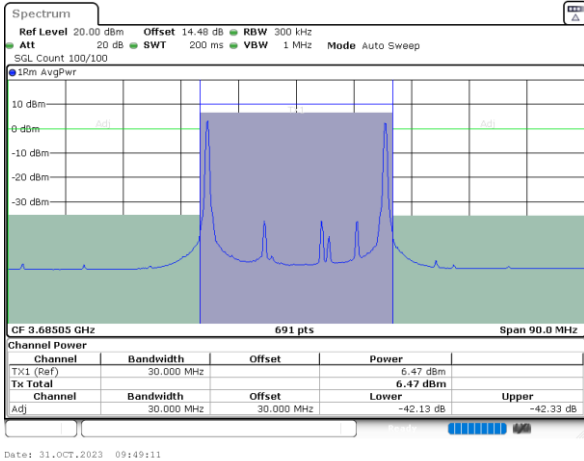




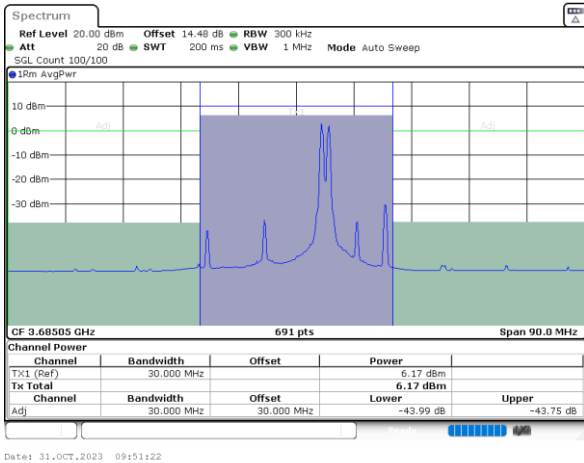
LTE Band 48C / 20MHz+10MHz

QPSK

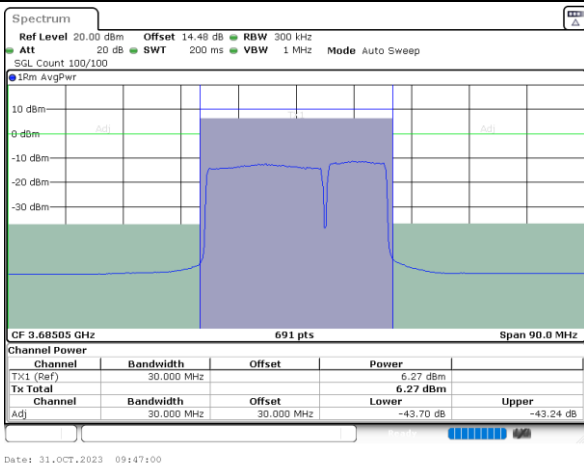
Highest Band Edge / 1RB0 and 1RB99



Highest Band Edge / 1RB99 and 1RB0



Highest Band Edge / Full RB

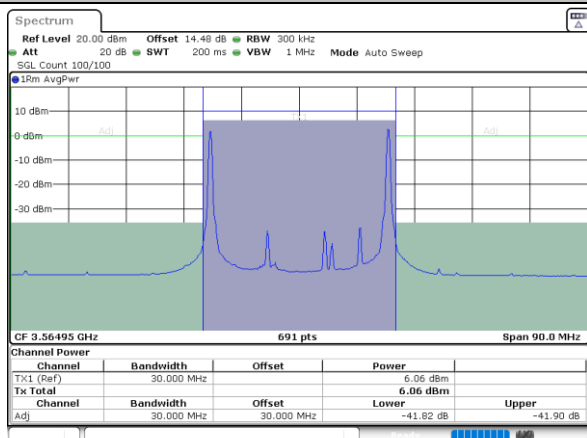




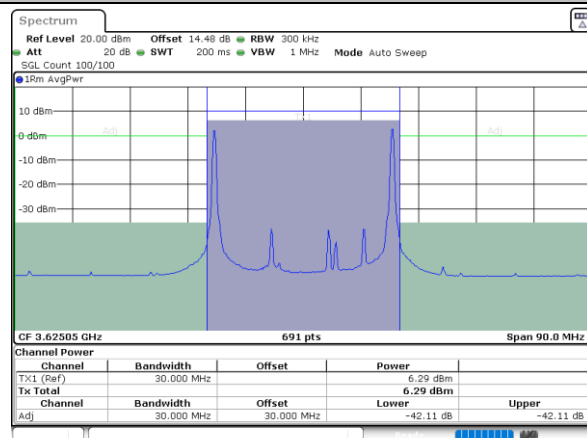
LTE Band 48C / 20MHz+10MHz

16QAM

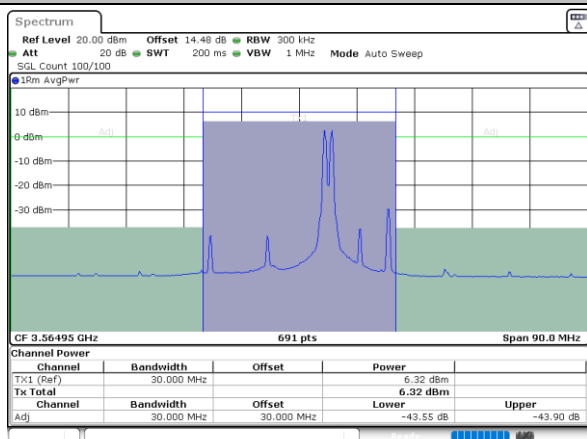
Lowest Band Edge / 1RB0 and 1RB99



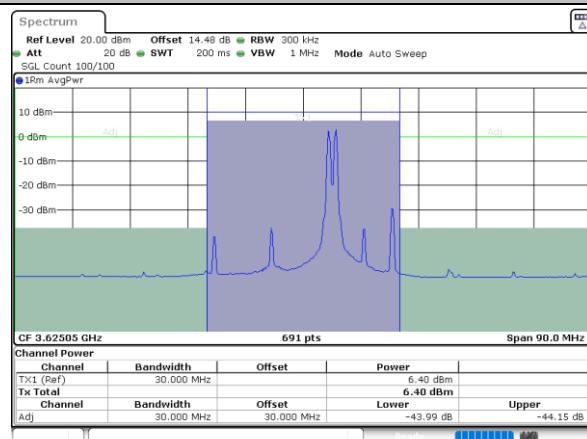
Middle Band Edge / 1RB0 and 1RB99



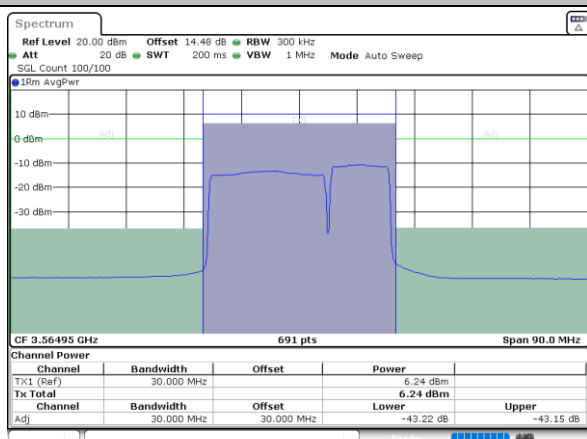
Lowest Band Edge / 1RB99 and 1RB0



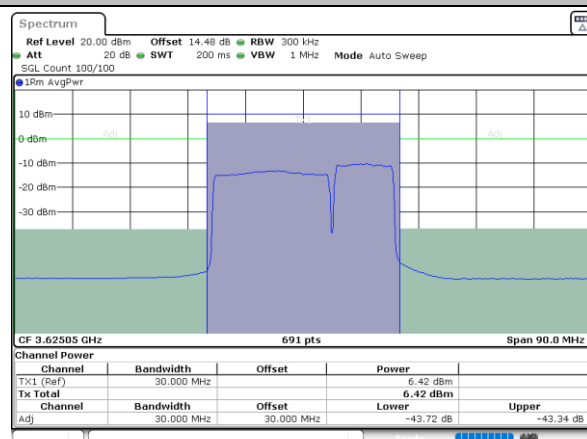
Middle Band Edge / 1RB99 and 1RB0



Lowest Band Edge / Full RB



Middle Band Edge / Full RB

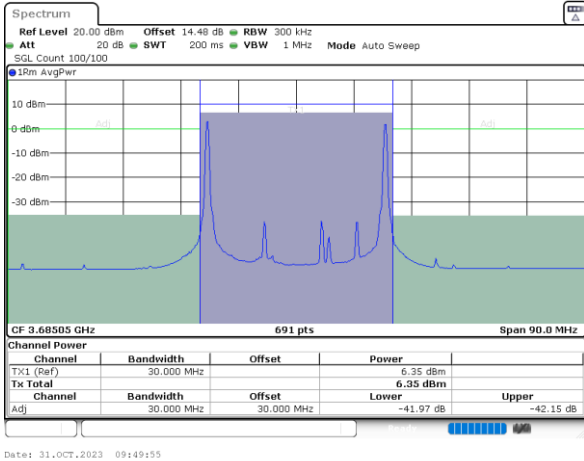




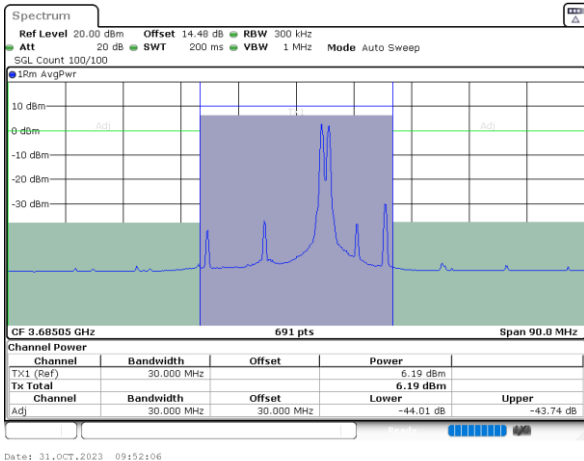
LTE Band 48C / 20MHz+10MHz

16QAM

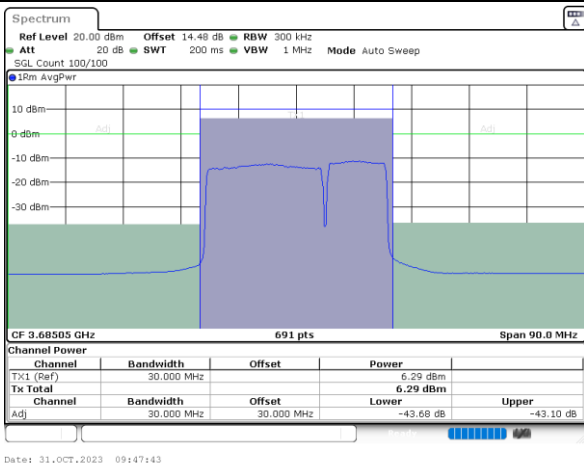
Highest Band Edge / 1RB0 and 1RB99



Highest Band Edge / 1RB99 and 1RB0



Highest Band Edge / Full RB

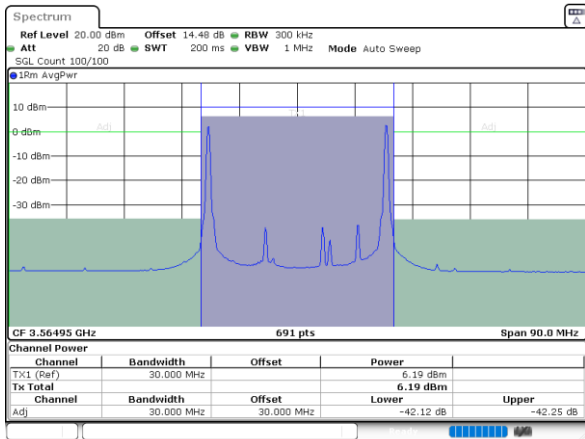




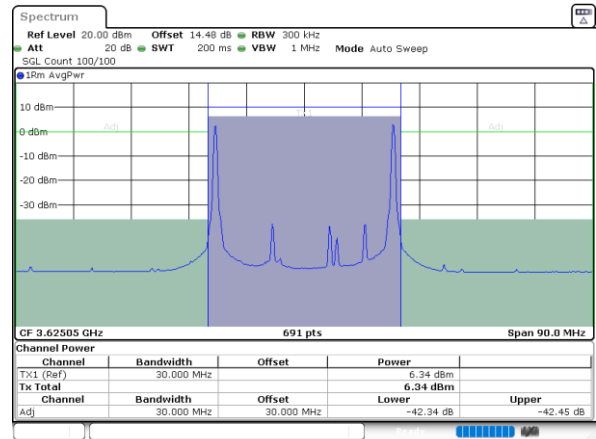
LTE Band 48C / 20MHz+10MHz

64QAM

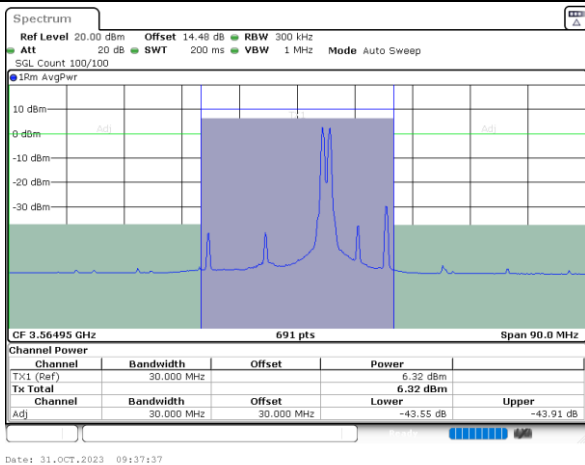
Lowest Band Edge / 1RB0 and 1RB99



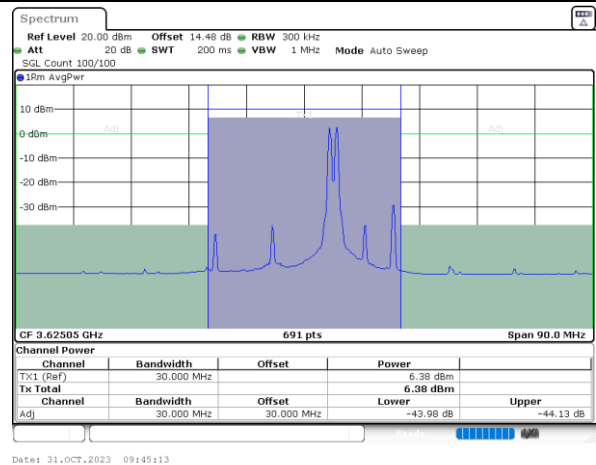
Middle Band Edge / 1RB0 and 1RB99



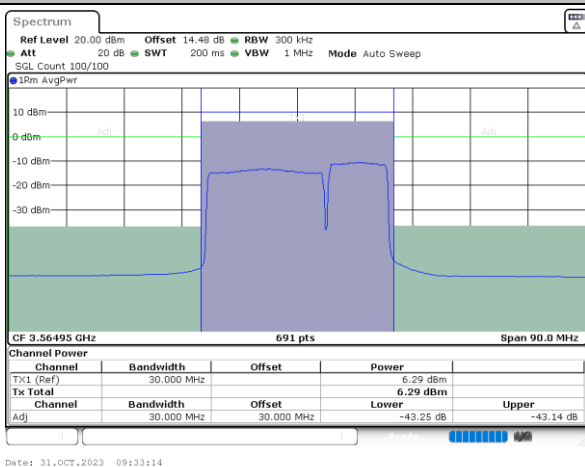
Lowest Band Edge / 1RB99 and 1RB0



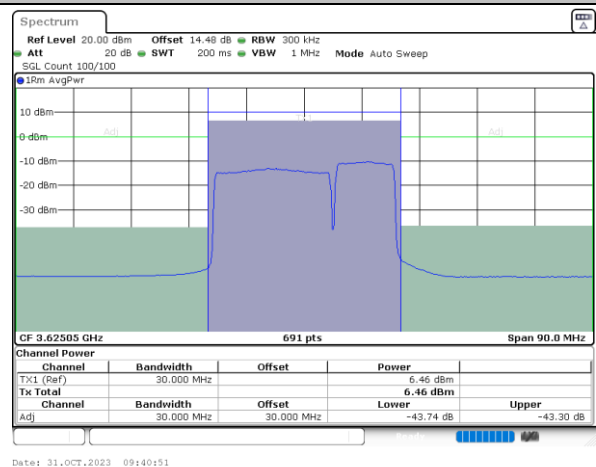
Middle Band Edge / 1RB99 and 1RB0



Lowest Band Edge / Full RB



Middle Band Edge / Full RB

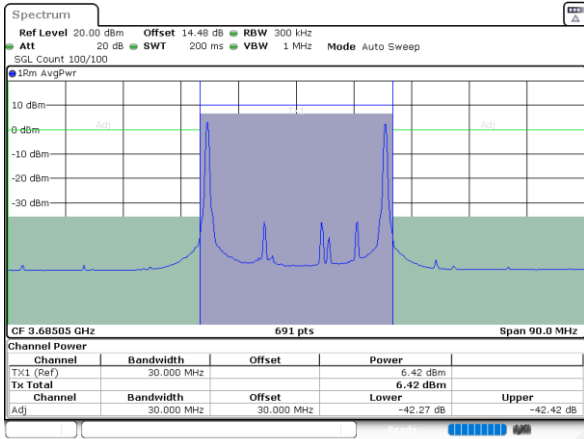




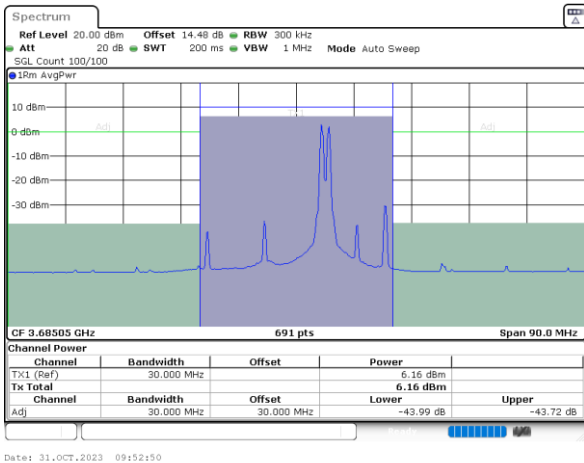
LTE Band 48C / 20MHz+10MHz

64QAM

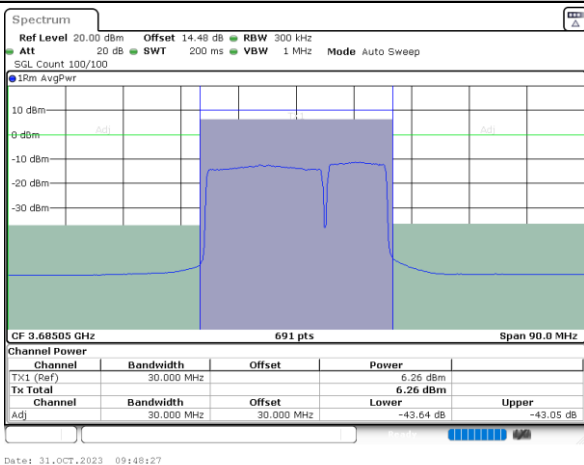
Highest Band Edge / 1RB0 and 1RB99



Highest Band Edge / 1RB99 and 1RB0



Highest Band Edge / Full RB

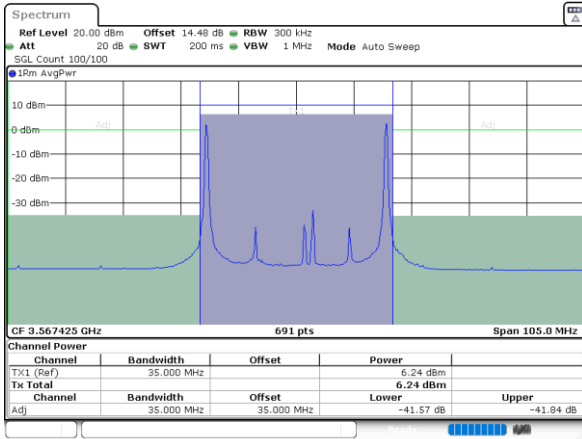




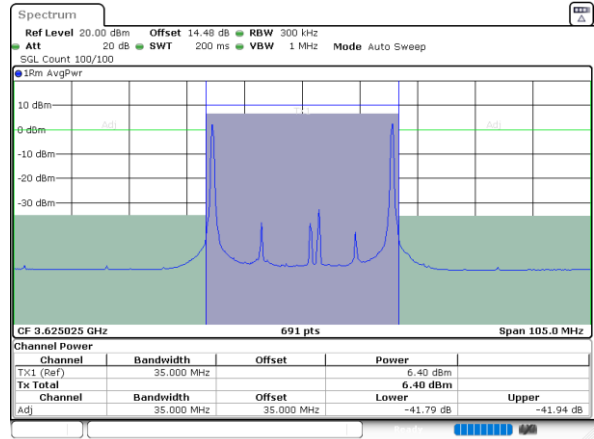
LTE Band 48C / 20MHz+15MHz

QPSK

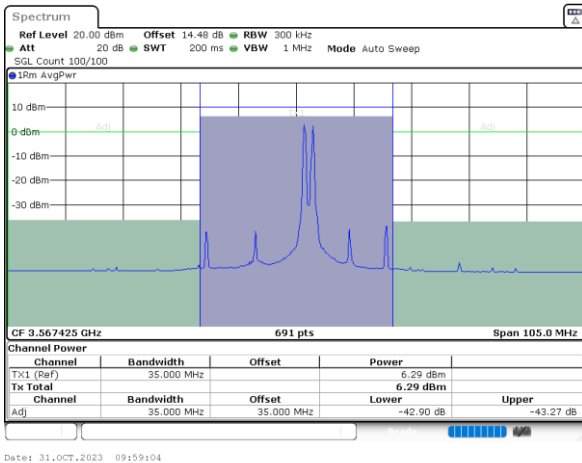
Lowest Band Edge / 1RB0 and 1RB99



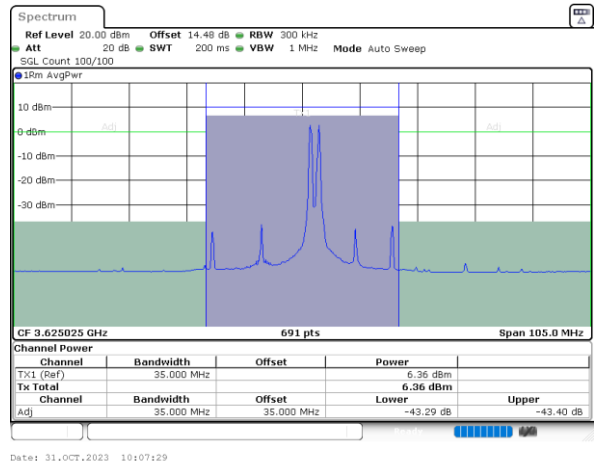
Middle Band Edge / 1RB0 and 1RB99



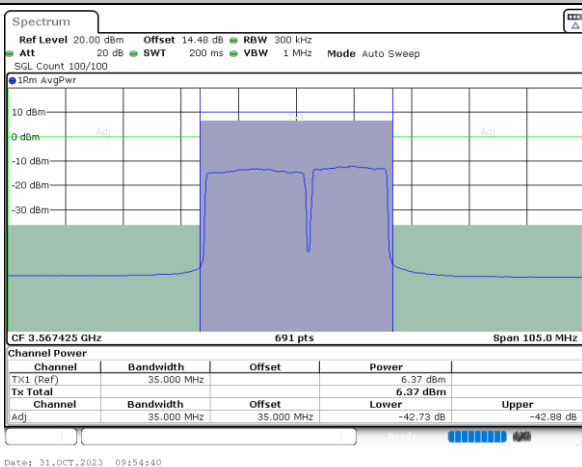
Lowest Band Edge / 1RB99 and 1RB0



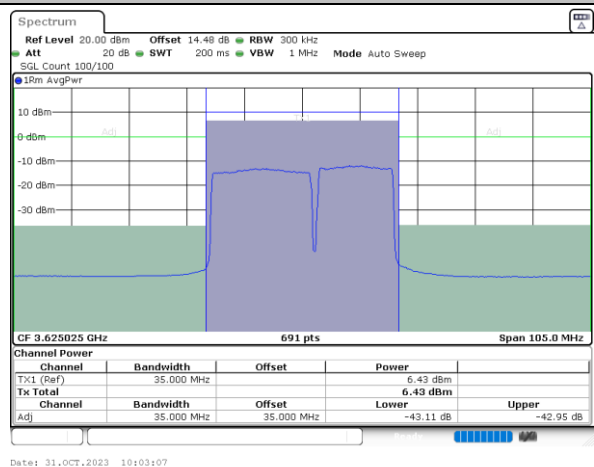
Middle Band Edge / 1RB99 and 1RB0



Lowest Band Edge / Full RB



Middle Band Edge / Full RB

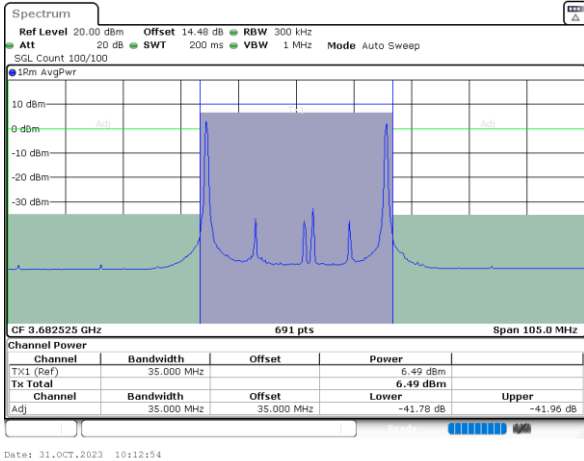




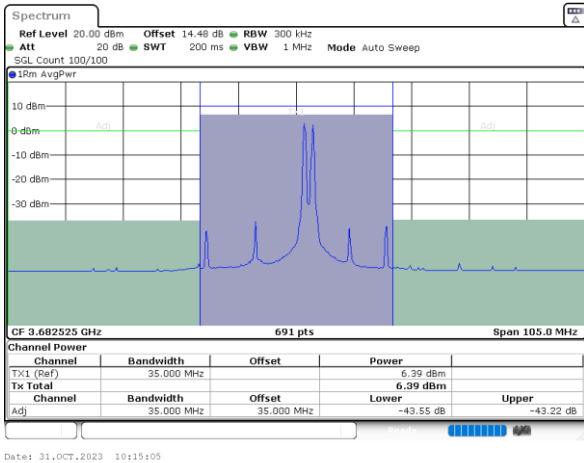
LTE Band 48C / 20MHz+15MHz

QPSK

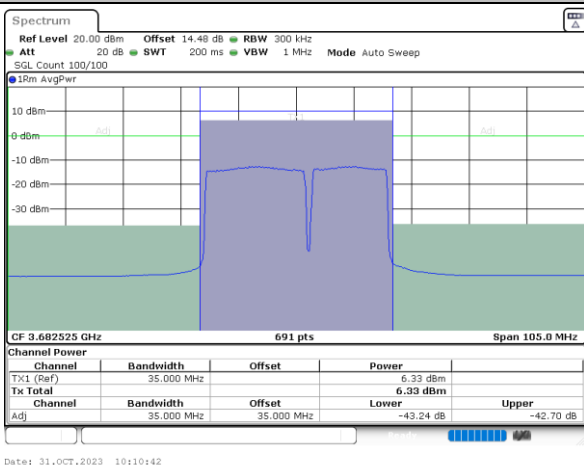
Highest Band Edge / 1RB0 and 1RB99



Highest Band Edge / 1RB99 and 1RB0



Highest Band Edge / Full RB

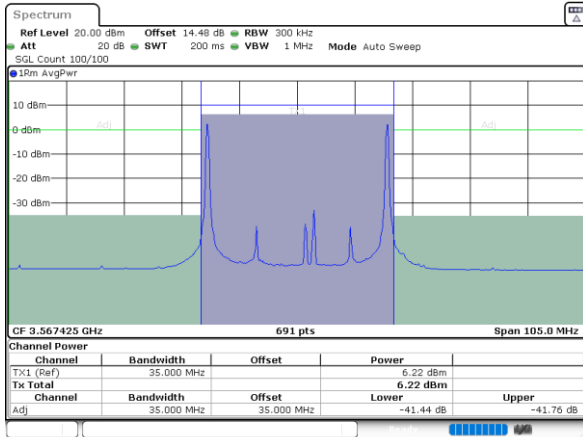




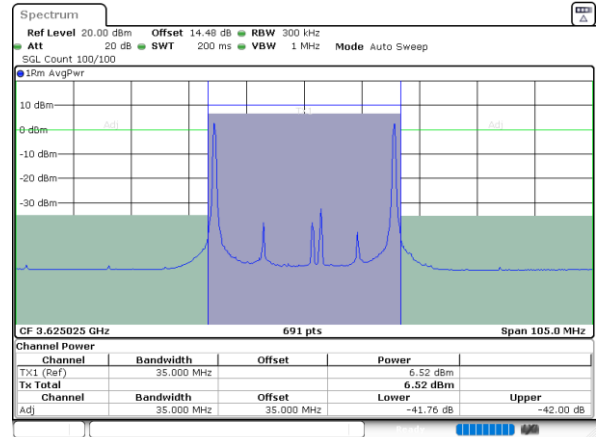
LTE Band 48C / 20MHz+15MHz

16QAM

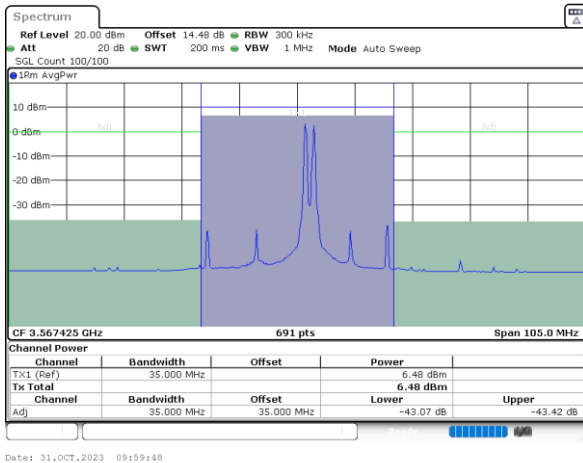
Lowest Band Edge / 1RB0 and 1RB99



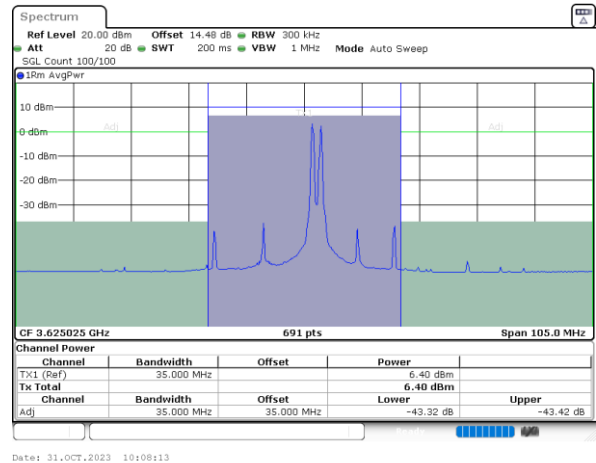
Middle Band Edge / 1RB0 and 1RB99



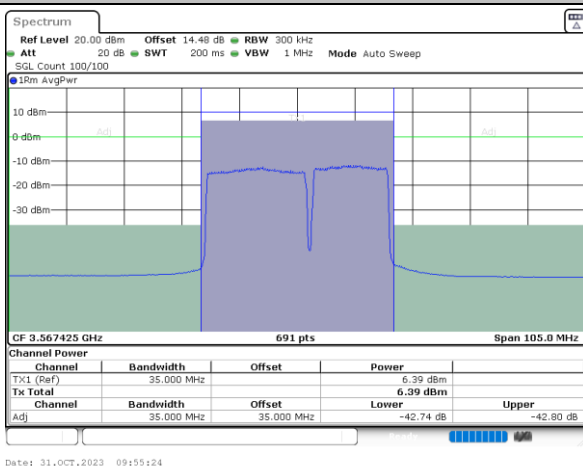
Lowest Band Edge / 1RB99 and 1RB0



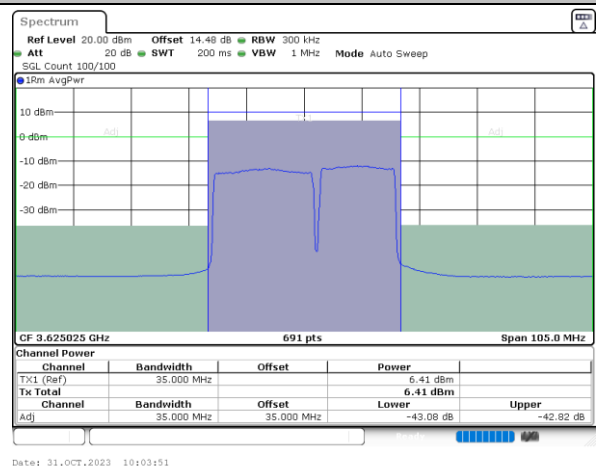
Middle Band Edge / 1RB99 and 1RB0



Lowest Band Edge / Full RB



Middle Band Edge / Full RB

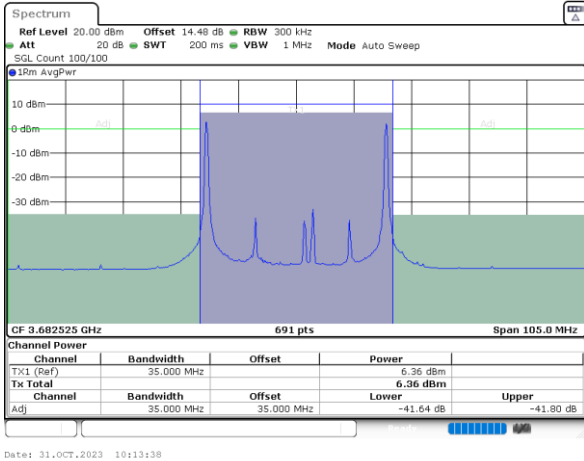




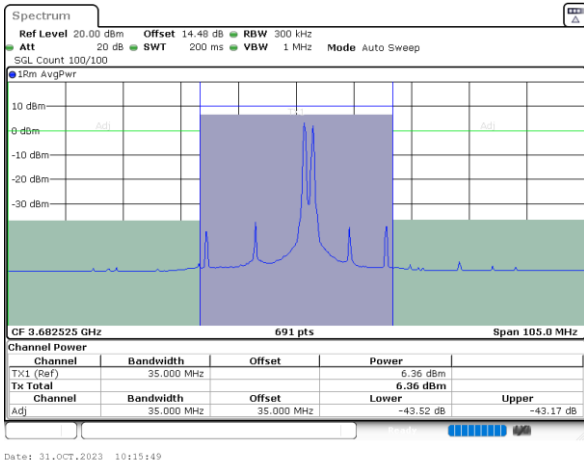
LTE Band 48C / 20MHz+15MHz

16QAM

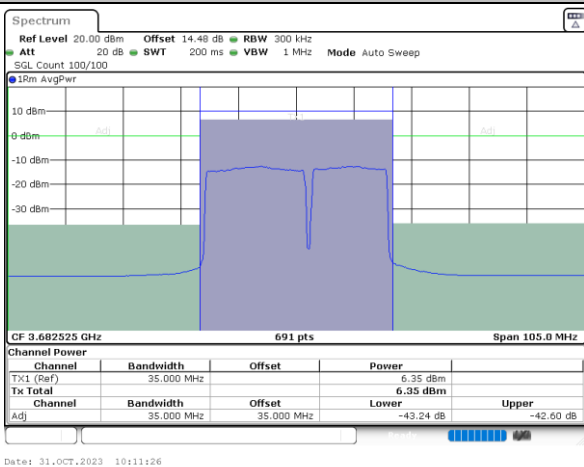
Highest Band Edge / 1RB0 and 1RB99



Highest Band Edge / 1RB99 and 1RB0



Highest Band Edge / Full RB

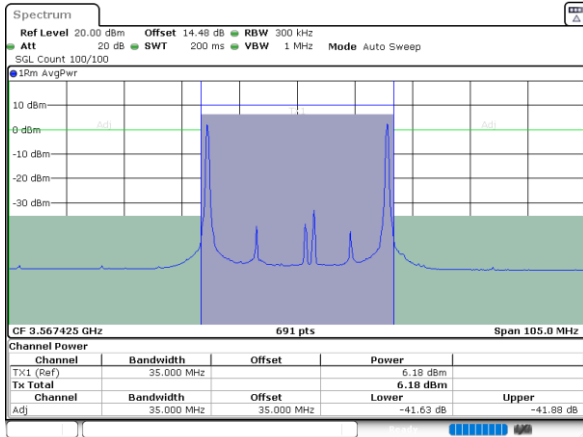




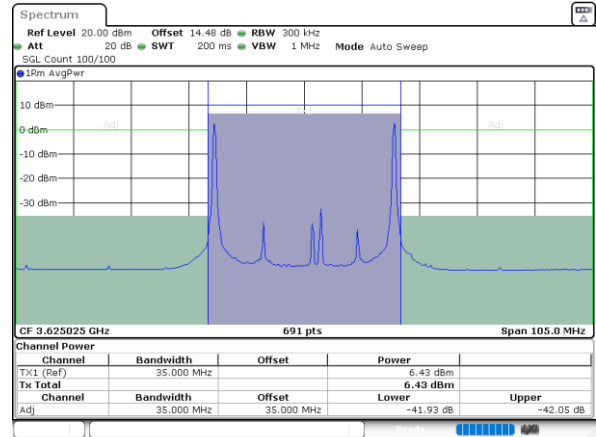
LTE Band 48C / 20MHz+15MHz

64QAM

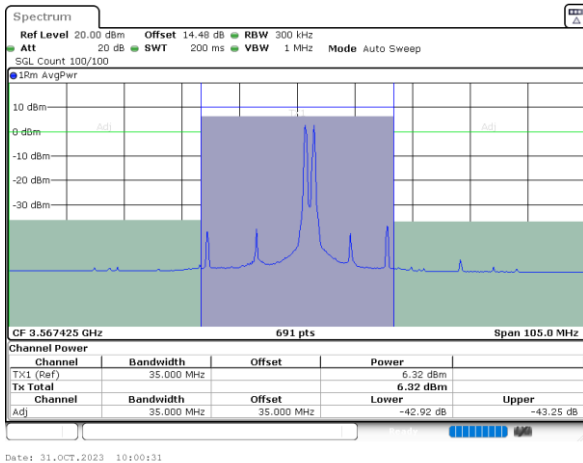
Lowest Band Edge / 1RB0 and 1RB99



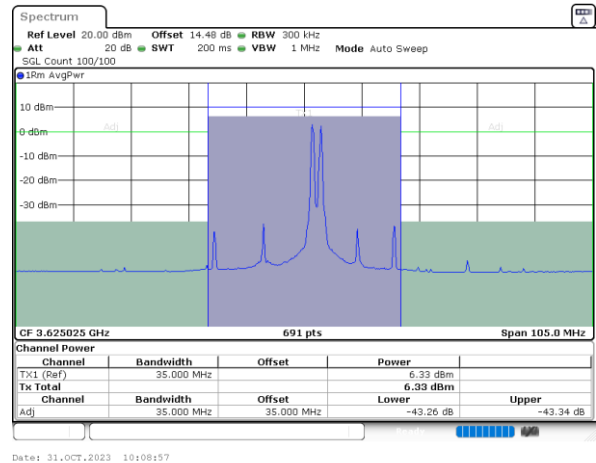
Middle Band Edge / 1RB0 and 1RB99



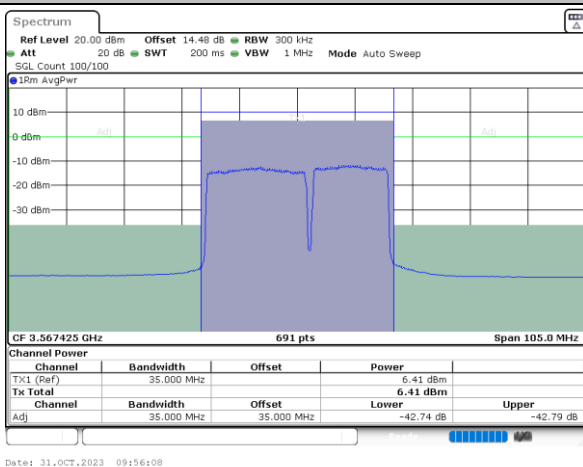
Lowest Band Edge / 1RB99 and 1RB0



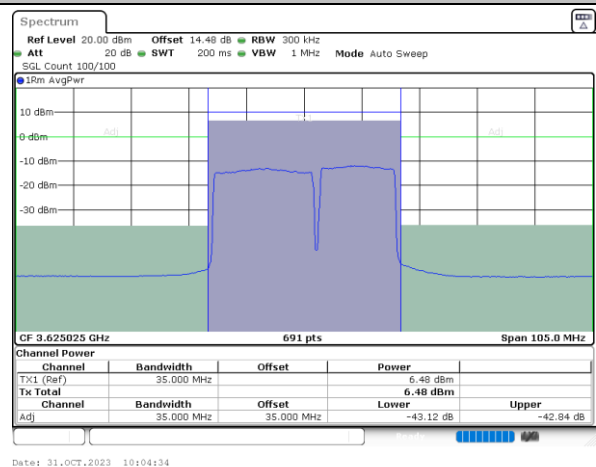
Middle Band Edge / 1RB99 and 1RB0



Lowest Band Edge / Full RB



Middle Band Edge / Full RB

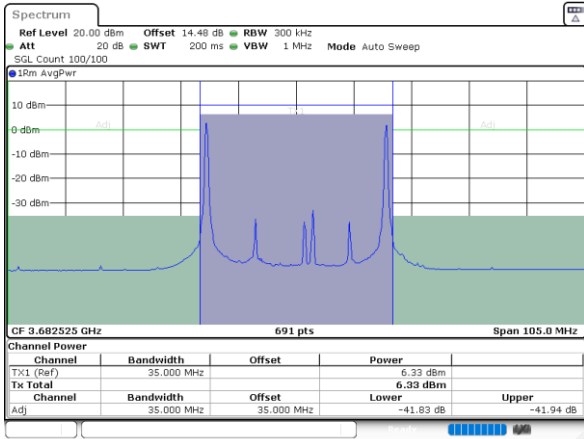




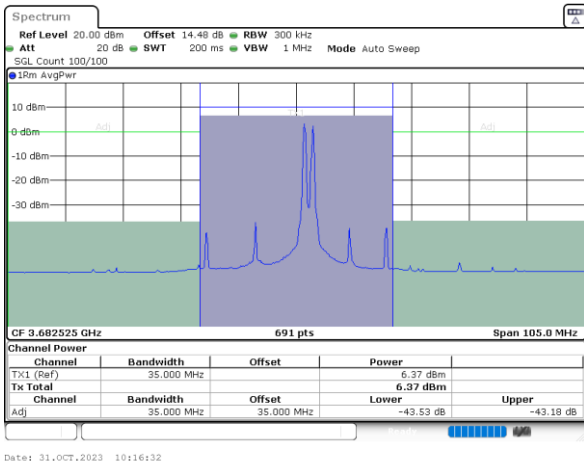
LTE Band 48C / 20MHz+15MHz

64QAM

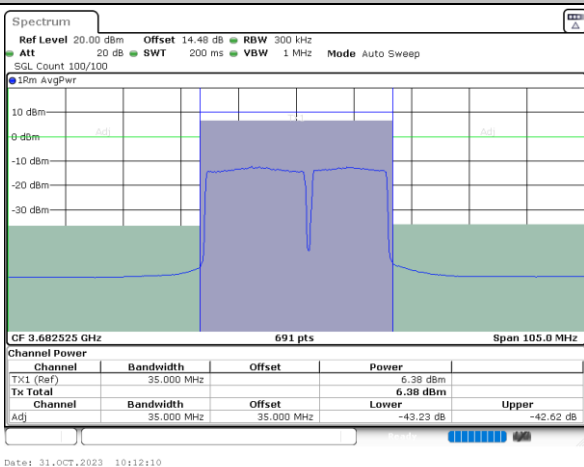
Highest Band Edge / 1RB0 and 1RB99



Highest Band Edge / 1RB99 and 1RB0



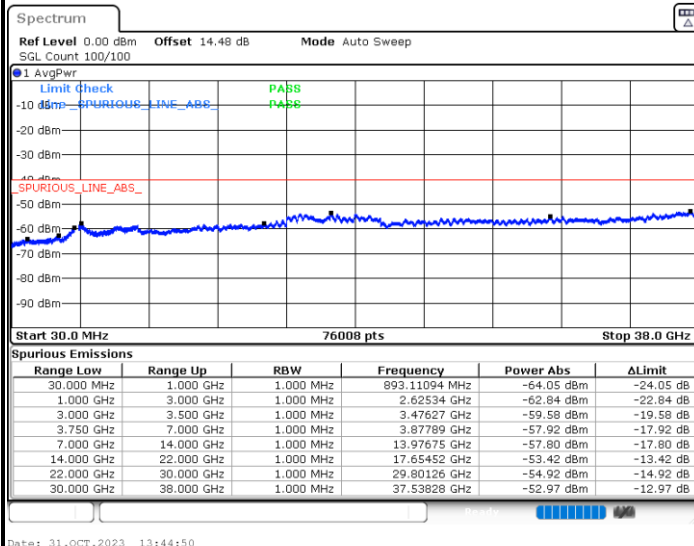
Highest Band Edge / Full RB



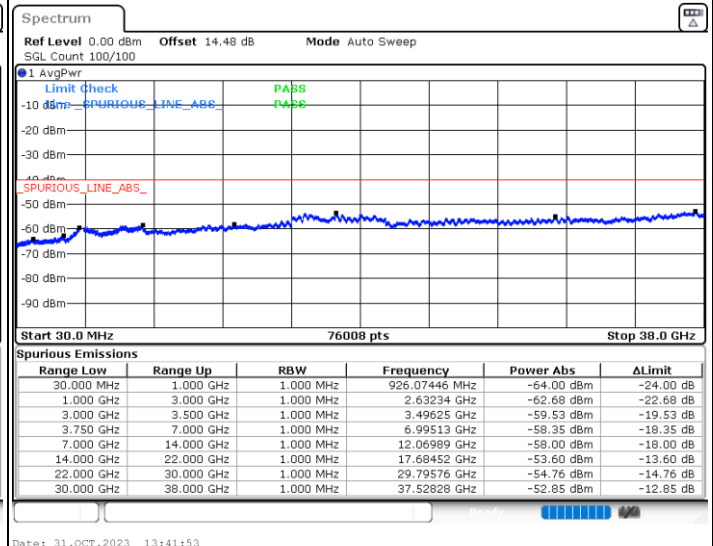


Conducted Spurious Emission

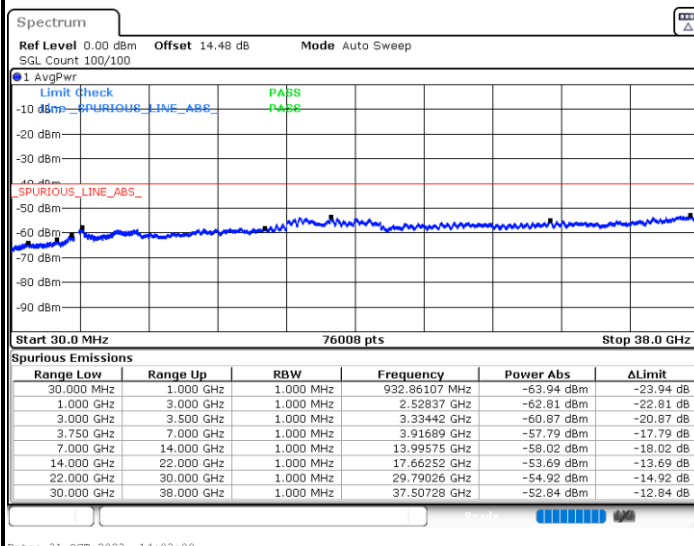
LTE Band 48C / 5MHz+20MHz QPSK Lowest Channel / 1RB24 and 1RB0

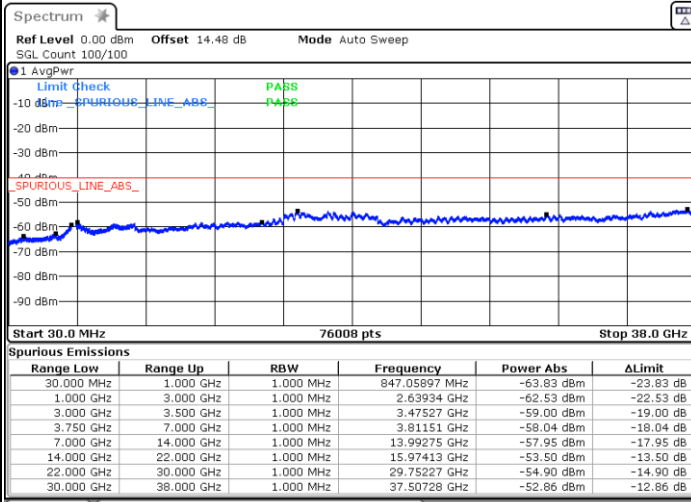


LTE Band 48C / 5MHz+20MHz QPSK Middle Channel / 1RB24 and 1RB0

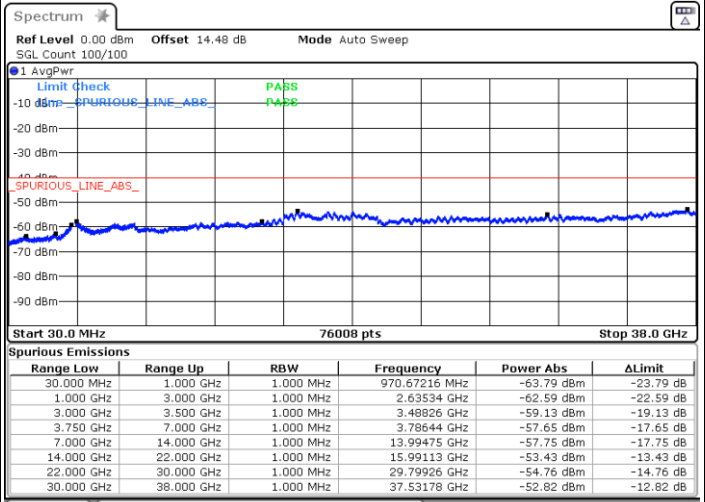


LTE Band 48C / 5MHz+20MHz QPSK Highest Channel / 1RB24 and 1RB0

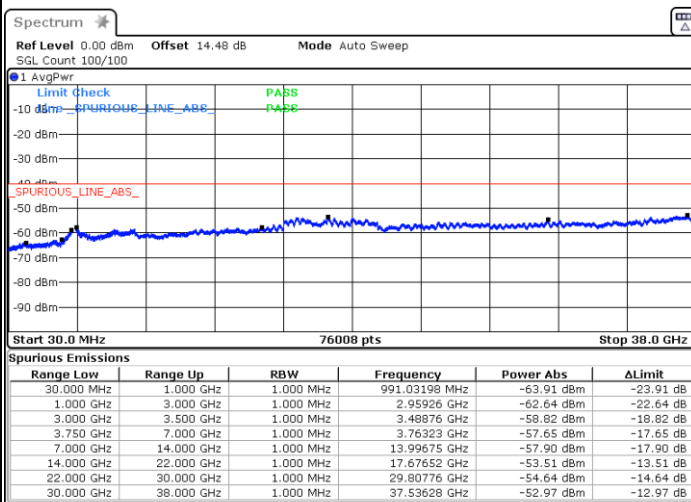


LTE Band 48C / 10MHz+20MHz QPSK Lowest
Channel / 1RB49 and 1RB0LTE Band 48C / 10MHz+20MHz QPSK Middle
Channel / 1RB49 and 1RB0

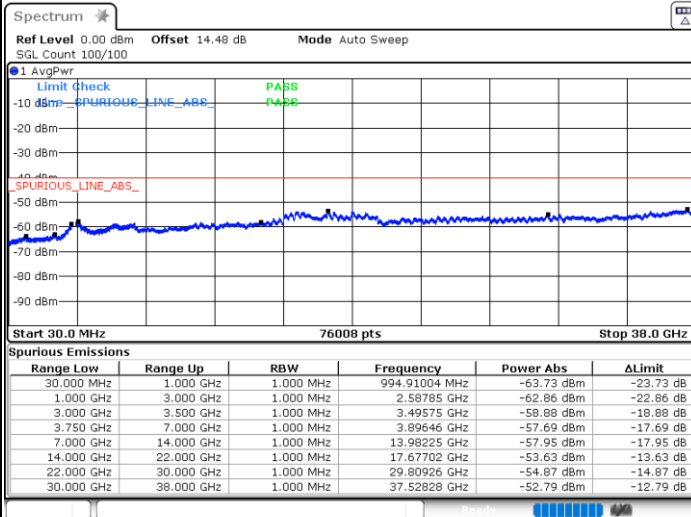
Date: 31.OCT.2023 13:26:41



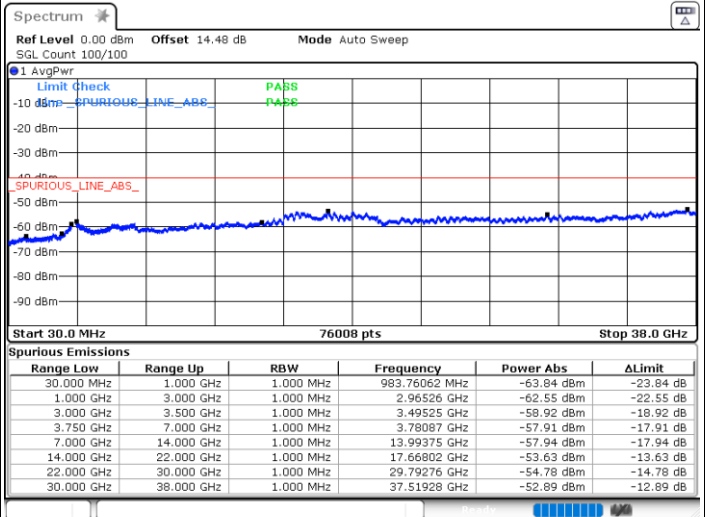
Date: 31.OCT.2023 13:33:28

LTE Band 48C / 10MHz+20MHz QPSK Highest
Channel / 1RB49 and 1RB0

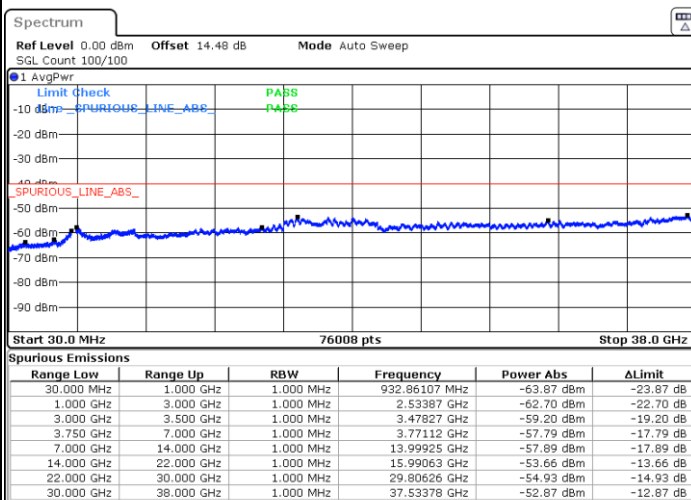
Date: 31.OCT.2023 13:30:05

LTE Band 48C / 15MHz+20MHz QPSK Lowest
Channel / 1RB74 and 1RB0LTE Band 48C / 15MHz+20MHz QPSK Middle
Channel / 1RB74 and 1RB0

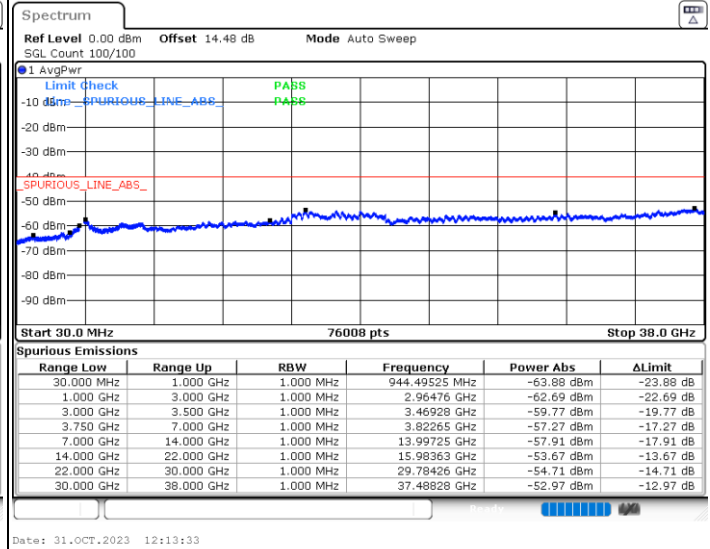
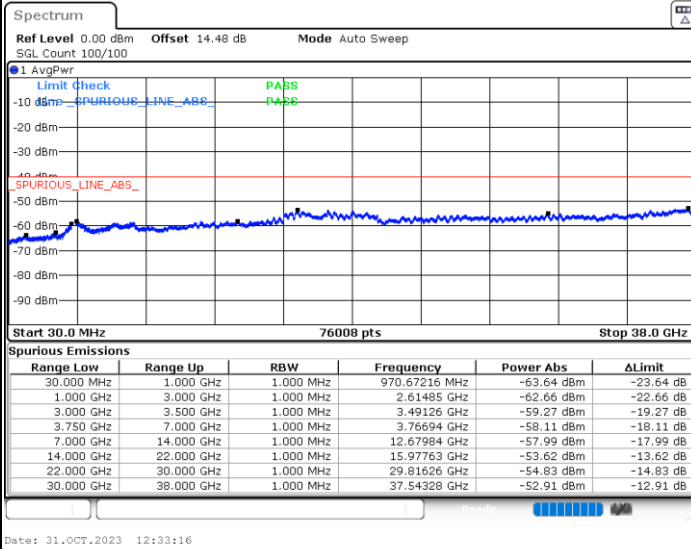
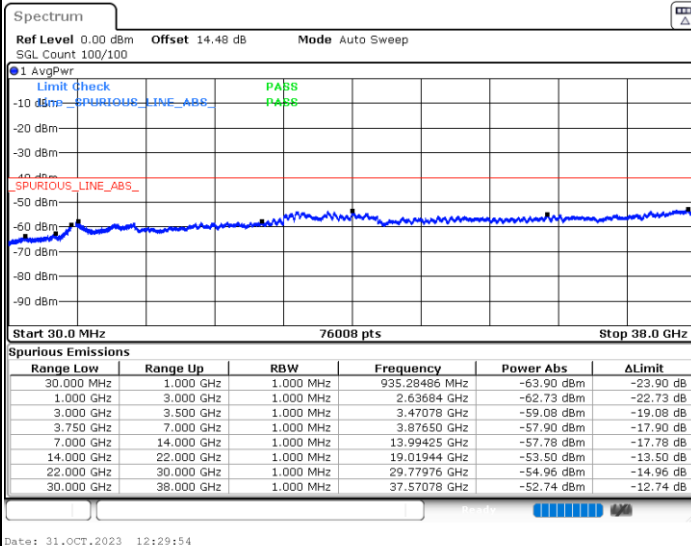
Date: 31.OCT.2023 13:20:50

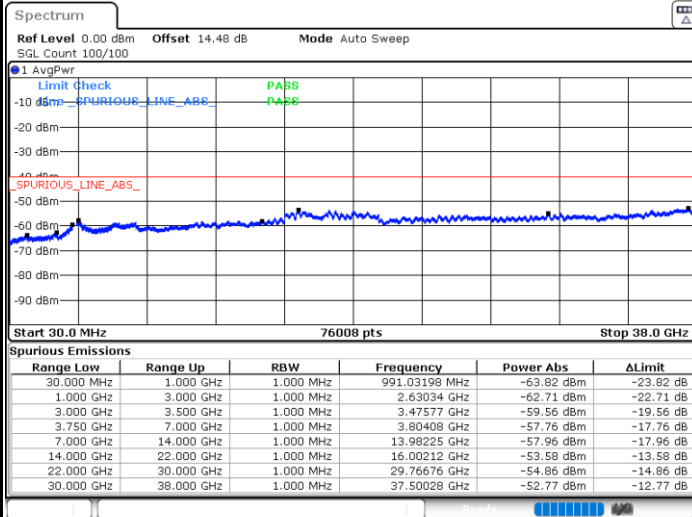


Date: 31.OCT.2023 13:17:12

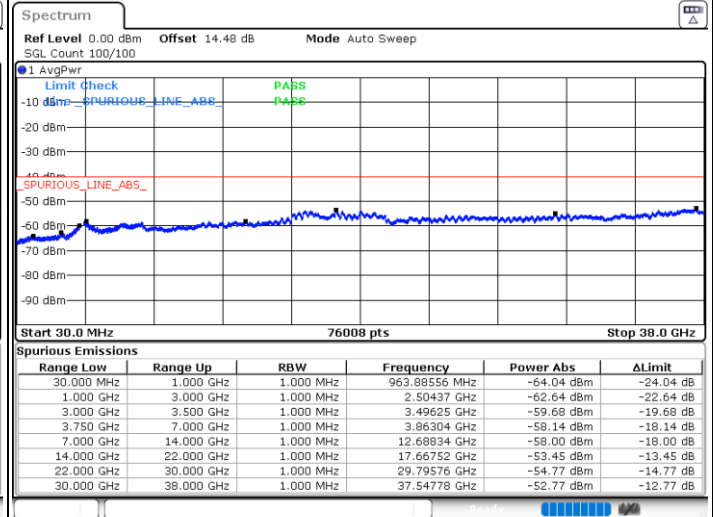
LTE Band 48C / 15MHz+20MHz QPSK Highest
Channel / 1RB74 and 1RB0

Date: 31.OCT.2023 13:22:50

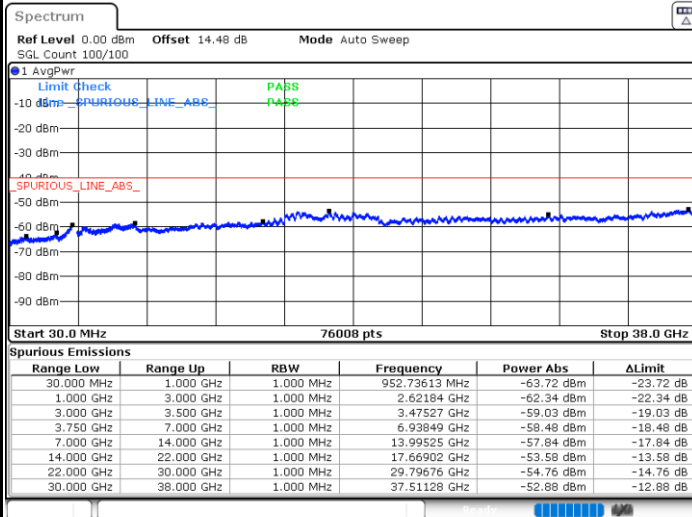
LTE Band 48C / 20MHz+20MHz QPSK Lowest
Channel / 1RB99 and 1RB0LTE Band 48C / 20MHz+20MHz QPSK Middle
Channel / 1RB99 and 1RB0LTE Band 48C / 20MHz+20MHz QPSK Highest
Channel / 1RB99 and 1RB0

LTE Band 48C / 20MHz+5MHz QPSK Lowest
Channel / 1RB99 and 1RB0

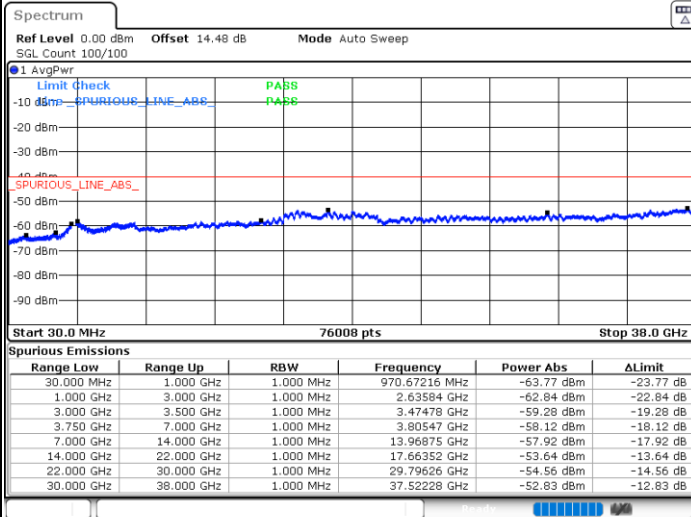
Date: 31.OCT.2023 13:02:45

LTE Band 48C / 20MHz+5MHz QPSK Middle Channel
/ 1RB99 and 1RB0

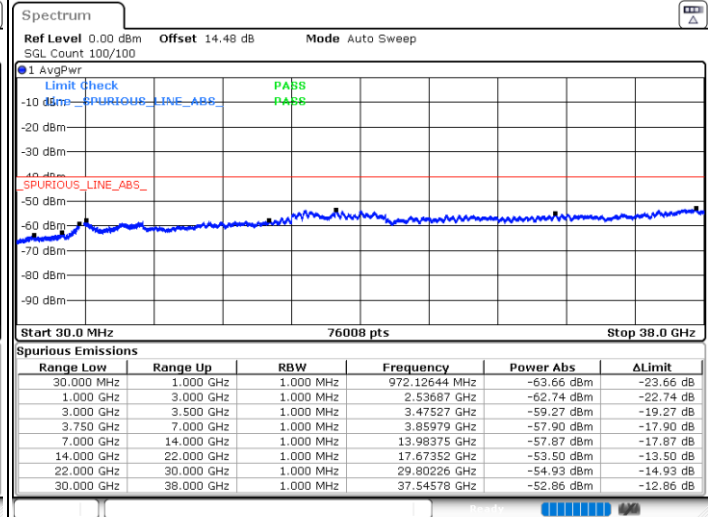
Date: 31.OCT.2023 13:09:00

LTE Band 48C / 20MHz+5MHz QPSK Highest
Channel / 1RB99 and 1RB0

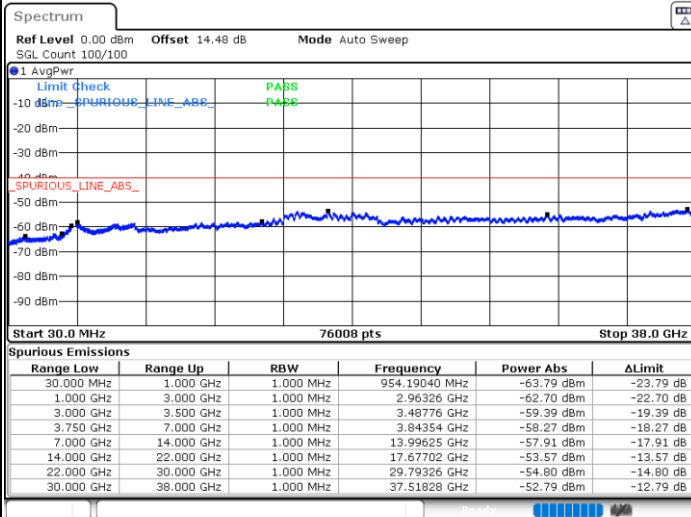
Date: 31.OCT.2023 13:06:01

LTE Band 48C / 20MHz+10MHz QPSK Lowest
Channel / 1RB99 and 1RB0LTE Band 48C / 20MHz+10MHz QPSK Middle
Channel / 1RB99 and 1RB0

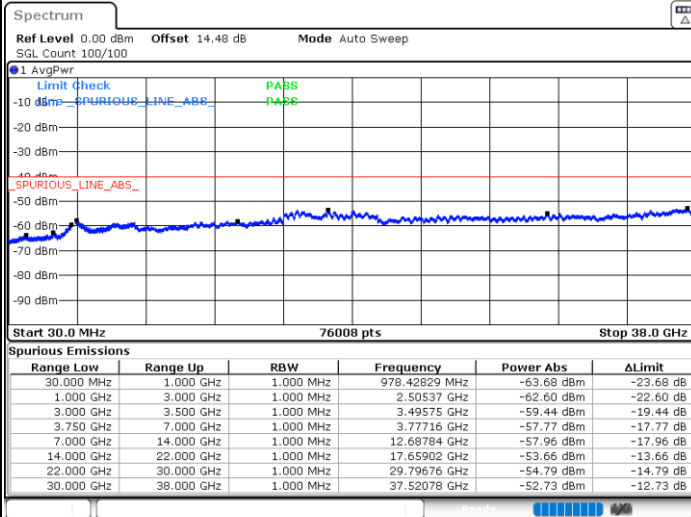
Date: 31.OCT.2023 12:55:28



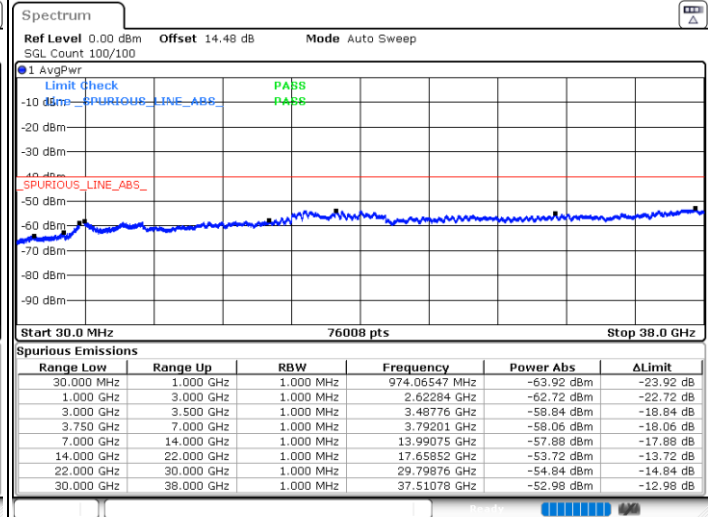
Date: 31.OCT.2023 12:52:29

LTE Band 48C / 20MHz+10MHz QPSK Highest
Channel / 1RB99 and 1RB0

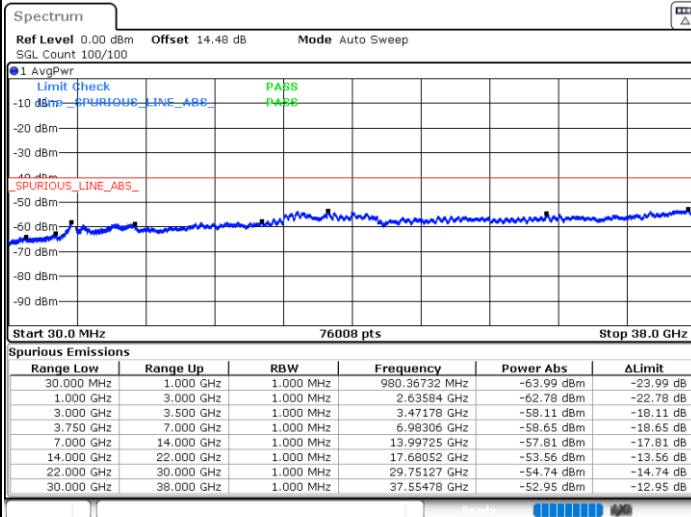
Date: 31.OCT.2023 12:58:36

LTE Band 48C / 20MHz+15MHz QPSK Lowest
Channel / 1RB99 and 1RB0LTE Band 48C / 20MHz+15MHz QPSK Middle
Channel / 1RB99 and 1RB0

Date: 31.OCT.2023 12:36:30



Date: 31.OCT.2023 12:42:33

LTE Band 48C / 20MHz+15MHz QPSK Highest
Channel / 1RB99 and 1RB0

Date: 31.OCT.2023 12:39:28

Frequency Stability

Test Conditions		LTE Band 48C (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20+20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0033	PASS
40	Normal Voltage	0.0028	
30	Normal Voltage	0.0037	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0012	
0	Normal Voltage	0.0035	
-10	Normal Voltage	0.0024	
-20	Normal Voltage	0.0029	
-30	Normal Voltage	0.0037	
20	Maximum Voltage	0.0059	
20	Normal Voltage	0.0000	
20	Minimum Voltage	0.0087	

Note:

1. Normal Voltage =52 V. ; Minimum Voltage =48 V. ; Maximum Voltage =56 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Carl Ni	Temperature :	23~25°C
		Relative Humidity :	41~42%

Note: Pre-scanned harmonic for the different antennas, we choose the worst antenna mode to perform final test and record in the report.

LTE Band 48 / 20MHz / QPSK / Ant.2								
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	7236	-41.61	-40	-1.61	-53.07	2.84	14.30	H
	10848	-60.38	-40	-20.38	-70.32	3.49	13.43	H
	14460	-59.86	-40	-19.86	-70.10	3.85	14.09	H
	7236	-49.32	-40	-9.32	-60.78	2.84	14.30	V
	10848	-61.45	-40	-21.45	-71.39	3.49	13.43	V
	14460	-60.06	-40	-20.06	-70.30	3.85	14.09	V

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

LTE Band 48_UL MIMO / 20MHz / QPSK / Ant.(0+2)								
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	7236	-60.82	-40	-20.82	-72.28	2.84	14.30	H
	10848	-61.14	-40	-21.14	-71.08	3.49	13.43	H
	14460	-59.15	-40	-19.15	-69.39	3.85	14.09	H
	7236	-60.33	-40	-20.33	-71.79	2.84	14.30	V
	10848	-60.66	-40	-20.66	-70.60	3.49	13.43	V
	14460	-58.82	-40	-18.82	-69.06	3.85	14.09	V

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

LTE Band 48B_CA / 10MHz+10MHz / QPSK / Ant.2								
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 1RB0,QPSK	7272	-54.17	-40	-14.17	-65.63	2.84	14.30	H
	10920	-56.18	-40	-16.18	-66.12	3.49	13.43	H
	14556	-58.04	-40	-18.04	-68.28	3.85	14.09	H
	7272	-61.50	-40	-21.50	-72.96	2.84	14.30	V
	10920	-56.12	-40	-16.12	-66.06	3.49	13.43	V
	14556	-57.95	-40	-17.95	-68.19	3.85	14.09	V
Middle 1RBMAX,QPSK	7272	-54.17	-40	-14.17	-65.63	2.84	14.30	H
	10920	-56.18	-40	-16.18	-66.12	3.49	13.43	H
	14556	-58.04	-40	-18.04	-68.28	3.85	14.09	H
	7272	-61.50	-40	-21.50	-72.96	2.84	14.30	V
	10920	-56.12	-40	-16.12	-66.06	3.49	13.43	V
	14556	-57.95	-40	-17.95	-68.19	3.85	14.09	V

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

LTE Band 48C_CA / 20MHz+20MHz / QPSK / Ant.2								
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 1RB0,QPSK	7212	-54.39	-40	-14.39	-65.85	2.84	14.30	H
	10824	-60.88	-40	-20.88	-70.82	3.49	13.43	H
	14424	-60.06	-40	-20.06	-70.30	3.85	14.09	H
	7212	-52.60	-40	-12.60	-64.06	2.84	14.30	V
	10824	-61.45	-40	-21.45	-71.39	3.49	13.43	V
	14424	-60.17	-40	-20.17	-70.41	3.85	14.09	V
Middle 1RBMAX,QPSK	7272	-59.80	-40	-19.80	-71.26	2.84	14.30	H
	10872	-60.79	-40	-20.79	-70.73	3.49	13.43	H
	14508	-60.13	-40	-20.13	-70.37	3.85	14.09	H
	7272	-61.05	-40	-21.05	-72.51	2.84	14.30	V
	10872	-60.91	-40	-20.91	-70.85	3.49	13.43	V
	14508	-60.51	-40	-20.51	-70.75	3.85	14.09	V

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

ULCA_48A-48A / 20MHz+20MHz / Ant.2								
Channel	Frequency (MHz)	EIRP/ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
LTE B48 BW 20MHz Middle 1RB0,QPSK	7116	-59.25	-40	-19.25	-70.71	2.84	14.30	H
	10653	-61.92	-40	-21.92	-71.86	3.49	13.43	H
	14204	-59.79	-40	-19.79	-70.03	3.85	14.09	H
	7116	-58.45	-40	-18.45	-69.91	2.84	14.30	V
	10656	-62.34	-40	-22.34	-72.28	3.49	13.43	V
	14208	-59.94	-40	-19.94	-70.18	3.85	14.09	V
LTE B48 BW 20MHz Middle 1RBMAX,QPSK	7398	-63.40	-40	-23.40	-74.86	2.84	14.30	H
	11097	-61.88	-40	-21.88	-71.82	3.49	13.43	H
	14796	-60.46	-40	-20.46	-70.70	3.85	14.09	H
	7392	-63.29	-40	-23.29	-74.75	2.84	14.30	V
	11097	-61.76	-40	-21.76	-71.70	3.49	13.43	V
	14796	-60.20	-40	-20.20	-70.44	3.85	14.09	V

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