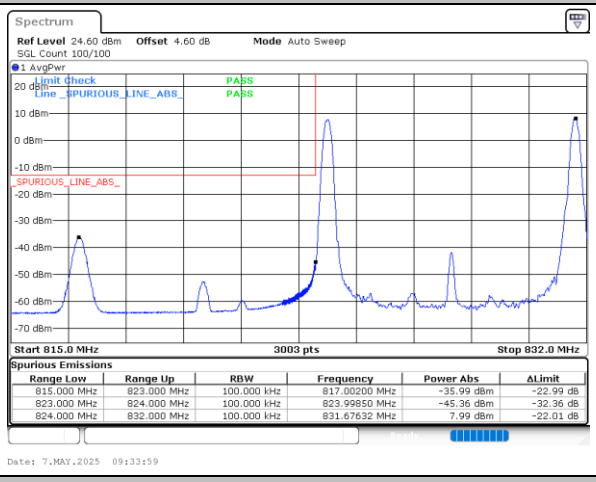
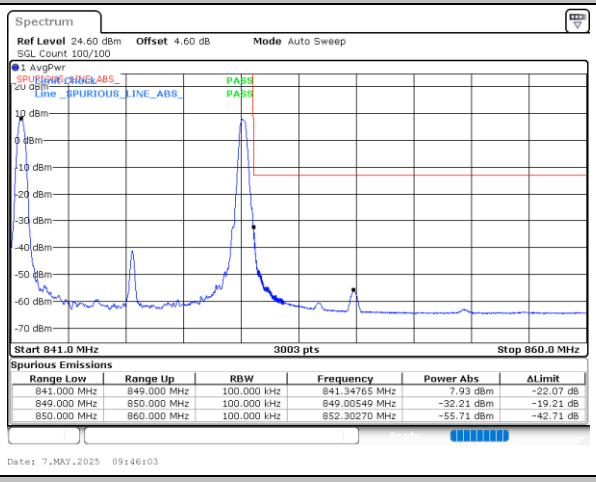
LTE Band 5B / 3MHz+5MHz

256QAM

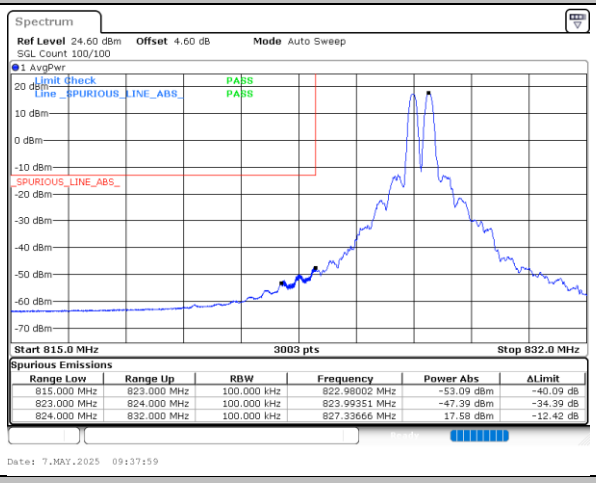
Lowest Band Edge / 1RB0 and 1RB24



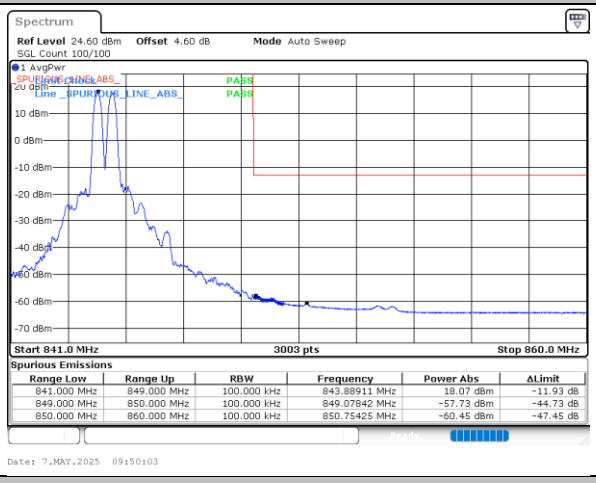
Highest Band Edge / 1RB0 and 1RB24



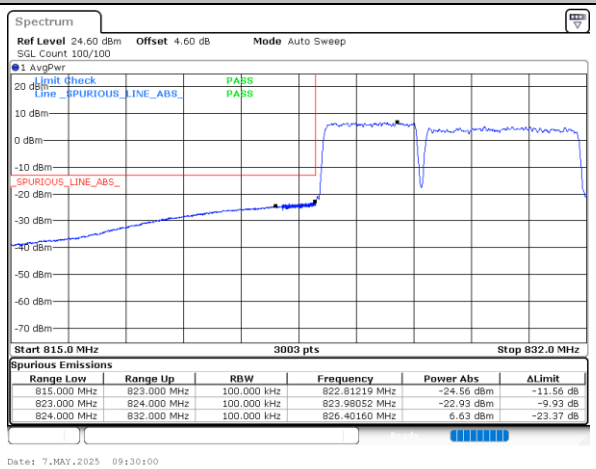
Lowest Band Edge / 1RB14 and 1RB0



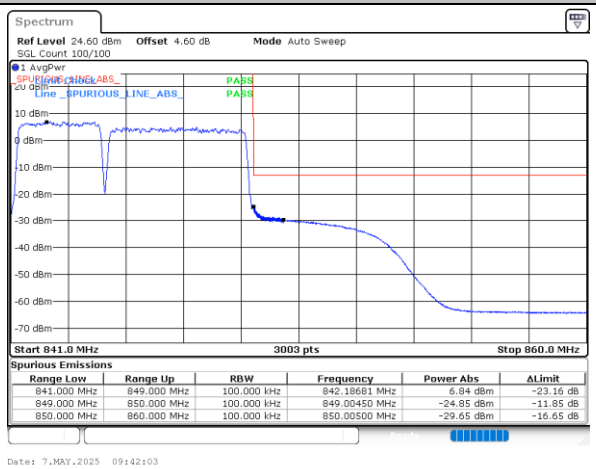
Highest Band Edge / 1RB14 and 1RB0

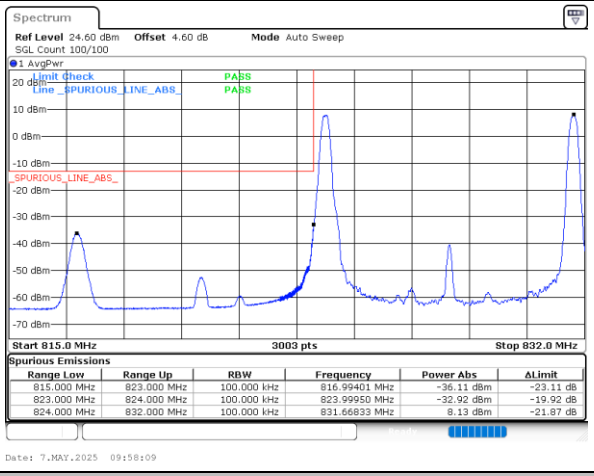
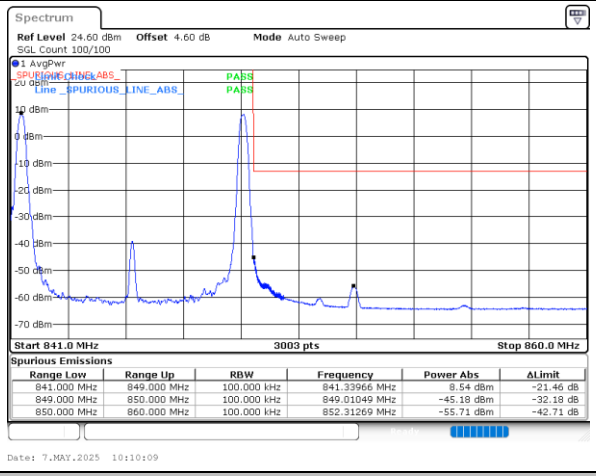
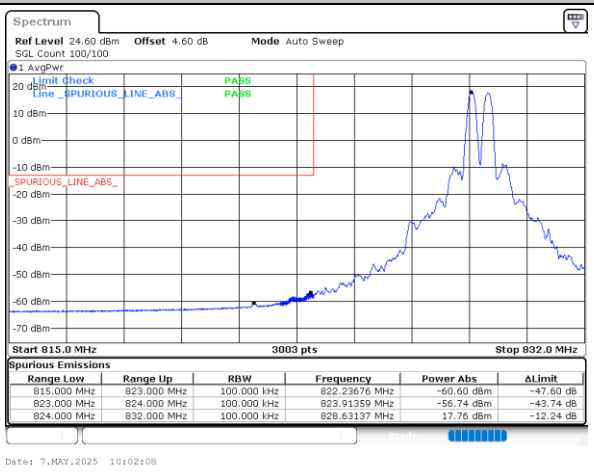
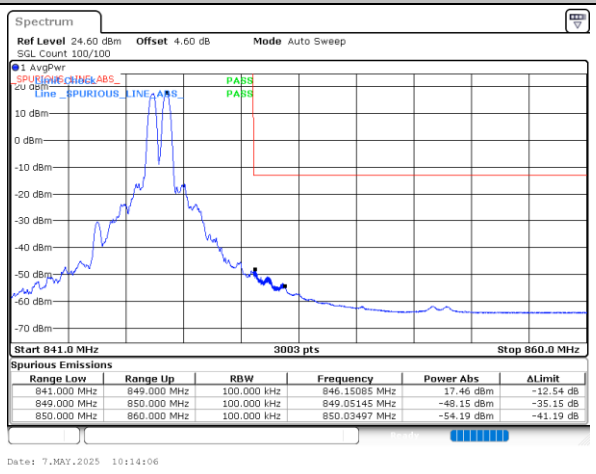
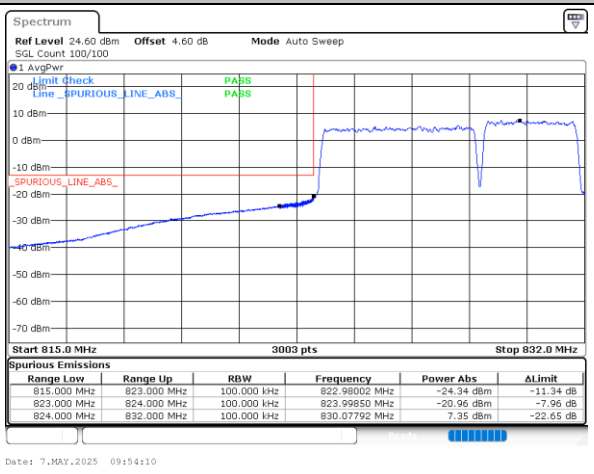
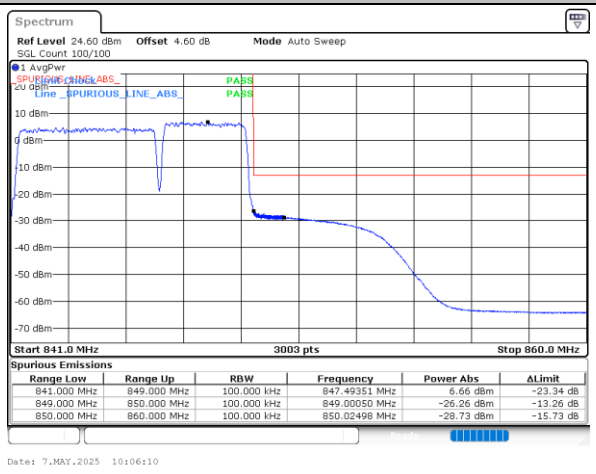


Lowest Band Edge / Full RB



Highest Band Edge / Full RB

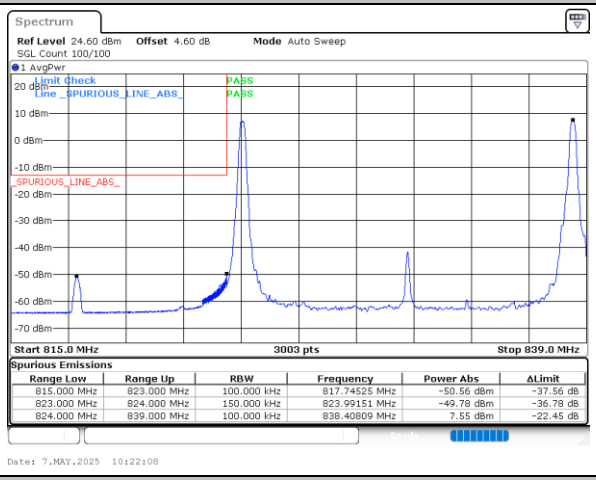


LTE Band 5B / 5MHz+3MHz	
256QAM	
Lowest Band Edge / 1RB0 and 1RB14	Highest Band Edge / 1RB0 and 1RB14
	
Lowest Band Edge / 1RB24 and 1RB0	Highest Band Edge / 1RB24 and 1RB0
	
Lowest Band Edge / Full RB	Highest Band Edge / Full RB
	

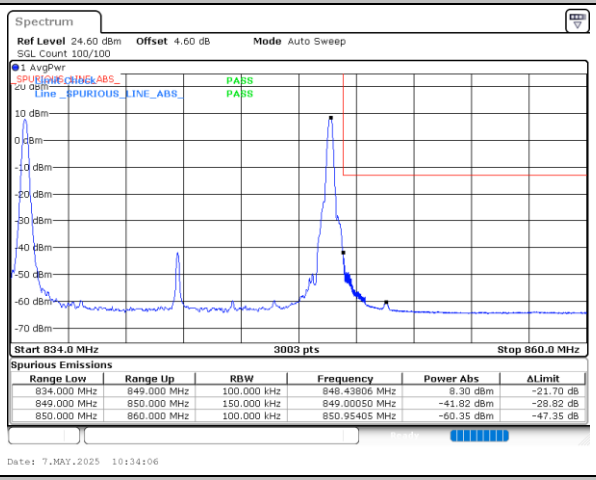
LTE Band 5B / 5MHz+10MHz

256QAM

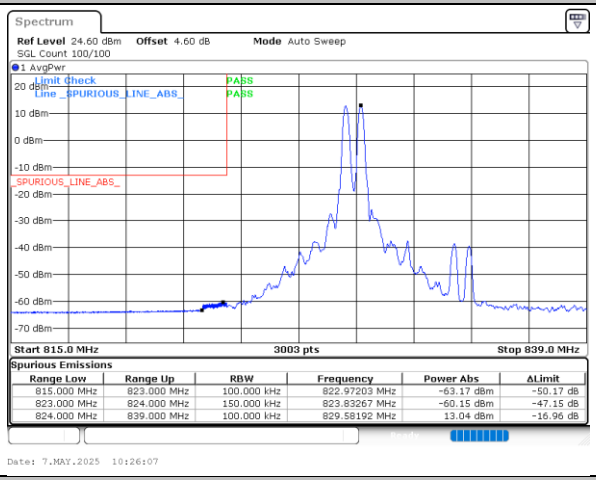
Lowest Band Edge / 1RB0 and 1RB49



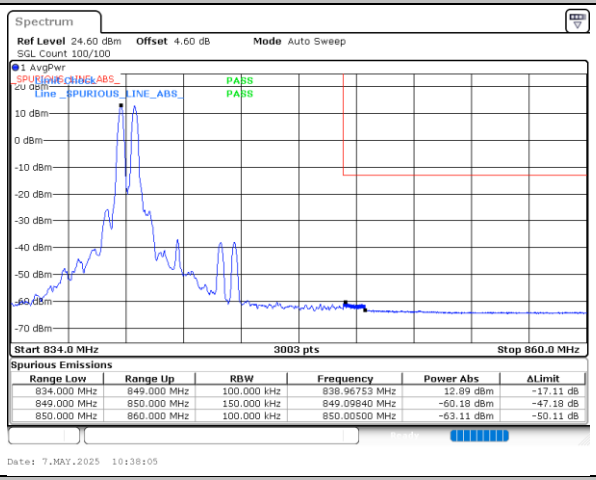
Highest Band Edge / 1RB0 and 1RB49



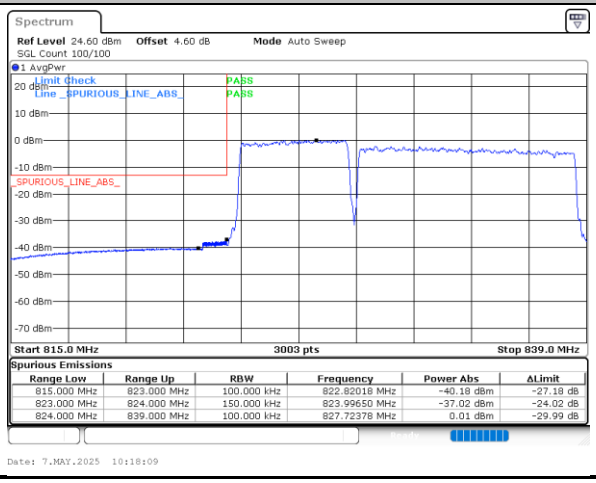
Lowest Band Edge / 1RB24 and 1RB0



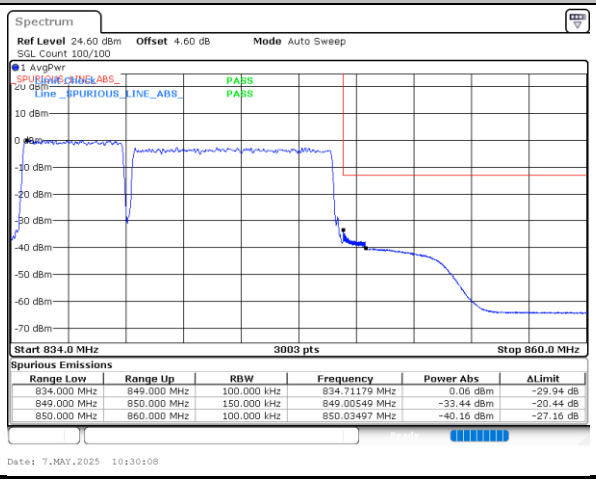
Highest Band Edge / 1RB24 and 1RB0



Lowest Band Edge / Full RB



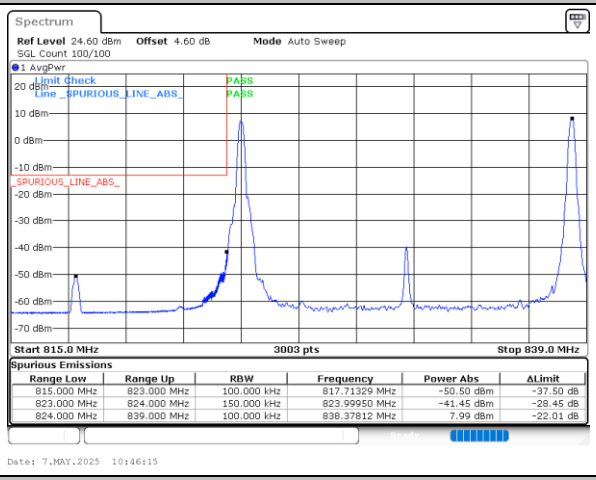
Highest Band Edge / Full RB



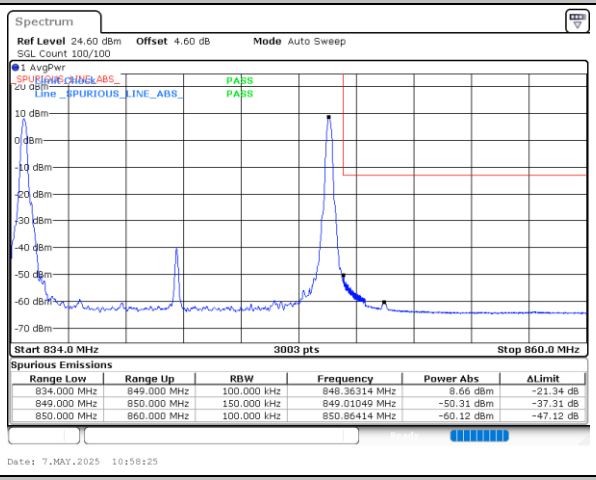
LTE Band 5B / 10MHz+5MHz

256QAM

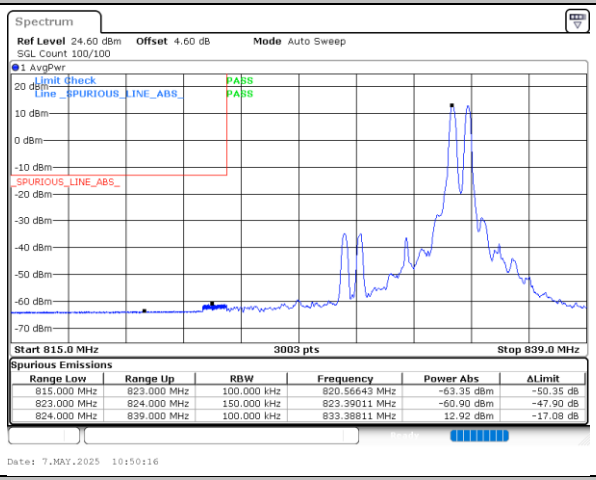
Lowest Band Edge / 1RB0 and 1RB24



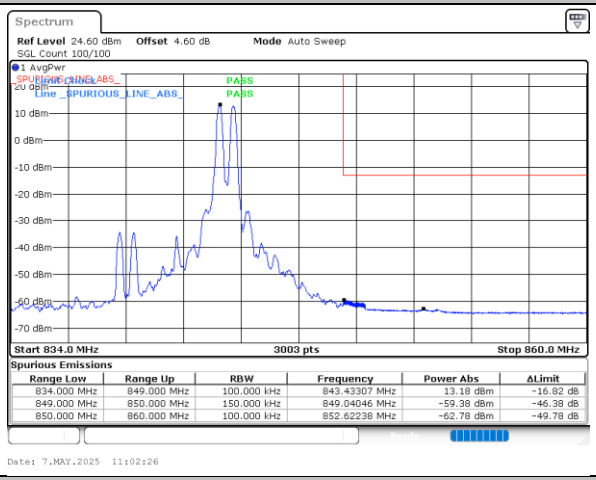
Highest Band Edge / 1RB0 and 1RB24



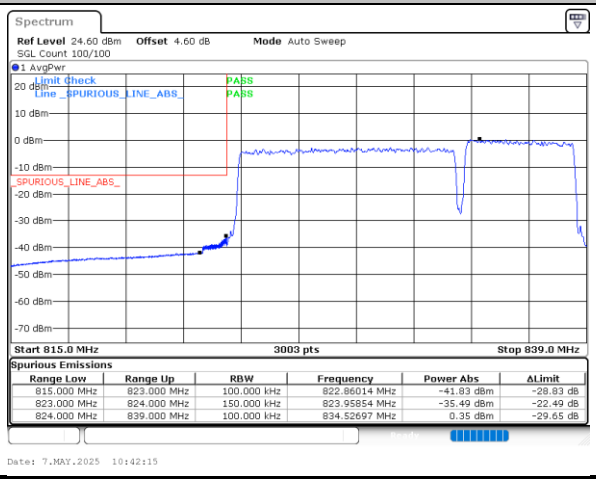
Lowest Band Edge / 1RB49 and 1RB0



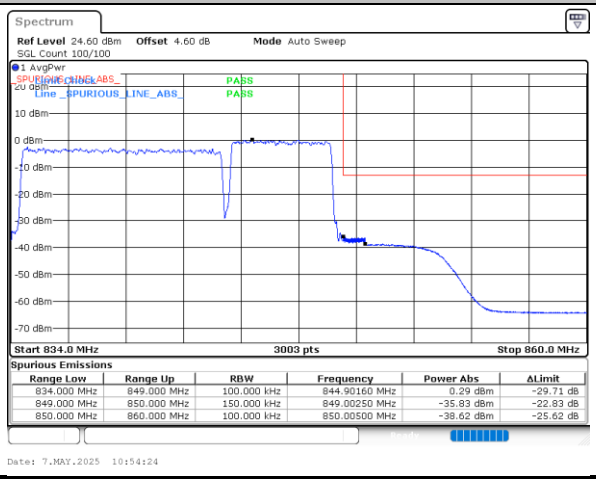
Highest Band Edge / 1RB49 and 1RB0



Lowest Band Edge / Full RB



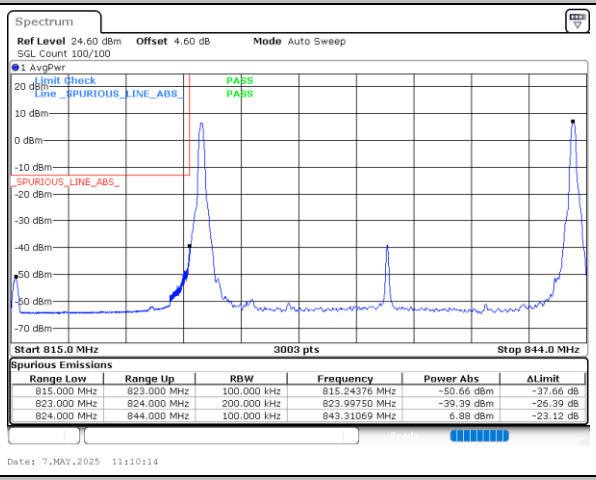
Highest Band Edge / Full RB



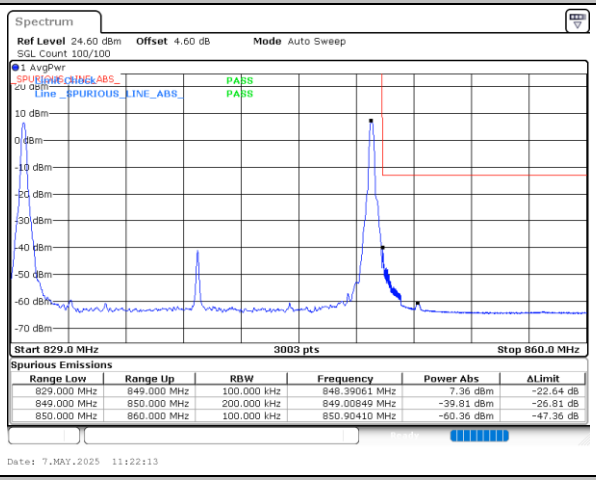
LTE Band 5B / 10MHz+10MHz

256QAM

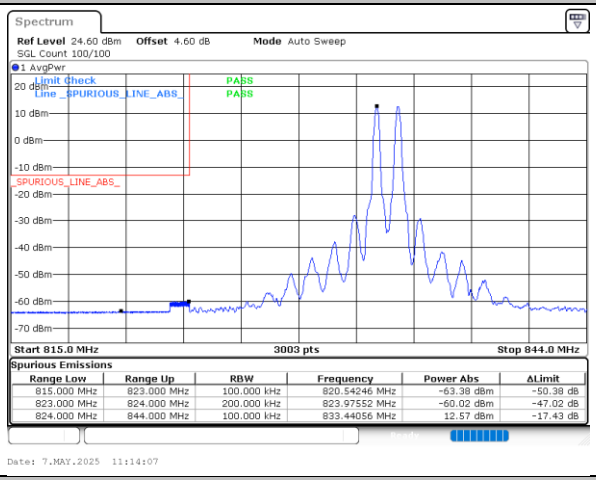
Lowest Band Edge / 1RB0 and 1RB49



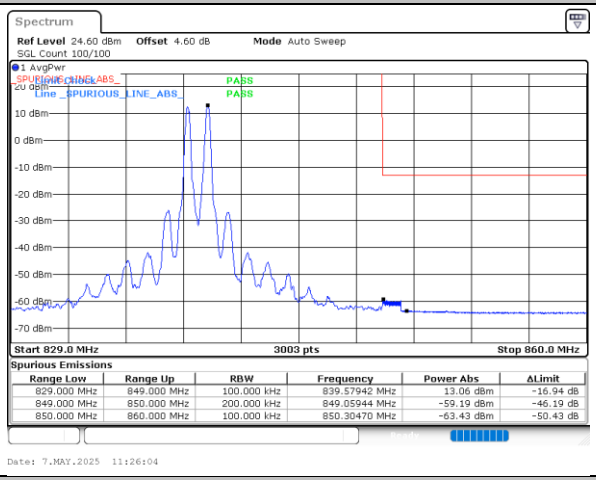
Highest Band Edge / 1RB0 and 1RB49



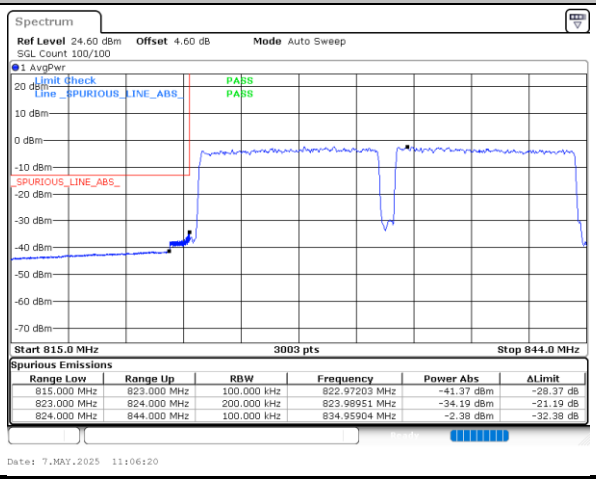
Lowest Band Edge / 1RB49 and 1RB0



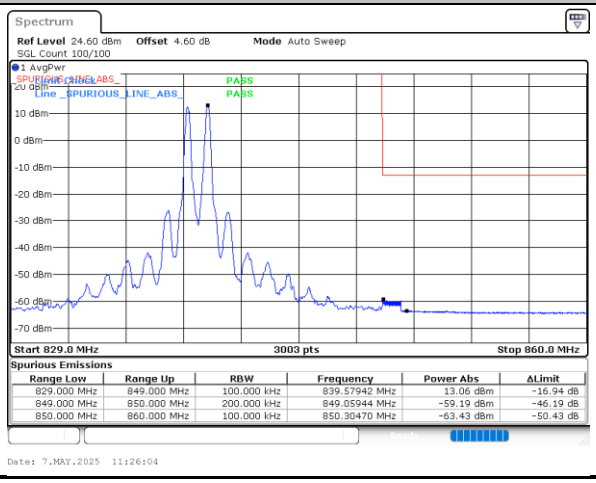
Highest Band Edge / 1RB49 and 1RB0



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

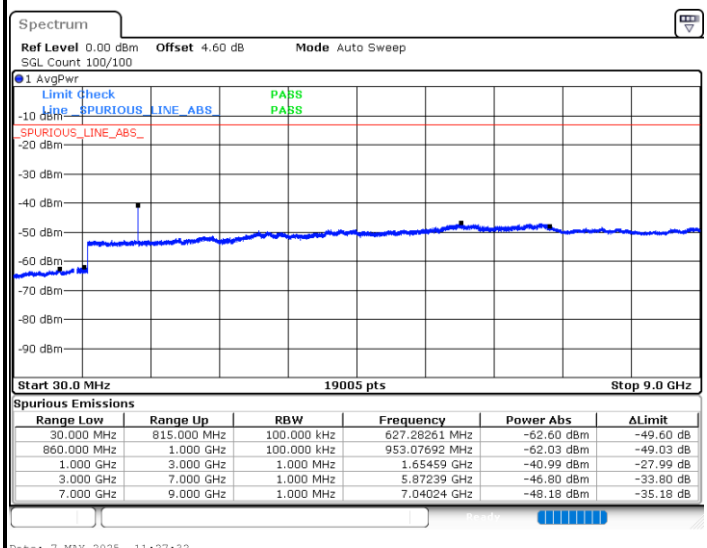


Conducted Spurious Emission

LTE Band 5B / 3MHz+5MHz

QPSK

Lowest Channel / 1RB14 and 1RB0

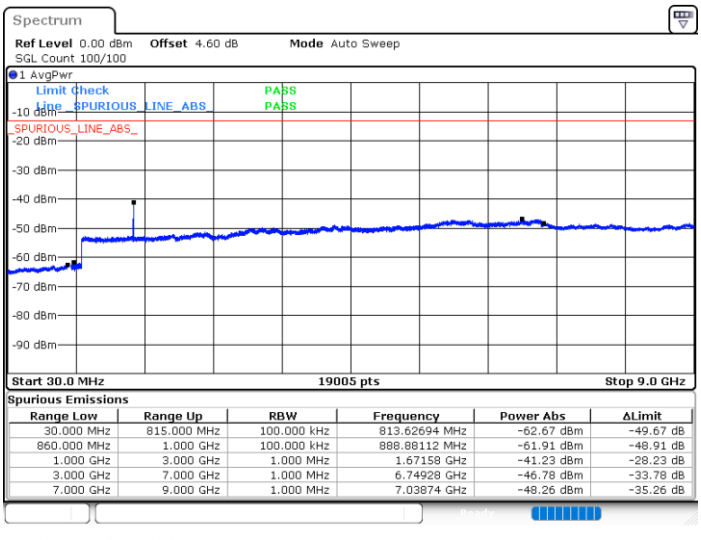


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	627.28261 MHz	-62.60 dBm	-49.60 dB
860.000 MHz	1.000 GHz	100.000 kHz	953.07692 MHz	-62.03 dBm	-49.03 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.65459 GHz	-40.99 dBm	-27.99 dB
3.000 GHz	7.000 GHz	1.000 MHz	5.87239 GHz	-46.80 dBm	-33.80 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.04024 GHz	-48.18 dBm	-35.18 dB

Date: 7.MAY.2025 11:27:32

Middle Channel / 1RB14 and 1RB0

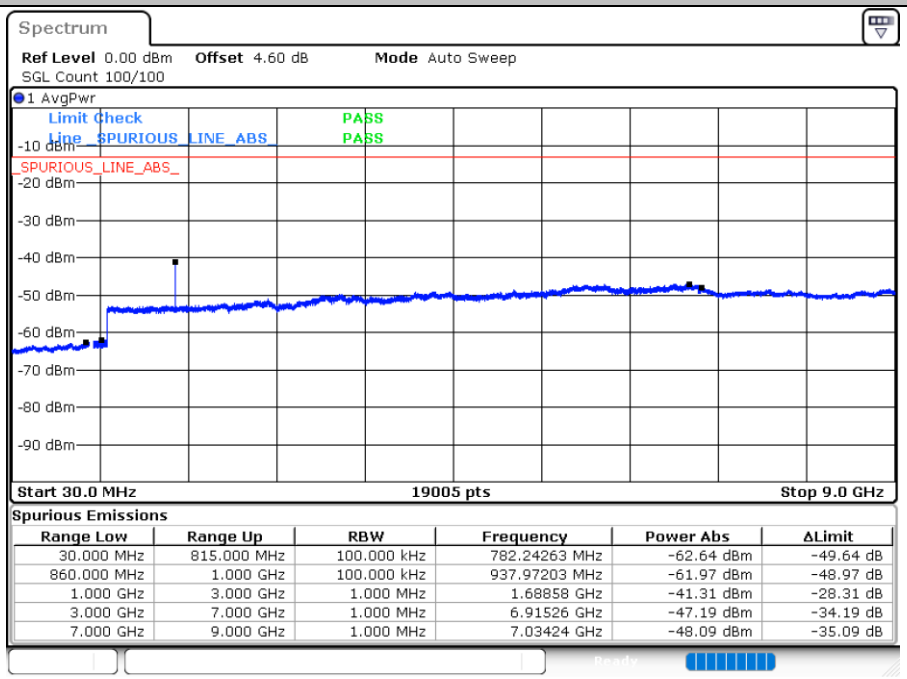


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	813.62694 MHz	-62.67 dBm	-49.67 dB
860.000 MHz	1.000 GHz	100.000 kHz	888.88112 MHz	-61.91 dBm	-48.91 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.67158 GHz	-41.23 dBm	-28.23 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.74928 GHz	-46.78 dBm	-33.78 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.03874 GHz	-48.26 dBm	-35.26 dB

Date: 7.MAY.2025 11:28:56

Highest Channel / 1RB14 and 1RB0



Spurious Emissions

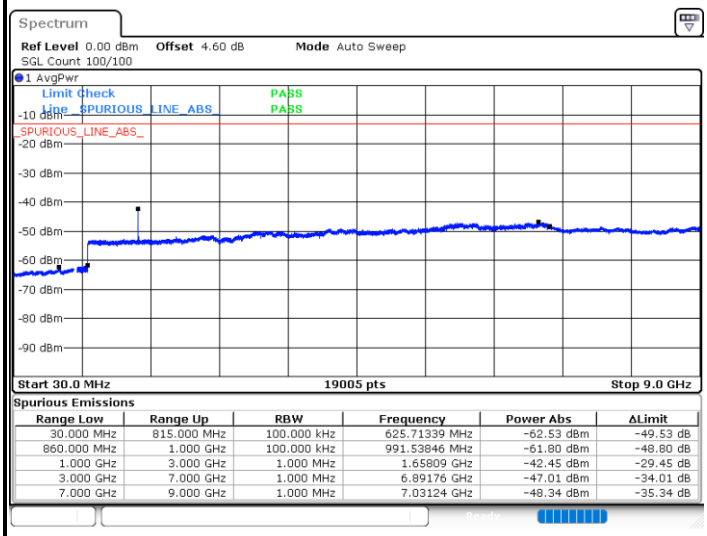
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	782.24263 MHz	-62.64 dBm	-49.64 dB
860.000 MHz	1.000 GHz	100.000 kHz	937.97203 MHz	-61.97 dBm	-48.97 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.68858 GHz	-41.31 dBm	-28.31 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.91526 GHz	-47.19 dBm	-34.19 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.03424 GHz	-48.09 dBm	-35.09 dB

Date: 7.MAY.2025 11:32:20

LTE Band 5B / 5MHz+3MHz

QPSK

Lowest Channel / 1RB24 and 1RB0

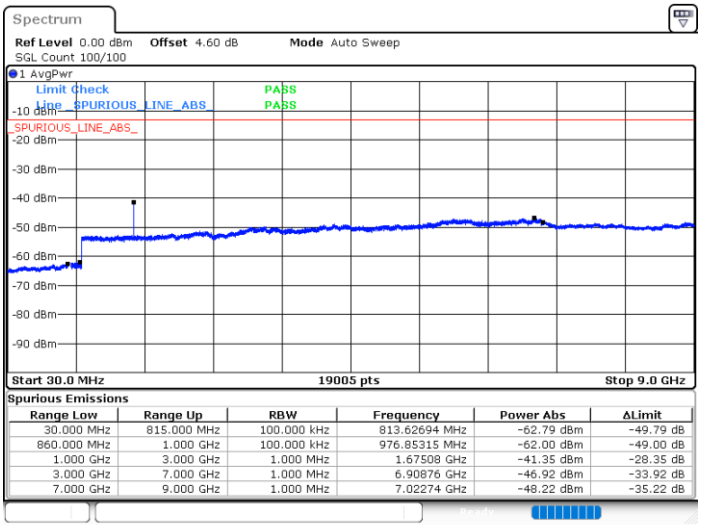


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	625.71339 MHz	-62.53 dBm	-49.53 dB
860.000 MHz	1.000 GHz	100.000 kHz	991.53846 MHz	-61.80 dBm	-48.80 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.65809 GHz	-42.45 dBm	-29.45 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.89176 GHz	-47.01 dBm	-34.01 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.03124 GHz	-48.34 dBm	-35.34 dB

Date: 7.MAY.2025 11:33:48

Middle Channel / 1RB24 and 1RB0

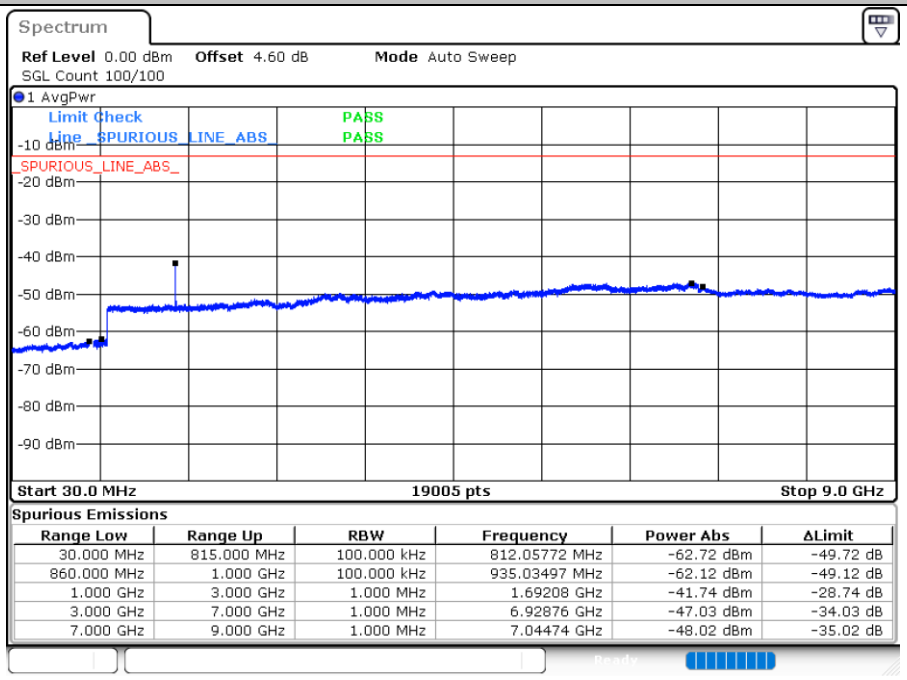


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	813.62694 MHz	-62.79 dBm	-49.79 dB
860.000 MHz	1.000 GHz	100.000 kHz	976.85315 MHz	-62.00 dBm	-49.00 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.67508 GHz	-41.35 dBm	-28.35 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.90876 GHz	-46.92 dBm	-33.92 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.02274 GHz	-48.22 dBm	-35.22 dB

Date: 7.MAY.2025 11:35:18

Highest Channel / 1RB24 and 1RB0



Spurious Emissions

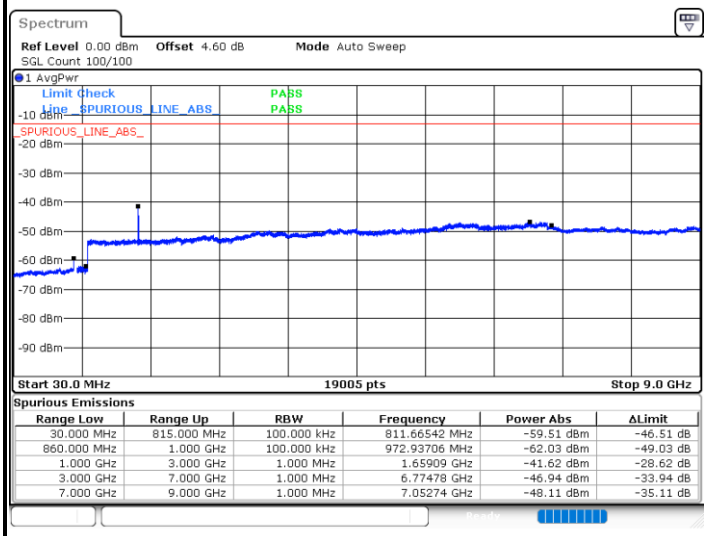
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	812.05772 MHz	-62.72 dBm	-49.72 dB
860.000 MHz	1.000 GHz	100.000 kHz	935.03497 MHz	-62.12 dBm	-49.12 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.69208 GHz	-41.74 dBm	-28.74 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.92876 GHz	-47.03 dBm	-34.03 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.04474 GHz	-48.02 dBm	-35.02 dB

Date: 7.MAY.2025 11:38:43

LTE Band 5B / 5MHz+10MHz

QPSK

Lowest Channel / 1RB24 and 1RB0

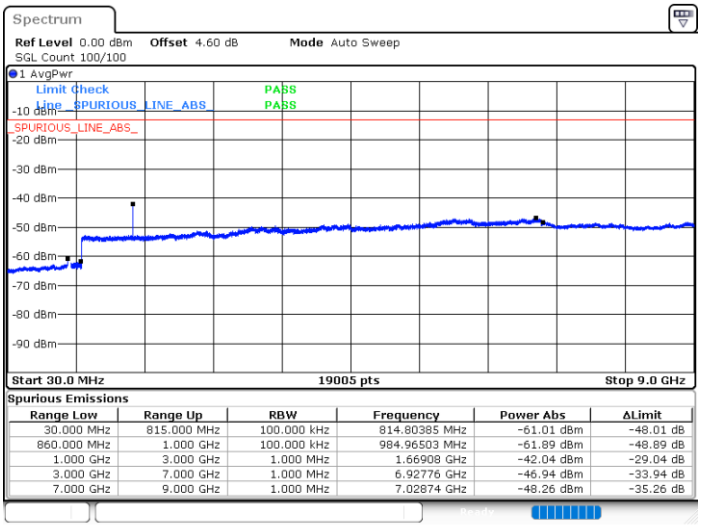


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	811.66542 MHz	-59.51 dBm	-46.51 dB
860.000 MHz	1.000 GHz	100.000 kHz	972.93706 MHz	-62.03 dBm	-49.03 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.65909 GHz	-41.62 dBm	-28.62 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.77478 GHz	-46.94 dBm	-33.94 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.05274 GHz	-48.11 dBm	-35.11 dB

Date: 7.MAY.2025 11:40:08

Middle Channel / 1RB24 and 1RB0

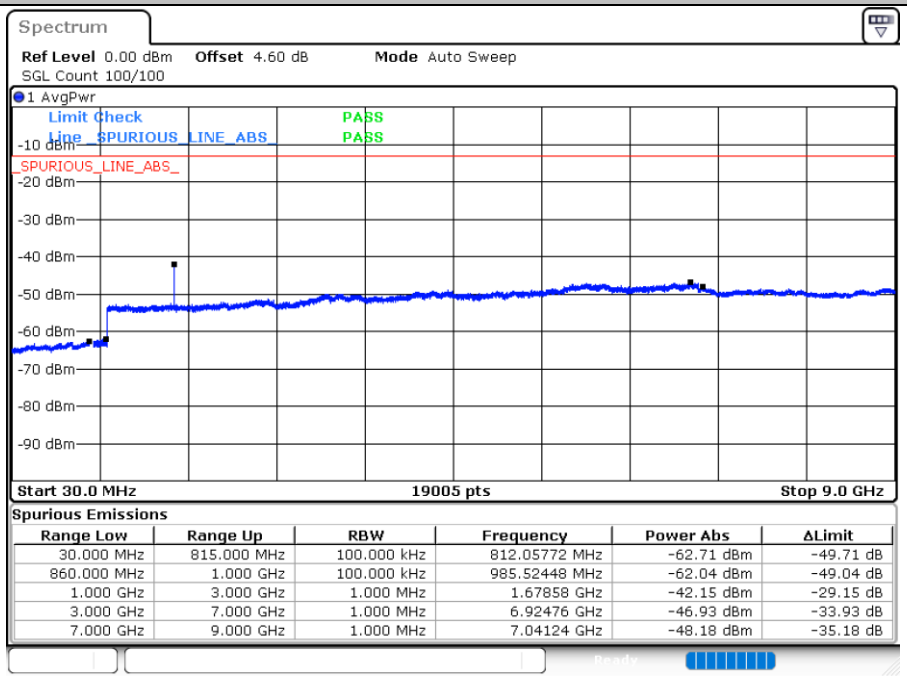


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	814.80385 MHz	-61.01 dBm	-48.01 dB
860.000 MHz	1.000 GHz	100.000 kHz	984.96503 MHz	-61.89 dBm	-48.89 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.66908 GHz	-42.04 dBm	-29.04 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.92776 GHz	-46.94 dBm	-33.94 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.02874 GHz	-48.26 dBm	-35.26 dB

Date: 7.MAY.2025 11:41:38

Highest Channel / 1RB24 and 1RB0



Spurious Emissions

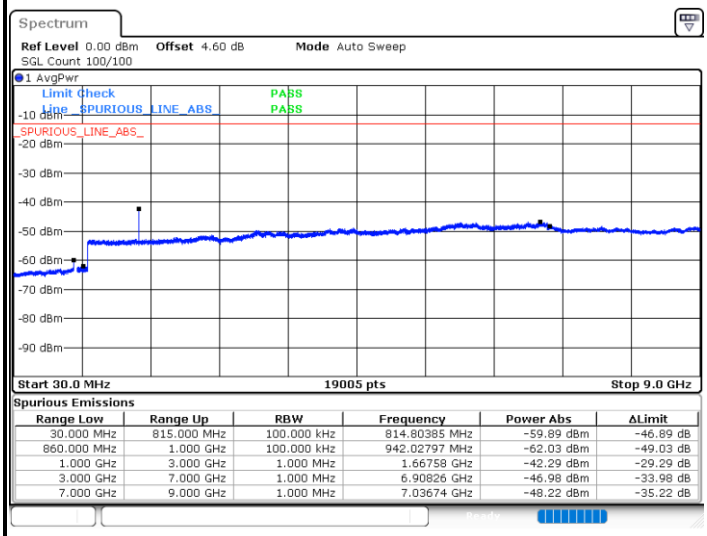
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	812.05772 MHz	-62.71 dBm	-49.71 dB
860.000 MHz	1.000 GHz	100.000 kHz	985.52448 MHz	-62.04 dBm	-49.04 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.67858 GHz	-42.15 dBm	-29.15 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.92476 GHz	-46.93 dBm	-33.93 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.04124 GHz	-48.18 dBm	-35.18 dB

Date: 7.MAY.2025 11:45:03

LTE Band 5B / 10MHz+5MHz

QPSK

Lowest Channel / 1RB49 and 1RB0

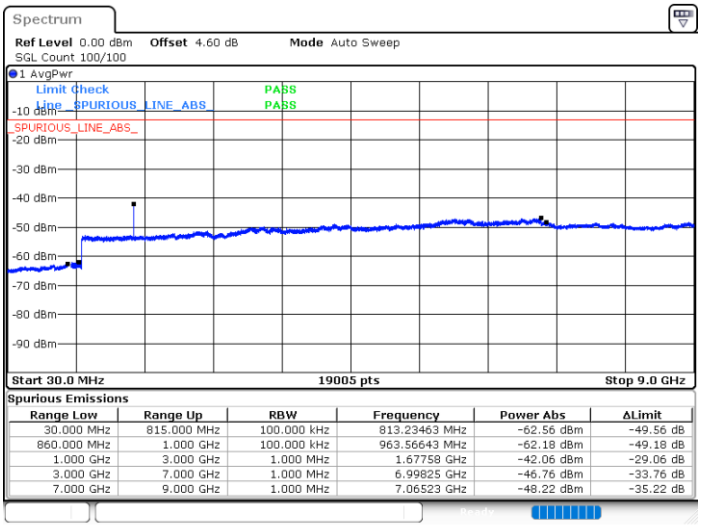


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	814.80385 MHz	-59.89 dBm	-46.89 dB
860.000 MHz	1.000 GHz	100.000 kHz	942.02797 MHz	-62.03 dBm	-49.03 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.66758 GHz	-42.29 dBm	-29.29 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.90826 GHz	-46.98 dBm	-33.98 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.03674 GHz	-48.22 dBm	-35.22 dB

Date: 7.MAY.2025 11:46:31

Middle Channel / 1RB49 and 1RB0



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	813.23463 MHz	-62.56 dBm	-49.56 dB
860.000 MHz	1.000 GHz	100.000 kHz	963.56643 MHz	-62.18 dBm	-49.18 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.67758 GHz	-42.06 dBm	-29.06 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99825 GHz	-46.76 dBm	-33.76 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.06523 GHz	-48.22 dBm	-35.22 dB

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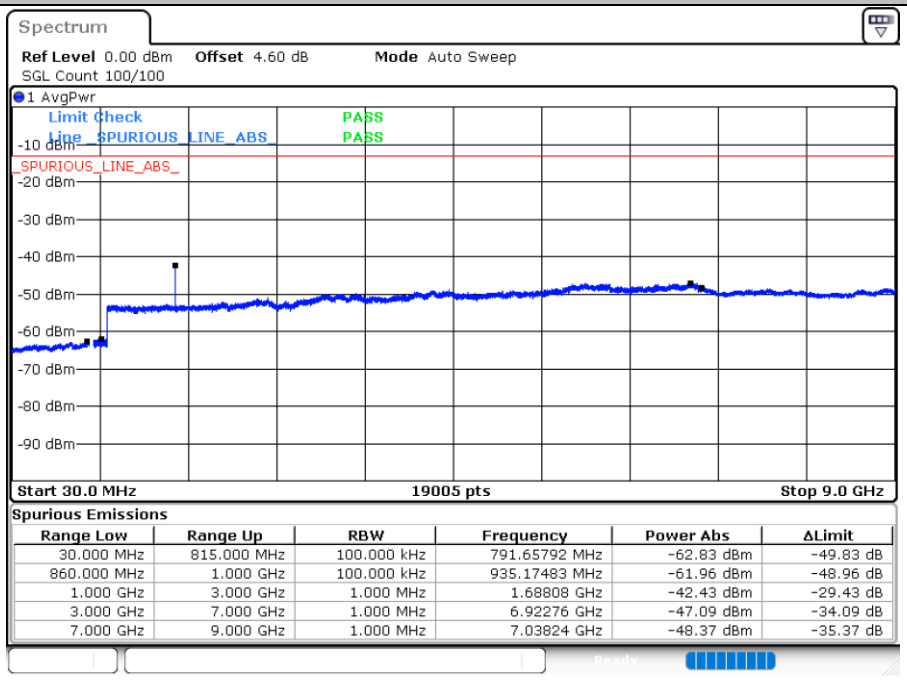
Highest Channel / 1RB49 and 1RB0



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	791.65792 MHz	-62.83 dBm	-49.83 dB
860.000 MHz	1.000 GHz	100.000 kHz	935.17483 MHz	-61.96 dBm	-48.96 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.68808 GHz	-42.43 dBm	-29.43 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.92276 GHz	-47.09 dBm	-34.09 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.03824 GHz	-48.37 dBm	-35.37 dB

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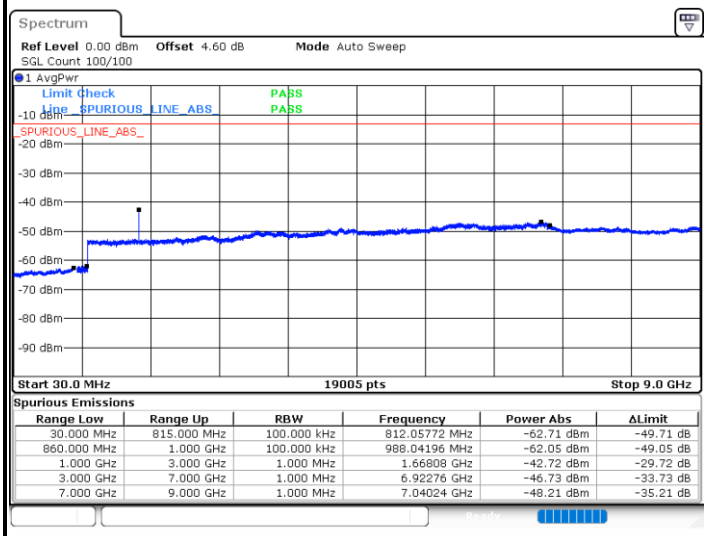
LTE Band 5B / 10MHz+10MHz

QPSK

Lowest Channel / 1RB49 and 1RB0



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	812.05772 MHz	-62.71 dBm	-49.71 dB
860.000 MHz	1.000 GHz	100.000 kHz	988.04196 MHz	-62.05 dBm	-49.05 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.66808 GHz	-42.72 dBm	-29.72 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.92276 GHz	-46.73 dBm	-33.73 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.04024 GHz	-48.21 dBm	-35.21 dB

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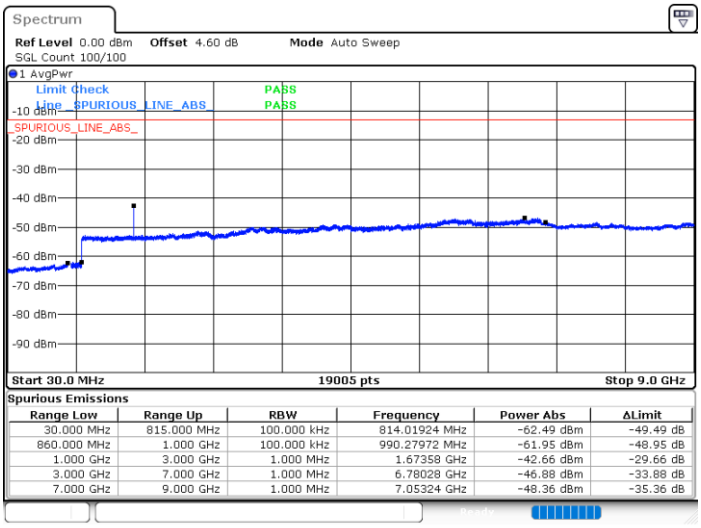
Middle Channel / 1RB49 and 1RB0



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	814.01924 MHz	-62.49 dBm	-49.49 dB
860.000 MHz	1.000 GHz	100.000 kHz	990.27972 MHz	-61.95 dBm	-48.95 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.67358 GHz	-42.66 dBm	-29.66 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.78028 GHz	-46.88 dBm	-33.88 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.05324 GHz	-48.36 dBm	-35.36 dB

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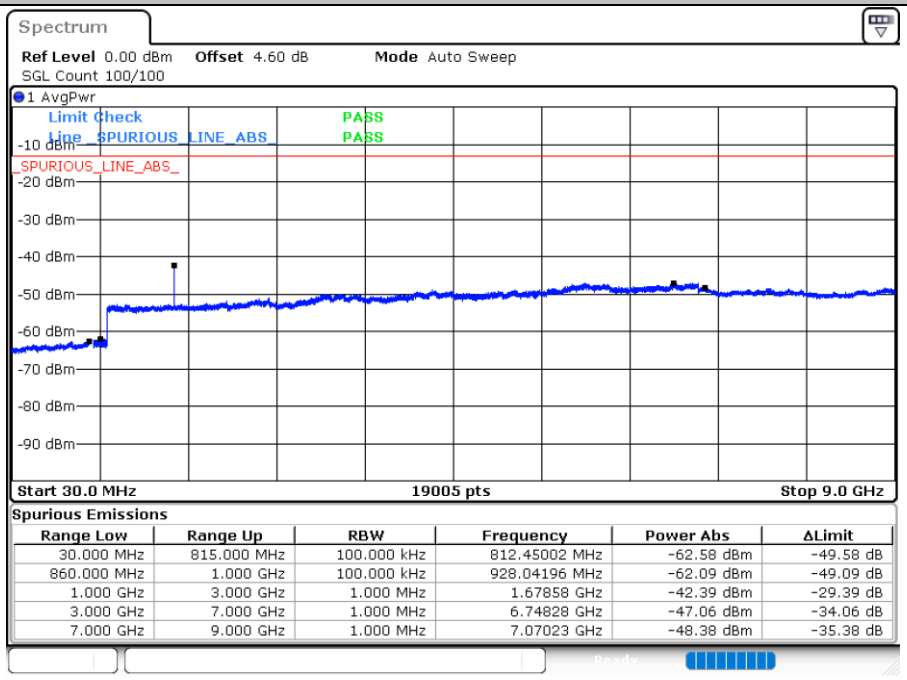
Highest Channel / 1RB49 and 1RB0



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	815.000 MHz	100.000 kHz	812.45002 MHz	-62.58 dBm	-49.58 dB
860.000 MHz	1.000 GHz	100.000 kHz	928.04196 MHz	-62.09 dBm	-49.09 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.67858 GHz	-42.39 dBm	-29.39 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.74828 GHz	-47.06 dBm	-34.06 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.07023 GHz	-48.38 dBm	-35.38 dB

Date: 7.MAY.2025 11:58:59

Frequency Stability

Test Conditions		LTE Band 5B (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz+10MHZ	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0025	PASS
40	Normal Voltage	0.0038	
30	Normal Voltage	0.0015	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0024	
0	Normal Voltage	0.019	
-10	Normal Voltage	0.0028	
-20	Normal Voltage	0.0035	
-30	Normal Voltage	0.0015	
20	Maximum Voltage	0.0007	
20	Normal Voltage	0.0015	
20	Battery End Point	0.0027	

Note:

1. Normal Voltage =3.91V. ; Battery End Point (BEP) =3.5V. ; Maximum Voltage =4.5V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Jake	Temperature :	22~25℃
		Relative Humidity :	50~53%

LTE Band 12 / 10MHz / QPSK								
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)
Middle	1408	-44.55	-13	-31.55	-51.52	1.58	10.70	H
	2112	-54.77	-13	-41.77	-63.02	2.102	12.50	H
	2808	-58.16	-13	-45.16	-67.05	2.856	13.90	H
	1408	-54.49	-13	-41.49	-61.46	1.58	10.70	V
	2112	-54.03	-13	-41.03	-62.28	2.10	12.50	V
	2808	-57.31	-13	-44.31	-66.20	2.86	13.90	V

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

LTE Band 26 / 15MHz / QPSK								
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)
Middle	1656	-51.03	-13	-38.03	-58.00	1.58	10.70	H
	2488	-53.58	-13	-40.58	-61.83	2.102	12.50	H
	3320	-58.63	-13	-45.63	-67.52	2.856	13.90	H
	1656	-52.45	-13	-39.45	-59.42	1.58	10.70	V
	2488	-49.65	-13	-36.65	-57.90	2.10	12.50	V
	3320	-58.57	-13	-45.57	-67.46	2.86	13.90	V

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

LTE Band 71 / 20MHz / QPSK								
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)
Middle	1344	-55.44	-13	-42.44	-66.18	2.604	13.34	H
	2016	-61.29	-13	-48.29	-71.80	3.011	13.52	H
	2688	-58.24	-13	-45.24	-68.44	3.271	13.47	H
	1344	-59.67	-13	-46.67	-70.41	2.604	13.34	V
	2016	-60.55	-13	-47.55	-71.06	3.011	13.52	V
	2688	-57.86	-13	-44.86	-68.06	3.271	13.47	V

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

LTE Band 5B / 10MHz + 10MHz / QPSK-PCC								
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)
Middle	1656	-65.97	-13	-52.97	-72.94	1.58	10.70	H
	2472	-61.84	-13	-48.84	-70.09	2.102	12.50	H
	3304	-60.89	-13	-47.89	-69.78	2.856	13.90	H
	1656	-65.14	-13	-52.14	-72.11	1.58	10.70	V
	2472	-52.19	-13	-39.19	-60.44	2.10	12.50	V
	3304	-60.77	-13	-47.77	-69.66	2.86	13.90	V

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

LTE Band 5B / 10MHz + 10MHz / QPSK-SCC								
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)
Middle	1672	-65.46	-13	-52.46	-72.43	1.58	10.70	H
	2512	-60.56	-13	-47.56	-68.81	2.102	12.50	H
	3352	-60.38	-13	-47.38	-69.27	2.856	13.90	H
	1672	-64.37	-13	-51.37	-71.34	1.58	10.70	V
	2512	-60.25	-13	-47.25	-68.50	2.10	12.50	V
	3352	-60.47	-13	-47.47	-69.36	2.86	13.90	V

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