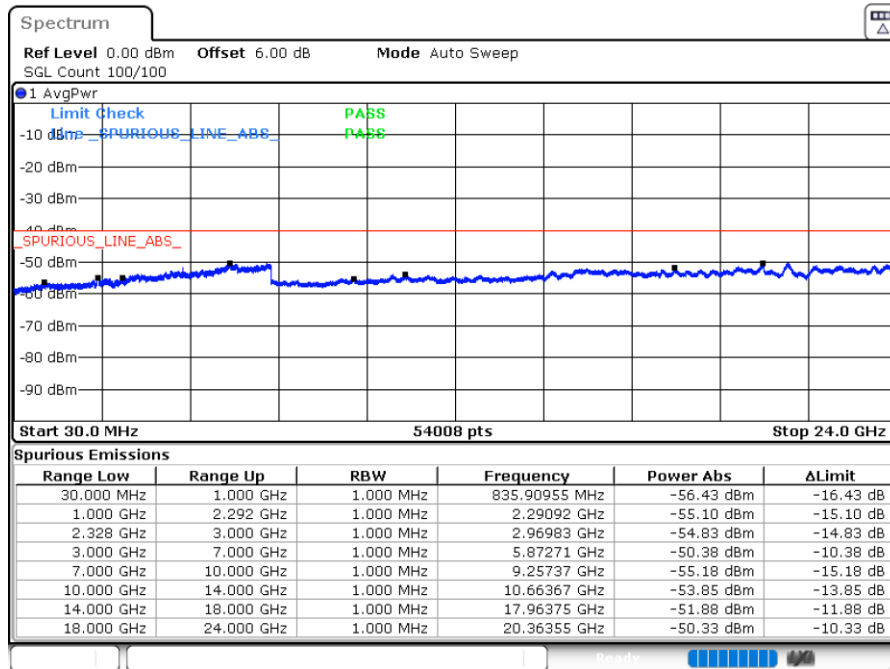




LTE Band 30 / 10MHz

Middle Channel / QPSK



Date: 11.OCT.2024 23:09:10

Frequency Stability

Test Conditions		LTE Band 30 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0030	PASS
40	Normal Voltage	0.0019	
30	Normal Voltage	0.0048	
20(Ref.)	Normal Voltage	0.0016	
10	Normal Voltage	0.0032	
0	Normal Voltage	0.0013	
-10	Normal Voltage	0.0032	
-20	Normal Voltage	0.0034	
-30	Normal Voltage	0.0019	
20	Maximum Voltage	0.0015	
20	Normal Voltage	0.0009	
20	Battery End Point	0.0017	

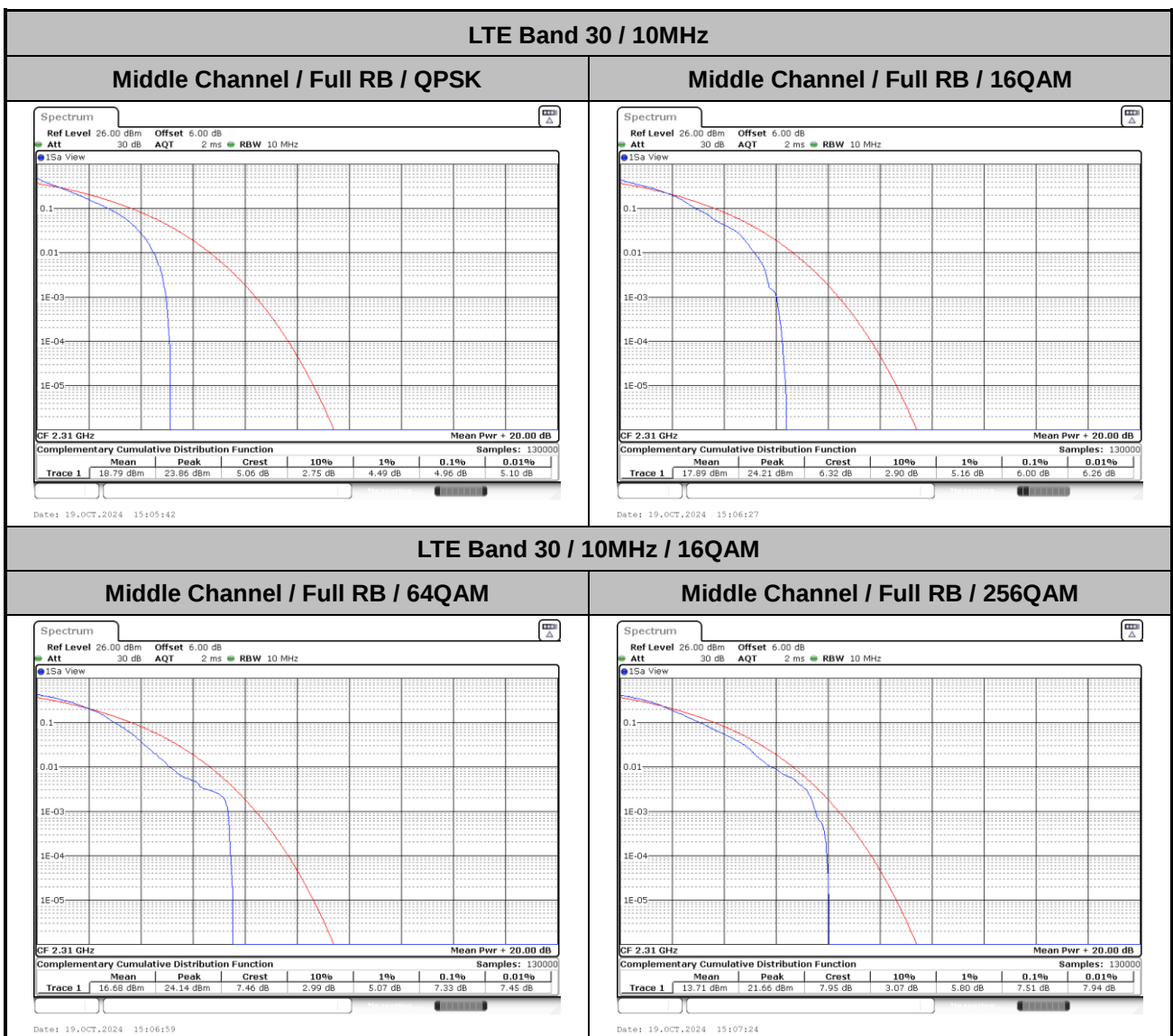
Note:

1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

LTE Band 30(Other PA)

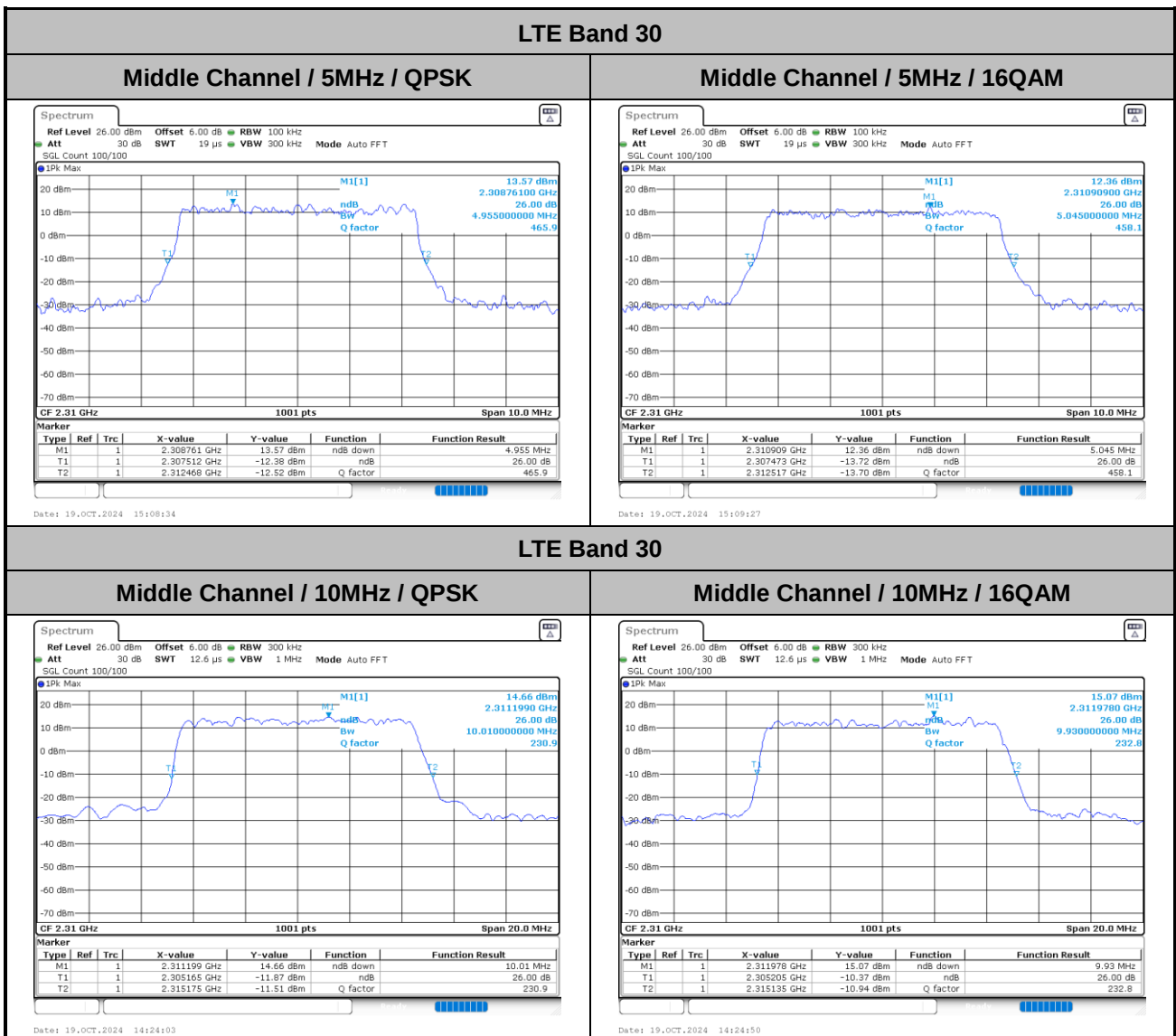
Peak-to-Average Ratio

Mode	LTE Band 30 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.96	6.00	7.33	7.51	PASS



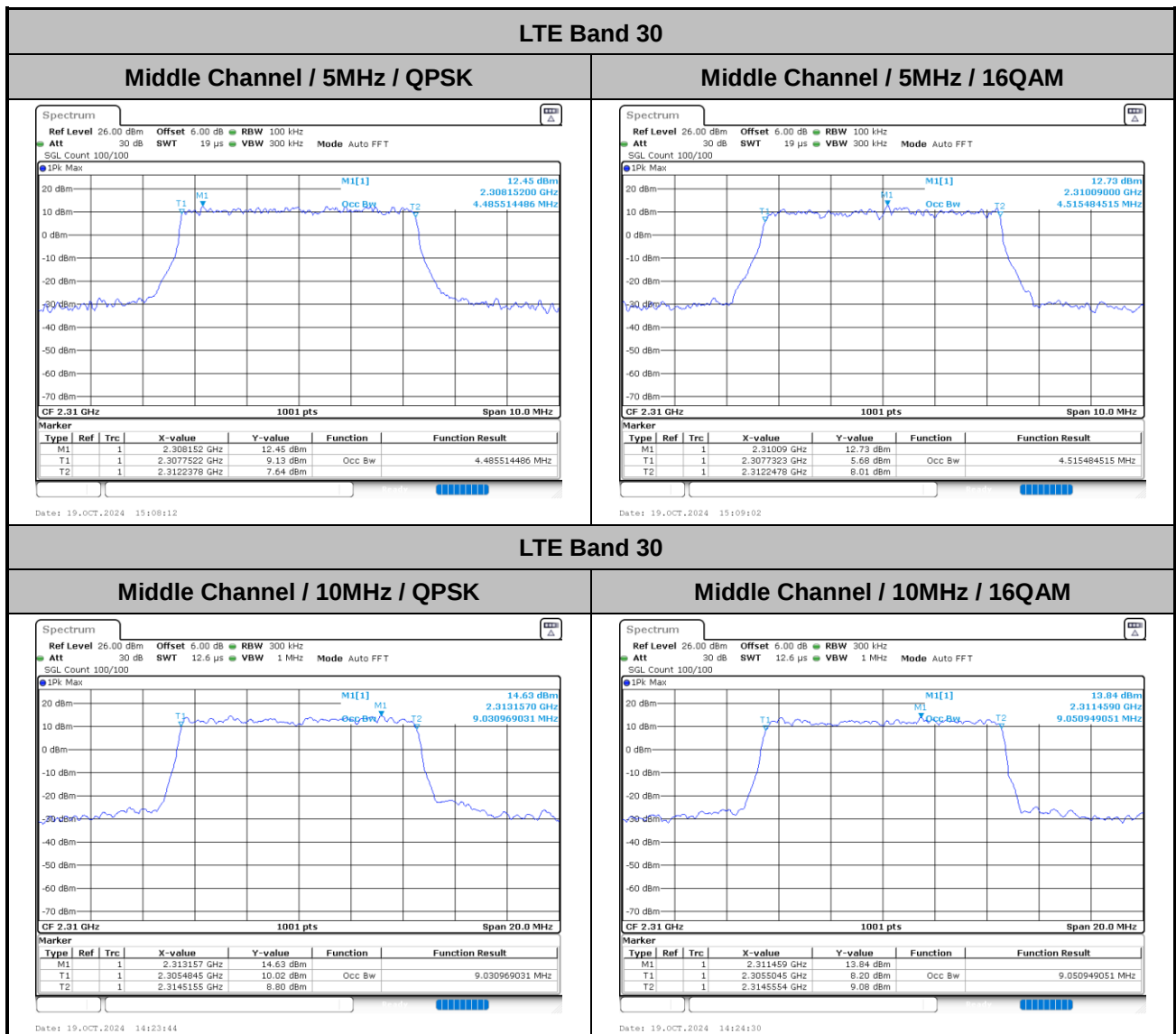
26dB Bandwidth

Mode	LTE Band 30 : 26dB BW(MHz)			
BW	5MHz		10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM
Middle CH	4.96	5.05	10.01	9.93



Occupied Bandwidth

Mode	LTE Band 30 : 99%OBW(MHz)			
BW	5MHz		10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM
Middle CH	4.49	4.52	9.03	9.05



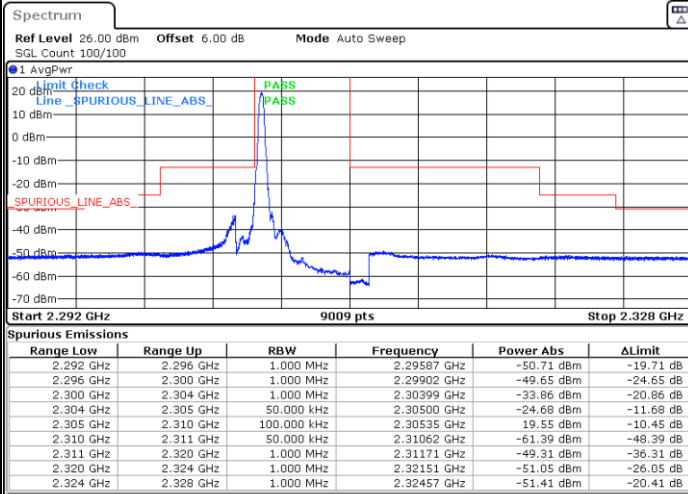


Conducted Band Edge

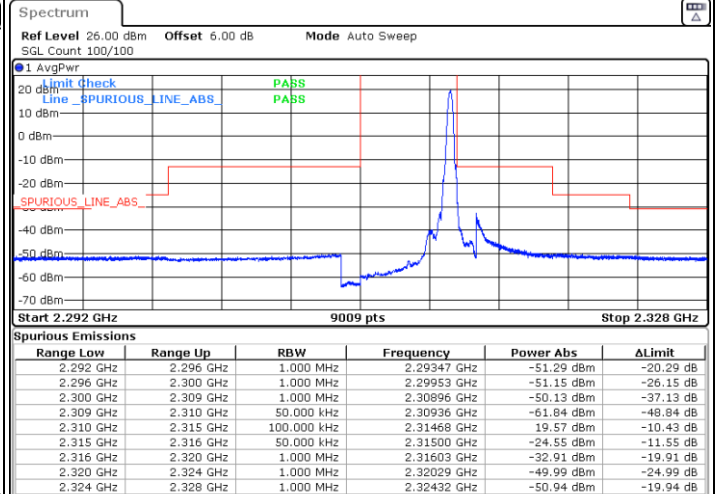
LTE Band 30 / 5MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RBMAX



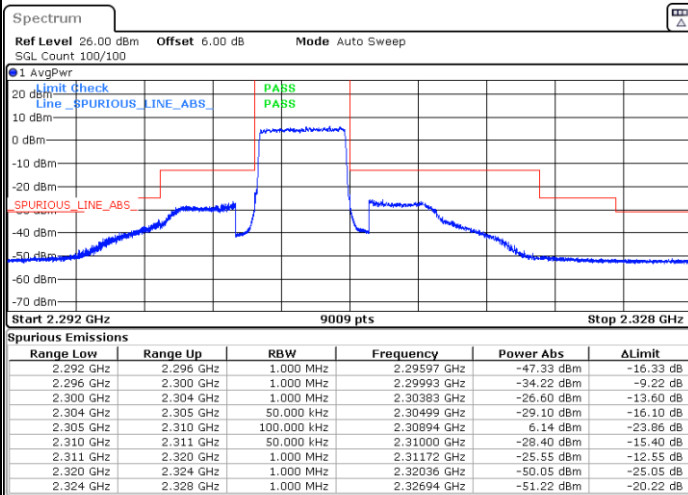
Date: 19.OCT.2024 13:50:38



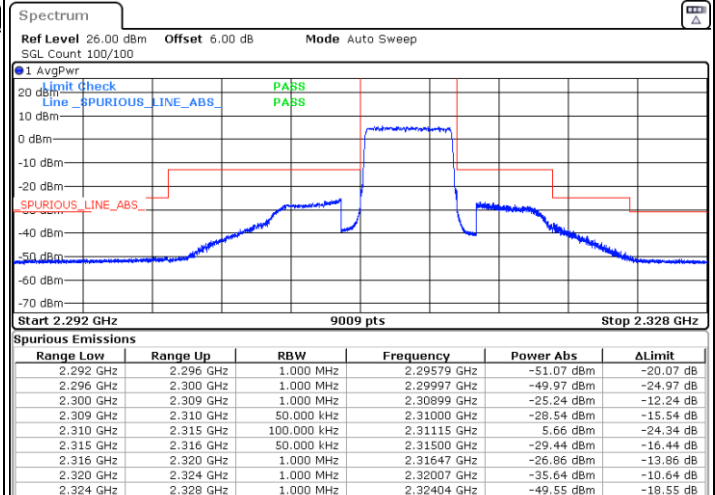
Date: 19.OCT.2024 14:00:06

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 19.OCT.2024 13:55:22



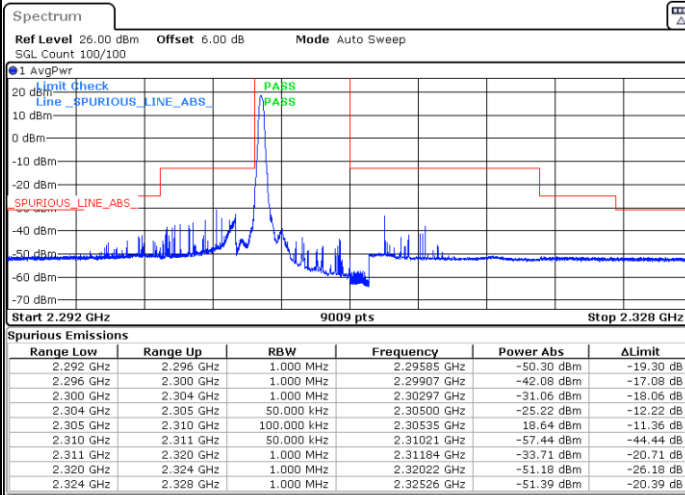
Date: 19.OCT.2024 14:04:54



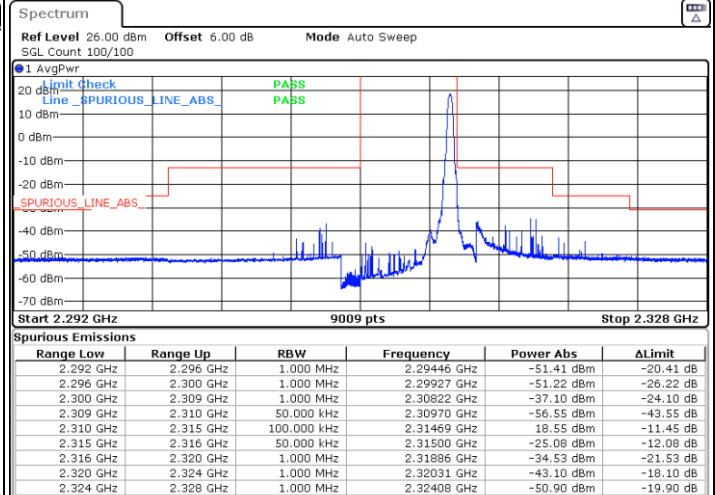
LTE Band 30 / 5MHz / 16QAM

Lowest Band Edge / 1RB

Highest Band Edge / 1 RBMAX



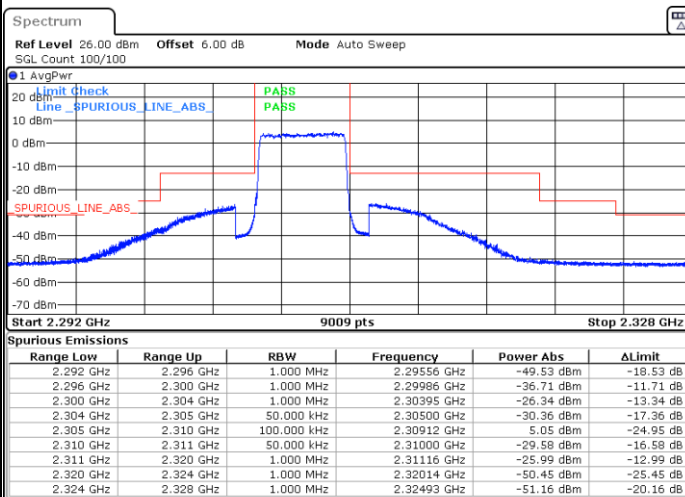
Date: 19.OCT.2024 13:51:49



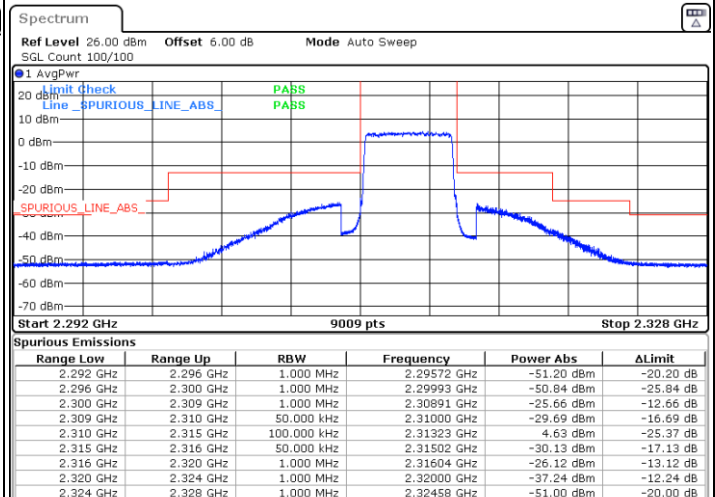
Date: 19.OCT.2024 14:01:17

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 19.OCT.2024 13:56:33



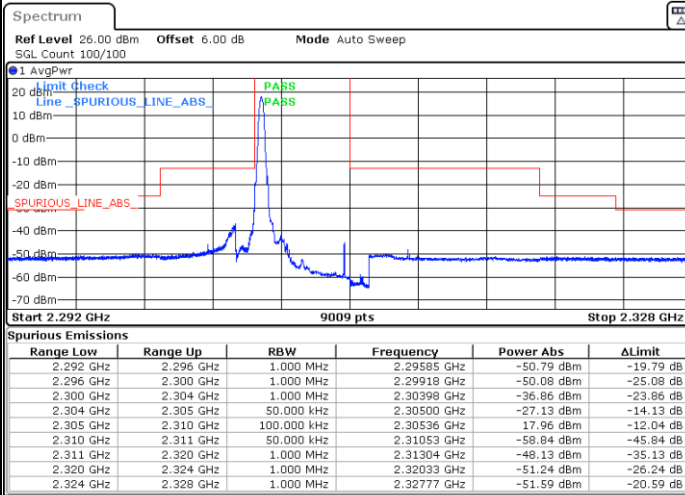
Date: 19.OCT.2024 14:06:04



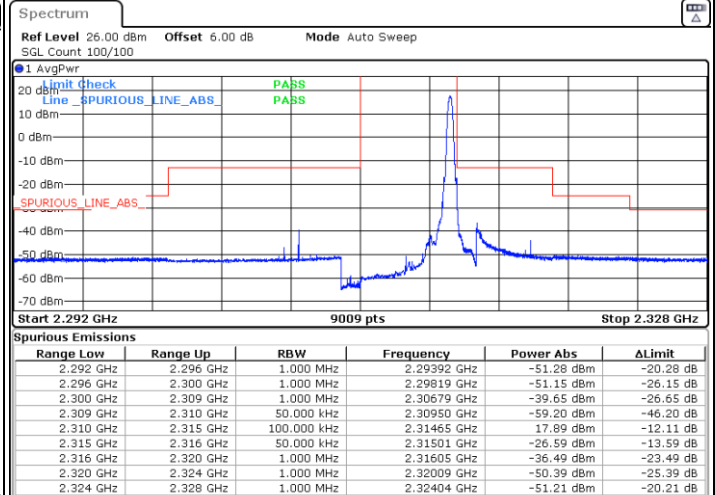
LTE Band 30 / 5MHz / 64QAM

Lowest Band Edge / 1RB

Highest Band Edge / 1 RBMAX



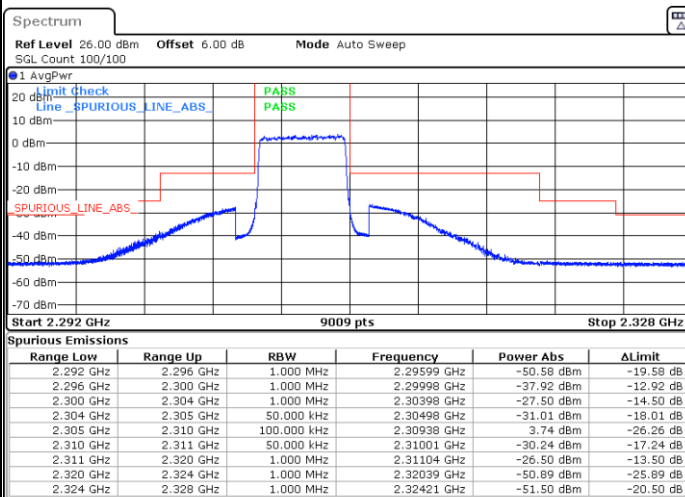
Date: 19.OCT.2024 13:53:00



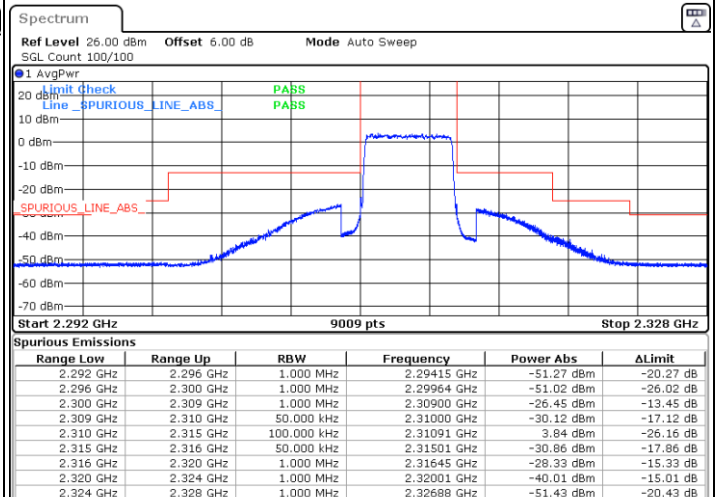
Date: 19.OCT.2024 14:02:28

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 19.OCT.2024 13:57:44



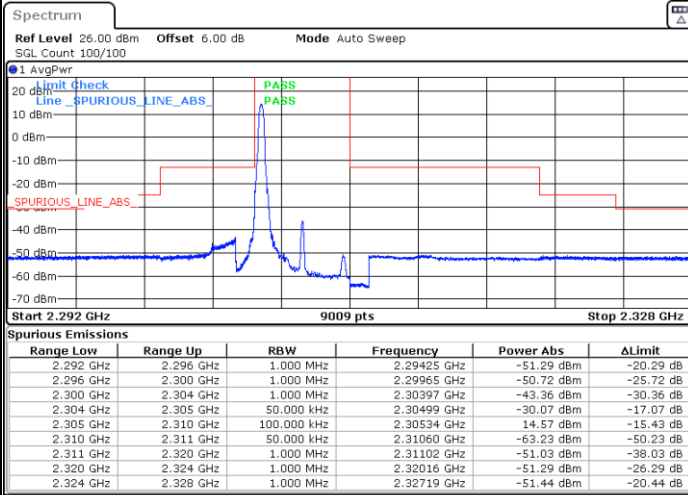
Date: 19.OCT.2024 14:07:15



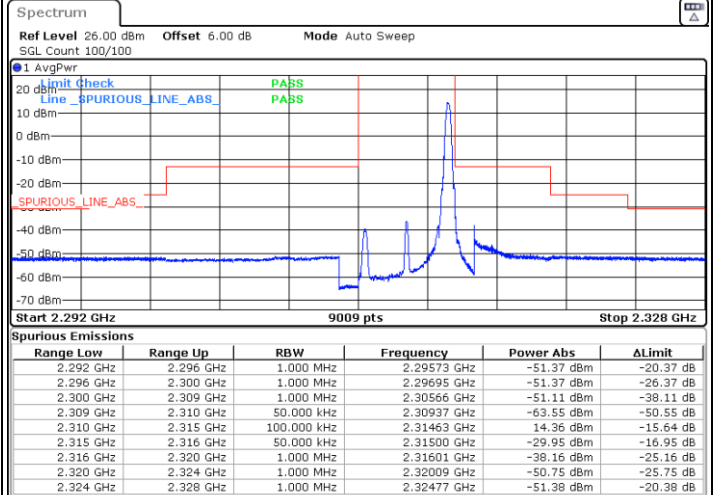
LTE Band 30 / 5MHz / 256QAM

Lowest Band Edge / 1RB

Highest Band Edge / 1 RBMAX



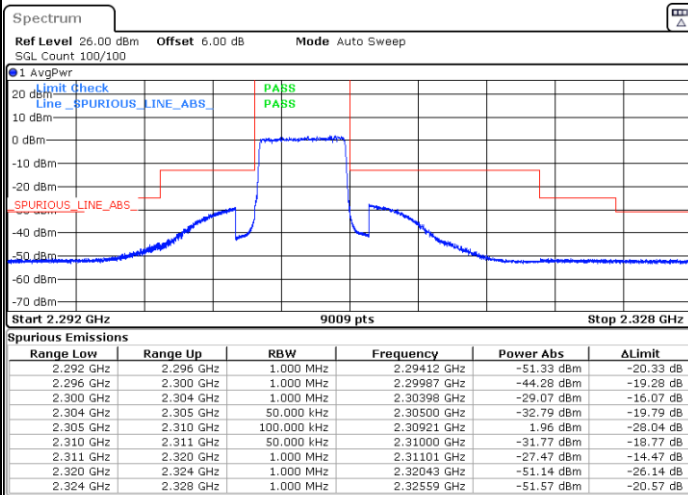
Date: 19.OCT.2024 13:54:11



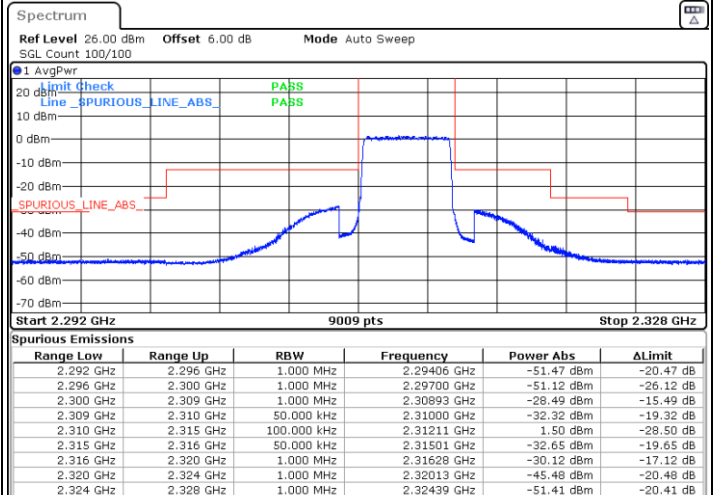
Date: 19.OCT.2024 14:03:40

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 19.OCT.2024 13:58:55

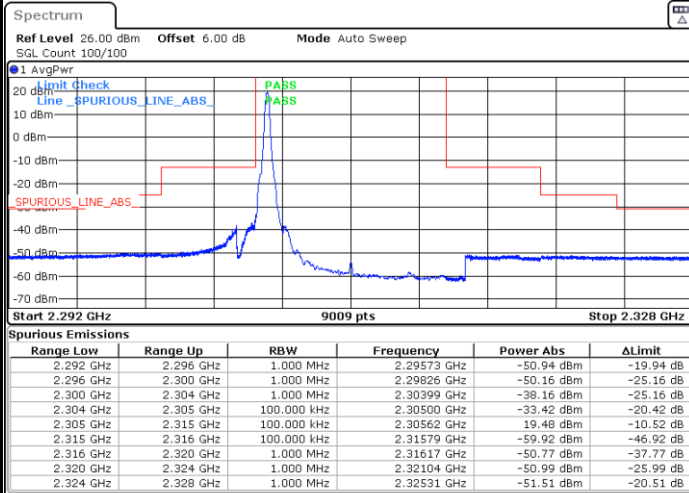


Date: 19.OCT.2024 14:08:26



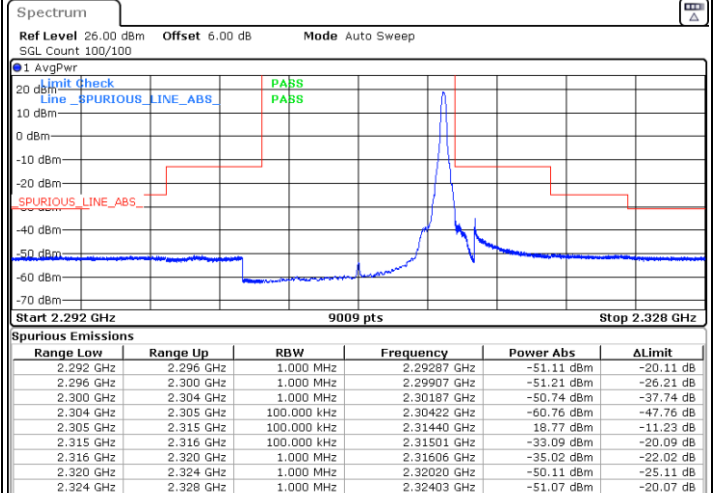
LTE Band 30 / 10MHz / QPSK

1 RB



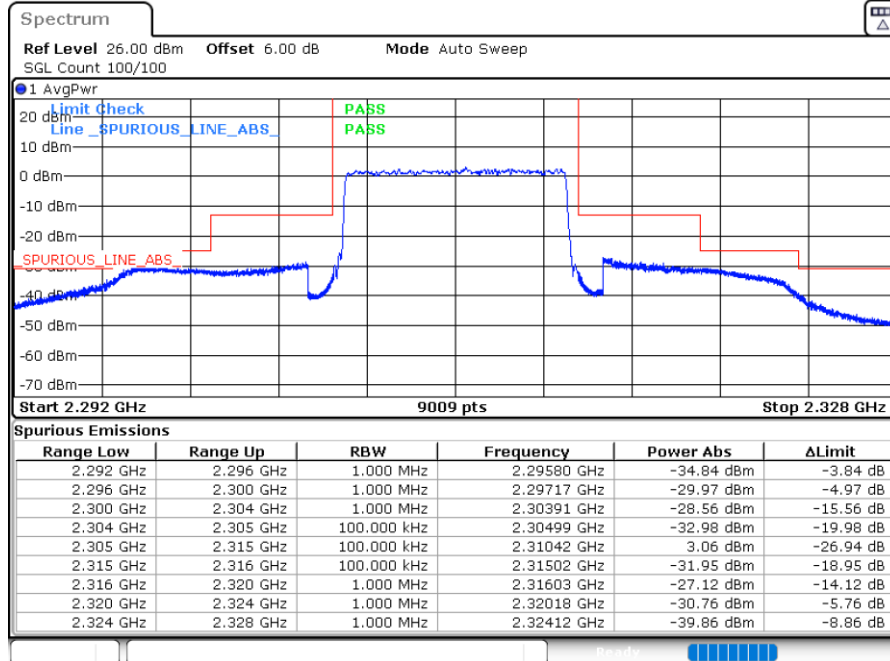
Date: 19.OCT.2024 14:09:40

1 RBMax



Date: 19.OCT.2024 14:14:21

Full RB



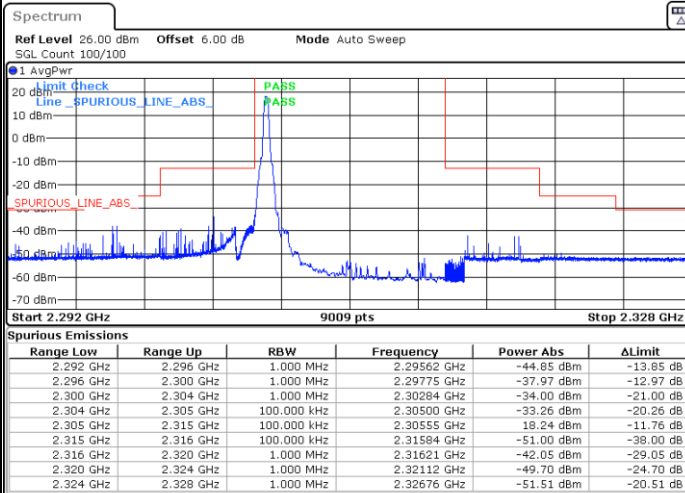
Date: 19.OCT.2024 14:19:03



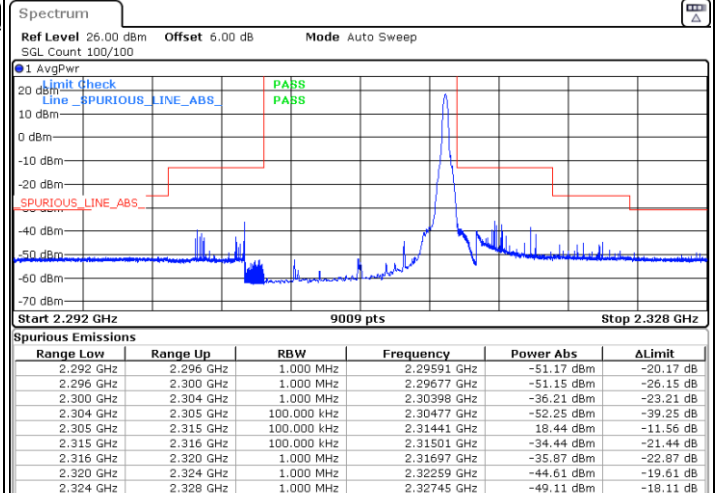
LTE Band 30 / 10MHz / 16QAM

1 RB

1 RBMax

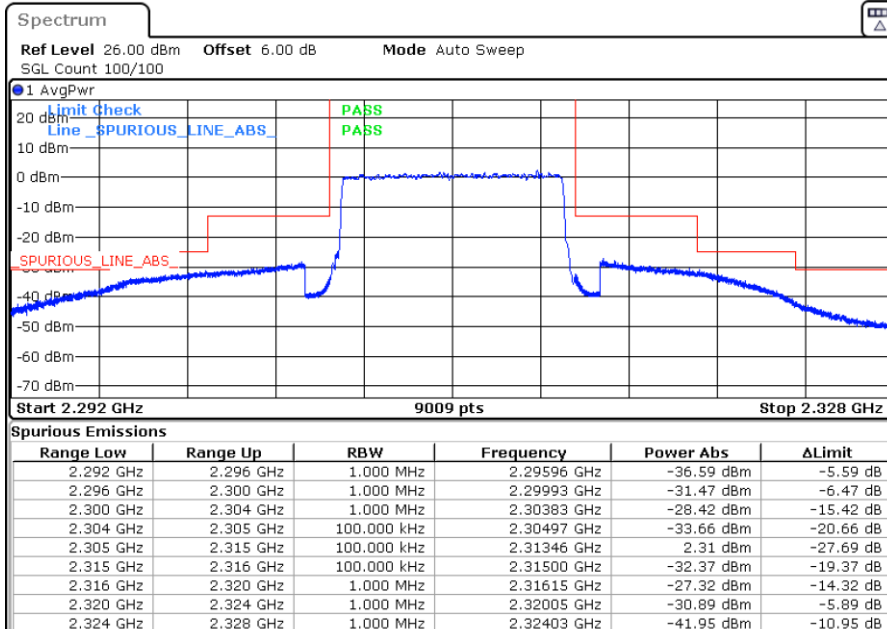


Date: 19.OCT.2024 14:10:50



Date: 19.OCT.2024 14:15:32

Full RB



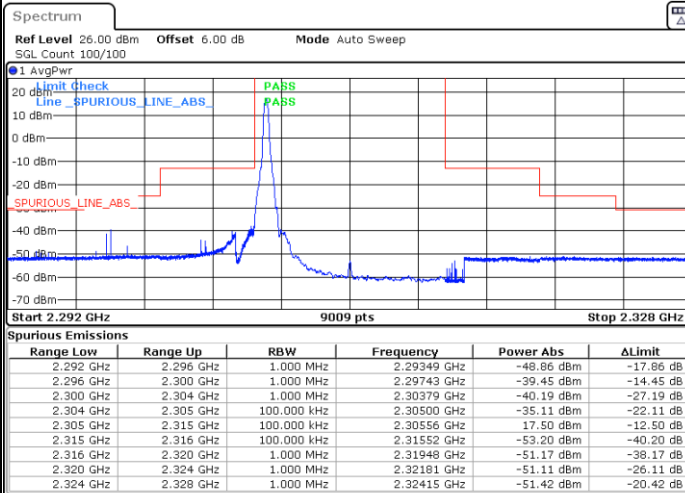
Date: 19.OCT.2024 14:20:13



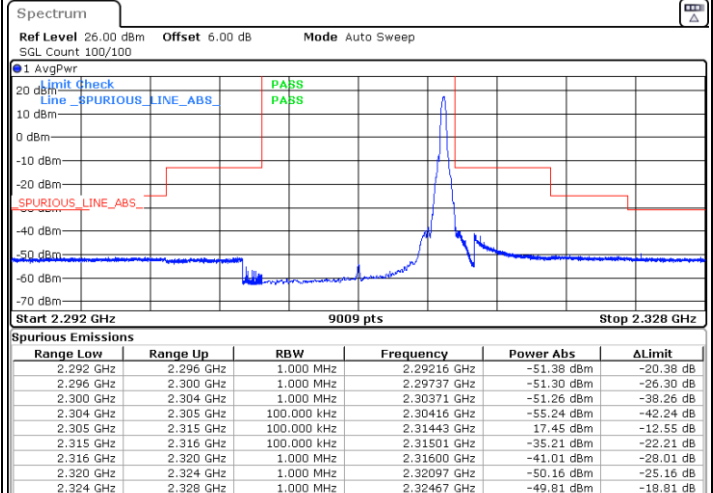
LTE Band 30 / 10MHz / 64QAM

1 RB

1 RBMax

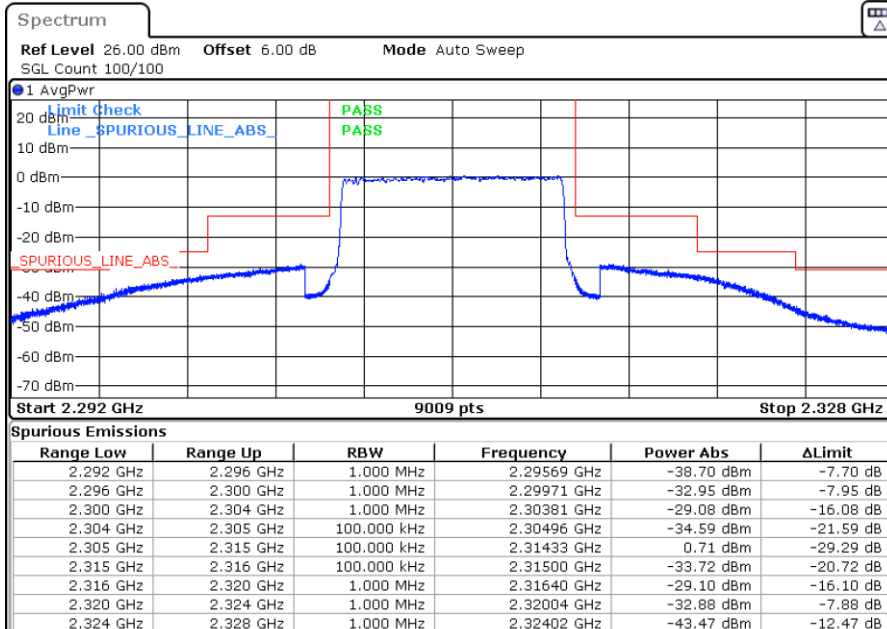


Date: 19.OCT.2024 14:12:01



Date: 19.OCT.2024 14:16:42

Band Edge / Full RB

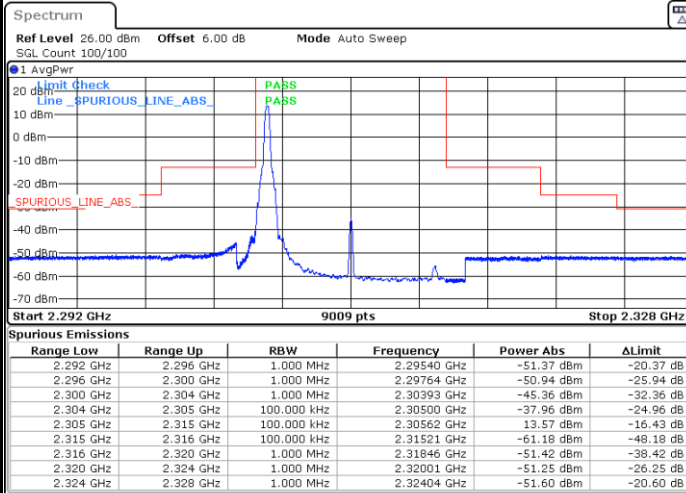


Date: 19.OCT.2024 14:21:24



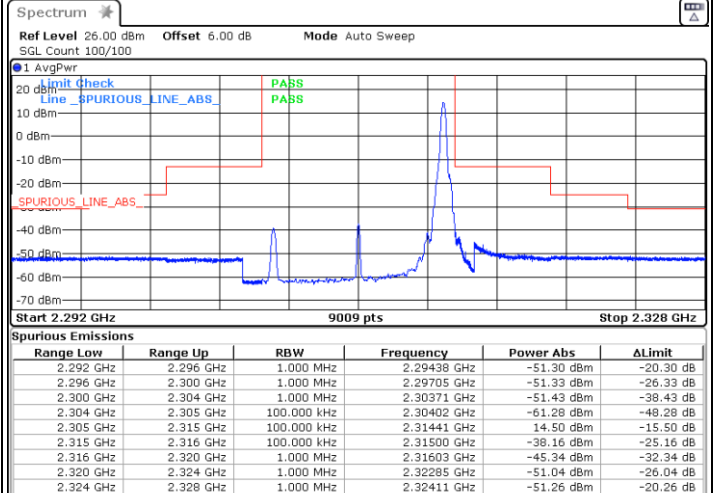
LTE Band 30 / 10MHz / 256QAM

1 RB



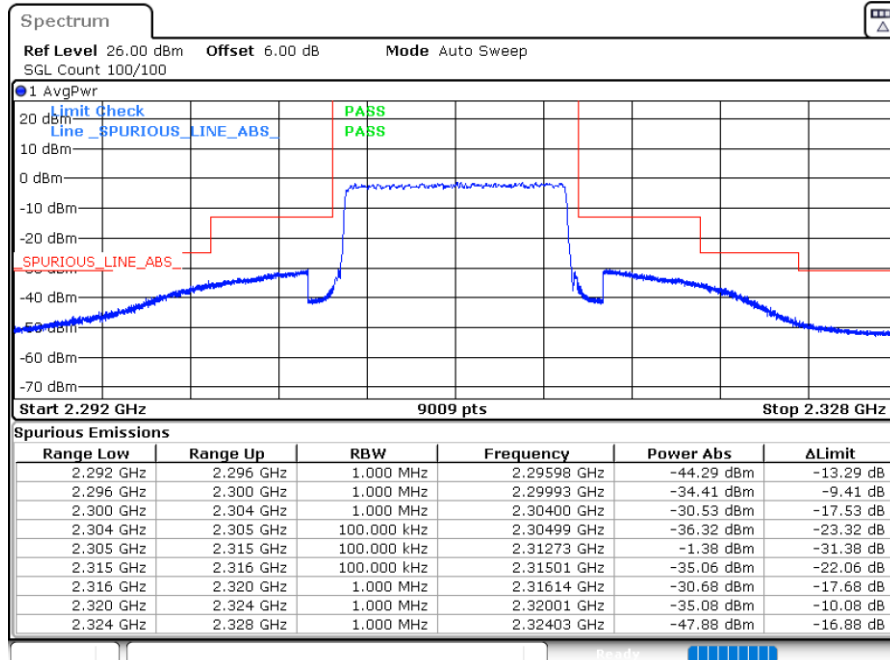
Date: 19.OCT.2024 14:13:11

1 RBMax



Date: 19.OCT.2024 14:17:52

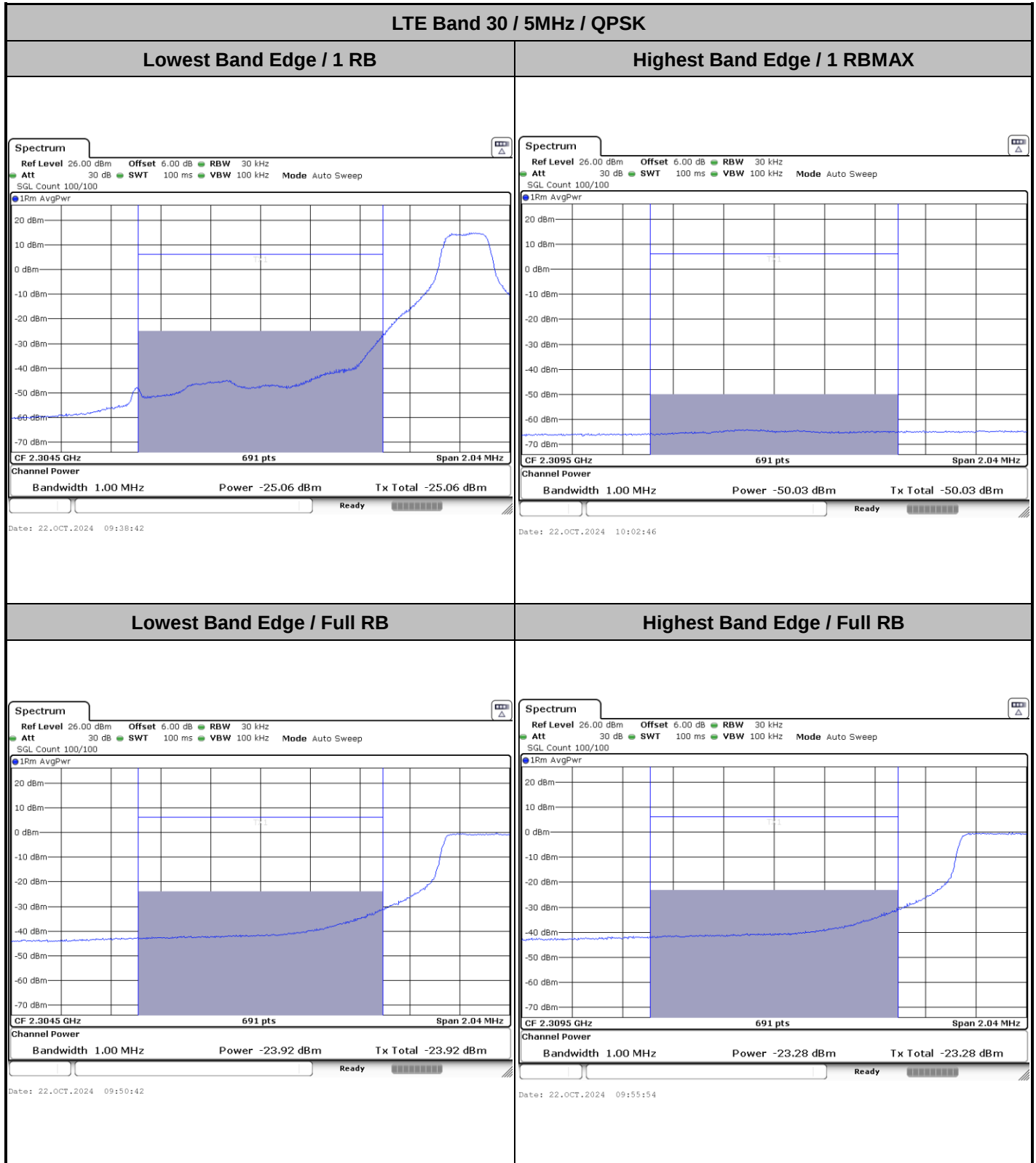
Band Edge / Full RB



Date: 19.OCT.2024 14:22:34



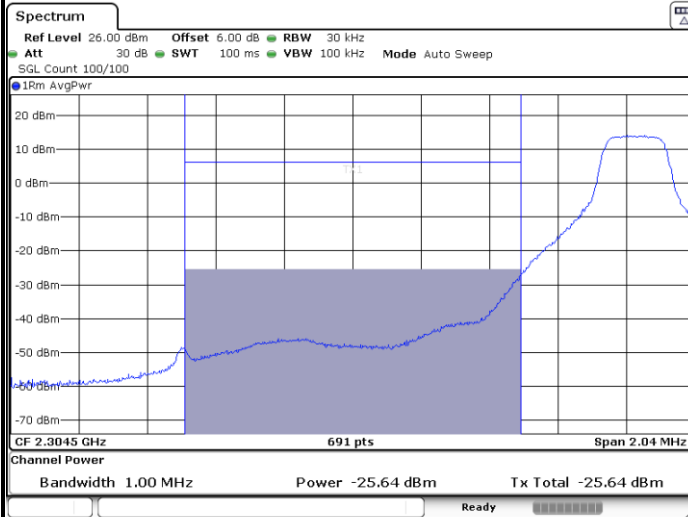
Channel Power Left



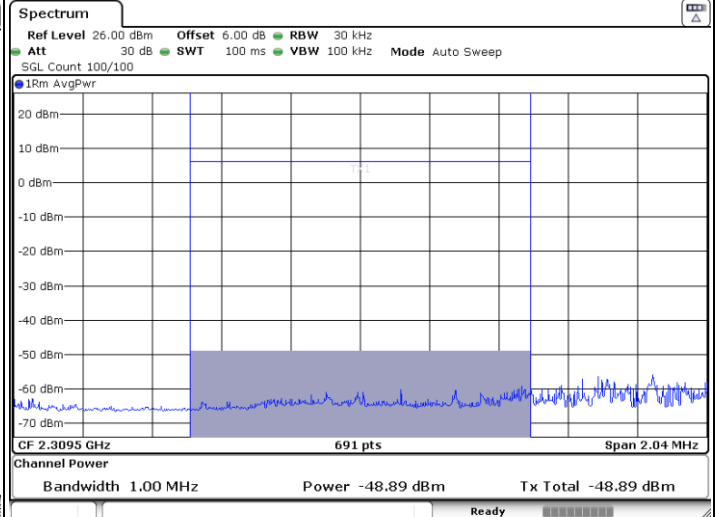


LTE Band 30 / 5MHz / 16QAM

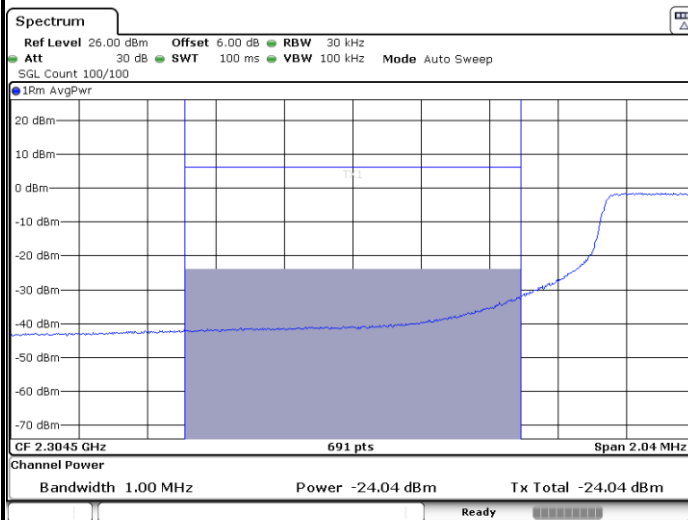
Lowest Band Edge / 1RB



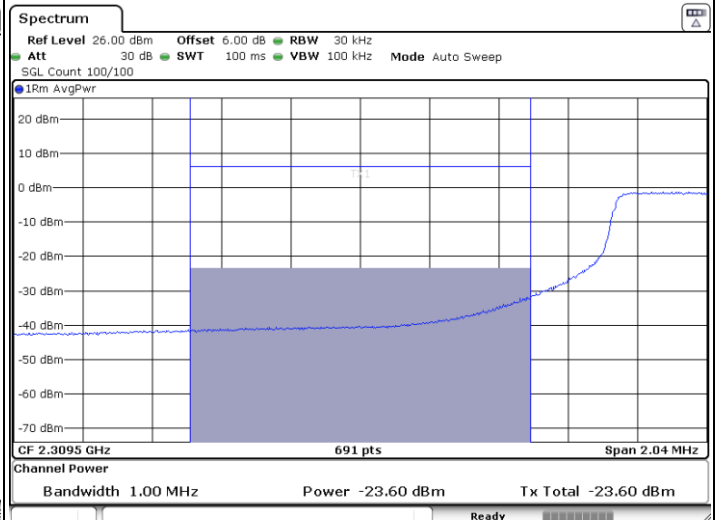
Highest Band Edge / 1 RBMAX



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

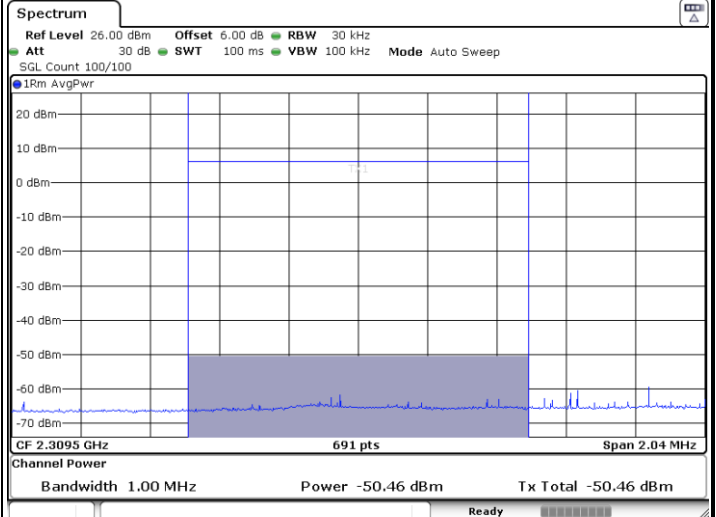
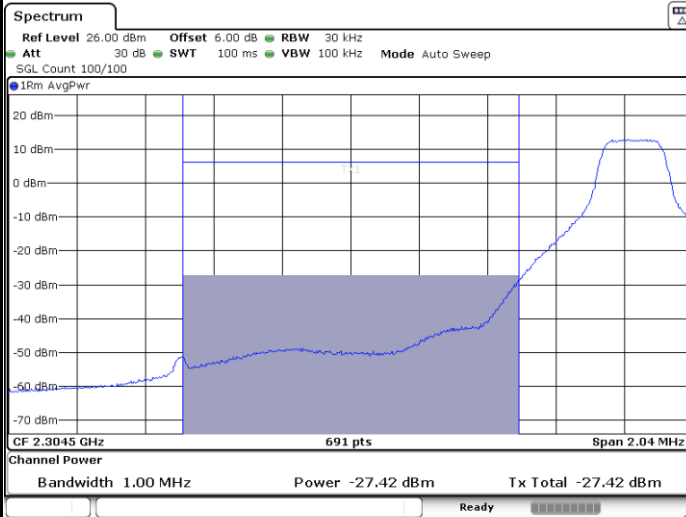




LTE Band 30 / 5MHz / 64QAM

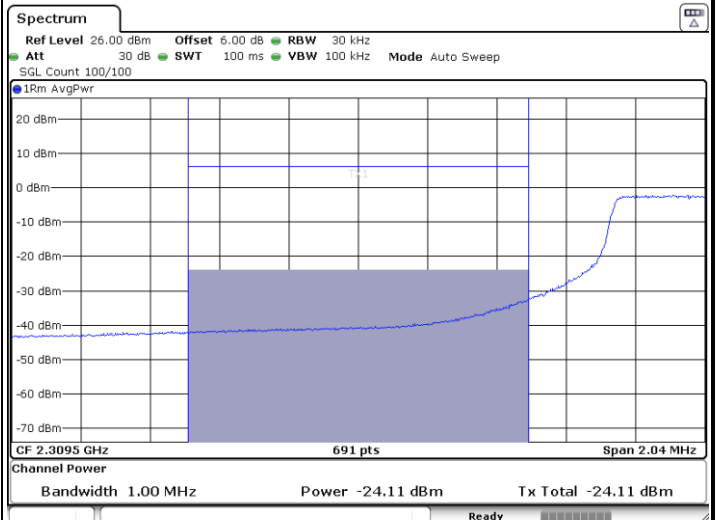
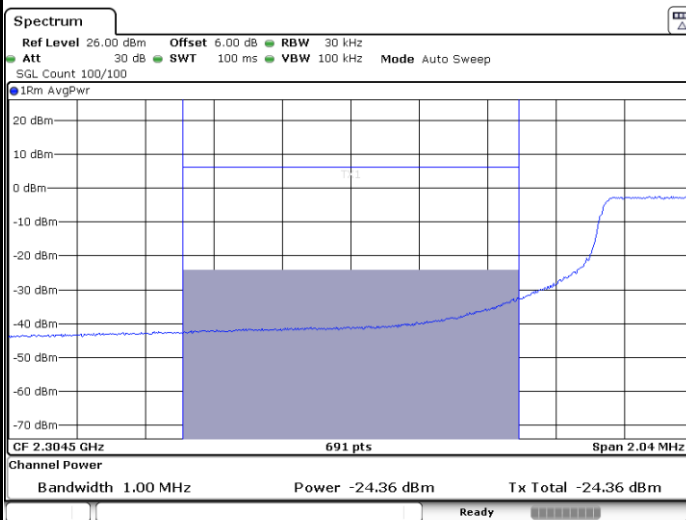
Lowest Band Edge / 1RB

Highest Band Edge / 1 RBMAX



Lowest Band Edge / Full RB

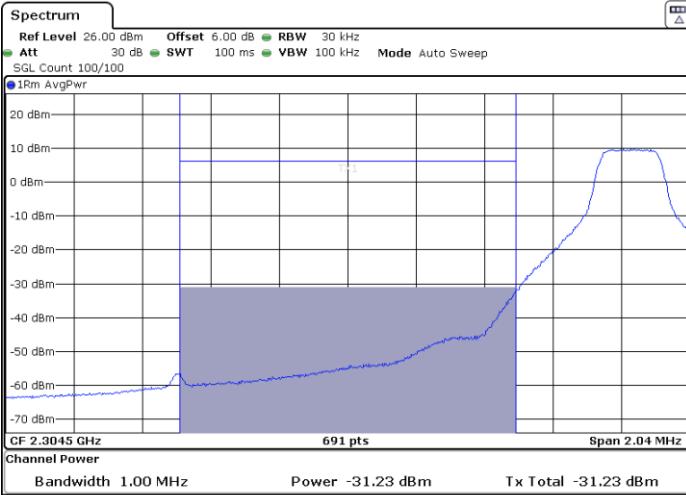
Highest Band Edge / Full RB





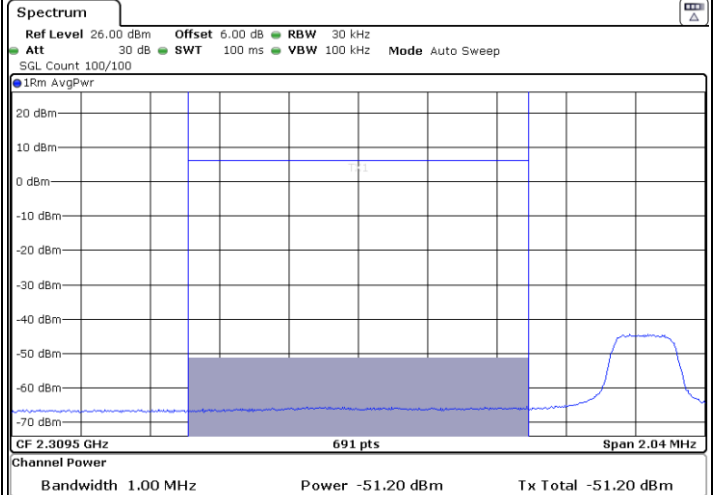
LTE Band 30 / 5MHz / 256QAM

Lowest Band Edge / 1RB



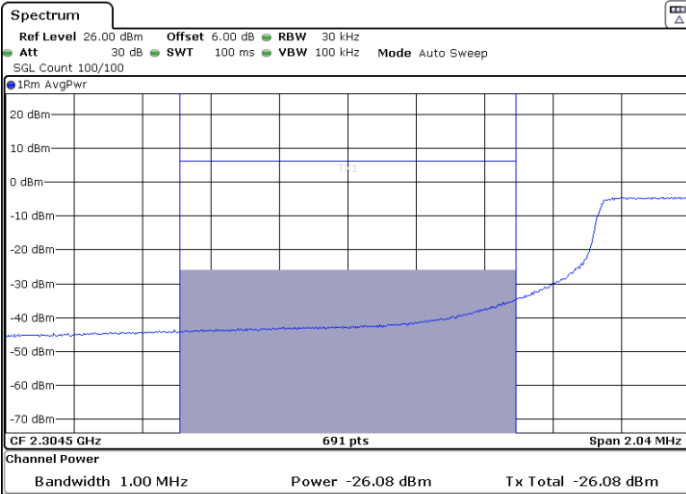
Date: 22.OCT.2024 09:42:13

Highest Band Edge / 1 RBMAX



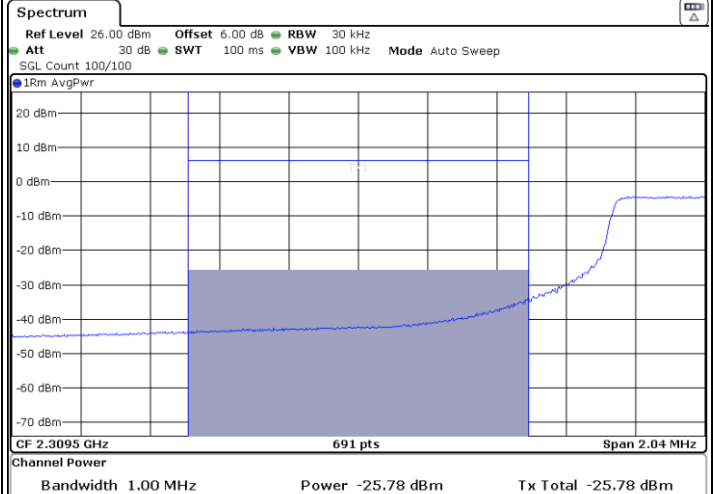
Date: 22.OCT.2024 10:04:32

Lowest Band Edge / Full RB



Date: 22.OCT.2024 09:52:24

Highest Band Edge / Full RB

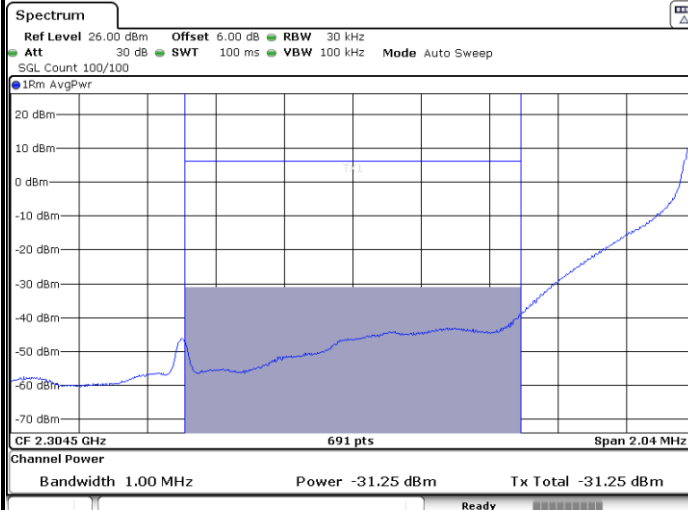


Date: 22.OCT.2024 09:57:27

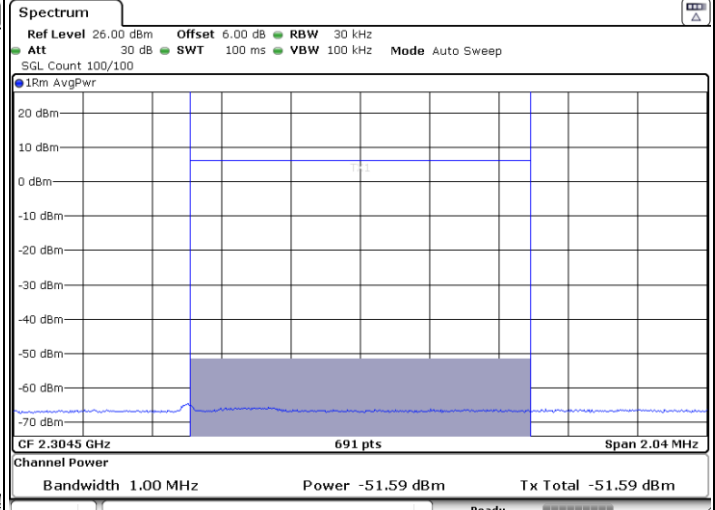


LTE Band 30 / 10MHz / QPSK

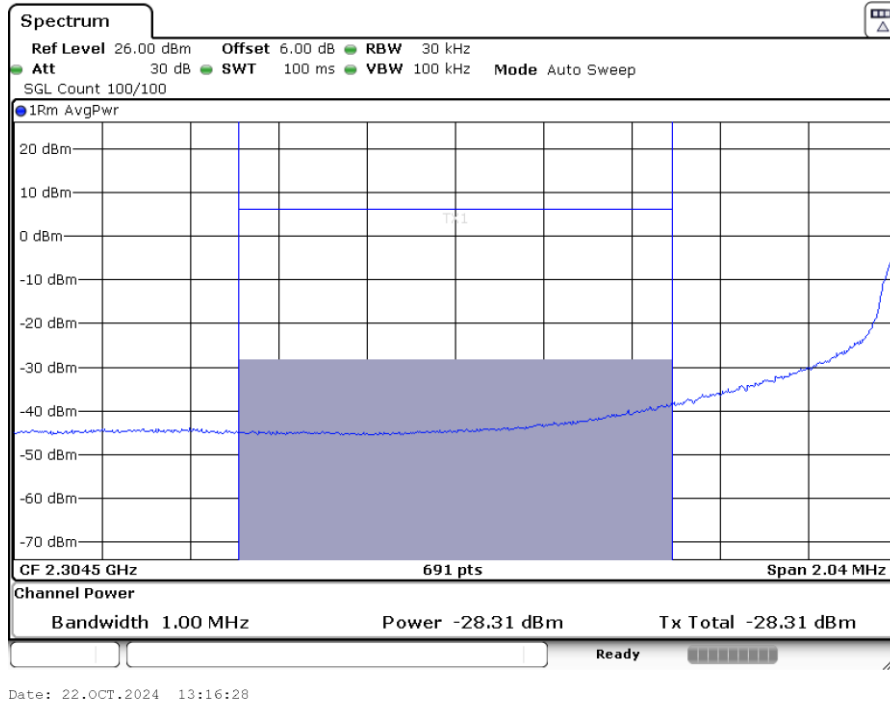
1 RB



1 RBMax



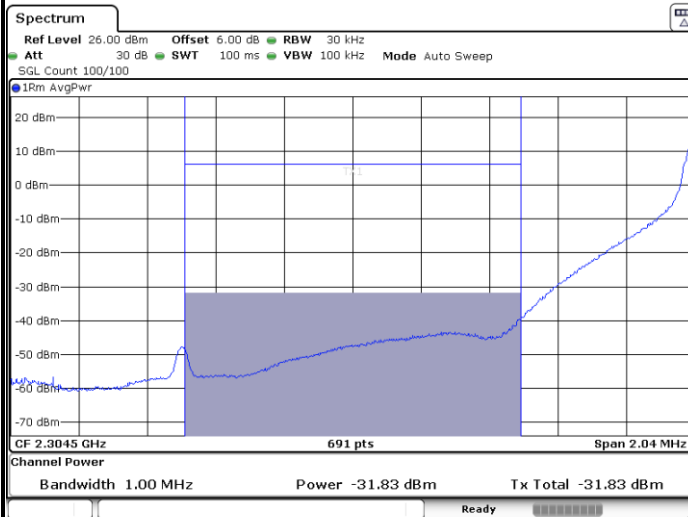
Full RB



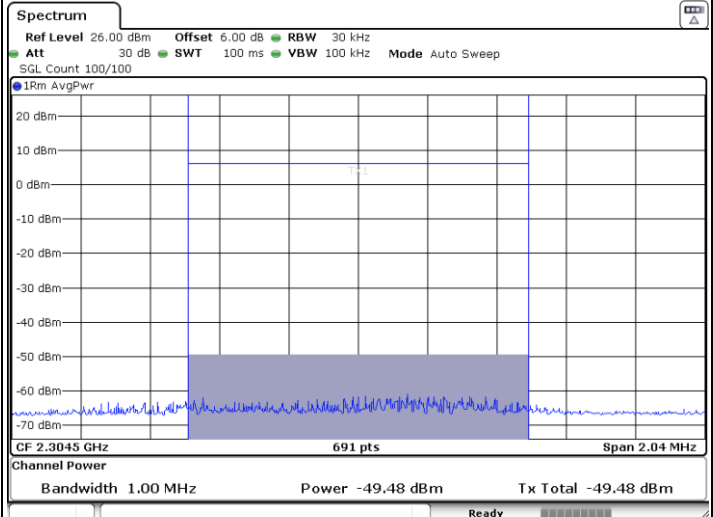


LTE Band 30 / 10MHz / 16QAM

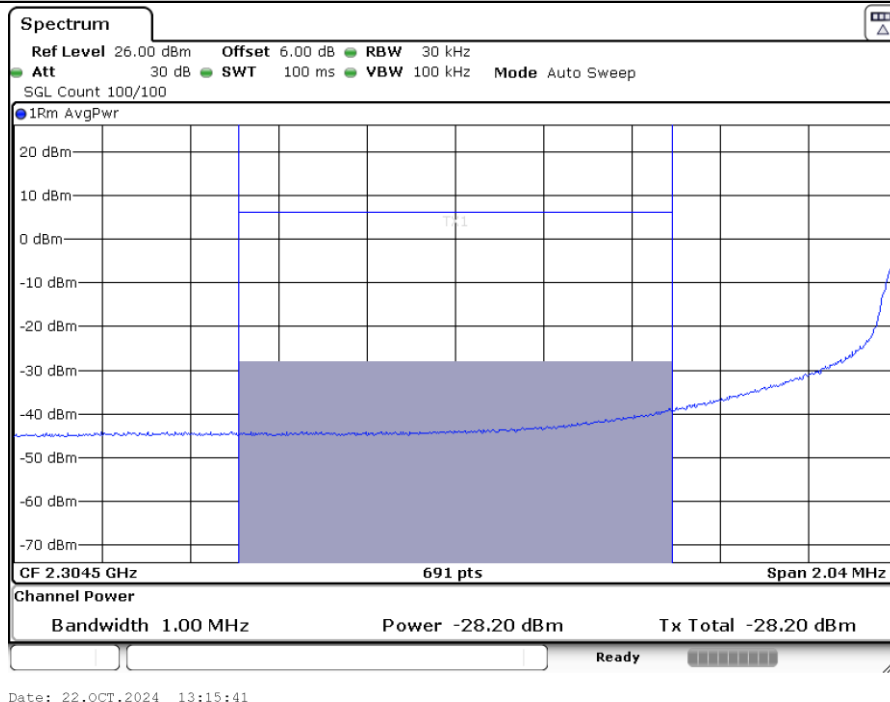
1 RB



1 RBMax



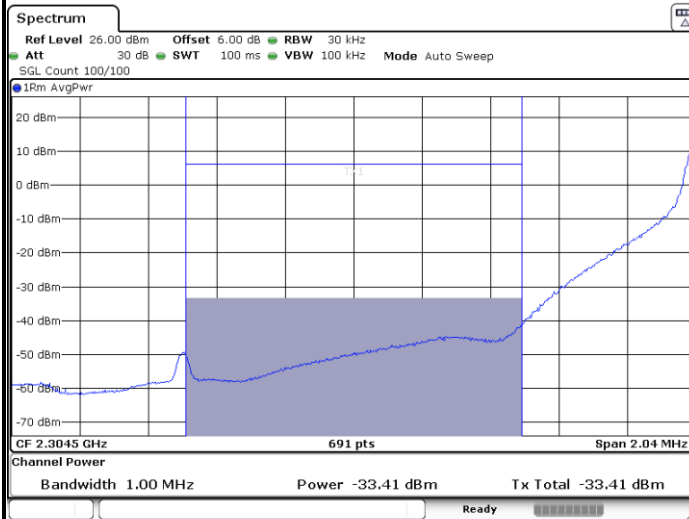
Full RB



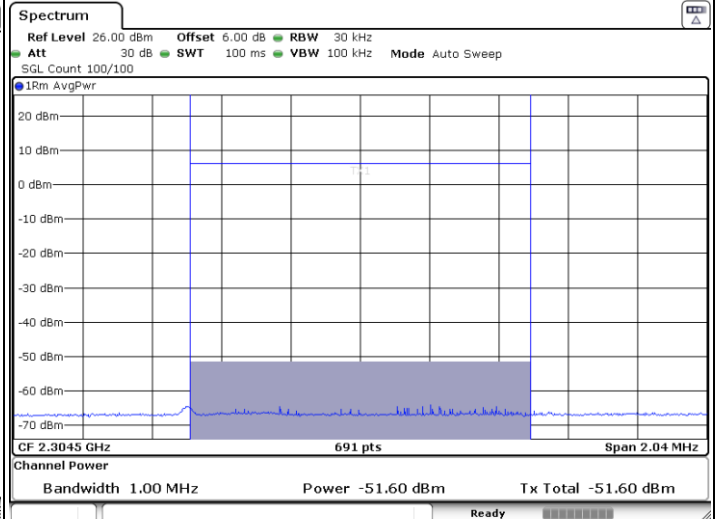


LTE Band 30 / 10MHz / 64QAM

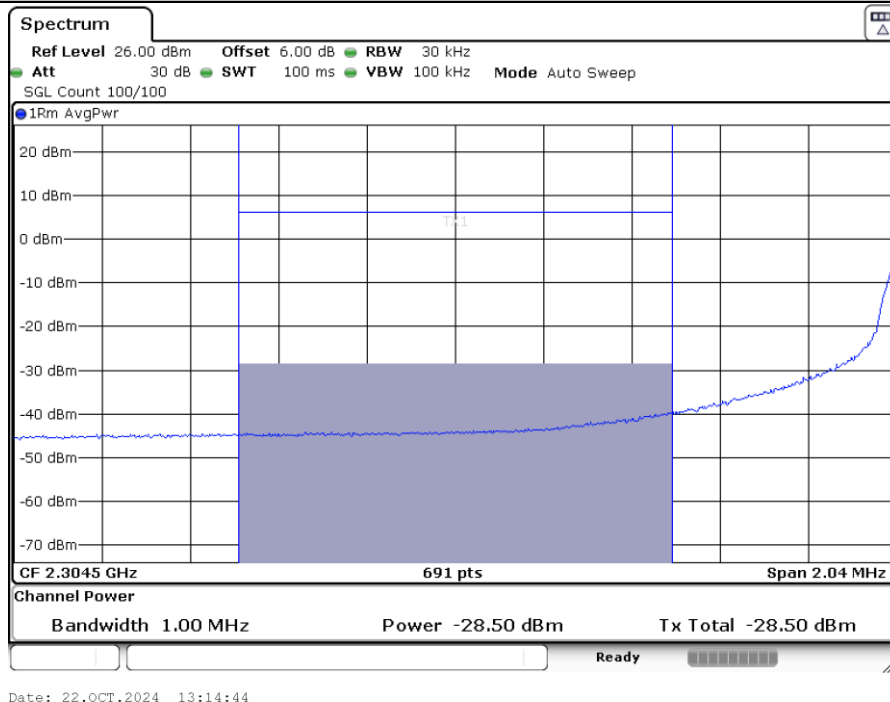
1 RB



1 RBMax



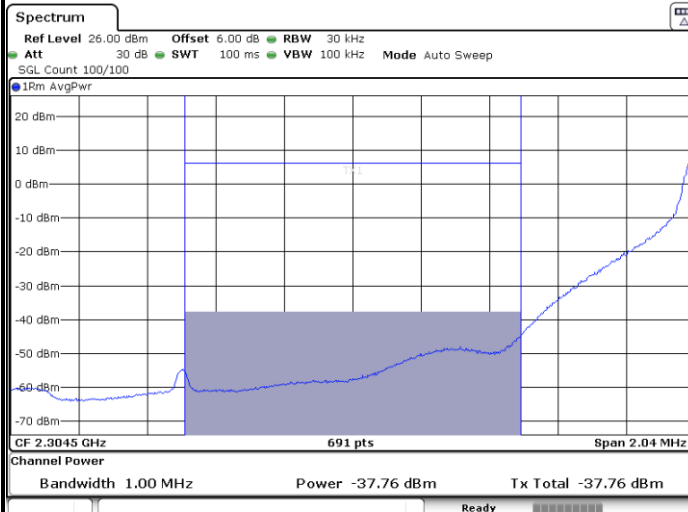
Band Edge / Full RB



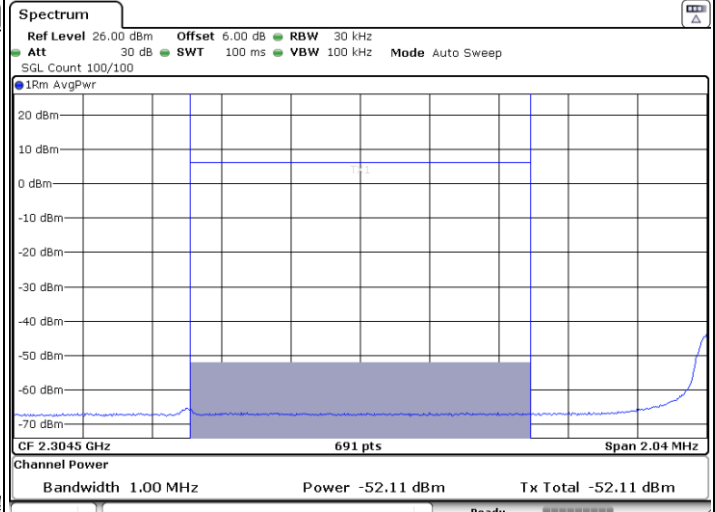


LTE Band 30 / 10MHz / 256QAM

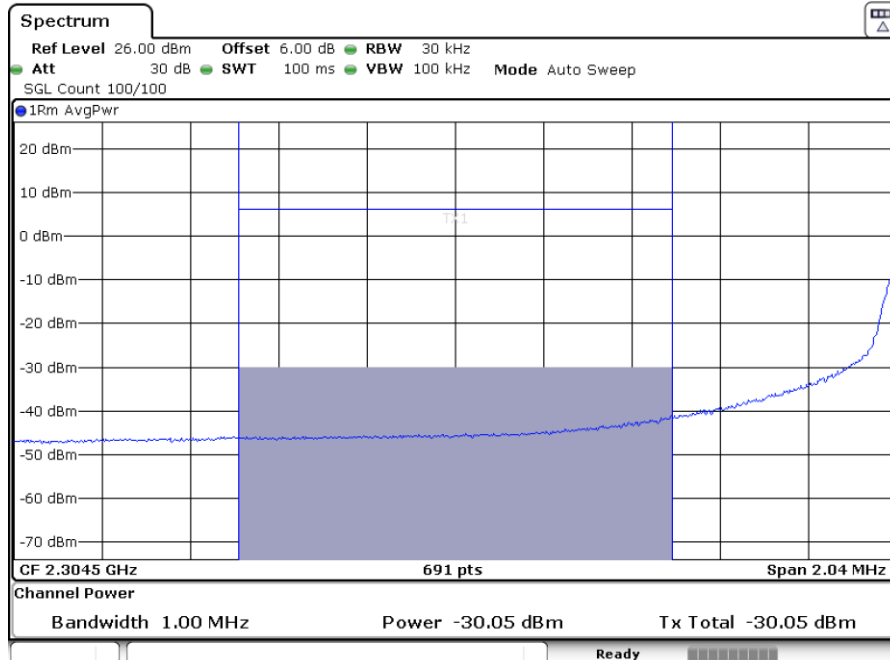
1 RB



1 RBMax

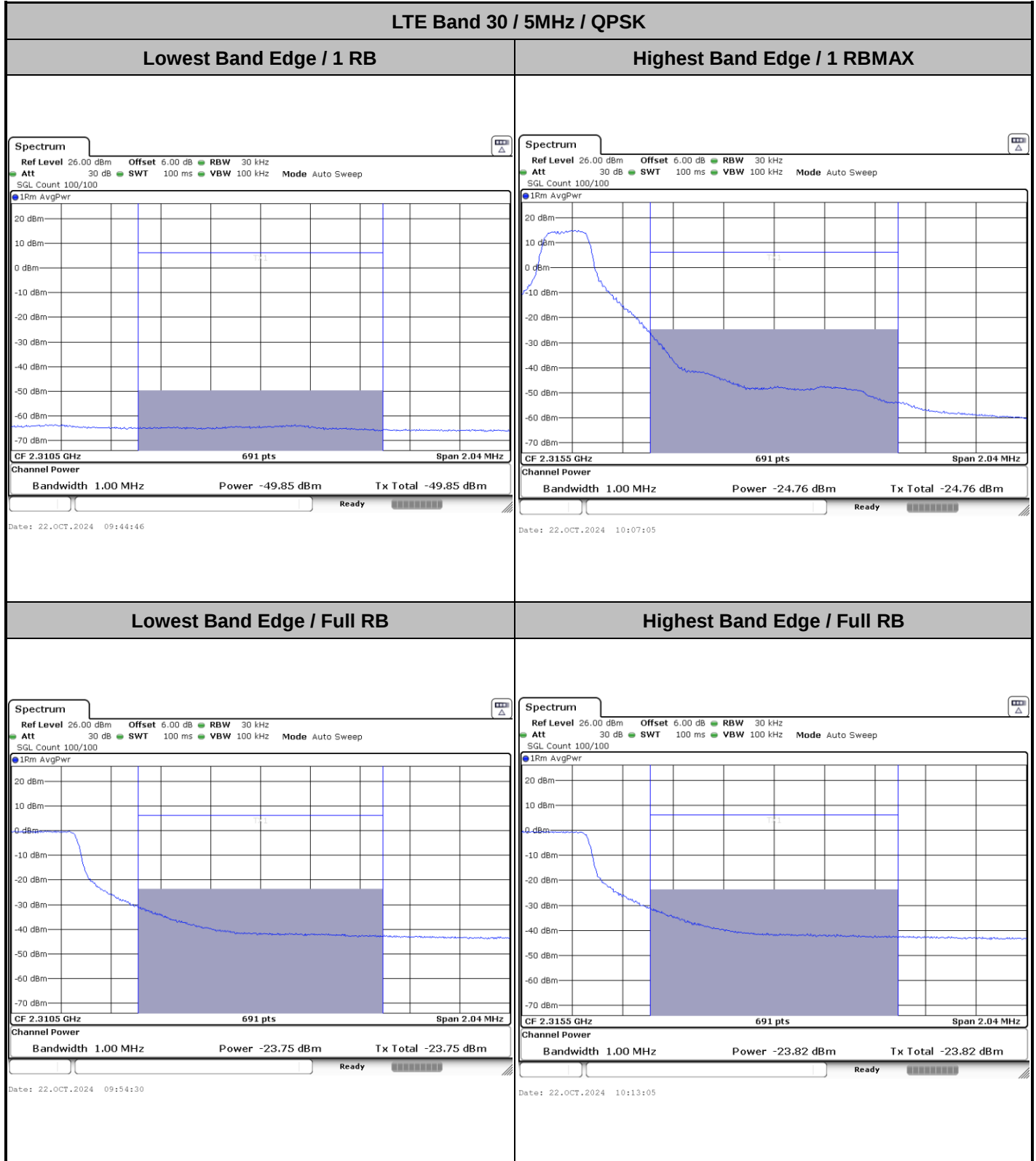


Band Edge / Full RB





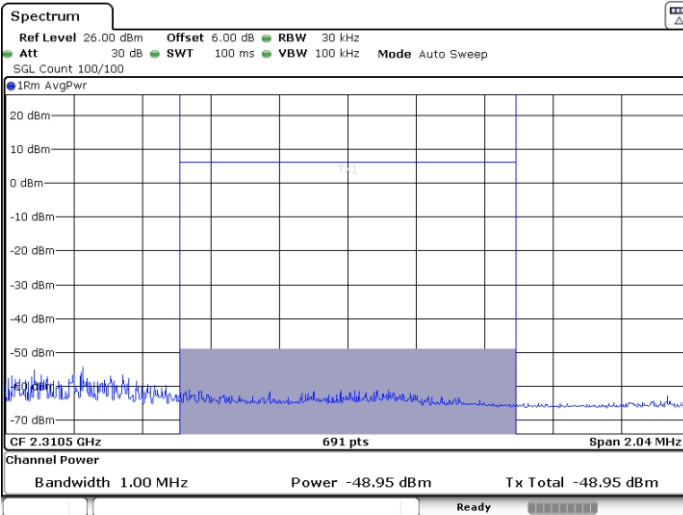
Channel Power Right



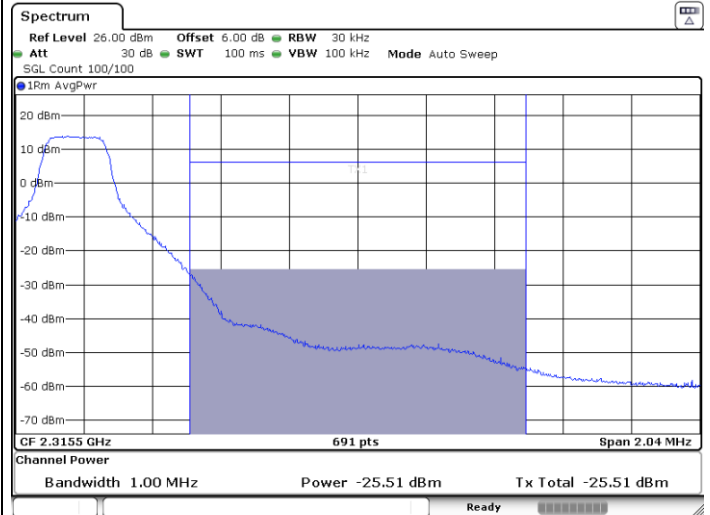


LTE Band 30 / 5MHz / 16QAM

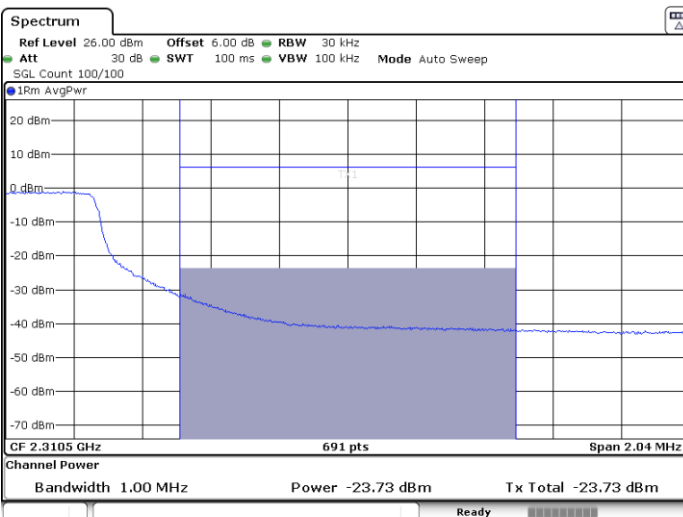
Lowest Band Edge / 1RB



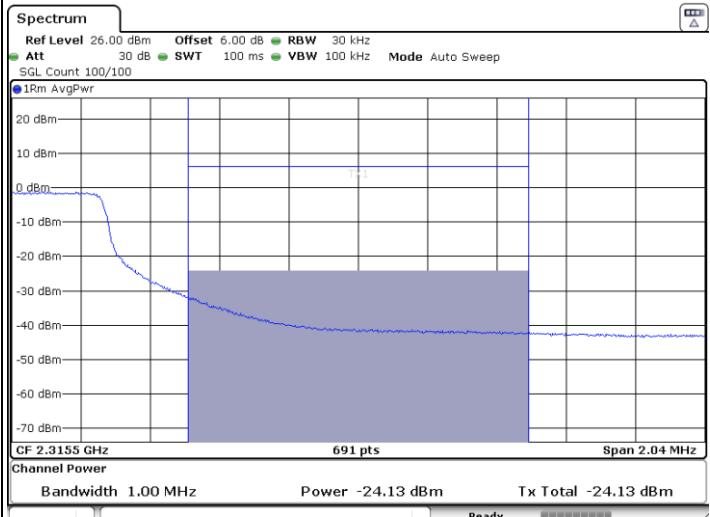
Highest Band Edge / 1 RBMAX



Lowest Band Edge / Full RB



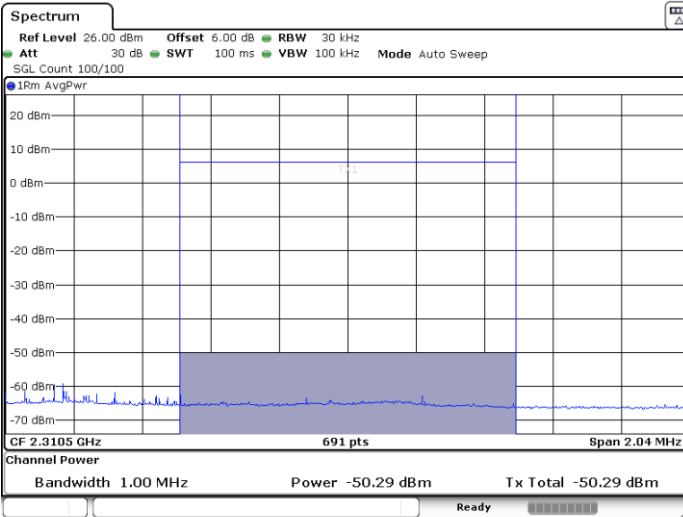
Highest Band Edge / Full RB



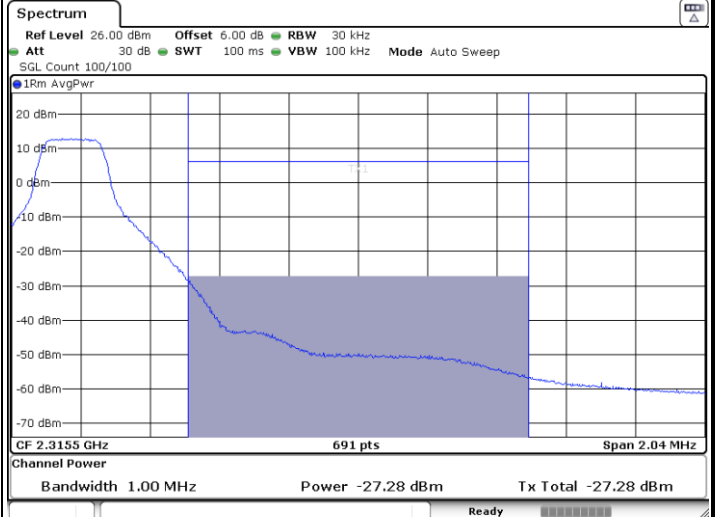


LTE Band 30 / 5MHz / 64QAM

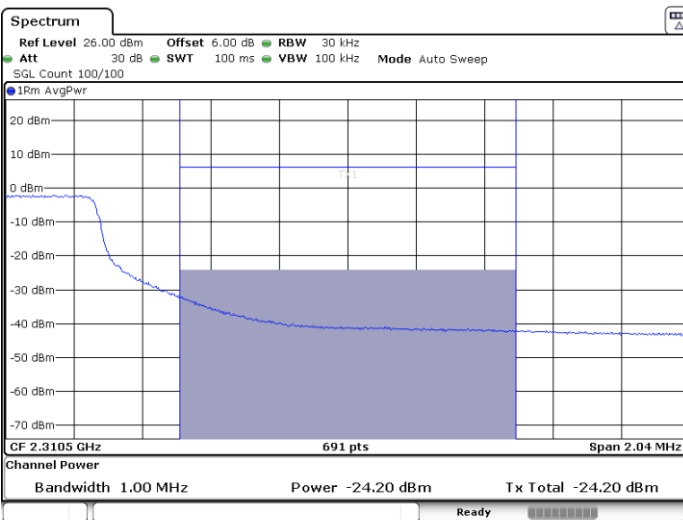
Lowest Band Edge / 1RB



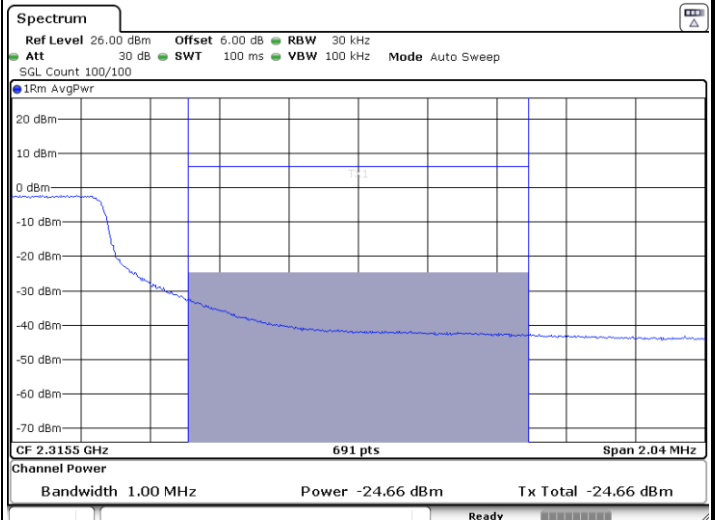
Highest Band Edge / 1 RBMAX



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

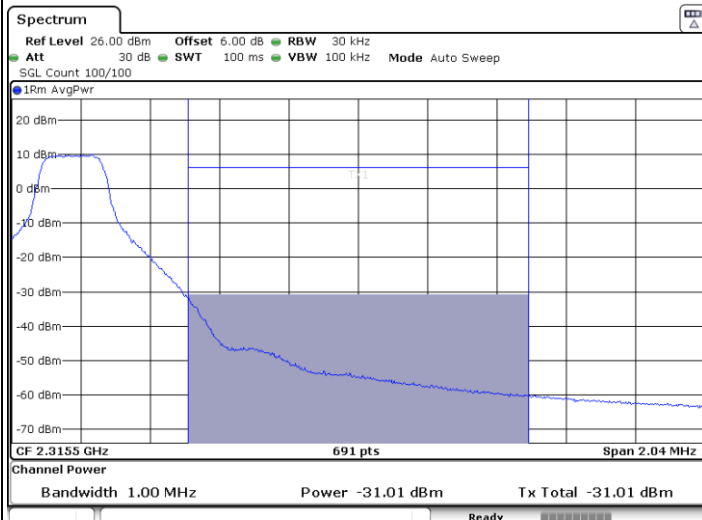
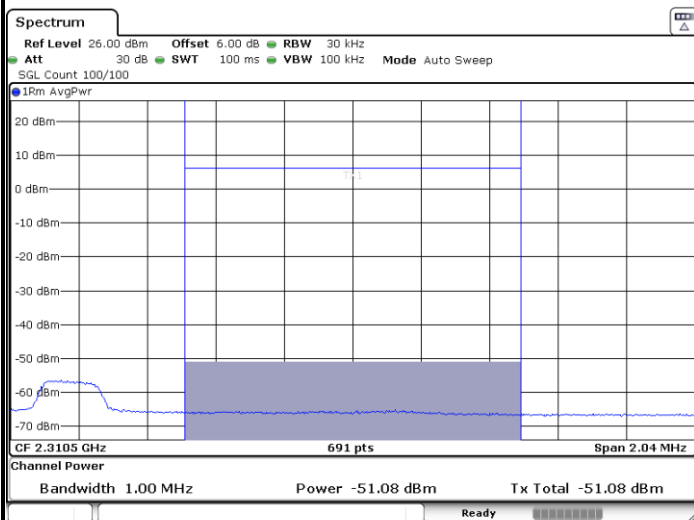




LTE Band 30 / 5MHz / 256QAM

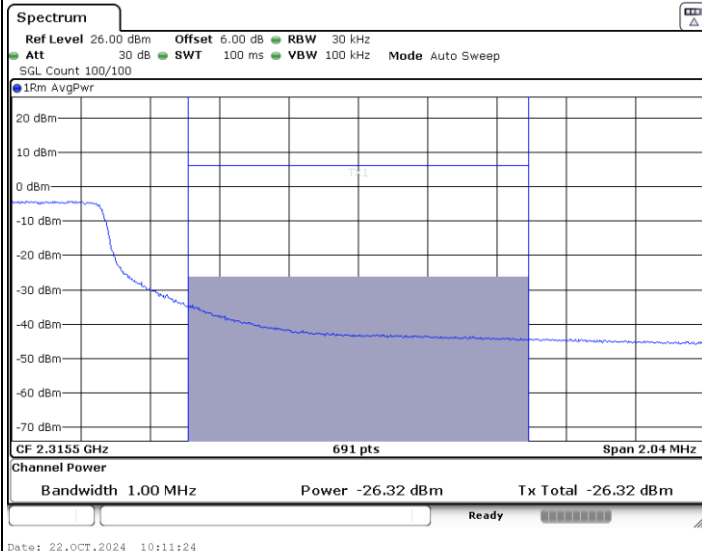
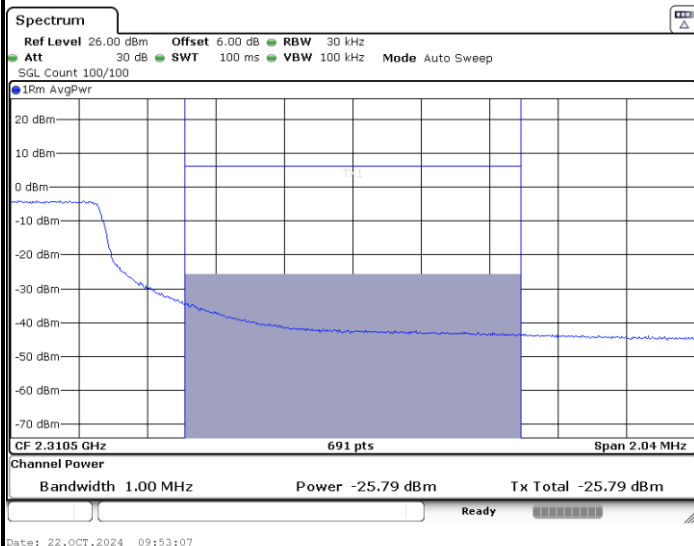
Lowest Band Edge / 1RB

Highest Band Edge / 1 RBMAX



Lowest Band Edge / Full RB

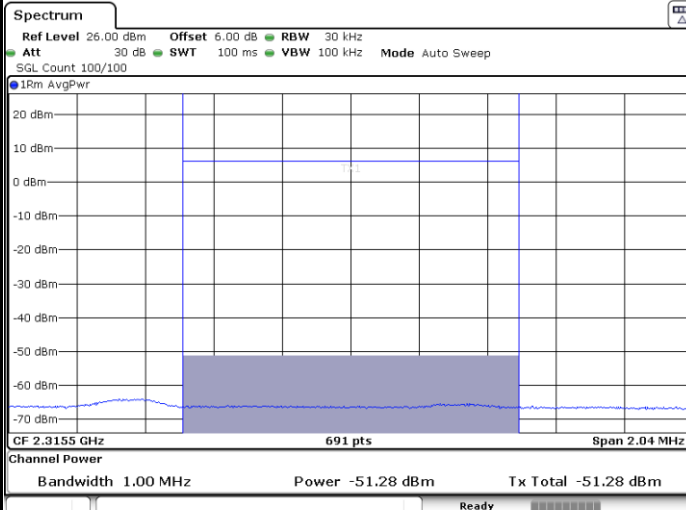
Highest Band Edge / Full RB



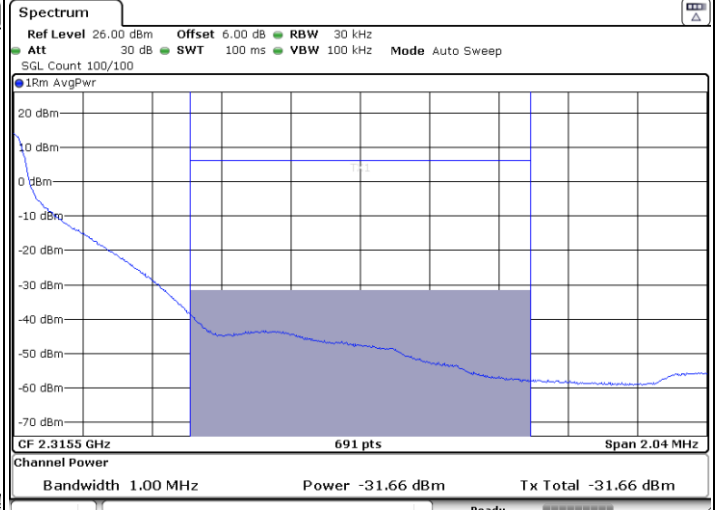


LTE Band 30 / 10MHz / QPSK

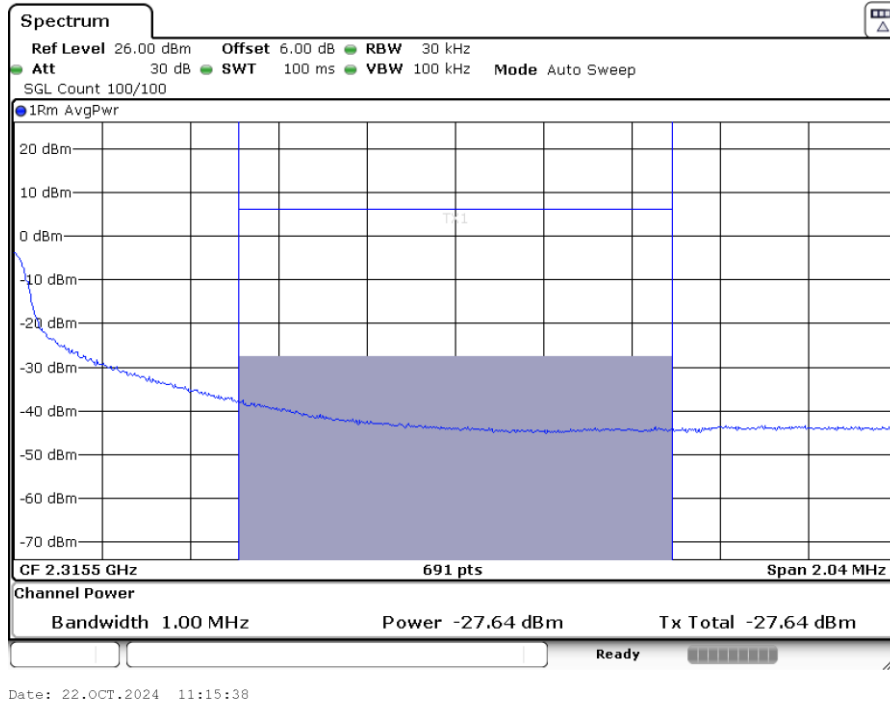
1 RB



1 RBMax



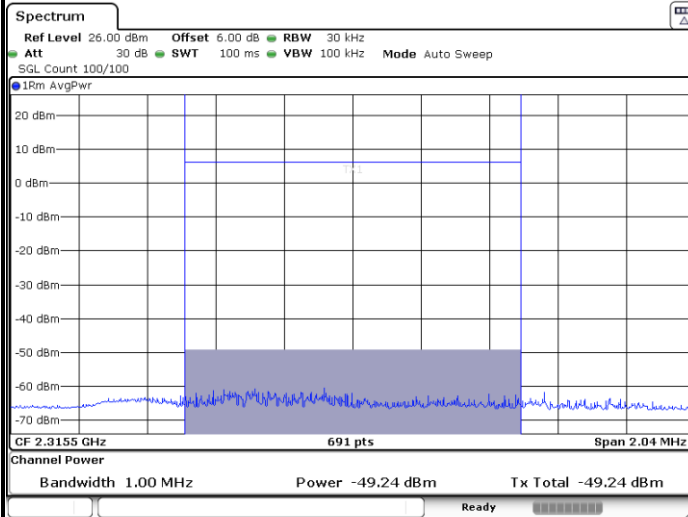
Full RB





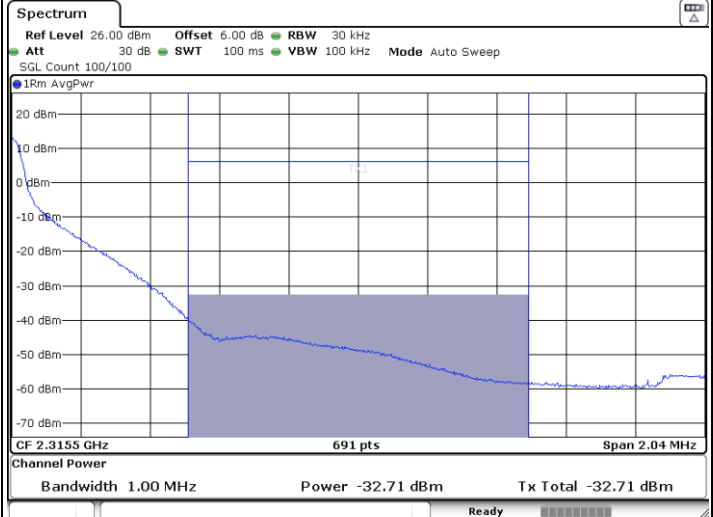
LTE Band 30 / 10MHz / 16QAM

1 RB



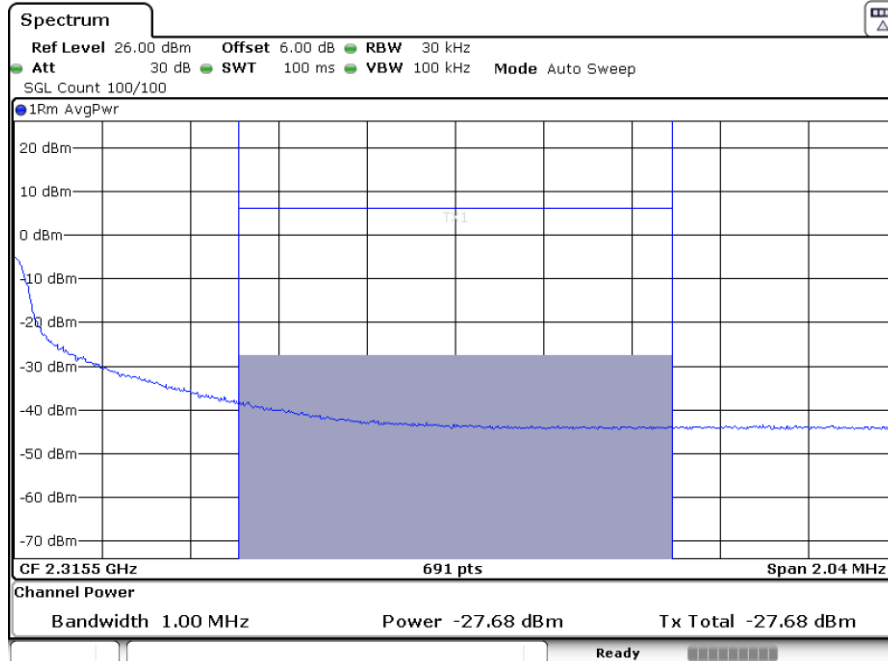
Date: 22.OCT.2024 13:02:00

1 RBMax



Date: 22.OCT.2024 13:03:27

Full RB

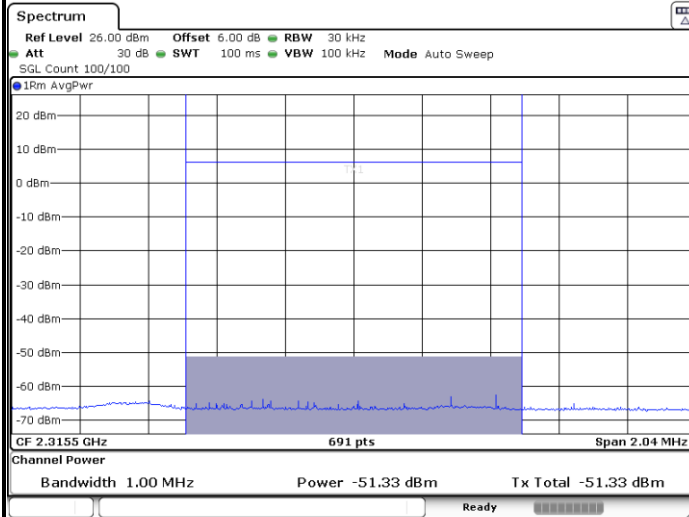


Date: 22.OCT.2024 11:16:16

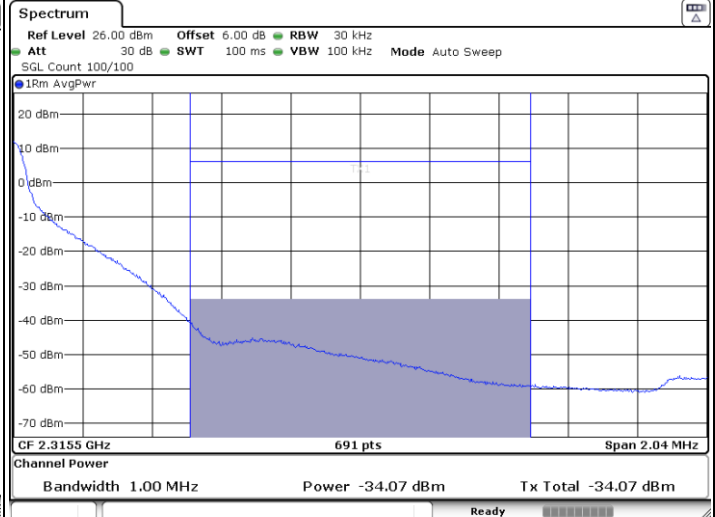


LTE Band 30 / 10MHz / 64QAM

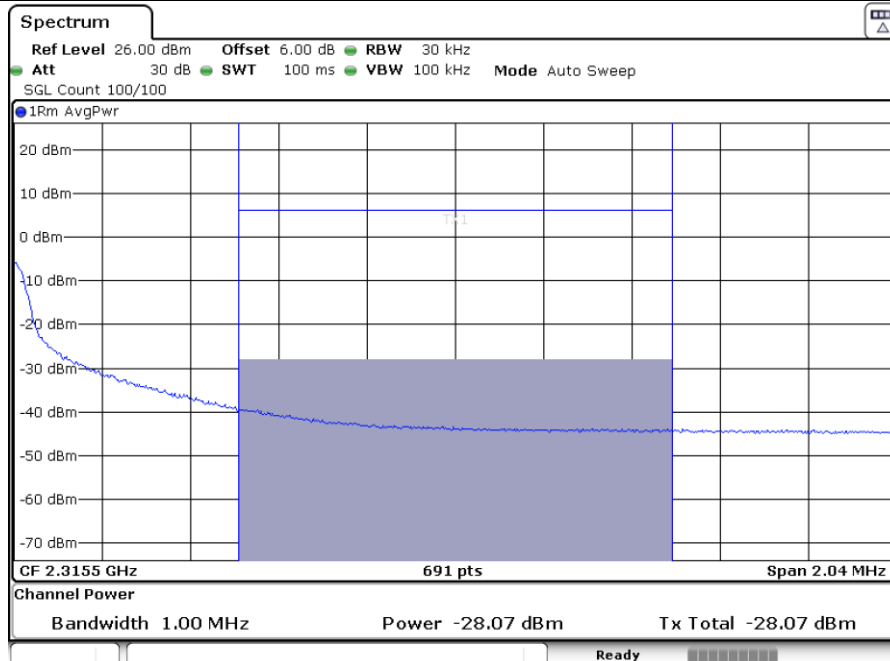
1 RB



1 RBMax



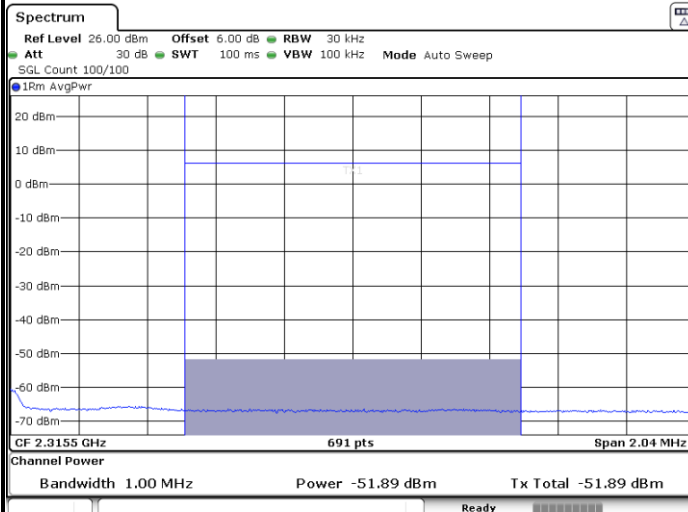
Band Edge / Full RB



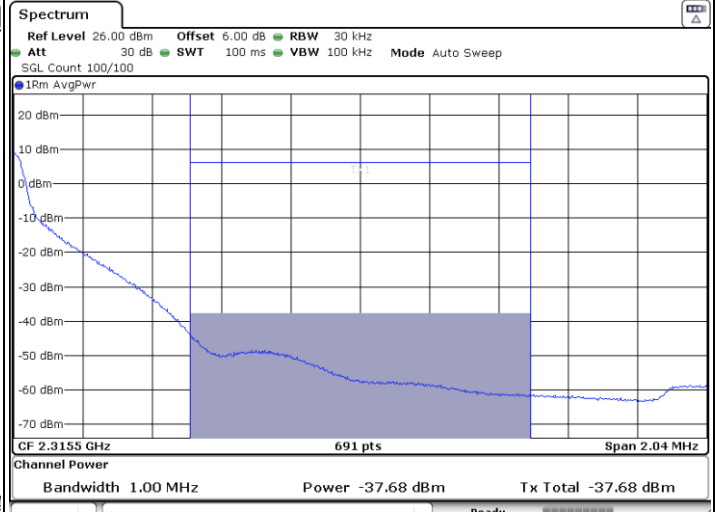


LTE Band 30 / 10MHz / 256QAM

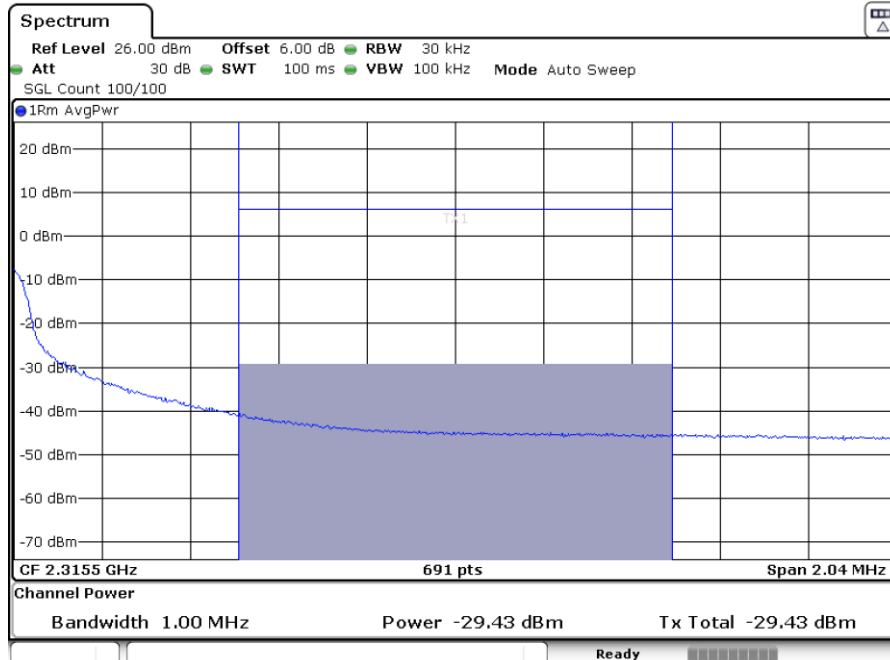
1 RB



1 RBMax



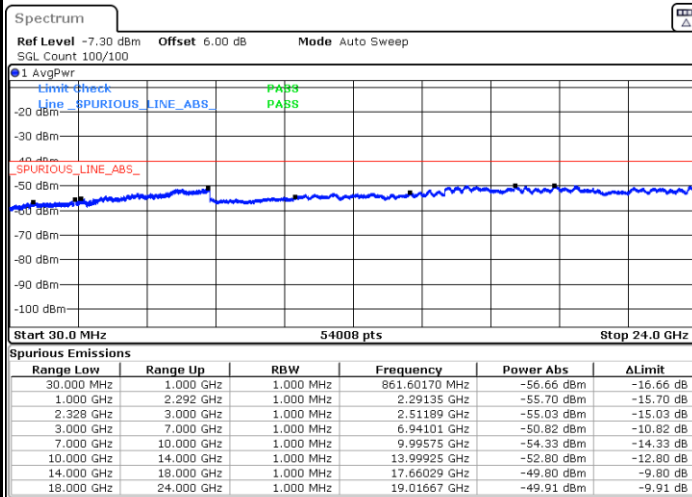
Band Edge / Full RB



Conducted Spurious Emission

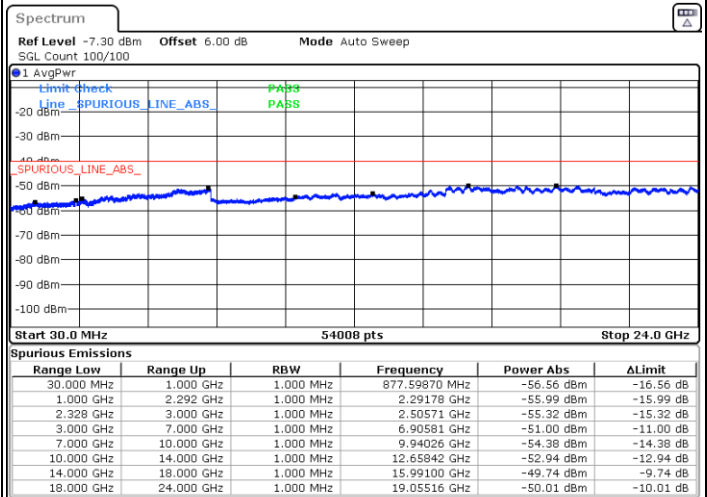
LTE Band 30 / 5MHz

Lowest Channel / QPSK



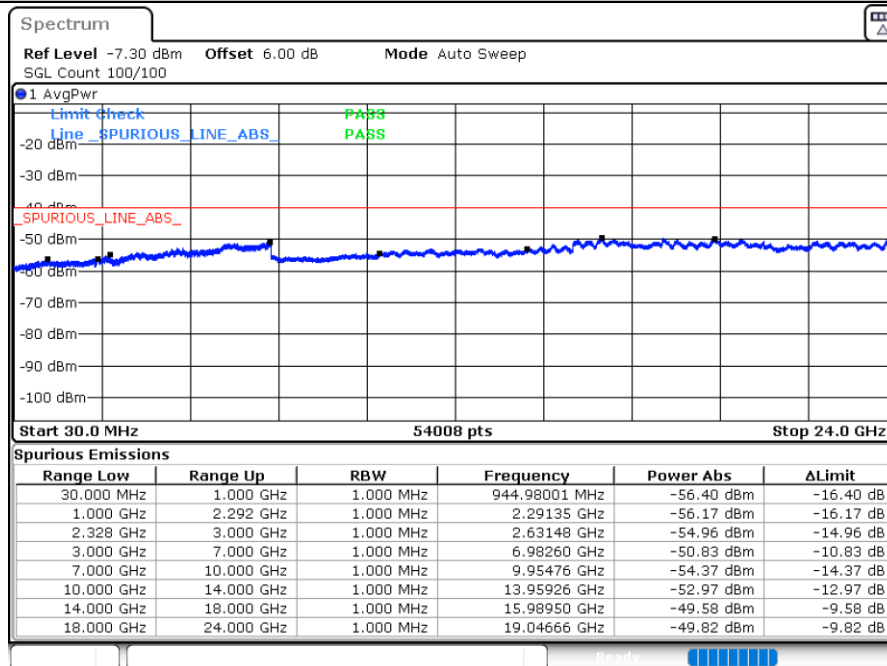
Date: 19.OCT.2024 15:11:23

Middle Channel / QPSK



Date: 19.OCT.2024 15:13:16

Highest Channel / QPSK

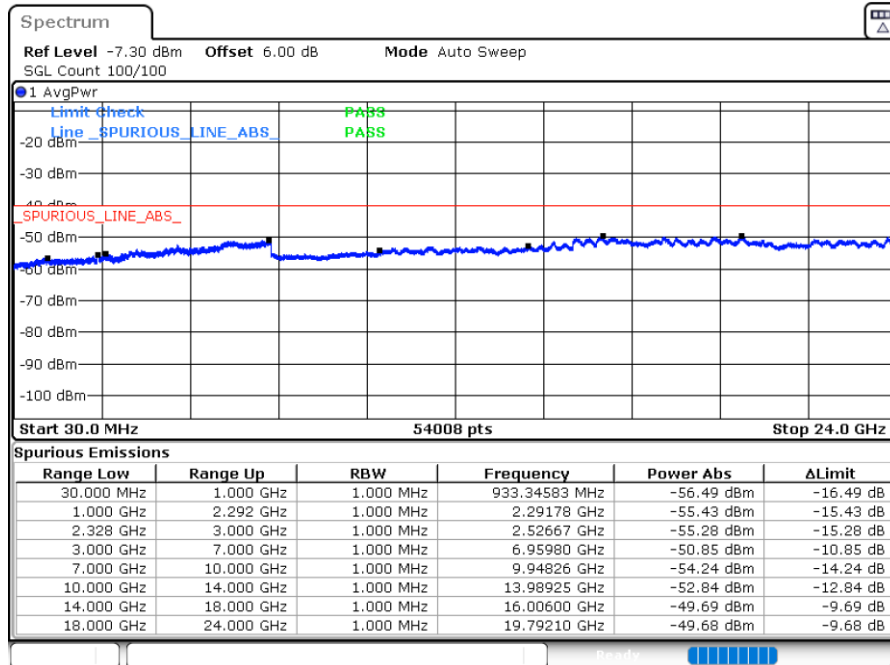


Date: 19.OCT.2024 15:14:51



LTE Band 30 / 10MHz

Middle Channel / QPSK



Date: 19.OCT.2024 14:26:35

Frequency Stability

Test Conditions		LTE Band 30 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0019	PASS
40	Normal Voltage	0.0022	
30	Normal Voltage	0.0033	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0064	
0	Normal Voltage	0.0057	
-10	Normal Voltage	0.0018	
-20	Normal Voltage	0.0062	
-30	Normal Voltage	0.0006	
20	Maximum Voltage	0.0024	
20	Normal Voltage	0.0033	
20	Battery End Point	0.0019	

Note:

1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.45 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 :	Bruce	Temperature :	23~25°C
		Relative Humidity :	41~42%

RSE pretest all the supported Antennas, only the worst results are shown in the report.

LTE Band 30 / 5MHz / QPSK / Ant.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)
Lowest	4616	-62.67	-40	-22.67	-74.13	2.84	14.30	H
	6912	-44.79	-40	-4.79	-54.73	3.49	13.43	H
	9222	-61.83	-40	-21.83	-72.07	3.85	14.09	H
	4616	-62.13	-40	-22.13	-73.59	2.84	14.30	V
	6912	-43.35	-40	-3.35	-53.29	3.49	13.43	V
	9222	-61.60	-40	-21.60	-71.84	3.85	14.09	V
Middle	4616	-61.09	-40	-21.09	-72.55	2.84	14.30	H
	6926	-46.33	-40	-6.33	-56.27	3.49	13.43	H
	9236	-61.57	-40	-21.57	-71.81	3.85	14.09	H
	4616	-60.57	-40	-20.57	-72.03	2.84	14.30	V
	6926	-44.27	-40	-4.27	-54.21	3.49	13.43	V
	9236	-61.49	-40	-21.49	-71.73	3.85	14.09	V
Highest	4616	-63.94	-40	-23.94	-75.40	2.84	14.30	H
	6926	-47.29	-40	-7.29	-57.23	3.49	13.43	H
	9236	-61.82	-40	-21.82	-72.06	3.85	14.09	H
	4616	-62.97	-40	-22.97	-74.43	2.84	14.30	V
	6926	-44.02	-40	-4.02	-53.96	3.49	13.43	V
	9236	-62.00	-40	-22.00	-72.24	3.85	14.09	V

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

LTE Band 30 / 10MHz / QPSK / Ant.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	4616	-59.33	-40	-19.33	-70.79	2.84	14.30	H
	6912	-46.83	-40	-6.83	-56.77	3.49	13.43	H
	9222	-61.95	-40	-21.95	-72.19	3.85	14.09	H
	4616	-60.12	-40	-20.12	-71.58	2.84	14.30	V
	6912	-43.52	-40	-3.52	-53.46	3.49	13.43	V
	9222	-61.94	-40	-21.94	-72.18	3.85	14.09	V

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

DC_30A-66A_N66a / QPSK / Ant. 2+3+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	4616	-59.67	-40	-19.67	-71.13	2.84	14.30	H
	6912	-44.28	-40	-4.28	-54.22	3.49	13.43	H
	9222	-62.10	-40	-22.10	-72.34	3.85	14.09	H
	4616	-58.07	-40	-18.07	-69.53	2.84	14.30	V
	6912	-47.38	-40	-7.38	-57.32	3.49	13.43	V
	9222	-62.23	-40	-22.23	-72.47	3.85	14.09	V

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