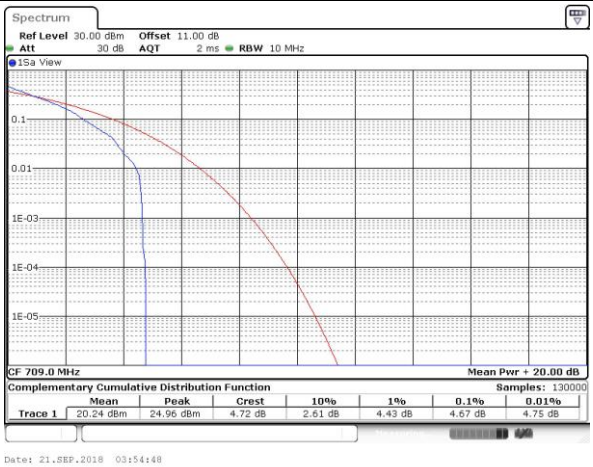
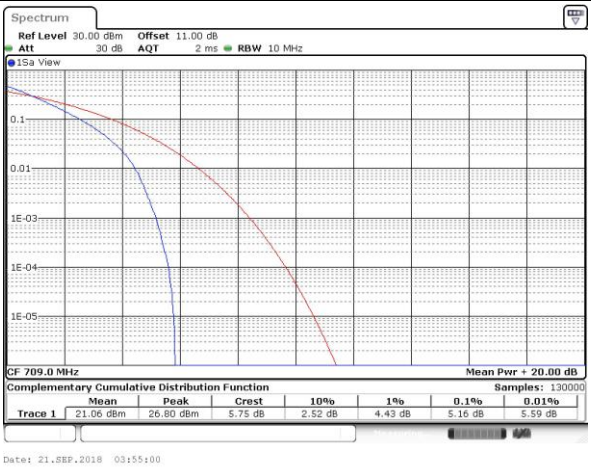
LTE Band 17 / 10MHz / QPSK

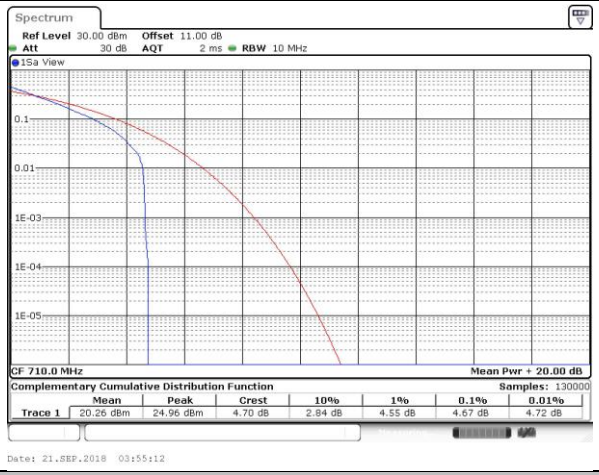
Lowest Channel / 1RB



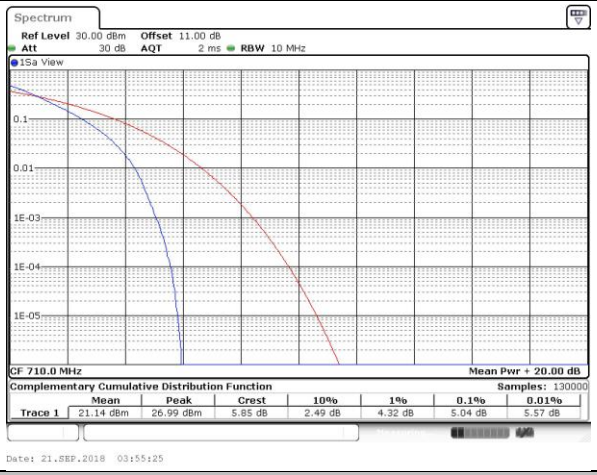
Lowest Channel / Full RB



Middle Channel/ 1RB

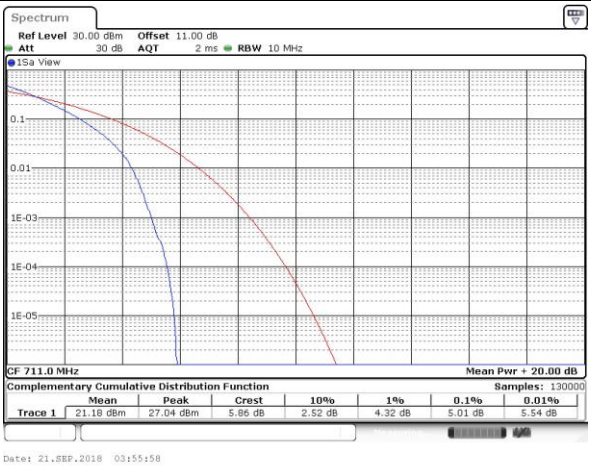


Middle Channel / Full RB



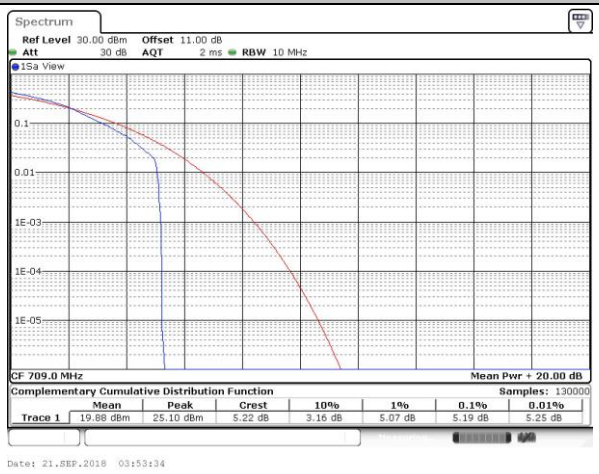
Highest Channel/ 1RB

Highest Channel / Full RB

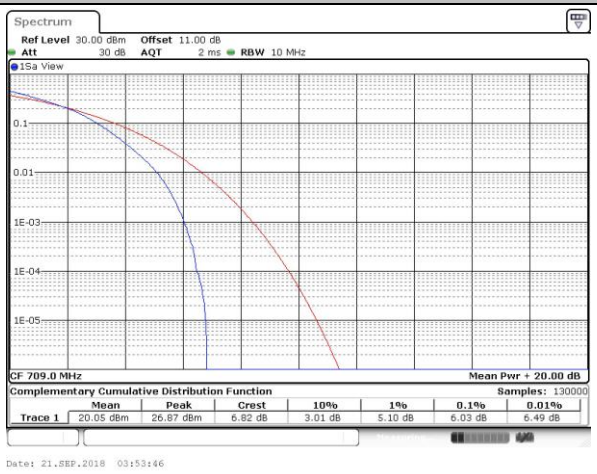


LTE Band 17 / 10MHz / 16QAM

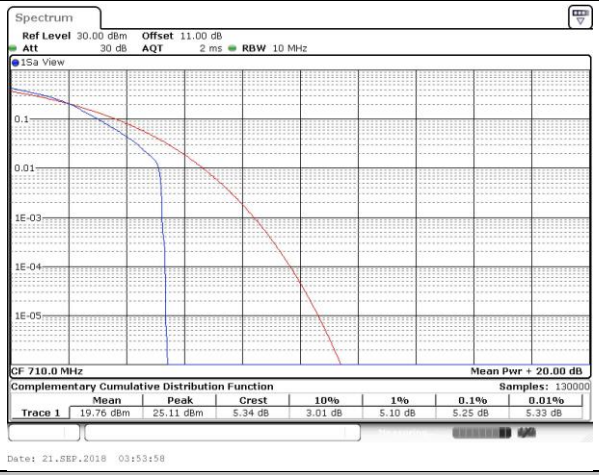
Lowest Channel / 1RB



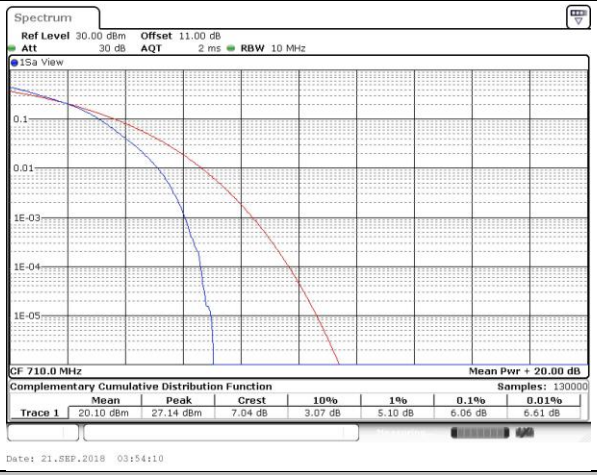
Lowest Channel / Full RB



Middle Channel/ 1RB

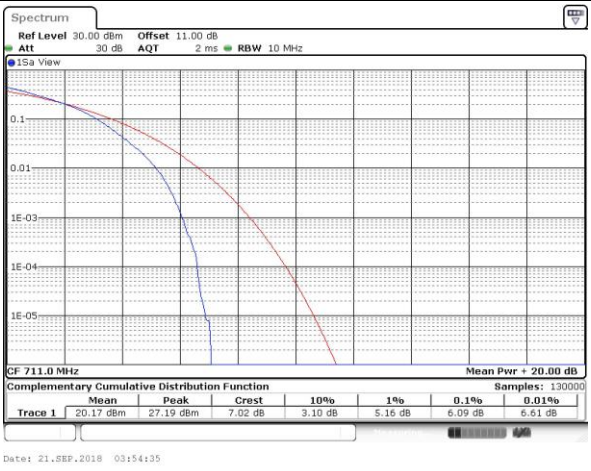


Middle Channel / Full RB



Highest Channel/ 1RB

Highest Channel / Full RB

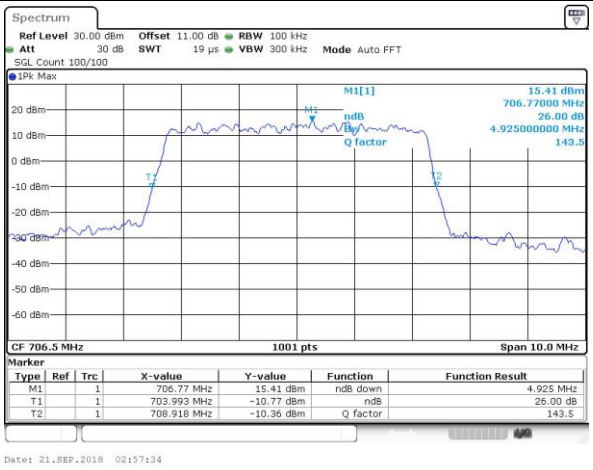


26dB Bandwidth

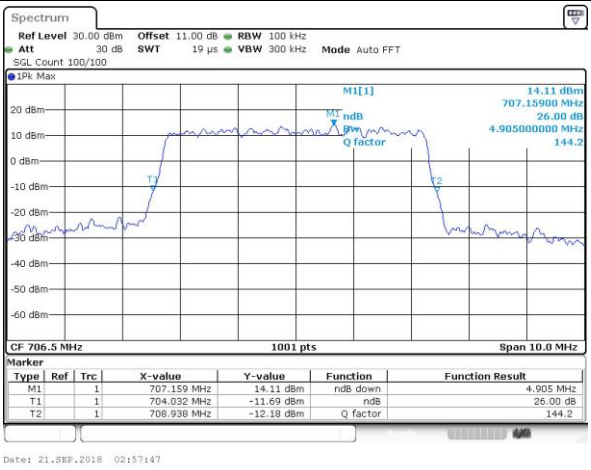
Mode	LTE Band 17 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.93	4.91	9.91	9.69	-	-	-	-
Middle CH	-	-	-	-	4.95	4.93	9.87	9.67	-	-	-	-
Highest CH	-	-	-	-	4.90	4.87	9.79	9.75	-	-	-	-

LTE Band 17

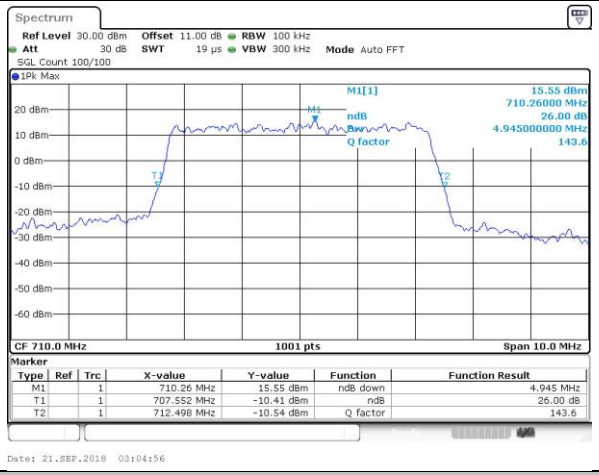
Lowest Channel / 5MHz / QPSK



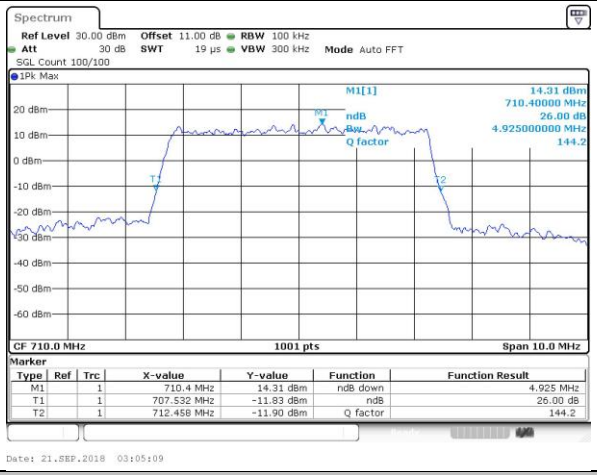
Lowest Channel / 5MHz / 16QAM



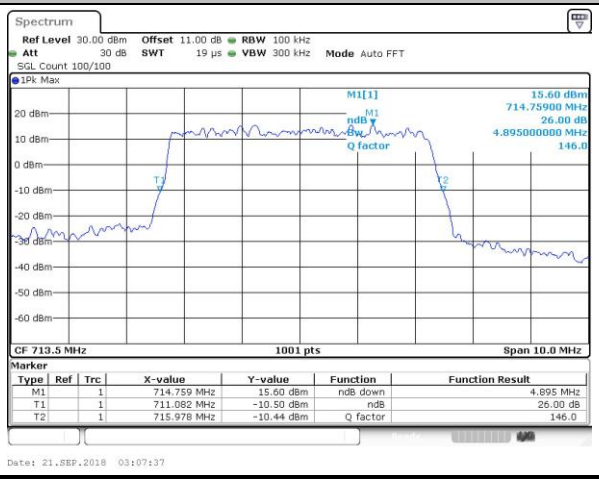
Middle Channel / 5MHz / QPSK



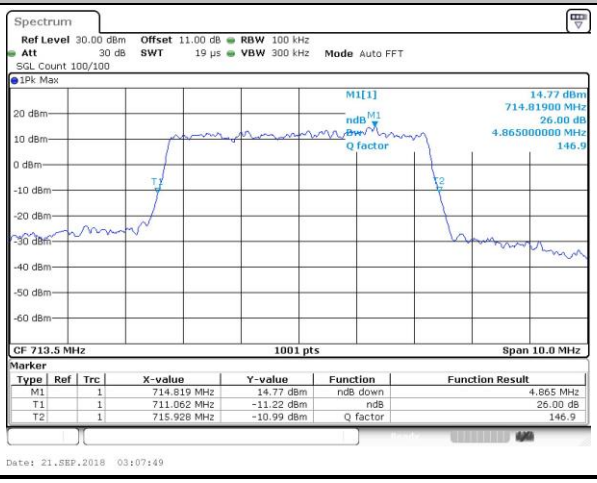
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



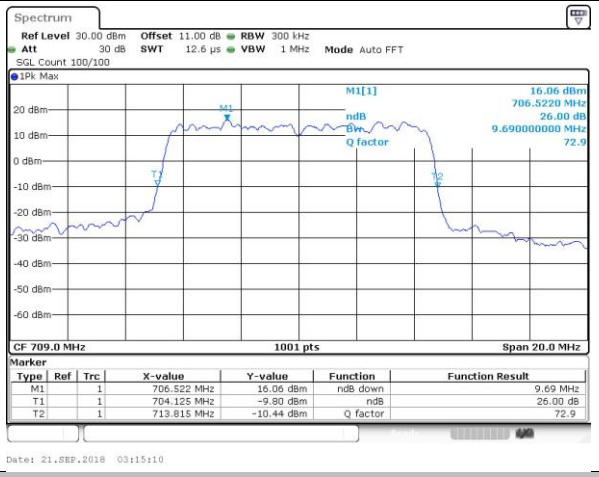
Highest Channel / 5MHz / 16QAM



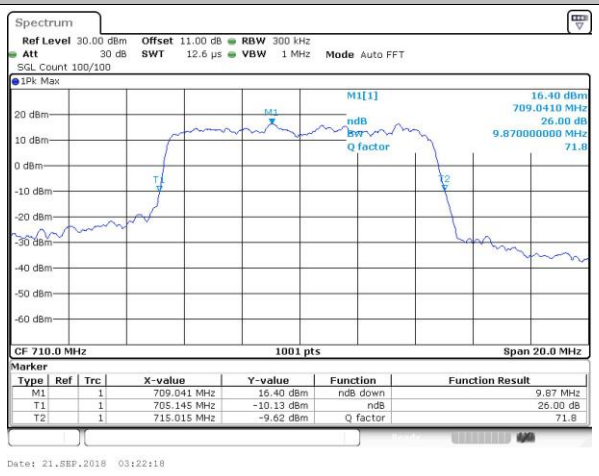
LTE Band 17

Lowest Channel / 10MHz / QPSK

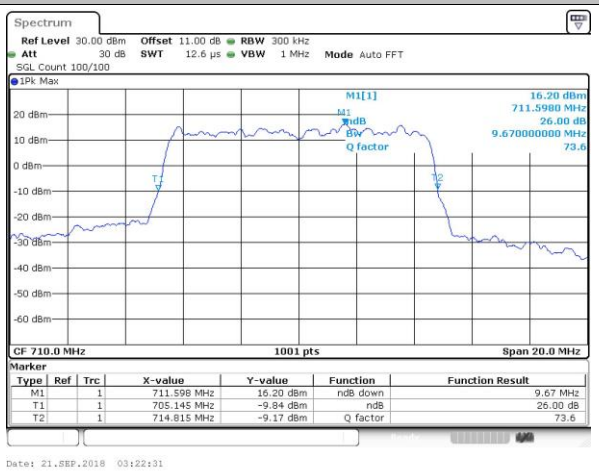
Lowest Channel / 10MHz / 16QAM



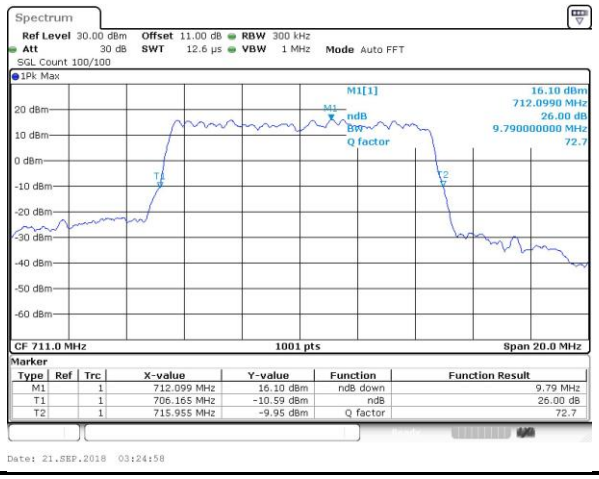
Middle Channel / 10MHz / QPSK



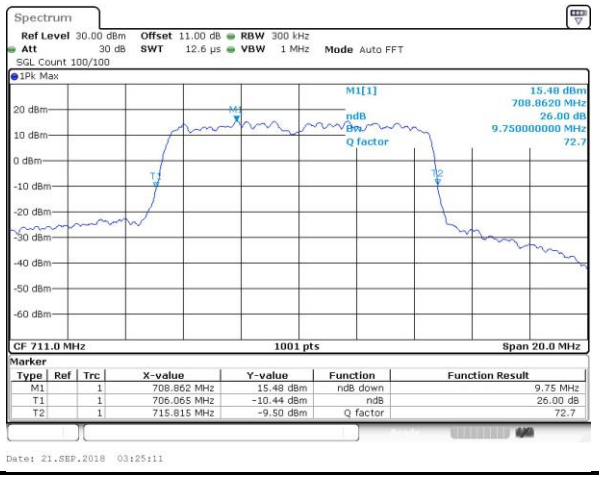
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



Highest Channel / 10MHz / 16QAM

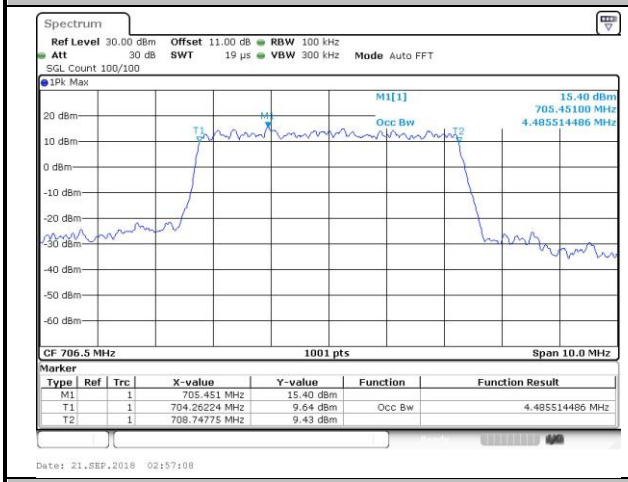


Occupied Bandwidth

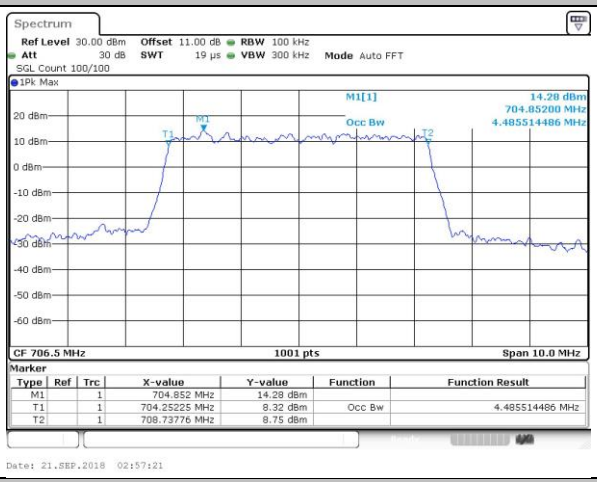
Mode	LTE Band 17 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.49	4.49	9.05	9.01	-	-	-	-
Middle CH	-	-	-	-	4.51	4.5	9.05	9.03	-	-	-	-
Highest CH	-	-	-	-	4.5	4.48	8.99	9.01	-	-	-	-

LTE Band 17

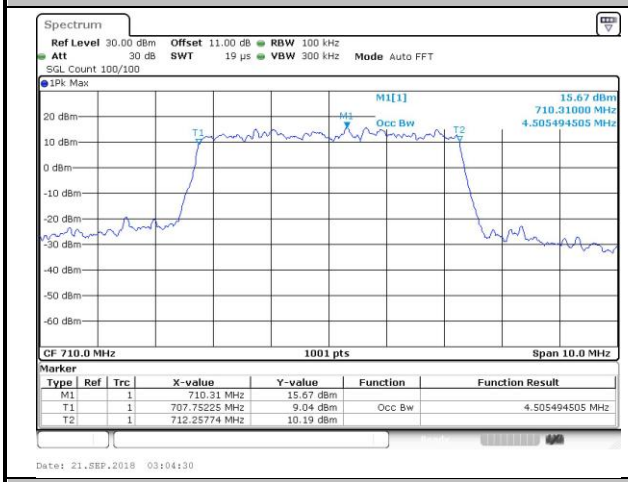
Lowest Channel / 5MHz / QPSK



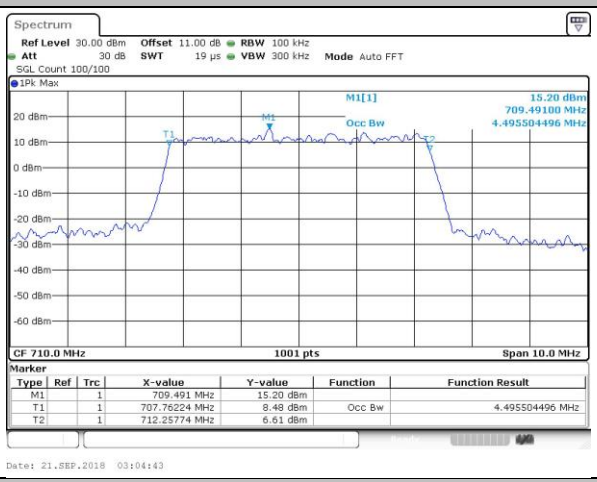
Lowest Channel / 5MHz / 16QAM



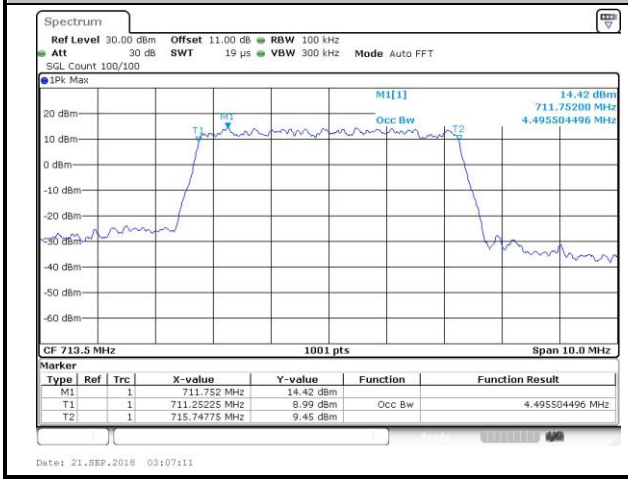
Middle Channel / 5MHz / QPSK



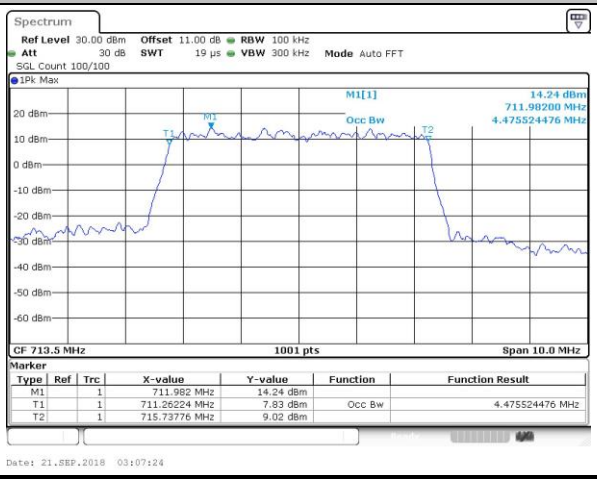
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK

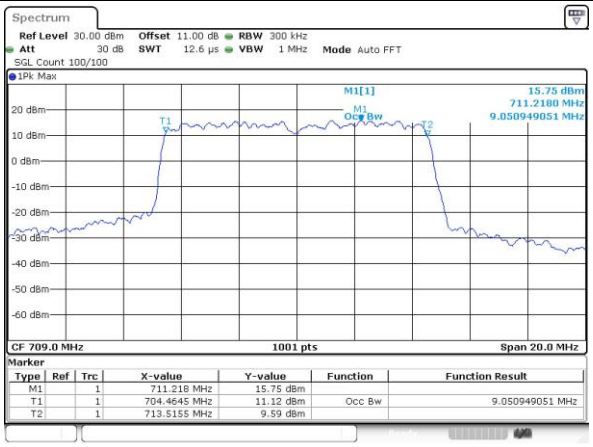


Highest Channel / 5MHz / 16QAM

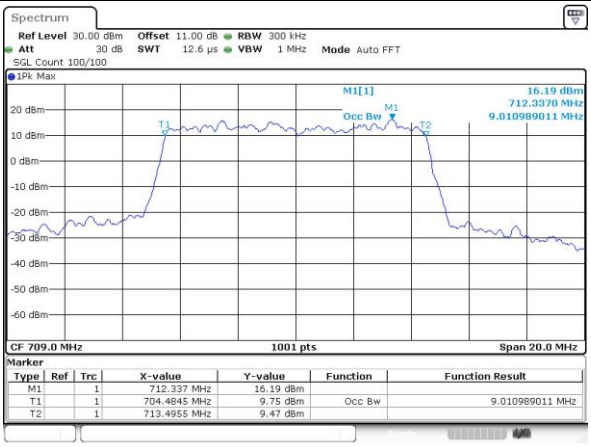


LTE Band 17

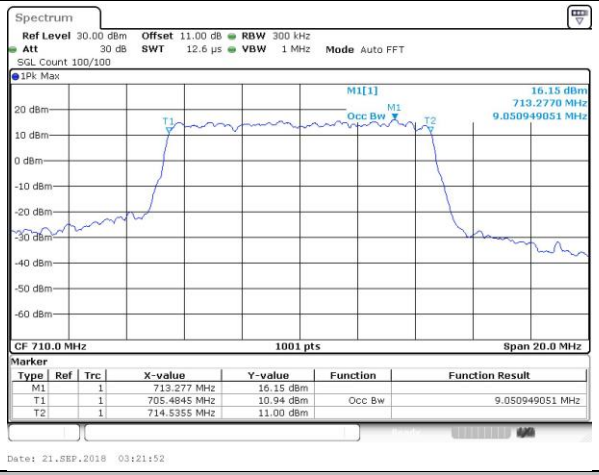
Lowest Channel / 10MHz / QPSK



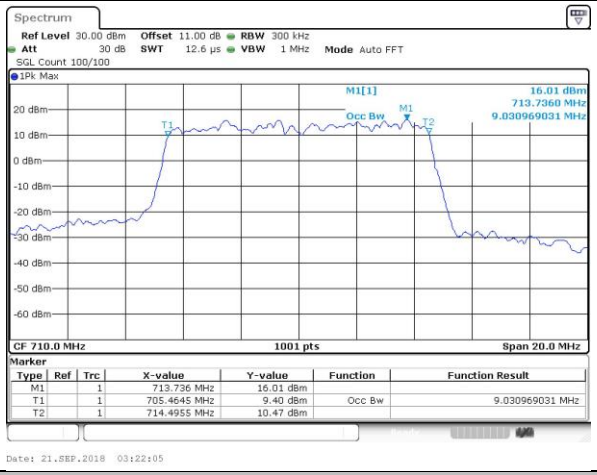
Lowest Channel / 10MHz / 16QAM



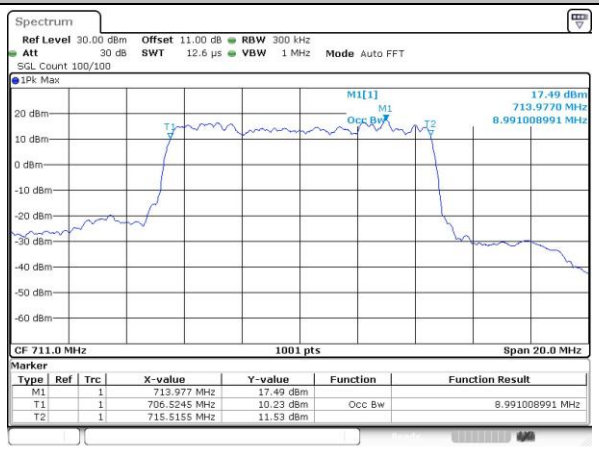
Middle Channel / 10MHz / QPSK



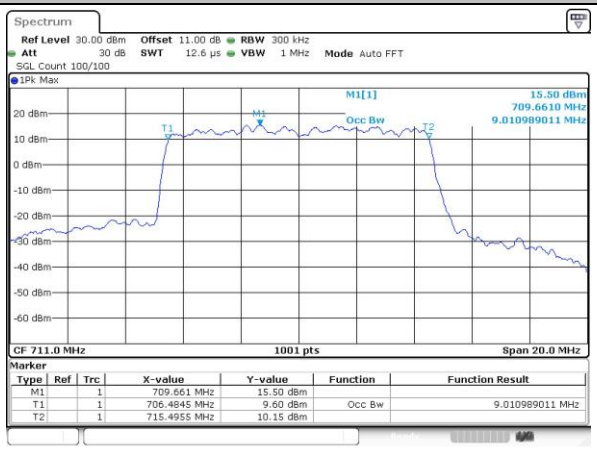
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



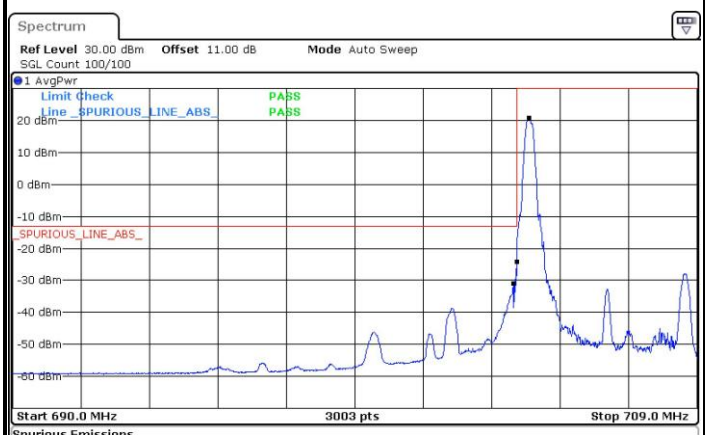
Highest Channel / 10MHz / 16QAM



Conducted Band Edge

LTE Band 17 / 5MHz / QPSK

Lowest Band Edge / 1 RB

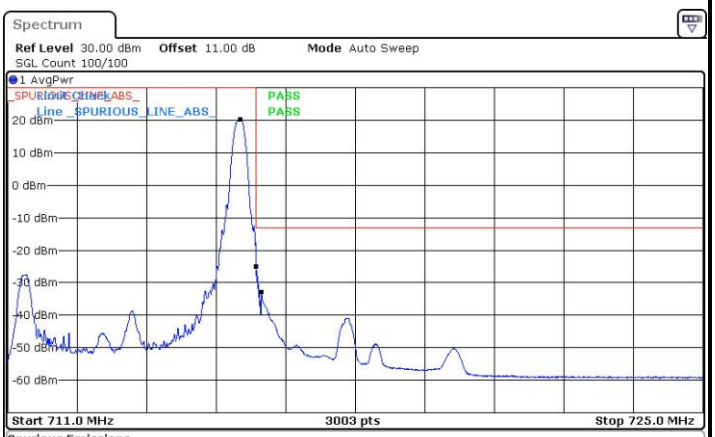


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
690.000 MHz	703.900 MHz	100.000 kHz	703.89306 MHz	-31.01 dBm	-18.01 dB
703.900 MHz	704.000 MHz	30.000 kHz	703.99735 MHz	-24.25 dBm	-11.25 dB
704.000 MHz	709.000 MHz	100.000 kHz	704.33716 MHz	20.72 dBm	-9.28 dB

Date: 21.SEP.2018 02:58:58

Highest Band Edge / 1 RB

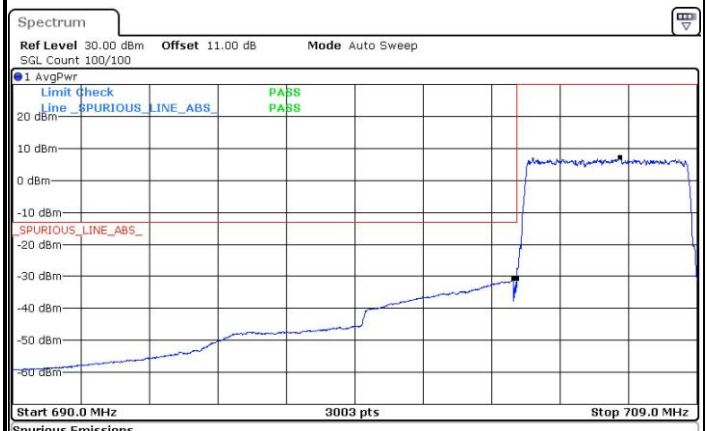


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
711.000 MHz	716.000 MHz	100.000 kHz	715.67782 MHz	20.32 dBm	-9.68 dB
716.000 MHz	716.100 MHz	30.000 kHz	716.00195 MHz	-25.12 dBm	-12.12 dB
716.100 MHz	725.000 MHz	100.000 kHz	716.10445 MHz	-32.80 dBm	-19.80 dB

Date: 21.SEP.2018 03:09:00

Lowest Band Edge / Full RB

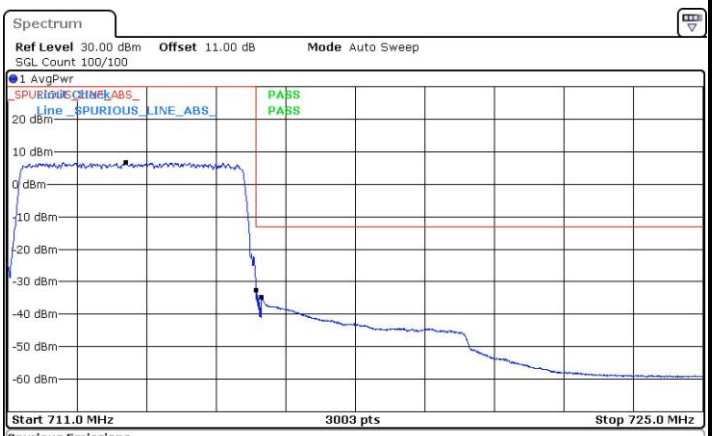


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
690.000 MHz	703.900 MHz	100.000 kHz	703.89306 MHz	-30.67 dBm	-17.67 dB
703.900 MHz	704.000 MHz	30.000 kHz	703.99905 MHz	-30.73 dBm	-17.73 dB
704.000 MHz	709.000 MHz	100.000 kHz	706.84965 MHz	7.14 dBm	-22.86 dB

Date: 21.SEP.2018 03:01:19

Highest Band Edge / Full RB



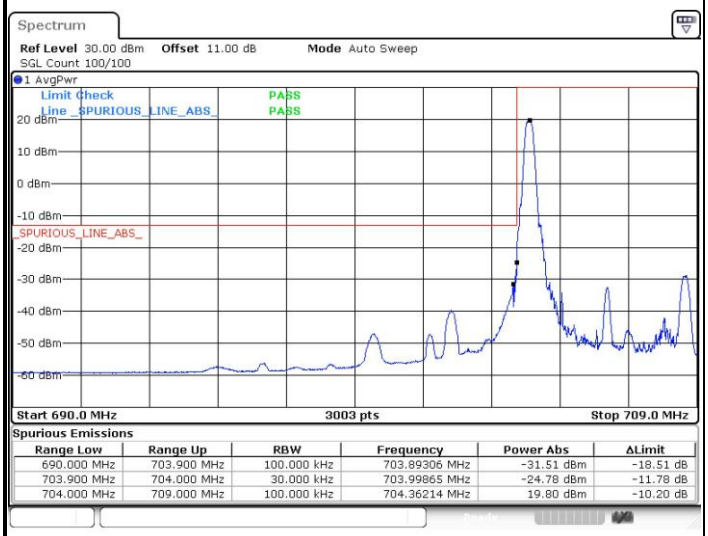
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
711.000 MHz	716.000 MHz	100.000 kHz	713.38012 MHz	6.70 dBm	-23.30 dB
716.000 MHz	716.100 MHz	30.000 kHz	716.00015 MHz	-32.63 dBm	-19.63 dB
716.100 MHz	725.000 MHz	100.000 kHz	716.10445 MHz	-34.81 dBm	-21.81 dB

Date: 21.SEP.2018 03:11:21

LTE Band 17 / 5MHz / 16QAM

Lowest Band Edge / 1 RB

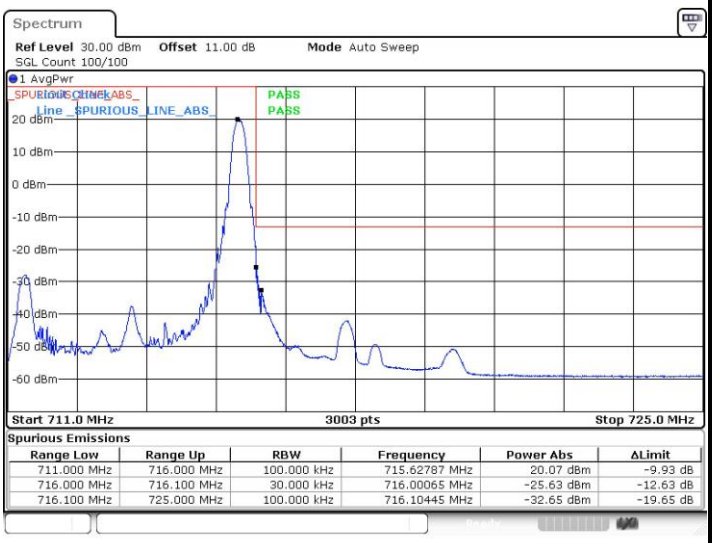


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
690.000 MHz	703.900 MHz	100.000 kHz	703.89306 MHz	-31.51 dBm	-18.51 dB
703.900 MHz	704.000 MHz	30.000 kHz	703.99865 MHz	-24.78 dBm	-11.78 dB
704.000 MHz	709.000 MHz	100.000 kHz	704.36214 MHz	19.80 dBm	-10.20 dB

Date: 21.SEP.2018 03:00:08

Highest Band Edge / 1 RB

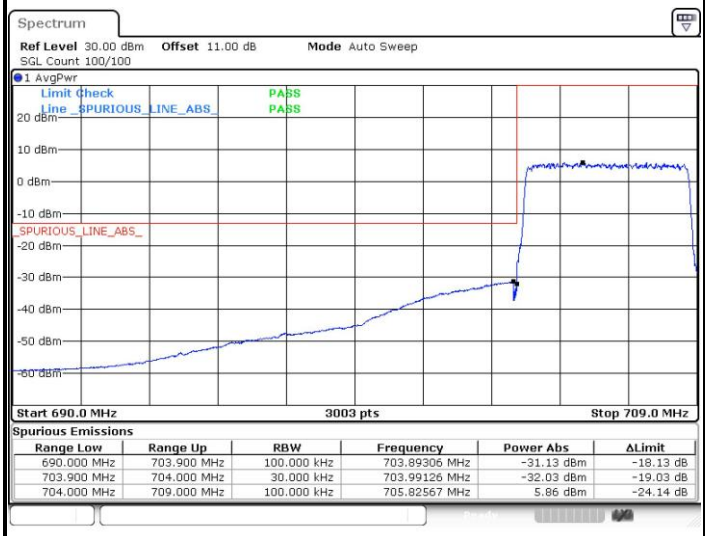


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
711.000 MHz	716.000 MHz	100.000 kHz	715.62787 MHz	20.07 dBm	-9.93 dB
716.000 MHz	716.100 MHz	30.000 kHz	716.00065 MHz	-25.63 dBm	-12.63 dB
716.100 MHz	725.000 MHz	100.000 kHz	716.10445 MHz	-32.65 dBm	-19.65 dB

Date: 21.SEP.2018 03:10:10

Lowest Band Edge / Full RB

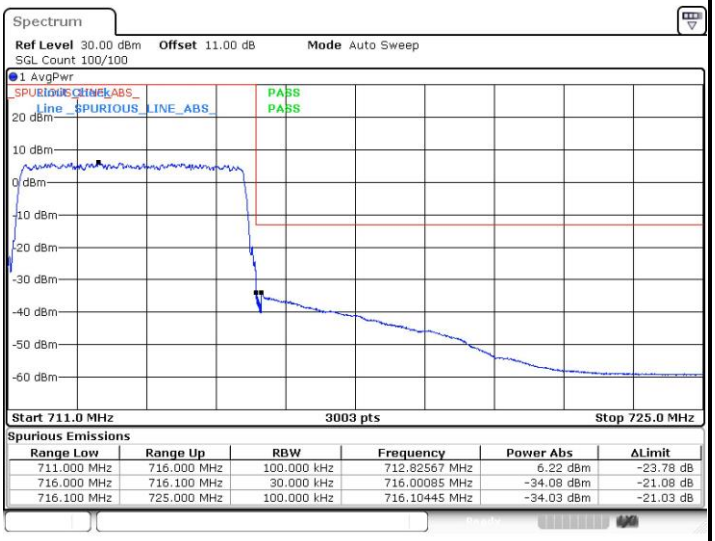


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
690.000 MHz	703.900 MHz	100.000 kHz	703.89306 MHz	-31.13 dBm	-18.13 dB
703.900 MHz	704.000 MHz	30.000 kHz	703.99126 MHz	-32.03 dBm	-19.03 dB
704.000 MHz	709.000 MHz	100.000 kHz	705.82567 MHz	5.86 dBm	-24.14 dB

Date: 21.SEP.2018 03:02:29

Highest Band Edge / Full RB



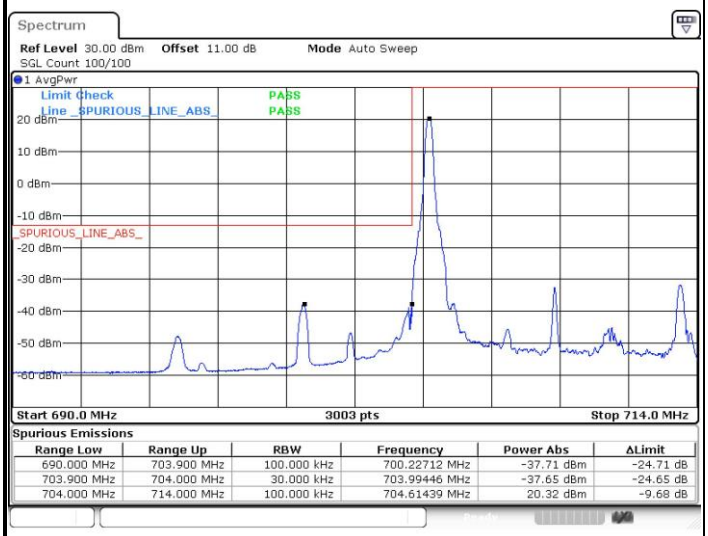
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
711.000 MHz	716.000 MHz	100.000 kHz	712.82567 MHz	6.22 dBm	-23.78 dB
716.000 MHz	716.100 MHz	30.000 kHz	716.00085 MHz	-34.08 dBm	-21.08 dB
716.100 MHz	725.000 MHz	100.000 kHz	716.10445 MHz	-34.03 dBm	-21.03 dB

Date: 21.SEP.2018 03:12:31

LTE Band 17 / 10MHz / QPSK

Lowest Band Edge / 1 RB

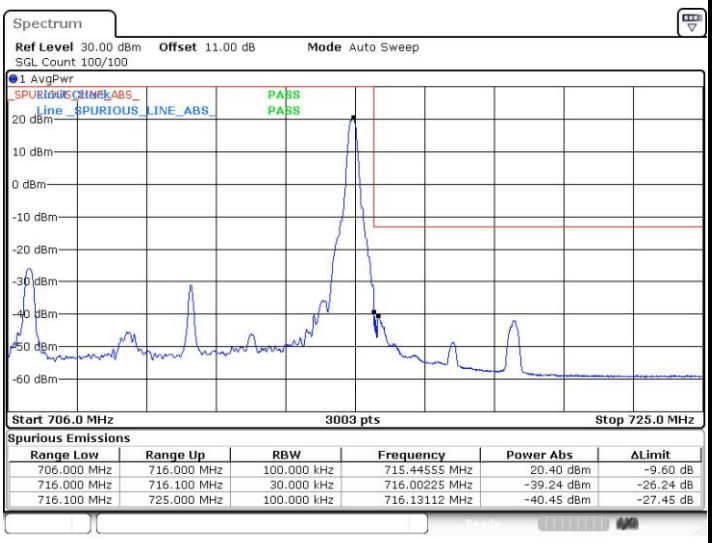


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
690.000 MHz	703.900 MHz	100.000 kHz	700.22712 MHz	-37.71 dBm	-24.71 dB
703.900 MHz	704.000 MHz	30.000 kHz	703.99446 MHz	-37.65 dBm	-24.65 dB
704.000 MHz	714.000 MHz	100.000 kHz	704.61439 MHz	20.32 dBm	-9.68 dB

Date: 21.SEP.2018 03:16:21

Highest Band Edge / 1 RB

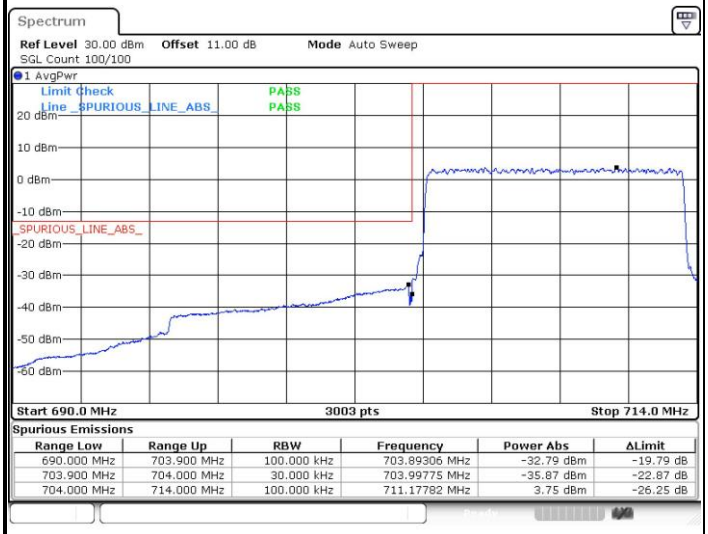


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
706.000 MHz	716.000 MHz	100.000 kHz	715.44555 MHz	20.40 dBm	-9.60 dB
716.000 MHz	716.100 MHz	30.000 kHz	716.00225 MHz	-39.24 dBm	-26.24 dB
716.100 MHz	725.000 MHz	100.000 kHz	716.13112 MHz	-40.45 dBm	-27.45 dB

Date: 21.SEP.2018 03:26:21

Lowest Band Edge / Full RB

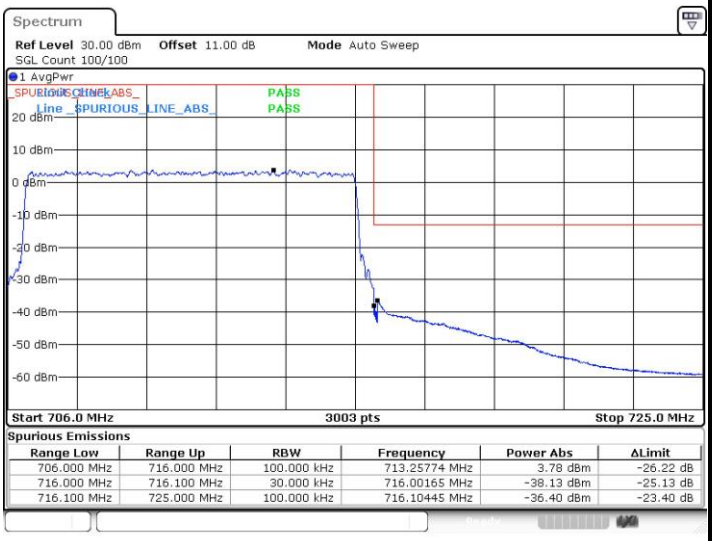


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
690.000 MHz	703.900 MHz	100.000 kHz	703.89306 MHz	-32.79 dBm	-19.79 dB
703.900 MHz	704.000 MHz	30.000 kHz	703.99775 MHz	-35.87 dBm	-22.87 dB
704.000 MHz	714.000 MHz	100.000 kHz	711.17782 MHz	3.75 dBm	-26.25 dB

Date: 21.SEP.2018 03:18:41

Highest Band Edge / Full RB



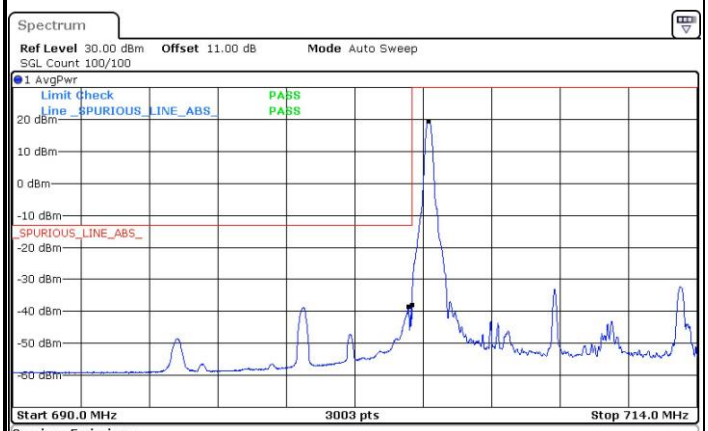
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
706.000 MHz	716.000 MHz	100.000 kHz	713.25774 MHz	3.78 dBm	-26.22 dB
716.000 MHz	716.100 MHz	30.000 kHz	716.00165 MHz	-38.13 dBm	-25.13 dB
716.100 MHz	725.000 MHz	100.000 kHz	716.10445 MHz	-36.40 dBm	-23.40 dB

Date: 21.SEP.2018 03:28:42

LTE Band 17 / 10MHz / 16QAM

Lowest Band Edge / 1 RB

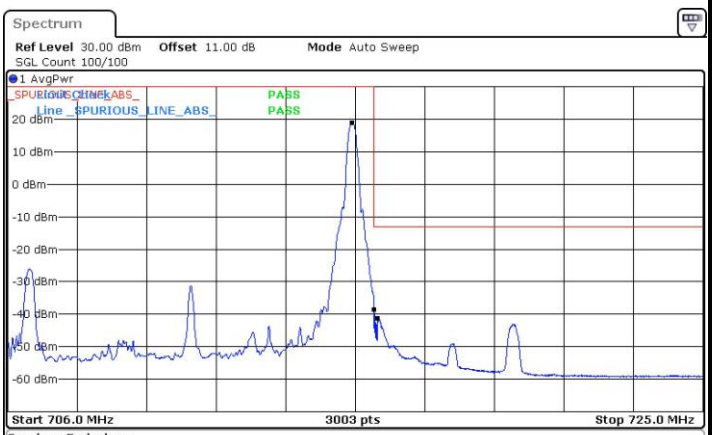


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
690.000 MHz	703.900 MHz	100.000 kHz	703.89306 MHz	-38.68 dBm	-25.68 dB
703.900 MHz	704.000 MHz	30.000 kHz	703.99565 MHz	-38.07 dBm	-25.07 dB
704.000 MHz	714.000 MHz	100.000 kHz	704.58442 MHz	19.35 dBm	-10.65 dB

Date: 21.SEP.2018 03:17:31

Highest Band Edge / 1 RB

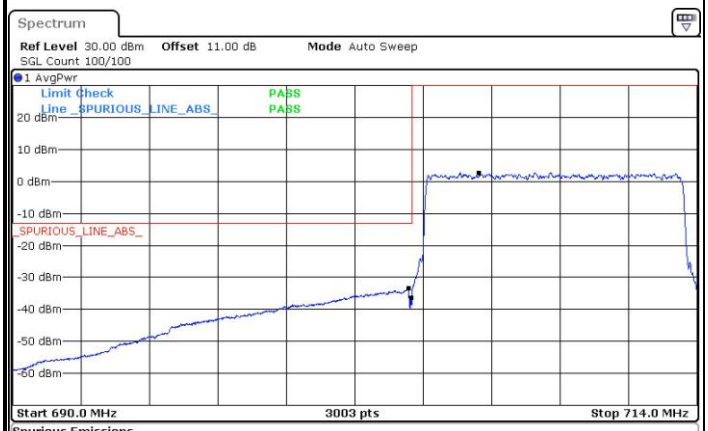


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
706.000 MHz	716.000 MHz	100.000 kHz	715.39560 MHz	18.91 dBm	-11.09 dB
716.000 MHz	716.100 MHz	30.000 kHz	716.00025 MHz	-38.44 dBm	-25.44 dB
716.100 MHz	725.000 MHz	100.000 kHz	716.10445 MHz	-41.40 dBm	-28.40 dB

Date: 21.SEP.2018 03:27:32

Lowest Band Edge / Full RB

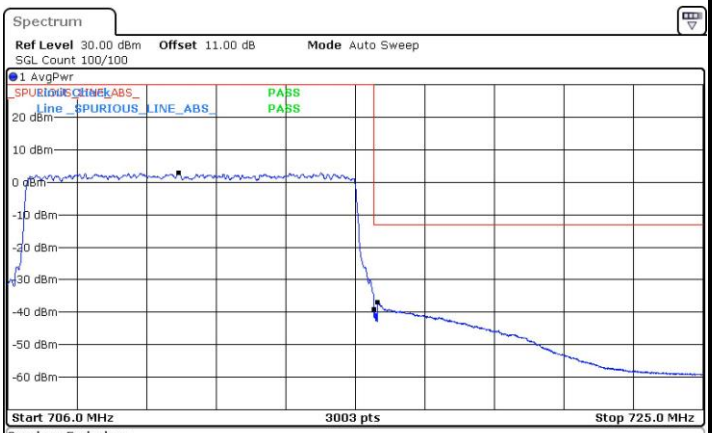


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
690.000 MHz	703.900 MHz	100.000 kHz	703.89306 MHz	-33.45 dBm	-20.45 dB
703.900 MHz	704.000 MHz	30.000 kHz	703.96748 MHz	-36.37 dBm	-23.37 dB
704.000 MHz	714.000 MHz	100.000 kHz	706.35265 MHz	2.76 dBm	-27.24 dB

Date: 21.SEP.2018 03:19:51

Highest Band Edge / Full RB



Spurious Emissions

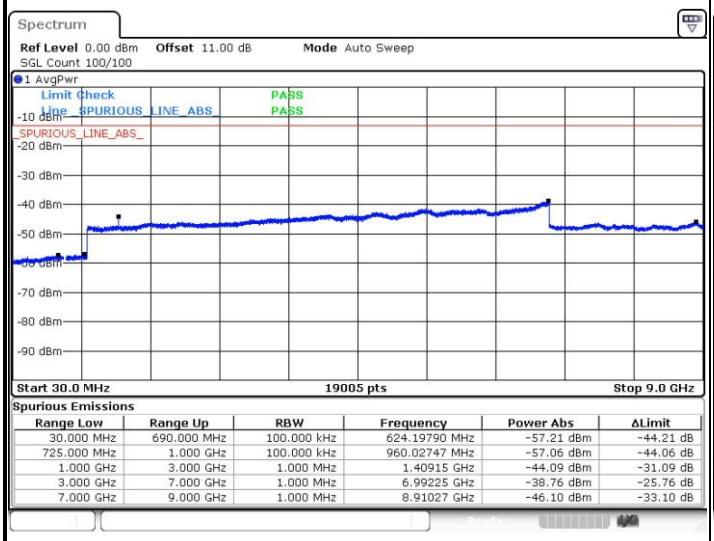
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
706.000 MHz	716.000 MHz	100.000 kHz	710.66034 MHz	2.94 dBm	-27.06 dB
716.000 MHz	716.100 MHz	30.000 kHz	716.00744 MHz	-39.03 dBm	-26.03 dB
716.100 MHz	725.000 MHz	100.000 kHz	716.10445 MHz	-36.80 dBm	-23.80 dB

Date: 21.SEP.2018 03:29:52

Conducted Spurious Emission

LTE Band 17 / 5MHz

Lowest Channel / QPSK

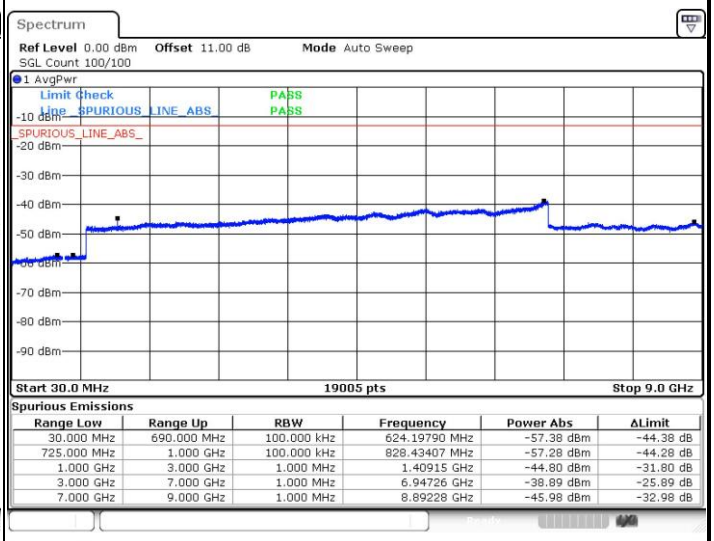


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	624.19790 MHz	-57.21 dBm	-44.21 dB
725.000 MHz	1.000 GHz	100.000 kHz	960.02747 MHz	-57.06 dBm	-44.06 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.40915 GHz	-44.09 dBm	-31.09 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99225 GHz	-38.76 dBm	-25.76 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.91027 GHz	-46.10 dBm	-33.10 dB

Date: 21.SEP.2018 03:03:22

Lowest Channel / 16QAM

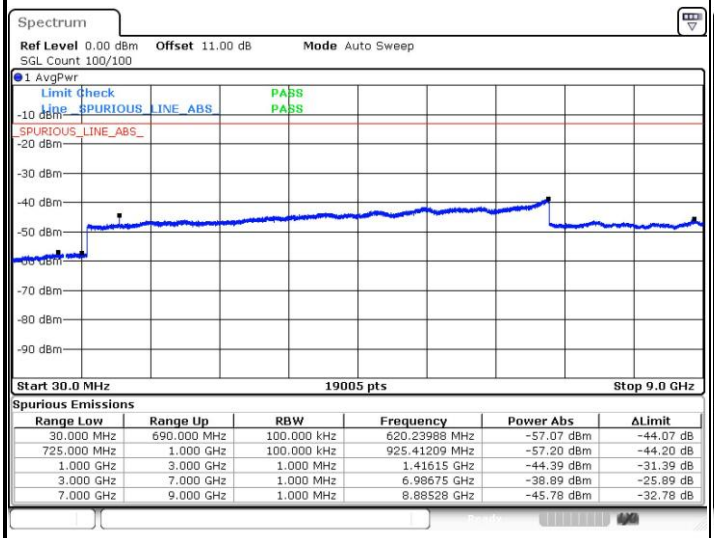


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	624.19790 MHz	-57.38 dBm	-44.38 dB
725.000 MHz	1.000 GHz	100.000 kHz	828.43407 MHz	-57.28 dBm	-44.28 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.40915 GHz	-44.80 dBm	-31.80 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.94726 GHz	-38.89 dBm	-25.89 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.89228 GHz	-45.98 dBm	-32.98 dB

Date: 21.SEP.2018 03:04:16

Middle Channel / QPSK

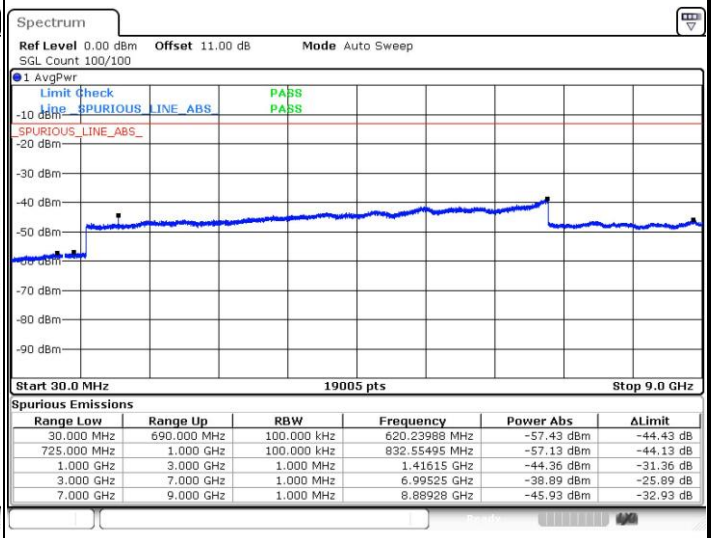


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	620.23988 MHz	-57.07 dBm	-44.07 dB
725.000 MHz	1.000 GHz	100.000 kHz	925.41209 MHz	-57.20 dBm	-44.20 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.41615 GHz	-44.39 dBm	-31.39 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.98675 GHz	-38.89 dBm	-25.89 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.88528 GHz	-45.78 dBm	-32.78 dB

Date: 21.SEP.2018 03:06:02

Middle Channel / 16QAM



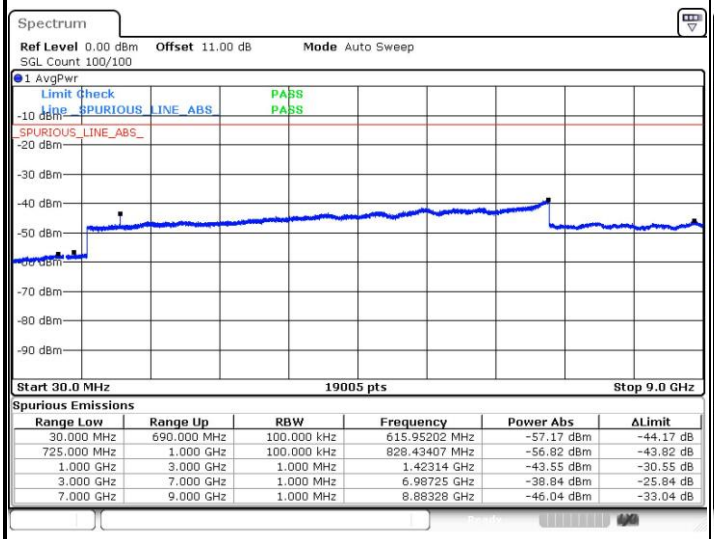
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	620.23988 MHz	-57.43 dBm	-44.43 dB
725.000 MHz	1.000 GHz	100.000 kHz	832.55495 MHz	-57.13 dBm	-44.13 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.41615 GHz	-44.36 dBm	-31.36 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99525 GHz	-38.89 dBm	-25.89 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.88928 GHz	-45.93 dBm	-32.93 dB

Date: 21.SEP.2018 03:06:57

LTE Band 17 / 5MHz

Highest Channel / QPSK

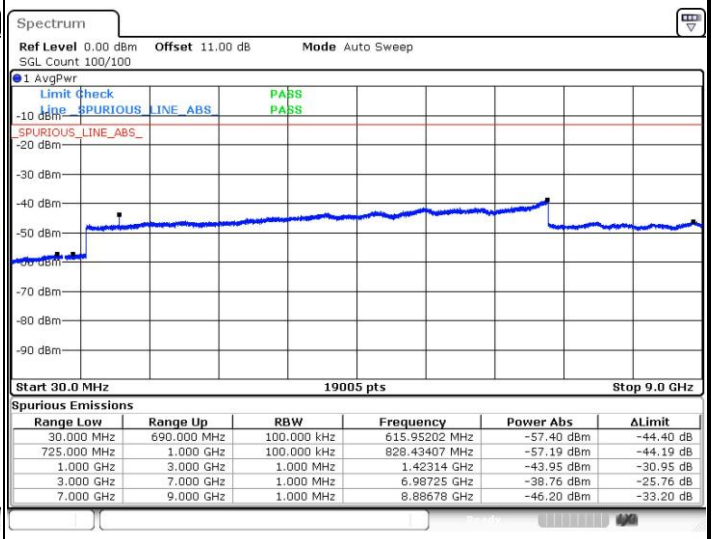


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	615.95202 MHz	-57.17 dBm	-44.17 dB
725.000 MHz	1.000 GHz	100.000 kHz	828.43407 MHz	-56.82 dBm	-43.82 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.42314 GHz	-43.55 dBm	-30.55 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.98725 GHz	-38.84 dBm	-25.84 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.88328 GHz	-46.04 dBm	-33.04 dB

Date: 21.SEP.2018 03:13:24

Highest Channel / 16QAM



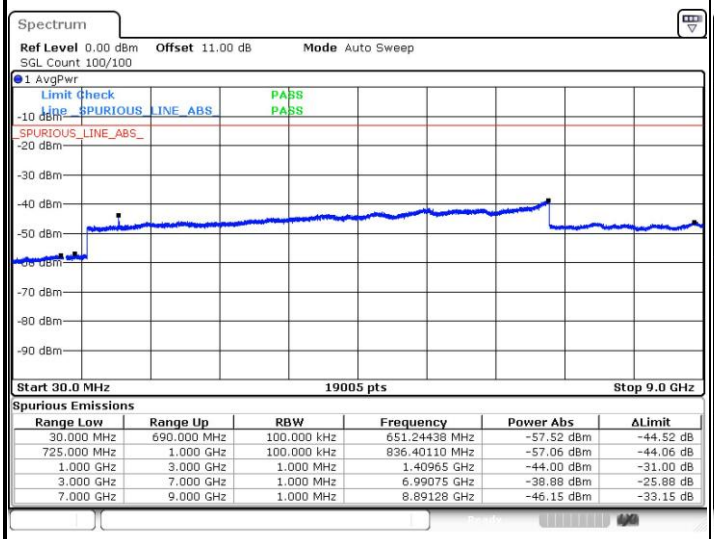
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	615.95202 MHz	-57.40 dBm	-44.40 dB
725.000 MHz	1.000 GHz	100.000 kHz	828.43407 MHz	-57.19 dBm	-44.19 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.42314 GHz	-43.95 dBm	-30.95 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.98725 GHz	-38.76 dBm	-25.76 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.88678 GHz	-46.20 dBm	-33.20 dB

Date: 21.SEP.2018 03:14:18

LTE Band 17 / 10MHz

Lowest Channel / QPSK

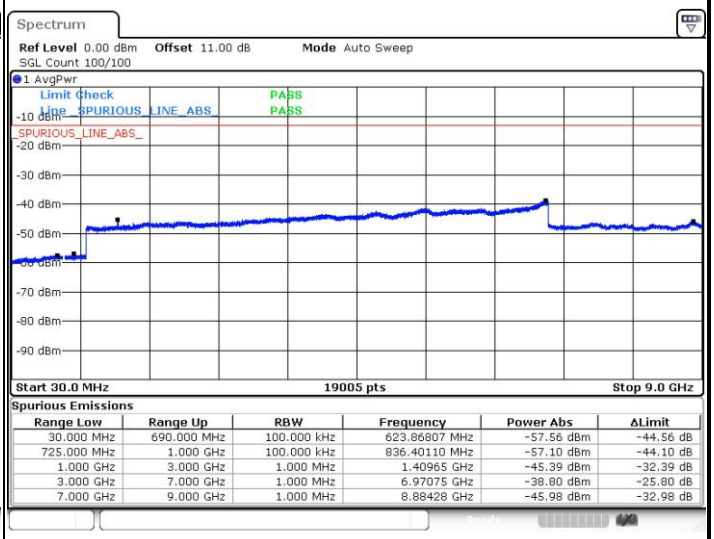


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	651.24438 MHz	-57.52 dBm	-44.52 dB
725.000 MHz	1.000 GHz	100.000 kHz	836.40110 MHz	-57.06 dBm	-44.06 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.40965 GHz	-44.00 dBm	-31.00 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99075 GHz	-38.88 dBm	-25.88 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.89128 GHz	-46.15 dBm	-33.15 dB

Date: 21.SEP.2018 03:20:45

Lowest Channel / 16QAM



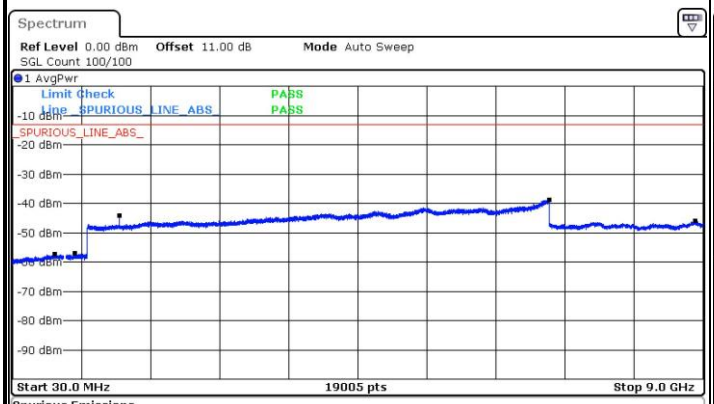
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	623.86807 MHz	-57.56 dBm	-44.56 dB
725.000 MHz	1.000 GHz	100.000 kHz	836.40110 MHz	-57.10 dBm	-44.10 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.40965 GHz	-45.39 dBm	-32.39 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.97075 GHz	-38.80 dBm	-25.80 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.88428 GHz	-45.98 dBm	-32.98 dB

Date: 21.SEP.2018 03:21:39

LTE Band 17 / 10MHz

Middle Channel / QPSK

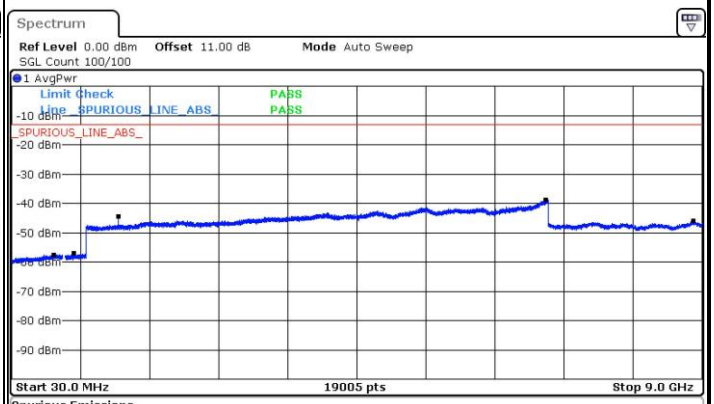


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	571.75412 MHz	-57.38 dBm	-44.38 dB
725.000 MHz	1.000 GHz	100.000 kHz	835.30220 MHz	-57.01 dBm	-44.01 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.41165 GHz	-44.12 dBm	-31.12 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99975 GHz	-38.84 dBm	-25.84 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.89678 GHz	-46.11 dBm	-33.11 dB

Date: 21.SEP.2018 03:23:25

Middle Channel / 16QAM

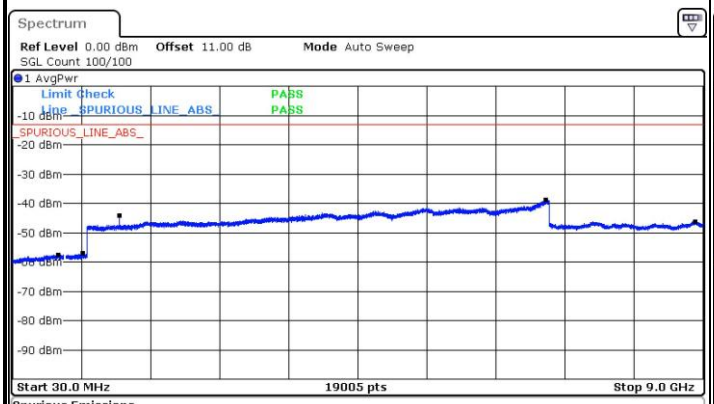


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	578.02099 MHz	-57.51 dBm	-44.51 dB
725.000 MHz	1.000 GHz	100.000 kHz	835.30220 MHz	-56.97 dBm	-43.97 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.41165 GHz	-44.62 dBm	-31.62 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.96975 GHz	-38.88 dBm	-25.88 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.88678 GHz	-46.04 dBm	-33.04 dB

Date: 21.SEP.2018 03:24:19

Highest Channel / QPSK

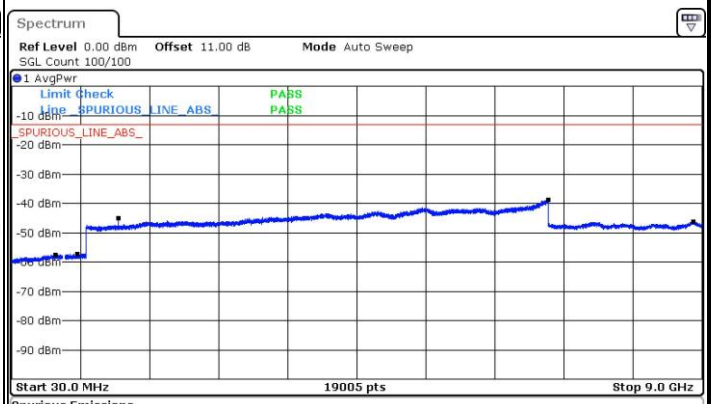


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	618.26087 MHz	-57.52 dBm	-44.52 dB
725.000 MHz	1.000 GHz	100.000 kHz	935.57692 MHz	-56.91 dBm	-43.91 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.41365 GHz	-44.13 dBm	-31.13 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.95876 GHz	-38.92 dBm	-25.92 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.89528 GHz	-46.14 dBm	-33.14 dB

Date: 21.SEP.2018 03:30:45

Highest Channel / 16QAM



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	593.19340 MHz	-57.50 dBm	-44.50 dB
725.000 MHz	1.000 GHz	100.000 kHz	887.22527 MHz	-57.17 dBm	-44.17 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.41315 GHz	-45.18 dBm	-32.18 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99625 GHz	-38.69 dBm	-25.69 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.89078 GHz	-46.20 dBm	-33.20 dB

Date: 21.SEP.2018 03:31:40

Frequency Stability

Test Conditions		LTE Band 17 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0079	PASS
40	Normal Voltage	0.0039	
30	Normal Voltage	0.0061	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0052	
0	Normal Voltage	0.0031	
-10	Normal Voltage	0.0076	
-20	Normal Voltage	0.0051	
-30	Normal Voltage	0.0042	
20	Maximum Voltage	0.0039	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0015	

Note:

1. Normal Voltage =3.8 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.

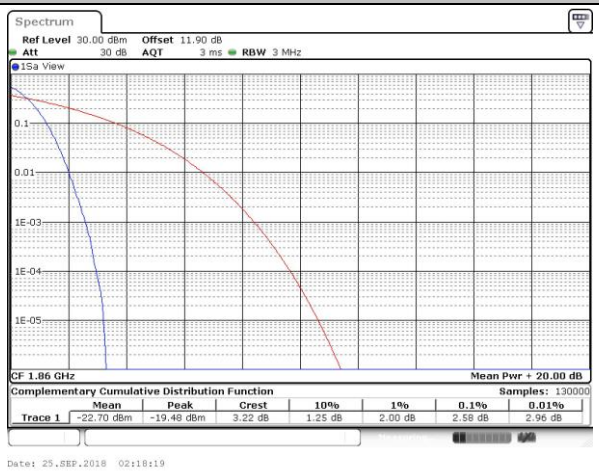
LTE Band 25

Peak-to-Average Ratio

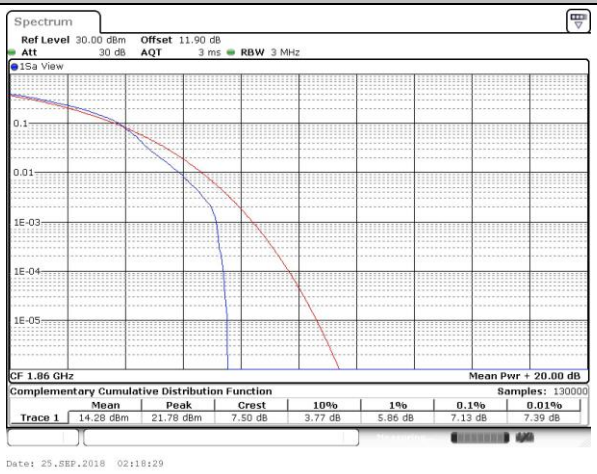
Mode	LTE Band 25 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	2.58	7.13	2.72	7.36	PASS
Middle CH	2.99	6.87	3.04	7.39	
Highest CH	3.19	6.96	2.96	7.33	

LTE Band 25 / 20MHz / QPSK

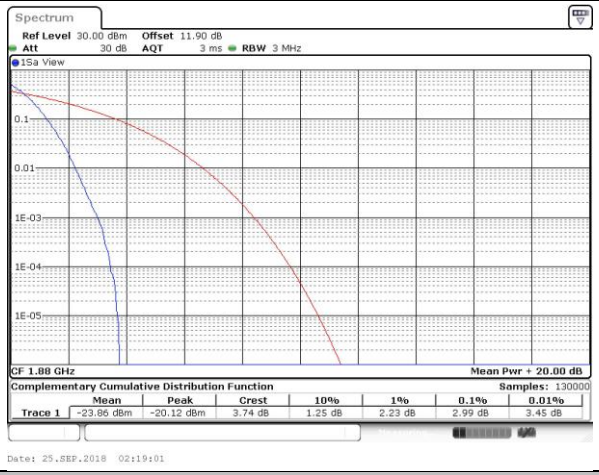
Lowest Channel / 1RB



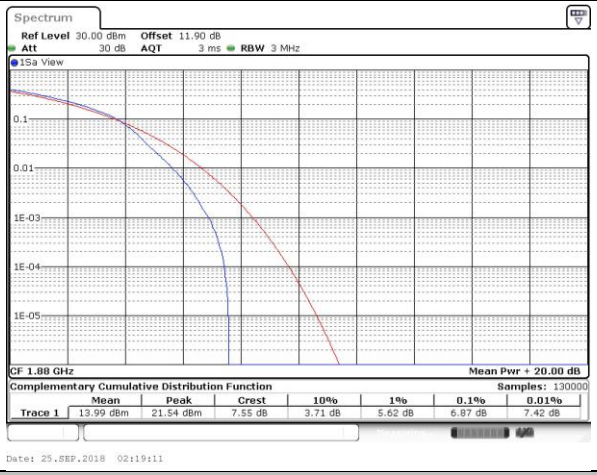
Lowest Channel / Full RB



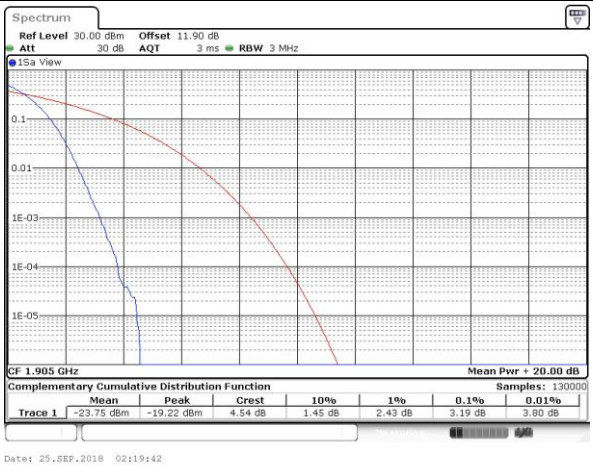
Middle Channel / 1RB



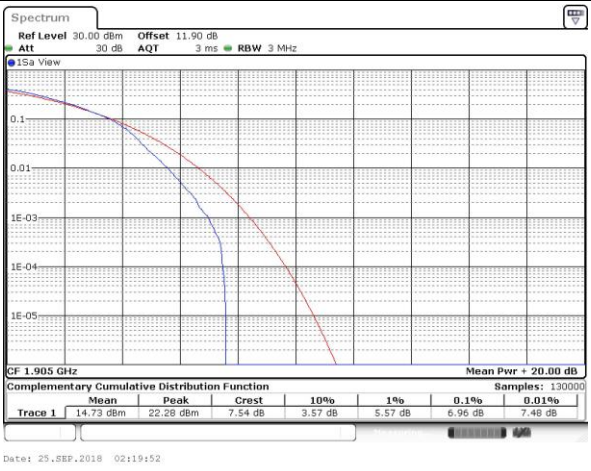
Middle Channel / Full RB



Highest Channel / 1RB

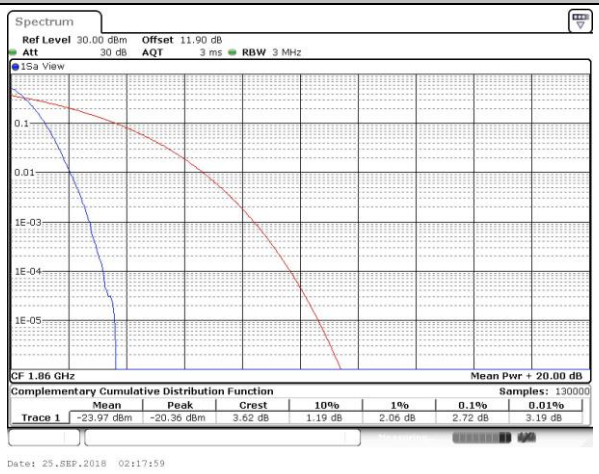


Highest Channel / Full RB

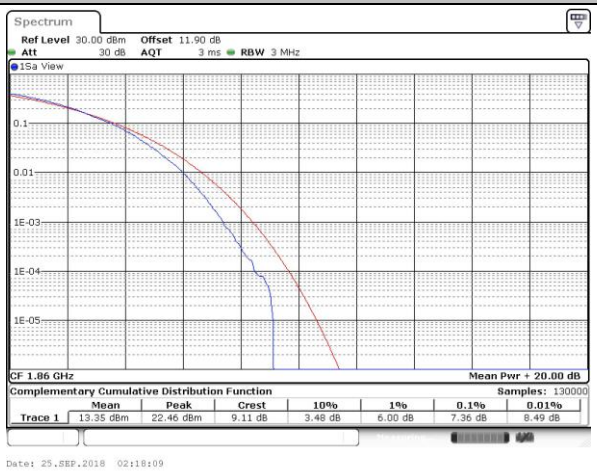


LTE Band 25 / 20MHz / 16QAM

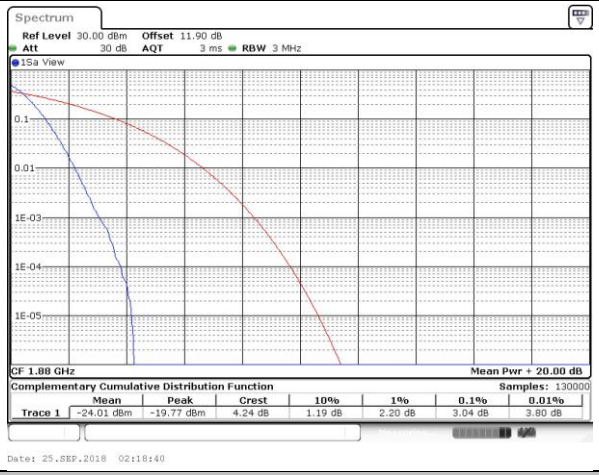
Lowest Channel / 1RB



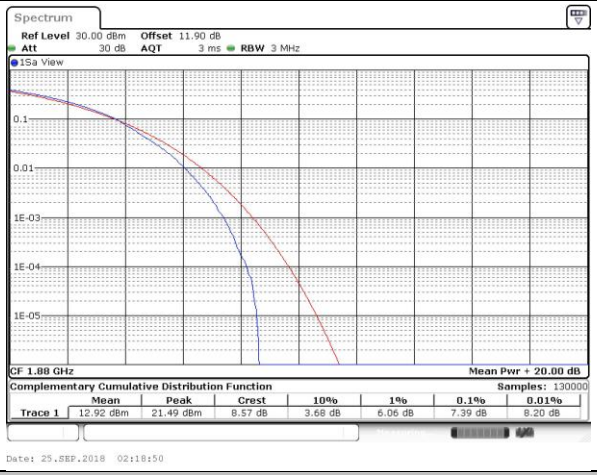
Lowest Channel / Full RB



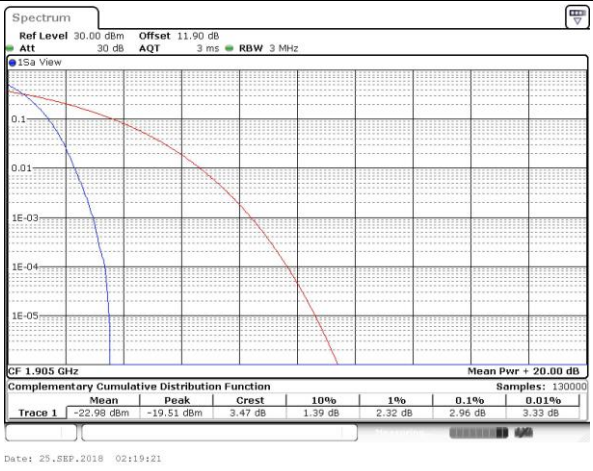
Middle Channel / 1RB



Middle Channel / Full RB



Highest Channel / 1RB



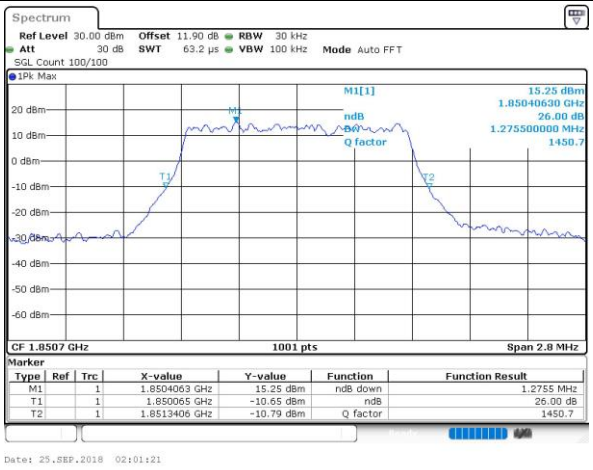
Highest Channel / Full RB

26dB Bandwidth

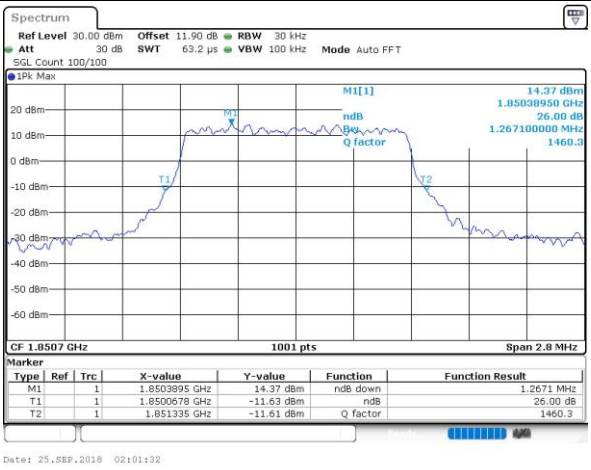
Mode	LTE Band 25 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.28	1.27	3.02	3.01	4.88	4.94	10.01	9.93	14.27	14.54	20.22	20.22
Middle CH	1.28	1.26	3.01	3.05	4.96	4.90	9.87	9.73	14.42	14.36	20.34	20.3
Highest CH	1.28	1.28	2.99	3.04	4.93	4.90	9.67	9.71	14.27	14.36	20.18	20.14

LTE Band 25

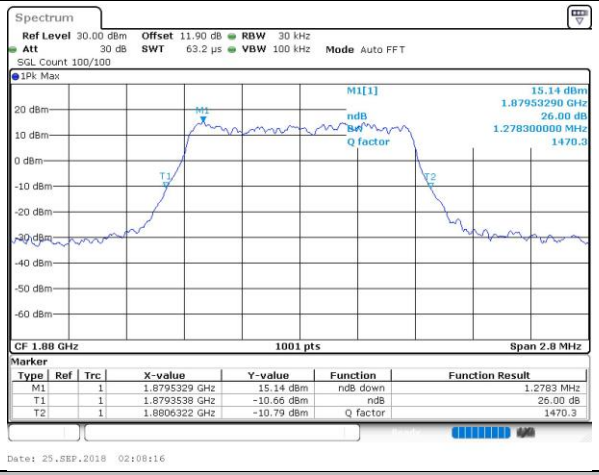
Lowest Channel / 1.4MHz / QPSK



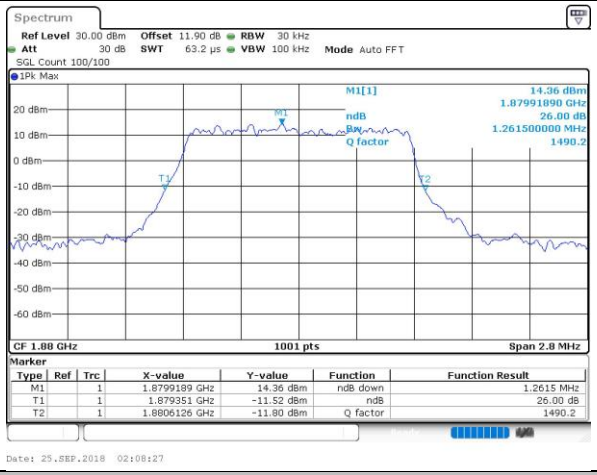
Lowest Channel / 1.4MHz / 16QAM



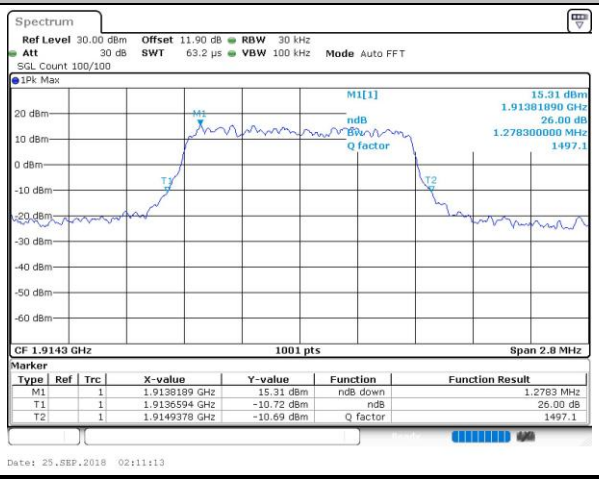
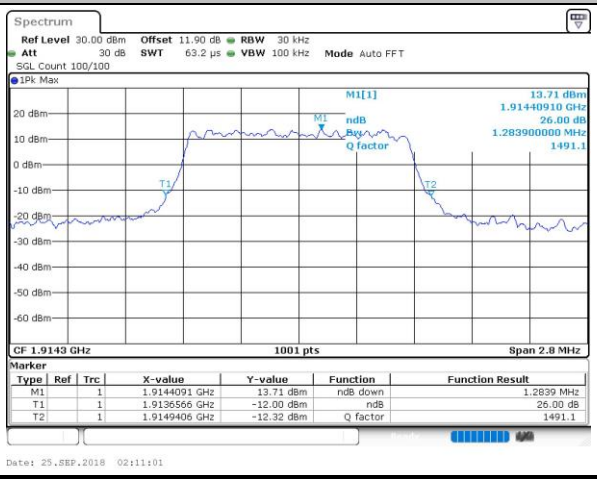
Middle Channel / 1.4MHz / QPSK



Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK



Highest Channel / 1.4MHz / 16QAM