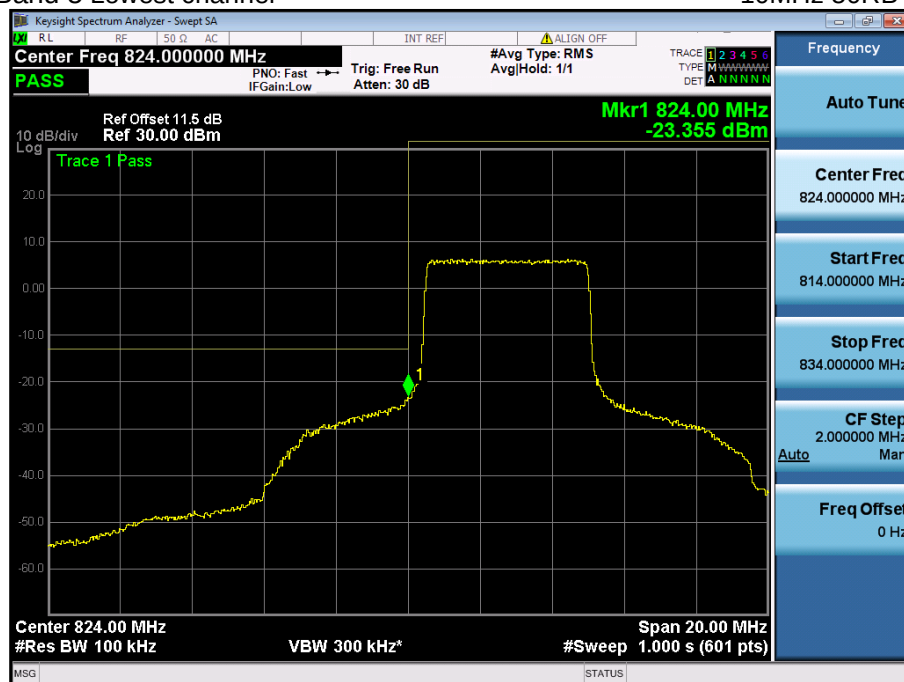
LTE Band 5 Lowest channel

10MHz 1RB



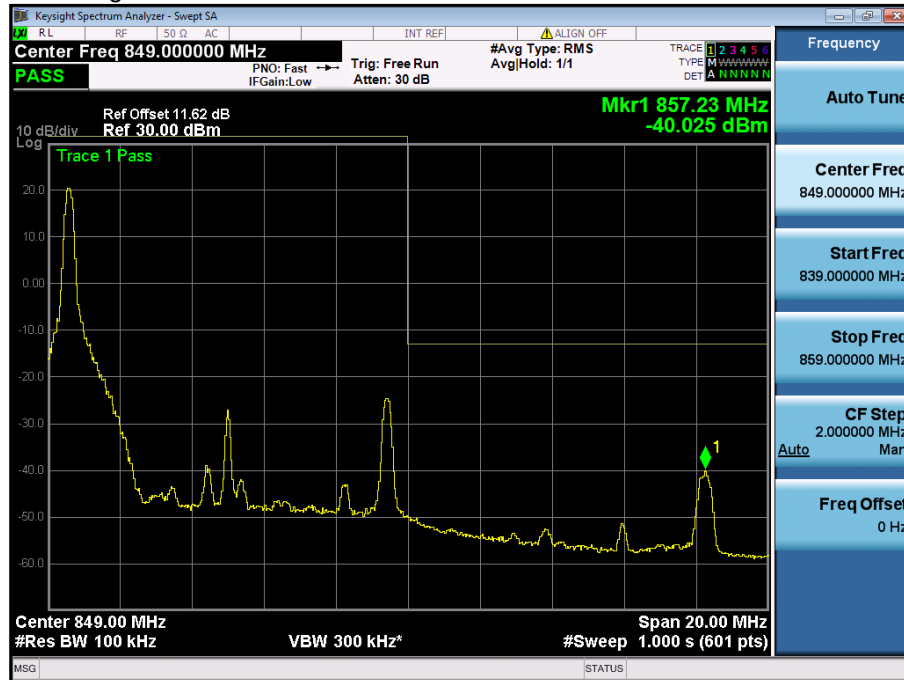
LTE Band 5 Lowest channel

10MHz 50RB



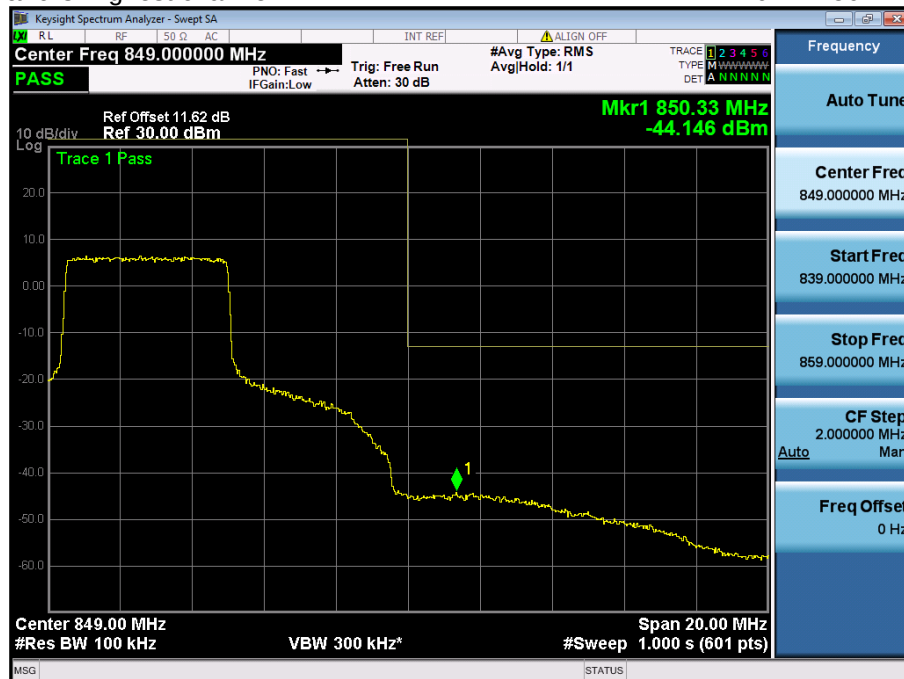
LTE Band 5 Highest channel:

10MHz 1RB



LTE Band 5 Highest channel:

10MHz 50RB



***** END *****