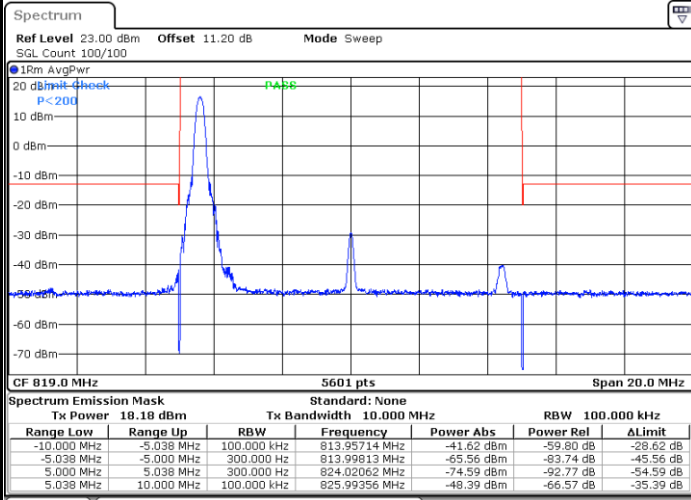




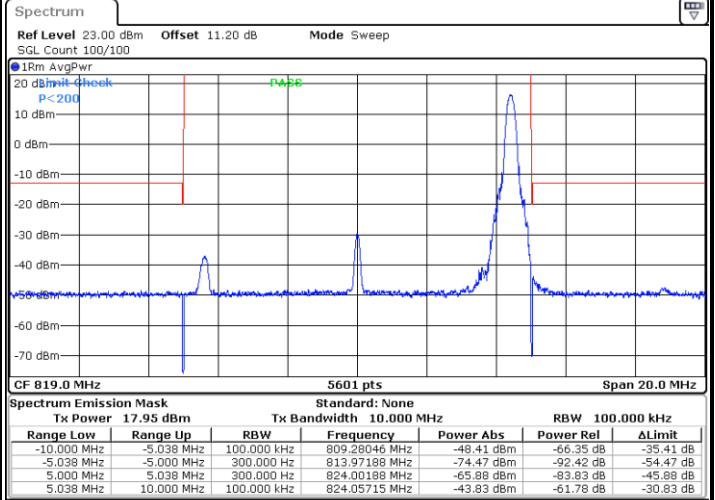
LTE Band 26 / 10MHz / 256QAM

Lowest Band Edge / 1 RB



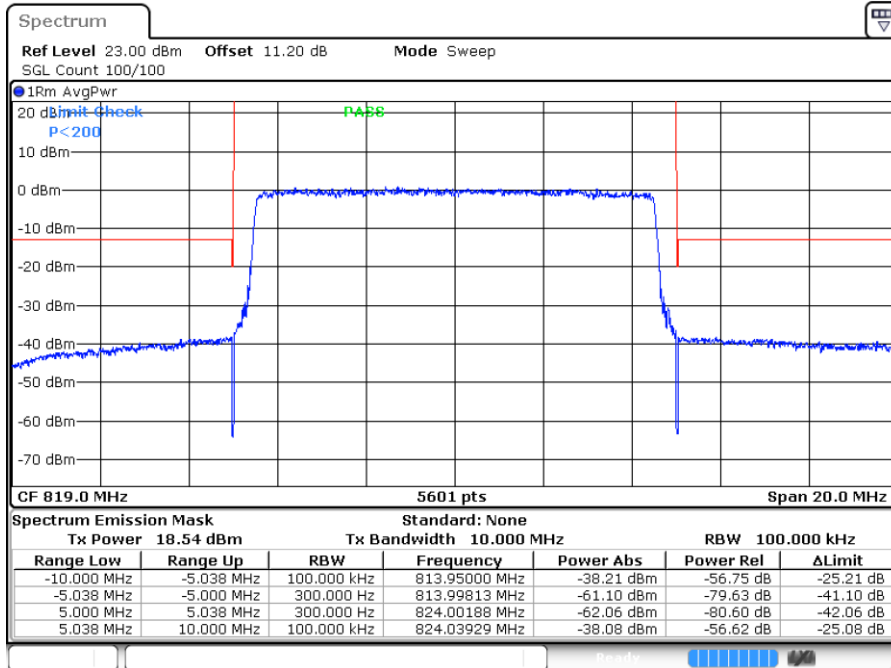
Date: 24.DEC.2020 10:43:21

Highest Band Edge / 1 RB



Date: 24.DEC.2020 10:44:04

Lowest Band Edge / Full RB

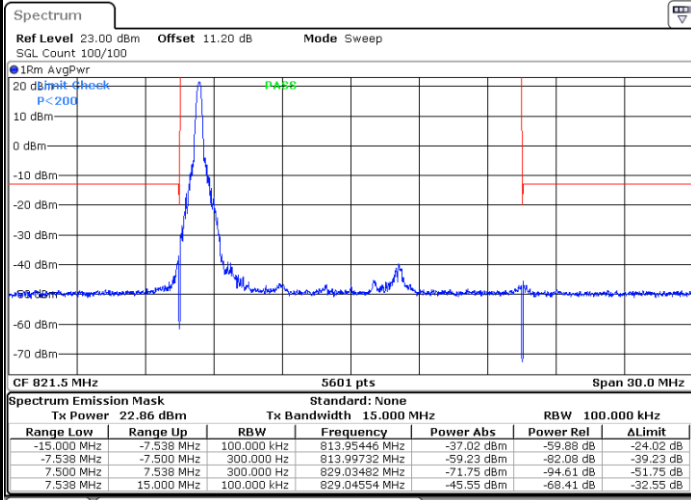


Date: 24.DEC.2020 10:44:55



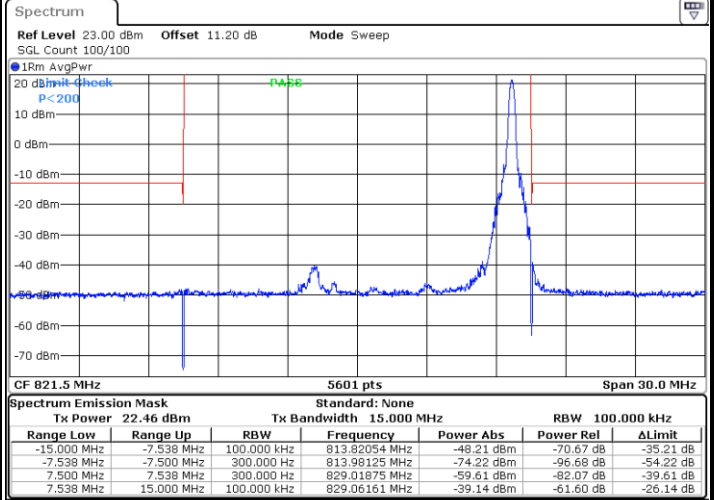
LTE Band 26 / 15MHz / QPSK

Lowest Band Edge / 1 RB



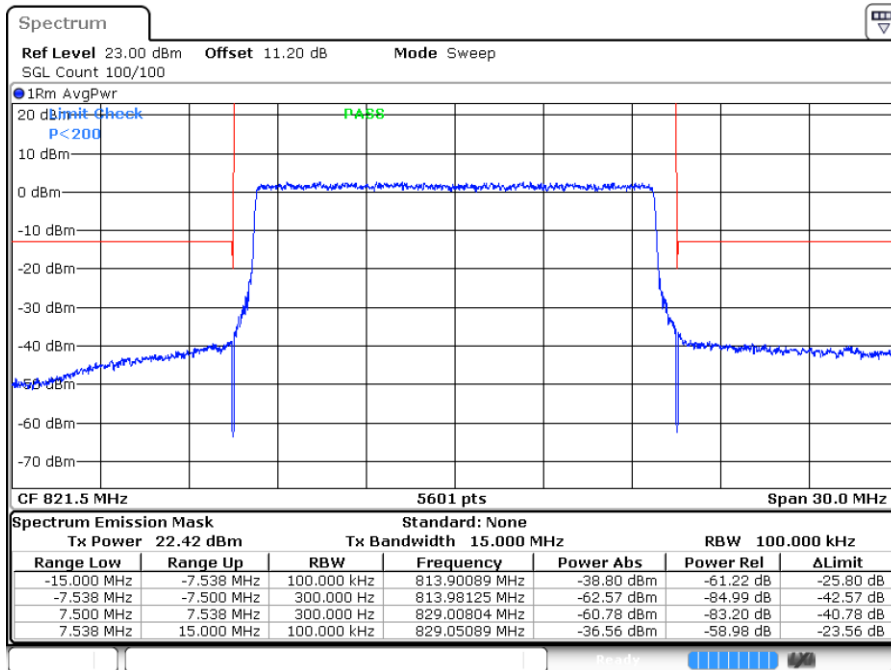
Date: 23.DEC.2020 10:29:00

Highest Band Edge / 1 RB



Date: 23.DEC.2020 10:30:06

Lowest Band Edge / Full RB

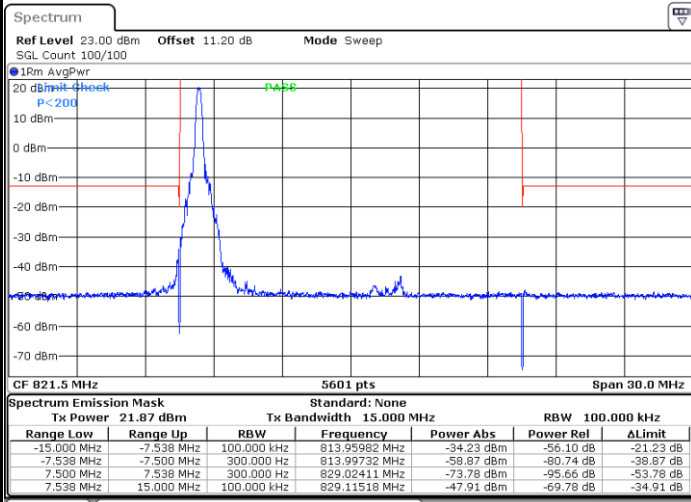


Date: 23.DEC.2020 10:31:11



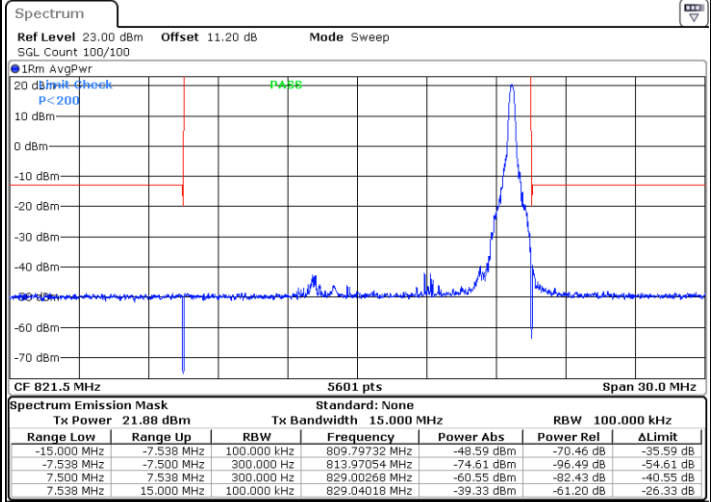
LTE Band 26 / 15MHz / 16QAM

Lowest Band Edge / 1 RB



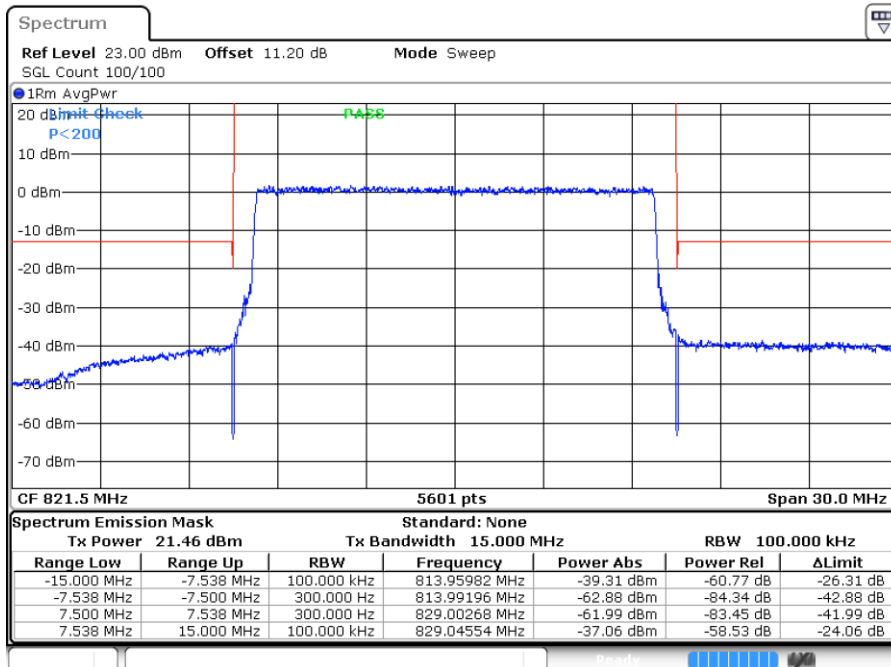
Date: 23.DEC.2020 10:29:33

Highest Band Edge / 1 RB



Date: 23.DEC.2020 10:30:38

Lowest Band Edge / Full RB

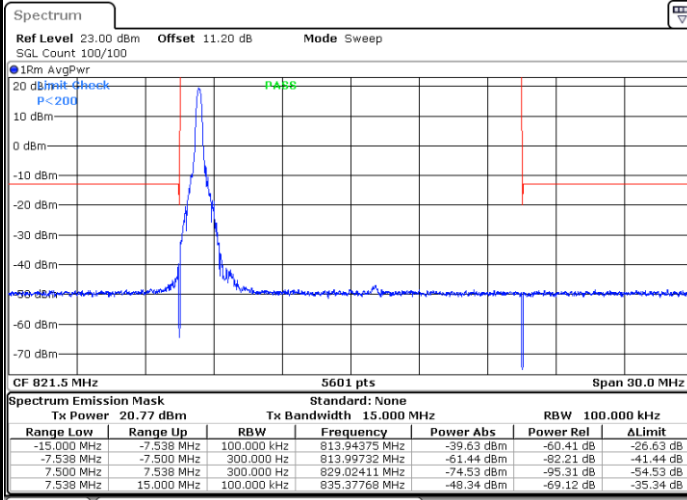


Date: 23.DEC.2020 10:31:44



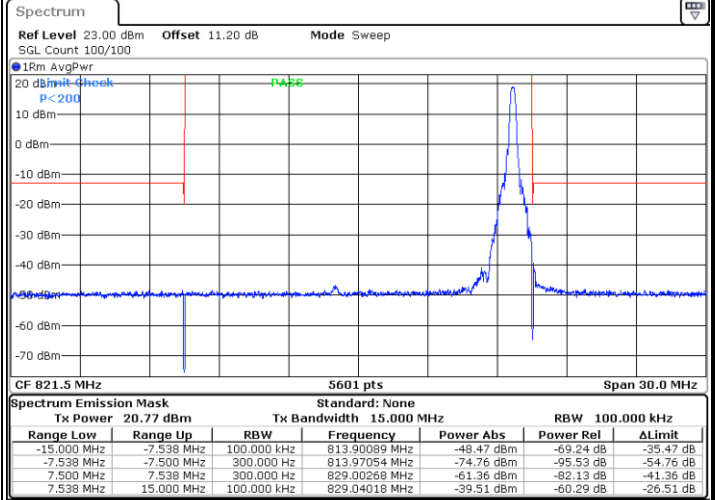
LTE Band 26 / 15MHz / 64QAM

Lowest Band Edge / 1 RB



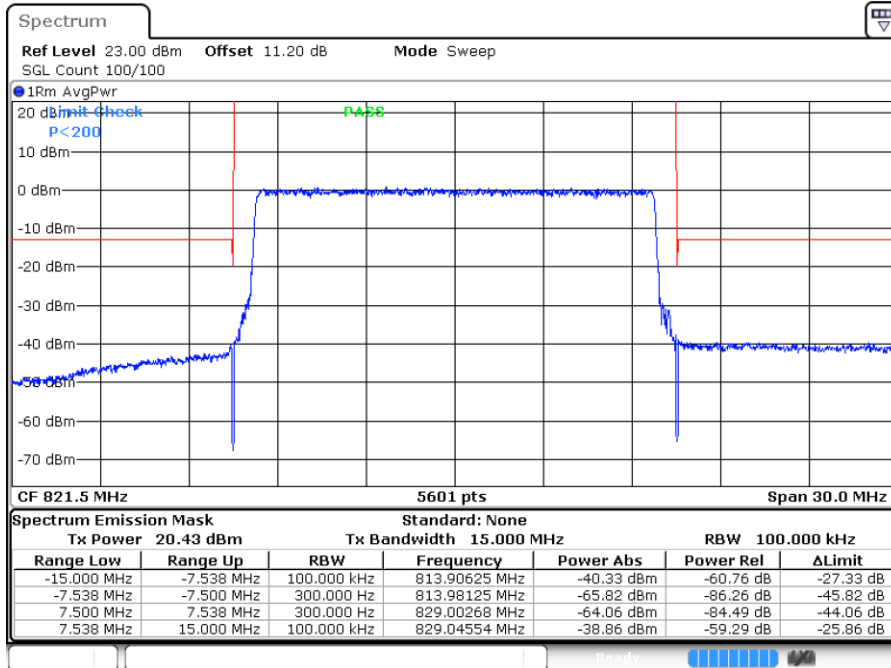
Date: 24. DEC. 2020 10:23:31

Highest Band Edge / 1 RB



Date: 24. DEC. 2020 10:24:04

Lowest Band Edge / Full RB

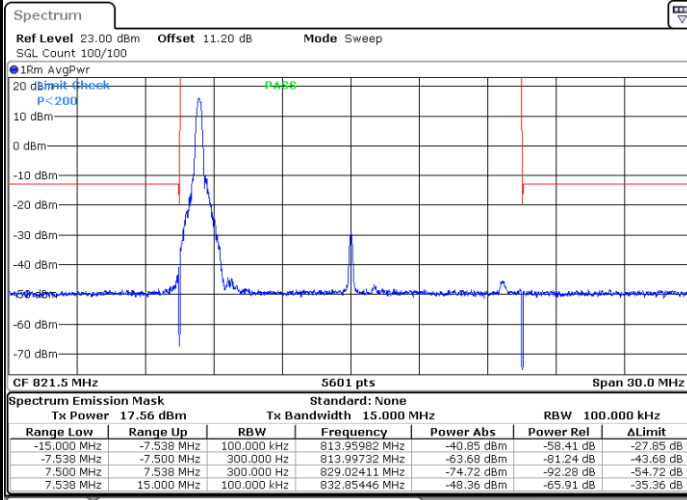


Date: 24. DEC. 2020 10:24:36



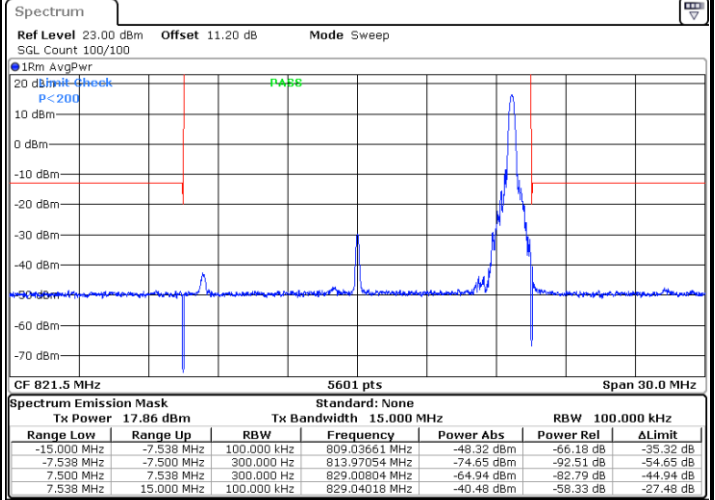
LTE Band 26 / 15MHz / 256QAM

Lowest Band Edge / 1 RB



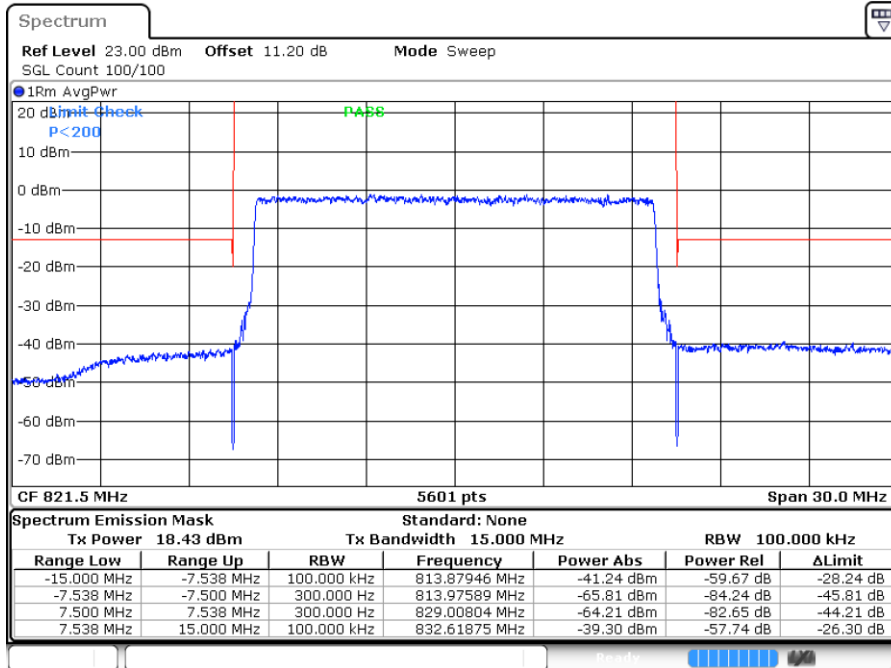
Date: 24.DEC.2020 10:45:41

Highest Band Edge / 1 RB



Date: 24.DEC.2020 10:46:22

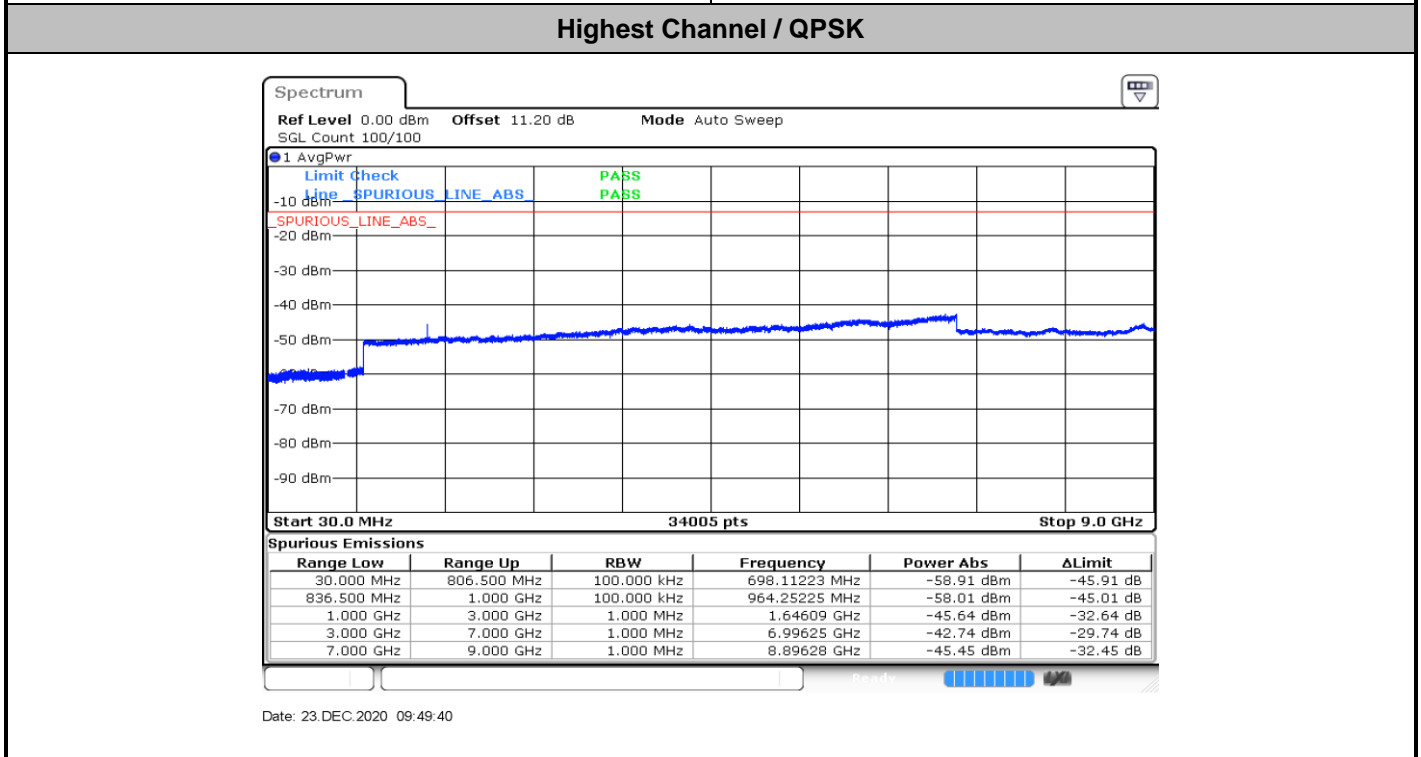
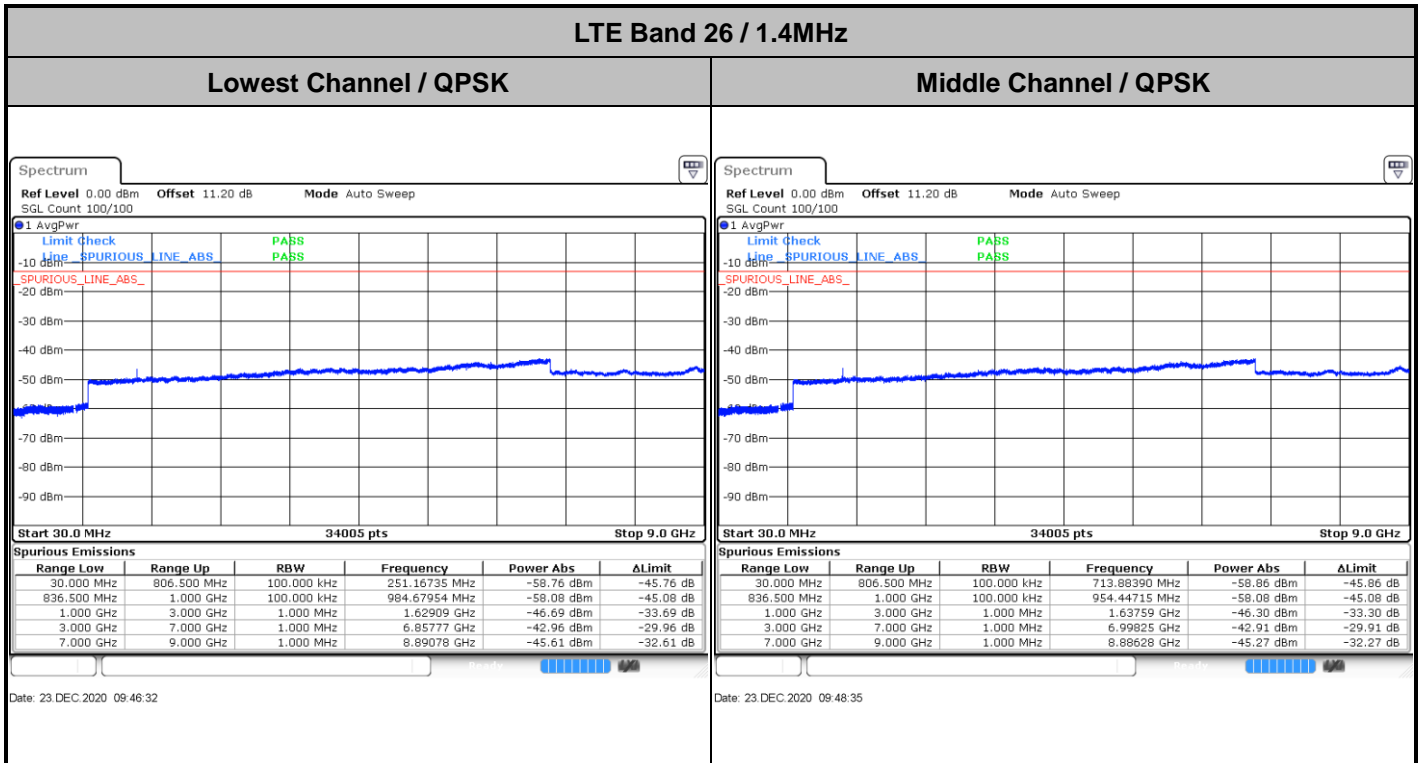
Lowest Band Edge / Full RB



Date: 24.DEC.2020 10:47:08



# Emission masks – Out of band emissions

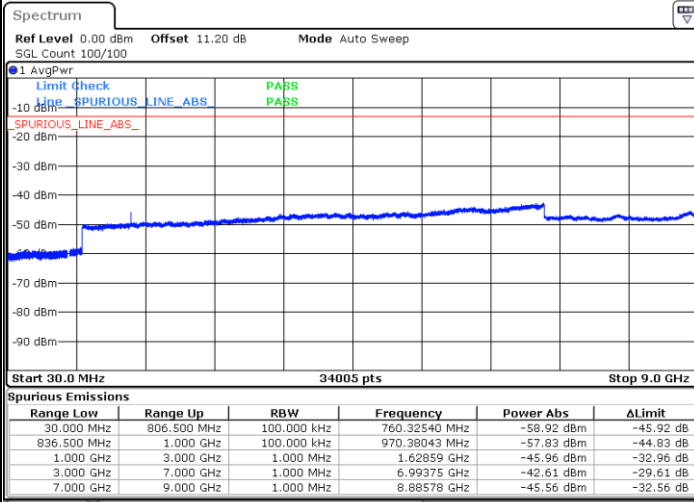




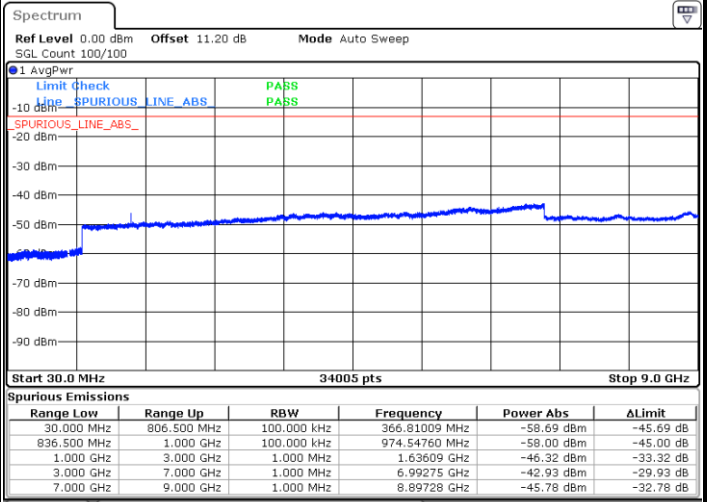
LTE Band 26 / 3MHz

Lowest Channel / QPSK

Middle Channel / QPSK

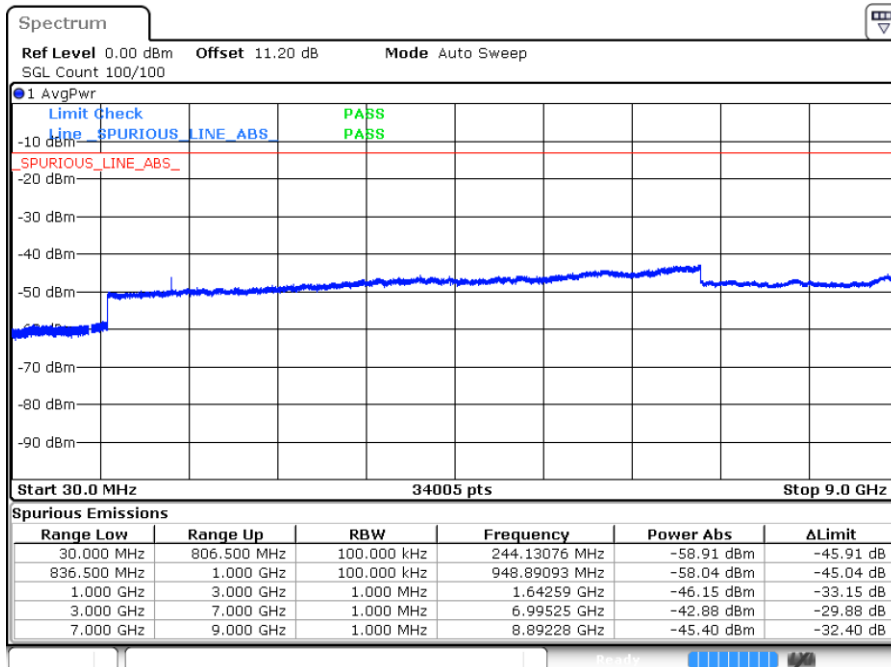


Date: 23.DEC.2020 10:42:28



Date: 23.DEC.2020 10:44:32

Highest Channel / QPSK



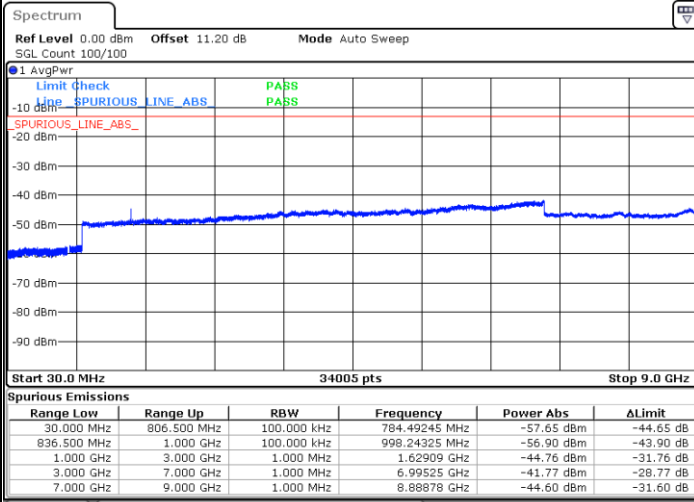
Date: 23.DEC.2020 10:45:37



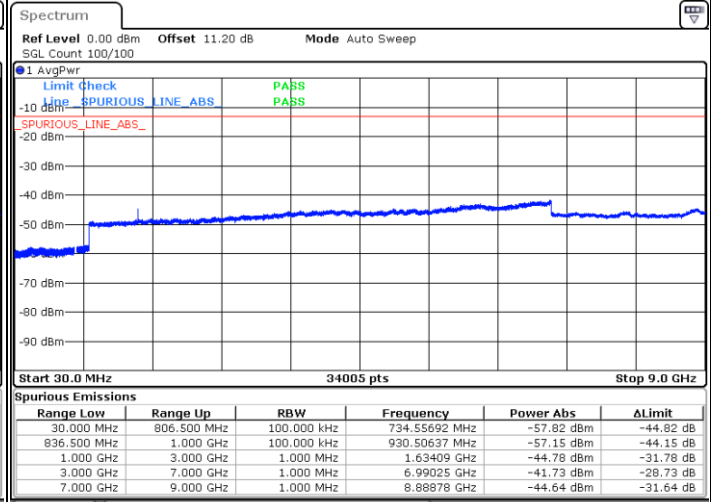
LTE Band 26 / 5MHz

Lowest Channel / QPSK

Middle Channel / QPSK

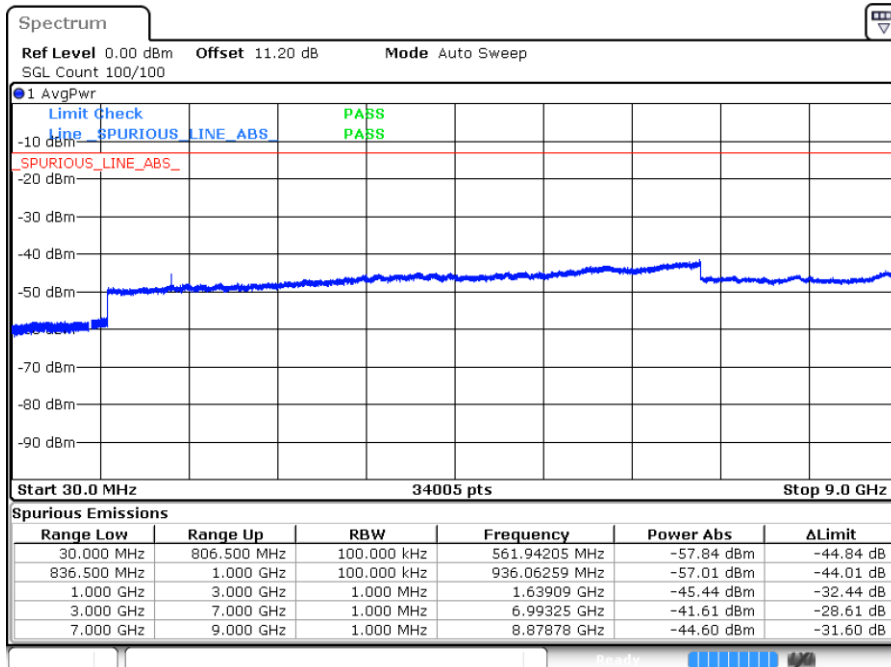


Date: 5 JAN 2021 13:47:26



Date: 5 JAN 2021 14:05:49

Highest Channel / QPSK



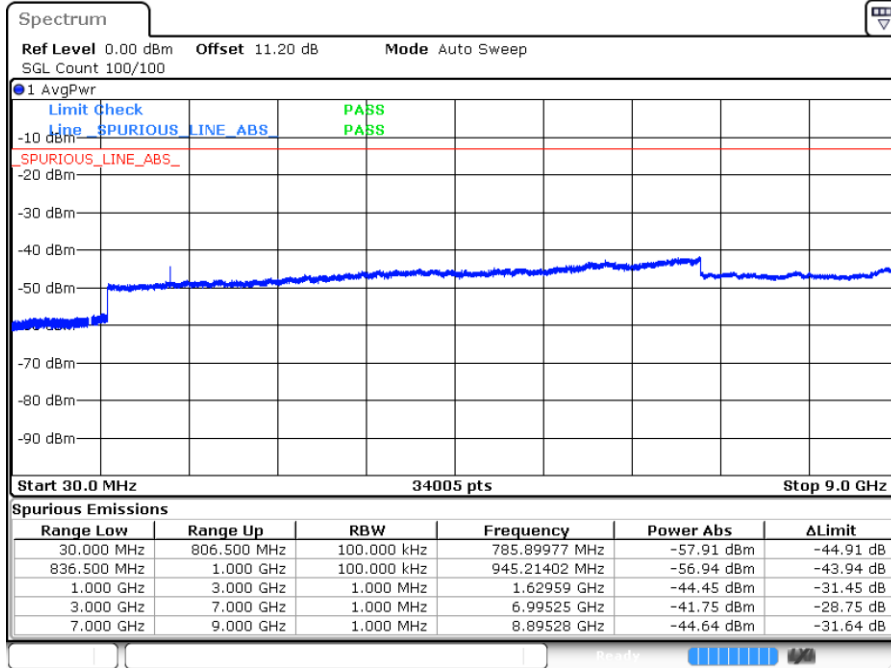
Date: 5 JAN 2021 14:21:24





LTE Band 26 / 10MHz

Middle Channel / QPSK

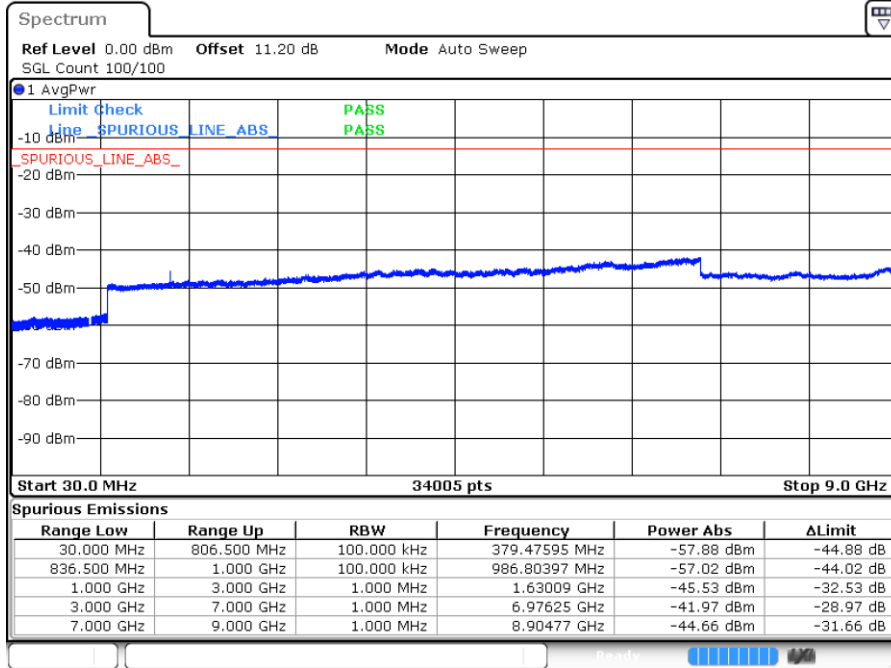


Date: 5.JAN.2021 13:56:01



LTE Band 26 / 15MHz

Middle Channel / QPSK



Date: 5.JAN.2021 13:54:05



Frequency Stability

Test Conditions		LTE Band 26 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0127	PASS
40	Normal Voltage	0.0085	
30	Normal Voltage	0.0038	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0082	
0	Normal Voltage	0.0074	
-10	Normal Voltage	0.0044	
-20	Normal Voltage	0.0009	
-30	Normal Voltage	0.0049	
20	Maximum Voltage	0.0020	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0049	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Test Conditions		LTE Band 26 (QPSK) / Low Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 15MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0130	PASS
40	Normal Voltage	0.0039	
30	Normal Voltage	0.0093	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0049	
0	Normal Voltage	0.0007	
-10	Normal Voltage	0.0015	
-20	Normal Voltage	0.0039	
-30	Normal Voltage	0.0123	
20	Maximum Voltage	0.0074	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0112	

**Note:**

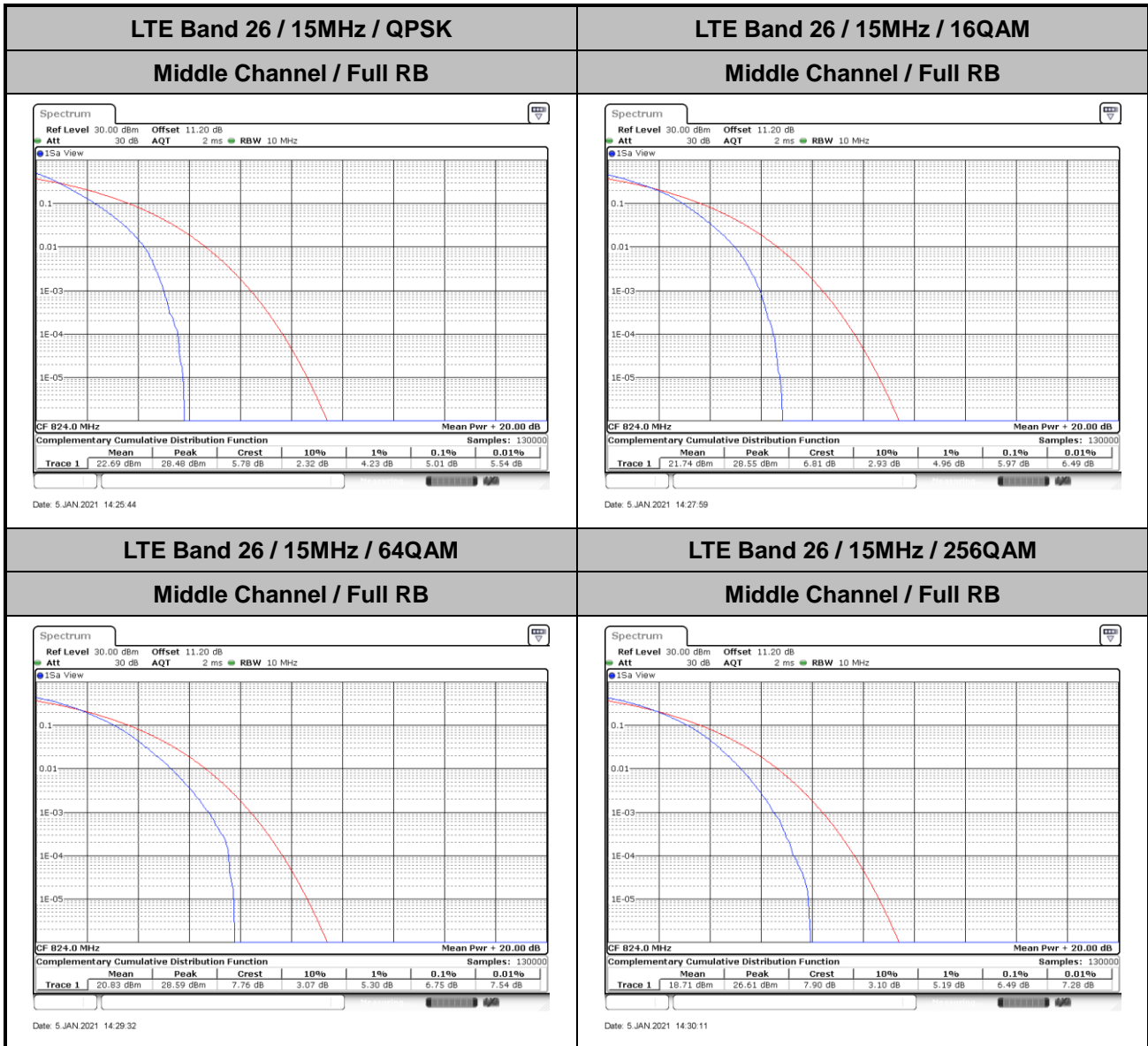
1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



## LTE Band 26

### Peak-to-Average Ratio

Mode	LTE Band 26 / 15MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	5.01	5.97	6.75	6.49	<b>PASS</b>





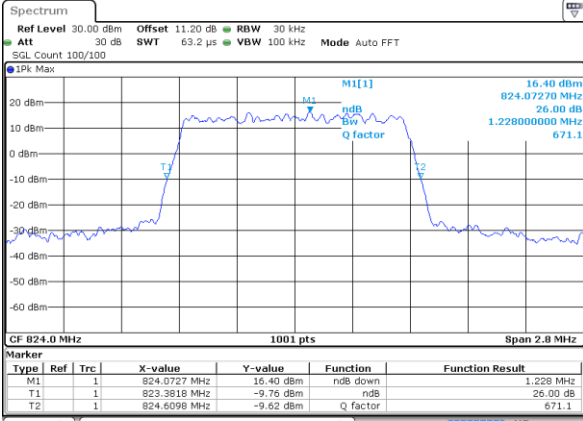
**26dB Bandwidth**

Mode	LTE Band 26 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	1.23	1.23	3.02	3.04	4.81	4.85	9.87	9.81	14.63	14.42	-	-
Mode	LTE Band 26 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM
Middle CH	1.23	1.22	3.03	3.00	4.87	4.79	9.77	9.81	14.45	14.36	-	-



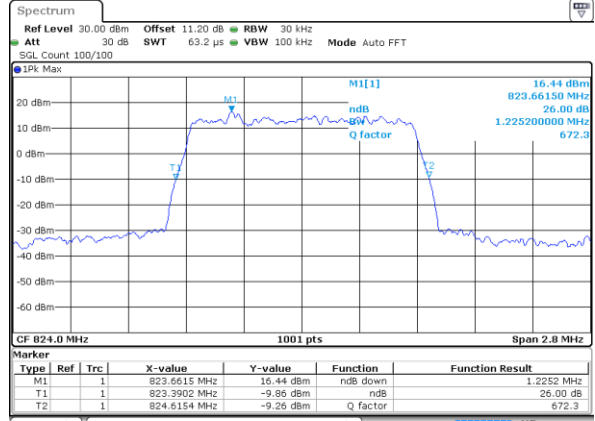
LTE Band 26

Middle Channel / 1.4MHz / QPSK



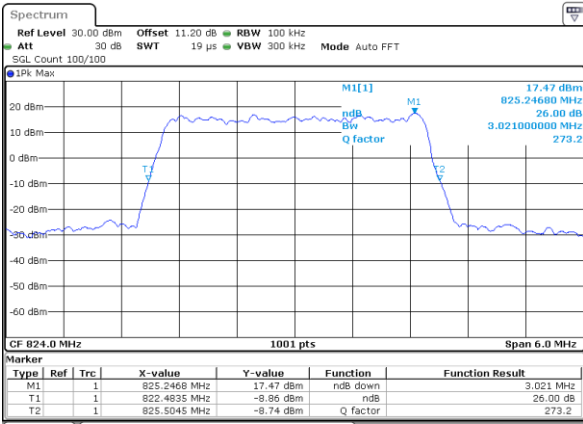
Date: 23 DEC 2020 10:48:53

Middle Channel / 1.4MHz / 16QAM



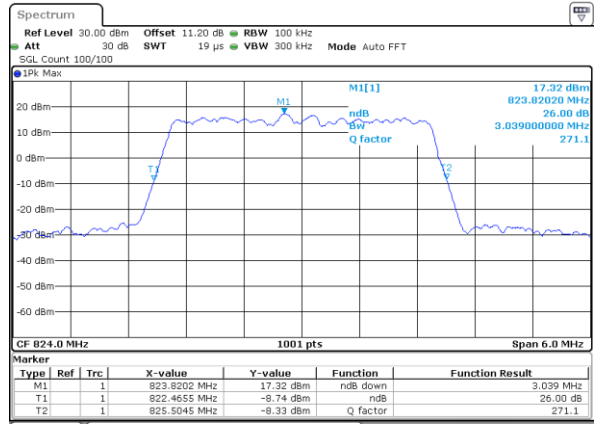
Date: 23 DEC 2020 10:49:07

Middle Channel / 3MHz / QPSK



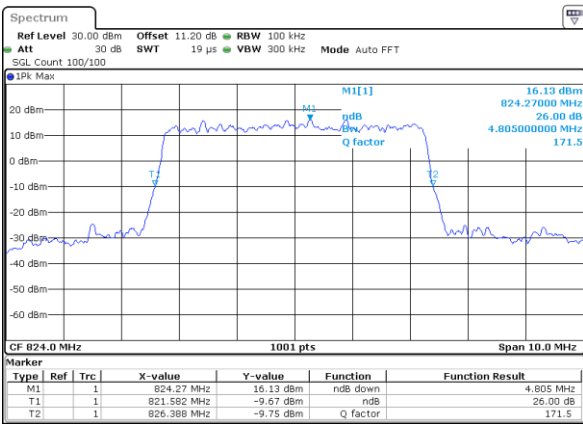
Date: 23 DEC 2020 10:59:08

Middle Channel / 3MHz / 16QAM



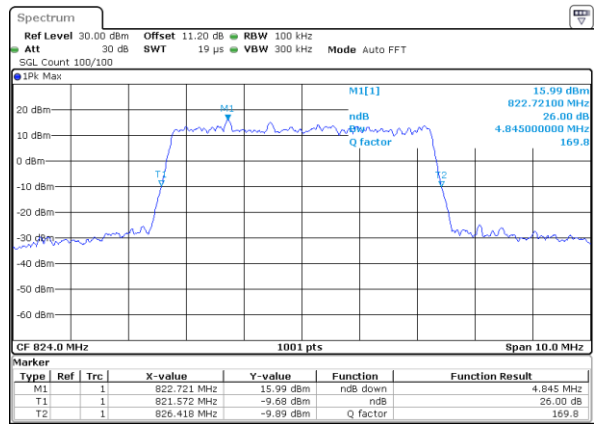
Date: 23 DEC 2020 10:59:20

Middle Channel / 5MHz / QPSK



Date: 23 DEC 2020 11:00:33

Middle Channel / 5MHz / 16QAM



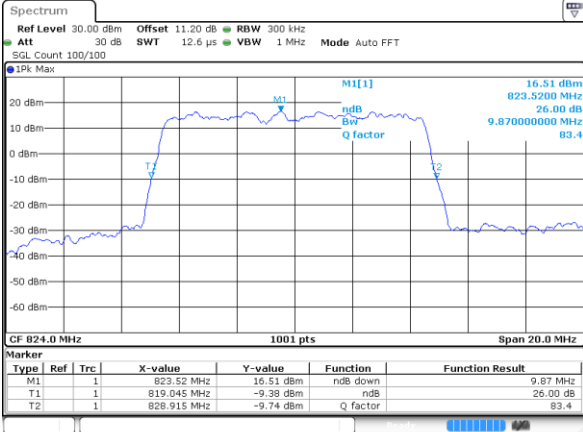
Date: 23 DEC 2020 11:00:48





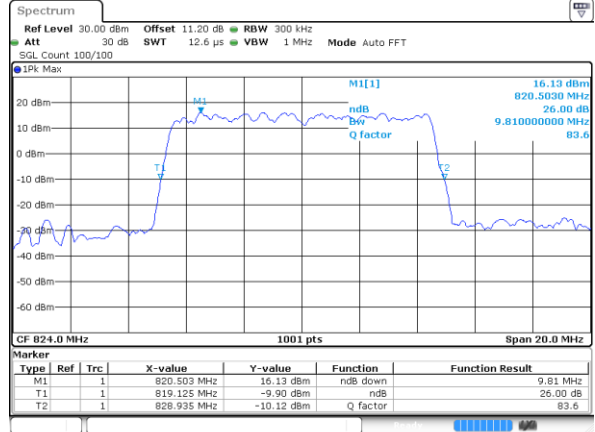
LTE Band 26

Middle Channel / 10MHz / QPSK



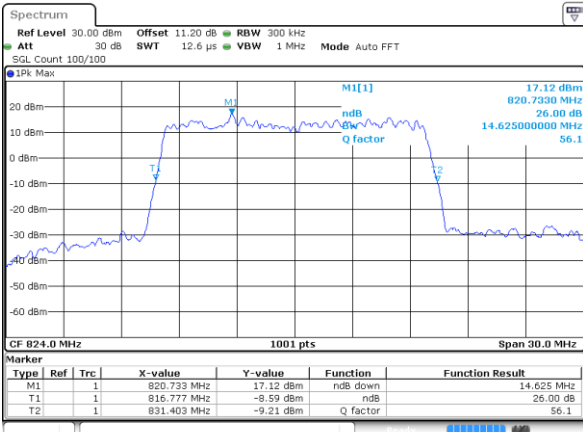
Date: 23 DEC 2020 11:02:01

Middle Channel / 10MHz / 16QAM



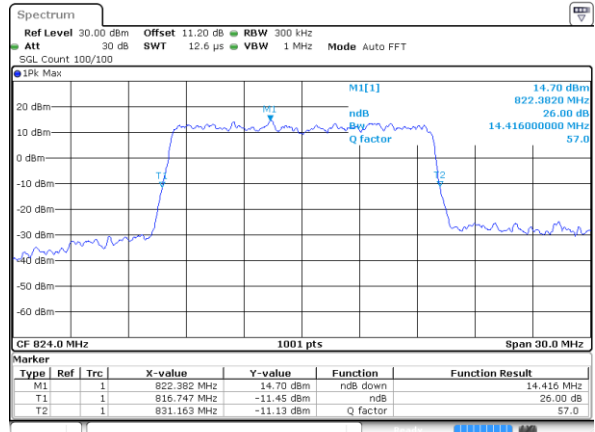
Date: 23 DEC 2020 11:02:16

Middle Channel / 15MHz / QPSK



Date: 23 DEC 2020 11:03:29

Middle Channel / 15MHz / 16QAM

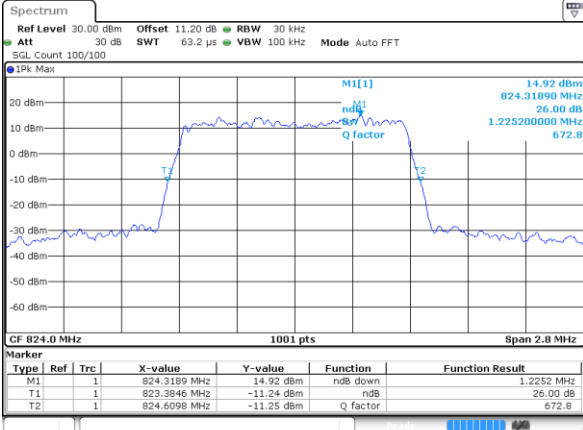


Date: 23 DEC 2020 11:03:44



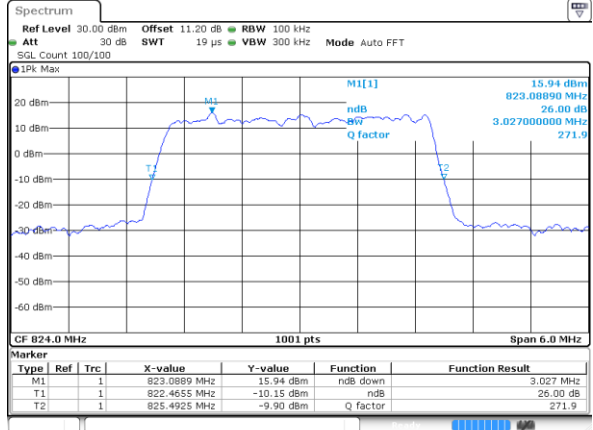
LTE Band 26

Middle Channel / 1.4MHz / 64QAM



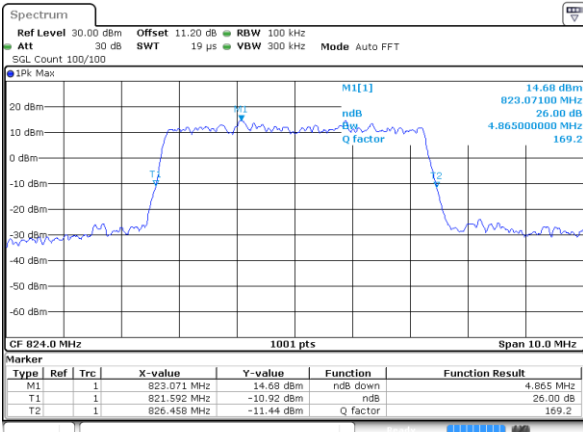
Date: 23 DEC 2020 10:49:51

Middle Channel / 3MHz / 64QAM



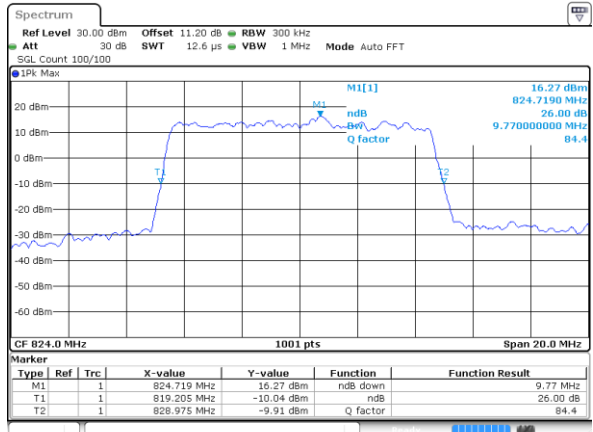
Date: 23 DEC 2020 11:00:04

Middle Channel / 5MHz / 64QAM



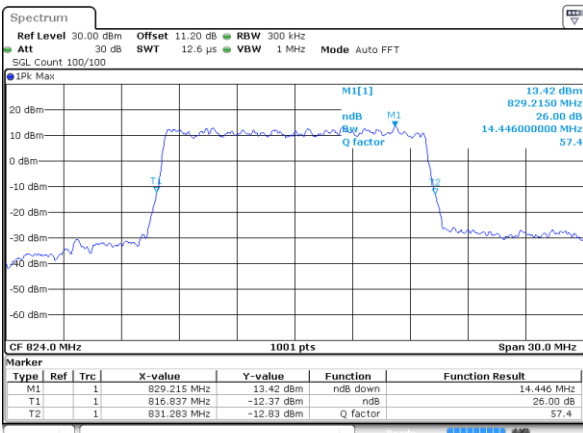
Date: 23 DEC 2020 11:01:32

Middle Channel / 10MHz / 64QAM



Date: 23 DEC 2020 11:03:00

Middle Channel / 15MHz / 64QAM



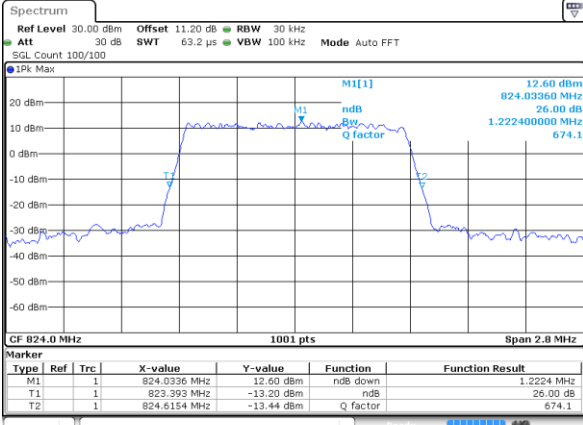
Date: 23 DEC 2020 11:04:28

N/A



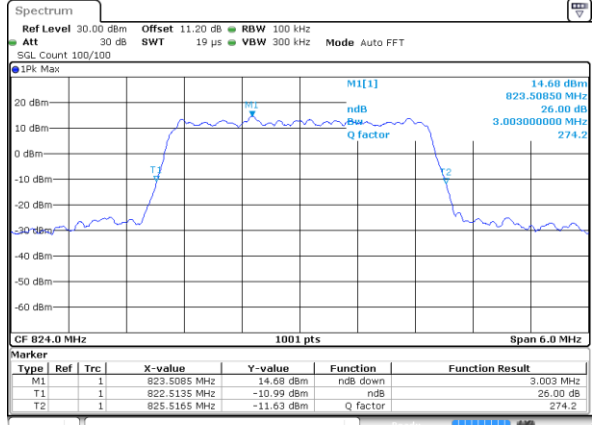
LTE Band 26

Middle Channel / 1.4MHz / 256QAM



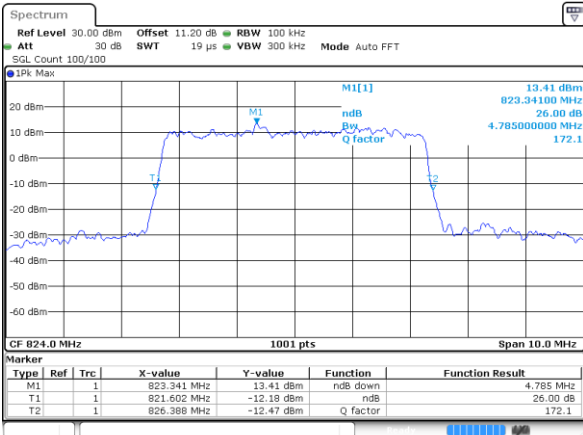
Date: 23 DEC 2020 12:54:46

Middle Channel / 3MHz / 256QAM



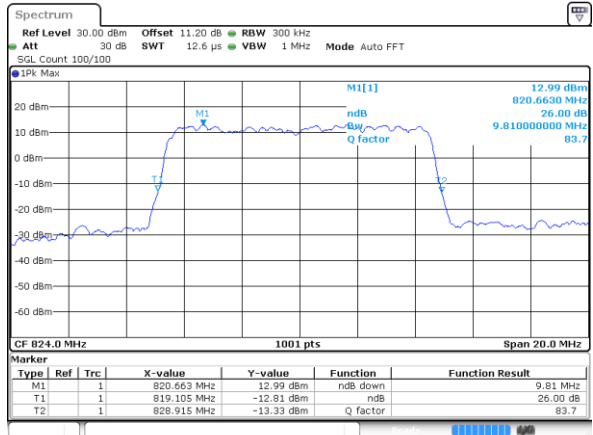
Date: 23 DEC 2020 12:57:21

Middle Channel / 5MHz / 256QAM



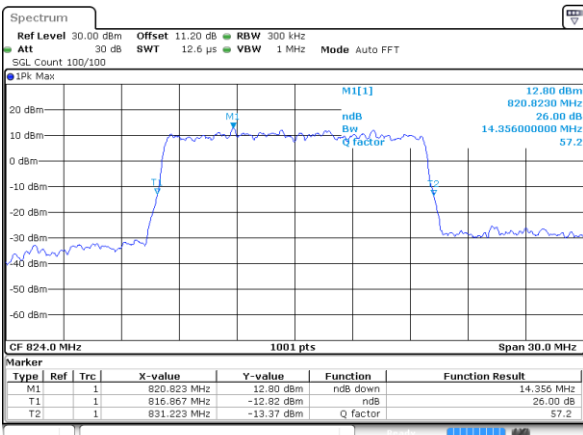
Date: 23 DEC 2020 12:58:03

Middle Channel / 10MHz / 256QAM



Date: 23 DEC 2020 12:58:36

Middle Channel / 15MHz / 256QAM



Date: 23 DEC 2020 12:59:20

N/A



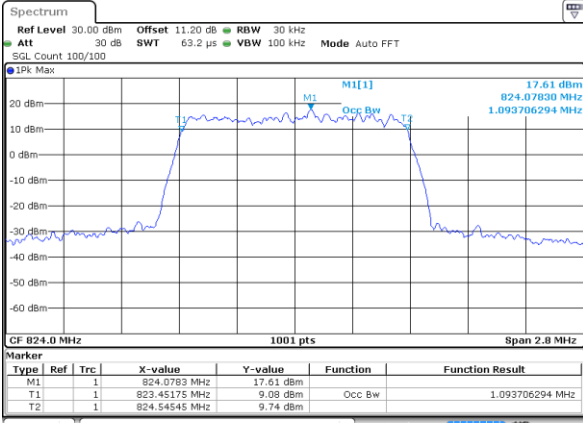
**Occupied Bandwidth**

Mode	LTE Band 26 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	1.09	1.09	2.70	2.72	4.51	4.50	9.05	8.99	13.49	13.40	-	-
Mode	LTE Band 26 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM
Middle CH	1.09	1.09	2.73	2.72	4.49	4.49	8.97	9.03	13.49	13.46	-	-



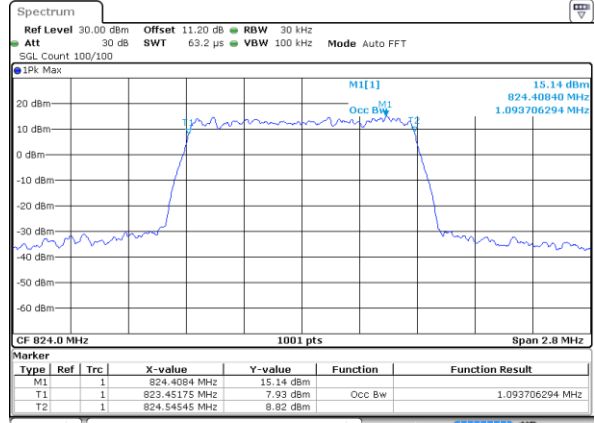
LTE Band 26

Middle Channel / 1.4MHz / QPSK



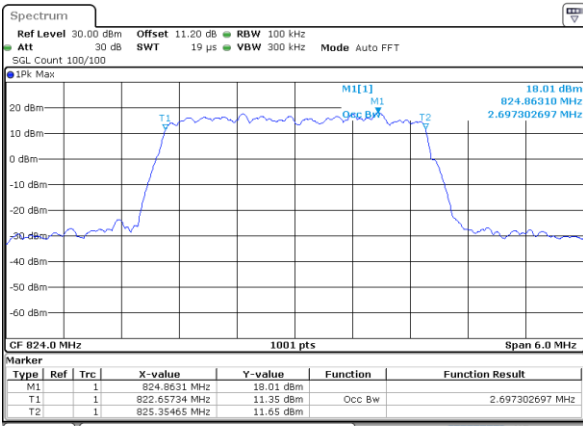
Date: 23 DEC 2020 10:48:38

Middle Channel / 1.4MHz / 16QAM



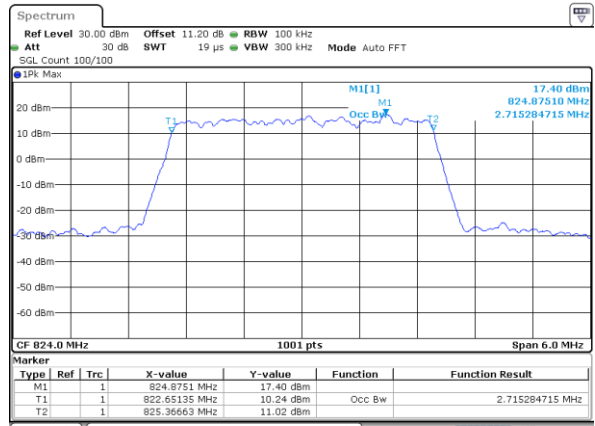
Date: 23 DEC 2020 10:49:22

Middle Channel / 3MHz / QPSK



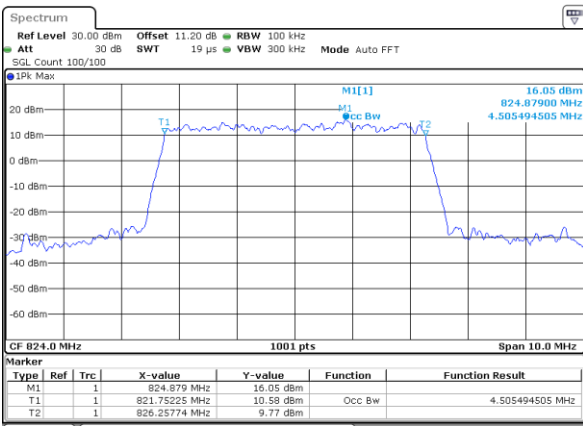
Date: 23 DEC 2020 10:58:51

Middle Channel / 3MHz / 16QAM



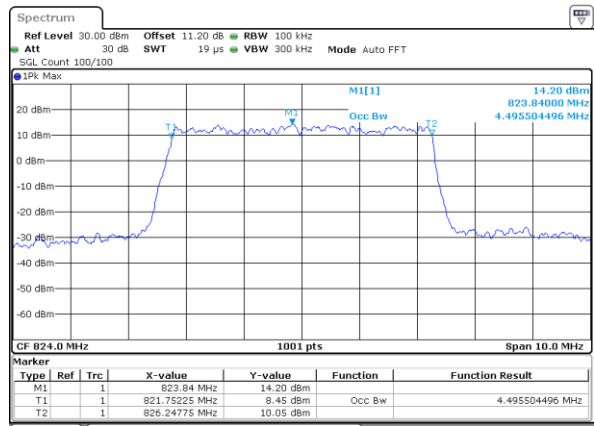
Date: 23 DEC 2020 10:59:35

Middle Channel / 5MHz / QPSK



Date: 23 DEC 2020 11:00:19

Middle Channel / 5MHz / 16QAM

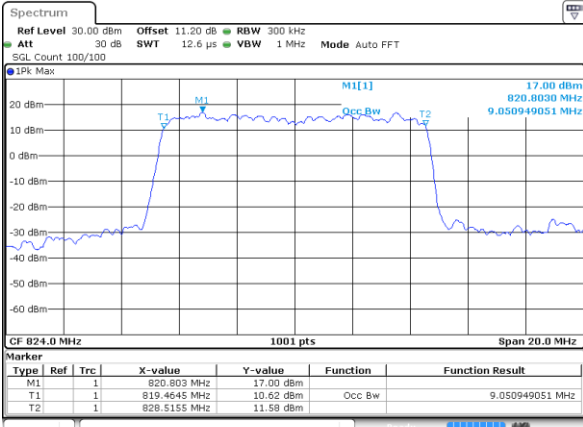


Date: 23 DEC 2020 11:01:03



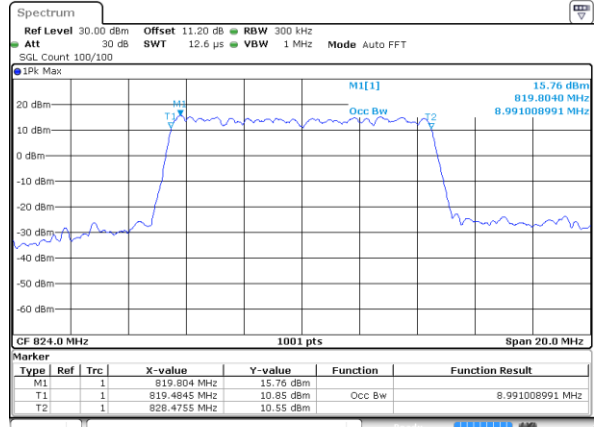
LTE Band 26

Middle Channel / 10MHz / QPSK



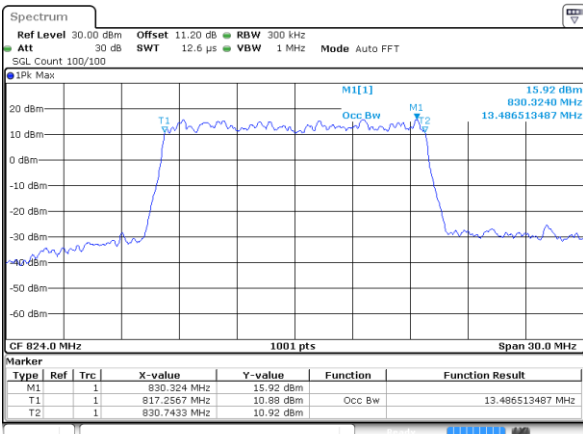
Date: 23 DEC 2020 11:01:47

Middle Channel / 10MHz / 16QAM



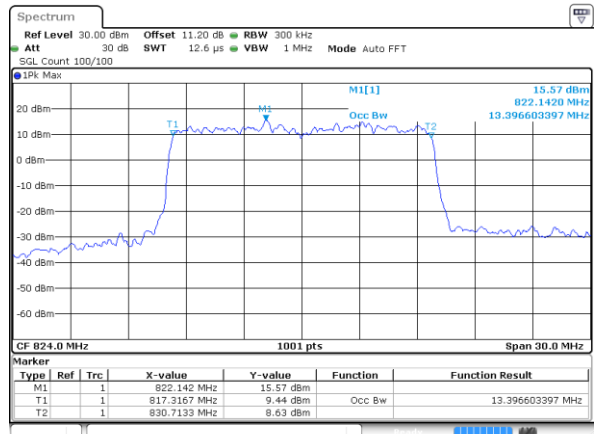
Date: 23 DEC 2020 11:02:31

Middle Channel / 15MHz / QPSK



Date: 23 DEC 2020 11:03:15

Middle Channel / 15MHz / 16QAM

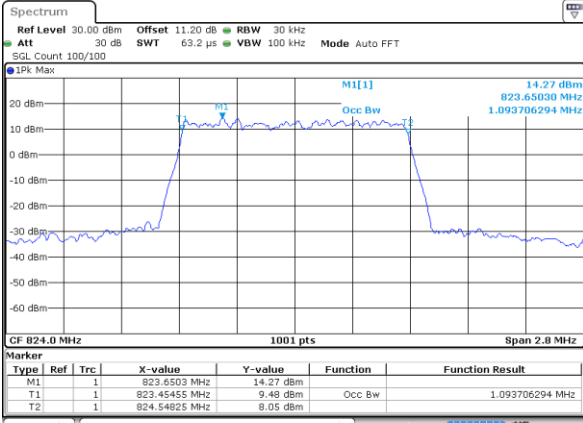


Date: 23 DEC 2020 11:03:59



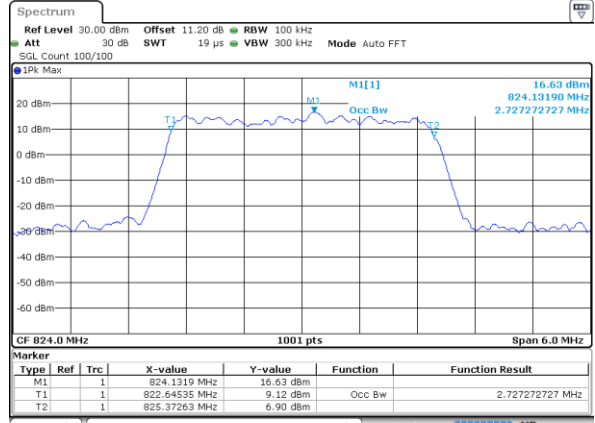
LTE Band 26

Middle Channel / 1.4MHz / 64QAM



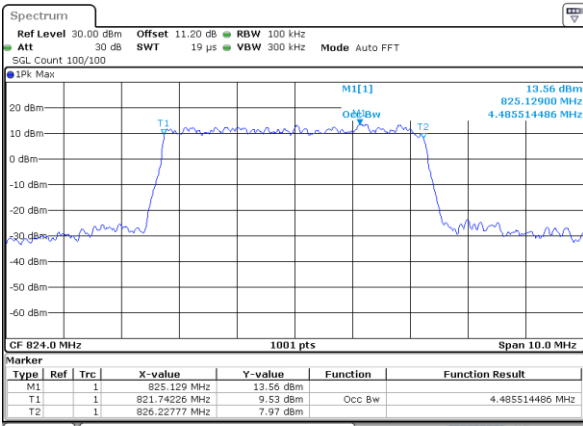
Date: 23 DEC 2020 10:49:36

Middle Channel / 3MHz / 64QAM



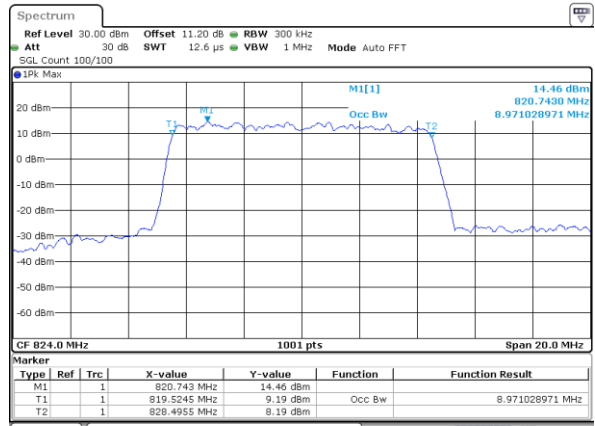
Date: 23 DEC 2020 10:59:49

Middle Channel / 5MHz / 64QAM



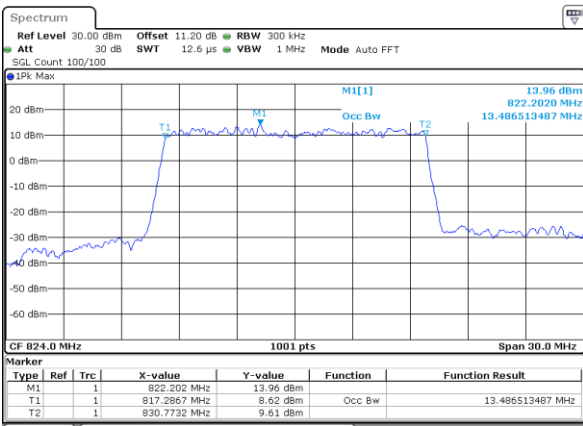
Date: 23 DEC 2020 11:01:17

Middle Channel / 10MHz / 64QAM



Date: 23 DEC 2020 11:02:45

Middle Channel / 15MHz / 64QAM



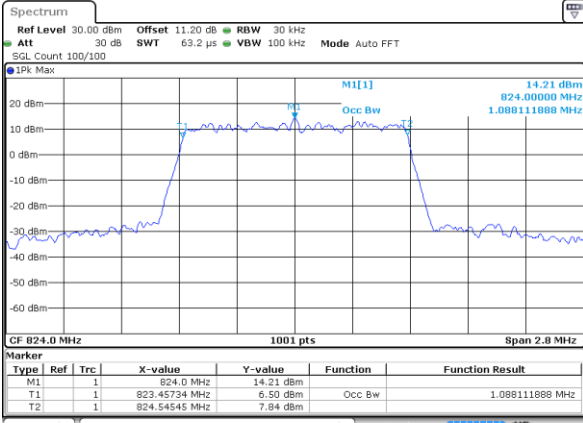
Date: 23 DEC 2020 11:04:13

N/A



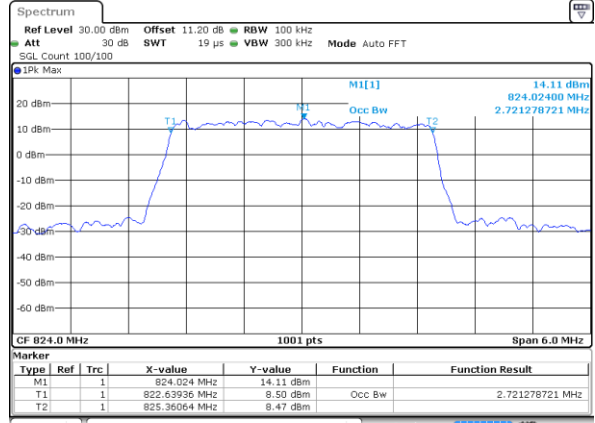
LTE Band 26

Middle Channel / 1.4MHz / 256QAM



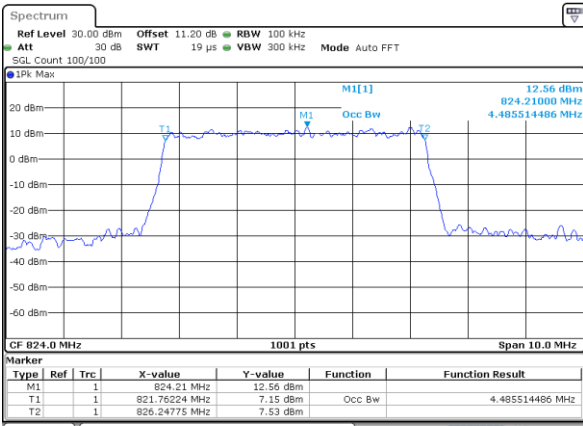
Date: 23 DEC 2020 12:53:46

Middle Channel / 3MHz / 256QAM



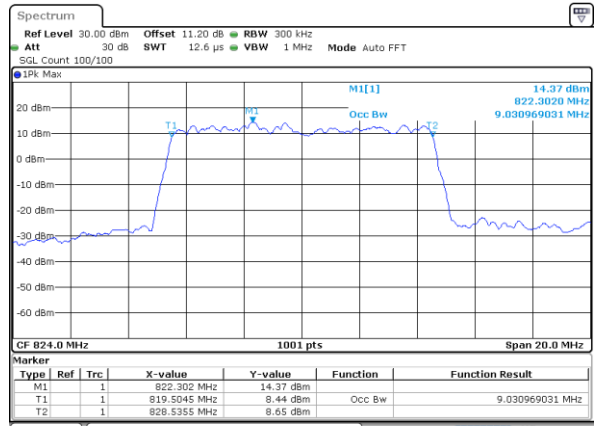
Date: 23 DEC 2020 12:57:10

Middle Channel / 5MHz / 256QAM



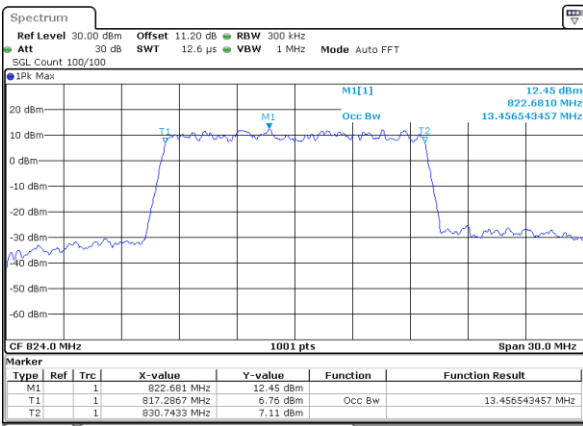
Date: 23 DEC 2020 12:57:51

Middle Channel / 10MHz / 256QAM



Date: 23 DEC 2020 12:58:22

Middle Channel /15MHz / 256QAM



Date: 23 DEC 2020 12:58:03

N/A

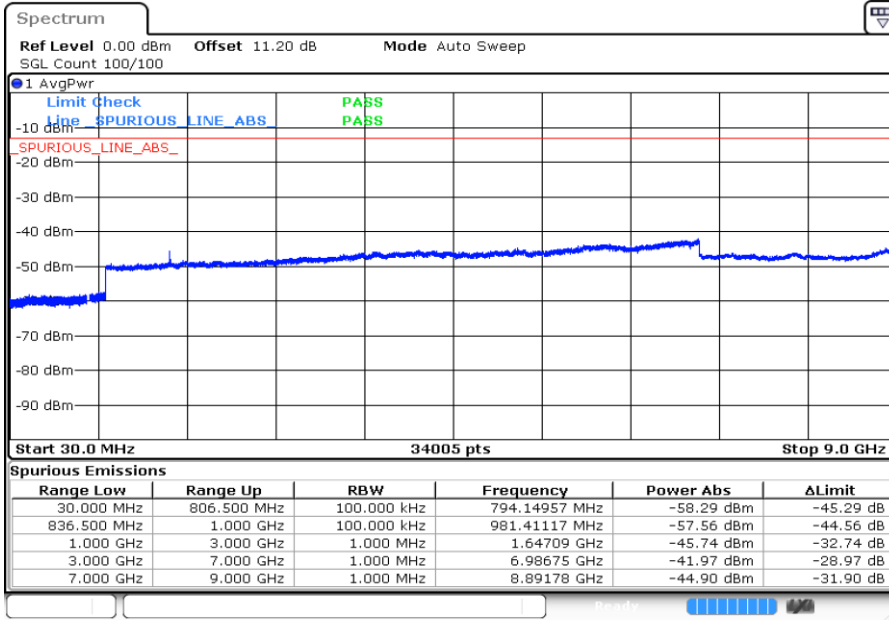




# Emission masks – Out of band emissions

## LTE Band 26 / 1.4MHz

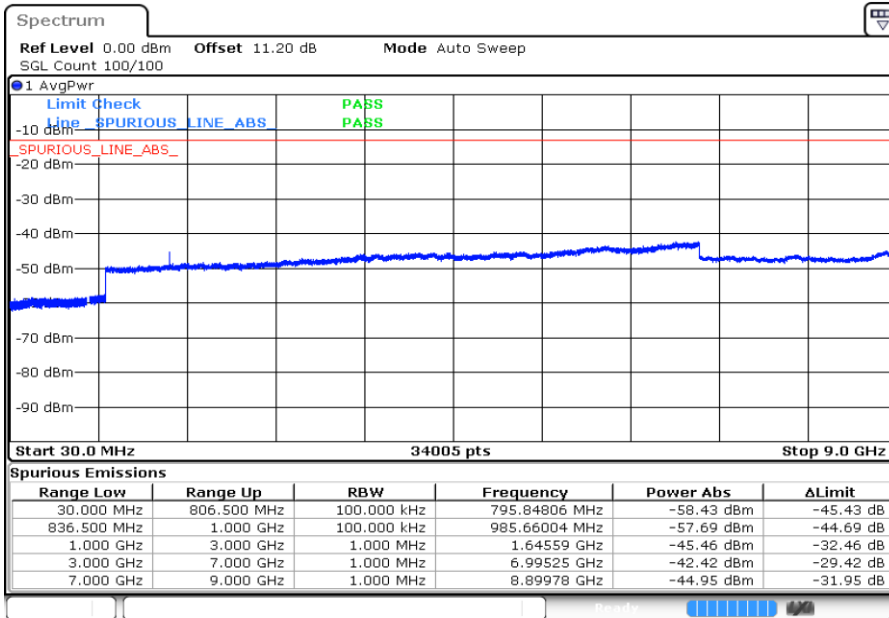
### Middle Channel / QPSK



Date: 23.DEC.2020 12:47:43

## LTE Band 26 / 3MHz

### Middle Channel / QPSK

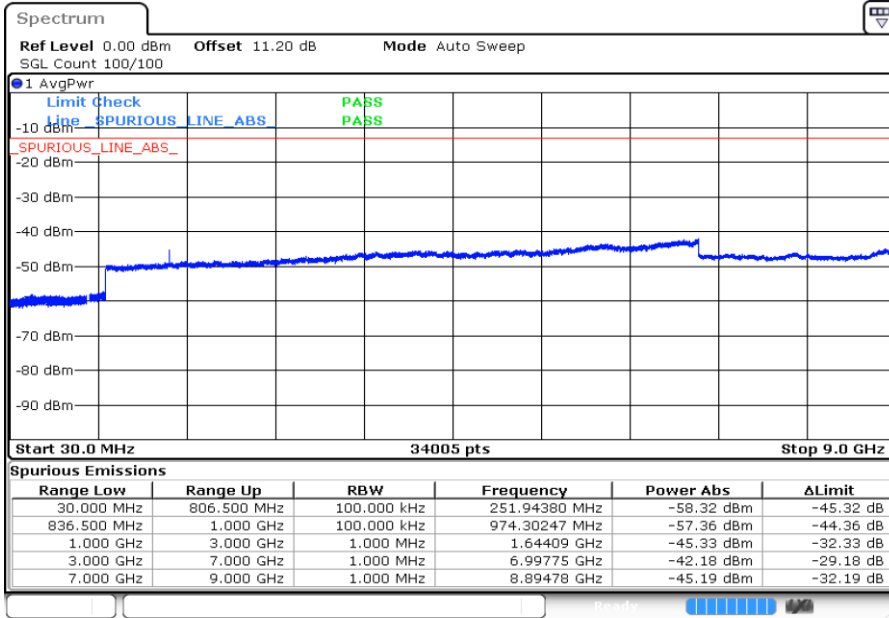


Date: 23.DEC.2020 12:49:50



LTE Band 26 / 5MHz

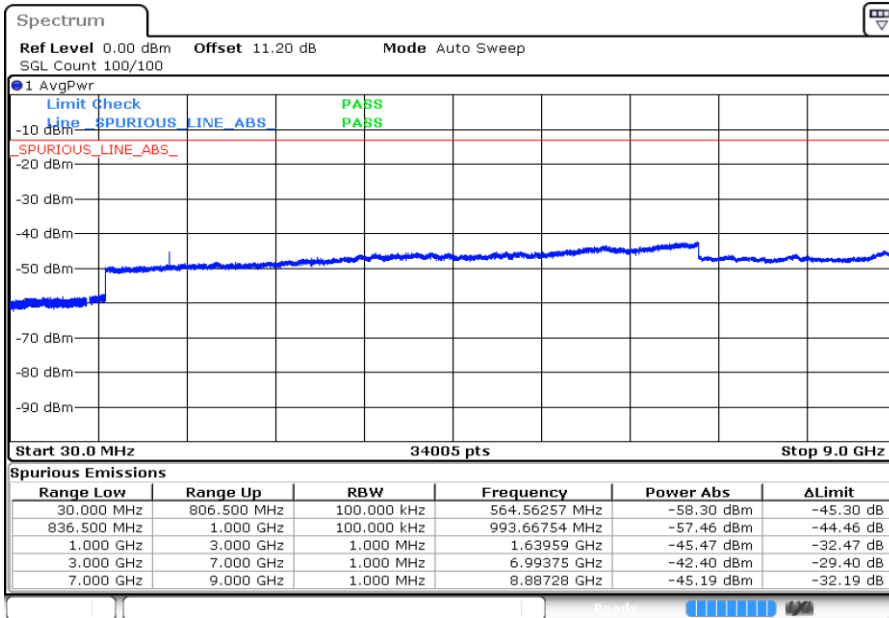
Middle Channel / QPSK



Date: 23.DEC.2020 12:50:45

LTE Band 26 / 10MHz

Middle Channel / QPSK

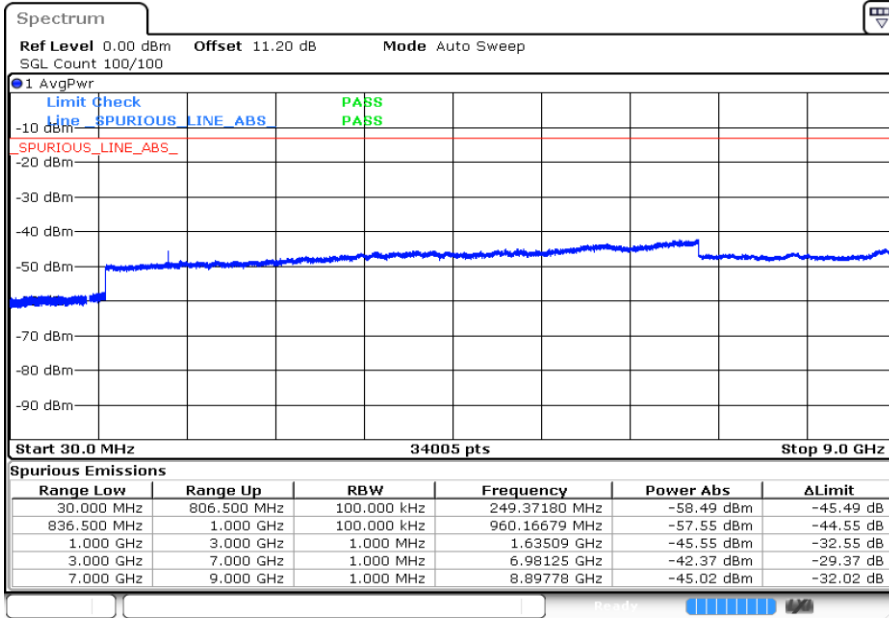


Date: 23.DEC.2020 12:51:32



LTE Band 26 / 15MHz

Middle Channel / QPSK



Date: 23.DEC.2020 12:52:13



Frequency Stability

Test Conditions		LTE Band 26 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0127	PASS
40	Normal Voltage	0.0085	
30	Normal Voltage	0.0038	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0082	
0	Normal Voltage	0.0074	
-10	Normal Voltage	0.0044	
-20	Normal Voltage	0.0009	
-30	Normal Voltage	0.0049	
20	Maximum Voltage	0.0020	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0049	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Test Conditions		LTE Band 26 (QPSK) / Low Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 15MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0130	PASS
40	Normal Voltage	0.0039	
30	Normal Voltage	0.0093	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0049	
0	Normal Voltage	0.0007	
-10	Normal Voltage	0.0015	
-20	Normal Voltage	0.0039	
-30	Normal Voltage	0.0123	
20	Maximum Voltage	0.0074	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0112	

**Note:**

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.6 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

<Primary Antenna>

<Ant. 0>

### LTE Band 26

LTE Band 26 / 5MHz / QPSK									
Channel	Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1624	-63.16	-13	-50.16	-75.38	-68.46	1.22	8.67	H
	2440	-44.48	-13	-31.48	-60.7	-51.35	1.43	10.45	H
	4072	-45.25	-13	-32.25	-65.04	-53.09	2.11	12.10	H
									H
									H
									H
	1624	-63.23	-13	-50.23	-75.3	-68.53	1.22	8.67	V
	2440	-41.37	-13	-28.37	-58	-48.24	1.43	10.45	V
	4072	-56.73	-13	-43.73	-77.04	-64.57	2.11	12.10	V
									V
									V
Middle	1633	-63.35	-13	-50.35	-75.6	-68.68	1.22	8.71	H
	2448	-46.37	-13	-33.37	-62.57	-53.25	1.43	10.46	H
	4088	-57.24	-13	-44.24	-77.01	-65.09	2.10	12.10	H
									H
									H
									H
	1633	-63.60	-13	-50.60	-75.7	-68.93	1.22	8.71	V
	2448	-48.62	-13	-35.62	-65.2	-55.50	1.43	10.46	V
	4088	-55.17	-13	-42.17	-75.48	-63.02	2.10	12.10	V
									V
									V



Highest	1640	-63.33	-13	-50.33	-75.59	-68.69	1.22	8.73	H
	2456	-60.20	-13	-47.20	-76.39	-67.08	1.43	10.46	H
	3280	-58.09	-13	-45.09	-76.09	-65.99	1.69	11.74	H
									H
									H
									H
	1640	-63.41	-13	-50.41	-75.54	-68.77	1.22	8.73	V
	2456	-59.39	-13	-46.39	-75.93	-66.27	1.43	10.46	V
	3280	-57.78	-13	-44.78	-76.13	-65.68	1.69	11.74	V
									V
									V
									V

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



<ASDIV Antenna>

<Ant. 1>

**LTE Band 26**

LTE Band 26 / 5MHz / QPSK									
Channel	Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1624	-63.15	-13	-50.15	-75.37	-68.45	1.22	8.67	H
	2440	-59.90	-13	-46.90	-76.12	-66.77	1.43	10.45	H
	3257	-57.53	-13	-44.53	-75.7	-65.38	1.67	11.67	H
									H
									H
									H
	1624	-63.49	-13	-50.49	-75.56	-68.79	1.22	8.67	V
	2440	-59.36	-13	-46.36	-75.99	-66.23	1.43	10.45	V
	3257	-57.60	-13	-44.60	-76.05	-65.45	1.67	11.67	V
									V
									V
									V
Middle	1633	-62.79	-13	-49.79	-75.03	-68.12	1.22	8.71	H
	2448	-60.17	-13	-47.17	-76.37	-67.05	1.43	10.46	H
	3264	-57.84	-13	-44.84	-75.96	-65.71	1.68	11.69	H
									H
									H
	1633	-63.52	-13	-50.52	-75.62	-68.85	1.22	8.71	V
	2448	-57.58	-13	-44.58	-74.16	-64.46	1.43	10.46	V
	3264	-57.87	-13	-44.87	-76.29	-65.74	1.68	11.69	V
									V
									V
									V





Highest	1640	-63.49	-13	-50.49	-75.75	-68.85	1.22	8.73	H
	2456	-60.00	-13	-47.00	-76.19	-66.88	1.43	10.46	H
	3280	-57.98	-13	-44.98	-75.98	-65.88	1.69	11.74	H
									H
									H
									H
	1640	-63.20	-13	-50.20	-75.33	-68.56	1.22	8.73	V
	2456	-59.87	-13	-46.87	-76.41	-66.75	1.43	10.46	V
	3280	-57.66	-13	-44.66	-76.01	-65.56	1.69	11.74	V
									V
									V
									V

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

————THE END————