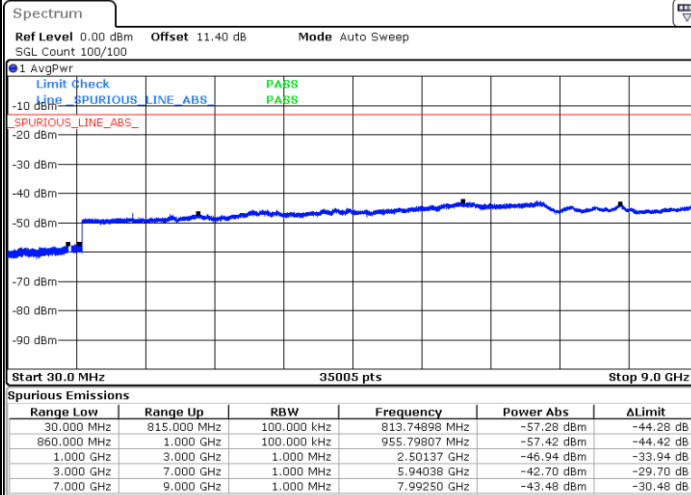




Conducted Spurious Emission

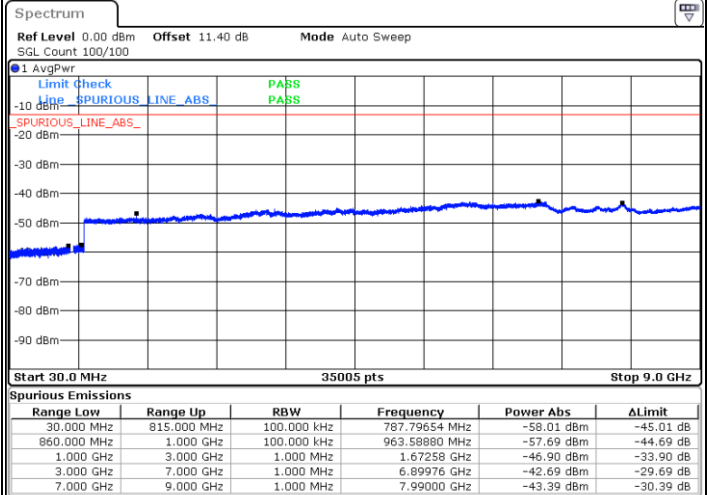
LTE Band 26 / 1.4MHz

Lowest Channel / QPSK



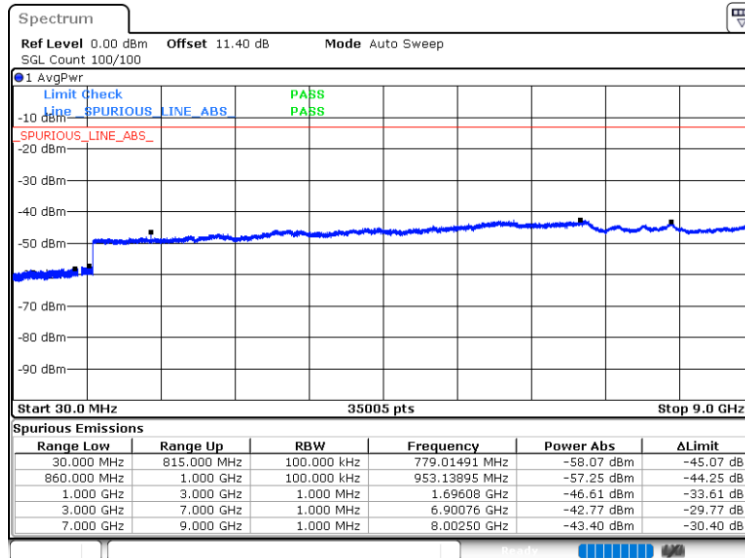
Date: 17.JAN.2021 07:10:25

Middle Channel / QPSK



Date: 17.JAN.2021 07:11:39

Highest Channel / QPSK

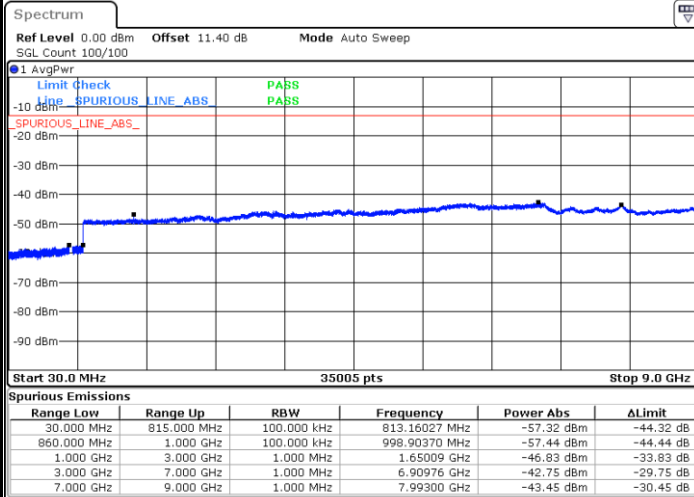


Date: 17.JAN.2021 07:14:24



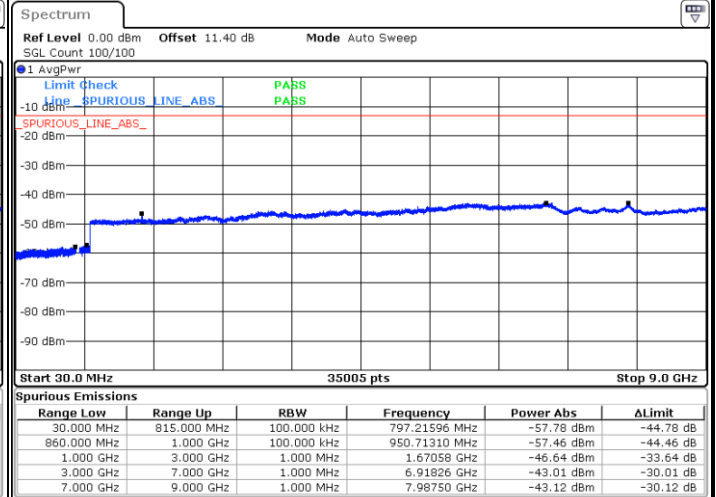
LTE Band 26 / 3MHz

Lowest Channel / QPSK



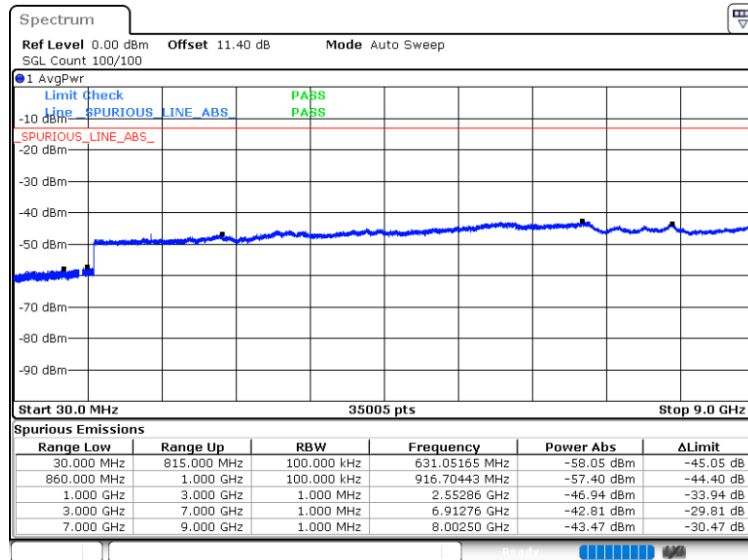
Date: 17.JAN.2021 07:22:10

Middle Channel / QPSK



Date: 17.JAN.2021 07:23:25

Highest Channel / QPSK

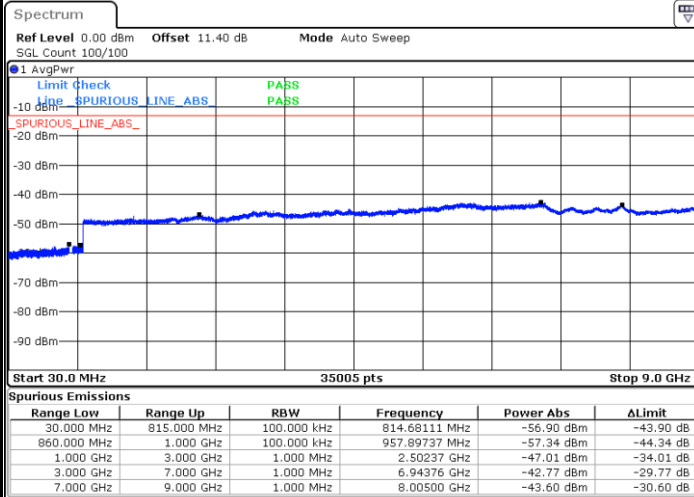


Date: 17.JAN.2021 07:26:09



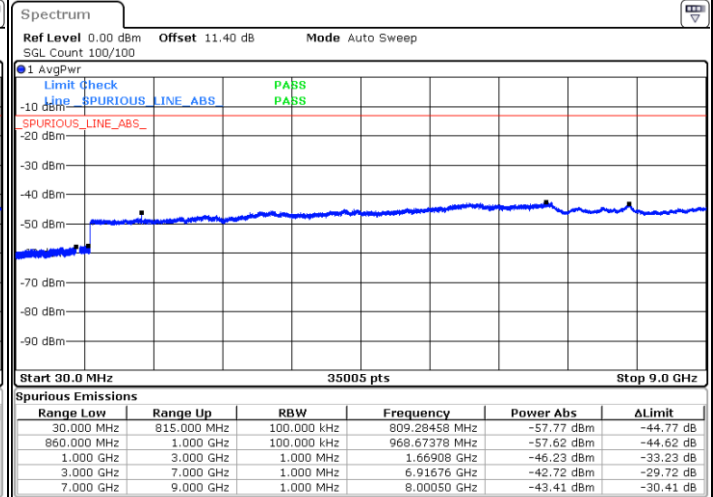
LTE Band 26 / 5MHz

Lowest Channel / QPSK



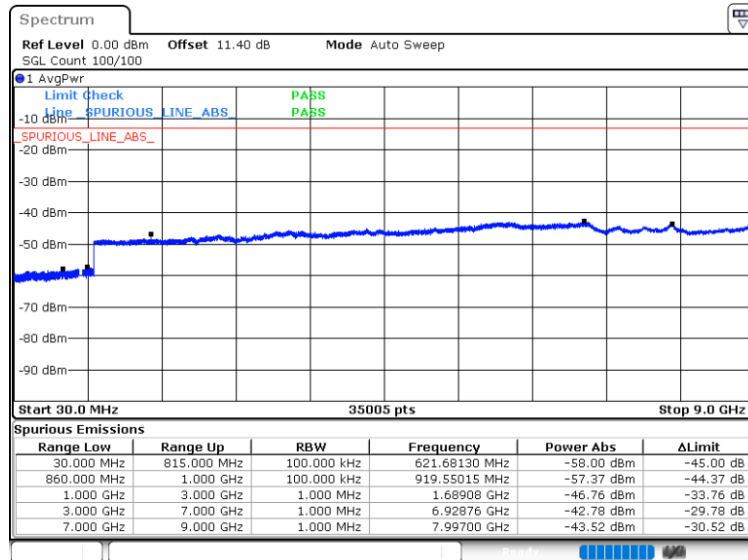
Date: 17.JAN.2021 07:28:44

Middle Channel / QPSK



Date: 17.JAN.2021 07:29:59

Highest Channel / QPSK

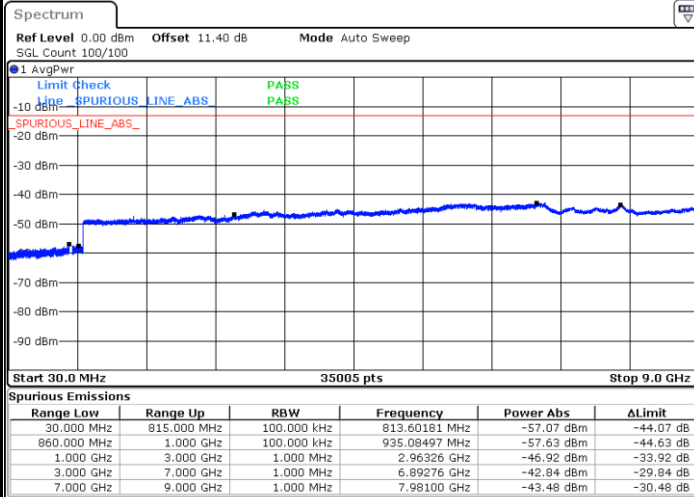


Date: 17.JAN.2021 07:32:45



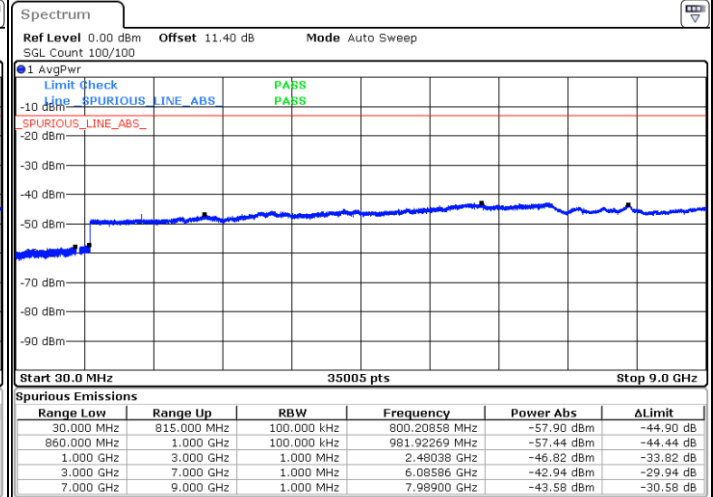
LTE Band 26 / 10MHz

Lowest Channel / QPSK



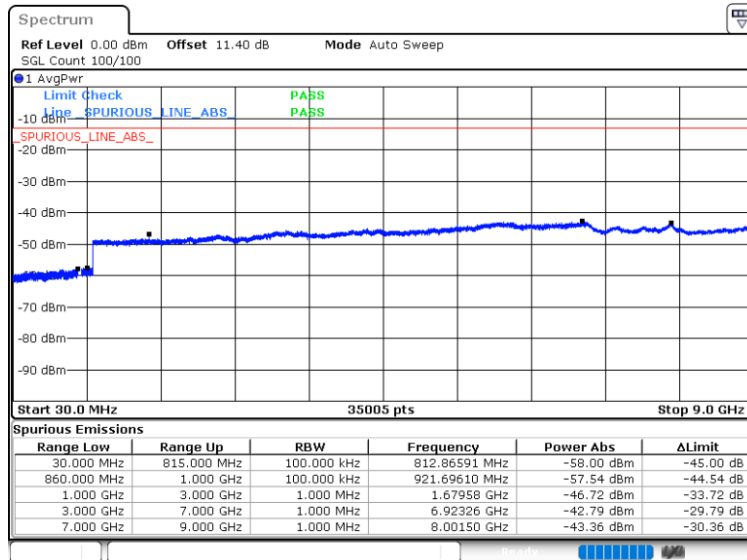
Date: 17.JAN.2021 07:37:55

Middle Channel / QPSK



Date: 17.JAN.2021 07:38:59

Highest Channel / QPSK

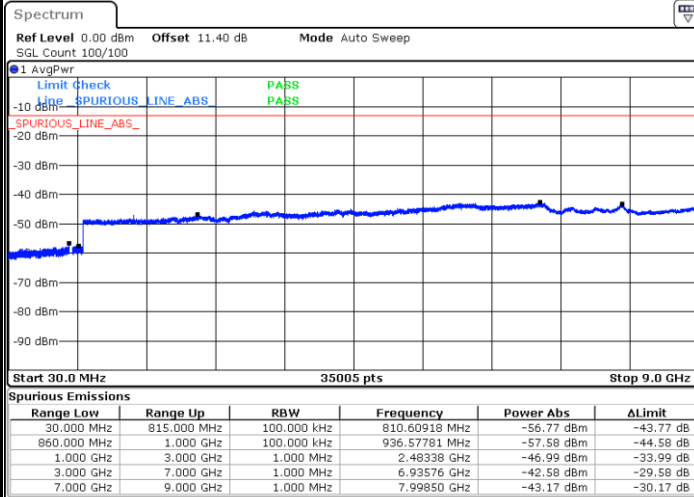


Date: 17.JAN.2021 07:41:44



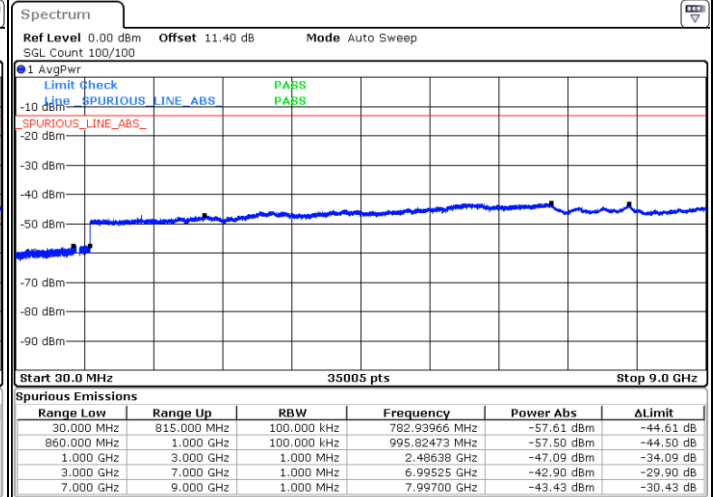
LTE Band 26 / 15MHz

Lowest Channel / QPSK



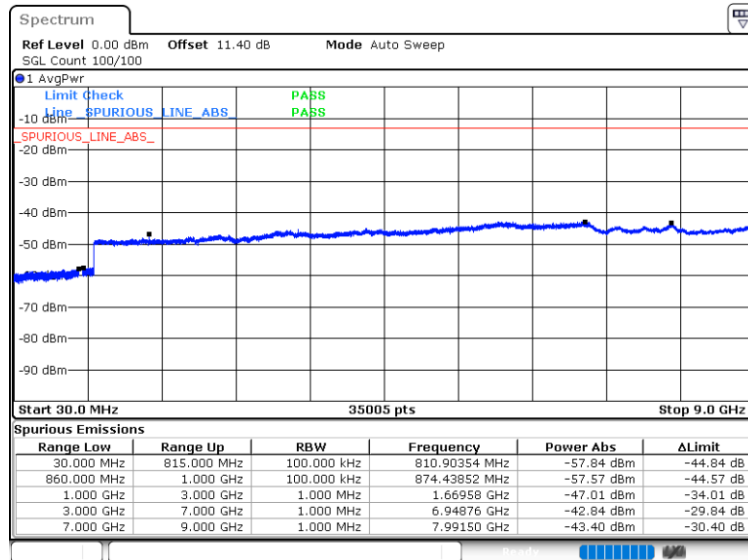
Date: 17.JAN.2021 07:49:25

Middle Channel / QPSK



Date: 17.JAN.2021 07:50:40

Highest Channel / QPSK



Date: 17.JAN.2021 07:53:25

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	0.0130	PASS
40	Normal Voltage	0.0005	
30	Normal Voltage	0.0133	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0123	
0	Normal Voltage	0.0031	
-10	Normal Voltage	0.0116	
-20	Normal Voltage	0.0108	
-30	Normal Voltage	0.0061	
20	Maximum Voltage	0.0134	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0111	

Note:

1. Normal Voltage =48 V. ; Battery End Point (BEP) =43 V. ; Maximum Voltage =53 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 38

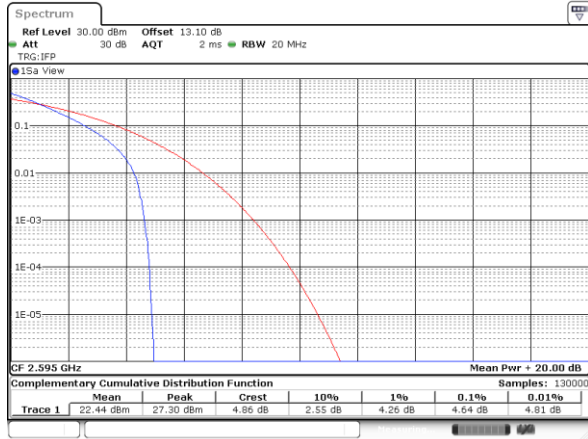
Peak-to-Average Ratio

Mode	LTE Band 38 / 20MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.64	5.71	6.55	PASS



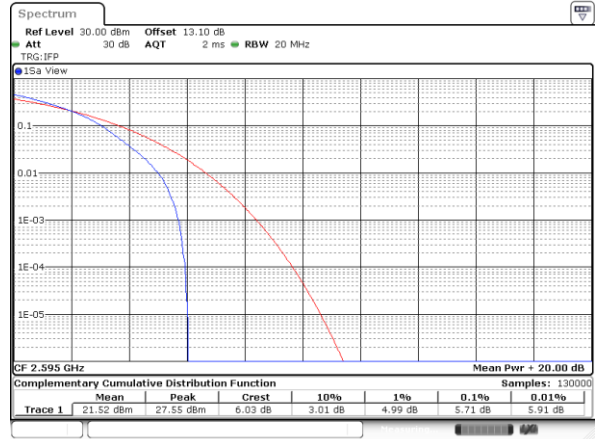
LTE Band 38 / 20MHz / QPSK

Middle Channel / Full RB



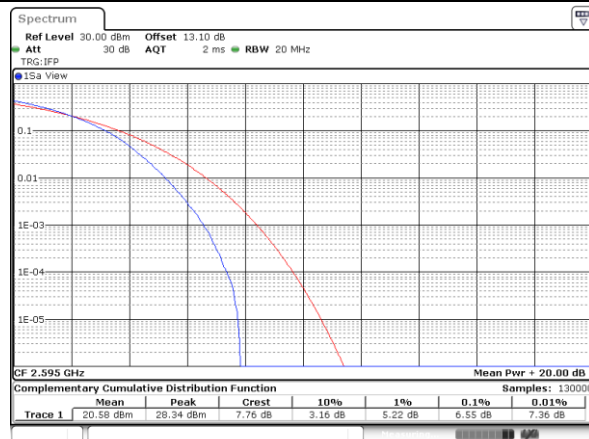
LTE Band 38 / 20MHz / 16QAM

Middle Channel / Full RB



LTE Band 38 / 20MHz / 64QAM

Middle Channel / Full RB



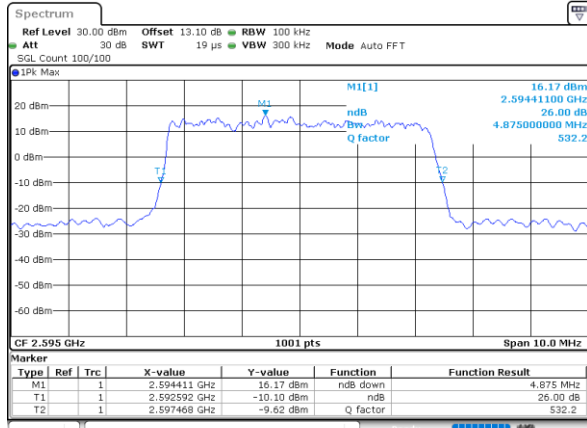
**26dB Bandwidth**

Mode	LTE Band 38 : 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	-	-	-	-	4.88	4.82	9.81	9.81	14.24	14.30	18.90	18.78
Mode	LTE Band 38 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-
Middle CH	-	-	-	-	4.89	-	9.59	-	14.15	-	18.78	-



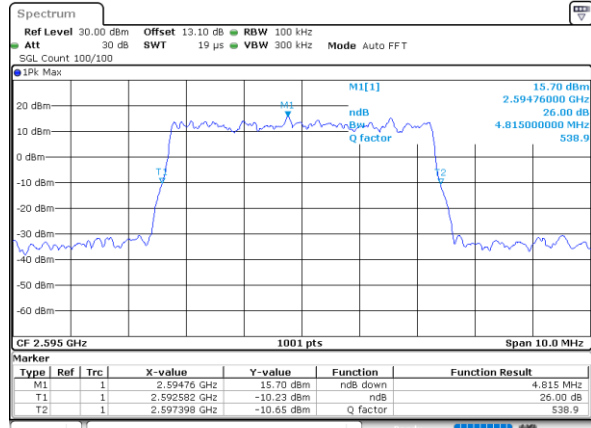
LTE Band 38

Middle Channel / 5MHz / QPSK



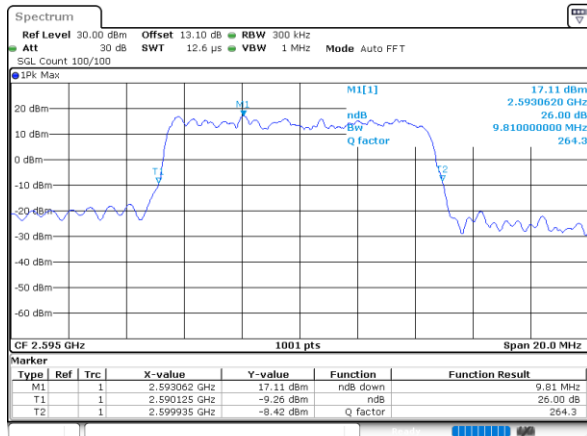
Date: 17_JAN_2021 06:55:45

Middle Channel / 5MHz / 16QAM



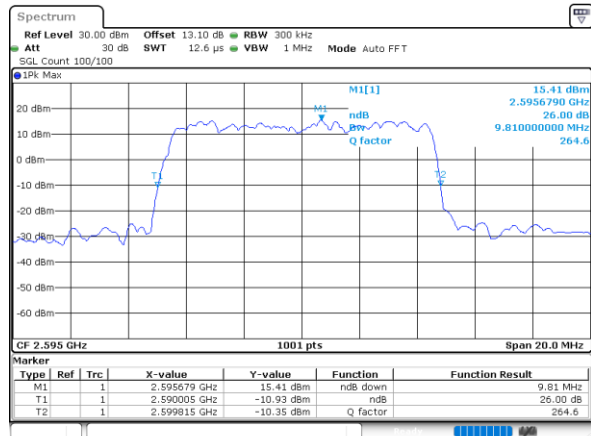
Date: 17_JAN_2021 06:55:56

Middle Channel / 10MHz / QPSK



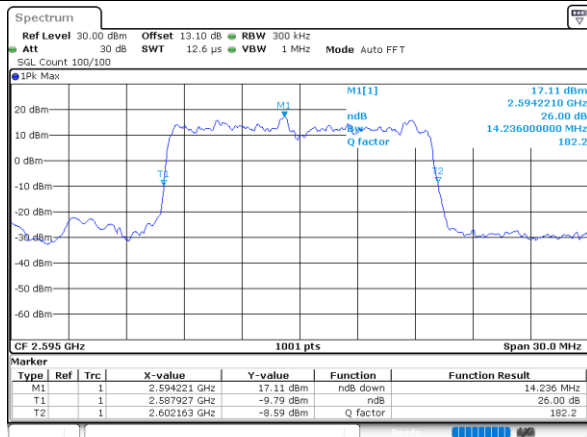
Date: 17_JAN_2021 06:56:30

Middle Channel / 10MHz / 16QAM



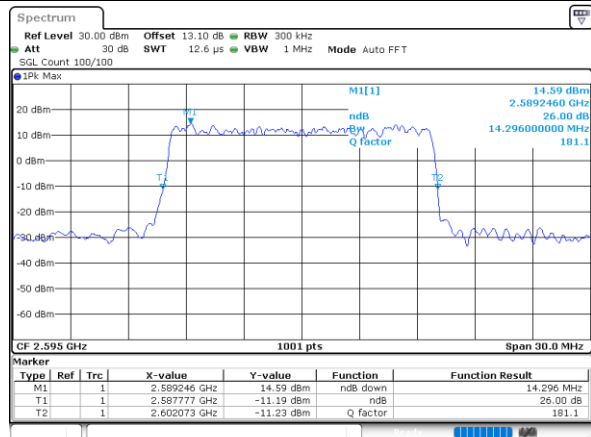
Date: 17_JAN_2021 06:56:41

Middle Channel / 15MHz / QPSK



Date: 17_JAN_2021 06:57:16

Middle Channel / 15MHz / 16QAM

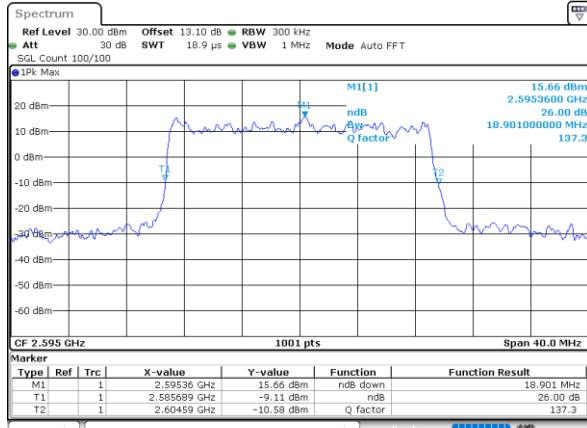


Date: 17_JAN_2021 06:57:27



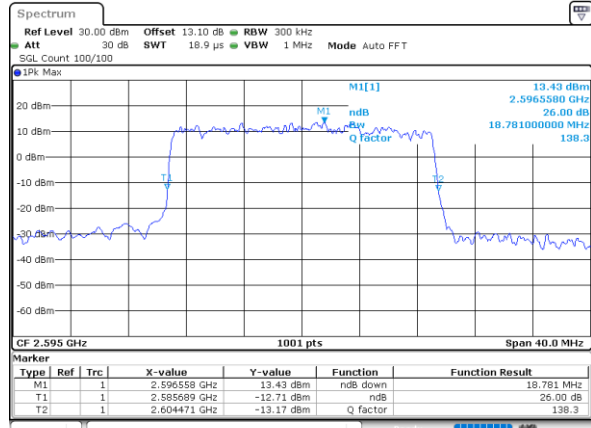
LTE Band 38

Middle Channel / 20MHz / QPSK



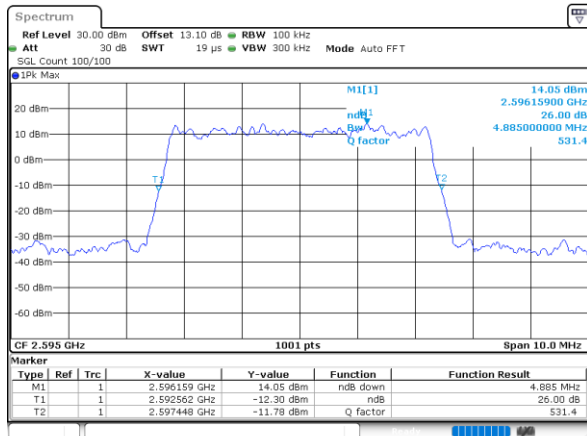
Date: 17_JAN_2021 06:58:01

Middle Channel / 20MHz / 16QAM



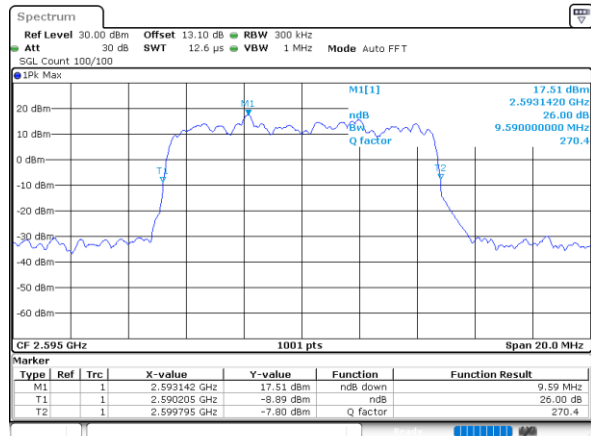
Date: 17_JAN_2021 06:58:12

Middle Channel / 5MHz / 64QAM



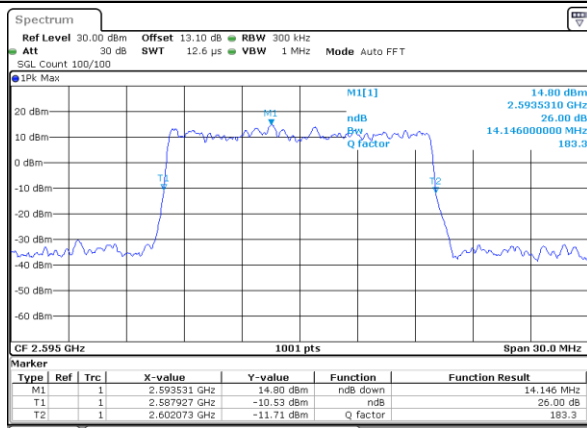
Date: 17_JAN_2021 06:58:35

Middle Channel / 10MHz / 64QAM



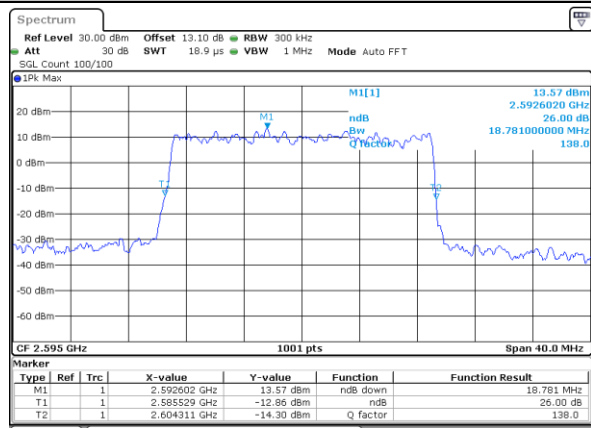
Date: 17_JAN_2021 06:58:58

Middle Channel / 15MHz / 64QAM



Date: 17_JAN_2021 06:59:21

Middle Channel / 20MHz / 64QAM



Date: 17_JAN_2021 06:59:44

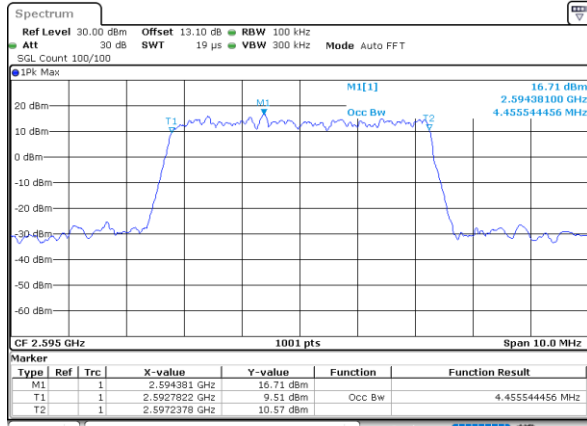
**Occupied Bandwidth**

Mode	LTE Band 38 : 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	-	-	-	-	4.46	4.48	9.01	9.07	13.52	13.43	17.90	17.82
Mode	LTE Band 38 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-
Middle CH	-	-	-	-	4.46	-	8.99	-	13.46	-	17.90	-



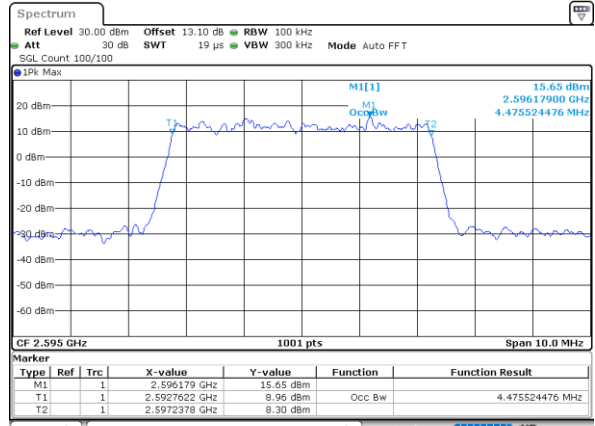
LTE Band 38

Middle Channel / 5MHz / QPSK



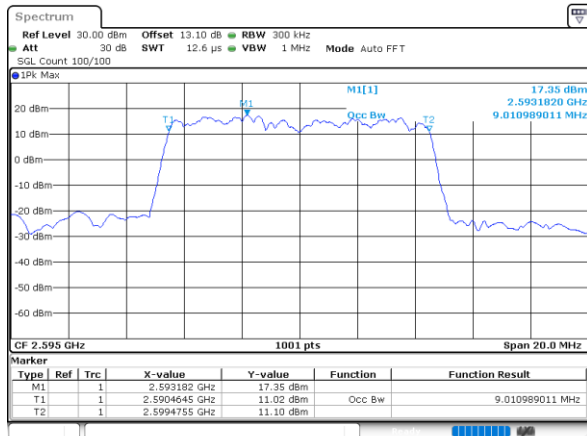
Date: 17.JAN.2021 06:55:21

Middle Channel / 5MHz / 16QAM



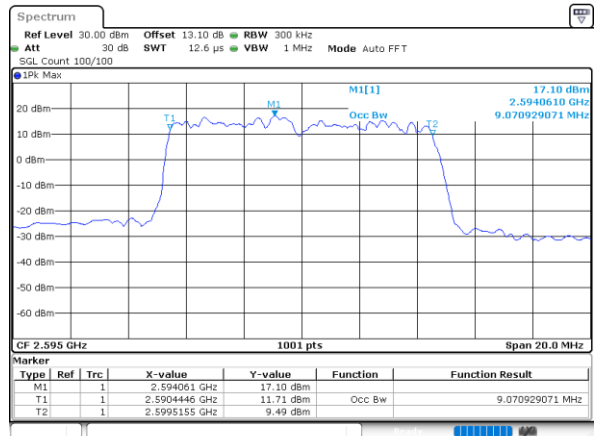
Date: 17.JAN.2021 06:55:34

Middle Channel / 10MHz / QPSK



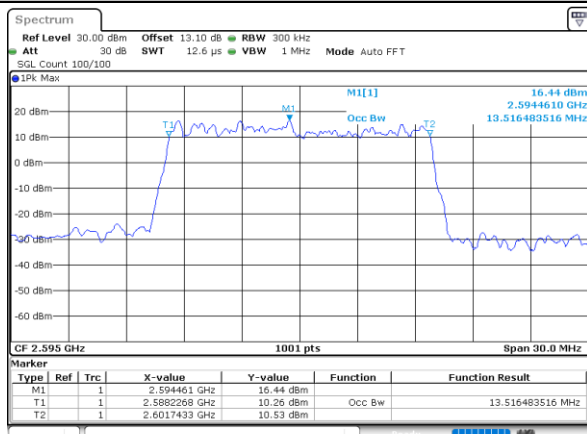
Date: 17.JAN.2021 06:56:08

Middle Channel / 10MHz / 16QAM



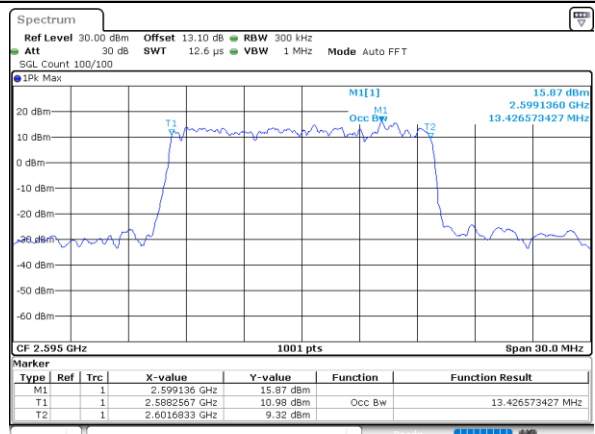
Date: 17.JAN.2021 06:56:19

Middle Channel / 15MHz / QPSK



Date: 17.JAN.2021 06:56:53

Middle Channel / 15MHz / 16QAM

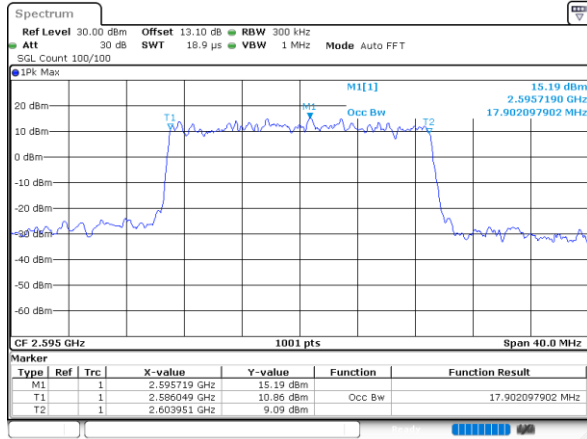


Date: 17.JAN.2021 06:57:04

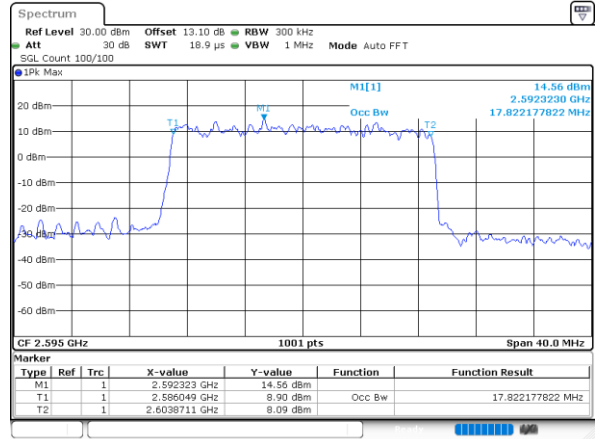


LTE Band 38

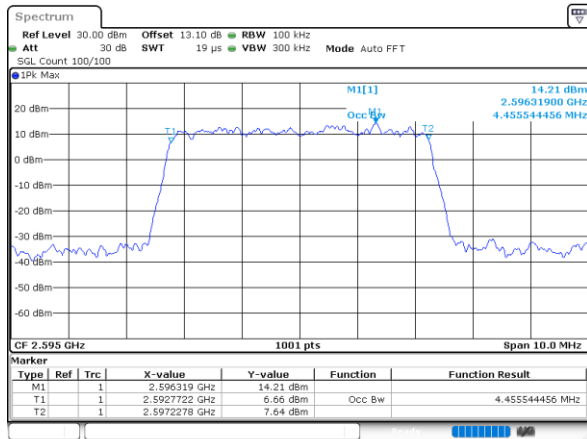
Middle Channel / 20MHz / QPSK



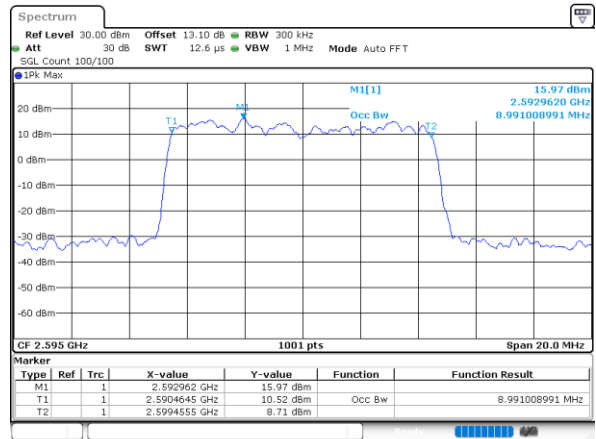
Middle Channel / 20MHz / 16QAM



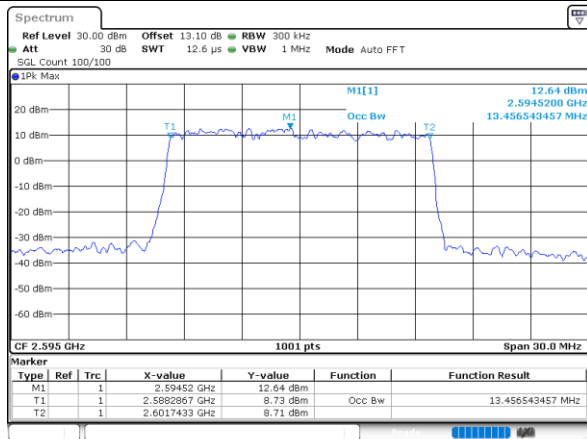
Middle Channel / 5MHz / 64QAM



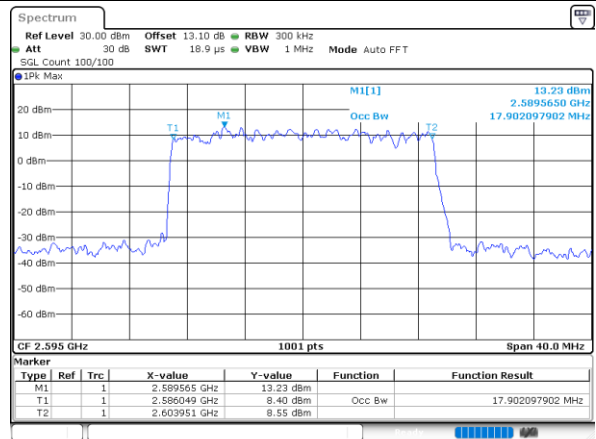
Middle Channel / 10MHz / 64QAM



Middle Channel / 15MHz / 64QAM



Middle Channel / 20MHz / 64QAM

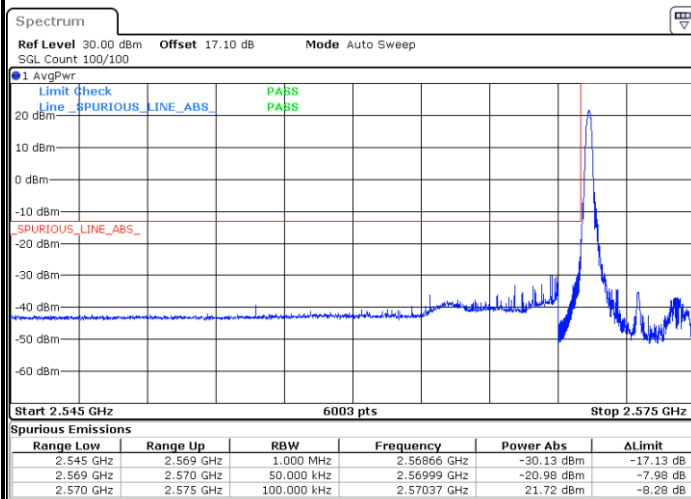




Conducted Band Edge

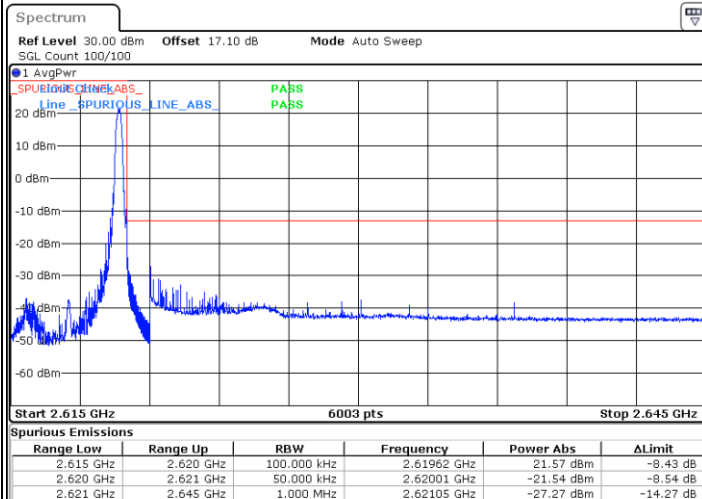
LTE Band 38 / 5MHz / QPSK

Lowest Band Edge / 1 RB



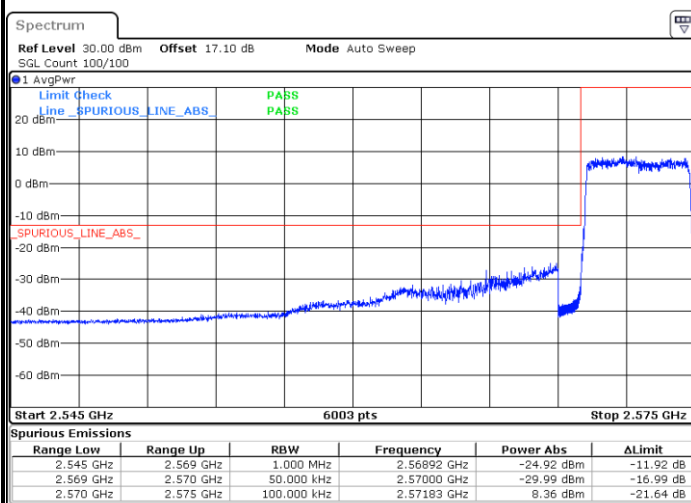
Date: 19.JAN.2021 11:40:07

Highest Band Edge / 1 RB



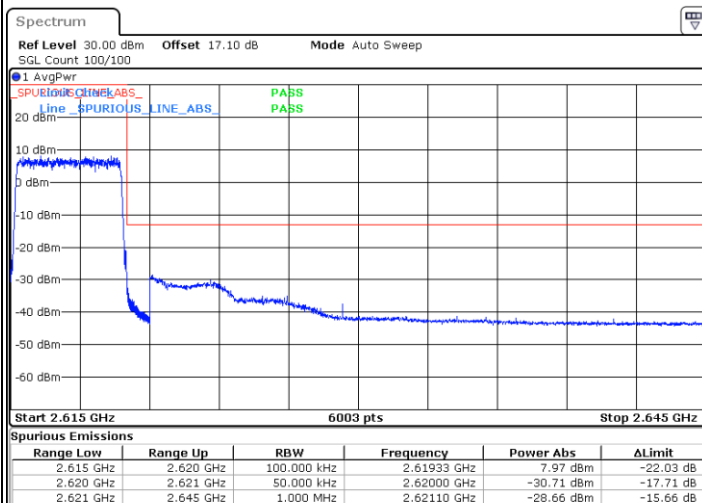
Date: 19.JAN.2021 11:42:20

Lowest Band Edge / Full RB



Date: 19.JAN.2021 11:40:51

Highest Band Edge / Full RB

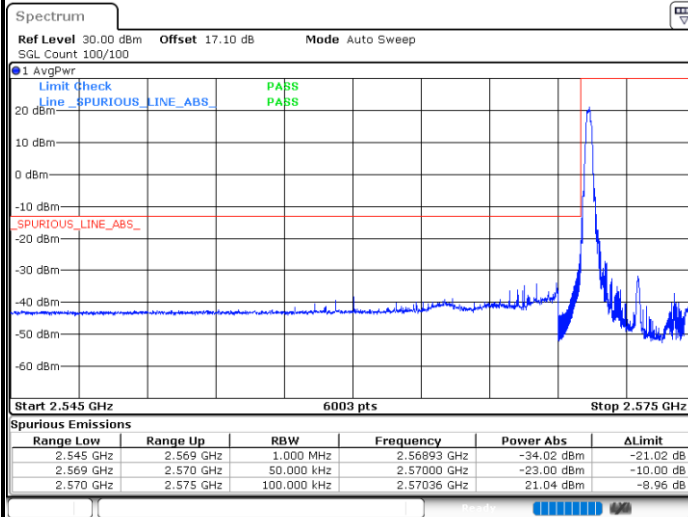


Date: 19.JAN.2021 11:41:35

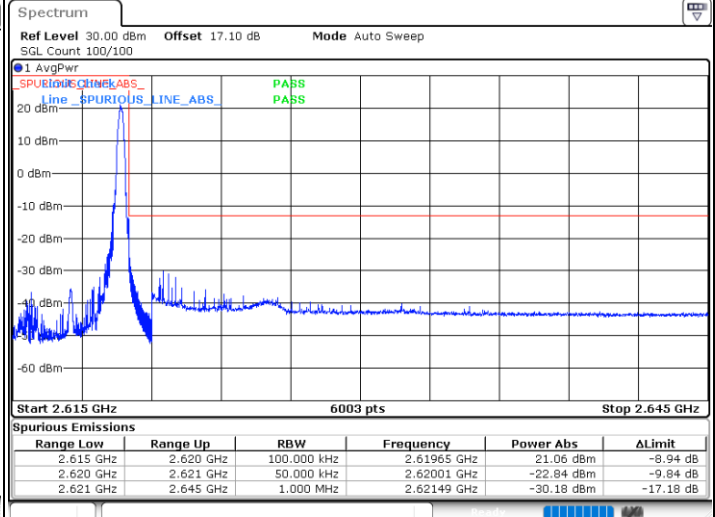


LTE Band 38 / 5MHz / 16QAM

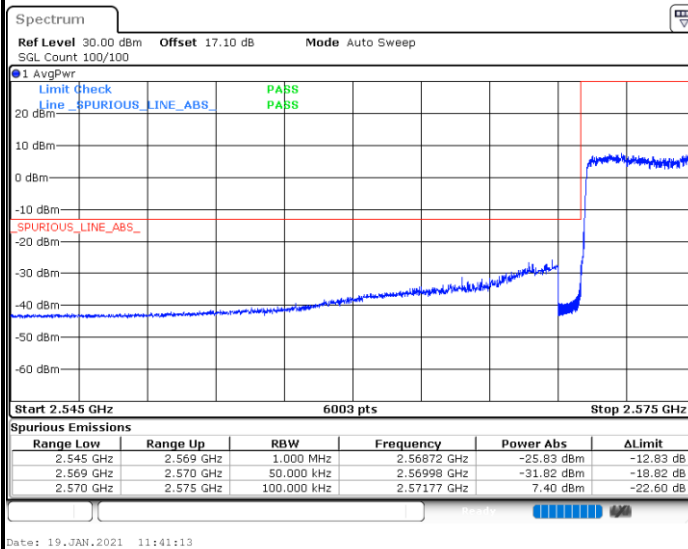
Lowest Band Edge / 1RB



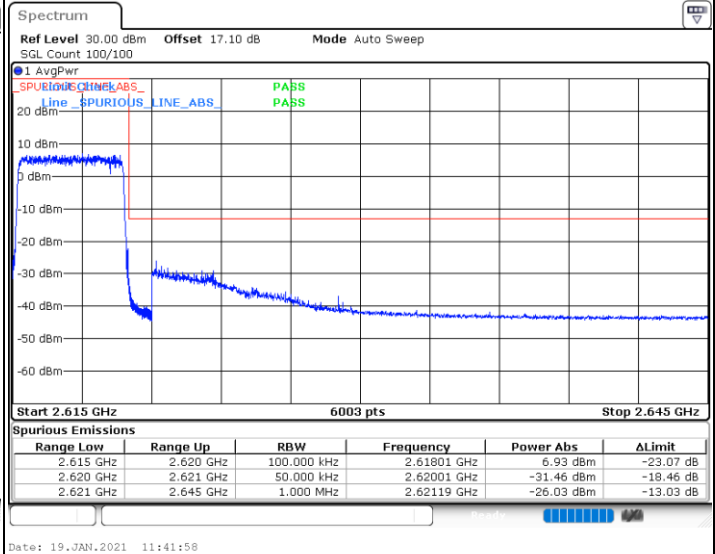
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



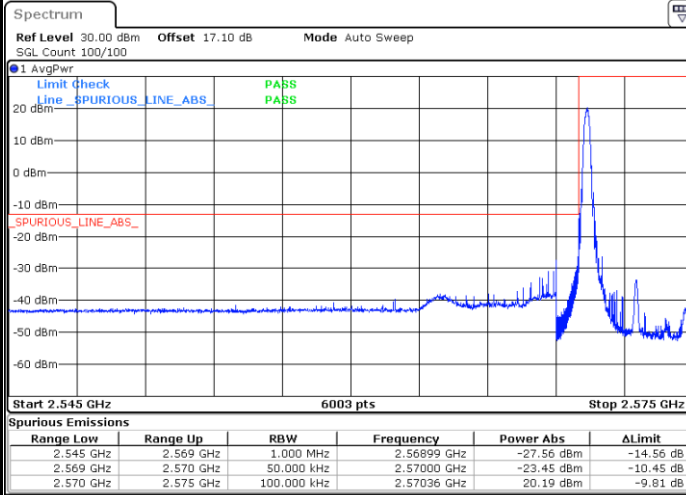
Highest Band Edge / Full RB



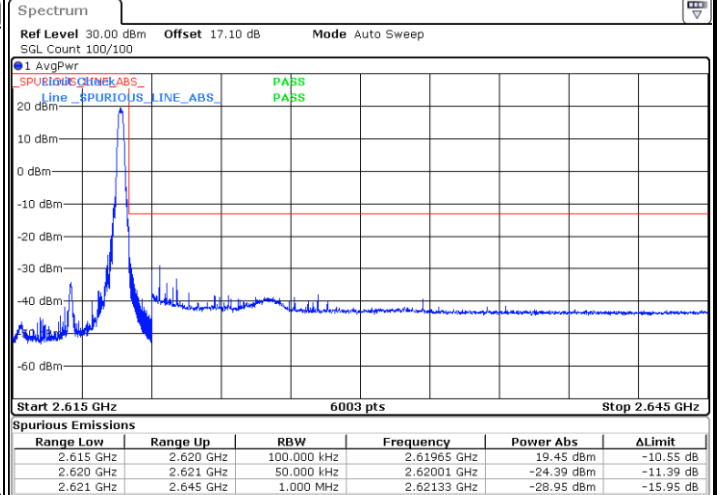


LTE Band 38 / 5MHz / 64QAM

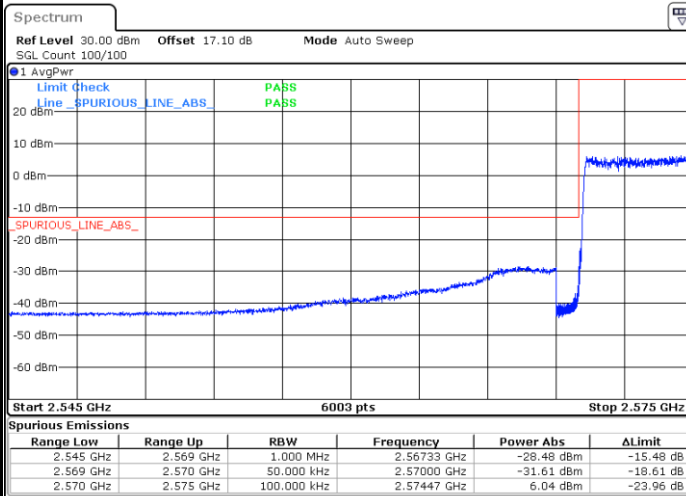
Lowest Band Edge / 1RB



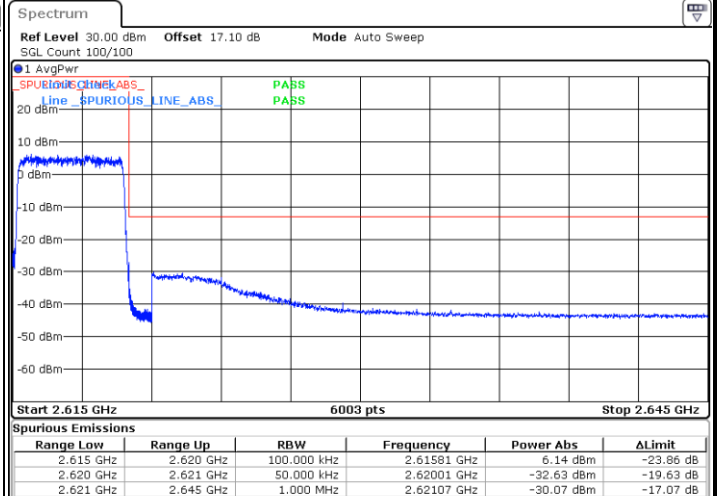
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



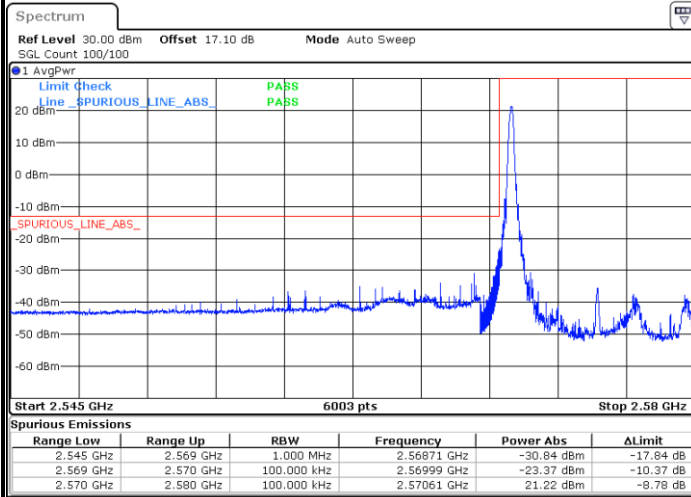
Highest Band Edge / Full RB



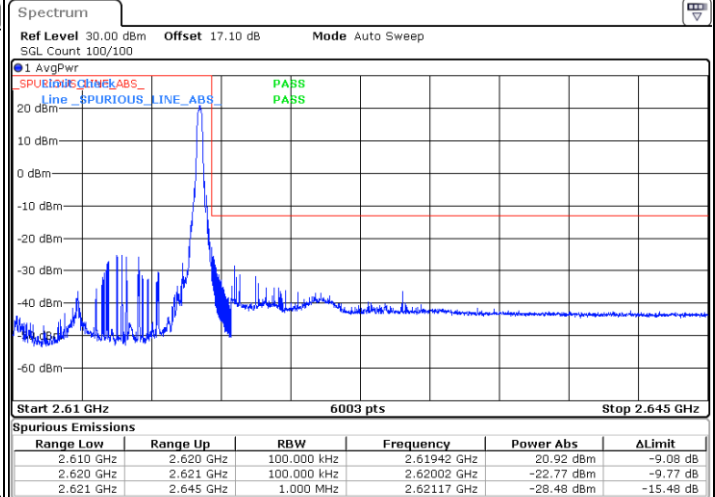


LTE Band 38 / 10MHz / QPSK

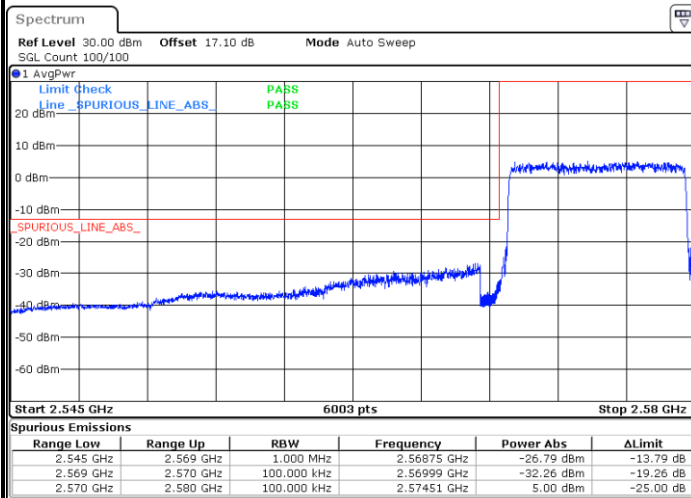
Lowest Band Edge / 1 RB



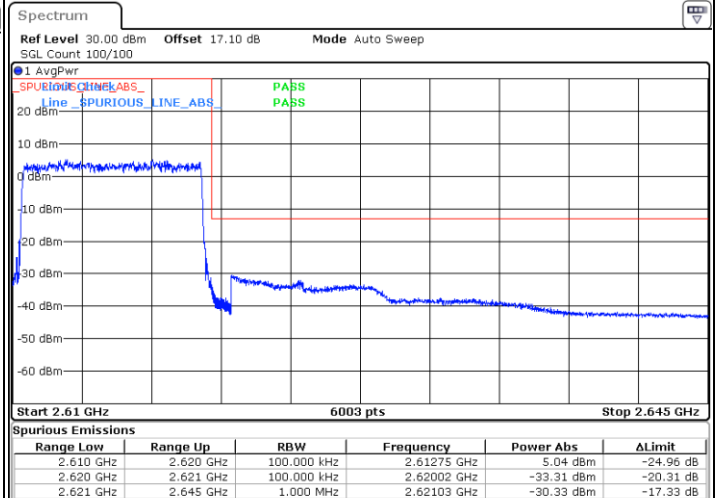
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



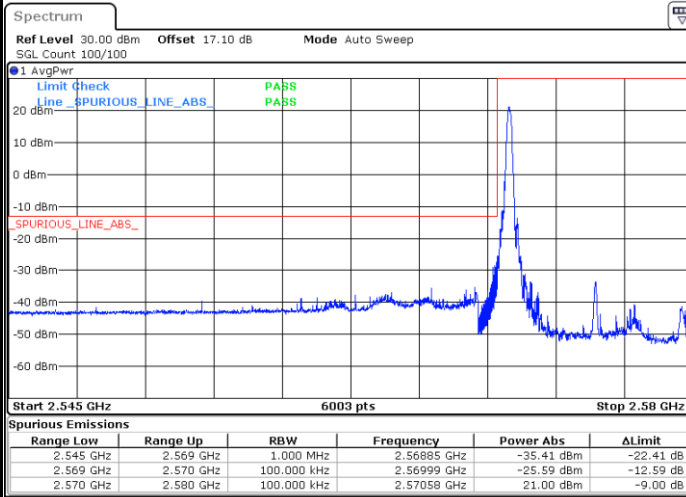
Highest Band Edge / Full RB



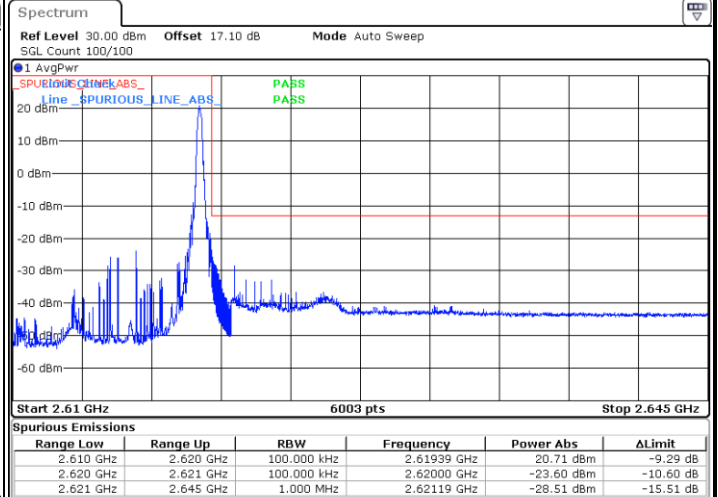


LTE Band 38 / 10MHz / 16QAM

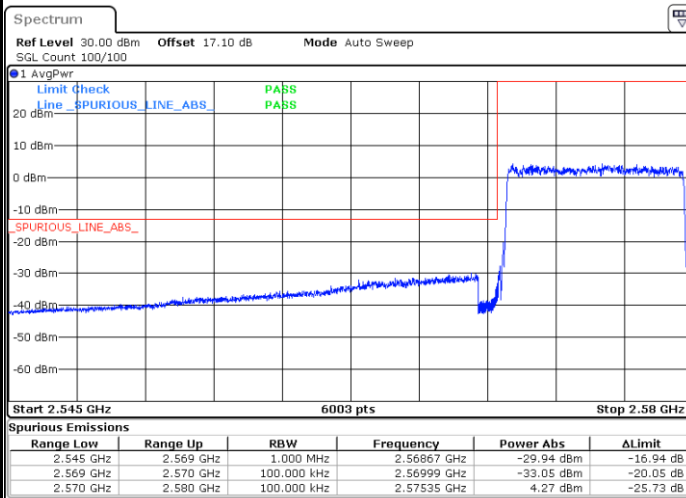
Lowest Band Edge / 1 RB



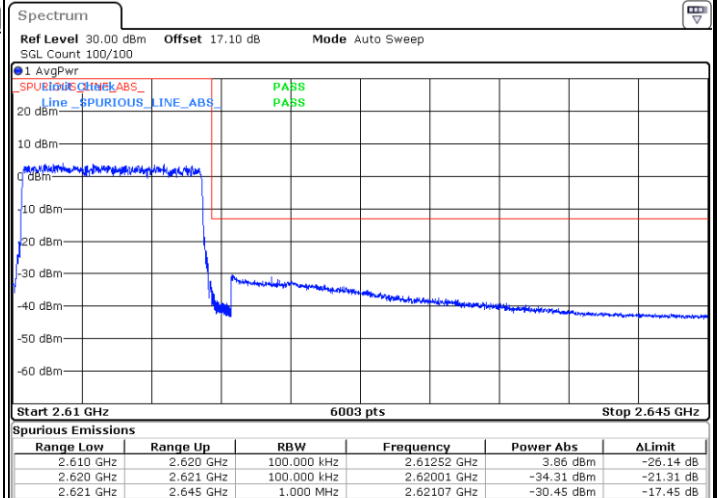
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



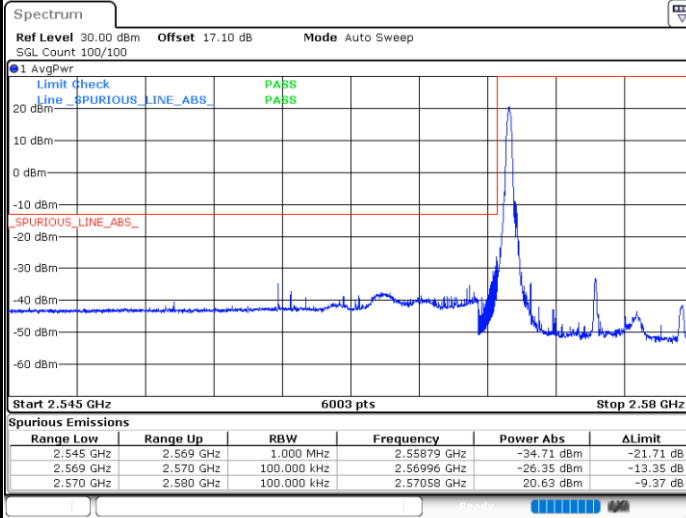
Highest Band Edge / Full RB



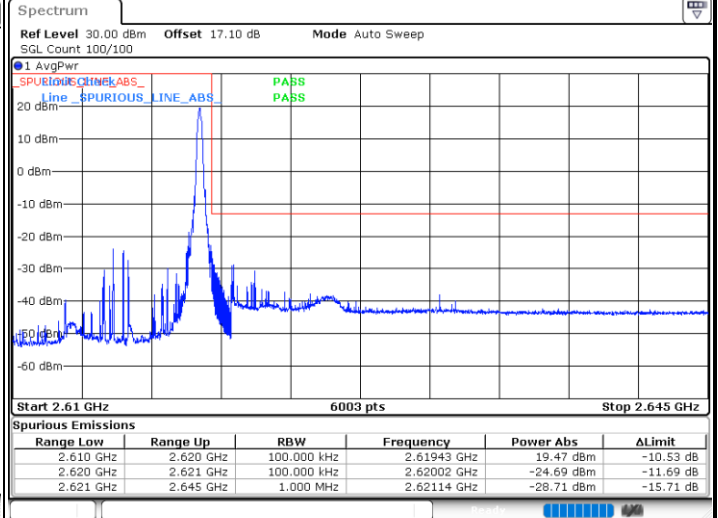


LTE Band 38 / 10MHz / 64QAM

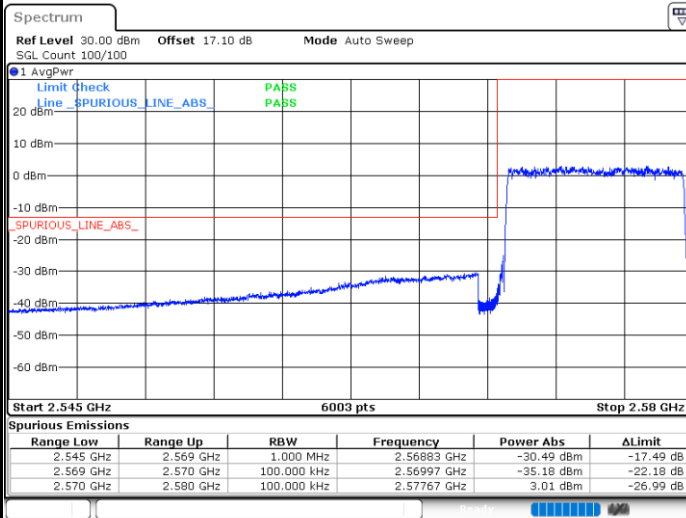
Lowest Band Edge / 1 RB



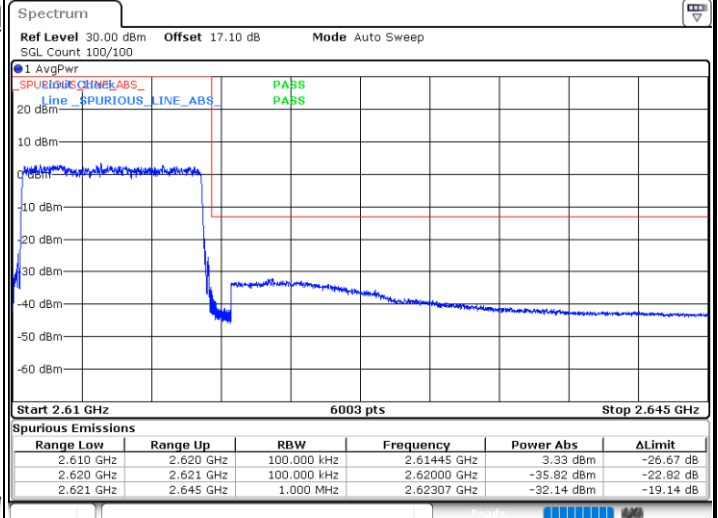
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



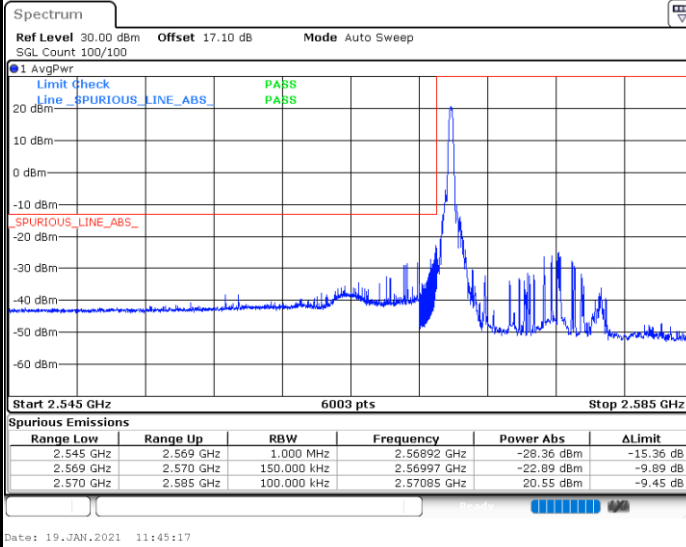
Highest Band Edge / Full RB



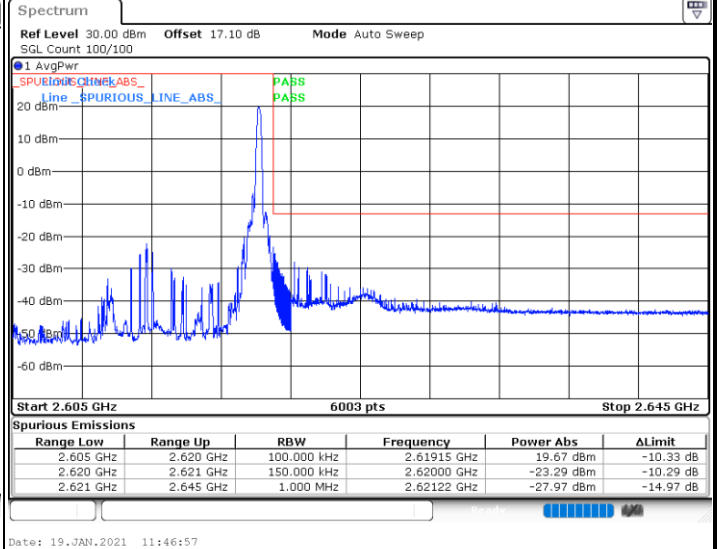


LTE Band 38 / 15MHz / QPSK

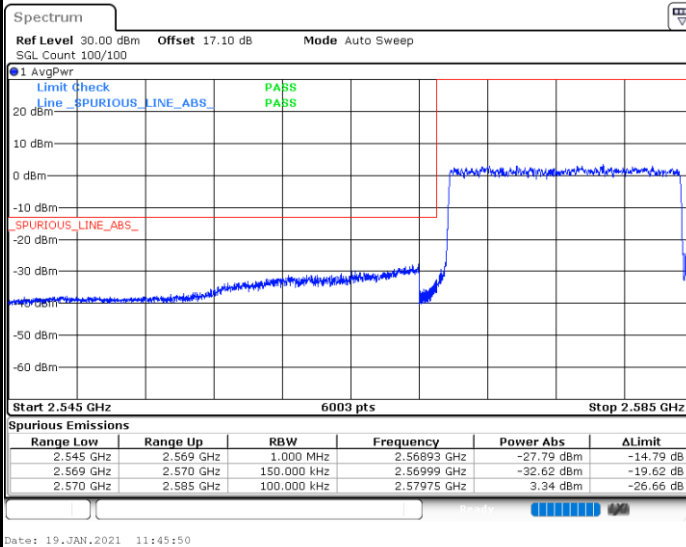
Lowest Band Edge / 1 RB



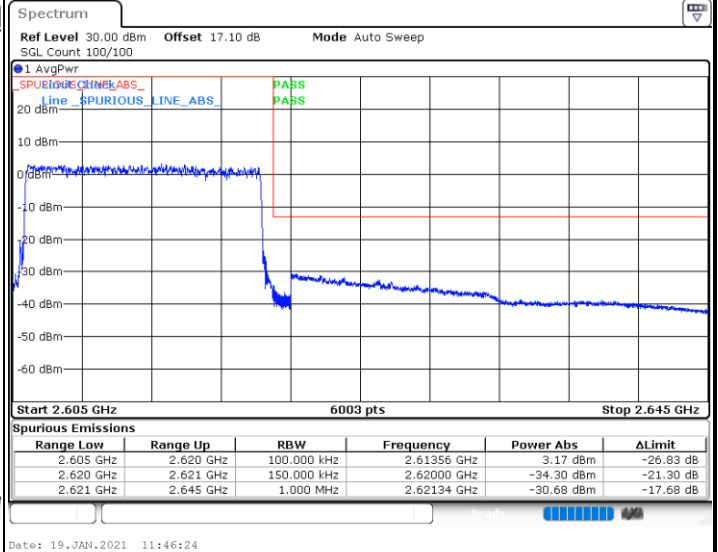
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



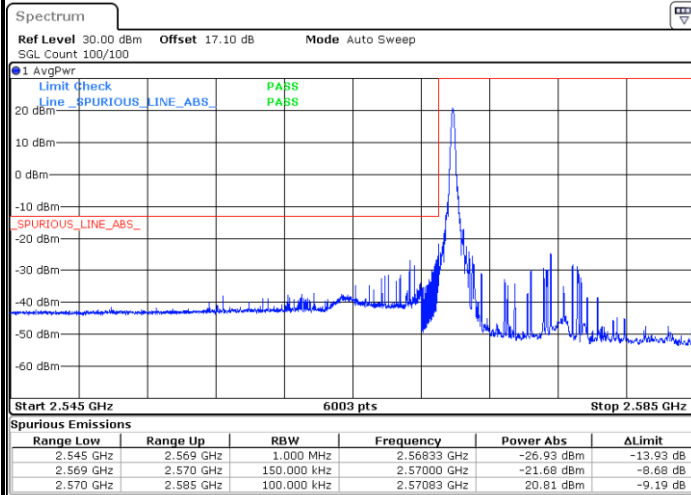
Highest Band Edge / Full RB



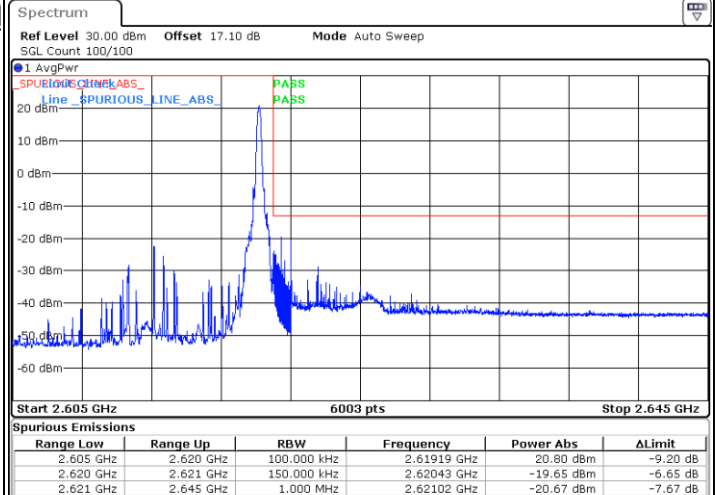


LTE Band 38 / 15MHz / 16QAM

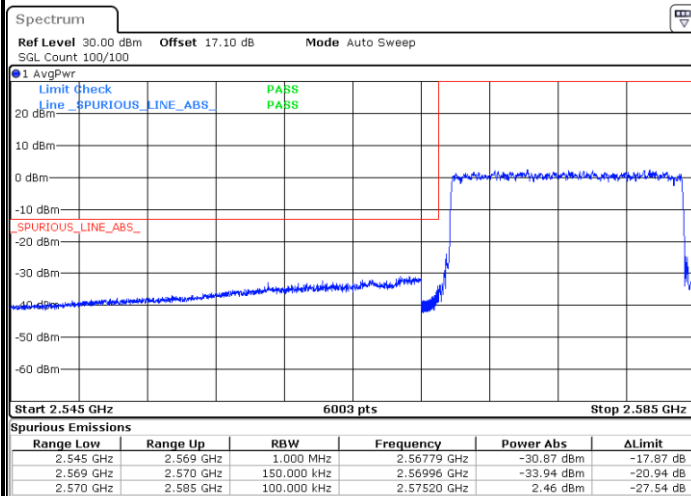
Lowest Band Edge / 1 RB



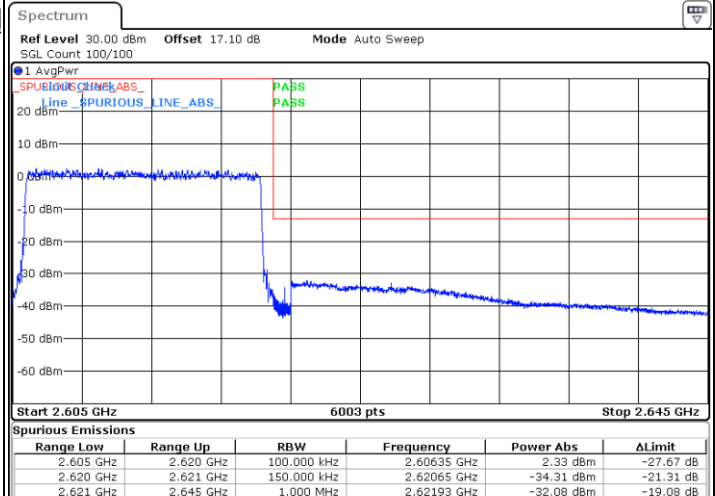
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



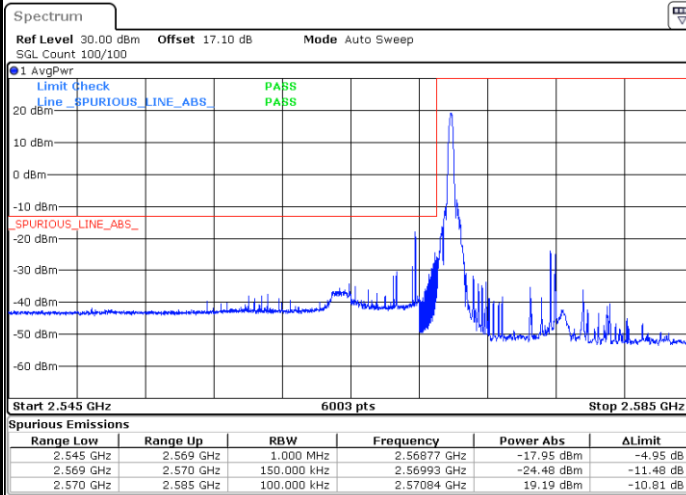
Highest Band Edge / Full RB



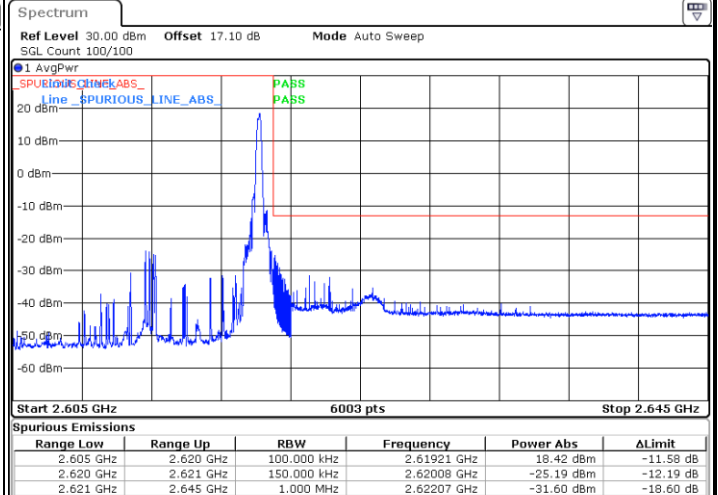


LTE Band 38 / 15MHz / 64QAM

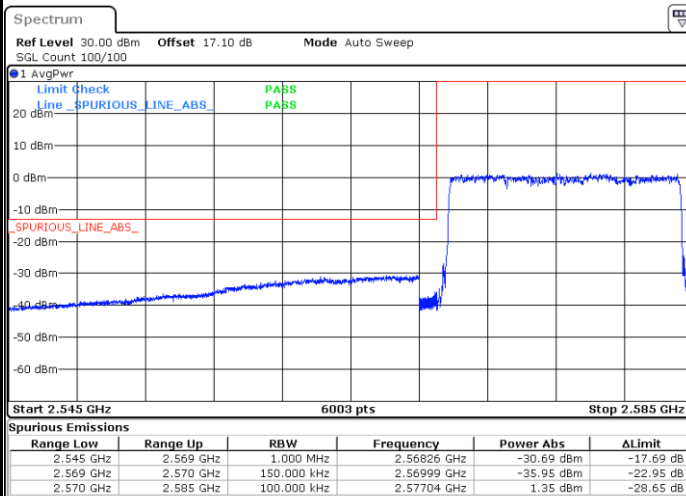
Lowest Band Edge / 1 RB



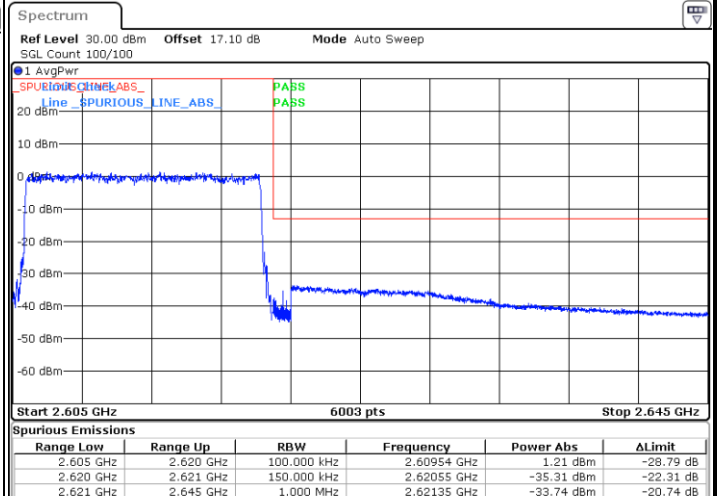
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



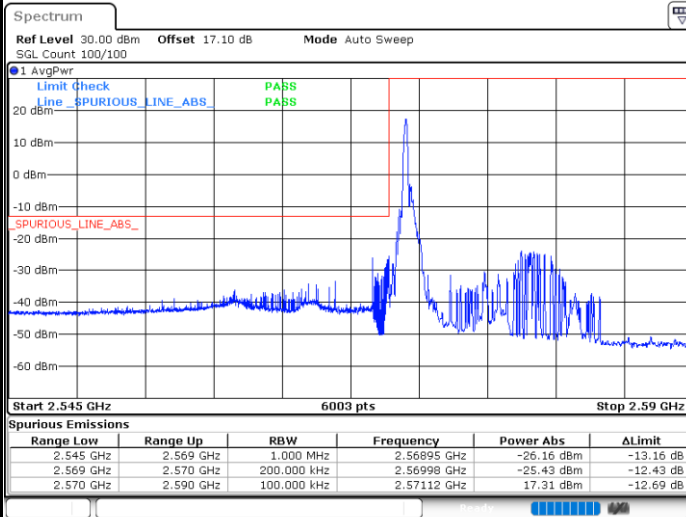
Highest Band Edge / Full RB



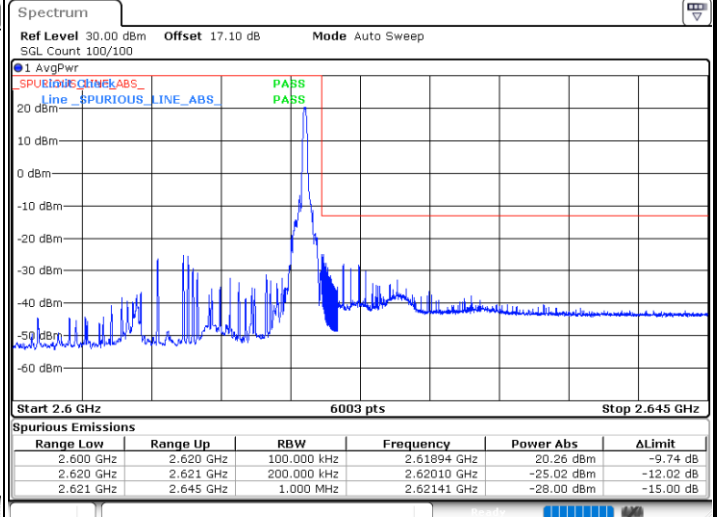


LTE Band 38 / 20MHz / QPSK

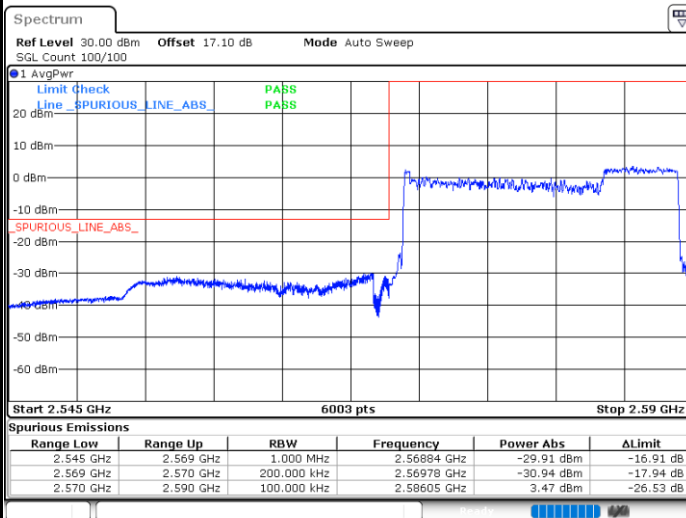
Lowest Band Edge / 1 RB



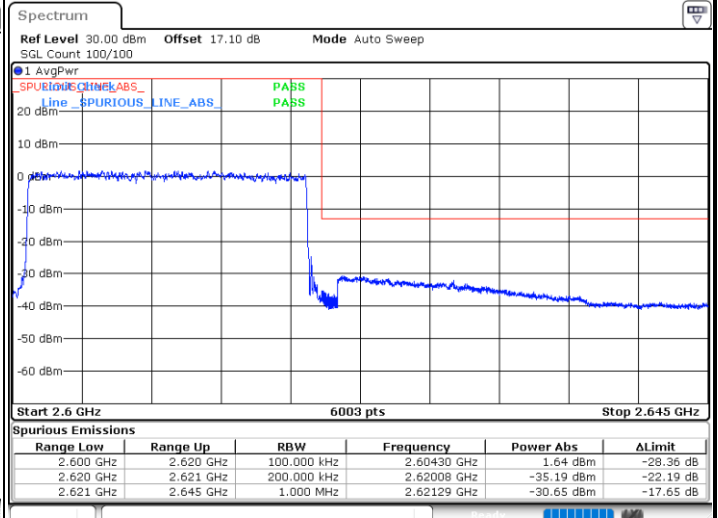
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



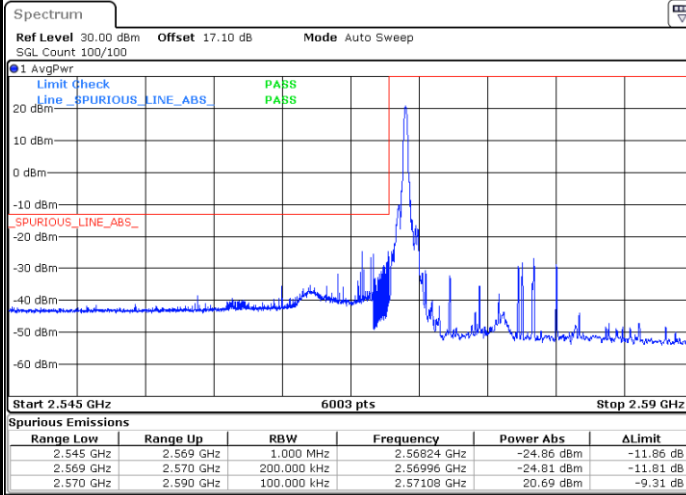
Highest Band Edge / Full RB



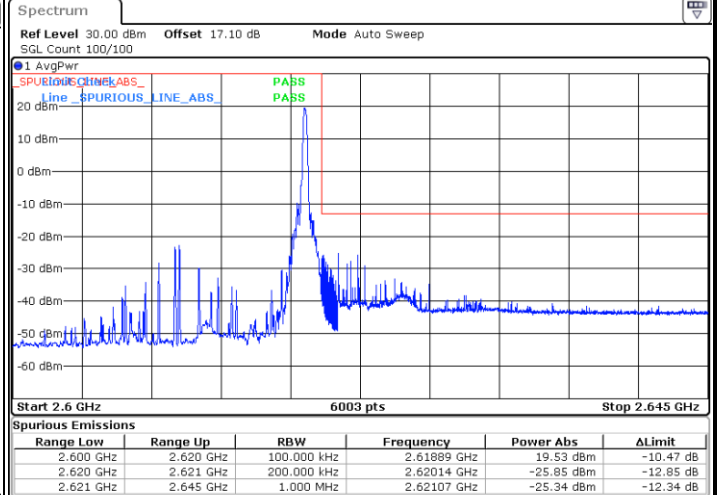


LTE Band 38 / 20MHz / 16QAM

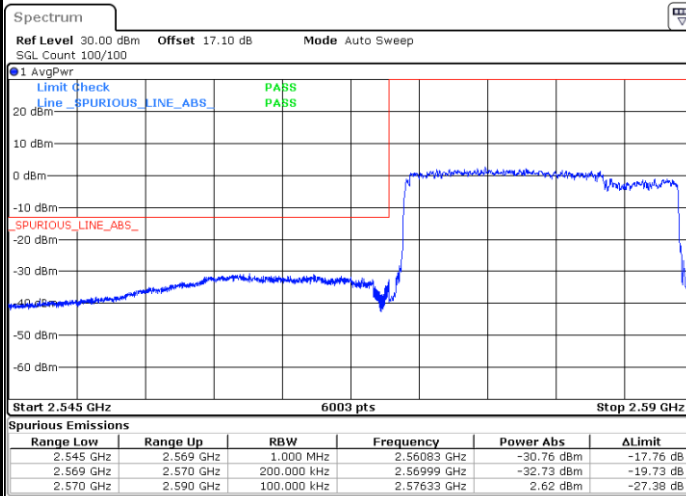
Lowest Band Edge / 1 RB



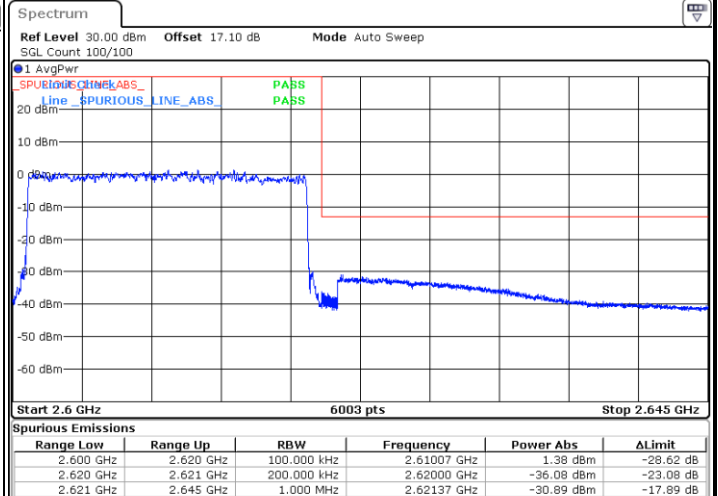
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



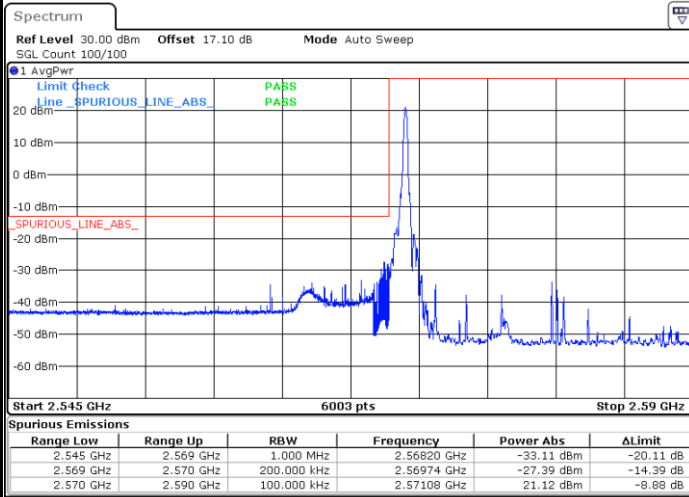
Highest Band Edge / Full RB



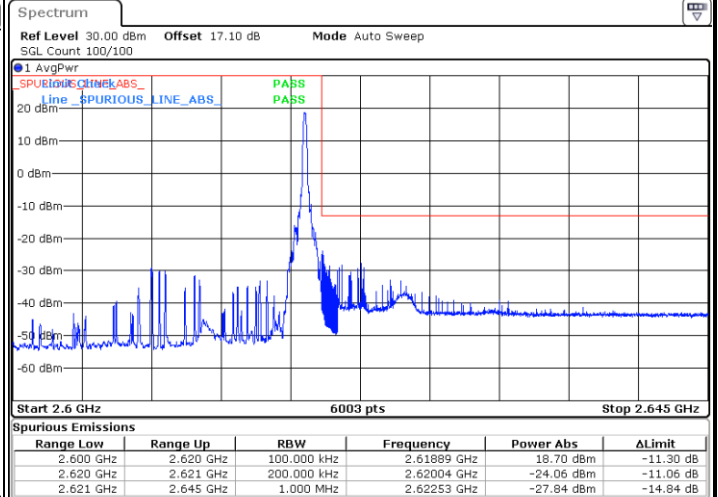


LTE Band 38 / 20MHz / 64QAM

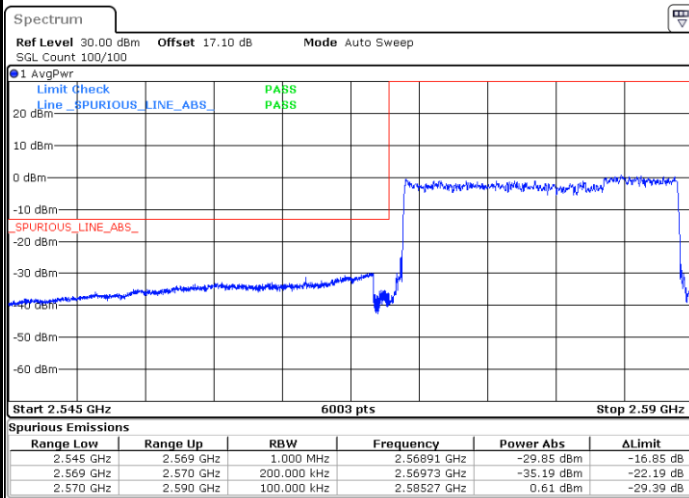
Lowest Band Edge / 1 RB



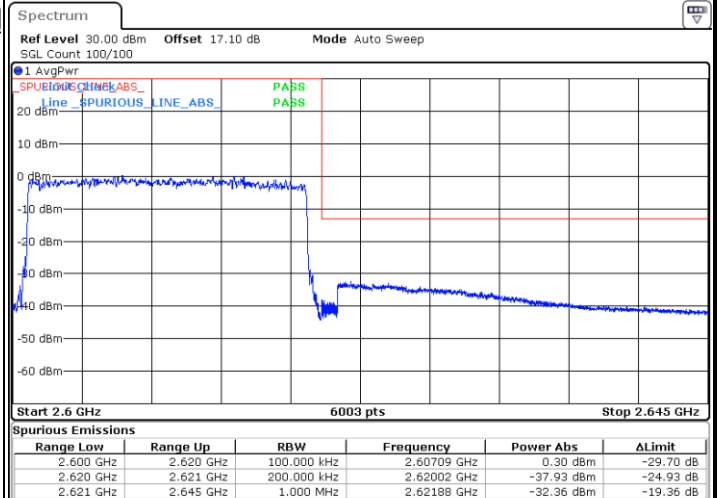
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

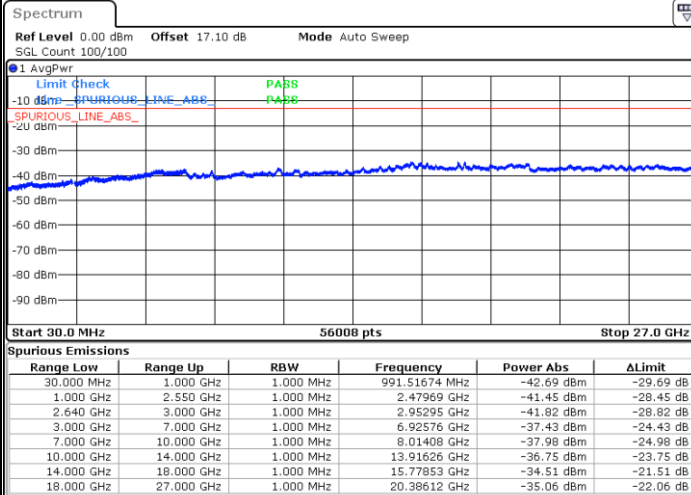




Conducted Spurious Emission

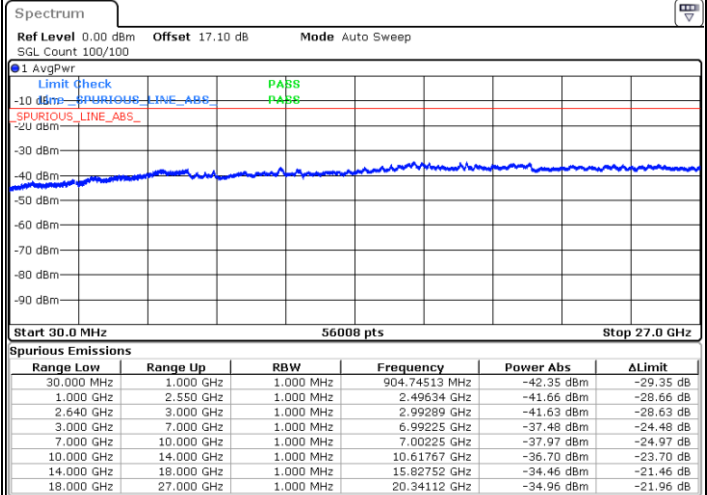
LTE Band 38 / 5MHz

Lowest Channel / QPSK



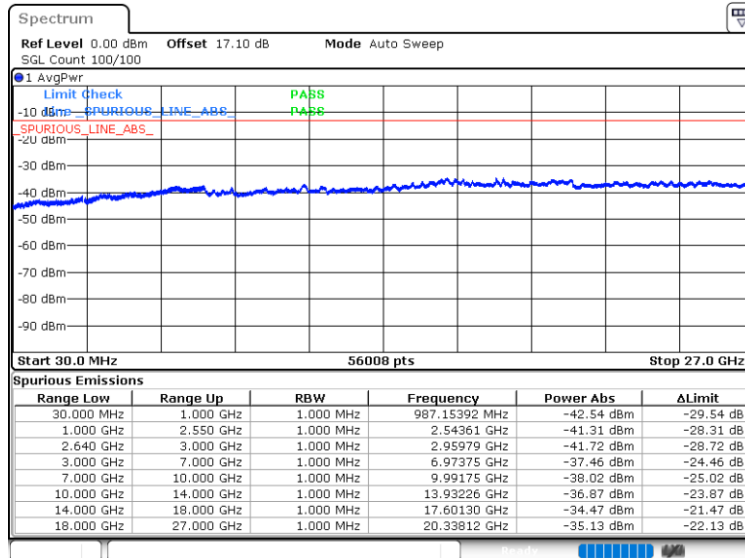
Date: 19.JAN.2021 11:59:05

Middle Channel / QPSK



Date: 19.JAN.2021 11:59:58

Highest Channel / QPSK

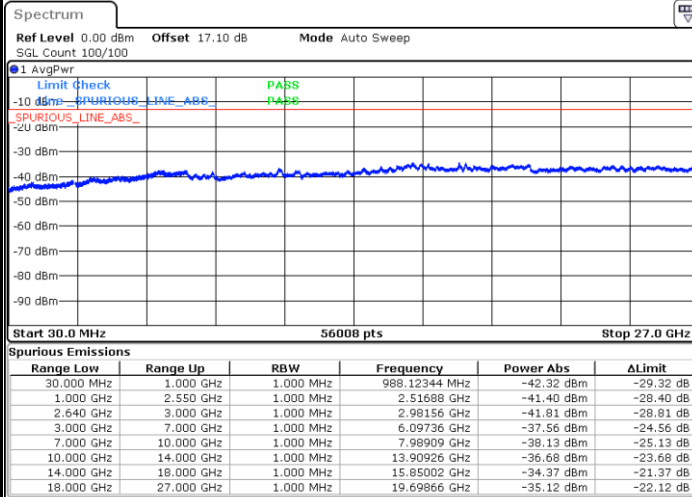


Date: 19.JAN.2021 12:00:50



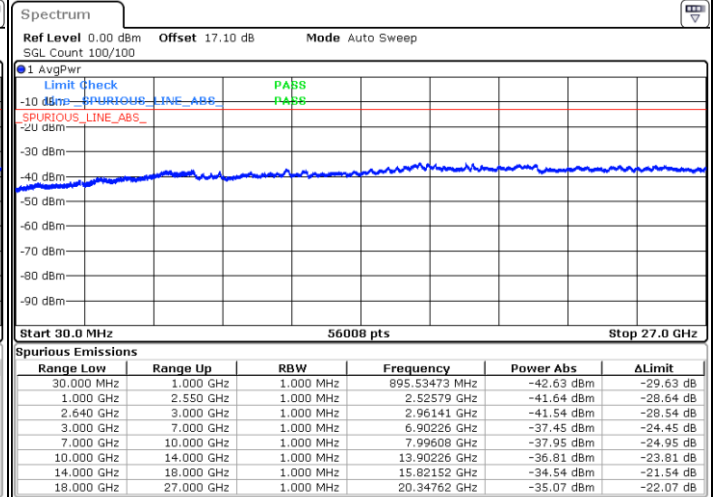
LTE Band 38 / 10MHz

Lowest Channel / QPSK



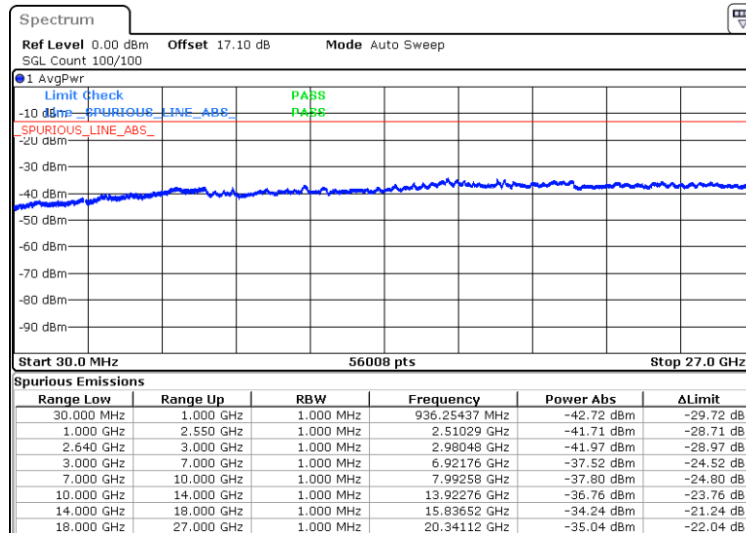
Date: 19.JAN.2021 12:01:44

Middle Channel / QPSK



Date: 19.JAN.2021 12:02:36

Highest Channel / QPSK

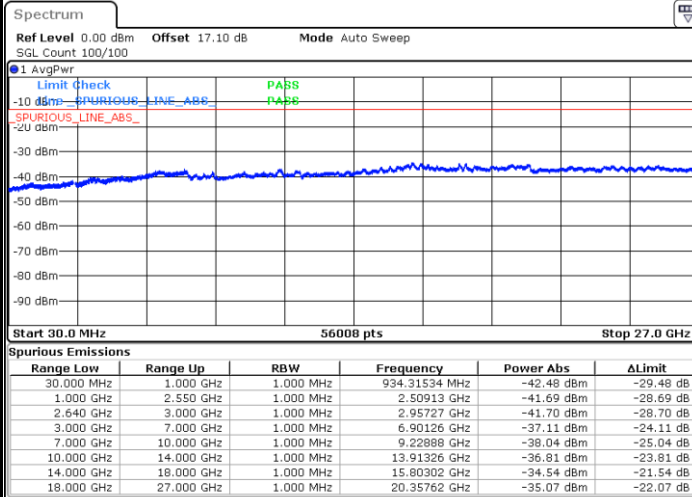


Date: 19.JAN.2021 12:03:28



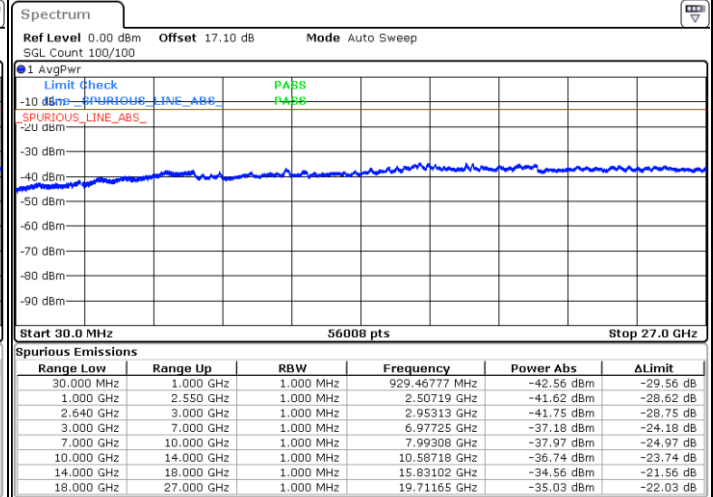
LTE Band 38 / 15MHz

Lowest Channel / QPSK



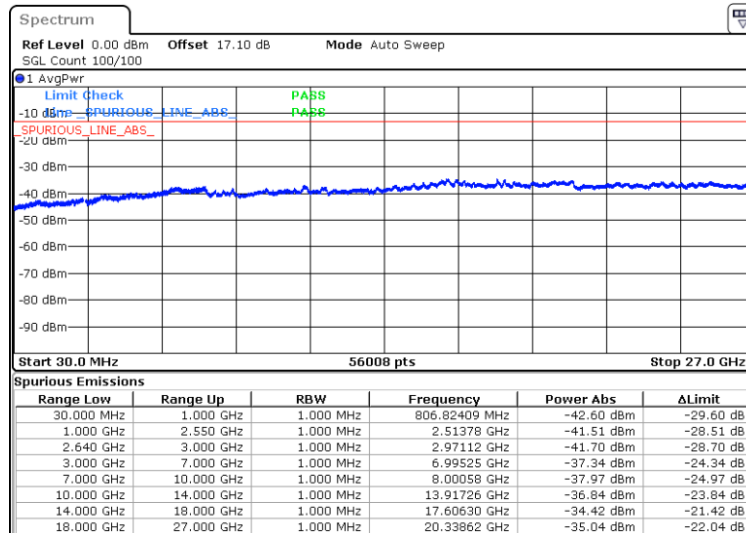
Date: 19.JAN.2021 12:04:22

Middle Channel / QPSK



Date: 19.JAN.2021 12:05:14

Highest Channel / QPSK

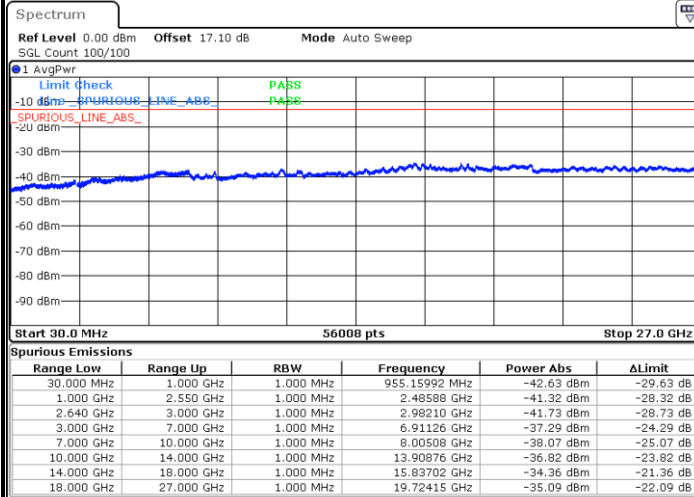


Date: 19.JAN.2021 12:06:06



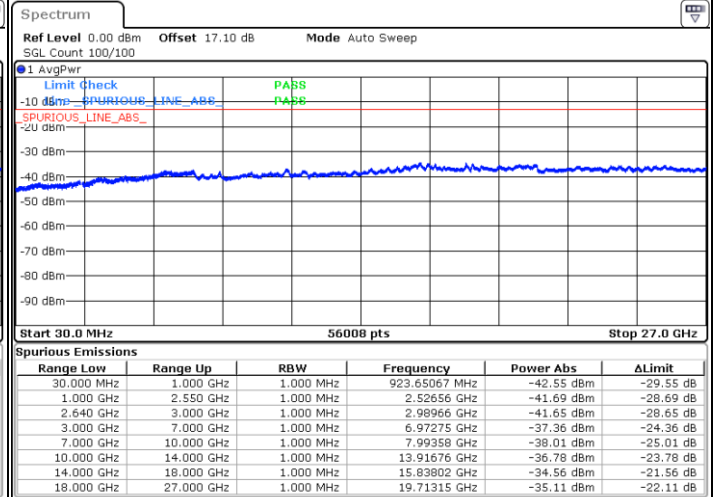
LTE Band 38 / 20MHz

Lowest Channel / QPSK



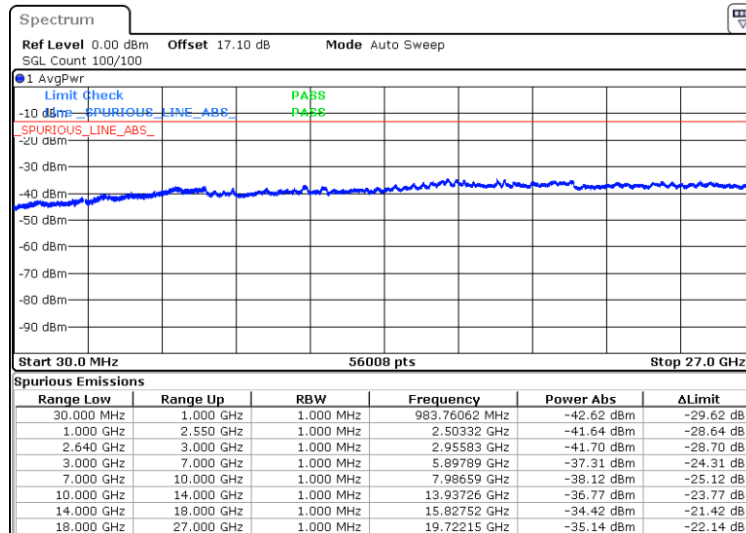
Date: 19.JAN.2021 12:06:59

Middle Channel / QPSK



Date: 19.JAN.2021 12:07:52

Highest Channel / QPSK



Date: 19.JAN.2021 12:08:44

Frequency Stability

Test Conditions		LTE Band 38 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0060	PASS
40	Normal Voltage	0.0070	
30	Normal Voltage	0.0066	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0063	
0	Normal Voltage	0.0002	
-10	Normal Voltage	0.0065	
-20	Normal Voltage	0.0002	
-30	Normal Voltage	0.0005	
20	Maximum Voltage	0.0006	
20	Normal Voltage	0.0021	
20	Battery End Point	0.0024	

Note:

1. Normal Voltage =48 V. ; Battery End Point (BEP) =43 V. ; Maximum Voltage =53 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

**LTE Band 38C****26dB Bandwidth**

Mode	LTE Band 38C : 26dB BW(MHz)		
	QPSK	16QAM	64QAM
BW	15MHz+15MHz	15MHz+15MHz	15MHz+15MHz
Middle CH	30.69	30.63	30.51
BW	20MHz+20MHz	20MHz+20MHz	20MHz+20MHz
Middle CH	39.64	39.80	39.88