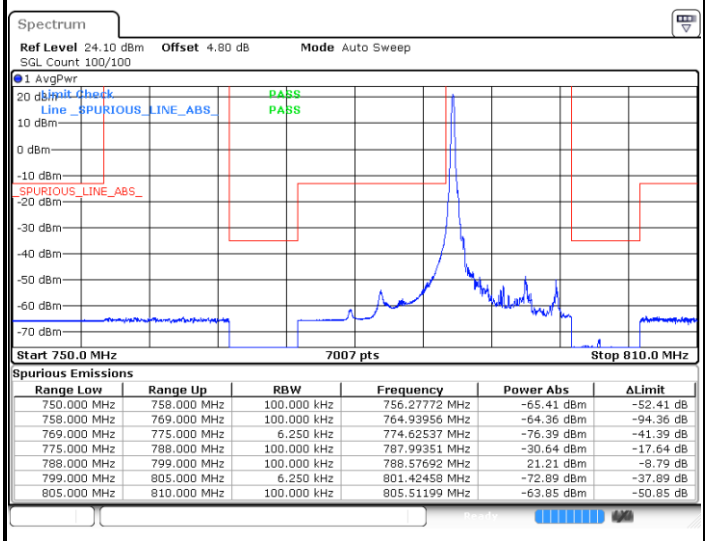
LTE Band 14 / 10MHz /16QAM

Lowest Band Edge / 1RB0

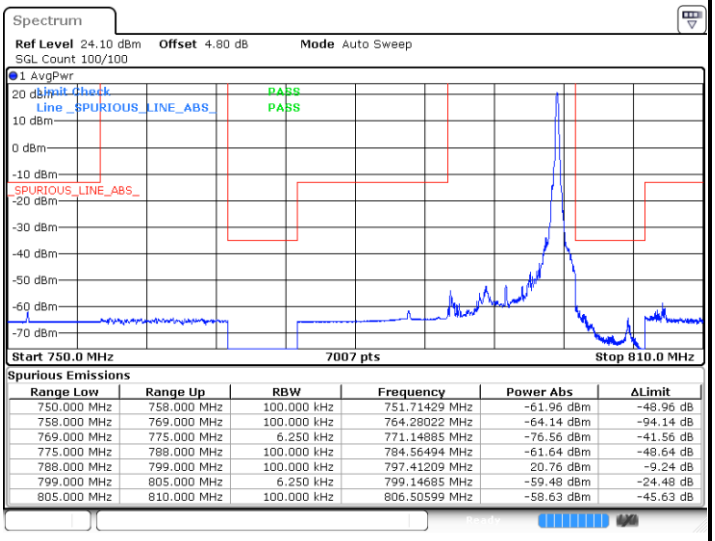


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
750.000 MHz	758.000 MHz	100.000 kHz	756.27772 MHz	-65.41 dBm	-52.41 dB
758.000 MHz	769.000 MHz	100.000 kHz	764.93956 MHz	-64.36 dBm	-94.36 dB
769.000 MHz	775.000 MHz	6.250 kHz	774.62537 MHz	-76.39 dBm	-41.39 dB
775.000 MHz	788.000 MHz	100.000 kHz	787.99351 MHz	-30.64 dBm	-17.64 dB
788.000 MHz	799.000 MHz	100.000 kHz	788.57692 MHz	21.21 dBm	-8.79 dB
799.000 MHz	805.000 MHz	6.250 kHz	801.42458 MHz	-72.89 dBm	-37.89 dB
805.000 MHz	810.000 MHz	100.000 kHz	805.51199 MHz	-63.85 dBm	-50.85 dB

Date: 7.SEP.2020 21:19:07

Highest Band Edge / 1RB Max

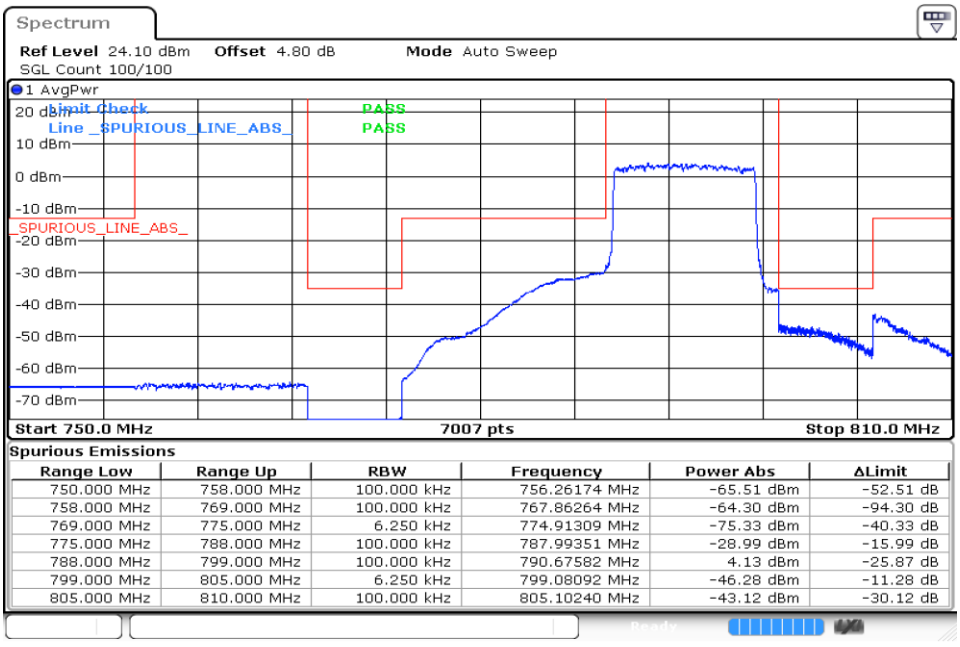


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
750.000 MHz	758.000 MHz	100.000 kHz	751.71429 MHz	-61.96 dBm	-48.96 dB
758.000 MHz	769.000 MHz	100.000 kHz	764.28022 MHz	-64.14 dBm	-94.14 dB
769.000 MHz	775.000 MHz	6.250 kHz	771.14885 MHz	-76.56 dBm	-41.56 dB
775.000 MHz	788.000 MHz	100.000 kHz	784.56494 MHz	-61.64 dBm	-48.64 dB
788.000 MHz	799.000 MHz	100.000 kHz	797.41209 MHz	20.76 dBm	-9.24 dB
799.000 MHz	805.000 MHz	6.250 kHz	799.14685 MHz	-59.48 dBm	-24.48 dB
805.000 MHz	810.000 MHz	100.000 kHz	806.50599 MHz	-58.63 dBm	-45.63 dB

Date: 7.SEP.2020 21:23:22

Full RB



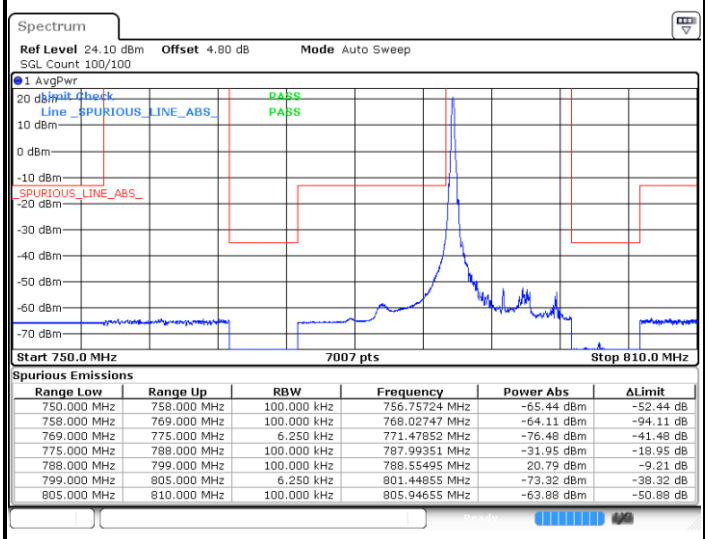
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
750.000 MHz	758.000 MHz	100.000 kHz	756.26174 MHz	-65.51 dBm	-52.51 dB
758.000 MHz	769.000 MHz	100.000 kHz	767.86264 MHz	-64.30 dBm	-94.30 dB
769.000 MHz	775.000 MHz	6.250 kHz	774.91309 MHz	-75.33 dBm	-40.33 dB
775.000 MHz	788.000 MHz	100.000 kHz	787.99351 MHz	-28.99 dBm	-15.99 dB
788.000 MHz	799.000 MHz	100.000 kHz	790.67582 MHz	4.13 dBm	-25.87 dB
799.000 MHz	805.000 MHz	6.250 kHz	799.08092 MHz	-46.28 dBm	-11.28 dB
805.000 MHz	810.000 MHz	100.000 kHz	805.10240 MHz	-43.12 dBm	-30.12 dB

Date: 7.SEP.2020 21:15:26

LTE Band 14 / 10MHz / 64QAM

Lowest Band Edge / 1RB0

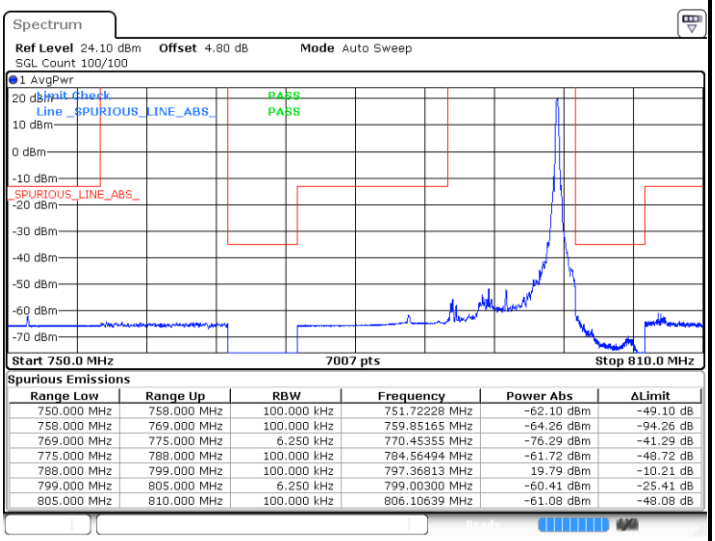


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
750.000 MHz	758.000 MHz	100.000 kHz	756.75724 MHz	-65.44 dBm	-52.44 dB
758.000 MHz	769.000 MHz	100.000 kHz	768.02747 MHz	-64.11 dBm	-94.11 dB
769.000 MHz	775.000 MHz	6.250 kHz	771.47852 MHz	-76.48 dBm	-41.48 dB
775.000 MHz	788.000 MHz	100.000 kHz	787.99351 MHz	-31.95 dBm	-18.95 dB
788.000 MHz	799.000 MHz	100.000 kHz	788.55495 MHz	20.79 dBm	-9.21 dB
799.000 MHz	805.000 MHz	6.250 kHz	801.44855 MHz	-73.32 dBm	-38.32 dB
805.000 MHz	810.000 MHz	100.000 kHz	805.94655 MHz	-63.88 dBm	-50.88 dB

Date: 7.SEP.2020 21:17:59

Highest Band Edge / 1RB Max

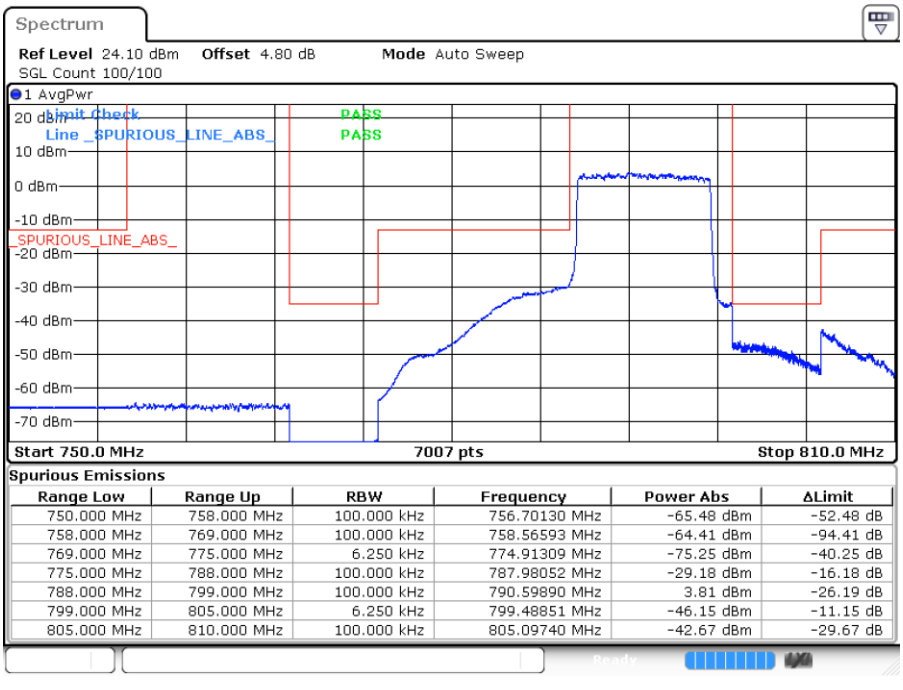


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
750.000 MHz	758.000 MHz	100.000 kHz	751.72228 MHz	-62.10 dBm	-49.10 dB
758.000 MHz	769.000 MHz	100.000 kHz	759.85165 MHz	-64.26 dBm	-94.26 dB
769.000 MHz	775.000 MHz	6.250 kHz	770.45355 MHz	-76.29 dBm	-41.29 dB
775.000 MHz	788.000 MHz	100.000 kHz	784.56494 MHz	-61.72 dBm	-48.72 dB
788.000 MHz	799.000 MHz	100.000 kHz	797.36813 MHz	19.79 dBm	-10.21 dB
799.000 MHz	805.000 MHz	6.250 kHz	799.00300 MHz	-60.41 dBm	-25.41 dB
805.000 MHz	810.000 MHz	100.000 kHz	806.10639 MHz	-61.08 dBm	-48.08 dB

Date: 7.SEP.2020 21:41:53

Full RB



Spurious Emissions

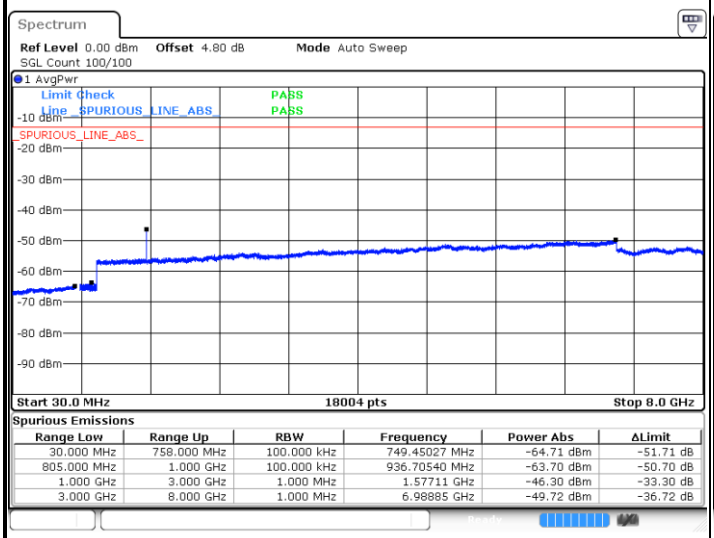
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
750.000 MHz	758.000 MHz	100.000 kHz	756.70130 MHz	-65.48 dBm	-52.48 dB
758.000 MHz	769.000 MHz	100.000 kHz	758.56593 MHz	-64.41 dBm	-94.41 dB
769.000 MHz	775.000 MHz	6.250 kHz	774.91309 MHz	-75.25 dBm	-40.25 dB
775.000 MHz	788.000 MHz	100.000 kHz	787.98052 MHz	-29.18 dBm	-16.18 dB
788.000 MHz	799.000 MHz	100.000 kHz	790.59890 MHz	3.81 dBm	-26.19 dB
799.000 MHz	805.000 MHz	6.250 kHz	799.48851 MHz	-46.15 dBm	-11.15 dB
805.000 MHz	810.000 MHz	100.000 kHz	805.09740 MHz	-42.67 dBm	-29.67 dB

Date: 7.SEP.2020 21:16:37

Conducted Spurious Emission

LTE Band 14 / 5MHz

Lowest Channel / QPSK

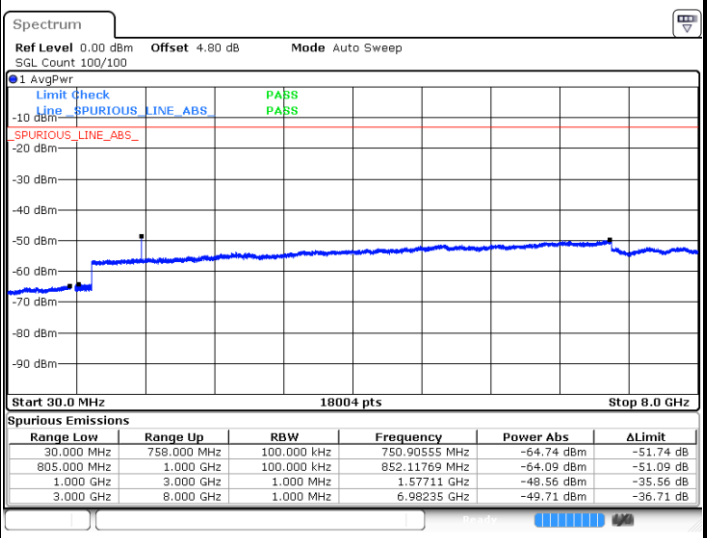


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	758.000 MHz	100.000 kHz	749.45027 MHz	-64.71 dBm	-51.71 dB
805.000 MHz	1.000 GHz	100.000 kHz	936.70540 MHz	-63.70 dBm	-50.70 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.57711 GHz	-46.30 dBm	-33.30 dB
3.000 GHz	8.000 GHz	1.000 MHz	6.98885 GHz	-49.72 dBm	-36.72 dB

Date: 2.SEP.2020 10:21:19

Lowest Channel / 16QAM

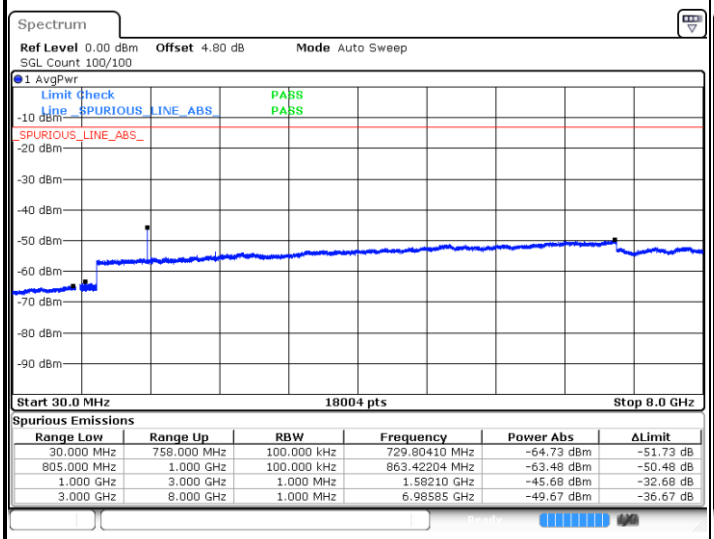


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	758.000 MHz	100.000 kHz	750.90555 MHz	-64.74 dBm	-51.74 dB
805.000 MHz	1.000 GHz	100.000 kHz	852.11769 MHz	-64.09 dBm	-51.09 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.57711 GHz	-48.56 dBm	-35.56 dB
3.000 GHz	8.000 GHz	1.000 MHz	6.98235 GHz	-49.71 dBm	-36.71 dB

Date: 2.SEP.2020 10:18:34

Middle Channel / QPSK

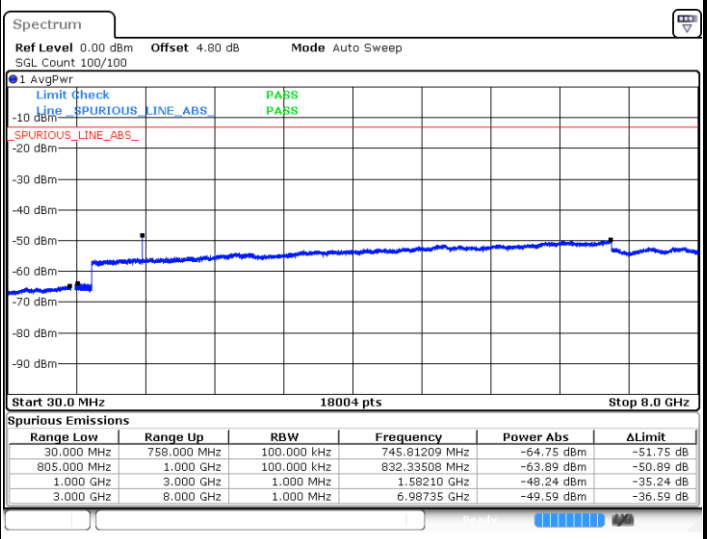


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	758.000 MHz	100.000 kHz	729.80410 MHz	-64.73 dBm	-51.73 dB
805.000 MHz	1.000 GHz	100.000 kHz	863.42204 MHz	-63.48 dBm	-50.48 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.58210 GHz	-45.68 dBm	-32.68 dB
3.000 GHz	8.000 GHz	1.000 MHz	6.98585 GHz	-49.67 dBm	-36.67 dB

Date: 2.SEP.2020 10:03:06

Middle Channel / 16QAM



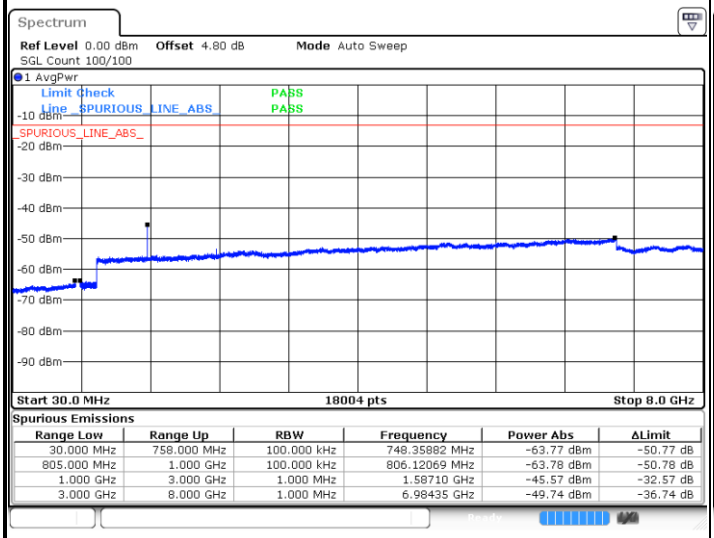
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	758.000 MHz	100.000 kHz	745.81209 MHz	-64.75 dBm	-51.75 dB
805.000 MHz	1.000 GHz	100.000 kHz	832.33508 MHz	-63.89 dBm	-50.89 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.58210 GHz	-48.24 dBm	-35.24 dB
3.000 GHz	8.000 GHz	1.000 MHz	6.98735 GHz	-49.59 dBm	-36.59 dB

Date: 2.SEP.2020 10:01:47

LTE Band 14 / 5MHz

Highest Channel / QPSK

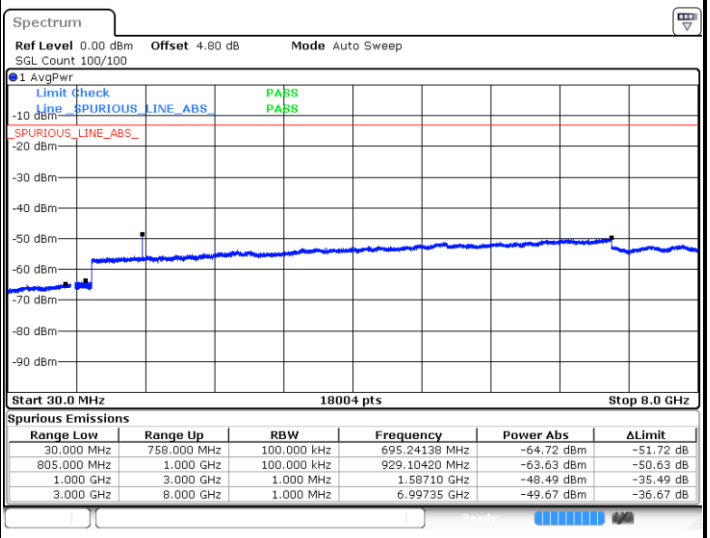


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	758.000 MHz	100.000 kHz	748.35882 MHz	-63.77 dBm	-50.77 dB
805.000 MHz	1.000 GHz	100.000 kHz	806.12069 MHz	-63.78 dBm	-50.78 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.58710 GHz	-45.57 dBm	-32.57 dB
3.000 GHz	8.000 GHz	1.000 MHz	6.98435 GHz	-49.74 dBm	-36.74 dB

Date: 2.SEP.2020 10:40:09

Highest Channel / 16QAM



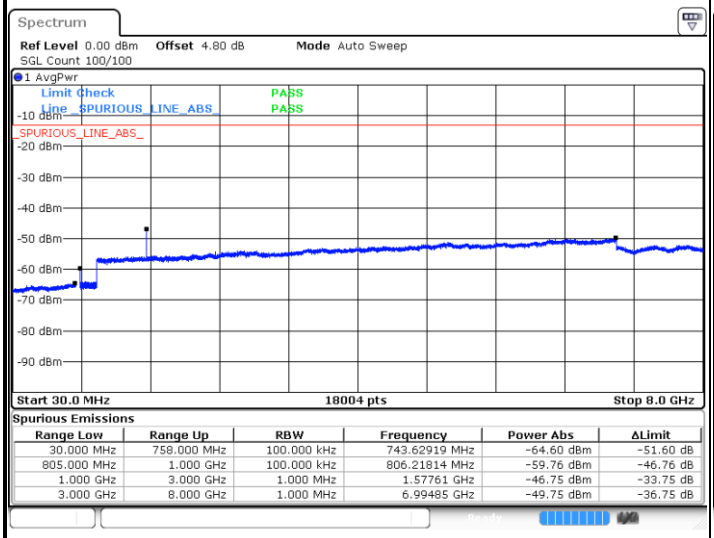
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	758.000 MHz	100.000 kHz	695.24138 MHz	-64.72 dBm	-51.72 dB
805.000 MHz	1.000 GHz	100.000 kHz	929.10420 MHz	-63.63 dBm	-50.63 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.58710 GHz	-48.49 dBm	-35.49 dB
3.000 GHz	8.000 GHz	1.000 MHz	6.99735 GHz	-49.67 dBm	-36.67 dB

Date: 2.SEP.2020 10:39:09

LTE Band 14 / 10MHz

Middle Channel / QPSK

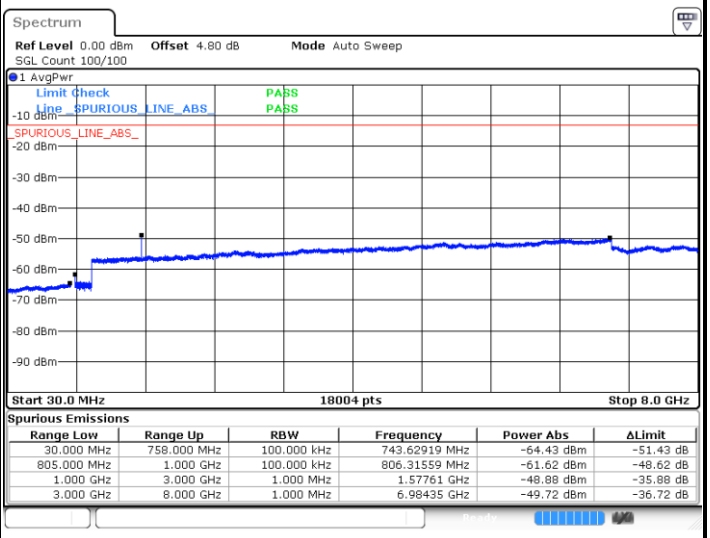


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	758.000 MHz	100.000 kHz	743.62919 MHz	-64.60 dBm	-51.60 dB
805.000 MHz	1.000 GHz	100.000 kHz	806.21814 MHz	-59.76 dBm	-46.76 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.57761 GHz	-46.75 dBm	-33.75 dB
3.000 GHz	8.000 GHz	1.000 MHz	6.99485 GHz	-49.75 dBm	-36.75 dB

Date: 2.SEP.2020 11:02:45

Middle Channel / 16QAM



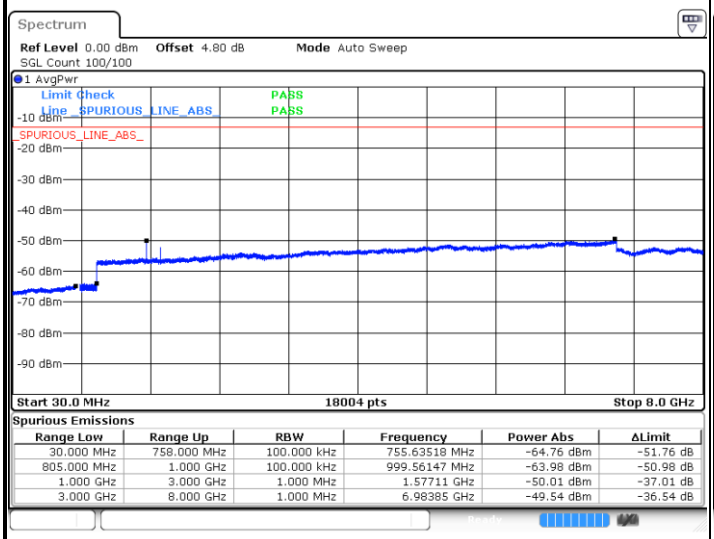
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	758.000 MHz	100.000 kHz	743.62919 MHz	-64.43 dBm	-51.43 dB
805.000 MHz	1.000 GHz	100.000 kHz	806.31559 MHz	-61.62 dBm	-48.62 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.57761 GHz	-48.88 dBm	-35.88 dB
3.000 GHz	8.000 GHz	1.000 MHz	6.98435 GHz	-49.72 dBm	-36.72 dB

Date: 2.SEP.2020 10:59:56

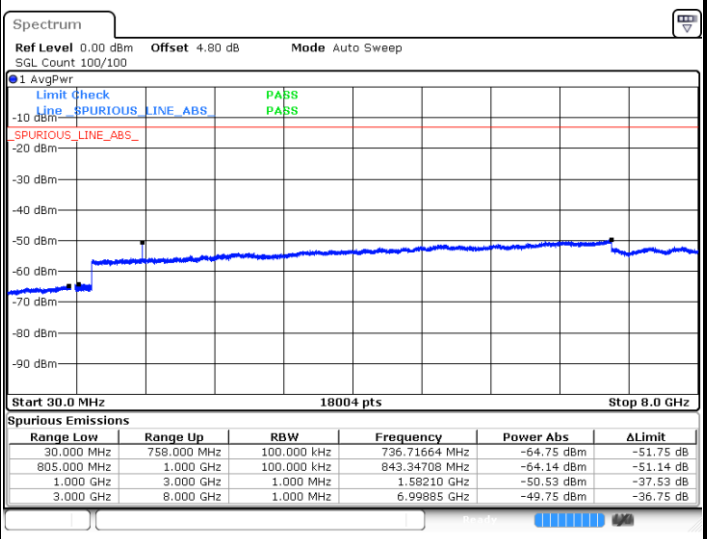
LTE Band 14 / 5MHz

Lowest Channel / 64QAM



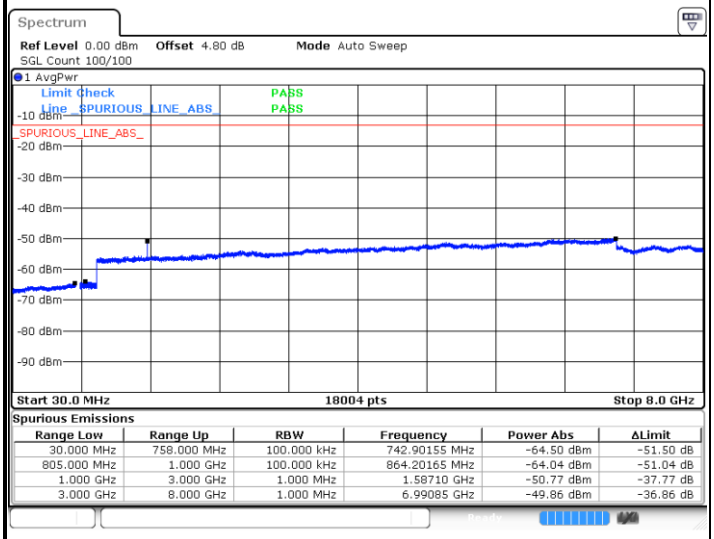
Date: 2.SEP.2020 10:13:16

Middle Channel / 64QAM



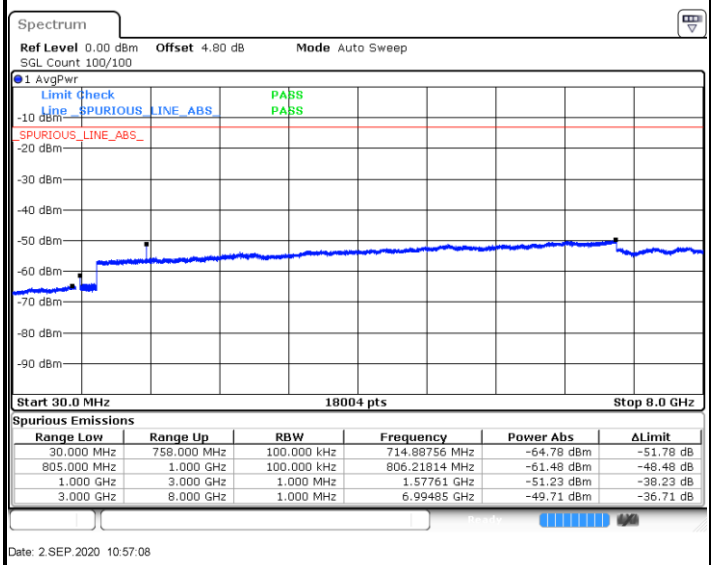
Date: 2.SEP.2020 10:00:41

Highest Channel / 64QAM



Date: 2.SEP.2020 10:38:09

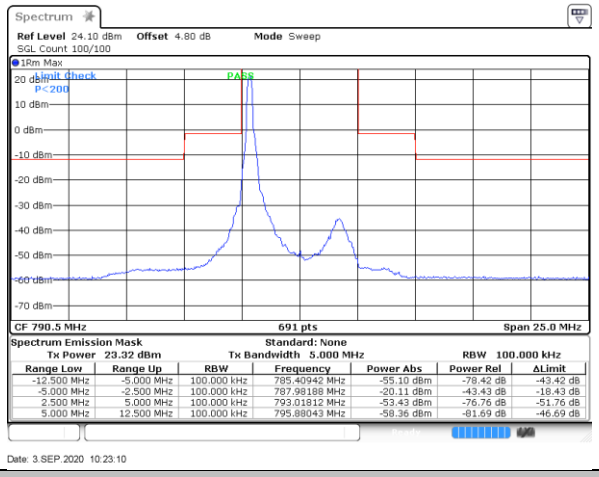
LTE Band 14 / 10MHz	
Middle Channel / 64QAM	

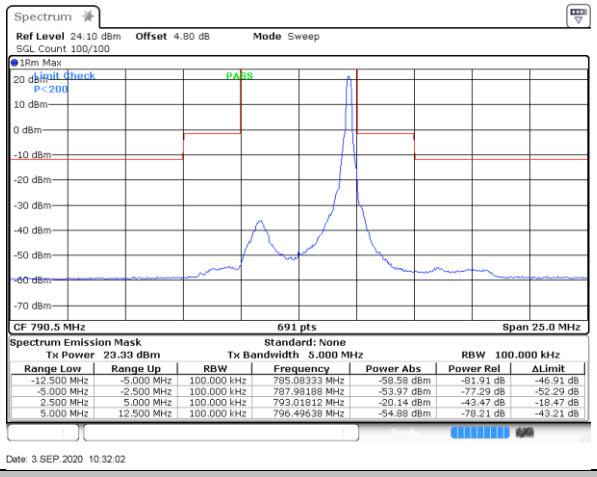


Mask

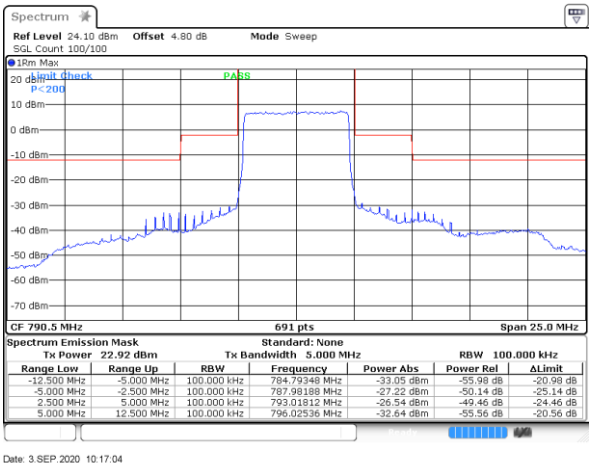
LTE Band 14 / 5MHz / QPSK

Lowest Channel / 1RB



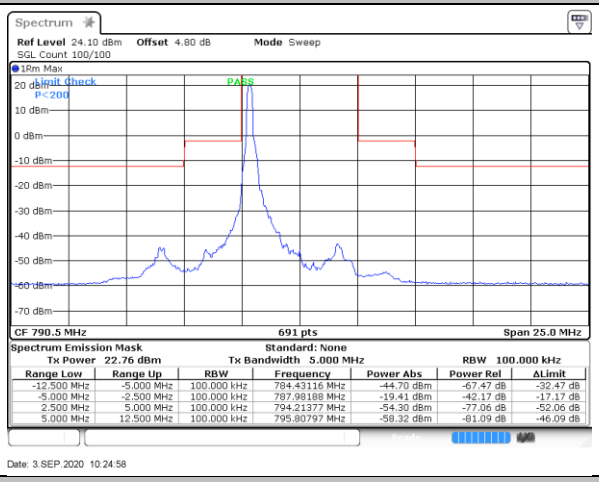


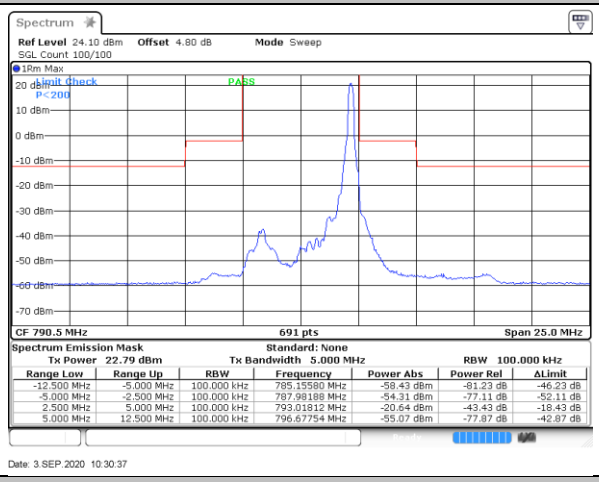
Lowest Channel / Full RB



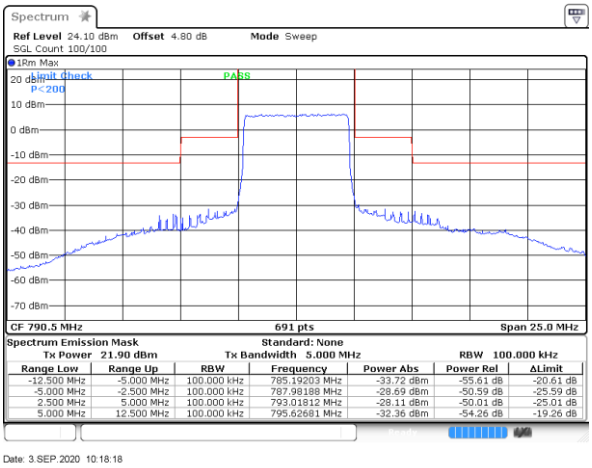
LTE Band 14 / 5MHz / 16QAM

Lowest Channel / 1RB



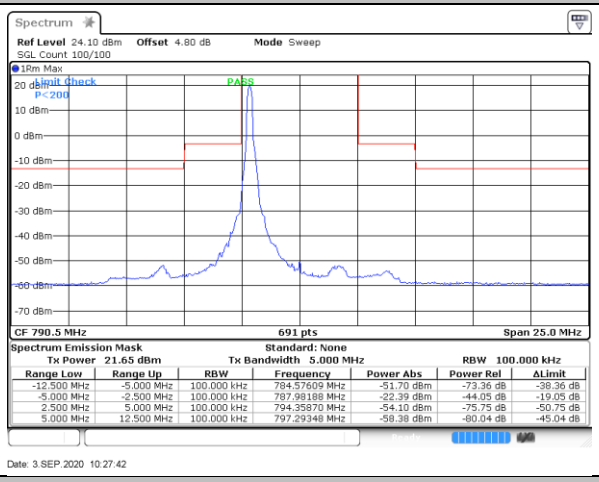


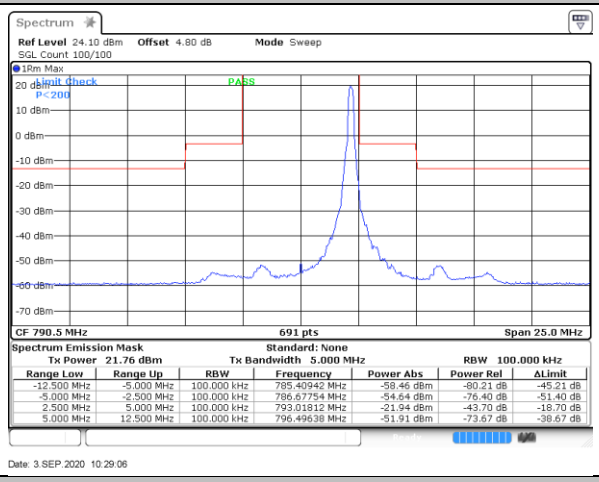
Lowest Channel / Full RB



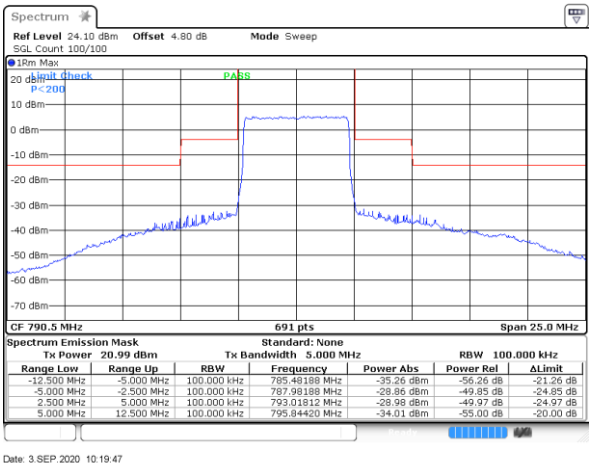
LTE Band 14 / 5MHz / 64QAM

Lowest Channel / 1RB



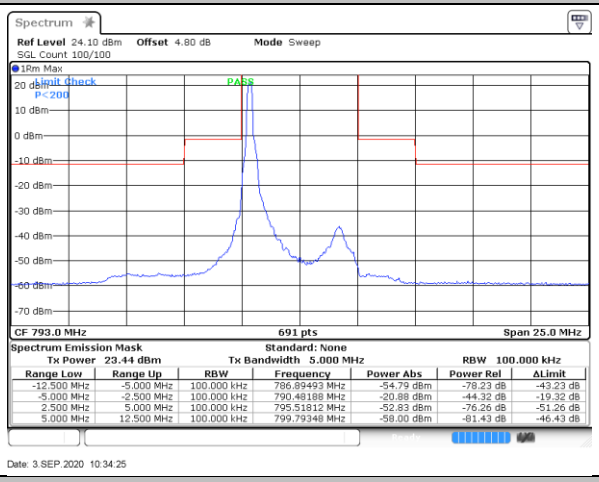


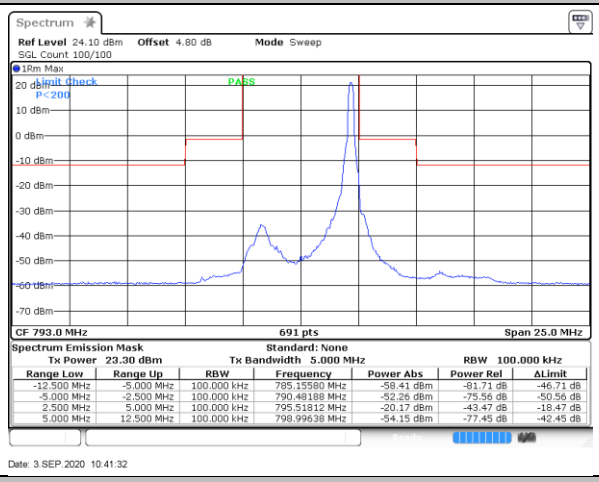
Lowest Channel / Full RB



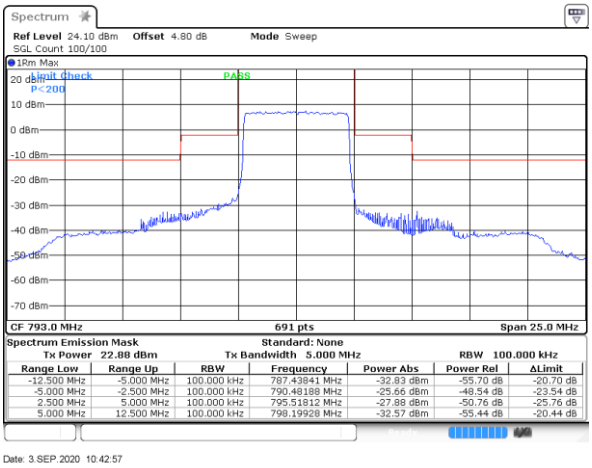
LTE Band 14 / 5MHz / QPSK

Middle Channel / 1RB



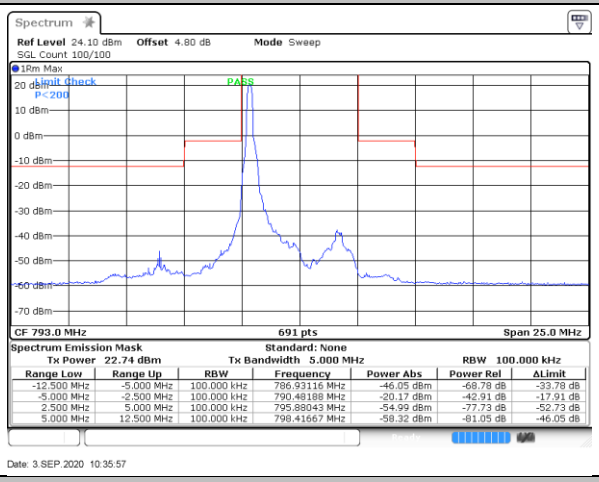


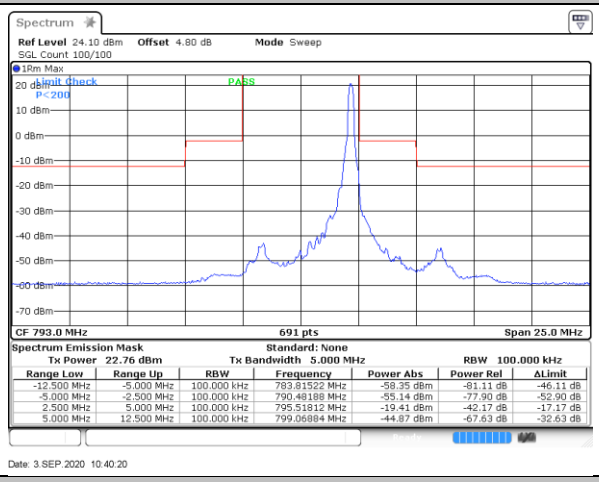
Middle Channel / Full RB



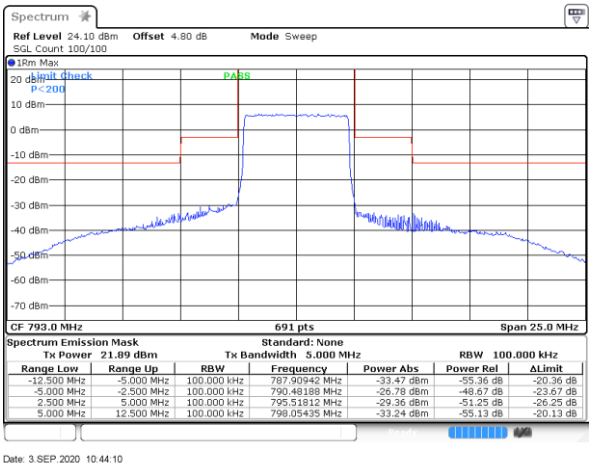
LTE Band 14 / 5MHz / 16QAM

Middle Channel / 1RB



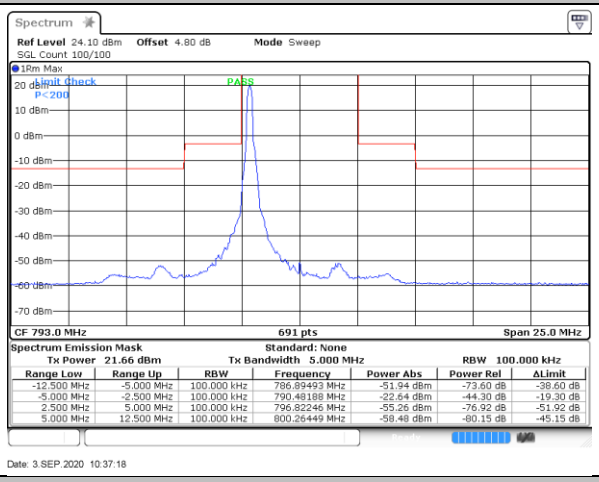


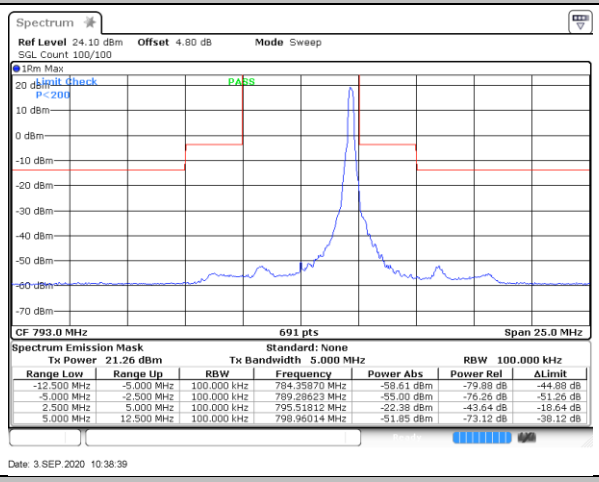
Middle Channel / Full RB



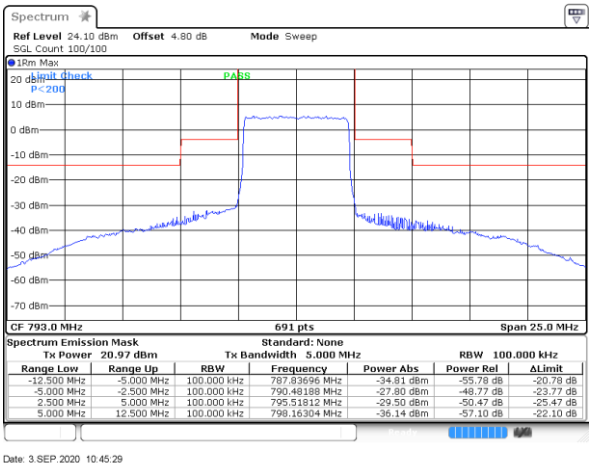
LTE Band 14 / 5MHz / 64QAM

Middle Channel / 1RB



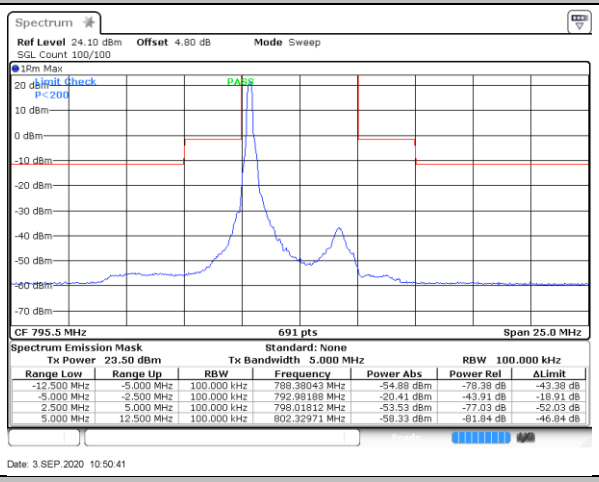


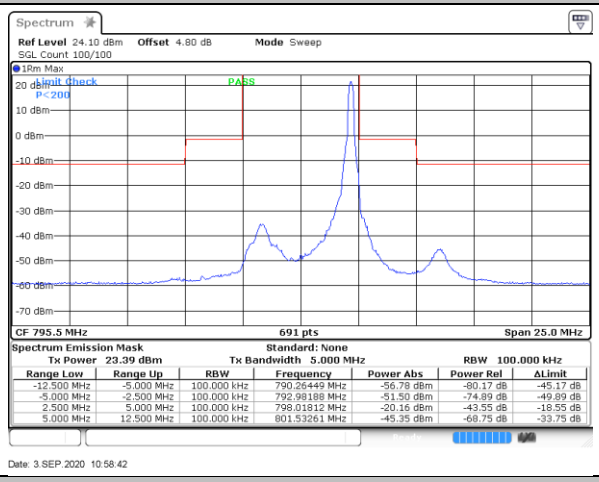
Middle Channel / Full RB



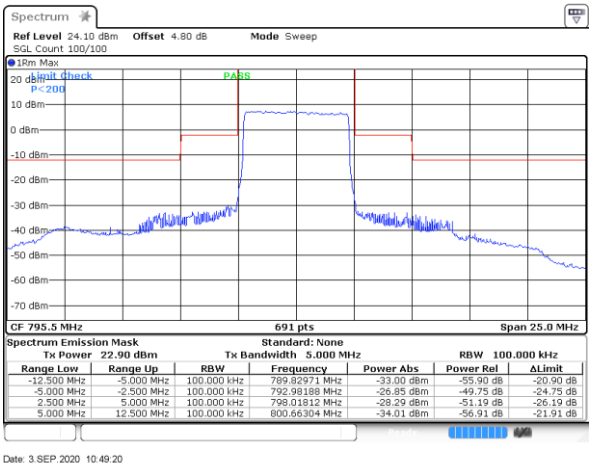
LTE Band 14 / 5MHz / QPSK

Highest Channel / 1RB



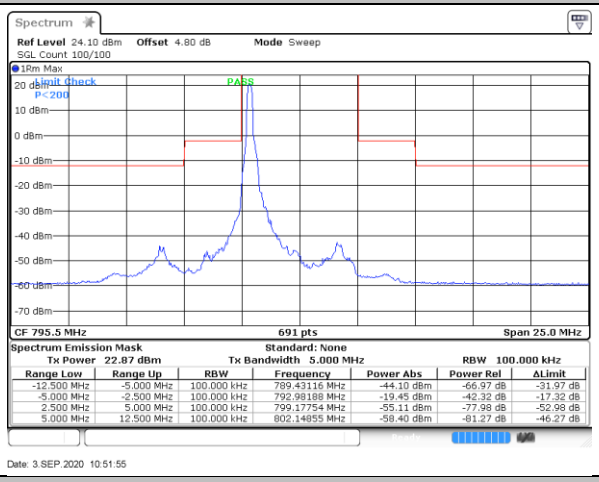


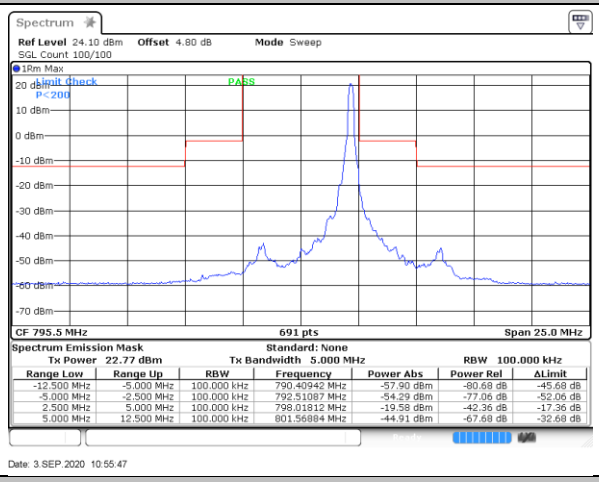
Highest Channel / Full RB



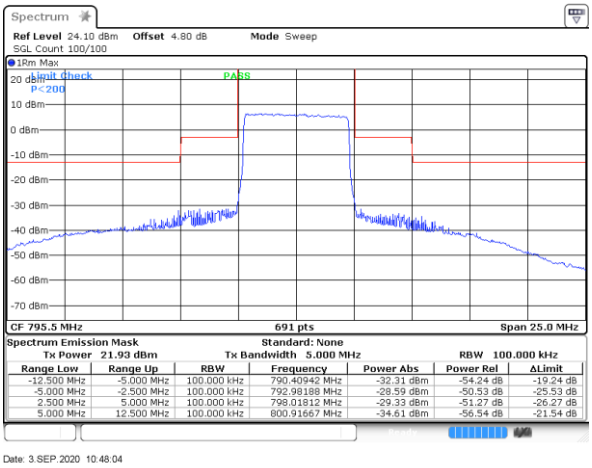
LTE Band 14 / 5MHz / 16QAM

Highest Channel / 1RB



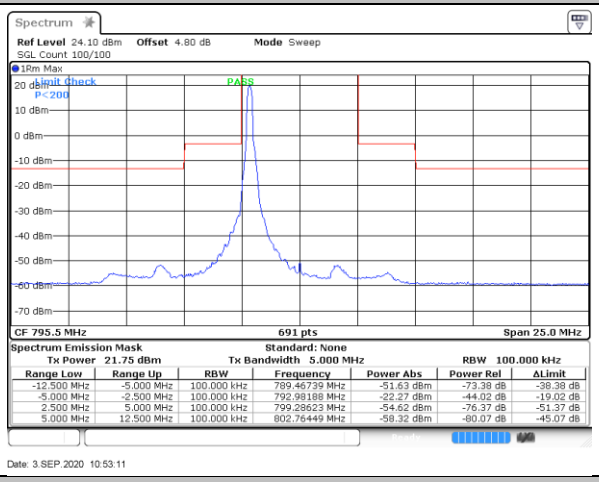


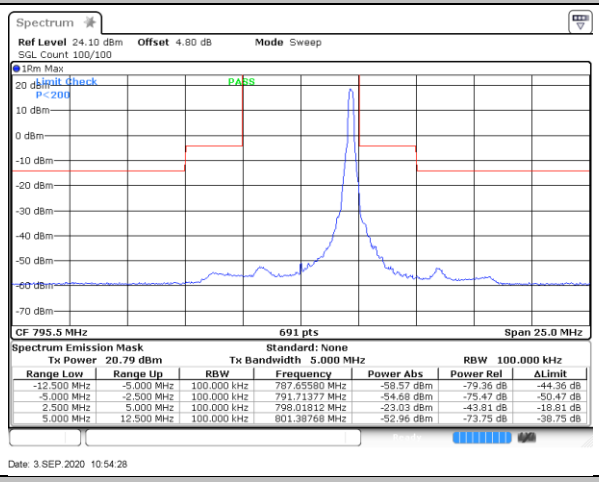
Highest Channel / Full RB



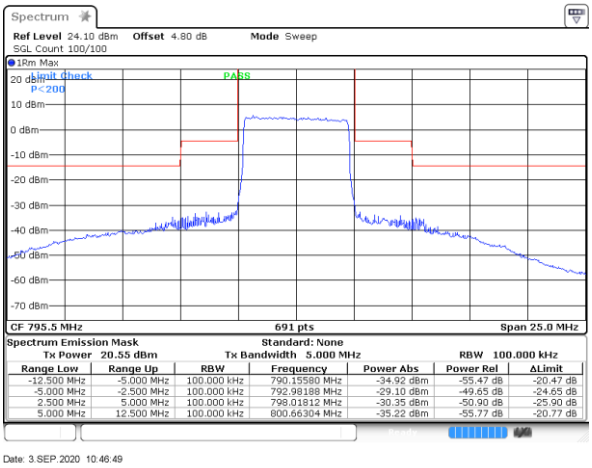
LTE Band 14 / 5MHz / 64QAM

Highest Channel / 1RB



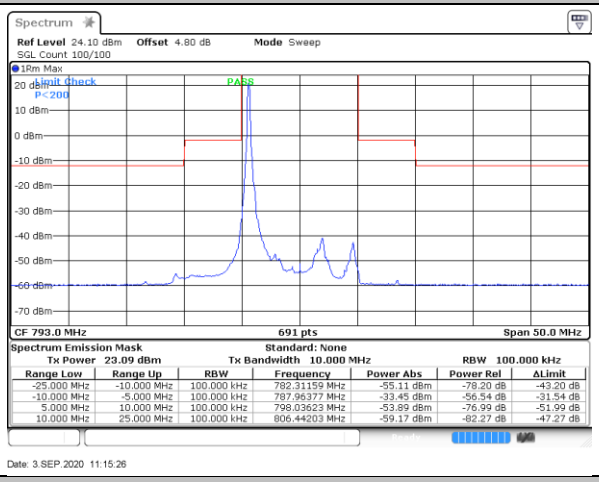


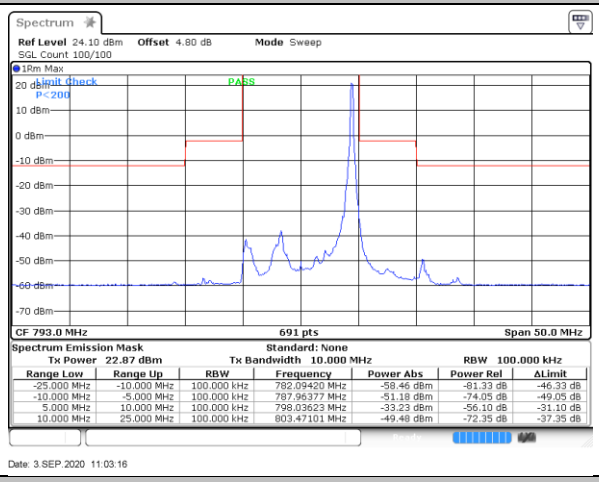
Highest Channel / Full RB



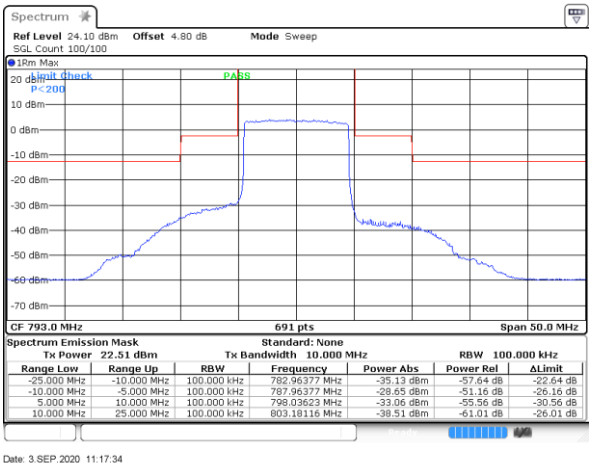
LTE Band 14 / 10MHz / QPSK

Middle Channel / 1RB



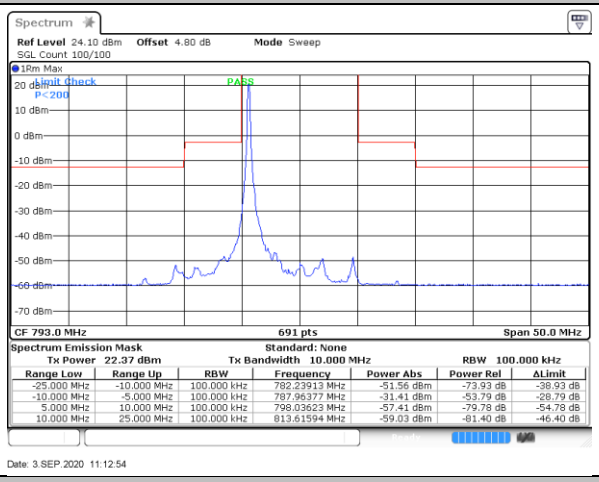


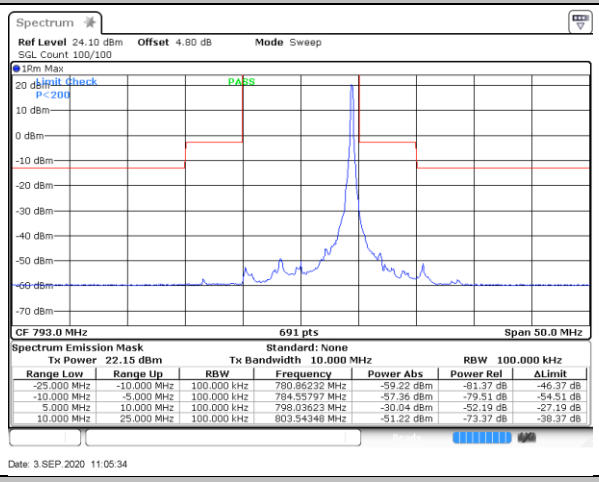
Middle Channel / Full RB



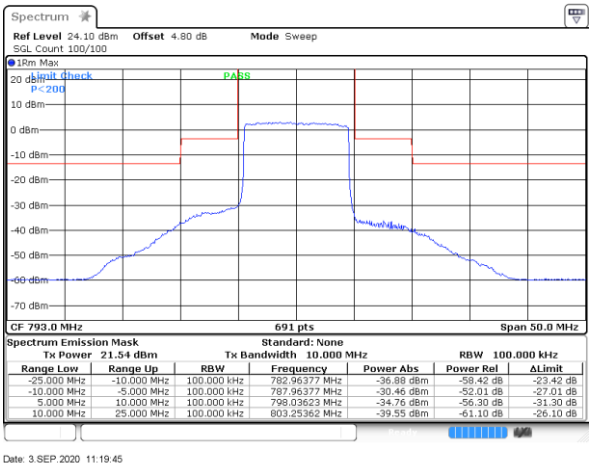
LTE Band 14 / 10MHz / 16QAM

Middle Channel / 1RB



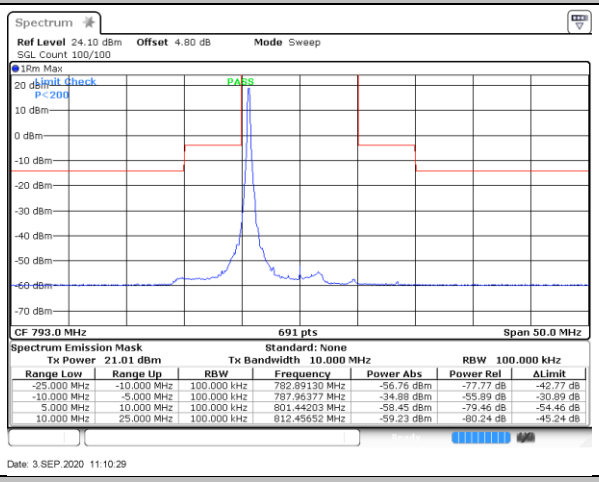


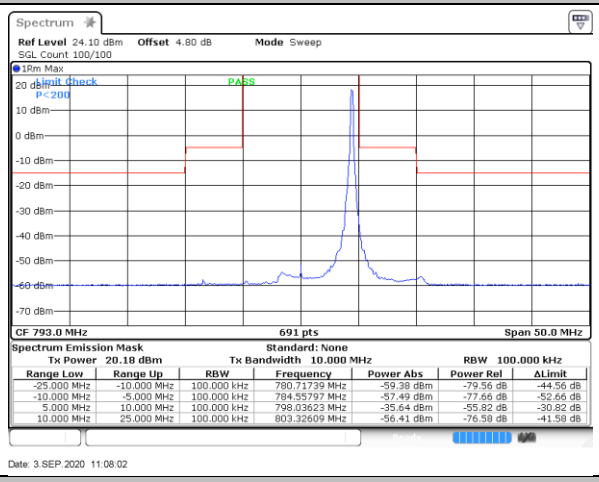
Middle Channel / Full RB



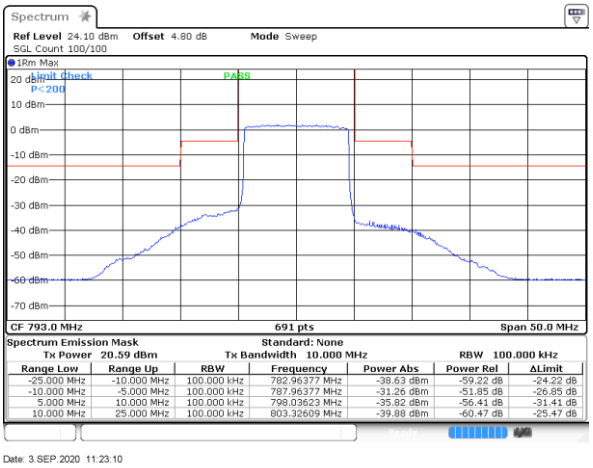
LTE Band 14 / 10MHz / 64QAM

Middle Channel / 1RB





Middle Channel / Full RB



Frequency Stability

Test Conditions		LTE Band 14 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0044	PASS
40	Normal Voltage	0.0035	
30	Normal Voltage	0.0005	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0026	
0	Normal Voltage	0.0040	
-10	Normal Voltage	0.0011	
-20	Normal Voltage	0.0044	
-30	Normal Voltage	0.0006	
20	Maximum Voltage	0.0037	
20	Normal Voltage	0.0006	
20	Battery End Point	0.0026	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.4 V.

2. Note: The frequency fundamental emissions stay within the authorized frequency block.

Appendix B. Test Results of Radiated Test

Field Strength of Spurious Radiated

LTE Band 14 / 5MHz / QPSK / RB Size 1 Offset 0								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1554.68	-67.33	-42.15	-25.18	-69.96	1.09	5.87	H
	2332	-65.81	-13	-52.81	-68.21	1.37	5.92	H
	3108	-64.45	-13	-51.45	-68.34	1.64	7.68	H
	1554	-67.08	-42.15	-24.93	-69.71	1.09	5.87	V
	2332	-65.99	-13	-52.99	-68.39	1.37	5.92	V
	3108	-64.71	-13	-51.71	-68.60	1.64	7.68	V
Middle	1559.68	-67.48	-42.15	-25.33	-70.11	1.09	5.87	H
	2340	-65.12	-13	-52.12	-67.52	1.37	5.92	H
	3120	-64.58	-13	-51.58	-68.47	1.64	7.68	H
	1560	-67.25	-42.15	-25.10	-69.88	1.09	5.87	V
	2340	-66.31	-13	-53.31	-68.71	1.37	5.92	V
	3120	-64.43	-13	-51.43	-68.32	1.64	7.68	V
Highest	1564.68	-68.06	-42.15	-25.91	-70.69	1.09	5.87	H
	2346	-65.77	-13	-52.77	-68.17	1.37	5.92	H
	3132	-64.66	-13	-51.66	-68.55	1.64	7.68	H
	1564	-67.42	-42.15	-25.27	-70.05	1.09	5.87	V
	2347.02	-66.71	-13	-53.71	-69.11	1.37	5.92	V
	3132	-64.53	-13	-51.53	-68.42	1.64	7.68	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 14 / 10MHz / QPSK / RB Size 1 Offset 0								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1578	-67.39	-42.15	-25.24	-70.02	1.09	5.87	H
	2366	-65.27	-13	-52.27	-67.67	1.37	5.92	H
	3156	-64.47	-13	-51.47	-68.36	1.64	7.68	H
	1578	-67.16	-42.15	-25.01	-69.79	1.09	5.87	V
	2366	-65.79	-13	-52.79	-68.19	1.37	5.92	V
	3156	-64.55	-13	-51.55	-68.44	1.64	7.68	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.