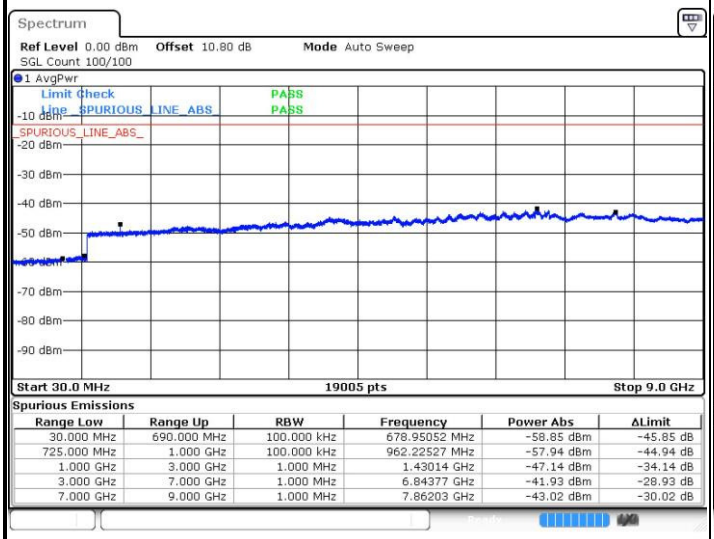
LTE Band 12 / 1.4MHz

Highest Channel / QPSK

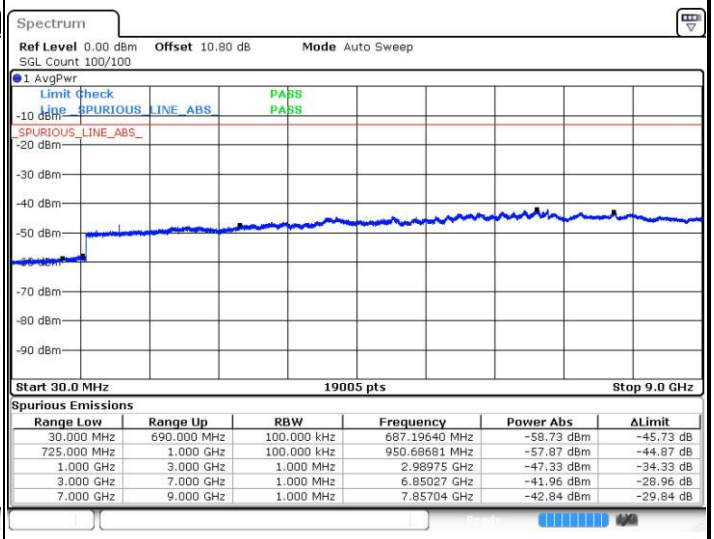


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	678.95052 MHz	-58.85 dBm	-45.85 dB
725.000 MHz	1.000 GHz	100.000 kHz	962.22527 MHz	-57.94 dBm	-44.94 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.43014 GHz	-47.14 dBm	-34.14 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.84377 GHz	-41.93 dBm	-28.93 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.86203 GHz	-43.02 dBm	-30.02 dB

Date: 17.FEB.2017 17:03:03

Highest Channel / 16QAM



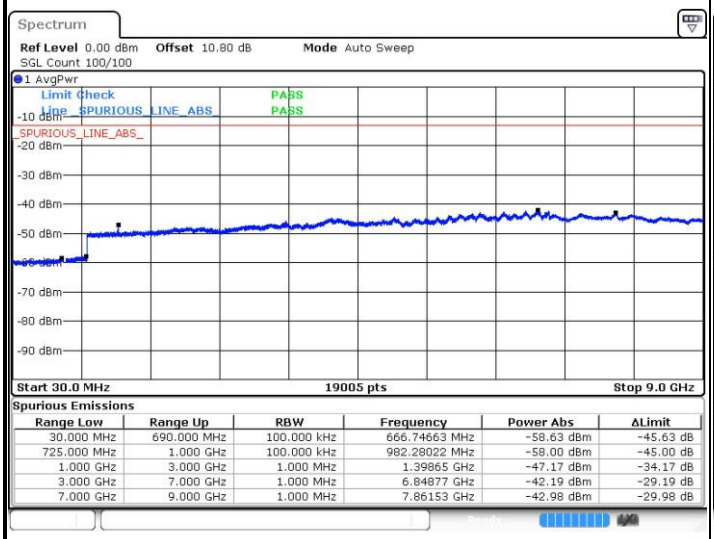
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	687.19640 MHz	-58.73 dBm	-45.73 dB
725.000 MHz	1.000 GHz	100.000 kHz	950.68681 MHz	-57.87 dBm	-44.87 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.98975 GHz	-47.33 dBm	-34.33 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.85027 GHz	-41.96 dBm	-28.96 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.85704 GHz	-42.84 dBm	-29.84 dB

Date: 17.FEB.2017 17:03:57

LTE Band 12 / 3MHz

Lowest Channel / QPSK

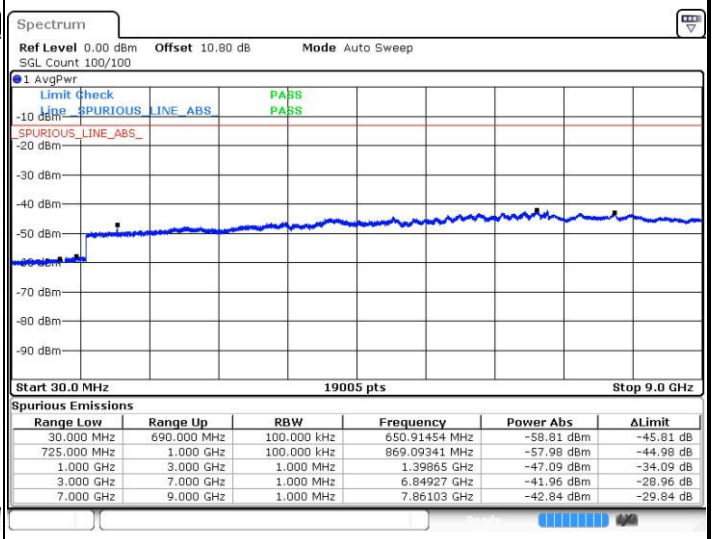


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	666.74663 MHz	-58.63 dBm	-45.63 dB
725.000 MHz	1.000 GHz	100.000 kHz	982.28022 MHz	-58.00 dBm	-45.00 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.39865 GHz	-47.17 dBm	-34.17 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.84877 GHz	-42.19 dBm	-29.19 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.86153 GHz	-42.98 dBm	-29.98 dB

Date: 17.FEB.2017 17:10:10

Lowest Channel / 16QAM



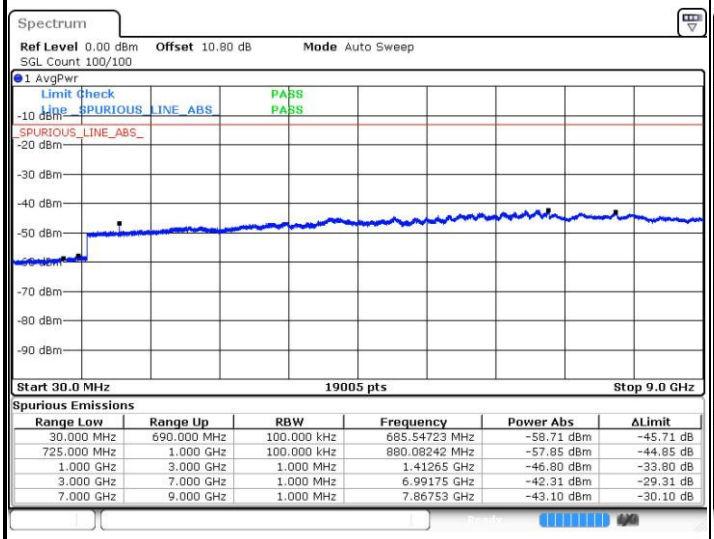
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	650.91454 MHz	-58.81 dBm	-45.81 dB
725.000 MHz	1.000 GHz	100.000 kHz	869.09341 MHz	-57.98 dBm	-44.98 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.39865 GHz	-47.09 dBm	-34.09 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.84927 GHz	-41.96 dBm	-28.96 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.86103 GHz	-42.84 dBm	-29.84 dB

Date: 17.FEB.2017 17:11:04

LTE Band 12 / 3MHz

Middle Channel / QPSK

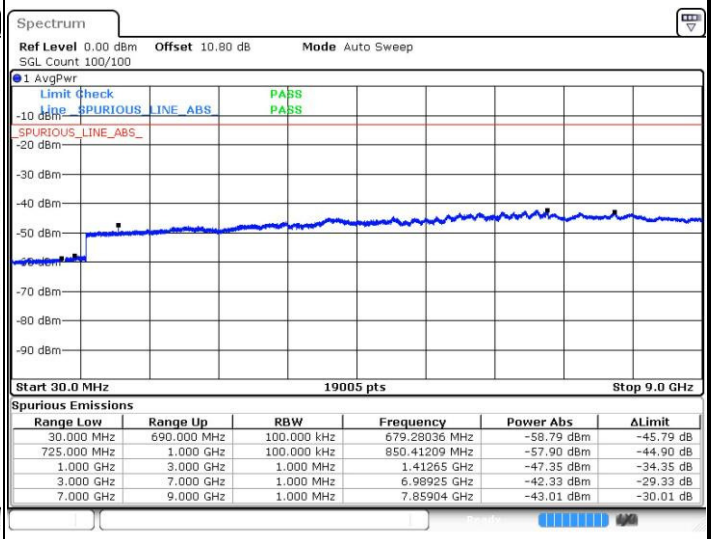


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	685.54723 MHz	-58.71 dBm	-45.71 dB
725.000 MHz	1.000 GHz	100.000 kHz	880.08242 MHz	-57.85 dBm	-44.85 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.41265 GHz	-46.80 dBm	-33.80 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99175 GHz	-42.31 dBm	-29.31 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.86753 GHz	-43.10 dBm	-30.10 dB

Date: 17.FEB.2017 17:13:34

Middle Channel / 16QAM

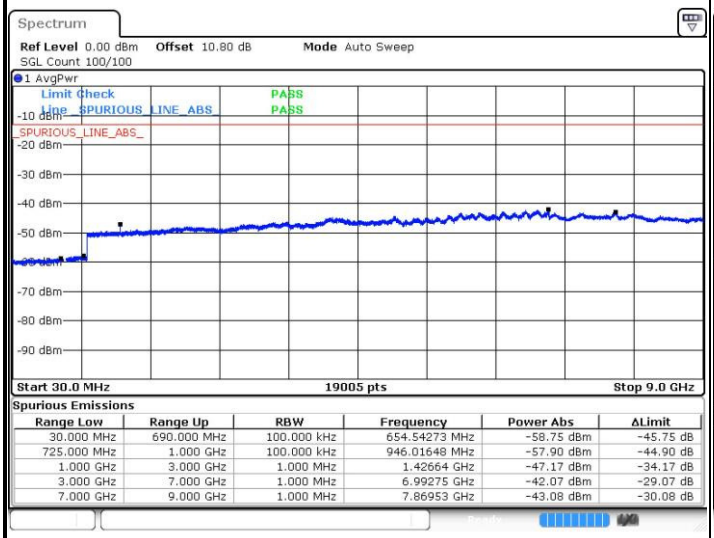


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	679.28036 MHz	-58.79 dBm	-45.79 dB
725.000 MHz	1.000 GHz	100.000 kHz	850.41209 MHz	-57.90 dBm	-44.90 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.41265 GHz	-47.35 dBm	-34.35 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.98925 GHz	-42.33 dBm	-29.33 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.85904 GHz	-43.01 dBm	-30.01 dB

Date: 17.FEB.2017 17:12:40

Highest Channel / QPSK

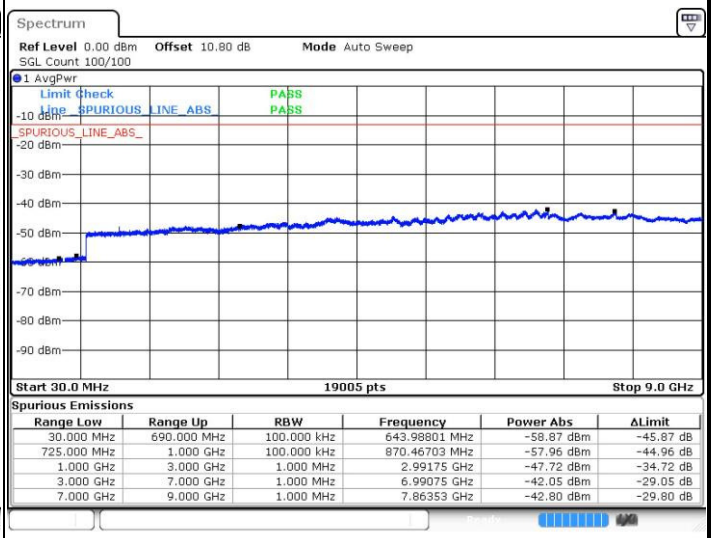


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	654.54273 MHz	-58.75 dBm	-45.75 dB
725.000 MHz	1.000 GHz	100.000 kHz	946.01648 MHz	-57.90 dBm	-44.90 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.42664 GHz	-47.17 dBm	-34.17 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99275 GHz	-42.07 dBm	-29.07 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.86953 GHz	-43.08 dBm	-30.08 dB

Date: 17.FEB.2017 17:19:46

Highest Channel / 16QAM



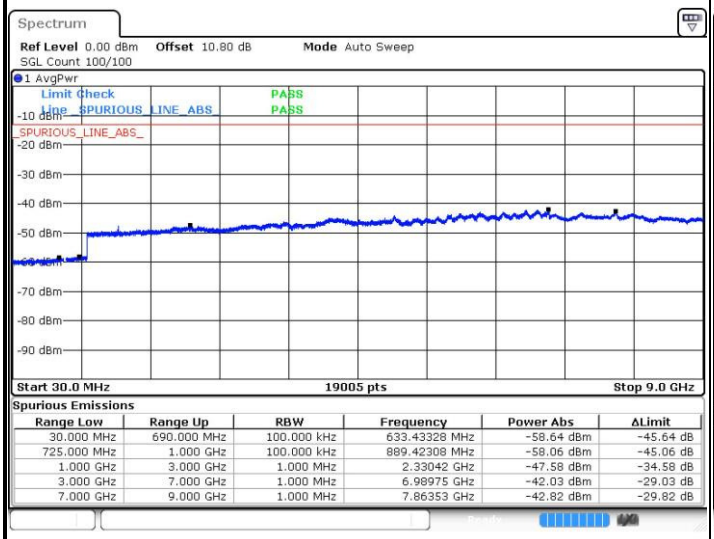
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	643.98801 MHz	-58.87 dBm	-45.87 dB
725.000 MHz	1.000 GHz	100.000 kHz	870.46703 MHz	-57.96 dBm	-44.96 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.99175 GHz	-47.72 dBm	-34.72 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99075 GHz	-42.05 dBm	-29.05 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.86353 GHz	-42.80 dBm	-29.80 dB

Date: 17.FEB.2017 17:20:40

LTE Band 12 / 5MHz

Lowest Channel / QPSK

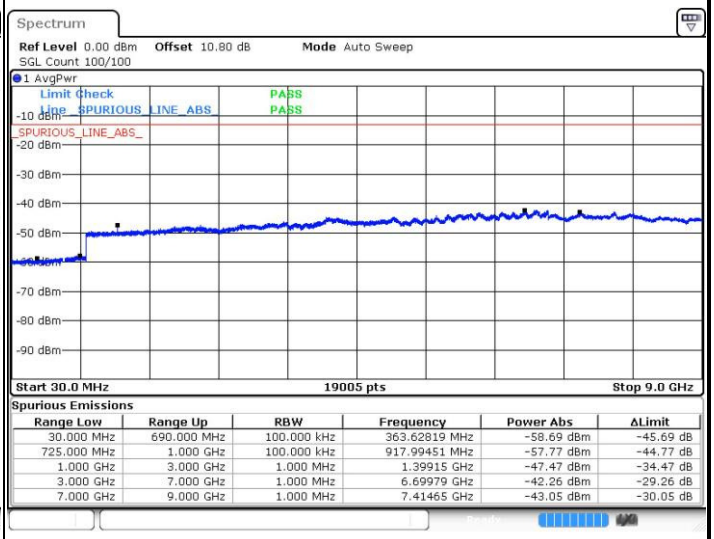


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	633.43328 MHz	-58.64 dBm	-45.64 dB
725.000 MHz	1.000 GHz	100.000 kHz	889.42308 MHz	-58.06 dBm	-45.06 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.33042 GHz	-47.58 dBm	-34.58 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.98975 GHz	-42.03 dBm	-29.03 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.86353 GHz	-42.82 dBm	-29.82 dB

Date: 17.FEB.2017 17:26:53

Lowest Channel / 16QAM

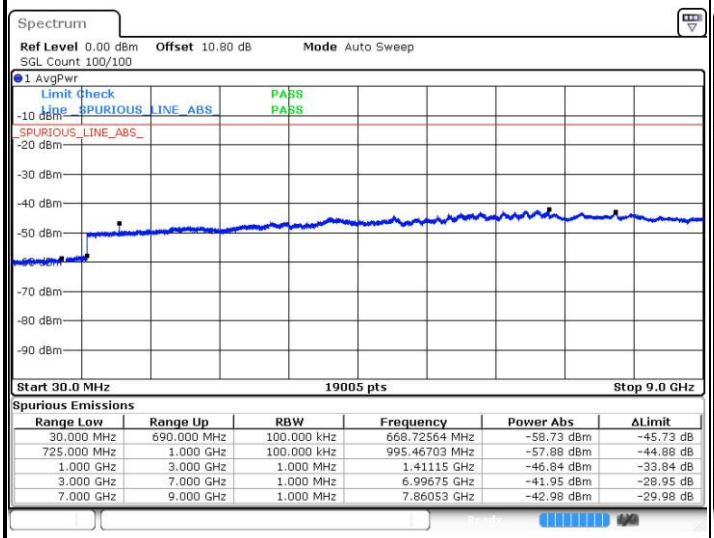


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	363.62819 MHz	-58.69 dBm	-45.69 dB
725.000 MHz	1.000 GHz	100.000 kHz	917.99451 MHz	-57.77 dBm	-44.77 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.39915 GHz	-47.47 dBm	-34.47 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.69979 GHz	-42.26 dBm	-29.26 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.41465 GHz	-43.05 dBm	-30.05 dB

Date: 17.FEB.2017 17:27:47

Middle Channel / QPSK

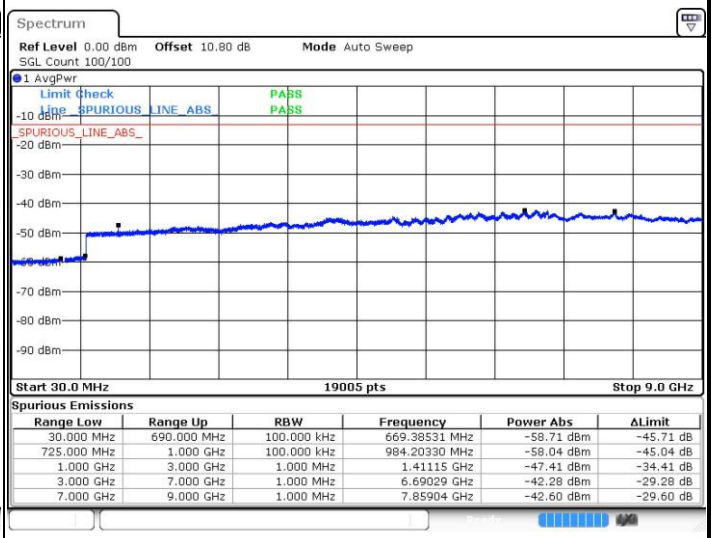


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	668.72564 MHz	-58.73 dBm	-45.73 dB
725.000 MHz	1.000 GHz	100.000 kHz	995.46703 MHz	-57.88 dBm	-44.88 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.41115 GHz	-46.84 dBm	-33.84 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99675 GHz	-41.95 dBm	-28.95 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.86053 GHz	-42.98 dBm	-29.98 dB

Date: 17.FEB.2017 17:30:17

Middle Channel / 16QAM



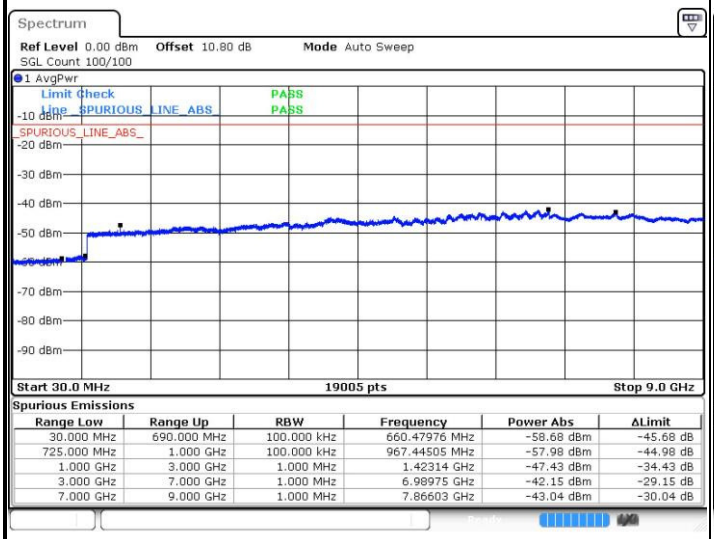
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	669.38531 MHz	-58.71 dBm	-45.71 dB
725.000 MHz	1.000 GHz	100.000 kHz	984.20330 MHz	-58.04 dBm	-45.04 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.41115 GHz	-47.41 dBm	-34.41 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.69029 GHz	-42.28 dBm	-29.28 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.85904 GHz	-42.60 dBm	-29.60 dB

Date: 17.FEB.2017 17:29:23

LTE Band 12 / 5MHz

Highest Channel / QPSK

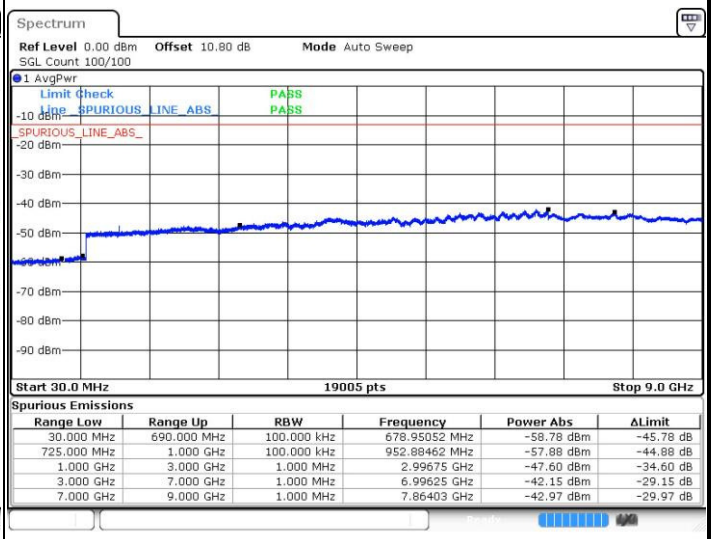


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	660.47976 MHz	-58.68 dBm	-45.68 dB
725.000 MHz	1.000 GHz	100.000 kHz	967.44505 MHz	-57.98 dBm	-44.98 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.42314 GHz	-47.43 dBm	-34.43 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.98975 GHz	-42.15 dBm	-29.15 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.86603 GHz	-43.04 dBm	-30.04 dB

Date: 17.FEB.2017 17:37:24

Highest Channel / 16QAM



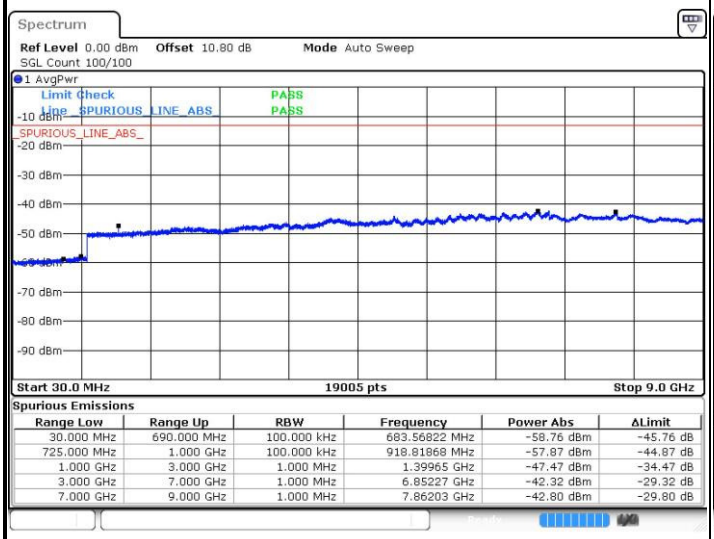
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	678.95052 MHz	-58.78 dBm	-45.78 dB
725.000 MHz	1.000 GHz	100.000 kHz	952.88462 MHz	-57.88 dBm	-44.88 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.99675 GHz	-47.60 dBm	-34.60 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99625 GHz	-42.15 dBm	-29.15 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.86403 GHz	-42.97 dBm	-29.97 dB

Date: 17.FEB.2017 17:36:29

LTE Band 12 / 10MHz

Lowest Channel / QPSK

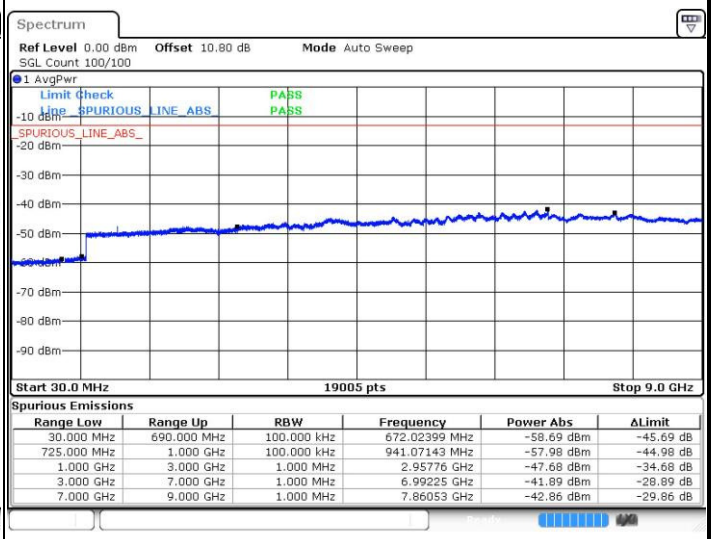


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	683.56822 MHz	-58.76 dBm	-45.76 dB
725.000 MHz	1.000 GHz	100.000 kHz	918.81868 MHz	-57.87 dBm	-44.87 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.39965 GHz	-47.47 dBm	-34.47 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.85227 GHz	-42.32 dBm	-29.32 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.86203 GHz	-42.80 dBm	-29.80 dB

Date: 17.FEB.2017 17:43:36

Lowest Channel / 16QAM



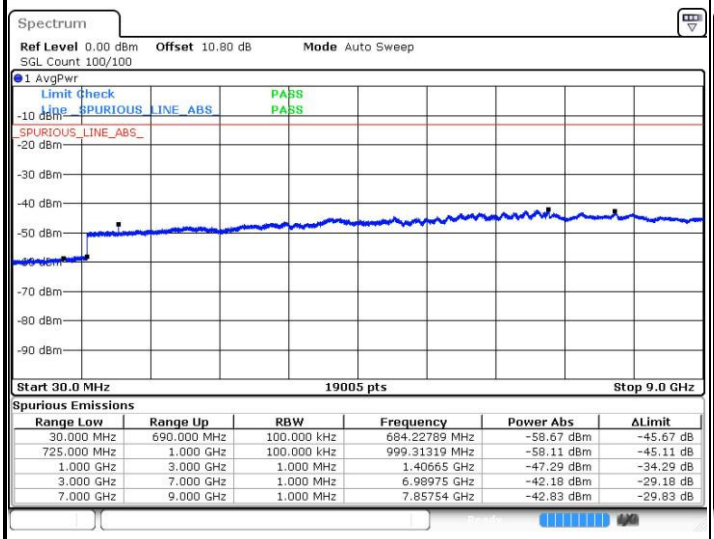
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	672.02399 MHz	-58.69 dBm	-45.69 dB
725.000 MHz	1.000 GHz	100.000 kHz	941.07143 MHz	-57.98 dBm	-44.98 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.95776 GHz	-47.68 dBm	-34.68 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99225 GHz	-41.89 dBm	-28.89 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.86053 GHz	-42.86 dBm	-29.86 dB

Date: 17.FEB.2017 17:44:30

LTE Band 12 / 10MHz

Middle Channel / QPSK

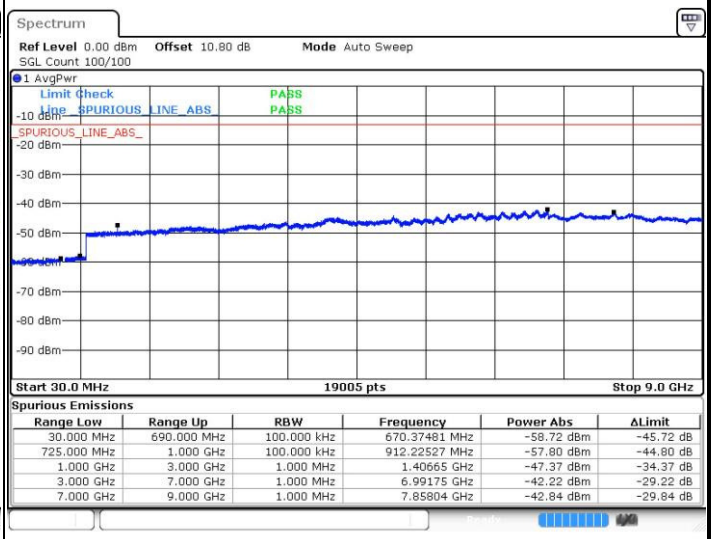


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	684.22789 MHz	-58.67 dBm	-45.67 dB
725.000 MHz	1.000 GHz	100.000 kHz	999.31319 MHz	-58.11 dBm	-45.11 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.40665 GHz	-47.29 dBm	-34.29 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.98975 GHz	-42.18 dBm	-29.18 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.85754 GHz	-42.83 dBm	-29.83 dB

Date: 17.FEB.2017 17:47:00

Middle Channel / 16QAM

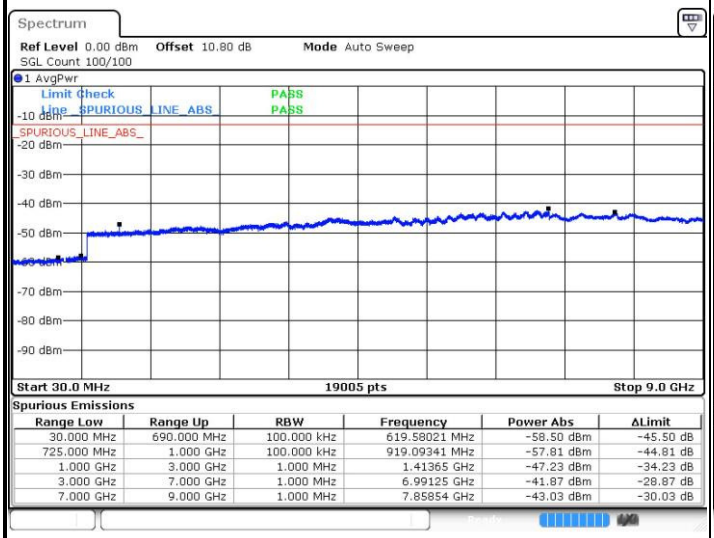


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	670.37481 MHz	-58.72 dBm	-45.72 dB
725.000 MHz	1.000 GHz	100.000 kHz	912.22527 MHz	-57.80 dBm	-44.80 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.40665 GHz	-47.37 dBm	-34.37 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99175 GHz	-42.22 dBm	-29.22 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.85804 GHz	-42.84 dBm	-29.84 dB

Date: 17.FEB.2017 17:46:05

Highest Channel / QPSK

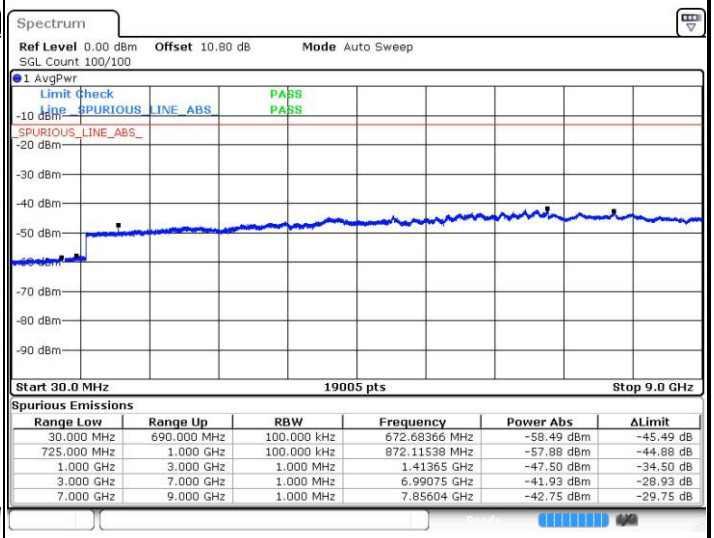


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	619.58021 MHz	-58.50 dBm	-45.50 dB
725.000 MHz	1.000 GHz	100.000 kHz	919.09341 MHz	-57.81 dBm	-44.81 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.41365 GHz	-47.23 dBm	-34.23 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99125 GHz	-41.87 dBm	-28.87 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.85854 GHz	-43.03 dBm	-30.03 dB

Date: 17.FEB.2017 17:53:11

Highest Channel / 16QAM



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	672.68366 MHz	-58.49 dBm	-45.49 dB
725.000 MHz	1.000 GHz	100.000 kHz	872.11538 MHz	-57.88 dBm	-44.88 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.41365 GHz	-47.50 dBm	-34.50 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99075 GHz	-41.93 dBm	-28.93 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.85604 GHz	-42.75 dBm	-29.75 dB

Date: 17.FEB.2017 17:54:05

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	0.0055	PASS
40	Normal Voltage	0.0079	
30	Normal Voltage	0.0007	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0017	
0	Normal Voltage	0.0054	
-10	Normal Voltage	0.0068	
-20	Normal Voltage	0.0076	
-30	Normal Voltage	0.0008	
20	Maximum Voltage	0.0008	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0049	

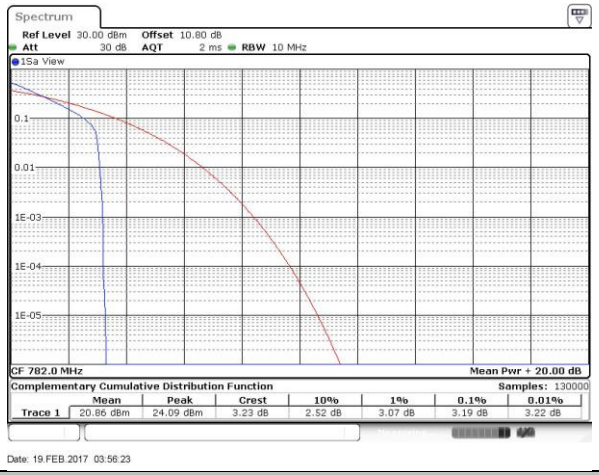
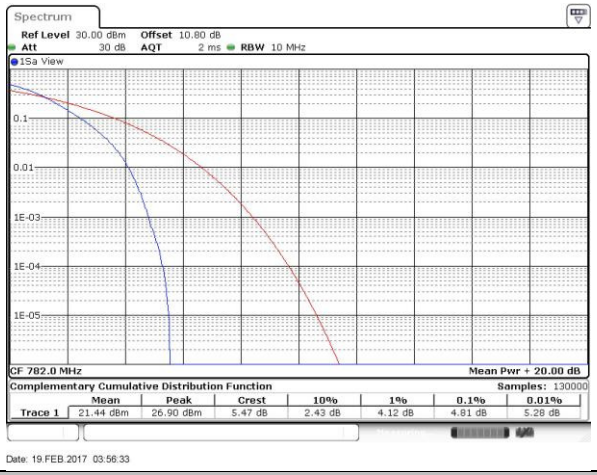
Note:

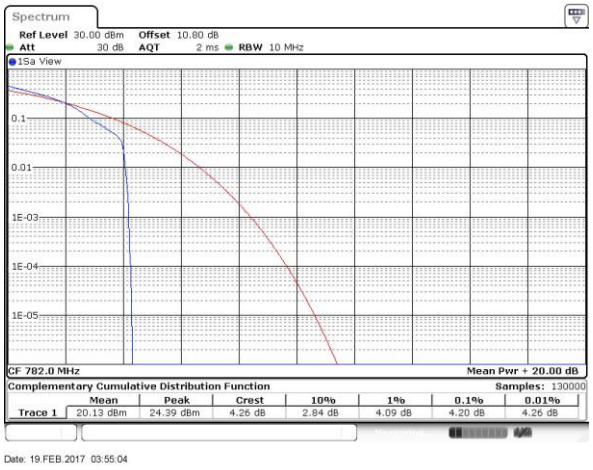
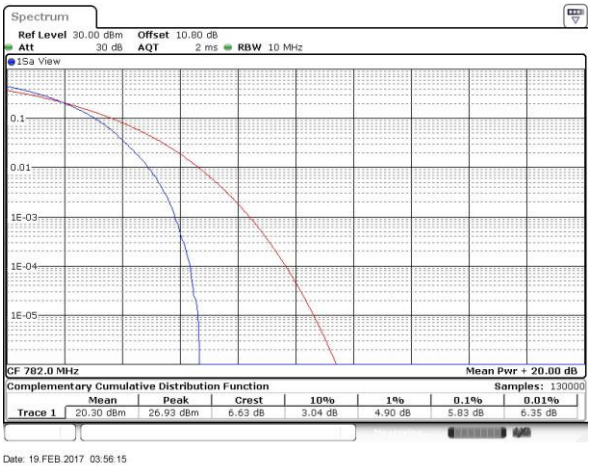
1. Normal Voltage =3.9 V.；Battery End Point (BEP) =3.4 V.；Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

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	3.19	4.81	4.2	5.83	
Highest CH	-	-	-	-	

LTE Band 13 / 10MHz / QPSK	
Middle Channel/ 1RB	**Middle Channel / Full RB**
	

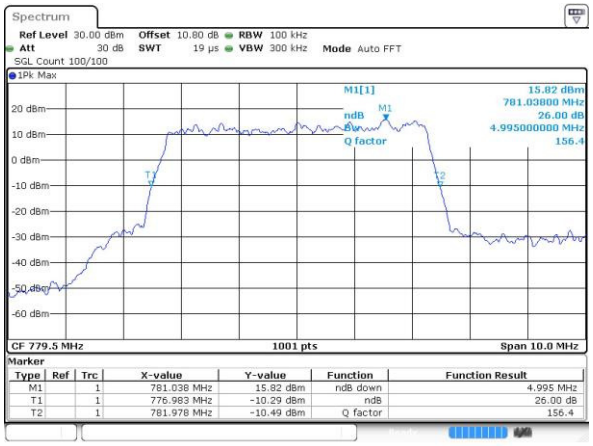
LTE Band 13 / 10MHz / 16QAM	
Middle Channel/ 1RB	**Middle Channel / Full RB**
	

26dB Bandwidth

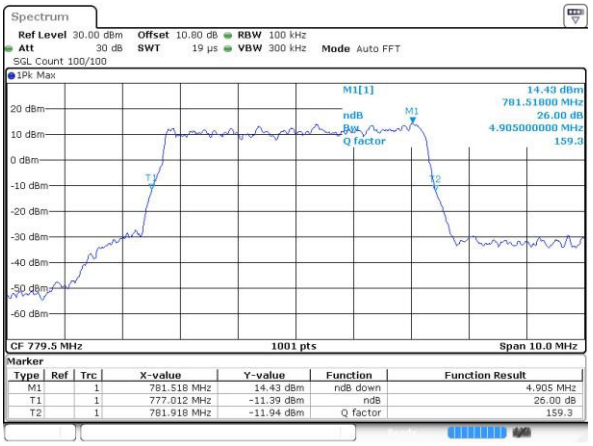
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	5.00	4.91	-	-	-	-	-	-
Middle CH	-	-	-	-	5.00	4.91	9.91	9.91	-	-	-	-
Highest CH	-	-	-	-	4.98	4.87	-	-	-	-	-	-

LTE Band 13

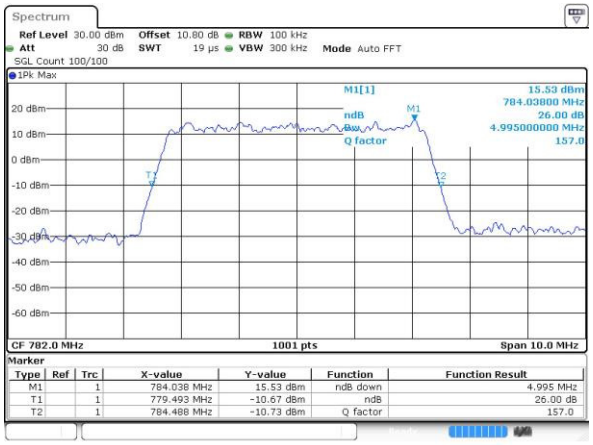
Lowest Channel / 5MHz / QPSK



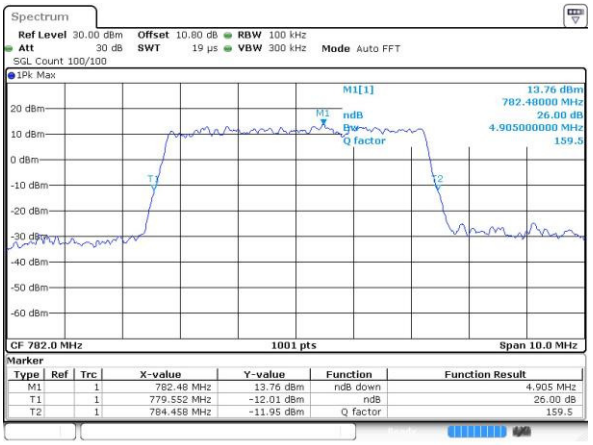
Lowest Channel / 5MHz / 16QAM



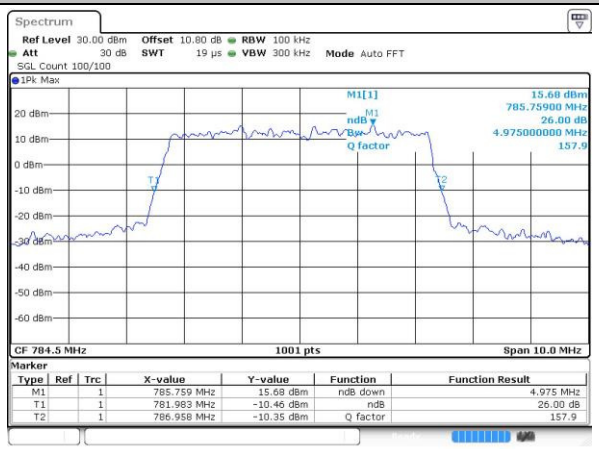
Middle Channel / 5MHz / QPSK



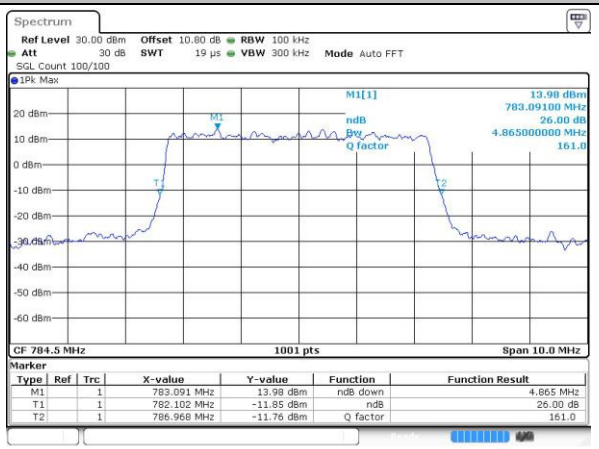
Middle Channel / 5MHz / 16QAM

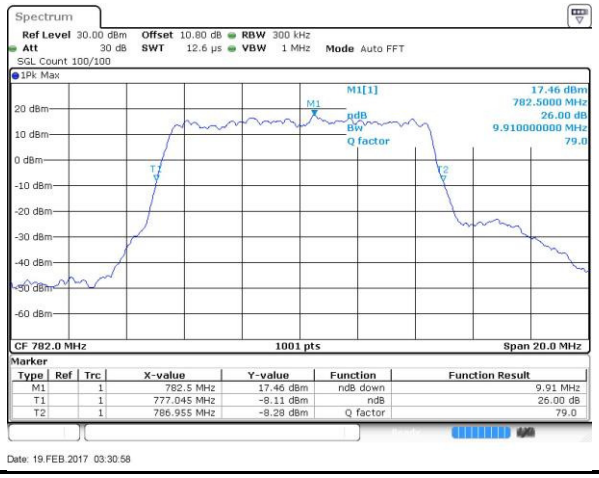
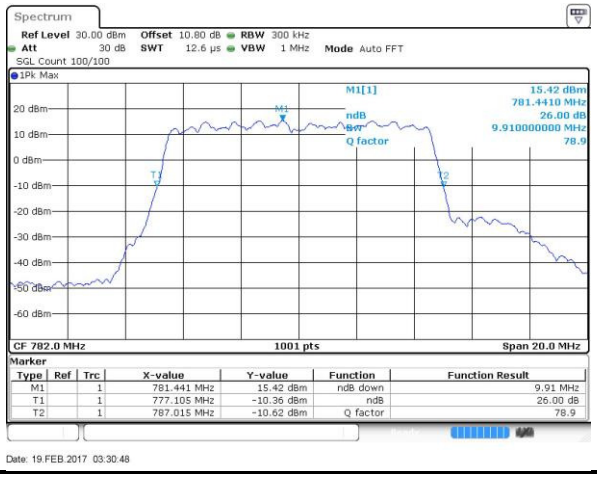


Highest Channel / 5MHz / QPSK



Highest Channel / 5MHz / 16QAM



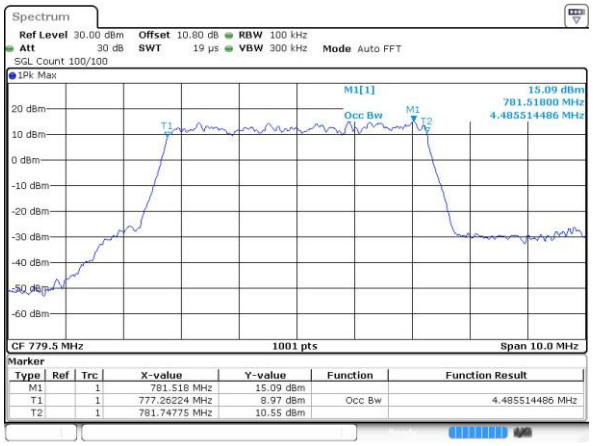
LTE Band 13	
Middle Channel / 10MHz / QPSK	**Middle Channel / 10MHz / 16QAM**
	

Occupied Bandwidth

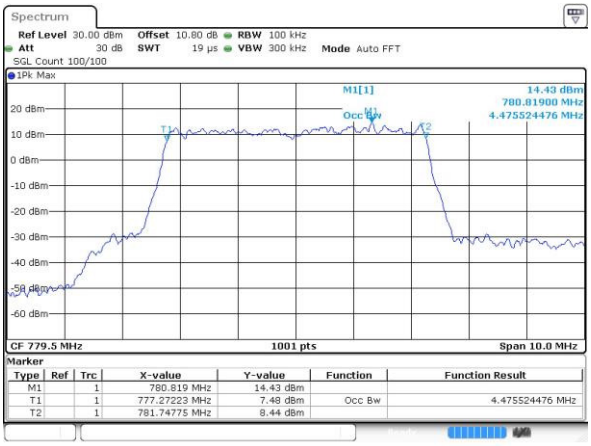
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.49	4.48	-	-	-	-	-	-
Middle CH	-	-	-	-	4.47	4.5	9.07	8.93	-	-	-	-
Highest CH	-	-	-	-	4.5	4.49	-	-	-	-	-	-

LTE Band 13

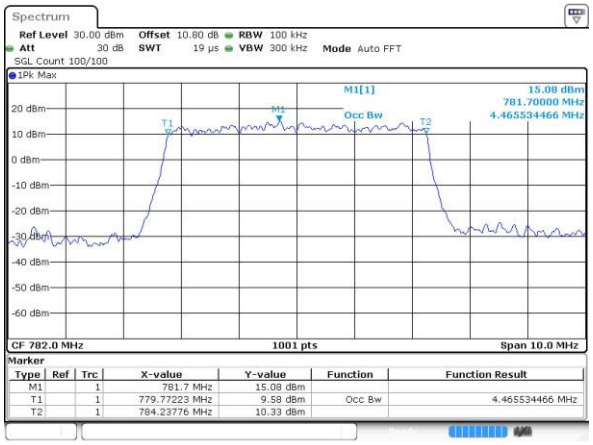
Lowest Channel / 5MHz / QPSK



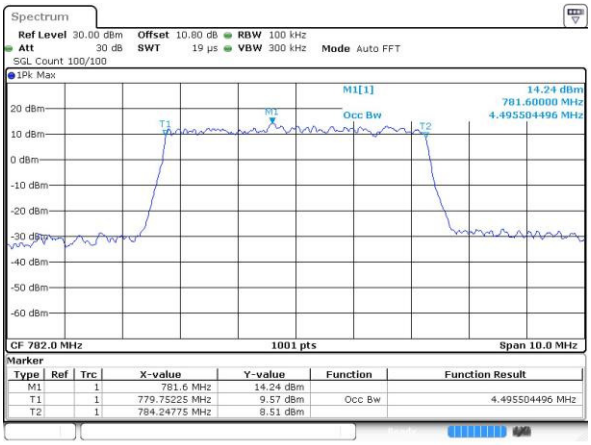
Lowest Channel / 5MHz / 16QAM



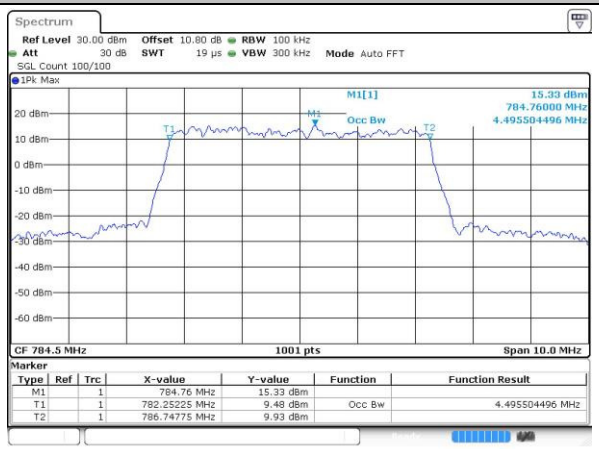
Middle Channel / 5MHz / QPSK



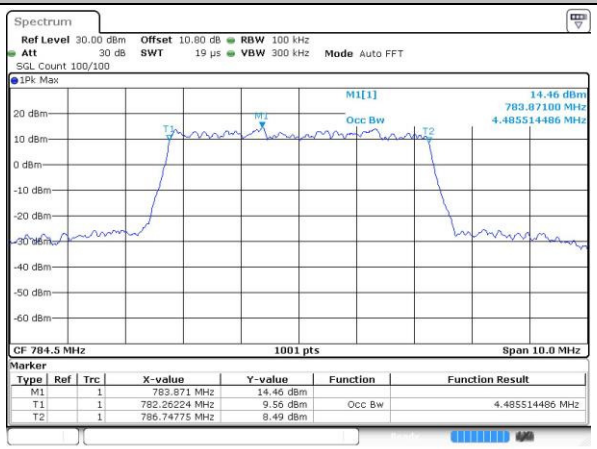
Middle Channel / 5MHz / 16QAM

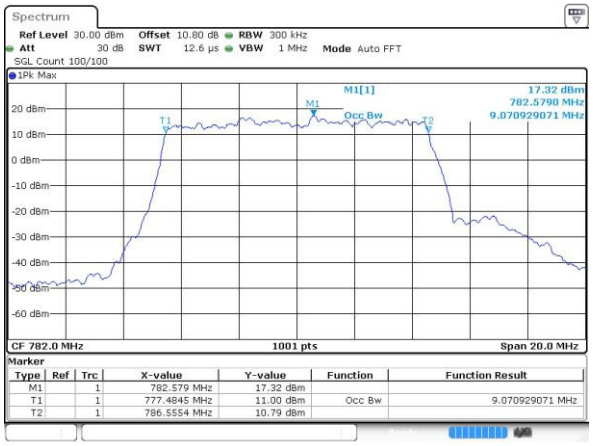
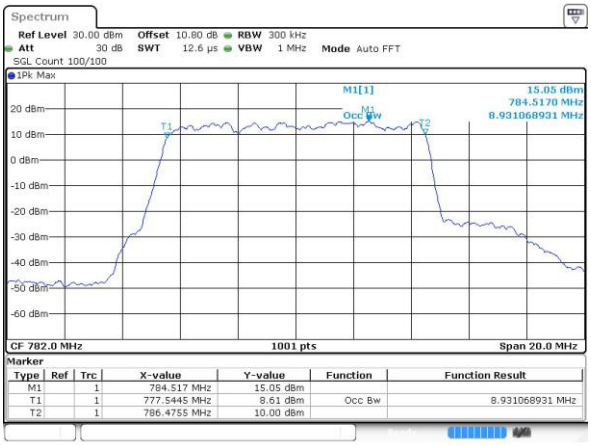


Highest Channel / 5MHz / QPSK



Highest Channel / 5MHz / 16QAM

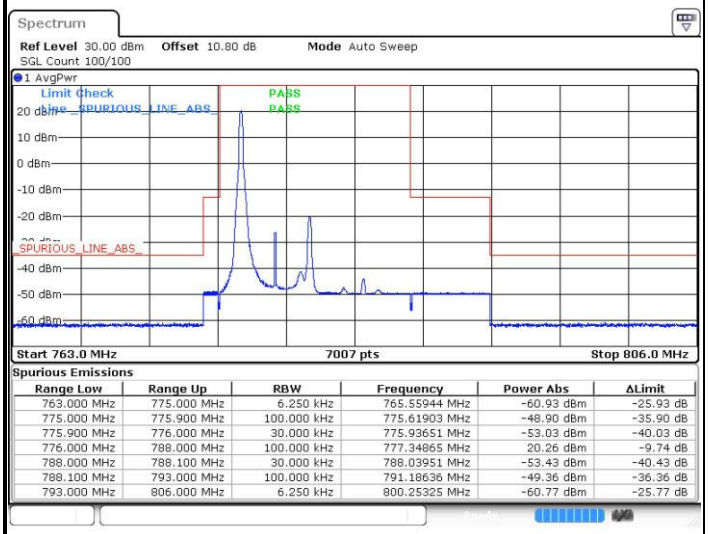


LTE Band 13	
Middle Channel / 10MHz / QPSK	**Middle Channel / 10MHz / 16QAM**
	

Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB

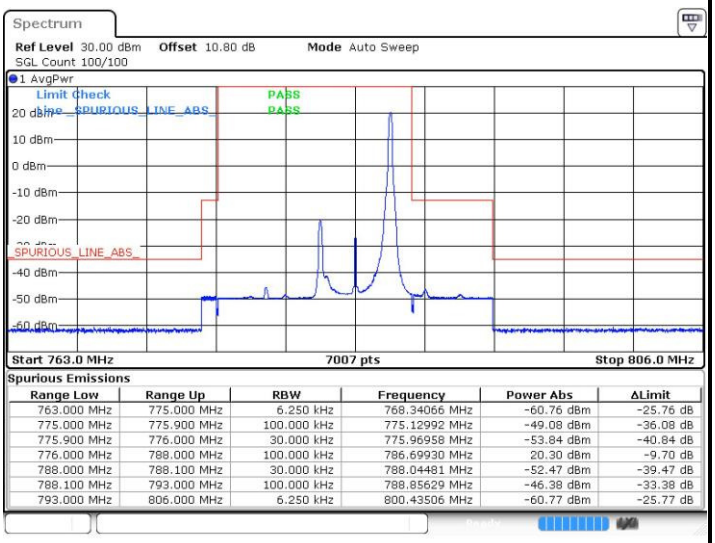


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	765.55944 MHz	-60.93 dBm	-25.93 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.61903 MHz	-48.90 dBm	-35.90 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.93651 MHz	-53.03 dBm	-40.03 dB
776.000 MHz	788.000 MHz	100.000 kHz	777.34865 MHz	20.26 dBm	-9.74 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.03951 MHz	-53.43 dBm	-40.43 dB
788.100 MHz	793.000 MHz	100.000 kHz	791.18636 MHz	-49.36 dBm	-36.36 dB
793.000 MHz	806.000 MHz	6.250 kHz	800.25325 MHz	-60.77 dBm	-25.77 dB

Date: 19.FEB.2017 03:16:52

Highest Band Edge / 1 RB

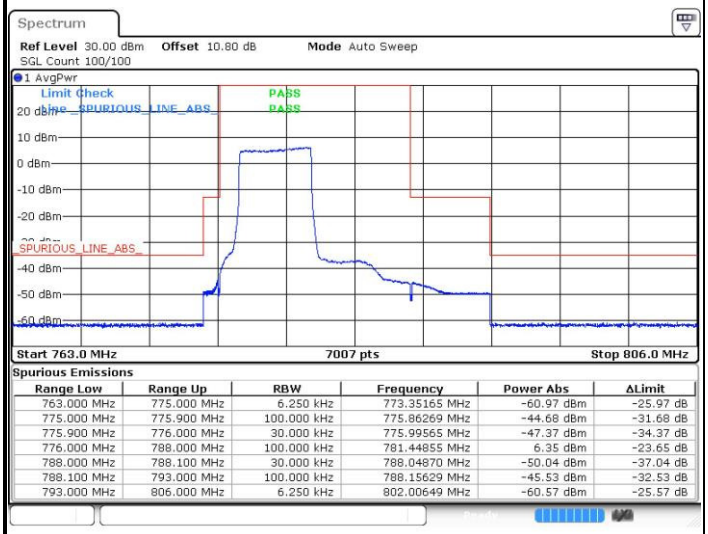


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	768.34066 MHz	-60.76 dBm	-25.76 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.12992 MHz	-49.08 dBm	-36.08 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.96958 MHz	-53.84 dBm	-40.84 dB
776.000 MHz	788.000 MHz	100.000 kHz	786.69930 MHz	20.30 dBm	-9.70 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.04481 MHz	-52.47 dBm	-39.47 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.85629 MHz	-46.38 dBm	-33.38 dB
793.000 MHz	806.000 MHz	6.250 kHz	800.43506 MHz	-60.77 dBm	-25.77 dB

Date: 19.FEB.2017 03:28:28

Lowest Band Edge / Full RB

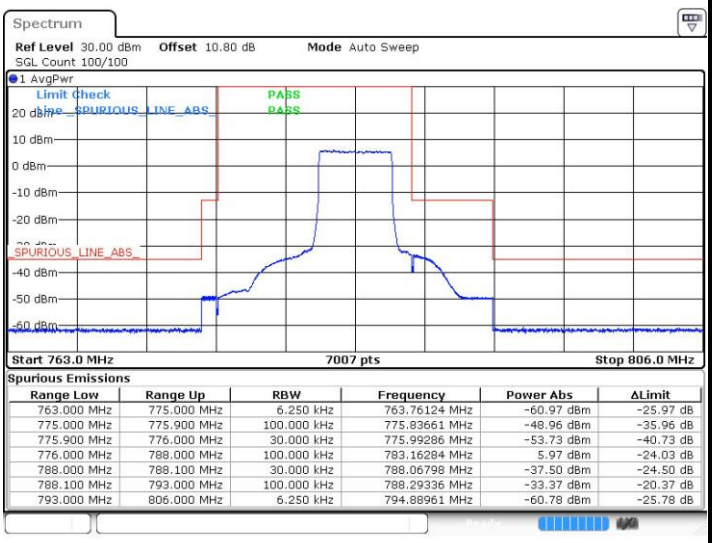


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	773.35165 MHz	-60.97 dBm	-25.97 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.86269 MHz	-44.68 dBm	-31.68 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.99565 MHz	-47.37 dBm	-34.37 dB
776.000 MHz	788.000 MHz	100.000 kHz	781.44855 MHz	6.35 dBm	-23.65 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.04870 MHz	-50.04 dBm	-37.04 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.15629 MHz	-45.53 dBm	-32.53 dB
793.000 MHz	806.000 MHz	6.250 kHz	802.00649 MHz	-60.57 dBm	-25.57 dB

Date: 19.FEB.2017 03:11:55

Highest Band Edge / Full RB



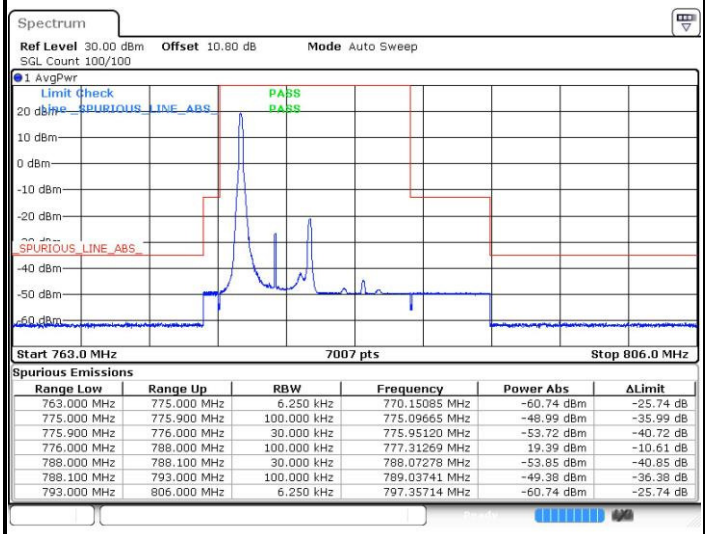
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	763.76124 MHz	-60.97 dBm	-25.97 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.83661 MHz	-48.96 dBm	-35.96 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.99286 MHz	-53.73 dBm	-40.73 dB
776.000 MHz	788.000 MHz	100.000 kHz	783.16284 MHz	5.97 dBm	-24.03 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.06798 MHz	-37.50 dBm	-24.50 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.29336 MHz	-33.37 dBm	-20.37 dB
793.000 MHz	806.000 MHz	6.250 kHz	794.88961 MHz	-60.78 dBm	-25.78 dB

Date: 19.FEB.2017 03:23:30

LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge /1 RB

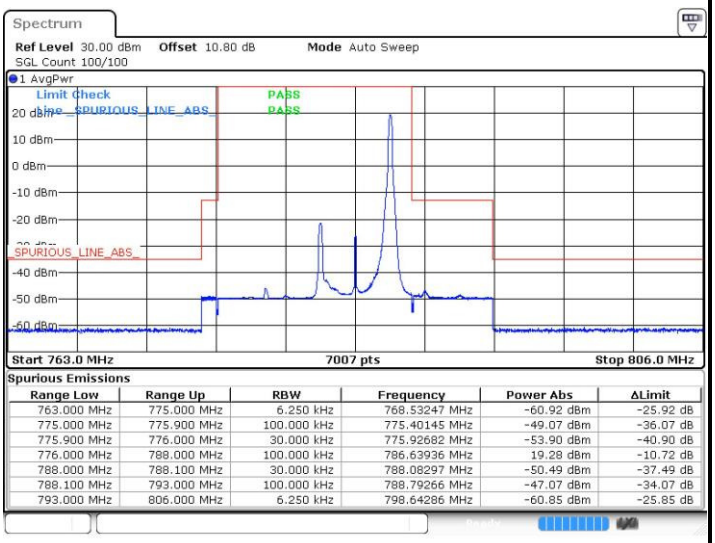


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	770.15085 MHz	-60.74 dBm	-25.74 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.09665 MHz	-48.99 dBm	-35.99 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.95120 MHz	-53.72 dBm	-40.72 dB
776.000 MHz	788.000 MHz	100.000 kHz	777.31269 MHz	19.39 dBm	-10.61 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.07278 MHz	-53.85 dBm	-40.85 dB
788.100 MHz	793.000 MHz	100.000 kHz	789.03741 MHz	-49.38 dBm	-36.38 dB
793.000 MHz	806.000 MHz	6.250 kHz	797.35714 MHz	-60.74 dBm	-25.74 dB

Date: 19.FEB.2017 03:15:13

Highest Band Edge / 1 RB

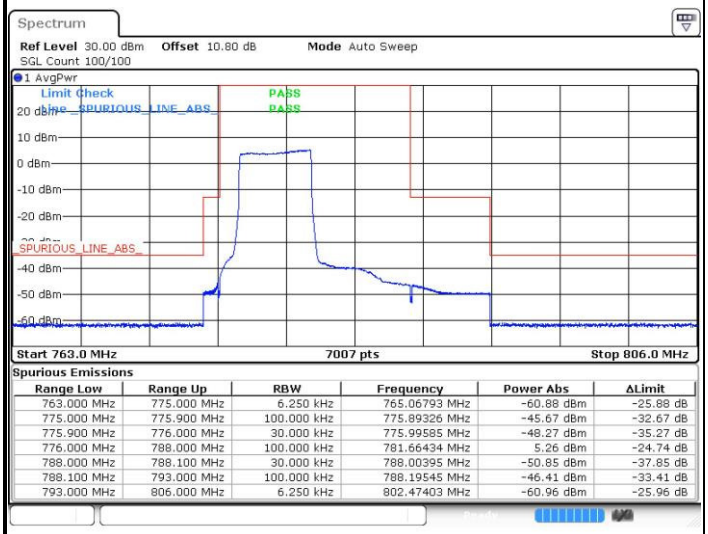


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	768.53247 MHz	-60.92 dBm	-25.92 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.40145 MHz	-49.07 dBm	-36.07 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.92682 MHz	-53.90 dBm	-40.90 dB
776.000 MHz	788.000 MHz	100.000 kHz	786.63936 MHz	19.28 dBm	-10.72 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.08297 MHz	-50.49 dBm	-37.49 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.79266 MHz	-47.07 dBm	-34.07 dB
793.000 MHz	806.000 MHz	6.250 kHz	798.64286 MHz	-60.85 dBm	-25.85 dB

Date: 19.FEB.2017 03:26:49

Lowest Band Edge / Full RB

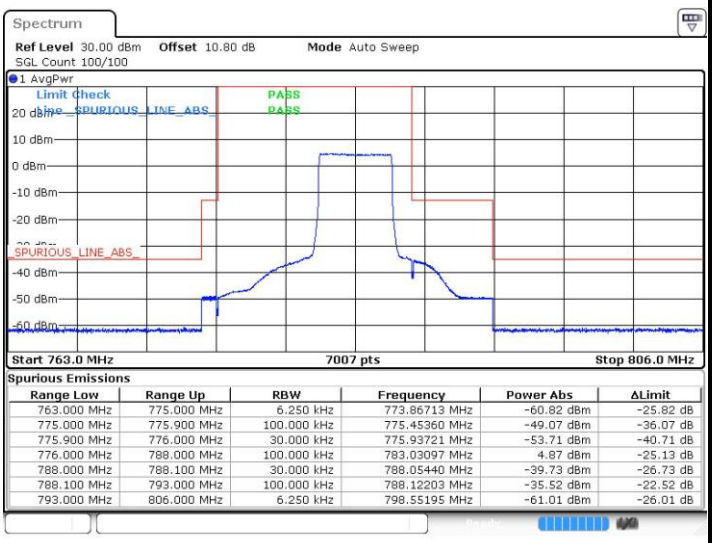


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	765.06793 MHz	-60.88 dBm	-25.88 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.89326 MHz	-45.67 dBm	-32.67 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.99585 MHz	-48.27 dBm	-35.27 dB
776.000 MHz	788.000 MHz	100.000 kHz	781.66434 MHz	5.26 dBm	-24.74 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.00395 MHz	-50.85 dBm	-37.85 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.19545 MHz	-46.41 dBm	-33.41 dB
793.000 MHz	806.000 MHz	6.250 kHz	802.47403 MHz	-60.96 dBm	-25.96 dB

Date: 19.FEB.2017 03:13:34

Highest Band Edge / Full RB



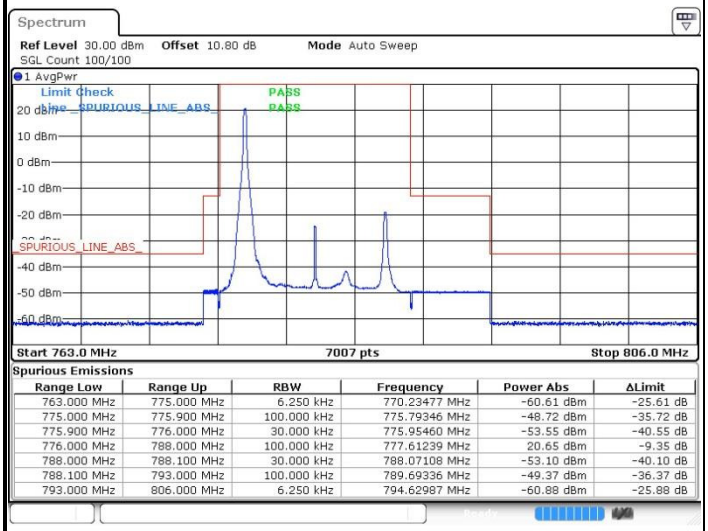
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	773.86713 MHz	-60.82 dBm	-25.82 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.45360 MHz	-49.07 dBm	-36.07 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.93721 MHz	-53.71 dBm	-40.71 dB
776.000 MHz	788.000 MHz	100.000 kHz	783.03097 MHz	4.87 dBm	-25.13 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.05440 MHz	-39.73 dBm	-26.73 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.12203 MHz	-35.52 dBm	-22.52 dB
793.000 MHz	806.000 MHz	6.250 kHz	798.55195 MHz	-61.01 dBm	-26.01 dB

Date: 19.FEB.2017 03:25:10

LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB

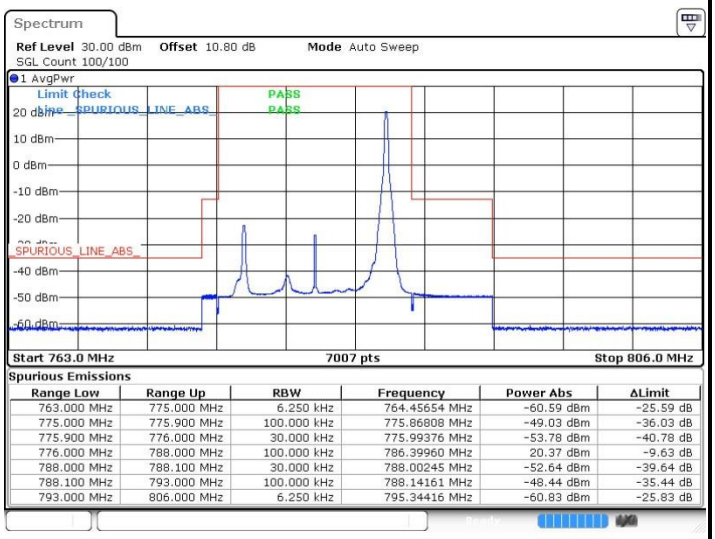


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	770.23477 MHz	-60.61 dBm	-25.61 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.79346 MHz	-48.72 dBm	-35.72 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.95460 MHz	-53.55 dBm	-40.55 dB
776.000 MHz	788.000 MHz	100.000 kHz	777.61239 MHz	20.65 dBm	-9.35 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.07108 MHz	-53.10 dBm	-40.10 dB
788.100 MHz	793.000 MHz	100.000 kHz	789.69336 MHz	-49.37 dBm	-36.37 dB
793.000 MHz	806.000 MHz	6.250 kHz	794.62987 MHz	-60.88 dBm	-25.88 dB

Date: 19.FEB.2017 03:37:35

Highest Band Edge / 1 RB

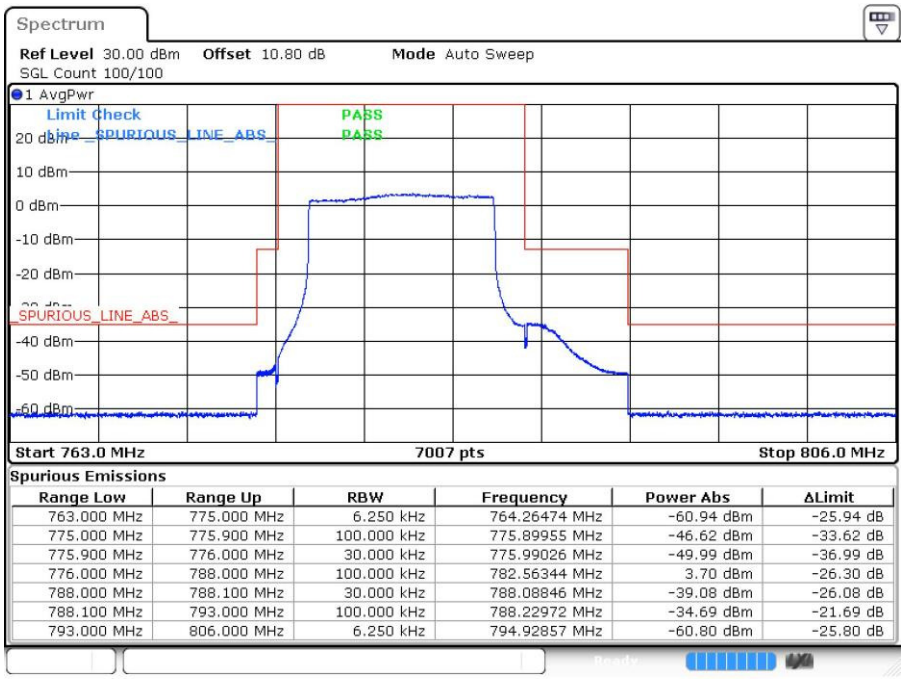


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	764.45654 MHz	-60.59 dBm	-25.59 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.86808 MHz	-49.03 dBm	-36.03 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.99376 MHz	-53.78 dBm	-40.78 dB
776.000 MHz	788.000 MHz	100.000 kHz	786.39960 MHz	20.37 dBm	-9.63 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.00245 MHz	-52.64 dBm	-39.64 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.14161 MHz	-48.44 dBm	-35.44 dB
793.000 MHz	806.000 MHz	6.250 kHz	795.34416 MHz	-60.83 dBm	-25.83 dB

Date: 19.FEB.2017 03:39:14

Band Edge / Full RB



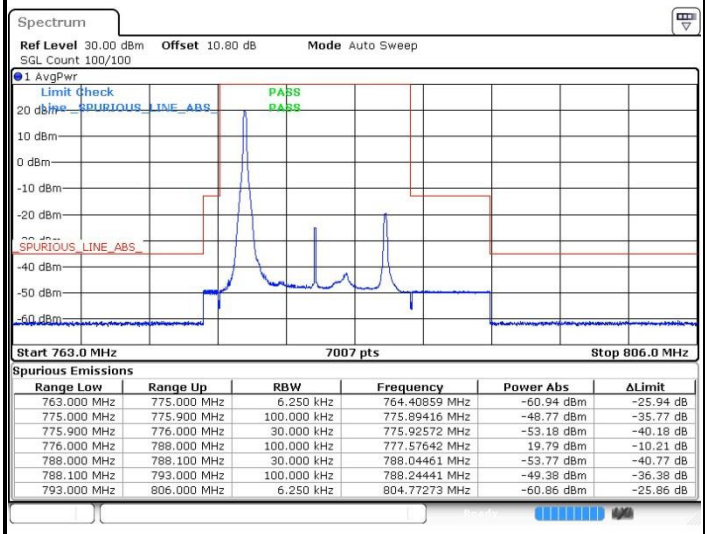
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	764.26474 MHz	-60.94 dBm	-25.94 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.89955 MHz	-46.62 dBm	-33.62 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.99026 MHz	-49.99 dBm	-36.99 dB
776.000 MHz	788.000 MHz	100.000 kHz	782.56344 MHz	3.70 dBm	-26.30 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.08846 MHz	-39.08 dBm	-26.08 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.22972 MHz	-34.69 dBm	-21.69 dB
793.000 MHz	806.000 MHz	6.250 kHz	794.92857 MHz	-60.80 dBm	-25.80 dB

Date: 19.FEB.2017 03:32:37

LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB

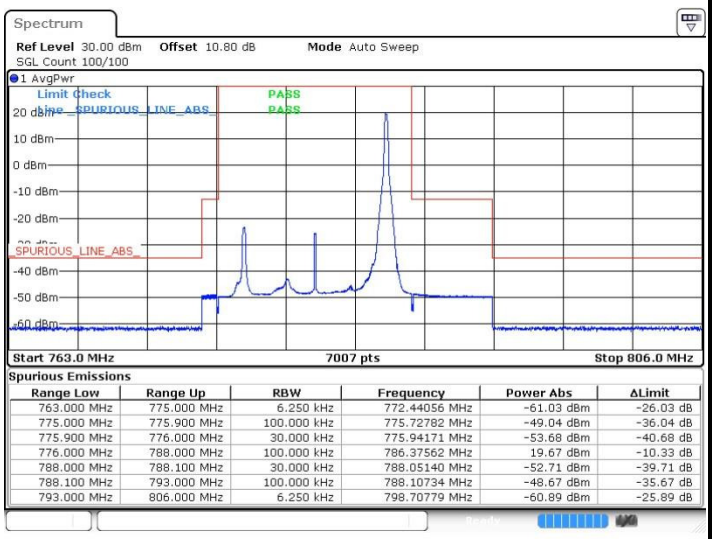


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	764.40859 MHz	-60.94 dBm	-25.94 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.89416 MHz	-48.77 dBm	-35.77 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.92572 MHz	-53.18 dBm	-40.18 dB
776.000 MHz	788.000 MHz	100.000 kHz	777.57642 MHz	19.79 dBm	-10.21 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.04461 MHz	-53.77 dBm	-40.77 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.24441 MHz	-49.38 dBm	-36.38 dB
793.000 MHz	806.000 MHz	6.250 kHz	804.77273 MHz	-60.86 dBm	-25.86 dB

Date: 19.FEB.2017 03:35:56

Highest Band Edge / 1 RB

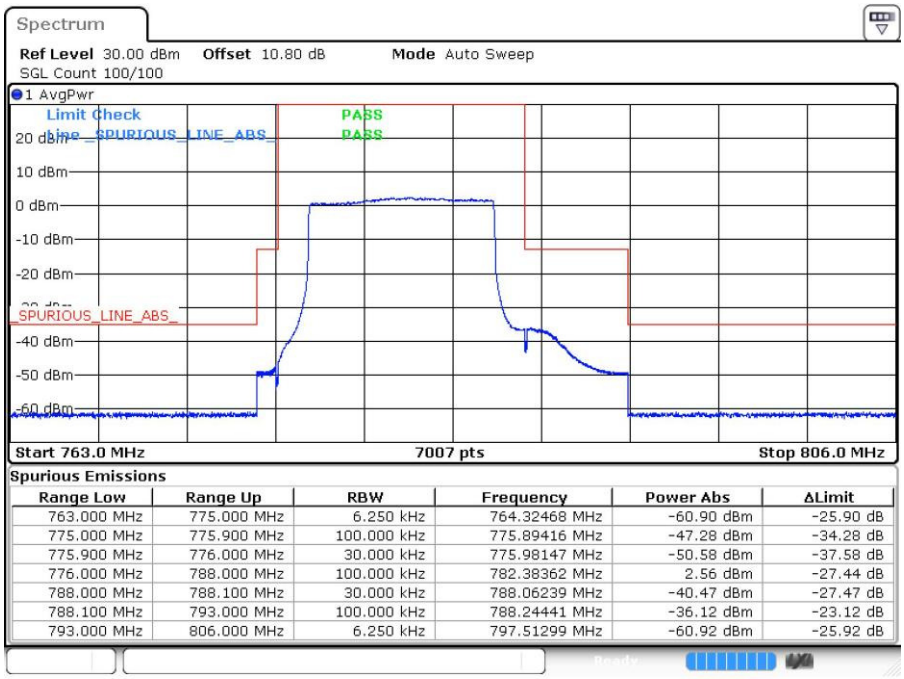


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	772.44056 MHz	-61.03 dBm	-26.03 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.72782 MHz	-49.04 dBm	-36.04 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.94171 MHz	-53.68 dBm	-40.68 dB
776.000 MHz	788.000 MHz	100.000 kHz	786.37562 MHz	19.67 dBm	-10.33 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.05140 MHz	-52.71 dBm	-39.71 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.10734 MHz	-48.67 dBm	-35.67 dB
793.000 MHz	806.000 MHz	6.250 kHz	798.70779 MHz	-60.89 dBm	-25.89 dB

Date: 19.FEB.2017 03:40:53

Band Edge / Full RB



Spurious Emissions

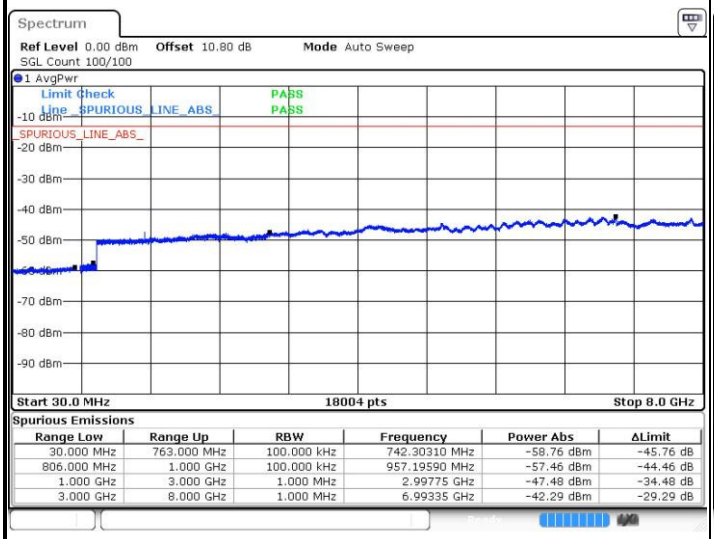
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	764.32468 MHz	-60.90 dBm	-25.90 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.89416 MHz	-47.28 dBm	-34.28 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.98147 MHz	-50.58 dBm	-37.58 dB
776.000 MHz	788.000 MHz	100.000 kHz	782.38362 MHz	2.56 dBm	-27.44 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.06239 MHz	-40.47 dBm	-27.47 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.24441 MHz	-36.12 dBm	-23.12 dB
793.000 MHz	806.000 MHz	6.250 kHz	797.51299 MHz	-60.92 dBm	-25.92 dB

Date: 19.FEB.2017 03:34:16

Conducted Spurious Emission

LTE Band 13 / 5MHz

Lowest Channel / QPSK

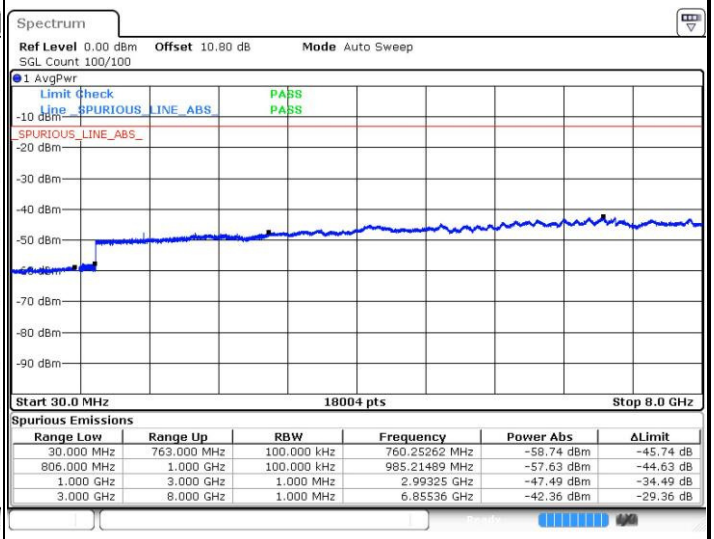


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	763.000 MHz	100.000 kHz	742.30310 MHz	-58.76 dBm	-45.76 dB
806.000 MHz	1.000 GHz	100.000 kHz	957.19590 MHz	-57.46 dBm	-44.46 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.99775 GHz	-47.48 dBm	-34.48 dB
3.000 GHz	8.000 GHz	1.000 MHz	6.99335 GHz	-42.29 dBm	-29.29 dB

Date: 19.FEB.2017 03:17:47

Lowest Channel / 16QAM

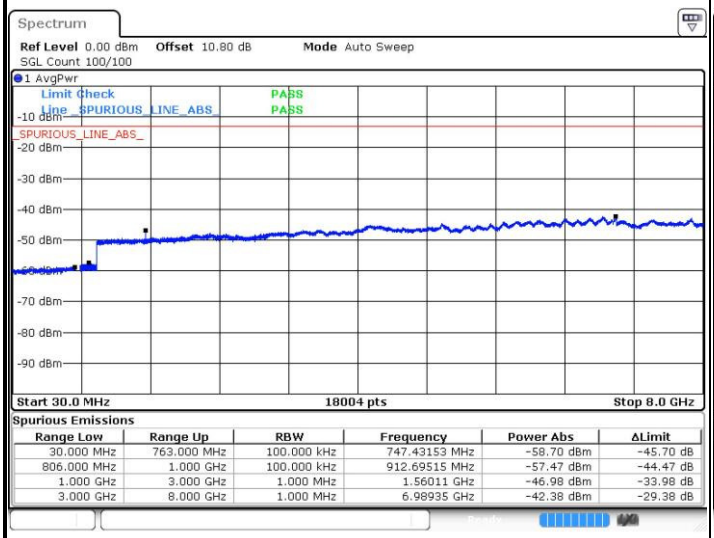


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	763.000 MHz	100.000 kHz	760.25262 MHz	-58.74 dBm	-45.74 dB
806.000 MHz	1.000 GHz	100.000 kHz	985.21489 MHz	-57.63 dBm	-44.63 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.99325 GHz	-47.49 dBm	-34.49 dB
3.000 GHz	8.000 GHz	1.000 MHz	6.85536 GHz	-42.36 dBm	-29.36 dB

Date: 19.FEB.2017 03:18:41

Middle Channel / QPSK

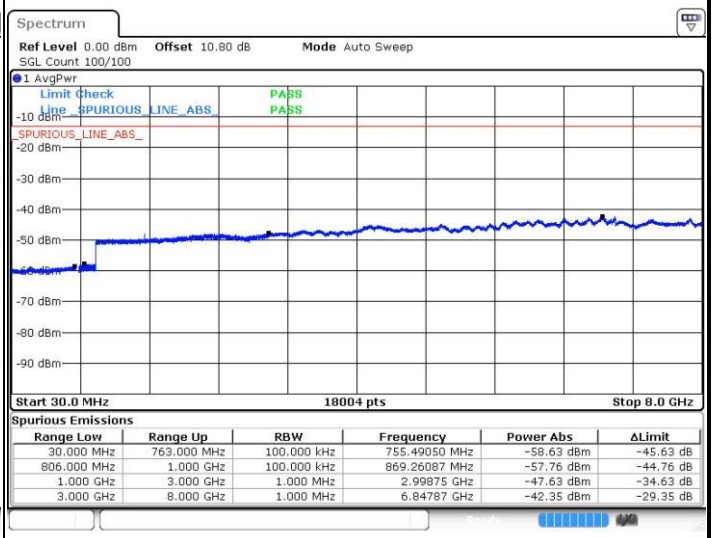


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	763.000 MHz	100.000 kHz	747.43153 MHz	-58.70 dBm	-45.70 dB
806.000 MHz	1.000 GHz	100.000 kHz	912.69515 MHz	-57.47 dBm	-44.47 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.56011 GHz	-46.98 dBm	-33.98 dB
3.000 GHz	8.000 GHz	1.000 MHz	6.98935 GHz	-42.38 dBm	-29.38 dB

Date: 19.FEB.2017 03:20:29

Middle Channel / 16QAM



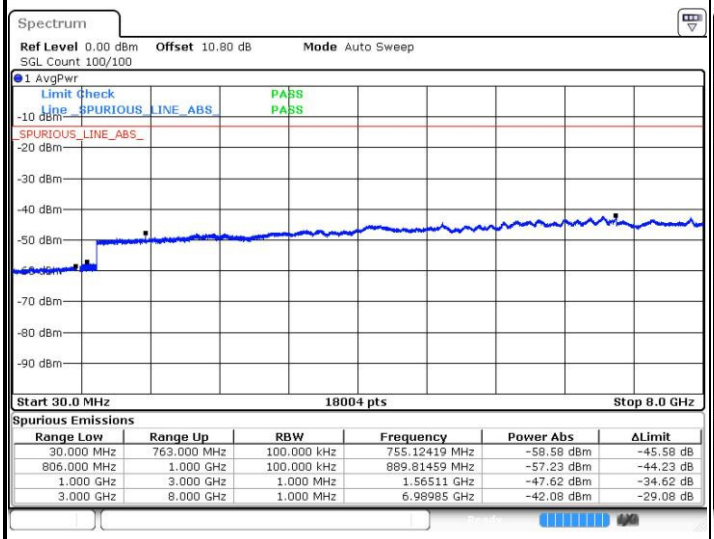
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	763.000 MHz	100.000 kHz	755.49050 MHz	-58.63 dBm	-45.63 dB
806.000 MHz	1.000 GHz	100.000 kHz	869.26087 MHz	-57.76 dBm	-44.76 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.99875 GHz	-47.63 dBm	-34.63 dB
3.000 GHz	8.000 GHz	1.000 MHz	6.84787 GHz	-42.35 dBm	-29.35 dB

Date: 19.FEB.2017 03:19:35

LTE Band 13 / 5MHz

Highest Channel / QPSK

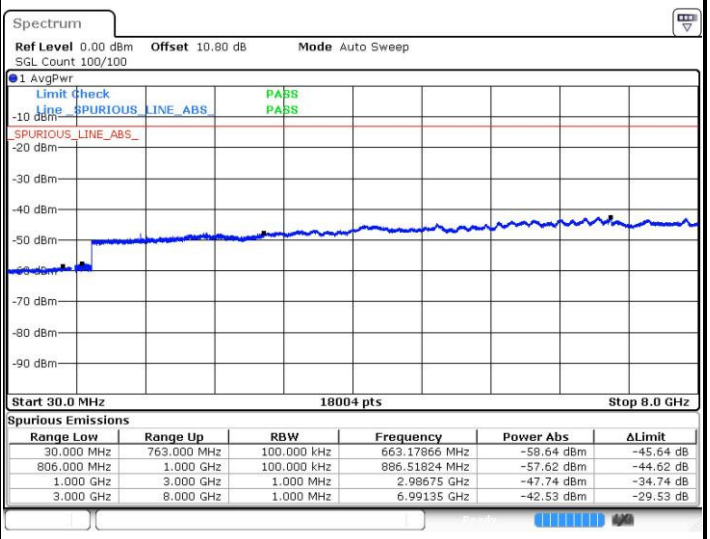


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	763.000 MHz	100.000 kHz	755.12419 MHz	-58.58 dBm	-45.58 dB
806.000 MHz	1.000 GHz	100.000 kHz	889.81459 MHz	-57.23 dBm	-44.23 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.56511 GHz	-47.62 dBm	-34.62 dB
3.000 GHz	8.000 GHz	1.000 MHz	6.98985 GHz	-42.08 dBm	-29.08 dB

Date: 19.FEB.2017 03:29:23

Highest Channel / 16QAM



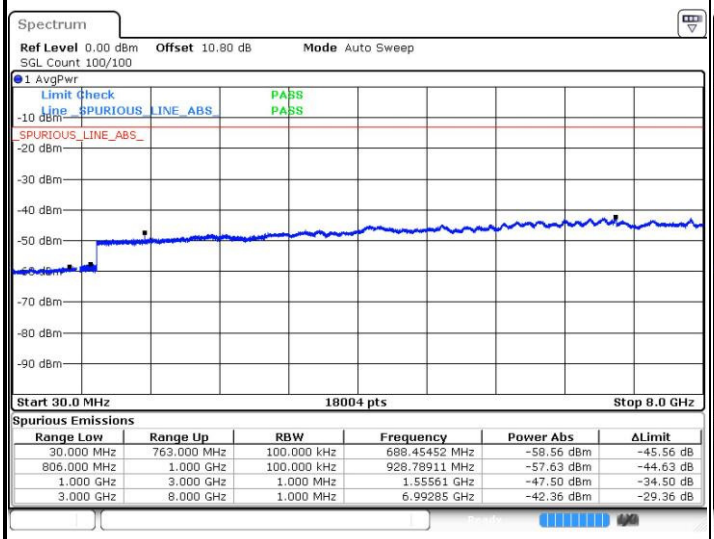
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	763.000 MHz	100.000 kHz	663.17866 MHz	-58.64 dBm	-45.64 dB
806.000 MHz	1.000 GHz	100.000 kHz	886.51824 MHz	-57.62 dBm	-44.62 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.98675 GHz	-47.74 dBm	-34.74 dB
3.000 GHz	8.000 GHz	1.000 MHz	6.99135 GHz	-42.53 dBm	-29.53 dB

Date: 19.FEB.2017 03:30:17

LTE Band 13 / 10MHz

Middle Channel / QPSK

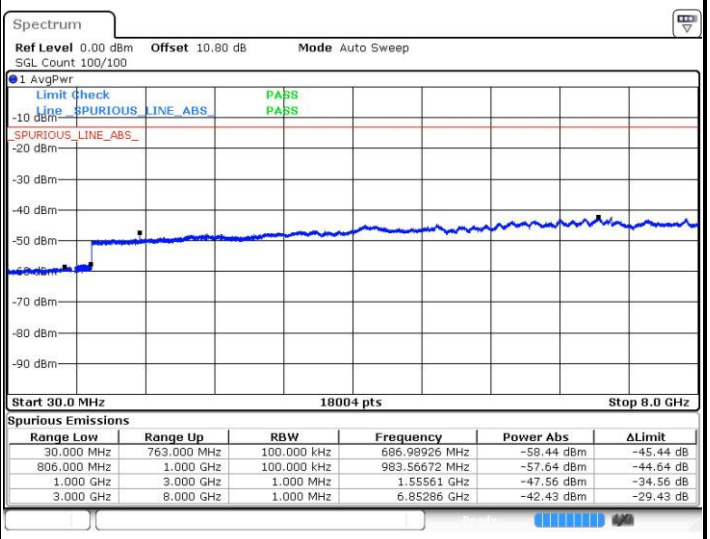


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	763.000 MHz	100.000 kHz	688.45452 MHz	-58.56 dBm	-45.56 dB
806.000 MHz	1.000 GHz	100.000 kHz	928.78911 MHz	-57.63 dBm	-44.63 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.55561 GHz	-47.50 dBm	-34.50 dB
3.000 GHz	8.000 GHz	1.000 MHz	6.99285 GHz	-42.36 dBm	-29.36 dB

Date: 19.FEB.2017 03:42:42

Middle Channel / 16QAM



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	763.000 MHz	100.000 kHz	686.98926 MHz	-58.44 dBm	-45.44 dB
806.000 MHz	1.000 GHz	100.000 kHz	983.56672 MHz	-57.64 dBm	-44.64 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.55561 GHz	-47.56 dBm	-34.56 dB
3.000 GHz	8.000 GHz	1.000 MHz	6.85286 GHz	-42.43 dBm	-29.43 dB

Date: 19.FEB.2017 03:41:48

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	0.0028	PASS
40	Normal Voltage	0.0069	
30	Normal Voltage	0.0075	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0084	
0	Normal Voltage	0.0020	
-10	Normal Voltage	0.0069	
-20	Normal Voltage	0.0098	
-30	Normal Voltage	0.0045	
20	Maximum Voltage	0.0077	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0042	

Note:

1. Normal Voltage =3.9 V.；Battery End Point (BEP) =3.4 V.；Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

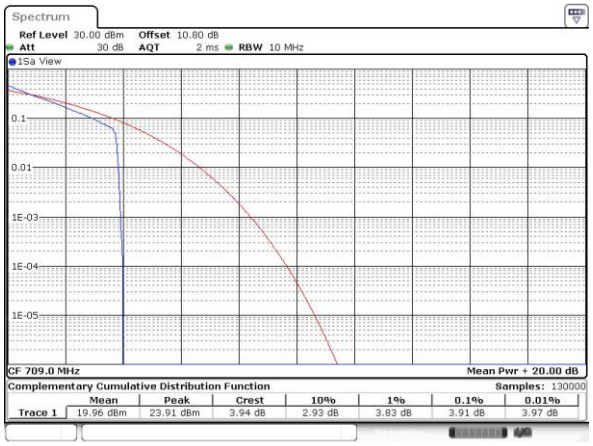
LTE Band 17

Peak-to-Average Ratio

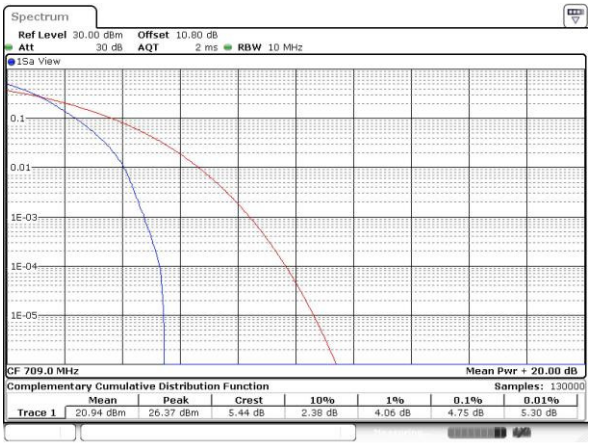
Mode	LTE Band 17 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.91	4.75	4.78	5.71	PASS
Middle CH	3.83	4.67	4.72	5.68	
Highest CH	3.8	4.72	4.75	5.65	

LTE Band 17 / 10MHz / QPSK

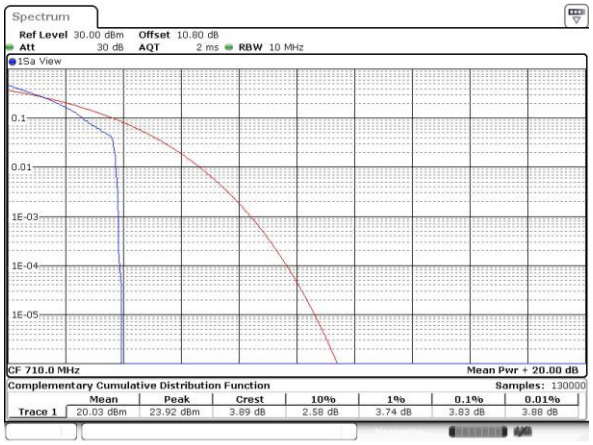
Lowest Channel / 1RB



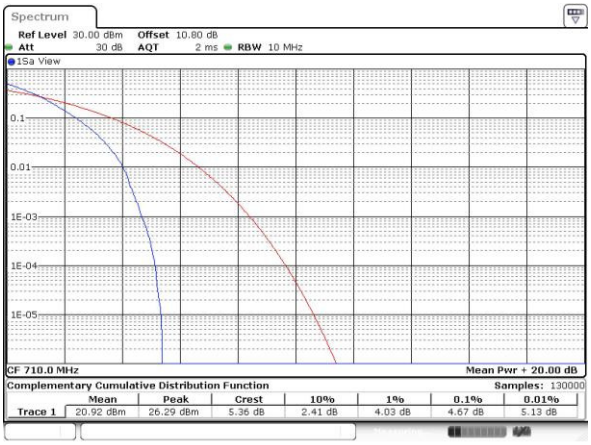
Lowest Channel / Full RB



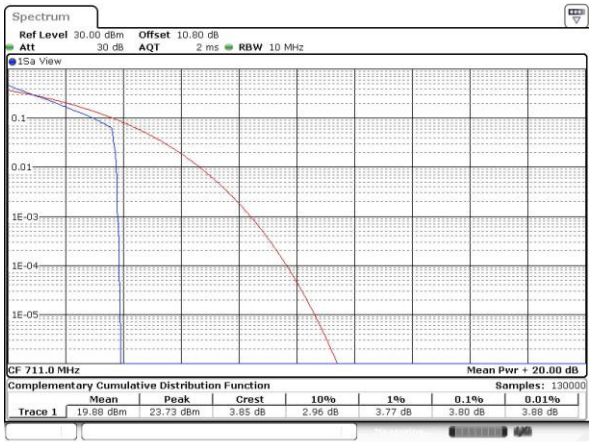
Middle Channel/ 1RB



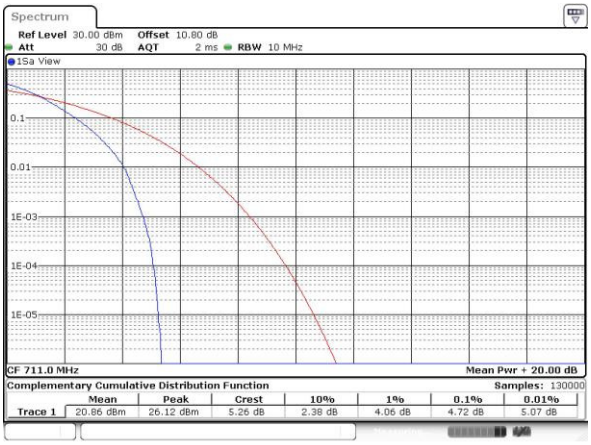
Middle Channel / Full RB



Highest Channel/ 1RB

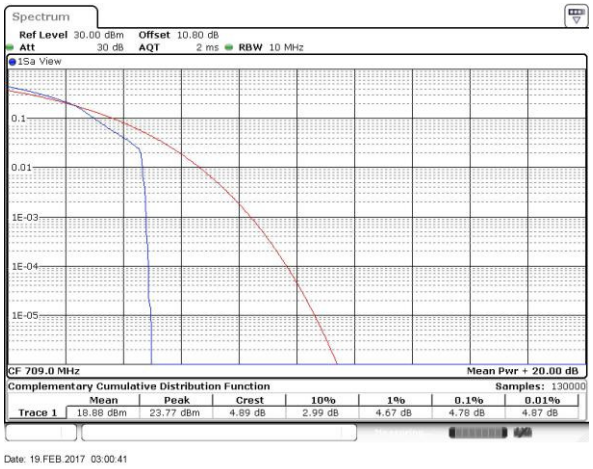


Highest Channel / Full RB

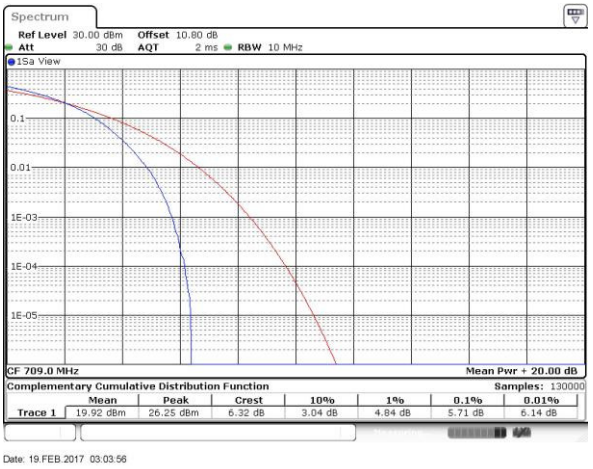


LTE Band 17 / 10MHz / 16QAM

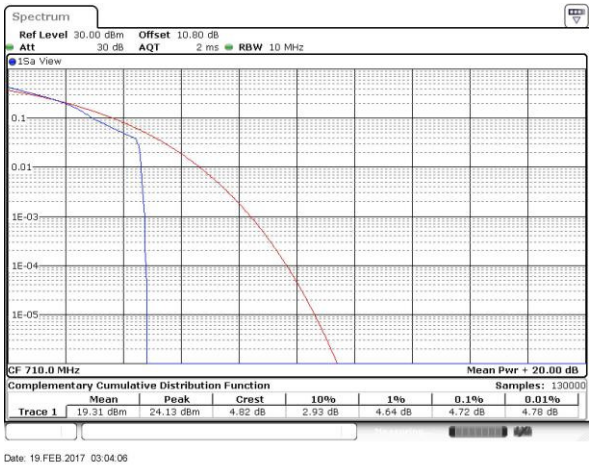
Lowest Channel / 1RB



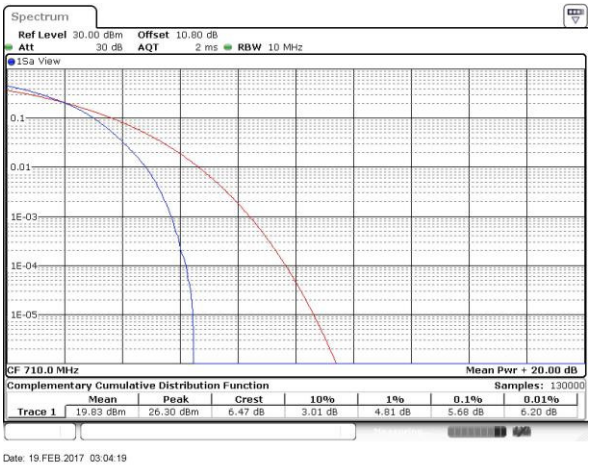
Lowest Channel / Full RB



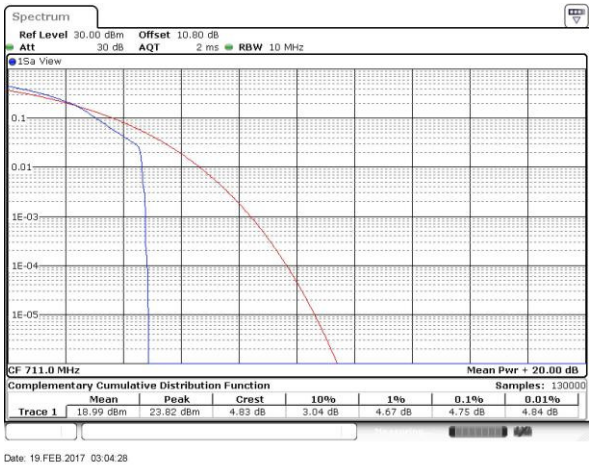
Middle Channel/ 1RB



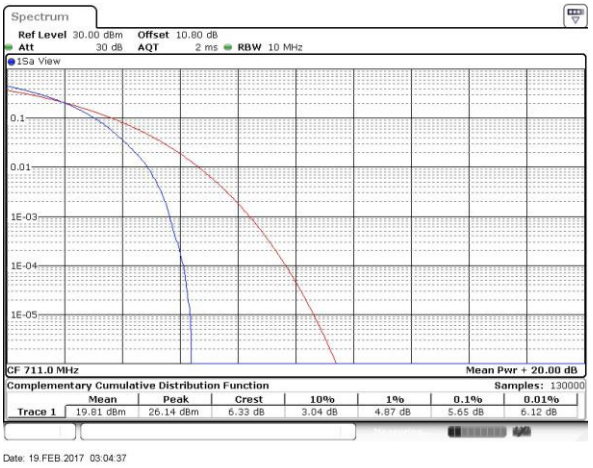
Middle Channel / Full RB



Highest Channel/ 1RB



Highest Channel / Full RB

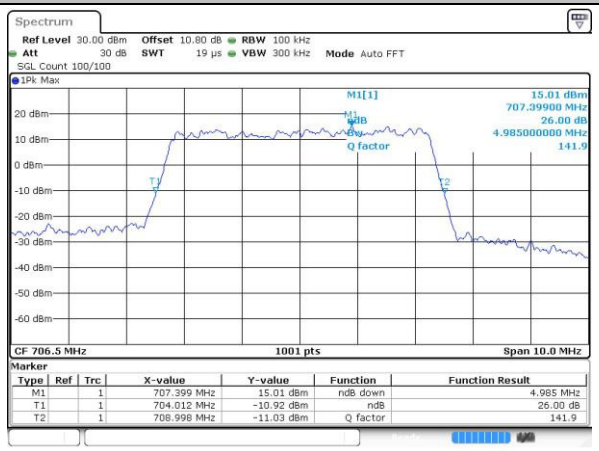


26dB Bandwidth

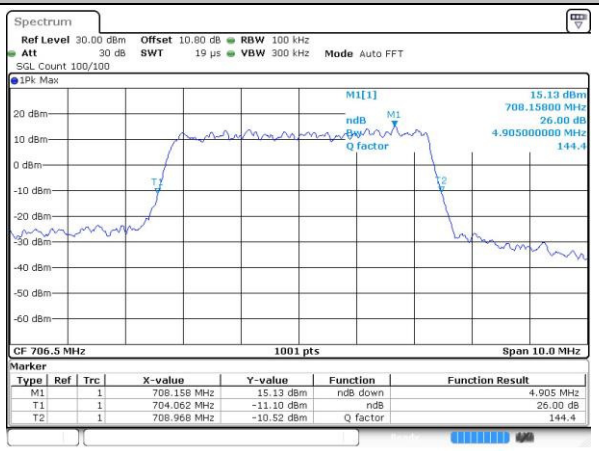
Mode	LTE Band 17 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.99	4.91	9.75	9.93	-	-	-	-
Middle CH	-	-	-	-	4.88	4.86	9.89	9.67	-	-	-	-
Highest CH	-	-	-	-	4.98	4.96	9.73	9.75	-	-	-	-

LTE Band 17

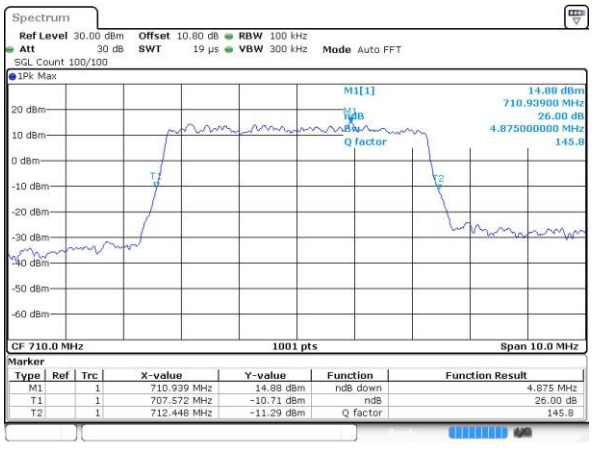
Lowest Channel / 5MHz / QPSK



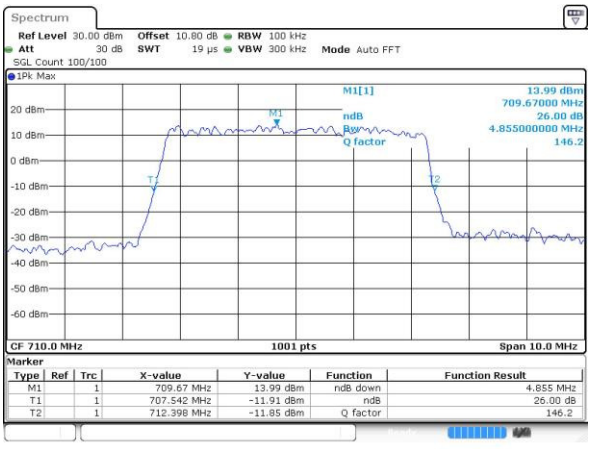
Lowest Channel / 5MHz / 16QAM



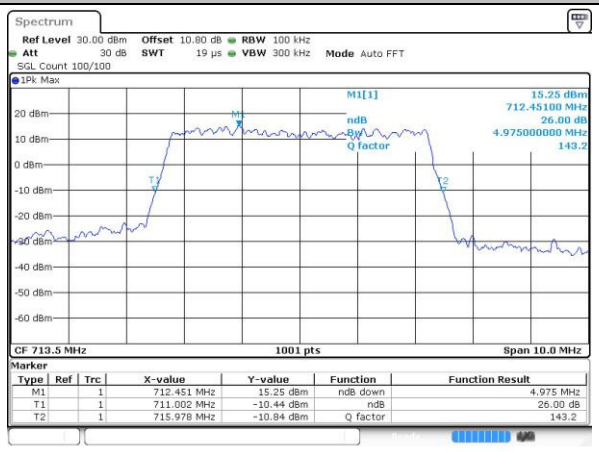
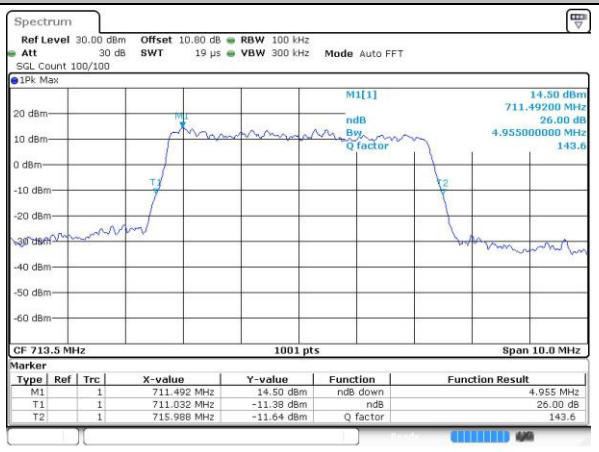
Middle Channel / 5MHz / QPSK



Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



Highest Channel / 5MHz / 16QAM