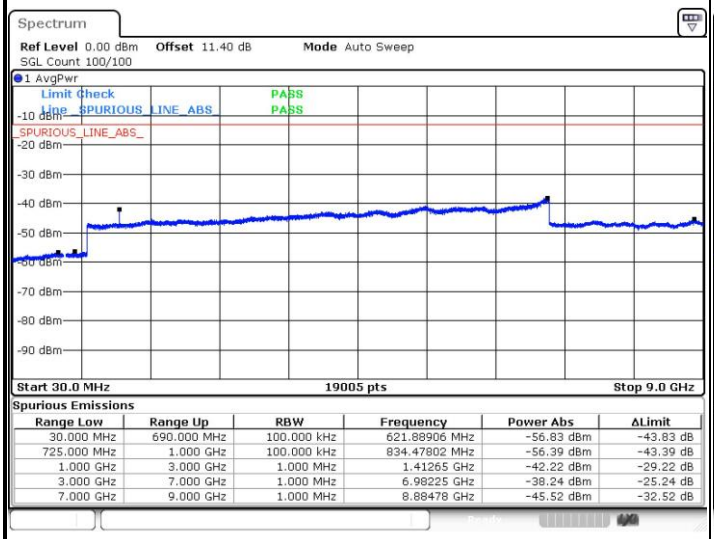
LTE Band 12 / 3MHz

Middle Channel / QPSK

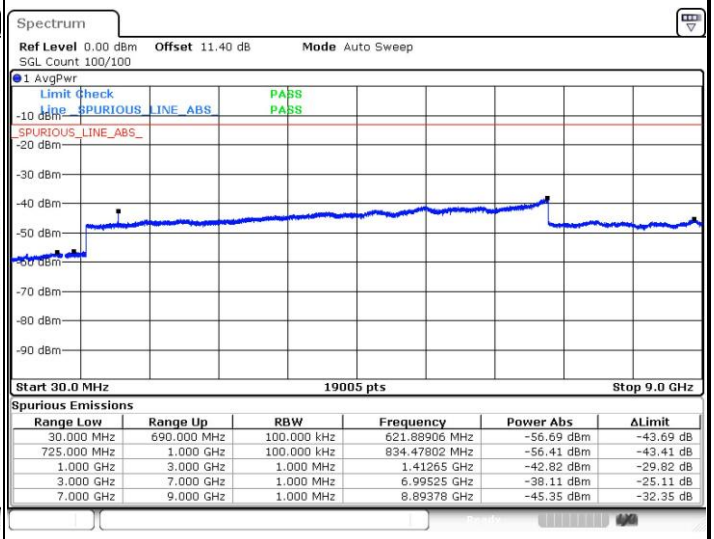


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	621.88906 MHz	-56.83 dBm	-43.83 dB
725.000 MHz	1.000 GHz	100.000 kHz	834.47802 MHz	-56.39 dBm	-43.39 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.41265 GHz	-42.22 dBm	-29.22 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.98225 GHz	-38.24 dBm	-25.24 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.88478 GHz	-45.52 dBm	-32.52 dB

Date: 10.SEP.2018 09:12:19

Middle Channel / 16QAM

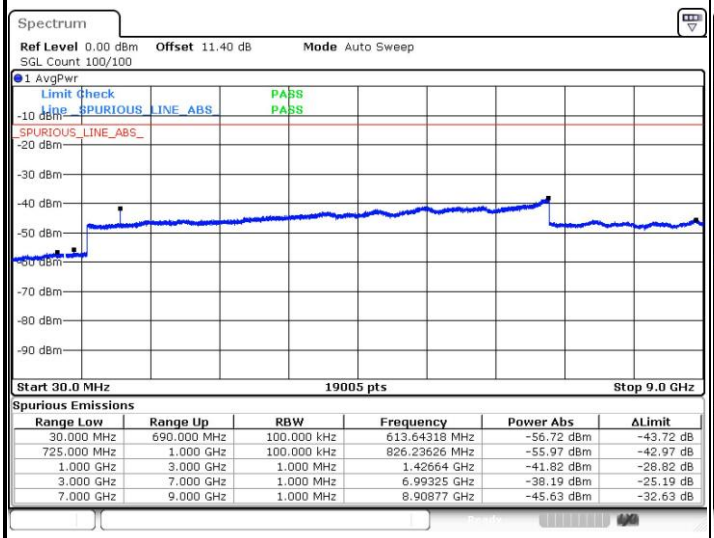


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	621.88906 MHz	-56.69 dBm	-43.69 dB
725.000 MHz	1.000 GHz	100.000 kHz	834.47802 MHz	-56.41 dBm	-43.41 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.41265 GHz	-42.82 dBm	-29.82 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99525 GHz	-38.11 dBm	-25.11 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.89378 GHz	-45.35 dBm	-32.35 dB

Date: 10.SEP.2018 09:11:24

Highest Channel / QPSK

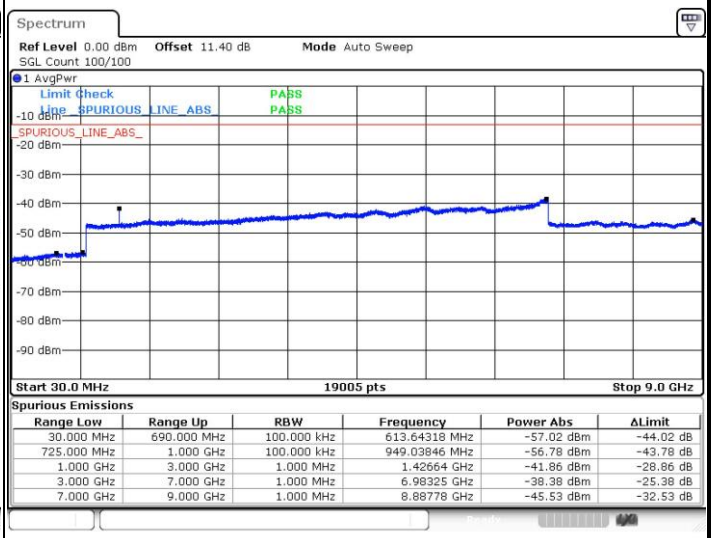


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	613.64318 MHz	-56.72 dBm	-43.72 dB
725.000 MHz	1.000 GHz	100.000 kHz	826.23626 MHz	-55.97 dBm	-42.97 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.42664 GHz	-41.82 dBm	-28.82 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99325 GHz	-38.19 dBm	-25.19 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.90877 GHz	-45.63 dBm	-32.63 dB

Date: 10.SEP.2018 09:18:49

Highest Channel / 16QAM



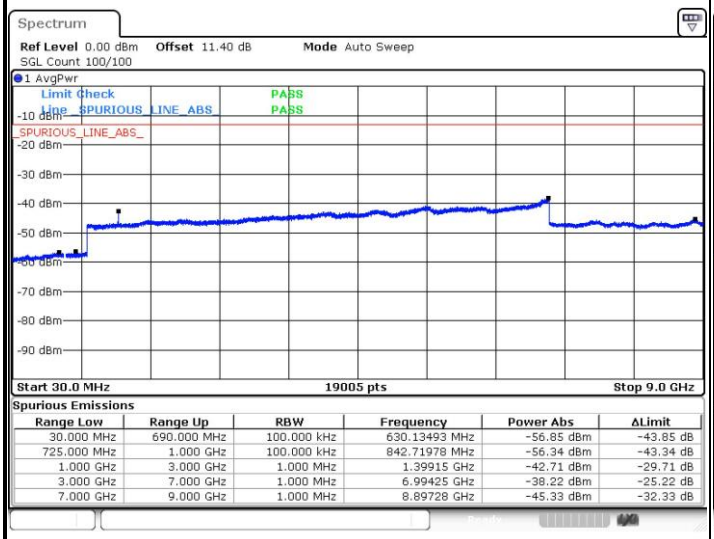
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	613.64318 MHz	-57.02 dBm	-44.02 dB
725.000 MHz	1.000 GHz	100.000 kHz	949.03846 MHz	-56.78 dBm	-43.78 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.42664 GHz	-41.86 dBm	-28.86 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.98325 GHz	-38.38 dBm	-25.38 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.88778 GHz	-45.53 dBm	-32.53 dB

Date: 10.SEP.2018 09:19:43

LTE Band 12 / 5MHz

Lowest Channel / QPSK

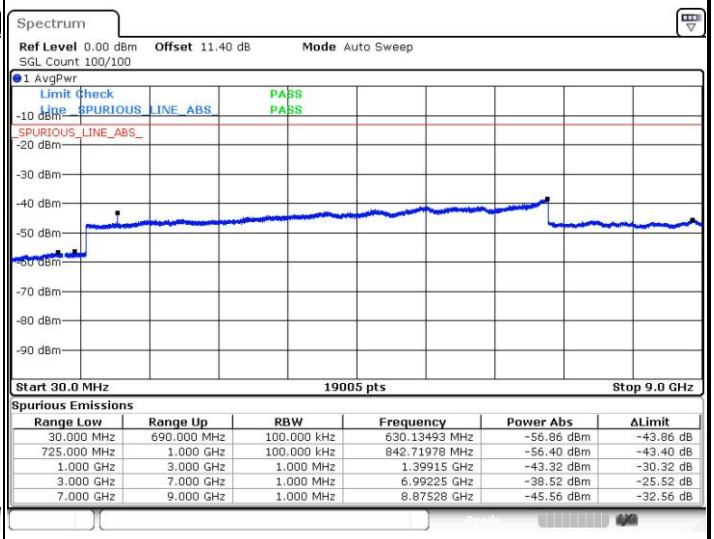


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	630.13493 MHz	-56.85 dBm	-43.85 dB
725.000 MHz	1.000 GHz	100.000 kHz	842.71978 MHz	-56.34 dBm	-43.34 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.39915 GHz	-42.71 dBm	-29.71 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99425 GHz	-38.22 dBm	-25.22 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.89728 GHz	-45.33 dBm	-32.33 dB

Date: 10.SEP.2018 09:26:12

Lowest Channel / 16QAM

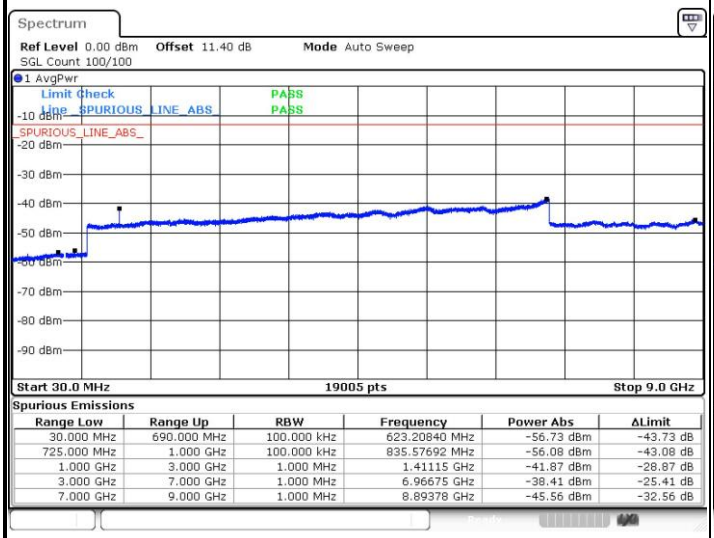


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	630.13493 MHz	-56.86 dBm	-43.86 dB
725.000 MHz	1.000 GHz	100.000 kHz	842.71978 MHz	-56.40 dBm	-43.40 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.39915 GHz	-43.32 dBm	-30.32 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99225 GHz	-38.52 dBm	-25.52 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.87528 GHz	-45.56 dBm	-32.56 dB

Date: 10.SEP.2018 09:27:07

Middle Channel / QPSK

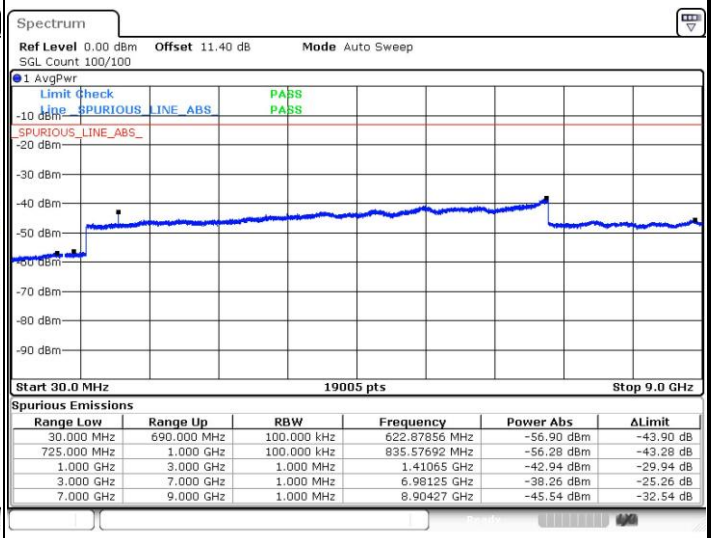


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	623.20840 MHz	-56.73 dBm	-43.73 dB
725.000 MHz	1.000 GHz	100.000 kHz	835.57692 MHz	-56.08 dBm	-43.08 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.41115 GHz	-41.87 dBm	-28.87 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.96675 GHz	-38.41 dBm	-25.41 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.89378 GHz	-45.56 dBm	-32.56 dB

Date: 10.SEP.2018 09:29:49

Middle Channel / 16QAM



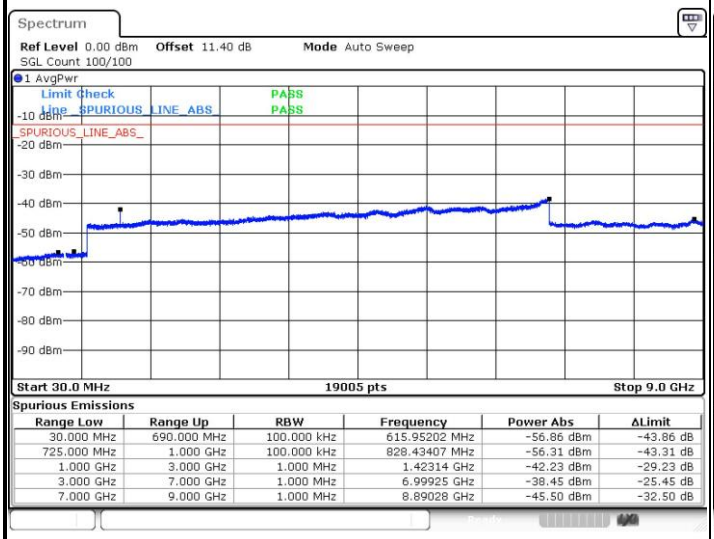
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	622.87856 MHz	-56.90 dBm	-43.90 dB
725.000 MHz	1.000 GHz	100.000 kHz	835.57692 MHz	-56.28 dBm	-43.28 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.41065 GHz	-42.94 dBm	-29.94 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.98125 GHz	-38.26 dBm	-25.26 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.90427 GHz	-45.54 dBm	-32.54 dB

Date: 10.SEP.2018 09:28:54

LTE Band 12 / 5MHz

Highest Channel / QPSK

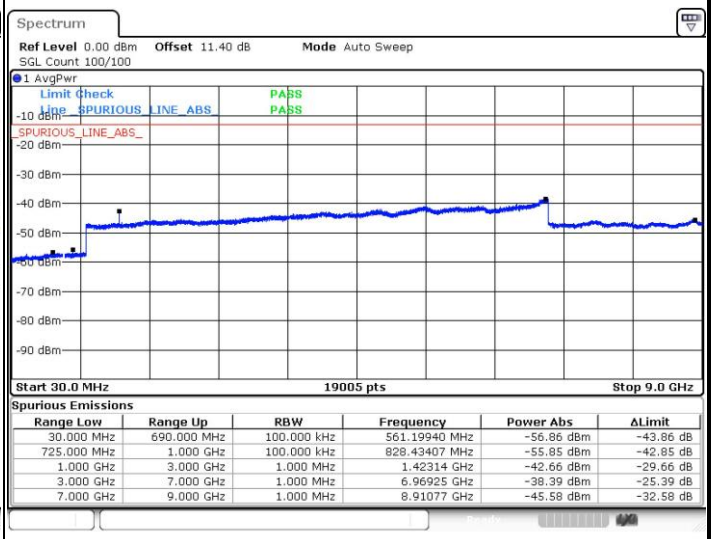


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	615.95202 MHz	-56.86 dBm	-43.86 dB
725.000 MHz	1.000 GHz	100.000 kHz	828.43407 MHz	-56.31 dBm	-43.31 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.42314 GHz	-42.23 dBm	-29.23 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99925 GHz	-38.45 dBm	-25.45 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.89028 GHz	-45.50 dBm	-32.50 dB

Date: 10.SEP.2018 09:37:13

Highest Channel / 16QAM



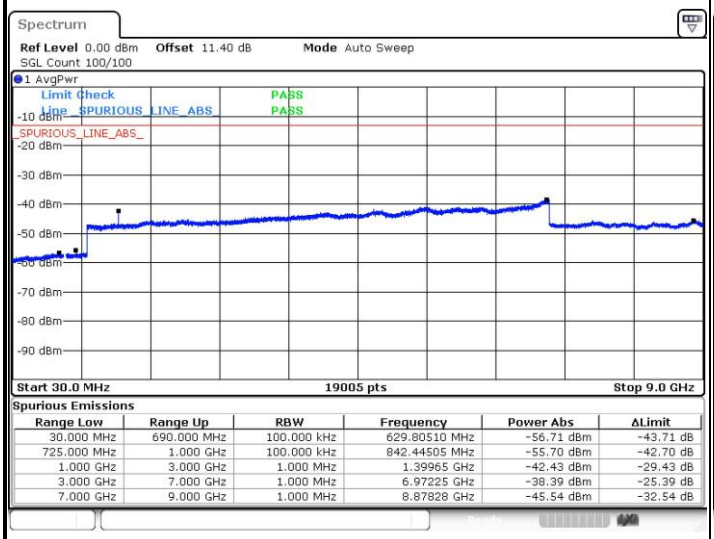
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	561.19940 MHz	-56.86 dBm	-43.86 dB
725.000 MHz	1.000 GHz	100.000 kHz	828.43407 MHz	-55.85 dBm	-42.85 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.42314 GHz	-42.66 dBm	-29.66 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.96925 GHz	-38.39 dBm	-25.39 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.91077 GHz	-45.58 dBm	-32.58 dB

Date: 10.SEP.2018 09:36:18

LTE Band 12 / 10MHz

Lowest Channel / QPSK

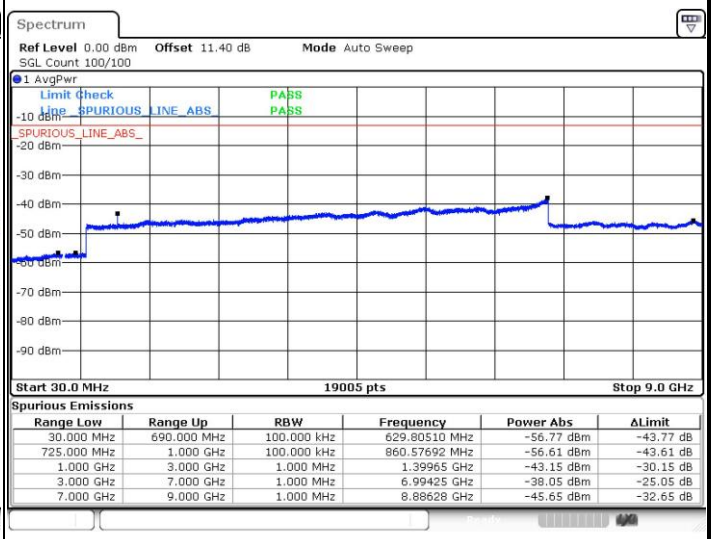


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	629.80510 MHz	-56.71 dBm	-43.71 dB
725.000 MHz	1.000 GHz	100.000 kHz	842.44505 MHz	-55.70 dBm	-42.70 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.39965 GHz	-42.43 dBm	-29.43 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.97225 GHz	-38.39 dBm	-25.39 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.87828 GHz	-45.54 dBm	-32.54 dB

Date: 10.SEP.2018 09:43:42

Lowest Channel / 16QAM



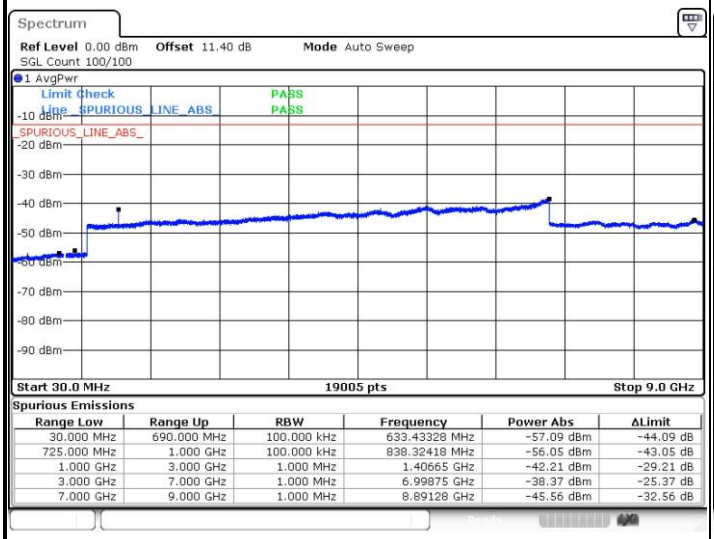
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	629.80510 MHz	-56.77 dBm	-43.77 dB
725.000 MHz	1.000 GHz	100.000 kHz	860.57692 MHz	-56.61 dBm	-43.61 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.39965 GHz	-43.15 dBm	-30.15 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99425 GHz	-38.05 dBm	-25.05 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.88628 GHz	-45.65 dBm	-32.65 dB

Date: 10.SEP.2018 09:44:37

LTE Band 12 / 10MHz

Middle Channel / QPSK

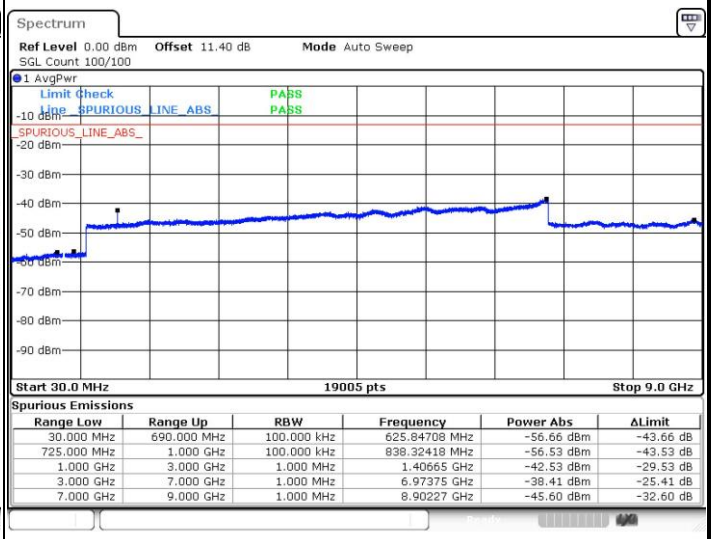


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	633.43328 MHz	-57.09 dBm	-44.09 dB
725.000 MHz	1.000 GHz	100.000 kHz	838.32418 MHz	-56.05 dBm	-43.05 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.40665 GHz	-42.21 dBm	-29.21 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99875 GHz	-38.37 dBm	-25.37 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.89128 GHz	-45.56 dBm	-32.56 dB

Date: 10.SEP.2018 09:47:18

Middle Channel / 16QAM

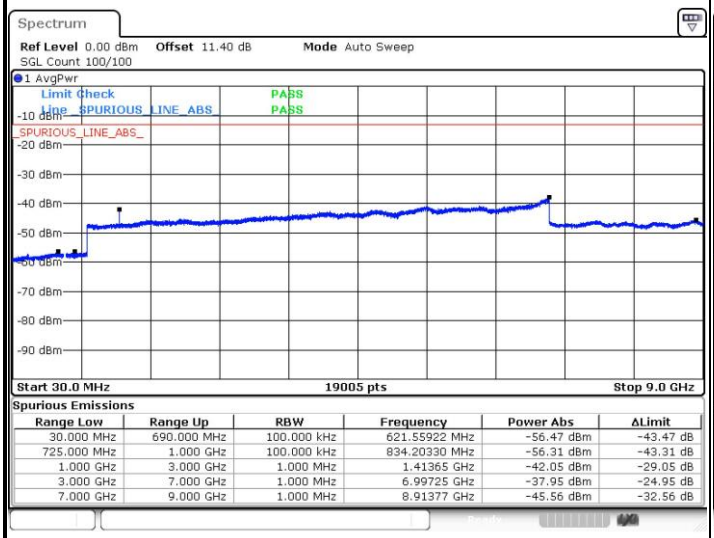


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	625.84708 MHz	-56.66 dBm	-43.66 dB
725.000 MHz	1.000 GHz	100.000 kHz	838.32418 MHz	-56.53 dBm	-43.53 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.40665 GHz	-42.53 dBm	-29.53 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.97375 GHz	-38.41 dBm	-25.41 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.90227 GHz	-45.60 dBm	-32.60 dB

Date: 10.SEP.2018 09:46:23

Highest Channel / QPSK

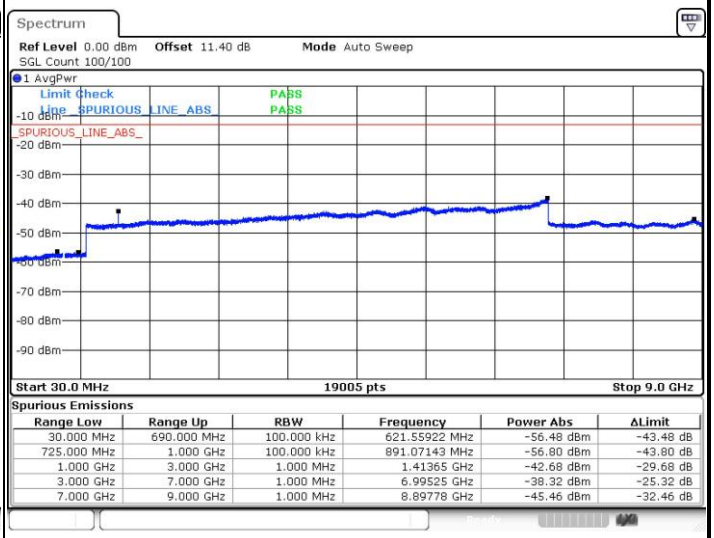


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	621.55922 MHz	-56.47 dBm	-43.47 dB
725.000 MHz	1.000 GHz	100.000 kHz	834.20330 MHz	-56.31 dBm	-43.31 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.41365 GHz	-42.05 dBm	-29.05 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99725 GHz	-37.95 dBm	-24.95 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.91377 GHz	-45.56 dBm	-32.56 dB

Date: 10.SEP.2018 09:53:47

Highest Channel / 16QAM



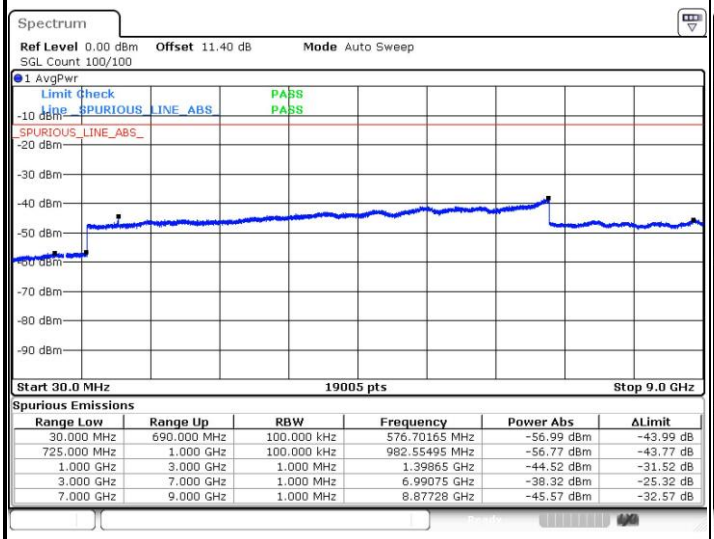
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	621.55922 MHz	-56.48 dBm	-43.48 dB
725.000 MHz	1.000 GHz	100.000 kHz	891.07143 MHz	-56.80 dBm	-43.80 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.41365 GHz	-42.68 dBm	-29.68 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99525 GHz	-38.32 dBm	-25.32 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.89778 GHz	-45.46 dBm	-32.46 dB

Date: 10.SEP.2018 09:54:43

LTE Band 12 / 1.4MHz

Lowest Channel / 64QAM

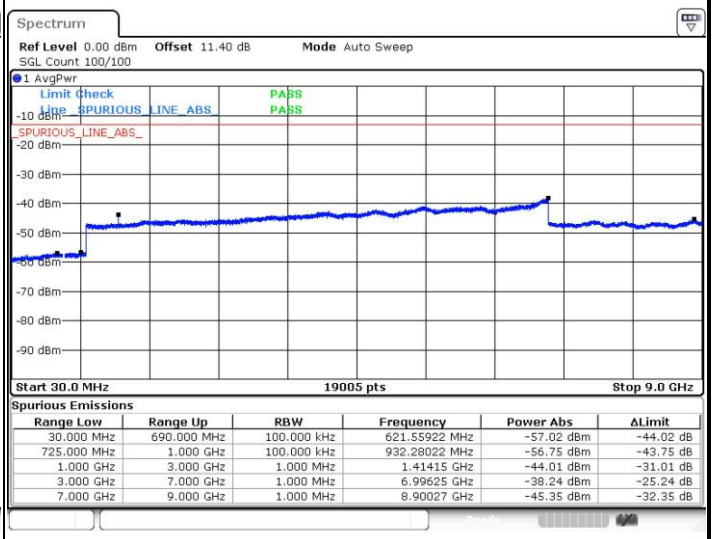


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	576.70165 MHz	-56.99 dBm	-43.99 dB
725.000 MHz	1.000 GHz	100.000 kHz	982.55495 MHz	-56.77 dBm	-43.77 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.39865 GHz	-44.52 dBm	-31.52 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99075 GHz	-38.32 dBm	-25.32 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.87728 GHz	-45.57 dBm	-32.57 dB

Date: 10.SEP.2018 15:42:11

Middle Channel / 64QAM

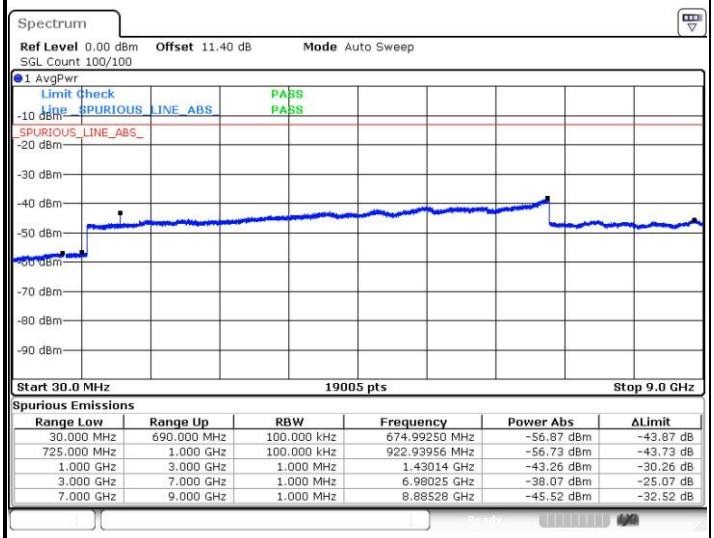


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	621.55922 MHz	-57.02 dBm	-44.02 dB
725.000 MHz	1.000 GHz	100.000 kHz	932.28022 MHz	-56.75 dBm	-43.75 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.41415 GHz	-44.01 dBm	-31.01 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99625 GHz	-38.24 dBm	-25.24 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.90027 GHz	-45.35 dBm	-32.35 dB

Date: 10.SEP.2018 15:43:52

Highest Channel / 64QAM



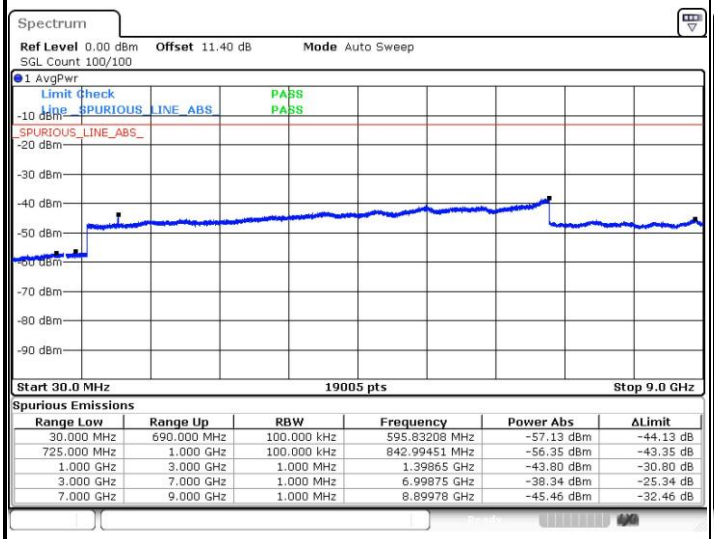
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	674.99250 MHz	-56.87 dBm	-43.87 dB
725.000 MHz	1.000 GHz	100.000 kHz	922.93956 MHz	-56.73 dBm	-43.73 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.43014 GHz	-43.26 dBm	-30.26 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.98025 GHz	-38.07 dBm	-25.07 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.88528 GHz	-45.52 dBm	-32.52 dB

Date: 10.SEP.2018 15:47:54

LTE Band 12 / 3MHz

Lowest Channel / 64QAM

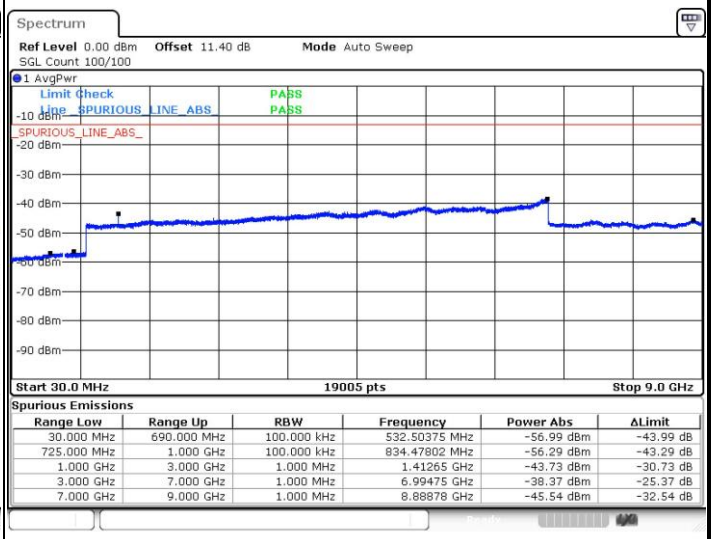


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	595.83208 MHz	-57.13 dBm	-44.13 dB
725.000 MHz	1.000 GHz	100.000 kHz	842.99451 MHz	-56.35 dBm	-43.35 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.39865 GHz	-43.80 dBm	-30.80 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99875 GHz	-38.34 dBm	-25.34 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.89978 GHz	-45.46 dBm	-32.46 dB

Date: 10.SEP.2018 10:44:52

Middle Channel / 64QAM

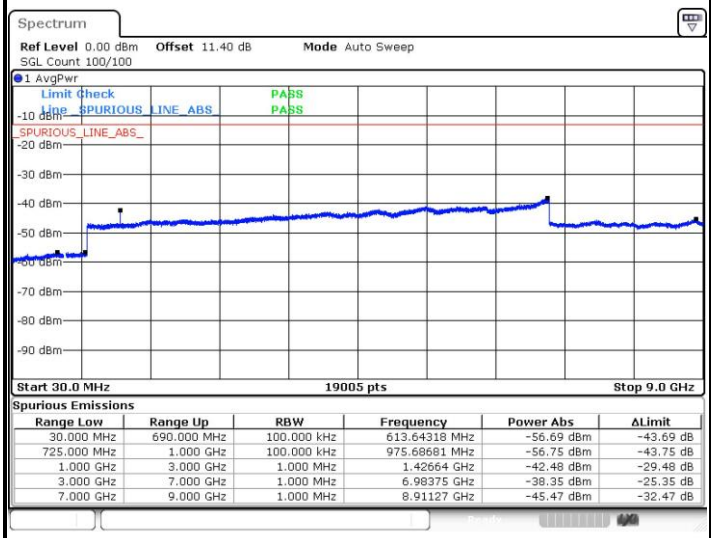


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	532.50375 MHz	-56.99 dBm	-43.99 dB
725.000 MHz	1.000 GHz	100.000 kHz	834.47802 MHz	-56.29 dBm	-43.29 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.41265 GHz	-43.73 dBm	-30.73 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99475 GHz	-38.37 dBm	-25.37 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.88878 GHz	-45.54 dBm	-32.54 dB

Date: 10.SEP.2018 10:46:32

Highest Channel / 64QAM



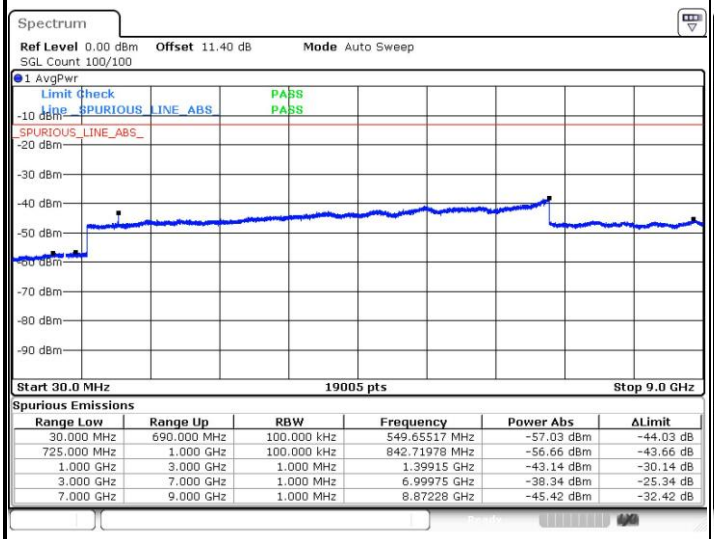
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	613.64318 MHz	-56.69 dBm	-43.69 dB
725.000 MHz	1.000 GHz	100.000 kHz	975.68681 MHz	-56.75 dBm	-43.75 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.42664 GHz	-42.48 dBm	-29.48 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.98375 GHz	-38.35 dBm	-25.35 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.91127 GHz	-45.47 dBm	-32.47 dB

Date: 10.SEP.2018 10:50:34

LTE Band 12 / 5MHz

Lowest Channel / 64QAM

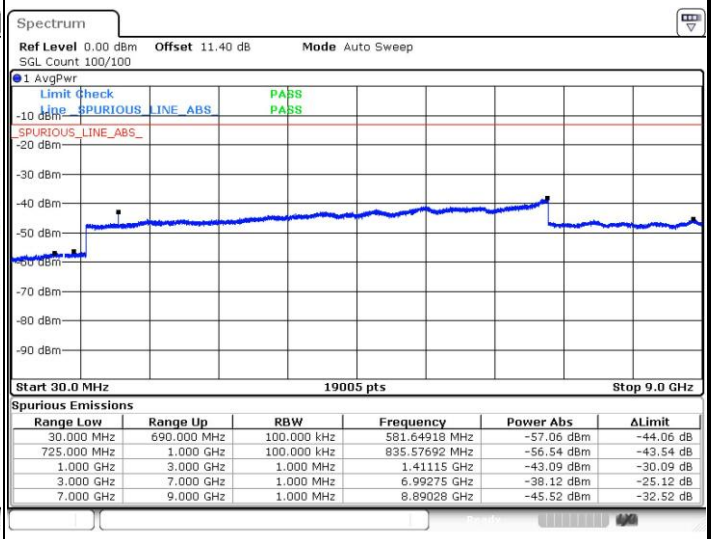


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	549.65517 MHz	-57.03 dBm	-44.03 dB
725.000 MHz	1.000 GHz	100.000 kHz	842.71978 MHz	-56.66 dBm	-43.66 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.39915 GHz	-43.14 dBm	-30.14 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99975 GHz	-38.34 dBm	-25.34 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.87228 GHz	-45.42 dBm	-32.42 dB

Date: 10.SEP.2018 15:18:47

Middle Channel / 64QAM

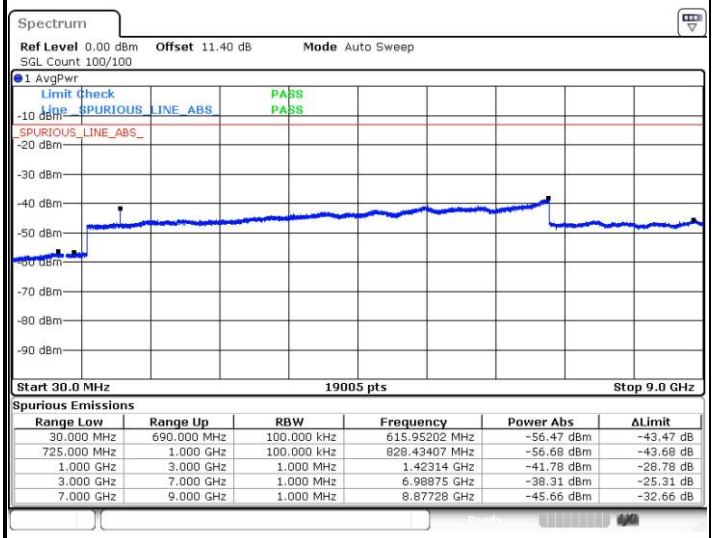


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	581.64918 MHz	-57.06 dBm	-44.06 dB
725.000 MHz	1.000 GHz	100.000 kHz	835.57692 MHz	-56.54 dBm	-43.54 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.41115 GHz	-43.09 dBm	-30.09 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99275 GHz	-38.12 dBm	-25.12 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.89028 GHz	-45.52 dBm	-32.52 dB

Date: 10.SEP.2018 15:20:28

Highest Channel / 64QAM



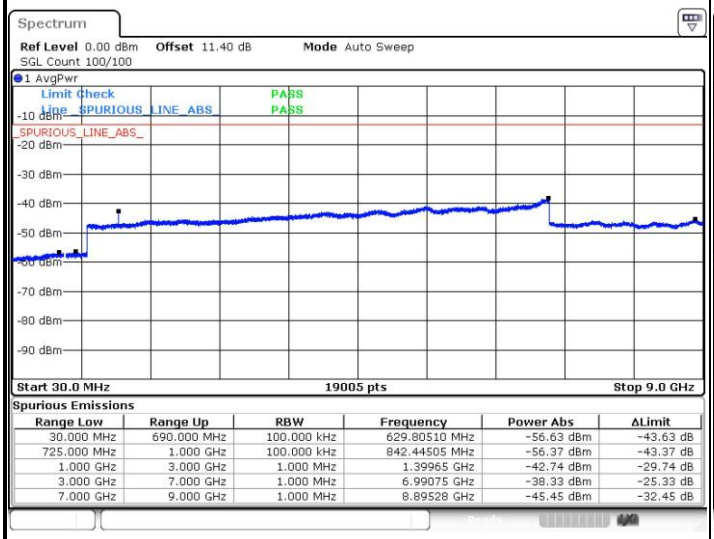
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	615.95202 MHz	-56.47 dBm	-43.47 dB
725.000 MHz	1.000 GHz	100.000 kHz	828.43407 MHz	-56.68 dBm	-43.68 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.42314 GHz	-41.78 dBm	-28.78 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.98875 GHz	-38.31 dBm	-25.31 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.87728 GHz	-45.66 dBm	-32.66 dB

Date: 10.SEP.2018 15:24:30

LTE Band 12 / 10MHz

Lowest Channel / 64QAM

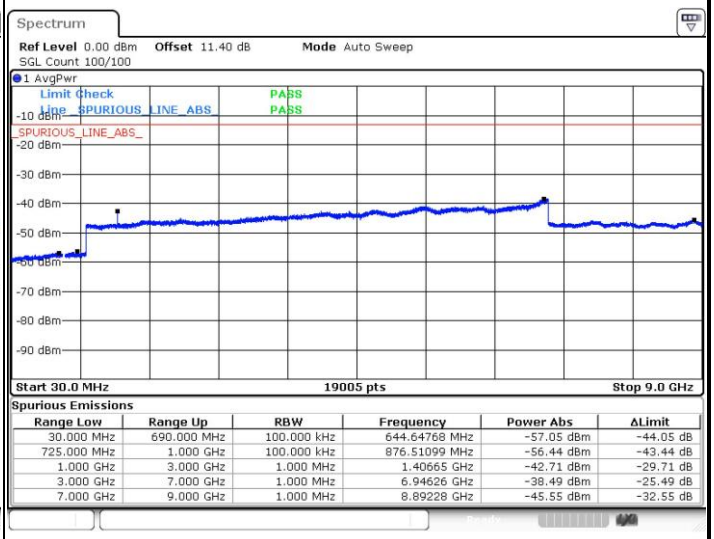


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	629.80510 MHz	-56.63 dBm	-43.63 dB
725.000 MHz	1.000 GHz	100.000 kHz	842.44505 MHz	-56.37 dBm	-43.37 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.39965 GHz	-42.74 dBm	-29.74 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99075 GHz	-38.33 dBm	-25.33 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.89528 GHz	-45.45 dBm	-32.45 dB

Date: 10.SEP.2018 15:28:32

Middle Channel / 64QAM

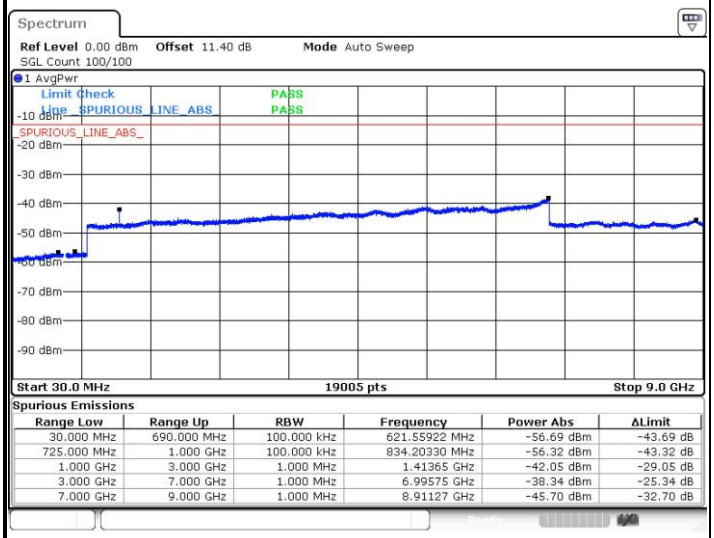


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	644.64768 MHz	-57.05 dBm	-44.05 dB
725.000 MHz	1.000 GHz	100.000 kHz	876.51099 MHz	-56.44 dBm	-43.44 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.40665 GHz	-42.71 dBm	-29.71 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.94626 GHz	-38.49 dBm	-25.49 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.89228 GHz	-45.55 dBm	-32.55 dB

Date: 10.SEP.2018 15:30:13

Highest Channel / 64QAM



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	690.000 MHz	100.000 kHz	621.55922 MHz	-56.69 dBm	-43.69 dB
725.000 MHz	1.000 GHz	100.000 kHz	834.20330 MHz	-56.32 dBm	-43.32 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.41365 GHz	-42.05 dBm	-29.05 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99575 GHz	-38.34 dBm	-25.34 dB
7.000 GHz	9.000 GHz	1.000 MHz	8.91127 GHz	-45.70 dBm	-32.70 dB

Date: 10.SEP.2018 15:34:15

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	0.0098	PASS
40	Normal Voltage	0.0133	
30	Normal Voltage	0.0038	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0031	
0	Normal Voltage	0.0117	
-10	Normal Voltage	0.0037	
-20	Normal Voltage	0.0007	
-30	Normal Voltage	0.0030	
20	Maximum Voltage	0.0016	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0031	

Note:

1. Normal Voltage =3.8 V.；Battery End Point (BEP) =3.5V.；Maximum Voltage =4.4V.
2. The frequency fundamental emissions stay within the authorized frequency block.

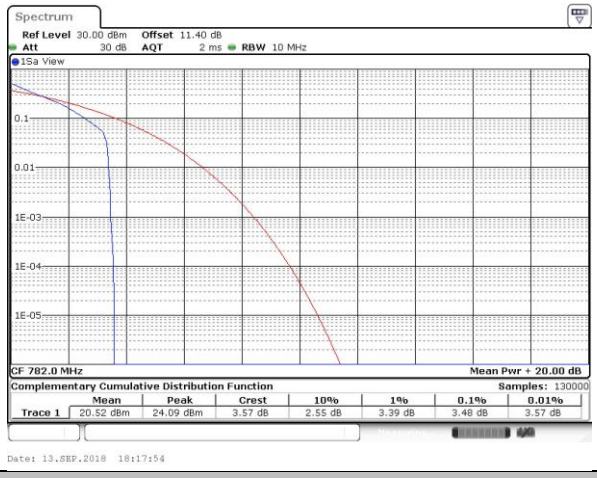
LTE Band 13

Peak-to-Average Ratio

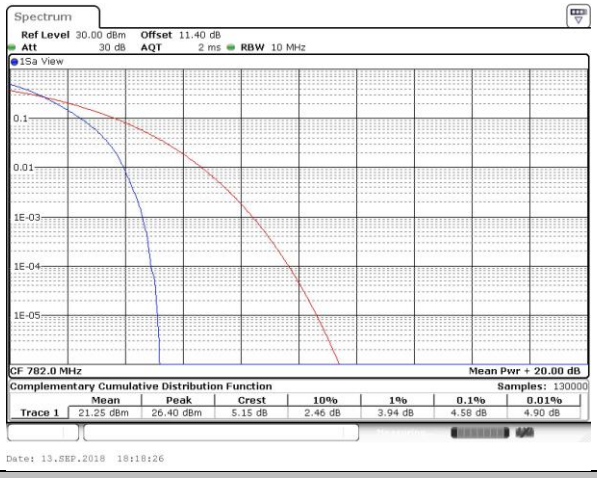
Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	3.48	4.58	5.22	5.94	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	-	-	-	-	PASS
Middle CH	6.17	6.52	-	-	
Highest CH	-	-	-	-	

LTE Band 13 / 10MHz / QPSK

Middle Channel / 1RB

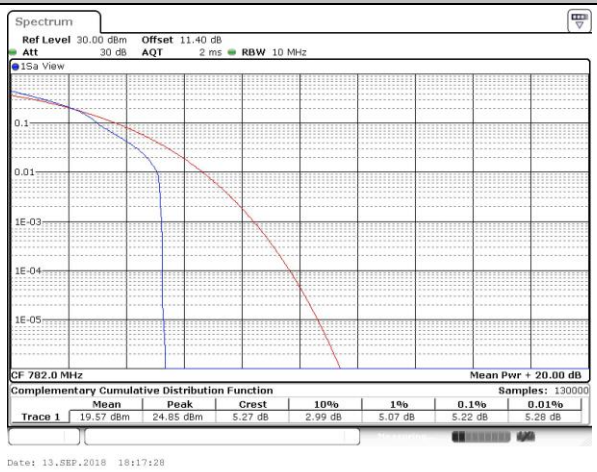


Middle Channel / Full RB

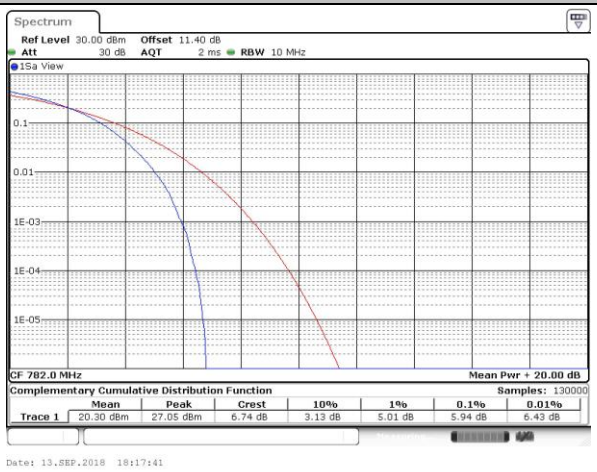


LTE Band 13 / 10MHz / 16QAM

Middle Channel / 1RB

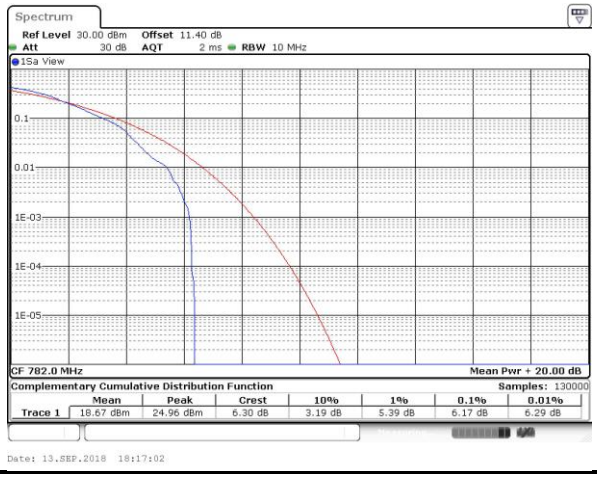


Middle Channel / Full RB

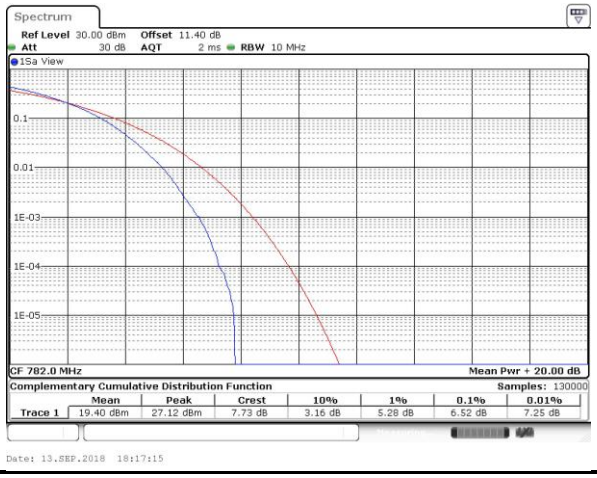


LTE Band 13 / 10MHz / 64QAM

Middle Channel / 1RB



Middle Channel / Full RB

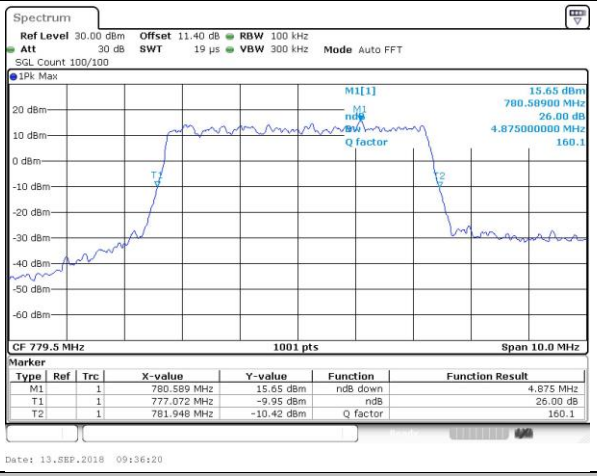


26dB Bandwidth

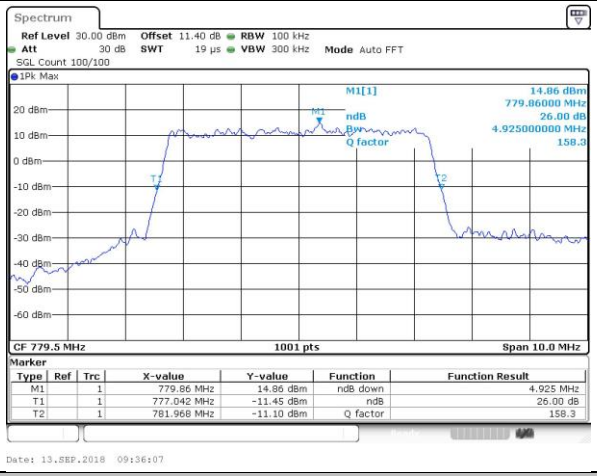
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.88	4.93	-	-	-	-	-	-
Middle CH	-	-	-	-	4.88	4.90	9.91	9.81	-	-	-	-
Highest CH	-	-	-	-	4.94	4.81	-	-	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.94	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.94	-	9.79	-	-	-	-	-
Highest CH	-	-	-	-	4.89	-	-	-	-	-	-	-

LTE Band 13

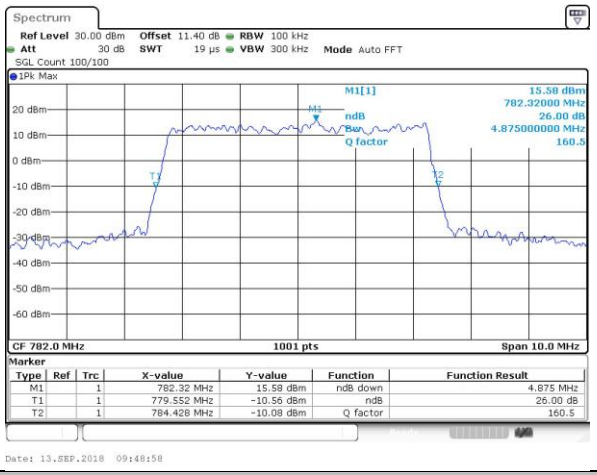
Lowest Channel / 5MHz / QPSK



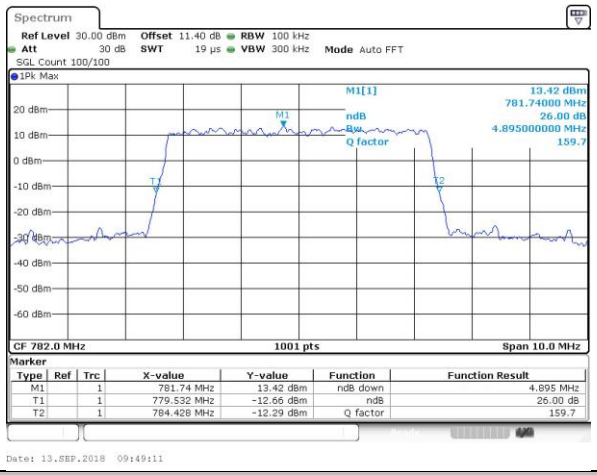
Lowest Channel / 5MHz / 16QAM



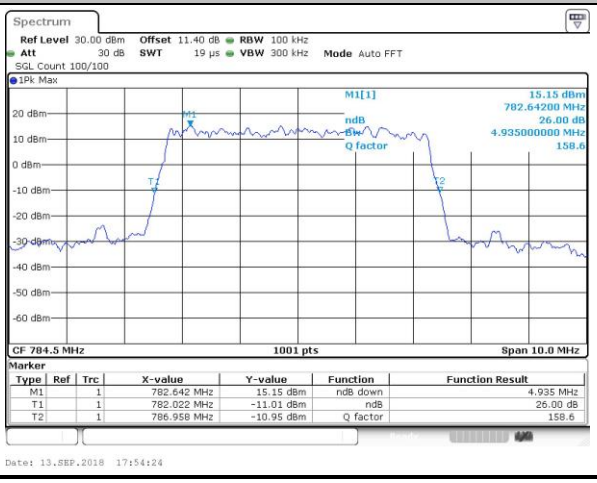
Middle Channel / 5MHz / QPSK



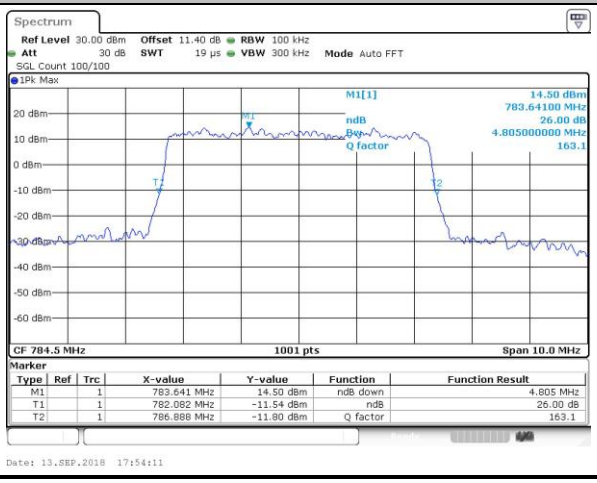
Middle Channel / 5MHz / 16QAM



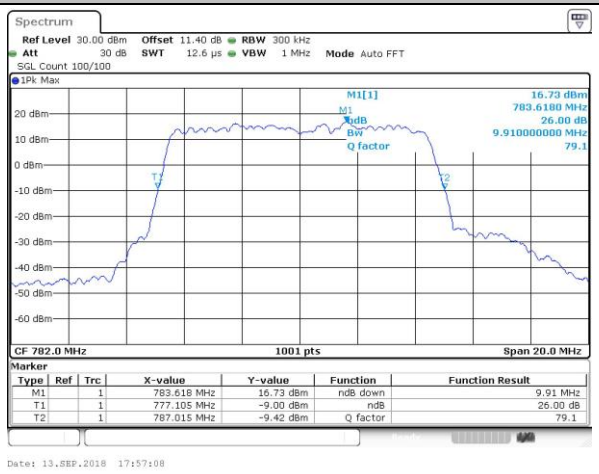
Highest Channel / 5MHz / QPSK

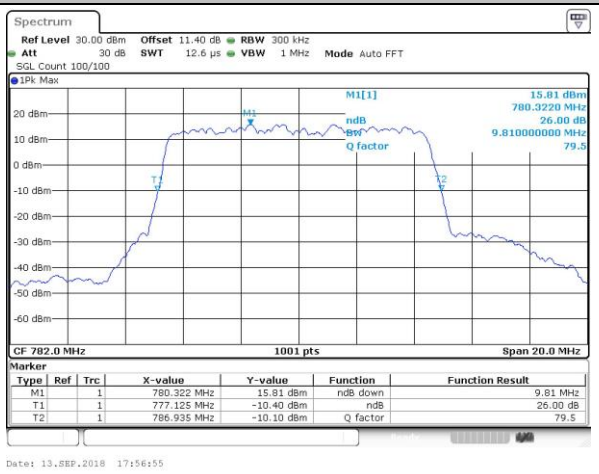


Highest Channel / 5MHz / 16QAM



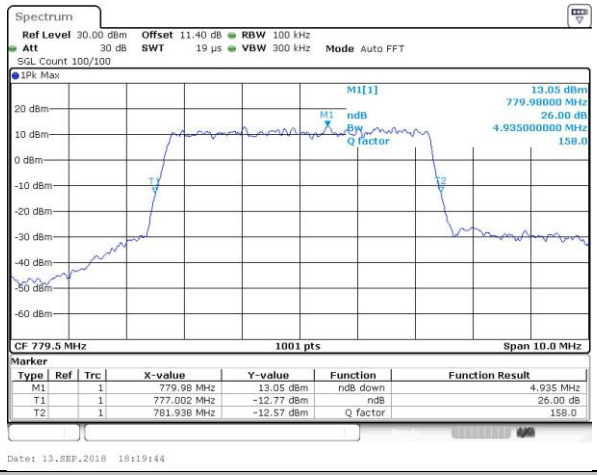
LTE Band 13	
Middle Channel / 10MHz / QPSK	**Middle Channel / 10MHz / 16QAM**



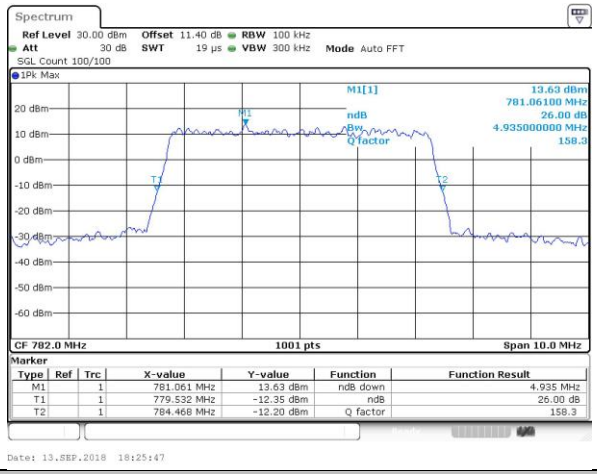


LTE Band 13

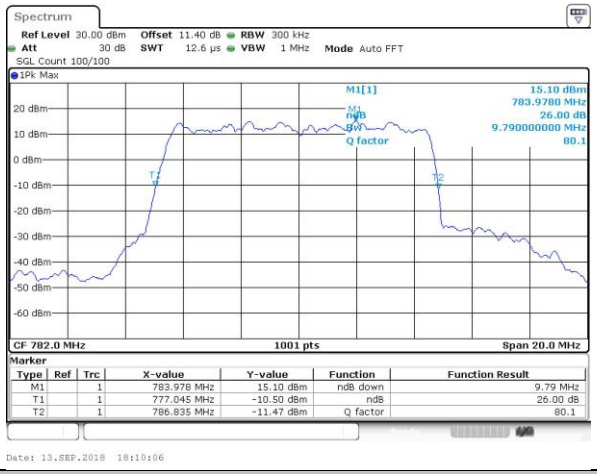
Lowest Channel / 5MHz / 64QAM



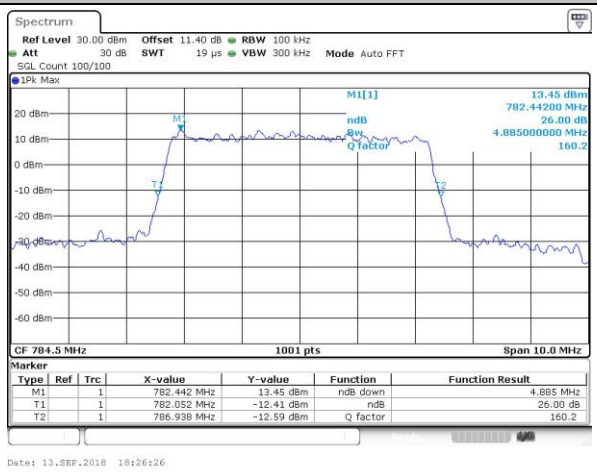
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM

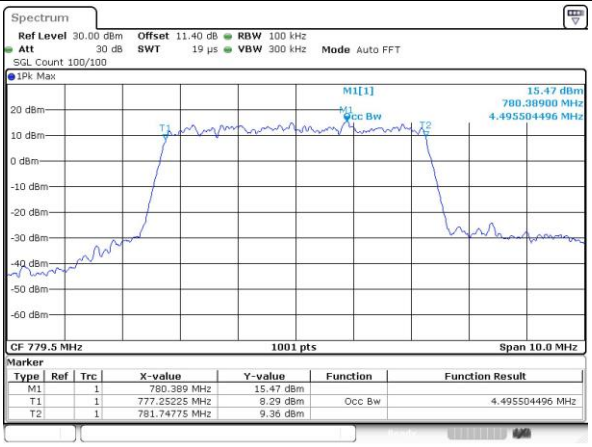


Occupied Bandwidth

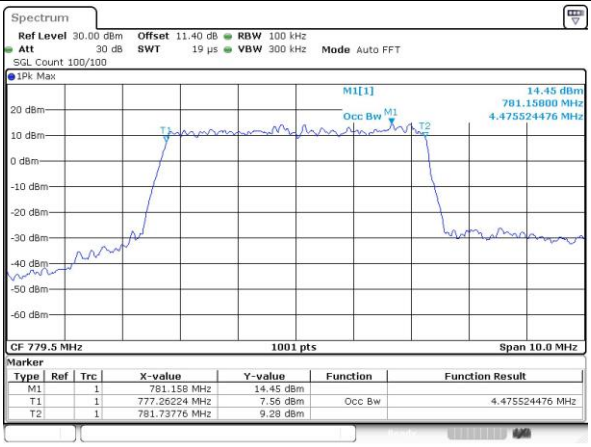
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.5	4.48	-	-	-	-	-	-
Middle CH	-	-	-	-	4.49	4.48	8.93	8.99	-	-	-	-
Highest CH	-	-	-	-	4.51	4.5	-	-	-	-	-	-
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.49	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.50	-	9.01	-	-	-	-	-
Highest CH	-	-	-	-	4.48	-	-	-	-	-	-	-

LTE Band 13

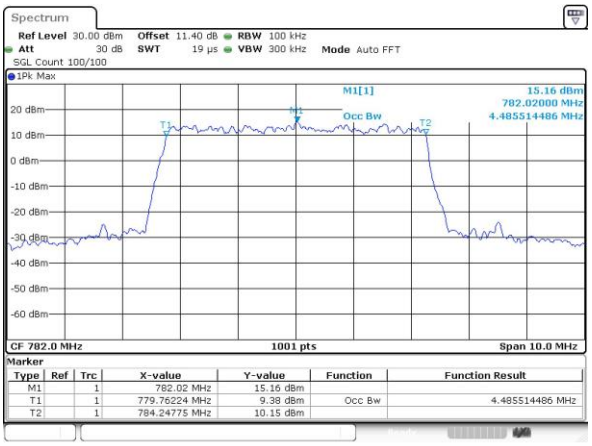
Lowest Channel / 5MHz / QPSK



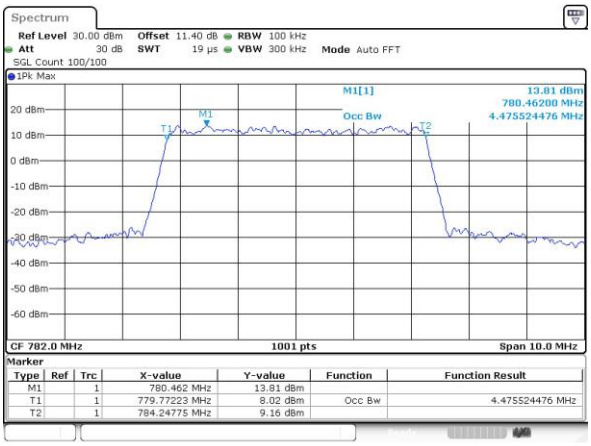
Lowest Channel / 5MHz / 16QAM



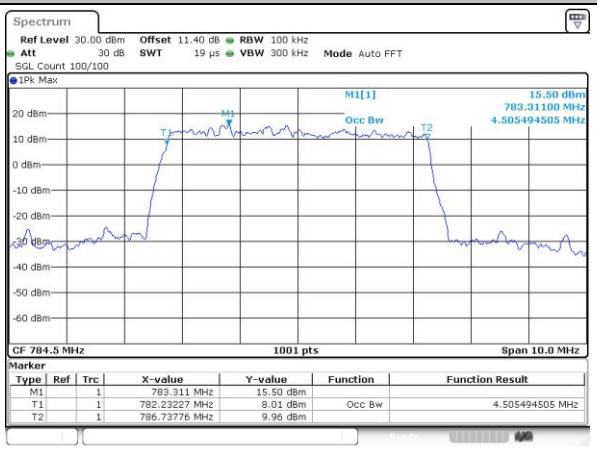
Middle Channel / 5MHz / QPSK



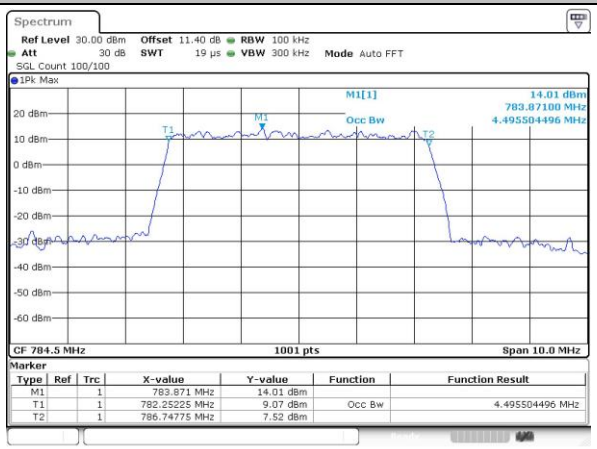
Middle Channel / 5MHz / 16QAM

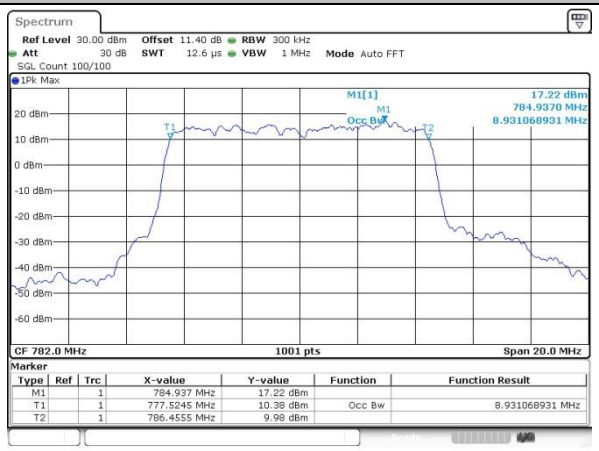
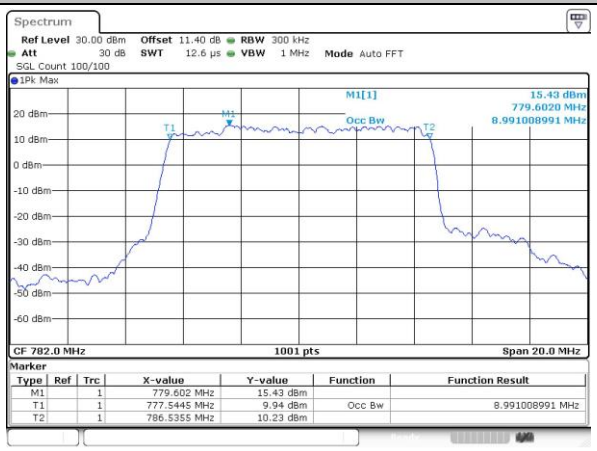


Highest Channel / 5MHz / QPSK



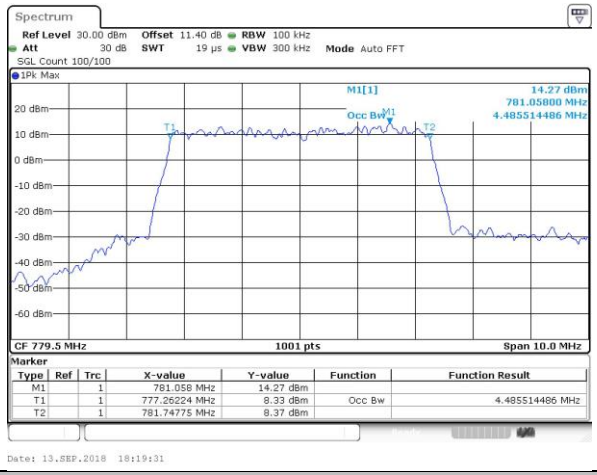
Highest Channel / 5MHz / 16QAM



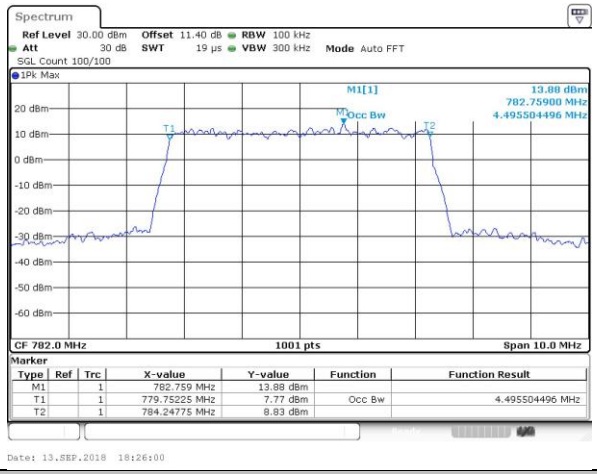
LTE Band 13	
Middle Channel / 10MHz / QPSK	**Middle Channel / 10MHz / 16QAM**
	

LTE Band 13

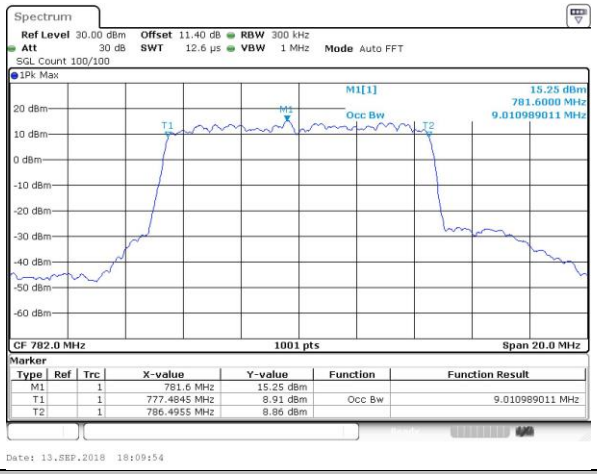
Lowest Channel / 5MHz / 64QAM



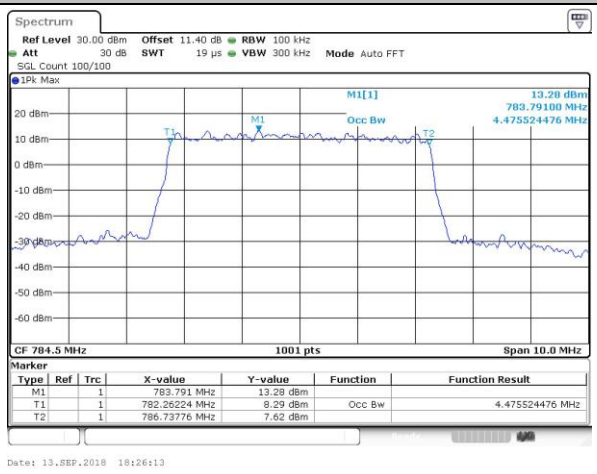
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



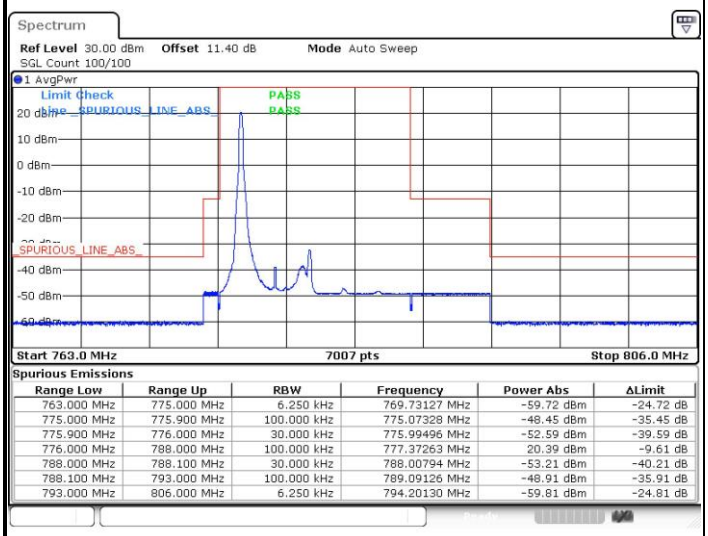
Highest Channel / 5MHz / 64QAM



Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB

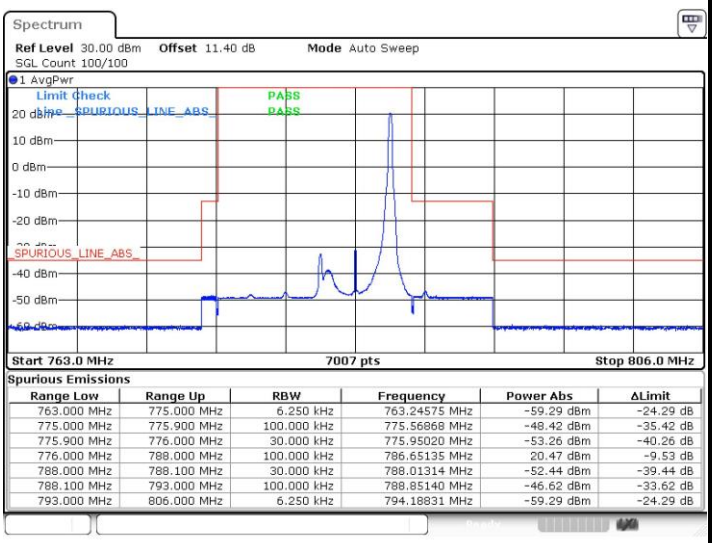


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	769.73127 MHz	-59.72 dBm	-24.72 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.07328 MHz	-48.45 dBm	-35.45 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.99496 MHz	-52.59 dBm	-39.59 dB
776.000 MHz	788.000 MHz	100.000 kHz	777.37263 MHz	20.39 dBm	-9.61 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.00794 MHz	-53.21 dBm	-40.21 dB
788.100 MHz	793.000 MHz	100.000 kHz	789.09126 MHz	-48.91 dBm	-35.91 dB
793.000 MHz	806.000 MHz	6.250 kHz	794.20130 MHz	-59.81 dBm	-24.81 dB

Date: 13.SEP.2018 09:43:07

Highest Band Edge / 1 RB

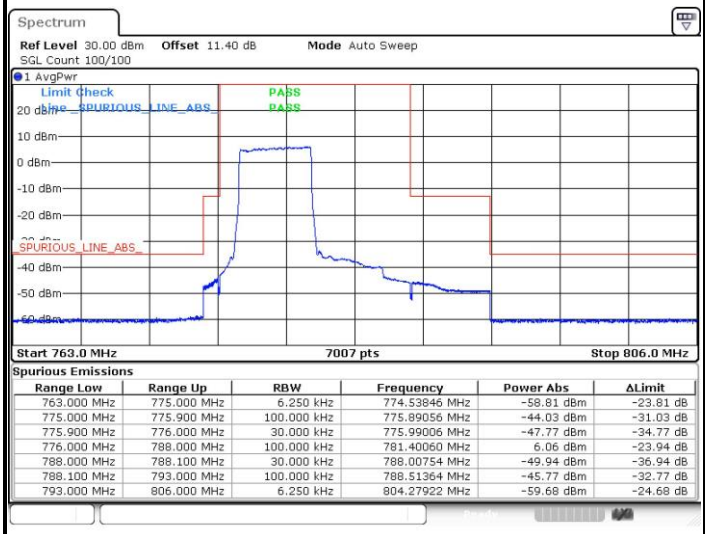


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	763.24575 MHz	-59.29 dBm	-24.29 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.56868 MHz	-48.42 dBm	-35.42 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.95020 MHz	-53.26 dBm	-40.26 dB
776.000 MHz	788.000 MHz	100.000 kHz	786.65135 MHz	20.47 dBm	-9.53 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.01314 MHz	-52.44 dBm	-39.44 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.85140 MHz	-46.62 dBm	-33.62 dB
793.000 MHz	806.000 MHz	6.250 kHz	794.18831 MHz	-59.29 dBm	-24.29 dB

Date: 13.SEP.2018 18:34:18

Lowest Band Edge / Full RB

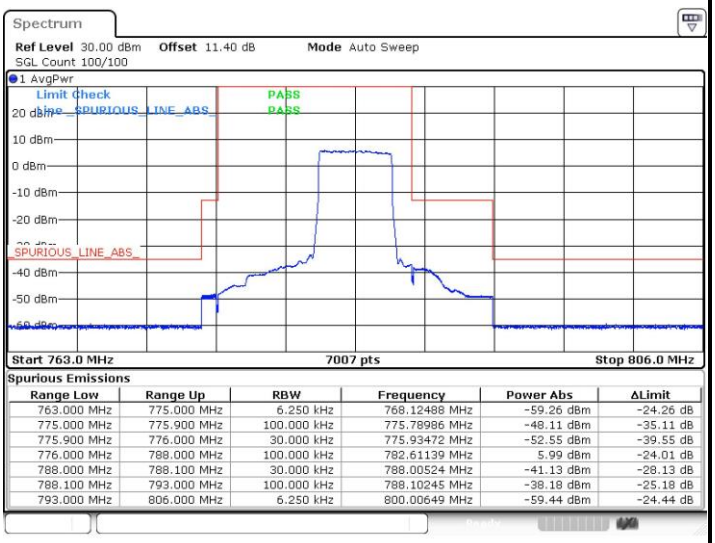


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	774.53846 MHz	-58.81 dBm	-23.81 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.89056 MHz	-44.03 dBm	-31.03 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.99006 MHz	-47.77 dBm	-34.77 dB
776.000 MHz	788.000 MHz	100.000 kHz	781.40060 MHz	6.06 dBm	-23.94 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.00754 MHz	-49.94 dBm	-36.94 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.51364 MHz	-45.77 dBm	-32.77 dB
793.000 MHz	806.000 MHz	6.250 kHz	804.27922 MHz	-59.68 dBm	-24.68 dB

Date: 13.SEP.2018 09:38:02

Highest Band Edge / Full RB



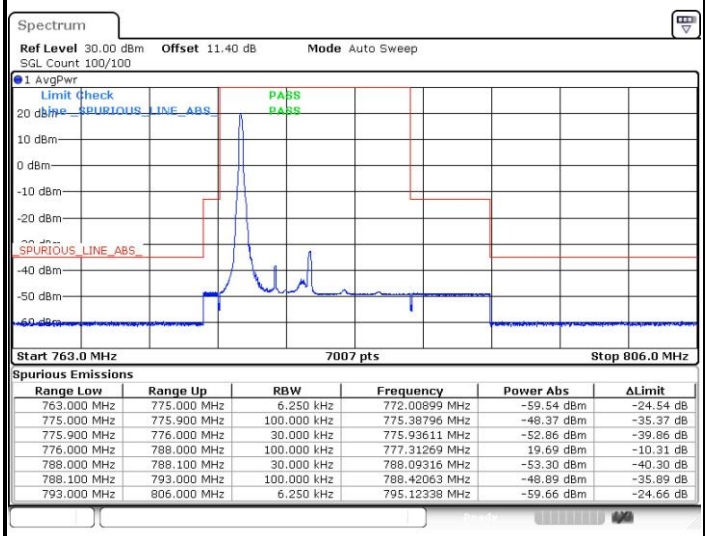
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	768.12488 MHz	-59.26 dBm	-24.26 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.78986 MHz	-48.11 dBm	-35.11 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.93472 MHz	-52.55 dBm	-39.55 dB
776.000 MHz	788.000 MHz	100.000 kHz	782.61139 MHz	5.99 dBm	-24.01 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.00524 MHz	-41.13 dBm	-28.13 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.10245 MHz	-38.18 dBm	-25.18 dB
793.000 MHz	806.000 MHz	6.250 kHz	800.00649 MHz	-59.44 dBm	-24.44 dB

Date: 13.SEP.2018 18:39:09

LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB

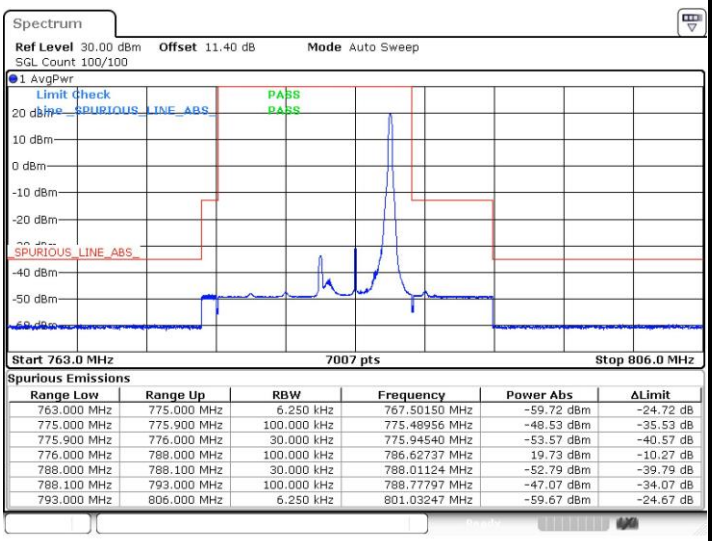


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	772.00899 MHz	-59.54 dBm	-24.54 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.38796 MHz	-48.37 dBm	-35.37 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.93611 MHz	-52.86 dBm	-39.86 dB
776.000 MHz	788.000 MHz	100.000 kHz	777.31269 MHz	19.69 dBm	-10.31 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.09316 MHz	-53.30 dBm	-40.30 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.42063 MHz	-48.89 dBm	-35.89 dB
793.000 MHz	806.000 MHz	6.250 kHz	795.12338 MHz	-59.66 dBm	-24.66 dB

Date: 13.SEP.2018 09:41:25

Highest Band Edge / 1 RB

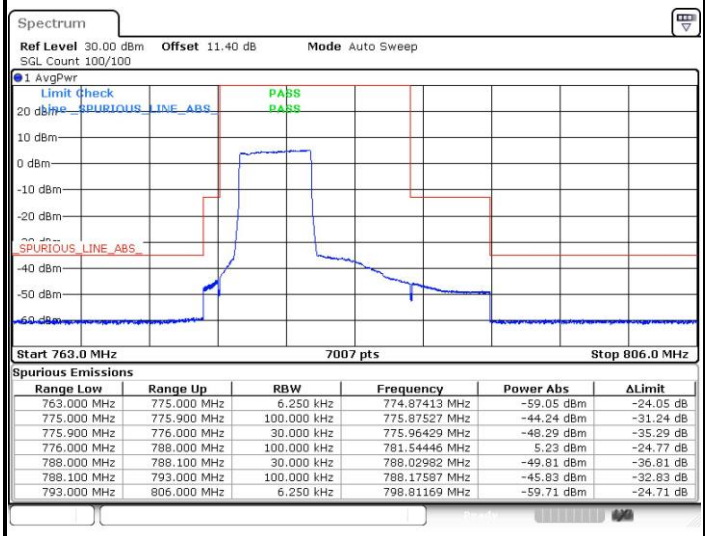


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	767.50150 MHz	-59.72 dBm	-24.72 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.48956 MHz	-48.53 dBm	-35.53 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.94540 MHz	-53.57 dBm	-40.57 dB
776.000 MHz	788.000 MHz	100.000 kHz	786.62737 MHz	19.73 dBm	-10.27 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.01124 MHz	-52.79 dBm	-39.79 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.77797 MHz	-47.07 dBm	-34.07 dB
793.000 MHz	806.000 MHz	6.250 kHz	801.03247 MHz	-59.67 dBm	-24.67 dB

Date: 13.SEP.2018 18:36:03

Lowest Band Edge / Full RB

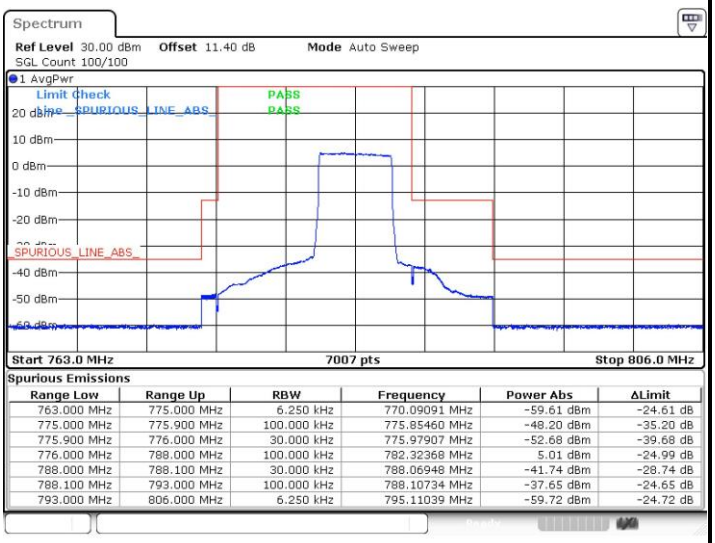


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	774.87413 MHz	-59.05 dBm	-24.05 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.87527 MHz	-44.24 dBm	-31.24 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.96429 MHz	-48.29 dBm	-35.29 dB
776.000 MHz	788.000 MHz	100.000 kHz	781.54446 MHz	5.23 dBm	-24.77 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.02982 MHz	-49.81 dBm	-36.81 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.17587 MHz	-45.83 dBm	-32.83 dB
793.000 MHz	806.000 MHz	6.250 kHz	798.81169 MHz	-59.71 dBm	-24.71 dB

Date: 13.SEP.2018 09:39:44

Highest Band Edge / Full RB



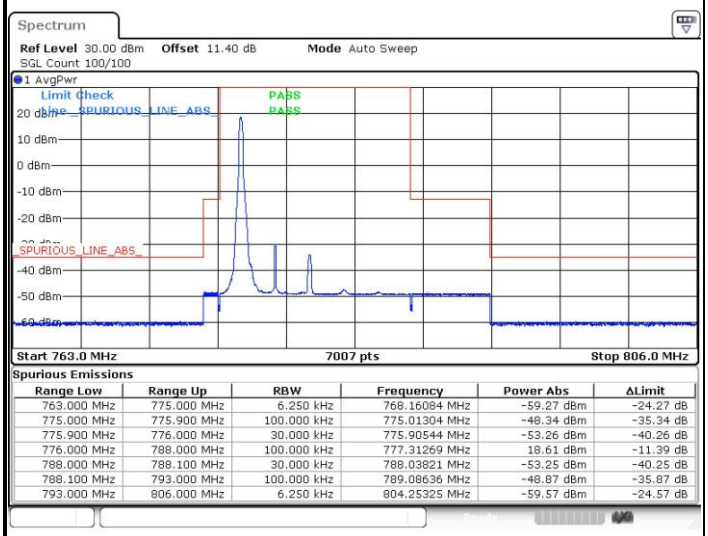
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	770.09091 MHz	-59.61 dBm	-24.61 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.85460 MHz	-48.20 dBm	-35.20 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.97907 MHz	-52.68 dBm	-39.68 dB
776.000 MHz	788.000 MHz	100.000 kHz	782.32368 MHz	5.01 dBm	-24.99 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.06948 MHz	-41.74 dBm	-28.74 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.10734 MHz	-37.65 dBm	-24.65 dB
793.000 MHz	806.000 MHz	6.250 kHz	795.11039 MHz	-59.72 dBm	-24.72 dB

Date: 13.SEP.2018 18:37:30

LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB

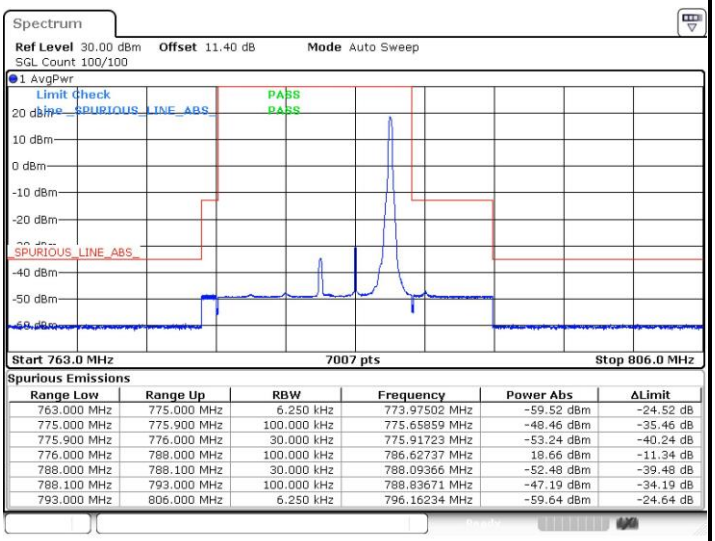


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	768.16084 MHz	-59.27 dBm	-24.27 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.01304 MHz	-48.34 dBm	-35.34 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.90544 MHz	-53.26 dBm	-40.26 dB
776.000 MHz	788.000 MHz	100.000 kHz	777.31269 MHz	18.61 dBm	-11.39 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.03821 MHz	-53.25 dBm	-40.25 dB
788.100 MHz	793.000 MHz	100.000 kHz	789.08636 MHz	-48.87 dBm	-35.87 dB
793.000 MHz	806.000 MHz	6.250 kHz	804.25325 MHz	-59.57 dBm	-24.57 dB

Date: 13.SEP.2018 18:23:07

Highest Band Edge / 1 RB

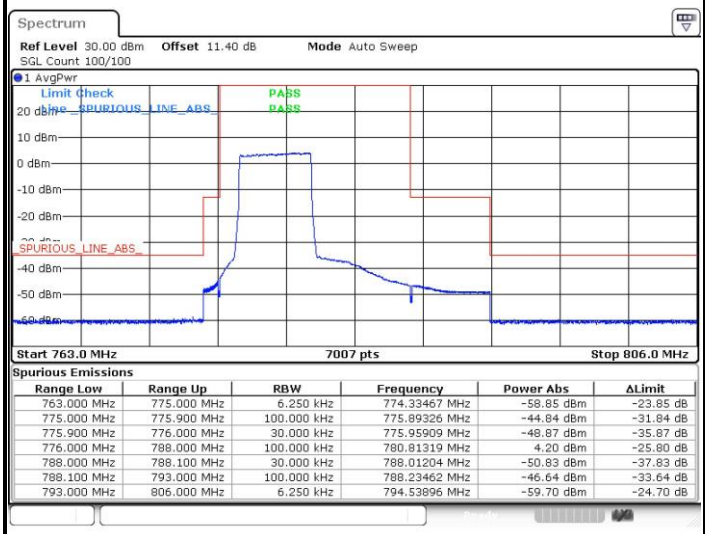


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	773.97502 MHz	-59.52 dBm	-24.52 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.65859 MHz	-48.46 dBm	-35.46 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.91723 MHz	-53.24 dBm	-40.24 dB
776.000 MHz	788.000 MHz	100.000 kHz	786.62737 MHz	18.66 dBm	-11.34 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.09366 MHz	-52.48 dBm	-39.48 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.83671 MHz	-47.19 dBm	-34.19 dB
793.000 MHz	806.000 MHz	6.250 kHz	796.16234 MHz	-59.64 dBm	-24.64 dB

Date: 13.SEP.2018 18:29:48

Lowest Band Edge / Full RB

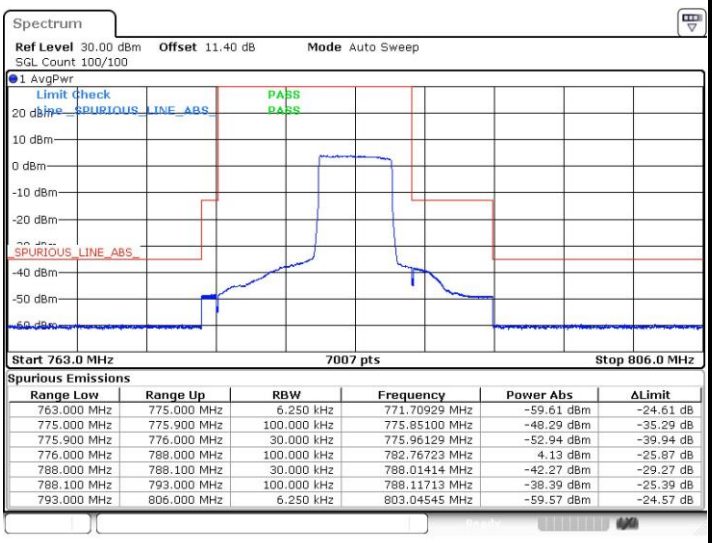


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	774.33467 MHz	-58.85 dBm	-23.85 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.89326 MHz	-44.84 dBm	-31.84 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.95909 MHz	-48.87 dBm	-35.87 dB
776.000 MHz	788.000 MHz	100.000 kHz	780.81319 MHz	4.20 dBm	-25.80 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.01204 MHz	-50.83 dBm	-37.83 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.23462 MHz	-46.64 dBm	-33.64 dB
793.000 MHz	806.000 MHz	6.250 kHz	794.53896 MHz	-59.70 dBm	-24.70 dB

Date: 13.SEP.2018 18:21:25

Highest Band Edge / Full RB



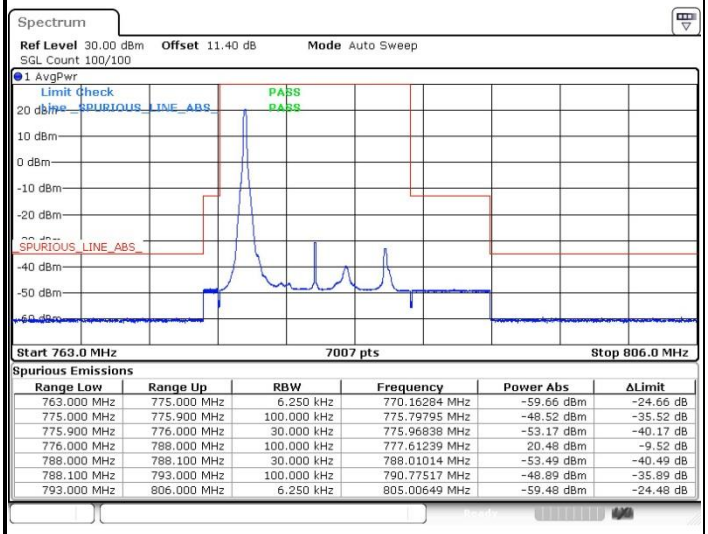
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	771.70929 MHz	-59.61 dBm	-24.61 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.85100 MHz	-48.29 dBm	-35.29 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.96129 MHz	-52.94 dBm	-39.94 dB
776.000 MHz	788.000 MHz	100.000 kHz	782.76723 MHz	4.13 dBm	-25.87 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.01414 MHz	-42.27 dBm	-29.27 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.11713 MHz	-38.39 dBm	-25.39 dB
793.000 MHz	806.000 MHz	6.250 kHz	803.04545 MHz	-59.57 dBm	-24.57 dB

Date: 13.SEP.2018 18:28:07

LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB

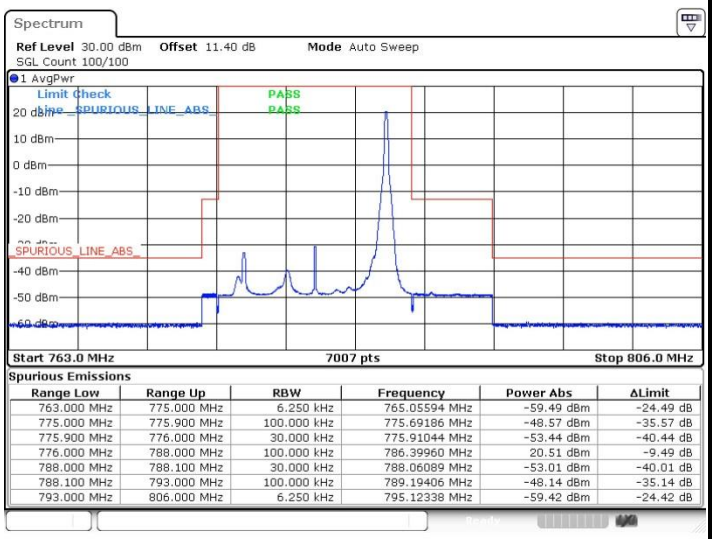


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	770.16284 MHz	-59.66 dBm	-24.66 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.79795 MHz	-48.52 dBm	-35.52 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.96838 MHz	-53.17 dBm	-40.17 dB
776.000 MHz	788.000 MHz	100.000 kHz	777.61239 MHz	20.48 dBm	-9.52 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.01014 MHz	-53.49 dBm	-40.49 dB
788.100 MHz	793.000 MHz	100.000 kHz	790.77517 MHz	-48.89 dBm	-35.89 dB
793.000 MHz	806.000 MHz	6.250 kHz	805.00649 MHz	-59.48 dBm	-24.48 dB

Date: 13.SEP.2018 18:03:51

Highest Band Edge / 1 RB

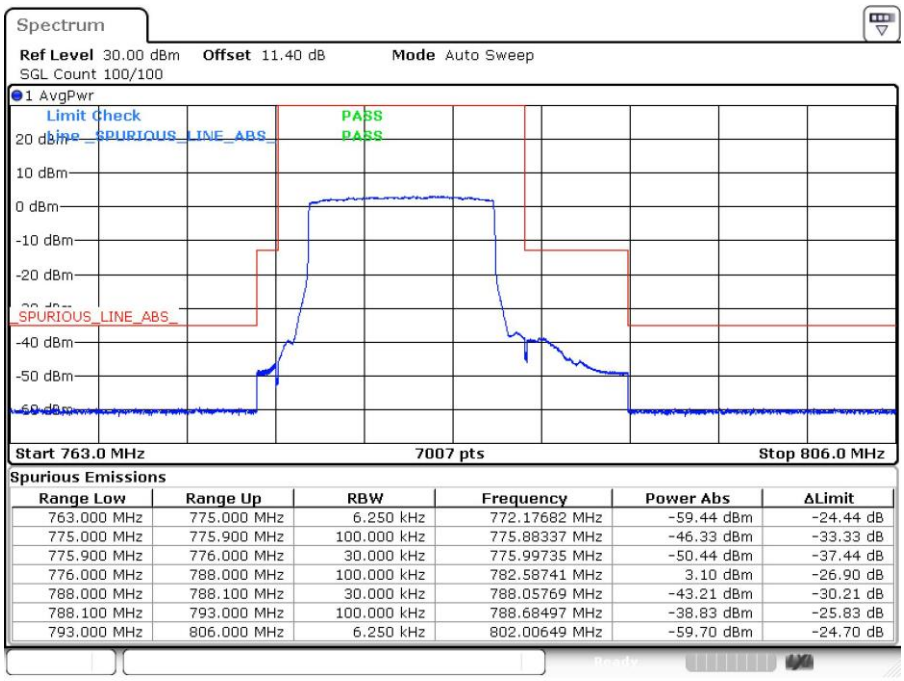


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	765.05594 MHz	-59.49 dBm	-24.49 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.69186 MHz	-48.57 dBm	-35.57 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.91044 MHz	-53.44 dBm	-40.44 dB
776.000 MHz	788.000 MHz	100.000 kHz	786.39960 MHz	20.51 dBm	-9.49 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.06089 MHz	-53.01 dBm	-40.01 dB
788.100 MHz	793.000 MHz	100.000 kHz	789.19406 MHz	-48.14 dBm	-35.14 dB
793.000 MHz	806.000 MHz	6.250 kHz	795.12338 MHz	-59.42 dBm	-24.42 dB

Date: 13.SEP.2018 18:05:32

Band Edge / Full RB



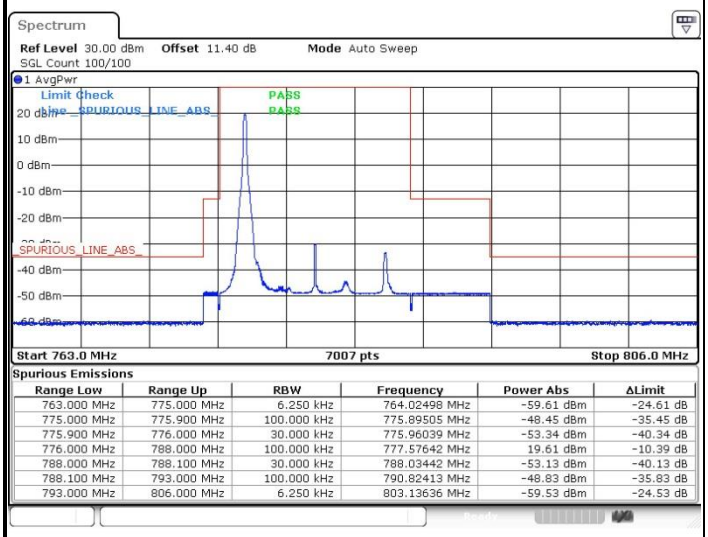
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	772.17682 MHz	-59.44 dBm	-24.44 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.88337 MHz	-46.33 dBm	-33.33 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.99735 MHz	-50.44 dBm	-37.44 dB
776.000 MHz	788.000 MHz	100.000 kHz	782.58741 MHz	3.10 dBm	-26.90 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.05769 MHz	-43.21 dBm	-30.21 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.68497 MHz	-38.83 dBm	-25.83 dB
793.000 MHz	806.000 MHz	6.250 kHz	802.00649 MHz	-59.70 dBm	-24.70 dB

Date: 13.SEP.2018 17:58:49

LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB

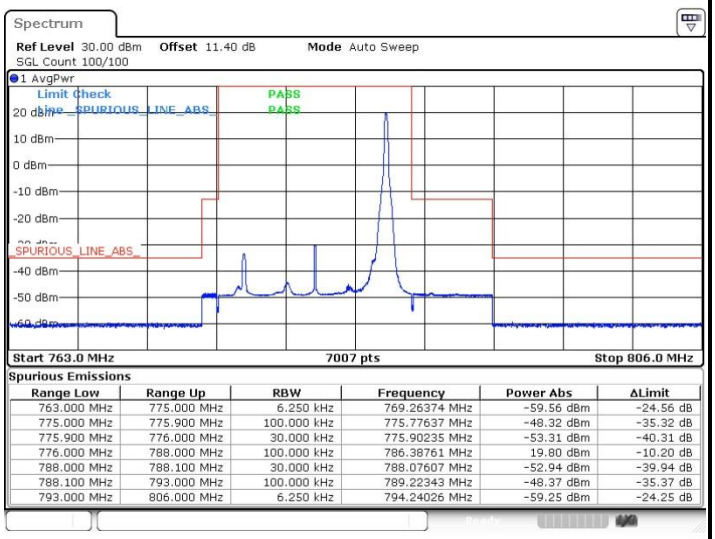


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	764.02498 MHz	-59.61 dBm	-24.61 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.89505 MHz	-48.45 dBm	-35.45 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.96039 MHz	-53.34 dBm	-40.34 dB
776.000 MHz	788.000 MHz	100.000 kHz	777.57642 MHz	19.61 dBm	-10.39 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.03442 MHz	-53.13 dBm	-40.13 dB
788.100 MHz	793.000 MHz	100.000 kHz	790.82413 MHz	-48.83 dBm	-35.83 dB
793.000 MHz	806.000 MHz	6.250 kHz	803.13636 MHz	-59.53 dBm	-24.53 dB

Date: 13.SEP.2018 18:02:10

Highest Band Edge / 1 RB

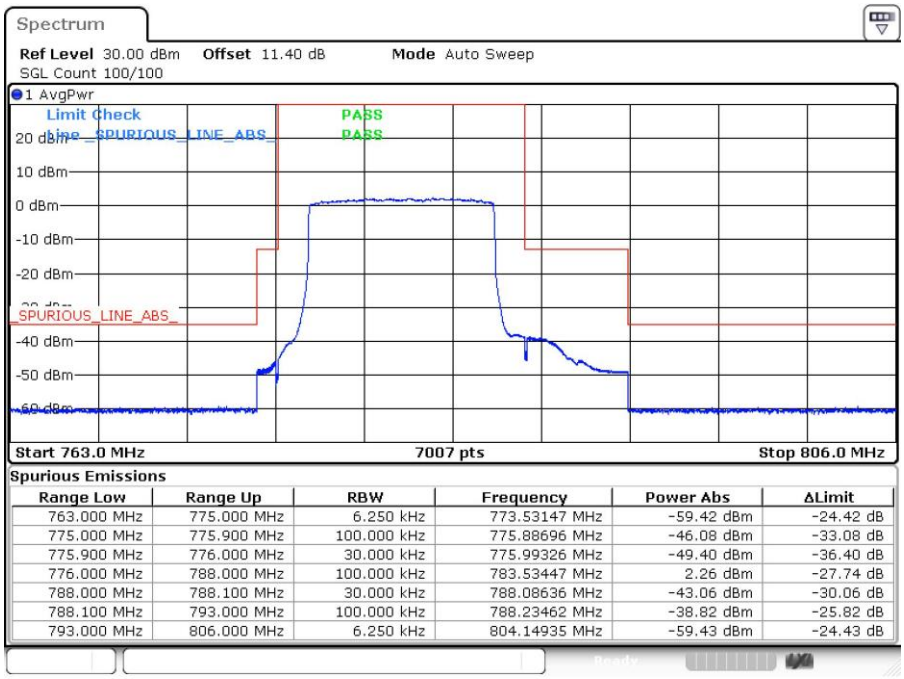


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	769.26374 MHz	-59.56 dBm	-24.56 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.77637 MHz	-48.32 dBm	-35.32 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.90235 MHz	-53.31 dBm	-40.31 dB
776.000 MHz	788.000 MHz	100.000 kHz	786.38761 MHz	19.80 dBm	-10.20 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.07607 MHz	-52.94 dBm	-39.94 dB
788.100 MHz	793.000 MHz	100.000 kHz	789.22343 MHz	-48.37 dBm	-35.37 dB
793.000 MHz	806.000 MHz	6.250 kHz	794.24026 MHz	-59.25 dBm	-24.25 dB

Date: 13.SEP.2018 18:07:12

Band Edge / Full RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	773.53147 MHz	-59.42 dBm	-24.42 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.88696 MHz	-46.08 dBm	-33.08 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.99326 MHz	-49.40 dBm	-36.40 dB
776.000 MHz	788.000 MHz	100.000 kHz	783.53447 MHz	2.26 dBm	-27.74 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.08636 MHz	-43.06 dBm	-30.06 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.23462 MHz	-38.82 dBm	-25.82 dB
793.000 MHz	806.000 MHz	6.250 kHz	804.14935 MHz	-59.43 dBm	-24.43 dB

Date: 13.SEP.2018 18:00:29