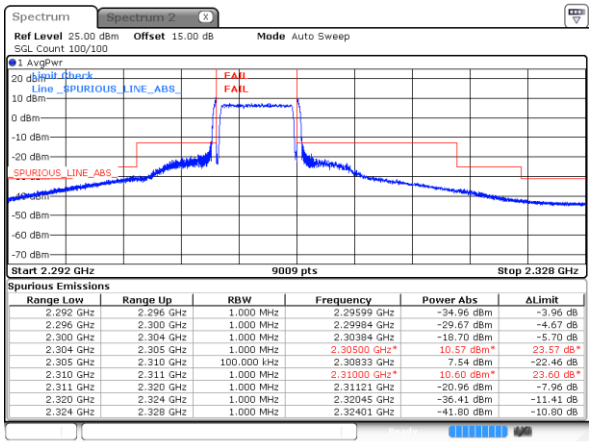
LTE Band 30 / 5MHz / 16QAM

Lowest Band Edge / Full RB

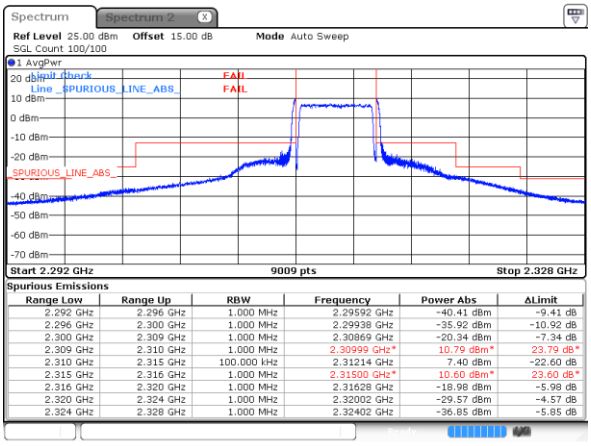


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.292 GHz	2.296 GHz	1.000 MHz	2.29599 GHz	-34.96 dBm	-3.96 dB
2.296 GHz	2.300 GHz	1.000 MHz	2.29984 GHz	-29.67 dBm	-4.67 dB
2.300 GHz	2.304 GHz	1.000 MHz	2.30384 GHz	-18.70 dBm	-5.70 dB
2.304 GHz	2.305 GHz	1.000 MHz	2.30500 GHz*	10.57 dBm*	23.57 dB*
2.305 GHz	2.310 GHz	100.000 kHz	2.30833 GHz	7.54 dBm	-22.46 dB
2.310 GHz	2.311 GHz	1.000 MHz	2.31000 GHz*	10.60 dBm*	23.60 dB*
2.311 GHz	2.320 GHz	1.000 MHz	2.31121 GHz	-20.96 dBm	-7.96 dB
2.320 GHz	2.324 GHz	1.000 MHz	2.32045 GHz	-36.41 dBm	-11.41 dB
2.324 GHz	2.328 GHz	1.000 MHz	2.32401 GHz	-41.80 dBm	-10.80 dB

Date: 10.DEC.2025 16:46:11

Highest Band Edge / Full RB

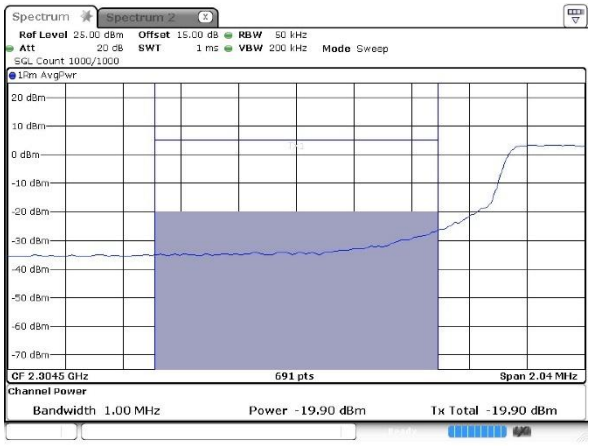


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.292 GHz	2.296 GHz	1.000 MHz	2.29592 GHz	-40.41 dBm	-9.41 dB
2.296 GHz	2.300 GHz	1.000 MHz	2.29938 GHz	-35.92 dBm	-10.92 dB
2.300 GHz	2.309 GHz	1.000 MHz	2.30869 GHz	-20.34 dBm	-7.34 dB
2.309 GHz	2.310 GHz	1.000 MHz	2.30999 GHz*	10.79 dBm*	23.79 dB*
2.310 GHz	2.315 GHz	100.000 kHz	2.31214 GHz	7.40 dBm	-22.60 dB
2.315 GHz	2.316 GHz	1.000 MHz	2.31500 GHz*	10.60 dBm*	23.60 dB*
2.316 GHz	2.320 GHz	1.000 MHz	2.31628 GHz	-18.98 dBm	-5.98 dB
2.320 GHz	2.324 GHz	1.000 MHz	2.32002 GHz	-29.57 dBm	-4.57 dB
2.324 GHz	2.328 GHz	1.000 MHz	2.32402 GHz	-36.85 dBm	-5.85 dB

Date: 10.DEC.2025 16:51:08

Lowest Band Edge / Full RB / Lower zoom in

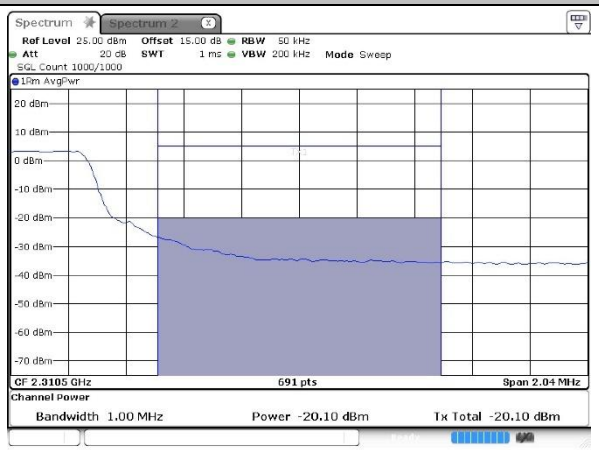


Date: 10.DEC.2025 16:48:39

Highest Band Edge / Full RB / Lower zoom in

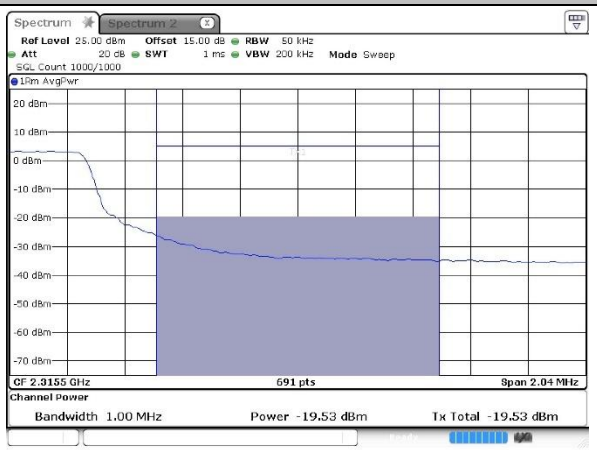
Date: 10.DEC.2025 16:51:41

Lowest Band Edge / Full RB / Upper zoom in

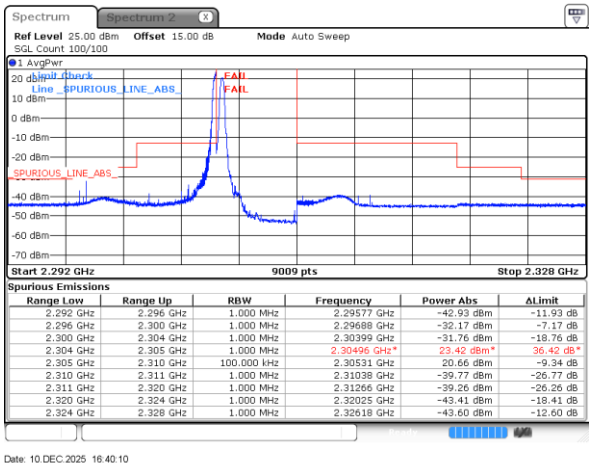
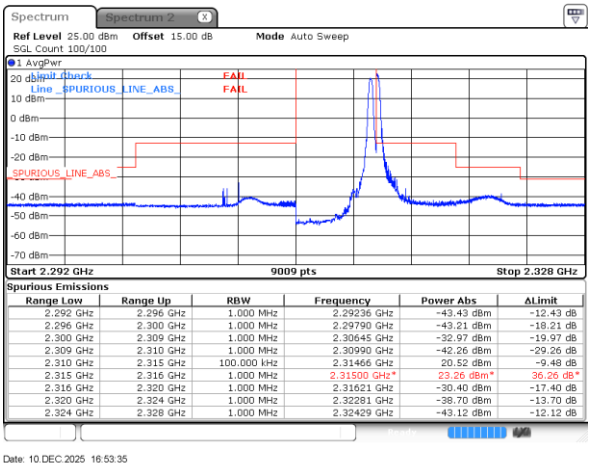


Date: 10.DEC.2025 16:47:02

Highest Band Edge / Full RB / Upper zoom in

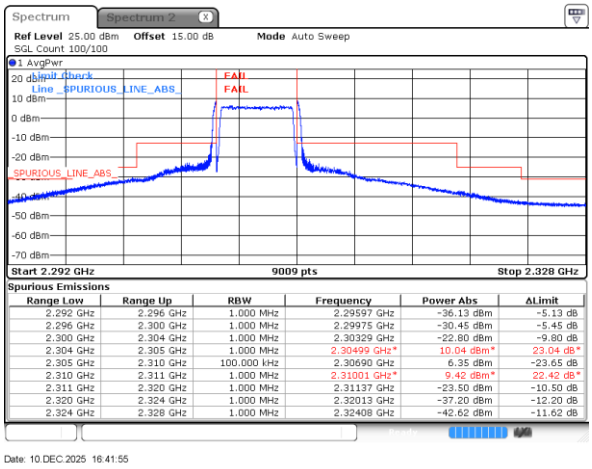


Date: 10.DEC.2025 16:51:54

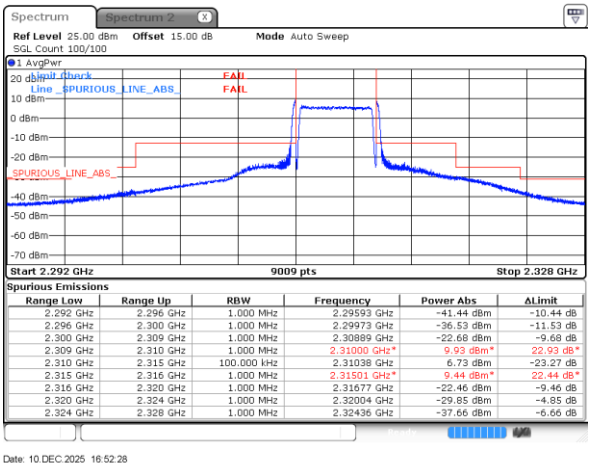
LTE Band 30 / 5MHz / 64QAM	
Lowest Band Edge / 1 RB	**Highest Band Edge / 1 RB**
	
Lowest Band Edge / 1 RB / Lower zoom in	**Highest Band Edge / 1 RB / Lower zoom in**

LTE Band 30 / 5MHz / 64QAM

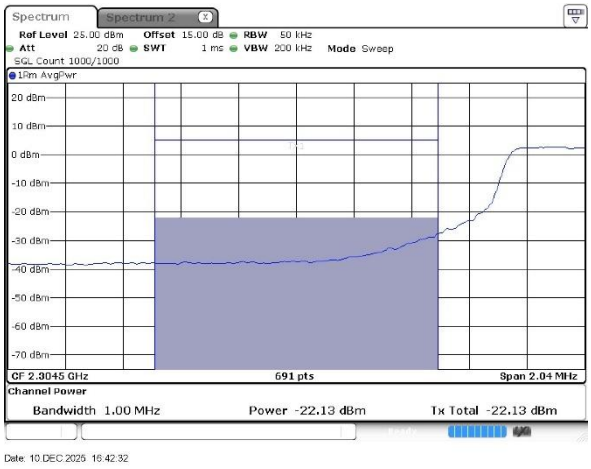
Lowest Band Edge / Full RB



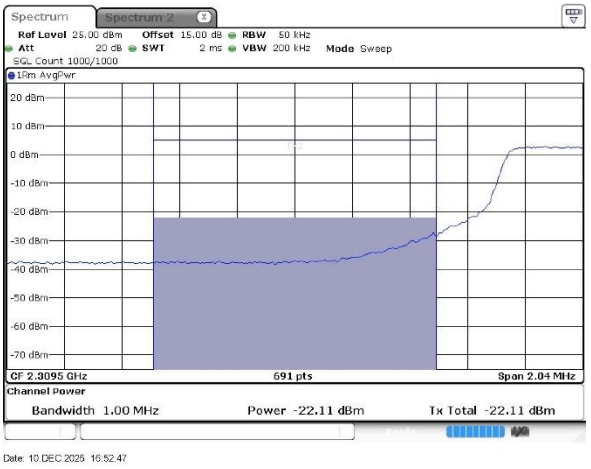
Highest Band Edge / Full RB



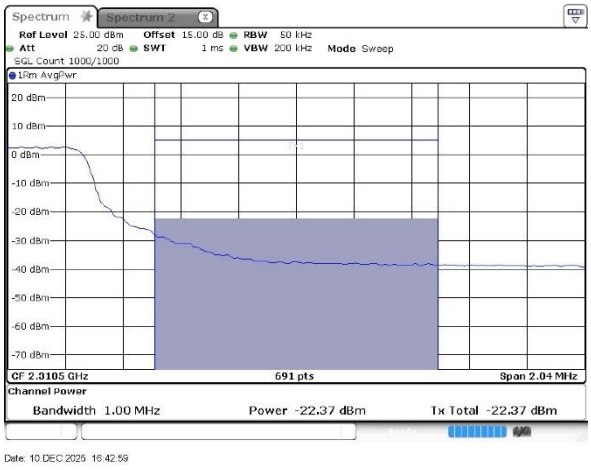
Lowest Band Edge / Full RB / Lower zoom in



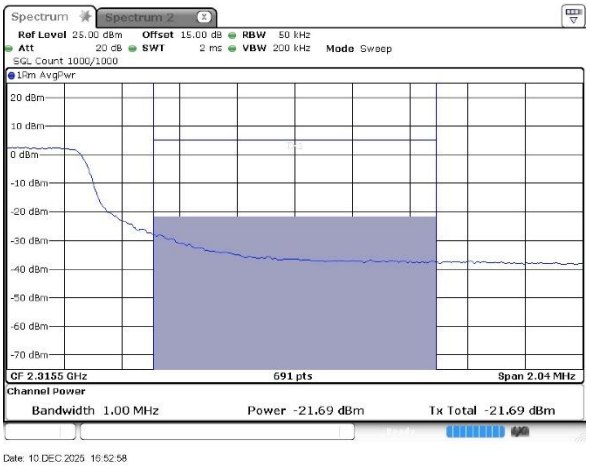
Highest Band Edge / Full RB / Lower zoom in

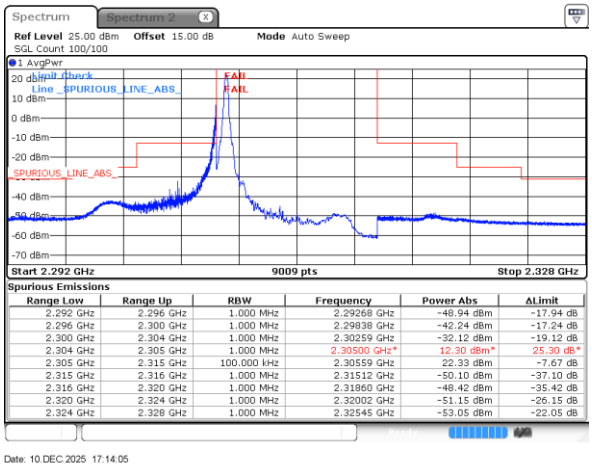
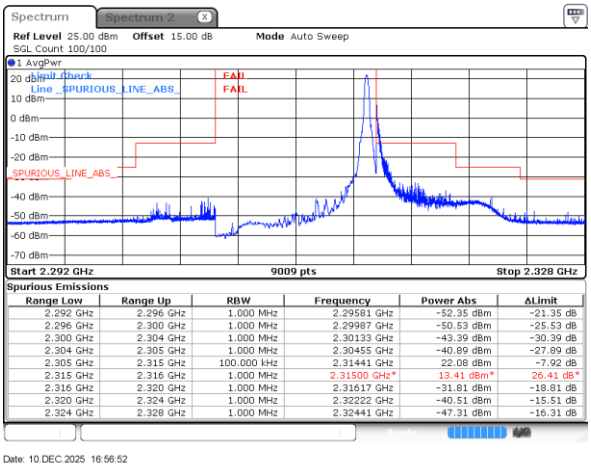
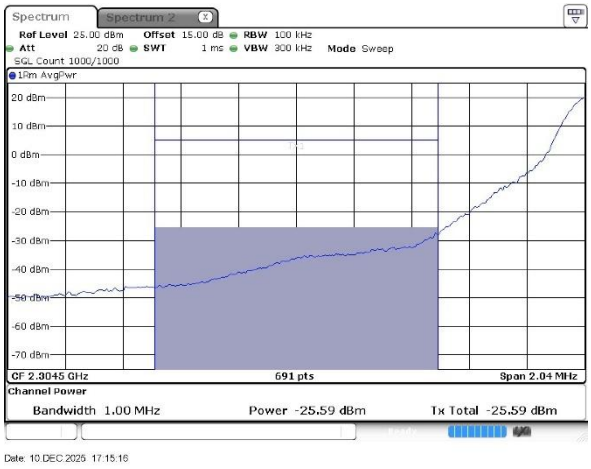
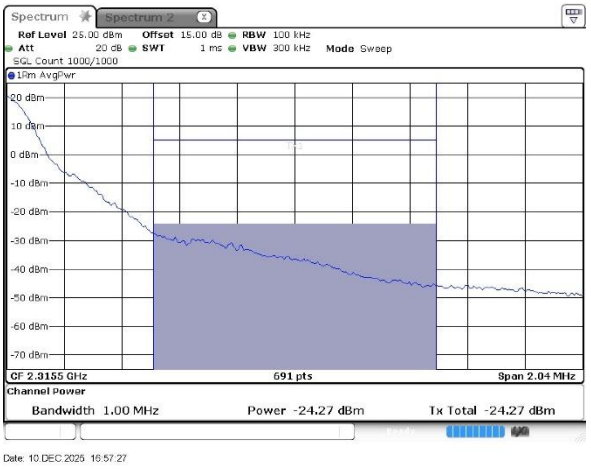


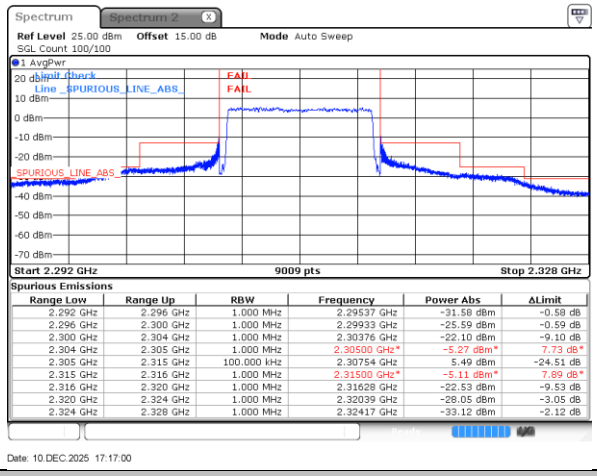
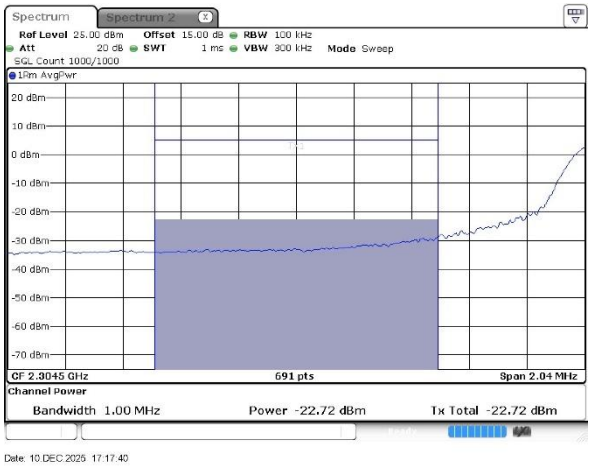
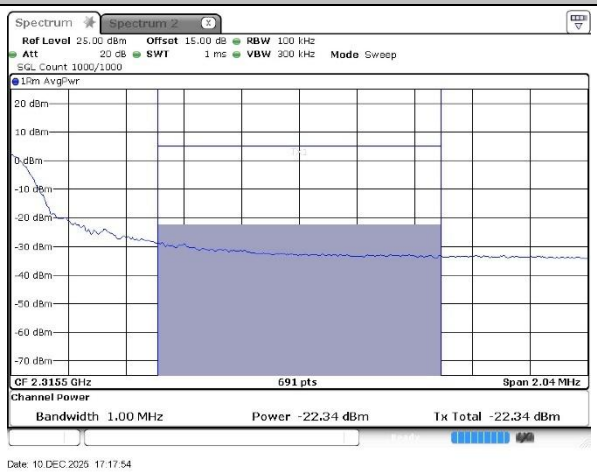
Lowest Band Edge / Full RB / Upper zoom in



Highest Band Edge / Full RB / Upper zoom in

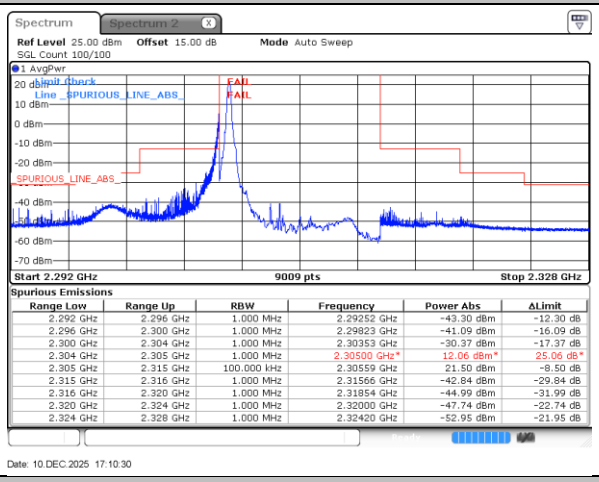


LTE Band 30 / 10MHz / QPSK	
Lowest Band Edge / 1 RB	**Highest Band Edge / 1 RB**
	
Lowest Band Edge / 1 RB / Lower zoom in	**Highest Band Edge / 1 RB / Lower zoom in**
	

LTE Band 30 / 10MHz / QPSK	
Lowest Band Edge / Full RB	
	
Lowest Band Edge / Full RB / Lower zoom in	
	
Lowest Band Edge / Full RB / Upper zoom in	
	

LTE Band 30 / 10MHz / 16QAM

Lowest Band Edge / 1 RB

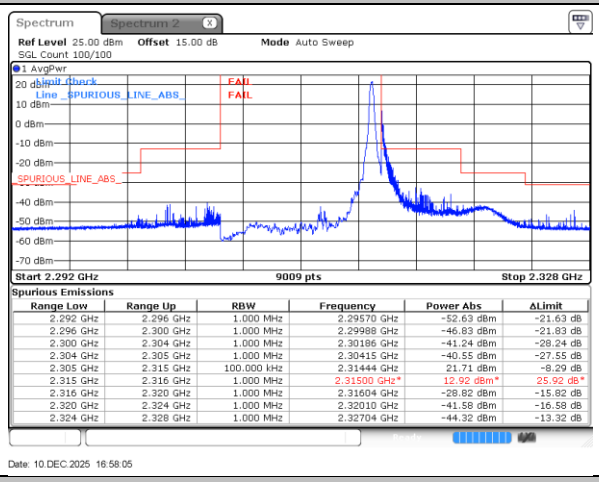


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.292 GHz	2.296 GHz	1.000 MHz	2.29252 GHz	-43.30 dBm	-12.30 dB
2.296 GHz	2.300 GHz	1.000 MHz	2.29823 GHz	-41.09 dBm	-16.09 dB
2.300 GHz	2.304 GHz	1.000 MHz	2.30353 GHz	-30.37 dBm	-17.37 dB
2.304 GHz	2.305 GHz	1.000 MHz	2.30500 GHz*	12.06 dBm*	25.06 dB*
2.305 GHz	2.315 GHz	100.000 kHz	2.30559 GHz	21.50 dBm	-8.50 dB
2.315 GHz	2.316 GHz	1.000 MHz	2.31566 GHz	-42.84 dBm	-29.84 dB
2.316 GHz	2.320 GHz	1.000 MHz	2.31854 GHz	-44.99 dBm	-31.99 dB
2.320 GHz	2.324 GHz	1.000 MHz	2.32000 GHz	-47.74 dBm	-22.74 dB
2.324 GHz	2.328 GHz	1.000 MHz	2.32420 GHz	-52.95 dBm	-21.95 dB

Date: 10.DEC.2025 17:10:30

Highest Band Edge / 1 RB

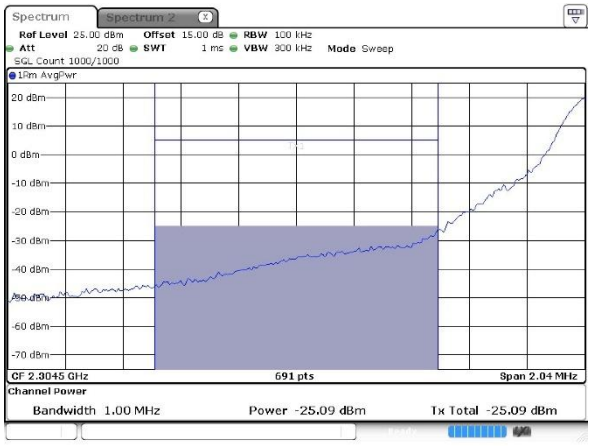


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.292 GHz	2.296 GHz	1.000 MHz	2.29570 GHz	-52.63 dBm	-21.63 dB
2.296 GHz	2.300 GHz	1.000 MHz	2.29988 GHz	-46.83 dBm	-21.83 dB
2.300 GHz	2.304 GHz	1.000 MHz	2.30186 GHz	-41.24 dBm	-28.24 dB
2.304 GHz	2.305 GHz	1.000 MHz	2.30415 GHz	-40.55 dBm	-27.55 dB
2.305 GHz	2.315 GHz	100.000 kHz	2.31444 GHz	21.71 dBm	-8.29 dB
2.315 GHz	2.316 GHz	1.000 MHz	2.31500 GHz*	12.92 dBm*	25.92 dB*
2.316 GHz	2.320 GHz	1.000 MHz	2.31604 GHz	-28.82 dBm	-15.82 dB
2.320 GHz	2.324 GHz	1.000 MHz	2.32010 GHz	-41.58 dBm	-16.58 dB
2.324 GHz	2.328 GHz	1.000 MHz	2.32704 GHz	-44.32 dBm	-13.32 dB

Date: 10.DEC.2025 16:58:05

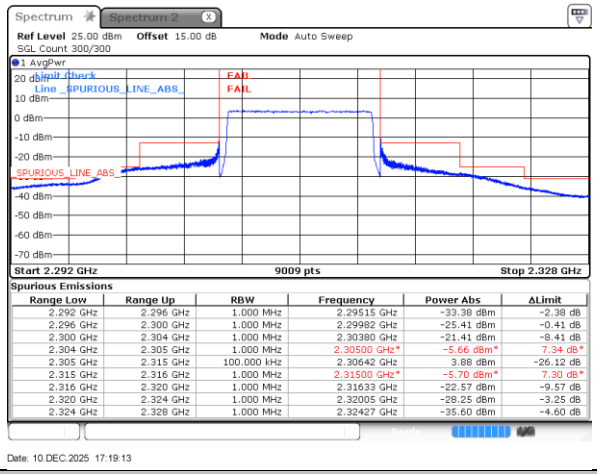
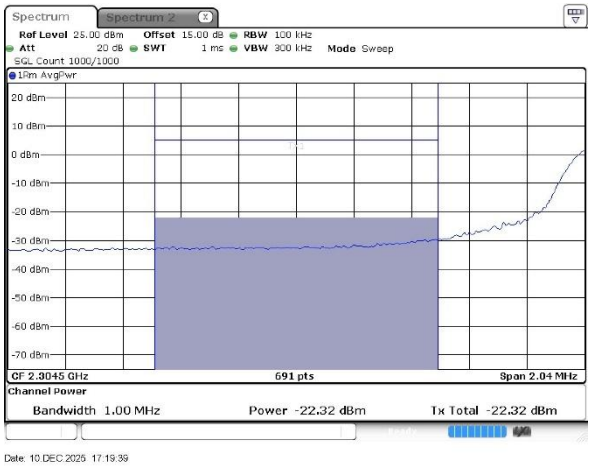
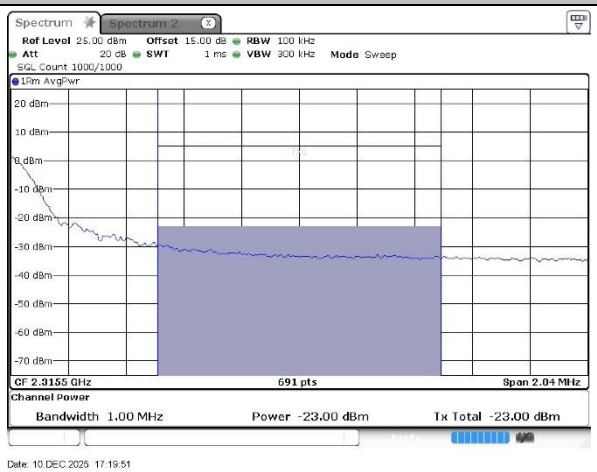
Lowest Band Edge / 1 RB / Lower zoom in



Date: 10.DEC.2025 17:11:30

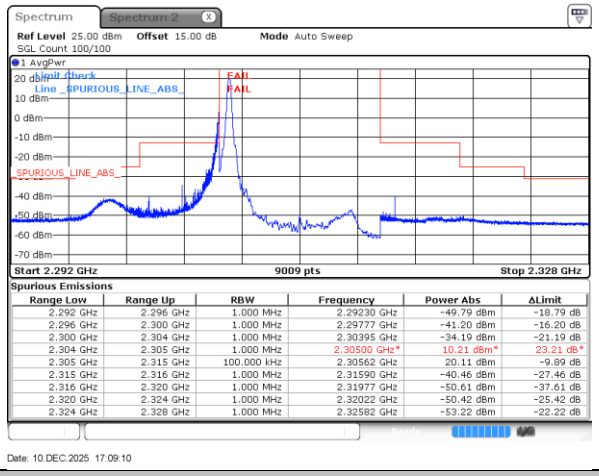
Highest Band Edge / 1 RB / Lower zoom in

Date: 10.DEC.2025 16:58:36

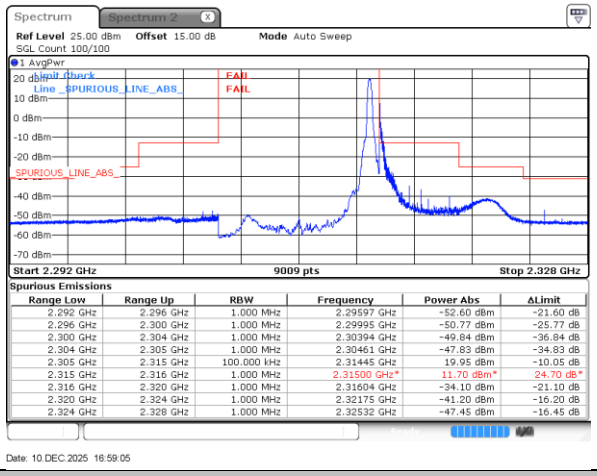
LTE Band 30 / 10MHz / 16QAM	
Lowest Band Edge / Full RB	
	
Lowest Band Edge / Full RB / Lower zoom in	
	
Lowest Band Edge / Full RB / Upper zoom in	
	

LTE Band 30 / 10MHz / 64QAM

Lowest Band Edge / 1 RB

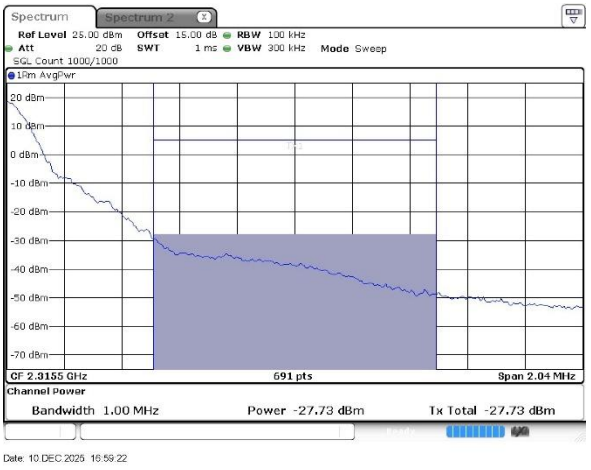


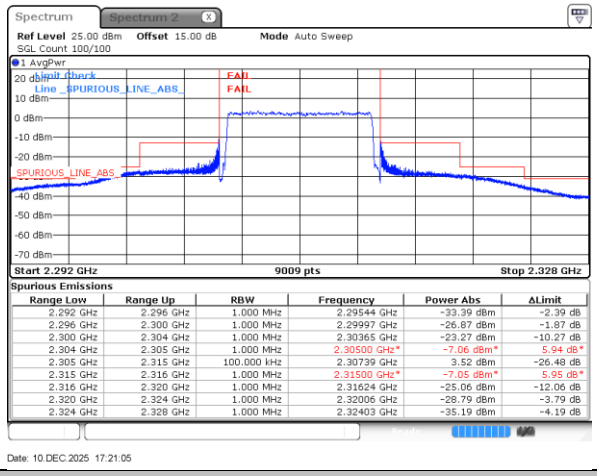
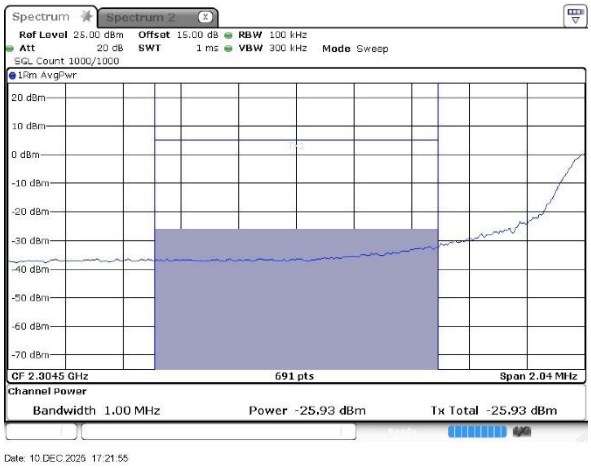
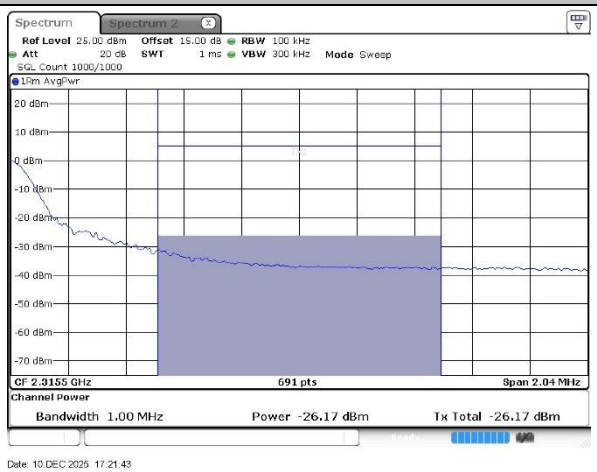
Highest Band Edge / 1 RB



Lowest Band Edge / 1 RB / Lower zoom in

Highest Band Edge / 1 RB / Lower zoom in

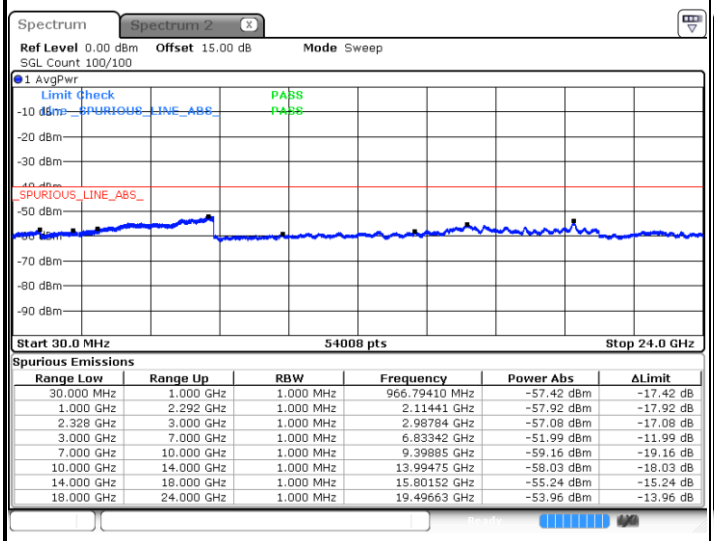


LTE Band 30 / 10MHz / 64QAM	
Lowest Band Edge / Full RB	
	
Lowest Band Edge / Full RB / Lower zoom in	
	
Lowest Band Edge / Full RB / Upper zoom in	
	

Conducted Spurious Emission

LTE Band 30 / 5MHz

Lowest Channel / QPSK

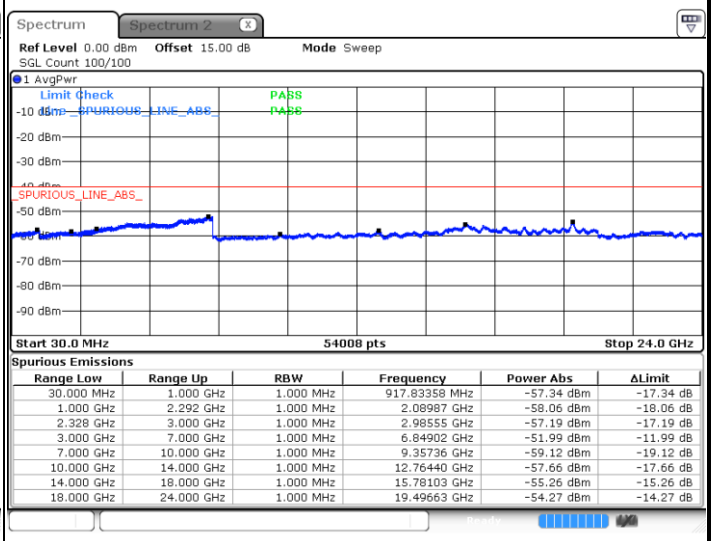


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	966.79410 MHz	-57.42 dBm	-17.42 dB
1.000 GHz	2.292 GHz	1.000 MHz	2.11441 GHz	-57.92 dBm	-17.92 dB
2.328 GHz	3.000 GHz	1.000 MHz	2.98784 GHz	-57.08 dBm	-17.08 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.83342 GHz	-51.99 dBm	-11.99 dB
7.000 GHz	10.000 GHz	1.000 MHz	9.39885 GHz	-59.16 dBm	-19.16 dB
10.000 GHz	14.000 GHz	1.000 MHz	13.99475 GHz	-58.03 dBm	-18.03 dB
14.000 GHz	18.000 GHz	1.000 MHz	15.80152 GHz	-55.24 dBm	-15.24 dB
18.000 GHz	24.000 GHz	1.000 MHz	19.49663 GHz	-53.96 dBm	-13.96 dB

Date: 10.DEC.2025 16:17:13

Middle Channel / QPSK

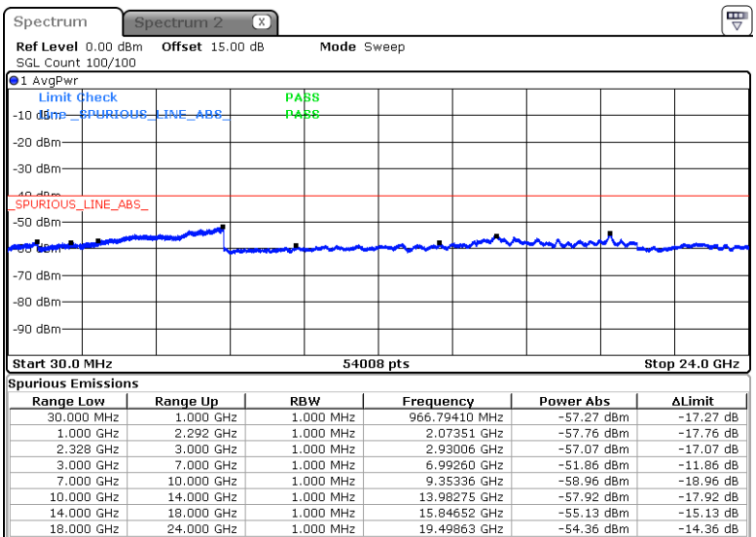


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	917.83358 MHz	-57.34 dBm	-17.34 dB
1.000 GHz	2.292 GHz	1.000 MHz	2.08987 GHz	-58.06 dBm	-18.06 dB
2.328 GHz	3.000 GHz	1.000 MHz	2.98555 GHz	-57.19 dBm	-17.19 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.84902 GHz	-51.99 dBm	-11.99 dB
7.000 GHz	10.000 GHz	1.000 MHz	9.35736 GHz	-59.12 dBm	-19.12 dB
10.000 GHz	14.000 GHz	1.000 MHz	12.76440 GHz	-57.66 dBm	-17.66 dB
14.000 GHz	18.000 GHz	1.000 MHz	15.78103 GHz	-55.26 dBm	-15.26 dB
18.000 GHz	24.000 GHz	1.000 MHz	19.49663 GHz	-54.27 dBm	-14.27 dB

Date: 10.DEC.2025 16:18:22

Highest Channel / QPSK

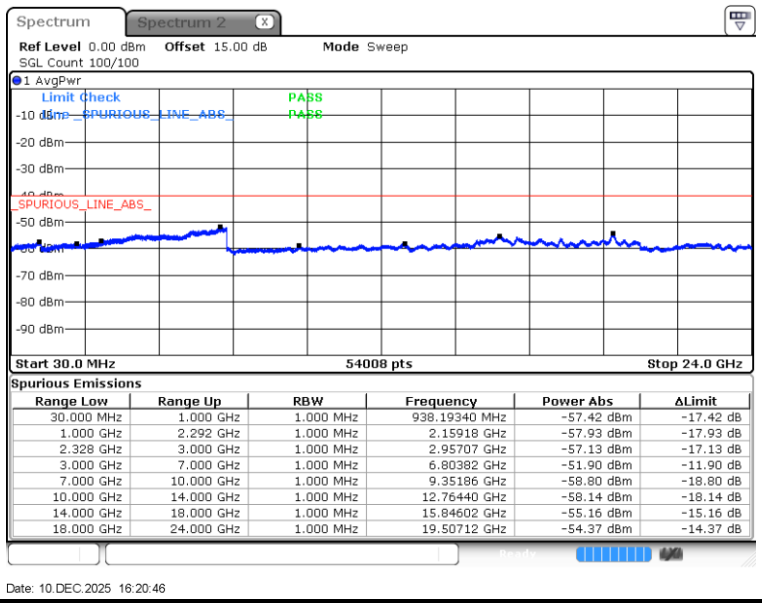


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	966.79410 MHz	-57.27 dBm	-17.27 dB
1.000 GHz	2.292 GHz	1.000 MHz	2.07351 GHz	-57.76 dBm	-17.76 dB
2.328 GHz	3.000 GHz	1.000 MHz	2.93006 GHz	-57.07 dBm	-17.07 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99260 GHz	-51.86 dBm	-11.86 dB
7.000 GHz	10.000 GHz	1.000 MHz	9.35336 GHz	-58.96 dBm	-18.96 dB
10.000 GHz	14.000 GHz	1.000 MHz	13.98275 GHz	-57.92 dBm	-17.92 dB
14.000 GHz	18.000 GHz	1.000 MHz	15.84652 GHz	-55.13 dBm	-15.13 dB
18.000 GHz	24.000 GHz	1.000 MHz	19.49863 GHz	-54.36 dBm	-14.36 dB

Date: 10.DEC.2025 16:19:32

LTE Band 30 / 10MHz
Middle Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	938.19340 MHz	-57.42 dBm	-17.42 dB
1.000 GHz	2.292 GHz	1.000 MHz	2.15918 GHz	-57.93 dBm	-17.93 dB
2.328 GHz	3.000 GHz	1.000 MHz	2.95707 GHz	-57.13 dBm	-17.13 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.80382 GHz	-51.90 dBm	-11.90 dB
7.000 GHz	10.000 GHz	1.000 MHz	9.35186 GHz	-58.80 dBm	-18.80 dB
10.000 GHz	14.000 GHz	1.000 MHz	12.76440 GHz	-58.14 dBm	-18.14 dB
14.000 GHz	18.000 GHz	1.000 MHz	15.84602 GHz	-55.16 dBm	-15.16 dB
18.000 GHz	24.000 GHz	1.000 MHz	19.50712 GHz	-54.37 dBm	-14.37 dB

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Frequency Stability

Test Conditions		LTE Band 30 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 5MHz	Note 2.
		Frequency Offset (△f) (Hz)	Result
50	Normal Voltage	1.5	PASS
40	Normal Voltage	2.9	
30	Normal Voltage	3.5	
20(Ref.)	Normal Voltage	2.1	
10	Normal Voltage	2.2	
0	Normal Voltage	2.5	
-10	Normal Voltage	1.3	
-20	Normal Voltage	3.3	
-30	Normal Voltage	2.6	
20	Maximum Voltage	3.2	
20	Normal Voltage	2.1	
20	Battery End Point	2.3	

Note:

1. Normal Voltage = 3.91 V.; Battery End Point (BEP) = 3.5 V.; Maximum Voltage = 4.45 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

|MAX(△f)| = 3.5Hz

Frequency Stability	Frequency (MHz)	Limit Line	Result
f_L – |MAX(△f)|	2305.242297	≧ 2305 MHz	PASS
f_H + |MAX(△f)|	2314.757704	≦ 2315 MHz	

Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Liang PingZhou	Temperature :	22~25℃
		Relative Humidity :	48~52%

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

LTE Band 30 / 5MHz / QPSK/ Ant 8								
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)
Lowest	4610.50	-57.84	-40	-17.84	-64.09	6.30	12.55	H
	6915.75	-60.79	-40	-20.79	-64.19	8.25	11.65	H
	9221.00	-57.51	-40	-17.51	-59.86	9.50	11.85	H
	4610.50	-59.90	-40	-19.90	-66.15	6.30	12.55	V
	6915.75	-59.13	-40	-19.13	-62.53	8.25	11.65	V
	9221.00	-58.19	-40	-18.19	-60.54	9.50	11.85	V
Middle	4615.50	-60.75	-40	-20.75	-67.00	6.45	12.70	H
	6923.25	-60.37	-40	-20.37	-63.77	8.40	11.80	H
	9231.00	-57.59	-40	-17.59	-59.94	9.65	12.00	H
	4615.50	-60.50	-40	-20.50	-66.75	6.45	12.70	V
	6923.25	-60.50	-40	-20.50	-63.90	8.40	11.80	V
	9231.00	-57.34	-40	-17.34	-59.69	9.65	12.00	V
Highest	4620.50	-61.10	-40	-21.10	-67.35	6.61	12.86	H
	6930.75	-60.72	-40	-20.72	-64.10	8.56	11.94	H
	9241.00	-57.63	-40	-17.63	-59.98	9.81	12.16	H
	4620.50	-60.52	-40	-20.52	-66.77	6.61	12.86	V
	6930.75	-60.28	-40	-20.28	-63.66	8.56	11.94	V
	9241.00	-58.08	-40	-18.08	-60.43	9.81	12.16	V

LTE Band 30 / 10MHz / QPSK/ Ant 8								
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	4611.00	-48.44	-40	-8.44	-54.69	6.45	12.70	H
	6916.50	-54.49	-40	-14.49	-57.89	8.40	11.80	H
	9222.00	-57.92	-40	-17.92	-60.27	9.65	12.00	H
	4611.00	-44.34	-40	-4.34	-50.59	6.45	12.70	V
	6916.50	-49.18	-40	-9.18	-52.58	8.40	11.80	V
	9222.00	-57.39	-40	-17.39	-59.74	9.65	12.00	V

EN-DC_30A_n12A / LTE 5MHz + NR 10MHz / QPSK / ANT5(LTE) & ANT8(NR)								
Channel	Frequency (MHz)	ERP/EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
NR n12 Lowest	1399	-64.81	-13	-51.81	-68.04	3.98	9.36	H
	2098.5	-62.98	-13	-49.98	-66.53	4.85	10.55	H
	2798	-61.97	-13	-48.97	-66.90	5.50	12.58	H
	1399	-65.19	-13	-52.19	-68.42	3.98	9.36	V
	2098.5	-63.00	-13	-50.00	-66.55	4.85	10.55	V
	2798	-61.51	-13	-48.51	-66.44	5.50	12.58	V
LTE Band30 Lowest	4610.50	-55.46	-40	-15.46	-61.71	6.45	12.70	H
	6915.75	-53.97	-40	-13.97	-57.37	8.40	11.80	H
	9221.00	-56.54	-40	-16.54	-58.89	9.65	12.00	H
	4610.50	-53.17	-40	-13.17	-59.42	6.45	12.70	V
	6915.75	-50.86	-40	-10.86	-54.26	8.40	11.80	V
	9221.00	-57.80	-40	-17.80	-60.15	9.65	12.00	V
NR n12 Middle	1401	-65.15	-13	-52.15	-68.40	4.00	9.40	H
	2101	-63.00	-13	-50.00	-66.57	4.88	10.60	H
	2802	-61.79	-13	-48.79	-66.72	5.52	12.60	H
	1401	-65.23	-13	-52.23	-68.48	4.00	9.40	V
	2101	-62.54	-13	-49.54	-66.11	4.88	10.60	V
	2802	-61.79	-13	-48.79	-66.72	5.52	12.60	V
LTE Band30 Middle	4615.50	-57.99	-40	-17.99	-64.24	6.45	12.70	H
	6923.25	-60.08	-40	-20.08	-63.48	8.40	11.80	H
	9231.00	-57.13	-40	-17.13	-59.48	9.65	12.00	H
	4615.50	-56.06	-40	-16.06	-62.31	6.45	12.70	V
	6923.25	-59.60	-40	-19.60	-63.00	8.40	11.80	V
	9231.00	-57.54	-40	-17.54	-59.89	9.65	12.00	V
NR n12 Highest	1403	-64.54	-13	-51.54	-67.71	4.10	9.42	H
	2104.5	-63.03	-13	-50.03	-66.61	4.90	10.63	H
	2806	-62.16	-13	-49.16	-67.08	5.55	12.62	H
	1403	-65.76	-13	-52.76	-68.93	4.10	9.42	V
	2104.5	-62.86	-13	-49.86	-66.44	4.90	10.63	V
	2806	-61.93	-13	-48.93	-66.85	5.55	12.62	V
LTE Band30 Highest	4620.50	-59.28	-40	-19.28	-65.53	6.45	12.70	H
	6930.75	-59.99	-40	-19.99	-63.39	8.40	11.80	H
	9241.00	-56.39	-40	-16.39	-58.74	9.65	12.00	H
	4620.50	-56.90	-40	-16.90	-63.15	6.45	12.70	V
	6930.75	-59.57	-40	-19.57	-62.97	8.40	11.80	V
	9241.00	-57.26	-40	-17.26	-59.61	9.65	12.00	V

EN-DC_30A_n12A / LTE 10MHz + NR 10MHz / QPSK / ANT5(LTE) & ANT8(NR) for other PA								
Channel	Frequency (MHz)	ERP/EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
NR n12 Middle	1401	-64.81	-13	-51.81	-68.06	4.00	9.40	H
	2101	-62.98	-13	-49.98	-66.55	4.88	10.60	H
	2802	-61.78	-13	-48.78	-66.71	5.52	12.60	H
	1401	-65.07	-13	-52.07	-68.32	4.00	9.40	V
	2101	-63.00	-13	-50.00	-66.57	4.88	10.60	V
	2802	-61.79	-13	-48.79	-66.72	5.52	12.60	V
LTE Band30 Middle	4611.00	-55.63	-40	-15.63	-61.88	6.45	12.70	H
	6916.50	-54.14	-40	-14.14	-57.54	8.40	11.80	H
	9222.00	-56.71	-40	-16.71	-59.06	9.65	12.00	H
	4611.00	-53.30	-40	-13.30	-59.55	6.45	12.70	V
	6916.50	-50.99	-40	-10.99	-54.39	8.40	11.80	V
	9222.00	-57.93	-40	-17.93	-60.28	9.65	12.00	V

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