Frequency Stability

Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0003	PASS
40	Normal Voltage	0.0033	
30	Normal Voltage	0.0003	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0016	
0	Normal Voltage	0.0025	
-10	Normal Voltage	0.0004	
-20	Normal Voltage	0.0034	
-30	Normal Voltage	0.0004	
20	Maximum Voltage	0.0025	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0025	

Note:

1. Normal Voltage =7.6 V.；Battery End Point (BEP) =6.8 V.；Maximum Voltage =8.7 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

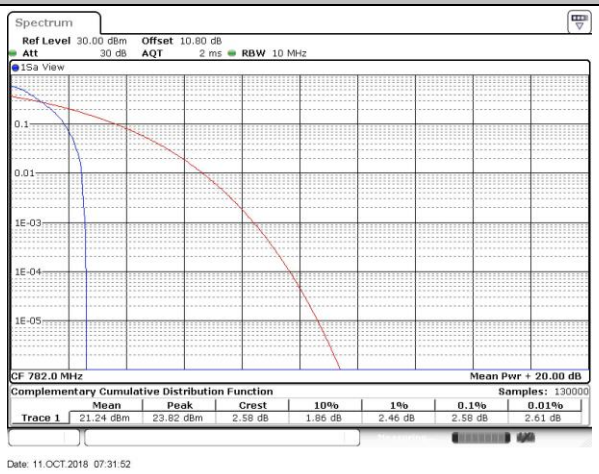
LTE Band 13

Peak-to-Average Ratio

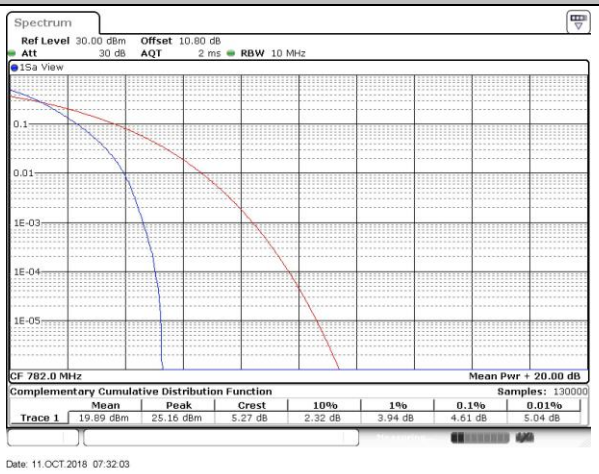
Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	2.58	4.61	3.16	5.36	
Highest CH	-	-	-	-	

LTE Band 13 / 10MHz / QPSK

Middle Channel/ 1RB

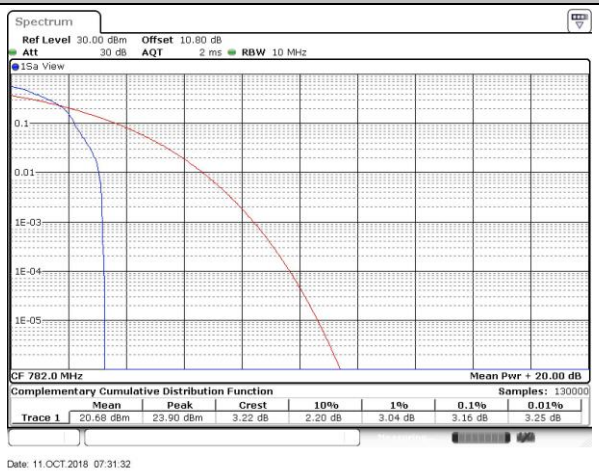


Middle Channel / Full RB

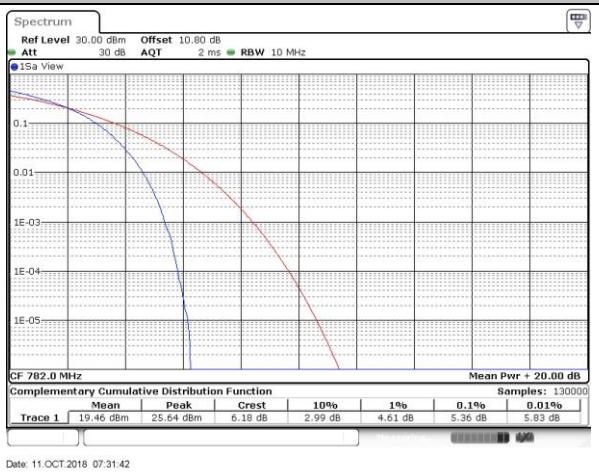


LTE Band 13 / 10MHz / 16QAM

Middle Channel/ 1RB



Middle Channel / Full RB

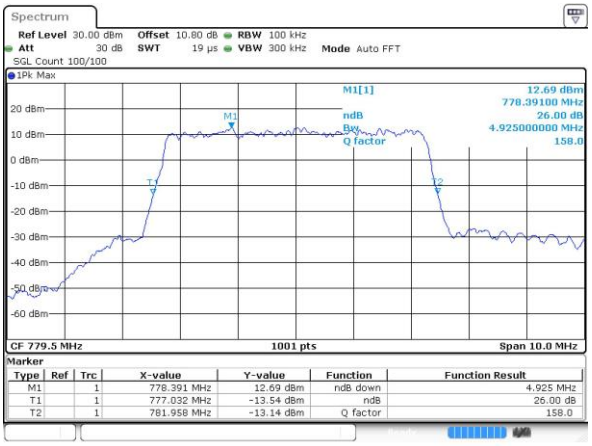


26dB Bandwidth

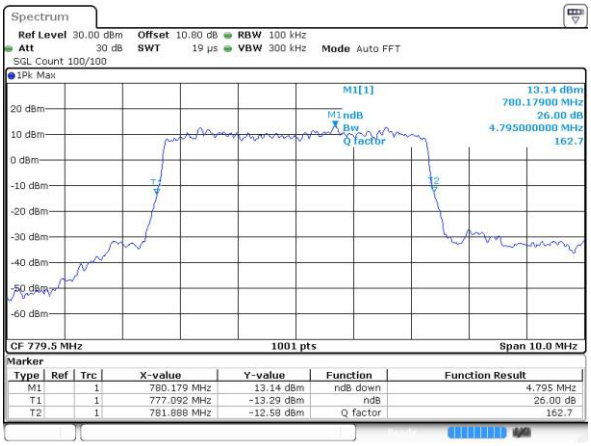
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.93	4.80	-	-	-	-	-	-
Middle CH	-	-	-	-	4.90	4.88	9.89	9.85	-	-	-	-
Highest CH	-	-	-	-	4.90	4.89	-	-	-	-	-	-

LTE Band 13

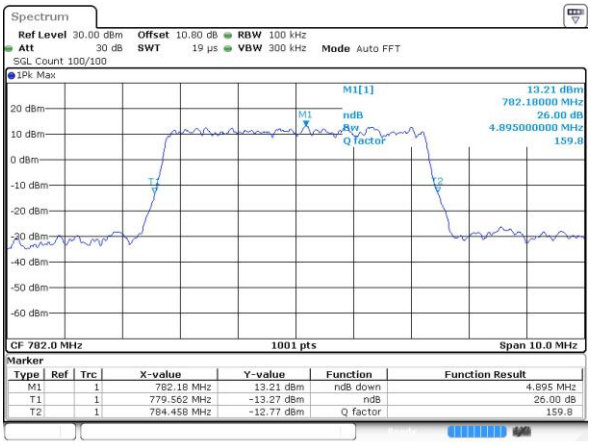
Lowest Channel / 5MHz / QPSK



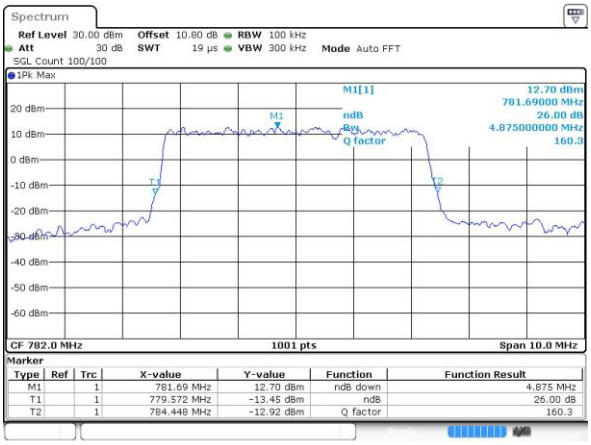
Lowest Channel / 5MHz / 16QAM



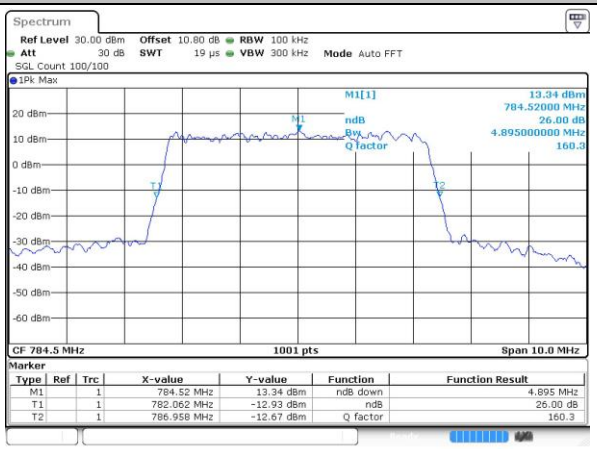
Middle Channel / 5MHz / QPSK



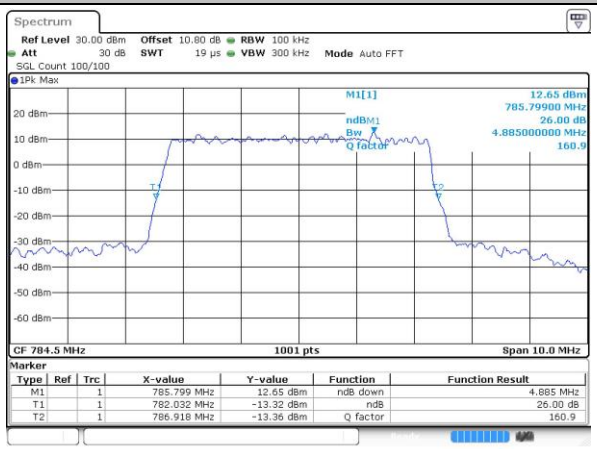
Middle Channel / 5MHz / 16QAM



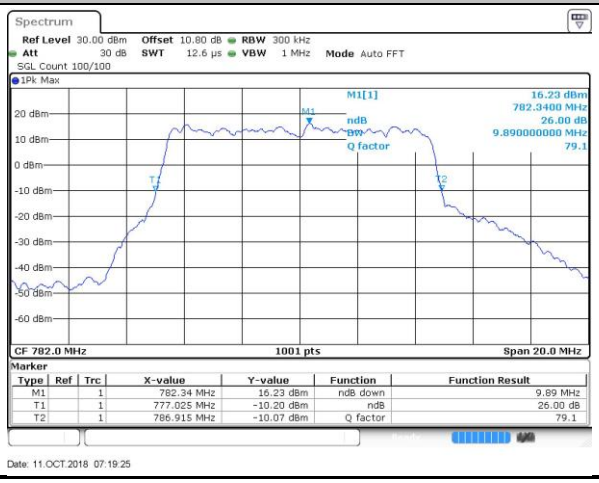
Highest Channel / 5MHz / QPSK

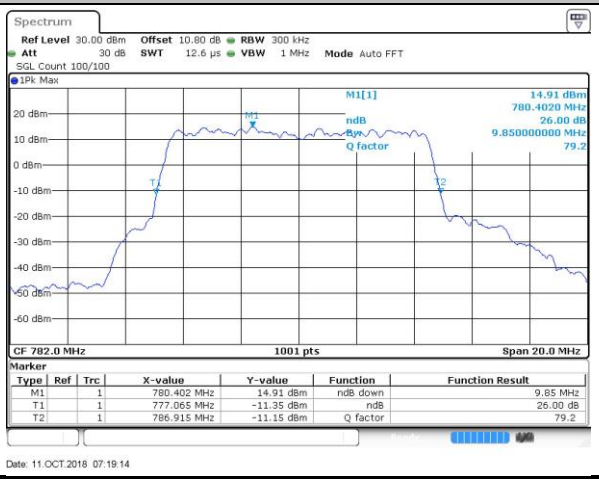


Highest Channel / 5MHz / 16QAM



LTE Band 13	
Middle Channel / 10MHz / QPSK	**Middle Channel / 10MHz / 16QAM**



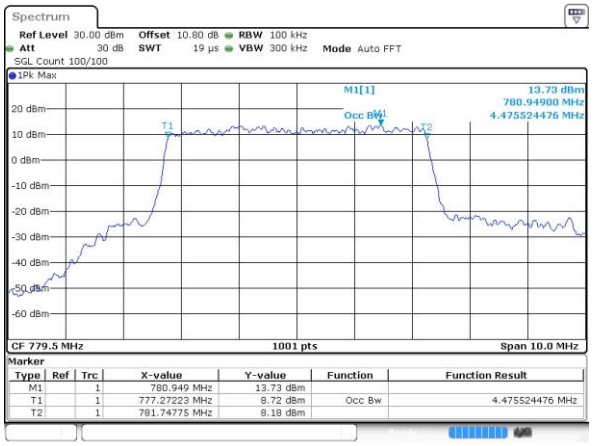


Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.48	4.51	-	-	-	-	-	-
Middle CH	-	-	-	-	4.49	4.51	8.99	9.01	-	-	-	-
Highest CH	-	-	-	-	4.49	4.49	-	-	-	-	-	-

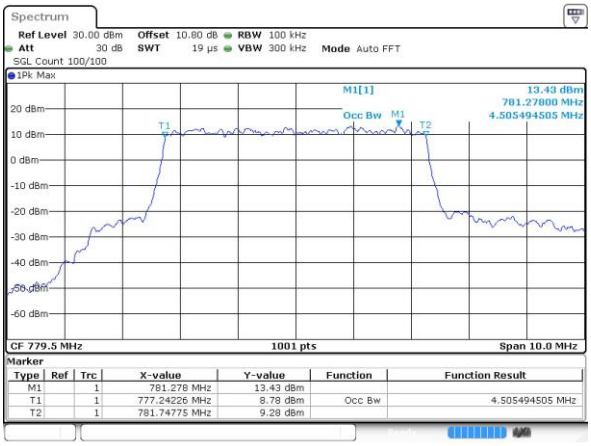
LTE Band 13

Lowest Channel / 5MHz / QPSK



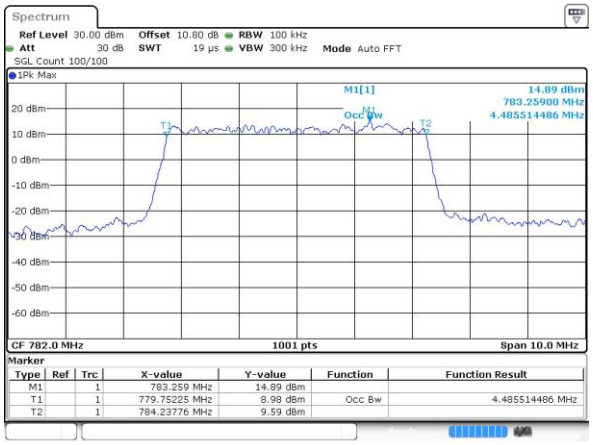
Date: 11.OCT.2018 06:59:13

Lowest Channel / 5MHz / 16QAM



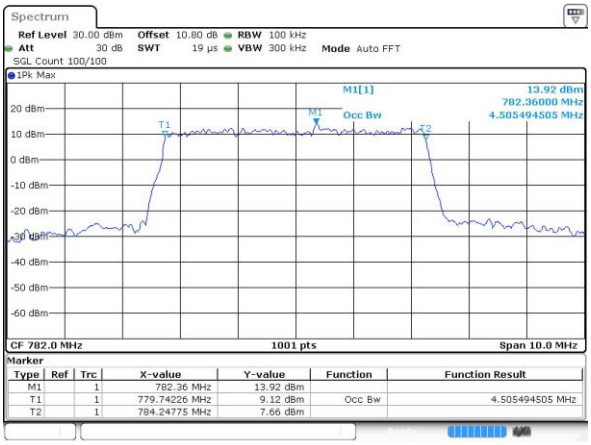
Date: 11.OCT.2018 06:59:24

Middle Channel / 5MHz / QPSK



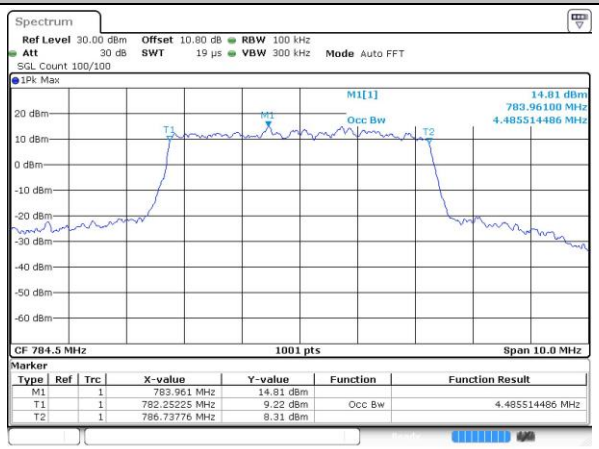
Date: 11.OCT.2018 07:09:53

Middle Channel / 5MHz / 16QAM



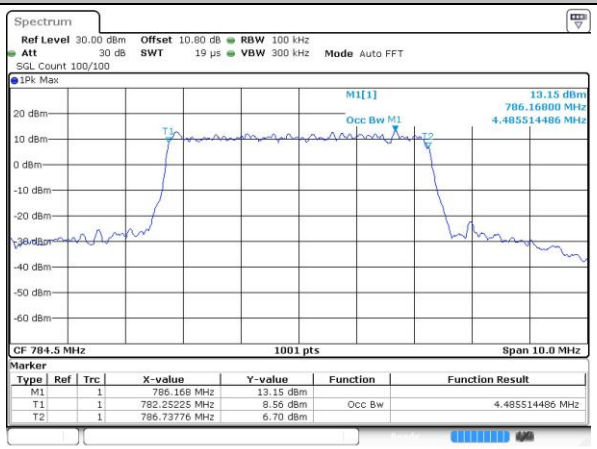
Date: 11.OCT.2018 07:09:42

Highest Channel / 5MHz / QPSK

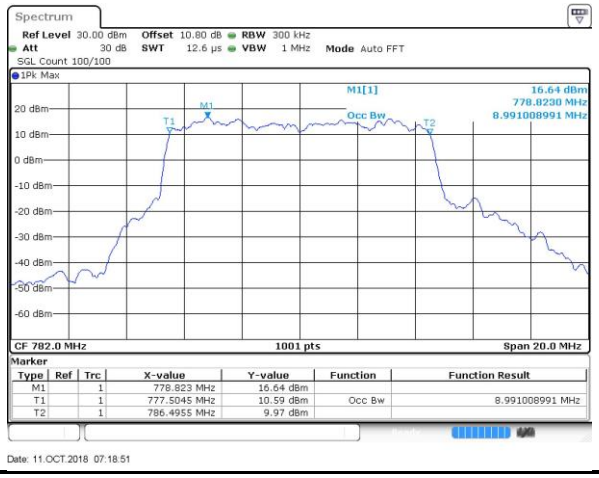
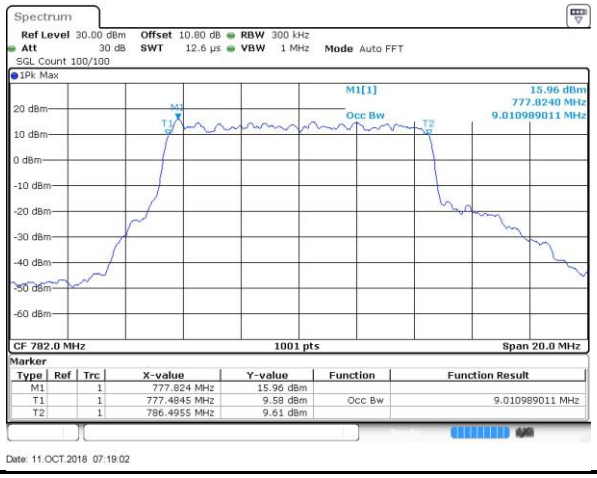


Date: 11.OCT.2018 07:10:05

Highest Channel / 5MHz / 16QAM



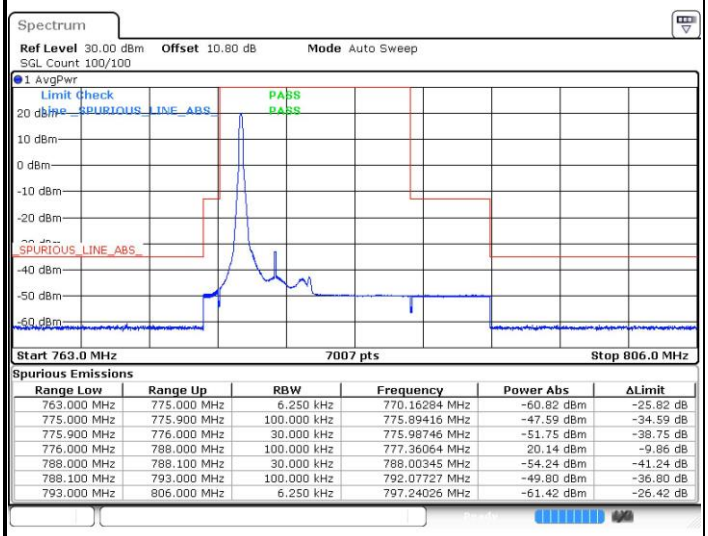
Date: 11.OCT.2018 07:10:16

LTE Band 13	
Middle Channel / 10MHz / QPSK	**Middle Channel / 10MHz / 16QAM**
	

Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB

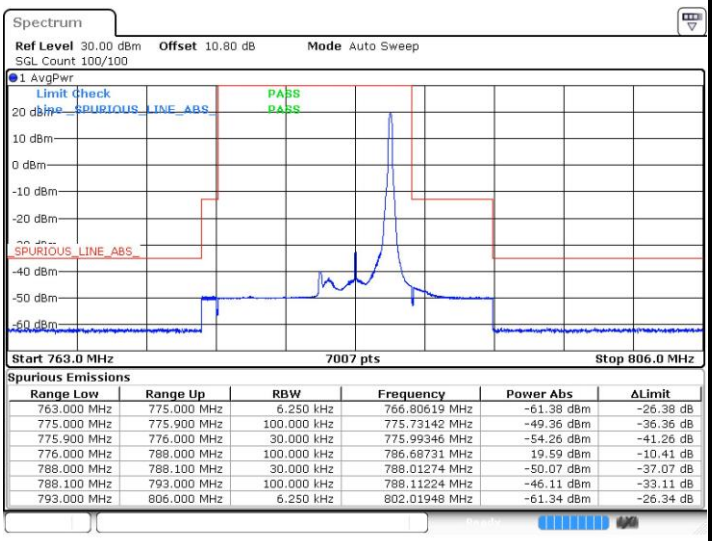


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	770.16284 MHz	-60.82 dBm	-25.82 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.89416 MHz	-47.59 dBm	-34.59 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.98746 MHz	-51.75 dBm	-38.75 dB
776.000 MHz	788.000 MHz	100.000 kHz	777.36064 MHz	20.14 dBm	-9.86 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.00345 MHz	-54.24 dBm	-41.24 dB
788.100 MHz	793.000 MHz	100.000 kHz	792.07727 MHz	-49.80 dBm	-36.80 dB
793.000 MHz	806.000 MHz	6.250 kHz	797.24026 MHz	-61.42 dBm	-26.42 dB

Date: 11.OCT.2018 07:06:27

Highest Band Edge / 1 RB

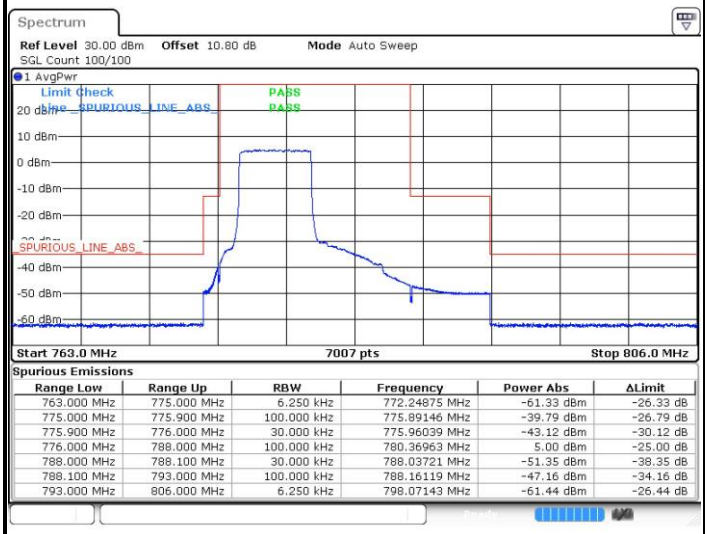


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	766.80619 MHz	-61.38 dBm	-26.38 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.73142 MHz	-49.36 dBm	-36.36 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.99346 MHz	-54.26 dBm	-41.26 dB
776.000 MHz	788.000 MHz	100.000 kHz	786.68731 MHz	19.59 dBm	-10.41 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.01274 MHz	-50.07 dBm	-37.07 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.11224 MHz	-46.11 dBm	-33.11 dB
793.000 MHz	806.000 MHz	6.250 kHz	802.01948 MHz	-61.34 dBm	-26.34 dB

Date: 11.OCT.2018 07:17:19

Lowest Band Edge / Full RB

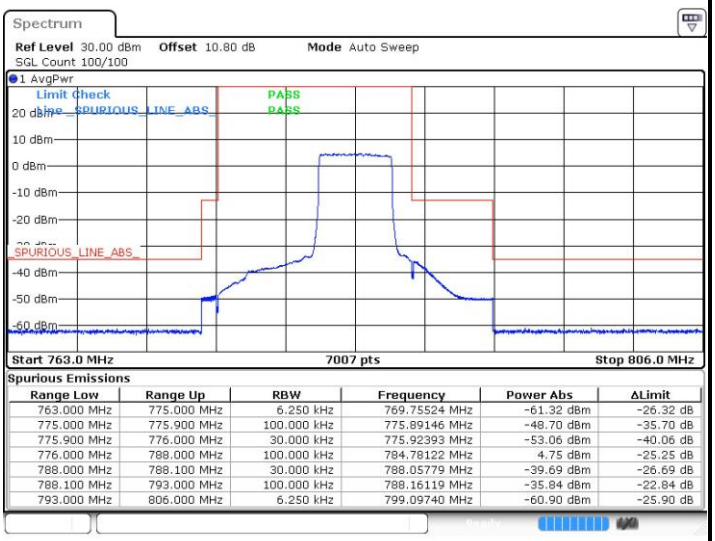


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	772.24875 MHz	-61.33 dBm	-26.33 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.89146 MHz	-39.79 dBm	-26.79 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.96039 MHz	-43.12 dBm	-30.12 dB
776.000 MHz	788.000 MHz	100.000 kHz	780.36963 MHz	5.00 dBm	-25.00 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.03721 MHz	-51.35 dBm	-38.35 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.16119 MHz	-47.16 dBm	-34.16 dB
793.000 MHz	806.000 MHz	6.250 kHz	798.07143 MHz	-61.44 dBm	-26.44 dB

Date: 11.OCT.2018 07:01:26

Highest Band Edge / Full RB



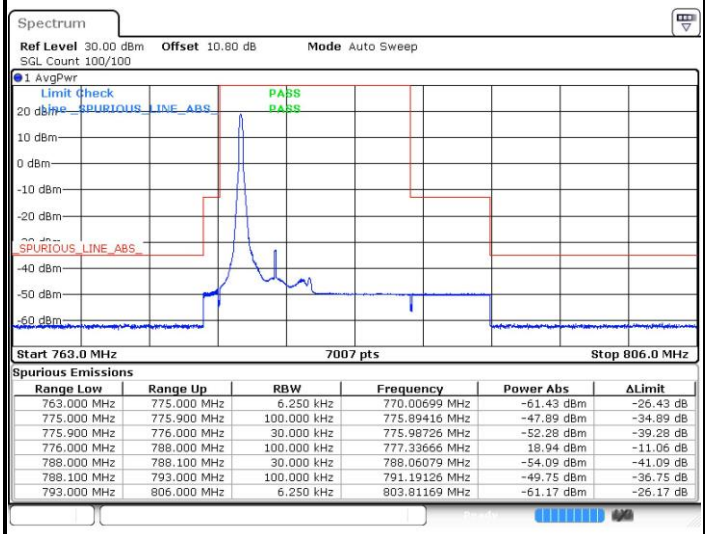
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	769.75524 MHz	-61.32 dBm	-26.32 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.89146 MHz	-48.70 dBm	-35.70 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.92393 MHz	-53.06 dBm	-40.06 dB
776.000 MHz	788.000 MHz	100.000 kHz	784.78122 MHz	4.75 dBm	-25.25 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.05779 MHz	-39.69 dBm	-26.69 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.16119 MHz	-35.84 dBm	-22.84 dB
793.000 MHz	806.000 MHz	6.250 kHz	799.09740 MHz	-60.90 dBm	-25.90 dB

Date: 11.OCT.2018 07:12:18

LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge /1 RB

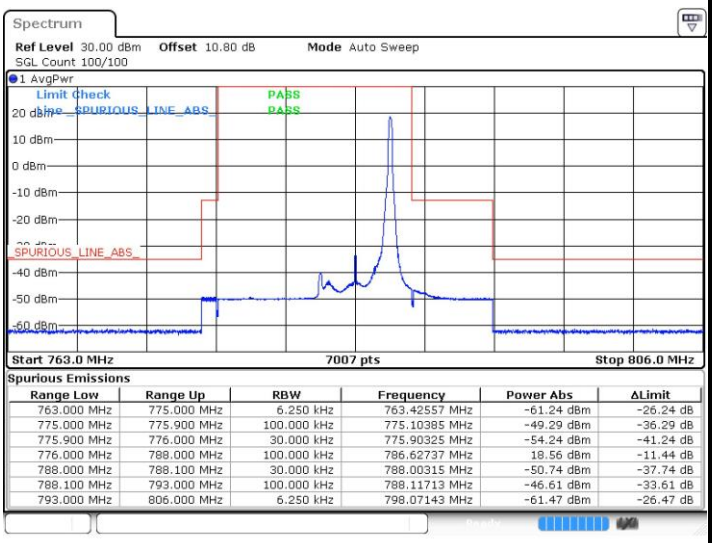


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	770.00699 MHz	-61.43 dBm	-26.43 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.89416 MHz	-47.89 dBm	-34.89 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.98726 MHz	-52.28 dBm	-39.28 dB
776.000 MHz	788.000 MHz	100.000 kHz	777.33666 MHz	18.94 dBm	-11.06 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.06079 MHz	-54.09 dBm	-41.09 dB
788.100 MHz	793.000 MHz	100.000 kHz	791.19126 MHz	-49.75 dBm	-36.75 dB
793.000 MHz	806.000 MHz	6.250 kHz	803.81169 MHz	-61.17 dBm	-26.17 dB

Date: 11.OCT.2018 07:04:47

Highest Band Edge / 1 RB

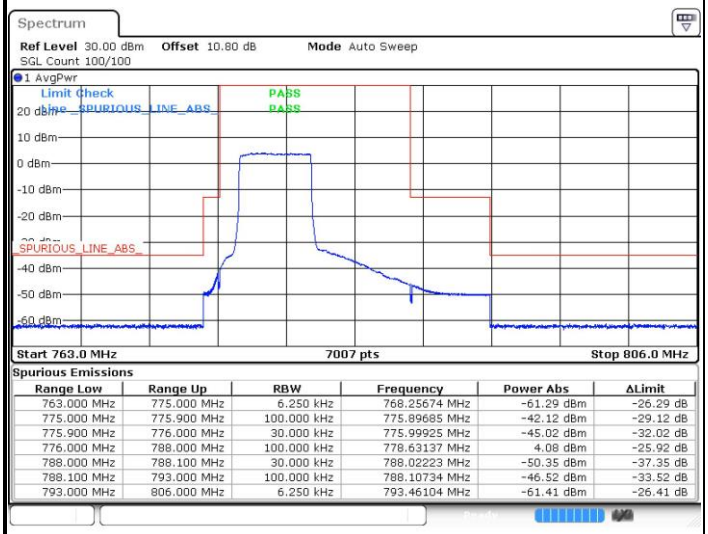


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	763.42557 MHz	-61.24 dBm	-26.24 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.10385 MHz	-49.29 dBm	-36.29 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.90325 MHz	-54.24 dBm	-41.24 dB
776.000 MHz	788.000 MHz	100.000 kHz	786.62737 MHz	18.56 dBm	-11.44 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.00315 MHz	-50.74 dBm	-37.74 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.11713 MHz	-46.61 dBm	-33.61 dB
793.000 MHz	806.000 MHz	6.250 kHz	798.07143 MHz	-61.47 dBm	-26.47 dB

Date: 11.OCT.2018 07:15:39

Lowest Band Edge / Full RB

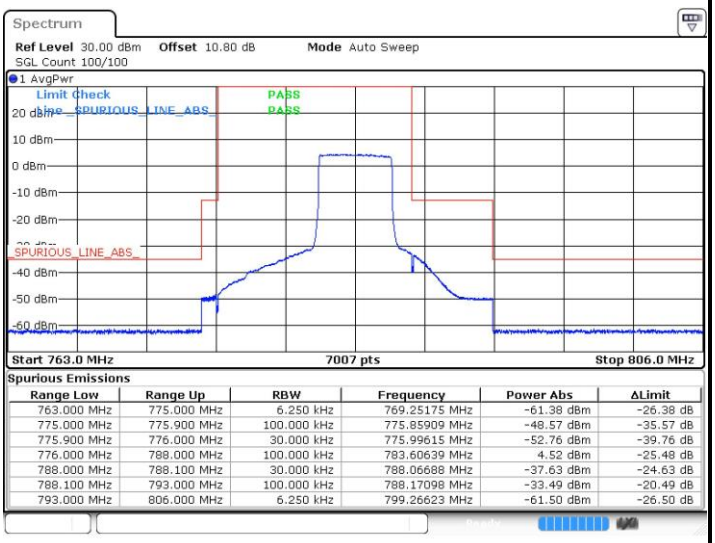


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	768.25674 MHz	-61.29 dBm	-26.29 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.89685 MHz	-42.12 dBm	-29.12 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.99925 MHz	-45.02 dBm	-32.02 dB
776.000 MHz	788.000 MHz	100.000 kHz	778.63137 MHz	4.08 dBm	-25.92 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.02223 MHz	-50.35 dBm	-37.35 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.10734 MHz	-46.52 dBm	-33.52 dB
793.000 MHz	806.000 MHz	6.250 kHz	793.46104 MHz	-61.41 dBm	-26.41 dB

Date: 11.OCT.2018 07:03:07

Highest Band Edge / Full RB



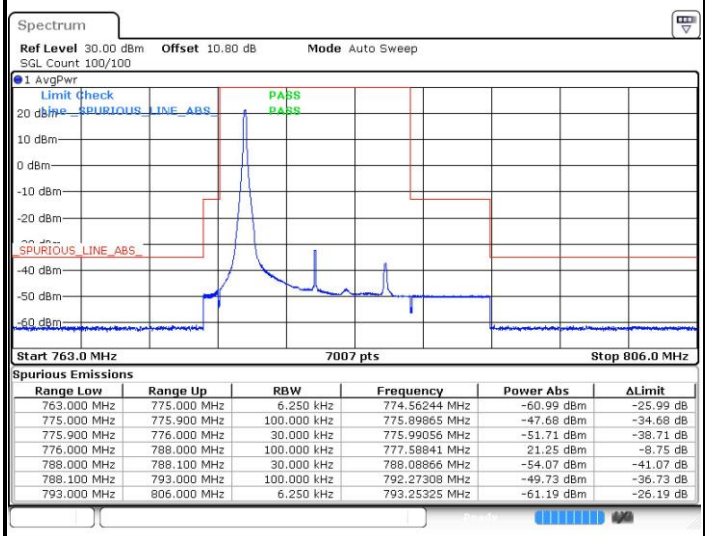
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	769.25175 MHz	-61.38 dBm	-26.38 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.85909 MHz	-48.57 dBm	-35.57 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.99615 MHz	-52.76 dBm	-39.76 dB
776.000 MHz	788.000 MHz	100.000 kHz	783.60639 MHz	4.52 dBm	-25.48 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.06688 MHz	-37.63 dBm	-24.63 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.17098 MHz	-33.49 dBm	-20.49 dB
793.000 MHz	806.000 MHz	6.250 kHz	799.26623 MHz	-61.50 dBm	-26.50 dB

Date: 11.OCT.2018 07:13:59

LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB

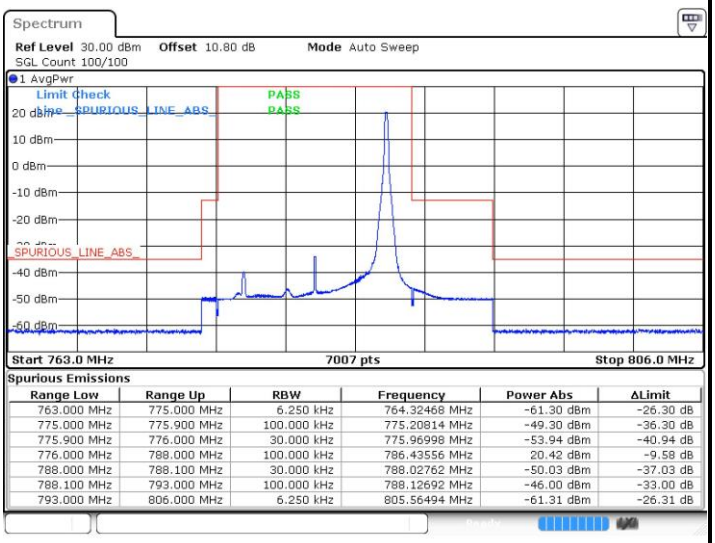


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	774.56244 MHz	-60.99 dBm	-25.99 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.89865 MHz	-47.68 dBm	-34.68 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.99056 MHz	-51.71 dBm	-38.71 dB
776.000 MHz	788.000 MHz	100.000 kHz	777.58841 MHz	21.25 dBm	-8.75 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.08866 MHz	-54.07 dBm	-41.07 dB
788.100 MHz	793.000 MHz	100.000 kHz	792.27308 MHz	-49.73 dBm	-36.73 dB
793.000 MHz	806.000 MHz	6.250 kHz	793.25325 MHz	-61.19 dBm	-26.19 dB

Date: 11.OCT.2018 07:26:06

Highest Band Edge / 1 RB

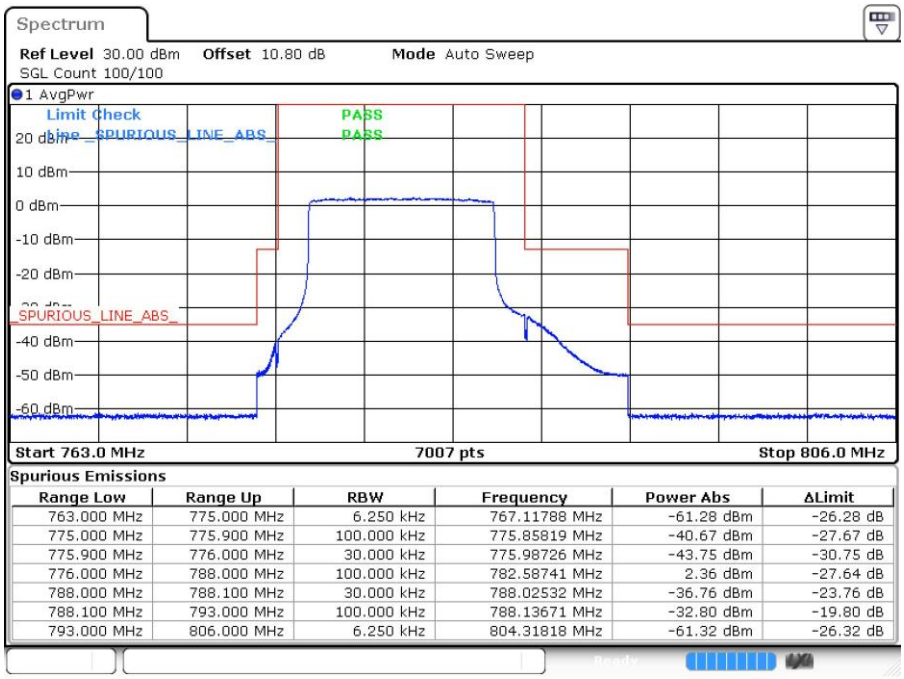


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	764.32468 MHz	-61.30 dBm	-26.30 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.20814 MHz	-49.30 dBm	-36.30 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.96998 MHz	-53.94 dBm	-40.94 dB
776.000 MHz	788.000 MHz	100.000 kHz	786.43556 MHz	20.42 dBm	-9.58 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.02762 MHz	-50.03 dBm	-37.03 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.12692 MHz	-46.00 dBm	-33.00 dB
793.000 MHz	806.000 MHz	6.250 kHz	805.56494 MHz	-61.31 dBm	-26.31 dB

Date: 11.OCT.2018 07:27:46

Band Edge / Full RB



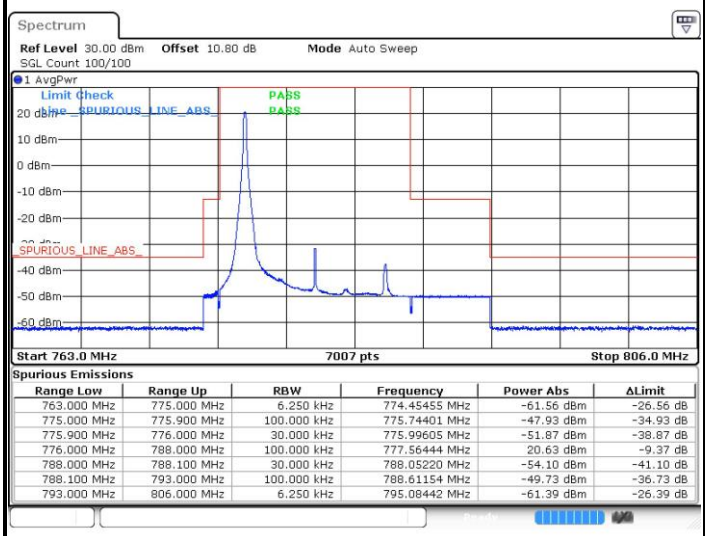
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	767.11788 MHz	-61.28 dBm	-26.28 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.85819 MHz	-40.67 dBm	-27.67 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.98726 MHz	-43.75 dBm	-30.75 dB
776.000 MHz	788.000 MHz	100.000 kHz	782.58741 MHz	2.36 dBm	-27.64 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.02532 MHz	-36.76 dBm	-23.76 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.13671 MHz	-32.80 dBm	-19.80 dB
793.000 MHz	806.000 MHz	6.250 kHz	804.31818 MHz	-61.32 dBm	-26.32 dB

Date: 11.OCT.2018 07:21:05

LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB

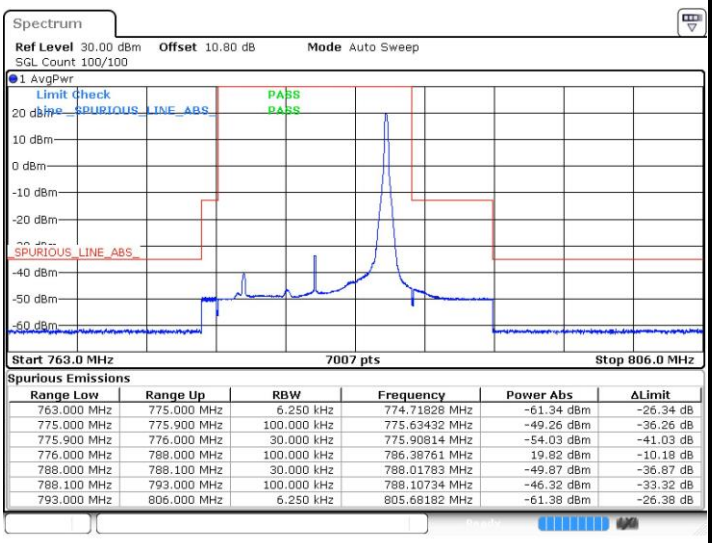


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	774.45455 MHz	-61.56 dBm	-26.56 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.74401 MHz	-47.93 dBm	-34.93 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.99605 MHz	-51.87 dBm	-38.87 dB
776.000 MHz	788.000 MHz	100.000 kHz	777.56444 MHz	20.63 dBm	-9.37 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.05220 MHz	-54.10 dBm	-41.10 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.61154 MHz	-49.73 dBm	-36.73 dB
793.000 MHz	806.000 MHz	6.250 kHz	795.08442 MHz	-61.39 dBm	-26.39 dB

Date: 11.OCT.2018 07:24:25

Highest Band Edge / 1 RB

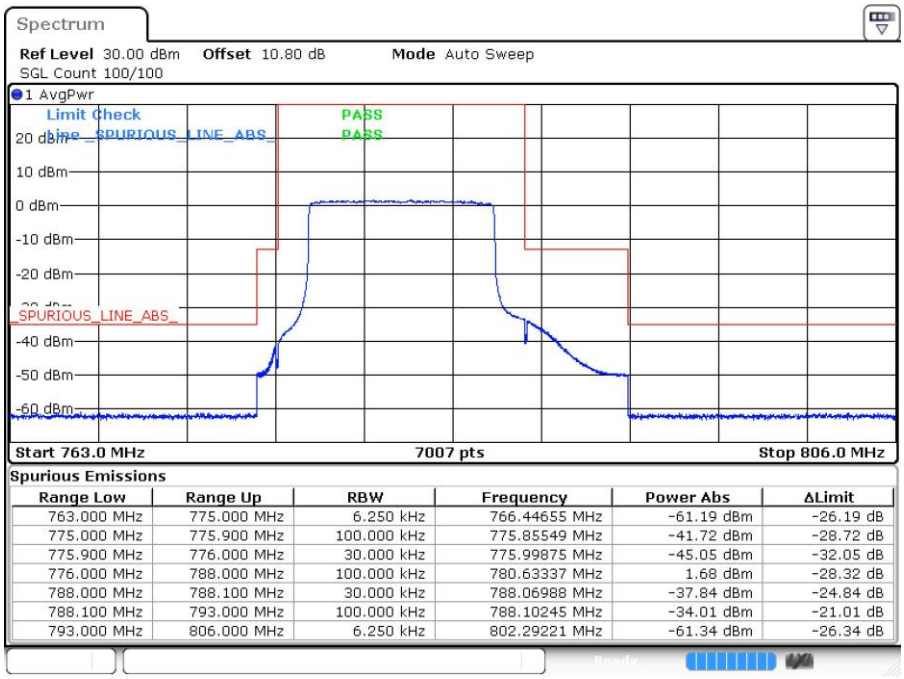


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	774.71828 MHz	-61.34 dBm	-26.34 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.63432 MHz	-49.26 dBm	-36.26 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.90814 MHz	-54.03 dBm	-41.03 dB
776.000 MHz	788.000 MHz	100.000 kHz	786.38761 MHz	19.82 dBm	-10.18 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.01783 MHz	-49.87 dBm	-36.87 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.10734 MHz	-46.32 dBm	-33.32 dB
793.000 MHz	806.000 MHz	6.250 kHz	805.68182 MHz	-61.38 dBm	-26.38 dB

Date: 11.OCT.2018 07:29:26

Band Edge / Full RB



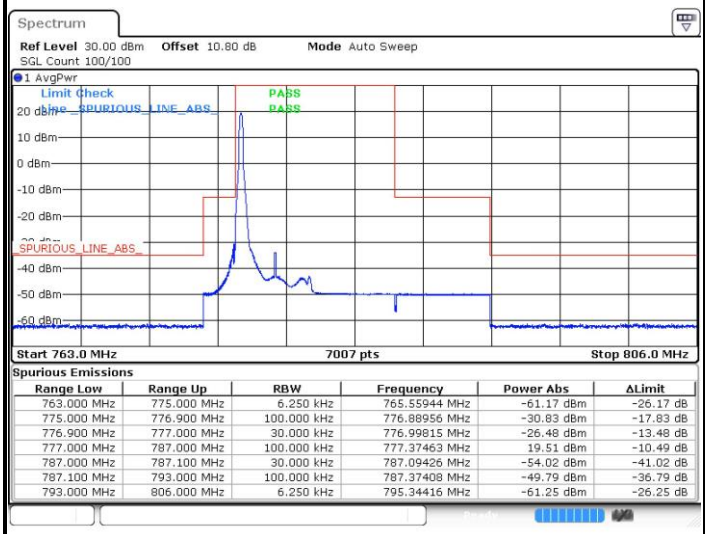
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	766.44655 MHz	-61.19 dBm	-26.19 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.85549 MHz	-41.72 dBm	-28.72 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.99875 MHz	-45.05 dBm	-32.05 dB
776.000 MHz	788.000 MHz	100.000 kHz	780.63337 MHz	1.68 dBm	-28.32 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.06988 MHz	-37.84 dBm	-24.84 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.10245 MHz	-34.01 dBm	-21.01 dB
793.000 MHz	806.000 MHz	6.250 kHz	802.29221 MHz	-61.34 dBm	-26.34 dB

Date: 11.OCT.2018 07:22:45

IC LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB

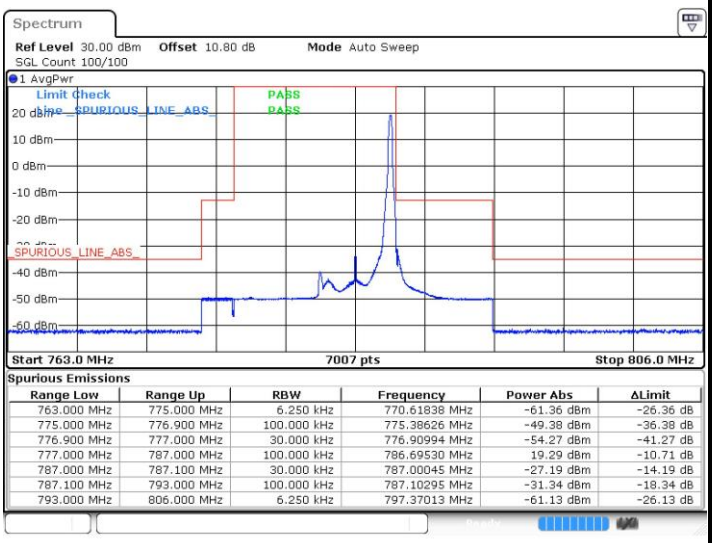


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	765.55944 MHz	-61.17 dBm	-26.17 dB
775.000 MHz	776.900 MHz	100.000 kHz	776.88956 MHz	-30.83 dBm	-17.83 dB
776.900 MHz	777.000 MHz	30.000 kHz	776.99815 MHz	-26.48 dBm	-13.48 dB
777.000 MHz	787.000 MHz	100.000 kHz	777.37463 MHz	19.51 dBm	-10.49 dB
787.000 MHz	787.100 MHz	30.000 kHz	787.09426 MHz	-54.02 dBm	-41.02 dB
787.100 MHz	793.000 MHz	100.000 kHz	787.37408 MHz	-49.79 dBm	-36.79 dB
793.000 MHz	806.000 MHz	6.250 kHz	795.34416 MHz	-61.25 dBm	-26.25 dB

Date: 11.OCT.2018 07:40:41

Highest Band Edge / 1 RB

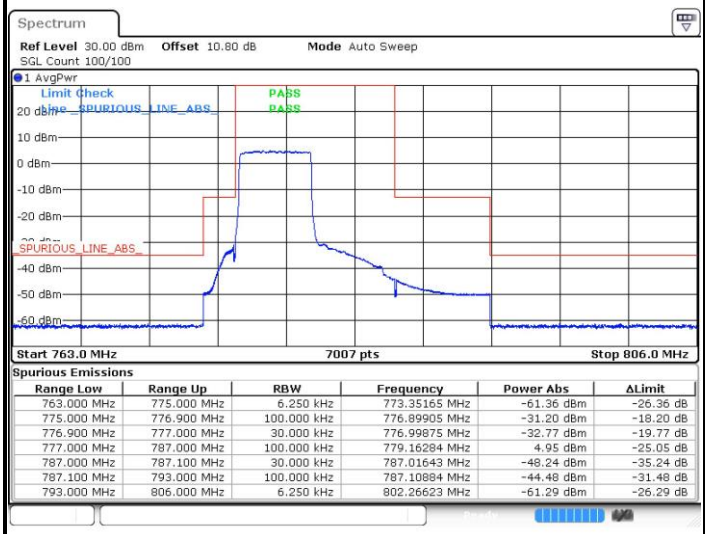


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	770.61838 MHz	-61.36 dBm	-26.36 dB
775.000 MHz	776.900 MHz	100.000 kHz	775.38626 MHz	-49.38 dBm	-36.38 dB
776.900 MHz	777.000 MHz	30.000 kHz	776.90994 MHz	-54.27 dBm	-41.27 dB
777.000 MHz	787.000 MHz	100.000 kHz	786.69530 MHz	19.29 dBm	-10.71 dB
787.000 MHz	787.100 MHz	30.000 kHz	787.00045 MHz	-27.19 dBm	-14.19 dB
787.100 MHz	793.000 MHz	100.000 kHz	787.10295 MHz	-31.34 dBm	-18.34 dB
793.000 MHz	806.000 MHz	6.250 kHz	797.37013 MHz	-61.13 dBm	-26.13 dB

Date: 11.OCT.2018 07:47:22

Lowest Band Edge / Full RB

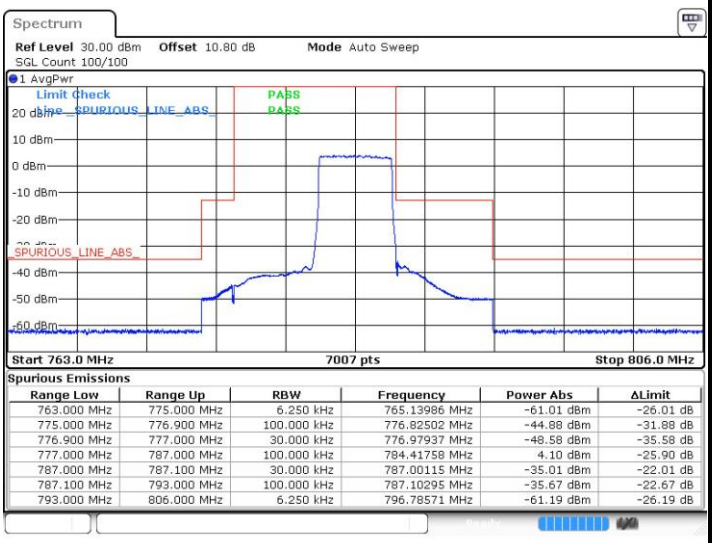


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	773.35165 MHz	-61.36 dBm	-26.36 dB
775.000 MHz	776.900 MHz	100.000 kHz	776.89905 MHz	-31.20 dBm	-18.20 dB
776.900 MHz	777.000 MHz	30.000 kHz	776.99875 MHz	-32.77 dBm	-19.77 dB
777.000 MHz	787.000 MHz	100.000 kHz	779.16284 MHz	4.95 dBm	-25.05 dB
787.000 MHz	787.100 MHz	30.000 kHz	787.01643 MHz	-48.24 dBm	-35.24 dB
787.100 MHz	793.000 MHz	100.000 kHz	787.10884 MHz	-44.48 dBm	-31.48 dB
793.000 MHz	806.000 MHz	6.250 kHz	802.26623 MHz	-61.29 dBm	-26.29 dB

Date: 11.OCT.2018 07:35:40

Highest Band Edge / Full RB



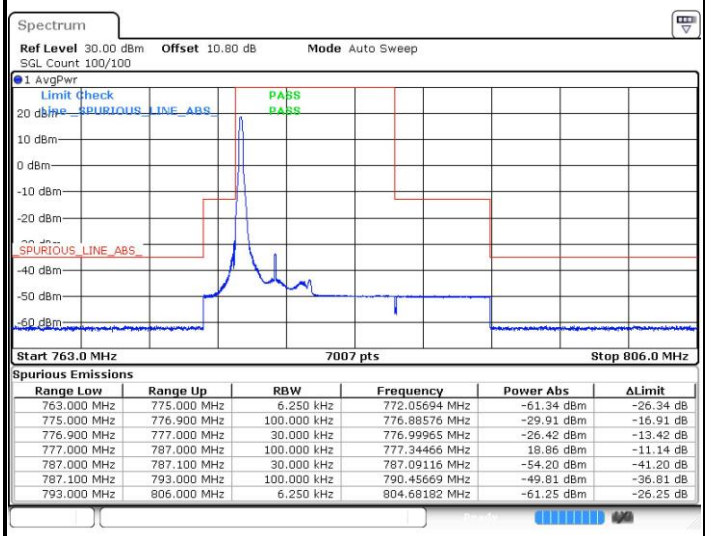
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	765.13986 MHz	-61.01 dBm	-26.01 dB
775.000 MHz	776.900 MHz	100.000 kHz	776.82502 MHz	-44.88 dBm	-31.88 dB
776.900 MHz	777.000 MHz	30.000 kHz	776.97937 MHz	-48.58 dBm	-35.58 dB
777.000 MHz	787.000 MHz	100.000 kHz	784.41758 MHz	4.10 dBm	-25.90 dB
787.000 MHz	787.100 MHz	30.000 kHz	787.00115 MHz	-35.01 dBm	-22.01 dB
787.100 MHz	793.000 MHz	100.000 kHz	787.10295 MHz	-35.67 dBm	-22.67 dB
793.000 MHz	806.000 MHz	6.250 kHz	796.78571 MHz	-61.19 dBm	-26.19 dB

Date: 11.OCT.2018 07:42:21

IC LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge /1 RB

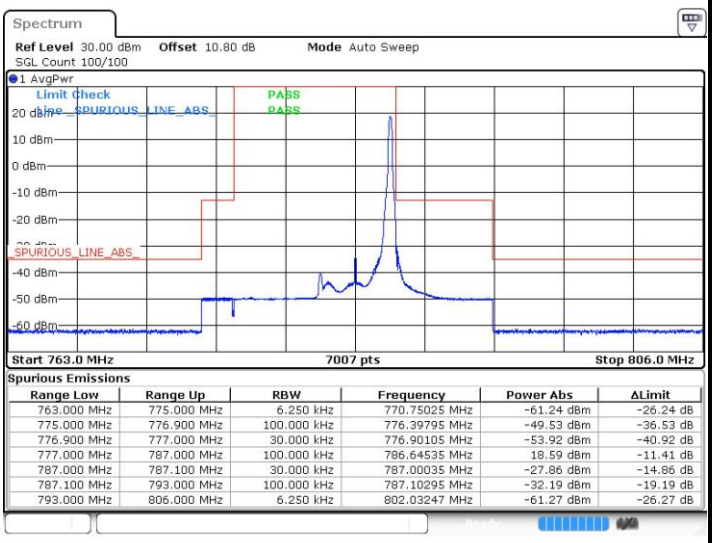


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	772.05694 MHz	-61.34 dBm	-26.34 dB
775.000 MHz	776.900 MHz	100.000 kHz	776.88576 MHz	-29.91 dBm	-16.91 dB
776.900 MHz	777.000 MHz	30.000 kHz	776.99965 MHz	-26.42 dBm	-13.42 dB
777.000 MHz	787.000 MHz	100.000 kHz	777.34466 MHz	18.86 dBm	-11.14 dB
787.000 MHz	787.100 MHz	30.000 kHz	787.09116 MHz	-54.20 dBm	-41.20 dB
787.100 MHz	793.000 MHz	100.000 kHz	790.45669 MHz	-49.81 dBm	-36.81 dB
793.000 MHz	806.000 MHz	6.250 kHz	804.68182 MHz	-61.25 dBm	-26.25 dB

Date: 11.OCT.2018 07:39:01

Highest Band Edge / 1 RB

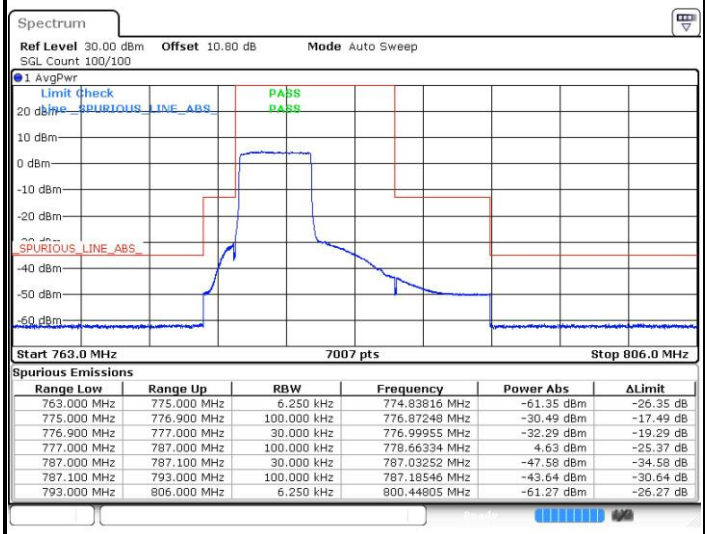


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	770.75025 MHz	-61.24 dBm	-26.24 dB
775.000 MHz	776.900 MHz	100.000 kHz	776.39795 MHz	-49.53 dBm	-36.53 dB
776.900 MHz	777.000 MHz	30.000 kHz	776.90105 MHz	-53.92 dBm	-40.92 dB
777.000 MHz	787.000 MHz	100.000 kHz	786.64535 MHz	18.59 dBm	-11.41 dB
787.000 MHz	787.100 MHz	30.000 kHz	787.00035 MHz	-27.86 dBm	-14.86 dB
787.100 MHz	793.000 MHz	100.000 kHz	787.10295 MHz	-32.19 dBm	-19.19 dB
793.000 MHz	806.000 MHz	6.250 kHz	802.03247 MHz	-61.27 dBm	-26.27 dB

Date: 11.OCT.2018 07:45:42

Lowest Band Edge / Full RB

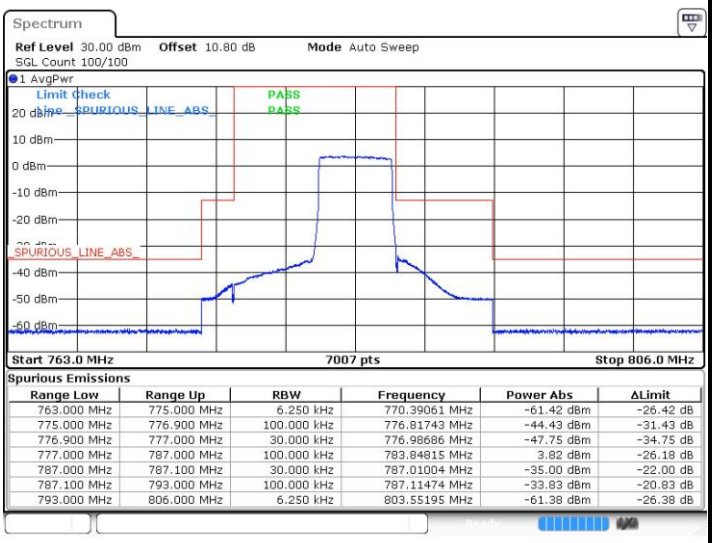


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	774.83816 MHz	-61.35 dBm	-26.35 dB
775.000 MHz	776.900 MHz	100.000 kHz	776.87248 MHz	-30.49 dBm	-17.49 dB
776.900 MHz	777.000 MHz	30.000 kHz	776.99955 MHz	-32.29 dBm	-19.29 dB
777.000 MHz	787.000 MHz	100.000 kHz	778.66334 MHz	4.63 dBm	-25.37 dB
787.000 MHz	787.100 MHz	30.000 kHz	787.03252 MHz	-47.58 dBm	-34.58 dB
787.100 MHz	793.000 MHz	100.000 kHz	787.18546 MHz	-43.64 dBm	-30.64 dB
793.000 MHz	806.000 MHz	6.250 kHz	800.44805 MHz	-61.27 dBm	-26.27 dB

Date: 11.OCT.2018 07:37:20

Highest Band Edge / Full RB



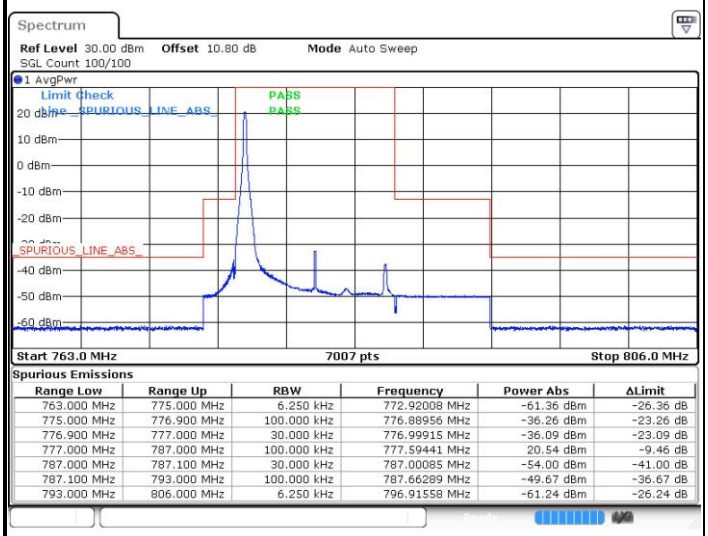
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	770.39061 MHz	-61.42 dBm	-26.42 dB
775.000 MHz	776.900 MHz	100.000 kHz	776.81743 MHz	-44.43 dBm	-31.43 dB
776.900 MHz	777.000 MHz	30.000 kHz	776.98686 MHz	-47.75 dBm	-34.75 dB
777.000 MHz	787.000 MHz	100.000 kHz	783.84815 MHz	3.82 dBm	-26.18 dB
787.000 MHz	787.100 MHz	30.000 kHz	787.01004 MHz	-35.00 dBm	-22.00 dB
787.100 MHz	793.000 MHz	100.000 kHz	787.11474 MHz	-33.83 dBm	-20.83 dB
793.000 MHz	806.000 MHz	6.250 kHz	803.55195 MHz	-61.38 dBm	-26.38 dB

Date: 11.OCT.2018 07:44:01

IC LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB

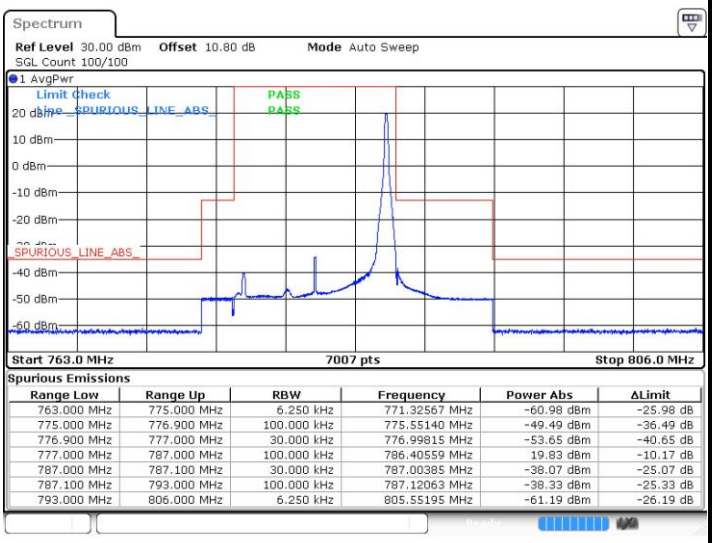


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	772.92008 MHz	-61.36 dBm	-26.36 dB
775.000 MHz	776.900 MHz	100.000 kHz	776.88956 MHz	-36.26 dBm	-23.26 dB
776.900 MHz	777.000 MHz	30.000 kHz	776.99915 MHz	-36.09 dBm	-23.09 dB
777.000 MHz	787.000 MHz	100.000 kHz	777.59441 MHz	20.54 dBm	-9.46 dB
787.000 MHz	787.100 MHz	30.000 kHz	787.00085 MHz	-54.00 dBm	-41.00 dB
787.100 MHz	793.000 MHz	100.000 kHz	787.66289 MHz	-49.67 dBm	-36.67 dB
793.000 MHz	806.000 MHz	6.250 kHz	796.91558 MHz	-61.24 dBm	-26.24 dB

Date: 11.OCT.2018 07:54:03

Highest Band Edge / 1 RB

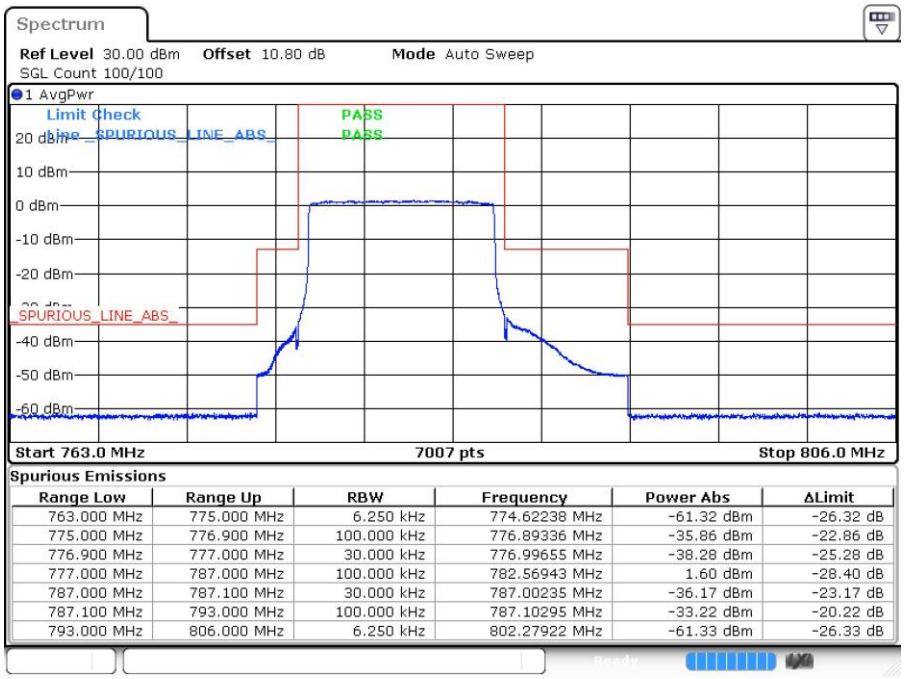


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	771.32567 MHz	-60.98 dBm	-25.98 dB
775.000 MHz	776.900 MHz	100.000 kHz	775.55140 MHz	-49.49 dBm	-36.49 dB
776.900 MHz	777.000 MHz	30.000 kHz	776.99815 MHz	-53.65 dBm	-40.65 dB
777.000 MHz	787.000 MHz	100.000 kHz	786.40559 MHz	19.83 dBm	-10.17 dB
787.000 MHz	787.100 MHz	30.000 kHz	787.00385 MHz	-38.07 dBm	-25.07 dB
787.100 MHz	793.000 MHz	100.000 kHz	787.12063 MHz	-38.33 dBm	-25.33 dB
793.000 MHz	806.000 MHz	6.250 kHz	805.55195 MHz	-61.19 dBm	-26.19 dB

Date: 11.OCT.2018 07:55:44

Band Edge / Full RB



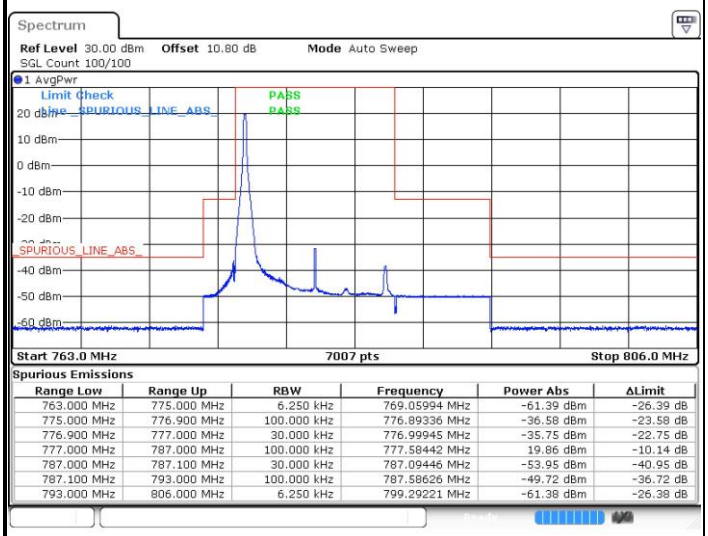
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	774.62238 MHz	-61.32 dBm	-26.32 dB
775.000 MHz	776.900 MHz	100.000 kHz	776.89336 MHz	-35.86 dBm	-22.86 dB
776.900 MHz	777.000 MHz	30.000 kHz	776.99655 MHz	-38.28 dBm	-25.28 dB
777.000 MHz	787.000 MHz	100.000 kHz	782.56943 MHz	1.60 dBm	-28.40 dB
787.000 MHz	787.100 MHz	30.000 kHz	787.00235 MHz	-36.17 dBm	-23.17 dB
787.100 MHz	793.000 MHz	100.000 kHz	787.10295 MHz	-33.22 dBm	-20.22 dB
793.000 MHz	806.000 MHz	6.250 kHz	802.27922 MHz	-61.33 dBm	-26.33 dB

Date: 11.OCT.2018 07:49:03

IC LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB

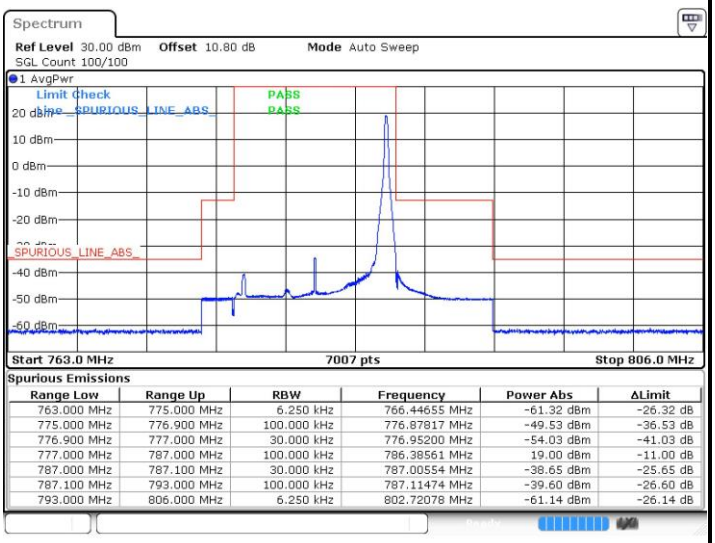


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	769.05994 MHz	-61.39 dBm	-26.39 dB
775.000 MHz	776.900 MHz	100.000 kHz	776.89336 MHz	-36.58 dBm	-23.58 dB
776.900 MHz	777.000 MHz	30.000 kHz	776.99945 MHz	-35.75 dBm	-22.75 dB
777.000 MHz	787.000 MHz	100.000 kHz	777.58442 MHz	19.86 dBm	-10.14 dB
787.000 MHz	787.100 MHz	30.000 kHz	787.09446 MHz	-53.95 dBm	-40.95 dB
787.100 MHz	793.000 MHz	100.000 kHz	787.58626 MHz	-49.72 dBm	-36.72 dB
793.000 MHz	806.000 MHz	6.250 kHz	799.29221 MHz	-61.38 dBm	-26.38 dB

Date: 11.OCT.2018 07:52:23

Highest Band Edge / 1 RB

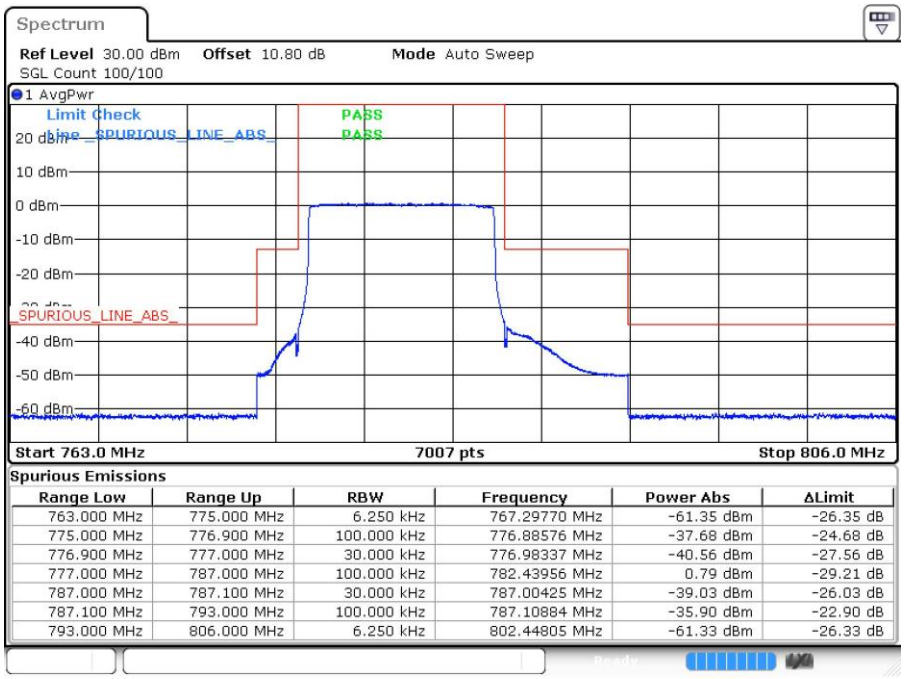


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	766.44655 MHz	-61.32 dBm	-26.32 dB
775.000 MHz	776.900 MHz	100.000 kHz	776.87817 MHz	-49.53 dBm	-36.53 dB
776.900 MHz	777.000 MHz	30.000 kHz	776.95200 MHz	-54.03 dBm	-41.03 dB
777.000 MHz	787.000 MHz	100.000 kHz	786.38561 MHz	19.00 dBm	-11.00 dB
787.000 MHz	787.100 MHz	30.000 kHz	787.00554 MHz	-38.65 dBm	-25.65 dB
787.100 MHz	793.000 MHz	100.000 kHz	787.11474 MHz	-39.60 dBm	-26.60 dB
793.000 MHz	806.000 MHz	6.250 kHz	802.72078 MHz	-61.14 dBm	-26.14 dB

Date: 11.OCT.2018 07:57:24

Band Edge / Full RB



Spurious Emissions

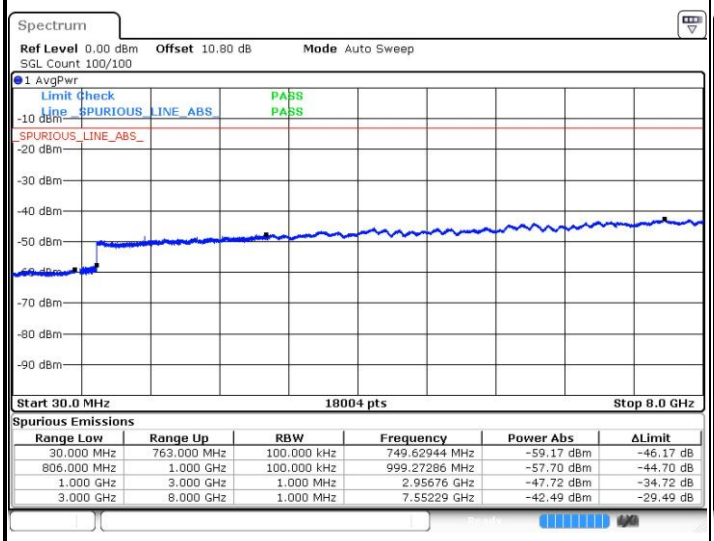
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	767.29770 MHz	-61.35 dBm	-26.35 dB
775.000 MHz	776.900 MHz	100.000 kHz	776.88576 MHz	-37.68 dBm	-24.68 dB
776.900 MHz	777.000 MHz	30.000 kHz	776.98337 MHz	-40.56 dBm	-27.56 dB
777.000 MHz	787.000 MHz	100.000 kHz	782.43956 MHz	0.79 dBm	-29.21 dB
787.000 MHz	787.100 MHz	30.000 kHz	787.00425 MHz	-39.03 dBm	-26.03 dB
787.100 MHz	793.000 MHz	100.000 kHz	787.10884 MHz	-35.90 dBm	-22.90 dB
793.000 MHz	806.000 MHz	6.250 kHz	802.44805 MHz	-61.33 dBm	-26.33 dB

Date: 11.OCT.2018 07:50:43

Conducted Spurious Emission

LTE Band 13 / 5MHz

Lowest Channel / QPSK

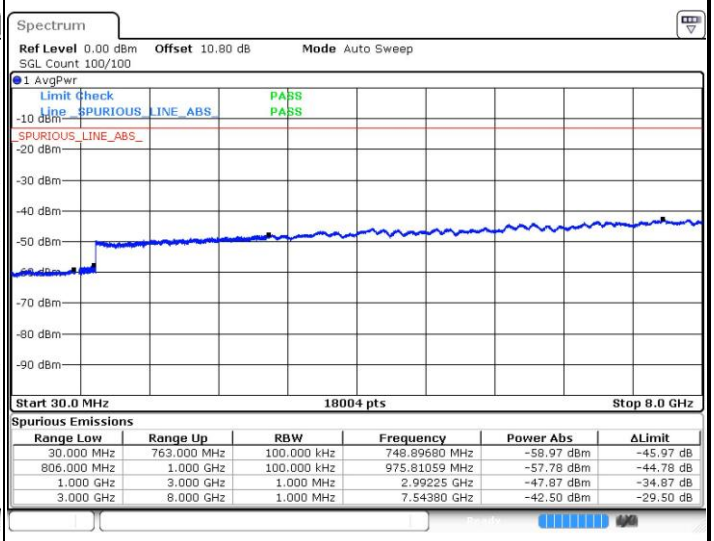


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	763.000 MHz	100.000 kHz	749.62944 MHz	-59.17 dBm	-46.17 dB
806.000 MHz	1.000 GHz	100.000 kHz	999.27286 MHz	-57.70 dBm	-44.70 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.95676 GHz	-47.72 dBm	-34.72 dB
3.000 GHz	8.000 GHz	1.000 MHz	7.55229 GHz	-42.49 dBm	-29.49 dB

Date: 11.OCT.2018 07:07:08

Lowest Channel / 16QAM

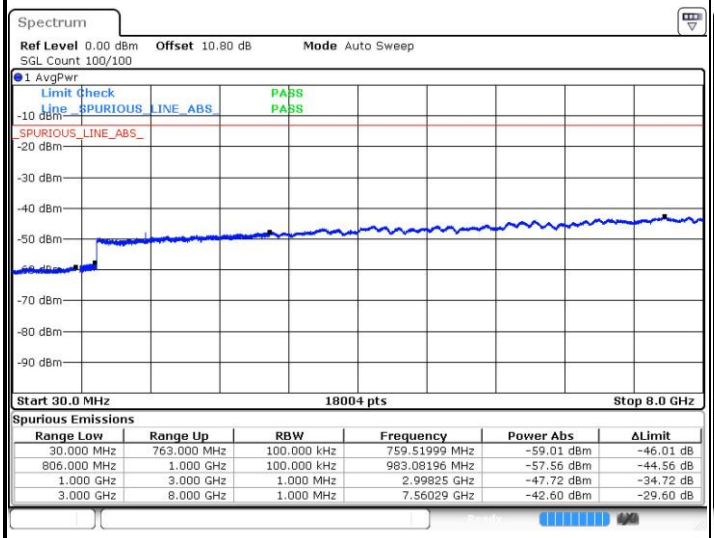


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	763.000 MHz	100.000 kHz	748.89680 MHz	-58.97 dBm	-45.97 dB
806.000 MHz	1.000 GHz	100.000 kHz	975.81059 MHz	-57.78 dBm	-44.78 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.99225 GHz	-47.87 dBm	-34.87 dB
3.000 GHz	8.000 GHz	1.000 MHz	7.54380 GHz	-42.50 dBm	-29.50 dB

Date: 11.OCT.2018 07:07:48

Middle Channel / QPSK

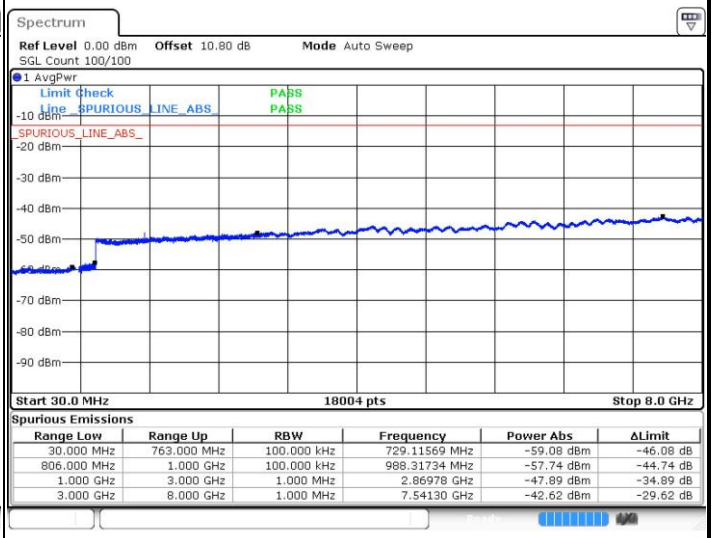


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	763.000 MHz	100.000 kHz	759.51999 MHz	-59.01 dBm	-46.01 dB
806.000 MHz	1.000 GHz	100.000 kHz	983.08196 MHz	-57.56 dBm	-44.56 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.99825 GHz	-47.72 dBm	-34.72 dB
3.000 GHz	8.000 GHz	1.000 MHz	7.56029 GHz	-42.60 dBm	-29.60 dB

Date: 11.OCT.2018 07:09:08

Middle Channel / 16QAM



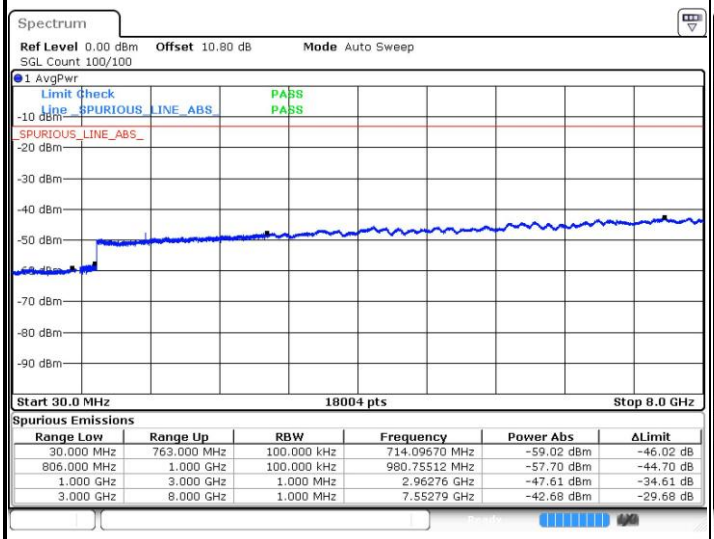
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	763.000 MHz	100.000 kHz	729.11569 MHz	-59.08 dBm	-46.08 dB
806.000 MHz	1.000 GHz	100.000 kHz	988.31734 MHz	-57.74 dBm	-44.74 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.86978 GHz	-47.89 dBm	-34.89 dB
3.000 GHz	8.000 GHz	1.000 MHz	7.54130 GHz	-42.62 dBm	-29.62 dB

Date: 11.OCT.2018 07:08:28

LTE Band 13 / 5MHz

Highest Channel / QPSK

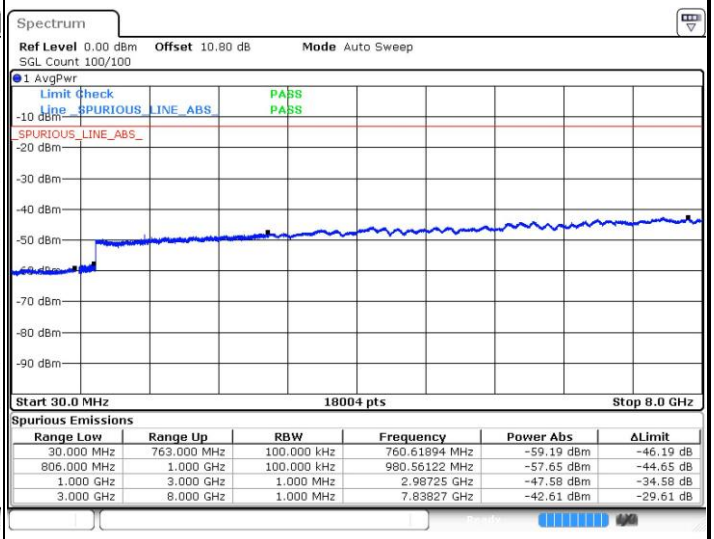


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	763.000 MHz	100.000 kHz	714.09670 MHz	-59.02 dBm	-46.02 dB
806.000 MHz	1.000 GHz	100.000 kHz	980.75512 MHz	-57.70 dBm	-44.70 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.96276 GHz	-47.61 dBm	-34.61 dB
3.000 GHz	8.000 GHz	1.000 MHz	7.55279 GHz	-42.68 dBm	-29.68 dB

Date: 11.OCT.2018 07:18:00

Highest Channel / 16QAM



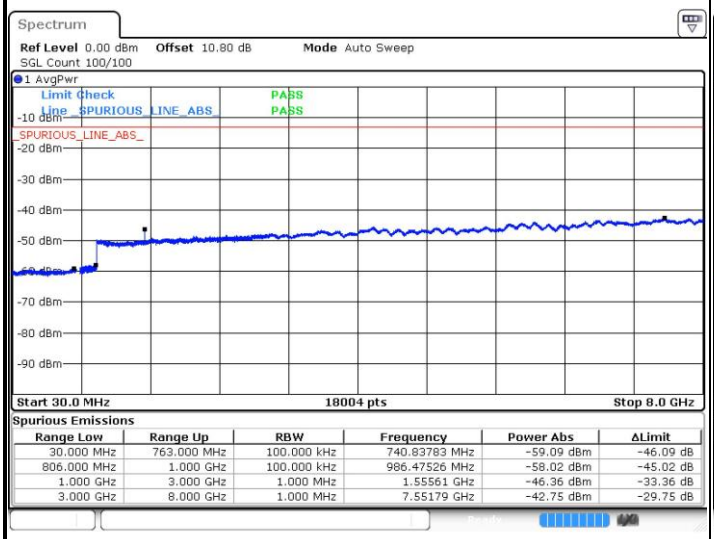
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	763.000 MHz	100.000 kHz	760.61894 MHz	-59.19 dBm	-46.19 dB
806.000 MHz	1.000 GHz	100.000 kHz	980.56122 MHz	-57.65 dBm	-44.65 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.98725 GHz	-47.58 dBm	-34.58 dB
3.000 GHz	8.000 GHz	1.000 MHz	7.83827 GHz	-42.61 dBm	-29.61 dB

Date: 11.OCT.2018 07:18:40

LTE Band 13 / 10MHz

Middle Channel / QPSK

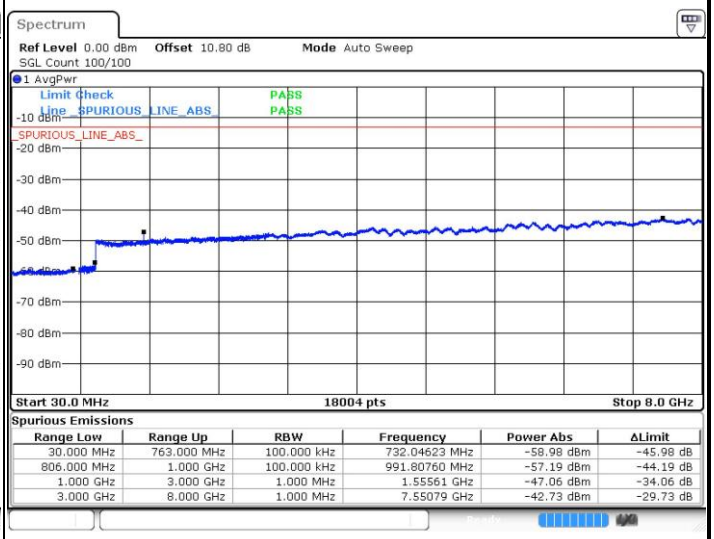


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	763.000 MHz	100.000 kHz	740.83783 MHz	-59.09 dBm	-46.09 dB
806.000 MHz	1.000 GHz	100.000 kHz	986.47526 MHz	-58.02 dBm	-45.02 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.55561 GHz	-46.36 dBm	-33.36 dB
3.000 GHz	8.000 GHz	1.000 MHz	7.55179 GHz	-42.75 dBm	-29.75 dB

Date: 11.OCT.2018 07:30:47

Middle Channel / 16QAM



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	763.000 MHz	100.000 kHz	732.04623 MHz	-58.98 dBm	-45.98 dB
806.000 MHz	1.000 GHz	100.000 kHz	991.80760 MHz	-57.19 dBm	-44.19 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.55561 GHz	-47.06 dBm	-34.06 dB
3.000 GHz	8.000 GHz	1.000 MHz	7.55079 GHz	-42.73 dBm	-29.73 dB

Date: 11.OCT.2018 07:30:07

Frequency Stability

Test Conditions		LTE Band 13 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0006	PASS
40	Normal Voltage	0.0020	
30	Normal Voltage	0.0013	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0004	
0	Normal Voltage	0.0027	
-10	Normal Voltage	0.0022	
-20	Normal Voltage	0.0000	
-30	Normal Voltage	0.0001	
20	Maximum Voltage	0.0018	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0028	

Note:

1. Normal Voltage =7.6 V.；Battery End Point (BEP) =6.8 V.；Maximum Voltage =8.7 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

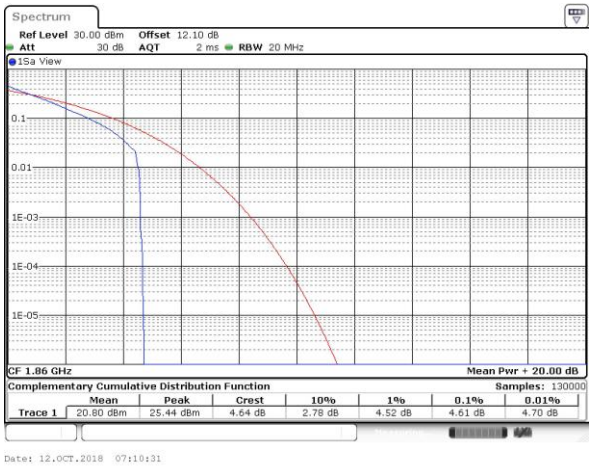
LTE Band 25

Peak-to-Average Ratio

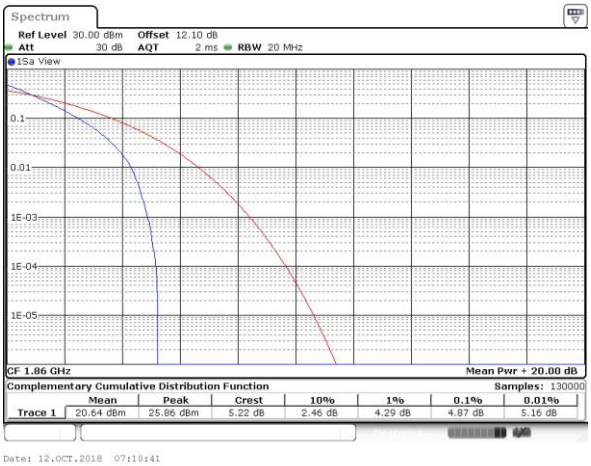
Mode	LTE Band 25 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.61	4.87	5.48	5.91	PASS
Middle CH	4.67	4.72	5.28	5.77	
Highest CH	3.74	4.75	4.7	5.83	

LTE Band 25 / 20MHz / QPSK

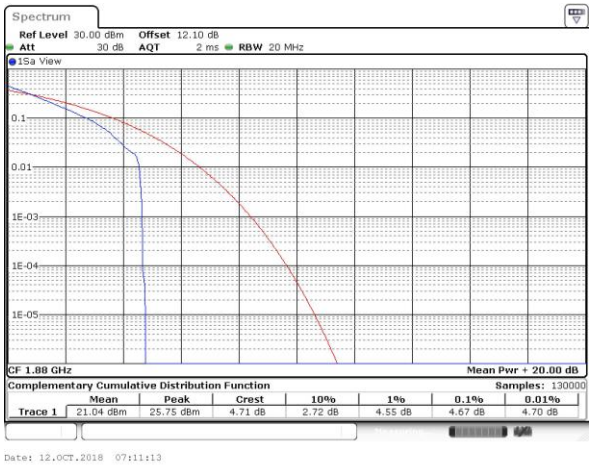
Lowest Channel / 1RB



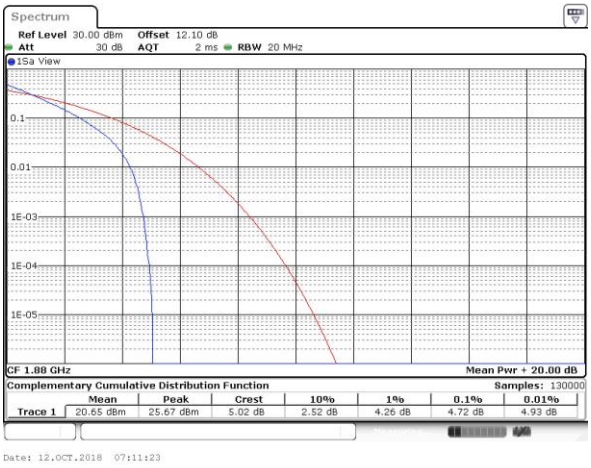
Lowest Channel / Full RB



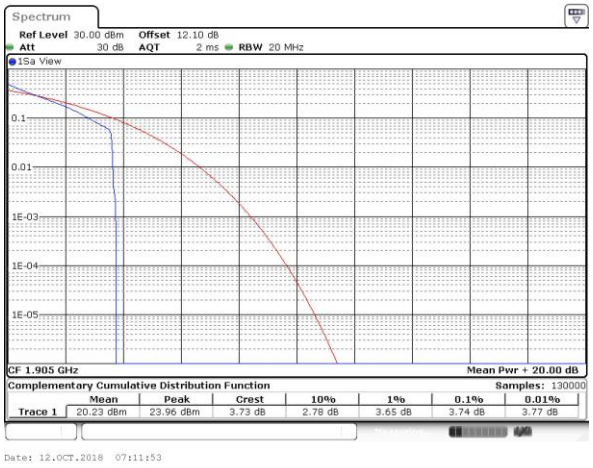
Middle Channel / 1RB



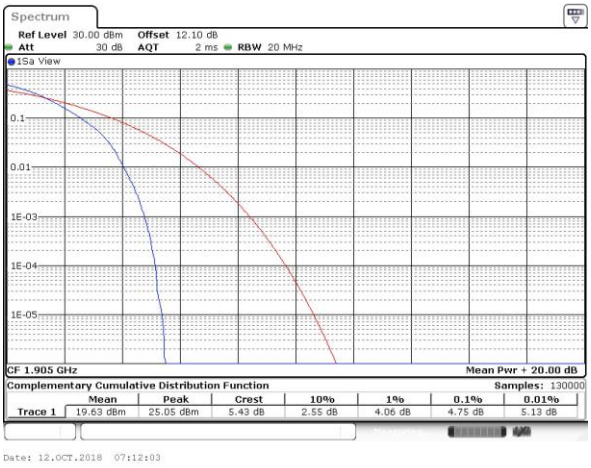
Middle Channel / Full RB



Highest Channel / 1RB

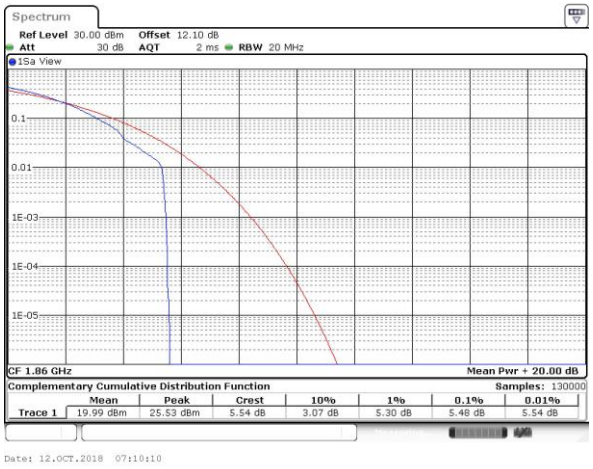


Highest Channel / Full RB

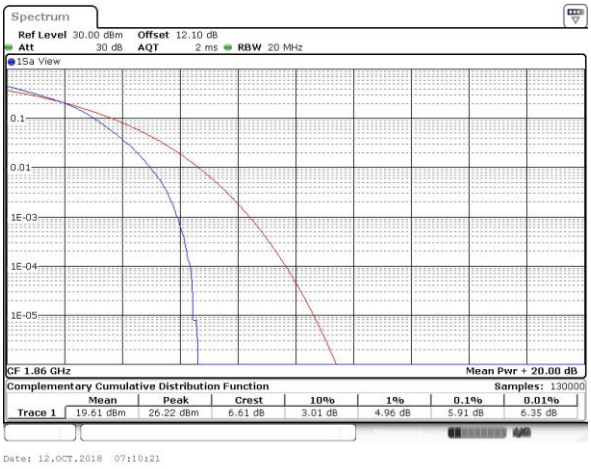


LTE Band 25 / 20MHz / 16QAM

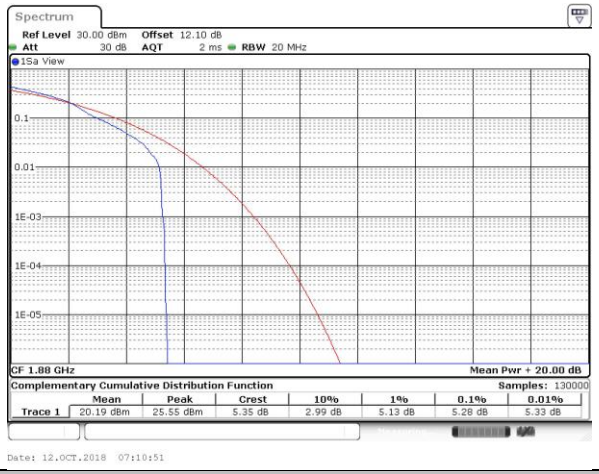
Lowest Channel / 1RB



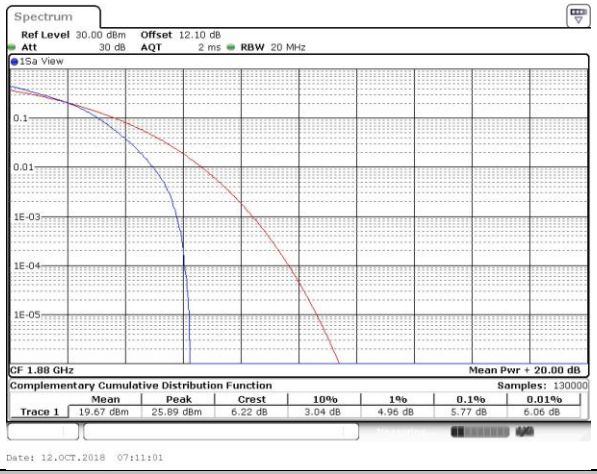
Lowest Channel / Full RB



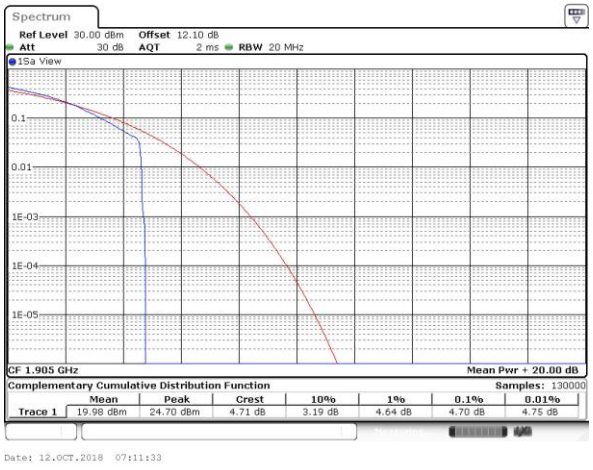
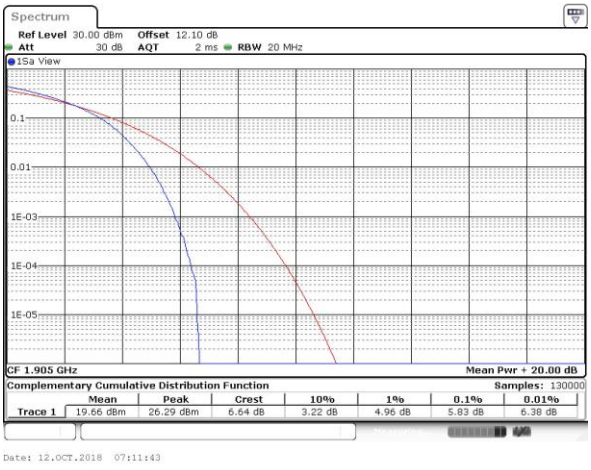
Middle Channel / 1RB



Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB